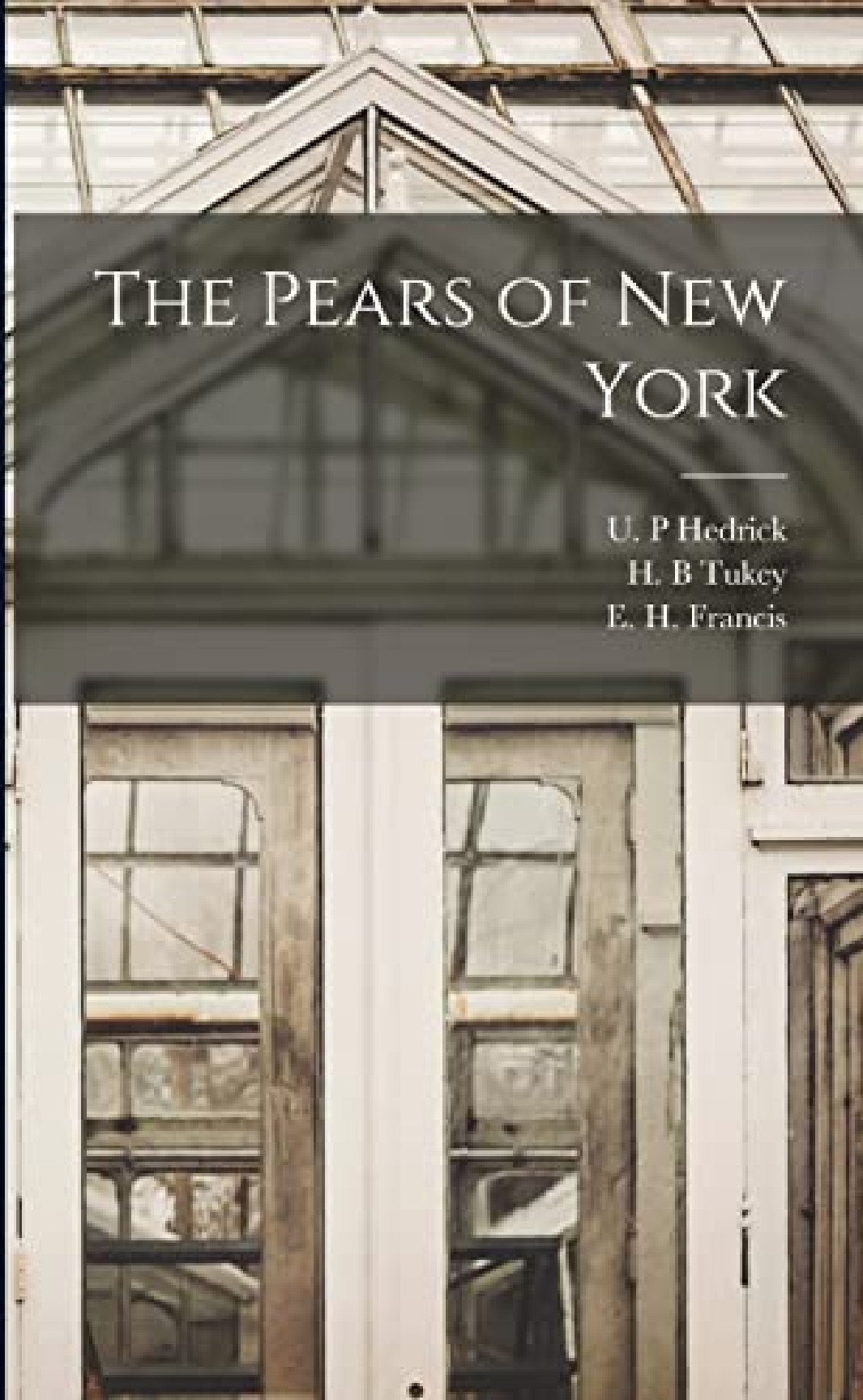


The Pears of New York

U. P Hedrick
H. B Tukey
E. H. Francis

The Project Gutenberg eBook of The pears of New York

This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at www.gutenberg.org. If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.

Title: The pears of New York

Author: U. P. Hedrick

Contributor: E. H. Francis
G. H. Howe
O. M. Taylor
H. B. Tukey

Release date: September 29, 2014 [eBook #46994]
Most recently updated: October 24, 2024

Language: English

Other information and formats: www.gutenberg.org/ebooks/46994

Credits: Produced by Steven Giacomelli, Mark C. Orton, The Internet
Archive (TIA) and the Online Distributed Proofreading Team
at http://www.pgdp.net (This file was produced from images
produced by Core Historical Literature in Agriculture
(CHLA), Cornell University)

*** START OF THE PROJECT GUTENBERG EBOOK THE PEARS OF NEW YORK ***



STATE OF NEW YORK—DEPARTMENT OF AGRICULTURE
Twenty-ninth Annual Report—Vol. 2—Part II

THE PEARS OF NEW YORK

BY

U. P. HEDRICK

ASSISTED BY

G. H. HOWE
O. M. TAYLOR
E. H. FRANCIS
H. B. TUKEY

Report of the New York Agricultural Experiment Station for the Year 1921

II

ALBANY
J. B. LYON COMPANY, PRINTERS
1921

NEW YORK AGRICULTURAL EXPERIMENT STATION,

GENEVA, N. Y., *October* 1, 1921.

To the Honorable Board of Control of the New York Agricultural Experiment Station:

GENTLEMEN:—I have the honor to transmit herewith the manuscript of the sixth of the series of monographs on fruits, to be entitled "The Pears of New York." I recommend that, under the authority of chapter 636 of the Laws of 1919, this be submitted for publication as Part II of the report of this Station for 1921.

The wide-spread use of and frequent expressions of appreciation for the preceding books of this series are ample justification for the preparation and publication of this similar treatise on pears. Further, the added years of experience and observation of Dr. Hedrick and his assistants serve to bring each successive monograph to a higher state of excellence and completeness. The present work is a splendid example of painstaking care in the collection and compilation of all available evidence concerning all known varieties of pears.

With the publication of this volume, the series will include books on apples, peaches, plums, cherries and pears, all of our leading tree-fruits of the non-citrus type. The book on grapes and the "Sturtevant's Notes on Edible Plants" are similar treatises published in uniform style with those dealing with tree-fruits and it is hoped that the series may eventually be extended to include similar discussions of small fruits.

"The Pears of New York" cannot fail to find an extremely useful place in the literature of fruit-growing, and its publication will be welcomed by the fruit growers of the State and by horticulturists the world over.

R. W. THATCHER,
Director

PREFACE

The Pears of New York is sixth in the series of books on hardy fruits being published by the New York Agricultural Experiment Station. The object and scope of these treatises have been given in prefaces of the preceding books, and though this work does not differ from its predecessors, for the convenience of readers the aim and the contents of the book in hand are set forth in this foreword.

Broadly speaking, the aim is to make *The Pears of New York* a complete record of the development of the pear wherever cultivated up to the present time. With this end in view an attempt is made: To give an account of the history and uses of the pear; to depict the botanical characters of cultivated pears; to describe pear growing in this country and more particularly in New York; and, lastly, to give in full detail the synonymy, bibliography, economic status, and full descriptions of the most important cultivated pears with brief notices of varieties of minor importance.

The reader will want to know what considerations have governed the selection of varieties for color plates and full descriptions. These

are several: (1) The value of a variety for home or commercial orchards. (2) Noteworthy new varieties. (3) Varieties desirable in breeding new pears. (4) A few sorts are described and illustrated to show the trend of evolution in the pear.

In the use of horticultural names the rules of the American Pomological Society as adopted at the meeting in Columbus, Ohio, in 1919, have been followed. With a very few varieties these rules have not been followed since the changes required by their strict observance would augment rather than diminish confusion.

The references given are those that have been used in ascertaining the history and economic status or in verifying the description of varieties. The synonyms created by pomologists whose works we have had have been noted, but in no case are synonyms given only when quoted by pomologists from another writer. One of the chief aims of *The Pears of New York* is to set straight in high degree the names of pears.

Biographical sketches of men who have been most prominent in pear growing in the United States are to be found in the footnotes. These are written to give in some measure the credit and honor due to those who introduced new varieties or improved their culture. A knowledge of the career of these men is indispensable to a full comprehension of the industry of growing pears.

U. P. HEDRICK,
Horticulturist, New York Agricultural Experiment Station

TABLE OF CONTENTS

		PAGE
PREFACE		v
INDEX TO ILLUSTRATIONS		ix
CHAPTER I.	—HISTORY OF THE PEAR	1
CHAPTER II.	—SPECIES OF PEARS AND THEIR CHARACTERS	57
CHAPTER III.	—PEAR CULTURE	83
CHAPTER IV.	—LEADING VARIETIES OF PEARS	122
CHAPTER V.	—MINOR VARIETIES OF PEARS	236
BIBLIOGRAPHY, REFERENCES, AND ABBREVIATIONS		589
INDEX		599

INDEX TO ILLUSTRATIONS

Portrait of Marshall P. Wilder	*Frontispiece*
	FACING PAGE
Description of a Pear	68
VARIETIES	
André Desportes	122
Ansault	122
Bartlett	124
Belle Lucrative	126
Beurré d'Anjou	128
Beurré Bosc	130
Beurré Clairgeau	132
Beurré Diel	134
Beurré Giffard	134
Beurré Hardy	136
Beurré Superfin	138
Bloodgood	138
Brandywine	140
Buffum	142
Clapp Favorite	142

Colonel Wilder 144
Columbia 144
Dana Hovey 146
Dearborn 148
Dorset 150
Doyenné d'Alençon 152
Doyenné Boussock 152
Doyenné du Comice 154
Duchesse d'Angoulême 156
Duchesse d'Orléans 156
Duhamel du Monceau 158
Early Harvest 158
Easter Beurré 160
Elizabeth 162
Flemish Beauty 164
Fontenay 166
Frederick Clapp 170
Gansel Seckel 170
Glou Morceau 172
Guyot 174
Howell 174
Idaho 176
Jargonelle 178
Joséphine de Malines 180
Kieffer 182
Koonce 184
Lamy 184
Lawrence 186

Le Conte 188
Léon Leclerc (Van Mons) 190
Lincoln 190
Lincoln Coreless 192
Louise Bonne de Jersey 194
Madeleine 196
Margaret 196
Marie Louise 198
Mount Vernon 200
Onondaga 202
Ontario 202
P. Barry 204
Passe Colmar 206
Pitmaston 208
Pound 208
Président Drouard 210
Pyrus betulaefolia 80
Pyrus serotina 74
Reeder 212
Riehl Best 212
Roosevelt 214
Rutter 214
Seckel 216
Sheldon 218
Souvenir du Congrès 218
Souvenir d'Espéren 220
Sudduth 220
Summer Doyenné 222

Tyson	222
Urbaniste	224
Vermont Beauty	226
Vicar of Winkfield	228
White Doyenné	230
Wilder Early	230
Winter Bartlett	232
Winter Nelis	234
Worden Seckel	234

THE PEARS OF NEW YORK

CHAPTER I
HISTORY OF THE PEAR

The pear has no history if history be defined as a record of evolution. Even the annals of the pear, which but state events in chronological order, are a heap of confused facts and dates with important data missing at every turn. The origin of the cultivated pear is so completely hidden in prehistoric darkness that it can never be known precisely from what wild pear it came. The historian must content himself with recording what the pear was when written records began; what the touch of time has done since the first written accounts; and what the events and

by whom directed which have aided time in making its impressions since cultivated pears have accompanied its flight.

Happily, it does not matter much what the pear was before husbandmen appeared on the scene. But from the day the pear began to supply the needs of men, and in its turn to require ministration from those it nourished, its history becomes of importance to all mankind. Those whom it helps sustain as well as those who tend the pear, may well ask: What was the raw material when the domestication of the pear began? How has this material been fashioned into the pear of the present? Who began domestication and who has carried it forward? And, gauged by past progress, what further progress is possible? These are questions of prime importance to those who seek to improve the pear; they throw light on the culture of the pear; and they are of general interest to all husbandmen, and to all interested in the world's food supply. The history of the pear is important, as has been said, only as it is connected with the history of man. Yet, this history must begin with the wild pear.

WILD PEARS

Botanists number from twenty to twenty-five species of pears, all of which are found in the northern hemisphere of the Old World, there being no true pear native to the southern hemisphere or to the New World. Some ten or twelve wild pears are found in China, several of which overrun the limits of China; three or four are natives of Japan; at least one has its habitat in Korea; another is to be found in the western Himalayas; while the remainder, some eight or ten species, are found westward from Turkestan, through Persia and Asia Minor into

southern and western Europe and northern Africa. From these statements as to habitats it is seen that pears grow wild over a very extended area and under quite varied conditions; therefore, it would be expected that the several species are quite distinct, differing chiefly, however, from a horticultural point of view, in the fruits.

But three of these wild species are now under common cultivation, though it is possible that through hybridization the blood of one or two more are to be found in cultivated varieties. Several others have horticultural possibilities either for their fruit, as means through which new characters may be introduced into cultivated pears, or as stocks upon which to grow orchard varieties. The three species of chief horticultural importance are *Pyrus communis* Linn., *P. nivalis* Jacq., and *P. serotina* Rehd.

The pear of common cultivation in ancient and modern orchards is *Pyrus communis*, native of southern Europe and Asia as far east as Kashmir. The species is now to be found naturalized in forests and byways of northern Europe, as it is in parts of America, so that it is impossible to tell precisely what its ancient habitat was. While most often to be found in mountainous regions in the great area which it inhabits, wild pears are common enough in the forests of Europe and western Asia so that it is probable that most of the early inhabitants of this part of the Old World enlivened their fare, obtained with the spear or the bow, with ready-made food from the pear. The species runs into at least three botanical forms, a dozen or more horticultural divisions and between two and three thousand orchard varieties.

Pyrus nivalis, the Snow pear, is a small tree native

of southern Europe, more particularly of Austria and northern Italy, from which region it has spread in modern times as an escape from cultivation into neighboring countries. It is called Snow pear because the fruits are not fit to eat until after snow falls. The French call it the “Sage-leaved pear” (*Poirier sauger*), from the fact that the under side of the leaves is covered with down so that the leaf resembles that of garden sage. The Snow pear is cultivated in southern Europe, particularly in France, for the making of perry for which purpose several varieties are grown. Probably the Greeks and Romans used fruit of this species for perry so that it may be said to have had attention from man, if not care under cultivation, from the earliest times. It is doubtful if it has been hybridized with *P. communis*, parent of nearly all cultivated pears. The Snow pear is not cultivated in America but is to be found in botanical collections.

From *Pyrus serotina* came the Japanese, Chinese, or Sand pears of pomologists. The species is a native of central and eastern China and is found wild in Japan, but whether as a native or as an escape from cultivation it is impossible to say. There are three botanical forms of the species and possibly a score of horticultural varieties cultivated for their fruits and as ornamentals. Of all the species of Pyrus found in western Asia, this, in the light of present knowledge, is most closely related to the common pear, with which it hybridizes freely.

We have now discovered in what countries the progenitors of cultivated pears grow spontaneously, and are therefore ready to search for the first landmarks in the domestication of the three cultivated species. What has ancient literature to say on the subject? We turn first to the Bible and find

that the pear is not mentioned in sacred literature, and that, according to commentators on the Sanscrit and Hebrew languages, there is no name in the tongues of Biblical lands for the pear. Nor should we expect ancient notices of the pear in north-west India or Persia, for the pear does not flourish in hot countries. The survey next turns to ancient Greece where landmarks are at once sighted which must be put down as the earliest records of the pear, and as such deserve full consideration.

THE PEAR IN ANCIENT GREECE

In ancient Greece we find the first landmarks and begin the history of the pear as a cultivated plant. It is wrong, however, to assume that the beginning of the cultivation of the pear, or of any plant, was contemporaneous with the writing of even the oldest books. Mention of a cultivated plant in a book is proof that its domestication antedates the writing of the book. It is not easy to imagine tribes of semi-civilized men in southern Europe and Asia who did not make use of the apples, pears, quinces, plums, cherries, almonds, olives, figs, pomegranates, and grapes which grew wild in this land of gardens and orchards, and who did not minister to their needs as husbandmen long before men wrote books. Names for orchard operations, as planting, grafting, and pruning, in the simplest dialects of primitive peoples, establish the fact that husbandry long antedates writing, as would be expected from the greater need of the one than of the other.

Plutarch, a Greek writer, A.D. 50-120, enlightens us as to the early use of the pear by the Greeks, and also as to the Grecian name for the fruit and tree. He

says in his Greek Questions (51):

> "Why do the boys of the Argives playing at a certain festival call themselves Ballachrades? (*Ballo*, I throw; *achras*, a wild pear.)
>
> "It is because they say that those who were first brought down by Inachus (founder of Argos) from the rural districts into the plains were nourished on wild pears (*achrades*). But wild pears (they say) were first seen by the Greeks in Peloponnesus, when that country was still called Apia; whence wild pears were named *apioi*. (*Apios*, a pear-tree; *apion*, a pear.)"

The pear is one of the "gifts of the gods" which Homer tells us grew in the garden of Alcinöus. It is certain, therefore, whether or not this is the earliest mention of the pear in Greek literature, that in Homer's time, nearly one thousand years before the Christian era, the pear was cultivated in Greece. As this garden of Alcinöus furnishes the earliest noteworthy landmarks of the pear, and is moreover the most renowned of heroic times, an early paradise of trees, vines, and herbs, it is worth while to take a look at it with a view of discovering the status of the pear at this early date. Stripped of the harmonious rhyme and pleasing rhythm of Homer's poetry, the garden is described in English prose as follows:

> "And without the court-yard hard by the door is a great garden, of four plough-gates, and a hedge runs round on either side. And there grow tall trees blossoming, pear-trees and pomegranates, and apple-trees with bright fruit, and sweet figs, and olives in their bloom. The fruit of these trees never perisheth, neither faileth winter or summer, enduring through all the year. Evermore the West Wind blowing brings some fruits to birth and ripens others. Pear upon pear waxes old, and apple on apple, yea, and cluster

> ripens upon cluster of the grape, and fig upon fig. There too hath he a faithful vineyard planted, whereof the one part is being dried by the heat, a sunny plot on level ground, while other grapes men are gathering, and yet others they are treading in the wine-press. In the foremost row are unripe grapes that cast the blossom, and others there be that are growing black to vintaging. There too, skirting the furthest line, are all manner of garden beds, planted trimly, that are perpetually fresh, and therein are two fountains of water, whereof one scatters his streams all about the garden, and the other runs over against it beneath the threshold of the court-yard, and issues by the lofty house, and thence did the townsfolk draw water.—These were the splendid gifts of the gods in the palace of Alcinöus.[1]"

Divested of the spell with which the poet's flight of imagination bewitches us, we find that the wonderful garden of Alcinöus is, after all, rather trifling, probably of small extent, and containing an orchard, a vineyard, garden beds and two fountains of water, which brings us to the conclusion that this renowned garden would cut but a sorry figure beside modern gardens; but, on the other hand, we are made sure that certain fruits, among them the pear, were commonly cultivated in Greece a thousand years before Christ's time. There is no hint in Homer as to whether there were as yet varieties of pears, or as to whether fruits were as yet pruned, grafted, fertilized and otherwise cared for. For indications that these arts of the orchard were under practice, we must pass on to the writings of another great Greek, Theophrastus.

Between Homer and Theophrastus nearly 600 years intervene, in all of which time traces of the

pear are few and uncertain. But from Theophrastus, to whom botanists accord the title “Father of Botany,” we know that orcharding had been making progress, and that the pear, among other fruits, must have been as well known and nearly as well cared for in his time, 370-286 B.C., as in this twentieth century. All the expedients we now know to assist nature to bring pears to perfection, save spraying and cross-pollination, were known to Theophrastus, although of course the evolution from the wild state as indicated by number and diversity of kinds had not progressed so far. Out of one of the books of Theophrastus, *Enquiry into Plants*, a very good treatise on the pear might be compiled and one better worth following than many of his more modern imitators. To quote Theophrastus at length is impossible, but space must be given to a summary of what he says about pears.

Theophrastus distinguishes between wild and cultivated pears and says that the cultivated forms have received names. He speaks of the propagation of pears from seeds, roots, and cuttings and makes plain that plants grown from seed “lose the character of their kind and produce a degenerate kind.” Grafting is described. The nature of the ground is said to regulate the distance for planting pears, and the lower slopes of hills are recommended as the best sites for pear orchards. Root-pruning, girdling the stems, and driving iron pegs in the trunk and other methods of “punishing” trees are said to hasten the bearing time. Even the necessity of cross-pollination is recognized though of course the reasons for it are not known. Thus, Theophrastus says: “Trees which are apt to shed their fruit before ripening it are almond, apple, pomegranate, pear, and, above all, fig and date-palm; and men try to find the suitable

remedies for this. This is the reason for the process called ‘caprification’; gall-insects come out of the wild figs which are hanging there, eat the tops of the cultivated figs, and so make them swell.” The growth of the pear on various soils and in diverse situations is compared; he makes mention of a “peculiar, red and hairy worm” which infested the pear of these old Greek orchards. In Pontus, it is stated, “pears and apples are abundant in a great variety of forms and are excellent.” “General diseases” are enumerated as “those of being worm-eaten, sun-scorched, and rot.” Certain affections due to season and situation are mentioned, as freezing, scorching, and injury from winds.

This is but a brief epitome of what Theophrastus writes of the pomology of the Greeks, and only topics in which the pear is specifically mentioned are set down and not all of these. By inference, one who reads Theophrastus might apply much more to the pear. Yet enough has been said to prove the point that pear culture was as well established in Greece 300 years B.C. as in 1900 years A.D. One leaves Theophrastus, satisfied that pear-growers of his day had about the same problems that growers have nowadays and solved them by the same sort of reasoning intelligence.

In crediting Theophrastus as the earliest writer on pomology, we may assume that there were earlier writers from whom he must have received much knowledge. Perhaps greater writers on botany and pomology preceded him, since he cites older authors on the same subjects whose books have been lost. His alone of the books of its kind have come down to us from ancient Greece. Theophrastus was the friend and pupil of Aristotle, another philosopher and

prince of science, and both in turn were taught by Plato. Who shall say, then, from whence Theophrastus received his knowledge? Aristotle is said to have written two books on botany antedating the *Enquiry into Plants* of Theophrastus, neither of which has survived the passing centuries. May not these great minds have been indebted to authors whose books and names have perished? These speculations serve to remind us again that the beginnings of botany and pomology long antedate written records.

There were Greeks who wrote on agriculture after Theophrastus, and before the Roman treatises on farm management, a few of which are to be mentioned in the next topic. Of books, as monuments of vanished minds, however, there are none to indicate the activities of Greek farmers who wrote, but there are citations to show that ancient Greek literature on farming was voluminous. Thus, Marcus Terentius Varro (B.C. 116-28), called “the most learned of the Romans,” in his eightieth year wrote a book on Roman agriculture for the guidance of his wife in the practice of farming. Learned old Varro believed in “book farming,” or science with practice, of which we hear so much nowadays. He begins his treatise by invoking Greek and Roman deities to aid his wife, and names fifty monographs on husbandry written by Greeks, in which, he tells this early farmerette, she will find all of the practical information she needs. This is but one of several sources from which we learn that in the making of books on agriculture there was no end in the heroic days of Greece as in modern times.

THE PEAR IN ANCIENT ROME

Italy, by common consent, is the garden of the world, and it would be strange if the pear had not been taken to this favored land with the earliest tillers of orchards, or if attempts had not been made to domesticate the wild pears found in the northern mountains. And so we may assume, with no very definite proofs, that the pear was cultivated in ancient Rome some hundreds of years before the Christian era. In Cato, the first book written in Latin on agriculture, the pear is discussed, and six varieties are named and described. What had this illustrious Roman, known generally as a statesman and scholar, to do with pomology?

Marcus Portius Cato (B.C. 235-150), called the elder Cato, besides serving Rome in state and army, wrote a treatise on farming, fruit-growing, and gardening, which, first of its kind in Latin literature, may be read with greater profit than the works of most writers of our own day in agriculture. Cato was preeminently the first agricultural philosopher, and no one who has followed him has packed more shrewd agricultural philosophy in a book than he. But it is as a pomologist that Cato concerns us most at this time. Cato describes almost every method of propagating, grafting, caring for, and keeping fruits known to twentieth-century fruit-growers. He describes, also, many varieties of fruits, as well as of vegetables, grains, and breeds of farm animals. Among Cato's fruits are six varieties of pears. What is of especial interest in this history is that Cato writes as if the practices of agriculture and the plants and animals he described were not only established but ancient in his time.

Varro, whose standing as a Roman writer on agriculture is noted above, says nothing of varieties

of pears, but gives directions for grafting pear-trees, among other methods that of inarching of which he seems the first ancient writer to take note, thereby justifying, in small degree, it is true, the appellation often given him, "the most modern of all the ancients." Varro also tells how pears should be stored. While, therefore, he says nothing that helps in following the evolution of the pear, yet his accounts of grafting and storing make plain the fact that this fruit was a standard product of the times. Were it worth while, still other early Roman treatises on husbandry might be quoted to establish the place of the pear in the agriculture of ancient Rome, but it is chiefly in the evolution of the fruit we are concerned and so pass from Varro to Pliny, who, in his *Natural History*, adds to Cato's six varieties thirty-five new sorts, giving a total of forty-one for the generation following Christ.

Pliny, more or less discredited as a scientist because he was a compiler and, as the men of science for science sake never forget to point out, at all times of a utilitarian bent of mind, makes a most important contribution to the history of the pear as a domesticated fruit. Indefatigable compiler as he was, few cultivated pears of his or more ancient times could have escaped his notice, and the thread of the utilitarian running through his *Natural History* makes all the more important what he has to say in this study of the domestication and improvement of the pear. A good authority says that there are sixty manuscript copies of Pliny and eighty different editions, no two of which are exactly alike. Allowing some latitude, therefore, to the translator, Pliny's descriptions of pears run as follows:

> "For the same reason (as in the case of apples) in the case of pears the name Superba (proud) is

given; these are small, but earliest ripe. The Crustumia are most pleasant to all; next to these the Falerna, so called from the wine, since they have such abundance of sap or milk, as it is called; among these are those which others call Syrian from their dark color. Of the rest, some are called by one name in one place and by another in another. Some by their Roman names reveal their discoverers, as the Decimiana, and what they call the Pseudo-Decimiana, derived from that; the Dolabelliana with their long stalk; the Pomponiana of protuberant (full-breasted) shape; the Liceriana; the Seviana and those which spring from these, the Turraniana, distinguished by their length of stalk; the Favoniana of reddish color, a little larger than the Superba; the Lateriana; the Aniciana, which ripens in late autumn and has a pleasant acid flavor. The Tiberiana are so called because the Emperor Tiberius was very fond of them. They get more color from the sun and grow to larger size, but otherwise are the same as the Liceriana. These bear the name of the country from which they come; the Amerina, latest of all; the Picentina; the Numantina; the Alexandria; the Numidiana; the Greek and among them the Tarentine, the Signina, which others from their color call Testacea (like tiles, or brick-colored), like the Onychina (onyx) and Purpurea (purple). From their odor are named the Myrapia (myrrh-pear), Laurea (laurel), Nardina (nard); from their season the Hordearia (barley, at the barley-harvest); from the shape of their neck the Ampullacea (flask). The Coriolana and Bruttia have family-names (Coriolanus, Brutus); the Cucurbitina (gourd-pears) are so called from their bitter taste. The origin of the name is unknown in the case of the Barbarica and the Veneria which they call colored; the Regia, which are attached to a very short stalk; the Patricia; the Voconia, which are

> green and oblong. Virgil mentions also the Volema, taken from Cato, who names also the Sementiva and the Mustea.[2]"

It is pertinent to inquire, now, as to what types of pears the ancients had. Such an inquiry leads up to another and much more important question: Have new characters appeared in pears since Pliny wrote? If so, it may be possible that we shall be forced to assume that man's dominancy over this fruit has produced the new characters, in which case search might be made for the key to unlock more new characters. For the present, however, only the first question can be considered, before going into which it is necessary to know what the most prominent characters of the pear are. Only those of the fruit need be named.

There are twenty outstanding characters which differentiate the varieties of pears now cultivated, not taking account of those introduced by the hybridization of *P. communis* with *P. serotina* which has given pomology the Kieffer-like varieties. These characters are: Smooth or russet skin; red, yellow, or green color; large or small size; early or late season; long or short stem; round, oblate, ovate, and pyriform shapes; granular, buttery, or breaking flesh; sweet or acid flavor. In the pears described by Pliny so many of these characters are mentioned or may be assumed to be present from inference, that the conclusion is forced that in the many new pure-bred pears of *P. communis* which have come into existence since Pliny's time, showing a great shuffling of characters in pear-breeding, it is doubtful whether new characters have come into being in 2000 years. This, in turn, forces the conclusion that if this fruit is to be greatly changed, the change must come about through hybridization with other species.

Another quotation from Pliny shows that the Romans valued pears as a medicine as well as a food, had curious notions as to their digestibility, and, as with most plants, ascribed other marvelous qualities to them. Thus, Pliny says:

> "All kinds of pears, as an aliment, are indigestible, to persons in robust health, even; but to invalids they are forbidden as rigidly as wine. Boiled, however, they are remarkably agreeable and wholesome, those of the Crustumium in particular. All kinds of pears, too, boiled with honey, are wholesome to the stomach. Cataplasms of a resolvent nature are made with pears, and a decoction of them is used to disperse indurations. They are efficacious, also, in cases of poisoning by mushrooms and fungi, as much by reason of their heaviness, as by the neutralizing effects of their juice.
>
> "The wild pear ripens but very slowly. Cut in slices and hung in the air to dry, it arrests looseness of the bowels, an effect which is equally produced by a decoction of it taken in drink; in which case the leaves are also boiled up together with the fruit. The ashes of pear-tree wood are even more efficacious as an antidote to the poison of fungi.
>
> "A load of apples or pears, however small, is singularly fatiguing to beasts of burden; the best plan to counteract this, they say, is to give the animals some to eat, or at least to show them the fruit before starting."

There is in the books of these old farmer-writers a mass of sagacious teachings which can never be outlived—will always underlay the best practice. Followed carefully, except in the matter of pests, the precepts of Cato and Varro would as certainly lead to success as the mandates of the modern experiment

stations with all the up-to-date appliances for carrying out their commands. Sagacity fails, however, in one respect in these Roman husbandmen —all are fettered by superstitions. In these old books on the arts of husbandry, woven in with the practical precepts, which stand well the test of science, superstitions abound beyond present belief. Thus, whenever the discourse turns to pears, from Diophanes, who lived in Asia Minor a century before Christ, down through the ages in Greece, Italy, France, Belgium to the eighteenth century in England, runs the superstition, with various modifications, that to grow the best pears you must bore a hole through the trunk at the ground and drive in a plug of oak or beech over which the earth must be drawn. If the wound does not heal, it must be washed for a fortnight with the lees of wine. As the superstition waned, the apologetic injunction usually follows, that, in any event the wine-lees will improve the flavor of the fruit. Another superstition, current for centuries, accepted by Cato and Varro, and handed on with abiding faith almost to modern times was, as stated by Barnaby Googe, a farmer and writer subject of Queen Elizabeth, “if you graffe your peare upon a Mulbery, you shall have red Peares.” Stories of promiscuous grafting abound in the old books. Another is that if an apple be grafted on the pear, the fruit is a “pearmain.”

After Pliny follows a dreary and impenetrable period of 1500 years, in which time but few new facts regarding the evolution of the pear come to light in what is now Italy. The pear is mentioned, it is true, by many Roman writers, but all copy Theophrastus, Cato, and Pliny. Dioscorides, a learned Greek physician and botanist, who may be said to have been the author of the first book of “applied

science" in botany, was the great botanical and pomological authority for the first 1600 years of the present era, many editions of his book appeared and in several languages, and it is he who is most often quoted by writers on fruits even until the seventeenth century, but he adds nothing new on the pear, and does not even extend the list of known varieties. During these 1600 years a great number of voluminous commentaries on Dioscorides appeared, in several of which names of new pears are mentioned, but, with the exception of one writer, the descriptions are so terse that the new sorts cannot be connected with older or later periods. The exception is Matthiolus (1501-1577), but since the English herbalists, in their turn, largely copy Matthiolus, with valuable amplifications, it is better to give space further on to them.

Perhaps one more name should be mentioned among the Roman writers. Messer Pietro de Crescenzi, an Italian born at Bologna in 1230, wrote a book on agriculture in which the chapters on fruits are especially well written. For reasons to be mentioned, this book had a remarkable influence on the horticulture of Europe for the next three or four centuries. With the discovery of printing, nearly two centuries after the book was written, Crescenzi was published in numerous editions and in several languages to the great enlightenment of pomologists on the cultivation of fruits, but with small additions to the knowledge of the fruits themselves. Whether because the book was really the most serviceable of its kind in the world for four centuries, or whether by virtue of the happy circumstance of being many times printed, it had absolute supremacy over other agricultural texts, is now too late to judge. There is good reason to suspect that Crescenzi's is the

precedence of circumstance, for he stole page after page from Palladius, of the fourth century, who, to be sure, in his turn, copied Columella and the Greeks. Most of these borrowings, however, meet the requirement of being "bettered by the borrower" that separates adoption from plagiarism.

One other landmark, though a somewhat inconspicuous one, in the history of the pear in Italy, is deserving brief mention. Toward the middle of the sixteenth century Agostino Gallo, an Italian, wrote *The Twenty Days of Agriculture and the Charms of Country Life*. With the fall of the Roman Empire in the fifth century, agriculture was reduced to the production of the necessities of life and pomology all but perished. It required a thousand years to recover from the domination of the barbarian conqueror of Rome. Hence, it is not surprising that Gallo names but twelve varieties of pears instead of the forty-one of Pliny. Gallo says that he does not name all of the summer pears, but leaves the inference that his list is complete for autumn and winter sorts. There probably was a greater number under cultivation at this time in Italy, but Gallo's list shows that the number was small. Gallo is regarded as the restorer of agriculture in Italy after the dark ages, and as one of the most enlightened men of his time, so that we may accept him as an accurate historian. Besides furnishing a list of the pears of his day in Italy, Gallo names two that are now under cultivation—Bergamot and Bon Chrétien.

THE PEAR IN FRANCE

Who introduced the pear in France matters little. The Greeks who founded Marseille 600 B.C. may

have done so. The Romans, masters of ancient Gaul for centuries, undoubtedly planted pears at widely separated places and in earliest times of Roman occupation. Or, and quite possibly, the original natives of the land began the domestication of the pear for, as we have seen, two cultivated species grow wild in what is now France. Date and manner of introduction matter less than a recognizable landmark in the history of the pear as an orchard plant in France. There is such a landmark and a conspicuous one.

Charlemagne, the many-sided genius who ruled the Franks in the ninth century, exercised his powerful influence in behalf of agriculture during the time of his reign, and to him is due credit for establishing the first notable landmark in the history of the pear in France. We are well informed of Charlemagne's various activities while in power, for official annals were kept at the Frankish Court. Charlemagne's secretary has left a biography of his master, and many of the King's *Capitularies*, or lists of laws, are extant. In these records, agriculture is a matter of constant comment and the pear is often up for discussion. One quotation serves to show that this fruit was cultivated in considerable variety in Charlemagne's orchards.

In the *Capitulaire de Villis*, Chapter LXX, Charlemagne is reported to have commanded his orchardists to plant pears of distinct kinds for distinct purposes. That the command was of sufficient importance to be recorded in a capitulaire indicates that Charlemagne esteemed this fruit. The order runs: "Plant pear trees whose products, because of pleasant flavor, could be eaten raw, those which will furnish fruits for cooking, and, finally,

those which mature late to serve for use in winter." There is little information in this brief command, but it tells us that a considerable number of varieties of pears were grown in France in the ninth century, and that they were of sufficient importance to hold the attention of a great and busy monarch.

Either the culture of the pear abruptly ceased with the death of Charlemagne or records ceased to be kept that would throw light on the agriculture of the next five centuries, for from the tenth to the fifteenth century is an uncharted waste in the history of the pear in France. Undoubtedly pears were cultivated during this time by the monks who had the time, the taste, and the land for carrying on agriculture. When the pear comes to light again in the happier period for pomology of the sixteenth century, the many names of monasteries in the list of varieties suggest that the monks not only busied themselves with the culture of the fruit but greatly increased the number of kinds of pears.

Three great minds now appeared to make France the leading country in the production of agricultural literature in the sixteenth and seventeenth centuries and all paid attention to pomology. The names of Charles Estienne, Olivier de Serres, and Le Lectier in agriculture mark the departure from traditions handed down from the old Greeks and Romans to the beginning of a new agriculture founded on first-hand study and observation. The printing-press, it is true, was now an invaluable ally, but these three men were of an original bent of mind and would have been distinguished in any period before printing.

Charles Estienne, the first and the least of these three early geniuses of French agriculture, published several works on agriculture, mostly compilations,

but all containing original observations, in one of which, his “Seminarium,” printed in Paris in 1540, is a list of sixteen pears with brief descriptions of each. Not one of Estienne’s pears is now important, but all appear in the histories of minor sorts in the last chapter of this text.

De Serres, known in France as “The Father of Agriculture,” published his *Le Théâtre d’Agriculture* in 1608, a book ever to be notable in agriculture as the first to break wholly away from the 1600 years of repetition of book after book in the languages of Europe which but copied the ancients. De Serres was a good farmer—most of his farming operations have not been improved upon; he founded the first experimental farm of which there is record at his home near Pradel and so became the first of a long line of modern experimenters in agriculture. Lastly, De Serres was a charming writer and his book rapidly ran through many editions and was translated into several languages. To him must be given credit for first sounding the alluring call of “back to the land” which rings from nearly every page of his books. Here is his appeal to plant pears; and words could hardly make it simpler, more charming, and more compelling:

> “There is no tree among all those planted which abounds so much in kinds of fruits as the pear tree, whose different sorts are innumerable and their different qualities wonderful. For from the month of May to that of December pears good to eat are found on the trees. In considering particularly the different shapes, sizes, colors, flavors, and odors of the pear, who will not adore the wisdom of the creator. Pears are found round, long ‘goderonnees’[3] pointed, blunt, small, and large. Gold, silver, vermillion, and satin green are found among the pears. Sugar, honey, cinnamon,

> clove, flavor them. They smell of musk, amber, and chive. In short, so excellent are the fruits that an orchard would not be worth while in a place where pear trees do not thrive."

This laudation of the pear, in which it is made manifest that many pears of diverse shapes, colors, flavors, and perfumes existed in the year 1600, is all that space permits from De Serres, though much could be quoted as to the care of pear orchards, and a list of kinds could be given, of which, however, the descriptions count for but little. Le Lectier, to whom we now come, is a better authority on varieties.

Le Lectier, an attorney of the king at Orleans, was an amateur fruit collector, but a collector who reflected and printed his reflections. He seems to have been about the first of the many collectors who, with fruit-growing as an avocation, have zealously sought to improve and distribute varieties, and thereby have done as much or more for pomology than those who have made fruit-growing a vocation. Though Le Lectier collected all of the fruits of his time and country, the pear was mistress of his passion, a passion which gave him such pleasure that it excited others to become amateurs and emulate him. The result was that a country-wide taste for pears was stimulated and a veritable craze for this fruit was started—everybody planted pears.

The famous collection of fruits was begun by Le Lectier in 1598. By 1628, the infatuation to plant had progressed until Le Lectier could send to his fellow amateurs a catalog of his possessions of fruits with the desire to exchange. His offer to exchange shows all of the collector's zeal. It reads as follows:

> "I beg all those who have good fruits (not contained in the present Catalogue) when he

> obtains them to inform me of it, so that I can have grafts of them in exchange for those which they have not, but which they wish to get from me, and which I will furnish them.
>
> "Signed, Le Lectier, Attorney of the King at Orleans.
> 20th of December, 1628."

From Le Lectier's list we learn that 300 years ago the French had at least 254 pears. In this catalog are many pears in the pomologies of today, but, unfortunately without descriptions or any attempt to determine duplicates in names or varieties, the list serves for little more than a monument for one of the first and one of the most zealous collectors of pears. Le Lectier, however, may be said to have introduced the golden age of pomology in France; for, during historical times there seems to have been no other period in which pomology exercised the minds and hands of well-to-do people as in the century that followed Le Lectier. Even the kings of France took pleasure in using the spade and the pruning-knife. La Quintinye, the best of the pomological writers of the day, complained that the country was overwhelmed with books on pomology. Thus, was ushered in the period which we may call our own in which the history of the pear may be read in books innumerable.

As steps in the progress of the pear, the number of varieties may be noted as given by French pomologists in the modern era of pear-growing. Merlet, 1667, describes 187 varieties; La Quintinye, 1690, 67; Duhamel, 1768, 119; the Chartreuse fathers, 1775, 102; Tollard, 1805, 120; Noisette, 1833, 238; while Leroy, 1867, from whom the figures just given were taken, says that in the half century preceding, the number of pears in France

was quadrupled and that there are 900 varieties for which there are 3000 names. Leroy notes three events as the cause of the generous multiplication of pears in the period of which he writes: The introduction of the many varieties grown by Van Mons and other Flemish pomologists beginning about 1805; a little later, the establishment of exchange relations with English nurseries; and still later, 1849, the importation of a great number of new varieties from America. To Americans, it is particularly significant to note that the great progress of the pear in France is due to amateur tendance and not commercial success.

THE PEAR IN BELGIUM

Providence ordained Belgium to produce the modern pear. The evolution of the pear proceeded slowly, indeed, until its culture became common on the clayey and chalky soils in the cool, moist climate of Belgium, where flavor, aroma, texture, size, and color reach perfection. The pear was improved more in one century in Belgium than in all the centuries that had past. The part Providence played in endowing the Belgians with an ideal soil and climate for the pear, is but one of two causes of the results in improving the pear in this country. The other is that the Belgians, ever notable horticulturists, give the pear assiduous care, cultivate only the most approved varieties, and in breeding, aim ever at high quality, so that Belgian pear-growers, as well as an ordained soil and climate, must be given credit for the modern pear.

The early history of the pear in Belgium follows step by step that of the pear in France. In the sixteenth century, botanists were numerous in the

Low Countries, their zeal and activity showing forth in several of the best of the early herbals. These herbalists, however, gave scant attention to the pear. Dodoens, most noted Belgian botanist of the century, dismissed the matter of varieties with the statement that the names change from village to village, and that it is therefore useless to give them. From this we may assume that a considerable number of pears were cultivated in Belgium at the time Dodoens wrote, about the middle of the sixteenth century.

Pear-breeding began in Belgium about 1730, when Nicolas Hardenpont, 1705-1774, a priest in his native town of Mons, made a large sowing of pear seed with a view of obtaining new pears of superior quality. Time is fleeting in breeding tree fruits, and the Abbé Hardenpont waited nearly 30 years before introducing his selected seedlings, and then, beginning in 1758, he introduced one new variety after another until a dozen or more new pears were accredited to him. At least six of these are still grown in Europe, but only one, the Passe Colmar, is known in America. But before going further with the work of the Belgian breeders, it is necessary to take stock of what was on hand before their time.

La Quintinye, the most noted French pomologist of his time, in 1690 listed 67 pear varieties. The Belgians probably had all of these. What were they? Most of them were old sorts—some were centuries old. All, so far as their histories show, originated by chance in garden, orchard, hedge row, and forest. No one seems yet to have planted seed with a view of obtaining new and better pears. Camerarius in 1694 had made known the fact of sex in plants. Soon after, experiments in hybridization began, but no one as yet had hybridized pears. Lastly, nearly all pears,

before the Belgians began to improve them, were crisp or breaking in flesh, the *crevers* of the French, while the soft-fleshed, melting pears, the *beurrés* of the French, were as yet hardly known. Now, mostly owing to the work of the Belgians, the buttery pears predominate.

Of the means by which Hardenpont obtained his superior pears, there is no precise knowledge. Whether his new sorts were lucky chances out of a large number of promiscuous seedlings, or whether he was a pioneer in hybridizing can never be known. Du Mortier, a distinguished Belgian botanist, gives the credit of hybridization to the Abbé, basing his opinion on the fact that the characters of most of Hardenpont's varieties are plainly a commingling of two well-known parents which could hardly be the case if they were happy chances were fate ever so kindly disposed.

Hardenpont soon had many imitators in Belgium. Indeed, the Belgians seem to have been quite carried off their feet by pear-breeding, and during the first half of the nineteenth century a fad like the "tulip craze" of Holland and the "mulberry craze" of America reigned in the country. Among the breeders are found the names of priests, physicians, scientists, apothecaries, attorneys, tradesmen, and gentlemen of leisure. The introduction of new varieties made notable in horticulture the towns of Mons, Tournaii, Enghien, Louvain, Malines, and Brussels. The awarding of medals for new pears produced the horticultural sensations of the times. Hundreds if not thousands of new varieties were introduced, of which many, it is true, have proved worthless, others of but secondary merit, while still others, as we shall find, are even now among the best pears under

cultivation. But the great fact, be it remembered, is that these amateur pear-breeders wrought in a few years a complete transformation in a fruit that had been domesticated and had been fairly stable for over 2000 years.

A few names besides Hardenpont stand out prominently and must be mentioned. Of these, Van Mons is best known. Jean Baptiste Van Mons, 1765-1842, was a pharmacist, physicist, and physician, one of the savants of his time, who, late in the eighteenth century, under the potent spell cast by Hardenpont's work, began to breed pears. Space forbids an account of Van Mons' experiments. Suffice to say that he introduced more than two scores of pears having lasting merit, and that in the height of his career he had in his "Nursery of Fidelity" at Louvain, eighty thousand seedlings. Van Mons outlives in fame the Belgian pear-breeders of his time because he propounded a theory for the origination of new varieties of plants, and this in its turn is famed as the first complete system of plant improvement. Van Mons contributed but little of direct value to plant-breeding, but indirectly he gave a great impetus to breeding pears and to the culture of the pear, more especially in America, and we must therefore glance at his theory and trace more in detail its influence on American pear-growing.

Van Mons' theory, in brief, as expounded in various papers, is: A species does not vary in the place in which it is born; it reproduces only plants which resemble itself. The causes of variation are changes in soil, climate, or temperature. Whenever a species produces one or many varieties, these varieties continue to vary always. The source of all variation, which is transmissible by sowing, resides

in the seeds. The older a variety, the less the seedlings vary, and the more they tend to return toward the primitive form, without being able ever to reach that state; the younger or newer the variety, the more the seedlings vary.

In putting his theory in practice Van Mons took the first seeds from wild plants or those little improved, from which he grew seedlings, and from these the seeds were taken from the first fruits to ripen for new sowings. This practice he repeated generation after generation. Thus, it is seen that Van Mons was an early apostle of selection. He is said to have distributed over 400 varieties, about 40 of which are still under cultivation. It is to be feared, however, that Van Mons' theory was preconceived without experiment or even observation for a foundation. He devoted a life of most admirable zeal to verifying and developing this vision of his early years with some material reward it is true, but with a better foundation his prodigious labors would have yielded greater direct results in improving the pear. Still, the indirect results, his influence on the pomologists of two continents, even though they did not subscribe to his theories, was more valuable than the work of one mind and one pair of hands could possibly have been.

There must always be pioneers, men who stray from beaten paths, but pioneers seldom exert wide and deep influence at once—leave the worn path, so to speak, and at once construct a macadamized road —yet this was what Van Mons did. Pomologists agree that until his time no man had exerted so profound an influence on pomology. His love of discovery and love of labor permeated fruit-growing in Europe and America. Fortunately, it was the age of the amateur

fruit-grower. Pleasure and progress, driven by curiosity, counted for more than commercial success, so that Van Mons' new varieties at once gave him wide fame. He was made known to American pear-growers by Robert Manning who distributed his new varieties in this country and described them in the horticultural literature of the day and in his *Book of Fruits* published in 1838. Later, Andrew Jackson Downing, the brilliant genius of American horticulture, published Van Mons' theories and described many of his new pears in his *Fruits and Fruit Trees*, which came from the press in 1845. Thus, Van Mons became the recognized authority in America on all matters relating to the pear. Indeed, it is hardly too much to say that we owe him obligations as the founder of pear-culture in this country.

But the work of the Belgians does not end with Van Mons. There were other breeders of pears, who, though not to be classed with Van Mons as a Titan, lacking the quality of mind to set forth a new philosophy, helped to enliven the impulse given by their leader to the improvement of the pear by originating new varieties. Chief of these are Major Espéren, of Malines, who introduced twenty of the pears mentioned in the *Pears of New York*; Bivort, who has twenty-three to his credit; Gregoire, forty-two; Simon Bouvier, eleven; De Jonghe, six; and De Nelis, five. While, if the lists of varieties in the last two chapters of this text be scanned for Belgians who introduced but one, two, or three new pears, the list runs up into the hundreds. Labor finds its summit in the work of these Belgian pear-breeders, who obtained petty rewards by sifting millions of seedlings through the coarse meshes of the sieve of selection. We can pardon these enthusiastic breeders

with grace for over-zealousness in naming varieties obtained with such prodigious efforts.

THE PEAR IN CENTRAL AND EASTERN EUROPE

The pear can be improved only where the pear-tree flourishes, and then only when assisted by the foresight and desire of men. This happy combination seems not to exist in Europe outside of Italy, France, Belgium, and England. The pear flourishes along the Danube, in parts of Austria and southern Germany, and along the upper Rhine, but the people of these regions seem to have been followers rather than leaders in developing this fruit, having produced almost no meritorious varieties. America is indebted to the vast region of central and western Europe for but one major variety, the Forelle, and this sort is of little importance.

Pomology, the world over, however, is indebted to Germany for much valuable pomological literature. Cordus, Mayer, Christ, Diel, Dittrich, Truchsess, Hinkert, Dochnahl, Oberdieck, Engelbrecht, Lauche, and Gaucher, all Germans, and Kraft, an Austrian, have been industrious compilers, and have given pomology some of its best texts on systematic pomology.

Cordus, earliest German pomological writer, wrote an illuminating chapter in the history of the pear, which must be reproduced. Valerius Cordus, 1515-1544, a botanical genius, made botanical expeditions to nearly every part of Germany, in the course of which he made special study of the apple and the pear. He described fifty pears and thirty-one apples. These descriptions are noteworthy as the

earliest for these fruits in Germany. Cordus is called by one great botanist, “the inventor of the art of describing plants;” by another, he is said to have been “first to teach men to cease from dependence on the poor descriptions of the ancients and to describe plants anew from nature;” a third botanical authority says of him, “the first of all men to excel in plant description;” while a fourth writes of the four books of his *Historia Plantarum* “truly extraordinary because of the accuracy with which the plants are described.” Thus, botanists accord him special distinction, but pomologists seem not to know this resplendent systemist of the sixteenth century, who, as we shall see, is especially deserving of pomological recognition.

Cordus is entitled to honor in the history of pomology as first to print descriptions of fruits for the purpose of identifying varieties. No doubt as soon as the earth ceased to furnish spontaneously the primitive luxury of ready-to-eat food in the shape of fruit, making culture necessary, varieties were acquired and became commodities as they are today. Varieties were certain to originate under cultivation, and their value was certain to be recognized by our first ancestors, to whom the convenience, necessity, and expediency of having a diversity of kinds of any fruit as well as of a means of keeping them true to kind, must have been apparent at the beginning of fruit culture. That such was the case, the most ancient sacred and profane writings assure us. Varieties of the fig, olive, grape, and other fruits are mentioned by all early writers on plants. That varieties of fruits would not come true to seed was early known, and propagation by cuttings, layers, and grafting was invented to preserve choice sorts. Many of the early writers name varieties, tell from

whence they came, and some set forth a remarkable character or two, but none give detailed descriptions. Cordus was first to engage in this sort of enterprise.

This chapter from Cordus is important, too, because it makes plain that the pears grown in Germany four hundred years ago possessed all the characters to be found in modern pears. Culture has increased size, modified shapes, augmented flavors, brightened colors, and softened textures, but no characters that can be considered new or distinct, unit characters of the plant-breeder, have been introduced in the four centuries that have gone by. The characters possessed by these German pears are the same, so far as can be made out, as those of the varieties grown by the Greeks and Latins nearly 2000 years earlier. From this, the inference must be drawn that the characters of the pear have not originated under cultivation but exist in wild types. New and distinct characters can come only by hybridization with another species. Pears within a species are changed only by a recombination of the characters possessed by the species.

The descriptions of varieties from Cordus[4] that follow are commended to pomologists as models of brevity and accuracy. These word-pictures reproduce the pears as vividly as an artist could paint them. One sees at once that Cordus was no compiler. Such descriptions as Cordus writes can be made only in the orchard with the pear in hand.

> "The domesticated pear-tree is like the wild tree in trunk, bark, timber, leaves and blossoms, but has straighter and more shapely boughs and leaves a little larger. Of the fruits themselves, which we call pears, there are innumerable kinds, of which we will describe some that are found in Germany, adding also their German names,

which vary, however, in the different provinces.

"*Probstbirn*, that is, Provost pear, so-called from their broad base, near the stalk end in a blunt point, have a length of three inches, breadth a little less. Their color is pale green, speckled with green spots or dots; they are astringent to the taste, and by the abundance of their juice extinguish thirst. They ripen at the beginning of autumn, and quickly decay because of the abundance of watery and rather cold juice. They are found in abundance at Eisleben near the Harz forest in Saxony.

"*Speckbirn*, that is, Lard pear, swell in the middle with a thick belly, from which they suddenly taper off into a point; they have a length of more than three inches, a width somewhat less than three inches; they are of pale color, and like the Provost, speckled with green dots, rather mild and sweet to the taste, dissolving in the mouth like lard, whence they have received their name, and with the abundance of their juice they quench thirst; when they are peeled they give a sweet odor. They ripen at the beginning of autumn and very easily decay.

"*Kaulbirn*, that is, Ball pear, have almost the roundness of a globe, except that near the stalk they rise to a blunt and inconspicuous circle. Their length is scarcely two inches; they rarely exceed this, but in width slightly exceed their length. In color they are pale green, in taste and smell they rival the Lard with which also they come to ripeness; these too easily decay. They are found at Eisleben.

"*Hanffbirn*, that is, Hemp pear, are like the Ball but a little larger; they have a green color, marked with spots or dots; in taste they correspond to the Ball, but do not dissolve so

readily in the mouth; they ripen at the same time, and are easily affected by decay. These too are found at Eisleben.

"*Glockenbirn*, that is, Bell pear, from a broad base narrow down to a sort of narrow neck and then end in a blunt head; they have quite the shape of a bell, whence they have received their name. They are wholly of a yellow color spotted with dots, in length a little less than three inches, but in width they do not reach two inches. They have no unpleasant odor, especially when peeled; in taste they correspond to the Hemp, and reach maturity at the same time, and easily decay. They grow in abundance at Eisleben.

"*Königsbirn*, King's pear, or *Regalbirn*, Rule pear, that is, Royal pear, are large and big-bellied; they have a length sometimes of four inches, a width a little less; they are of bluish-gray color, but in that part where they have had the sun they become slightly red. They are astringent to the taste and with a copious juice, and that sweet and something like wine, they allay thirst. They ripen when the sun has entered Libra, and do not so easily decay.

"*Klunssbirn*, that is, Lump pear, are of two varieties; both kinds, however, correspond proportionately in shape to the Royal, but are inferior to them in size. There is a difference in color, for one kind has a bluish-gray color, the other reddish-gray. They have a juice similar in flavor to the Royal but more acid. They ripen with the Royal. In Saxony there is great abundance of them, especially at Hildesheim.

"*Bonnebirn*, that is, Bonn pear, so-called from the city of Bonn on the Rhine, from which they have been transplanted into other districts. They have an almost spherical shape, except that near the stalk they end in a blunt point. They are three inches in length, a little less in width. Their color

is on one side green or pale, on the other, where they have been touched by the sun, reddish. They are moderately acid to the taste, and abound with copious juice, rather watery, very refreshing in effect. They ripen when the sun is hastening toward Scorpio. They are abundant at Marburg in Hesse.

"*Schmalzbirn* that is, Butter pear, so called because they melt in the mouth like fat or some liquid mixture; their fruit is generally swollen at the lower end and gradually tapers to a narrow neck toward the stem. Like gourds they are three inches in length or often more, but in breadth two and a half inches. They have a pale yellow color, a pleasing fragrance, but are very acid in taste, with the admixture of a peculiar, winey flavor; when insufficiently ripe and not thoroughly chewed or too greedily devoured they sometimes stick in the throat and choke the breathing; on the other hand, when ripe and well masticated they melt in the mouth like fat. They ripen before the sun passes into Libra. They are found in Hesse, especially in Frankenberg, where there is great abundance of them.

"*Junckfrauenbirn gross*, that is, Maiden pear, large, are like the Lump pear in color and shape, but in size somewhat smaller. In taste they are powerfully astringent, so that they irritate the throat and contract the lips into a pucker like a maiden's kiss. They have a watery juice mixed as it were with sour wine. They ripen at the end of summer. At Brunswick in Saxony they are very abundant.

"*Junckfrauenbirn klein*, that is, Maiden pear, small, from a swelling belly they end in a narrow neck; they have a length a little less than three inches, but in breadth somewhat exceed an inch and a half; they are of beautiful color, as if one should mix dark blue-green with reddish-purple;

they are besides speckled with dots, acid in taste, and in like manner are easily dissolved in the mouth. They ripen at the beginning of autumn. They are much cultivated at Eisleben.

"*Hamelsswenstebirn*, that is, Ram's paunch pear, have received their name from the fact that in their swelling shape they resemble the bellies of wethers; they swell as it were with a thick paunch; reach three inches in length and often even more, but less in width. In color they are bluish-gray, but slightly reddish on that side which they have turned to the sun. They have a very acid flavor, with a certain pleasantness and a winey juice. They ripen at the end of summer. They are found in Hesse and neighboring districts, and there are preferred to other pears.

"*Loewenbirn*, that is, Lion pear, so called from their excellence; these are called Hessiatica in Thuringen and neighboring districts; their fruit is remarkable, holding the supremacy among all autumn fruits for duration and excellence of taste and juice. They are swollen in the lower part and generally unequal; they have a length of three inches and often greater; in width they not rarely exceed two inches. They are of greenish gray color, slightly reddened. They have an astringent taste of marked pleasantness. They abound in copious juice, winey, sweet-smelling, and very refreshing, so that they speedily quench thirst; indeed the pears themselves by their strong aromatic odor wonderfully revive the sick. They ripen when the sun has entered Libra; finally when stored away they last for a long time. They abound in Hesse, especially at Marburg and likewise at Frankenberg, a town near Marburg. They are called Barber's pear, from a certain barber who first introduced them there.

"*Hangelbirn*, that is, Hanging pear, are equal to the Butter in shape, color, and size; they hang

from a long stalk, whence they have received their name; in flavor they differ from the Butter, for their juice is not so winey nor so acid; they have a simpler flavor, not composed of so many qualities. However, they ripen at the same time. These too are cultivated in Hesse.

"*Margarethenbirn*, that is, Margaret's pear, are so called because they become ripe about St. Margaret's Day, when the sun is entering into Leo. They end in an oblong neck; in length they reach three inches, in width hardly two inches. They have a reddish-blue color. Their pulp is tender and juicy, of very sweet taste, easily melting in the mouth; they have a very pleasant smell. They abound at Brunswick in Saxony.

"*Winterbirn*, that is, Winter pear, from a round shape become slightly conical; they are less than three inches in length, little more than two inches in breadth. They have a green color, a very hard substance, so that they scarcely give way to the teeth. In taste they are very acid and refreshing, quenching the thirst with a watery, sour juice. They ripen late in autumn after all other fruits, after they have been touched with frosts and cold. They are found at Frankenberg in Hesse.

"*Knochenbirn*, that is, Bone pear, have received their name from their hardness; from a swelling belly they end gradually in a short and narrow neck. They rarely exceed two inches in length and an inch and a half in breadth. They have a light reddish color; they are of such hard substance that they cannot be chewed raw but only when cooked. They have a very acid taste. They ripen at the beginning of autumn. They are cultivated at Frankenberg in Hesse.

"*Augustbirn*, that is, August pear, would be almost round except that they end in a short point. Their length is a little more than two inches, their width a little less. They have a

yellow color, at times turning to pale red. In taste they are acid, with a peculiar sweetness of juice. They ripen early in August, whence they have received their name. They are short-lived and do not last long. They abound everywhere in Hesse.

"*Honigbirn gross*, that is, Honey pear, large, end in an oblong cone: they are two inches and a half in length, but in breadth hardly reach two inches. They have a bluish-gray color verging on yellow, and a surface not so smooth; in taste they are acid and abound in sweet juice; they ripen at the beginning of autumn, lasting for a while. They are found at Wittenberg in upper Saxony.

"*Honigbirn klein*, that is, Honey pear, small, are of conical shape, in length do not exceed an inch and a half, in width are a little less; they have a light reddish color, a flavor very sweet and pleasant, whence they have received their name. They melt readily in the mouth of those who taste them. They ripen soon after the August pear. They abound in Hesse.

"*Muscatellerbirn*, that is, Musk pear, are very small and conical, in length a little more than an inch, in width a little less. Their color is green tinged with red, their taste most sweet and aromatic, as if it were flavored with a little musk, whence their name. They easily melt in the mouth; they have also a pleasing odor. They ripen in June. They are carefully cultivated in Meissen.

"*Schaffbirn*, that is, Sheep pear, are like the larger Honey in size, shape and color, but a little more oblong and narrow. They have a very sweet flavor, moderately astringent, and easily dissolve in the mouth on account of the tender softness of their pulp and juice. They ripen when the sun is hastening toward Libra. They are found in Frankenberg in Hesse.

"*Waxbirn*, that is, Wax pear, are big-bellied at the lower end, at the upper end taper off into a cone; in length sometimes exceed three inches by a little, but in width rarely exceed two inches. They have a yellow or wax-like color, whence their name has been given them, but on that side where they have received the sun they invite those who look upon them to eat them by their pleasing, speckled redness. They have a sweet flavor, slightly astringent; their pulp is soft and easily melts in the mouth. They ripen when the sun has entered Virgo; they are short-lived and do not last long. They are found at Marburg in Hesse.

"*Rostbirn*, that is, Rust pear, are big-bellied in the middle and narrow down at both ends; in length three inches and a half, in width two inches and a half. They have a yellow color, speckled with bluish-gray spots; they have a very mild, sweet flavor, and easily melt in the mouth; because of their extreme softness they last a very short time. They ripen at the beginning of autumn. They are cultivated at Eisleben and neighboring towns.

"*Aschbirn*, that is, Ash pear, have their name because they are soft like ashes and easily dissolve in the mouth. They resemble the Rust pear in shape, color, quality of pulp, and flavor; but are a little smaller, and more conical at one end toward the stalk, though sometimes they become big-bellied in the middle like the Rust. They ripen with the Rust. They are cultivated at Eisleben.

"*Drinkebirn*, that is, Drink pear, are so called because like a drink they drive away anybody's thirst. They are swollen in the middle and end in a blunt point; in length a little over two inches, in width scarcely two inches. Their color is wholly yellow, but they redden on that side which is

exposed to the sun; they have a sweet flavor, tender pulp, abounding with copious and drinkable juice. They ripen with the Rust and quickly decay just as they do. They are cultivated in the country near Eisleben.

"*Eyerbirn*, that is, Egg pear, have received their name from their shape, which becomes conical at both ends like a short egg; otherwise they do not differ much from the Drink pear in proportion and shape. They are, however, a little smaller, have a yellow color speckled with dots. In flavor they rival the Rust and like them are moderately astringent; they have a very sweet fragrance, ripen with the Drink pear, and quickly decay. They too are found at Eisleben and neighboring towns.

"*Pfaltzgräuischbirn* (Palatinate grayish-pear), that is, Palatina, which are called Mass pear in Hesse, are the most excellent of the short-lived ones, and in like manner generally end in a cone; in length they reach two inches and a half, in width rarely exceed two inches. Their color is mid-way between saffron and reddish purple. They have a tender, juicy pulp, an exceptionally sweet flavor, aromatic as it were. They have a most pleasing fragrance both when they are whole and when they are cut, surpassed in excellence by no other variety of pear. They ripen at the end of August, when the sun has entered Virgo. They are found in the Rhine Valley, in France, Hesse, and many other regions.

"*Spindelbirn* or *Rautenbirn* (Rhombus pear), that is, Spindle pear, are like the Rust in shape, color, and size, but a little narrower; in substance and flavor they differ from them, since they consist of harder pulp and so last longer; they have a flavor astringent and at the same time sweet. They ripen with the Rust, and are cultivated in the country about Eisleben.

"*Zuckerbirn*, that is, Sugar pear, are a little more than two inches in length, rarely as much in width; of greenish color; they have a tender pulp, melting easily in the mouth like sugar, sweet and of pleasant flavor. They ripen with the Egg pear and do not last long. They are cultivated in the country about Eisleben.

"*Packelemischbirn*, that is, Paclemiana, are like the Sugar in size and shape; their color is green and bluish-gray; their surface is rather rough, their pulp hard, juicy, and acid. They ripen with the Sugar, and if they receive no injury they do not easily decay, but may last for some time, as most others do which have hard pulp and acid taste. They are cultivated in the country about Eisleben.

"*Kirchmessbirn*, that is, Church Mass pear, are round and big-bellied, and end toward the stalk in a long, narrow, and much attenuated point. In length they are three and a half inches, in breadth over two inches, though even smaller ones are produced. They are yellow in color, tender and juicy in pulp, and like the Palatina and Drink in flavor. They ripen in autumn and last almost until the sun enters Sagittarius. They are found at Wittemberg.

"*Knaustbirn* or *Gelbe Honigbirn* (Yellow Honey pear), that is, Bread Crust pear, have a broad base and are swollen and almost round, toward the stalk ending in a short, blunt, and rounded point; both in length and in breadth they sometimes exceed two inches and a half, but rarely; they are of yellow color, speckled generally around the bottom; they resemble the larger Honey in color and acidity; their pulp is rather hard but juicy, stony around the seed-receptacles. They have a flavor between that of the larger Honey and the Lion and that very pleasing. They ripen in autumn and sometimes

last almost to the winter solstice. They are cultivated at Wittemberg and neighboring places.

"*Klosterbirn*, that is, Cloister pear, swell out with uneven belly and toward the stalk become conical; they reach three inches in length and not much less in breadth. They have a yellow color, speckled with green dots; their pulp is rather hard and somewhat stony; their taste mildly astringent and of slightly glutinous sweetness. They ripen with the Bread Crust pear and last as long. They are found in the country about Wittemberg.

"*Glassbirn*, that is, Glass pear, are round and slightly conical; in length they generally reach two and one-third inches, in breadth a little over two inches; their color is light green verging on yellow; their flesh is tender, juicy, astringent to the taste, sweet and winey; they ripen with the Rust a little before the beginning of autumn. There is an abundant crop of them at Eisleben and neighboring towns. They last until the sun enters Sagittarius.

"*Kirchbirn*, that is, Church pear, have an oblong oval shape but end in a cone rather than an oval. They reach two inches in length, in width somewhat exceed an inch and a half. Their color is on one side yellowish-green, on the other, where they have received the sun, reddish. Their pulp is hard, rather juicy, slightly sour to the taste, and very astringent. They ripen at the end of summer and last for a long time. Of these too there is an abundant crop at Eisleben.

"*Quittenbirn*, that is, Quince pear, like the Cloister pear, swell out with uneven belly, and toward the stalk end in a short point, like the conical Cotonea, but protuberant ones are also found, whence the name was given them. In breadth as well as length they exceed two inches and a third. They have a green color, a hard,

juicy pulp, rather winey and astringent to the taste. They ripen at the beginning of autumn and last till the winter. They are found at Eisleben.

"*Parissbirn*, that is, Parisiana, are round at the lower end and taper to a point at the upper end. Their length is two and a half inches, their width not over two inches, or rarely more. Their color on one side is yellow, but on the other, where they have felt the sun, purple. Their pulp is juicy, their taste pleasantly astringent. They ripen with those before mentioned, lasting into the winter. There is an abundant crop of them in the country about Eisleben.

"*Weybersterbenbirn*, that is, Women's Death pear, would be round, except that toward the stalk they end in a short, blunt point. They generally exceed two inches in breadth as well as in length. They have a yellow color, saffron towards the base, speckled with purple dots. Their pulp is hard and rather stony, with juice slightly sour to the taste and very astringent, like the Church pear, with which also they ripen. They last into the winter. They are cultivated in the country about Eisleben.

"*Kölbirn*, that is, Cabbage pear, are large, almost round, tapering to a cone, three inches in length and one-half to one-third of an inch less in breadth. They have a pale green color, one side slightly reddish and speckled with dots. Their pulp is rather hard, juicy, somewhat sour and very astringent to the taste, like the Women's Death pear, with which also they ripen, and they last as long. They are cultivated at Eisleben.

"*Hölpenerbirn*, that is, Hollow pear, are large, big-bellied, uneven, and conical; in length they sometimes exceed two and a half inches, in width almost equal their length. Their color is green; they have a juicy pulp, winey in taste, slightly acid, and more astringent than the Brassicana.

They ripen at the beginning of autumn, and last long into the winter. There is a large crop of them in the country about Eisleben.

"*Safftbirn*, that is, Sap pear, are like the Hollow pear but a little smaller and less uneven, of a greenish-yellow color; their pulp is solid and when cut sheds a copious juice, when chewed passes almost wholly into juice and very little dry substance remains; when the juice is swallowed, it is cool to the taste, somewhat acid, winey, and astringent. They ripen at the beginning of autumn and last for a long time. They are found at Wittemberg.

"*Eierlingebirn*, that is, Little-egg pear, have received their name from their oval shape; in shape and size they are midway between the Drink and the Egg pear; their color is yellow, speckled with reddish dots on a dark background. They have hard, juicy pulp, acid to the taste, winey, and astringent. They ripen at the beginning of autumn and last for a long time. They grow at Wittemberg.

"*Kruselbirn*, that is, Curling pear, in shape resemble a top which boys throw upon the ground wound up with a string to make it spin. In length they reach three inches, in width two and a half. Their color is pale green, speckled with many green dots or spots; their pulp is solid, juicy, very astringent to the taste, somewhat acid and pleasant. They last until the sun has passed Aquarius or Pisces. They abound in Meissen.

"*Bratbirn gross*, also called *Fregelbirn*, that is, pears for roasting, are about the largest of all, for sometimes they weigh a mina (about 15.2 ounces) and a half; they are of globular shape, sometimes conical, and frequently irregular; of a color midway between pale green and red, redder on one side. They have a pulp with pleasant juice, astringent, partaking somewhat of acid.

They grow in Meissen, especially at Leisnig and Koldit.

"*Grauchenbirn*, that is, Gray pear, have received their name from their color, since they are ash-colored and at the same time greenish. They are small and of globular shape, measuring an inch in breadth as well as in length; in appearance are in no way different from some of the wild pears; in taste are soft, mild, sweet, with a pleasantly astringent quality; they last till after the winter solstice. They grow in the country about Meissen and Leipzig.

"*Gelbrotebirn*, that is, Yellow-red pear, have an oblong pyramidal shape, generally reaching a length of three inches, and a width of two inches. Their color on one side is yellow, on the other saffron and purple; their pulp is soft, astringent to the taste, pleasant, slightly acid, and watery. They ripen at the beginning of autumn, and last till the winter solstice. They grow at Hildesheim in Saxony.

"*Grünlingebirn*, that is, Green pear, are quite large, since sometimes they exceed three inches in length, two inches in breadth; they have an oblong pyramidal shape, a green color, a juicy pulp, sharply astringent to the taste. They ripen at the beginning of autumn, and last till after the solstice. There is a large crop of them at Hildesheim.

"*Wasserbirn*, that is, Water pear, rival Green pear in size, they have a shape big-bellied in the middle and taper to a point at both ends, sharper and more oblong toward the stem, but shorter and blunter near the base. Their color on one side is pale, speckled with dots, on the other reddish, pale on the edges. They have juicy pulp, watery and rather pleasant to the taste. They become ripe with the Green pear but do not last so long. They grow at Hildesheim.

> "*Kegelbirn*, that is, Cone pear, have the shape of a pine cone, and from a rather broad base end in a point; their length is three inches, their width two; their color on one side green, on the other reddish. Their pulp is juicy, harsh to the taste. Their maturity falls at the beginning of autumn, from which time they may last till the winter solstice. They are produced at Hildesheim."

THE PEAR IN ENGLAND

Much as America owes England for fruit, farm, and garden crops, she is but little indebted to her for pears. Varieties of pears have come to the New World almost wholly from Belgium and France, not more than three or four major sorts of English origin being among those now commonly grown in America. But even though the line of march in the development of varieties scarcely touches England, all English speaking pear-growers have received instruction as to culture and have had knowledge of continental varieties transmitted to them through English publications. In the history of fruits in England, therefore, many gleams of light illuminate the path along which the pear has been brought from the ancients to America.

No doubt the pear was brought to Britain before the Roman conquest. Tacitus, in the first century, says the climate of Britain is suitable to the culture of all fruits and vegetables except the grape and the olive. Pliny writes that the Britains had the cherry before the middle of the first century, and almost certainly the pear and other fruits were introduced with it. There was, also, a Saxon name for the pear, *pirige*, so philologists say, before the fall of the Roman Empire. The years 43 and 407 mark the

beginning and the end of the Romans and of civilization in Britain for many centuries, and whether or not the pear was permanently established during this time there are now no means of ascertaining. The climate and soil of England are congenial to the pear, however, and no doubt wild or little cultivated trees persisted until the Norman conquest, the spread of Christianity, and the building of many monasteries with orchards and gardens as essential adjuncts.

Even in England under the Normans who came in 1066, not much progress was made in fruit-growing. Tillers of the soil were hard pressed for the necessities of life and could only with difficulty harvest a bare sustenance from the land. Besides, monks and nobles preyed on the starving peasants so that at no time could the farmer be sure of reaping what he planted. Only these monks and nobles enjoyed luxuries. But even men who boasted of titles and owned large holdings of land had little room within fortified walls and on moated islands, which constant wars made necessary, for fruits; nor had they time from projects of war and the pleasures of the chase to devote to the art of agriculture. Fortunately, priors and abbots were well disposed toward the good things of life, therefore made much of fruits and vegetables, and with abundance of leisure the monks became the only proficients of the times in gardening and orcharding. Moreover, they were in constant correspondence with the continent and could ascertain what culture was needed to grow perfect fruits. Pear culture had its beginnings in England, then, in the monasteries established under the Normans.

Pressed for an exact date as to when the pear

began to be cultivated in England, the historians would be troubled to name one. There is a plan of the monastery of Canterbury made in 1165 which shows an orchard and a vineyard. History, moreover, relates that armed men collected in an orchard to take hand in the murder of Thomas Becket in 1170. Men in those days set small store by written accounts, and history must be helped out by imagination, and we may imagine that there were pears in this orchard.

Pears by this time had become common, for there are records of varieties to a considerable number and in large quantities which could have been had only from rather extensive orchards. Mrs. Evelyn Cecil[5] publishes documents from the Record office of England which contain items of pears bought for Henry III and Edward I at different times in the thirteenth century, the first date being “probably for the year 1223.” The pears appear to be of French origin, and the varieties are Caloels, Pesse Pesceles, Ruler, and Martyns. In a later memorandum, 1292-93, still other varieties are named as the Regul, Calwel, Dieyer, Sorell, Chryfall, and Gold Knoper. The pears were sold by the hundred and were used for desert, though “pears in syrup” and pears for cider are mentioned. The perusal of these documents, printed in considerable detail in Mrs. Cecil’s admirable book, enables us to fix the beginning of commercial pear culture in England at as early a date as 1200.

Passing by several other references from records and financial accounts of monasteries in the twelfth and thirteenth centuries as too vague to be of importance, although they make certain that the pear was rather widely cultivated in England in these two

centuries, we come at last to a noteworthy landmark in pear history in England, the introduction of the Warden pear, which may be put at the conveniently vague date of the end of the fourteenth century, 1388 being the first year they are mentioned.

"Warden" was a name used for centuries to designate a group of pear varieties having crisp, firm flesh and which were used for culinary purposes. Their history runs back to the Cistercian Abbey of Warden in Bedfordshire and to a date earlier than 1388. Warden pears were favorites for centuries for pies and pastries which every early cook-book contained recipes for making. In the early English literature they are considered a distinct fruit as "apples, pears, quinces, wardens," and even the herbals and early fruit books count them as distinct. Shakespeare's clown in *A Winter's Tale* says: "I must have saffron to colour the Warden pies." The name came to signify any long-keeping, cooking pear and even yet is so used in parts of England.

The most noteworthy landmark is found in the discussions of pears by the English herbalists of the sixteenth and seventeenth centuries. Turner, the first of these herbalists, in his *Herbal* of 1551, mentions the pear but without important details, though we may infer from what he says that the pear is now a common fruit. Thomas Tusser, in his *Five Hundred Points of Good Husbandrie*, published in 1573, gives a list of fruits to be set or removed in January in which he includes "pears of all sorts," and then as a separate item includes "Warden, white and red," showing that "Wardens" were held as distinct from the pear and that they were prominent in the orchards of the time. The century ends with John Gerarde's *Herball or Generall Historie of Plantes*, 1597,

in which we are brought to the realization that the pear is no longer a probationary fruit or even to be considered a novelty or luxury but a standard food product. Gerarde might well be quoted in full, but since Parkinson, a few years later, contains a "fuller discourse," as one of Gerarde's editors says, we take but a few sentences from Gerarde.

Varieties by this time had become numerous. Gerarde, while he names but eight, says he knew someone who grew "at the point of three score sundrie sorts of Peares, and those exceeding good; not doubting but that if his minde had beene to seeke after multitudes he might have gotten together the like number of those worse kindes ... to describe each pear apart, were to send an owle to Athens, or to number those things without number." Eight sorts are considered worth figuring, those accorded the honor being: "the Jenneting, Saint James, Royall, Beugomot, Quince, Bishop, Katherine, and the Winter Peare." Of these the Katherine is given further prominence by being listed as "known to all." If one is to judge from number of varieties, the pear at this time is a more general favorite than the apple, a considerably greater number of sorts being indicated.

Parkinson's account in his *Paradisus* of 1629, indeed does prove to be a "fuller discourse" for he names and describes 65 sorts; but these are not all for he says: "The variety of peares is as much or more then of apples, and I thinke it is as hard in this, as before in apples, for any to be so exquisite, as that hee could number up all the sorts that are to be had: for wee have in our country so manie, as I shall give you the names of by and by, and are hitherto come to our knowledge: but I verily beleeve that there be

many, both in our country, and in others, that we have not yet knowne or heard of; for every yeare almost wee attaine to the knowledge of some, we knew not of before. Take therefore, according to the manner before held, the description of one, with the severall names of the rest, untill a more exact discourse be had of them, every one apart." Some of the names in Parkinson's list are group names covering several varieties. Thus, he says, "the Winter Bon Chretien is of many sorts;" and again, "the Winter Bergomot is of two or three sorts;" and, "the Winter peare is of many sorts."

Parkinson's descriptions are brief but written with rare clearness, and the old herbalist seems to have possessed a nicety of observation that commends him to all who have eyes for the distinguishing characters of fruits. With Parkinson our history of the pear in England must come to a close, since later accounts are available to all, and therefore as an important inventory, and because every word is pertinent, his account of varieties is republished.

> "The Summer bon Chretien is somewhat a long peare, with a greene and yellow russetish coate, and will have sometimes red sides; it is ripe at Michaelmas: Some use to dry them as they doe Prunes, and keepe them all the yeare after. I have not seene or heard any more Summer kindes hereof then this one, and needeth no wall to nourse it as the other.
>
> "The Winter bon Chretien is of many sorts, some greater, others lesser, and all good; but the greatest and best is that kinde that groweth at Syon: All the kinds of this Winter fruit must be planted against a wall, or else they will both seldome beare, and bring fewer also to ripenesse, comparable to the wall fruit: The kindes also are according to their lasting; for some will endure

good much longer than others.

“The Summer Bergomot is an excellent well rellished peare, flattish, & short, not long like others, of a meane bignesse, and of a darke yellowish greene colour on the outside.

“The Winter Bergomot is of two or three sorts, being all of them small fruit, somewhat greener on the outside then the Summer kindes; all of them very delicate and good in their due time: For some will not be fit to bee eaten when others are well-nigh spent, every of them outlasting another by a moneth or more.

“The Diego peare is but a small peare, but an excellent well rellished fruit, tasting as if Muske had been put among it; many of them growe together, as it were in clusters.

“The Duetete or double headed peare, so called of the forme, is a very good peare, not very great, of a russettish browne colour on the outside.

“The Primating peare is a good moist peare, and early ripe.

“The Geneting peare is a very good early ripe peare.

“The greene Chesill is a delicate mellow peare, even melting as it were in the mouth of the eater, although greenish on the outside.

“The Catherine peare is knowne to all I thinke to be a yellow red sided peare, of a full waterish sweete taste, and ripe with the foremost.

“The King Catherine is greater than the other, and of the same goodnesse, or rather better.

“The Russet Catherine is a very good middle sized peare.

“The Windsor peare is an excellent good

peare, well knowne to most persons, and of a reasonable greatnesse: it will beare fruit some times twice in a yeare (and as it is said) three times in some places.

“The Norwich peare is of two sorts, Summer and Winter, both of them good fruit, each in their season.

“The Worster peare is blackish, a farre better peare to bake (when as it will be like a Warden, and as good) than to eate rawe; yet so it is not to be misliked.

“The Muske peare is like unto a Catherine peare for bignesse, colour, and forme; but farre more excellent in taste, as the very name importeth.

“The Rosewater peare is a goodly faire peare, and of a delicate taste.

“The Sugar peare is an early peare, very sweete, but waterish.

"The Summer Popperin
"The Winter Popperin
} both of them are very good dry firme peares, somewhat spotted, and brownish on the outside.

“The greene Popperin is a winter fruit, of equall goodnesse with the former.

“The Soveraigne peare, that which I have seene and tasted, and so termed unto me, was a small brownish yellow peare, but of a most

dainty taste; but some doe take a kind of Bon Chretien, called the Elizabeth peare, to be the Soveraigne peare; how truely let others judge.

“The Kings peare is a very good and well tasted peare.

“The peare Royall is a great peare, and of a good rellish.

“The Warwicke peare is a reasonable faire and good peare.

“The Greenfield peare is a very good peare, of a middle size.

“The Lewes peare is a brownish greene peare, ripe about the end of September, a resonable well rellished fruit, and very moist.

“The Bishop peare is a middle sized peare, of a reasonable good taste, not very waterish; but this property is oftentimes seene in it, that before the fruit is gathered, (but more usually those that fall of themselves, and the rest within a while after they are gathered) will be rotten at the core, when there will not be a spot or blemish to bee seene on the outside, or in all the peare, untill you come neare the core.

“The Wilford peare is a good and a faire peare.

“The Bell peare a very good greene peare.

“The Portingall peare is a great peare, but more goodly in shew than good indeed.

“The Gratiola peare is a kinde of Bon Chretien, called the Cowcumber peare, or Spinola’s peare.

“The Rowling peare is a good peare, but hard, and not good before it bee a little rowled or bruised, to make it eate the more mellow.

“The Pimpe peare is as great as the Windsor

peare, but rounder, and of a very good rellish.

“The Turnep peare is a hard winter peare, not so good to eate rawe, as it is to bake.

“The Arundell peare is most plentifull in Suffolke, and there commended to be a verie good peare.

“The Berry peare is a Summer peare, reasonable faire and great, and of so good and wholesome a taste, that few or none take harme by eating never so many of them.

“The Sand peare is a reasonable good peare, but small.

“The Morley peare is a very good peare, like in forme and colour unto the Windsor, but somewhat grayer.

“The peare pricke is very like unto the Greenfield peare, being both faire, great, and good.

“The good Rewell is a reasonable great peare, as good to bake as to eate rawe, and both wayes it is a good fruit.

“The Hawkes Bill peare is of a middle size, somewhat like unto the Rowling peare.

“The Petworth peare is a winter peare, and is great, somewhat long, faire, and good.

“The Slipper peare is a reasonable good peare.

“The Robert peare is a very good peare, plentiful in Suffolke and Norfolke.

“The Pound peare is a reasonable good peare, both to eate rawe, and to bake.

“The Ten Pound peare, or the hundred pound peare, the truest and best, is the best Bon Chretien of Syon, so called, because the grafts cost the Master so much the fetching by the messengers expences, when he brought nothing

else.

“The Gilloflower peare is a winter peare, faire in shew, but hard, and not fit to bee eaten rawe, but very good to bake.

“The peare Couteau is neither good one way nor other.

“The Binsce peare is a reasonable good winter peare, of a russetish colour, and a small fruit: but will abide good a long while.

“The Pucell is a greene peare, of an indifferent good taste.

“The blacke Sorrell is a reasonable great long peare, of a darke red colour on the outside.

“The red Sorrell is of a redder colour, else like the other.

“The Surrine is no very good peare.

“The Summer Hasting is a little greene peare, of an indifferent good rellish.

“Peare Gergonell is an early peare, somewhat long, and of a very pleasant taste.

“The white Genneting is a reasonable good peare, yet not equall to the other.

“The Sweater is somewhat like the Windsor for colour and bignesse, but nothing neare of so good a taste.

“The bloud red peare is of a darke red colour on the outside, but piercing very little into the inner pulpe.

“The Hony peare is a long greene Summer peare.

“The Winter peare is of many sorts, but this is onely so called, to bee distinguished from all other Winter peares, which have severall names given them, and is a very good peare.

> "The Warden or Luke Wards peare of two sorts, both white and red, both great and small.
>
> "The Spanish Warden is greater than either of both the former, and better also.
>
> "The peare of Jerusalem, or the stript peare, whose barke while it is young, is as plainly seene to be stript with greene, red, and yellow, as the fruit it selfe is also, and is of a very good taste: being baked also, it is as red as the best Warden, whereof Master William Ward of Essex hath assured mee, who is the chiefe keeper of the Kings Granary at Whitehall.
>
> "Hereof likewise there is a wilde kinde no bigger than ones thumbe, and striped in the like manner, but much more.
>
> "The Choke peares, and other wilde peares, both great and small, as they are not to furnish our Orchard, but the Woods, Forrests, Fields, and Hedges, so wee leave them to their naturall places, and to them that keep them, and make good use of them."

Three hundred years have played havoc with the pears Parkinson knew. None are known in America, and unless the Pound of Parkinson is the Pound of today, not a half dozen are found in current lists in England. Parkinson's Catherine, Winter Bon Chretien, Windsor, Bergamot, possibly the Pound, and his Gergonell, the Jargonelle of today, are about all the names that would be recognized by modern pear-growers. The pear shows far fewer familiar names at the end of three centuries than Parkinson lists of apples, plums, cherries, or even the peach in Europe. Dropping old varieties can only be interpreted as improvement in the pear. The pear, it seems certain, has been more profoundly changed for the better through the touch of man's hand than the other fruits

named since Parkinson wrote. For this, pomology has the Belgians to thank.

Pear culture seems to have reached its height, if it be judged by its literature and by the number of varieties cultivated, early in the nineteenth century. The Belgians' passion for pears was no doubt the chief stimulus, for the Belgian breeders spread their offerings with generous hand throughout England. In 1826, the catalog of the Horticultural Society of London listed 622 pears. Pomology in England was then, and is now as compared with America, an art of the leisure classes. This has been an advantage and a disadvantage to the pear in England. The advantage is that when fruit is grown for pleasure many varieties are grown to add novelty to luxury so that the fruit is thereby more rapidly improved and its culture brought to greater perfection. The disadvantage is that those who grow fruit for market find a poorer market for their wares since those who should be their best customers supply their own wants. For the reason, therefore, that the English take delight in growing their own fruit, pear-growing is not the great commercial enterprise that it is in America.

Pear-growing in England differs from that of America in another respect. The pear-tree in England is built as much as planted. In many plantations each tree has a precise architectural form. The plants are trained into fans, cordons, espaliers and u-forms on walls; or as pyramids, globes, or vases in the open; sometimes in fantastic shapes to suit the fancy of the grower; and now and then as a hedge or border. The undisciplined standards of America are hardly known, though what the English call a standard seems to be increasing. This difference in training is

due in part to the necessity of meeting different climatic conditions, and in part to greater devotion on the Englishman's part to the art of gardening—the use of the shears, the knife, and the billhook give the gardener greater scope. The pear-tree in England is often decorative as well as useful.

THE PEAR IN AMERICA

The pear is a popular fruit in America, but its culture as a commercial product is limited to a few favored localities. From the earliest records of fruit-growing in America the pear has been grown less than the apple and peach and scarcely more than the cherry and plum. In Europe, it is a question if the pear is not more commonly grown than the apple, and is much more common than the plum and the peach, the last-named fruit being grown out of doors for most part only in southern Europe. Pears are more varied in size, shape, texture, and flavor of flesh than others of the hardy tree-fruits, and in length of season exceed all others excepting the apple. Varieties of pears, possibly, have the charm of individuality more marked than varieties of its orchard associates. The trees, where environment permits their culture, are not difficult to grow, and attain greater size, produce larger crops, and live longer than any other hardy fruit. Why, then, is the pear not more popular in America? Conditions of climate, pests, season of ripening, taste, and trade prevent the expansion of pear-culture on this side of the Atlantic.

The climate in most parts of America is uncongenial to the pear. Pears from the European stock, to which most varieties grown in America belong, thrive only in relatively equable climates,

and do not endure well the sudden and extreme variations in climate to which most parts of this continent are subject. Extremes of heat or cold, wetness or dryness, are fatal to the pear. In North America, therefore, commercial pear-culture is confined to favored localities on the Atlantic seaboard, about the Great Lakes, and on the Pacific slope. Even in these favored regions, pears sent to market come largely from the plantations of specialists. On the Atlantic seaboard, European pears are products of commerce only in southern New England and New York, westward through Ohio on the shores of Lake Erie, and in the southern lake regions of Michigan. Away from these bodies of water to the Pacific, varieties of European pears refuse to grow except with the utmost care in culture and selection of sites. On the Pacific slope, in the hardy-fruit regions, the pear reaches its highest development in the New World. Oriental pears, or varieties having Oriental blood, as Kieffer and Le Conte, are grown in every part of America where the culture of hardy fruits is attempted.

Liability to loss by pests is a great detriment to the popularity of the pear in America. The insect pests of pears are numerous. Codling-moths attack the fruit wherever the pear is grown in America, and can be kept down only by expensive arsenical sprays. The psylla, while irregular in its outbreaks, is most damaging and hard to control when it appears. These are the chief insect enemies, but a dozen others take more or less toll from tree or fruit. Foliage and fruit are attacked by several parasitic fungi, of which pear-scab is most troublesome, requiring treatment wherever the pear is grown, and under favorable conditions for the fungus preventives often fail to give the fruits a fair cheek. But of all diseases pear-

blight is the most serious, its effects and virulency being such as to give it the popular name “fire-blight.” It is caused by a bacterium which cannot be checked by sprays, and must be combatted with expensive and unsatisfactory sanitary measures, such as cutting out branches and trees, so drastic as to make impossible commercial cultivation of pears in regions where climate favors the disease.

Pears compete with apples more than with any other fruit, but are at a disadvantage with this near relative in having a much shorter period during which the fruits can be used. Varieties of the two fruits begin to ripen at nearly the same season, but there are few sorts of pears in season later than December, and these are of poorer quality than the fall varieties; while apples are abundant and of prime quality four or five months later, and may be kept until early apples usher in a new season. During most of its season, also, the pear must compete with the perishable summer and autumn plums and peaches, so luscious and delectable that the firmer and less highly flavored pome-fruits suffer in comparison.

Still another reason why the pear is not a popular dessert fruit in America is that, of all fruits, the varieties of this one are the most variable in quality of the product. Sorts that should produce pears of highest quality bear fruits poor or indifferent in texture and flavor in unfavorable seasons, on unsuitable soils, or under neglect. Good pears can be grown only when environmental factors are favorable and under the most generous treatment. Extensive cultivation of the Kieffer and its kin for canning has hindered the cultivation of pears for the fruit-stand and to grace the table as a dessert fruit. So common has the Kieffer become that many of the

present generation are hardly aware that the pear may be a delicious fruit to eat out of hand.

Lastly, the pear falls short of the apple as a commercial product because it is not nearly so satisfactory to handle as a commercial crop. Pears are more difficult to pack, and do not stand transportation as well as apples. They cannot be kept in cold storage nearly as long, and decay more quickly when brought into warmer temperatures. The demand for evaporated pears is slight in comparison with that for evaporated apples, and although perry, the expressed juice of pears, is quite as refreshing as cider, this by-product of the fruit is little known in America. As a prepared product, the pear surpasses the apple only as a canned fruit. Failing in comparison with the apple, as a commercial product, pears are largely left to fruit connoisseurs, and with these a generation ago the pear was the fruit of fruits, many splendid collections of it having been made in regions where pears could be grown. With the expansion of commercial fruit-growing, collections of pears, and with them many choice varieties, have gone out of cultivation—more is the pity—and pear-growing has expanded least of all the fruit industries in the United States.

With this brief discussion of the present status of pear-culture in this country, we can proceed to trace the history of the pear with more exactness by reason of knowing its limitations under American conditions.

The peach is the only hardy fruit that belongs to the heroic age of Spanish discovery in the New World. Pears, apples, plums, and cherries came to the new continent with the French and English. The early records of fruit-growing in America show that

the pear came among the first luxuries of the land in the French and English settlements from Canada to Florida. Pioneers in any country begin at once to cultivate the soil for the means of sustenance. Naturally, cereals and easily-grown nutritious vegetables receive attention first as giving more immediate harvests and more sustaining fare to supplement game and fish. Agriculture and gardening usually precede orcharding, and this was the case in early settlements in America, but not long. The first generation born in colonial America knew and used all of the hardy fruits from Europe; as many records attest, and of which there is confirmatory proof with the pear in many ancient pear-trees of great size near the old settlements, some of which were planted by the first settlers from Europe. Of pears, many notable trees planted by the hands of the first English and French who crossed the seas to settle the new country were conspicuous monuments in various parts of America in the memory of men still living, if, indeed, some of the old trees themselves are not still standing.

Of these ancient pear-trees, New England furnishes the most notable monuments to mark the introduction of this fruit in the New World. Fortunately, their histories have been preserved in several horticultural annals, and of these accounts the fullest and best is by Robert Manning, Jr., in the Proceedings of the American Pomological Society for 1875, pages 100 to 103. Manning's notes throw so much light on the early history of the pear in New England, as well as upon the varieties then grown, that they are published in full.

"The *Endicott* Pear. The tradition in the Endicott family is that this tree was planted in 1630. It is said that the trees constituting the original orchard came over from England in June, in the Arabella with Governor Winthrop, or in one of the other ships of the fleet arriving at Salem in June. The farm on which the tree now stands, not having been granted to Endicott until 1632, it is not probable that the trees were planted there before that time, but they might have been at first set in the Governor's town garden at Salem, where the Rev. Francis Higginson, on his arrival in the summer of 1629, found a vine-yard already planted. The tradition further states that the Governor said that the tree was of the same date with a sun-dial which formerly stood near it. This dial, after having passed through the hands of the Rev. William Bentley, D.D., is now in the Essex Institute in Salem, and bears the date 1630, with the Governor's initials. The farm, which early bore the name of 'Orchard,' was occupied and cultivated by the Governor and his descendants for 184 years, from 1632 to 1816, and was held solely by the original grant until 1828, a period of 196 years. Under these circumstances the history of the tree is more likely to have been handed down correctly than if the estate had changed hands. It is certain that Governor Endicott was early engaged in propagating trees, for in a letter to John Winthrop in 1644, he speaks of having at least 500 trees burnt by his children setting fire near them, and, in a letter to John Winthrop, Jr., a year later, of being engaged to pay for 1500 trees.

"As early as 1763 the tree was very old and decayed. It was very much injured in the gale of 1804. In the gale of 1815 it was so much shattered that its recovery was considered

doubtful. It was injured again in a gale about 1843. For the last fifty years it has been protected by a fence around it. In 1837 it was eighty feet high by measurement and fifty-five feet in the circumference of its branches, and does not probably vary much from these dimensions now. Two suckers have sprung up on opposite sides of the tree, which bear the same fruit as the original, proving it to be ungrafted. It stands near the site of the first mansion of the Governor, on a slope where it is somewhat sheltered from the north and north-west winds. The soil is a light loam, with a substratum of clay. Grafts taken from the old tree grow very vigorously. From a pomological point of view, the fruit is of no value. It is hardly of medium size, roundish, green, with more or less rough russet, very coarse, and soon decays.

"It may be of interest to state that the farm on which the old tree stands is again in the Endicott name, having lately been purchased by a descendant of the Governor. The tree stands in the town of Danvers originally a part of Salem.

"For further facts concerning this tree, see the *Transactions of the Massachusetts Horticultural Society* for 1837, and also an article by Charles M. Endicott, a descendant of the Governor, in Hovey's *Magazine of Horticulture*, vol. xix, p. 254, June, 1853, from which the above account has been mainly derived. Each of these articles is illustrated with a cut of the pear.

"The *Orange* Pear. This tree is owned by Capt. Charles H. Allen, and stands in his yard on Hardy street, Salem. The Rev. Dr. Bentley, who died about 1820, investigated the history of this tree and found it to be then 180 years old, which would make it now 235 years old. The trunk is hollow, nine feet five inches in circumference in the smallest part near the ground; just below the

limbs it is several inches more. The tree is more than forty feet high, and the limbs are supported by shores. It was grafted in the limbs, as a branch fifteen or twenty years old, shooting out several feet higher than a man's head, produces 'Button' pears, and a large limb, part of which was 'Button' which grew out still higher up, was blown off several years ago. In the very favorable pear season of 1862 it bore thirteen and a half bushels of pears. It bears in alternate years, having produced eight and a half bushels in 1873. The brittleness of the limbs of old pear trees is well known, yet Capt. Allen, with a care worthy of imitation, gathers every pear, excepting about a dozen specimens, by hand.

"This variety was, until the introduction of the modern kinds, highly esteemed. It is above medium size, averaging fifty-six pears to the peck, globular obtuse pyriform, covered with thin russet, juicy when gathered early and ripened in the house; of pleasant flavor but rather deficient in this respect. It is ripe about the middle of September. It was considered by my father a native, and was called by him the *American Orange*, and after examination of the descriptions and plates, I cannot think it the same as the *Orange Rouge* or *Orange d'Automne* of Duhamel, Decaisne, and Leroy. The Hon. Paul Dudley, Esq., of Roxbury, in some 'Observations on some of the Plants in New England with remarkable Instances of the Power of Vegetation,' communicated to the Royal Society of London (I quote from the 'Philosophical Transactions,' abridged, London, 1734, Vol. VI, Part II, p. 341), says: 'An *Orange* Pear Tree grows the largest, and yields the fairest fruit. I know one of them near forty Foot high, that measures six Foot and six Inches in Girt, a Yard from the Ground, and has borne thirty Bushels at a Time, and this Year I measured an *Orange* pear, that grew in my own Orchard, of

eleven Inches round the Bulge.'

"If this is, as believed, of native origin, it is the oldest American fruit in cultivation, unless we except the *Apple* pear, which is probably of about the same date. This is small, oblate, of pale yellow color, ripening in August. It is quite distinct from the *Poire Pomme d'Hiver*, of Leroy, and I think also from the *Poire Pomme d'Été*, of the same author. I had supposed the variety to be extinct, but last year discovered in a garden in Salem the remnant of an old tree with a trunk four feet in diameter, and still producing fruit.

"The *Orange* pear tree which produced the specimens exhibited, was inherited by the present owner from his father, to whom it came from his wife. It had descended to her almost from the first settlement of Salem, but partly in the female line, so that the name of the owner sometimes changed. The house on the estate was built in 1812, having replaced one which was pulled down after standing 150 years. Within the period of a generation there were standing in Salem several trees of the *Orange* pear, some of which were reputed to be more than two centuries old, and all of which were undoubtedly very ancient, but they are all now gone except Capt. Allen's, the last one having been blown down in the winter of 1874-75. I have heard a tradition that this last mentioned tree was one of several imported from England and planted in gardens at intervals on the northerly side of the principal street in Salem. This tradition may or may not be true with regard to these trees, but it would not apply to the Allen tree, for the height at which it was grafted forbids the idea that it was imported from England in a grafted state.

"The *Anthony Thacher* Pear. This tree stands near the meadows about a fourth of a mile north of the Universalist church in Yarmouth, where

Anthony Thacher's house formerly stood. It is a large, rotten-hearted old tree. It has lost nearly all its old branches, but has thrown out many new ones. The late Judge George Thacher, who, if now living, would be 120 years old, inquired into its history, and made the matter certain that it was planted by Anthony Thacher about 1640. It is believed to be a grafted tree, as it contracts two or three inches at about a foot and a half from the ground. It is taken good care of and will probably last many years. It is now owned by the heirs of James C. Hallet. There are other trees of the same kind in the vicinity, but their age cannot be proved.

"The fruit is of medium size, ovate pyriform, green, changing to yellow at maturity, of tolerable quality, ripening early in September. For the specimens exhibited, as well as the facts above noted, I am indebted to the kindness of Amos Otis, Esq., of Yarmouth Port, who had made the local history of Cape Cod his study for the last fifty years, and who died much lamented on the 19th of October last.

"Anthony Thacher came from England in 1635, and after residing in Marshfield, removed to Yarmouth in 1639, being one of the three original grantees of land in that town. The late Dr. James Thacher, of Plymouth, author of the 'American Orchardist' (published in 1821), was a descendant of Anthony in the sixth generation. Anthony Thacher accompanied his cousin, Rev. John Avery, in that disastrous voyage of which Whittier has perpetuated the memory in his ballad, 'The Swan Song of Parson Avery.' Anthony Thacher got ashore on Thacher's Island, the headland of Cape Ann, and gave name to the island. (See Whittier's 'Home Ballads' and Young's 'Chronicles of the First Planters of Massachusetts,' p. 485.)

"I endeavored, but without success, to obtain fruit from the pear tree planted at least as early as 1650, by Governor Prence, or Prince, at Eastham, on Cape Cod, and now owned by Capt. Ezekiel Doane. It is known as the *Fall* pear. It is about the size of a hen's egg, tapering towards both ends, green, nearly covered with thin russet, of inferior quality, but not as coarse as the *Endicott*. In 1836 it was a flourishing, lofty tree, producing an average of fifteen bushels of fruit. It consisted of two stems, branching from the ground, the larger of which was blown down in the great storm of April, 1851. The portion now remaining is thirty-five feet high. It is a natural tree and has not failed of bearing for twenty years. It stands in low ground.

"The *Pickering* or *Warden* Pear. This tree was grafted on the 19th of April, 1775, the day the battle of Lexington was fought, and must have been at that time a small tree. It is called by the owner the *Uvedale Warden* or *Pickering* pear, which are synonyms of the *Uvedale's St. Germain* or *Pound*, but it is entirely distinct from that variety, being much smaller as well as otherwise different. It resembles, and very probably is identical with, a variety which I have known as the *English Warden*, but which I do not find described in any pomological work, and have not seen for years. It is of medium size, turbinate, light yellow, with a dull brownish cheek, in use in winter, for cooking only. Paul Dudley says, in the paper above quoted, 'I have a *Warden* Pear Tree that measures five Foot six Inches round.'

"The Pickering tree contracts suddenly at about a foot from the ground, where it must have been grafted. It shows no sign of being grafted elsewhere. Below the point of grafting, it is full two feet in diameter and is about twenty-five feet high. It stands in a low, moist place. The top was

much injured by the great gale of September, 1869, losing several large limbs, but the tree is on the whole in good preservation. In the same garden is a tree probably as old or older, believed to be a *Messire Jean*.

"The estate, now much circumscribed from its original extent, on which this tree stands, has been in the same family since 1642, having been purchased in that year by John Pickering, who came from England in 1637, and built the house, now standing and occupied by the owner, in 1651. It is on Broad street, Salem. The tree was grafted by John Pickering, of the fifth generation.

"The Hon. Timothy Pickering, eminent for his incorruptible integrity and immovable firmness, who successively held the offices of Adjutant-general and Quartermaster-general in the Revolutionary army, and of Postmaster-general, Secretary of War, and Secretary of State in the Cabinet of President Washington, and continued to hold the last named office under President Adams, was a brother of John. At the breaking out of the Revolution he was Colonel of the Essex regiment, and on the day when this tree was grafted by John Pickering, who was an invalid, his more vigorous brother mustered his regiment and marched to intercept the retreating British troops. Timothy Pickering was also interested in agriculture, having been Secretary of the Philadelphia Society for Promoting Agriculture, the oldest agricultural society in the United States, and after his return to Massachusetts, was the first President of the Essex County Agricultural Society. The estate on which the old pear tree stands was devised by John Pickering, who died unmarried, to his nephew John, son of Timothy, the most eminent American philologist of his time. On his death, it descended to his son John, the present owner, to whom I am indebted

> for the facts here stated, as well as for the specimens of fruit exhibited at Chicago last September."

Out of an embarrassing number of references in regard to the early introduction of the pear in New England one may choose the following: Francis Higginson, writing in 1629, notes that pears are under cultivation in New England.[6] In the same year, a memorandum of the Massachusetts Company shows that seeds of pears, with those of other fruits were sent to the colony.[7] Trees from these seeds grew amazingly fast in the virgin soils of the colony, for John Josselyn, who made voyages to New England in 1638 and 1639, writing in his *New England Rarities Discovered*, notes that "fruit trees prosper abundantly" enumerating, among others, those of the pear.[8] Josselyn further says "the Kernels sown or Succors planted produce as fair and good fruit, without grafting, as the trees from which they were taken," and that "the Countrey is replenished with fair and large Orchards." As early as 1641 a nursery had been started in Massachusetts and no doubt was selling pear-trees. These probably came from seeds, for trees were not imported until in the next century. Varieties were few then as for many years later. In 1726, Paul Dudley, one of the Chief Justices of Massachusetts, in a paper in the *Philosophical Transactions*, says, "Our apples are without doubt as good as those of England, and much fairer to look to, and so are the pears, but we have not got all the sorts." In another paragraph, Justice Dudley gives the following account of several varieties of pears in these first orchards in New England.

He says:[9]

> "An *Orange* Pear Tree grows the largest and yields the fairest Fruit. I know one of them near forty Foot high, that measures six Foot and six Inches in Girt, a Yard from the Ground, and has borne thirty Bushels at a Time: and this year I measured an *Orange* Pear, that grew in my own Orchard, of eleven Inches round the Bulge. I have a Warden Pear Tree, that measures five Foot six Inches round. One of my Neighbors has a *Bergamot* Pear Tree that was brought from *England* in a Box, about the Year 1643, that now measures six Foot about, and has borne twenty-two Bushels of fine Pears in one Year. About twenty years since, the Owner took a Cyon, and grafted it upon a common Hedge Pear; but the Fruit does not prove altogether so good, and the Rind or Skin, is thicker than that of the Original."

Thus, early in the history of Massachusetts, the pear was largely planted and became a prominent fruit. These early plantations grew so well that no doubt they inspired the horticulturists of the first half of the nineteenth century, of which the names of Dearborn, Hovey, Kenrick, the two Mannings, and Wilder are notable in the history of the pear in this country, to undertake the popularization of this fruit by extensive culture, by breeding new varieties, and by the introduction of the best pears from Europe. Their work, as we shall see later, gave pear-growing its first great impetus in America. Until the middle of the last century, the pear industry in America centered in Massachusetts; and most of the new varieties which originated in this country and nearly all of the introductions from abroad came from that state.

The pear was not neglected in the other New England states as the horticultural records of all attest, but its history in the several states is so similar

in time and events that the account of its early culture in Massachusetts suffices for the whole region. It must, however, be noted that the pear was introduced in Maine at a very early date, probably by the French. In an orchard on the east bank of the Sheepscot, below Wiscasset Bay, a venerable pear-tree stood until early in the nineteenth century of such girt and height that it was supposed to be more than 200 years old. Of the planting of this orchard there are no records nor traditions. The most reasonable supposition was that the trees had been planted there by the French in one of the several attempts of France to colonize the coast of Maine.[10]

This introduction of the French in the history of the pear in the New World, brings us to a discussion of the part they took in bringing this fruit to America. The debt to France for early horticulture in America rests largely on tradition, but in the case of the pear, there are such substantial proofs of it in ancient pear-trees of enormous size found on the sites of old French settlements, that though there are no written records, and even the people and their habitations have disappeared, it is certain that the seeds from which these venerable trees sprang were planted by early French explorers or missionaries. The first plantings of pears made by the French were in Canada. History and tradition, substantiated by ancient trees, make certain that this fruit was planted by the first French settlers in Nova Scotia, Cape Breton, Prince Edward Island, in favored situations bordering on the St. Lawrence, and on the islands in this river, notably the Island of Montreal. Later plantations of fruit were set in the Niagara region and along the Detroit river. No new varieties seem to have come from these early plantings in Canada, but they demonstrated that pear-growing was possible.

The history of the pear in America cannot be written without making note of the magnificent specimens of this fruit standing until recent years—a few may still be found—about the old French settlements in Michigan, Indiana, and Illinois. These are offspring of seeds brought from France. A century ago the French *habitants* in Detroit had a tradition as to the manner in which these pears were introduced. The legend ran that an emigrant from France brought three pear seeds in his vest pocket, which, planted on the banks of the Detroit river, became the parents through suckers and seeds of the gigantic old pear-trees that have long been such striking landmarks of the towns and farms on the Detroit river. No doubt these trees are the remains of orchards in which there were apples, and possibly some plums and cherries, of which the shorter-lived trees long since disappeared, while the pears, flourishing in a green old age, are the sole remaining relics of the old French settlements of this region. The writer herewith puts on record another account of these truly remarkable pears as he saw them in 1899.

All of these ancient French pears are of the same type, but the fruits vary slightly, indicating that the trees were grown from seeds, although some may have come from sprouts since many of the trees throw out sprouts abundantly. The pears are of medium size, usually turbinate, and lemon-yellow is the predominating color. The ripening season runs from late summer to early winter. The flesh is melting, juicy, usually mildly sweet, spicy, not high in quality for dessert but excellent for all culinary purposes. But the most remarkable characters of these French pears are the great size of the trees and their vigor, healthfulness, productiveness, and

longevity. The trees have the majestic port of a century-old elm or oak. They attain a height of eighty feet; a girt of eight or ten feet is not uncommon, while one monarch measured by the writer fell a few inches short of eleven feet in circumference three feet from the ground. The leaves are small but abundant, and are of the luxuriant green color that betokens great vigor. The trees have attained immunity to blight, but the fruits are inviting prey to codling-moth when that insect is rife. In these rich river-bottom lands the trees almost annually load themselves with fruit, a crop of from forty to fifty bushels on one tree not being uncommon. No one knows the age of most of these ancient lichen-covered giants, although one which stood until a few years ago was known to have been planted within the pickets of the palisaded fortress of Detroit in 1705.

A generation or two ago, these French pears were very common about the French settlements of Michigan and Canada in this region but they have been disappearing fast, until it is doubtful if any of those set by French *habitants* can be found now. The pears possessed no commercial value, and were replaced by named varieties better known by fruit-growers and nurserymen. It is doubtful if the trees of the newcomers will ever attain the age, size, vigor, and productiveness of these oldtimers of the French, characters which make them noteworthy in the history of the pear in America.

Pear-trees of enormous size survive on other sites of old French settlements in the United States to show what notable horticulturists the early missionaries of this people were, who, we are many times told in the early records, usually surrounded

their missions and homes with trees of the apple, peach, pear, and cherry. Pear-trees very like those found about the French settlements in Canada and Michigan still grow in the rich intervale lands of the Wabash and Mississippi in Indiana, Illinois, and Missouri. Vincennes, Indiana, was settled by the French in 1702; Kaskaskia and Cahokia, Illinois, about 1685; St. Louis, Missouri, in 1764. These may be set down as approximate dates in which horticulture began in these inland regions. When the English conquered these settlements they found giant pear-trees which persisted well into the last century, the second generation of which were scattered far and wide in the river settlements of this region. Tradition says that a Monsieur Girardin, a native of France, planted a pear orchard from seeds he brought with him at Cahokia about 1780, from which came the Prairie du Pont pear, a small, roundish, lemon-colored fruit similar to the French pears of Detroit, borne on an immense blight-proof tree. No doubt the variety could still be found in this part of the Mississippi valley. One wishes that the American-born descendants and the conquerers of these early settlers from Normandy were as energetic in forwarding horticulture as the first settlers. After the invasion of the English and later the Americans, there is little evidence of progress in horticulture in this region, until the early years of the nineteenth century.

Another famous pear-tree of the Middle West is worthy of notice as an evidence of early interest in horticulture. This tree, known as the Ockletree pear, from the name of its owner, has acquired fame as the largest pear-tree of which there is record. The tree was a seedling brought from Pittsburgh, Pennsylvania, in 1804, and was planted in an

orchard at Vincennes, Indiana. It bore a number of record-breaking crops, the largest of which was 140 bushels of pears borne in 1837. In 1855, the trunk measured ten and one-half feet in circumference at the smallest place below the limbs; the top was estimated to have a spread of 75 feet. The tree gained its great port and productiveness from spread of branch rather than height, which was estimated to be only 65 feet. The variety was unknown, but the fruit was said to be somewhat inferior in quality. This monarch of its species was struck by a tornado in 1867 which stripped off its branches and caused the death of the tree a few years later.

Another living monument marked the beginnings of pear-culture in America until 1866, when the trunk, little more than a shell, was broken down by a dray, having furnished shade and shelter in a New York garden for 220 years. This garden was laid out by the redoubtable Peter Stuyvesant who took the reins of government in New Amsterdam in 1647, at which time this pear-tree was planted. The pear was a Summer Bon Chrétien, said to have been imported from Holland in a tub. Stuyvesant's garden, kept in a high state of cultivation by forty or fifty negro slaves, was called the "Bouwery," now the Bowery, and the pear-tree in it stood at what is now the corner of Third Avenue and Thirteenth Street. No doubt other pears were imported from Holland at the same time, and from these and seeds and sprouts, this fruit was started in the Dutch settlements up and down the Hudson, where the pear even to this day is a favorite fruit, finding here a more congenial soil and climate than in any other part of America.

Soon after Governor Stuyvesant planted his bowery of fruits, flowers, and vegetables, the French

laid out orchards in the vicinity of New York City. After the revocation of the Edict of Nantes in 1685, many Huguenots fled to America. In 1689, some of these French *emigrés* settled at New Rochelle, New York, and on Long Island. The trees grown by the Huguenots were usually grafted, the parent plants having been brought from France. No doubt, it was from these importations that White Doyenné, Brown Beurré, St. Germain, Virgouleuse, and many other old French sorts that seem to have been in America from time immemorial came.

However, the pear, in common with other fruits, was more largely grown from seeds in these pioneer days than from buds or grafts. Fruits were known and grown as species and not as varieties almost wholly in America until the nineteenth century. The sale of budded or grafted trees began in New York, so far as records show, with the establishment of a nursery at Flushing, Long Island, in 1730, by Robert Prince. This nursery afterwards became the famous Linnaean Botanic Garden. At what date Prince began to offer grafted pears for sale cannot now be ascertained, but advertisements appearing in 1767, 1771, and 1790 offer named varieties at these dates. The following is a list of pears offered by the Princes in 1771:[11]

Bergamot	Russelet
Catharine	Early sugar
Vergalieu	Baurre vert
July	Winter baurre
Monsier Jean	Baurre de roy
Trom valette	Green chissel
French primative	Swan’s egg

Winter bon cretan	Colmar
Easter bergamot	Cressan
Amber	Spanish bon cretan
Chaumontelle	Large bell
Citron de camis	La Chassaire
Summer bergamot	Hampden's bergamot
Autumn bergamot	Doctor Uvedale's St. Germain
Amozelle	Large winter, weighs near two pounds
Lent St. Germain	Pear wardens
Brocaus bergamot	Empress
Winter bergamot	Large summer baking
Jargonelle	The black pear of Worcester or Parkinson's warden
Roussilon	The skinless
Cuissemadam	Green catharine

Coincident with the establishment of nurseries selling named varieties of pears another event of prime importance to pear-growers occurred. Pear-blight became epidemic in the orchards along the Hudson, and while it must have been noticed before, its ravages at this time brought it prominently to the attention of pear-growers. The disease seems to have been first mentioned by William Denning who described it in the *Transactions of the Society for the Promotion of Agriculture* for 1794 (pt. 2, p. 219) in an article on the decay of apple-trees. Denning says that he first saw the malady in orchards on the highlands of the Hudson in 1780 attacking apples, pears, and quinces. He gives a good description of the disease, but says it is caused by a borer in the trunk which he

found after much labor. From Denning's discovery until Burrill a hundred years later, in 1882, discovered a cause of the disease and suggested a preventive, every treatise on the pear speculates on the cause and cure of pear-blight, a disease which has been and is the terror and despair of growers of this fruit.

Philadelphia was another center of pear-growing in the early settlements of the country. The Quakers, settling in Pennsylvania in 1682, planted all of the hardy fruits; which were soon, as we are several times told, a great asset to the colony. No results worthy of note seem to have come from these early plantings until nearly a half century later when John Bartram[12] founded, in 1728, what became a famous botanic garden. The Bartram Botanic Garden became almost at once the clearing house for native and foreign fruits and plants, and to it came several varieties of pears for distribution throughout the colonies. Here, the first variety of the pear to originate in America of which we have definite record, came into existence. This was the Petre pear raised by Bartram, from seeds sent him from England by Lady Petre. The seed was planted in 1735 near the stone house which Bartram built with his own hands. The tree still stands, somewhat stricken with its two centuries, but withal a noble specimen seemingly capable of breasting the blows of age for many years to come.

The pear industry of the eastern United States is confined to the regions in which the history of this fruit has been traced, and most if not all of the varieties that originated in this country until the middle of the nineteenth century came from the importations to these French, Dutch, and English

settlements. There is little profit, therefore, in attempting to trace further the history of pear-culture on the Atlantic seaboard in colonial times. Pears were grown in the states south of Pennsylvania, for many references are found in the colonial records of the southern states, but they bring out no new facts to illuminate the history of this fruit in America. The Quakers and Swedes grew pears in the regions watered by the Delaware, and the English in Maryland, Virginia, and North Carolina all planted pears with the other hardy fruits only to find that they so quickly succumbed to unfavorable climate and the blight as to be unprofitable. The Bergamy and Warden, in particular, are mentioned as varieties of this fruit grown in the colonial period of the southern colonies.

Perhaps one, at least, of these lesser centers of pear-growing somewhat to the south of the pear regions in which there are now commercial plantations should receive notice. In 1794, William Coxe,[13] Burlington, New Jersey, began planting experimental orchards. Coxe was acquainted with the leading pomologists of Europe and his own country, and collected the best varieties of tree-fruits to be found in the United States, England, and France. In 1817, he published his *View of the Cultivation of Fruit Trees, and the Management of Orchards and Cider, etc.*, the first American book on pomology. This pioneer pomologist described 65 varieties of pears, most of which he had grown at one time or another on his own place, and names 21 other sorts that were grown in his and neighboring states. Coxe seems to have been the first nurseryman to import new varieties from the Old World. To Coxe, more than to any other one man, the regions adjacent to the Delaware are indebted for the early

development of fruit-growing both for pleasure and profit, and the whole country is indebted to him for the introduction of many fine fruits.

A new phase in the history of the pear began soon after the Revolutionary war. Until this time, and until well into the next century, tree-fruits were nearly all seedlings. The pears of the country until as late as 1830 were for most part seedlings, the fruits varying greatly in size, shape, color, and flavor. According to the accounts of the times, the product was so hard of flesh and so astringent in flavor as to be fit only for cooking and perry. Indeed, the great object in growing apples, pears, and peaches was the making of cider, perry, and peach-brandy. Good eating pears were few indeed. But beginning in a small way with Coxe in New Jersey, as noted, a little later with William Kenrick, Newton, Massachusetts, and still later with Robert Manning, Salem, Massachusetts, the importation of European varieties of fruits became an important part of the nursery business. The importation of pears became an obsession with Manning, his nursery alone importing several hundred varieties. Manning's work must have a more extended notice.

In 1823, Robert Manning established a pomological garden at Salem, Massachusetts, to collect and test as many varieties of fruits as he could obtain, native and foreign, with the intention of propagating and distributing those which proved most worthy. In furthering this great project he entered into correspondence with the leading pomologists of Europe, and from them secured trees and cions, which, with native sorts, brought his collection up to 2000 varieties of fruits at the time of his death in 1842. More than half of the varieties

planted by Manning were pears. This, it will be remembered, was the period in which Belgian, French, and English pomologists were making pears a specialty, and led by Van Mons, the Belgian scientist, had succeeded in putting almost a new pear flora in the hands of fruit-growers. Manning grew in America nearly all of Van Mons' introductions, received direct from the originator, and many acquisitions from other European pomologists as well, notably many varieties from Robert Thompson of the London Horticultural Society. Manning was one of the most careful observers amongst American pomologists, and to him pear-growers are indebted for the first full and accurate descriptions of the fruits grown in his time in this country. These were published in 1838 in his *Book of Fruits*. American pomologies before and many since were compilations. Manning made his descriptions first-hand and described no fruit "not actually identified beyond a reasonable doubt of its genuineness."

After Manning, one might well scan the work of several eminent American pomologists who made pears a specialty. Robert Manning, Jr., continued the work of his father with this fruit and the two Downings, Wilder, Barry, and Thomson found the pear the most interesting of the fruits which they grew. To all of these men, pomologists are indebted for the introduction of many new and choice pears; for the identification of varieties; for the correction of the nomenclature of this fruit; for testing hundreds of seedlings and native and foreign varieties; and for the distribution of pears throughout the whole country.

A history of the pear in America requires some mention of its introduction in the Pacific states since

that region is now the greatest center of the pear industry in the country, and the home of several notable varieties. Franciscan monks established missions in California at about the time the colonies on the eastern coast were fighting for their independence. To these they brought the cultivated plants of Europe and among them the pear. Vancouver, in 1792, found all of the hardy fruits growing at Santa Clara and the mission of San Buena Ventura, California. Robinson, a little later, describes extensive orchards connected with the mission of San Gabriel in which there were pears in abundance. In 1846, Edwin Bryant found at the mission of San Jose six hundred pear-trees bearing fruit in great abundance and full perfection. The missions were secularized in 1834, and the orchards fell into decay. But the pear and the vine withstood neglect, drouth, and the browsing of cattle to furnish food to the Argonauts of ’49. But little came of these early plantings that affects the present industry of growing pears in California either as to methods of culture or the introduction of new varieties.

As an example of the remarkable recuperative power of the pear, however, the orchard which Bryant described in 1846 at the San Gabriel Mission is noteworthy. An enterprising pioneer, W. M. Stockton, grafted over the old orchard in 1854 to improved varieties, and by pruning, cultivation, and irrigation succeeded in rejuvenating it so that the orchard became a profitable commercial plantation —the first commercial pear orchard in California. There are other instances given in the early accounts of fruit-growing in California in which the youth of old pear-trees was renewed by generous treatment, showing that the pear in a congenial soil and climate is most self-assertive in maintaining life. It could

hardly be otherwise than that the health and vigor of these old trees stimulated the planting of fruits by the gold-seekers who rushed to this region in 1849.

Meanwhile, orcharding had been established as an avocation. In the rich Willamette Valley in Oregon, where the growing of wheat and cattle was the vocation, the plantations of hardy fruits made by Henderson Lewelling, near Portland, Oregon, in 1847, included pears and marked the beginning of pear-culture in Oregon. Lewelling's venture, so pregnant with results in pomology for the Pacific Northwest, has been described in *The Cherries of New York*, and needs no detailed description here. It is mentioned only to call attention to it as another landmark in the history of the pear.

The padres began the cultivation of the pear at the missions. The pioneers of '47 in Oregon and '49 in California started a new era in the cultivation of this and other tree-fruits by introducing named and improved varieties and extending their cultivation along the coast from British Columbia to Lower California. So far, the plantings were fruit gardens, not orchards. The era of commercial fruit-growing began in the year 1869 in which the first fresh fruits were sent east by rail, the shipment amounting to thirty-three tons, mostly pears and apples. This event marks the beginning of a great industry in growing pears on the Pacific slope for the fresh fruit market, and was followed shortly by the introduction of canning and evaporation to use up the surplus product. The special demands of these three more or less distinct industries called for new varieties, and American pomology has been enriched by a score or more varieties of pears from this great pear region.

An event which has had a profound influence on

pear-growing in the whole country was the introduction of Oriental pears and their hybrids. The mongrel offspring of the Oriental with the European pear were unfortunate in regions where pure-bred European sorts can be grown, but in vast tracts of the United States, as almost the whole of the South and the Middle West, only hybrids of the two species find a congenial environment, and here varieties with Oriental blood became a great asset. The introduction of these pears, also, has greatly stimulated the canning of this fruit in regions where fruit-preserving is an industry. It was hoped that these hybrids could be used successfully as stocks upon which European varieties could be worked, but the stocks have not proved satisfactory, and their use is decreasing.

The Oriental, Chinese, or Sand pear came into America from Asia by the way of Europe. The importation into Europe was made by the Royal Horticultural Society of London in 1820. There seems to be no record of when these pears reached America, but they were growing in the Prince Nursery as early as 1840 under the names Chinese pear and Sha Lea. Here, or in one of several nurseries to which it was sent by Prince, the Oriental seems to have hybridized with the European pear, the product being the Le Conte, which came to notice in 1846 and is the first of these hybrids on record. The Kieffer fruited first in 1873 and proved to be much better than Le Conte except in certain parts of the South. The Garber, another valuable hybrid, came to notice about 1880. There are now, perhaps, two score of these hybrids, with new ones coming from time to time. These hybrid pears, while not blight-proof, are more immune to blight than the European varieties, and pear-breeders are hybridizing the two species

with the hope of obtaining a variety with the fruit of the European type on a tree of the Oriental type. Several promising seedlings bred with this combination in view have been announced, and the number of these hybrids is certain to be increased as time goes on.

The advent of Russian pears in the United States must also be mentioned as a notable event in the history of this fruit. Russian pears are hardy strains of *Pyrus communis* grown from time immemorial in Russia. The fruits of these Russian varieties are low in quality, but the trees are much hardier than those of strains coming from more southern parts of Europe. Some seventy or eighty of these hardy pears have been imported from Russia, the first shipment coming in 1879 from St. Petersburg. For a few years importations followed rapidly, and fruit-growers in cold regions had high hopes of being able to grow pears in competition with growers in more favored regions. The fruits turned out to be so poor in quality and the trees so subject to blight, however, that the cultivation of all but a few varieties has ceased. Of the whole number, Bessemianka, possibly, is the only one worthy of comparison with the pears of southern Europe, and this sort is rated as poor where the southern pears are grown. Professor J. L. Budd,[14] Ames, Iowa, and Charles Gibb, Montreal, Canada, were the two men most instrumental in bringing these pears to America.

The chief import of these brief records of the origin and history of cultivated pears in several countries is to show the evolution of this fruit. It is hoped that the chapter will furnish inspiration for further amelioration of the pear, and that it contains facts that will be helpful in the future development

of this fruit. The men, times, and places have historical and narrative interest to pomologists; but these are quite secondary to the knowledge of what the raw material was from which our pear flora has been fashioned, and the methods of domestication that were employed. This chapter is only a sketch—the briefest possible outline of how the leading types of pears came to be, and how and when they came to America.

CHAPTER II
SPECIES OF PEARS AND THEIR CHARACTERS

The pear belongs to the great order Rosaceae, the Rose Family. There are about ninety genera in this family, the most important of all botanical groups to growers of hardy fruits, of which ten or twelve bear pome-fruits. Of the genera whose fruits are pomes, only two contain important hardy fruits, namely, Pyrus, to which belong apples, crab-apples, and pears; and Cydonia, the quince. Three other genera are of lesser importance, but must be named to show their relationship to the pear. These are Mespilus, the medlar, grown in Europe but little known in America; Chænomeles, the Japanese quince, well known as an ornamental, the fruits of which are used for conserves; and Amelanchier, the Juneberry, a common fruit in American forests. One other genus in this family has possibilities for domestication but is not yet cultivated for its fruits in America. This is

Cratægus, comprising the hawthorns and thorn-apples, the fruits of which are edible and several species of which are cultivated in various parts of the world as food plants.

Nearly every botanist who has attempted to classify plants has grouped the pome-fruits according to a plan of his own. There are, therefore, several classifications of genera and species of the pomes, in consequence of which the nomenclature is badly confused. A century ago the tendency was for botanists to put in the genus Pyrus the apple, pear, crab-apple, quince, medlar, sorbus, and chokeberry. The modern tendency is to segregate these fruits in distinct genera in accordance with common names. As a rule the differences which suggest a distinct common name suffice for a botanical division.

The pear and apple, however, are usually kept together in Pyrus, and botanists generally agree that separation in species is sufficient, or, at most, that the separation should not be greater than in two sections of the genus. Happily, the difficulties of classification in botany trouble little or not at all in pomology, as each of the pome-fruits constitutes a distinct pomological group. The distinguishing characters of Pyrus are:

> Woody plants, trees or shrubs, with smooth or scaly bark. Leaves simple, or sometimes lobed, alternate, usually serrate, deciduous, with deciduous stipules which are free from the petiole. Flowers perfect, regular, borne in compound terminal cymes; torus urn-shaped, adnate to the ovary and inclosing it with thick, succulent flesh at maturity; calyx-lobes 5, acuminate and reflexed, persistent in some and deciduous in other species; petals 5, white, pink or red, inserted on the thickened border of the

disk; stamens 15 to 20, in three rows; styles 2 to 5, free or united below; carpels 2 to 5, inferior, crowned by the styles, usually 2-seeded. Fruit an ovoid or pyriform pome; seeds two in each cell, brown or brownish, lustrous, mucilaginous on the outer surface.

The genus comprises fifty to sixty species in the north temperate zone of the three continents. The largest number is found in south-central and eastern Asia. In North America, Pyrus is represented by five species, while eight or nine species inhabit Europe. In several of the species there are many natural varieties. The two sections of Pyrus, given the rank of genera by some authors, are distinguished as follows:

1. Apples (Malus). Flowers pink, rose-color, red or sometimes white, borne in fascicles or subumbellate clusters on short spurs or lateral branchlets; ovary 3- to 5-celled; styles more or less united at the base. Fruit more or less globular with a distinct depression at both ends, the flesh without grit cells, rounded at the base. The species in this section number 30 to 40, of which not more than a half dozen are domesticated.

2. Pears (Pyrus). Flowers white, few, borne in corymbs on short spurs or lateral branchlets; ovary 5-celled; styles usually free. Fruit usually pyriform, sometimes subglobose, usually conical at the base, the flesh usually bearing grit cells when ripened on the tree. The species number 15 to 20 of which but two are truly domesticated, but several others give promise of value for stocks and possibly for their fruits.

THE STRUCTURAL BOTANY OF THE PEAR

A major purpose in *The Pears of New York* is to

describe varieties of pears so that their faults and merits can be seen, and that varieties may be identified. It is apparent at once that one cannot describe accurately nor understand the descriptions of others unless acquainted with the organs of tree and fruit—one must know the form and structure of the whole plant. A study of the organs of plants is structural botany. Plant descriptions are portraitures of the plant's organs, and structural botany thus becomes the foundation of systematic pomology, with a study of which, as concerns the pear, we are to be chiefly concerned in the following pages. We must, therefore, pay some attention to the structural botany of the pear. A pear is one of the pome-fruits. What is a pome?

A pome is variously defined by students of structural botany. The most conspicuous part of the apple, pear, or quince, the best-known pome-fruits, is the outer, fleshy, edible part. This succulent part is said by some botanists to be the thickened calyx; others say that it is the enlarged receptacle. Some botanists believe that a pome consists of two to five drupe-like fruits, each drupe called a carpel, each of which contains one or more seeds. These drupes, if they are rightly so-named, are held together by a fleshy receptacle. The best definition seems to be that a pome is a fleshy fruit of which the compound ovary is borne within and connected to the receptacle.

CHARACTERS OF PEAR-TREES

Pome-fruits are all woody plants, shrubby or tree-like, of which the pear is always a tree. The value of the variety and the recognition of it usually depend on characters of the fruits, but the trees are nearly as

distinct as the fruits, are always helpful in identification, and in the absence of fruit must be relied upon to identify a variety. Also, and even more important, the pear-grower must know whether the plant is manageable in the orchard, for which purpose he must have a description of the chief characters of the tree.

Size and habit of tree.—Size of tree is a very reliable character to determine varieties of pears. The Winter Nelis pear is dwarf as compared with other pears. Size varies greatly with environment, it must be remembered in using this character. The terms *large*, *small*, and *medium* are commonly used to designate size. Vigor, which may be defined as internal energy, must not be confused with size. Small trees may be as vigorous as large ones.

The term *habit of growth*, as used by pomologists, has reference to the form of the top. In describing the tops of pear-trees a number of self-explanatory terms are used, such as *pyramidal*, *upright-spreading*, *drooping*, *tall*, *low*, *dense*, *open-topped*, and *round-topped*. Many if not most varieties of pears may be told by the form of the top. One can tell Bartlett or Clapp Favorite at a glance by their upright branches; as one can, also, Beurré d'Anjou and Beurré Superfin by their wide-spreading branches; or Winter Nelis pear by its drooping branches. Depending upon the form of the top, a variety is easy or difficult to manage in an orchard.

Constitutional characters.—Hardiness, productiveness, susceptibility to pests, adaptability to diverse soils and climates are vaguely supposed to be dependent on the constitution of the tree. Pomologists very generally refer to these characters as constitutional. They speak of the constitution as

the aggregate of the vital powers of a variety.

Horticulturally, hardiness is ability to withstand cold. Obviously, hardiness is of utmost importance in characterizing the value of a variety to the pear-grower, and degree of hardiness is of some use in identifying pears. Bartlett and Beurré Bose are relatively tender to cold, Tyson is hardy, and Flemish Beauty is very hardy. Less important, but still of some importance, is the ability to withstand heat, a character possessed in varying degrees by varieties of pears.

Productiveness, age of bearing, regularity of bearing, certainty of bearing, and longevity are constitutional characters that must be noted in full descriptions. All help to determine the value of a variety, and all aid more or less in classification. For most part, these are inherent characters and are influenced but little by environment.

The degree of susceptibility of a variety to fungous diseases and insect pests is a valuable cultural character, but has little use in identifying or classifying pears. There are great variations in varieties of pears to the dreaded pear-blight: Bartlett, Beurré Bose, Beurré d'Anjou, and Clapp Favorite are among the varieties most susceptible; Kieffer, Seckel, and Winter Nelis are among those least susceptible to blight. Kieffer and related hybrids are somewhat immune to San Jose scale, but are very susceptible to psylla. Flemish Beauty and White Doyenné are so badly attacked by the scab-fungus that it is almost impossible to grow them in eastern America.

Some of these constitutional characters are much modified by care and environment, as all are more or less. Care and local environment often make it possible to grow varieties in special localities,

although some varieties are inherently adapted to a greater number of diverse conditions than others. Bartlett, Seckel, and Kieffer have in common as one of their most valuable characters adaptability to a great diversity of soils and climates.

Trunk and branch.—The trunk does not count for much in descriptions of varieties. The height of the trunk usually depends on the whims of the pruner. Whether *stout* or *slender* is sometimes noteworthy. The bark may be *smooth* or *shaggy*. Color of bark is often a valuable diagnostic character, especially in young trees. Many if not most varieties of pears can be identified in nursery rows by an expert nurseryman from the color of the bark. Seckel, Sheldon, and Beurré d'Anjou have remarkably distinctive color as young trees.

The branches of pear-trees are often reliable guides in identifying varieties in orchard or nursery, especially when trees are leafless and fruitless. The twisting, drooping branches of Winter Nelis serve to identify that variety at any time. The zigzag branches of Beurré d'Anjou and Bloodgood are typical. The branches of Beurré Superfin are rough and shaggy. Those of Dorset and Fox are slender. The branches of several well-known pears are spiny. A glance through the technical descriptions in Chapter IV shows that branches and branchlets are variously colored. The branchlets may be *stout* or *slender*, *long-jointed* or *short-jointed*, *pubescent* or *glabrous*, *straight* or *zigzag*. The angle at which branchlets are set is often characteristic. The epidermis may be smooth or covered with scarf-skin. Lastly, the size, shape, color, number, and position of the corky cells or lenticels on young wood is most important in identifying trees after leaves have fallen.

Leaf-buds and leaves.—Size, length, and shape of leaf-buds are helpful in identifying varieties when the trees are dormant. There is considerable difference in the length of buds of different varieties, and they may vary in thickness; some are *plump*, others are *slender*. The shape can usually be described as *acute*, *pointed*, *obtuse*, or *conical*. If the bud lies close to the twig, it is said to be *appressed*; if it stands from the twig at a considerable angle, it is *free*. In some varieties the leaf-scar is conspicuous; in others, it is inconspicuous.

While leaves vary much in accordance with the condition of the plant which bears them, yet they offer a number of valuable distinguishing characters. It is important in making use of leaves to take only those borne on free-growing twigs, as those growing on luxuriant water-sprouts on the one hand, or on slow-growing spurs on the other are seldom typical.

The size of the leaf is a most valuable determinant of varieties of pears. Length and breadth should be given in figures. The shape should be depicted in carefully chosen words. The body of the leaf is usually *ovate* or *oval*, but these shapes must nearly always be modified by *broad* or *narrow*, *long* or *short*. The apex requires a descriptive word or two; as, *taper-pointed*, *acute*, or *obtuse*. Thickness and texture are sometimes noteworthy. The texture is usually described as *stiff*, *leathery*, or *pliant*. Sometimes the leaves are flat; sometimes folded upward, and rarely they are folded downward. The color of both the upper and lower surfaces is often important; and the amount of pubescence, if present, must always be noted on the two surfaces. The autumnal tint is a marked characteristic in some varieties. The margins offer valuable evidence for

identification in the character of the serrations which are usually distinct in a variety. Sometimes glands and hairs are found on the margins, in which case they are usually noteworthy. The time of appearance and the fall of leaves are life events that distinguish some varieties. Leaves are many in some sorts; few in others. The length, thickness, color of the petiole and whether it is *smooth*, *pubescent* or *channeled* are usually worth noting. The presence and the size and color of stipules are often important enough to record. The petioles of pear leaves are larger and slenderer than those of the apple, and the foliage of a pear-tree has something of the tremulous habit of the aspen and other poplars. The leaves have a gloss that distinguishes them at once from those of the apple-tree. As a rule, the foliage of the pear drops earlier in the autumn than that of the apple.

When the leaves of pears open in the spring they are folded along the midrib, and are covered with snow-white wool, but at full maturity no trace of this woolly covering remains. The amount and texture of this covering on the leaves of different varieties vary greatly, although it is doubtful if this character is of much use for taxonomic purposes.

Flower-buds and flowers.—It is not possible to distinguish flower-buds from leaf-buds by their external appearance as certainly as might be wished for the purposes of ascertaining what the crop will be and that pruning and budding may be done more intelligently. As a rule, however, the flower-buds are larger, plumper, and have a blunter point. The flower-buds are much like leaf-buds in color—usually a dark brown. They may be readily told by their contents when examined under a microscope. Time of opening is a mark of distinction with varieties that

bloom very early or very late, but the flowers of most varieties of pears open at approximately the same time.

The flowers of pears give small opportunity to identify varieties but are useful. The petals in most of the flowers of varieties of *P. communis* meet or lap at the widest point, which is a short distance from the point of attachment. Occasionally a variety has the petals widely separated. Easter Beurré, Vermont Beauty, and Dana Hovey are examples of varieties with widely-separated petals. Round and broadly-oval petals meet or lap, long narrow petals are usually separated. The size, shape, and color of the petals offer the best means of identification from flowers. The length, thickness, and amount and kind of pubescence on the styles may distinguish varieties. The styles of the Howell pear are abnormally short. The number of flowers in a cluster, and whether the cluster is dense or loose are important. The character of the fruit-spurs is nearly always noteworthy. The calyx-tubes, calyx-lobes, and pedicels differ materially. These structures in the flower, while offering decisive evidence in identification, are seldom used by pomologists because character of plant and fruit may be studied during a much longer time and are of greater cultural importance. In the blooming season, length, diameter, and the pubescence of stamens may be noted, but much more important taxonomically is the position of the stamens on the calyx-tube in the mature fruit. These organs, or remnants of them, persist in the ripened fruits, as will be noted in the discussion of characters of the fruit. Lastly, some varieties may be told during the blooming season by the distribution of the blossoms on the tree. The flowers of many varieties are borne on the periphery of the tree, and give the

plant an aspect by which one may recognize the variety at once.

If a variety is not noteworthy in the characters for which the fruit is grown—those which appeal to the senses of taste and sight—it has small chance of being cultivated long or widely. Hence, especial attention is paid to descriptions of the fruit. Some pomologists describe varieties only from the fruit, saying little or nothing about the plant.

FRUIT-CHARACTERS OF POMES

Season and use.—Perhaps season is the first, and certainly it is one of the most important characters to be noted in the ripened fruit. By season is meant the period in which a variety is in proper condition for use. Unless otherwise stated, season has reference to the period during which fruit is in condition in ordinary storage, as it is understood that cold-storage greatly prolongs the natural season. The terms *summer*, *fall*, and *winter*, sometimes modified by *early* or *late*, give the season with sufficient accuracy. Keeping quality and shipping quality, both dependent on several factors, are usually mentioned in connection with season.

Rather closely connected with season is use. The uses for which a variety is particularly suited should always be indicated. Thus, a market variety is one suitable for the general market; a local market sort is one which does not stand handling well enough for the general market but is acceptable in local trade. A variety for dessert or table is suitable for eating in the uncooked state; cooking or kitchen varieties are desirable for culinary purposes.

Size and shape of fruit.—Of external characters of

pears, size is important if several typical specimens can be examined, but is often misleading because under the stress of environment abnormal specimens may be produced. Gradations in size are expressed by the terms *large*, *medium*, and *small*, modified by *very*, *above*, and *below*. Used in connection with size, *uniform* signifies that the fruit of a variety runs fairly even in the same size.

Shape is the most important character in describing the fruit. It may be used with immature as well as mature specimens. In determining the shape of the fruit, the pear should be held opposite to the eye perpendicular to the diameter from stem to calyx; or the fruit may be cut longitudinally at its widest diameter. The shape of the body of the pear is usually described first, followed by a description of the narrow part bearing the stem, if this neck is prominent enough to be noteworthy. A pear is *pyriform* when the curve formed by the body and neck is concave; *turbinate*, or top-shaped, when the body is nearly round with a short neck. The neck may be *long* or *short*, *distinct* or *obscure*, *obtuse* or *acute*. Sheldon is typically turbinate; Beurré d'Anjou, Beurré Bose, and Bartlett are all pyriform.

A graphic record should accompany a description of the fruit to show size and shape. A simple outline drawing serves the purpose.

The stem.—Varying as little as any other character of the pear, the stem is much used in identification. It may be *long* and *slender*, as in the Beurré Bose; *short* and *thick*, as in Doyenné du Comice; *fleshy*, as in Louise Bonne de Jersey; *clubbed*, when enlarged at the end; and *lipped* when the flesh forms a protuberance under which the stem is inserted. The stems of pears are often set *obliquely* as in Beurré

Clairgeau; or are *crooked* or *curved* as in Howell. In a few varieties the stems are *channeled*. The stems of some pears have distinguishing colors, those of others are pubescent. In some pears, as Souvenir d'Espéren, there are bud-like projections on the stem.

The length of the stem in pears is a reliable diagnostic character only when it is known from what part of the flower-cluster the fruit was developed. For, as a rule, the nearer the flower to the tip of the raceme in the pear, the shorter the stem on the fruit.

Cavity and basin.—The cavity, the depression in which the stem is set, offers several marks which greatly enhance the value of a description of any of the pears. The cavity may be *acute* or *obtuse*; *shallow*, *medium*, or *deep*; *narrow*, *medium*, or *broad*; *smooth* or *russeted*; *furrowed*, *ribbed*, *angular*, or *uniform*; or it may be *lipped* as described under stem. The color of the skin within the cavity is sometimes different from that without, and there may be radiating lines, rays, or streaks.

The basin, the depression in which the calyx is set, is as important as the cavity in classifying pears and is described by the same terms. The furrows in the basin are sometimes indistinct and are then called *wavy*. The skin around the calyx-lobes may be *wrinkled*, *plaited*, *folded*, or *corrugated*. Rarely, there are fleshy protuberances about the calyx-lobes called *mammiform appendages*.

Calyx-lobes.—The withered calyx-lobes persist in some pears and not in others. They persist in European pears, but are deciduous in the edible-fruited Asiatic species. The calyx-lobes may be *open*, *partly open*, or *closed* in varieties of the fruits in which they are persistent. In some varieties the

segments are separated at the base; in others, united. The lobes may lie flat on the fruit or may stand erect. When upright, if the tips incline inward the lobes are said to be *connivent*; if inclined outward, they are *reflexed*, or *divergent*. The lobes may be *broad* or *narrow*, with tips *acute* or *accuminate*.

Characters of the skin.—The skin of all pears offers several most valuable features for classification. Of these characters, color is the most important. Perhaps no character of fruits varies more in accordance with environment than the color, yet the color itself and the way in which it is distributed on the fruit, serve to make this character a fairly safe distinguishing mark for most varieties of pears. The ground-color of pears is the green or yellow-green of chlorophyll, usually with an over-color of tints and shades of yellow or red. The over-color may be laid on in *stripes*, *splashes*, or *streaks*; as a *blush*; may mottle the surface; or may be a single color, in which case the fruit is said to be *self-colored*. In nearly all varieties of colored pears, it is not an uncommon anomaly to find trees under some conditions bearing green fruits. Usually, in pears, the color is laid on solidly; very few varieties have striped or splashed fruits.

The skin may be *thick* or *thin*, *tough* or *tender*. In a few varieties it is relatively free from the flesh, but with most clings tightly. The surface of the skin is often waxy or oily. This character must not be confused with *waxen* which refers to the glossy appearance of the skin.

Some pears have an unbroken russet surface as Beurré Bose and Sheldon. Or, the surface may be rough because of minute russet dots or netted veins. With many sorts, the cavity alone is russeted.

Sometimes the russet of the cavity is spread out in radiating lines.

Nearly all pears have few or many dots on the skin, notes on which may enhance the value of a description. These may be *obscure* or *conspicuous, large* or *small*, *raised* or *sunken*. If visible under the epidermis, they are said to be *submerged*. When star-like, they are called *stellate*. If surrounded by a halo of lighter color, they are said to be *areolar*. In some varieties, the dots are elongated. Very often the dots are russeted. The roughened outer skin, called *scarf-skin*, gives a distinguishing appearance to a few pears.

Cutting pears to show the internal structure.—When varieties cannot be distinguished from external marks, there are several very reliable characters that can be made use of in the internal anatomy of the fruits. To study these it is necessary to make a longitudinal and a transverse section of the pear. To make an accurate examination of the internal structure, the sectioning must be done with a keen, thin knife, with a steady hand, and a good eye.

In making the longitudinal section the knife should pass through the center of the calyx, showing the remnants of styles and stamens; through the middle of the core cell, showing the outline of the core cavity; and through the middle of the stem. A true record cannot be obtained, unless the organs named are divided fairly accurately in halves. In making the transverse section, the knife should pass through the widest diameter of the fruit, cutting the core in half. If the core is not in the center of the fruit, trial cuts to locate it must be made that it may be halved exactly.

The stamens, calyx-tube, and styles.—After halving

the fruit longitudinally, the first organs to be studied are the stamens, the position of which furnishes reliable taxonomic data in apples and is occasionally worth noting in pears. Passing from the stamens to the calyx-tube, it will be found that the shape of this structure is of some use in separating varieties, although it is exceedingly variable in accordance with the size of the pear, and is materially altered by abnormalities in the fruit. The base of the styles in some varieties develop into fleshy tissue which alters the shape of the calyx-tube. The calyx-tube may be *cone-shaped*, *funnel-shaped*, or *urn-shaped*. When funnel-shaped, the broad upper part is called the *limb*; the narrow lower part, the *cylinder*. In some varieties the remnants of the styles are often more or less fleshy and form a point, called the *pistil point*, which projects into the calyx-tube.

The core.—The position of the core in the fruit is often a valuable means of distinguishing varieties. If close to the stem, the core is said to be *sessile*; if at the center of the pome, it is *median*; when distant from the stem, *distant*.

The cell containing seed, called a carpel, is morphologically a modified leaf, which, by folding together and by union of its edges forms a closed receptacle. In some varieties, the carpels are *open*; in others *closed*. If the tip of the carpel is indented, it is said to be *emarginate*; if long and pointed, *mucronate*. In shape, carpels may be *round*, *cordate*, *obcordate*, *elliptical*, *oblong*, *elongated*, *ovate*, or *obovate*. In the cores of most pomes there is a central cavity called the *core cavity*, sometimes spoken of as the *axial sac* which may be either *narrow*, *wide*, or *lacking*. This is a character of much importance and reliability in pears. When the carpels extend quite to the axis of

the fruit, they are said to be *axile* and there is no core cavity; when distant from the axis, they are *abaxile* and a core cavity is formed. Sometimes the carpel is lined on the inner surface with a white substance, when it is said to be *tufted*. In some pears, there are many fine hairs in the core-cavity in which case the cavity is said to be *tufted*.

The limits of the core are marked by a line in most pome-fruits—usually very distinct in apples and quinces—which in most varieties of pears is indistinct. The area enclosed by this line may be large or small and may be variously shaped. When the core-line joins the calyx-tube along the sides, it is said to be *clasping*; when the two ends of the line meet at the base of the calyx-tube, the expression *core-lines meeting* is used. The core-line in pears is nearly always, if not always, clasping and very often it is a more or less thickened area of grit-cells.

Seeds.—Seeds are characteristic in all varieties of pears and might well be used more generally than is the case in classification. The number is exceedingly variable in different varieties. The usual number is two in each cell, but often there are three or more and occasionally they are missing. Seeds vary greatly in different varieties in size, shape, and color, and differences in these characters are as constant as are those of any other organ of the fruit. Number, size, shape, and color of seeds should be noted with care in every technical description of a pear. The point of the seed, also, is worth noting; it may be *acute, acuminate*, or *obtuse*. Like the carpels, the seeds are often *tufted*. There are several so-called seedless pears, but all of these occasionally contain some seeds. Very often seedlessness is brought about by lack of proper pollination. An occasional fruit

without seeds is found in nearly all varieties, but these fruits are usually more or less abnormal in size or shape.

Flesh.—Most pears may be identified from the flesh-characters without a glance at any other part of fruit or plant. Flavor, odor, and texture of flesh are distinct in almost every variety, and appeal more strongly to the senses of taste and smell than characters measured by the eye do to the sight. Unfortunately, flavors, odors, and textures are difficult to describe.

All characters of the flesh vary greatly in accordance with conditions of growth, soil and climate having a profound influence on texture, flavor, and quality. It is important, also, in describing the flesh to have the fruit at the proper stage of maturity, and as immaturity verges into maturity and maturity into decay almost imperceptibly, each condition affecting the flesh, it is not surprising that differences of opinion may be many in judging the flesh-characters of a fruit.

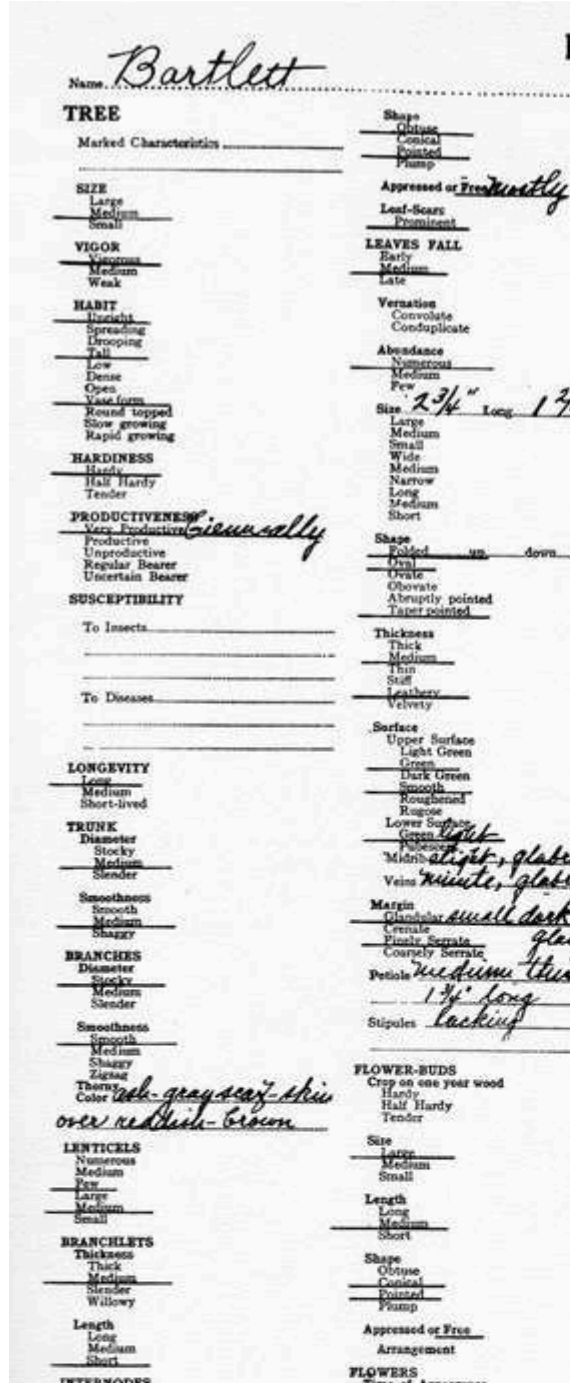
In cutting a pear the color of the flesh is first noted. It may be nearly white, as in Flemish Beauty; tinged with yellow, as in Tyson; greenish-white as in Bartlett; or tinged with red, as in Joséphine de Malines. Pears with red flesh are occasionally found, but no standard varieties have flesh of this color. Sanguinole, grown more or less in Europe, has flesh of a wine-red color. Very often the texture of pear-flesh is marred by grittiness to which some varieties are much more subject than others. In most cases, however, the grit-cells are abnormal, and a discussion of their presence and cause belongs under the head of diseases in another chapter.

One determines the nature of the texture by

cutting the fruit, through pressure by the fingers, and by eating. The texture may be *coarse* or *fine*; *tender* or *tough*; *crisp*, *breaking*, *melting*, or *almost buttery*; *dry* or *juicy*.

Flavor and quality.—Pears are readily divided into two classes as to flavor; they are either *sweet* or *sour*. The qualifying terms *mildly* and *very* are often used with sweet and sour. *Subacid*, *tart*, and *sprightly* are sometimes most expressive. *Austere* refers to a flavor more or less sour with some astringency. The flavor may often be put down as *astringent*. All varieties have a more or less distinct aroma. *Rich* and *refreshing* are words often found in the rather extensive vocabulary necessary to describe the flavor of this fruit.

Quality is that combination of texture, flavor, and aroma which makes a fruit pleasant to the palate. Quality is rated by common consent of pomologists by five grades: *Poor*, *fair*, *good*, *very good*, and *best*. It should be noted that *good* in this rating signifies a fruit of but medium quality.



Name Bartlett

TREE

Marked Characteristics

SIZE
Large
Medium
Small

VIGOR
Vigorous
Medium
Weak

HABIT
Upright
Spreading
Drooping
Tall
Low
Dense
Open
Vase form
Round topped
Slow growing
Rapid growing

HARDINESS
Hardy
Half Hardy
Tender

PRODUCTIVENESS
Very Productive Biennially
Productive
Unproductive
Regular Bearer
Uncertain Bearer

SUSCEPTIBILITY
To Insects
To Diseases

LONGEVITY
Long
Medium
Short-lived

TRUNK
Diameter
Stocky
Medium
Slender

Smoothness
Smooth
Medium
Shaggy

BRANCHES
Diameter
Stocky
Medium
Slender

Smoothness
Smooth
Medium
Shaggy
Zigzag
Thorns
Color reb-gray scaly skin over reddish-brown

LENTICELS
Numerous
Medium
Few
Large
Medium
Small

BRANCHLETS
Thickness
Thick
Medium
Slender
Willowy

Length
Long
Medium
Short

Shape
Obtuse
Conical
Pointed
Plump

Appressed or Pre[illegible]ently

Leaf-Scars
Prominent

LEAVES FALL
Early
Medium
Late

Vernation
Convolute
Conduplicate

Abundance
Numerous
Medium
Few

Size 2 3/4" Long 1 3/8

Large
Medium
Small
Wide
Medium
Narrow
Long
Medium
Short

Shape
Folded up down
Oval
Ovate
Obovate
Abruptly pointed
Taper pointed

Thickness
Thick
Medium
Thin
Stiff
Leathery
Velvety

Surface
Upper Surface
Light Green
Green
Dark Green
Smooth
Roughened
Rugose
Lower Surface
Green light
Pubescent
Midrib slight, glabro
Veins minute, glabro

Margin
Glandular small dark
Crenate
Finely Serrate glan
Coarsely Serrate
Petiole medium thic
1 1/4' long
Stipules lacking

FLOWER-BUDS
Crop on one year wood
Hardy
Half Hardy
Tender

Size
Large
Medium
Small

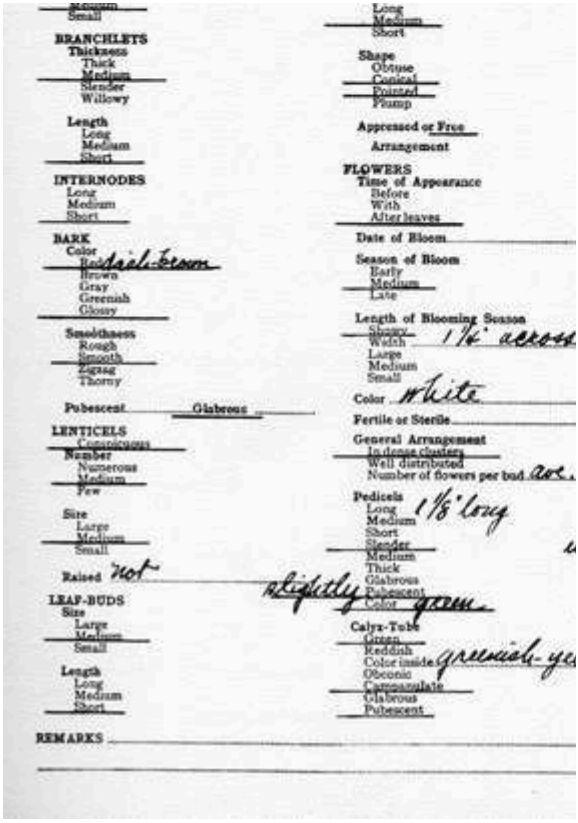
Length
Long
Medium
Short

Shape
Obtuse
Conical
Pointed
Plump

Appressed or Free

Arrangement

FLOWERS


Small

BRANCHLETS
Thickness
Thick
Medium
Slender
Willowy

Length
Long
Medium
Short

INTERNODES
Long
Medium
Short

BARK
Color
Reddish-brown
Brown
Gray
Greenish
Glossy

Smoothness
Rough
Smooth
Zigzag
Thorny

Pubescent Glabrous

LENTICELS
Conspicuous
Number
Numerous
Medium
Few

Size
Large
Medium
Small

Raised not slightly

LEAF-BUDS
Size
Large
Medium
Small

Length
Long
Medium
Short

Long
Medium
Short

Shape
Obtuse
Conical
Pointed
Plump

Appressed or Free
Arrangement

FLOWERS
Time of Appearance
Before
With
After leaves

Date of Bloom

Season of Bloom
Early
Medium
Late

Length of Blooming Season
Showy 1½" across
Width
Large
Medium
Small

Color White

Fertile or Sterile

General Arrangement
In dense clusters
Well distributed
Number of flowers per bud 20±

Pedicels 1⅛" long
Long
Medium
Short
Slender
Medium
Thick
Glabrous
Pubescent
Color green

Calyx-Tube
Green
Reddish
Color inside greenish-ye
Obconic
Campanulate
Glabrous
Pubescent

REMARKS

The characters of pears are graphically shown on the opposite page in a descriptive form filled out for Bartlett in a description of this variety for *The Pears of New York*. This is, however, but a skeleton, and most of the characters must be more fully described than a form like this permits. Few pomologists in these days have the temerity to offer a description compiled in whole or in part. Descriptions are worth while only when made from living specimens before the eyes of the describer.

SPECIES OF PEARS

The foregoing pages discussing the characters of pears were preparation for a proper understanding of

descriptions of pears. A discussion of the species which constitute or may constitute forms for cultivation either for their fruit or as stocks upon which to grow edible pears logically follows.

Edible pears fall into two well-marked groups: Those coming from Europe and northwestern Asia, occidental pears; and those coming from eastern and northeastern Asia, oriental pears.

OCCIDENTAL PEARS

In this group belong the thousands of varieties under common cultivation in Europe, the United States, and in temperate regions settled by Europeans. These pears are distinct from oriental pears in place of origin, and by fairly well-marked botanical characters. Thus, the leaves of these occidental pears are crenate-serrate and entire and never setose-serrate; and the calyx is persistent on the fruits. For most part, the fruits of the two divisions are quite distinct, especially in shape, but no constant line of cleavage can be found in the pears. There are several species of these occidental pears grown for their fruits or as ornamentals. Only one, however, is of great importance. This is *P. communis*, to a discussion of which we now come.

1. **PYRUS COMMUNIS** Linnaeus.

1. Linnaeus *Sp. Pl.* 479. 1753.
2. Loudon *Arb. et Frut. Brit.* **2**:880. 1838.
3. Schneider *Laubholzk*. **1**:661. 1906.

Tree vigorous, attaining a height of 50 ft. and a diameter of 2 ft., usually with an upright, oblong, or pyramidal, compact top; bark on trunk of mature trees rough, with large persistent scales; branches usually stout, thorny, variously colored, overlaid with scarf-skin; branchlets

glossy, smooth, glabrous, with more or less conspicuous lenticels. Leaf-buds prominent, plump, obtuse or pointed, mostly free; leaf-scars conspicuous. Leaves 2 to 4 in. long, 1 to 2½ in. wide, oval or oblong-ovate, thin, hard or leathery, veiny; upper surface dark green, glabrous; lower surface light green, glabrous; both surfaces downy as the leaves open; apex acuminate; margins crenate-serrate or entire, never setose-serrate; teeth often tipped with small glands; petiole 1 to 2 in. long, slender. Flower-buds larger and plumper than leaf-buds; borne on fruiting spurs in dense or loose clusters of 4 to 10; flowers showy, 1 in. across, white or sometimes with tinge of pink; calyx persistent or rarely deciduous; styles distinct to the base, sometimes downy; stamens 15 to 20; pedicels 1 in. long, slender, sometimes pubescent.

Fruits exceedingly variable under cultivation; varying from 1 in. in length and diameter to 3 in. in diameter and 5 to 6 in. in length; variously shaped, as pyriform, turbinate, round-conic, or round-oblate; green, yellow, red, or russet, or combinations of these colors; flesh white, yellowish, sometimes pink or wine-red, rarely salmon-colored; flesh firm, melting, or buttery and when ripening on the tree with few or many grit-cells. Seeds 1 to 3 in a cell, sometimes abortive or wanting, large, brown, or brownish, often tufted at the tips.

Pyrus communis, the common pear, as stated in the preceding chapter, is a native of southern Europe and southwestern Asia as far east as Kashmir. The species is a frequent escape from cultivation, multiplying from seed distributed by animals and by human agencies, and is now to be found naturalized in forests and byways of the temperate zones wherever pears are cultivated in orchards. The pear

is not as hardy as the apple, and is, therefore, less generally grown. It refuses to grow in the warmest and coldest parts of the temperate zones, but is a favorite orchard, dooryard, and roadside plant in all mid-temperate regions.

The species comes from regions or localities where the climate is mild and equable, neither very hot nor very cold, and grows in moist, cool, and rather heavy soils. These predilections cling to cultivated pears wherever grown, and pure-bred varieties do not thrive under other conditions. Wild or cultivated, the pear is a deep-rooted plant, a fact that must be taken into consideration in selecting orchard sites. On shallow soils pears thrive better on the shallow-rooted quince.

Few cultivated fruits have changed more under domestication than the common pear. The trees under cultivation are larger and much more vigorous, and the fruits in the best orchard varieties —the consummation of the breeder's art—would by no one be considered the same species if the two were found in the wild. The pears from truly wild trees in the Old World are small, nearly round, hard, gritty, sour, and astringent. Fruits from the run-wild trees from the chance transport of seeds in this country are scarcely more attractive to either eye or palate. The product of these wild trees can hardly be called edible fruits. Cultivated varieties seem to have been evolved, until the advent of Le Conte and Kieffer, only by cultivation and selection. All plants are improved more rapidly under hybridization than selection, and now that the hybridization of this pear with other species is in full swing, we may expect, for the New World at least, a new pear flora in the immediate future.

The pear supplies man not only an important article of food but also a refreshing drink. Perry, the expressed juice of pears, is a common drink in all European countries. It is used somewhat as a fruit-juice, but chiefly as a fermented beverage. Pear-juice is fermented in open casks and at the end of fermentation contains from six to twelve per cent of alcohol. In parts of England and France, special varieties are grown in considerable numbers for perry-making. The wood of the pear is hard, heavy, and close grained, for which qualities it is esteemed by turners and engravers and for fuel. A mature pear-tree is a beautiful ornamental, and few forest trees are nobler or more picturesque than an old specimen of this species with its great size and irregular, pyramidal top. A pear-tree has much merit for shade as well as an ornamental.

Pears are easy of culture and propagation, subjects to be discussed in full in the next chapter. A few words as to propagation are in place here to show the affinities of this species with other species and genera. The common pear readily inter-grafts with other pears, and its cions may be made to grow, though with difficulty, on the apple. A most noteworthy fact with this fruit is that though not easily grafted on the apple and some other pears, it unites readily with the quince and the hawthorn, both of which belongs to distinct genera. The common pear hybridizes freely with the oriental pear, but whether with other species does not appear. There are no records of the pear hybridizing with the apple, but there are trustworthy accounts of hybrids with the quince and with sorbus.

The classical name of the pear was Pirus, changed to Pyrus by Tournefort, after which it was adopted

by Linnaeus, who established the genus and united with it the Malus and Cydonia of Tournefort. Fortunately there is no confusion in the botanical nomenclature of this fruit. Botanists agree, without notable divergence of opinion, on the generic and specific names of this fruit. There are several well-marked botanical varieties of *Pyrus communis* as well as a number of horticultural forms. The most prominent of these must be noted.

PYRUS COMMUNUS PYRASTER Linnaeus

1. Linnaeus *Sp. Pl.* 479. 1753.

This variety, rather common in parts of Europe, is similar to the type in foliage but has globose fruits. The leaves differ somewhat in being more rounded and in having margins more serrate. The plant is often very thorny. Some botanists believe this form to be only an escape from cultivation.

PYRUS COMMUNIS SATIVA De Candolle

1. De Candolle *Prod.* **2**:634. 1825.

This name is applied to the cultivated pear in its many pomological forms. The trees are usually larger than those of the wild pears and are without thorns. They differ also in having larger leaves, and larger and better-flavored fruits.

PYRUS COMMUNIS CORDATA Hooker

1. Hooker, J. D. *Stud. Flora* 131. 1878.
2. *P. cordata* Desvaux *Obs. Pl. Anjou* 152. 1818.

This botanical variety is a spiny shrub or shrub-like tree. The leaves are smaller than those of the species, 1 in. in width, suborbicular to ovate, subcordate at the base. Flowers smaller. Fruit globose or slightly turbinate, very small, ½ in. in diameter; calyx persistent. The species is a

native of western France and is found in Devon and Cornwall, England. This species is said to propagate itself freely from root-suckers which suggests that it might be tried as a dwarfing stock for the common pears.

PYRUS COMMUNIS LONGIPES Henry

1. Henry *Trees Gt. Brit. & Ire.* **6**:1561. 1912.
2. *P. longipes* Cosson and Durien *Bull. Soc. Bot. France.* **2**:310. 1855.

The tree is small with a few spines. The leaves are about 2 in. long and 1 in. wide, ovate, acuminate, subcordate, glabrous, finely and crenately serrate, on long slender petioles. This variety differs little from var. *cordata* in its fruit except in the deciduous calyx. It is found along the mountain streams of Algeria.

PYRUS COMMUNIS MARIANA Willkomm

1. *Linnaea* **25**:25. 1852.
2. *P. bourgaeana* Decaisne *Jar. Fruit.* i. t. 2. 1871.

This is a small tree found in the Sierra Morena in Spain. The leaves are ovate, 1 in. in length, rounded at the base, on very long, slender petioles. The pear is very small with a persistent calyx.

2. **PYRUS NIVALIS** Jacquin

1. *Fl. Austr.* **2**: 4, t. **107.** 1774.

Tree small, stout, without thorns; young shoots thickly covered with white wool. Leaves oval or obovate, 2 to 3 in. long, ¾ to 1¼ in. wide, crenate at the base, entire, upper and lower surfaces covered with white wool when young, nearly glaucous and the upper surface shining when mature. Flowers white, 1½ in. across, clustered. Fruit roundish, yellowish-green, borne on a stalk as long or longer than the fruit, acid or becoming sweetish at full maturity.

This pear is a native of eastern Europe and Asia Minor and is often found in France as an escape from the orchard. The tree, which sometimes attains a height of fifty feet, is said to be a handsome ornamental. The species is sometimes under cultivation in France for the fruits which make very good perry, and when bletted, as is the medlar, are suitable for dessert. In Austria and adjoining parts of Germany, the species is somewhat cultivated for the same purposes as in France under the name *Schnee birn* or Snow pear, because not fit to eat until snow falls. This pear might have value to hybridize with common pears for the improvement of their fruit.

Botanists are not quite certain of the botanical standing of *P. nivalis*. By some botanists it is considered a cultivated form of *P. elæagrifolia* Pallas. By others it is thought to be a cross of which *P. communis* is one parent. *P. salvifolia* De Candolle is either closely allied to or identical with this species. *P. kotschyana* Boissier differs from *P. nivalis* chiefly in having smaller and harder fruits. *P. elæagrifolia* Pallas is distinguished by some botanists from *P. kotschyana* only by its spiny branches—not a constant character.

3. PYRUS AURICULARIS Knoop

1. *Pomol.* **2**:38. 1763.
2. *P. irregularis* Muenchhausen *Hausvater* **5**:246. 1770.
3. *P. pollveria* Linnaeus *Mant.* **2**:244. 1771.
4. *P. bollwyleriana* De Candolle *Fl. France Suppl.* **5**:530. 1815.

A tree 30 to 50 ft. high, forming a round head; branchlets and buds downy. Leaves ovate or oval, 3 to 4 in. long, 2 to 2½ in. wide; pointed, irregular, and coarsely and sometimes doubly toothed; upper surface glossy, dark green, with

glands on the midrib, glabrous at maturity, downy when young; lower surface permanently covered with gray tomentum; stalk 1 to 1½ in. long, woolly. Flowers white, nearly 1 in. across, 5 to 20 in tomentose corymbs; sepals covered with pure white wool on both surfaces; styles 2 to 5, united and tomentose at the base; stamens rosy red. Fruit pyriform, 1 to 1½ in. in diameter; stalk 1 to 1½ in. long, reddish yellow; flesh yellow, sweet.

This tree is an interesting hybrid between *P. communis* and the whitebeam, *P. aria*. It was first noticed at Bollweiler, Alsace, and was first mentioned by J. Bauhin in 1619. It is propagated by grafts as few of the seeds are fertile and these do not come true to name. It bears fruit very sparingly, none being produced in some seasons.

Besides the species that have been named there are several other occidental pears named by European botanists which may be looked for in botanic gardens. Some of these might have value for work in hybridization but it is doubtful. Of these, *P. heterophylla* Regel and Schmalhausen (*Act. Hort. Petropol* **5**:pt. ii, 581. 1878) is a small thorny tree from the mountain valleys of Turkestan. *P. amygdaliformis* Villars (*Cat. Meth. Jardin Strasbourg* 323. 1807) is a spiny shrub or small tree, bearing small worthless fruits; a native of arid soils in the regions of olives in southern Europe. *P. salicifolia* Pallas (*Itin.* **3**:734. 1776) is a small spiny tree from the Crimea, Caucasas, and Armenia; the fruit has little or no value. *P. syriaca* Boissier (*Diag. Nov. Pl. Orient* **10**:1. 1849) is a thorny, shrubby tree from Syria, Asia Minor, and Kurdistan.

A review of botanical literature shows several other names of doubtful species of Pyrus which seem

more likely to be hybrids or abnormal escapes from orchards. There are, also, many names which seem to be synonyms. Material and literature at hand do not enable the author to make certain of these, even if any sufficiently worthy purpose could be served in a pomological text.

ORIENTAL PEARS

The oriental pears have been brought to America in comparatively recent years, chiefly as ornamentals and for blight-resistant stocks; but hybrids of at least one species of this group, *P. serotina*, with the common pear have given many valuable orchard varieties. The Chinese and Japanese cultivate several species for their fruits. These pears constitute a group quite distinct in aspect of tree and fruit, but no characters not in occidental species are found in all species of the oriental group. The most constant differences, besides region of origin, are found in the leaves and the calyx. The leaves in most species are markedly acuminate and their margins are sharp-serrate or setose-serrate. The calyx falls from the fruit in the species now cultivated for food, but does not in two species promising for stocks.



4. PYRUS SEROTINA Rehder

1. Rehder *Proc. Amer. Acad. Arts & Sci.* **50**:213. 1915.

Tree vigorous, upright, attaining a height of 20 to 50 ft., the branches becoming glabrous. Leaves ovate-oblong, sometimes ovate, 3 to 5 in. long, rounded at the base and rarely subcordate or cuneate, long-acuminate, sharply setose-serrate, with partially appressed seratures; when young, villous, or lower surface cobwebby, but becoming glabrous. Flowers white, borne in 6 to 9 flowered umbellate-racemose clusters; glabrous or somewhat tomentose and borne on slender pedicels; calyx-lobes triangular-ovate and long-acuminate, ¼ to ½ in. long, glandulose-denticulate; petals oval, short-clawed, ¾ in. long; stamens about 20; styles 4 or 5, glabrous. Fruit subglobose, russet-brown; stalk slender; calyx deciduous.

This oriental pear has been referred to *P. sinensis* Lindley (not Poiret) by botanists and horticulturists since its introduction in Europe nearly one hundred years ago until 1915 when Rehder, discovering that the true *P. sinensis* had been lost to cultivation, proposed the name *P. lindleyi* for one group and *P. serotina* for another group of Chinese pears passing under Lindley's original species, *P. sinensis*.

This species comes from central and western China, where the fruits are used for food under the name, with that of other brown-fruited species, of *tang-li*. American pomologists are interested in the type species as a possible source of blight-resistant stocks for varieties of the common pear. Stocks of this species, however, grown on the Pacific slope have not proved satisfactory because difficult to bud, and very susceptible to leaf-blight, and because they are not as resistant to pear-blight as an ideal stock

should be. Rehder, an authority on oriental pears, gives two botanical varieties. His var. *stapfiana* differs from the type in bearing pyriform fruits; leaves with less appressed serratures; and petals with attenuate claws. So far as now appears it is of no greater value to pomology than the type. The other botanical variety which Rehder describes, var. *culta*, is of great importance in pomology and must have detailed consideration.

PYRUS SEROTINA CULTA Rehder

1. Rehder *Prod. Amer. Acad. Arts & Sci.* **50**:233. 1915.
2. *P. sinensis* Hort. Not Lindley nor Poiret.
3. *P. japonica* Hort. Not Thunberg.
3. *P. sieboldi* Carrière *Rev. Hort.*. 110. 1880.
5. *P. sinensis culta* Makino *Tokyo Bot. Mag.* **22**:69. 1908.

Tree large, vigorous; top spreading, drooping, open; trunk thick, shaggy; branches stout, zigzag, greenish-brown, with a slight covering of scarf-skin marked with many conspicuous, elongated lenticels; branchlets slender, with long internodes, brownish-red, tinged with green and with thin, ash-gray scarf-skin, glabrous, with many unusually conspicuous, raised lenticels. Leaf-buds sharply pointed, plump, thick at the base, free; leaf-scars prominent. Leaves 4⅛ in. long, 2⅝ in. wide, thick, leathery; apex taper-pointed; margin tipped with very fine reddish-brown glands, finely serrate; petiole thick, 2 in. long, lightly pubescent, greenish-red. Flower-buds thick, short, conical, plump, free, arranged singly on very short spurs; flowers with a disagreeable odor, bloom in mid-season, 1¼ in. across, averaging 7 buds in a cluster; calyx-lobes long, narrow, acuminate, glandular, reflexed, lightly pubescent within and without; petals broadly oval, entire, apex rounded; pistils 4 or 5, from a common base, longer than the stamens,

pubescent at base; stamens ¼ in. long, with dull red anthers; pedicels 1½ in. long, slender, thinly pubescent, pale green.

Fruit ripe February-March; 2¼ in. long, 2⅛ in. wide, round, slightly pyriform, irregularly ribbed, with unequal sides; stem 1½ in. long, curved, slender; cavity acute, deep, narrow, furrowed, lipped; calyx deciduous; basin shallow, wide, obtuse, gently furrowed or wrinkled; skin tough, smooth, waxy; color lemon-yellow, with russet lines and nettings and many russet specks; dots numerous, small, conspicuous, brownish-russet; flesh yellowish-white, very granular, crisp, tough, juicy, with a peculiar aroma unlike that of the common pear; poor in quality. Core large, open, axile, with clasping core-lines; calyx-tube short, wide, conical; seeds roundish, of medium size, wide, plump, obtuse.

The Sand pear differs from the type in fruit and foliage. The pears are much larger and are commonly apple-form as shown in the accompanying plate, but trees bearing pyriform fruits are not unknown. The leaves are larger and broader. Rehder, who separated this form from its species, writes, “The Japanese pear cultivated under the name Madame Von Siebold may be considered as representing the type of this variety.” These pears are known to pomologists under several names; as Chinese Sand, Sand, Japanese, Hawaii, Sha Lea, Gold Dust, Mikado, and Diamyo, although it is possible that the last three are hybrids. The pear illustrated and described in this text as a representative of this botanical variety came from seed sent from Manchuria.

The pears are attractive in appearance, keep well, and are palatable in culinary preparations, but are possessed of a gritty flesh and potato-like flavor which debar them as dessert fruits in all regions

where the common pear can be grown. The several varieties of var. *culta* now in America came from Japan where the species must have been early introduced from China as this is now the most common fruit of the Japanese with the exception of the persimmon. In China and Japan there are a number of pomological varieties, which, however, differ from each other less than varieties of the European pear. The fruits of the several varieties grown in America are often mistaken for apples, from which they are distinguished by their deciduous calyxes, rough, dry skins, long stems, juicy, gritty flesh, and insipid potato-like flavor. Seedlings of var. *culta* fail as stocks for European varieties in the same characters in which the species is unsatisfactory.

This oriental pear hybridizes freely with the common pear, and it is for this purpose that it is most valuable in America. Several of these hybrids are important commercial varieties in North America of which Kieffer, Le Conte, and Garber, in the order named, are the best known and the most useful. Sterility is a common attribute of hybrids, but the hybrids between these two species are not more sterile than varieties of the parents. These hybrids are stronger and more rapid in growth than the common pear and are more productive and more resistant to blight. The pears are more pyriform and of much better flavor than those of the oriental parent. The calyx of hybrid fruits is sometimes persistent and sometimes deciduous. The hybrids do not make good stocks and intergraft but poorly with the common pear. Of all pear-trees, these are handsomest in growth when in perfect health and make excellent ornamental trees. The strong, clean growth, luxuriant green foliage, beautifully tinted in the autumn, resembles the oriental rather than the

occidental parent. It is doubtful whether hybrid trees will attain the great size of those of the common pear, and they seem to succumb to the ills of old age rather more quickly than those of the European parent. The hybrid pears seem less well liked by the pestiferous San Jose scale than the common pear. The first flush of popularity having passed, hybrid pears have found their proper place in American pomology. They belong to the South and Middle West where the common pear is illy adapted to the climate. In the North and on the Pacific slope, pear-growers are wisely planting varieties the fruits of which are better in quality.

5. PYRUS USSURIENSIS Maximowicz

1. *P. ussuriensis* Maximowicz *Bull. Acad. Sci. St. Petersb.* **15**:132. 1857.
2. *P. sinensis* Decaisne *Bull. Acad. Sci. St. Petersb.* **19**:172. 1883.
3. *P. simonii* Carrière *Rev. Hort.* 28. 1872. fig. 3.
4. *P. sinensis ussuriensis* Makino *Tokyo Bot. Mag.* **22**:69. 1908.

Rehder says of *P. ussuriensis*,[15] "This species differs from the allied species chiefly in the short stalk of the globose fruit with persistent calyx, in the broad, often nearly orbicular, strongly setosely serrate leaves and in the lighter yellowish-brown branches; the flower clusters are, owing to the short stalks, rather dense and hemispherical, the petals are obovate and rather gradually narrowed toward the base; the styles are distinctly pilose near the base."

Wilson,[16] describing the vegetation of Korea, says of this species: "*Pyrus ussuriensis* is abundant and this year is laden with fruit. On some trees the fruit is wholly green, on others reddish on one side; the length of the peduncle varies and the same is true of

the leaf-structure; the calyx is persistent or deciduous often on fruits on the same branch."

The habitat of this species is northern and northeastern China and eastern Siberia. Manchuria, Korea, Amurland, and Ussurri are named as regions in which it is most commonly found. A glance at the map shows that this habitat is in the far north for pears, and it might well be suspected that this would be one of the hardiest of all pears, and this proves to be the case. Horticultural varieties are reported by Chinese explorers, some of which have been introduced by the United States Department of Agriculture. These no doubt have some value in the most northern fruit regions of America and if not for their fruits, they may prove useful in hybridization. But it is as a possible stock resistant to blight that the species has received most attention in this country.

Reimer, of Oregon, found this species to be very resistant to fire-blight and at first thought it might prove to be a valuable stock. Following Reimer's experiments much was said of it as a promising new stock, and the United States Department of Agriculture gave it a thorough trial from the results of which they discouraged its use. The tree proved to be a slow grower; very subject to leaf-blight, therefore unable to hold its leaves during the growing and budding season, difficult to use in budding as the tough bark did not "slip" easily, and but a small number of the buds took. According to Galloway,[17] however, the Kuan li or Chinese water pear, which he says belongs to the Ussuriensis group, is one of the most promising pear stocks. Both for its fruits and as a stock, this species is likely to receive much attention in the United States for some time to come. The difficulty at present, as we have found at

this Station, is to get seeds or budding wood true to name of the forms of the species that seem to be most desirable.

6. **PYRUS SERRULATA** Rehder

1. *P. serrulata* Rehder *Proc. Amer. Acad. Arts & Sci.* **50**:234. 1915.

Chinese Saw-leafed Pear. This species, according to Rehder, is closely related to *P. serotina* but differs from it chiefly in its serrulate, not setosely serrate, generally broader, leaves, in the smaller flowers with usually three or four styles, and in the shorter sepals and smaller fruit.

This pear was first found by E. H. Wilson in 1907 in western Hupeh. The province of Hupeh is 800 or 900 miles west and south of Shanghai. The pears in this location grow in thickets at an altitude of 4000 to 5000 feet. Reimer found the species at Ichang, in Hupeh, at elevations of 3000 to 3700 feet. Its occurrence at these altitudes indicates that it is a hardy form. Whether the species is likely to be valuable for its fruits, or for hybridization, does not appear, but Galloway,[17] reporting on it as tested by the United States Department of Agriculture, says that it is affected but slightly by leaf-blight, holds its foliage well in hot summers, and has a long budding season. These statements indicate that it is worth trying as a stock.



7. PYRUS BETULÆFOLIA Bunge

1. *P. betulæfolia* Bunge *Mem. Sav. Etr. Acad. Sci. St. Petersb.* **2**:101. 1833.
2. Decaisne *Jard. Fruit.* **1**:20. 1872.

3. Carrière *Rev. Hort.* 318. 1879. figs. 68, 69.
4. Sargent *Gard. & For.* **7**:224. 1894. fig. 39.

Tree vigorous, upright-spreading, tall, open-topped, hardy; trunk stocky, shaggy, and rough; branches thick, dull brownish-red, thickly coated with gray scarf-skin, sprinkled with numerous small, raised lenticels; branchlets slender, willowy, long, with long internodes, dull reddish-brown, with gray scarf-skin, heavily pubescent, with small, conspicuous, raised lenticels. Leaf-buds small, short, flattened, pointed, free. Leaves 4 in. long, 2⅛ in. wide, thick, stiff; apex taper-pointed; margin sharply and coarsely serrate; teeth tipped with small, reddish-brown glands; petiole 1¾ in. long, slender, pubescent, tinged red. Flower-buds small, short, conical, plump, free, arranged singly on long spurs; flowers open late, with a rather unpleasant odor, showy, $1^{3}/_{16}$ in. across, white, in dense clusters, 13 buds in a cluster; pedicels $1^{5}/_{16}$ in. long, slender, pubescent, pale green; calyx-tube pale green mingled with white pubescence, dark greenish-yellow within, campanulate, thickly pubescent; calyx-lobes greenish within and with white pubescence, short, narrow, acuminate, tipped with very small, sharp, reddish-brown glands, heavily pubescent within and without, reflexed; petals separated at the base but with meeting cheeks, round-oval, entire, with short, narrow claws, white at the base; anthers deep pinkish-red; filaments short, shorter than the petals; styles 2 to 3; pistils glabrous, usually as long as the stamens; stigma very small. Fruit russet, heavily dotted, the size of a small grape; calyx deciduous; pears hanging until the following spring.

The above description was made from a plant grown from seed obtained from the Arnold Arboretum in 1900, that institution having obtained the species from the mountains near Peking in 1882.

This pear has been collected by various explorers in the regions about Peking, especially to the north and east, and is not uncommon in these parts of China. The small pears are without value for food, but the trees are promising stocks. While Reimer reports the species as susceptible to fire-blight in Oregon, it has not proved particularly so on the grounds of this Station nor elsewhere in the East. The seedlings are also free from leaf-blight. The young plants grow vigorously from seed or cuttings; are capable of being budded throughout a long season; they make a good union with other pears in China according to Reimer; and the variety is so common in China that there is little difficulty in getting seed true to name. The tree is a handsome ornamental.

8. PYRUS CALLERYANA Decaisne

1. *P. calleryana Decaisne Jard. Fruit.* **1**:8. 1872.

Rehder[18] says of this species, "*Pyrus calleryana* is a widely distributed species and seems not uncommon on mountains at an altitude of from 1000 to 1500 m. It is easily recognizable by its comparatively small crenate leaves, like the inflorescence glabrous or nearly glabrous, and by its small flowers with two, rarely three styles. When unfolding most specimens show a loose and thin tomentum on the under side of the leaves which usually soon disappears, but in No. 1662 from Kuling even the fully grown leaves are loosely rusty tomentose on the midrib beneath. In No. 415a the leaves are longer, generally ovate-oblong, the pedicels very long and slender, about 3 to 4 cm. long and the sepals are mostly long-acuminate. The fruit of No. 556a is rather large, about 1 to 1.4 cm. in diameter, but a fruit examined proved to be two-

celled."

This species is reported from various places in China with western Hupeh as the chief habitat. Reimer,[19] of Oregon, reports this as a most promising stock for the common pear, and Galloway, [20] of the United States Department of Agriculture, says that "Of all the pears tested and studied this remarkable species holds out the greatest promise as a stock." In America it stands the cold as far north as the Arnold Arboretum, near Boston, and endures summer heat as far south as Brooksville, Florida. The plant is reported as vigorous under nearly all conditions. Galloway reports that it can be budded from July 1 to September 1 at Washington. All kinds of pears take well upon it; the seeds are easily obtained, easily grown, and run remarkably uniform.

9. PYRUS OVOIDEA Rehder

1. *Proc. Am. Acad. Arts & Sci.* **50**:228. 1915.
2. *P. sinensis Hemsley Jour. Linn. Soc.* **23**:257. 1887, in part. Not Poiret nor Lindley.
3. Schneider *Ill. Handb. Laubholzk.* **1**:663. 1906. fig. 364 c-d.
4. *P. simonii* Hort. Not Carrière.

Rehder, who established this species, says of it: "This species seems to be most closely related to *P. ussuriensis* Maximowicz which differs chiefly in the broader orbicular-ovate or ovate leaves, in the lighter colored branches, and in the short-stalked subglobose fruit with the persistent sepals spreading. The shape of the fruit of *P. ovoidea* is very unusual and quite distinct from any pear I know; the fruit is exactly ovate, broad and rounded at the base and tapering from the middle toward the truncate apex, as figured by Schneider (fig. 364 d). This may, however, not be a specific character and the shape of the fruit may vary in other specimens referable to

this species. The Chinese material which I have seen and which might belong here is very meagre. The Fokien specimen is in young fruit which suggests a more pyriform shape, though tapering toward the apex and showing the same kind of persistent calyx; the serration of the leaves is more minute and more accumbent. The Yunnan specimen is in flower and differs somewhat in the more copious tomentum of the leaves and of the inflorescence and in the shorter, nearly entire calyx-lobes.

"It is not known when and whence this species was introduced. Possibly it was sent in the early sixties from northern China by G. E. Simon, or by A. David a little later from the same region or from Mongolia to the Museum in Paris and was afterwards distributed by Decaisne."

This species is of importance to pear-growers as a stock. Discussing it as a stock, Reimer[21] says: "This species ranks second only to *Pyrus ussuriensis* in blight resistance. During 1915 we were unable to get the disease to develop more than four inches even in vigorous growing shoots of this species. During the very favorable season of 1916 vigorous shoots would blight down as much as fifteen inches. As soon as it reached the hard wood of the previous season it would stop. All the inoculations into one and two-year-old trunks have failed to develop the disease.

"The trees are vigorous growers, and produce medium sized fruit, which is egg-shaped, and has a persistent calyx. This species is a native of northern China, and was formerly known as *Pyrus simonii*."

10. PYRUS VARIOLOSA Wallich

1. *Cat. No. 680.* 1828.

Reimer,[21] now a leading authority on blight-

resistant stocks, writes of *P. variolosa*: “This species is one of the most promising types in our collection. The tree is a beautiful, vigorous, upright grower. It makes a good union with cultivated varieties, and should prove valuable as a stock for top-working.

“This species, while not immune to blight, is very resistant. During the summer of 1915 a large number of innoculations were made into the tips of young branches, and these usually would blight back for a distance of three to five inches. During 1916, a very favorable season for pear blight, the disease would extend down young branches as much as from twelve to eighteen inches, and in one case as much as two feet. Seventy-seven inoculations were made into the trunks of two-year-old trees. All but seven of them failed to develop the disease. In the successful infections, only small superficial cankers were produced. In these cankers a new cambium would readily form, and the entire wound would heal over perfectly in a short time.

“The origin of this species, or type, is still a matter of dispute. It has been confused with *Pyrus pashia* of northern India, from which species it is very distinct. *Pyrus variolosa* produces medium sized, pear-shaped fruits, which have a persistent calyx. It is possible that this is not a distinct species, but a hybrid. If this should prove to be the case, it probably will not come true to type from seeds. This matter will be determined by a study of the seedlings of this type. If this does not come true to type from seeds, the seedlings may be of little value for root stocks. If this should prove to be the case, it will, nevertheless, be of value as a stock for top-working, when propagated by budding or grafting on some other root system.”

CHAPTER III
PEAR CULTURE

The common pear or some of its hybrids with the oriental pear is grown for a home supply of fruit, if not for the markets, in every part of North America where hardy fruits thrive except in the extreme north and south. But commercial pear-growing on this continent is confined to a few regions, and in these is profitable only in carefully selected situations. Perhaps the culture of no other fruit, not even of the tender peach nor of the capricious grape, is more definitely determined by environment than is that of the pear. A study of the regions in America in which pears are successfully grown for the markets furnishes clews to the proper culture of this fruit in New York, and shows with what regions this State must compete in growing pears for the markets. The location of the pear regions in America is readily determined by figures showing the number of trees and their yield in the various fruit regions of the country.

PEAR STATISTICS FOR THE UNITED STATES AND NEW YORK

Six states produced over 65 per cent of the pears grown in the United States in 1919. The census of 1920 shows that in the preceding year the total crop of the country was 14,211,346 bushels, of which California produced 3,952,923 bushels; New York, 1,830,237 bushels; Washington, 1,728,759 bushels; Oregon, 761,063 bushels; Texas, 637,400 bushels; and Missouri, 430,828 bushels. Trees in all other states yielded 4,870,136 bushels. There were

according to this census 14,646,995 bearing trees and 6,051,845 not of bearing age. The yield of fruit was 60 per cent greater than in 1909; the number of bearing trees 3 per cent less; and the number of non-bearing trees 28 per cent less. Compared with other tree-fruits, according to this census, the pear occupies fourth place in value of product, the apple, peach (including the nectarine), and plum (including the prune), in order named, outranking the pear. Probably the orange, grape, and strawberry yield greater value to the country than the pear, although the acreage of each of these three fruits is smaller. Commercial production cannot be segregated from the total, but without question the increase in plantings is due to commercial activities; for the development of the canning industry, refrigerator service, and better transportation have greatly stimulated trade in this fruit.

In the states in which pear-growing is a commercial industry, commercial orchards are confined to localities in which climate, soil, and transportation combine to favor the pear. In New York, for example, pears are grown for market on a large scale in only ten of the sixty-one counties. These, with the number of trees in each, according to the last census are as follows: Niagara, 620,743; Monroe, 384,374; Orleans, 377,371; Columbia, 308,298; Wayne, 305,239; Ulster, 304,158; Greene, 208,885; Oswego, 154,576; Ontario, 121,934; Orange, 96,456.

Over 77 per cent of all the pear-trees in the State are in these counties, and 79 per cent of the pears grown in the State are produced in these ten counties. The production of pears in New York for the eleven-year period from 1909 to 1919, inclusive,

show the increase and fluctuation in the production of pears in the State for this period. The figures for 1909 and 1919 are from the thirteenth and fourteenth census reports, while those of the intervening years are estimates from the Bureau of Crop Estimates of the United States Department of Agriculture. The yields run in bushels for the eleven years as follows: 1,343,000, 1,530,000, 1,886,000, 1,128,000, 2,016,000, 1,298,000, 1,375,000, 1,675,000, 1,708,000, 1,352,000, and 1,830,237.

Bartlett and Kieffer are conspicuous leaders among varieties in number of trees and in production for the whole country. In the great commercial pear-growing regions of New York and California, Bartlett is the favorite variety, but Kieffer is grown largely also, especially for canners. In the South and in the Mississippi Valley, Kieffer is the leading variety because it is relatively resistant to blight and withstands extremes in climate better than other varieties. For many years after its introduction about 1870, Kieffer was over-praised by both fruit-growers and nurserymen. Fruit-growers liked it because of its resistance to blight and great productiveness, and nurserymen preferred it to other sorts because it is the easiest of all varieties to grow in the nursery. It is, however, so universally condemned for its tasteless fruits that it is losing its popularity, and is not now as largely planted in competition with Bartlett as it once was. Seckel, Clapp Favorite, Winter Nelis, Beurré d'Anjou, Beurré Bosc, Howell, Sheldon, Beurré Clairgeau, and Garber for the South, are the standard varieties following Bartlett and Kieffer in popularity.

Bartlett is far in the lead of commercial varieties in New York. At present, Kieffer probably holds

second place in this State, but its popularity is fast waning and Seckel is nearly as commonly planted, if, indeed, it does not now surpass Kieffer in number of trees. Clapp Favorite, Beurré d' Anjou, Beurré Bosc, Beurré Clairgeau, Duchesse d'Angoulême, Howell, Lawrence, Sheldon, Vermont Beauty, and Winter Nelis are all planted more or less in commercial orchards, and are the favorites for home use. All of these varieties are susceptible to blight, are a little too tender to cold, and have other faults of tree and fruit, so that pear-growers in New York anxiously look forward to better varieties. It is hardly too much to say that pear-growing can never become a great industry in New York until better varieties take the place of the unreliable sorts that must be planted now.

To some extent, man-governed agencies determine where pears may be grown profitably if the planter is growing for the markets. Pears do not keep long and are easily bruised, and transportation must not take too great toll; therefore, handling facilities must be suitable, markets must not be distant, and transportation must be cheap and efficient. But in the culture of this fruit, natural agencies outrank those depending on man, two of which determine very largely where pears are to be grown commercially in both the country and the state. These two, climate and soil, have been mentioned before, but must now be discussed somewhat in detail.

CLIMATE

The ideal climate for a cultivated plant is one in which the plant thrives as an escape from cultivation wholly independent of care from man. The apple,

cherry, plum, and peach are often found wild in one or another part of America, but the pear almost never. The pear does not naturally become inured to the American climate, and in the orchard is not well acclimated even in the varieties which have originated in the country. In particular, as a young tree and until well advanced toward maturity, the pear shows the bad effects of maladjustment to climate, but as an old tree it seems to be far less susceptible to the extremes of climate to which fruit trees are subjected in most parts of America. Both of the two chief constituents of climate, temperature and rainfall, are determinants of regions and sites in pear-growing.

Extremes in temperature, more particularly of cold, are the only phases of temperature that pear-growers need consider in New York. The pear is not nearly as hardy as the apple, and Bartlett, the foremost variety in the State, is almost as tender to cold as the peach. The limits of commercial pear-culture are set in this State by the winter climate. The pear cannot be grown profitably where the temperature often falls below −15° F., for while winter-killing of the wood does not always occur at this temperature it sometimes does, and even occasional injury to the tree is almost fatal to the profitable growing of fruit. Fruit-buds of the pear are a little more tender to cold than the wood, and a season's crop is often ruined when the temperature drops to −10° F. Pears in the nursery are more tender to cold than trees in the orchard, and unless the wood is thoroughly mature or protected by a heavy covering of snow, nursery stock is likely to be injured by any temperature below zero. The injury of nursery stock is manifested in the well-known "black heart" of young pear-trees subjected to severe cold.

Happily, there is some flexibility in the constitutions of varieties of pears, as with all fruits, and a degree of cold that will kill a variety under one set of conditions may not under another. While, therefore, it is not safe for commercial fruit-growers to gamble with the weather, those who grow pears for their own use may do so with the expectation of losing trees or crop now and then but of having them in most seasons. A little can be done to prevent winter injury by carefully selecting sites protected from prevailing winter winds, and by planting on warm soils on which the wood matures more thoroughly than on cold soils. Careful cultural methods, especially the use of cover-crops, may be helpful. Not much can be done in the way of coddling pear-trees from cold. They cannot be laid down as is sometimes done with peach-trees, nor can they be grown low enough, even as dwarfs, to count on much protection from deep snow.

Happily, also, there are varieties of pears endowed with constitutions fitted for very different climates. Varieties of pears from central and northern Russia show remarkable capacity in resisting cold, heat, dryness, strong winds, and other peculiarities of the climate of the Great Plains, and some of them can be grown in the coldest agricultural regions of New York. A few hybrids, as Kieffer, Le Conte, Garber, Douglas, and others of their kind can be grown in the Gulf States where the common pear cannot withstand the hot summers. Cincinis, Le Conte, and Garber thrive as far south as central Florida and southern Texas. There is considerable variation in the hardiness of the common pear. Tyson, Flemish Beauty, and Beurré Superfin are much hardier than Bartlett, Seckel, or Clapp Favorite, and may be chosen to extend the culture of

this fruit to any part of New York in which the Baldwin apple can be grown. It is most surprising to find occasionally these hardiest of the common pears growing in some of the coldest parts of the State, usually as demonstrations not only of superior inherent hardiness but also of hardiness brought about by conditions which enable the trees to enter the winter with unimpaired constitutions.

The pear is seldom injured by heat in the summers of New York. Occasionally fruit and foliage suffer from long-continued heat in the dry weather of a hot summer. More often the trunks of pear-trees are injured by a blazing sun in late winter or early spring, especially when the sun's rays are reflected by ice or snow and strike the tree intensified. Indeed, sunscald so produced is one of the common troubles of the pear in New York. With the pear, as with all other fruits, there is a sum total of heat units above a certain temperature, put by most experimenters at about 43° F., the awakening point of growth, necessary to carry the crop from blossoms to proper maturity. Of the number of units necessary to mature a crop little is known. Many varieties do not ripen in New York in a cold season, but come to perfect maturity in warm seasons. A study of phenology would throw much light on the failure of pears to ripen properly.

The average date at which the last killing frost occurs in the spring helps to determine the limits in latitude and altitude at which the pear can be grown in New York. The pear blossoms early, and while both in bud and blossom the reproductive organs seem able to stand more cold than those of the peach and sweet cherry, yet even in the most favored regions for growing this fruit in New York a crop is

occasionally lost from killing frosts, and there are few years in which frost does not take toll in some part of the State. Damage from frost must be expected when the commonly recognized precautions in selecting frost-resistant sites are not recognized. Little or nothing can be done in New York to prevent injury from frost once trees have been set. Windbreaks, whitewashing, smudging, and orchard-heaters are all failures in frost-fighting in this State.

The pear-grower should know how the blooming time of the varieties of pears he plants agrees in time with spring frosts. To do this he must have weather data and must know the approximate date of blooming of varieties. He ought also to be able to synchronize three of these phases of climate—spring frosts, fall frosts, and the length of the summer—with the ripening dates of varieties. Data as to the average dates of spring and fall frosts can be obtained from the nearest local weather bureau. The accompanying table gives the blooming and ripening dates of pears grown at the New York Agricultural Experiment Station. Blooming and ripening dates vary in different parts of the State, and to make use of the data from this Station the grower must compare the latitude, altitude, and local environment of his orchard with those of the Station. Data for the Station is as follows:

BLOOMING SEASON AND SEASON OF RIPENING OF PEAR-VARIETIES

	Blooming season					Ripening season				
	Very early	Early	Mid-season	Late	Very late	Very early	Early	Mid-season	Late	Very late
Abraham		*								
Alamo			*				*			
André			*			*				
Desportes										

Ansault			*					*		
Appert			*					*		
Bartlett			*					*		
Belle Lucrative			*						*	
Beurré d'Anjou		*							*	
Beurré d'Arenberg			*							
Beurré Bosc		*							*	
Beurré Clairgeau			*						*	
Beurré Diel		*							*	
Beurré Giffard			*				*			
Beurré Hardy			*					*		
Beurré de Jonghe			*							
Beurré Superfin								*		
Bihorel			*				*			
Bloodgood		*					*			
Bordeaux			*						*	
Buffum			*					*		
Canner		*						*		
Chamogea			*							
Cincincis		*								*
Clapp Favorite			*					*		
Cocklin		*							*	
Colonel Wilder					*				*	
Columbia			*					*		
Craig				*					*	
Dana Hovey			*						*	
Dearborn			*				*			
Diamyo		*								*
Dorset	*									*
Douglas			*						*	

Doyenné d'Alençon	*									*	
Doyenné Boussock		*							*		
Doyenné du Comice				*					*		
Duchesse d'Angoulême			*							*	
Duchesse d'Orléans			*						*		
Duhamel du Monceau				*						*	
Early Harvest		*					*				
Easter Beurré			*							*	
Eastern Belle			*						*		
Elizabeth			*				*				
Fitzwater			*						*		

Blooming Season and Season of Ripening of Pear-Varieties — *Continued*

	Blooming season					Ripening season				
	Very early	Early	Mid-season	Late	Very late	Very early	Early	Mid-season	Late	Very late
Flemish Beauty			*						*	
Fontenay					*				*	
Fox		*						*		
Frederick Clapp			*					*		
French			*					*		
Gansel-Seckel		*							*	
Garber			*							
Glou Morceau				*					*	
Golden Russet				*						*
Grand Isle		*						*		

Guyot										*		
Hemminway			*							*		
Howell		*									*	
Japan		*										*
Jargonelle			*						*			
Jones		*									*	
Joséphine de Malines		*									*	
Kieffer		*									*	
Koonce			*						*			
Krull			*									*
Lady Clapp		*								*		
Lamartine		*									*	
Lamy			*								*	
Lawrence		*									*	
Lawson		*							*			
Le Conte	*										*	
Léon Leclerc (Van Mons)			*							*		
Lemon		*							*			
Liegel		*									*	
Lincoln			*								*	
Lincoln Coreless			*									*
Longworth		*									*	
Louise Bonne de Jersey			*								*	
Louvenjal			*								*	
Lucy Duke					*						*	
Madeline			*						*			
Magnate			*								*	
Margaret			*						*			
Marie Louise			*								*	
Mongolian	*										*	
Mount Vernon			*								*	
Nickerson			*								*	

Ogereau				*							
Olivier de Serres			*								*
Onondaga			*							*	
Osband		*									
P. Barry				*						*	
Peffer			*							*	
Pitmaston			*							*	

BLOOMING SEASON AND SEASON OF RIPENING OF PEAR-VARIETIES — *Concluded*

	Blooming season					Ripening season				
	Very early	Early	Mid-season	Late	Very late	Very early	Early	Mid-season	Late	Very late
Pound		*								*
Président Drouard			*						*	
Président Mas			*							
Raymond			*					*		
Reeder			*						*	
Riehl Best			*						*	
Ritson			*						*	
Romain		*					*			
Roosevelt		*						*		
Rossney			*							
Russet Bartlett			*					*		
Rutter			*						*	
Seckel			*						*	
Seneca			*					*		
Sha Lea		*								*
Sheldon			*						*	
Siebold			*						*	
Souvenir de Congrès			*					*		

Souvenir d'Espéren				*						*		
Sudduth				*					*			
Summer Beauty		*										
Summer Doyenne			*				*					
Treyve	*								*			
Triumph			*							*		
Tyson			*				*					
Ulm			*						*			
Vermont Beauty			*							*		
White Doyenné		*								*		
Wilder Early				*			*					
Winter Bartlett					*					*		
Winter Nelis				*						*		
Worden Seckel			*						*			

The latitude of the Smith Astronomical Observatory, a quarter of a mile from the Station orchards, is 42° 52′ 46.2″; the altitude of the orchards is from five hundred to five hundred and twenty-five feet above the sea level. The soil is a loamy but rather cold clay; the orchards lie about a mile west of Seneca Lake, a body of water forty miles in length and from one to three and one-half miles in width and more than six hundred feet deep. The lake has frozen over but a few times since the region was settled, over a hundred years ago, and has a very beneficial influence on the adjacent country in lessening the cold of winter and the heat of summer and in preventing early blooming.

The blooming period is that of full bloom. The data were taken from trees grown under normal conditions as to pruning, distance apart, and as to all other factors which might influence the blooming period. There is a variation of several days between the time of full bloom of the different varieties of pears. These differences can be utilized in selecting sorts to avoid injury from frost. In using blooming-time data it must be kept constantly in mind that varieties of fruits may not bloom in the same relative time. In very warm or very cold springs the usual relations of blooming-time may be upset.

Rainfall, moisture, and cloudiness are most important in growing pears. England, Belgium, and northern France, regions where the pear finds the climate most congenial, have much cool, moist, cloudy weather with much less variation in temperature than is the case in the United States. The climate of New York and the states bordered by the Great Lakes where most of the pears of eastern America are grown, is cooler, moister, and cloudiness is more prevalent than in other eastern states. The summer climate of the Pacific slope is not moist but is equable and, in the best pear orchards, moisture is supplied abundantly by irrigation. From these considerations we may assume that the pear requires more moisture than most other fruits. The pear in New York more often suffers from too little than from too much rain. The exception is when pears are in bloom, at which time the crop is sometimes lost or badly injured by cold, wet weather. Warm, moist weather is favorable to both fire-blight and the scab fungus, the two most dreaded diseases of the pear.

Several other weather problems should be studied before selecting a region as a site for a pear-orchard.

The direction, force, and frequency of prevailing winds both in winter and summer are important considerations. Unfavorable winds in winter favor winter-killing; in blooming time prevent the proper setting of fruit; and at ripening time make many windfalls. Hail storms are more frequent in some parts of New York than in others and may be a deterrent in selecting a site. Lastly, drouths, so fatal to the pear, are more common in some parts of the State than in others.

LOCATIONS AND SOILS FOR PEARS

Pears thrive in a great diversity of soils, provided, almost always, that there is depth for proper root-run. A few varieties may be grown in comparatively shallow soils, but most pears are deep-rooted. The common pear is rather averse to sand, gravels, and light soils in general, and does best in rather heavy loams, clays, and even in silts. Many varieties show preferences for the several types of loam and clay, and the commercial grower must see to it that the varieties he plants are suited in their particular soil preference. Hybrids between the common pear and the oriental pear—the Kieffer and its kin—grow well in much lighter soils than pure-bred sorts of the common pear, and, as a rule, find sands and gravels more to their liking than clays and heavy loams. Pears will stand rather more water in the soil than any other of their orchard associates, but a soil water-soaked for any great length of time in the growing season is a poor medium in which to grow pears. If, therefore, a soil is not sufficiently dry naturally it must be tile-drained.

Pear soils must be fertile. All varieties of this fruit refuse to produce good crops in soils lacking an

abundance of the several chemical elements of plant nutrition. Even the light soils on which Kieffer, Garber, and Le Conte seem to do best must be well stored with plant-food. This means that good pear land is costly. Soils that grow good pears usually grow good farm crops. Pears planted in a poor soil do not live but linger. Who has not seen short-wooded, rough, malformed, dwarfed, starved trees which have come to their wretched condition because planted on land not fertile enough for this fruit? The land-skinner who grows grass in his orchard usually comes to grief quickly. Pears start best in a virgin soil from which the forest has not been long removed; on the other hand, they are often hard to start on senile soils even though they have been heavily fertilized. Plenty of humus seems to stimulate pears. There is a prejudice against soils too rich, some holding that on overly rich land the growth is soft and sappy and therefore a good medium for the multiplication of the blight bacteria. This is mostly prejudice, but certain it is that culture and fertility should not be so managed that the growth continues late, and the trees go into the winter soft and tender to cold.

Soils seem to have a profound influence on the flavor and texture of pears. In uncongenial soils the fruits are often so sour or astringent, dry or gritty, that the product is poor in quality; whereas the pears of the same variety in a soil to which it is suited are choicely good. A few varieties, as Bartlett, Clapp Favorite, and Seckel, grow well and produce fine fruit in a great diversity of soils, but most sorts do so much better in one soil than in another that it becomes a matter of prime importance in pear-growing to discover the particular adaptations of the varieties to be planted. To discover an ideal soil for a

variety is about the highest desideratum in pear-growing.

Some varieties are made to grow in uncongenial soils by grafting them on stocks better adapted to the soil. Thus, on certain soils some pears grafted on quince stocks do better than on pear roots. This is a great field of future discovery and one in which discoveries are being made as experimenters try new stocks to secure greater resistance to blight. In all of this work, pear-growers must know not only how well the stock resists blight, but also how well the cion takes to the stock and the stock thrives on various soils.

The pear is easy to suit in matter of site for the orchard so far as lay of land is concerned. Altitude, exposure, slope, and local climate, all so important in choosing sites for the more tender peach, plum, and sweet cherry, need receive little consideration in planting the pear. A site somewhat higher than the surrounding country gives the two great advantages of soil drainage and air drainage. Good air drainage is a prime requisite with pears, as it helps to reduce the danger from frost, and neither pear-scab nor fire-blight are as virulent as on trees planted on sites where there is little movement of air. Rolling land, so often recommended for all fruits, seems not to be essential for pears, as many splendid orchards of this fruit are on flat lands, which, however, usually have an elevation above the surrounding country on one or more boundaries. The influence of large bodies of water, so favorable to the peach, is not as necessary with the pear, although the best pear regions in the State are near the Great Lakes, the Finger Lakes, or along the Hudson. There are no successful pear-orchards in the State surrounded by higher land.

Frosts, freezes, pear-blight, and fungi would soon play havoc with pear-trees in such a situation.

The shelter of hills, forests, or of apple-orchards, provided they do not shade the pear-orchard too much, may be a valuable adjunct to a site. Such shelter, however, is desirable only when so situated as to protect against unseasonable winds and storms. Tree and fruit suffer greatly when loaded branches are whipped about by strong winds. The advantages of artificial windbreaks, whether of evergreen or deciduous trees, are usually more than offset by disadvantages. The direction in which land slopes is greatly over-emphasized by horticultural writers if orchards in New York are considered. The only important aspect of exposure for pears in this State is that the land slope toward the water when near a large body of water that the orchard may secure in full the effects that come from planting trees near the water.

Economic considerations are becoming more and more important in choosing sites for all fruits in New York. Transportation facilities, including good roads, markets, labor, and packing and selling organizations are now more important in the pear regions of the State than the natural determinants of soil and climate, since these are so favorable in any of the fruit regions in which pears are largely grown. Natural advantages are more common than man-made ones, and the pear may be grown on vast areas of New York lands so far as climate and soil are concerned, but which are wholly unsuited because the economic factors are unfavorable. Sites for pear-orchards should be sought for in localities where there are pears enough grown for a central packing association; near a shipping center where the haul is

short and over good roads; the freight service should be prompt, regular, and efficient, with low freight and good refrigerator service; labor should be abundant and not too expensive; and the markets should be several and so located that they are not controlled by growers in regions more advantageously situated.

The pear-grower is becoming more and more concerned with the kind of stock upon which his trees are grafted. One or more of several objects is sought in working a pear on roots other than its own. The stock may be chosen, and most often is, with the single purpose in view of perpetuating a variety; it may be selected to dwarf or magnify the size of the cion; very often the stock is better adapted to the soil than the cion would be on its own roots; the quality of the fruit is sometimes improved by the stock; lastly, some stocks are much more resistant to fire-blight than others. It is this last character of the stock that is now receiving most attention. Stock and cion are united either by budding or grafting, with budding coming more and more in use. More than with any other fruit, *double-working* is used in propagating pears. For example, the quince stock is often preferred to a pear stock. But some varieties of pears do not unite well with the quince, in which case a sort which makes a good union with the quince is first budded or grafted on the stock, and when this cion has grown to sufficient size, it is top-worked to the desired variety. According to the size of the mature plant, pear-trees are designated as *dwarfs* and *standards*, the difference in size being brought about by the stock. Dwarf trees are usually grown on quince stocks; standards, on pear stocks.

Dwarfing pear-trees is an old practice, having

been in use in Europe at least 300 years. During this time the use of quince stocks to dwarf the pear has been a common practice in France and England. For a century, dwarfing the pear by growing it on the quince has been common in America. Dwarfing is recommended to secure several effects. Dwarf trees are more manageable than standard trees when the orchard area is small; dwarfing stocks are shallow rooted, and dwarfs, as a rule, do not need a soil so deep as do standard trees; pears grown on quince stocks are often larger, handsomer, and better in flavor and texture than those grown as standards; the trees come in bearing earlier. Dwarf pears, never very common on this continent, are not planted as much now as they were some years ago. At one time, orchards of these dwarfs were a familiar sight in New York. A dwarf orchard and even a dwarf tree is now seldom seen. The faults that have driven them out of New York are: The stocks used in dwarfing are not uniform, consequently the trees vary in vigor, health, habit of growth, and in time of maturity; nurserymen find that the stocks vary greatly in ease of propagation either from cuttings or layers; the quince stocks are of several varieties, difficult and expensive to obtain and, therefore, the orchard trees are expensive; dwarf trees require much more care in pruning, training, and cultivation than do standard trees; the cost of producing pears in a dwarf orchard is greater than in a plantation of standard trees, and the fruit does not command a much higher price; dwarf trees are commonly rated as less hardy than standard trees and are much shorter-lived; left to themselves, or if planted too deep, the cions take root and the trees are but half dwarf. Some of the objections to dwarf trees could be done away with by obtaining a variety of the quince which would dwarf

the pear satisfactorily, which could be grown easily from cuttings or layers, and upon which most pears could be easily worked. A quince of this description is not in sight.

There is great difference of opinion among growers as to what varieties may be successfully grown on quince stocks. Probably all will agree that the following, few indeed, are the best dwarfs in America: Beurré d'Anjou, Duchesse d'Angoulême, Howell, Lawrence, Louise Bonne de Jersey, Elizabeth, and White Doyenné. All other sorts, if to be grown on dwarfs, grow better when double worked.

Almost all of the pears grown in America, as has been said, are standard trees. The stocks for these standard pears are nearly all imported from Europe under the name French stocks, although on the Pacific slope seedlings of oriental species are being used more and more. The French stocks are seedlings of vigorous forms of the common pear, *P. communis*. Efforts to grow stocks of this species in America usually fail because leaf-blight is so destructive as to make their culture unprofitable. Leaf-blight can be controlled by spraying, but other deterrents, as high price of labor and losses from dry summers, added to the cost of spraying, make American-grown stocks expensive. Stocks raised in this country are usually seedlings from imported seed. Seedlings of the Sand pear, *P. serotina*, and its hybrids have been tried extensively in the South and West to obtain cheap stocks more resistant to pear-blight than the French stock, but they do not seem to be much more resistant to blight, and many of the best varieties do not take on these stocks, so that they are generally considered a failure.

New types of stocks are needed badly. The ideal stock must be vigorous and hardy; fairly immune to leaf-blight and fire-blight; it must come from a species which seeds freely, and the seedlings from which are uniform; this ideal stock must be adapted to all pear-growing regions in the country; a large percentage of the seedlings must make first-class stocks; the budding season must be long; congeniality with all cultivated varieties must be great or very nearly perfect; the consort of stock and cion must make a long-lived tree.

Quince stocks are obtained from cuttings or mound-layers. Layering is considered the better method of the two. Stocks from the oriental hybrids, of the Kieffer and Le Conte type, are often grown from cuttings in the South. These are made in the spring from mature wood of the preceding year's growth, and are treated much as are grape and currant cuttings. Long cuttings, a foot in length if possible, should be used. These stocks are of little value for varieties of the common pear, but are better than French stocks for the oriental hybrids, since these, in the South at least, usually overgrow French stocks. Own-rooted trees of these oriental hybrids are often grown from cuttings.

While of doubtful utility, stocks from other genera may be used for the pear. Some of the thorns are occasionally used as dwarfing stocks. The mountain ash is sometimes used to adapt pears to light sandy soils. Occasionally one hears of pears grafted on sorbus. The pear on the apple is short-lived, but old apple-trees top-worked to pears sometimes give abundant crops for a few years. Apple roots may be used as a nurse for pear cions. To be successful, the pear cion should be long, when, if

grafted on short apple-roots and set deeply, the pear sends out roots and eventually becomes own-rooted.

PEAR ORCHARDS AND THEIR CARE

Perhaps no tree-fruit is more exacting in care than the pear. Young trees, in particular, must be well cared for and more or less coddled if any factor in environment is adverse. Almost any young orchard of this fruit becomes moribund if the owner settles down to self-satisfied complacency. As the trees come into full bearing, the several items of culture need not be so intensive. A perfect pear-orchard is about the consummation of good fruit-growing. But a perfect orchard of this fruit is seldom to be found, for, sooner or later, blight is certain to take its toll. Because of blight, the culture of no other fruit is attended with more frequent or keener disappointments. Today a man may walk in his orchard with adoration, as an artist walks in a beautiful landscape. Tomorrow, blight may blast the fairest trees. Pear-growing, thus, becomes a good deal of a gamble, and the boundaries within which a fruit-grower's ambitions must be confined as to acreage must be more closely drawn than with other fruits. In most pear regions, the risks are too great to venture all in the culture of this fruit.

It is an uphill task to grow pears on land not well fitted before planting. A young pear-tree is about the least self-assertive of any of the tree-fruits. For the first year or two young pears seem to have almost no internal push, and are unable to get much of a start out of any but land in the best of tilth. A bare, stony, starved soil is no place for a young pear. The ground should be well tilled almost or quite to the depth the

trees are to be planted, otherwise the roots seek the upper layers of earth where there is least resistance and food is most available. If the drainage is faulty, subsequent treatment is well-nigh useless. Sometimes retentive soils in which drainage is good most of the year but slow at planting time may be brought into condition by plowing a back-furrow along the line of each row in the direction of surface drainage to carry away the surface water. Under no circumstances should a tree be planted in a hole in which water is liable to stand about the roots. If possible, the land should be prepared a year in advance by putting in a hoed crop, after which it should be plowed deeply in the fall and pulverized well in the spring, and the trees planted as promptly as possible.

Land suitable for growing pears does not need to be fertilized for young trees. It is not too much to say that land which will not grow good wheat or corn is hardly fit for pears, although lighter soils fertilized as the trees come in bearing grow some varieties very well; but even on these the young trees will start as well without as with fertilizers. Commercial fertilizers, at least, are not wanted by young trees. Stable manure, usually priceless in orchard regions, often puts an atmosphere in an orchard not to be had by any other means, chiefly, probably, because it helps to put the land in good tilth rather than because of the plant food supplied.

Present practices in the use of fertilizers for mature pear-trees are very diverse. Until experiments in fertilizing pears are carefully carried out, the pear-grower may well follow the practices of apple-growers, since a considerable number of long-time experiments have thrown light on the fertilizer requirements of apples in the several great fruit

regions of the country. The pear, however, requires a richer soil than the apple; but, on the other hand, it is pretty well agreed that the blight bacterium finds readier entrance and a better medium in which to grow in the soft wood of a luxuriant growth than in the more compact wood of slow growths. Whatever fertilizer is used should be applied early to promote early growth and so permit thorough ripening of wood well in advance of severe cold. Many growers maintain that blight is less virulent in orchards laid down to grass. It is doubtful if this is true and if true the produce is so scant and the pears so small that an orchard grown in grass is about as often a liability as an asset. When the pear is set in grass, however, nitrate of soda applied very early in the season in liberal amounts is a necessary adjunct to the grass-mulch. In any pear orchard, when the foliage is off color, small, sparse, or hangs limp, nitrate of soda is a sovereign rejuvenator.

This discussion may be closed with advice as to how one may know when his trees need fertilizers. If the trees are vigorous, bearing well, the fruits of proper size, the foliage a luxuriant green, the growth plump, the buds turgid, he may well assume that his trees need no additional plant-food. If the trees are not in the condition of well-being indicated, one ought to be well assured that drainage, tillage, and health are as they should be before applying expensive and uncertain fertilizers. Nothing is more satisfactory than making sure that one is not putting chemicals in the ground for nothing in the use of fertilizers. A simple experiment to obtain positive evidence as to whether a pear-orchard needs fertilizers is easily carried on and gives assurance where before there was doubt.

The following is an example of such an experiment: (1) Acid phosphate to give about 50 pounds of phosphoric acid to the acre applied to one plat; (2) phosphate as above and muriate of potash to give 100 pounds of potash to the acre on another plat; (3) phosphate and muriate as above and nitrate of soda and dried blood to give 50 pounds of nitrogen per acre on a third plat; (4) six tons of stable manure on a fourth plat; and (5) one plat left unfertilized as a check.

Planting practices vary so greatly from place to place and from time to time, and each method at the place and time seems so justifiable, that one can hardly advocate particular methods and can only state what they are. Thus, pears have been set in accordance with all of several planting plans, and at distances ranging from sixteen to twenty-five feet apart. At present, pear-orchards are usually laid out in meridians and parallels at intervals of eighteen and twenty feet; when the first distance is used, one hundred and thirty-four trees are planted to the acre; if the second, one hundred and eight trees. It is patent to the eye of every passer-by that these distances are more often too small than too great. Certainly on rich soils and with varieties the trees of which are spreading, the distance might often better be put at twenty-two or twenty-four feet. A poorly-colored pear is usually a poorly-flavored pear; and color and flavor are largely dependent on sunshine and air which are hardly to be had in closely-planted trees. Perfect alignment is imperative for convenience in working and pride of appearance. Dwarf trees in New York should be set at least fifteen feet apart each way, one hundred and ninety-three trees to the acre, although it is a common practice to set them closer.

Until recently one of the discouragements in pear-growing was the failure of fruit to set, even though the trees bore an abundance of blossoms. The discovery that failure was often due to self-sterility in a variety, and that it was necessary to set another variety near-by to furnish pollen to fertilize the self-sterile blossoms has removed much of the uncertainty in growing pears. We now know that self-sterility has a most important economic aspect in the planting of pears. Some of the varieties most profitable when planted to secure cross-pollination, are so unfruitful as to be quite unprofitable when a tree stands alone or when the variety is set in a solid block with no other sort near. Under most conditions Bartlett and Kieffer, the mainstays of American pear-culture, both need pollen from another variety to insure a full set of fruit. Under some conditions both may be sufficiently self-fertile. From these two statements it is seen that self-sterility is not a constant factor in a variety.

Self-sterility and self-fertility are greatly influenced by the condition under which a variety is grown. Thus, a variety is often self-sterile in one locality and not in another. Occasionally Bartlett, usually nearly or quite self-sterile, and other varieties as well, set fruit one season and not the next. All pears, the Bartlett in particular, seem to have a greater degree of self-sterility in eastern pear regions than on the Pacific slope. In general, the better the adaptation of a variety to its environment the better it sets fruit with its own pollen. It is obvious, therefore, that it is not possible to give lists of self-sterile and self-fertile varieties. Such lists can be made out only for regions and localities. Some varieties, however, more often fail to set fruit

because of self-sterility than others. Among standard pears, Bartlett, Beurré d'Anjou, Beurré Clairgeau, Clapp Favorite, Howell, Kieffer, Lawrence, Sheldon, and Winter Nelis appear to be most often self-sterile. Beurré Bosc, Flemish Beauty, and Seckel are usually self-fertile.

A self-sterile variety usually sets fruit when another variety is at hand to supply pollen. Several considerations determine the selection of varieties to interplant. Thus, the two varieties must blossom at the same time if cross-pollination is to be effective. The table on pages 88 to 90 shows the sorts that bloom at the same time, or nearly enough so to make cross-pollination possible. Under normal conditions, the blooming time of varieties overlaps sufficiently for cross-pollination excepting those that bloom very early and very late. If the table is used for regions much to the north or to the south of this Station, allowance must be made for a shorter blooming period the farther north; a longer one the farther south. That varieties of pears have sexual affinities is another consideration that merits some attention. That is, one variety will fertilize another sort very well, while pollen from a third may not be at all acceptable. "Affinities" can be determined only by hand crossing. Probably the importance of affinities is over-rated. The distance between varieties set for cross-pollination must not be too great—not more than two or three rows apart. For convenience in harvesting, varieties should be selected in relation to ripening. Only commercial varieties should be interplanted, as the wastage is too great if comparatively worthless sorts are set to fertilize a standard commercial variety.

Some disadvantages attend the setting of mixed

orchards of pears, and these must be weighed and overcome as far as possible. There are many current statements to the effect that all varieties, whether self-sterile or self-fertile, are more fruitful and produce better fruit with foreign pollen than with their own. To old pear-growers, this seems to be putting it rather strong, but the statements come from accurate experimenters and observers and should have consideration. Cross-pollination, be it remembered, is not a cure-all for failures to set fruit. Unseasonable weather, lack of vitality in trees, various fungi, and no doubt other agencies, may be the cause of unfruitfulness.

As to commercial varieties, the tale is soon told. Only a half-dozen sorts are generally planted in New York orchards. These, about in order of importance, are: Bartlett, Kieffer, Seckel, Beurré Bosc, Beurré d'Anjou, and Winter Nelis. To this short list may be added the following grown more or less for local markets: Clapp Favorite, Sheldon, Beurré Clairgeau, Lawrence, Howell, Tyson, and Mount Vernon. A list for the home orchard should include all of these and many more to be chosen from the major varieties described in Chapter IV. The pear flora of the country changes very slowly, and there are now almost no new sorts on general probation in the country.

Perhaps with no other tree-fruits is it more important to begin with good trees, as even with the best it is often difficult to get a good start toward a pear-orchard. Black-heart, caused by winter-killing, is a sign that must be heeded, and a tree badly blackened in its pith, especially if the surrounding wood is discolored, should be discarded. Crown-gall on tap roots affects the tree deleteriously. Trees

marked by hail or insects are often worthless. Other marks that commend or condemn trees are: A short stocky plant is better than a tall spindling one. A tree with many branches is better than one with few branches. The roots should be much branched rather than sparsely branched. A tree with smooth, bright bark is better than one with rough, dull bark. Both trunk and branches should be plump and show no signs of shrivelling. A poor pear-tree in the nursery seldom makes a good tree in the orchard. There is great variation in varieties as the trees come from the nursery, a fact to be considered. In New York, two-year-old trees are best.

A good deal of the success that attends the culture of the pear depends on properly setting the young trees and the right care of the young plants. It is superfluous to discuss these operations in detail, but a statement as to proper setting and care will serve as reminders. In this State, pear-trees should always be set in the spring. A young pear-tree should be set in the soil about as deep as it stood in the nursery; in light soils the roots might well be planted a little deeper, and in heavy soils not quite so deep. The soil must be packed firmly about the roots—best done by tramping. Watering is necessary only when the land is parched with drought. When necessary, water should be used liberally. Puddling the roots by dipping them in thin mud before planting serves very well for watering. The surface soil should always be left loose. Rank manure about the roots of young trees is plant infanticide. During the tender nonage of the young pear, cultivation should be intensive; insects and fungi should be kept off; and plants that refuse to grow well must be marked for discarding.

A catch-crop grown between the rows of pears is

a profitable adjunct to the pear-orchard for the first four or five years. Few indeed are the pear-orchards in New York that cannot be made to sustain themselves for the first few years by inter-cropping. The crops should be hoed crops, such as potatoes, cabbage, beans, tomatoes, and nearly all crops in demand at the canneries. Along the Hudson, small-fruits are often planted in young pear-orchards, but in Western New York these are not looked upon with favor. Grass and grain are deadly in a young pear-orchard, and no right-minded man would plant them there. This brings us to cultivation.

Cultivation should be the rule; sod mulch, the exception, in growing pears in New York. After pear-trees come into bearing they may be made to produce crops if kept in sod. The grass in sodded orchards should be kept closely mown to form a mulch about the trees. Commercial fertilizers as well as mulch are needed in sodded orchards, and of the several chemical fertilizers nitrogen is most requisite. The man who grows pears in sod must not expect as much fruit, as the crop is lessened in both number and size of the pears. On the other hand, the pears may be better colored, and the trees may be freer from blight.

Tillage is begun in the spring by plowing the land. This operation is followed by cultivation with smoothing-harrow, weeder, or cultivator. There are several reliable guides to tell when and how often a pear-orchard should be cultivated. When the soil becomes dry it should be tilled. A heavy rain should always be followed by the cultivator to prevent the formation of a crust on the surface. At this time, he tills twice who tills quickly. Cultivate when there are clods to be pulverized. Usually a pear-orchard should

be cultivated once in two or three weeks until time to sow the cover-crop in midsummer. The depth to till is governed by the season and the nature of the soil. Heavy soils need deep stirring; light soils, shallow stirring. Till moist soils deeply; dry soils, lightly. The time to stop tillage depends on the soil, the climate, and the season. The fruit should be nearly full sized when tillage is stopped and the cover-crop sown.

The cover-crop seed is covered the last time the cultivator goes over the orchard. Clover, vetch, cow-horn turnip, rape, oats, rye, and buckwheat are all used as cover-crops in this State. Combination crops are not popular because of too great cost of seed. The quantity of seed sown is the same as when the crops are grown as farm crops. The crops must be changed from time to time in whatever rotation seems most suitable for the soil. The weather-map must be watched at sowing time to make sure of a moist seed-bed. Whatever the crop, it should be plowed under in the fall or early spring, and under no circumstances should it stand late in the spring to rob the trees of food and moisture. In moist, hot seasons, the cover-crop should be sown earlier than in seasons of slow growth, when, possibly, it acts as a deterrent to blight, and certainly makes more certain thorough ripening of the new wood.

The double nature of pruning must be kept in mind whenever a pruning tool is taken in the pear-orchard. Fruit-trees are pruned to increase the quantity and quality of the crop—this is pruning proper; and to give the trees such form that they are easily managed in the orchard—this is training. Pruning tools are used first when the trees are set, and they should be used every year thereafter as long

as the tree lives. The pruning at setting time is particularly important with the pear, since newly set pears are slow and uncertain in starting, and linger in growth for a year or two after going into the orchard. The pruning is much the same as with other trees, but must be done with a little greater care.

The top of the young plant must be pruned to enable the injured root-system to supply the remaining branches with water. The less the roots are injured, the less the top need be cut. Some cut back all of the branches; some remove whole branches and do not head back those that remain. The latter is the better plan for this reason: The top buds on branches are largest and develop first, and the newly set tree will grow best if it develops a large leaf-surface before hot dry weather sets in. Young trees usually have surplus branches; remove those not needed, leaving three, four, or rarely five to form the framework of the tree. A pear so pruned will start growth and acquire vigor more quickly than if all branches are cut back.

A choice must be made when planting as to whether the tree is to be low- or high-headed. The habit of growth of varieties differs so greatly that there can be no rule to determine how high the head of a tree should be started. One can generalize to this extent: The heads of varieties with spreading tops should be started higher than those having an upright or pyramidal top. Without question, the choice should be for a low-headed pear-tree. The trunks of pear-trees suffer terribly from blight and sun-scald. The less trunk and the more it is shaded by branches, the less the tree suffers from these two troubles. Also, low trees are more easily sprayed and pruned; the crop is more easily thinned and

harvested; crop and tree are less subject to injury by frost; the top is more quickly formed; and a low-headed tree bears fruit soonest. By low-headed is meant a distance from the ground to the first limb of two feet.

Two shapes of tops are open to choice—the open-centered and the close-centered. In the open-centered, or vase-form top, the tree consists of a short trunk, surmounted by four or five main branches ascending obliquely. In the close-centered top, the trunk is continued above the lower branches and forms the center of the tree. The close-centered pear-tree produces more fruit and is most easily kept to its shape. No doubt it is best for most varieties. The open-centered tree, with its framework of several main branches, has the advantage when trees are attacked by blight, since if one or two branches are destroyed by the disease a part of the tree may still be saved. The head should never be formed by two central leaders forming a crotch, as the trunk is liable to split and ruin the tree.

For several years after planting, the pear needs to be pruned only to train the tree to the height of head determined upon and to form the top. Exceptions are the sorts which produce few branches and thus form straggling heads. This defect is overcome by cutting back some of the branches in the spring, an operation which increases the number of branches. A few other sorts, as Winter Nelis and White Doyenné, have drooping, twisting, wayward branches which can be trained into manageable shape only by cutting back or tying the branches in place. Pear-growers as a rule prune young trees too much. Over-pruning increases the growth of wood and leaf too greatly, and thus delays the fruiting of the plant. A

good deal might be said about the use and abuse of heading-in pears—that is, cutting back the terminal growths from year to year. Dwarf pears must be headed-in severely to keep the trees down, but standard trees should be headed-in only to make the tops thicker and broader—a desirable procedure with some varieties.

Old trees often need to be pruned to increase their vigor. Such pruning is often spoken of as *pruning for wood*. When the tops of pear-trees have dead and dying wood, when the seasonal growth is short and slender, when the crops are small and the pears lack size, or when trees are weakened by disease, a healthy condition may oftentimes be restored by severely cutting back some branches and wholly removing others. In such pruning the following rules ought to be observed:

Weak-growing varieties are pruned heavily; strong-growing kinds, lightly.

Varieties which branch freely need little pruning; those having few and unbranching limbs should be pruned closely.

In cool, damp climates, trees produce much wood and need little pruning; in hot dry climates, growth is scant and trees need much pruning.

Rich, deep soils favor growth; trees in such soils should be pruned lightly. In light or shallow soils, trees produce few and short shoots; the pruning of trees on such soils should be severe.

A good deal is said about *pruning for fruit*. It is doubtful, however, whether unfruitful pear-trees can be made more fruitful by the pruning recommended for this purpose. When barrenness is caused by the production of wood and foliage at the expense of

fruit-buds, as possibly sometimes happens, summer-pruning may check the over-production of growth and cause flower-buds to form. There seems to be no definite experiments to prove this theory in America, nor do pear-growers generally practice this kind of pruning which has been preached so long and so often. To follow the rules in this operation, summer-pruning should be done when the growth for the season has nearly ceased. If done earlier, the shoots cut back start again and the pruning has been useless. If done too late, there is too little time for the production of fruit-buds. In the unequable climate of this country it is most difficult to know when to prune in the summer to meet the requirements of the theory urged so strongly by European pomologists. A weighty objection to summer-pruning in America is that the wounds might and probably would become centers of infection for blight.

There is no attempt to give a full discussion of pruning in this text. Such details as making the cut, covering the wounds, pruning paraphernalia, filling cavities and the amount to prune, belong to texts on pruning. Perhaps two minor details important in growing pears should be mentioned. Suckers or water-sprouts form so freely on branches of pears that they often seriously devitalize the tree, and usually are centers of blight. They should therefore be removed promptly whenever and wherever found. The time to prune the pear is important. If the work is done too early in the winter, injury may result to the tissues near the wound from cold or from checking. If done late in the spring when sap is flowing, the wound becomes wet and sticky and is a suitable place for the growth of fungi and the blight bacterium.

The pear is as easily grafted as any other pome, and the operation is more certain and more often desirable than with any of the stone-fruits. Almost any method of grafting used with orchard fruits is successful with the pear. But the pear is not often grafted in this State after the tree has been set in the orchard. The great objection is that the vigorous growth made by grafts is nearly always nipped by blight. Possibly the lack of affinity between different varieties is more pronounced than with other pomes. The common European varieties cannot be inter-worked without experimental knowledge of how one variety will grow on another, and it is almost impossible to intergraft common varieties with the oriental hybrids. The temptation is strong in this State to graft such sorts as Bartlett and Seckel on Kieffer. This combination is seldom successful; nor, as a rule, can other European pears be grafted on Kieffer, although some growers have succeeded fairly well in growing Seckel on Kieffer.

Thinning the fruit is not a common practice in pear-growing in this State. There is no doubt but that much might be done to improve pears in both size and quality by thinning, for be it remembered that large size of fruit and high quality are usually correlated in pears. Thinning often saves the vigor of the tree, and it is often good orchard management to destroy insect- or disease-infected fruit by thinning. The objection is high cost. Most growers, however, find that it pays to thin. Thinning is usually done as soon as possible after the June drop. It is most difficult to tell, when thinning, what will prove superfluity at harvest. A skilled grower adjusts the size of the crop to the variety, the vigor of the tree, fertility and moisture in the ground, the season, and insects and fungi. Thinning should begin in the

winter with the removal of what seem to be superfluous branches, for even at this time fruit-prospects for the ensuing season are fore-shadowed.

HARVESTING AND MARKETING

Fruit-growing is made up of several quite distinct phases of activity; as, propagation, culture, pruning, pests, harvesting, and marketing. Treated in detail, each of these several operations constitutes matters quite sufficient for separate treatises. In a manual such as this only outlines of present practices are in place. Perhaps of all deciduous fruits the pear needs as particular attention in the various operations which conduct it from the orchard to the table as any other, if, indeed, it is not the most difficult of hardy fruits to handle after it leaves the orchard. The several operations that should be treated in a discussion of handling the pear crop, no matter how brief, are picking, grading, packing, storing, shipping, and marketing.

The time of picking is most important in handling pears. Pears are picked, especially for the markets, long before they are ready to eat out of hand. So harvested, almost without exception, all pears acquire higher quality than when they ripen on the tree. Moreover, when the necessary percentage of sugars and solids has developed to give full flavor the pears are too easily bruised to be shipped. Just how green pears can be harvested and afterward have the rich shades of red and yellow and the delectable flavor of ripe pears develop seems not yet to have been determined.[22] No doubt the stages of development differ somewhat with the variety. In New York, the generally accepted rule is to pick when the stem parts readily from the branch if the fruit is lifted. Some wait until there is a perceptible yellowing of the maturer fruits; others until full-grown, wormy specimens are ripe; still others until

the seeds begin to change color. But on the Pacific slope and for the cannery in this State, pears are picked when much greener than in any of the conditions named and yet seem to ripen well. As a matter of economy, the fruits should be left until they attain nearly or quite full size.

The directions just given apply more particularly to the main-crop pears and early and fall sorts. Winter pears in this State should be left on the trees until in danger from freezing. Even so, the season is too short for some choice winter sorts. No matter what the season, pears should be shipped before they reach edible condition. A few of the winter pears, suitable only for culinary purposes, never soften, and change color little or not at all.

Picking pears is not the delicate business that picking the stone-fruits is, but yet must be done with considerable care as a bruise provides a place for subsequent decay. Few picking appliances are needed, but these should be carefully chosen to insure speed and careful handling of the fruit. A full complement of ladders is necessary, and the picking receptacle, either bag, basket, or bucket, should be chosen to fulfill most conveniently its purpose and yet not be a source of danger to the fruit. From the picking receptacle, the pears go to the crate or barrel for carriage to the packing-house; for, unless the fruit is going to the cannery, pears should be graded and packed in the packing-house.

Grading pears is a more difficult operation than grading apples, as mechanical graders have proved of little use, and the work must be done by hand. Only good fruit is worth grading. It follows, that the higher the price and the more special the market, the more carefully should the pears be picked and

graded. Pears are usually graded in New York into firsts, seconds, and culls. The State has no law governing the grading and packing of pears as it has of apples and peaches, so that pear-growers must establish their own grades. By common consent of growers and dealers, Grade I consists of pears of one variety, full sized, well formed, free from dirt, skin-breaks, worms, scale, scab or other damage caused by insect or disease, hail pecks, or mechanical injuries. Grade II differs from Grade I only in that the pears may not be of full size nor perfect in form. A leeway of five to ten per cent is allowed for variation incident to grading and handling. Culls are pears which do not meet the requirements of the foregoing grades.

In putting up grades every effort is made to keep the fruit in a package uniform in size. At the beginning of the season the sizes are gauged by putting the pears through rings of the diameter desired. But packers soon become expert in sizing, and with a little practice perform the work quickly and accurately without rings. Of the larger pears, such as Bartlett, Clapp Favorite, Beurré Bosc, and Beurré d'Anjou, fruits are hardly worth putting in a good package that do not measure two and one-fourth inches through the shorter axis.

Grading and sizing pears are greatly neglected, and most of the crop goes to the market in this State wretchedly packed, for which reason maximum prices are seldom received. The industry can never compete successfully with western pear-growing until higher standards are adopted in putting the New York crop on the market.

In common with grading and sizing, packages are neglected in marketing New York pears. Some

growers pack in bushel baskets; a few send the crop to market in half-bushel baskets; a large size of the Climax basket is occasionally seen in the markets filled with summer pears or small Seckels; a keg holding about a bushel or more is less used; a pear barrel holding a peck less than an apple barrel was formerly more used than now; Kieffer is often sent to the market in apple barrels. A very few New York growers ship in boxes, but these are few indeed. In all excepting the boxes, the pears, having been graded, are carefully put in the packages, sometimes in layers and sometimes hit or miss, but the package is always faced. Good grades are usually labeled, though the same attention is not given to labeling pears that is given in putting up apples. Truth is, the packing of pears in New York is a decade or two behind the packing of apples.

The commercial pear-grower now stores his pears in cold storage if he keeps them any length of time after harvesting. A few varieties, of which Beurré Bosc is most notable, do not keep well in cold storage, but most of the mainstays in the pear industry keep fairly well in artificial cold. There is, however, much to be learned about the commercial storage of pears. There seems to be little information that can be relied upon as to how low the temperature should go; how humid the atmosphere should be; how long the pears can be kept in good condition; and how different varieties behave under these several conditions.

Perhaps a word should be said as to how the pear can be ripened best in the home. After harvesting, the pears should be placed in a cool sweet-smelling fruit-room in shallow boxes or spread upon shelves to acquire in time full flavor and color. Most pears

part with their moisture readily, and the pear-room must not be open to draughts which usually cause the fruits to become hard and leathery or to shrivel. If the pears are to be kept long, wrapping in paper helps to prevent shriveling. Nearly all pears ripen perfectly in cool or cold storage, but a few late winter sorts ripen better if brought into a temperature of 60° or 70° for two or three weeks before their season.

A large part of New York's pear crop is canned in commercial canneries. Canners usually pay high prices, and the crop, when sold to them, need not be so carefully picked, packed, and otherwise handled. It is a mistake to assume that pears for the cannery can be shaken from the tree or handled roughly otherwise. Neither do the canners want the poor grades, after the good pears have been sent to the market. Large sizes are usually preferred, and the fruits must be well formed, free from serious insect, fungous, or mechanical injuries, and at a particular stage of maturity which the canner specifies. The profits in selling to canners are usually more certain, and are often quite as great as in selling on the markets. The cannery is a splendid safety valve to the pear industry in this State. Pears are not dried commercially in New York as they are in California, although it would seem that here in the center of the apple-drying industry of the world pears might also be dried with profit.

Most of the pear crop of this region is now sold to local buyers or on consignment to city dealers. Co-operative methods are just beginning and promise much. There are several reasons why the pear, even more than the apple, which is more and more going to the markets through co-operative associations,

should be handled by organizations of growers. Thus, an association could load a car quickly, which few individual growers can do; pears are not now, but would be, graded and packed under one standard; more favorable transportation rates would be secured; and, most important of all, the pear crop would be distributed to the great markets of the country without the disastrous competition that attends individual marketing. If the pear industry is to grow in the State, pears must be largely marketed through the central packing associations that are now being rapidly organized to sell fruits.

No reliable data can be obtained to show what the costs are in growing pears in this State. It would be hard to obtain such data, for pear-growing is now a game of chance from start to finish. Good pear-lands are not hard to obtain, and the risks to tree and crop attendant on weather are not great, but the trees are everywhere subject to blight; which, despite the recommendations of plant pathologists, cannot be controlled, and which annually destroys thousands of trees, ruins others, and sooner or later upsets calculations of costs and profits in almost every pear-orchard in the State. Other pests, as psylla, the scab-fungus, and codling-moth beset the pear and make profits uncertain. When all goes well, the costs are about the same as in growing apples, while the profits are somewhat greater.[23] But with blight to contend with, most of the economic factors are inconstant, and calculating costs and profits is guessing pure and simple.

DISEASES OF THE PEAR

The pear is attacked by a half dozen or more diseases in New York, of which two, at least, need

treatment every year, in every orchard, and on nearly every variety. One, pear-blight, is about the most malignant of the diseases of the orchard, for which there is no antidote and no alleviation or preventive except by the most drastic sanitary measures. The other, pear-scab, is always present but not always destructive, although some varieties are always injured by it. The scab, however, is amenable to treatment and at its worst only destroys fruit and foliage, seldom endangering the life of the tree. The four or five other diseases of the pear in New York are of minor importance and are readily controlled by the treatment necessary to keep in check the scab-fungus. Pear-blight merits attention first.

Pear-blight is a malignant bacterial disease, very contagious, usually virulent and so terrible in its consequences as to warrant the common name *fire-blight*. No part of the tree is exempt from destruction by the malign bacterium that causes blight of the pear. Root, trunk, branch, leaf, flower, and fruit are all attacked, turn black and wither under the disease. Few plant diseases produce more disastrous results. The pear competes with the apple in importance in Europe where blight is unknown. In America it is a poor fourth to the apple, peach, and plum, and takes fourth place instead of second because of the ravages of blight. About the most important discovery to be made in pomology is a race of blight-resistant pears. Failing in this, if the pear-industry is to grow, or even continue in its present magnitude, blight-resistant stocks must be found.

The symptoms of pear-blight are so characteristic that the disease cannot be confounded with any other malady or condition of the tree. It appears earliest in the season on the blossoms causing

blossom-blight. Attacked by blight, the blossoms wilt, and after the petals fall, fruit and spur show the characteristic blackening of the disease. Blossom-blight may escape the attention of the pear-grower, but twig-blight, a succeeding form of the disease, can escape no one who has the sense of sight. No other disease of the pear brings on such palpable destruction to the tree as twig-blight. No other disease causes such comfortless despair to the grower. Twig, branch, or tree, as the case may be, in all affected parts, turns black, the leaves droop, seeming to show the effects of fire. A marked symptom is, if there can be doubt of those given, that the blackened foliage clings most tenaciously to the dead branches. Twig-blight is the most common manifestation of the disease. Another form of the blight appears as a canker on the trunk and large branches—canker-blight or body-blight. These cankers are dark, smooth, and sunken, with definite margins marked by a crevasse in the winter; but as spring comes on the advancing margins become raised and more or less indefinite. Occasionally an opaque liquid oozes from lenticels newly attacked. On branches, the cankers usually surround a smaller offshoot, sucker, or spur. The disease spreads with great rapidity, by reason of which it is easily told from winter-killing. Injury from cold is also more general, and the foliage browns rather than blackens.

Pear-blight is an American disease, the history of which was briefly given on page 51. Until recently it was confined to regions east of the Rocky Mountains, but since about 1900 it has been a virulent epidemic on the Pacific slope as well, and is now found from coast to coast wherever pears are grown in North America. It seems not to be found in the pear regions of other continents. It attacks the apple, quince, and

other pomes as well as the pear, and plant pathologists declare it to be the most destructive disease attacking the pome-fruits. Trees in the nursery suffer as well as those in the orchard. Every variety of the pear bearing edible fruit is attacked. Fortunately, some sorts are more immune than others. Kieffer, Seckel, Winter Nelis, and Duchesse d'Angoulême are most resistant of standard varieties, while Bartlett, Clapp Favorite, and Flemish Beauty are little resistant.

Pear-blight is caused by a bacterium, *Bacillus amylovorous*, the discovery of which by Burrill in 1877 as a cause of this disease is one of the landmarks in plant pathology. The organisms are dormant during the winter, which they pass in the margins of blight-cankers where moisture is sufficient to keep them alive. With the return of vegetative growth, some sort of fermentation seems to set in and drops of a thick, opaque liquid ooze out of the margins of blight-cankers. These contain countless numbers of the blight bacteria which may swarm into the healthy tissues adjoining, or be carried by any one of the great number of kinds of insects which visit trees at flowering time to the pear-blossoms, to growing tips, or to wounds in tender bark. The pruner with his tools may be an unwilling agent in carrying the bacteria from tree to tree. The organisms now multiply apace, killing tissues wherever they find entrance and causing the several manifestations of the disease described under symptoms. Were it not that the bacteria are killed by sunlight and even brief periods of drying, the life of the plants attacked would be the only limits of the disease unless checked by man.

Theoretically, pear-blight can be controlled.

Practically, pear-growers fail to control it. Control consists in orchard sanitation whereby the bacterium causing the disease is kept out of the orchard. This proves all but impossible in the average orchard. Sometimes, without doubt, the virulency of the disease is lessened. Possibly, if all the recommendations of plant pathologists could be put in practice, pear-growers would more often succeed in keeping blight down, but the necessary sanitary measures require such watchful care and so great an expense that few pear-growers can carry out the program for controlling this disease. Of those who have studied methods of control and have given advice on the subject, Hesler and Whetzel[24] are as reliable as any and we quote herewith their recommendations:

> "In attempting to control fire-blight, the following important points should be borne in mind: (1) That the disease is caused by bacteria which gain entrance to the host tissues only through wounds, or punctures by insects, into succulent, rapidly growing tissues, or through the nectaries of the blossoms. (2) That insects of several kinds are the usual agents of inoculation. (3) That practically all pome fruit-growing sections in North America are infested, and therefore there is always a source from which the bacteria may be disseminated. (4) That all known varieties of the hosts, on which the blight organism occurs, are more or less susceptible; while some show resistance, none are wholly immune. Therefore control consists chiefly in the elimination of the pathogene from the infected trees. This is accomplished by a strict application of the following operations: (a) Inspect all pear trees in the autumn and again in the early spring before the blossoms open, and cut out and treat all cankers in the body and main limbs. With a

> sharp knife, or draw-shave, remove all the diseased tissue, wash the wound with corrosive sublimate (one tablet to one pint of water), and, when dry, paint the wound with coal-tar or lead paint, preferably the former. The wound-dressing will need renewal every year or so. (b) Throughout the summer, beginning with the fall of blossoms, make an inspection every few days of the young trees. Break out the blighted spurs and cut out diseased twigs, making the cut at least six inches below the diseased portion. Disinfect the cuts with corrosive sublimate. (c) Remove all watersprouts from the trees two or three times during the season. (d) In the nursery remove the blossom-buds, particularly of the quinces. Here inspection must be frequent, particularly in susceptible stock, in order to keep the disease under control. It is often necessary to inspect certain blocks daily, the diseased twigs being cut out as soon as observed. When budded stock of the first year becomes affected, the trees should be dug out, since cutting below the diseased area causes the trunk of the young tree to be crooked and therefore not marketable. (e) Control the insects. The real point of attack lies in this phase of the problem."

Scab (*Venturia pyrina* Aderh.), after blight, is the best-known and most prevalent disease of the pear in New York. Like blight, it is found wherever pears are grown in North America, and also wherever pears are grown in foreign countries. It attacks the pear at all ages from the youngest to the oldest plant. Twigs, leaves, flowers, and fruit suffer. A closely related and very similar fungus attacks the apple and causes the apple-scab, but the two fungi are not the same and do not spread from the one fruit to the other.

The name describes the disease at maturity so that all may know it. Black, canker-like lesions spot

the fruit, leaf, and twig. These are most characteristic on the pear. The scabs first appear on the fruit as olive-green velvety spots; the young fruits may drop; if they persist, growth may cease, the skin crack, or the fruit be distorted; the fruit-stalk is often shriveled. The scab shows on the leaves much as on the fruit and usually attacks the lower surface. On the twigs the scab is not so conspicuous, but appears as a small round spot which may or may not slough off and be replaced by healthy bark. Young twigs are most often attacked, in which case the scabby spots suggest scale insects.

Pear-scab is caused by a fungus. The chief life events of this fungus must be known to control the disease. The organism passes the winter in leaves on the ground. In the spring, the spores which have matured in the spore-cases are forcibly discharged, and, being very light, are carried hither and thither by the wind so that some of them reach the opening flower and leaf-buds. If moisture and heat are sufficient, the spores germinate, and an infection is started. A foothold secured, the germ-tubes branch and form a dense mycelium—the velvety layer visible to the unaided eye. From these masses of mycelium spore-stalks arise in great numbers bearing countless spores which by one agent and another are carried to other leaves, twigs, or blossoms for new infections. New infections continue throughout the growing season. The black scab spots on fruit and leaf are corky layers of tissue formed to heal the wounds made by the fungus which has ceased to grow vigorously in these scabs. The fungus may pass the winter on the twigs as well as in fallen leaves.

Different varieties resist the scab-fungus differently. Flemish Beauty and Summer Doyenné are

most susceptible and in seasons favorable to the fungus seldom present fruits with a clean cheek no matter how careful the treatment. Pruning off badly infected twigs and plowing under scabby leaves are good sanitary measures. In New York, two applications of lime and sulphur at the summer strength, if applied annually, are usually sufficient to control the fungus. The first of these applications should be made when the blossoms show color, a few days before they open. The second should be put on when most of the petals have fallen. In seasons favorable to the scab, a third application two weeks after the second may be the means of saving the crop. The spread of the disease is greatly favored by damp warm weather.

Pear-growers are plagued by two leaf-spots, one of which is also known as leaf-blight. The leaf-spot here to be discussed (*Mycosphærella sentina* (Fr.) Schroet.) is sometimes called the ashy leaf-spot. The disease is not often seriously troublesome in New York, but is capable of doing great damage in both the nursery and orchard. The spots which give name to the disease are conspicuous enough, but even when present in great numbers are often not seen by the pear-grower until there is a premature dropping of the leaves in August or earlier. The trees often put out new growths, with the result that the wood does not ripen and the tree is left in no condition to stand the cold of winter in this northern climate.

As with nearly all diseases of plants, some varieties suffer more than others. Sheldon, Seckel, and Flemish Beauty are more injured than Kieffer, Lawrence, and Mount Vernon. Nursery stock is more often injured the second than the first year set. Only the leaves suffer. The fungus first shows its work in

minute purplish spots on the upper surface of the leaf. The mature spots measure about one-sixth of an inch in diameter, are angular in shape, with well-defined margins, and have an outer zone of brownish-purple, with a grayish center. Late in the season, dots, the spore-cases of the fungus, appear in the gray central area. The fungus passes the winter in diseased leaves which fall to the ground in late summer. From these leaves spores are discharged into the air to be carried to the leaves after growth begins in the spring. The disease is usually controlled by the sprays necessary every year to keep pear-scab in submission. In the nursery, two-year-old trees are sprayed just after the new leaves open and twice thereafter at two-week intervals. One-year-olds seldom need to be sprayed.

Leaf-blight (*Fabræa maculata* (Lev.) Atk.) is a common and destructive fungus in pear-nurseries in New York and is sometimes troublesome in orchards. The quince suffers even more than the pear from this fungus. In the nursery, leaves and twigs are attacked, and in the orchard the pears themselves sometimes suffer. The disease appears in the spring as minute, reddish-brown circular spots on the upper surface of the leaves, but the fungus penetrates through to the lower surface as the disease progresses. Eventually the color changes to dark brown, and later a coal-black, raised spot appears in the center. The spots sometimes run together. Young leaves shrivel under the attacks of the fungus; while old ones, if badly diseased, turn yellow and drop prematurely. Twigs and leaf-stalks are frequently girdled, and the lesions are more elongated. The spots are similar on the fruits to those on the leaves. The fungus spends the winter in fallen leaves. In the spring the spores are discharged from the fruiting organs of the fungi and

are carried to the tender leaf or twig of the pear or quince. The parasite begins growth at once and in about a month a new crop of spores develop. This fungus grows on various other pome-fruits which complicates remedial measures. The treatment recommended for leaf-spot should control leaf-blight.

As are all tree-fruits in New York, the pear is attacked by crown-gall (*Bacterium tumefaciens* Smith & Townsend). This disease, however, is seldom a serious menace to orchard trees this far north, but the vigor of nursery stock is sapped when the galls girdle the tap-root or the stem at the collar. Moreover, trees affected by crown-gall are barred in most states by inspection laws so that nurserymen can ill afford to produce gall-infected trees. It is a wise precaution not to plant badly diseased trees. The galls are tumor-like structures on the roots of the plant, or often at the juncture of root and stem. They vary from the size of a pea to that of a large egg, forming at maturity rough, knotty, dark-colored masses. Another form of the disease appears as a dense tangle of hair-like roots arising from callous-like galls. This form passes under the name “hairy root.” Neither preventive nor cure is known. Orchard or nursery should not be planted on ground known to have been infected as the disease is highly contagious. The brambles, especially raspberries, are common carriers of crown-gall, and none of the brambles should be planted as inter-crops in pear-orchards.

Brown-blotch (*Leptothyrium pomi* (Mont. & Fr.) Sacc. var.) is another fungus which is sometimes troublesome. The fungus causes reddish blotches on the fruit which coalesce into rusty-brown patches often covering the whole surface of the pear. Here,

again, the Kieffer suffers most although fruits of other varieties are often disfigured by the blotch. The disease is most common on heavy soils and in densely shaded trees. Pruning to let in the sun is usually sufficient to keep the fungus in check, but a late application of lime and sulphur is often necessary.

Black mold (*Fumago vagans* Fr.), a fungus which grows in the honey-dew exuded by the nymphs of the pear-psylla, sometimes causes a sooty covering of the pears which spoils their sale. Twigs and leaves are also covered with thin superficial growth of the fungus somewhat to the detriment of growth. The remedy is obvious—control the psylla.

Pink-rot (*Cephalothecium roseum* Cda.) sometimes does much damage to pears in common or cold storage. The fungus seems able to enter the skin of pears only through injuries, and when reasonable care is used in handling the fruit the rot does little damage. Not infrequently it is found on fruits unpicked, having entered the skin through ruptures made by pear-scab, black-spot, or other fungi. This, of course, seldom happens in well-sprayed orchards.

INSECTS ATTACKING THE PEAR

Several insect pests are very destructive to pear-trees, as many more are often troublesome, while perhaps in addition to the dozen that must always or occasionally be combatted some thirty or forty more have been listed as pear-pests. Young pear-trees are very susceptible to injuries of any kind and if beset by any of the common insect pests do not prosper. As the trees come to maturity, life and vigor of the tree may not be endangered by any but two or three of

the worst pests, but the crop is always cut short by infestations of insects on any part of the plant which interferes with the normal life of the tree. The pests most destructive to the pear in New York, about in order of importance, are San Jose scale, psylla, codling-moth, pear-slug, and pear-leaf blister-mite.

San Jose scale (*Aspidiotus perniciosus* Comstock) is particularly harmful to tree and fruit of the pear. The pears, possibly, are malformed more and show the scales with their discoloration more plainly than the product of any other fruit-tree. A scale-infested pear-tree is easily recognized. Dead and dying twigs or branches and moribund trees are evidences of the dreaded pest. Examination shows the moribund parts to be covered with myriads of minute scales which give the infected bark a scurfy, ashy look. A reddish discoloration is discovered if the bark be cut or scraped. A foothold gained on trunk or branch, fruit and foliage are soon infected. Reproduction is continuous throughout the summer, and the scales increase by leaps and bounds. Smooth-barked young trees succumb within three or four years if the insects are unchecked; the rougher-barked old trees survive the pest indefinitely, although the vigor is lessened to the point of unproductiveness in many old orchards. Pear-growers find the lime-sulphur solution applied in the dormant season the most effective spray in combating San Jose scale. Several insect enemies of the scale help to keep the pest down. A quarter-century ago, it was feared that the pear industry of the State might be ruined by San Jose scale, but no energetic fruit-grower now fears the pest.

Next to San Jose scale, psylla is the most feared pest of the pear in New York. Indeed, this insect is

much more difficult to combat successfully than scale, and were it as wide-spread, the pear industry in New York would be hard hit. The psylla is a minute, sucking insect, wingless in its immature stages, but winged and very active as an adult. They are nearly related to plant-lice, and like them suck the juices of the buds and new leaves. Like plant-lice also they reproduce very rapidly. The immature insects secrete a sticky honey-dew which becomes blackened with a fungus, and the presence of this blackish, sticky substance on foliage and branches is usually the first indication of the pest. The adult is about one-tenth inch long, with four membranous wings, the body dark in color and showing brownish-black markings. Seen through a hand lens, the mature insects look like tiny cicadas. The adults hibernate in crevices of the bark, and at the time buds are swelling in the spring come out to lay their eggs. The eggs hatch in two or three weeks, and there may be four or five broods in a season. The pest is best controlled by spraying with such contact insecticides as tobacco extract both to kill the hibernating insects and later the immature psylla. The winter strength of lime-sulphur solution will kill the eggs.

The apple-worm, the larva of the codling moth (*Carpocapsa pomonella* Linnaeus), destroys great quantities of pears year in and year out in New York, causing greater monetary loss to pear-growers than any other insect pest. The worm and its work scarcely need description—all know “wormy” apples and pears and the agent of the mischief. A pinkish-white, fleshy worm eats a cavity within the pear, usually through and around the core, and then eats its way out to the surface, after which it finds suitable shelter in a crevice of the bark and spins its

cocoon. About the time apples blossom the larvae transform into small brown pupae, from which small moths emerge in two or three weeks. The moths are coppery-brown, small, with a wing expanse of about three-quarters inch, and very inconspicuous as they rest during the day on the bark of the pear-tree which they closely resemble; they fly only at dusk. The moth lays its eggs on leaves or the fruit itself and the young larvae immediately begin work on the nearest pear. Control consists in spraying with arsenate of lead. Two and sometimes three sprayings are necessary. The most important spraying is made just after the blossoms fall, while the calyx-cup is still open, so that the poison will lodge in the blossom-end of the upturned pear. Codling moth was once a most serious pest of the pear, but is now easily kept under control by seasonal applications of arsenate of lead.

The pear-slug (*Caliroa cerasi* Linnaeus), a generation ago, before spraying was common, did much damage to the pear in New York, but is now a negligible pest except in the orchards of the indifferent or slothful since it is easily controlled by spraying. The slugs are small, dark green shiny creatures which eat the surface of the leaves of pear, cherry, and plum. They devour the upper surface of the leaf leaving the veins and the tissues of the lower surface, which turn brown so that the infested tree has the aspect of having been scorched by fire. The slugs molt and finally lose their shiny coat and dirty green color, the full-grown larvae becoming clear yellow. The adult is one of the numerous saw-flys. Eggs are laid within the tissues of the leaves. There are two or three generations in a season. The slugs are most common in the hottest part of the summer or late in the summer. This pest is easily kept in

check by applications of arsenate of lead.

The foliage of the pear, in common with that of the apple, is often seriously injured by a mite (*Eriophyes pyri* Pgst.) which burrows into the tissues of the leaves. The mites attack the young leaves causing reddish blisters which turn black. The blisters are thickened spots which are found to have a corky texture. The young fruits are sometimes attacked, in which case they are badly malformed. The mites are of microscopic size and can be seen only by the aid of a magnifying glass. They hibernate under the scales of the leaf-buds, and are thus ready to attack the young leaves as soon as they unfold, which they do by eating their way in from the under side and then by their work cause the characteristic swellings. As they mature, the mites come out and move to new places and start more colonies. In the autumn, they find their way to the maturing buds and go into winter quarters. An application of lime-sulphur solution at winter strength usually disposes of the mites; that put on for San Jose scale suffices for this pest also. Summer sprays do not reach the mites as they are then hidden within the leaves. The pest was once a serious menace to the pear, but with the advent of winter spraying has become of small importance.

Of the numerous other insects which occasionally become serious pests of the pear, at least twenty have been troublesome at one time or another in New York. Space does not permit a description of these minor pests—they are named as a matter of record. It is not necessary to give remedies for them, as all are controlled by the treatment of major pests which in most orchards need annual applications of one spray or another.

Several scale insects, other than San Jose scale, are more or less pestiferous in the pear-orchards of this State; commonest of these is the oyster-shell, which not infrequently does serious damage to young and unhealthy trees. The scurfy scale found chiefly on the apple sometimes becomes a pest on the pear. A hemispherical scale, about one-twelfth of an inch in length, known as the terrapin scale, now and then infests the pear, but is seldom if ever harmful. As a rule, the treatment for San Jose scale keeps all other scales in check, but all are more difficult to kill than the San Jose and in cases of troublesome infestations may require drastic treatment with a contact insecticide.

A great number of chewing insects, as distinguished from sucking insects, defoliate the pear when given an opportunity, but are kept in check by the treatment for codling moth. The much-dreaded browntail moth and gypsy moth now have a foothold in the State, but as yet can hardly be called pests although their advent threatens the pear industry as it does all other orchard industries. The bud-moth, seldom seen in well-cared-for orchards, is sometimes a vexatious visitor in pear-orchards. Three species of caterpillars, all most striking in appearance, the larval stages of tussock moths, infest pear-trees. These are the white-marked tussock moth, the rusty tussock moth, and the definite-marked tussock moth.

The pear-tree has its share of borers. A small, dark brown beetle, about one-third of an inch in length, the apple twig-borer, sometimes does considerable damage to young shoots of the pear. The flat-headed apple-tree borer works in the sap wood of the pear as in the apple. The shot-hole borer, a tiny insect, eats a small round hole in the

trunk of the pear, as it does also in several fruits, but does little damage except in devitalized trees. The shot-borer, a tiny black beetle, one-tenth of an inch long, bores into twigs or small branches and sooner or later causes their death. None of these borers are very harmful on the pear in New York, but all must be reckoned with occasionally. All are difficult to control.

The pear thrips attack the newly opening flower- and leaf-buds and when the insect, a small winged creature with sucking mouth-parts, is abundant much damage is done. This pest in New York is chiefly confined to the Hudson River Valley. The European grain aphis, closely related to the destructive apple aphis, is sometimes a serious pest on pears. Both of these pests are comparatively easily controlled by timely applications of contact insecticides.

Lastly, there are several chewing insects which feed on the leaves of the pear, which, unless checked, sometimes become major pests for a season or two in an orchard here and there. All of them, fortunately, are controlled by the arsenical poisons which are necessary to keep the codling moth down. The pests are: Cigar case-bearer, green fruit worm, pistol case-bearer, and oblique-banded leaf-roller. With these, as with most of the other pests of the pear, cultivation to keep down all foreign vegetation, and orchard sanitation, consisting chiefly of the destruction of infested fruit, foliage, or wood, are essential preventives.

CHAPTER IV
LEADING VARIETIES OF PEARS

ANDRÉ DESPORTES

1. Leroy *Dict. Pom.* **1**:127, fig. 1867. **2.** Mas *Pom. Gen.* **3**:51, fig. 122. 1878. **3.** *Cat. Cong. Pom. France* 138, fig. 1906.

This old French sort is sparingly grown in New York, and is still listed by a few American nurserymen. The pears are handsome and very good in quality, but they quickly soften at the center and neither keep nor ship well. While usually of medium size, or sometimes large, the pears often run small. The variety is well worth planting in a collection, but has no value in a commercial plantation, and there are many better sorts for home orchards.



The parent tree of this variety grew in the seed beds of M. André Leroy, the well-known authority on

pomology, at Angers, France. M. Leroy obtained it in 1854 from pips of Williams' Bon Chrétien, or as it is better known here, the Bartlett pear. He named it after the son of M. Baptiste Desportes, manager of the business department of his establishment. The vigor and high quality of the fruit were quickly appreciated, and the variety was soon disseminated far and wide.

Tree characteristically upright and vigorous, rapid-growing, hardy, productive; branches slender, smooth, light brown overlaid with thin, grayish scarf-skin, marked with small lenticels; branchlets thick, long, with short internodes, reddish-brown, slightly streaked toward the tips with ash-gray scarf-skin, dull, smooth, glabrous, with numerous small, but very conspicuous, raised lenticels.

Leaf-buds large, pointed, plump, appressed. Leaves 2¾ in. long, 1⅝ in. wide, ovate, stiff, leathery; apex taper-pointed; margin glandular, slightly crenate; petiole 1½ in. long. Flower-buds large, long, conical, plump, free, arranged singly as lateral buds or on short spurs; flowers showy, 1¼ in. across, occasionally tinged pink, in dense clusters, averaging 9 flowers per cluster; pedicels ¾ in. long, thick, pubescent.

Fruit ripe in August; medium in size, 2⅞ in. long, 2¼ in. wide, obovate-obtuse-pyriform, symmetrical, uniform; stem 1 in. long, thick, curved; cavity obtuse, shallow, dotted with russet, often lipped; calyx small, open; lobes separated at the base, short, narrow, acute; basin shallow, narrow, obtuse, gently furrowed, symmetrical; skin thin, tender, smooth; color dull greenish-yellow, dotted and marbled with reddish-brown, blushed on the sunny side; dots numerous, small, light colored, obscure; flesh tinged with yellow, fine, tender and melting,

buttery, juicy, sweet, aromatic; quality very good. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds small, wide, plump, acute.



ANSAULT

1. *Am. Pom. Soc. Cat.* 36. 1883. **2.** *Can. Hort.* **24**:454, fig. 2169. 1901.

Bonne du Puits-Ansault. **3.** Leroy *Dict. Pom.* **1**:486, fig. 1867. **4.** Downing *Fr. Trees Am.* 1st App. 123, fig. 1872. **5.** *Am. Pom. Soc. Cat.* 34. 1877.

Well grown, the fruits of Ansault rival those of Seckel in quality. In particular, the flesh is notable, and is described by the term *buttery*, so common in pear parlance, rather better than that of any other pear. The rich sweet flavor, and distinct but delicate perfume contribute to make the fruits of highest quality. Unfortunately, the pears are not very attractive in appearance. They are small, and the green coat, nearly covered with russet dots and markings, is dull, though enlivened somewhat at full maturity by a rich yellow. The tree in good pear soils is vigorous, productive, bears annually, and is not more subject to blight than that of the average variety. While not at all suitable for commercial orchards, Ansault should find a place in every collection of pears for home use.

The pear Bonne du Puits-Ansault was raised from seed in the nurseries of M. André Leroy, Angers, France. The parent tree bore fruit in 1863, and M. Leroy states that the name which it bears is that of the enclosure where it was first raised. It was propagated in 1865. The American Pomological Society first listed this variety in its catalog in 1877, and in 1883 shortened the name to its present form.

Tree large, upright-spreading, hardy, very

productive; trunk stocky, shaggy; branches thick, dull brownish-red, tinged with green and heavily covered with greenish scarf-skin, with numerous raised lenticels; branchlets long, reddish-brown, with traces of gray scarf-skin, smooth, glabrous, with few inconspicuous, small, slightly raised lenticels.

Leaf-buds plump, pointed, nearly free. Leaf-scars prominent. Leaves numerous, 2¾ in. long, 1½ in. wide, ovate or broadly oval, leathery; apex abruptly pointed; margin finely serrate, with small, reddish, sharp-pointed glands; petiole 1½ in. long, slender, glabrous. Fruit-buds large, conical, plump, free; flowers 1⅛ in. across, in dense clusters, 7 to 9 flowers in a cluster; pedicels ⅝ in. long, thick, greenish, lightly pubescent.

Fruit ripe in late September and early October; medium in size, 2⅜ in. long, 2⅛ in. wide, uniform, obtuse-obovate-pyriform, irregular; stem ⅝ in. long, short, thick; cavity obtuse, russeted, furrowed, ribbed; calyx partly open, large; lobes acute; basin somewhat abrupt, furrowed and wrinkled; skin roughened with russet markings and dots; color pale yellow, considerably russeted about the basin and cavity with russet dots, with scattered flecks and patches of russet; dots numerous, small, russet; flesh tinged with yellow, granular at the center, melting and tender, buttery, very juicy, sweet, aromatic; quality good to very good. Core closed, axile, the core-lines clasping; calyx-tube long, narrow, funnel-shaped; seeds rather short, plump, obtuse.



BARTLETT

1. Downing *Fr. Trees Am.* 334, fig. 134. 1845.
2. *Horticulturist* **2**:169. 1847-48. **3.** *Proc. Nat. Con.*

Fr. Gr. 29. 1848. **4.** Hovey *Fr. Am.* **2**:11, Pl. 1851. **5.** *Horticulturist* N. S. **3**:350, Pl. 1853. **6.** Field *Pear Cult.* 190, 276, fig. 66. 1858. **7.** Downing *Fr. Trees Am.* 666, fig. 1869. **8.** Ont. Dept. Agr. *Fr. Ont.* 148, fig. 1914.

Williams' Bon Chrétien. **9.** Lindley *Guide Orch. Gard.* 350. 1831. **10.** Prince *Pom. Man.* **1**:137. 1831. **11.** Hogg *Fruit Man.* 664. 1884.

Williams' Apothekerbirne. **12.** Dochnahl *Führ. Obstkunde* **2**:181. 1856.

Bon Chrétien Williams'. **13.** *Pom. France* **1**: No. 16, Pl. 16. 1863. **14.** Mas *Le Verger* 2:23, fig. 10. 1866-73.

Williams. **15.** Leroy *Dict. Pom.* **2**:758, fig. 1869.

Williams Christbirne. **16.** Lauche *Deut. Pom.* **II**: No. 18, Pl. 18. 1882. **17.** Mathieu *Nom. Pom.* 298. 1889.

Bartlett leads all other pears in number of trees in New York, and vies with Kieffer for the greatest number in America. Its fruits are more common and more popular in American markets than those of any other pear. When the characters of the variety are passed in review, although several poor ones of fruit and tree appear, the popularity of Bartlett with growers and sellers, if not with consumers, seems justified. As with the leading variety of any fruit, the preëminently meritorious character of this one is its great adaptability to different climates, soils, and situations. Thus, Bartlett is grown with profit in every pear-growing region in America and in all is grown in greater quantities than any other sort excepting, perhaps, the notorious Kieffer. Another character which commends this variety to pear-growers is fruitfulness—barring frosts or freezes, the trees bear full crops year after year. Moreover, the

trees are very vigorous, attain large size, bear young, live long, are easily managed in the orchard, and thrive on both standard and quince stocks. The pears are large, handsome, of good but not of the best quality, and keep and ship remarkably well.

Bartlett is not without serious faults, however. The trees blight badly, and are not much above the average in resistance to blight, the black plague of the pear. Neither are they as hardy to cold or to heat as those of some other varieties. They are scarcely hardier to cold than those of the peach, and cannot withstand the summer heat of the southern, or of the Mississippi Valley states. Another serious defect of the trees is that, more than those of any other standard variety, their blossoms require cross-fertilization. The fruits are satisfactory in all characters excepting quality. There are many better-flavored pears. The fruits lack the rich, perfumed flavor of Seckel on one hand, and the piquant, vinous taste of Winter Nelis on the other. But the pears are much above the average in quality, and since no other variety is so easily grown, nor so reliable in the markets, Bartlett promises long to continue its supremacy for home and commercial plantations. After Kieffer, it is the most desired of all pears by the canning trade. Bartlett is the parent of several other well-known varieties, and of many sorts of small importance.

This pear was found as a wilding by a Mr. Stair, a schoolmaster at Aldermaston, Berkshire, England. From him it was acquired by a Mr. Williams, a nurseryman at Turnham Green, Middlesex, and as it was propagated and distributed by him it became known by his name, although it is still known as Stair’s pear at Aldermaston. It was brought to this

country in 1797 or 1799 by James Carter of Boston for Thomas Brewer who planted the variety in his grounds at Roxbury, Massachusetts, under the name of Williams' Bon Chrétien, by which name it was then and still is known both in England and France. In 1817 Enoch Bartlett, Dorchester, Massachusetts, became possessed of the Brewer estate, and not knowing its true name allowed the pear to go out under his own. Henceforth it was known in America as Bartlett. The American Pomological Society added this variety to its catalog-list of fruits in 1848.

Tree medium in size, tall, pyriform, upright, hardy, very productive; branches stocky, smooth, reddish-brown overlaid with ash-gray scarf-skin, with few lenticels; branchlets short, with short internodes, reddish-brown, glossy, smooth, glabrous, with conspicuous lenticles.

Leaf-buds short, obtuse, pointed, mostly free; leaf-scars prominent. Leaves 2¾ in. long, 1⅘ in. wide, oval, leathery; apex taper-pointed; margin tipped with small dark red glands, finely serrate; petiole 1¾ in. long. Flower-buds large, conical, pointed, free; flowers showy, 1¼ in. across, in dense clusters averaging 7 buds in a cluster; pedicels 1⅛ in. long, slender, slightly pubescent.

Fruit matures in September; large, 3⅜ in. long, 2⅜ in. wide, oblong-obtuse-pyriform, tapering toward the apex, symmetrical, uniform; stem 1⅛ in. long, often curved, thick; cavity small, usually lipped, with thin, overspreading streaks of light russet, acute, shallow; calyx partly open; lobes separated at the base, narrow, acute; basin very shallow, narrow, obtuse, furrowed and wrinkled; skin thin, tender, smooth, often dull, the surface somewhat uneven; color clear yellow, with a faint blush on the exposed cheek, more or less dotted with russet and often thinly russeted around the basin; dots many, small, conspicuous,

greenish-russet; flesh fine-grained although slightly granular at the center, melting, buttery, very juicy, vinous, aromatic; quality very good. Core large, closed, with clasping core-lines; calyx-tube long, wide, funnel-shaped; seeds wide, plump, acute.



BELLE LUCRATIVE

1. Lindley *Guide Orch. Gard.* 364. 1831. **2.** Kenrick *Am. Orch.* 135. 1841. **3.** Hovey *Fr. Am.*

1:41, Pl. 1851. **4.** *Am. Pom. Soc. Rpt.* 53. 1852. **5.** Field *Pear Cult.* 194, fig. 68. 1858.

Fondante d'Automne. **6.** Downing *Fr. Trees Am.* 387, fig. 168. 1845. **7.** Hogg *Fruit Man.* 578. 1884.

Seigneur. **8.** *Ann. Pom. Belge* **7**:5, Pl. 1859. **9.** *Pom. France* **1**: No. 28, Pl. 28. 1863. **10.** Mas *Le Verger* **3**: Pt. 1, 21, fig. 9. 1866-73.

Bergamote Lucrative. **11.** Leroy *Dict. Pom.* **1**:247, figs. 1867.

Seigneur d'Espéren. **12.** *Guide Prat.* 59, 303. 1876.

Esperen's Herrenbirne. **13.** Mathieu *Nom. Pom.* 212. 1889. **14.** Gaucher *Pom. Prak. Obst.* No. 37, Pl. 85. 1894.

Lucrative. **15.** *Am. Pom. Soc. Cat.* 36. 1889.

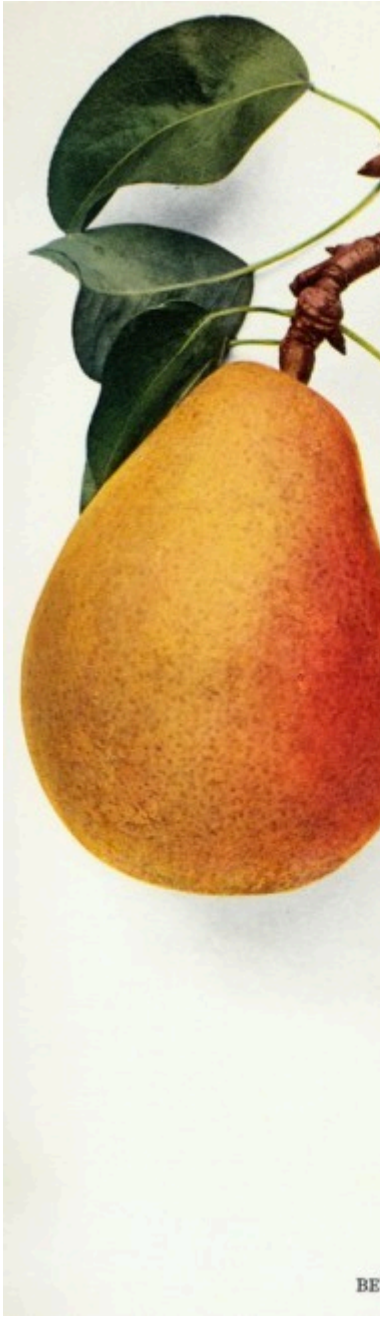
This good old pear has been a standard autumn sort for nearly a century. The internal characters of both flesh and flavor are nearly perfect, but externally much more might be desired as to shape and size. In flesh and flavor, the fruits are of the Bergamot type—fine-grained, buttery, juicy, and sugary, with a musky taste and perfume. The fruits are not as large as is desirable, and are variable in shape and color, external defects which a rather handsome color offsets in part. The trees are more satisfactory than the fruits. They bear enormously and almost annually on either standard or dwarfing stocks; they are very vigorous, with a somewhat distinct upright-spreading habit of growth; are hardier than the average variety of this fruit; and are rather more resistant to blight than the average variety. The fruits are too small for a good commercial product, but their delectable flavor and luscious flesh make them as desirable as any other

pear for home use; besides which the trees grow so well, and are so easily managed that the variety becomes one of the very best for the home planter.

Belle Lucrative is of Flemish origin. In 1831 it was growing in the London Horticultural Society's gardens at Chiswick, and was then described by Lindley as "another of the new Flemish pears." It had been taken to England by a Mr. Braddick who received the cions from M. Stoffels of Mechlin. By some writers it is considered probable that it originated with M. Stoffels, but the leading Belgian and French writers say that it was raised by Major Espéren, also of Mechlin, about 1827. In this country it first fruited in the Pomological Garden of Robert Manning, Salem, Massachusetts, in 1835 or 1836. The American Pomological Society added the variety to its fruit catalog-list in 1852 under the name Belle Lucrative.

> Tree medium in size, vigorous, upright-spreading, dense-topped, rapid-growing, hardy, productive; branches smooth, grayish-brown mingled with red, covered with scarf-skin, with numerous elongated lenticels; branchlets slender, short, light brown, glossy, smooth, glabrous, with few small, inconspicuous lenticels.
>
> Leaf-buds small, short, conical, pointed, plump, appressed. Leaves 3 in. long, 1½ in. wide, stiff; apex abruptly pointed; margin finely serrate, tipped with very small, sharp glands; petiole 2 in. long. Flower-buds conical, pointed, plump, free, singly on very short spurs; flowers with an unpleasant odor, showy, 1½ in. across, average 7 buds in a cluster; pedicels $1^{1}/_{16}$ in. long, thick, thinly pubescent.
>
> Fruit ripe in late September and October; medium in size, 2⅜ in. long, 2¼ in. wide, obovate, conical, with sides unequal; stem 1⅛ in.

long; cavity very shallow and narrow, or lacking, the flesh drawn up about the base of the stem; calyx open, large; lobes long, narrow, acuminate; basin shallow, obtuse, smooth; skin thin, tender, smooth; color dull greenish-yellow, thickly sprinkled with small, russet dots, often overspread with russet around the basin; dots numerous, small, russet, conspicuous; flesh tinged with yellow, firm, fine-grained, crisp, buttery, juicy, sweet; quality very good. Core closed, abaxile; calyx-tube long, narrow, funnel-shaped; seeds narrow, plump, acute.


BE



BEURRÉ D'ANJOU

1. Kenrick *Am. Orch.* 136. 1841. **2.** Downing *Fr. Trees Am.* 360. 1845. **3.** Hovey *Fr. Am.* **1**:61, Pl. 1851. **4.** *Am. Pom. Soc. Rpt.* 53. 1852. **5.** *Flor. & Pom.* **5**:1, Pl. 1866. **6.** Downing *Fr. Trees Am.* 679, fig. 1869. **7.** Hogg *Fruit Man.* 510. 1884.

Anjou. **8.** *Am. Pom. Soc. Cat.* 36. 1883.

Winter Meuris. **9.** Lucas *Tafelbirnen* 171, fig. 1894.

Nec plus Meuris. **10.** Baltet *Cult. Fr.* 321, fig. 214. 1908. **11.** *Guide Prat.* 49, 282. 1895.

Beurré d'Anjou is a standard market pear for late fall and early winter, its season lasting until well into January even in common storage. As an early winter pear, it has no superior and few equals in appearance and quality of fruit. In appearance, the pear is of distinct type—large, very uniform, the sides slightly unequal, smooth of skin, yellow, marked and dotted with russet, faintly blushed, and borne on a very short, thick stem. A fruit of this variety can never be mistaken for that of another. The internal characters are scarcely less notable than the external ones. The yellowish-white flesh is firm but tender, slightly granular, very juicy, sweet, spicy, with a rich, vinous flavor. Uniformity of shape and the smooth skin are marked and constant characters. In common with all varieties, the fruits of this pear are not always up to their best, but they are never poor in quality. The trees are vigorous, hardy, fairly free from blight, grow rapidly and come in bearing early, but have the serious fault of being uncertain croppers. In Europe and America, the trees thrive on the quince, and the variety is rated by all as a splendid one for dwarfing.

Of all winter pears, none is more valuable for commercial or home orchards than Beurré d'Anjou. In particular, it is recommended for New York, where, possibly, it is more at home than in any other part of America.

Beurré d'Anjou is an old French pear the origin of which is obscure, although it is supposed to have originated in the vicinity of Angers. Early in the nineteenth century it was introduced into England by Thomas Rivers, noted author and pomologist. The variety was introduced into this country by Colonel Wilder[25] of Boston about 1842, and first fruited with him in 1845. The American Pomological Society added Beurré d'Anjou to its list of fruits recommended for general cultivation in 1852.

> Tree large, vigorous, spreading, hardy, an uncertain bearer; trunk smooth; branches slightly zigzag, covered with gray scarf-skin over reddish-brown, with few small lenticels; branchlets long, with long internodes, reddish-brown tinged with green, smooth, glabrous, with many conspicuous, raised lenticels.
>
> Leaf-buds small, short, obtuse, nearly free. Leaves 3½ in. long, 1½ in. wide, elongated-oval, thin, leathery; apex taper-pointed; margin nearly entire or crenate; petiole 2 in. long. Flower-buds large, long, conical, plump, free; flowers 1⅜ in. across, showy, in dense clusters, from 8 to 12 buds in a cluster; pedicels ½ in. long, very thick, pubescent, green.
>
> Fruit ripe November to early January; large, 3½ in. long, 3 in. wide, uniform in size, oblong-obovate-pyriform, with surface irregular in outline, sides slightly unequal, uniform in shape; stem ½ in. long, short, very thick and woody; cavity obtuse, shallow, russeted and furrowed, usually lipped; calyx open; lobes separated at the

base, long, narrow, acuminate; basin shallow, narrow, obtuse, smooth, symmetrical and regular; skin thin, tender, smooth, dull; color yellow, clouded with russet around the basin and occasionally with very fine russet lines and markings; dots many, small, russet, conspicuous; flesh yellowish-white, firm, but slightly granular, tender, buttery, very juicy, sweet and spicy, with a rich, aromatic flavor; quality very good. Core large, closed; core-lines clasping; calyx-tube short, wide, conical; seeds large, wide, long, plump, acuminate, tufted at the tips.

BEURRÉ D'ARENBERG[26]

1. *Trans. Lond. Hort. Soc.* **5**:406. 1824. **2.** Lindley *Guide Orch. Gard.* 392. 1831. **3.** Prince *Pom. Man.* **1**:51. 1831. **4.** Kenrick *Am. Orch.* 188. 1832. **5.** *Ibid.* 156. 1841. **6.** *Gard. Chron.* 716, fig. 2. 1844. **7.** Downing *Fr. Trees Am.* 423, fig. 195. 1845. **8.** *Proc. Nat. Con. Fr. Gr.* 51. 1848. **9.** Hovey *Fr. Am.* **1**:1, Pl. 1851. **10.** *Mass. Hort. Soc. Rpt.* 93, Pl. 1852. **11.** Mas *Le Verger* **1**:161, fig. 79. 1866-73. **12.** Hogg *Fruit Man.* 510. 1884.

Orpheline d'Enghien. **13.** *Ann. Pom. Belge* **3**:35, Pl. 1855. **14.** *Guide Prat.* 108, 292. 1876.

In favorable locations this pear seems to possess all of the characters which constitute a first-class fruit; but, notwithstanding, although it has been in the country nearly a century, it is now scarcely to be found in the nurseries, and orchard trees are becoming rare. The fruits are distinguished by their refreshing, vinous taste and long-keeping qualities. Very often, however, they do not ripen in eastern America, and when not properly ripened the pears are highly acidulous and so astringent as to be almost intolerable to the taste. The frequency with which these poor fruits are borne, always on heavy,

cold clays and in cold climates, coupled with rather small, short-lived trees, condemn the variety for most pear regions in the East. In the far West, the crop ripens better, and the pears are splendid winter fruits. The merits of the variety are so varying in New York that it is not now worth while attempting to bring it into new life.

Beurré d'Arenberg, in the opinion of some European writers, holds first place among the pears produced by French and Belgian pomologists. Unfortunately, Beurré d'Arenberg and Glou Morceau are often mistaken the one for the other. Beurré d'Arenberg was raised by Monseigneur Deschamps, Abbé of the Orphan Hospital, Enghien, Belgium. At about the same time, M. Noisette, a nurseryman of Paris, sent out Glou Morceau, which he had procured from the gardens of the Duc d'Arenberg, under the name Beurré d'Arenberg, so that there were two distinct varieties in cultivation under the same name. The true Beurré d'Arenberg of the Abbé Deschamps came to this country about 1827, having been sent over by Thomas Andrew Knight, President of the London Horticultural Society, to the Hon. John Lowell of Boston. The American Pomological Society recommended this variety for cultivation in 1848, but in 1871 the name disappeared from the Society's catalog.

> Tree medium in size and vigor, upright, very hardy and very productive; trunk and branches medium in thickness and smoothness; branchlets slender, short, light brown mingled with green, smooth, glabrous, with numerous, small, raised lenticels. Leaf-buds small, short, plump, free; leaf-scars with prominent shoulders. Leaves 3 in. long; 1⅜ in. wide; apex taper-pointed; margin glandless, finely serrate; petiole 1⅞ in. long.

Flower-buds small, short, sharply pointed, free, singly on short spurs.

Fruit ripe December to January; large, obovate-pyriform, ribbed; stem 1 in. long, thick, fleshy at the base, obliquely inserted; cavity lacking, drawn up in an oblique lip about the stem; calyx small, closed; lobes short, sometimes lacking; basin deep, smooth; skin roughish, thick, uneven; color yellow, with patches and tracings of russet especially around the calyx end; dots numerous, cinnamon-russet; flesh white, very juicy, melting, vinous or acidulous; quality very good. Core large; seeds large, roundish, plump.



BEURRÉ BOSC

1. Kenrick *Am. Orch.* 161. 1832. **2.** Downing *Fr. Trees Am.* 358, fig. 152. 1845. **3.** *Proc. Nat. Cong. Fr. Gr.* 29, 51. 1848. **4.** Hovey *Fr. Am.* **1**:65, Pl. 1851. **5.** *Ann. Pom. Belge* **5**:79, Pl. 1857. **6.** Leroy *Dict. Pom.* **1**:320, fig. 1867. **7.** Hogg *Fruit Man.* 514. 1884.

Bosc's Butterbirne. **8.** Dochnahl *Führ. Obstkunde* **2**:100. 1856.

Beurré d'Apremont. **9.** *Pom. France* **1**: No. 26, Pl. 26. 1863. **10.** Mas *Le Verger* **3**: Pt. 2, 65, fig. 129. 1866-73. **11.** *Guide Prat.* 48, 230. 1895.

Bosc. **12.** *Am. Pom. Soc. Cat.* 36. 1883.

Bosc's Flaschenbirne. **13.** Lauche *Deut. Pom.* **II**: No. 75, Pl. 75. 1883. **14.** Mathieu *Nom. Pom.* 188. 1889. **15.** *Deut. Obstsorten* **2**: Pt. 5, Pl. 1906.

The fruits of Beurré Bosc merit unqualified praise. They are nearly flawless in every character. The pears at once receive approbation from all who see them by virtue of their uniquely beautiful color and shape, in which characters they are wholly unlike any other pear. The shape is pyriform, with a very long, tapering neck, perfectly symmetrical and unequalled in trimness of contour. The color is a dark rich yellow overspread with cinnamon-russet, with here and there a spot of the yellow ground color visible. The quality is rated by all as "very good" or "best;" the Seckel alone surpasses it as a dessert fruit in the estimation of most pear fanciers. The flesh, while slightly granular, is tender and melting or almost buttery, very juicy, with a rich piquant flavor and a pleasing aroma. The fruits seldom crack, scab, or mildew. The characters of the tree fall far short of those of the fruits. Nurserymen complain that it is difficult to propagate the trees as they make a poor growth in the nursery and come to transplanting age with a root system of two or three prongs almost

devoid of fibrous roots. The trees must be humored in soil and climate, and under favorable conditions make but moderate growth as young plants. Established trees in suitable soils, however, surpass most of their neighbors in size and luxuriance of foliage. Very old trees have a nobility of aspect possessed by few other pears. While slow in coming in bearing, after fruiting begins the trees bear regularly and abundantly. The variety does not succeed well on the quince unless double-worked. Unfortunately, the trees are tender to cold and somewhat too susceptible to blight. Beurré Bosc has long been a favorite in the pear regions of Europe and America, and its culture in this country may be recommended for the home, for local and general markets, and for exportation.

This pear is a native of Belgium, having been raised from seed in 1807 by Dr. Van Mons, the renowned pomologist of Louvain, and was in the first instance named by him Calebasse Bosc in honor of M. Bosc, a distinguished French naturalist. In 1820, it was received at the garden of the Horticultural Society of London under the name Beurré Bosc, and Robert Thompson, at that time Director of the gardens, thought it best to retain this name. The variety was early introduced into France. About 1832 or 1833, Robert Manning and William Kenrick received cions in the United States from Van Mons and from the London Horticultural Society. The variety was cataloged by the American Pomological Society at its first meeting in 1848.

> Tree medium in size, vigorous, upright-spreading, hardy, productive, not an early bearer; trunk stocky; branches smooth, brownish, covered with ash-gray scarf-skin, with large lenticels; branchlets brownish, tinged with gray,

glossy, smooth, nearly glabrous, with slightly raised, conspicuous lenticels.

Leaf-buds obtuse, pointed, appressed; leaf-scars prominent. Leaves 3 in. long, 1⅞ in. wide, ovate, thick, leathery; apex taper-pointed; margin finely crenate; petiole 1¼ in. long. Flower-buds large, conical, pointed, free; flowers open early, 1½ in. across, showy, in dense clusters, from 10 to 20 buds in a cluster; pedicels 1 in. long, slightly pubescent, light green.

Fruit ripe in late October and November; large, 3⅜ in. long, 2¾ in. wide, uniform in size, acute-obovate-pyriform, with a very long, tapering neck, uniform in shape and very symmetrical; stem 1½ in. long, curved; cavity very obtuse or lacking, occasionally very shallow and narrow, wrinkled, russeted, with a fleshy ring folded up around the stem, slightly lipped; calyx open, small; lobes short, broad, obtuse; basin very shallow, narrow, obtuse, smooth, symmetrical; skin slightly granular, tender, roughened by russet, dull; color dark yellow, overspread with thick, dark russet, laid on in streaks and patches, with a cheek of solid russet; dots small, light russet, obscure; flesh yellowish-white, slightly granular, tender and melting, buttery, very juicy, with a rich, delicious, aromatic flavor; quality very good to best. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds wide, short, plump, obtuse.



BEURRÉ CLAIRGEAU

1. Hovey *Fr. Am.* **2**:73, Pl. 1851. **2.** *Ann. Pom. Belge* **2**:103, Pl. 1854. **3.** *Gard. Chron.* 805. 1854. **4.** *Am. Pom. Soc. Rpt.* 337. 1860. **5.** *Pom. France* **1**: No. 11, Pl. 11. 1863. **6.** Mas *Le Verger* **1**:39, fig. 26. 1866-73. **7.** *Jour. Hort.* N. S. **12**:211. 1867. **8.** Leroy *Dict. Pom.* **1**:335, fig. 1867. **9.** Downing *Fr. Trees Am.* 678. 1869. **10.** *Gard. Chron.* 1271. 1873. **11.** Hogg *Fruit Man.* 517. 1884.

Clairgeau's Butterbirne. **12.** Dochnahl *Führ. Obstkunde* **2**:127. 1856. **13.** Lauche *Deut. Pom.* **II**: No. 7, Pl. 7. 1882. **14.** *Deut. Obstsorten* **3**: Pt. 9, Pl. 1907.

Clairgeau. **15.** *Am. Pom. Soc. Cat.* 36. 1883.

Beurré Clairgeau is one of the mainstays in American pear-growing, and is an especially valuable variety in New York. It maintains its place among standard varieties chiefly because of splendid tree-characters, as the fruits, while handsome, are not of the best quality. The tree is second only to that of Buffum in vigor, health, and productiveness, and is nearly as handsome as an ornamental. It does equally well on quince or pear stock, although the Europeans maintain that the product is better on the dwarfing stock. On either stock, the trees bear young and annually. The fruits are large, smooth, symmetrical, and uniform in shape, with a handsome ground color of rich yellow at maturity and a bright crimson cheek. But here praises end, for the "deceptive cheek of the Clairgeau" is proverbial in pear-growing, the handsome coat covering rather coarse, granular flesh which is sometimes very good but more often commonplace. The core is very large, and the flesh surrounding it often rots or softens prematurely. The fruit is more suitable for cookery than dessert. The pears are heavy and often drop before maturity, and the trees should not be set in wind-swept situations.

Despite these demerits of the fruits, the variety is well worth planting in commercial orchards for late markets.

The original tree of Beurré Clairgeau appears to have grown by chance about 1830 with Pierre Clairgeau, Nantes, France. M. Clairgeau's first account of it was given in 1848 when he exhibited fruit. The reputation of the variety seems to have been at once established, for J. de Jonghe and others combined and purchased the stock of about 300 trees grafted on quince. Together with the parent tree, these were the same year removed to Brussels, and in 1852 the pear was placed on the market. Thus it happened that a French pear was first distributed by Belgian growers. The variety was introduced in America about 1854. The American Pomological Society placed it upon its list of recommended fruits in 1860.

Tree medium in size, vigorous, unusually upright, dense, slow-growing, hardy, productive, a regular bearer; trunk slender, shaggy; branches smooth, slightly zigzag, ashgray almost completely overspreading reddish-brown, with many lenticels; branchlets thick, short, with short internodes, greenish-brown, smooth, glabrous, with slightly raised lenticels.

Leaf-buds conical, pointed, appressed; leaves very numerous, 3 in. long, 2 in. wide, broadly oval, leathery; apex abruptly pointed; margin glandless, finely serrate; petiole 2 in. long, glabrous; stipules rudimentary or lacking. Flower-buds medium to long, conical, pointed; flowers 1½ in. across, showy, in dense clusters, averaging 7 buds to a cluster; pedicels ⅝ in. long, thick, pubescent, greenish.

Fruit in season, late October and November; large, 3⅝ in. long, 2⅝ in. wide, uniform in size,

roundish-acute-pyriform, with a long, tapering neck, symmetrical, uniform in shape; stem ½ in. long, short, very thick and fleshy; cavity obtuse, very shallow and narrow, fleshy around the base of the stem, russeted, lipped; calyx open, large; lobes separated at the base, long, broad, acute or acuminate; basin shallow, narrow, obtuse, furrowed, often compressed; skin thick and granular, tough, smooth, glossy; color yellow, with bright red blush; dots many, small, russet, conspicuous; flesh white, quite granular, firm at first but becoming at maturity tender and melting, buttery, very juicy, sweet, aromatic, with a rich, vinous flavor; quality variable, good to best. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide, long, plump, acute.



BEURRÉ DIEL

1. *Pom. Mag.* **1**:19, Pl. 1828. **2.** *Ibid.* **3**:131, Pl. 1830. **3.** Lindley *Guide Orch. Gard.* 392. 1831. **4.** Kenrick *Am. Orch.* 189. 1832. **5.** *Ibid.* 156. 1841.

6. Downing *Fr. Trees Am.* 360, fig. 153. 1845. **7.** *Gard. Chron.* 856. 1845. **8.** Hovey *Fr. Am.* **1**:77, Pl. 1851. **9.** *Am. Pom. Soc. Rpt.* 231. 1854. **10.** *Pom. France* **1**: No. 7, Pl. 7. 1863. **11.** Mas *Le Verger* **1**:137, fig. 67. 1866-73. **12.** Leroy *Dict. Pom.* **1**:349, fig. 1867. **13.** Downing *Fr. Trees Am.* 686, fig. 1869. **14.** Hogg *Fruit Man.* 518. 1884. **15.** *Guide Prat.* 234. 1895.

Diel's Butterbirne. **16.** Liegel *Syst. Anleit.* 110. 1825. **17.** Lauche *Deut. Pom.* **11**: No. 8, Pl. 8. 1882. **18.** Mathieu *Nom. Pom.* 203. 1889.

Diel. **19.** *Am. Pom. Soc. Cat.* 36. 1883.

The catalogs and text-books supply Beurré Diel with several virtues which Nature denies it as the variety grows in New York. As grown in the eastern United States, the pears are dull and unattractive even at maturity when the pale lemon color is brightest. When the tree is happily situated as to soil and care, the quality of its product is excellent, its fruits being delicious and ranking among the very best, but when illy suited to soil, climate or care, the flesh is coarse, the flavor insipid and astringent, bringing the quality down to second or third rate. The pears keep and ship well. The tree is hardy, uncommonly vigorous and fruitful, but very subject to blight; it is characterized by its long twisting branches which need to be pruned back heavily. The variety is still being planted, but there are better autumn pears.

This variety came from a chance seedling found near Brussels in 1805 by M. Meuris, head gardener for Dr. Van Mons. Being unnamed and of fine quality, Van Mons dedicated it to his German friend, Diel, one of the most distinguished German pomologists. Van Mons sent cions of the variety to the London Horticultural Society in 1817. In 1823,

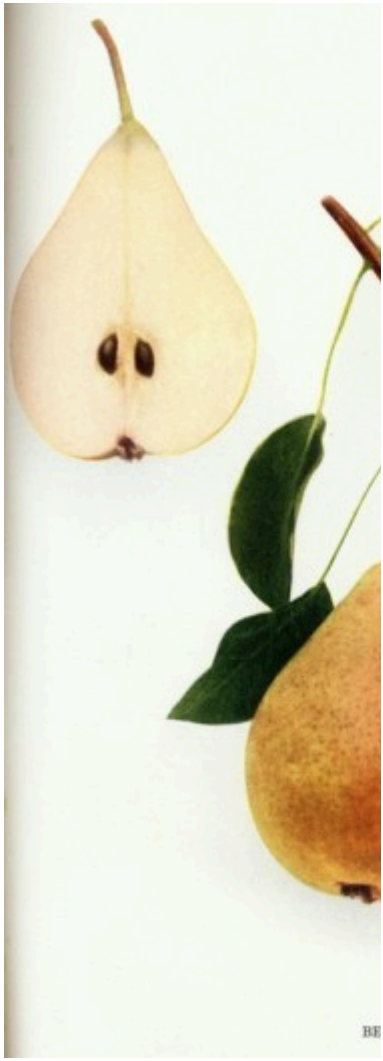
Thomas Andrew Knight sent cions to the Massachusetts Agricultural Society whence it became disseminated generally throughout the United States. The American Pomological Society placed this variety upon its fruit catalog-list in 1854.

Tree medium in size and vigor, spreading, open-topped, slow-growing, hardy, productive; trunk slender, smooth; branches slender, twisting, reddish-brown mingled with grayish scarf-skin, with few lenticels; branchlets with short internodes, dark reddish-brown, smooth, glabrous, with few small, raised lenticels.

Leaf-buds obtuse, free; leaf-scars prominent. Leaves 2¾ in. long, 1¾ in. wide, oval, thick, leathery; apex abruptly pointed; margin finely serrate; petiole 1½ in. long. Flower-buds large, long, conical, rather plump, free; flowers open early, nearly 1⅜ in. across, showy, in dense clusters, 7 or 8 buds in a cluster; pedicels 1⅛ in. long, pubescent, greenish.

Fruit ripe in November; large, 3 in. long, 2⅜ in. wide, uniform in size, obovate-obtuse-pyriform, often irregular and usually with sides unequal; stem 1¼ in. long, thick, curved; cavity obtuse, shallow, very narrow, russeted, furrowed and uneven, often lipped; calyx partly open, large; lobes separated at the base, broad, acute; basin shallow, obtuse, furrowed and uneven; skin very thick and granular, somewhat roughened by russet markings and by dots; color lemon-yellow, with a faint pinkish-red blush and markings and flecks of russet; dots many, russet, very conspicuous; flesh yellowish-white, firm, becoming tender and melting, quite granular around the core, very juicy, sweet, aromatic and rich; quality very good. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide, long, plump, often

abortive, acute.



BEURRÉ GIFFARD

1. *Gard. Chron.* 69. 1848. **2.** *Mag. Hort.* **18**:433, fig. 30. 1852. **3.** *Ann. Pom. Belge* **5**:69, Pl.

1857. **4.** *Am. Pom. Soc. Rpt.* 231. 1858. **5.** *Pom. France* **1**: No. 1, Pl. 1. 1863. **6.** Mas *Le Verger* **2**:39, fig. 18. 1866-73. **7.** Leroy *Dict. Pom.* **1**:369, fig. 1867. **8.** Downing *Fr. Trees Am.* 689. 1869. **9.** Hogg *Fruit Man.* 521. 1884. **10.** *Soc. Nat. Hort. France Pom.* 374, fig. 1904.

Giffard's Butterbirne. **11.** Oberdieck *Obst-Sort.* 255. 1881. **12.** Lauche *Deut. Pom.* **II**: No. 57, Pl. 57. 1883.

Giffard. **13.** *Gard. Chron.* 415. 1863. **14.** *Am. Pom. Soc. Cat.* 38. 1883.

This is one of the few summer pears with a distinctly vinous flavor, which, with the crisp and tender flesh, makes it one of the most refreshing of summer fruits. The pears are larger than those of most other sorts of its season, somewhat like those of Beurré Clairgeau in shape and color, and ripen at a time—just before Clapp Favorite—when good pears should be in demand for home and market. The fruits keep well for summer pears, and are remarkable for their small cores. The trees, while in no way remarkable, are quite up to the average in all characters, and surpass most of their orchard associates in hardiness and fruitfulness. The variety is desirable for both home and commercial orchards.

This early summer pear was found as a chance seedling in 1825 by Nicolas Giffard, Foussières, France. In 1840, M. Millet, president of the Society of Horticulture of Maine-et-Loire, wrote the first description of it in the Bulletins of the Society. It was introduced in America about 1850, and in 1858 was added to the fruit catalog-list of the American Pomological Society.

Tree of medium size, vigorous, spreading, open-topped, hardy, productive; branches reddish-brown, nearly covered with gray scarf-

skin, with long and narrow, large lenticels; branchlets slender, new growth willowy, long, reddish-brown, smooth, glabrous except near the tips of the new growth, with conspicuous, raised, round lenticels.

Leaf-buds small, short, pointed, appressed. Leaves 2¾ in. long, 1½ in. wide, stiff; apex taper-pointed; margin entire, sometimes slightly pubescent; petiole 2½ in. long, slender, reddish-green; stipules very long and slender. Flower-buds small, plump, free, singly on very short spurs; flowers showy, 1¼ in. across, in dense clusters, average 8 buds in a cluster; pedicels ¾ in. long, pubescent.

Fruit ripe in late August; variable in size, averages 3 in. long, 2⅜ in. wide, obovate-acute-pyriform; stem ¾ in. long; cavity lacking, the flesh closing up symmetrically around the stem except when drawn up in a lip; calyx open, small; lobes separated at the base, narrow, accuminate; basin shallow, narrow, obtuse, almost smooth, symmetrical; skin thin, tender, smooth; color dull greenish-yellow, with a dotted, dull red blush, often without blush; dots numerous, small, greenish and russet, very conspicuous; flesh tinged with yellow, granular at the center, melting, very juicy, vinous, highly aromatic; quality very good. Core small, closed, with clasping core-lines; calyx-tube narrow, funnel-shaped; seeds plump, acute.



BEURRÉ HARDY

1. Barry *Fr. Garden* 314. 1851. **2.** Downing *Fr. Trees Am.* 466. 1857. **3.** *Am. Pom. Soc. Rpt.* 66. 1862. **4.** *Pom. France* **2**: No. 46, Pl. 46. 1864. **5.** Mas *Le Verger* **3**: Pt. 1, 11, fig. 4. 1866-73. **6.** Leroy *Dict. Pom.* **1**:379, fig. 1867. **7.** Hogg *Fruit Man.* 521. 1884. **8.** *Soc. Nat. Hort. France Pom.* 378, fig. 1904.

Hardy. **9.** *Gard. Chron.* 463. 1863. **10.** *Am. Pom. Soc. Cat.* 38. 1883.

Gellert's Butterbirne. **11.** Gaucher *Pom. Prak. Obst.* No. 38, Pl. 78. 1894.

Beurré Hardy is one of the good autumn pears. Both fruit and tree commend it. The fruits are usually large; are handsome in appearance; and the flesh and flavor are exceptionally fine. Thus, the flesh, while a little granular at the core, is melting, juicy, and richly aromatic,—as truly luscious as in any other pear. Unfortunately the fruits do not keep well, having a tendency to soften at the core as maturity advances. When poorly grown or not properly ripened, the pears are sometimes a little astringent, and there is always a smack of astringency. The trees, while not large, are vigorous, hardy, productive, and healthy except in being a little susceptible to blight. This is a favorite pear with nurserymen to bud or graft on the quince, Japanese pear stocks, or other stocks, since it makes a perfect union with any of those in common use. The tree is one of the best dwarfs, also, for its own crop. Wherever pears are grown, this is a good dessert sort, and in many regions it is a valuable fruit for commerce. Beurré Hardy does especially well in New York and in eastern United States.

This is a French pear raised about 1820 by M. Bonnet, Boulogne-sur-Mer, France. In 1830, it was acquired by M. Jean-Laurent Jamin, a nurseryman

near Paris, who named it in honor of M. Hardy, Director and Professor of Arboriculture at the Garden of the Luxembourg. It was propagated, made known, and distributed by M. Jamin between 1840 and 1845. The American Pomological Society added Beurré Hardy to its list of recommended fruits in 1862.

Tree medium in size, vigorous, upright, dense-topped, hardy, productive; trunk stocky; branches smooth, dull brown overspread with gray, marked more or less with scarf-skin, with very numerous large, elongated lenticels; branchlets thick, greenish-brown, glossy, smooth, glabrous, with numerous small, raised, conspicuous lenticels.

Leaf-buds conical, pointed, plump, usually free; leaf-scars prominent. Leaves 2½ in. long, 2 in. wide, stiff; apex abruptly pointed; margin tipped with small glands, finely serrate; petiole 1½ in. long. Flower-buds small, short, conical, pointed, plump, free, singly or in small clusters on short spurs; flowers 1¼ in. across, well distributed, average 9 buds in a cluster; pedicels 1 in. long, pubescent, reddish-green.

Fruit in season, late September and early October; large, 3 in. long, 2¼ in. wide, uniform, obtuse-pyriform, with a rather long neck, symmetrical; stem ⅞ in. long, thick, slightly curved; cavity obtuse, very shallow and narrow, russeted, often uneven and gently furrowed, lipped; calyx large, open; lobes broad, acute; basin shallow, narrow, obtuse, gently furrowed; skin granular, tender, russet; color dull greenish-yellow, overspread with thin, brownish-russet, without blush; dots numerous, russet, small, very conspicuous; flesh granular, melting, buttery, very juicy, sweet, richly aromatic and somewhat vinous; quality very good to best. Core large,

closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide, long, plump, acute.

BEURRÉ DE JONGHE

1. *Mag. Hort.* **28**:258. 1857. **2.** *Gard. Chron.* 147, fig. 1866. **3.** Mas *Le Verger* **1**:73, fig. 43. 1866-73. **4.** Downing *Fr. Trees Am.* 683. 1869. **5.** *Jour. Hort.* N. S. **32**:408. 1877. **6.** Hogg *Fruit Man.* 522. 1884. **7.** *Guide Prat.* 64, 232. 1895. **8.** *Garden* **49**:225. 1896.

De Jonghe's Butterbirne. **9.** Mathieu *Nom. Pom.* 201. 1889.

A prime requisite in any pear of best quality is that there be no disagreeable after-taste in the flesh. The fruits of almost none of the winter pears meet this requirement. Almost all have more or less astringency in the after-taste. But the fruits of this variety are wholly free from this astringency and are, moreover, so sweet and rich that they are nearly as delectable as those of Seckel, the standard of excellence in quality. The pears ripen at Geneva in January and may be kept for a month or six weeks at a season when there are few other sweet, rich pears, the fruits of nearly all other pears of this season being vinous and piquant. The trees are hardy and productive, but are slow in coming in bearing, rather small, and not at all self-assertive and must be coddled somewhat. They are reported by many to do better on quince than on pear stocks. The variety is desirable only for the amateur.

According to Mas, the French pomologist, M. de Jonghe mentioned this pear in a pamphlet on new varieties published in 1865. It was described in the *Magazine of Horticulture* in 1857 as a new variety. In

Gardener's Chronicle, 1866, M. de Jonghe said that he saw this pear first in 1852 at Uccle, Belgium. The seedling had been planted there two years before.

Tree medium in size and vigor, spreading, slow-growing, hardy, very productive; trunk slender, shaggy; branches reddish-brown overspread with thick scarf-skin; branchlets thick, curved, short, with very short internodes, smooth except for the raised, conspicuous lenticels. Leaf-buds small, short; leaf-scars with prominent shoulders. Leaves 2¾ in. long, 1½ in. wide, thick; apex abruptly pointed; margin glandular, finely serrate; petiole 1½ in. long, reddish-green. Flower-buds large, long, very plump, free; flowers 1¼ in. across, 7 or 8 buds in a cluster; pedicels ½ in. long, thick.

Fruit ripe December to January; medium in size, 3 in. long, 2¼ in. wide, obovate-obtuse-pyriform, very regular; stem short, thick, inserted obliquely; cavity very shallow or none, the flesh often drawn up in a lip on one side of the stem; calyx small, open; basin shallow; skin thin; color dull yellow, thickly overspread with a pale, brownish-russet, often with traces of a russet-red blush; dots numerous, small, dull russet; flesh nearly white, fine-grained, melting, buttery, pleasant flavored, aromatic, sweet; quality very good.



BEURRÉ SUPERFIN

1. *Mag. Hort.* **20**:8, 135. 1854. **2.** *Horticulturist* N. S. **5**: 88. 1855. **3.** Downing *Fr. Trees Am.* 465. 1857. **4.** *Am. Pom. Soc. Rpt.* 231. 1858. **5.** Leroy *Dict. Pom.* **1**:432, fig. 1867. **6.** Hogg *Fruit Man.* 529. 1884.

Hochfeine Butterbirne. **7.** Lauche *Deut. Pom.* **II**: No. 59, Pl. 59. 1883. **8.** Gaucher *Pom. Prak. Obst.* No. 47, Pl. 60. 1894.

Superfin. **9.** *Am. Pom. Soc. Cat.* 40. 1883.

Tender in skin and delicate in flesh, the product of this variety is not for the markets, but that of few other sorts so admirably supplies those who want choicely good fruits. The pears are not as attractive in appearance as might be wished, but are hardly surpassed in flavor in their season. The flesh is notable for juiciness, rich vinous flavor, and pleasant perfume. The trees are large, healthy even as regards blight, very productive, and are easily suited as to soils. The trees do not bear early, but are regular in bearing after this life event begins. In Europe, the variety is commonly and successfully grown as a dwarf, and the pear-growers of a generation ago in America recommend this variety as one of the good sorts to work on the quince. The variety is a valuable one for home orchards, especially in New York where it grows exceptionally well.

Beurré Superfin was raised from a bed of pear seeds made at Angers, France, by M. Goubault, a well-known pomologist, in 1837. The parent tree so produced bore fruit in 1844 and the Committee of the Horticultural Society of Maine-et-Loire was requested to report on its merits, which it did in that year, and M. Millet, president of the society, named it Beurré Superfin. It was introduced in America about 1850. The variety was placed on the fruit catalog-list of the American Pomological Society in

1858.

Tree large, vigorous, upright-spreading, dense-topped, hardy, very productive; trunk stocky, rough; branches thick, rough and shaggy, zigzag, dull brownish-red, overspread with gray scarf-skin, sprinkled with numerous elongated lenticels; branchlets slender, light brown, glossy, smooth, glabrous, with small, raised, inconspicuous lenticels.

Leaf-buds small, short, conical, pointed, plump, appressed or free; leaf-scars prominent. Leaves 3¼ in. long, 1⅞ in. wide, stiff; apex abruptly pointed; margin tipped with small glands, coarsely serrate; petiole 1¾ in. long. Flower-buds conical, pointed, plump, free, singly on short branches and short spurs.

Fruit matures in October; large, 3¼ in. long, 2¾ in. wide, roundish-oblate, with a short, thick, rounded neck, symmetrical; stem 1⅛ in. long, very thick, curved; cavity very shallow and narrow or lacking, the flesh tapering into the stem or wrinkled in a fleshy fold about the base of the stem, often lipped; calyx open; lobes separated at the base, broad, narrow; basin narrow, obtuse, gently furrowed, symmetrical; skin very granular, tender, smooth; color yellow, netted and streaked with light russet, often with a slight brownish-russet cheek; dots numerous, small, russet, conspicuous; flesh tinged with yellow, granular, melting, buttery, very juicy, sweet yet with a rich, brisk, vinous flavor, aromatic; quality very good. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide, long, plump, acute.



BLOODGOOD

1. *Mag. Hort.* **3**:14. 1837. **2.** Manning *Book of Fruits* 65. 1838. **3.** *Mag. Hort.* **9**:366, fig. 31.

1843. **4.** Downing *Fr. Trees Am.* 332, fig. 132. 1845. **5.** *Proc. Nat. Con. Fr. Gr.* 51. 1848. **6.** Mas *Le Verger* **2**:181, fig. 89. 1866-73. **7.** Leroy *Dict. Pom.* **1**:449, fig. 1867. **8.** Hogg *Fruit Man.* 532. 1884.

Bloodgood's Sommerbirne. **9.** Mathieu *Nom. Pom.* 186. 1889.

Bloodgood has long been a standard summer pear in America. It surpasses any European associate of its season in both fruit- and tree-characters. In particular, the fruits are meritorious for flesh of fine texture, which, though a little granular, is melting and juicy, and has a rich, sweet, perfumed flavor. Complaints appear in the horticultural press that the quality is exceedingly variable. The reports of poor flavor may arise from the fact that the quality is always poor if the fruit is not picked as soon as full grown and ripened indoors. The season in New York is August. The trees are resistant to blight, healthy, bear young and regularly, are long-lived, and attain large size, although in some situations they are but medium in size. The variety has little or no value in commercial plantations, but is prized in every collection for home use.

The origin of this pear is unknown, but it is supposed to be a native of New York. It seems to have been brought to notice about 1835 by James Bloodgood of the nursery firm of Bloodgood and Company, Flushing, Long Island. According to Robert Manning, the variety was listed in Prince's *Catalogue* for 1837 as Early Beurré. After being introduced by Bloodgood and Company, it was speedily recognized as one of the most valuable native sorts. The variety was placed upon the fruit catalog-list of the American Pomological Society in 1848.

Tree medium in size and vigor, upright, dense, slow-growing, productive; trunk medium in thickness and smoothness; branches zigzag, reddish-brown partly overspread with grayish scarf-skin, marked with few small lenticels; branchlets thick, very long, with long internodes, reddish-brown, the new growth greenish, with a brown tinge, glossy, smooth, with small, raised, conspicuous lenticels.

Leaf-buds broad at the base, small, short, sharply pointed, free; leaf-scars with prominent shoulders. Leaves 2¼ in. long, 1⅜ in. wide, oval, leathery; apex taper-pointed; margin finely serrate; petiole 1¼ in. long, slender, tinged red; stipules few, variable in size and shape, tinged red. Flower-buds medium in size and length, conical, plump, free, arranged singly on short spurs; flowers early, 1¼ in. across, in dense clusters, 7 or 8 buds in a cluster; pedicels often ⅞ in. long, pubescent.

Fruit matures in late August; medium in size, 2⅛ in. long, 2 in. wide, roundish-pyriform to acute-pyriform, symmetrical, uniform, with equal sides; stem ¾ in. long, thick; cavity russeted, lipped, drawn up in fleshy folds about the stem; calyx open, small; lobes separated at the base, short, broad, obtuse; basin narrow, obtuse, smooth, symmetrical; skin thick, tough, roughish; color bright yellow, with patches and nettings of russet, producing a mottled russet effect; dots many, small, russet, inconspicuous; flesh tinged yellow, granular, melting, buttery, rich, very juicy, sweet, highly flavored, aromatic; quality very good. Core small, closed, with clasping core-lines; calyx-tube short, narrow, conical; seeds small, short, plump, acute.



BRANDYWINE

1. *Horticulturist* **3**:166, figs. 25 and 26. 1848-49. **2.** *Mag. Hort.* **15**:106. 1849. **3.** Hovey *Fr. Am.* **2**:51, Pl. 1851. **4.** *Mag. Hort.* **19**:450, fig. 30, 1853. **5.** *Am. Pom. Soc. Rpt.* 231. 1858. **6.** Leroy *Dict. Pom.* **1**:496, fig. 1867. **7.** *Pom. France* **4**: No. 160, Pl. 160. 1867.

Were it not that Tyson is better in both tree and fruit, Brandywine, which ripens its crop with that of Tyson, could be put down as about the best pear of its season. Tyson is the better variety, however, in almost every soil and situation, and Brandywine has a place in American pear flora only because the pears have a distinct flavor which gives them the charm of individuality. The flesh is neither sweet nor perfumed, as is that of most pears at this season, but has the piquant smack of some of the winter pears which makes the fruits particularly refreshing. The tree is vigorous, with a handsome pyramidal top, but is not remarkable otherwise. Sometimes it is unproductive. The variety is worth planting for the sake of diversity in home orchards.

The original tree, a chance seedling, was found on the farm of Eli Harvey, Chaddsford, on the banks of the Brandywine River, Pennsylvania. This parent tree began to bear about 1820, but in 1835 wind broke it down near the surface of the ground. The present tree is a sucker from the original, and first fruited in 1844. This fact accounts for its not sooner having become known to cultivation. Dr. Brincklé of Philadelphia showed the fruits first at a meeting of the Massachusetts Horticultural Society in 1848 when it received high commendations. In 1858 the American Pomological Society added Brandywine to its list of recommended fruits.

Tree large, vigorous, very upright, dense-topped, productive; branches long, olive-gray,

sprinkled with roundish lenticels; branchlets slender, curved, with short internodes, brownish-red overspread with scarf-skin, glabrous, with few small, obscure lenticels.

Leaf-buds medium in size and length, pointed, free. Leaves small, long-ovate; apex taper-pointed; margin serrate; petiole 1½ in. long. Flower-buds large, plump, conical, free, singly on spurs and as terminal buds; flowers ⅞ in. across, in dense clusters, average 9 buds in a cluster; pedicels ½ in. long, slender, pubescent.

Fruit ripens in late August and early September; medium in size, 2¾ in. long, 2½ in. wide, variable in shape but generally obovate-pyriform; stem 1½ in. long, fleshy, curved, obliquely attached; cavity lacking, the flesh drawn up in a wrinkled fold about the base of the stem; calyx large, open; lobes short, entire; basin small, shallow, usually smooth; skin roughish; color greenish-yellow, blushed with red on the sunny side, marked with tracings of russet especially near the cavity; dots numerous, large, conspicuous, russet; flesh whitish, or faintly tinged with yellow, granular, melting, juicy, aromatic, vinous; quality good to very good. Core small; seeds few, small, dark brown.



BUFFUM

1. Kenrick *Am. Orch.* 166. 1832. **2.** *Mag. Hort.* **10**:300, fig. 15. 1844. **3.** *Ibid.* **16**:297. 1850. **4.** Hovey *Fr. Am.* **2**:19, Pl. 1851. **5.** *Am. Pom. Soc. Rpt.* 53. 1852. **6.** *Horticulturist* N. S. **6**:300, Pl. 1856. **7.** *Ibid.* **25**:104, fig. 1870. **8.** Mas *Le Verger* **3**: Pt. 1, 81, fig. 39. 1866-73.

Buffam. **9.** Downing *Fr. Trees Am.* 356, fig. 150. 1845.

Without deserving a high place among pears, Buffum has several meritorious characters which should keep it in the list of standard varieties. The variety must depend chiefly on its tree-characters for approbation, and in these it excels nearly all of its orchard associates. The trees are remarkably vigorous, nearly free from blight, very productive, although they have a tendency to bear biennially; and by virtue of great size, symmetrical, pyramidal form, dark green, glossy foliage, and sturdy, ruddy wood in winter, they are among the most ornamental of all fruit trees. In full leaf, a Buffum tree might easily be taken for a Lombardy poplar. The quality of the fruits is very variable. At times the flesh is rich, aromatic, melting, and very good; again, the pears may be insipid or even illy flavored, devoid of perfume, coarse in texture, and poor. The fruits are never large and often run small. To attain good quality, the pears must be picked early and ripened in a moderately cool fruit-room. The culture of Buffum is on the wane, chiefly for the reason that its fruits ripen with those of Seckel and fail in competition, as the Seckels are nearly as large and much better in quality. But because of its admirable tree-characters the variety should not be lost.

Some confusion exists as to the origin of Buffum.

Some writers state that the original tree stood on the grounds of Prescott Hall, Newport, Rhode Island. Hovey, however, in his *Fruits of America*, 1851, says that the variety originated in the garden of David Buffum, Warren, Rhode Island, shortly after the advent of the nineteenth century. In the opinion of Downing the variety came from seed of White Doyenné. Soon after the founding of the Massachusetts Horticultural Society in 1828, Robert Manning exhibited specimens of the Buffum pear, and through him the variety became known in the vicinity of Boston from which place it was disseminated throughout the country. Buffum was added to the fruit-list of the American Pomological Society in 1852.

Tree vigorous, very upright, dense, hardy, almost immune to blight, very productive; branches shaggy, zigzag, reddish-brown, overspread with grayish scarf-skin, with numerous small lenticels; branchlets short, reddish-brown, tinged with green and streaked with grayish scarf-skin, smooth, glabrous, with conspicuous, small, raised lenticels.

Leaf-buds small, short, conical, pointed, appressed; leaf-scars prominent. Leaves 3¼ in. long, 2 in. wide, oval, thin, leathery; apex abruptly pointed; margin glandular, finely serrate; petiole 2¼ in. long. Flower-buds large, conical, pointed, plump, free, arranged singly on short spurs and branchlets; flowers 1½ in. across, showy, in dense clusters, 6 to 8 buds in a cluster; pedicels ⅞ in. long, slender, pubescent, greenish.

Fruit ripe in late September and October; medium in size, 2¼ in. long, 2 in. wide, uniform in size and shape, oblong-obovate-pyriform, with unequal sides; stem ¾ in. long, very thick; cavity obtuse, very shallow, narrow, russeted, gently

furrowed, often lipped; calyx open; lobes separated at the base, short, narrow, obtuse; basin shallow, obtuse, gently furrowed; skin thick, very tough and granular, smooth except for the russet markings, dull; color deep brownish-yellow, with a bright reddish blush on the exposed cheek toward the basin; dots many, small, brownish or russet, conspicuous; flesh white, tinged with yellow, firm, granular, stringy toward the center, juicy, sweet, aromatic; quality good. Core large, closed; core-lines clasping; calyx-tube short, wide, conical; seeds large, wide, plump, acute.



CLAPP FAVORITE

1. *Mass. Hort. Soc. Rpt.* 50. 1860. **2.** *Am. Pom. Soc. Cat.* 20. 1867. **3.** *Pom. France* **4**: No. 170, Pl. 170. 1867. **4.** Downing *Fr. Trees Am.* 720, fig. 1869. **5.** Thomas *Am. Fruit Cult.* 452. 1897.

Favorite de Clapp. **6.** Mas *Le Verger* **2**:207, fig. 102. 1866-73.

Clapp's Favourite. **7.** Hogg *Fruit Man.* 548. 1884. **8.** Bunyard-Thomas *Fr. Gard.* 134, 462, fig. 1904.

Clapp's Liebling. **9.** Gaucher *Pom. Prak. Obst.* No. 31, Pl. 46. 1894.

Clapp Favorite is by universal consent the standard late summer pear to precede Bartlett, which it much resembles in size, shape, color, and flavor. In most regions in the United States and Canada where pears are largely grown for the market, Clapp Favorite is the first pear to be put on the market. The season is usually a week or sometimes ten days before that of Bartlett. The chief fault of the fruits is that they soon soften at the center after ripening, to obviate which they should be picked at least ten days before they would ripen on the tree. This softening at the core debars the fruit from distant markets, and makes it suitable only for local trade. The illustration of the whole fruit in the accompanying plate is so foreshortened by the camera that size and shape are not shown correctly, but the half-fruit illustrates the size and shape very well. The fruits are usually a little larger than those of Bartlett. Except in one particular, the trees of Clapp Favorite are as nearly perfect as those of any variety in American orchards. The weak character, unfortunately, is a most important one, and all but debars the variety from some regions in which pear-growing is a large industry. The weakness is susceptibility to blight. No standard pear goes down so quickly as this one when blight is epidemic. Two good characters of the trees redeem the variety from failure because of blight. After those of Flemish Beauty and Tyson, the trees of this variety show greater hardihood to cold than

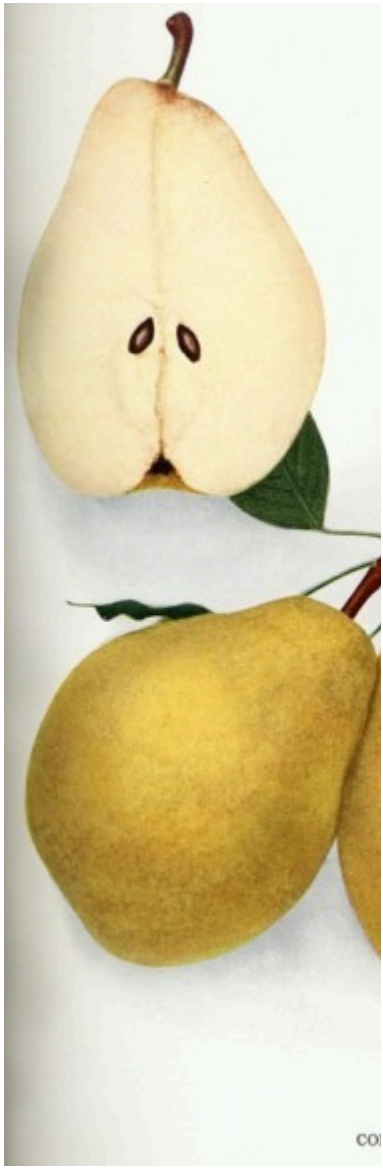
those of any other standard sort; and of all pears grown in America, Kieffer not excepted, the trees of Clapp Favorite are most fruitful. Other merits of the tree are large size, great vigor, longevity, and earliness and regularity in bearing. The variety shows a predilection for heavy soils, and the trees may be set on the heaviest clays. Clapp Favorite is grown satisfactorily on dwarf as well as standard stocks. The variety is a desirable one wherever pears are grown, and is one of the half-dozen leading sorts in New York.

Clapp Favorite was raised by Thaddeus Clapp, Dorchester, Massachusetts, but the date of its origin is uncertain. It was favorably mentioned as a promising new fruit at the meeting of the Massachusetts Horticultural Society in 1860. By some writers this pear is supposed to be a cross between Flemish Beauty and Bartlett, but this supposition cannot be proved. The variety was early introduced into England and France where it almost immediately received favorable commendation. The American Pomological Society first listed Clapp Favorite in its fruit-catalog in 1867.

> Tree large, upright-spreading, round-topped, very productive; trunk stocky, rough; branches characteristically shaggy, zigzag, reddish-brown overspread with gray scarf-skin, marked by few small, roundish, raised lenticels; branchlets short, dull reddish-brown, tinged with green, smooth, glabrous, with few small, inconspicuous lenticels.
>
> Leaf-buds medium in size, short, conical, pointed; leaf-scars prominent. Leaves 2½ in. long, 1½ in. wide, oval, leathery; apex taper-pointed; margin glandular, finely serrate; petiole 2 in. long. Flower-buds large, conical, pointed, plump, free, arranged singly on short spurs and branches;

flowers very showy, 1⅝ in. across, large, well distributed, averaging 7 buds in a cluster; pedicels $1^{3}/_{16}$ in. long, lightly pubescent.

Fruit ripe in late August and early September; large, 4 in. long, 3¼ in. wide, obovate-obtuse-pyriform, tapering slightly toward the apex, symmetrical; stem 1¼ in. long, very thick, curved, fleshy; cavity very shallow, narrow, lipped, with a fleshy ring around the stem; calyx large, open; lobes separated at the base, narrow, acuminate, usually erect and very stiff; basin shallow, wide, obtuse, corrugated and wrinkled; skin thick, tough, smooth, glossy; color pale lemon-yellow, mottled and dotted with bright red, deepening in highly colored specimens to a crimson blush, with occasional faint traces of russet; dots numerous, small, russet, conspicuous; flesh tinged with yellow, very granular and gritty at the center, tender and melting, buttery, juicy, sweet, rich, vinous, aromatic; quality very good. Core large, closed, with clasping core-lines; calyx-tube long, narrow, funnel-shaped; seeds medium in size and width, plump.



COLONEL WILDER

1. *Mass. Hort. Soc. Rpt.* Pt. 2. 119. 1875. **2.** Downing *Fr. Trees Am.* 2nd App. 146, fig. 1876. **3.** *Am. Pom. Soc. Rpt.* 23. 1881. **4.** *Me. Pom. Soc. Rpt.* 114. 1891.

Colonel Wilder originated in California and was once a favorite there, but is now reported as being little planted. At one time it was prominent in eastern orchards because of its late season and large, handsome, well-flavored fruits. The variety came in competition with Beurré d'Anjou, however, the season and fruits of the two being similar, but the trees of Colonel Wilder were so greatly outmatched by those of Beurré d'Anjou that this variety is less and less planted in the East. Perhaps it is worth preserving in pear collections for the sake of variety.

This pear originated from seed sown by Bernard S. Fox, San Jose, California, about 1870. It was named after Marshall P. Wilder, Boston, Massachusetts. Just prior to his death Mr. Fox, in a letter to the editor of the *Rural Press*, wrote of three pears, P. Barry, Fox, and Colonel Wilder, as follows: "The list of pears is already large, and, unless something extremely good is offered, there is no use adding to it. But, after many years of trial here and elsewhere, I claim now, that, at their respective times of ripening, there are no large pears superior to them in size, flavor, and good shipping qualities."

Tree medium in size, spreading and drooping, open-topped, hardy, an uncertain bearer; trunk shaggy; branches stocky, roughish, reddish-brown nearly covered with gray scarf-skin, marked with many lenticels; branchlets slender, willowy, light brown, with a slight reddish tinge, smooth, glabrous, with few small, slightly raised, obscure lenticels.

Leaf-buds small, short, sharply pointed, free or slightly appressed. Leaves 2¼ in. long, 1¼ in. wide, narrow, short, oval, leathery; apex abruptly pointed; margin glandless, finely serrate; petiole 2¼ in. long, slender, pale green or yellowish, sometimes with a tinge of pink; stipules light greenish-yellow, with a pink tinge. Flower-buds small, short, conical, plump, free, arranged singly on very short spurs; blossoms open very late; flowers 1¼ in. across, in dense clusters, 7 or 8 buds in a cluster; pedicels ½ in. long, pubescent, greenish.

Fruit in season, late December to February; large, 3 in. long, 2¼ in. wide, uniform in size, ribbed, oblong-obovate-pyriform, with unequal sides; stem ¾ in. long, thick, curved; cavity small, obtuse, shallow, narrow, furrowed, occasionally lipped; calyx large, open; lobes separated at the base, narrow, acute; basin shallow, narrow, abrupt, usually smooth, symmetrical; skin thick, tough, rough, dull; color light yellow, often with a faint orange-red blush on the exposed cheek, with nettings and markings of russet; dots numerous, small, grayish and russet-colored, conspicuous; flesh yellowish-white, granular around the core, melting, buttery, very juicy, sweet, aromatic, with a musky flavor; quality good. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds wide, plump, acute.



COLUMBIA

1. *Mag. Hort.* **2**:37. 1836. **2.** Kenrick *Am. Orch.* 159. 1841. **3.** *Mag. Hort.* **9**: 252, fig. 15. 1843. **4.** Downing *Fr. Trees Am.* 430, fig. 198. 1845. **5.** *Horticulturist* **1**:20, 480, fig. 9. 1846-47. **6.** Hovey *Fr. Am.* **2**:17, Pl. 1851. **7.** *Am. Pom. Soc. Rpt.* 66. 1862. **8.** Leroy *Dict. Pom.* **1**:589, fig. 1867. **9.** *Pom. France* **4**: No. 140, Pl. 140. 1867. **10.** Downing *Fr. Trees Am.* 725. 1869.

Once a favorite in eastern United States, Columbia is planted now only in collections. The variety never was a leader as far north as the pear regions of New York and Massachusetts, but when pear-growing was being attempted in the southern states in the middle of the last century, before the advent of Kieffer, Garber, and Le Conte, Columbia was the most dependable sort for the South. The pears are not attractive in appearance, nor remarkably good in quality, but the trees are vigorous, healthy, and very fruitful, although they come in bearing late. The variety is above the average in both fruit and tree, and is too valuable to be discarded. This variety must not be confused with the Columbia now listed in many catalogs, the proper name of which is Barseck.

The original seedling grew on the farm of a Mr. Casser in Westchester County, thirteen miles from New York City. In 1835, Bloodgood and Company, nurserymen of Flushing, Long Island, secured fruit from the original tree, which was then fifteen inches in diameter, and sent it to the Massachusetts Horticultural Society. Later, the variety was propagated and distributed by the Bloodgood Nursery. Columbia was added to the fruit-catalog of the American Pomological Society in 1862.

Tree large, vigorous, upright-spreading, hardy, very productive; trunk stocky, roughish;

branches thick, rough, shaggy, dull brownish-red overspread with much gray scarf-skin, marked with roundish lenticels; branchlets short, light brown intermingled with green, dull, smooth, glabrous, with few very small, slightly raised, lenticels.

Leaf-buds small, short, conical, pointed, plump, usually appressed. Leaves 3¼ in. long, 1½ in. wide, long-oval, thin; apex abruptly pointed; margin finely serrate, usually tipped with very small glands; petiole 2¼ in. long. Flower-buds small, short, conical, pointed, plump, free, arranged singly on short spurs; blossoms late; flowers 1¾ in. across, very showy, in dense clusters, 9 to 12 buds in a cluster; pedicels 1⅛ in. long, very thick, pubescent, light green.

Fruit ripe from late November to January; large, 3 in. long, 2⅜ in. wide, uniform in size, oblong-obovate-pyriform, broad at the middle, unequal sides, uniform in general shape; stem 1 in. long, curved, thick; cavity obtuse, very shallow and narrow, smooth; calyx partly open, large; lobes narrow, acuminate; basin shallow, obtuse, wrinkled; skin thick, granular, tough, roughish, dull; color yellowish-green, frequently with a dotted, dull red blush on the exposed cheek; dots many, of various colors, conspicuous; flesh yellowish-white, firm, granular, rather tough, very juicy, sweet, aromatic and rich; quality good. Core large, closed, with clasping core-lines; calyx-tube wide, conical; seeds narrow, very long, often flattened and abortive, acuminate.


DANA HOVEY



DANA HOVEY

1. *Am. Pom. Soc. Cat.* **48.** 1891.

Dana's No. 16. **2.** *Mag. Hort.* **19**:541. 1853. **3.** *Ibid.* **20**:136. 1854.

Dana's Hovey. **4.** *Mag. Hort.* **25**:202, fig. 10. 1859. **5.** *Am. Pom. Soc. Rpt.* 68. 1862. **6.** *Gard. Chron.* 1191, fig. 1866. **7.** Downing *Fr. Trees Am.* 730. 1869. **8.** Hogg *Fruit Man.* 556. 1884. **9.** *Garden* **49**:226. 1896.

Danas Hovey. **10.** *Gard. Chron.* 3rd Ser. **47**:67, fig. 39. 1910.

Dana Hovey is a delicious little dessert pear, so juicy, sweet, and rich that it is a veritable sweetmeat. The fruits are so similar to those of Seckel that the variety is sometimes called "Winter Seckel." Dana Hovey is one of the best pears to succeed Seckel. The fruits come in season about the middle of November and keep six weeks in ordinary storage. The flavor is that of Winter Nelis with a smack of Seckel. If the fruits are picked early and kept in a dry, cool place they ripen early in December with a rich, golden color strewn with russet. It is in the same class with Seckel as to size of fruit, although the pears average larger and are more uniform in size from different trees and in different seasons. The pears are also more brightly colored than those of Seckel. Superiority in size and color makes the fruits of this variety much more attractive than those of the better-known Seckel. The trees are hardy, vigorous, and thrive on various soils but are only moderately

productive and are somewhat susceptible to blight, falling far short of those of Seckel in these characters, for which reason the last-named variety is the better for commercial plantations. Dana Hovey is one of few winter pears with fruits of high quality, and thus is very desirable for home plantations and ought to have value in commercial plantations.

Francis Dana, Roxbury, Massachusetts, was an indefatigable raiser of new fruits, there being no fewer than sixteen varieties of pears with the prefix "Dana's," of which the one under notice is the best of all. It was introduced to the public about 1854 under the name of Dana's Hovey in honor of C. M. Hovey, the well-known nurseryman of Boston and author of *The Fruits of America*. Dana Hovey is so similar to Seckel that the latter is supposed to be one of its parents. The variety was added to the American Pomological Society's fruit-list in 1862.

> Tree large, vigorous, upright-spreading, rapid-growing, productive; trunk stocky; branches reddish-brown mingled with green which is almost completely overspread with gray scarf-skin, marked by few small lenticels; branchlets thick, short, light brown mingled with green, marked with ash-gray at the tips, smooth, glabrous, with small, scattering, slightly raised lenticels.
>
> Leaf-buds small, short, pointed, plump, usually appressed. Leaves 3¼ in. long, 2⅛ in. wide, leathery; apex taper-pointed; margin glandless or with few reddish glands, finely serrate; petiole short, stocky, 1½ in. long, glabrous. Flower-buds short, conical but obtuse at the apex, plump, free, arranged singly on short spurs; flowers 1½ in. across, in dense clusters, average 8 buds in a cluster; pedicels ¾ in. long, slender, thinly pubescent.

Fruit matures in late October and November; medium in size, 2½ in. long, 2⅛ in. wide, obovate-obtuse-pyriform, symmetrical, uniform; stem ½ in. long, slender; cavity abrupt, shallow, very small, narrow, slightly lipped; calyx partly open, small; lobes short, narrow, acute; basin shallow, narrow, obtuse, smooth, symmetrical; skin thin, tender, smooth; color golden-yellow at maturity, covered with thin russet; dots numerous, small, greenish-russet; flesh tinged with yellow, granular at the center, tender and melting, juicy, sweet, highly perfumed; quality of the best. Core large, closed, abaxile; calyx-tube short, wide, conical; seeds wide, short, plump, obtuse.



DEARBORN

1. *Am. Pom. Soc. Cat.* 36. 1883. **2.** *Ont. Dept. Agr. Fr. Ont.* 155. 1914.

Dearborn's Seedling. **3.** *Kenrick Am. Orch.* 154.

1832. **4.** *Downing Fr. Trees Am.* 336, fig. 135. 1845. **5.** *Proc. Nat. Con. Fr. Gr.* 51. 1848. **6.** *Hovey Fr. Am.* **1**:63, Pl. 1851. **7.** Elliott *Fr. Book* 336. 1859. **8.** *Mas Le Verger* **2**:17, fig. 7. 1866-73. **9.** Leroy *Dict. Pom.* **2**:7, fig. 1869.

Once a favorite, Dearborn is now nearly lost to cultivation, and few or no nurserymen grow the trees. It is too good a variety to be lost, however, because of splendid fruit- and tree-characters. The fruits ripen early and are of good quality, though hardly as richly flavored as those of Elizabeth which ripen at the same time. Unfortunately the pears run small, but they are attractive in shape and color. In season, the crop succeeds that of Bloodgood and precedes that of Bartlett. The trees are almost flawless, and therefore are well adapted to home orchards where fruits cannot receive the care of skilled hands. Besides being almost free from blight, the trees are hardy, vigorous, and very productive. The variety has many valuable qualities for a summer pear in home orchards.

This pear was found growing in a border of shrubs in 1818 at Brinley Place, Roxbury, Massachusetts, the home of General H. A. S. Dearborn,[27] first president of the Massachusetts Horticultural Society. In 1831, General Dearborn first exhibited fruit of the variety at the Massachusetts Horticultural Society where it was named Dearborn's Seedling in honor of the originator. This variety should not be confused with a pear raised by Van Mons of Belgium and named by him Dearborn. The Dearborn of Van Mons is larger and ripens later than the American Dearborn, and was long since taken from lists of pears recommended for cultivation in America. Dearborn was included in the American Pomological Society's first fruit-catalog in 1848,

where it was called Dearborn's Seedling. In 1883, the Society shortened the name to Dearborn. Since 1891, the name has failed to appear in the catalogs of this Society.

Tree large, vigorous, spreading, tall, very productive; trunk stocky; branches thick, zigzag, reddish-brown partly covered with a heavy, gray scarf-skin, marked by many reddish-brown lenticels; branchlets slender, very long, with long internodes, older wood brown, new growth greenish, nearly covered with reddish-brown, mottled with ash-gray scarf-skin, smooth, glabrous becoming pubescent near the tips of the new growth, with numerous small, brownish, round, raised, conspicuous lenticels.

Leaf-buds very small, short, pointed, plump, free. Leaves 3 in. long, 1½ in. wide, thin; apex obtusely-pointed; margin with very fine dark tips, finely and shallowly serrate; petiole tinged red, 1¾ in. long, glabrous. Flower-buds small, short, conical, plump, free, arranged singly on short spurs; flowers showy, 1¼ in. across, in dense clusters, 9 or 10 buds in a cluster; pedicels ¾ in. long, pubescent.

Fruit ripe in late August; small, 2 in. long, 2¼ in. wide, uniform, roundish-pyriform, with a slight neck, symmetrical, uniform; stem 1 in. long, slender; cavity obtuse, shallow, narrow, thinly russeted, often slightly lipped; calyx open, large; lobes separated at the base, narrow, acuminate; basin very shallow, obtuse, gently furrowed and wrinkled, symmetrical; skin thick, very tough, smooth, dull; color pale yellow, with russet specks; dots numerous, small, russet, conspicuous; flesh white, slightly granular at the center, tender and melting, very juicy, sweet but spicy, aromatic; quality good. Core large for the size of the fruit, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide,

long, plump, acute.



DORSET

1. Ellwanger & Barry *Cat.* 6, fig. 1895. **2.** *Ibid.* 17, fig. 1900. **3.** *W. N. Y. Hort. Soc. Rpt.* 118. 1900. **4.** *Ill. Hort. Soc. Rpt.* 220. 1902.

Dorset has been on probation in New York for twenty-five years, and its status is not yet decided. The fruits resemble those of Seckel in shape and color, but are larger and come in season later. These external resemblances to Seckel have given it the name "Late Seckel," which, however, is a misnomer, as a taste of the two fruits at once makes plain. Dorset is not nearly as richly flavored as Seckel. The tree-characters are all very good. Since there are few good late pears to follow Seckel, there may be a place for Dorset.

Dorset was raised from seed by Lemuel Clapp, Dorchester, Massachusetts, but the exact date of origin is unknown. The variety was introduced by Ellwanger and Barry, Rochester, New York, in 1895. During the next ten years it was placed on trial by several state experiment stations, and soon gained a reputation for the characters noted in the preceding paragraph.

Tree small, spreading, very productive, a regular bearer; trunk slender, shaggy; branches slender, smooth, reddish-brown mingled with dull ash-gray, marked with many large lenticels; branchlets slender, dark brown, smooth, glabrous, with large, raised, lenticels.

Leaf-buds medium to small, conical, pointed, free. Leaves 3 in. long, 1½ in. wide, oval, leathery; apex taper-pointed; margin crenate; petiole 1¾ in. long, slender. Flower-buds large, long, conical, pointed, free; blossoms open very early; flowers often 1⅜ in. across, showy, in

dense clusters, from 8 to 12 buds in a cluster; pedicels 1 in. or less in length, pubescent, greenish.

Fruit matures in December; medium in size, 2¾ in. long, 2½ in. wide, uniform in size and shape, obovate-obtuse-pyriform, with unequal sides; stem ¾ in. long, curved, cavity almost lacking, obtuse, shallow, narrow, furrowed, compressed, often lipped; calyx open; lobes separated at the base, long, acute; basin narrow, obtuse or often quite abrupt, gently furrowed; skin thick, smooth; color dull greenish-yellow, marked with a dull bronze-red blush on the exposed cheek; dots many, small, grayish and russet, conspicuous; flesh yellowish-white, firm, granular at the center, tender, very juicy, very sweet and aromatic; quality good. Core closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide, long, plump, acute, broad at the base.

DOUGLAS

1. *Kan. Hort. Soc. Rpt.* 63. 1908-09. **2.** *Rural N. Y.* **70**:59, fig. 24. 1911. **3.** *U. S. D. A. Yearbook* 267, Pl. 4. 1912. **4.** *Rural N. Y.* **72**:458, fig. 146. 1913. **5.** *Am. Pom. Soc. Rpt.* 41, 42. 1915.

In regions where blight and heat make pear-growing precarious, and only pears with oriental blood, as Kieffer, Garber, and Le Conte, can be grown, Douglas, which belongs with the pears just named, might well be tried. Certainly it is better in flavor than any other variety of its class. The trees come in bearing remarkably early, and are as productive as those of Kieffer, though hardly as large or as vigorous. The trees are inclined to overbear, in which case the fruits run small. The variety has little

to recommend it for New York, but those who grow Kieffer might put it on probation with the hope of growing a fruit passably fair for dessert.

Douglas is a seedling of Kieffer crossed, it is believed, with Duchesse d'Angoulême by O. H. Ayer, Lawrence, Douglas County, Kansas, about the year 1897. It fruited first in 1902 and attracted the attention of A. H. Griesa, also of Lawrence, who propagated it in 1907, and sent out specimens of it for appraisement in October, 1910, when it was very favorably reported on by many prominent horticulturists. In accordance with Mr. Griesa's suggestion, it was named Douglas after the county of its origin.

> Tree medium in size and vigor, upright, very productive; trunk slender, smooth; branches slender, dull brownish-red, mottled with gray scarf-skin; branchlets medium in thickness and length, smooth, glabrous, sprinkled with numerous raised, conspicuous lenticels. Leaf-buds large, long, pointed, plump, free; leaf-scars prominent. Leaves 3¼ in. long, 1½ in. wide, thick; apex taper-pointed; margin glandless, finely and shallowly serrate; petiole 1⅝ in. long. Flower-buds large, long, conical, plump, free; flowers 1¼ in. across, white or occasionally with a faint tinge of pink, 11 or 12 buds in a cluster; pedicels 1⅝ in. long.
>
> Fruit matures in October; large, 3¼ in. long, 2¾ in. wide, obovate-pyriform, tapering at both ends like the Kieffer; stem 1⅝ in. long, slender; cavity deep, narrow, compressed, often lipped; calyx small, partly open; basin furrowed; skin thick, tough; color pale yellow, heavily dotted and sometimes flecked with russet; dots numerous, small, light russet or greenish; flesh tinged with yellow, firm but tender, granular,

very juicy, sweet yet with an invigorating flavor; quality good. Core closed, axile; calyx-tube short, wide; seeds long, plump, acute.



DOYENNÉ D'ALENÇON

1. *Am. Pom. Soc. Rpt.* 213. 1856. **2.** *Ibid.* 231. 1858. **3.** *Ann. Pom. Belge* **8**:15, Pl. 1860. **4.** *Pom. France* **2**: No. 47, Pl. 47. 1864. **5.** *Mas Le Verger* **1**:23, fig. 10. 1866-73. **6.** Downing *Fr. Trees Am.* 742. 1869. **7.** Leroy *Dict. Pom.* **2**:55, fig. 1869. **8.** *Jour. Hort.* N. S. **20**:135. 1871. **9.** *Guide Prat.* 61, 264. 1876. **10.** Hogg *Fruit Man.* 564. 1884.

Marmorirte Schmalzbirne. **11.** Dochnahl *Führ. Obstkunde* **2**:65. 1856.

Dechantsbirne von Alençon. **12.** Mathieu *Nom. Pom.* 201. 1889.

This old French pear is worth planting, if the trees can be obtained, because of its very late fruits and long season. The pears come in season under ordinary conditions in December and keep until March. The fruits are not remarkable for either taste or appearance, but are good for a winter product when there is little competition with other varieties. The pears are admirably adapted for culinary purposes. In some seasons the pears fail to ripen, and the variety should be planted only on warm soils and in situations where the season is warm and long. Tree and fruit have a family resemblance to Easter Beurré; the latter, however, is generally a better pear than this one. This variety is much grown in Europe on the quince, and in the various fanciful forms Europeans make use of in training fruit trees.

Doyenné d'Alençon is reported to be a wilding discovered by the Abbé Malassis near Alençon, Orne, France, and propagated by M. Thuillier, a nurseryman at Alençon. There was, however, a pear of the same name and season found at Orléans in 1628, in the orchard of Le Lectier, the renowned

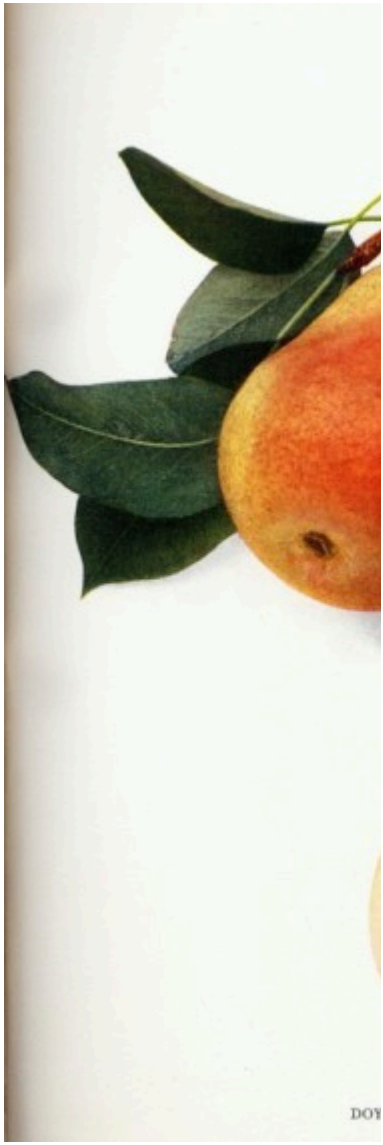
pomologist. It is probable that the pear which M. Thuillier propagated was the one found many years previously by Le Lectier. The variety must have been introduced into America between 1840 and 1850, as it was mentioned by the American Pomological Society in 1856 as one of the promising new pears. In 1858, the Society added the variety to its fruit-catalog, but discontinued recommending it in 1897.

Tree medium in size and vigor, upright, dense-topped, productive; trunk thick, shaggy; branches stocky, reddish-brown lightly covered with gray scarf-skin; branchlets slender, curved, short, with short internodes, light brown, with a faint reddish tinge, smooth, pubescent near the tips of the new growth, with numerous small, raised, conspicuous lenticels.

Leaf-buds small, short, sharply pointed, plump, free; leaf-scars with prominent shoulders. Leaves 2¾ in. long, 1⅛ in. wide, thin; apex taper-pointed; margin with few glands, coarsely serrate; petiole 2⅝ in. long, glabrous, with tinge of red, slender. Flower-buds small, short, conical, plump, free, arranged singly on short spurs; flowers early, 1¼ in. across, in dense clusters, average 9 buds in a cluster; pedicels ⅝ in. long, lightly pubescent.

Fruit ripe December to February; 2⅞ in. long, 2⅜ in. wide, medium in size, obovate-obtuse-pyriform, symmetrical, uniform; stem ¾ in. long, thick, curved; cavity obtuse, shallow, symmetrical, often slightly lipped, small; calyx open, large; lobes not separated at the base, broad, narrow; basin narrow, abrupt, smooth, symmetrical; skin very thick, tough, roughish; color dull greenish-yellow, with a faint orange blush on the exposed cheek, marked with many brown and russet dots and netted with russet; dots numerous, small, brownish-russet,

inconspicuous; flesh tinged with yellow, granular at the center, tender and melting, juicy, aromatic, with a lively vinous flavor; quality good. Core large, closed, axile, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide, long, plump, acute.



DOYENNÉ BOUSSOCK

1. Hovey *Fr. Am.* **1**:31, Pl. 1851. **2.** *Am. Pom.*

Soc. Rpt. 210. 1856. **3.** Downing *Fr. Trees Am.* 742, fig. 1869.

Doyenne Boussock Nouvelle. **4.** Kenrick *Am. Orch.* 143. 1841.

Beurré de Mérode. **5.** *Ann. Pom. Belge* **5**:81, Pl. 1857.

Doyenné de Mérode. **6.** *Pom. France* **2**: No. 86, Pl. 86. 1864. **8.** *Guide Prat.* 64, 266. 1876. **7.** Mas *Le Verger* **3**: Pt. 1, 171, fig. 84. 1866-73.

Doyenné Boussock. **9.** Leroy *Dict. Pom.* **2**:58, fig. 1869. **10.** Hogg *Fruit Man.* 564. 1884.

Boussock. **11.** *Am. Pom. Soc. Cat.* 36. 1883.

Doppelte Philippsbirne. **12.** Mathieu *Nom. Pom.* 204. 1889. **13.** Gaucher *Pom. Prak. Obst.* No. 33, Pl. 61. 1894.

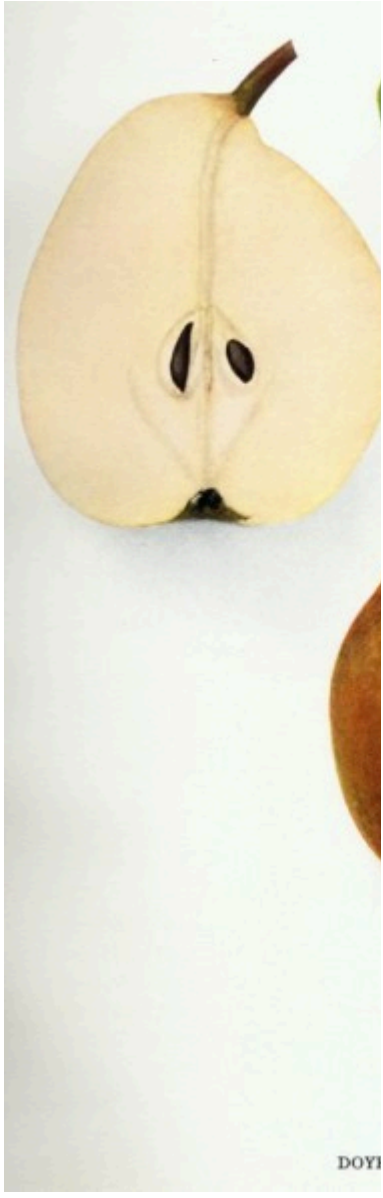
This old Belgian pear is a leader in the second rank of commercial pears in this country. If the fruits were better in quality and kept a little longer, the variety would take rank among the best commercial pears, for the fruits are handsome and the trees are nearly flawless. As the color-plate shows, there are few pears more attractive than this one, but the briskly acid flavor is not pleasing to many, and the fruits become soft at the center soon after ripening. The pears are above medium in size and are sometimes large or very large. The seeds are often abortive. The trees are very large and vigorous, as hardy as those of any other pear to cold, less susceptible to blight than most of their orchard associates, and are remarkable for their prominent buds and large, thick, glossy-green leaves, which turn deep red in the autumn. On some soils the trees do not hold their crop well, and it is always best to plant them where there is some protection against heavy winds. The trees are prodigious bearers, and

fruit regularly, characters which make the variety desirable for local markets.

This pear is supposed to have been raised by Van Mons at the beginning of the nineteenth century. It was placed on sale at Brussels about 1819. The variety was first given the name Doyenné de Mérode in honor of the Comté de Mérode of Waterloo, Belgium. In 1836, however, the name was changed to Doyenné Boussock. The catalog of the Horticultural Society of London shows that it was received in England in 1842. William Kenrick, on his return from Europe in the spring of 1841, brought the variety to America. In 1856 the American Pomological Society added this pear to its fruit-list.

> Tree very large, vigorous, upright-spreading, tall, hardy, productive; trunk thick, shaggy; branches stocky, shaggy, grayish-brown; branchlets long, with long intemodes, light brown tinged with red, overspread with ash-gray, smooth, glabrous, with few elongated, raised, inconspicuous lenticels.
>
> Leaf-buds small, short, sharply pointed, plump, free; leaf-scars with prominent shoulders. Leaves 3½ in. long, 1⅞ in. wide, leathery; apex abruptly pointed; margin very finely serrate; petiole 1½ in. long, slender. Flower-buds small, long and narrow, conical, free, singly on very short spurs; flowers early, showy, 1⅝ in. across, in dense clusters, average 8 buds in a cluster; pedicels 1⅛ in. long, thick, pubescent.
>
> Fruit ripe in September; large, 3 in. long, 2¾ in. wide, uniform, obtuse-obovate-pyriform, symmetrical; stem 1 in. long, very thick; cavity obtuse, rather shallow, broad, often russeted, furrowed, lipped; calyx large, open; lobes separated at the base, broad, acute; basin shallow, wide, obtuse, gently furrowed and

wrinkled; skin thin, tender, smooth except for the russet nettings; color pale yellow, occasionally with a mottled pinkish-red blush on the exposed cheek, more or less netted with russet; dots numerous, small, russet, conspicuous; flesh white, tender and melting, buttery, very juicy, briskly acid; quality good. Core large, closed, axile, with meeting core-lines; calyx-tube very short, wide, broadly conical; seeds black, narrow, long, flattened, often abortive.



DOYENNÉ DU COMICE

1. *Mag. Hort.* **18**:168, fig. 16. 1852. **2.** *Ann. Pom. Belge* **8**:47, Pl. 1860. **3.** *Am. Pom. Soc. Rpt.* 68. 1862. **4.** *Pom. France* **2**: No. 58, Pl. 58. 1864. **5.** Mas *Le Verger* **3**: Pt. 1, 7, fig. 2. 1866-73. **6.** *Downing Fr. Trees Am.* 744, fig. 1869. **7.** *Jour. Hort.* N. S. **17**:440, fig. 1869. **8.** Leroy *Dict. Pom.* **2**:60, fig. 1869. **9.** *Hogg Fruit Man.* 565. 1884. **10.** Rev. Hort. 447, Pl. 1908.

Beurré Robert. **11.** Leroy *Dict. Pom.* **1**:418, fig. 1867. **12.** *Ibid.* **2**:775. 1869.

Comice. **13.** *Am. Pom. Soc. Cat.* 36. 1883.

Vereins Dechantsbirne. **14.** Mathieu *Nom. Pom.* 293. 1889. **15.** Gaucher *Pom. Prak. Obst.* No. 68, Pl. 36. 1894. **16.** *Deut. Obstsorten* **5**: Pt. 14, Pl. 1909.

This pear has been esteemed long and justly for the beauty and high quality of its fruits. If its tree-characters were better the variety would take high place in commercial orcharding as well as for the home orchard, to which it is now almost wholly confined. The fruits are very large, smooth except for russet markings, clear handsome yellow at maturity, sometimes brightened by a delicate blush, with yellow, fine-grained flesh which is tender, melting, very juicy, sweet, piquant, perfumed. The quality is so good that the fruits of this variety are called by many the best of all pears. The list of faults for the trees is as long as the list of merits for the fruits. The young trees make a poor growth in the nursery; young or old, the trees must be humored in soil, climate, and care; they are subject to blight; while usually productive, they are not always so even where vigorous, healthy, and hardy; lastly, they are a little below the average in hardihood to cold. The variety is seldom at home in New York, but where it thrives, as on the Pacific slope, it is a valuable

commercial pear, and is always worthy a place in the home orchard or in the collection of the pear-fancier. In Europe, it is reported as doing especially well on the quince.

The parent tree of Doyenné du Comice was taken from the first seed bed made in the fruit-garden of the Comice Horticole, Angers, Department of Maine-et-Loire, France. In November, 1849, it produced its first fruit, which was at once so highly esteemed that it was named Doyenné du Comice. It was placed on the market with unusual promptitude and rapidly distributed in foreign lands, reaching America about 1850. The variety was recommended for general cultivation by the American Pomological Society in 1862.

Tree vigorous, characteristically upright, dense, usually productive; branches smooth, dull gray mingled with greenish-brown, marked with large lenticels; branchlets long, brown tinged with red, glabrous, with many small, slightly raised, conspicuous lenticels.

Leaf-buds large, medium to long, conical, pointed, nearly free; leaf-scars prominent. Leaves 3¼ in. long, 1½ in. wide, oval, leathery; margin finely serrate; petiole 2 in. long. Flower-buds short, conical, free; blossoms open late; flowers 1¼ in. across, in dense clusters, about 8 buds in a cluster; pedicels ⅞ in. long, slender, pubescent, light green.

Fruit ripe in late October and November; large, 3 in. long, 2¾ in. wide, obovate-obtuse-pyriform or roundish, with unequal sides; stem 1¼ in. long, very thick, usually curved; cavity obtuse, shallow, narrow, russeted and wrinkled, often with a fleshy ring around the base of the stem; calyx open; lobes separated at the base,

long, narrow, acuminate; basin medium to wide, obtuse, often furrowed; skin tough and granular, smooth except for the russet markings, dull; color clear yellow, often with a very faint russet-red blush on the exposed cheek, the surface heavily covered with large patches and nettings of attractive russet; dots many, very small, dark brown, obscure; flesh tinged strongly with yellow, fine-grained near the outside but granular toward the core, melting, tender, buttery, very juicy, sweet and vinous, aromatic; quality very good to best. Core closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide, long, rather plump, acute, often abortive.



DUCHESSE D'ANGOULÊME

1. Kenrick *Am. Orch.* 171. 1832. **2.** Downing *Fr. Trees Am.* 381. 1845. **3.** *Ann. Pom. Belge* **1**:21, Pl. 1853. **4.** *Am. Pom. Soc. Rpt.* 68. 1862. **5.** *Pom. France* **1**: No. 17, Pl. 17. 1863. **6.** Mas *Le Verger* **3**:

Pt. 2, 79, fig. 136. 1866-73. **7.** Leroy *Dict. Pom.* **2**:98, figs. 1869. **8.** *Jour. Hort.* N. S. **24**:26. 1873. **9.** *Guide Prat.* 59, 267. 1876. **10.** *Hist. Mass. Hort. Soc.* 1829-78. 224. 1880. **11.** Hogg *Fruit Man.* 569. 1884.

Duchess of Angoulême. **12.** Lindley *Guide Orch. Gard.* 371. 1831.

Angouleme. **13.** *Am. Pom. Soc. Cat.* 36. 1883.

Herzogin von Angoulême. **14.** Gaucher *Pom. Prak. Obst.* No. 46, Pl. 43. 1894.

The fruits of Duchesse d'Angoulême excite admiration and wonder by their enormous size. They may always be known by their great size, squat pyriform shape, and uneven knobby surfaces. Well grown, the pears have other virtues than size, as the flesh is buttery and melting with a rich and delicious flavor; but poorly grown, and on unfavorable soils, the flesh is granular, coarse-grained, but half-melting and nearly devoid of the richness that characterizes the fruits in happier situations. Size shrinks also when poorly grown, so that one may say that a small pear of this variety is seldom fit for dessert and too insipid for a good product in cookery. The trees are vigorous, hardy, and healthy, bear abundantly under favorable conditions, and succeed either as a standard or a dwarf. Possibly it is best grown as a dwarf, and in America at least is more often worked on the dwarfing quince than on the pear. In fact, this variety is the favorite dwarf-pear for garden and home orchard, and commercial orchards of dwarfed trees of it are not uncommon. On either stock, the tree makes a beautiful, symmetrical pyramid, comes in bearing early, and bears regularly. This variety is more popular in New York than in any other part of America, and while less planted than formerly, is still regarded as a standard late autumn variety. It is a

particularly desirable sort for the pear-fancier.

The original tree of Duchesse d'Angoulême was a wilding growing in a garden near Angers, Maine-et-Loire, France. About 1808, M. Audusson, a nurseryman at Angers, appreciating the beauty and excellent quality of the pear, obtained the right to propagate it. In 1812 he began selling trees of the variety under the name of "Poire des Eparonnais." In 1820, M. Audusson sent a basket of the fruit to the Duchesse d'Angoulême with a request for permission to name the pear in her honor, a request which was granted. At the exhibition of the Massachusetts Horticultural Society held in 1830, Samuel G. Perkins showed a specimen which measured eleven and three-tenths inches. It was the only one that grew on the tree, and was considered to be the first fruit of this variety produced in America. The American Pomological Society added Duchesse d'Angoulême to its catalog-list of fruits in 1862.

> Tree medium in size, vigorous, upright-spreading, dense-topped, slow-growing, usually hardy, productive; trunk thick; branches stocky, shaggy, zigzag, dull reddish-brown overspread with scarf-skin, marked with small lenticels; branchlets thick, short, dull light brown, streaked with gray scarf-skin, smooth, glabrous, with many small, raised lenticels.
>
> Leaf-buds small, short, conical, pointed, nearly free; leaf-scars prominent. Leaves 2¾ in. long, 1⅝ in. wide, oval, thick, leathery; apex taper-pointed; margin marked with minute dark brown glands, crenate or nearly entire; petiole 1¾ in. long. Flower-buds large, long, conical, plump, free, arranged singly or in small clusters on short branches and spurs; flowers 1⅜ in. across, 7 or 8 buds in each cluster; pedicels 1 in. long, slender, lightly pubescent, greenish.

Fruit ripe October to November; large, often very large, 4 in. long, 3 in. wide, uniform in size, oblong-obovate-pyriform, with irregular and uneven surface and with sides often unequal; stem frequently 1½ in. long, very thick, curved; cavity acute, deep, furrowed, irregular, often lipped; calyx partly open, small; lobes short, narrow, acute; basin medium to deep, abrupt, furrowed and uneven, often corrugated; skin thick, granular, roughened with russet; color dull yellow, streaked, spotted and netted with dull russet; dots numerous, russet, conspicuous; flesh white, firm becoming somewhat melting and quite tender when fully mature, granular, juicy, sweet, rich and delicious when fully mature; quality good to very good. Core closed, with clasping core-lines; calyx-tube short, wide, conical; seeds small, narrow, flat, acute, very often abortive.



DUCHESSE D'ORLÉANS

1. Kenrick *Am. Orch.* 143. 1841. **2.** *Am. Pom.*

Soc. Rpt. 68. 1862. **3.** Downing *Fr. Trees Am.* 749. 1869. **4.** Hogg *Fruit Man.* 570. 1884.

Duchess of Orleans. **5.** Hovey *Fr. Am.* **1**:91, Pl. 1851.

Saint-Nicolas. **6.** *Pom. France* **1**: No. 33, Pl. 33. 1863. **7.** *Cat. Cong. Pom. France* 343, fig. 1906.

Beurré de Saint-Nicolas. **8.** Mas *Le Verger* **3**: Pt. 1, 137, fig. 67. 1866-73. **9.** Leroy *Dict. Pom.* **1**:426, fig. 1867.

Butterbirne von Saint-Nicolas. **10.** Mathieu *Nom. Pom.* 191. 1889.

In the middle of the last century this pear was heralded as one of the best of the French varieties which were then coming to this country in great numbers, but it is now almost lost to cultivation. While in no way remarkable, the variety is too valuable to be discarded. As the color-plate shows, the fruits are prepossessing in appearance. The pears are bright yellow, with a brilliant cheek, the whole fruit being more or less mottled with golden russet. Few pears are smoother of skin or more symmetrical in shape, and the fruits are more uniform in size than those of most varieties. The quality, as well as the appearance, is pleasing. While the flesh is a little dry and not as rich in flavor as that of most other varieties of its season, it is so crisp and refreshingly piquant in contrast to the sweeter, buttery pears with which it ripens, its season being just after that of Bartlett, that the variety finds favor with all who like pears. The variety fails in its tree-characters. Thus, the trees are late in coming in bearing; are not very vigorous; are somewhat tender to cold; and do not resist blight well. The variety has little value for commercial places, but if the trees can be obtained, is well worth planting in the home orchard.

This pear is a chance seedling found by M. Maurier near Angers, Maine-et-Loire, France, nearly a century ago. It was propagated by M. Flon, a nurseryman of Angers and fruited first in 1839. In England and America the variety has been chiefly known as Duchesse d'Orléans, but many French horticulturists have used the name Saint-Nicolas. The variety was added to the fruit-catalog list of the American Pomological Society in 1862, but was dropped from the list in 1871.

Tree medium in size and vigor, spreading, moderately productive; trunk slender, shaggy; branches medium in thickness and smoothness, reddish-brown partly overspread with thin gray scarf-skin, with few indistinct lenticels; branchlets short, with short internodes, light brownish-red mingled with green and partly covered with thin, gray scarf-skin, dull, smooth, glabrous, with conspicuous, raised lenticels.

Leaf-buds long, narrow, sharply pointed, plump, free. Leaves 3 in. long, 1½ in. wide; apex taper-pointed; margin tipped with small, brownish glands, coarsely serrate; petiole 2 in. long, glabrous, reddish-green. Flower-buds long, conical, sharply pointed, free, singly on numerous short spurs; flowers showy, 1⅜ in. across, in dense clusters, average 7 buds in a cluster, the petals widely separated at the base; pedicels $^{7}/_{16}$ in. long, slender, lightly pubescent.

Fruit matures in late September and October; medium in size, 2⅞ in. long, 2¼ in. wide, obovate-acute-pyriform, symmetrical; stem 1 in. long, thick; cavity lacking, the flesh drawn up in a symmetrical fold about the stem; calyx small, open; lobes separated at the base, narrow, acute; basin very shallow, narrow, obtuse, smooth or slightly wrinkled; skin thin, tender, smooth; color

yellow overlaid with a red blush, faintly mottled with golden russet; dots numerous, whitish or russet, conspicuous; flesh tinged with yellow, firm, granular, crisp, juicy, subacid; quality good. Core small, closed, axile, with meeting core-lines; calyx-tube short, conical; seeds long, plump, acute.


DUHA

DUHAMEL DU MONCEAU

1. Leroy *Dict. Pom.* **2**:114, fig. 1869. **2.** Downing *Fr. Trees Am.* 2nd App. 146, fig. 1876. **3.** *W. N. Y. Hort. Soc. Rpt.* 118. 1881.

Duhamel's Butterbirne. **4.** Mathieu *Nom. Pom.* 207. 1889.

Duhamel. **5.** Budd-Hansen *Am. Hort. Man.* **2**:241. 1903.

The unattractive little fruits of this pear would have small value were it not for the fact that they are delicious in quality and come into edible condition late. The fruits are of the type of those of Winter Nelis, differing in shape somewhat, but are even better in quality and keep longer. The fruits are further distinguished by a musky taste and perfume, which make them especially agreeable to those who like rich, sweet, perfumed pears. The trees, while in no characters remarkable, are better than most of their orchard associates, and far superior to the unmanageable trees of Winter Nelis with which this variety must compete. After a probationary period of a half century in America, Duhamel du Monceau has not found favor with commercial orchardists, but pear fanciers value it for its delectable late-keeping fruits. Nurserymen find the trees rather difficult to grow.

Duhamel du Monceau was obtained from seed by André Leroy, the eminent author and pomologist at Angers, France. In naming the variety, M. Leroy said that his purpose was to do honor to the memory of the illustrious professor who filled an important place in pomology, and who, in giving us the *Traité des arbres fruitiers* published in 1768, rendered and still renders valuable services to horticulturists. The

original tree began to fruit in 1862 and was cataloged by Leroy in 1865. The variety seems to have been described first in America by Downing in 1876.

Tree vigorous, upright, dense, hardy; trunk stocky; branches thick, zigzag, dull brownish-red, covered with ash-gray scarf-skin, marked with numerous large lenticels; branchlets very thick, short, with short internodes, brownish-red, tinged with green, dull, smooth, glabrous, with many conspicuous, raised lenticels.

Leaf-buds long, obtuse, appressed; leaf-scars prominent. Leaves 3 in. long, 1⅞ in. wide, long, folded lengthwise with the margins curled under, leathery; apex taper-pointed; margin entire or coarsely crenate; petiole 2 in. long, slender. Flower-buds large, long, conical, plump, free, singly on short spurs; blossoms open late; flowers 1 in. across, well distributed, averaging 7 buds in a cluster; pedicels $1^{3}/_{16}$ in. long, slender, pubescent, pale green.

Fruit ripe October to November; above medium in size, 3⅛ in. long, 2½ in. wide, uniform in size, roundish-pyriform or at times oblong-pyriform, symmetrical, with equal sides; stem 1 in. long, slightly curved, thick; cavity lacking, the stem being attached to the smooth, flat surface; calyx open; lobes separated at the base, short, obtuse or acute; basin shallow, obtuse, gently furrowed, small; skin thin, tender, roughened by the russet skin, dull; color greenish-yellow overspread with solid russet, or splashed, spotted and sprinkled with russet, the cheek often solid russet; dots many, small, russet, obscure because of the russet color, slightly raised; flesh yellowish-white, granular especially around the core, melting, buttery, very juicy, vinous; quality very good. Core variable in size, closed, with clasping core-lines; calyx-tube short,

wide, conical; seeds elongated-oval, wide, plump, acute.



EARLY HARVEST

1. *Neb. Hort. Soc. Rpt.* 129. 1890. *2.* Budd-Hansen *Am. Hort. Man.* **2**:243. 1903. *Chambers*. **3.** *Horticulturist* **25**:263, fig. 1870. **4.** Tilton *Jour. Hort.* **8**:293. 1870. **5.** *Mass. Hort. Soc. Rpt.* 157. 1874. **6.** *Am. Pom. Soc. Cat.* 32. 1875. **7.** Downing *Fr. Trees Am.* 3rd App. 174. 1881. **8.** *Can. Hort.* **26**:130. 1903. **9.** Ont. Dept. Agr. *Fr. Ont.* 151, fig. 1914.

The fruits of Early Harvest are so poor in quality and rot at the core so soon after ripening, that the variety is hardly worth growing in New York, where there are many better pears of its season. To offset these defects, the pears are large and handsome for early fruits, and the trees are healthy and regular and heavy bearers. The pear is characterized by a thick, fleshy stem and a large closed core. Nurserymen report that the tree is difficult to propagate, and fruit-growers find that it is slow in coming in bearing; the growth is usually straggling and difficult to manage in nursery or orchard. The variety is more popular in the Middle West than in any other part of the country.

This variety appears to have been brought to Middletown, Kentucky, from Maryland by Captain William Chambers about 1800, with several other varieties. According to the rules of pomological nomenclature, this pear should be called Chambers as it was first known. The name Early Harvest was given the variety by Kentucky growers because of its extreme earliness, and became so closely associated with the variety that today it is the only one with which the public is familiar. In 1875 this variety was added to the fruit catalog-list of the American Pomological Society under the name Chambers.

Tree large, very vigorous, upright-spreading, dense-topped, very hardy, productive with age,

long-lived; trunk very stocky, shaggy; branches thick, shaggy, zigzag, dull reddish-brown mingled with green and heavily covered with grayish scarf-skin, marked with numerous, large, elongated lenticels; branchlets very thick, straight, long, with long internodes, dull olive-green mingled with light brown, smooth, glabrous, with numerous very conspicuous, raised lenticels, variable in size.

Leaf-buds small, short, obtuse, appressed; leaf-scars prominent. Leaves 3⅛ in. long, 2⅜ in. wide; apex very abruptly pointed; margin glandless, varying from finely serrate to entire; petiole 1⅝ in. long, slender. Flowers open early, showy, 1⅛ in. across, well distributed, average 7 buds in a cluster; pedicels 1 in. long, thinly pubescent.

Fruit ripens in August; large, 3½ in. long, 3 in. wide, obovate-obtuse-pyriform, symmetrical; stem very thick, fleshy at its juncture with the cavity; cavity obtuse, shallow, narrow, often slightly wrinkled and drawn up in fleshy folds around the base of the stem; calyx small, open; lobes short, obtuse; basin shallow, narrow, obtuse, slightly wrinkled; skin thin, smooth; color pale yellow, more or less overspread on the exposed cheek with a pinkish blush, with stripes of carmine; dots numerous, small, greenish-russet, obscure; flesh yellowish, firm, granular, crisp, somewhat tough, variable in juiciness; quality poor. Core large, closed, axile, with clasping core-lines; calyx-tube very long, narrow; seeds wide, short, plump, obtuse.



EASTER BEURRÉ

1. *Pom. Mag.* **2**:78, Pl. 1829. **2.** Lindley *Guide Orch. Gard.* 397. 1831. **3.** Kenrick *Am. Orch.* 160. 1841. **4.** Downing *Fr. Trees Am.* 425, fig. 196. 1845. **5.** *Gard. Chron.* 168, fig. 1845. **6.** *Mag. Hort.* **16**:73. 1850. **7.** *Am. Pom. Soc. Rpt.* 157. 1854. **8.** *Ibid.* 66. 1862. **9.** Downing *Fr. Trees Am.* 751, fig. 1869. **10.** Hogg *Fruit Man.* 572. 1884. **11.** Ont. Dept. Agr. *Fr. Ont.* 159, figs. 1914.

Bergamote de la Pentecôte. **12.** *Ann. Pom. Belge* **4**:41, Pl. 1856.

Doyenné d'Hiver. **13.** Mas *Le Verger* **1**:43, fig. 28. 1866-73. **14.** Leroy *Dict. Pom.* **2**:72, fig. 1869. **15.** *Guide Prat.* 61, 265. 1876.

Beurré Rouppé. **16.** Mas *Pom. Gen.* **4**:87, fig. 236. 1879.

Winter Dechantsbirne. **17.** Mathieu *Nom. Pom.* 300. 1889. **18.** Gaucher *Pom. Prak. Obst.* No. 71, Pl. 34. 1894.

The fruit-books of Europe have so much to say in praise of Easter Beurré that the variety has been tried time and time again in America, but nearly always with unfavorable results. The variety grows well only in comparatively warm climates and on light, warm, limy soils, and refuses to ripen its crop in any others. There are occasional places in eastern America where Easter Beurré can be well grown, but for most part it is at home only on the Pacific slope. The fruits are of first rate excellence when at their best, and add much to the winter supply of pears, the product of few other winter pears surpassing that of this sort from January to March in regions where it does well. The pears are excellent shippers, keep well in common or cold storage, so that where the variety succeeds it is valuable for home, and distant and

foreign markets. The trees are in every way satisfactory except that they bloom a little earlier than other sorts, and are somewhat more susceptible to the scab fungus in both fruit and foliage than a commercial variety should be. Although a little too susceptible to blight, the trees are above the average in immunity, and are hardy, vigorous, and productive. The variety is well worth planting in soils and climates where the crop matures properly.

In the gardens of the Capucin Monastery at Louvain, Belgium, there was, about 1823, an old pear tree known to the monks as the *Pastorale de Louvain*, which attracted the attention of Van Mons. He propagated the pear and in due course distributed it. By the year 1853, it was to be found pretty generally in the gardens of Belgium under the name of *Pastorale*. Since that time it has been very widely disseminated, but unfortunately has received a confusing variety of names, Leroy mentioning twenty-four and Mathieu fifty-five. The leading authorities, however, of England and this country have uniformly adopted the name Easter Beurré. It was received in the former country soon after its first dissemination, and it was brought to this country not later than 1837. Since 1862, Easter Beurré has appeared in the list of pears recommended for general cultivation by the American Pomological Society.

> Tree medium in size, vigorous, upright-spreading, open-topped, slow-growing, hardy; branches reddish-brown overspread with gray scarf-skin, sprinkled with inconspicuous lenticels; branchlets variable in length, with short internodes, greenish-brown mingled with red, rough, glabrous, with small, round, raised lenticels.

Leaf-buds small, very short, obtuse, free. Leaves 2⅛ in. long, 1⅛ in. wide, thin; apex abruptly pointed; margin finely serrate, the teeth very short, tipped with red; petiole 2 in. long, slender. Flower-buds small, short, conical, plump, free, singly on short spurs; flowers 1¼ in. across, occasionally tinged with pink in the bud, becoming white when open, well distributed, average 9 buds in a cluster; pedicels ¾ in. long, slender, pubescent.

Fruit in season late December to February; 3 in. long, 2⅜ in. wide, obovate-pyriform, with a short, thick neck; stem ¾ in. long, thick, woody; cavity acute, very deep, narrow, furrowed, uneven, compressed; calyx open; lobes narrow, acute; basin deep, narrow, abrupt, furrowed and wrinkled; skin thick, tough, roughened by the dots, the surface uneven; color yellow, marked with many russet dots and with patches and veinings of russet, often with a dull brownish-red blush; dots numerous, small, very conspicuous, russet; flesh tinged with yellow, granular near the center and toward the calyx, tender and melting, juicy, buttery, sweet, with a rich, pleasant flavor, very aromatic; quality very good. Core large, closed, axile, with meeting core-lines; calyx-tube short, wide, conical; seeds large, wide, long, plump, acute.



ELIZABETH

1. *Mag. Hort.* **8**:57. 1842. **2.** *Ibid.* **13**:63, fig. 6.

1847. **3.** Leroy *Dict. Pom.* **2**:126, fig. 1869. **4.** *Am. Pom. Soc. Cat.* 23. 1897.

Manning's Elizabeth. **5.** Downing *Fr. Trees Am.* 385. 1845. **6.** Hovey *Fr. Am.* **2**:41, Pl. 1851. **7.** *Am. Pom. Soc. Rpt.* 231. 1854. **8.** Downing *Fr. Trees Am.* 810, fig. 1869.

Elizabeth de Manning. **9.** Mas *Le Verger* **2**:105, fig. 51. 1866-73. **10.** *Guide Prat.* 93, 269. 1876.

Nina. **11.** Hogg *Fruit Man.* 623. 1884. **12.** Mathieu *Nom. Pom.* 258. 1889.

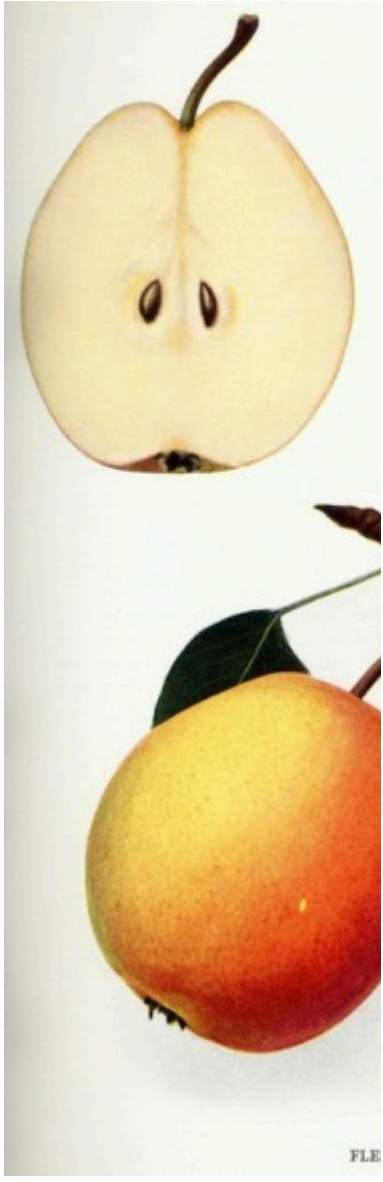
Elizabeth is among the best summer pears for eastern America, either for home consumption or for the markets. The characters which commend it are: handsome, well-flavored fruits; and vigorous, hardy, productive trees, which are as resistant to blight as those of any other European pear, and which come in bearing early and bear annually. Faults are: the fruits are small, a fault that can be overcome somewhat by thinning; they are a little coarse in texture of flesh, which is a little too gritty; and the flavor, while good for an early pear, is not as sweet and rich as might be desired. The trees are nearly flawless, failing, if at all, in not attaining as great size as some other inhabitants of pear orchards. The crop is often borne in clusters—a defect by reason of which the fruits are so often small. But even with these defects, we must end as we began with the statement that this is one of the best summer pears.

In the year 1819, Van Mons established his famous nursery at Louvain, Belgium, and in the years 1830 and 1831 he sent from there two consignments of pear cions to the Massachusetts Horticultural Society, both of which were unfortunately lost in turn on the way. Three years later, Kenrick, Manning, and Dearborn, Massachusetts

horticulturists, requested him to forward another collection. In the successive springs of 1835 and 1836, he sent two more collections which safely arrived in due course, though a large proportion of the cions died. These collections comprised originally about 150 named and 100 seedling unnamed varieties, and Van Mons granted Manning permission to name any of the latter that might prove worthy of cultivation. No. 154 of these, Mr. Manning[28] named *Elizabeth* (*Van Mons*). Later on it was disseminated as *Manning's Elizabeth*, and soon after the name was shortened to i. The variety was placed in the fruit-list of the American Pomological Society in 1854.

> Tree small, upright, dense-topped, hardy, very productive; trunk slender; branches brownish-green, partly overspread with thin, gray scarf-skin, marked by conspicuous, oval lenticels; branchlets slender, long, reddish-brown mingled with green, new growth exceptionally red, dull, smooth, glabrous except on the younger wood, with obscure, raised lenticels.
>
> Leaf-buds small, short, pointed, plump, free. Leaves 3 in. long, 1½ in. wide, stiff; apex variable; margin almost entire; petiole 2 in. long, slender, reddish-green; stipules very small and slender when present. Flower-buds small, short, conical, plump, free, singly on short spurs; flowers early, showy, 1⅝ in. across, in dense clusters, average 8 buds in a cluster; pedicels 1 in. long, lightly pubescent.
>
> Fruit ripe in late August; small, 2⅜ in. long, 2½ in. wide, obovate-obtuse-pyriform, symmetrical, uniform; stem 1 in. long, thick, curved; cavity acuminate, shallow, narrow, symmetrical, often lipped; calyx large, almost closed; lobes separated at the base, short, narrow,

acuminate; basin shallow, obtuse, gently furrowed and wrinkled; skin tough, characteristically rough, glossy; color bright yellow, with a lively, red cheek, mottled with brownish, minute specks; dots numerous, very small, conspicuous, russet or brown; flesh tinged with yellow, slightly granular under the skin, strongly granular at the center, tender and melting, very juicy, sweet, vinous, aromatic; quality very good. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds wide, plump, acute.



FLEMISH BEAUTY

1. *Pom. Mag.* **3**:128, Pl. 1830. **2.** Lindley *Guide Orch. Gard.* 373. 1831. **3.** Downing *Fr. Trees Am.* 386, fig. 167. 1845. **4.** *Proc. Nat. Con. Fr. Gr.* 51. 1848. **5.** Hovey *Fr. Am.* **1**:51, Pl. 1851. **6.** Downing *Fr. Trees Am.* 760, fig. 1869. **7.** Hogg *Fruit Man.* 578. 1884.

Belle de Flanders. **8.** *Kenrick Am. Orch.* 172. 1832.

Fondante des Bois. **9.** *Ann. Pom. Belge* **6**:41, Pl. 1858. **10.** *Pom. France* **1**: No. 25, Pl. 25, 1863. **11.** Mas *Le Verger* **3**: Pt. 2, 55, fig. 124. 1866-73. **12.** Leroy *Dict. Pom.* **2**:166, fig. 1869. **13.** *Guide Prat.* 58, 272. 1876. **14.** *Soc. Nat. Hort. France Pom.* 412, fig. 1904.

Holzfarbige Butterbirne. **15.** Mathieu *Nom. Pom.* 235. 1889. **16.** Gaucher *Pom. Prak. Obst.* No. 49, Pl. 38. 1894.

At one time Flemish Beauty was a leading commercial variety in the pear regions of eastern America, but it has been supplanted by other varieties because the toll of blighted trees is too great, and the fruits are too often disfigured by the scab fungus. Perhaps the latter is the greater fault as in some seasons no applications of spray give the pears a clean cheek, and they are blackened, scabbed, cracked and malformed with this fungus. Not infrequently the scab-infected foliage drops before the crop matures. To offset these defects, the trees have to their credit great vigor, unusual fruitfulness and as great hardihood to cold as those of any other variety. The trees do not come in bearing early, and are not suitable for dwarfing as they overgrow the quince stock. The fruits are nearly perfect if scab-free and properly matured. To make sure of perfect maturity, the pears must be picked as soon as they attain full size and be permitted to ripen

under cover. So treated, a bright-cheeked Flemish Beauty is as handsome as any pear, and is almost unapproachable in quality; the flavor is nicely balanced between sweetness and sourness, very rich, and has a pleasing muskiness. Blight and scab condemn tree and fruit for commercial orchards, but a lover of good pears should combat these troubles for the sake of the choice fruits.

The parent tree of this variety is said to have been a wilding found in a wood near Alost, East Flanders, Belgium, about the beginning of the nineteenth century. It was cultivated under the Flemish name of *Bosc Peêr* or *Pear of the Woods*. About 1810, the propagation of the variety was taken up by Van Mons who introduced it a few years later under the name *Fondante des Bois* by which name it was known in Europe for many years. Lindley, writing in 1831, described this variety under the name *Flemish Beauty*, and it appeared then to be in pretty general cultivation in England. Styling it *Barnard*, Hovey wrote, in 1851, that Flemish Beauty "had been known in Dorchester, Massachusetts, for nearly twenty years," so that it is to be inferred that the variety was introduced to this country prior to 1830 and possibly by some one by the name of Barnard. The rapid distribution of this pear was promoted by Van Mons who gave numerous grafts of it to his friends and correspondents. The fact that the variety has over sixty synonyms may be taken as some testimony to its popularity and excellence. At the first meeting of the American Pomological Society held in 1848, Flemish Beauty was placed in the list of pears recommended for general cultivation, a place it has since retained.

Tree medium in size, vigorous, spreading, with drooping branches, hardy, productive; trunk

smooth; branches thick, shaggy, bright reddish-brown, with dull gray scarf-skin, large lenticels; branchlets thick, short, with short internodes, reddish-brown, smooth, glabrous, with many large, raised lenticels.

Leaf-buds large, long, obtuse, pointed, nearly free; leaf-scars prominent. Leaves 3½ in. long, 1¾ in. wide, oval, thick, leathery; apex taper-pointed; margin finely serrate; petiole 2 in. long, usually slender. Flower-buds very large, long, conical or pointed, very plump, free; flowers 1¼ in. across, in dense clusters, usually 7 buds in a cluster; pedicels 1¼ in. long, slender, slightly pubescent, light green.

Fruit ripe in late September and early October; large, nearly 2¾ in. long, 2½ in. wide, uniform in size and shape, roundish or obovate-obtuse-pyriform, symmetrical, with nearly equal sides; stem 1⅛ in. long, thick; cavity acute, shallow to deep, narrow, slightly russeted, a little furrowed; calyx open; lobes partly separated at the base, short, obtuse; basin shallow, narrow, abrupt, symmetrical; skin thick, tough, roughish, dull; color clear yellow, overspread on the exposed cheek with a dotted and marbled red blush; dots numerous, russet, small, conspicuous; flesh yellowish-white, firm, becoming melting and tender, granular, juicy, sweet, aromatic, with a slight musky flavor; quality very good. Core closed, with clasping core-lines; calyx-tube short, wide, conical; seeds rather long, plump, acute.

FONDANTE DE NOËL

1. *Mag. Hort.* **21**:267, fig. 9. 1855. **2.** *Ann. Pom. Belge* **7**:67, Pl. 1859. **3.** *Pom. France* **1**: No. 14, Pl. 14. 1863. **4.** Mas *Le Verger* **1**:65, fig. 39. 1866-73. **5.** Downing *Fr. Trees Am.* 764. 1869. **6.** Hogg *Fruit Man.* 580. 1884.

Belle après Noël. **7.** McIntosh *Bk. Gard.* **2**:459. 1855.

Weihnachtsbirne. **8.** Dochnahl *Führ. Obstkunde* **2**:62. 1856. **9.** Mathieu *Nom. Pom.* 296. 1889.

Belle de Noël. **10.** Leroy *Dict. Pom.* **1**:209, fig. 1867.

It is doubtful whether this rather rare European pear can be purchased from American nurserymen now, but possibly it may be had, and at least it could be re-propagated from old trees. The fruit is distinguished by its trim, top-shaped form and handsome coat, usually enlivened with a dull color on the sunny side. The flesh, while gritty near the core, is tender, juicy, buttery, very rich, sweet, and aromatic. It is just the pear for those who prefer sweetness to vinousness or piquancy, and who object to even a trace of astringency. The trees, while only medium in size, are vigorous, hardy, healthy, and productive. If the variety grows elsewhere as well as it does on the grounds of the New York Agricultural Experiment Station it is too good to be lost. The fruits are in season and at their best for Christmas.

This pear was raised from seed by Major Espéren, Mechlin, Belgium. The tree fruited first in 1842 and was given the name *Fondante de Noël* to indicate the day on which it was tasted for the first time. In 1862 a pear called *Souvenir d'Espéren*, attributed to seed grown by Berckmans, a noted Belgian horticulturist living in the United States, was put forth, but after examination there did not appear to be any difference in either the fruit or the wood of this tree from that of the variety grown by Major Espéren. Because the name *Souvenir d'Espéren* appears in connection with *Fondante de Noël*, the variety has been confused with another pear which was raised

by Major Espéren and named *Souvenir d'Espéren*. The two, however, are entirely distinct and the last-named sort has long been known and is still found growing in certain pear orchards of the eastern United States.

Tree medium in size and vigor, upright, hardy, productive; trunk thick, smooth; branches brownish-green, nearly covered with gray scarf-skin; branchlets slender, with long internodes, smooth, glabrous, marked with conspicuous, raised lenticels.

Leaf-buds large, long, conical, plump, free. Leaves 3½ in. long, 1½ in. wide; apex taper-pointed; margin glandless, finely serrate; petiole 2⅞ in. long. Flower-buds large, long, plump, free, singly on short spurs; flowers showy, 1½ in. across, white often tinged pink on the edges of the petals, average 9 buds in a cluster; pedicels ⅞ in. long.

Fruit matures December to January; large, 2½ in. long, 2¾ in. wide, roundish-turbinate, irregular; stem ¾ in. long, thick, woody, obliquely set; cavity obtuse, shallow, narrow, furrowed, often lipped; calyx small, nearly closed; basin narrow, obtuse, furrowed; skin roughened by russet dots and patches; color dull greenish-yellow, with many dots, flecks and patches of russet, often with a faint trace of brownish-red on the sunny side; dots numerous, small, russet, rather conspicuous; flesh white, gritty only near the core, tender, buttery, juicy, sweet, highly aromatic; quality good to very good; core large, with meeting core-lines; calyx-tube short, wide; seeds large, long, plump, acute.



FONTENAY

1. *Am. Pom. Soc. Cat.* 38. 1883.

Jalousie de Fontenay Vendée. **2.** Downing *Fr.*

Trees Am. 396, fig. 173. 1845. **3.** *Am. Pom. Soc. Rpt.* 68. 1862.

Belle de Esquermes. **4.** *Mag. Hort.* **20**:135. 1854.

Jalousie de Fontenay. **5.** *Pom. France* **1**: No. 44, Pl. 44. 1863. **6.** Hogg *Fruit Man.* 303. 1866. **7.** Mas *Le Verger* **3**: Pt. 2, 157, fig. 175. 1866-73. **8.** Leroy *Dict. Pom.* **2**:295, fig. 1869. **9.** *Guide Prat.* 64, 281. 1876.

Birn von Fontenay. **10.** Mathieu *Nom. Pom.* 215. 1889. **11.** Lucas *Tafelbirnen* 87, fig. 1894.

The reader will discover no noteworthy characters in the description of this pear; nor does the accompanying illustration make the variety particularly alluring, although the color-plate scarcely does the fruits justice in either size or color. The variety is to be found in many old orchards in eastern America, but was long since relegated by pear-growers to the limbo of nurserymen's catalogs. The only reason for giving it a place in *The Pears of New York* is that the variety was once prominent, and references to it and comparisons with it are so common in horticultural literature that pear-growers are certain to want to know something about it. As the following description shows, the variety is but mediocre in tree and fruit.

Early in the eighteenth century M. Lévêque, an architect, acquired possession of an estate near Fontenay, France. A number of pear seedlings were growing upon this property, one of which was so good as to attract M. Lévêque's attention and he began propagating it in 1828. Later he distributed cions of the variety to his friends under the name *Poire de Fontenay*. Soon afterward the name was changed to *Jalousie de Fontenay*, Leroy took the

variety to the garden of the Horticultural Society of Angers about 1835, from which place it was still more widely disseminated. It soon found its way to America where it gained early popularity. In 1862 the American Pomological Society listed this variety in its fruit-catalog under the name *Jalousie de Fontenay*, but shortened the name, in 1883, to *Fontenay*. In 1899, however, the name disappeared from this catalog and has never been replaced.

Tree medium in size, vigorous, upright, dense-topped, hardy; trunk slender, smooth; branches slender, brown mingled with green, partly covered with thin, gray scarf-skin; branchlets thick, long, with short internodes, light brownish-green, faintly tinged with red, dull, the new growth pubescent near the ends, smooth, with numerous, conspicuous, small, raised lenticels.

Leaf-buds very small, short, sharply pointed, free; leaf-scars with large, prominent shoulders. Leaves 3 in. long, 1½ in. wide, very thick; apex taper-pointed; margin almost glandless, finely serrate; petiole 2 in. long, variable in size, glabrous; stipules very slender, tinged red. Flower-buds small, short, conical, free, singly on very short spurs; flowers late, showy, 1¾ in. across, in dense clusters, average 7 buds in a cluster; pedicels ⅝ in. long, lightly pubescent.

Fruit matures in October; small, 2⅝ in. long, 2 in. wide, oblong-acute-pyriform, symmetrical, with equal sides; stem ¾ in. long, curved; cavity lacking, the flesh folded around the base of the stem, often lipped; calyx partly open; lobes broad, acute; basin shallow, narrow, obtuse, slightly wrinkled, symmetrical; skin thick, tough, smooth; color dull yellowish-green, netted and patched with russet, with a tinge of red on the exposed cheek; dots numerous, small, russet, obscure; flesh strongly granular at the center,

tender and melting, very juicy, subacid; quality good. Core large, closed, axile, with meeting core-lines; calyx-tube short, narrow, funnel-shaped; carpels emarginate; seeds large, wide, long, plump, acute.

FORELLE

1. *Trans. Lond. Hort. Soc.* **5**:408, Pl. XVII. 1824. **2.** *Pom. Mag.* **3**:112, Pl. 1830. **3.** Lindley *Guide Orch. Gard.* 399, 1831. **4.** Prince *Pom. Man.* **1**:130. 1831. **5.** Downing *Fr. Trees Am.* 389, fig. 169. 1845. **6.** *Mag. Hort.* **13**:339, fig. 27. 1847. **7.** Downing *Fr. Trees Am.* 765. 1869. **8.** Leroy *Dict. Pom.* **2**:183, figs. 1869. **9.** Mas *Pom. Gen.* **1**:115, fig. 58. 1872.

Forellenbirne. **10.** Christ *Handb.* 514. 1817. **11.** Dochnahl *Führ. Obstkunde* **2**:12. 1856. **12.** Lauche *Deut. Pom.* **II**: No. 23, Pl. 23. 1882.

Florelle. **13.** Prince *Treat. Hort.* 13. 1828.

Trout Pear. **14.** *Gard. Chron.* 804, fig. 1846.

The pear fancier prizes Forelle for its singularly handsome and distinctive fruits, which are also of very good quality. Forelle pleases the eye as well as any pear for bright colors, and is distinguished among fruits of its kind by its trout-like specklings from which comes the name *Forelle*, the German name for trout. Looks do not belie taste for the flesh is delicate and buttery, is highly flavored, and satisfies those who regard high quality a prime requisite in a pear. The trees are very satisfactory in warm soils and exposures, but fail in heavy clays and cold climates. The variety is worth growing for its beautiful and distinctive fruits.

Nothing is very certainly known of the origin of this pear, but it seems highly probable that it had its

birth in northern Saxony at the beginning of the eighteenth century. From Germany it was taken to Flanders, and from there introduced into England. In the latter country, it was first fruited by Thomas Andrew Knight, President of the Horticultural Society of London, who, in 1823, sent cions to the Honorable John Lowell, President of the Massachusetts Horticultural Society. Forelle became quite widely disseminated in the eastern United States during the first half of the eighteenth century, and was considered by many pomologists a pear of merit. At the present time, however, the variety has almost disappeared from cultivation. Its place has been filled by Vermont Beauty, a pear introduced from Vermont more than forty years ago. It is not improbable that these two varieties are identical. Vermont Beauty may be the old German pear renamed.

Tree medium in size, vigorous, upright, very hardy and very productive; branches few, dark brownish-red, sprinkled with numerous lenticels; branchlets long, pubescent on the youngest shoots. Leaves small, flat, roundish-ovate; flowers open early.

Fruit ripens November to December; medium in size, 3 in. long, 2 in. wide, oblong-obovate-pyriform, with a neck variable in length; stem 1 in. long, slender; cavity shallow, oblique, narrow, often lipped; calyx small, open; lobes broad; basin shallow, narrow, abrupt; skin smooth; color yellow, more or less overlaid with red, deepening to rich crimson next to the sun, profusely covered with grayish-russet dots which are margined or rayed with crimson; dots numerous, large and small, russet or grayish; flesh white, fine-grained, although slightly granular at the center, melting, buttery, juicy, aromatic, with a rich, vinous

flavor; quality good. Core medium in size; seeds nearly black, of medium size.

FOX

1. Budd-Hansen *Am. Hort. Man.* **2**:245. 1903. **2.** Ragan *Nom. Pear, B. P. I. Bul.* **126**:123. 1908. *B. S. Fox.* **3.** Downing *Fr. Trees Am.* 2nd App. 154. 1876. **4.** *Am. Pom. Soc. Rpt.* 42, fig. 1877. **5.** *Gard. Mon.* **22**:369. 1880. **6.** *Mo. Hort. Soc. Rpt.* 170. 1883.

Fox seems to have failed in the pear-growing regions of America, in spite of its having several excellent characters in both fruit and tree. The fruits are not quite attractive enough to sell on the markets or to grace the table of the amateur, their rough, russet skins detracting greatly from their appearance. When the skin is removed, however, a better late fall pear cannot be found. The flesh is white, fine in texture, very juicy, melting, and has a brisk, vinous flavor and a pleasant aromatic smell and taste that at once place the quality very high. The trees are but mediocre in the prime characters of a good orchard plant, and condemn the variety for any purpose other than the collector's plantation.

Fox is one of many seedlings originated by B. S. Fox,[29] San José, California. Most of these seedlings were raised from seed of Belle Lucrative and Fox is among this number. The exact date of origin cannot be determined, but it is assumed to have been in the early seventies. The variety is considered to be one of the best of Fox's seedlings.

Tree medium in size and vigor, upright-spreading, round-topped, moderately productive; trunk slender; branches stocky, smooth, greenish-brown overspread with grayish scarf-skin;

branchlets thick, short, with short internodes, zigzag, glabrous, sprinkled with small, raised lenticels. Leaf-buds long, obtuse, pointed, free. Leaves 2⅛ in. long, 1¼ in. wide, thick; apex abruptly pointed; margin nearly entire to finely serrate. Flower-buds conical, pointed, free; flowers open early.

Fruit ripens October to November; large, 3⅛ in. long, 2⅛ in. wide, oblong-obovate-pyriform; stem 1½ in. long, very thick, curved, obliquely set; cavity very shallow or lacking, the flesh folded up around the base of the stem; calyx closed or slightly open, variable in size; lobes much separated at the base, short, broad, acute; basin shallow, narrow, very small, furrowed and compressed; skin thick, granular, tough, roughened by the russet dots; color russet-yellow, often with a russet-red blush on the side next to the sun, almost entirely overspread with russet; dots numerous, conspicuous, russet; flesh white, granular near the core, melting, very juicy, sweet mingled with a brisk, vinous flavor, richly aromatic; quality very good. Core large, closed; calyx-tube short, wide; seeds wide, plump, acute.



FREDERICK CLAPP

1. Downing *Fr. Trees Am.* 2nd App. 148, fig. 1876. **2.** *Mass. Hort. Soc. Rpt.* Pt. II, 94. 1876. **3.** *Am. Pom. Soc. Cat.* 34. 1877. **4.** Budd-Hansen *Am. Hort. Man.* **2**:245. 1903.

Clapp No. 22. **5.** *Mass. Hort. Soc. Rpt.* 90. 1872. **6.** *Ibid.* Pt. II, 153. 1874. **7.** *Am. Pom. Soc. Rpt.* 38, 66, 119. 1875.

Frederick Clapp has a place on the pear list, because it is one of the few good varieties with acidulous fruits. The refreshing, piquant flavor, the tender, melting, very juicy flesh, and the bright lemon-yellow color with only a trace of red give sufficient charm and character to the fruits to make the variety desirable in every collection of good pears. The fruits come in season with those of Beurré Superfin, and surpass them in quality at least. The trees are vigorous and healthy and form open, shapely, wide-spreading heads that commend them for orchard management. They grow with rapidity and vigor, come in bearing early, and are unusually fruitful. The variety is seldom planted in commercial orchards, but it has a welcome place in every home orchard fortunate enough to have it.

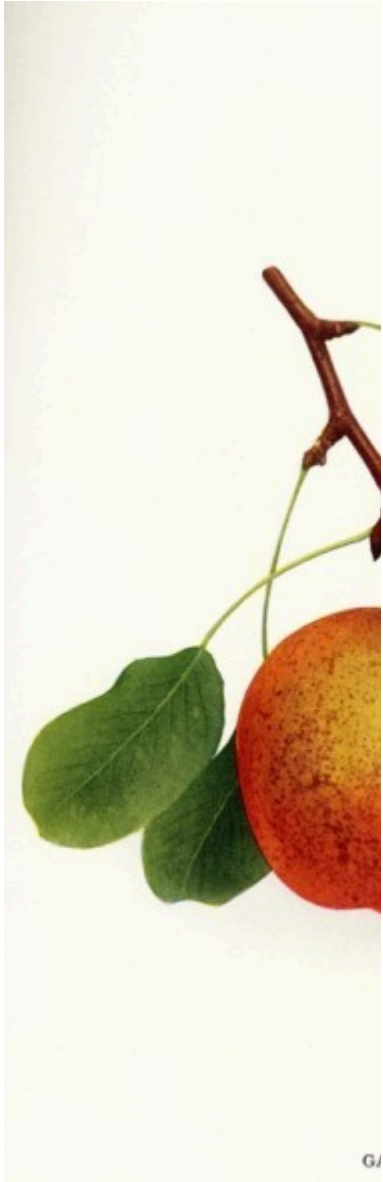
This pear was raised about 1870 by Lemuel Clapp, Dorchester, Massachusetts, brother of Frederick and Thaddeus Clapp, all of whom were the producers of large numbers of pear seedlings, several of which have been named. In all probability this variety is a cross between Urbaniste and Beurré Superfin. At various exhibitions and meetings of the Massachusetts Horticultural Society in the years 1872, 1874, 1875, and 1876 it was shown and favorably reported on, and in 1875 received high praise in a report of the Massachusetts State Fruit Committee to the American Pomological Society. In 1877 the latter Society added Frederick Clapp to its

list of fruits recommended for general cultivation.

Tree large, vigorous, upright-spreading, with open top, hardy; trunk thick, shaggy; branches stocky, shaggy, zigzag, dull reddish-brown, overspread with thick ash-gray scarf-skin, marked with many small lenticels; branchlets thick, dull reddish-brown, tinged with green, smooth except for the lenticels, glabrous, with many small, raised lenticels.

Leaf-buds small, short, conical or pointed, plump, usually free. Leaves 3 in. long, 1¾ in. wide, ovate, stiff; apex taper-pointed; margin finely serrate, tipped with very fine, sharp-pointed, reddish-brown glands; petiole 1½ in. long, slender, glabrous. Flower-buds small, short, conical, plump, free; flowers cup-shaped, often with a disagreeable odor, 1 in. wide, averaging 9 buds in a cluster; pedicels 1 in. long, thick, pubescent, pale green.

Fruit ripe in October; medium in size, more than 2 in. long, 2⅜ in. wide, variable in size, roundish or obovate, irregular in shape; stem ¾ in. long, thick; cavity variable in outline and smoothness, often with a fleshy fold drawn up around the base of the stem; calyx open; lobes short, broad, obtuse; basin deep, wide, abrupt, usually smooth, symmetrical; skin thin, tender, smooth; color lemon-yellow, often marked with flecks and mottlings of russet; dots numerous, small, russet, obscure; flesh with a very faint tinge of yellow, fine, tender, melting, characteristically juicy, sweet, with a rich sprightliness; quality very good. Core closed, axile, with clasping core-lines; calyx-tube very short, wide, broadly conical; carpels obovate; seeds large, wide, long, plump, acute.



GANSEL SECKEL

1. Downing *Fr. Trees Am.* 502. 1857. **2.** *Ibid.* 770. 1869.

Gansel-Seckle. **3.** *Jour. Hort.* N. S. **20**:30, fig. 1871. **4.** Hogg *Fruit Man.* 585. 1884. **5.** *Jour. Hort.* 3rd Ser. **23**:464. 1891. **6.** Bunyard *Handb. Hardy Fr.* 177. 1920.

There are no good reasons why this pear should be grown, it having received much more attention than it deserves during the half century it has been in America. Perhaps it suffices to say that the fruits and trees are in no way equal, except in size of fruit, to those of Seckel, with which variety it would compete, although the crop ripens a little later. While the pears are larger than those of Seckel, the yield is not as great as the trees do not bear as regularly, nor abundantly. The fruits are not as well flavored, nor as attractively colored. The variety is still offered by many nurserymen, most of whom, however, condemn it with faint praise.

According to Bunyard, Gansel Seckel was raised from seed a century ago by a Mr. Williams of Pitmaston, Worcester, England. It was obtained by crossing Seckel with Gansel Bergamot, whence its name.

Tree medium in size and vigor, upright-spreading, variable in yield; branches slender, zigzag, sprinkled with numerous lenticels; branchlets thick, light reddish-brown mingled with green, smooth, glabrous, with small, roundish, raised, conspicuous lenticels. Leaf-buds small, short, pointed, appressed. Leaves 2¼ in. long, 1½ in. wide; apex taper-pointed; margin tipped with few reddish glands, coarsely serrate; petiole 1¼ in. long. Flower-buds small, short, conical, plump, free; flowers open early, 1¼ in. across; pedicels ½ in. long.

Fruit ripens in late October and November; small to medium, 2½ in. long, 2⅜ in. wide, irregular, oblate-pyriform; stem ¾ in. long, stout; cavity variable in width, shallow, irregular; calyx small, closed; lobes erect, acute; basin variable in width, deep; skin roughened with russet, uneven; color pale yellow, overspread with thin cinnamon-russet, sometimes faintly blushed on the exposed cheek; dots distinct, cinnamon-russet; flesh yellowish-white, coarse, melting, buttery, juicy, highly aromatic, with a rich perfume, sweet, but without the spicy flavor of the Seckel; quality very good.

GARBER

1. *Am. Pom. Soc. Cat.* 48. 1891. **2.** Budd-Hansen *Am. Hort. Man.* **2**:247. 1903. **3.** *Chico Nur. Cat.* 12. 1904. **4.** *Cornell Sta. Bul.* **332**:481. 1913.

Garber's Hybrid. **5.** Black *Cult. Peach and Pear* 229, 242. 1886. **6.** Harcourt *Fla. Fruits* 255. 1886. **7.** Hood Cat. 25. 1905.

A few trivial differences separate Garber from Kieffer—the fruits of both are poor. The pears ripen a week or two earlier than those of Kieffer, are a little rounder, flatter at the ends, and some say are a little better in quality—certainly they are no worse to eat out of hand. The tree is hardy to heat and cold, and is much planted in the southern states, and in the Mississippi Valley, North and South. The variety might be sparingly planted in New York as an ornamental.

Garber is one of many seedlings of the Chinese Sand pear, raised by J. B. Garber, Columbia, Pennsylvania, sometime previous to 1880. It is supposed to be of hybrid origin. The variety was

added to the American Pomological Society's list of recommended fruits in 1891 where it has since remained.

Tree medium in size, vigorous, upright-spreading, hardy, productive with age; branches smooth, zigzag, reddish-brown partly covered with grayish scarf-skin; branchlets thick, with long internodes, smooth, glabrous, sprinkled with small, round, very conspicuous, raised lenticels. Leaf-buds small, short, pointed and with curved tips, appressed. Leaves 3½ in. long, 2¼ in. wide, thick; apex taper-pointed; margin with very minute and reddish tips, finely serrate; petiole 2¼ in. long, thick. Flower-buds small, conical, sharply pointed, free.

Fruit ripe September to October; large, usually roundish-oblong and tapering toward both ends; stem 1 in. long, stout, obliquely set; cavity small, narrow, often deep and furrowed; calyx variable in size, partly open; lobes slender; basin broad, abrupt, deep, furrowed; color pale yellow, often with a brownish-red blush on the exposed cheek; dots small, numerous, russet; flesh white, granular, crisp but tender, juicy, neither sweet nor sour but with a peculiar, pleasant flavor; quality inferior.



GLOU MORCEAU

1. *Mag. Hort.* **21**:143. 1855. **2.** Downing *Fr. Trees Am.* 503. 1857. **3.** *Ibid.* 773. 1869. **4.** Hogg *Fruit Man.* 586. 1884. **5.** *Jour. Hort.* 3rd Ser. **14**:203. 1887. **6.** Bunyard *Handb. Hardy Fr.* 178. 1920.

Gloux Morceau. **7.** *Trans. Lond. Hort. Soc.* 2nd App. **5**:6. 1824. **8.** Kenrick *Am. Orch.* 194. 1832.

Hardenpont's Winter Butterbirne. **9.** Liegel *Syst. Anleit.* 104. 1825. **10.** Dochnahl *Führ. Obstkunde* **2**:99. 1856. **11.** Lauche *Deut. Pom.* **II**: No. 11, Pl. 11. 1882. **12.** Mathieu *Nom. Pom.* 231. 1889.

Glout Morceau. **13.** Lindley *Guide Orch. Gard.* 400. 1831. **14.** *Gard. Chron.* 716, fig. 1. 1844. **15.** Downing *Fr. Trees Am.* 437, fig. 201. 1845. **16.** Hovey *Fr. Am.* **1**:5, Pl. 1851. **17.** Elliott *Fr. Book* 325. 1854. **18.** *Am. Pom. Soc. Rpt.* 68. 1862.

Beurré d'Hardenpont. **19.** *Pom. France* **1**: No. 12, Pl. 12. 1863. **20.** Mas *Le Verger* **1**:5, fig. i. 1866-73. **21.** *Guide Prat.* 60, 246. 1876. **22.** *Soc. Nat. Hort. France Pom.* 370, fig. 1904.

Beurré d'Arenberg. **23.** Leroy *Dict. Pom.* **1**:301, fig. 1867.

This old winter pear is nearly lost to cultivation, but is worth growing because of the high quality of the fruit and because the pear comes in season in early winter when there are few others. The pears are not attractively colored, although in this character the illustration does not do the fruit justice. The fruits are rich and sugary without the least trace of acid, but when poorly grown are often astringent. All agree that the quality is better in fruit from dwarf trees in which form the variety grows very well; and that it is better, also, when grown on heavy soils than on light ones. The fruits keep and ship remarkably well. The trees are neither very large nor vigorous, but are usually productive. The variety is

in disrepute in many localities because the crop does not always ripen well.

The Abbé of Mons, M. Hardenpont, a pioneer in pear-raising and a worthy forerunner of Van Mons, raised this pear from seed about 1750 in his garden at Mons, Belgium. The variety was introduced into France in 1806 by Louis Noisette, who had found it in the gardens of the Duc d'Arenberg. In France it was known, therefore, as *Beurré d'Arenberg*, and consequently became much confused with the true *Beurré d'Arenberg* raised by Monseigneur Deschamps. In order to overcome this confusion the name of the variety raised by M. Hardenpont was changed by a number of prominent Frenchmen to Beurré d'Hardenpont, but the variety has always been grown under both names in France. In 1820, M. Parmentier of Enghien, Belgium, sent this pear to England under the name *Glou Morceau*. (Glou, in the Walloon language, meaning *delicious* or *dainty*; morceau, French, *morsel* or *bit*; hence, the translation may be Delicious Morsel or Dainty Bit.) *Glou Morceau* has long been the popular name of the variety in England and America although, as Bunyard says, "It is regrettable that the memory of the pioneer of Pear raising, l'Abbé Hardenpont, is not commemorated in this fruit." Glou Morceau was brought to America within a few years after its introduction in England and rapidly found favor here as attested by leading American pomologists. In 1862 the American Pomological Society added the variety to its catalog-list of fruits under the name *Glou Morceau* as it has since remained.

Tree medium in size and vigor, spreading, dense-topped, rapid-growing, productive; trunk stocky; branches thick, reddish-brown, nearly covered with gray scarf-skin, marked with

numerous large lenticels; branchlets slender, short, light greenish-brown, overspread with gray scarf-skin, smooth, glabrous, with numerous, small, conspicuous, raised lenticels.

Leaf-buds small, very short, pointed, plump, appressed. Leaves 2¾ in. long, 1¾ in. wide, thick, leathery; apex taper-pointed; margin occasionally with very few, small glands, coarsely or finely serrate; petiole 2 in. long, thick, glabrous, greenish. Flower-buds small, short, conical, plump, free, singly on very short spurs; flowers late, showy, 1¼ in. across, in dense clusters, 8 to 11 buds in a cluster; pedicels ⅞ in. long, pubescent.

Fruit matures November to December; large, 3⅛ in. long, 2¾ in. wide, obovate-obtuse-pyriform, irregular, sides unequal, somewhat ribbed; stem ⅞ in. long, thick and woody, curved; cavity deep, narrow, russeted, deeply furrowed, compressed, lipped; *calyx* open; lobes long, narrow, acute; basin deep, smooth, broadly furrowed; skin tender, very gritty, dull, roughened by russet; color pale greenish-yellow, covered with large and small patches and mottlings of light russet; dots numerous, small, conspicuous, light russet; flesh tinged with yellow, fine-grained except near the core and under the skin, tender, buttery, sweet, with a rich, pleasant, aromatic flavor, astringent near the skin; quality good to very good. Core closed, axile, with clasping core-lines; calyx-tube short, broad, conical; seeds large, wide, long, plump, acute.



GUYOT

1. Ragan *Nom. Pear*, *B. P. I. Bul.* **126**:139. 1908.

Dr. Jules Guyot. **2.** Lauche *Deut. Pom.* **II**: No. 71, Pl. 71. 1883. **3.** Hogg *Fruit Man.* 562. 1884. **4.** *Ga. Hort. Soc. Rpt.* 54. 1892. **5.** *Garden* 52:248. 1897. **6.** *Deut. Obstsorten* **5**: Pt. 5, Pl. 1906. **7.**

Garden **73**:564, fig. 1909.

Docteur Jules Guyot. **8.** Lucas *Tafelbirnen* 73, fig. 1894. **9.** *Cat. Cong. Pom. France* 234. 1906.

The fruits of Guyot bear strong resemblance to those of Bartlett, but differ in being larger and rather more handsomely colored, ripen a little earlier, have coarser flesh, and are very differently flavored. The product can seldom compete with that of Bartlett, or even with that of Clapp Favorite with which it ripens, because its season is exceedingly transitory. Unless picked quite green and ripened indoors, the pears rot at the center, and even when ripened under the best conditions quickly become mealy and insipid. Taken at the proper moment, the pears are better flavored than those of Bartlett, as they are richer and have a more delicate taste and perfume than the musky fruits of Bartlett. The trees are quite as satisfactory as those of Bartlett, unless, possibly, they fall short somewhat in productiveness. The variety is well worth planting in collections for its early, handsome, well-flavored fruits.

Guyot was raised in the nurseries of the Baltet Brothers, Troyes, France, about 1870. Within the next decade it was quite widely distributed in France and England where it has since been esteemed as a pear of the Bartlett type. It was first brought to America about 1885.

Tree medium in size, vigorous, upright, hardy, productive, a regular bearer; branches brownish, overlaid with thick scarf-skin, marked by small, round, indistinct lenticels; branchlets slender, very long, curved, with long internodes, reddish-brown mingled with green, smooth, glabrous, sprinkled with raised, conspicuous lenticels.

Leaf-buds small, very short, pointed,

appressed. Leaves 2⅞ in. long, 1¾ in. wide; apex taper-pointed; margin glandular, variable in serration; petiole 2 in. long, thick, reddish-green. Flower-buds small, short, conical, plump, free, singly on very short spurs; flowers open late, showy, 1¼ in. across, in dense clusters, from 5 to 8 buds in a cluster; pedicels ⅞ in. long, pubescent.

Fruit ripens in early September; large, 3¼ in. long, 2⅝ in. wide, oblong-obtuse-pyriform, irregular, with unequal sides; stem 1¼ in. long, thick, curved; cavity obtuse, shallow, narrow, slightly russeted, drawn up on one side of the stem in a prominent lip; calyx large, open; lobes separated at the base, short, broad, acute; basin shallow, narrow, obtuse, furrowed; skin very thin, tender, roughish; color yellow, more or less mottled and with traces of russet, with a red blush on the exposed cheek; dots numerous, small, russet, conspicuous; flesh yellowish-white, granular, tender, moderately juicy, sweet mingled with sprightliness, aromatic; quality good. Core closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, long, plump, acute.



HOWELL

1. *Mag. Hort.* **15**:69, fig. 12. 1849. **2.** Hovey *Fr. Am.* **2**:75, Pl. 1851. **3.** *Am. Pom. Soc. Rpt.* 210.

1856. **4.** Downing *Fr. Trees Am.* 510, fig. 1857. **5.** Hoffy *N. Am. Pom.* **1**: Pl. 1860. **6.** *Pom. France* 3: No. 105, Pl. 105. 1865.

Howell's Seedling. **7.** *Mag. Hort.* **14**:519. 1848.

Howell is everywhere condemned by faint praise. The variety is a little too good to be discarded and not quite good enough to be generally recommended. Its characters in tree and fruit are faulty by reason of their mediocrity. After having said that the trees are not above the average in vigor, healthfulness, hardiness, and fruitfulness, it remains only to be said that their spreading tops make them desirable orchard inhabitants and handsome dooryard ornamentals. The fruits cannot be praised for attractive appearance or good quality, but they are preëminently meritorious in that they are probably more often uniform in appearance, quality, and freedom from the ravages of the scab fungus than those of almost any other pear. These qualities make Howell a most estimable variety for the home orchard where intensive care cannot be given. The variety further commends itself to amateur growers, because the trees bear early, annually, and abundantly. Howell seems to be better suited to the middle western states than to the eastern states.

In 1829 or 1830, Thomas Howell, New Haven, Connecticut, planted in his garden seeds from a variety of pear known locally as the Jonah, a hard and tough winter sort which seldom matures sufficiently to be regarded as a dessert fruit. One of the trees resulting from these seeds came into bearing in 1842 or 1843. Specimens were exhibited in Faneuil Hall by the Massachusetts Horticultural Society in 1848 and were considered to be "of the first class and worthy of cultivation in every place

where the soil and climate are congenial." In 1856, the Howell pear was recommended for general cultivation by the American Pomological Society.

Tree large, vigorous, spreading, open-topped; trunk thick; branches stocky, reddish-brown, overspread with gray scarf-skin, with few small lenticels; branchlets thick, short, dull reddish-brown, smooth, glabrous, with a few large, raised lenticels.

Leaf-buds large, long, conical, free. Leaves 2 in. long, 1⅛ in. wide, oval, leathery; apex taper-pointed; margin finely serrate, hairy, tipped with very minute glands; petiole 1½ in. long. Flower-buds large, long, conical, rather plump, free; flowers open early, 1⅜ in. across, in dense clusters, from 7 to 15 buds in a cluster; pedicels $1^{1}/_{16}$ in. long, pubescent, greenish.

Fruit ripe in late September and October; medium in size, 2⅜ in. long, 2¼ in. wide, uniform in size and shape, round-obovate, symmetrical; stem 1 in. long, thick, straight; cavity obtuse, very shallow and narrow, often with almost no cavity, smooth, symmetrical; calyx open, small; lobes separated at the base, short, narrow, obtuse; basin obtuse, slightly furrowed, nearly symmetrical; skin smooth, dull; color pale lemon-yellow, marked on the side exposed to the sun with a trace of blush and with patches and tracings of russet; dots many, small, russet, very conspicuous; flesh yellowish-white, firm but tender, granular, melting, very juicy, sweet, with a rich, somewhat brisk, almost vinous flavor, aromatic; quality very good. Core rather large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds long, plump, acute, frequently abortive.



IDAHO

1. *U. S. D. A. Rpt.* 572, Pl. II. 1888. **2.** *Can.*

Hort. **12**:2, fig. 1, Pl. 1889. **3.** Wickson *Cal. Fruits* 341. 1889. **4.** Thomas *Am. Fruit Cult.* 477, fig. 691. 1897. **5.** *Am. Pom. Soc. Cat.* 36. 1899. **6.** *Rev. Hort.* 60. 1901. **7.** Budd-Hansen *Am. Hort. Man.* **2**:249. 1903.

There is much difference of opinion as to the value of Idaho in America. Without question, the variety is of considerable worth in parts of the Pacific Northwest, and especially in regions where hardihood is a prime requisite. There, presumably, the fruits are larger and better flavored than in the East. As the accompanying plate shows, the pears are only medium in size on the grounds of this Station, but they are attractive in color and of excellent taste. The core is small, and the seeds are often abortive and sometimes wanting. The flesh is tender, buttery and almost free from granulation, with a rich, sweet, vinous flavor which make the rating for this fruit "good to very good." In many regions the pears are large, rough, and gross—sometimes a facsimile of Duchesse d'Angoulême. The trees are dwarf and fruitful to a fault so that the pears often run small; they are hardier than those of almost any other pear and bear annually. To offset these good characters, however, the trees have the fatal fault of blighting, so that the variety is of value only in regions where blight is not an annual scourge of this fruit.

Idaho was raised from seed of an unknown variety about the year 1867 by a Mrs. Mulkey, Lewiston, Idaho, and, having been propagated by the Idaho Pear Company, was first brought to public notice in the autumn of 1886 by John H. Evans of Lewiston. In 1888 it was introduced to Europe and was shown at the congress of fruit growers held at Geneva, Switzerland, in 1899. Idaho is included in the American Pomological Society's list of fruits

recommended for general cultivation, having been added to this list in 1899.

Tree medium in size, vigorous, upright-spreading, hardy, very productive; trunk smooth; branches slender, smooth, reddish-brown overspread with much gray scarf-skin, sprinkled with many small lenticels; branchlets dull brownish-red, overlaid with scarf-skin, smooth, glabrous, with small lenticels.

Leaf-buds small, short, conical, pointed, free; leaf-scars prominent. Leaves 2¾ in. long, 1⁴/₅ in. wide, leathery; apex abruptly pointed; margin glandular, finely serrate; petiole 2 in. long. Flower-buds short, conical, very plump, free, singly on short spurs; flowers showy, 1⅛ in. across, in dense racemes, average 8 buds in a cluster; pedicels 1⅛ in. long, pubescent.

Fruit matures in late September and October; medium in size, 2 in. long, 2⅛ in. wide, roundish, slightly pyriform, symmetrical; stem 1 in. long, thick, slightly curved; cavity acute, narrow, furrowed, slightly lipped; calyx closed; lobes broad, acute; basin shallow, obtuse, somewhat furrowed; skin thick and granular, tough, roughish; color dull lemon-yellow, tinged with green, dotted and streaked with russet, splashed with russet patches; dots numerous, small, russet, conspicuous; flesh dull white, tinged with yellow, firm, tender, buttery, juicy, sweet, rich, almost vinous; quality good to very good. Core closed, with clasping core-lines; calyx-tube short, wide, conical; seeds wide, acute.



JARGONELLE

1. Knoop *Pomologie* 101, fig. 1771. **2.** Coxe *Cult. Fr. Trees* 183, fig. 13. 1817. **3.** *Pom. Mag.* **3**:108, Pl. 1830. **4.** Lindley *Guide Orch. Gard.* 341. 1831. **5.** *Mag. Hort.* **9**:363, fig. 30. 1843. **6.** Downing *Fr. Trees Am.* 758. 1869.

Gergonell. **7.** Parkinson *Par. Ter.* 593. 1629.

Épargne. **8.** Duhamel *Trait. Arb. Fr.* **2**:133. Pl. VII. 1768. **9.** Coxe *Cult. Fr. Trees* 181, fig. 10. 1817. **10.** Prince *Pom. Man.* **1**:152. 1831. **11.** *Pom. France* **2**: No. 85, Pl. 85. 1864. **12.** Mas *Le Verger* **2**:19, fig. 8. 1866-73. **13.** Leroy *Dict. Pom.* **2**:135, fig. 1869. **14.** *Guide Prat.* 62, 269. 1876.

Sparbirne. **15.** Dochnahl *Führ. Obstkunde* **2**:131. 1856. **16.** Mathieu *Nom. Pom.* 286. 1889.

Wälsche Birne. **17.** Dochnahl *Führ. Obstkunde* **2**:144. 1856.

At one time the best second early pear, Jargonelle is now little grown in America, native varieties having crowded it out. The crop ripens two or three weeks before that of Bartlett, so that the pears come on the market with those of Bloodgood and Dearborn, which, for most situations, are better sorts. The fruits are as attractive as any of their season and are unique in shape and in having a long, curved stem. The quality leaves much to be desired. The flesh is coarse, rather gritty, and the flavor lacks the rich sugary taste on the one hand, or the refreshing piquancy on the other hand, of good pears. The fruits rot at the core and the season is short. The crop should be picked early and ripened in the house. The trees are large, vigorous and sometimes very productive, but are coarse, untidy bearers, especially when young, and are often uncertain in bearing. After setting the faults against the merits of this variety, one must conclude that is it too worthy to discard, but hardly good enough for a

recommendation for other than the home orchard or in the plantings of collectors.

Jargonelle is a patriarch among pears, being one of the oldest of all varieties. Its name appears to be derived from Jargon, anciently Gergon, a corruption of Groecum; whence Merlet, writing in 1675, infers that the Jargonelle was the *Pyrum Tarentinum* of Cato and Columella, the *Numidianum Groecum* of Pliny, and the *Groeculum* of Macrobius. So far as we know the earliest mention of the Jargonelle in England is by John Parkinson, who, writing in 1629, mentions sixty-five varieties of pears, among them being the *Peare Gergonell*. Stephen Switser, who wrote in 1731, also names it. The vitality of the English Jargonelle is remarkable; the trees, it is said, often live for 200 years. In Scotland the variety is cultivated as far north as pears will grow. William Coxe, Burlington, New Jersey, writing in 1817 of the Jargonelle, said, "This pear has not been much cultivated in America, and almost always under false names."

Tree large, vigorous, spreading, open-topped, rapid-growing, hardy, very productive, long-lived; trunk shaggy; branches reddish-brown overlaid with heavy gray scarf-skin, with large lenticels; branchlets slender, short, reddish-brown overlaid with gray, new growth brownish, dull, smooth, with numerous small, raised, very conspicuous lenticels.

Leaf-buds small, short, pointed, plump, appressed or free. Leaves 3¼ in. long, 2 in. wide, leathery; apex taper-pointed; margin tipped with few small, black glands, finely serrate; petiole 3 in. long, slender, tinged with red, glabrous; flower-buds small, very short, conical, plump, singly on short spurs; flowers late, showy, 1½ in. across, in dense clusters, from 8 to 14 buds in a

cluster; pedicels 1⅜ in, long, pubescent.

Fruit ripe in late August; large, 3⅜ in. long, 2 3/16 in. wide, oblong-obovate-pyriform, with an acute neck; stem characteristically long and curved, 1⅝ in. long; cavity lacking, the flesh folding up around the base of the stem, russeted, lipped; calyx open; lobes separated at the base, long, broad, acute; basin very shallow and narrow, obtuse, gently furrowed, compressed; skin smooth; color yellow, with a bright blush laid thinly over the exposed cheek in streaks and splashes; dots numerous, greenish-russet, very small, obscure; flesh yellowish-white, granular under the skin, gritty at the center, melting, very juicy, subacid, aromatic, vinous; quality very good. Core large, open, with clasping core-lines; calyx-tube long, narrow, conical; seeds large, wide, long, plump, acute.

JARGONELLE (FRENCH)

1. Duhamel *Trait. Arb. Fr.* **2**:123. 1768. **2.** Prince *Pom. Man.* **1**:154. 1831. **3.** Downing *Fr. Trees Am.* 339. 1845. **4.** *Ibid.* 767. 1869. **5.** Leroy *Dict. Pom.* **2**:303, fig. 1869. **6.** Mathieu *Nom. Pom.* 237. 1889.

Bellissime d'Été. **7.** Duhamel *Trait. Arb. Fr.* **2**:203, Pl. XLII. 1768. **8.** Mas *Le Verger* **2**:193, fig. 95. 1866-73. **9.** Leroy *Dict. Pom.* **1**:216, fig. 1867. **10.** *Guide Prat.* 70, 235. 1876.

Cuisse Madame. **11.** Coxe *Cult. Fr. Trees* 181, fig. 11. 1817.

Red Muscadel. **12.** Lindley *Guide Orch. Gard.* 346. 1831.

Bassin. **13.** Hogg *Fruit Man.* 491. 1884.

Schönste Sommerbirne. **14.** Mathieu *Nom. Pom.* 280. 1889.

This old sort, very different from Jargonelle, is worthy of description only to distinguish it from the much better and older pear of the same name. A generation ago this French Jargonelle was much grown in America, but has given way to better sorts. The pears are handsome, but are poor in quality and are edible only a day or two after maturity as they quickly rot at the center and become dry and mealy toward the periphery.

The name Jargonelle is used in France to denote a group of pears. This fact accounts for the confusion which exists among the names and synonyms of several varieties of this class. The French Jargonelle is said to have originated in Anjou, a former province in France, where it was much cultivated and highly esteemed toward the end of the fifteenth century.

Tree large, vigorous, upright, the younger branches inclined to droop, very productive; branches stocky, dark reddish-brown; branchlets often curved and drooping, short, sprinkled with elongated, inconspicuous lenticels. Leaf-buds large, conical, appressed. Leaves oval, enlarged at the base; apex abruptly pointed; margin coarsely serrate; petiole long, thick. Flower-buds large, long-conic; flowers medium in size.

Fruit ripens in August and September; medium to sometimes large, 3½ in. long, 2½ in. wide, obtuse-pyriform to oblong-pyriform; stem 1 in. long, slender, obliquely inserted; cavity obtuse, very shallow; calyx small, open; lobes long, projecting; basin variable in depth, small, irregular, furrowed; skin smooth, glossy; color lemon-yellow, blushed with red on the sunny side, occasionally marbled with thin orange-russet about the neck; dots light greenish or russet; flesh white, coarse, juicy, sweet, aromatic; quality good. Core large; seeds dark brown,

small, narrow, long, often abortive.



JOSÉPHINE DE MALINES

1. McIntosh *Bk. Gard.* **2**:461. 1855. **2.** *Am. Pom. Soc. Rpt.* 68. 1862. **3.** *Pom. France* **2**: No. 50, Pl. 50. 1864. **4.** *Jour. Hort.* N. S. **14**:67. 1868. **5.** Downing *Fr. Trees Am.* 793, fig. 1869. **6.** Leroy *Dict. Pom.* **2**:310, fig. 1869. **7.** *Guide Prat.* 61, 282. 1876. **8.** *Jour. Hort.* 3rd Ser. **5**:565, fig. 96. 1882. **9.** Hogg *Fruit Man.* 599. 1884. **10.** Bunyard *Handb. Hardy Fr.* 182. 1920.

Joséphine von Mecheln. **11.** Dochnahl *Führ. Obstkunde* **2**:93. 1856. **12.** Mathieu *Nom. Pom.* 239. 1889. **13.** Gaucher *Pom. Prak. Obst.* No. 50, Pl. 31. 1894.

Malines. **14.** *Am. Pom. Soc. Cat.* 24. 1897.

This is another of the few good winter pears. The fruit-characters are so distinctive and meritorious that the variety should be grown in every home orchard, and it possesses much merit for commercial plantations. The fruits have a marked peculiarity. Cut through the shaded yellow-russet skin, flesh with a faint, rosy tint is displayed. Several red or rosy-fleshed pears are grown in Europe, but this is the only one described by American pomologists. The tree also, has a marked peculiarity; it thrives amazingly well on the white-thorn as well as on pear and quince stocks. But it is the quality of the fruits that commends the variety most highly. The flesh is buttery, juicy, sweet, and perfumed—pleasing in every character that gratifies the palate. The season is exceedingly variable, and is given by different pomologists from December to March and January to May. The fruits are not very pleasing in appearance, but the accompanying illustration scarcely does them justice in either size or color. In the orchard, the trees are satisfactory, but the nurserymen find them

rather difficult to grow, this, no doubt, being the chief reason for the apparent neglect of this splendid pear. The trees thrive in almost any soil or situation suitable to pears, and are everywhere prodigiously fruitful, hardy, and resistant to blight. The variety deserves wider recognition than it now receives.

This pear originated about 1830 in the seed beds of Major Espéren, the well-known pomologist of Mechlin (Malines), Belgium, who named it Joséphine de Malines in honor of his wife. It was introduced in America prior to 1850, and in 1862 was added to the fruit-list of the American Pomological Society, a place it has since retained.

Tree large, vigorous, spreading, tall, dense-topped, rapid-growing, hardy, very productive; trunk stocky; branches thick, shaggy, reddish-brown overlaid with gray scarf-skin, marked with few lenticels; branchlets thick, dull reddish-brown, smooth, glabrous, with small, raised, inconspicuous lenticels.

Leaf-buds short, obtuse, plump, appressed. Leaves 2¼ in. long, 1¼ in. wide, leathery; apex taper-pointed; margin finely serrate; petiole 1¾ in. long. Flower-buds short, plump, free; flowers early, 1⅜ in. across, white, occasionally tinged with pink, well distributed, average 7 buds in a cluster; pedicels ¾ in. long, slender, thinly pubescent.

Fruit ripe December to February; medium in size, 2½ in. long, 2⅜ in. wide, turbinate, inclined to truncate; stem long, very thick; cavity obtuse, shallow, narrow, slightly furrowed; calyx large, open; lobes short, broad, obtuse; basin narrow, obtuse, smooth; skin thick, tough, dull; color pale greenish-yellow, netted and patched more or less with russet; dots numerous, small, brown or russet, conspicuous; flesh light salmon, granular,

melting, buttery, very juicy, sweet, slightly aromatic; quality good. Core large, closed, axile, with clasping core-lines; calyx-tube short, wide; carpels pyriform; seeds large, wide, long, plump, acuminate.



KIEFFER

1. *Gard. Mon.* **22**:49, fig. 1880. **2.** *Am. Pom. Soc. Cat.* 38. 1883. **3.** *Jour. Hort.* 3rd Ser. **12**:131. 1886. **4.** *Garden* **68**:398. 1905. **5.** *Ibid.* **69**:68. 1906. **6.** *Cornell Sta. Bul.* **332**:483. 1913. **7.** *Country Gent.* **84**:26, fig. 1919.

Kieffer's Hybrid. **8.** *W. N. Y. Hort. Soc. Rpt.* 53. 1879.

Keiffer. **9.** Downing *Fr. Trees Am.* 3rd App. 179. 1881. **10.** Mathieu *Nom. Pom.* 240. 1889. **11.** *Am. Pom. Soc. Rpt.* 178. 1909.

Although the most pretentious cheat in the orchard, Kieffer is grown more commonly than any other pear in North America. Its popularity can be accounted for only by accepting Barnum's dictum that "Americans love to be fooled." Pears are grown to eat, but those of Kieffer are fit to eat only in culinary preparations, dire necessity alone compelling their consumption uncooked. Yet, pleased by a bright cheek and a fair form, regardless of the potato-like flavor, people buy and eat Kieffer pears and persist in doing so. There are several reasons why Kieffer is popular. No pear has been advertised so widely and so unqualifiedly, growers of trees often supplying virtues to the variety which Nature denies it, because of all pears the trees of Kieffer are most easily grown. Besides this virtue in the trees there are several others that commend the variety more highly. Thus, of all pears grown in America, the trees are uniformly the most vigorous, fruitful, endure heat best, are least susceptible to blight, and withstand best the ravages of San José scale. There are several faults, however; the trees are tender to cold, in some soils refuse to set fruit, are often self-sterile, and sometimes with the best of care bear only pears of small size. Worthless for dessert, much can be said for the fruits of Kieffer for culinary

preparation. Cooking removes the disagreeable natural taste of the raw pear, and leaves a good product. Canned, the pears retain their shape, color, and flavor well; therefore, and because white and inviting, canned Kieffers are preferred by commercial canners. Use in the cannery is the true place for Kieffer pears in regions where better sorts can be grown for dessert. Now that the first flush of popularity is past, it would seem a wise precaution on the part of pear-growers to grow this fruit chiefly for the cannery, supplying the demands for dessert pears with worthier varieties, although as long as consumers buy it to eat out of hand, growers cannot be blamed for growing it in commercial orchards.

The seed parent of Kieffer was the Sand pear of China. Peter Kieffer,[30] who lived at Roxborough, near Philadelphia, for many years grew the Chinese Sand pear and sold the trees for ornamental purposes. In his garden there were also trees of Bartlett. Among chance seedlings, Mr. Kieffer observed one of peculiar growth which he saved. This tree bore fruit first in 1863. Later, it was exhibited at the Massachusetts Horticultural Society, and finally at the Centennial Exposition where in 1876 it was named Kieffer. The variety was added to the fruit-list of the American Pomological Society in 1883.

> Tree of medium size, vigorous, upright, dense-topped, hardy, very productive; branches slender, nearly smooth, reddish-brown, covered with dull ash-gray scarf-skin, marked with few small lenticels; branchlets medium to long, reddish-brown mingled with green, smooth, slightly pubescent, with numerous, large, raised, very conspicuous lenticels.
>
> Leaf-buds small, short, obtuse, slightly

pointed, appressed. Leaves 3¼ in. long, 1¾ in. wide, oval, thick, leathery; apex taper-pointed; margin often finely serrate; petiole 1⅞ in. long. Flower-buds conical to pointed, free; flowers open early, 1⅝ in. across, fairly well distributed, varying from 3 to 11 buds in a cluster; pedicels 1⅛ in. long, thick, very slightly pubescent, green, rarely tinged red.

Fruit matures in late October and November; above medium to large, 2¾ in. long, 2¼ in. wide, oval, narrowing at both ends, symmetrical, uniform; stem 1 in. long, thick; cavity very small, smooth; calyx open; lobes separated at the base, short, narrow, acute; basin shallow, narrow, obtuse, nearly smooth; skin thick, tough, smooth; color yellow, blushed with dull red on the exposed cheek; dots numerous, small, russet, conspicuous; flesh yellowish-white, very granular and coarse, crisp, juicy, not sweet, often astringent; quality poor. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds wide, plump, acute.

KINGSESSING

1. *Mag. Hort.* **13**:450. 1847. **2.** *Ibid.* **19**:453, 516, fig. 32. 1853. **3.** *Am. Pom. Soc. Rpt.* 231. 1858. **4.** Downing *Fr. Trees Am.* 795. 1869.

A summing up of the characters of Kingsessing, as is so often the case with varieties of fruits, makes it appear a most desirable sort. Nevertheless, its culture does not make headway. Growers rate it as a “good pear,” but will not grow it, for the reason, no doubt, that it has no outstanding characters for any region, season, or purpose. As the pears grow on the grounds of the New York Agricultural Experiment Station they are a little under size for a good commercial fruit, and while the sweet, perfumed flavor is

pleasant, it lacks individuality. The variety is grown chiefly along the Atlantic Coast from Long Island to Maryland.

This is a natural seedling which sprang up in the family burial ground of Isaac Leech, Kingsessing, a suburb of Philadelphia, about 1833. The tree first fruited about 1843. Dr. Brincklé, who introduced the variety, thought from its close resemblance to Chapman that it was probably a seedling from it, or of its parent, the Petre, as trees of both these varieties stood in the vicinity of the Kingsessing. The American Pomological Society placed Kingsessing on its fruit-list in 1858 but dropped it in 1899.

Tree very large and vigorous, upright-spreading, dense-topped, rapid-growing, hardy, medium in yield; trunk very thick; branches very stocky, grayish-brown, sprinkled with numerous large lenticels; branchlets thick, long, glossy, smooth, glabrous, with numerous rather small, raised, conspicuous lenticels.

Leaf-buds large, long, conical, free. Leaves 2¼ in. long, 1⅜ in. wide; apex abruptly pointed; margin glandular, finely serrate; petiole 1¾ in. long. Flower-buds large, conical, free.

Fruit ripens in September and October; medium in size, 2⅜ in. long, 2⅛ in. wide, obovate-obtuse-pyriform; stem ½ in. long, thick, usually curved, fleshy at the point of insertion in the fruit; cavity obtuse, shallow, slightly furrowed, occasionally lipped; calyx partly open; lobes separated at the base, short, narrow, acute; basin shallow, gently furrowed, usually symmetrical; skin granular, tender, roughish; color yellow, sprinkled and netted with russet, with a thin brownish-red blush on the exposed cheek; dots numerous, grayish or russet, small, conspicuous; flesh white, granular, tender and

melting, sweet, aromatic; quality good. Core closed, with clasping core-lines; calyx-tube short, wide, conical; seeds wide, long, plump, acute.



KOONCE

1. *Ill. Hort. Soc. Rpt.* 159. 1889. **2.** *Ibid.* 55. 1895. **3.** *Am. Pom. Soc. Rpt.* 44. 1897. **4.** Budd-Hansen *Am. Hort. Man.* **2**:251. 1903. **5.** *Chico Nur. Cat.* 12. 1904. **6.** *Am. Pom. Soc. Cat.* 41. 1909. **7.** Ont. Dept. *Agr. Fr. Ont.* 168. 1914.

Koonce is a popular early variety grown rather commonly in nearly every pear region in the United States. It is listed by nearly all nurserymen. Its tree-characters are more notable than those of its fruits. The trees make a splendid showing in the nursery and are hardy and productive in the orchard, although of but medium size and rather straggling at maturity. The pears are better in quality than those of Early Harvest or Lawson, with which it often competes, but are hardly as attractive in appearance, being rather small and often irregular in shape. The color is unusually bright, especially on the red cheek. The pears decay quickly after maturity and are suitable only for home and local markets.

This pear originated in southern Illinois but no one seems to know by whom, or at what time, or in what locality in the State. The variety has been grown for more than thirty years. The American Pomological Society added Koonce to its list of fruits in 1909.

Tree medium in size and vigor, upright-spreading, scraggly, open-topped, hardy, productive; trunk shaggy; branches zigzag, dark brownish-red, covered with thick grayish scarf-skin, with few lenticels; branchlets thick, long, with long internodes, dull light brown, smooth, glabrous, sprinkled with small, raised, elongated lenticels.

Leaf-buds small, short, conical, pointed, plump, appressed; leaf-scars prominent. Leaves 2½ in. long, 1½ in. wide, stiff; apex taper-

pointed; margin glandular, finely serrate; petiole 1½ in. long. Flower-buds short, obtuse or conical, plump, free; flowers showy, 1¼ in. across, in dense clusters, average 5 buds in a cluster; pedicels ⅞ in. long, slender, pubescent.

Fruit ripens in August; medium in size, 2⅜ in. long, 2¼ in. wide, obovate-obtuse-pyriform, with unequal sides; stem 1¼ in. long, thick; cavity obtuse, shallow, narrow, compressed, lipped or often drawn up in a wrinkled fold about the base of the stem; calyx open; lobes separated at the base, narrow, acuminate; basin obtuse, gently furrowed; skin thick, tough, roughish; color pale greenish-yellow, with a dull reddish-brown blush spreading over the exposed cheek; dots numerous, very small, greenish-russet, conspicuous; flesh whitish, granular especially at the center, medium tender, juicy, aromatic, sweet but vinous; quality good. Core small, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds small, narrow, short, plump, acute.



LAMY

1. Ragan *Nom. Pear*, *B. P. I. Bul.* **126**:161. 1908.

Comte de Lamy. **2.** Kenrick *Am. Orch.* 141.

1841. **3.** Downing *Fr. Trees Am.* 371, fig. 158. 1845. **4.** *Gard. Chron.* 20, fig. 1846. **5.** Downing *Fr. Trees Am.* 727. 1869. **6.** *Jour. Hort.* N. S. **38**:359, fig. 52. 1880. **7.** Hogg *Fruit Man.* 553. 1884.

Poire Dingler. **8.** *Ann. Pom. Belge* **2**:69, Pl. 1854.

Beurré Curtet. **9.** *Pom. France* **2**: No. 77, Pl. 77. 1864. **10.** Leroy *Dict. Pom.* **1**:341, figs. 1867. **11.** *Guide Prat.* 65, 243. 1876.

Curtet's Butterbirne. **12.** Mathieu *Nom. Pom.* 200. 1889.

As the history shows, this is an old European pear which had its probationary period in America many years ago, and which never got out of the limbo of nurserymen's catalogs and collections. On the grounds of the New York Agricultural Experiment Station, however, the pears are so handsome and so delectable in quality that the variety seems quite worth while describing and illustrating among the major sorts. It is a splendid pear for the home orchard, but the tree is not large nor robust enough for a commercial plantation. A few nurserymen still list it.

This variety was raised from seed about 1828 by M. Bouvier, Jodoigne, Belgium. It was first named *Beurré Curtet* in honor of M. Curtet, a physician and professor at Brussels. The London Horticultural Society first obtained the variety under the name *Comte de Lamy*, by which name it has best been known in England. Lamy was early introduced to America where trees have long been found in collections.

Tree small, spreading, open-topped, hardy, productive; trunk slender, shaggy; branches

slender, shaggy, dull brown, overspread with thick scarf-skin, sprinkled with numerous lenticels; branchlets slender, curved, short, with short internodes, brown changing to reddish-brown on the newer growth, glossy, smooth, glabrous, with small, raised, conspicuous lenticels.

Leaf-buds small, short, conical, pointed, plump, free. Leaves 2¾ in. long, 1¾ in. wide, leathery; apex taper-pointed; margin finely serrate to nearly entire, tipped with few minute glands; petiole 1⅞ in. long, pinkish. Flower-buds large, thick, long, conical, very plump, free, singly as lateral buds or on very short spurs; flowers late, very showy, 1¾ in. across, in dense clusters, average 9 buds in a cluster; pedicels ⅝ in. long, thick, lightly pubescent.

Fruit matures in late October and early November; medium in size, 2⅛ in. long, 2 in. wide, obovate-obtuse-pyriform, often irregular and with unequal sides; stem 1⅛ in. long, thick; cavity almost lacking, very obtuse and shallow, narrow, russeted, often lipped; calyx open; lobes broad, acute; basin rather deep, obtuse or abrupt, gently furrowed, compressed; skin thin, smooth except for the russet dots, dull; color yellow, with a solid, dark red blush on the exposed cheek; dots numerous, large, brownish-russet, very conspicuous; flesh tinged with yellow, granular at the center, tender and melting, buttery, juicy, sweet, with a faint, vinous flavor, pleasantly aromatic; quality good to very good. Core large, closed, with clasping core-lines; calyx-tube short, very wide, conical; seeds large, wide, plump, acute.



LAWRENCE

1. Kenrick *Am. Orch.* 169. 1841. **2.** *Mass. Hort. Soc. Rpt.* 4. 1843. **3.** *Mag. Hort.* **10**:212. 1844. **4.** Downing *Fr. Trees Am.* 442. 1845. **5.** *Mag. Hort.* **12**:432, fig. 29. 1846. **6.** Hovey *Fr. Am.* **2**:13, Pl.

1851. **7.** *Am. Pom. Soc. Rpt.* 230. 1854. **8.** Downing *Fr. Trees Am.* 440, fig. 1857. **9.** Thomas *Am. Fruit Cult.* 480. 1897.

There is great diversity of opinion as to the value of Lawrence for a market pear, but no one denies it a place as one of the very best early winter pears for the home orchard. A generation ago it was held in high esteem as a market pear, but the more showy Kieffer, kept in cold storage, has elbowed the less conspicuous Lawrence off the fruit-stands and almost out of the markets. The tree is hardy, moderately vigorous and fruitful, an early, annual, and uniform bearer, and has the reputation of being one of the longest lived of all pear trees. The fruits are of but medium size, but are shapely in form, trim in contour, and are distinctive in shape because of the rounded, truncate stem end. In color, the pear is a bright, clean lemon-yellow marked with patches of russet and faintly blushed on the side to the sun. No yellow pear is more attractive. The fruits come in season in early winter and have the excellent character of keeping well under ordinary care for a full month or longer. The melting flesh abounds with a rich, sugary, perfumed juice, by virtue of which it is justly esteemed as the best-flavored pear of its season. Lawrence finds congenial soils and climates in nearly every part of New York, and should have a place in every home orchard in the State.

Lawrence is a native of Flushing, Long Island, and was first introduced to growers by Wilcomb and King of Flushing, who sent specimens of it in 1843 to the Massachusetts Horticultural Society, saying that it appeared to be a cross between the old Saint Germain and White Doyenné, “as it resembles both of them in wood, foliage, and fruit, and there is no other variety in the neighborhood.” The variety

rapidly found favor among pear growers and was soon widely disseminated. The American Pomological Society added Lawrence to its fruit-catalog in 1854.

Tree of medium size, vigorous, spreading, with drooping branches, very hardy, productive; trunk shaggy; branches smooth, zigzag, reddish-brown mingled with ash-gray scarf-skin, with numerous large lenticels; branchlets reddish-brown, glossy, smooth, glabrous, with slightly raised, conspicuous lenticels.

Leaf-buds short, obtuse, plump, nearly free. Leaves 2½ in. long, 1¼ in. wide, oval, leathery; margin finely serrate; petiole 1¾ in. long, slender; stipules rudimentary. Flower-buds hardy, conical or pointed, free; flowers open early, 1⅜ in. across, in rather dense clusters, from 8 to 12 buds in a cluster; pedicels ⅞ in. long, lightly pubescent, greenish.

Fruit ripe November to December; medium in size, 2⅝ in. long, 2⅛ in. wide, uniform in size and shape, obovate-obtuse-pyriform, generally symmetrical; stem 1 in. long, thick, slightly curved; cavity small, obtuse, shallow, narrow, russeted, furrowed and irregular, often lipped; calyx large, partly open; lobes separated at the base, long, broad, acute; basin wide, obtuse, furrowed and sometimes corrugated; skin thick and granular, tough, roughish; color lemon-yellow, marked with occasional patches of russet and with a faint russet-red blush on the exposed cheek; dots numerous, small, russet, inconspicuous; flesh yellowish-white, firm, granular, tender and melting when fully mature, juicy, rich, sweet; quality very good. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, long, plump, acute.

LAWSON

1. *Rural N. Y.* **43**:651, fig. 385. 1884. **2.** *Gard. Mon.* **27**:282. 1885. **3.** *Rural N. Y.* **44**:693. 1885. **4.** *Gard. & For.* **5**:414. 1892. **5.** Van Lindley *Cat.* 22. 1892. **6.** *Am. Pom. Soc. Cat.* 36. 1899. **7.** Ont. Dept. Agr. *Fr. Ont.* 168. 1914. **8.** Cal. Com. Hort. *Pear Grow. Cal.* **7**:266, fig. 67. 1918.

Comet. **9.** *Gard. Mon.* **27**:144. 1885.

Cometbirne. **10.** Mathieu *Nom. Pom.* 198. 1889.

Of all early pears, the fruit of Lawson best satisfies the eye for bright colors. It is as brightly colored as the brilliant Vermont Beauty or as Mount Vernon. Another outstanding character is the small core, which, though the pears ripen early and quickly, seldom softens unduly. The pears are sometimes nearly or quite seedless. Unfortunately, the fruits are often irregular in shape, and in quality are never more than mediocre. The tree is fairly healthy, vigorous, hardy, and free from blight, and is characterized by its tall, upright growth. Although grown for more than a hundred years in New York, the variety has never made headway in this State, but seems to be attracting much attention on the Pacific slope.

This pear originated on the farm of a Mr. Lawson in Ulster County, New York, about 1800, judging from the appearance of the original tree which was standing in 1900. The variety was introduced toward the end of the nineteenth century under the name *Comet* by reason of its color, so that it is sometimes known as *Lawson Comet*. The American Pomological Society added Lawson to its fruit-catalog in 1899.

Tree medium in size, vigorous, upright, dense-

topped, very productive; branches slender, zigzag, reddish-brown overlaid with grayish scarf-skin, marked with numerous raised, large lenticels; branchlets slender, very long, with characteristically long internodes, rough, zigzag, marked with numerous large, raised, conspicuous lenticels. Leaves 3¼ in. long, 1¾ in. wide; apex abruptly pointed; margin glandless, serrate; petiole 2 in. long. Flowers early, showy, 1½ in. across, in dense clusters, 6 or 8 buds in a cluster; pedicels 1 in. long, thick.

Fruit ripens in August; large, 2¾ in. long, 3¼ in. wide, varies from obovate-obtuse-pyriform to globular-obtuse-pyriform, with unequal sides; stem ⅞ in. long, thick, curved, woody; cavity very small and narrow, often with a lip drawn up around one side of the stem; calyx partly open; lobes narrow, often reflexed; basin narrow, obtuse, gently furrowed; skin thin, tender, smooth; color pale yellow, overspread on the exposed cheek with a bright red blush; dots numerous, small, greenish or russet, obscure; flesh whitish or often salmon-color, firm, tough, medium juicy, lacking sweetness; quality poor. Core unusually small, closed, with clasping core-lines; calyx-tube short, wide; seeds short, wide, plump, obtuse, few in number.



LE CONTE

1. *Ga. Hort. Soc. Rpt.* 8, 29. 1878. **2.** *Ia. Hort. Soc. Rpt.* 303. 1879. **3.** *Am. Pom. Soc. Cat.* 38. 1883. **4.** *Gard. Mon.* **27**:282. 1885. **5.** *Ga. Hort. Soc. Rpt.* 55. 1885. **6.** Black *Cult. Peach & Pear* 234. 1886. **7.** *Cornell Sta. Bul.* **332**:484. 1913. **8.** Ont. Dept. Agr. *Fr. Ont.* 169. 1914.

Le Conte is a hybrid between the Chinese Sand pear and a European sort, therefore similar in parentage to Kieffer which it greatly resembles in both tree and fruit. The fruits are rather poorer in quality than those of Kieffer, if that be possible for an edible fruit, and the tree is in no way superior to that of its better-known rival, but seems to succeed better in warm climates and light soils. There is, therefore, a place for Le Conte in the South, and possibly on parts of Long Island, if a pear is wanted for culinary purposes only. The fruits sometimes rot badly at the core, and should usually be harvested as soon as they attain full size. The trees are more susceptible to blight than those of Kieffer. In the South, the trees are often, if not usually, propagated from cuttings.

Le Conte originated in America, and is probably a hybrid between the Chinese Sand pear and some native. It is supposed to have been carried from Philadelphia to Georgia about 1850 by Major Le Conte, and has since been extensively cultivated in the southern States for northern markets. In 1885 it was recommended by the Georgia Horticultural Society for cultivation in the middle region of that State. The American Pomological Society added Le Conte to its fruit-catalog in 1883.

Tree medium in size, vigorous, upright, very productive, a regular bearer; branches strongly zigzag, brownish-red mingled with green and covered with scarf-skin; branchlets thick, reddish-

brown mingled with green, smooth, pubescent on the new growth which later becomes glabrous, with numerous very small, conspicuous, raised lenticels.

Leaf-buds small, short, pointed, appressed. Leaves 3¼ in. long, 1½ in. wide, long-ovate or long-oval, leathery; apex taper-pointed; margin finely serrate; petiole pale green, glabrous. Flower-buds small, short, conical, plump, free, arranged singly on very short spurs; flowers open very early, 1¼ in. across, in dense clusters, 7 to 10 buds in a cluster; pedicels 1 in. long, slender, lightly pubescent, pale green.

Fruit ripe late October to November; large, 3 1/16 in. long, 2⅝ in. wide, uniform in size and shape, roundish-oval, tapering at both ends, ribbed, symmetrical; stem 1⅛ in. long, very thick, often curved; cavity obtuse, very shallow and narrow, smooth, slightly furrowed and wrinkled, often compressed; calyx partly open; lobes usually dehiscent, separated at the base, short, narrow, acute; basin usually very deep, abrupt, gently furrowed; skin thick, tough, smooth; color pale yellow, occasionally marked with russet; dots numerous, small, russet, conspicuous; flesh white, firm, granular, stringy, tender, juicy, sweet, with a strong and disagreeable flavor; quality poor. Core very large, closed, axile, with meeting core-lines; calyx-tube short, wide, broadly conical; seeds large, 2 in each carpel, wide, long, very plump, acute.

LE LECTIER

1. Mathieu *Nom. Pom.* 246. 1889. **2.** *Guide Prat.* 95. 1895. **3.** *Rev. Hort.* 466. 1899. **4.** *Garden* **59**:14, 93, 124. 1901. **5.** *Soc. Nat. Hort. France Pom.* 420, fig. 1904. **6.** *Cat. Cong. Pom. France* 287, fig. 1906.

In size and beauty of fruit, Le Lectier surpasses most of its associates, and the quality is first rate in soils and climates to which the variety is suited. Unfortunately the tree, while very satisfactory in some situations, is capricious to both soils and climates, and is seldom at home on this side of the Atlantic. The season is December and January, when good pears are scarce, and it would seem that the fine, large fruits of this pear would be most acceptable for either home or market if it could be made to thrive. In Europe, it grows best on warm, rich soils.

Auguste Lesueur, a horticulturist at Orléans, France, obtained this late winter pear about 1882 as a cross between Bartlett and Fortunée. It was named after Le Lectier, the great pomologist of Orléans, who was growing in the year 1628 about 260 varieties of pears. The variety was introduced about 1889. In France, Le Lectier has been described as greatly superior in flavor, aroma, and sweetness to varieties of the same class having established reputations. In 1894, the Royal Horticultural Society of London recommended this variety for cultivation in England.

Tree medium in size, vigorous, upright, dense-topped, very productive; trunk and branches medium in thickness and smoothness; branchlets thick, curved, light brownish-red, tinged with green and overspread with grayish scarf-skin, glabrous, sprinkled with numerous raised, conspicuous lenticels.

Leaf-buds very small, short, pointed, plump, free. Leaves 2⅞ in. long, 1½ in. wide, thick; apex taper-pointed; margin glandular, finely serrate; petiole 2¼ in. long, slender. Flower-buds short, conical, plump, free, singly on very short spurs; flowers showy, 1½ in. across, 8 or 10 buds in a

cluster; pedicels ⅞ in. long.

Fruit ripens December to January; large, elongated-obovate-pyriform, often with a narrow neck; stem slender, rather short, enlarged at both ends, inserted obliquely; cavity irregular, often lipped; calyx variable in size, partly open; basin variable in size, abrupt, irregular; skin glossy, thin, with uneven surface; color yellow, mottled and faintly blushed on the exposed cheek with yellowish-bronze; dots inconspicuous, small; flesh white, fine-grained, melting, juicy, sweet, pleasantly aromatic; quality very good.


LÉON LECLERC (VAN M



LÉON LECLERC (VAN MONS)

1. *Mass. Hort. Soc. Rpt.* 3. 1843. **2.** Downing *Fr. Trees Am.* 419, fig. 192. 1845. **3.** Hovey *Fr. Am.* **1**:9, Pl. 1851. **4.** *Ann. Pom. Belge* **5**:51, Pl. 1857. **5.** *Am. Pom. Soc. Rpt.* 70. 1862. **6.** *Pom. France* **1**: No. 29, Pl. 29. 1863. **7.** *Jour. Hort.* N. S. **10**:366. 1866. **8.** Mas *Le Verger* **3**: Pt. 1, 127, fig. 62. 1866-73. **9.** Leroy *Dict. Pom.* **2**:722, fig. 1869. **10.** *Jour. Hort.* 3rd Ser. **1**:573, fig. 103. 1880. **11.** *Cat. Cong. Pom. France* 361, fig. 1906.

Van Mons Butterbirne. **12.** Lauche *Deut. Pom.* **II**: No. 65, Pl. 65. 1883. **13.** Mathieu *Nom. Pom.* 292. 1889.

A century ago this pear was being heralded in Europe as the best of all pears, and shortly afterward was introduced into the United States with highest praise. The variety is still popular in Europe, but its reputation there is not sustained here. The pear deserves a place among major varieties only because it fills a particular niche in the pear season, the crop coming in season between late fall and early winter at a time when there are few other good varieties. Were it not for one serious fault, however, the variety might take high rank in America. The fault is great susceptibility to the scab fungus. After Flemish Beauty, no other variety suffers as much both in fruit and foliage. Well grown in a congenial environment, on standard or quince stock, the pears are often as large as those of Duchesse d'Angoulême, with which they compare rather closely in shape. On well-grown specimens, also, the color is rich and beautiful. The flavor is sprightly and refreshing, which, with good flesh-characters, give the variety high rank for

quality. There are no remarkable characters in the trees to recommend them, although they are quite up to the average in all characters either on pear or quince stocks. They are said to prefer a rich, deep soil. The variety is suitable only for collections.

This pear was obtained by M. Léon Leclerc, a distinguished pomologist living at Laval, France, who dedicated it to his friend Van Mons. Desiring to couple his own name with that of his friend, he gave it the name of *Van Mons Léon Leclerc*, by which appellation it has been known by most authors. The variety first fruited in 1828. There has been a good deal of confusion as to the identity of this pear, owing to the fact that Van Mons raised a pear in 1816 which he dedicated to Léon Leclerc. The proper name of the latter pear is *Léon Leclerc de Laval*. There is also a *Léon Leclerc de Louvain*. The variety under discussion was fruited in this country previous to 1843 by Marshall P. Wilder. The American Pomological Society added the variety to its fruit-catalog in 1862 but dropped it in 1869.

Tree medium in size, vigorous, spreading, open-topped, productive; trunk shaggy; branches roughish, reddish-brown, overspread with heavy, dull scarf-skin, with conspicuous, numerous, large lenticels; branchlets very slender and curved, short, with short internodes, light brown streaked with gray and tinged with green, dull, smooth, glabrous, with numerous small, conspicuous, raised lenticels.

Leaf-buds very small, short, pointed, appressed. Leaves 1½ in. long, 3¼ in. wide, leathery; apex taper-pointed; margin glandless, entire; petiole 1½ in. long, glabrous, reddish-green. Flower-buds small, short, conical, plump, free, singly on short spurs; flowers showy, 1¼ in.

across, in dense racemes, 7 or 8 buds in a cluster; pedicels ⅝ in. long, pubescent.

Fruit ripe in late September and October; large, 3⅜ in. long, 2¼ in. wide, oblong-pyriform, tapering to a very long, narrow neck; stem 1 in. long, thick, curved; cavity very small, compressed, usually lipped; calyx large, open; lobes separated at the base, broad, acute; basin shallow, narrow, obtuse, symmetrical; skin thick, tough, roughened by russet specks; color dull yellow, covered with dots and tracings of russet and occasionally with a faint russet-red blush; dots numerous, small, russet, conspicuous; flesh granular under the skin, nearly melting, juicy, subacid or with a peculiar sprightliness; quality good. Core large, closed, with clasping core-lines; calyx-tube short, narrow, conical; seeds large, wide, long, acute.





LINCOLN

1. *Mass. Hort. Soc. Rpt.* 88. 1845. **2.** *Ill. Hort. Soc. Rpt.* 196, Pls. 1894. **3.** *Mich. Hort. Soc. Rpt.* 141. 1894. **4.** *Ill. Hort. Soc. Rpt.* 42. 1889. **5.** *Rural N. Y.* **48**:754, figs. 275 and 276. 1889. **6.** *Am. Pom. Soc. Cat.* 36. 1899. **7.** Budd-Hansen *Am. Hort. Man.* **2**:253. 1903.

Nearly a hundred years old without having received favorable mention from pear growers, Lincoln has been brought from the limbo of lost fruits in recent years to take high rank in the list of pears for the Mississippi Valley. The variety is spoken of in such superlative terms for that region that judging from its behavior in New York, it would seem that western pear-growers give it attributes which Nature denies it. At best, in the East, the fruits are but mediocre in appearance and quality, falling below those of a dozen other varieties of the same season whether judged by the eye or the palate. In Illinois and Missouri, however, the fruits are spoken of as the handsomest and best. These are not regions in which many good pears grow, since the cold of winter, heat of summer, and pear-blight take toll from all but pears of the strongest constitution. Lincoln seems to possess a constitution to withstand these ills. At its best, the fruits of Lincoln seem comparable to those of Bartlett, which the western admirers of the variety say it resembles. In New York, comparisons of the fruits are all in favor of Bartlett, as are the trees in all characters excepting hardiness to heat and cold, and resistance to blight. The variety is valuable only in the Middle West.

This pear had its origin in a seedling grown in the spring of 1835 by Mrs. Maria Fleming, Corwin, Illinois, The original tree proved to be a vigorous grower as well as a heavy cropper, and was ultimately given the name of Lincoln. Augustine and Company of Normal, Illinois, propagated and distributed the variety about 1895. Young trees of the variety appear to be vigorous growers, free from blight and of high quality. The American Pomological Society added Lincoln to its list of fruits in 1899.

Tree large, vigorous, upright-spreading, open-topped, hardy, very productive; trunk stocky, smooth; branches zigzag, greenish-brown, partly overspread with thin gray scarf-skin, marked on the younger wood with very numerous large, round lenticels; branchlets slender, very long, willowy, brownish-green overlaid with thin gray, dull, the new growth reddish-green, with numerous large, roundish, raised lenticels.

Leaf-buds very small, short, pointed, appressed. Leaves 3½ in. long, 1½ in. wide, stiff; apex variable; margin glandless, finely serrate; petiole 2⅝ in. long, glabrous, tinged with red; stipules very long and slender, pinkish. Flower-buds small, short, conical, free, singly on short spurs; flowers 1⅜ in. across, well distributed, average 5 buds in a cluster; pedicels 1⅛ in. long, slender, pubescent.

Fruit matures in late August and September; medium in size, about 2¼ in. in length and width, roundish, with an obtuse neck, tapering very slightly; stem 1⅛ in. long, slender; cavity a slight, narrow depression, occasionally lipped; calyx large, open; lobes separated at the base, long, acuminate; basin shallow, obtuse, smooth, symmetrical; skin thick, tender, roughish; color yellow, sprinkled with few russet lines and nettings; dots numerous, small, russet, conspicuous; flesh tinged with yellow, firm, coarse and granular, tender, very juicy, sweet, aromatic, pleasing but not richly flavored; quality good. Core unusually large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, very wide, long, plump, acuminate.

LINCOLN CORELESS

1. Parry *Cat.* 9, fig. 1891. **2.** *Ann. Hort.* 185. 1892. **3.** *Ill. Hort. Soc. Rpt.* 137. 1894. **4.** *Ibid.* 52, 178. 1896. **5.** *Rural N. Y.* **64**:256. 1905.

The product of Lincoln Coreless is worthless for dessert, and but a coarse makeshift for culinary purposes. The variety receives attention only because the pear is a monstrosity and a curiosity. The fruits are enormous in size, outweighing all other pears unless it be those of the Pound. They are unique in having a very small core and few or sometimes no seeds. They are further characterized by very late maturity, ripening later than those of any other pear on the grounds of this Station and keeping until April. While usually rather dull greenish-yellow in color, the cheek is often enlivened by a bright blush which makes the fruits rather attractive despite their grossness. The catalogs describe the trees as "blight proof," but they blight on the grounds of this Station. The variety is worth growing only as an interesting curiosity.

According to William Parry, Parry, New Jersey, Lincoln Coreless originated in Lincoln County, Tennessee, near the Alabama line, about 1830. The original tree was rated as productive and free from blight, and young trees propagated from it have been unusually healthy and vigorous. The variety was introduced about 1890 by William Parry.

> Tree small, vigorous, upright, very dense, pyramidal, hardy, an uncertain bearer; trunk shaggy; branches smooth, zigzag, reddish-brown mingled with ash-gray, marked with small lenticels; branchlets short to medium, dull brown, smooth, glabrous, with conspicuous lenticels.

Leaf-buds large, obtuse, plump, appressed. Leaves 3 in. long, 1⅝ in. wide, elongated-oval, leathery; apex taper-pointed; margin finely serrate; petiole 1½ in. long, reddish; stipules very long. Flower-buds short, obtuse, plump, free; flowers 1¾ in. across, very large and showy, average 6 buds in a cluster; pedicels 1⅝ in. long, thick, pubescent, pale green.

Fruit ripe in February; very large, 4¾ in. long, 3 in. wide, uniform in size, obovate-acute-pyriform, somewhat ribbed, with unequal sides; stem 1⅜ in. long, thick, curved; cavity obtuse, shallow, narrow, russeted, furrowed, often lipped; calyx open, large; lobes separated at the base, narrow, acute; basin very shallow, narrow, obtuse, furrowed; skin very thick, tough, coarse and granular, smooth, dull; color greenish-yellow, with a handsome blush on the cheek exposed to the sun; dots many, brownish-russet, very conspicuous; flesh yellowish-white, very firm, granular at the core, crisp, tough, medium juicy, rather bitter and astringent; quality poor. Core closed, with clasping core-lines; calyx-tube long, wide, conical; seeds few, narrow, often abortive, acute.



LOUISE BONNE DE JERSEY

1. Kenrick *Am. Orch.* 148. 1841. **2.** *Am. Pom. Soc. Rpt.* 53. 1852. **3.** Field *Pear Cult.* 218, fig. 81. 1858.

Louise Bonne of Jersey. **4.** Downing *Fr. Trees*

Am. 397, fig. 174. 1845. **5.** Hovey *Fr. Am.* **1**:39, Pl. 1851. **6.** *Jour. Hort.* N. S. **38**:161, fig. 26. 1880. **7.** Hogg *Fruit Man.* 606. 1884.

Gute Louise von Avranches. **8.** Dochnahl *Führ. Obstkunde* **2**:138. 1856. **9.** Mathieu *Nom. Pom.* 229. 1889.

Bonne Louise d'Avranches. **10.** *Ann. Pom. Belge* **6**:29, Pl. 1858. **11.** *Pom. France* **1**: No. 21, Pl. 21. 1863. **12.** Mas *Le Verger* **3**: Pt. 1, 67, fig. 32. 1866-73. **13.** Leroy *Dict. Pom.* **1**:482, fig. 1867. **14.** *Guide Prat.* 286. 1876.

Louise. **15.** *Am. Pom. Soc. Cat.* 23. 1897. **16.** Ont. Dept. Agr. *Fr. Ont.* 170, fig. 1914.

Now known in America as Louise, a name given it by the American Pomological Society, this variety is described under the name given it in England to distinguish it from at least eight other varieties having Louise as the whole or a part of the name. The pear is an old one, having many excellent qualities of fruit and tree, which, however, are not sufficiently above the average to give it high place in the list of pears for the market. The pears are medium to large, handsome, of excellent quality, and keep and ship well. These qualities have given it some preëminence as a pear for the export trade. The trees are precariously hardy and somewhat subject to blight, but very vigorous, productive, and long-lived. In Europe, the testimony of prominent pomologists agrees that the fruits are better and the trees more productive when worked on the quince, and in America the variety is considered one of the best for dwarfing. This pear is a standard one for home collections, and finds favor in many commercial orchards in New York.

The parent tree of this pear was raised from seed about 1780 by M. de Longueval, Avranches,

Normandy. Some authorities say that the variety was first named Bonne de Longueval; others, that M. de Longueval immediately dedicated the pear to his wife and called it *Bonne Louise de Longueval*. Later still, the Pomological Congress adopted the name of *Bonne Louise d'Avranches*, by which it became more generally known, though in England, it rather unfortunately became widely disseminated as *Louise Bonne de Jersey*, having, presumably, found its way there through the Channel Islands. The variety was brought to the United States early in the nineteenth century, and in 1852 was entered in the recommended list of fruits of the American Pomological Society. In 1897, this Society shortened the name to Louise.

Tree large, vigorous, upright, very tall, dense-topped, hardy, productive, long-lived; trunk stocky; branches slightly zigzag, reddish-brown mingled with very dark grayish scarf-skin, with numerous raised lenticels; branchlets slender, long, dark reddish-brown, nearly smooth, glabrous, with few small, slightly raised lenticels.

Leaf-buds pointed, semi-free. Leaves 3¼ in. long, 1¾ in. wide, much curled under at the margins, oval, leathery; apex slightly taper-pointed; margin glandless, finely serrate; petiole 1½ in. long, slender. Flower-buds small, conical or pointed, free; flowers with a disagreeable odor, 1½ in. across, white or tinged with pink along the edge of the petals, averaging 6 buds in a cluster; pedicels 1½ in. long, slender, pubescent, light green.

Fruit matures in October; medium to large, 2⅞ in. long, 2¼ in. wide, uniform in size and shape, oblong-pyriform, somewhat irregular, with unequal sides; stem 1 in. long, slender, usually curved; cavity obtuse, very shallow and very

narrow, furrowed and wrinkled, often lipped, the flesh folded up around the stem; calyx open, large; lobes broad, acute; basin obtuse, furrowed and uneven; skin granular, smooth; color pale yellow, marked on the exposed cheek with a dull red blush and with streaks of russet; dots numerous, small, grayish or russet, conspicuous; fruit yellowish-white, somewhat granular, tender and melting, very juicy, sweet and vinous, aromatic, rich; quality very good. Core closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide, long, plump, acute.

LUCY DUKE

1. *Am. Pom. Soc. Rpt.* 153. 1885. **2.** *W. N. Y. Hort. Soc. Rpt.* 65. 1889. **3.** Van Lindley *Cat.* 22, Pl. 1892. **4.** *N. Y. Sta. Bul.* **364**:182. 1913.

Why Lucy Duke is neglected is hard to see. Tree and fruit are highly praised, Charles Downing thought the pear "not quite so fine as a first-class Seckel, but I must aver it is not far behind." The pear has a rich, juicy, spicy, melting flesh that makes it one of the best. In form, the fruits resemble those of Bartlett, which is probably one of the parents; they are of but medium size, but are of a beautiful golden-russet color, which makes them as handsome as the handsomest. The skin is thick and the pears stand shipping well. The variety can be recommended for home and local markets, but the trees are a little too unproductive and too irregular in bearing for commercial orchards. The tree is hardy but only moderately vigorous and resembles Winter Nelis, supposed to be the other parent, in habit of growth. The variety is relatively free from blight.

Lucy Duke was grown about 1880 by Mrs. Lucy Duke, Beaufort County, North Carolina, from seed of

a Bartlett pear which she had received from California, Its tree-characters are so nearly like those of Winter Nelis that the other parent is supposed to be that variety. Lucy Duke was introduced about 1892 by J. Van Lindley, Pomona, North Carolina.

Tree medium to large, variable in vigor, upright becoming slightly spreading, dense-topped, hardy, productive; trunk shaggy; branches thick, zigzag, marked by numerous elongated lenticels; branchlets strongly curved, with short internodes, dark brownish-red mingled with green, mottled with scarf-skin, smooth, glabrous, with small, elongated or roundish, conspicuous, raised lenticels.

Leaf-buds small, short, pointed, plump, usually free; leaf-scars prominent. Leaves 3 in. long, 1⅜ in. wide, thin; margin occasionally glandular, finely serrate or entire; petiole 1½ in. long, slender. Flower-buds large, long, pointed, plump, free, singly on short spurs; flowers open late, with an unpleasant odor, 1⅝ in. across; pedicels 1⅛ in. long.

Fruit ripens in late October and November; medium in size, acute-pyriform to oblong-pyriform, symmetrical; stem short, thick, curved; cavity obtuse, shallow, narrow, russeted, often wrinkled and occasionally lipped; calyx large, open, rounded and with a deeply-set center; basin obtuse, smooth, symmetrical; skin very tough, roughened with thick russet; color greenish-yellow, usually entirely overspread with solid, dark russet, changing to golden russet on the cheek exposed to the sun, with mottlings and flecks of russet; dots numerous, small, russet, obscure; flesh yellowish-white, fine, melting, rich, juicy, sweet; quality very good. Core large, closed, axile; calyx-tube short, wide, broadly conical; seeds large, wide, long, plump, acute.



MADELEINE

1. Duhamel *Trait. Arb. Fr.* **2**:124, Pl. IV. 1768. **2.** *Pom. Mag.* **2**:51, Pl. 1829. **3.** Prince *Pom. Man.* **1**:13. 1831. **4.** Downing *Fr. Trees Am.* 341, fig.

138. 1845. **5.** *Proc. Nat. Con. Fr. Gr.* 51. 1848. **6.** Elliott *Fr. Book* 331, fig. 1854. **7.** Mas *Le Verger* **2**:59, fig. 28. 1866-73. **8.** *Guide Prat.* 62, 287. 1876.

Sainte Madelaine. **9.** Knoop *Pomologie* 76, Tab. 1, fig. 1771.

Grüne Sommer-Magdalene. **10.** Dochnahl *Führ. Obstkunde* **2**:150. 1856. **11.** Lucas *Tafelbirnen* 47, fig. 1894.

Citron des Carmes. **12.** *Pom. France* **3**: No. 101, Pl. 101. 1865. **13.** Leroy *Dict. Pom.* **1**:563, fig. 1867. **14.** Hogg *Fruit Man.* 548. 1884. **15.** *Cat. Cong. Pom. France* 212, fig. 1906.

Grüne Magdalene. **16.** Mathieu *Nom. Pom.* 228. 1889.

Madeleine has long been a dependable summer variety, the crop of which ripens just before that of Bloodgood. Many consider it the best very early summer pear, and if the product alone were to be considered it might well be called the best, but, unfortunately, the faults of the trees more than offset the virtues of the fruits. The pears are attractive in appearance, and very good in quality; but their season is short, their skins are tender, and the flesh quickly softens at the core. While the trees are productive, they are not resistant to blight, do not hold their crop well, are tender to cold, and are short-lived. The variety is worth planting only for the sake of succession in crop, and in large collections of pears. The variety is recommended on the Pacific slope for local markets.

The Madeleine pear is of ancient and somewhat uncertain origin. It was cultivated by M. Le Lectier in his garden at Orléans in 1628, but previously no other author had made mention of it, though M.

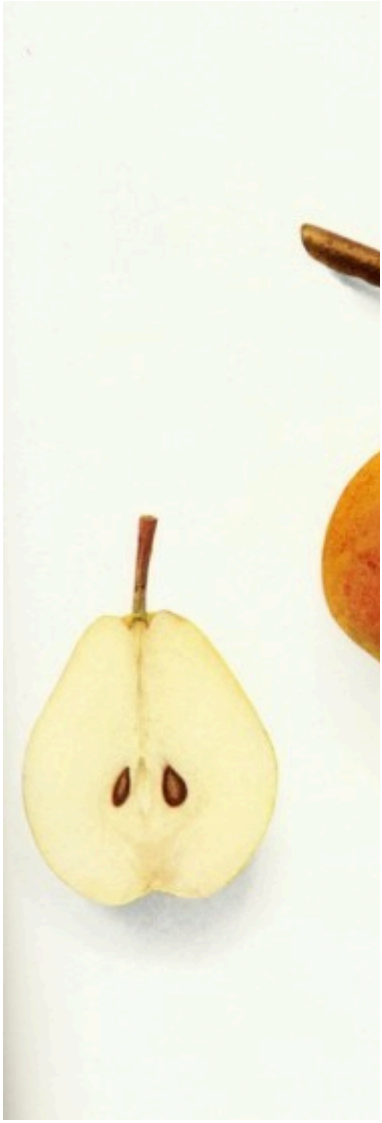
Leroy, writing in 1867, deemed it presumable that it had originated in France. Besides its original names this pear has been known by some fifty others in different localities and at different times, but Madeleine is now its recognized name in this country. In England, it is known as the *Citron des Carmes*. When and by whom it was introduced to America is not clear, but it was a standard variety as early as 1831 when Prince first described it. At the national convention of fruit-growers held in 1848, Madeleine was recommended for general cultivation, and ever since this time the variety has appeared in the fruit-catalog of the American Pomological Society.

Tree large, vigorous, upright, open-topped, tender, productive; trunk shaggy; branches zigzag, light greenish-brown covered with gray scarf-skin; branchlets slender, long, reddish-brown mingled with green, mottled with ash-gray near the tips, smooth, glabrous, with small, raised, conspicuous lenticels.

Leaf-buds small, very short, pointed, appressed. Leaves 3 in. long, 1½ in. wide, thin; apex taper-pointed; margin glandless, finely serrate; petiole 1¾ in. long, glabrous, reddish-green. Flower-buds small, thick, short, conical, plump, free, distributed as lateral buds or on very short spurs; flowers showy, 1⅜ in. across, in dense clusters, average 11 buds in a cluster; pedicels 1¼ in. long, slightly pubescent.

Fruit ripens in early August; inferior in size, 2⅛ in. long, 2 in. wide, roundish-obtuse-pyriform; stem 1½ in. long, thick, curved; cavity very shallow and narrow, or lacking, the flesh folded in a lip on one side of the stem; calyx partly open; lobes separated at the base, short, narrow, acuminate; basin shallow, narrow,

obtuse, gently furrowed, symmetrical; skin thin, smooth, very tender; color dull green, occasionally with a faint, dotted, brownish blush; dots numerous, greenish, obscure; flesh slightly tinged yellow, granular at the center, tender and melting, very juicy, sweet, vinous; quality good to very good. Core closed, with clasping core-lines; calyx-tube short, wide, conical; seeds wide, short, plump, acuminate.



MARGARET

1. *Horticulturist* **21**:172, 245, fig. 80. 1866. **2.** *Am. Pom. Soc. Rpt.* 53. 1869. **3.** Downing *Fr. Trees*

Am. 811. 1869. **4.** *Mo. Hort. Soc. Rpt.* 35, 36. 1890. **5.** *Guide Prat.* 68, 279. 1895.

Mary. **6.** *Horticulturist* **21**:78, figs. 43 and 44. 1866.

The fruits of Margaret are early and attractive in color and shape. This is about all that can be said for them, as they run small in size, and in neither flesh nor flavor can they compete with the product of several other varieties of the same season. The trees are hardly more desirable than the fruits, since they are tender to cold, blight badly, and are short-lived, seldom attaining full size. Despite these defects of fruit and tree, the variety is a one-time favorite still rather commonly planted. Better summer pears can be found for New York, and for almost every part of the country.

In the middle of the nineteenth century, Christopher Wiegel, a German nurseryman of Cleveland, Ohio, planted some seeds which he believed to have been from a Seckel pear. Out of the trees grown from these he selected two for further trial "because of their early coming into bearing, their upright, vigorous habits of growth, profuse bearing, and good quality of fruit." In 1866, Mr. Wiegel named one of these *Mary* but later changed the name to Margaret.

> Tree medium in size, vigorous, spreading, somewhat drooping, open-topped, productive; trunk shaggy; branches brown mingled with much red, overspread with thin gray scarf-skin, marked by numerous lenticels; branchlets slender, long, with long internodes, light reddish-brown, streaked with ash-gray scarf-skin, glossy, smooth, glabrous except on the newer growth, with numerous small, roundish, raised, conspicuous lenticels.

Leaf-buds small, very short, pointed, appressed. Leaves 3 in. long, 1¾ in. wide, thin; margin tipped with few pinkish glands, finely serrate; petiole 1¾ in. long, green; stipules of medium size. Flower-buds small, short, conical, pointed, free, singly on short spurs; flowers showy, 1¾ in. long, large, in dense clusters, 6 or 8 buds in a cluster; pedicels 1⅛ in. long, thick, pubescent.

Fruit matures in late August and early September; medium in size, 3 in. long, 2¾ in. wide, oblong-obovate-pyriform, irregular; stem 1¼ in. long, thick, curved; cavity acuminate, deep, narrow, russeted, furrowed and compressed, often with a pronounced lip; calyx open, large; lobes separated at the base, broad, acute, reflexed; basin deep, abrupt, furrowed, often compressed; skin thin, tender, smooth; color dull greenish-yellow, often with a deep but dull reddish-brown blush and occasional patches of russet; dots numerous, small, green or russet, obscure; flesh fine under the skin but granular and gritty near the center; tender, buttery, very juicy, faintly vinous, slightly aromatic; quality good. Core large, closed, with clasping core-lines; calyx-tube long, wide, funnel-shaped; seeds large, wide, plump, obtuse or acute.



MARIE LOUISE

1. *Pom. Mag.* **3**:122, Pl. 1830. **2.** Prince *Pom. Mag.* **1**:131. 1831. **3.** Kenrick *Am. Orch.* 179. 1832. **4.** Downing *Fr. Trees Am.* 399. 1845. **5.**

Hovey *Fr. Am.* **2**:37, Pl. 1851. **6.** Dochnahl *Führ. Obstkunde* **2**:59. 1856. **7.** *Am. Pom. Soc. Rpt.* 70. 1862. **8.** Leroy *Dict. Pom.* **2**:399, fig. 1869. **9.** *Guide Prat.* 59, 287. 1876. **10.** Lauche *Deut. Pom.* **II**: No. 38, Pl. 38. 1882. **11.** Hogg. *Fruit Man.* 613. 1884. **12.** Mathieu *Nom. Pom.* 251. 1889.

Marie-Louise Delcourt. **13.** *Pom. France* **1**: No. 19, Pl. 19. 1863. **14.** Mas *Le Verger* **3**: Pt. 1, 163, fig. 80. 1866-73.

The fruits of Marie Louise are among the perfections of Nature, and were the tree more certain in bearing and less fastidious as to environment and care, the variety would rank as one of the best of all pears. Pomologists generally agree that its fruits are the finest flavored of their season. The flesh is tender and melting, very juicy, and the flavor is a most delectable commingling of refreshing piquancy and scented sweetness. In shape, the pears resemble those of Beurré Bosc, having the same trim contour, but the color is very different—rich yellow, netted and sprinkled with russet, and sun-flecked with red on the sunny side. The fruit is somewhat susceptible to the scab fungus, and even the most careful spraying fails to give it a fair cheek in some seasons. The trees are hardy but only moderately vigorous, somewhat susceptible to blight, rather uncertain in bearing, and vary much from season to season in abundance and quality of product. Not at all suited for a commercial plantation, Marie Louise is one of the choicest sorts for a home collection or in the hands of a pear fancier.

The Abbé Duquesne, Mons, Belgium, raised this pear from seed in 1809 and dedicated it to Marie Louise, the second consort of Napoleon the First. The Abbé passed the pear on to Van Mons, who in 1816 sent it without a name to a Mr. Braddick of Thames

Ditton, England, where in time it became one of the best-known pears. Thomas Andrew Knight sent cions of the variety from England to John Lowell, Roxbury, Massachusetts, in 1823, whence it became widely disseminated in America. The American Pomological Society placed Marie Louise in its list of fruits in 1862.

Tree medium in size, vigorous, spreading, open-topped, hardy, productive; trunk slender; branches dark reddish-brown mingled with thin gray scarf-skin, marked with many large lenticels; branchlets very slender and very short, with short internodes, light brown, tinged with brownish-red, glossy, smooth, glabrous, with very small, slightly raised lenticels.

Leaf-buds small, short, sharply pointed, plump, free. Leaves 2½ in. long, 1¼ in. wide, narrow, short, oval or somewhat elongated, leathery; apex obtusely or slightly taper-pointed; margin glandless, entire; petiole 2 in. long, greenish, glabrous, slender. Flower-buds small, conical, free, arranged singly as lateral buds or on short spurs; flowers very showy, 1¾ in. across, in dense clusters, 7 to 9 buds in a cluster; pedicels often 1⅛ in. long, slender, slightly pubescent, greenish.

Fruit ripe in late September and early October; above medium in size, 3⅛ in. long, $2^{5}/_{16}$ in. wide, variable in size, oblong-pyriform, irregular, usually with sides unequal; stem 1⅛ in. long, thick, curved; cavity very small and one-sided, russeted, often lipped; calyx large, open; lobes separated at the base, narrow, acuminate; basin obtuse, considerably furrowed; skin thin, tender, smooth, dull; color yellow, netted and sprinkled with russet especially on the exposed cheek; dots numerous, small, russet, somewhat obscure; flesh yellowish-white, granular, tender,

buttery, very juicy, aromatic, with a rich, vinous flavor; quality very good. Core closed, with clasping core-lines; calyx-tube short, narrow, conical; seeds wide, acute.





MOUNT VERNON

1. *Am. Jour. Hort.* **3**:144, figs. 1868. **2.** Downing *Fr. Trees Am.* 818. 1869. **3.** *Horticulturist* **24**:367, fig. 1869. **4.** *Ibid.* **26**:361. 1871. **5.** *Am. Pom. Soc. Cat.* 20. 1871. **6.** *Horticulturist* **27**:204. 1872. **7.** Budd-Hansen *Am. Hort. Man.* **2**:256. 1903.

As a distinct type, and because the pears ripen at a season when there are few other varieties of this fruit, Mount Vernon has a prominent place in the list of worthy American pears. The top-shaped form and reddish-russet color give the pear a unique appearance, and with the greenish-yellow, granular, spicy, piquant flesh constitute very distinct characters in its quality. Unfortunately, the russet color is not well brought out in the accompanying color-plate. Lack of uniformity in shape and size are the chief defects in the appearance of the pears. The variety is valuable because it ripens its crop in early winter from which time, under good conditions, it may be kept until mid-winter, a season in which there are few good pears. The trees are unusually satisfactory in most of the characters of importance in a good pear-tree. The tree is vigorous but the head is small, with numerous, short, stocky branches, many of which droop. The aspect given the top by these peculiarities is quite distinct. The variety is worthy when a winter pear is wanted whether for home or market.

This pear, which is very distinct from any other variety, originated from a chance seedling in the garden of Samuel Walker, Roxbury, Massachusetts, at the end of the first half of the nineteenth century.

Tree large, vigorous, spreading, with many

drooping branches, dense-topped, hardy, productive, long-lived; trunk stocky; branches thick, shaggy, reddish-brown, overcast with gray scarf-skin, marked by few large lenticels; branchlets thick, with short internodes, grayish-brown, smooth, glabrous, with a few large, raised lenticels.

Leaf-buds variable in shape, usually free. Leaves 2½ in. long, 1½ in. wide, oval, medium to thick, leathery; apex taper-pointed; margin crenate, tipped with rudimentary glands; petiole 1¼ in. long. Flower-buds large, long, conical or pointed, free; flowers 1⅜ in. across, in dense clusters, 7 to 9 buds in a cluster; pedicels ¾ in. long, slender, lightly pubescent, pale green, with a faint tinge of red.

Fruit ripe in late October and November; medium in size, 2½ in. long, 2⅛ in. wide, uniform in size, roundish-obtuse-pyriform, irregular, with unequal sides, variable in shape; stem 1 in. long, thick, usually curved; cavity obtuse, very shallow and narrow, russeted, furrowed, often very heavily lipped, so that the stem appears to be inserted under a fleshy enlargement; calyx open; lobes short, narrow, acute to acuminate; basin narrow, obtuse, smooth, usually symmetrical; skin granular, roughened by russet, dull; color light russet overspreading a greenish-yellow ground, with a brownish-red blush on the exposed cheek, dotted and netted with russet; dots numerous, small, russet, obscure; flesh white, with a faint tinge of yellow, often with a green tinge under the skin, granular, tender and melting, juicy, sweet, aromatic, with a vinous tendency; quality good to very good. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds variable in size, wide, long, plump, acute, many abortive.

OLIVIER DE SERRES

1. Mas *Le Verger* **1**:67, fig. 40. 1866-73. **2.** Downing *Fr. Trees. Am.* 822. 1869. **3.** Leroy *Dict. Pom.* **2**:477, fig. 1869. **4.** Tilton *Jour. Hort.* **9**:377, fig. 1871. **5.** Oberdieck *Obst-Sort.* 316. 1881. **6.** *Jour. Hort.* 3rd Ser. **4**:15, fig. 4. 1882. **7.** Hogg *Fruit Man.* 624. 1884. **8.** Gaucher *Pom. Prak. Obst.* No. 58, Pl. 51. 1894. **9.** *Deut. Obstsorten* **5**: Pt. 15, Pl. 1909.

This variety is rated in Europe as a delicious late-winter pear, and the pomological writers of the last century give it all of the virtues on this side of the Atlantic ascribed to it by Europeans. A closer study of the variety as grown in America shows that it does not possess the merits in this country given it by the French and English. The quality of the pear as grown in New York is below that of several other sorts of its season. The flesh is coarse and gritty and the flavor is mediocre. The tree-characters are good, but are not sufficiently good to offset the faults of the fruits.

Olivier de Serres was raised from seed of Fortunée about the middle of the nineteenth century by M. Boisbunel, Rouen, France. It fruited a few years later, but did not receive attention until about 1862. At that time it was brought to the notice of the French Society of Horticulture, and was pronounced a fruit of merit. At the suggestion of M. Boisbunel, it was named after the illustrious Frenchman, Olivier de Serres, who in France is called “The Father of Agriculture.” It was brought to America about 1865.

Tree medium in size, vigorous, dense-topped, upright-spreading, productive; trunk and branches marked with numerous lenticels; branchlets slender, short, curved, with short internodes, light reddish-brown, tinged with

green, sprinkled with scattering, inconspicuous, very small, raised lenticels. Leaf-buds small, short, sharply pointed, free; leaf-scars with prominent shoulders. Leaves 2¾ in. long, 1¼ in. wide; apex taper-pointed; margin glandular, finely serrate; petiole 2 in. long, slender. Flower-buds small, short, sharply pointed, free, singly on short spurs; flowers with an unpleasant odor, showy, 1 9/16 in. across; pedicels 1 in. long, thinly pubescent.

Fruit ripens January to March; medium in size, 2½ in. long, 2¾ in. wide, roundish-obtuse-pyriform, truncate at both ends, irregular in outline; stem variable in length, averaging ¾ in. long, thick, enlarged at the top, curved; cavity broad, slightly furrowed; calyx large, slightly open; basin variable in depth, furrowed; skin tender; color greenish-yellow, partly overspread with cinnamon-russet and sometimes with a dull blush on the exposed cheek; flesh whitish, variable in texture, juicy, varying from sweet to a brisk, vinous flavor; quality poor unless grown under the most favorable conditions.



ONONDAGA

1. *Horticulturist* **1**:322, fig. 77. 1846-47. **2.** *Am. Pom. Soc. Rpt.* 231. 1858. **3.** Mas *Le Verger* **3**: Pt. 1, 179, fig. 88. 1866-73. **4.** Downing *Fr. Trees Am.* 823. fig. 1869. **5.** Leroy *Dict. Pom.* **2**:480, fig. 1869. **6.** *Guide Prat.* 74, 292. 1876. **7.** Hogg *Fruit Man.* 625. 1884.

Swan's Orange. **8.** *Mag. Hort.* **13**:243, fig. 19. 1847. **9.** Hovey *Fr. Am.* **1**:21, Pl. 1851.

Some seventy or eighty years ago this pear was widely introduced under the names *Onondaga* and *Swan's Orange*, and for a generation and more was much grown in eastern pear regions. It has now practically passed from cultivation in commercial orchards, but is still to be found in collections and home plantings. The fruits are large, handsome, and of very good quality, resembling those of Bartlett in flavor and with even better flesh-characters. The trees are vigorous, hardy, fruitful—almost ideal in every character but one. The tree is so susceptible to blight that the variety can never have commercial value in American orchards. Whether or not it is worth planting in home orchards depends upon the planter's willingness to suffer loss from blight.

It seems impossible to trace this variety to its ultimate source. We know, however, that Henry Case, Liverpool, New York, cut a graft during the winter of 1806 from a tree growing on land of a Mr. Curtiss at Farmington, Connecticut. In the spring of the same year, Mr. Case grafted this cion into a tree about three miles west of Onondaga Hill, New York, and in 1808 moved the tree to Liverpool where it grew and bore fruit. Many grafts were taken from

this tree before it died in 1823. Up to this time, the variety appears to have received no name nor had it been generally disseminated. We hear nothing further of it until about 1840 when it was brought to notice by a Mr. Swan of Onondaga Hollow, who exhibited specimens of the variety in Rochester. Ellwanger and Barry were so impressed with the fruit that they secured cions and propagated it under the name *Swan's Orange* which they changed later to *Onondaga*. Onondaga was given a place in the American Pomological Society's fruit-catalog in 1858.

Tree medium in size, vigorous, spreading, open-topped, very productive; branches zigzag, reddish-brown, overspread with thin gray scarf-skin, marked with many large lenticels; branchlets slender, short, light brown, tinged with green and lightly streaked with ash-gray scarf-skin, dull, smooth, the new growth slightly pubescent, with small, raised, pinkish lenticels.

Leaf-buds small, short, sharply pointed, plump, free. Leaves 3 1/16 in. long, 1¼ in. wide, narrow, oval, stiff, leathery; apex taper-pointed; margin coarsely but shallowly serrate, tipped with many reddish glands; petiole 1⅞ in. long, light green mingled with red; stipules often lacking but when present very small, pale green. Flower-buds small, short, conical, plump, free, arranged singly on very short spurs; blossoms 1⅛ in. across, in dense clusters, 7 to 8 buds in a cluster; pedicels pubescent, greenish.

Fruit ripe in early October; above medium to large, 2¾ in. long, 2½ in. wide, ovate or obovate-obtuse-pyriform, symmetrical, with unequal sides; stem ⅝ in. long, thick, curved; cavity a slight depression, with a fleshy enlargement at one side of the stem; calyx closed; lobes narrow, acute; basin narrow, obtuse, furrowed, uneven;

skin granular, tender, smooth, dull; color pale yellow, with few lines of russet and with many russet spots; dots numerous, small, russet, conspicuous; flesh yellowish, granular both near the skin and at the center, melting, buttery, very juicy, aromatic, with a sweet, rich, vinous flavor; quality very good. Core large, closed, with clasping core-lines; calyx-tube long, conical; seeds narrow, long, acute.



ONTARIO

1. *Am. Pom. Soc. Rpt.* 200, fig. 1856. **2.** Downing *Fr. Trees Am.* 529. 1857. **3.** *Horticulturist* N. S. **7**:112, fig. 1857. **4.** *Mag. Hort.* **23**:110, fig. 3. 1857. **5.** Mas *Le Verger* **3**: Pt. 2, 85, fig. 139. 1866-73. **6.** *Horticulturist* **23**:331, fig. 102. 1868. **7.** Downing *Fr. Trees Am.* 824. 1869. **8.** Thomas *Am. Fruit Cult.* 463, fig. 672. 1897.

This variety was introduced nearly seventy years ago with the expectation that the crop would follow that of Bartlett and be in as great demand. While the variety did not come up to expectations, it seems to have been too good to discard, and is to be found in many collections in New York. The fruits are of the type of Bartlett, but are smaller and usually lack the blush found on the fruits of Bartlett. The trees are very satisfactory. The variety fails chiefly in the small size of the fruits, although these are not as small as the rather poor specimens illustrated in the accompanying plate, which were grown on the grounds of this Station where the pears run below the average.

This variety was raised from seed of Canandaigua in the nurseries of W. and T. Smith, Geneva, Ontario County, New York, and was first introduced at the meeting of the American Pomological Society, Rochester, New York, in 1856.

Tree large, vigorous, upright, open-topped, hardy, productive; trunk stocky; branches thick, roughish, dull reddish-brown, overspread with dark ash-gray scarf-skin, marked by small lenticels; branchlets thick, very short, with short internodes, light brown mingled with green, smooth, glabrous, with small, raised, conspicuous lenticels.

Leaf-buds small, short, pointed, free. Leaves 2 in. long, 1½ in. wide, oval, thin, leathery, slightly curled under along the margins; apex abruptly pointed; margin glandular toward the apex, very finely serrate; petiole 1½ in. long. Flower-buds small, short, conical or pointed, plump, free, singly or in small clusters on short branches or very short spurs; flowers 1⅛ in. across, in a scattering raceme, from 8 to 10 buds in a cluster; pedicels 1¼ in. long, slender, pubescent, light green.

Fruit in season from the middle to the last of September; medium in size, 2½ in. long, 1⅞ in. wide, uniform in size and shape, oblong-pyriform, with sides usually unequal; stem ¾ in. long, thick; cavity obtuse, shallow, narrow, often russeted and lipped; calyx open; lobes separated at the base, narrow, acute; basin shallow to medium, obtuse, gently furrowed, sometimes compressed; skin smooth, dull; color pale yellow, with small patches and streaks of light-colored russet; dots numerous, very small, russet, obscure; flesh whitish, with a yellow tinge at the core, granular, firm but tender, juicy, sweet, slightly aromatic; quality good. Core closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide, long, plump, acute.



P. BARRY

1. *Am. Pom. Soc. Rpt.* 38. 1875. **2.** Downing *Fr. Trees Am.* 2d App. 152, fig. 1876. **3.** *W. N. Y. Hort. Soc. Rpt.* 18. 1882. **4.** Wickson *Cal. Fruits* 340. 1889. **5.** Ellwanger & Barry *Cat.* 20. 1892. **6.** *Am. Pom. Soc. Rpt.* 17, 68. 1895. **7.** *Am. Pom. Soc. Cat.* 41. 1909. **8.** Wickson *Cal. Fruits* 273. 1919.

The fruits of P. Barry are among the latest of all the pears grown on the grounds of the New York Agricultural Experiment Station. They do not ripen here until mid-winter and then keep until spring. A serious defect is that they sometimes refuse to ripen but shrivel until decay sets in late in the spring. To make certain that the pears ripen properly, the fruit-room must not be too cold. The pears are excellent in flavor, have good flesh-characters, and when properly ripened are excelled in quality by no other winter pear. The variety should have a place in the collection of every pear fancier to extend the season for this fruit, and commercial pear growers might find it a profitable sort for local market. Unfortunately, the trees are small, fastidious as to environment, and somewhat uncertain in bearing.

Bernard S. Fox, San Jose, California, raised many pears from seed of Belle Lucrative. Among these seedlings was one which fruited in 1873 and was named P. Barry, in honor of Patrick Barry,[31] an eminent nurseryman and horticulturist of Rochester, New York. Of many scores of seedlings raised by Mr. Fox only this one, Fox, and Colonel Wilder were considered by the originator to be worthy of propagation. All these received Wilder medals from the American Pomological Society in 1875 and 1881.

In 1909, this Society added P. Barry to its catalog-list of fruits.

Tree variable in size, lacking in vigor, spreading, open-topped, unusually hardy, medium in productiveness; trunk slender; branches stocky, zigzag, reddish-brown mingled with gray scarf-skin, marked with large lenticels; branchlets slender, long, with long internodes, reddish-brown, smooth, glabrous, with few small, very slightly raised lenticels.

Leaf-buds small, short, conical, free. Leaves 1¾ in. long, 1⅛ in. wide, leathery; apex abruptly pointed; margin finely serrate, tipped with few glands; petiole 1½ in. long. Flower-buds small, short, somewhat obtuse, free; flowers open late, 1¼ in. across, well distributed, averaging 7 buds in a cluster; pedicels 1 in. long, slender, slightly pubescent, pale green.

Fruit matures in late December to February; variable in size, averaging 2¾ in. long, 2¼ in. wide, oblong-obtuse-pyriform, irregular, with unequal sides; stem 1 in. long, thick, curved; cavity obtuse, narrow, furrowed, compressed, often lipped; calyx small, open; lobes separated at the base, short, narrow, obtuse; basin shallow, narrow, obtuse, smooth and regular; skin variable in smoothness, dull; color rich yellow, many specimens almost entirely overspread with russet or with russet coating around the cavity and with russet nettings and patches; dots numerous, small, russet, conspicuous; flesh yellowish-white, fine, melting, sweet, juicy, with a rich, vinous, aromatic flavor; quality good. Core large, closed, with clasping core-lines; calyx-tube short, conical; seeds large, wide, long, plump, acute.



PASSE COLMAR

1. *Trans. Lond. Hort. Soc.* **5**:410. 1824. **2.** Lindley *Guide Orch. Gard.* 403. 1831. **3.** Prince *Pom. Man.* **1**:101. 1831. **4.** Downing *Fr. Trees Am.* **444**, fig. 205. 1845. **5.** *Gard. Chron.* 185, fig. 1845. **6.** *Mag. Hort.* **15**:445, fig. 39. 1849. **7.** *Gard. Chron.* 989. 1861. **8.** *Am. Pom. Soc. Rpt.* 70, 1862. **9.** *Pom. France* **1**: No. 2, Pl. 2. 1863. **10.** Mas *Le Verger* **1**:121, fig. 59. 1866-73. **11.** Leroy *Dict. Pom.* **2**:499, figs. 1869. **12.** *Guide Prat.* 60, 293. 1876. **13.** Hogg *Fruit Man.* 627. 1884. **14.** *Soc. Nat. Hort. France Pom.* 436, fig. 1904.

Preul's Colmar. **15.** Liegel *Syst. Anleit.* **104**. 1825.

Regentin. **16.** Dochnahl *Führ. Obstkunde* **2**:103. 1856. **17.** Mathieu *Nom. Pom.* 268. 1889. **18.** Gaucher *Pom. Prak. Obst.* No. **61**, Pl. 88. 1894.

Little known in America, this is one of the standard winter pears in England. The fruits are exceedingly sugary, mildly spiced with cinnamon, a flavor so unique, especially when compared with the piquant flavor most common in winter pears, that the variety is worth growing where it succeeds for the sake of diversity. The chief fault of the variety is variability of product. On unsuitable soils and under indifferent care, the pears are unattractive and poor in quality. The accompanying illustration, it is to be feared, shows the variety at its worst rather than at its best, since it does not thrive on the heavy, cold clay of the Station lands. Under conditions at this Station, the flesh is crisp and gritty, rather than buttery and fine as it seems to be under more suitable conditions. The trees are very vigorous on standard stocks and heavy soils, with the result that

the fruits are many but small and poor; checking vigor by dwarfing on quince or planting on poor soil suits the variety. The trees are hardy and as free as the average pear from blight. The variety is a good winter sort for home or market.

This variety was raised in 1758 at Mons by the Abbé Hardenpont, the Belgian priest and horticulturist. Extensively cultivated in Belgium, it acquired a great diversity of names in different localities. From that country it passed first to Germany toward the end of the eighteenth century, and early in the nineteenth was taken to France. Soon after the close of the Napoleonic wars, about 1817, it was received in England. Within a few years after its introduction in England, the variety found its way to America where, for a time, it was quite extensively grown. The American Pomological Society added Passe Colmar to its fruit-list in 1862 but dropped it in 1899.

Tree medium in size, vigorous, upright, tall, rapid-growing, productive; trunk slender; branches medium in thickness and smoothness, reddish-brown almost entirely overspread with thick, gray scarf-skin, marked by large, conspicuous lenticels; branchlets thick, long, light brown mingled with green, dull, smooth, pubescent only near the ends of the new growth, sprinkled with few small, raised, inconspicuous lenticels.

Leaf-buds short, plump, free, thick at the base; leaf-scars with prominent shoulders. Leaves 3 in. long, 1½ in. wide, leathery; apex taper-pointed; margin tipped with few small glands, finely serrate to nearly entire; petiole 2 in. long, glabrous, pinkish-green. Flower-buds small, short, thick, conical, plump, free, singly as lateral buds or on very short spurs; flowers late, showy, 1¾

in. across, unusually large, in dense clusters, average 6 buds in a cluster; pedicels ¾ in. long, thick, thinly pubescent.

Fruit ripe December to January; medium in size, 2½ in. long, 2⅛ in. wide, obovate-obtuse-pyriform, somewhat irregular; stem 1 in. long, very thick; cavity obtuse, shallow, narrow, russeted, slightly furrowed; calyx partly open; lobes separated at the base, rather narrow, acute; basin shallow, narrow, obtuse, gently furrowed; skin thick, granular, tender, roughish; color greenish-yellow, sprinkled with reddish-brown and russet patches and nettings; dots numerous, small, russet, obscure; flesh tinged with yellow, granular, tender, buttery, very juicy, sweet, vinous, aromatic; quality very good. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide, plump, acute.



PITMASTON

1. *Can. Hort.* **26**:129, fig. 2564. 1903. **2.** Ont. Dept. Agr. *Fr. Ont.* 173, fig. 1914.

Pitmaston Duchesse d'Angoulême. **3.** *Gard. Chron.* 1108, fig. 1864. **4.** *Am. Pom. Soc. Rpt.* 55. 1871.

Pitmaston Duchess. **5.** *Jour. Hort.* N. S. **18**:11, fig. 1870. **6.** Tilton *Jour. Hort.* **7**:239, fig. 1870. **7.** *Jour. Hort.* N. S. 38:201, fig. 30. 1880. **8.** Hogg *Fruit Man.* 631. 1884. **9.** *Gard. Chron.* 3rd Ser. **4**:608. 1888. **10.** *Rev. Hort.* 196, 651. 1900. **11.** Bunyard *Handb. Hardy Fr.* 193. 1920.

Although this fine old English pear has more than ordinary merit, it seems to be little grown in America. In appearance, the pears are unsurpassed. The accompanying color-plate shows the shape and color very well, but not the size, as, well grown, the pears are larger. From the illustration, all must agree that the pears are handsome, fruits of few other sorts being so alluring in shape and color. On warm soils or in warm seasons, the flavor is choicely good giving the pears a rating of "good to very good;" but in cold soils and seasons, the flavor is often austere, or even acid and astringent. The season prolongs that of Bartlett, and as the fruits are flavored very differently, being more piquant and refreshing, and are ordinarily larger and handsomer, Pitmaston ought to make a good market variety where it thrives. The subacid flavor makes this one of the very best pears for culinary purposes. Such reports as are at hand state that the fruits keep and ship well. The variety seems not to have been grown widely in America, so that one cannot speak with assurance of the tree-characters; but on the grounds of this Station, the trees have fewer faults than those of most of the standard varieties. They are hardy, vigorous, fairly immune to blight, and while but

moderately productive, bear annually, and the large size of the fruits makes them high yielders. The variety should be put on probation by those who grow for the markets, and is well worthy a place in all home orchards.

Pitmaston was raised by John Williams at Pitmaston, near Worcester, England, in 1841. It has been generally stated that it originated from a cross between Duchesse d'Angoulême and Glou Morceau, although an old gardener, who was employed by Mr. Williams, stated that there was no record whatever of its parentage, but that it was the best of a number of seedlings. For some time it was known as the *Pitmaston Duchesse d'Angoulême* on account of the theory of its derivation in part from the Duchesse d'Angoulême; but in 1870 its name was simplified in England to *Pitmaston Duchess*. In 1874 it obtained a first-class certificate from the Royal Horticultural Society, England. In this country it was first fruited by John Saul, Washington, District of Columbia, in 1870, and was noted and illustrated by Elliott in the *Rural New Yorker* under the name *Pitmaston Duchesse d'Angoulême*. Although favorably mentioned several times by the American Pomological Society, the variety has never received a place in the Society's fruit-catalog.

> Tree large, vigorous, spreading, dense-topped, moderately productive; trunk stocky, shaggy; branches thick, slightly zigzag, reddish-brown, overlaid with very dark grayish scarf-skin, marked with numerous large lenticels; branchlets long, dull, dark reddish-brown, roughish, glabrous, with numerous small, raised, conspicuous lenticels.
>
> Leaf-buds short, obtuse, appressed; leaf-scars prominent. Leaves 2½ in. long, 1½ in. wide,

leathery; apex abruptly pointed; margin finely serrate; petiole 1¾ in. long. Flower-buds short, conical, pointed, free; flowers showy, 1¾ in. across, well distributed, average 7 buds in a cluster; pedicels 1 in. long, pubescent.

Fruit ripe in October; large, 3¾ in. long, 3 in. wide, oblong-obovate-pyriform, symmetrical; stem 1 in. long, thick, often curved; cavity very shallow and very narrow, or lacking, the flesh drawn up in a wrinkled fold around the base of the stem, often lipped; calyx closed, large; lobes long, broad, acute; basin shallow, obtuse, furrowed and wrinkled; skin thin, granular, smooth, tender, dull; color pale lemon-yellow, dotted and somewhat patched with light russet especially around the stem, without blush; dots numerous, small, russet, conspicuous; flesh tinged with yellow, somewhat granular, melting, buttery, very juicy, piquant and vinous; quality good to very good. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds narrow, long, flat, acute, very often abortive.



POUND

1. Coxe *Cult. Fr. Trees* 209, fig. 63. 1817. **2.** Prince *Pom. Man.* **1**:149. 1831. **3.** Kenrick *Am. Orch.* 151. 1832. **4.** Downing *Fr. Trees Am.* 445. 1845. **5.** *Ibid.* 835. 1869. **6.** *Am. Pom. Soc. Cat.* 22. 1871. **7.** Wickson *Cal. Fruits* 326, 338, 344. 1889.

Pickering. **8.** Langley *Pomona* 133, Pl. 71, fig. 1. 1729.

Union. **9.** Miller *Gard. Kal.* 31, 54. 1734. **10.** Miller *Gard. Dict.* **2**: Pt. 1. 1807.

Uvedale's St. Germain. **11.** Lindley *Guide Orch. Gard.* 413. 1831. **12.** *Am. Pom. Soc. Rpt.* 70. 1862. **13.** Hogg *Fruit Man.* 657. 1884. **14.** *Jour. Hort.* 3rd Ser. **13**:465. 1886. **15.** Bunyard *Handb. Hardy Fr.* 202. 1920.

Bruderbirne. **16.** Dochnahl *Führ. Obstkunde* **2**:148. 1856.

Winter Bell. **17.** Watson *Am. Home Gard.* 404, fig. 264. 1859.

Belle Angevine. **18.** *Gard. Chron.* 979. 1860. **19.** Mas *Le Verger* **1**:31 bis, fig. 22. 1866-73. **20.** *Gard. Chron.* 138. 1869. **21.** *Guide Prat.* 61, 233. 1876.

Schöne Angevine. **22.** Mathieu *Nom. Pom.* 279. 1889.

Pound is grown in collections for its monstrous fruits, which have few virtues other than large size. The pears not infrequently weigh three pounds, and one is noted in the next paragraph weighing four pounds, nine ounces. The pears are coarse in form, texture and flavor—but one degree better in flavor than the potato-like fruits of Kieffer and even more sappy. The pears keep well and are said to be fairly good for culinary purposes. The trees are unusually satisfactory, because of which the variety should make a good parent from which to breed.

The name “Pound” has been applied to a number of varieties, notably Black Worcester, Angora, Verulam, and others. The variety now known as Pound in America is more generally known in Europe as *Belle Angevine* or *Uvedale’s St. Germain*. This sort appears to have been raised by a Dr. Uvedale, who was a schoolmaster at Eltham, England, in 1690. Miller in his Dictionary, in 1724, speaks of him as a Dr. Udal of Enfield, “a curious collector and introducer of many rare exotics, plants and flowers,” and Bradley, in 1733, speaks of the pear as “Dr. Udale’s great pear, called by some the *Union* pear.” William Robert Prince mentions the Pound pear in 1831 saying that “it often weighs from twenty-five to thirty ounces, and one was exhibited in New Jersey about four years since, weighing forty and a half ounces.” In 1870, according to Wickson, a Pound pear sent from Sacramento to the late Marshall P. Wilder, President of the American Pomological Society, weighed four pounds and nine ounces. In 1862, the American Pomological Society added this variety to its fruit-catalog under the name *Uvedale’s St. Germain*, but in 1871 changed the name to Pound. The name continued to appear in the Society’s catalogs until 1909 when it was dropped.

Tree medium in size, upright, dense-topped, hardy, very productive; trunk stocky, shaggy; branches thick, shaggy, zigzag, dull reddish-brown, heavily covered with gray scarf-skin, marked with many large lenticels; branchlets short, with short internodes, brownish-red, mottled with gray scarf-skin, smooth, glabrous, with few small, elongated lenticels.

Leaf-buds large, long, conical or pointed, plump, free; leaf-scars prominent. Leaves 4¼ in. long, 3¾ in. wide, ovate, thin, stiff; apex taper-pointed; margin glandular, finely serrate; petiole

1¾ in. long, slender. Flower-buds large, long, conical or pointed, very plump, free, usually singly on short spurs; flowers open early, 1⅜ in. across, large, well distributed, average 7 buds in a cluster; pedicels 1½ in. long, pubescent, pale green.

Fruit matures in February; large, 4 in. long, 2⅞ in. wide, uniform in size and shape, obovate-acute-pyriform, with unequal sides; stem long, thick, curved; cavity obtuse, very shallow, narrow, russeted, furrowed, drawn up in a fleshy ring about the stem; calyx large, open; lobes separated at the base, obtuse; basin shallow, narrow, obtuse, slightly furrowed, symmetrical; skin thick, tough, with patches of russet, dull, roughened by the dots and by the russet markings; color golden-yellow, often marked on the exposed cheek with a bronze or pinkish blush; dots numerous, russet, very conspicuous; flesh yellowish, firm, granular, very tough, subacid, inferior in flavor; quality very poor. Core large, closed, axile, with meeting core-lines; calyx-tube short, wide, conical; carpels pear-shaped; seeds very large, brownish-black, wide, long, acuminate.



PRÉSIDENT DROUARD

1. *Gard. Chron.* N. S. **25**:431. 1886. **2.** *Guide*

Prat. 51. 1895. **3.** *Cat. Cong. Pom. France* 331, fig. 1906.

Präsident Drouard. **4.** Lucas *Tafelbirnen* 211, fig. 1894.

Drouard. **5.** *Am. Pom. Soc. Cat.* 35. 1899. **6.** Budd-Hansen *Am. Hort. Man.* **2**:241. 1903. **7.** *Mich. Sta. Sp. Bul.* **27**:22. 1903.

Président Drouard has been on probation in the United States for nearly thirty years, but does not seem to be in great demand in any part of the country. In the pear-growing region of New York to which it first came, it is scarcely known. The accompanying description shows that the fruits contain all of the requisites of a good pear. The flesh is juicy, melting, saccharine, rich, and perfumed. The trees, however, are not satisfactory. They lack vigor, blight badly, and are niggardly in bearing. With these faults, there is no place for the variety in commercial plantations, but it may well be planted in home orchards and in collections.

Président Drouard is a chance seedling found in the suburbs of Pont-de-Ce, Maine-et-Loire, France, by M. Olivier, gardener at the Fruit-Garden at Angers. It was sent out by M. Louis Leroy of Angers and was described in 1886 as a new pear. It seems to have been introduced in this country by Charles A. Green, Rochester, New York. The American Pomological Society added the variety to its list of fruits under the name *Drouard* in 1899.

Tree of medium size, spreading, open-topped, usually hardy; branches reddish-brown, nearly covered with gray scarf-skin, marked with small lenticels; branchlets thick, long, greenish-brown mingled with red, dull, smooth, pubescent on the new growth, with numerous small, brownish, raised, conspicuous lenticels.

Leaf-buds small, short, pointed, plump, free; leaf-scars with very prominent shoulders; Leaves 3 in. long, 1¾ in. wide, oval, thick, leathery; apex taper-pointed; margin glandless or with but few glands, entire or closely serrate; petiole glabrous, greenish, thick, 1⅝ in. long, tinged red; stipules very short, tinged with pink. Flower-buds short, conical, very plump, free, arranged singly on short spurs; flowers 1⅜ in. across, in dense clusters, 6 to 9 buds in a cluster; pedicels 1⅛ in. long, lightly pubscent, greenish.

Fruit in season from late November to December; large, 3½ in. long, 3 in. wide, oblong-obovate-pyriform, with unequal sides, uniform in shape; stem 1 in. long, very thick and woody; cavity obtuse, deep, irregular, furrowed, usually lipped; calyx large, open; lobes separated at the base, long, narrow, acuminate; basin deep, abrupt, usually smooth but sometimes gently furrowed; skin thick, tough, rough, dull; color clear lemon-yellow, with nettings and streaks of russet; dots numerous, small, russet, obscure; flesh tinged with yellow, very granular at the core, tender and melting, buttery, juicy, aromatic, sweet; quality good. Core large, closed, axile, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide, long, plump, acute, occasionally abortive.



REEDER

1. *Am. Pom. Soc. Cat.* 40. 1883. **2.** Budd-Hansen *Am. Hort. Man.* **2**:260. 1903.

Reeder's Seedling. **3.** *Am. Pom. Soc. Rpt.* 150. 1867.

Doctor Reeder. **4.** Downing *Fr. Trees Am.* 739, fig. 1869. **5.** *Am. Pom. Soc. Cat.* 20. 1871.

Docteur Rhéder. **6.** *Rev. Hort.* 87. 1889.

Reeder is another of the pears too good to discard, and not quite good enough to give an ardent recommendation. In quality, the fruits rank but little below those of Seckel; are about the same size as grown under average conditions; but are even duller and less attractive in color than the modest fruits of Seckel, which is probably one of its parents. The fruits have a place in the home and markets as a pear to follow Seckel, the crop coming in season just after that of Seckel passes out. The trees do poorly in the nursery, as they make but a short, slender growth until well established in the orchard, after which they become of medium size but very vigorous. The branches droop as do those of Winter Nelis, the other parent, although not so markedly. The variety is as nearly blight-proof as either of its parents.

Reeder is a seedling raised about 1855 by Dr. Henry Reeder, Varick, New York, from seed of Winter Nelis. The parent tree stood near a Seckel and it is considered that Reeder is a cross between the

two varieties. The American Pomological Society added the variety to its fruit-catalog in 1871 under the name *Doctor Reeder*, but in 1883 changed the name to Reeder.

Tree medium in size, vigorous, spreading, drooping, open-topped, productive; branches zigzag, reddish-brown partly overspread with gray scarf-skin, sprinkled with numerous lenticels; branchlets slender, willowy, long, reddish-brown mingled with gray, the new growth reddish-green, dull, smooth, glabrous except near the tips of the new growth, with few very small, inconspicuous lenticels.

Leaf-buds small, short, pointed, appressed. Leaves 2¾ in. long, 1¼ in. wide, leathery; apex taper-pointed; margin crenate to nearly entire; petiole 2 in. long, tinged with red; stipules few, very small, reddish-green. Flower-buds small, short, conical, free, singly on short spurs; flowers 1¼ in. across, in dense clusters, average 9 buds in a cluster; pedicels ¾ in. long, slender.

Fruit ripe in October and November; small, 1¾ in. long, 1⅞ in. wide, globular-obtuse-pyriform, slightly ribbed and irregular; stem 1¼ in. long, slender, curved; cavity a very small depression in which is inserted the base of the stem, symmetrical; calyx large, open; lobes separated at the base, long, narrow, reflexed, acuminate; basin very shallow and narrow, smooth; skin thick, smooth, tender; color dull greenish-yellow, mottled and streaked with russet, blushed faintly on the exposed cheek with brownish-red; dots few, small, obscure, greenish or russet; flesh white, granular toward the center but fine-grained near the skin, tender, somewhat stringy, very juicy, aromatic; quality good. Core large, closed, with clasping core-lines; calyx-tube long, narrow, funnel-shaped; seeds unusually large, wide, long, plump, acute.





RIEHL BEST

1. Stark Bros. *Cat.* 18. 1912. **2.** *Ibid.* 55. 1916.

Riehl Best is described among the major varieties because it is as nearly blight-proof as any other European pear. It might well be tried in localities where standard sorts cannot be raised because of blight, and is worth growing in breeding work as a parent to obtain blight-resistant varieties. The pears are rather unattractive in appearance, but are excellent in quality. The flesh is juicy, tender, vinous, free from grittiness and seldom rots at the core. The trees, besides being nearly free from blight, are hardy to heat and cold, and bear annually. The fruits fall far short of those of standard varieties in New York.

This pear was discovered by Edwin H. Riehl, Godfrey, Illinois, and was introduced by Stark Brothers, Louisiana, Missouri. Mr. Riehl says: “The farm on which the original tree stood was owned by a pioneer nurseryman who evidently imported from France a number of varieties, some perhaps without name. Riehl Best trees and several hundreds of other varieties represent the remains of three old orchards planted fifty years ago. Trees of other varieties are ruined by blight while Riehl Best is in perfect health and bears every season.” From this history it is probable that Riehl Best is an old European pear renamed.

Tree large, vigorous, upright, dense-topped, rapid-growing, productive; trunk stocky; branches thick, light reddish-brown, overspread with thin scarf-skin, marked with large, conspicuous, numerous lenticels; branchlets slender, often willowy, long, greenish-brown, dull, smooth, pubescent only near the ends of the new growth, sprinkled with small, slightly raised, inconspicuous lenticels.

Leaf-buds small, short, pointed, plump, free; leaf-scars with prominent shoulders. Leaves 3 in. long, 1¾ in. wide, thick; apex abruptly pointed; margin glandless, variable in serrations; petiole 2 in. long. Flower-buds small, short, conical, plump, free, singly on short spurs; flowers 1⅝ in. across, in dense clusters, average 6 buds in a cluster; pedicels ⅞ in. long, lightly pubescent.

Fruit ripens in October; medium in size, 2½ in. long, 2 in. wide, obovate-conic-pyriform, irregular, with unequal sides; stem 1⅛ in. long; cavity very shallow and narrow when present, or lacking, the flesh drawn up in a lip on one side of the stem; calyx open; lobes separated at the base, broad, obtuse; basin obtuse, furrowed; skin thick, roughened with russet; color dull yellow, largely overlaid with patches of russet, marked with distinct russet dots and with a faint trace of a pinkish-red blush on the cheek next the sun; dots numerous, russet, conspicuous; flesh tinged with yellow, granular under the skin, tender, moderately juicy, vinous; quality good. Core large, closed, axile, with meeting core-lines; calyx-tube short, wide, conical; carpels ovate; seeds medium in size, width, and plumpness, obtuse.



ROOSEVELT

1. *Gard. Chron.* 3rd Ser. **37**:243, fig. 92. 1905. **2.** *Rev. Hort.* 454. 1905. **3.** *Rural N. Y.* **54**:826, fig. 352. 1905. **4.** Bunyard *Cat.* 43. 1913-14. **5.** Bunyard *Handb. Hardy Fr.* 195. 1920.

This variety is still on probation in America, with the chances strongly against it proving worthy to bear the name of the man after whom it was called. On the grounds of the New York Agricultural Experiment Station, the fruits are too small, too poorly colored, and too poor in quality to compete with those of a score of other sorts of the same season. The core is remarkably small, and the seeds are few and small, but these are insufficient merits to count against the several defects named. The tree is robust and generally satisfactory. The variety may not be at its best on the grounds of this Station, as in Europe it was heralded as a most remarkable sort—one "destined to bring about a revolution in pear-growing." It may be worth further trial in New York.

This pear was introduced in 1905 by the noted French pomologist Charles Baltet, Troyes, France, after he had tested it for several years. He named it after President Roosevelt. The variety was approved at Horticultural Congresses in Paris, Lyons, and Orléans, as well as by the Royal Horticultural Society of London. It was received in America shortly after its dissemination in France.

Tree medium to large, vigorous, very upright, dense-topped, rapid-growing, productive; trunk slender, smooth; branches slender, smooth, glossy reddish-brown, mottled and overlaid with gray scarf-skin, marked with numerous small, raised lenticels; branchlets characteristically thick, with blunt ends, long, with short internodes, dull reddish-brown mingled with gray scarf-skin, smooth, glabrous, with many large, raised

lenticels.

Leaf-buds long, conical, sharply pointed, plump, free; leaf-scars with prominent shoulders. Leaves 3 in. long, 1⅜ in. wide, stiff; apex taper-pointed; margin usually glandless, finely serrate to almost entire; petiole 2 in. long, slender, curved. Flower-buds large, long, conical, pointed, free, singly on short spurs; flowers with a disagreeable odor, early, showy, 1⅝ in. across, in dense clusters, average 7 buds in a cluster; pedicels 1⅛ in. long, thick, pubescent.

Fruit ripens in late September and October; medium in size, about $2^{7}/_{16}$ in. in length and width, roundish-obtuse-pyriform, symmetrical; stem 1 in. long, thick; cavity very shallow, or lacking, faintly lipped; calyx very open, large; lobes separated at the base, narrow, acute; basin shallow, wide, obtuse, smooth, symmetrical; skin unusually thick, tough, smooth, dull; color pale lemon-yellow, mottled and netted with russet, with a faint blush; dots numerous, small, light russet, obscure; flesh light salmon, fine-grained except at the center which is granular, tender and melting, very juicy, mildly sweet, without much character; quality medium. Core small, closed, axile, with clasping core-lines; calyx-tube long, very wide, conical; carpels cordate; seeds wide, acute.



RUTTER

1. *Am. Pom. Soc. Rpt.* 151. 1867. **2.** *Am. Pom. Soc. Cat.* 24. 1869. **3.** Downing *Fr. Trees Am.* 848, fig. 1869.

Rutter does not seem to have made a very high place for itself in the country at large, but about Geneva, New York, it is a most excellent late autumn variety. The pears are good or very good in quality, rather attractive, keep well, ship well, and sell well to those who know the variety. The trees have a combination of good characters that commend them most highly. Thus, they are comparatively immune to blight, enormously productive, bear early, grow rapidly, live long, and are hardy. The fruits hang exceptionally well to the trees, so that the variety is a valuable one for exposed situations. Rutter can be recommended for both home and market plantations.

This variety was raised by John Rutter, West Chester, Pennsylvania, from seed of Léon Leclerc (Van Mons) about sixty years ago. It was approved by the Committee on New Native Fruits of the American Pomological Society in 1867. This Society placed the variety on its list of recommended fruits in 1869.

Tree large, vigorous, upright, dense-topped, rapid-growing, productive; trunk stocky; branches thick, reddish-brown, covered with gray scarf-skin, sprinkled with very conspicuous lenticels; branchlets long, light brown mingled with green and streaked with ash-gray scarf-skin, smooth, glabrous, with small, conspicuous, raised lenticels.

Leaf-buds long, conical, pointed, plump, free. Leaves 3⅜ in. long, 1⅝ in. wide, thick, leathery; apex taper-pointed; margin nearly glandless,

almost entire; petiole 2 in. long, glabrous, reddish-green. Flower-buds medium in size and length, conical, plump, free, singly on short spurs; flowers very showy, 1⅜ in. across, almost in racemes, 6 or 8 buds in a cluster; pedicels 1¼ in. long, pubescent.

Fruit matures in late October and early November; large, 3⅛ in. long, 3 in. wide, roundish-obtuse-pyriform, with a very thick, blunt neck, with unequal sides; stem ¾ in. long, thick, woody; cavity acuminate, unusually large, deep, russeted, occasionally furrowed and wrinkled, slightly lipped; calyx small, open; lobes separated at the base, short, narrow, acute; basin deep, obtuse, smooth, symmetrical; skin thick, gritty, roughish, dull; color yellow, overspread with light russet, mottled and flecked with russet; dots numerous, small, russet, conspicuous; flesh whitish, granular at the center, tender and melting, juicy, aromatic, sweet but refreshing; quality good to very good. Core small, closed, abaxile, with meeting core-lines; calyx-tube long, conical; seeds small, roundish, plump, obtuse.



SECKEL

1. Prince *Pom. Man.* **1**:139. 1831. **2.** Kenrick *Am. Orch.* 183. 1832. **3.** *Gard. Chron.* 708, fig. 1842. **4.** Downing *Fr. Trees Am.* 415, fig. 188. 1845. **5.** *Proc. Nat. Con. Fr. Gr.* 51. 1848. **6.** Hovey *Fr. Am.* **2**:33, Pl. 1851. **7.** *Mag. Hort.* **19**:457, fig. 34. 1853. **8.** Mas *Le Verger* **3**: Pt. 1, 29, fig. 13. 1866-73. **9.** Leroy *Dict. Pom.* **2**:656, figs. 1869. **10.** *Guide Prat.* 63, 303. 1876.

Seckle. **11.** Coxe *Cult. Fr. Trees* 189, fig. 25. 1817. **12.** *Trans. Lond. Hort. Soc.* **3**:256, Pl. 9. 1820. **13.** *Pom. Mag.* **2**:72, Pl. 1829. **14.** *Hort. Reg.* (Eng.) **1**:488. 1833. **15.** *Pom. France* **2**: No. 64, Pl. 64. 1864. **16.** *Jour. Hort.* 3rd Ser. **4**:128. 1882. **17.** Hogg *Fruit Man.* 644. 1884. **18.** Bunyard *Handb. Hardy Fr.* 197. 1920.

Seckel is an American pear distinct in type from any European variety. Among the several hundred pears that are grown on this side of the Atlantic, Seckel stands almost alone in vigor of tree, productiveness, and immunity to blight, and is equalled by no other variety in high quality of fruit. If the fruits were larger, Seckel would challenge the world as a pear for the markets as it now does as a pear for the home orchard. After Bartlett and the disreputable Kieffer, it is now more grown than any other variety in America, everywhere being used as the standard for excellence. The fruits are small, not highly colored, but attractive because clean and trim in contour. But it is the flesh-characters that give the fruits their high standing. The flesh is melting, juicy, perfumed and most exquisitely and delicately flavored, with the curious character of having much of its spicy, aromatic flavor in the skin, which should never be discarded in eating. The reddish-brown color of the fruit is another distinguishing character

of Seckel. Unlike most other dessert pears, the fruits of this one are excellent for culinary purposes. Still another distinctive character is that the fruits do not lose much in quality by ripening on the tree. Besides being nearly iron-clad in resistance to blight and very productive, the trees are almost as hardy as those of any other pear, and are remarkable for their large, low, compact, broadly pyramidal tops. The tree is further distinguished by its short-jointed, stout, olive-colored wood, and its habit of bearing fruits in clusters on the ends of the branches. The trees do best in fertile soils which must not be a heavy clay. Its blossoms are markedly self-fertile. There are several faults of fruit and tree. The fruits are small and do not keep after maturity; it costs twice as much to pick them as it does the large-fruited Bartlett; fruit and foliage are susceptible to scab; the pears are too small for commercial canning; and the trees are late in coming in bearing. With these several faults, however, Seckel is usually a profitable commercial variety as a well-grown crop almost always commands a fancy price. For the home orchard, Seckel has no rival in any part of North America where European varieties are grown.

Toward the close of the eighteenth century, there lived in Philadelphia a well-known sportsman and cattle dealer known as “Dutch Jacob.” Every autumn, upon returning from shooting excursions, Dutch Jacob distributed among his neighbors pears of exceedingly delicious flavor. The place of their growth he kept secret. In time, a tract of land south of Philadelphia was disposed of in parcels, and Dutch Jacob secured the ground on which his favorite pear tree stood, a neck of land near the Delaware river. Shortly afterwards this land became the property of a

Mr. Seckel, who gave the pear his name and introduced it. Later, the property was added to the estate of Stephen Girard, and the original tree long remained vigorous and fruitful. The new variety was soon widely disseminated and everywhere became popular. As early as 1819, Dr. Hossack of New York sent trees of the variety to the London Horticultural Society, whence it was later distributed in England. There is much difference of opinion as to the spelling of the name of this pear. Coxe, who lived in Philadelphia and probably knew the introducer of the pear, writing in 1817, spelled the name *Seckle*. English pomologists have followed Coxe. Nearly all of Coxe's contemporaries, however, spelled it *Seckel*, the spelling now in common use. At the first meeting of the American Pomological Society, held in 1848, Seckel was recommended for general cultivation and the variety has ever held its place among the pears recommended by the Society.

Tree large and very vigorous, upright-spreading, dense-topped, hardy, very productive, long-lived; trunk very stocky; branches thick, reddish-brown mingled with dull gray scarf-skin, covered with small lenticels; branchlets thick, long, dark reddish-brown, dull, smooth, glabrous, with small, slightly raised lenticels.

Leaf-buds small, short, obtuse or pointed, appressed; leaf-scars prominent. Leaves 2½ in. long, 1½ in. wide, oval, leathery; apex taper-pointed; margin finely serrate; petiole 1½ in. long; stipules very long when present. Flower-buds small, short, conical, free; flowers 1¼ in. across, in dense clusters, 7 or 8 buds in a cluster; pedicels ⅝ in. long, slender, lightly pubescent, light green, slightly streaked with red.

Fruit ripe in October; small, 2¼ in. long, 2 in. wide, uniform in size and shape, obovate,

symmetrical; stem ½ in. long, short, thick, often curved; cavity obtuse, with a very shallow, narrow depression, symmetrical; calyx small, partly open; lobes separated at the base, short, variable in width, acute; basin very shallow and narrow, strongly obtuse, symmetrical; skin smooth, dull; color yellowish-brown, lightly marked with pale russet and often with a lively russet-red cheek; dots numerous, very small, russet or grayish; flesh white, with a faint tinge of yellow, slightly granular, melting, buttery, very juicy; sweet, with an exceedingly rich, aromatic, spicy flavor; quality very good to best. Core small, closed, with clasping core-lines; calyx-tube short, conical; seeds small, short, not very plump, obtuse.



SHELDON

1. *Mag. Hort.* **17**:252, fig. 25. 1851. **2.** *Am. Pom. Soc. Rpt.* 151. 1854. **3.** *Ibid.* 210. 1856. **4.** Downing *Fr. Trees Am.* 444, fig. 1857. **5.** Elliott *Fr. Book* 347. 1859. **6.** Hoffy *N. Am. Pom.* **1**: Pl.

1860. **7.** Mas *Le Verger* **3**: Pt. 2, 119, fig. 156. 1866-73. **8.** Downing *Fr. Trees Am.* 855, fig. 1869. **9.** Leroy *Dict. Pom.* **2**:662, fig. 1869.

Were the fruits alone to be considered, Sheldon would take rank as one of the best of all pears. The fruits please both the eye and the palate. Those of no rival in season surpass them either in appearance or in characters that satisfy taste. While not large, the fruits are of sufficient size to meet the demands of a good dessert pear. The shape is a perfect turbinate, truncated at the base of the fruit, usually very symmetrical, and the fruits run uniform in shape. In color, the pears are distinctive in their russeted skin, with a handsome ruddy cheek. The accompanying color-plate does not do justice to the fruit in illustrating size, shape, or color. The flesh is melting and juicy, and deserves, more than that of almost any other pear, the adjective luscious. The flavor is sweet, vinous, and highly perfumed. The fruits keep well, ship well, and sell well during their season, and are esteemed both for dessert and for culinary purposes. The list of faults in the trees is as long as the list of virtues in the fruits. The trees, while large, vigorous, and hardy, blight as badly as any pear-tree in the orchard, are reluctant in coming in bearing, niggardly in production, and seldom hold their crop well. With these faults of the tree, Sheldon is not a commercial variety of high rank, but the splendid fruits make it worth growing by the pear-fancier, in the home orchard, or for the markets where the faults of the trees are not too marked. The variety grows better in New York, possibly, than in any other part of the United States.

This pear is a native of the town of Huron, New York. The original tree stood on the premises of Major Sheldon, having sprung from seed brought by

his father from Washington, New York, about 1815. The fruit was first exhibited at the Pomological Convention in Syracuse in the autumn of 1849. In 1854, Sheldon was mentioned by the American Pomological Society as promising well, and in 1856 it was given a place in the Society's fruit-catalog.

> Tree large, vigorous, upright-spreading, rapid-growing, hardy, moderately productive; trunk stocky; branches thick, reddish-brown, overlaid with dull gray scarf-skin, marked with large lenticels; branches thick, dull brown, glabrous, with numerous slightly raised, conspicuous lenticels.
>
> Leaf-buds large, above medium in length, obtuse or somewhat pointed, appressed. Leaves 2½ in. long, 1¼ in. wide, oval, leathery; apex taper-pointed; margin finely serrate; petiole 1½ in. long. Flower-buds conical or pointed, free; flowers 1⅛ in. across, in dense clusters, 13 or 14 buds in a cluster; pedicels ½ in. long, thick, pubescent, greenish.
>
> Fruit matures in October; large, 2¾ in. long, 2½ in. wide, uniform in size and shape, turbinate, often with a tendency to oblateness, symmetrical; stem ¾ in. long, thick, nearly straight; cavity obtuse, deep, slightly furrowed, occasionally lipped; calyx large, open; lobes very broad, obtuse; basin wide, obtuse, symmetrical; skin thick, granular, tender, roughish; color dull greenish-yellow, with a brownish-red blush, overspread with russet nettings and streaks; dots numerous, small, russet; flesh whitish, somewhat granular, tender and melting, very juicy, sweet, and vinous, with a rich and pleasantly aromatic flavor; quality very good to best. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds acute.



SOUVENIR DU CONGRÈS

1. *Pom. France* **4**: No. 162, Pl. 162. 1867. **2.** *Am. Pom. Soc. Cat.* 34. 1875. **3.** *Flor. & Pom.* 37, Pl. 1875. **4.** *Jour. Hort.* N. S. **38**:120, fig. 19. 1880. **5.** *Hogg Fruit Man.* 647. 1884. **6.** *Cat. Cong. Pom. France* 350, fig. 1906.

Andenken an den Congress. **7.** *Oberdieck Obst-Sort.* 237. 1881. **8.** Mathieu *Nom. Pom.* 168. 1889. **9.** *Deut. Obstsorten* **6**: Pt. 16, Pl. 1910.

Souvenir. **10.** *Am. Pom. Soc. Cat.* 24. 1897. **11.** Ont. Dept. Agr. *Fr. Ont.* 179. 1914.

Very similar to Clapp Favorite and Bartlett, and not as good as either in fruit-characters, Souvenir du Congrès hardly merits a place in American pomology. The crop ripens between those of the two sorts with which it has been compared, and the fruits are larger and often handsomer. The fruits are said to be larger and of better quality when the tree is double-worked on the quince. The tree is remarkable for vigor, hardihood to cold, and healthfulness; and bears so abundantly that the crop must be thinned to prevent breaking of branches. The variety grows especially well in New York, and is deserving a place in home orchards and in fruit-collections. The accompanying color-plate illustrates the size, shape, and color of this pear remarkably well.

Souvenir du Congrès owes its origin to M. François Morel, Lyons, France. M. Morel grafted one of his pear-trees with cions taken from several other varieties, including Bartlett, and from the tree thus grafted he obtained fruit, seeds of which he sowed in 1852. One of the resultant trees bore fruit in 1863, and the pears had so many earmarks of Bartlett that it was at once assumed to be a seedling of that

variety. The tree continued to do well and in due course the variety was judged to be worthy of dissemination by the Rhône Horticultural Society. Later, M. Morel dedicated the new pear to the Pomological Congress of France. The variety was introduced in the United States about 1870. The American Pomological Society placed Souvenir du Congrès on its fruit-catalog list in 1875.

Tree medium in size and vigor, upright-spreading, open-topped, very productive; branches zigzag, dull reddish-brown, heavily overspread with ash-gray scarf-skin, marked by small, raised lenticels; branchlets thick, long, reddish-brown, overspread with dull gray mingled with green, smooth, glabrous, with few small, slightly raised lenticels.

Leaf-buds small, short, pointed, plump, free. Leaves 1⅞ in. long, 1½ in. wide, roundish-oval, leathery; apex abruptly pointed; margin tipped with very few glands, finely serrate; petiole 1½ in. long, glabrous, tinged with red. Flower-buds short, conical or pointed, plump, free, arranged singly on very short spurs or branchlets; flowers with a disagreeable odor, 1⅛ in. across, pinkish-white as the buds unfold, becoming whitish, in dense clusters, 6 to 8 buds in a cluster; pedicels ¾ in. long, thick, heavily pubescent, light green.

Fruit ripe in September; large, $3^{7}/_{16}$ in. long, $2^{11}/_{16}$ in. wide, uniform in size and shape, oblong-acute-pyriform, symmetrical, with unequal sides; stem 1 in. long, short, thick, curved; cavity obtuse, almost lacking, very shallow, narrow, russeted, slightly furrowed, often with the stem inserted beneath a pronounced irregular lip; calyx open; lobes separated at the base, narrow, acute; basin wide, obtuse and flaring, slightly furrowed, symmetrical, smooth except for the thick, russet covering; color yellow, with a

reddish blush on the exposed cheek, covered with nettings of russet and yellow patches; dots numerous, small, russet, conspicuous; flesh white, with a faint tinge of yellow, firm, granular, tender, very juicy, sweet, with a musky flavor; quality good. Core closed, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide, plump, acute.



SOUVENIR D'ESPÉREN

1. Barry *Fr. Garden* 318. 1851. **2.** Downing *Fr. Trees Am.* 857. 1869. **3.** Tilton *Jour. Hort.* **6**:14,

fig. 1869.

Downing, in 1869, noted this old French pear as one of the best for either amateur or commercial grower, and at that time it was rather widely planted. Now, however, growers seldom set it. The trees are vigorous, hardy, healthy, and productive, and the fruits are attractive in appearance and rather good in quality, but neither tree nor fruit rise much above mediocrity, and the variety has no outstanding character to give it individuality. The crop comes in season in December, the pears keeping well until ripe, after which they quickly decay. The variety is worth planting only for the sake of diversity.

Major Espéren, Mechlin, Belgium, raised this pear from seed about the middle of the nineteenth century. The name *Souvenir d'Espéren* was at one time applied to *Fondante de Noël* in consequence of which confusion has existed as to the identity of the two sorts. The pear reached America about 1850.

Tree medium in size, upright, slightly spreading, dense-topped, productive; branches reddish-brown overlaid with thin scarf-skin, marked with very conspicuous but scattering lenticels; branchlets very thick and long, with long internodes, light brown mingled with green, dull, glabrous, sprinkled with small, conspicuous, raised lenticels.

Leaf-buds very small, short, pointed, plump, free. Leaves 3 in. long, 1⅝ in. wide; apex abruptly pointed; margin uneven, finely serrate; petiole 2⅝ in. long, tinged red. Flower-buds small, short, conical, plump, free, singly on very short spurs; flowers open late, showy, 1⅜ in. across, average 7 buds in a cluster; pedicels 1¼ in. long, slender.

Fruit ripe the last of November and December;

large, 3½ in. long, 2⅝ in. wide, oblong-obovate-pyriform, the surface uneven; stem 1¼ in. long, slender; cavity very obtuse and shallow or lacking, the flesh drawn up about the base of the stem in a lip; calyx partly open, small; lobes separated at the base, short, narrow, acute; basin shallow, narrow, obtuse, wrinkled; skin thick, roughened with russet; color greenish-yellow, mottled and patched with russet, sprinkled with many russet dots and often with russet overspreading nearly the entire surface; dots numerous, russet, small; flesh yellowish, very granular near the center, firm, crisp but tender, juicy, with a pleasant, aromatic, vinous flavor; quality good to very good. Core large, closed, with clasping core-lines; calyx-tube short, wide, conical; seeds small, short, plump, acute, light brown.



SUDDUTH

1. *Ill. Hort. Soc. Rpt.* 144, Pl. 1894. **2.** *Mich. Hort. Soc. Rpt.* 141. 1894. **3.** *Can. Hort.* **19**:126, figs. 936 and 937. 1896. **4.** *Gard. Chron.* 3rd Ser. **19**:108. 1896. **5.** *Ill. Hort. Soc. Rpt.* 9. 1897. **6.** Budd-Hansen *Am. Hort. Man.* **2**:264. 1903.

Sudduth has little to recommend it for New York or eastern pear regions, but it is a standard sort in parts of the Mississippi Valley. The characters which give it a place in the pear flora of the region just named are remarkable freedom from blight, hardiness to cold and heat, capacity to withstand drought, early bearing, and great productiveness. The fruits are neither attractive in appearance nor high in quality—hardly fit for dessert, being but a grade or two better than the disreputable Kieffer. Like those of the Kieffer, however, the fruits do very well for all culinary purposes. They do not keep well as they soften at the center soon after becoming edible. The trees are said to be nearly as hardy as those of the wild crab-apple. The variety is desirable only where hardiness and freedom from blight are prime requisites.

The Sudduth pear was introduced about 1895, although the parent tree was at that time fully seventy years old. It originated from seed planted by Thomas Constant in 1820, in Sangamon County, Illinois. Later, Judge Stephen A. Logan of Springfield, Abraham Lincoln's first law partner, acquired the property on which the tree stood and from him Titus Sudduth bought the place in 1862. Sudduth was so impressed with the fruit that he had trees propagated by Augustine and Company, Normal, Illinois, and disseminated under his name.

Tree large, vigorous, upright becoming quite spreading, open-topped, hardy, productive; trunk stocky, shaggy; branches thick, smooth, dull

reddish-brown, almost entirely covered with gray scarf-skin, sprinkled with numerous large, raised lenticels; branchlets slender, curved, long, with long internodes, dull reddish-brown, overspread with thin gray scarf-skin which is mingled with green, dull, smooth, glabrous, with conspicuous, raised lenticels.

Leaf-buds small, pointed, appressed, somewhat flattened. Leaves 3 in. long, 1⅝ in. wide, thin, velvety; apex taper-pointed; margin glandless, finely serrate; petiole 2 in. long, slender, tinged red, glabrous. Flower-buds small, short, conical, free, singly on very short spurs; flowers late, 1⅛ in. across, in dense clusters, average 8 buds in a cluster; pedicels ⅞ in. long, thick, pubescent.

Fruit ripe in late September and October; medium or below in size, 2¼ in. long, 2⅜ in. wide, roundish-oblate, slightly conical toward the apex; stem ⅞ in. long, slender; cavity acute, deep, narrow, smooth, sometimes lipped; calyx large, open; lobes separated at the base, long, acute; basin very shallow, narrow, obtuse, occasionally wrinkled; skin thin, tough, smooth, dull; color light green, without blush; dots very small, russet or greenish, very obscure; flesh greenish-white, firm, crisp, rather dry, subacid; quality medium to poor. Core large, closed, axile, with meeting core-lines; calyx-tube wide, conical; carpels ovate; seeds variable in size, wide, flat, obtuse.



SUMMER DOYENNÉ

1. *Am. Pom. Soc. Cat.* 40. 1883. **2.** Hogg *Fruit Man.* 651. 1884. **3.** Ont. Dept. Agr. *Fr. Ont.* 180, fig. 1914.

Doyenné d'Été. **4.** Downing *Fr. Trees Am.* 336. 1845. **5.** *Gard. Chron.* 508, fig. 1847. **6.** *Mag. Hort.* **13**:66, fig. 8. 1847. **7.** Hovey *Fr. Am.* **1**:59, Pl. 1851. **8.** *Am. Pom. Soc. Rpt.* 53. 1852. **9.** *Horticulturist* N. S. **3**:491, fig. 1853. **10.** Downing *Fr. Trees Am.* 742, fig. 1869.

Sommerdechantsbirne. **11.** Dochnahl *Führ. Obstkunde* **2**:20. 1856.

Doyenné de Juillet. **12.** Leroy *Dict. Pom.* **2**:77, fig. 1869. **13.** *Guide Prat.* 57, 266. 1876.

Juli Dechantsbirne. **14.** Mathieu *Nom. Pom.* 239. 1889. **15.** Gaucher *Pom. Prak. Obst.* No. 51, Pl. 108. 1894.

The extremely early and highly flavored fruits, which are borne in prodigious quantities, make this a very desirable pear for the home garden. The fruits have no value for the markets, as they are small, do not keep well, and are unattractive. The tree, while never large, is of medium size, comes in bearing early, is hardy, and is as free as most of its orchard associates from blight. Both fruit and foliage suffer badly from pear-scab, and no amount of spraying can give the fruits a fair cheek in seasons when this fungus is epidemic.

Van Mons is supposed to have originated this variety about 1800 as Diel mentioned it among his best pears in 1812. Summer Doyenné was first brought to the notice of American pomologists by William Kenrick, who compiled a description of it as early as 1836. It does not, however, appear to have

been introduced until 1843. It was recommended for general culture in the United States by the American Pomological Society in 1852.

Tree variable in size, upright, vigorous, very productive; trunk slender; branches slender, slightly zigzag, brownish, overlaid with gray scarf-skin, marked with numerous conspicuous lenticels; branchlets slender, long, light brown mingled with green, the new growth tinged with red, smooth, glabrous except near the ends of the new growth, with numerous raised lenticels.

Leaf-buds small, short, sharply pointed, plump, free; leaf-scars with prominent shoulders. Leaves 2⅞ in. long, 1⅛ in. wide, thin, leathery; apex taper-pointed; margin finely serrate; petiole 1¾ in. long, tinged with pink. Flower-buds small, short, plump, free, singly on very short spurs; flowers showy, 1¼ in. across, in dense clusters, 7 to 9 buds in a cluster; pedicels 1¼ in. long, slender, pubescent.

Fruit ripe in early August; small, 1½ in. long, 1⅝ in. wide, obovate-obtuse-pyriform, symmetrical; stem 1⅛ in. long, slender; cavity obtuse, shallow, narrow, slightly furrowed, often lipped; calyx small, closed; lobes separated at the base, short, narrow, acuminate; basin shallow, obtuse, furrowed; skin thin, smooth, tender, waxen yellow, washed or blushed with bright red, deepening on the exposed cheek to crimson; dots numerous, small, russet, obscure; flesh tinged with yellow, fine-grained, tender and melting, juicy, variable in flavor and quality, pleasantly sprightly under favorable conditions; quality variable, good under the best conditions. Core closed, axile, with clasping core-lines; calyx-tube short, narrow, urn-shaped; carpels roundish-ovate; seeds small, narrow, flat, acute.



TYSON

1. *Mag. Hort.* **12**:433, fig. 30. 1846. **2.** *Horticulturist* **1**:433. 1846-47. **3.** *Proc. Nat. Con. Fr. Gr.* 51. 1848. **4.** Hovey *Fr. Am.* **1**:33, Pl. 1851.

5. Downing *Fr. Trees Am.* 444, fig. 1857. **6.** *Ibid.* 870, fig. 1869. **7.** Leroy *Dict. Pom.* **2**:710, fig. 1869. **8.** Oberdieck *Obst-Sort.* 333. 1881. **9.** Lauche *Deut. Pom.* **II**: No. 95, Pl. 95. 1883. **10.** Ont. Dept. Agr. *Fr. Ont.* 182, fig. 1914.

Tyson competes with Clapp Favorite as the precursor of the pear season which is really opened by Bartlett. In every character of fruit and tree excepting size and color of fruit, Tyson excels Clapp Favorite. The quality of the fruit far excels that of Clapp Favorite and it is better than that of Bartlett. Indeed, of commonly grown pears, the characters of flesh and flavor are second only to those of the fruits of Seckel. The flesh is melting and juicy, with a spicy, scented sweetness that gives the fruit the charm of individuality. The pears keep longer and ship better than those of Clapp Favorite; their season in New York is from the middle of August to the middle of September. Unfortunately, the pears are but medium in size, and are often poorly colored, both of which defects appear on the fruits of this variety as grown on the grounds of this Station and shown in the accompanying illustration. The tree is the most nearly perfect of that of any pear grown in America—the Kieffer, praiseworthy only in its tree, not excepted. The tree is certainly as hardy as that of any other variety, if not hardier, and resists better than that of any other sort the black scourge of blight. Add to these notable characters large size, great vigor, and fruitfulness, and it is seen that the trees are nearly flawless. The only fault is, and this a comparatively trifling one, that the trees are slow in coming in bearing. Tyson is the best pear of its season for the home orchard, and has much merit for commercial orchards. Were the fruits larger, it would rival Bartlett for the markets. No other variety offers

so many good starting points for the pear-breeder.

Tyson originated as a wilding found about 1794 in a hedge on the land of Jonathan Tyson, Jenkintown, Pennsylvania. The tree first bore fruit in 1800. The pears proved to be so good that Mr. Tyson distributed cions among his neighbors, but the variety was not generally disseminated. About 1837, a Doctor Mease of Philadelphia sent cions to B. V. French, Braintree, near Boston, who in turn distributed them among his friends. The variety fruited here about 1842, and the fruit was exhibited before the Massachusetts Horticultural Society under the name Tyson. In 1848, at the National Convention of Fruit-Growers, Tyson was recommended for general cultivation, and since that date the name has appeared continuously in the catalogs of the American Pomological Society.

Tree very large, vigorous, upright-spreading, tall, dense-topped, hardy, productive; trunk very stocky, rough; branches thick, dull reddish-brown, overspread with gray scarf-skin, with few lenticels; branchlets slender, short, light brown mingled with green, smooth, glabrous, sprinkled with few small, inconspicuous lenticels.

Leaf-buds small, short, conical, pointed, plump, appressed or free. Leaves 2¾ in. long, 1½ in. wide, thin; apex abruptly pointed; margin finely and shallowly serrate; petiole 1⅝ in. long. Flower-buds small, short, conical, pointed, plump, free, singly on short spurs; flowers medium in season of bloom.

Fruit matures in late August; medium in size, 2⅛ in. long, 1¾ in. wide, roundish-acute-pyriform, with unequal sides; stem 1¾ in. long, curved; cavity very shallow, obtuse, roughened, usually drawing up as a lip about the base of the stem; calyx open, small; lobes separated at the

base, short, narrow, acute; basin shallow, narrow, flaring, slightly furrowed, compressed; skin tough, smooth, slightly russeted, dull; color deep yellow, usually blushed; dots numerous, very small, obscure; flesh tinged with yellow, granular around the basin, otherwise rather fine-grained, tender and melting, very juicy, sweet, aromatic; quality very good. Core small, closed, with clasping core-lines; calyx-tube, short, wide, conical; seeds medium in size and width, plump, acute.



URBANISTE

1. *Trans. Lond. Hort. Soc.* **5**:411. 1824. **2.** Lindley *Guide Orch. Gard.* 384. 1831. **3.** Kenrick *Am. Orch.* 186. 1832. **4.** *Mag. Hort.* **10**:131, fig. 1844. **5.** Downing *Fr. Trees Am.* 417, fig. 190. 1845. **6.** *Gard. Chron.* 68, fig. 1847. **7.** Hovey *Fr. Am.* **2**:21, Pl. 1851. **8.** *Am. Pom. Soc. Rpt.* 53. 1852. **9.** *Pom. France*. **1**: No. 32, Pl. 32. 1863. **10.** Mas *Le Verger* **3**: Pt. 1, 193, fig. 95. 1866-73. **11.** Downing *Fr. Trees Am.* 871, fig. 1869. **12.** *Guide Prat.* 59, 308. 1876. **13.** Hogg *Fruit Man.* 657. 1884.

Urbanister Sämling. **14.** Dochnahl *Führ. Obstkunde* **2**:116. 1856.

Poire des Urbanistes. **15.** Leroy *Dict. Pom.* **2**:712, fig. 1869.

Coloma's Herbst Butterbirne. **16.** Mathieu *Nom. Pom.* 197. 1889. **17.** Lucas *Tafelbirnen* 109, fig. 1894.

Urbaniste is another variety desirable for home use because of its highly-flavored fruits—so sweet, rich, perfumed, and luscious as to be a natural sweetmeat. The fruits are of but medium size and not particularly handsome, but the taste excels the looks. The flesh is as tender, sweet, juicy, and as delicately perfumed as that of Seckel or White Doyenné, but with a distinct flavor and scent which give the fruits the added charm of individuality. The crop ripens in October, in a season when there are many other pears, but the fruits stand comparison with those of any other variety and are welcome additions to the fruit-basket. The trees have several defects, chief of which is tardiness in coming in bearing, to remedy which grafting on the quince is recommended. They are also susceptible to blight, and are not as hardy as might be wished. Of all pears, the tree of this variety is one of the handsomest—clean and tidy, slender

and graceful, yet robust and productive. Fruit and tree make this a valuable variety for home plantings.

Urbaniste originated as a wilding in the gardens of the religious order of Urbanistes, Mechlin, Belgium. After the suppression of this order in 1783, their gardens remained uncultivated for some time and produced new seedlings of considerable merit. The beauty of one of these attracted the attention of Count de Coloma, a well-known pomologist, who acquired this property in 1786, and in due course propagated and disseminated the variety under the name Urbaniste. Early in the nineteenth century, Count de Coloma sent specimens of the pear to the London Horticultural Society, which organization afterwards distributed it in England about 1823. Thomas Andrew Knight sent cions to John Lowell, Roxbury, Massachusetts, through whom it became disseminated in the United States. The American Pomological Society added Urbaniste to its fruit-catalog list in 1852.

> Tree medium in size, vigorous, upright-spreading, slow-growing, productive with age; trunk slender, shaggy; branches stocky, shaggy, zigzag, reddish-brown, overspread with gray scarf-skin, sprinkled with numerous lenticels; branchlets long, reddish-brown mingled with grayish scarf-skin, smooth, zigzag, glabrous, marked with conspicuous, raised lenticels.
>
> Leaf-buds large, obtuse, semi-free. Leaves 2¼ in. long, ⅞ in. wide, thin, leathery; apex taper-pointed; margin finely serrate; petiole 1½ in. long, slender. Flower-buds short, variable in shape, free.
>
> Fruit ripe in late October and early November; medium in size, 2⅜ in. long, 2 in. wide, obovate-obtuse-pyriform, with unequal sides; stem ⅝ in.

long, short, thick; cavity obtuse, shallow, narrow, faintly russeted, furrowed, slightly lipped; calyx open; lobes separated at the base, narrow, obtuse; basin shallow, narrow, obtuse, slightly furrowed; skin thick, tough, roughened by the russet nettings, dull; color pale yellow, often with a faint russet-red blush on the exposed cheek and marked with nettings and patches of russet; dots numerous, small, russet, conspicuous; flesh tinged with yellow, granular especially around the core, tender and melting, buttery, juicy, sweet, pleasantly aromatic; quality very good. Core closed, with clasping core-lines; calyx-tube short, wide, conical; seeds medium in size and width, long, plump, acute.



VERMONT BEAUTY

1. *W. N. Y. Hort. Soc. Rpt.* 65. 1889. **2.** *Ibid.* 176. 1890. **3.** *Ibid.* 134. 1891. **4.** *Can. Hort.*

16:184. 1893. **5.** *Am. Pom. Soc. Cat.* 37. 1899. **6.** Ellwanger & Barry *Cat.* 18. 1900. **7.** Budd-Hansen *Am. Hort. Man.* **2**:267. 1903.

The fruits of Vermont Beauty elicit praise from all who see or taste them. The bright-cheeked pears are as alluring to the eye as those of any other, and are almost as delectable as those of Seckel, which they resemble in shape, but are larger and handsomer. Of all pears, those of this variety (or of Forelle, with which it may be identical) best satisfy the eye for bright color. The crop ripens a little later and keeps longer than that of Seckel, and for these reasons, and because of the handsome appearance, should sell better. The pears will probably be most used to grace the table and for dessert, but the somewhat more sprightly flavor makes them better suited for all culinary purposes than those of Seckel. The trees are scarcely less satisfactory than the fruits. They are preëminent among their kind by virtue of large size, rapidity of growth, productivity, and hardiness, the region from which the variety came bespeaking greater hardihood to cold than that possessed by the average variety. The trees rejoice in vigor and health as do those of almost no other variety, and while hardly as productive as those of Seckel, yet because of greater size the pears fill the basket nearly as quickly. Vermont Beauty is one of the best of the pears of its season, and deserves a place in the orchards of the country for home and market.

Vermont Beauty is supposed to have originated in the nursery of Benjamin Macomber, Grand Isle, Vermont, more than forty years ago. Macomber maintained a small nursery, and this pear was one of several hundreds planted for stock. The tree was budded in the usual manner, but the bud failed to grow, and the original tree was allowed to stand

without another budding. After the variety fruited, it attracted so much attention that Macomber propagated it. Later, it was introduced by W. P. Rupert and Son, Seneca, New York. The American Pomological Society, recognizing its worth, added the variety to its fruit-catalog in 1899. There has long been doubt in the minds of the writers as to whether Vermont Beauty is distinct from Forelle. Careful comparison has been made of the fruit-and tree-characters of the two sorts, and it is found that they are so closely allied as to be indistinguishable. It is possible that a tree of the old German pear may have found its way into Macomber's nursery and received the new name.

Tree medium in size, vigorous, upright-spreading, dense-topped, hardy, productive; trunk stocky, shaggy; branches zigzag, reddish-brown, thinly overspread with gray scarf-skin, with numerous large lenticels; branchlets very thick, long, reddish-brown mingled with green, thickly covered with ash-gray scarf-skin near the tips, smooth, glabrous except near the ends of the new growth, sprinkled with numerous small, roundish, conspicuous, raised lenticels.

Leaf-buds small, short, pointed, plump, free. Leaves 2¾ in. long, 1⅜ in. wide, leathery; apex abruptly-or taper-pointed; margin glandless, finely serrate; petiole 2 in. long, glabrous, slender, pinkish-green. Flower-buds small, short, conical, plump, free, singly on short spurs; flowers characteristically small, average 1 in. across, in dense clusters, about 6 buds in a cluster, the petals unusually small; pedicels ⅞ in. long, slender, pubescent.

Fruit ripe in late October and November; medium in size, 2½ in. long, 2 in. wide, obovate-acute-pyriform, symmetrical; stem ¾ in. long,

curved; cavity extremely small or lacking, the flesh folded up around the base of the stem, occasionally lipped; calyx small, open; lobes separated at the base, short, narrow, acute; basin shallow, narrow, obtuse, smooth, symmetrical; skin thick, tough, smooth or with slight russet markings; color clear pale lemon-yellow, with a broad and brilliantly blushed cheek, fading at the sides into pinkish-red dots; dots numerous, very small, light russet, conspicuous; flesh tinged with yellow, granular at the center but fine-grained near the skin, tender and melting, very juicy, with a rich, vinous flavor; quality very good. Core closed, axile, with meeting core-lines; calyx-tube short, wide, conical; seeds large, wide, plump, acute.


VICAR

VICAR OF WINKFIELD

1. *Card. Chron.* 20, fig. 1843. **2.** *Mag. Hort.* **9**:129, 269. 1843. **3.** Downing *Fr. Trees Am.* 448, fig. 208. 1845. **4.** *Am. Pom. Soc. Rpt.* 53. 1852. **5.** Elliott *Fr. Book* 344, fig. 1854. **6.** *Jour. Hort.* N. S. **7**:414. 1864. **7.** Downing *Fr. Trees Am.* 875, fig. 1869. **8.** Hogg *Fruit Man.* 660. 1884.

Vicar. **9.** Mawe-Abercrombie *Univ. Gard. Bot.* 1778. **10.** *Am. Pom. Soc. Cat.* 40. 1883. **11.** *Ont.* Dept. Agr. *Fr. Ont.* 183. 1914. Clion. **12.** Kenrick *Am. Orch.* 159. 1841.

Le Curé. **13.** Hovey *Fr. Am.* **1**:47, Pl. 1851.

Curé. **14.** *Pom. France* **1**: No. 18, Pl. 18. 1863. **15.** Leroy *Dict. Pom.* **1**:610, fig. 1867. **16.** *Guide Prat.* 61, 261. 1876. **17.** *Soc. Nat. Hort. France Pom.* 396, fig. 1904. **18.** *Cat. Cong. Pom. France* 221, fig. 1906.

Pastorenbirne. **19.** Mathieu *Nom. Pom.* 262. 1889. **20.** Gaucher *Pom. Prak. Obst.* No. 59, Pl. 49. 1894.

Though large and handsome, the pears of this variety vary so much in quality, often being wretchedly poor, that trees of it are now seldom planted in America. The variety is not liked, also, because the trees blight badly. The fruits, besides being large and handsome, keep well, and are excellent for all culinary purposes. They are in season from November to January. The pears have a strong musky smell, and are more or less astringent. The quality depends largely on the soil, and is best when the trees stand in a deep, warm loam. The fruits are long-pyriform, usually one-sided, and are further characterized by the peculiarity that the calyx is not in line with the axis, as in other pears, but is on one side, generally opposite to that in

which the stalk is inserted as shown in the accompanying illustration. The trees, barring susceptibility to blight, are about all that could be desired—large, vigorous, handsome, and thrive both as standards and dwarfs. Many old trees of largest size of this variety are still to be found in New York, but young stock is now seldom set.

In 1760, this pear was found as a wilding by a French curate at Villiers-en-Brenne. In due course it was introduced into England by the Rev. W. L. Rahm, Vicar of Winkfield, in Berkshire, and from this circumstance it lost its proper name, *Curé or Le Curé*, and wrongly acquired that by which it is now known here and in England. The variety was introduced to America early in the nineteenth century. It was placed on the list of recommended fruits by the American Pomological Society in 1852.

> Tree large, vigorous, upright-spreading, dense-topped, hardy, very productive, long-lived; trunk and branches stocky; branches zigzag, greenish-brown overspread with grayish scarf-skin, with lenticels variable in number and size; branchlets curved, thick, long and willowy, with long internodes, light greenish-brown which is mingled with red on the newer growth, smooth, glabrous except near the ends of the new growth, sprinkled with conspicuous, raised lenticels.
>
> Leaf-buds small, short, pointed, free. Leaves 3 in. long, 2¼ in. wide, thick, leathery; apex abruptly pointed; margin tipped with minute scattering glands, finely serrate; petiole variable in length, pinkish-green; stipules short, tinged with pink. Flower-buds small, short, conical, plump, free, singly on very short spurs.
>
> Fruit ripe December to January; large, 4¼ in. long, 3 in. wide, oblong-pyriform, with a long,

tapering neck, with unequal sides; stem 1⅛ in. long, slender, curved; cavity lacking, with stem obliquely set without a depression and often with a fleshy fold around the base in the form of a lip; calyx large, open; lobes long, unusually broad, obtusely pointed; basin very shallow, narrow, obtuse, smooth, symmetrical; skin thick, tough, smooth, dull; color pale yellow, often with a faint trace of a brownish-red blush over the exposed cheek, marked with light russet around the calyx, and occasionally with russet flecks scattered over the surface; dots numerous, small, conspicuous, brownish-russet; flesh white, granular only near the center, tender and melting, juicy, somewhat astringent or with a sprightly muskiness, with no pleasant aroma; quality inferior for dessert but good for cooking. Core small, closed, axile, with clasping core-lines; calyx-tube long, narrow, funnel-shaped; carpels long-oval; seeds large, long, not very plump, often abortive.



WHITE DOYENNÉ

1. *Pom. Mag.* **2**:60, Pl. 1829. **2.** Lindley *Guide Orch. Gard.* 385. 1831. **3.** Prince *Pom. Man.* **1**:43. 1831. **4.** Downing *Fr. Trees Am.* 378, fig. 162. 1845. **5.** *Proc. Nat. Con. Fr. Gr.* 51. 1848. **6.** Hovey *Fr. Am.* **2**:85, Pl. 1851. **7.** *Horticulturist* N. S. **4**:158, Pl. 1854. **8.** *Ibid.* N. S. **6**:406. 1856. **9.**

Downing *Fr. Trees Am.* 880, fig. 1869. **10.** Hogg *Fruit Man.* 663. 1884.

Warwicke. **11.** Parkinson *Par. Ter.* 592. 1629.

Doyenné. **12.** Langley *Pomona* 132. 1729. **13.** Duhamel *Trait. Arb. Fr.* **2**:205, Pl. XLIII. 1768. **14.** Miller *Gard. Dict.* **2**: Pt. 1. 1807. **15.** Brookshaw *Pom. Brit.* **2**: Pl. 49. 1817. **16.** Brookshaw *Hort. Reposit.* **2**:175, Pl. 92. 1823. **17.** Leroy *Dict. Pom.* **2**:52, fig. 1869. **18.** *Rev. Hort.* 51. 1898.

Virgalieu. **19.** Prince Cat. 1771.

White Beurré. **20.** Mawe-Abercrombie *Univ. Gard. Bot.* 1778.

Weisse Herbst Butterbirne. **21.** Christ *Handb.* 511. 1817. **22.** Liegel *Syst. Anleit.* 100. 1825. **23.** Dochnahl *Führ. Obstkunde* **2**:84. 1856. **24.** Lauche *Deut. Pom.* **II**: No. 16, Pl. 16. 1882. **25.** Mathieu *Nom. Pom.* 296. 1889.

Saint-Michael. **26.** Coxe *Cult. Fr. Trees* 191, fig. 38. 1817.

Doyenné Blanc. **27.** *Trans. Lond. Hort. Soc.* **5**:135. 1824. **28.** Kenrick *Am. Orch.* 121. 1841. **29.** *Pom. France* **1**: No. 74, Pl. 74. 1863. **30.** Mas *Le Verger* **3**: Pt. 2, 19, fig. 106. 1866-73. **31.** *Guide Prat.* 63, 264. 1876. **32.** *Cat. Cong. Pom. France* 236, fig. 1906.

Thorp. **33.** Downing *Fr. Trees Am.* 553. 1857. **34.** *Mag. Hort.* **24**:516. 1858.

Bonne-Ente. **35.** Noisette *Man. Comp. Jard.* **2**:532. 1860.

This ancient and world-renowned pear, its fruits the most delectable of any that come from a pear orchard, is now rarely planted in America. It is being discarded because the small and comparatively unattractive fruits fail to satisfy commercial demands. In the middle of the last century, when

there was almost a mania for the best of the European pears, when fruits were judged by the palate rather than the eye as now, White Doyenné was one of the most commonly planted varieties. Proof of its popularity at home and abroad is found in the great number of names under which it has been grown. A more serious fault than small and unattractive pears is that the fruits and foliage are inviting prey to the scab-fungus, which often cracks and scabs the pears and defoliates the trees. Except in susceptibility to scab, the trees are nearly perfect when grown in the soil which they prefer—a rich clay, heavy rather than light. On such a soil, tree and fruit attain perfection. The accompanying illustration shows this pear at its best in color and size—a handsome fruit rather than the unattractive product so often seen. Grown in a light soil, and when scab is unchecked, the fruits are small, green, cracked, and cankered—intolerable to sight and taste. Unfortunately, also, the trees are ravaged by blight when that disease is epidemic. The faults named have made the variety an outcast, but it should still receive attention for the superb quality of its fruits where scab and blight can be controlled.

This pear is one of the oldest of all varieties. It is impossible to state whether it originated in France or was brought to that country from Italy. A German, Henri Manger, who studied the origin of fruits, states in his *Systematische Pomologie*, 1780, that the White Doyenné originated with the Romans; he considered it to be their *Sementinum*. Agostino Gallo, 1559, called the variety *Pera Ghiacciuola*. In 1660, Claude Saint-Etienne described a *Poire de Neige*. Both of these descriptions represent White Doyenné. In the sixteenth century and for part of the seventeenth, the name *Ghiacciuola* was accepted for the variety in

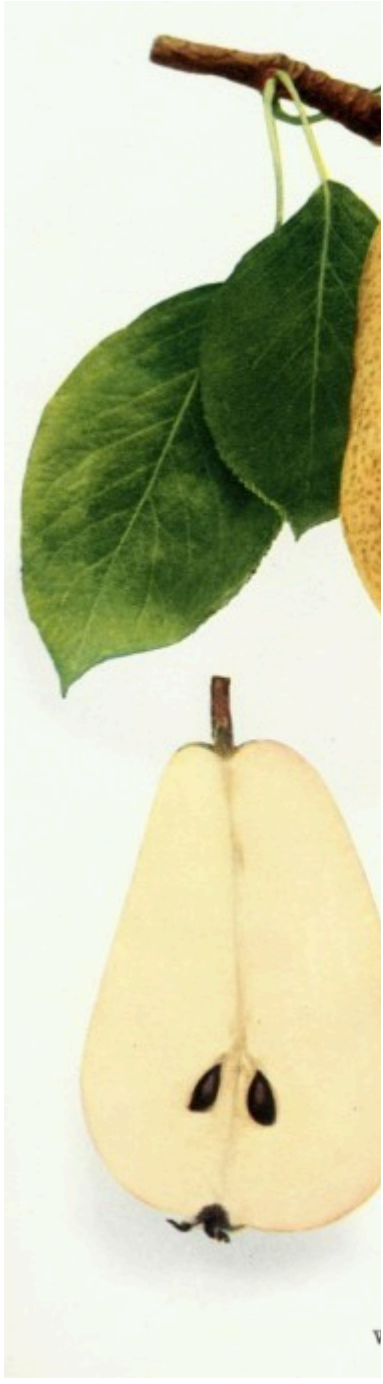
France with the synonym *Saint-Michel*. Leroy states that Le Lectier, in his catalog of the fruit trees which he grew at Orléans in 1628, changed the name to *Giaccole de Rome*, and Nicholas de Bonnefonds modified it in the first edition of his *Jardinier Francais*, 1652, to *Giacciola di Roma*. English pomologists have mentioned this pear under a variety of names since early in the seventeenth century. The names *Poire Doyenné* and *White Doyenné* have been most generally applied to it. The date of its introduction to America is not known, but it was probably brought to this country by the earliest French settlers. The first American catalogs mentioned the variety, and it was extensively grown in the vicinity of New York and Long Island where it was commonly called the *Virgalieu* pear. In the neighborhood of Boston, the name *Saint-Michael* was applied to it; while around Philadelphia it was called the *Butter Pear*. For nearly a century, however, the variety has been most generally known in this country as White Doyenné. At the Convention of Fruit-Growers held in New York, in 1848, White Doyenné was included in a short list of pears recommended for general cultivation. Since that date, the American Pomological Society has given the variety a place in its fruit-catalog.

Tree large, vigorous, upright, vasiform, hardy, very productive; trunk stocky, somewhat smooth; branches thick, dark gray, with many large lenticels; branchlets thick, reddish-brown, smooth, glabrous, with small, very slightly raised lenticels.

Leaf-buds obtuse, pointed, appressed. Leaves 2½ in. long, 1¾ in. wide, flattened, leathery; apex taper-pointed; margin finely serrate; petiole 1½ in. long, slender. Flower-buds large, long,

conical or pointed, free; flowers early, 1⅛ in. across, in dense clusters, 7 or 8 buds in a cluster; pedicels ⅞ in. long, slender, pubescent, light green.

Fruit matures in early October; medium in size, 2¼ in. long, 2⅛ in. wide, uniform, obovate-obtuse-pyriform, symmetrical; stem ¾ in. long, thick, slightly curved; cavity obtuse, shallow, narrow, russeted, usually symmetrical; calyx small, open or closed; lobes short, narrow, obtuse; basin shallow, obtuse, nearly smooth, symmetrical; skin thick, tough, smooth, dull; color clear pale yellow, with a small, bright red blush on the exposed cheek; dots numerous, small, russet, conspicuous; flesh yellowish-white, granular, firm at first but becoming melting when fully ripe, juicy, sweet, with a rich, aromatic flavor; quality very good. Core closed, with clasping core-lines; calyx-tube short, wide, conical; seeds wide, plump, obtuse.





WILDER EARLY

1. *Can. Hort.* **12**:286, fig. 73. 1889. **2.** *Ibid.* **13**:251, Pl. 1890. **3.** *Am. Pom. Soc. Cat.* 37. 1899. **4.** Budd-Hansen *Am. Hort. Man.* **2**:268. 1903.

Early Wilder. **5.** *Ill. Hort. Soc. Rpt.* 45. 1896.

Wilder. **6.** Ont. Dept. Agr. *Fr. Ont.* 183, fig. 1914.

This is one of the good, early pears for the markets. It is more highly prized in the Mississippi Valley than in New York and the Eastern states where summer pears are raised in greater variety. The pears are very attractive in size, shape, and particularly in the bright lemon-yellow color, with a flaming cheek to the sun, the whole pear being characteristically marked with small, russet dots set in a pinkish circle. Of all summer pears the fruits of this one seem least inclined to rot at the center, and usually keep longer and ship better, although the skin is tender and bruises easily. The flesh is buttery, moderately juicy, sweet and rich, with a faint, pleasant perfume. The fruits are small but are usually larger than those of the well-known Seckel, and are edible almost to the very center. The tree is large, vigorous, prodigiously productive, as healthy as any, and a remarkably handsome ornamental. Despite this catalog of virtues, Wilder Early is not largely planted in New York.

Wilder Early is a chance seedling found by Charles A. Green, Rochester, New York, about 1884, in Chautauqua County, New York. At the time of its discovery the tree was already in bearing. The

variety was named after Marshall P. Wilder, President of the Massachusetts Horticultural Society. The name first appeared in the fruit-catalog of the American Pomological Society in 1899.

Tree large, vigorous, upright, dense-topped, rapid-growing, hardy, very productive; branches zigzag, reddish-brown overspread with gray scarf-skin, with numerous lenticels; branchlets thick, very long, light greenish-brown, lightly streaked with ash-gray scarf-skin, dull, smooth, glabrous except near the tips of the new growth, sprinkled with many conspicuous, raised lenticels.

Leaf-buds small, short, pointed, appressed; leaf-scars prominent. Leaves 3¼ in. long, 1⅞ in. wide, leathery; apex taper-pointed; margin very finely serrate; petiole 2 in. long, glabrous. Flower-buds small, short, conical, plump, free, singly on short spurs; flowers late, $1^{3}/_{16}$ in. across, white or tinged with pink, in dense clusters, average 7 buds in a cluster; pedicels ½ in. long, pubescent.

Fruit ripe in late August; large, 2¾ in. long, 2⅜ in. wide, oblong-pyriform, symmetrical; stem ¾ in. long, very thick; cavity acute, narrow, russeted and with rays of russet extending over the sides, slightly compressed, rarely lipped; calyx large, open; lobes separated at the base, long, narrow, acuminate; basin very shallow, narrow, obtuse, wrinkled; skin thin, tender, smooth, dull; color pale lemon-yellow, with a pinkish blush on the exposed cheek often deepening to dark pink; dots characteristically distinct, very numerous, small, russet or russet-red; flesh white, stringy, tender and melting, buttery, moderately juicy, sweet, faintly aromatic; quality good. Core small, closed, with clasping core-lines; calyx-tube long, narrow,

conical; seeds long, narrow, acute.



WINTER BARTLETT

1. *Ore. Bd. Hort. Rpt.* 42. 1895. **2.** *Ore. Nur. Cat.* 19. 1903. **3.** *Am. Pom. Soc. Cat.* 41. 1909. **4.** Cal. Com. Hort. *Pear Grow. Cal.* **7**: No. 5, 278, fig. 94. 1918.

Winter Bartlett is heralded from the Pacific Coast as a winter variety bearing fruits similar to those of Bartlett. As the fruits grow in New York there is a suggestion of Bartlett in the shape, color, and flavor of the fruits, but in size, as the color-plate shows, the newcomer falls far short of the older pear. The season is December and January, a time when there are a half-dozen other good pears, and since this one has no outstanding characters to make it notable, it is doubtful if it will outlive a brief period of probation in eastern orchards. The westerners say that the tree is very resistant to blight, a statement neither proved nor disproved in the East as yet. The variety is worth trying in a small way in New York.

This pear seems to have originated at Eugene, Oregon, some time prior to 1880, and to have been introduced by D. W. Coolidge of Eugene, although it must have been grown to some extent before Mr. Coolidge brought it to the front. Because of its resemblance to Bartlett, it is assumed that it is a seedling of that variety. The American Pomological Society added Winter Bartlett to its catalog of fruits in 1909.

Tree large, vigorous, upright, scraggly, open-topped, hardy, productive; branches stocky, smooth, light-brown overlaid with gray scarf-skin, with few lenticels; branchlets thick, curved, long, with long internodes, brownish-red, streaked with gray scarf-skin, glossy, smooth, glabrous, sprinkled with conspicuous, raised lenticels.

Leaf-buds large, long, conical, pointed, plump, free; leaf-scars with very prominent shoulders. Leaves 3¼ in. long, 1⅜ in. wide, stiff; apex taper-pointed; margin finely serrate; petiole 2¼ in. long. Flower-buds conical, plump, free, singly on spurs variable in length; flowers very late, 1½ in. across, in dense clusters, average 5 buds in a cluster; pedicels 1 in. long, thick, thinly pubescent.

Fruit ripe in December and January; large, 3 in. long, 2⅜ in. wide, oblong-obovate-pyriform; stem 1 in. long, thick, curved; cavity narrow, shallow, smooth, oblique; calyx small, nearly closed; lobes short; basin small, shallow, irregular; skin uneven in surface; color yellow, splashed with russet and often blushed on the exposed cheek with bright red; dots numerous, small, brownish-russet; flesh yellowish-white, fine-grained, tender, juicy, sweet, pleasant-flavored; quality good to very good. Core small, nearly closed, with meeting core-lines; calyx-tube short, wide; seeds large, long, plump, obtuse.



WINTER NELIS

1. *Pom. Mag.* **3**:126, Pl. 1830. **2.** Lindley *Guide Orch. Gard.* 409. 1831. **3.** Kenrick *Am. Orch.* 199. 1832. **4.** *Mag. Hort.* **10**:127. 1844. **5.** Downing *Fr. Trees Am.* 450, fig. 208. 1845. **6.** *Gard. Chron.* 20, fig. 1845. **7.** *Proc. Nat. Con. Fr. Gr.* 51. 1848. **8.** Hovey *Fr. Am.* **1**:15, Pl. 1851. **9.** Downing *Fr. Trees Am.* 884, fig. 1869. **10.** Oberdieck *Obst-Sort.* 339. 1881. **11.** Lauche *Deut. Pom.* **II**: No. 49, Pl. 49. 1882. **12.** Hogg *Fruit Man.* 667. 1884. **13.** Mathieu *Nom. Pom.* 301. 1889. **14.** *Deut. Obstsorten* **5**: Pt. 15, Pl. 1909.

La Bonne Malinoise. **15.** *Trans. Lond. Hort. Soc.* **4**:276. 1822. **16.** *Ibid.* **5**:408. 1824.

Thouin. **17.** Dochnahl *Führ. Obstkunde* **2**:23. 1856.

Bonne de Malines. **18.** *Ann. Pom. Belge* **6**:77, Pl. 1858. **19.** *Pom. France* **2**: No. 53, Pl. 53. 1864. **20.** Leroy *Dict. Pom.* **1**:484, figs. 1867. **21.** *Guide Prat.* 60, 252. 1876. **22.** *Cat. Cong. Pom. France* 202. 1906.

Nélis d'Hiver. **23.** Mas *Le Verger* **1**:29 bis, fig. 21. 1866-73.

Winter Nelis is the standard winter pear in the United States. Both fruits and trees possess several serious faults, but these are outmatched by virtues which make the variety preëminent in its season. The fruits are small and are often so poorly colored as to be unattractive, but well grown they are sufficiently large for dessert fruits and are very handsome in a much-russeted coat and a ruddy cheek. Flesh and flavor are the chief assets of the fruits. The flesh is tender, melting, juicy, luscious, with a rich, sweet, aromatic flavor—one of the most delectable of all pears. The fruits keep, ship, and sell well. The season is from Christmas to March, but the pears can be kept until late spring in cold-storage. The trees begin

badly, for no variety is more difficult to grow well in the nursery. They thrive only on standard stocks, refusing to do well on the quince unless double worked. In the orchard, the trees are among the unmanageables. They are small or of but medium size, with straggling, wayward tops with habits of growth so self assertive that no art nor skill of the pruner can bring the branches under control. The limbs are always crooked; some bend inward toward the main stem, some are upright, some droop, and no two behave in quite the same way. Notwithstanding the illy-shaped tops, the trees are often enormously productive so that the crop usually requires thinning. They bear almost annually; come in bearing young; are fairly hardy; and are adapted to almost any soil or situation provided, only, that the soil is fertile or well fertilized. They are as nearly immune to blight as those of any other European pear. The trees are characterized by two marked peculiarities: the old wood is thickly set with small, short spurs; and they are about the latest of all their kind in leafing out in the spring. There is no better winter pear for either the commercial pear-grower or the amateur, and the variety grows especially well in New York.

Winter Nelis was raised from seed by Jean Charles Nélis, Mechlin, Belgium, early in the nineteenth century. It was introduced into England by the London Horticultural Society under the name *La Bonne Malinoise*. Subsequently this name was cancelled and that of Winter Nelis adopted, the name which had been given the variety by Van Mons in honor of the originator. In 1823, Thomas Andrew Knight, President of the London Horticultural Society, sent cions of the variety to John Lowell, Roxbury, Massachusetts, who, in his turn, shared them with Robert Manning, Salem, Massachusetts,

whence the sort was very generally disseminated in this country and attained great popularity. At the National Convention of Fruit-Growers held in New York in 1848, Winter Nelis was included in a short list of pears recommended for general cultivation. For more than half a century the name has appeared in the fruit-catalogs of the American Pomological Society.

Tree medium in size and vigor, spreading, hardy, very productive; trunk stocky; branches thick, zigzag, reddish-brown mingled with gray scarf-skin, marked with small lenticels; branchlets with short internodes, reddish-brown, dull, smooth, glabrous, with numerous raised, conspicuous lenticels.

Leaf-buds medium to large, long, conical or pointed, free. Leaves 3 in. long, 1⅛ in. wide, elongated-oval, leathery; apex taper-pointed; margin varies from crenate to serrate; petiole 1½ in. long, slender. Flower-buds conical or pointed, free; flowers open late, 1¾ in. across, 6 or 7 buds in a cluster; pedicels ⅞ in. long, rather slender, lightly pubescent, greenish.

Fruit ripe late November to early January; medium in size, 2¼ in. long, about 2¼ in. wide, uniform in size and shape, roundish-obovate to obtuse-obovate-pyriform, quite symmetrical except for the unequal sides; stem 1⅜ in. long, thick, curved; cavity obtuse, shallow, narrow, russeted, gently furrowed, occasionally lipped; calyx large, open; lobes separated at the base, short, broad, acute; basin shallow, obtuse, lightly furrowed, symmetrical; skin thick, tender, roughened with much russet, dull; color yellow with a tinge of green, dotted with grayish-russet and with many russet streaks and patches on the exposed cheek which is usually blushed with bright red; dots numerous, small, russet,

conspicuous; flesh yellowish-white, quite granular at the center and underneath the skin, tender and melting, buttery, very juicy, sweet, aromatic; quality very good. Core large, closed, axile, with clasping core-lines; calyx-tube short, wide, conical; seeds large, wide, long, plump, acute.



WORDEN SECKEL

1. *Rural N. Y.* **50**:888, figs. 326 and 327.

1891. **2.** Thomas *Am. Fruit Cult.* 465, fig. 675. 1897. **3.** *Franklin Davis Nur. Cat.* 23. 1901. **4.** Budd-Hansen *Am. Hort. Man.* **2**:268. 1903. **5.** Banker *Cat.* 19. 1915.

Worden. **6.** *Am. Pom. Soc. Cat.* 41. 1909.

Possibly no pear has been more widely advertised during the last quarter-century than Worden Seckel. Nurserymen and pear-growers alike describe it as a better variety than Seckel, and say that it ought to take the place of that good old sort of which it is a seedling. But it is not driving Seckel out in most pear regions, though in many it is considered the more profitable pear of the two. It is a splendid pear, but falls short of Seckel in not being quite as dependable in different soils and climates; the trees are not as vigorous, though just as productive in many places, they are not quite as resistant to blight, and the fruits are not as high in quality. On the other hand, the pears are larger and handsomer. Well grown, the fruits of Worden Seckel are voluptuously handsome in form and color. The pears are smooth, glossy, trim of contour, well turned, unusually uniform, with a beautifully blushed cheek on a handsome green and yellow background. The accompanying illustration does not do the pear justice in size or color and shows a lack of symmetry not usually present. When the crop is thinned so that the fruits attain their largest size, no pear is handsomer or will bring a higher price on the fruit-stands. The crop comes in with Seckel, but keeps longer, lasting until December in cold-storage. The tree is very hardy and bears young, but does poorly in the nursery. Commercial growers should give this variety a thorough test, and amateurs everywhere will find it worth planting.

Worden Seckel, as its name suggests, is a seedling

of Seckel, raised by Sylvester Worden, Minetto, Oswego County, New York, about 1881. Smiths and Powell, Syracuse, New York, placed it on the market about 1890. The American Pomological Society added the variety to its fruit-list in 1909.

Tree large, vigorous, upright-spreading, rapid-growing, very productive; trunk thick; branches reddish-brown, nearly covered with thin, gray scarf-skin, marked with numerous lenticels; branchlets short, with internodes variable in length, light greenish-brown, dull, glabrous except near the ends of the new growth, sprinkled with numerous small, conspicuous, raised lenticels.

Leaf-buds very small, short, pointed, appressed. Leaves 2½ in. long, 1½ in. wide, thick, leathery; apex taper-pointed; margin tipped with few minute glands, finely or coarsely serrate; petiole 1½ in. long, glabrous, slender, tinged with red; stipules very small when present. Flower-buds small, short, conical, sharply pointed, plump, free, singly on very short spurs; flowers showy, 1½ in. across, in dense clusters, 8 or 10 buds in a cluster; pedicels 1¼ in. long, slightly pubescent.

Fruit ripe late September to October; medium in size, 2½ in. long, 2⅛ in. wide, obovate-acute-pyriform, symmetrical; stem ¾ in. long, thick; cavity very shallow and obtuse or lacking, the flesh folded up around the base of the stem and often lipped; calyx open, large; lobes narrow, acute; basin shallow, narrow, obtuse, smooth or gently furrowed, symmetrical; skin thin, tender, smooth, glossy; color pale golden-yellow, blushed on the exposed cheek with solid bright red, becoming almost crimson in highly colored specimens; dots numerous, small, russet, obscure; flesh yellowish-white or dull white, fine-grained

near the skin, granular at the center, tender and melting, buttery, very juicy, characteristically spicy and aromatic; quality very good. Core closed, axile, with meeting core-lines; calyx-tube conical; carpels ovate; seeds wide, plump, obtuse.

CHAPTER V
MINOR VARIETIES OF PEARS

A. J. Cook. 1. Cal. Com. Hort. *Pear Grow. Cal.* **7**:No. 5, 247, figs. 25 to 31. 1918. **2.** *Am. Pom. Soc. Rpt.* 134. 1920.

Seedling of Bartlett which originated with J. E. Hassler, Placerville, Cal., and was introduced by Loma Rice Nursery in 1916. Tree similar to Bartlett but branches more slender and whip-like, vigorous. Fruit medium to very large, shaped like Bartlett but irregular, yellow; flesh rather coarse; flavor sweet, pleasant; Dec.

Aarer Pfundbirne. 1. Dochnahl *Führ. Obstkunde* **2**:184. 1856.

A German Pound pear originated in Nassau, Hesse, about 1826. Fruit large, pyriform, smooth, greenish-yellow turning to light yellow, often blushed and dotted densely with light brown and covered with patches of russet; fleshy pulpy, semi-melting, sweet and musky; Oct.

Abbé Fétel. 1. Mathieu *Nom. Pom.* 166. 1889.

Calebasse Abbé Fétel. **2.** *Guide Prat.* 61. 1895.

Fruit very large, very elongated, bright red on the side next the sun; flesh melting, very juicy, sugary; first; Nov.

Abbé Pérez. 1. Leroy *Dict. Pom.* **1**:83, fig. 1867. **2.** Downing *Fr. Trees Am.* 654. 1869.

The parent tree of this variety was found in a garden of the Abbé Pérez, Lectoure, Department Gers, Fr. It was grafted and distributed in 1859. Fruit above medium, ovate, flattened at both ends, yellowish-green, dotted and streaked with russet; flesh whitish, fine, melting, juicy, sugary, acidulous, delicately perfumed; first; Nov. to Feb.

Abbott. 1. *Mag. Hort.* **20**:472. 1854. **2.** Downing *Fr. Trees Am.* 654. 1869.

Raised from seed by Mrs. T. Abbott, Providence, R. I. First fruited in 1845 or 1846. Fruit medium, obovate, inclining to pyriform, smooth, deep green changing to yellow, strewed all over with gray and crimson dots, with blush of crimson on the side to the sun; flesh yellowish-white, buttery, melting, juicy, slightly coarse and gritty, with a rich, sweet and slightly perfumed flavor; second; Sept. and Oct.

Abdon Birne. 1. Dochnahl *Führ. Obstkunde* **2**:45. 1856

Fruit small, short, obtuse, ventriculous; skin smooth and tender, lemon-yellow with a soft, rosy blush; flesh granular, semi-melting, sweet, with an aroma of cinnamon; first for dessert; July and Aug.

Abele de St Denis. 1. McIntosh *Bk. Gard.* **2**:459. 1855.

Described in 1855 as a “comparatively new or recently introduced pear” in England. Fruit large; excellent for dessert.

Abercromby. 1. Downing *Fr. Trees Am.* 654. 1869.

A wilding found in Tallapoosa County, Ala. Fruit medium, obtuse-pyriform, greatest breadth at center; skin rough, greenish-yellow, russeted, with a mottled, red cheek; flesh whitish, coarse, moderately juicy, sweet, slightly vinous; good; Aug.

Achalzig. 1. Dochnahl *Führ. Obstkunde* **2**:180. 1856. **2.** Hogg *Fruit Man.* 467. 1884.

A Russian variety sent from the Crimea into Europe by a Mr. Hartwiss, superintendent of the royal garden at Nikita, where it originated in 1851. Fruit large, abruptly pyramidal, green changing at maturity to lemon-yellow, strewn with white and gray dots; flesh yellowish, rather gritty, melting, sweet, rich; good; Oct.

Achan. 1. *Mag. Hort.* **9**:130. 1843. **2.** Hogg *Fruit Man.* 467. 1884.

This well-known Scotch dessert pear is probably of Norwegian origin. It is suitable only to a northern climate. Fruit below medium, turbinate but often obovate when grown to a large size, greenish-yellow on the shaded side, strewed with gray-russet patches and dots; on the exposed cheek it is of a dull, ferruginous red; flesh tender, buttery, sugary, juicy, with a rich, aromatic flavor; Nov. and Dec.

Acidaline. 1. Dochnahl *Führ. Obstkunde* **2**:164. 1856. **2.** Hogg *Fruit Man.* 468. 1884.

A seedling of Van Mons. It was in 1833 sent to the Horticultural Society of Paris under the number 1253 and acquired the name Acidaline from its extreme acidity. Fruit above medium, obovate, shining bright green changing to yellow-green at maturity, mottled with red on the side next the sun

and dotted all over with reddish-brown specks; flesh whitish-yellow, semi-buttery, semi-melting, gritty around the middle, sourish, very juicy; third for dessert, first for cooking; Oct.

Acme. 1. *Am. Pom. Soc. Rpt.* 68. 1895.

Raised by A. Block, Santa Clara, Cal. Fruit large, pyriform, yellow, russeted, red cheek; flesh breaking, melting, juicy and vinous.

Adams. 1. *Mag. Hort.* **20**:464, fig. 21. 1854. **2.** Hovey *Fr. Am.* **2**:91, Pl. 1851.

Raised from seed of Seckel planted in 1836 by Dr. H. Adams, Waltham, Mass. It first bore fruit in 1848. Fruit large, obovate-pyriform, yellow, shaded with crimson; flesh white, vinous; first; early Sept.

Adélaïde de Rèves. 1. Hogg *Fruit Man.* 469. 1884.

Madame Adélaïde de Rêves. **2.** *Ann. Pom. Belge* **3**:97, fig. 1855.

A seedling, found about 1850 in the gardens of the Society Van Mons, Belgium. Fruit medium, turbinate; skin smooth, bright green changing to lemon-yellow, dotted with fawn and marked with brown-black patches, slightly colored with reddish-brown on the side next the sun; flesh white, semi-fine, melting, full of sugary juice, vinous, well perfumed; first; late Oct.

Adèle Lancelot. 1. Leroy *Dict. Pom.* **1**:86, fig. 1867. **2.** Mas *Pom. Gen.* **3**:95, fig. 144. 1878.

Alexandre Bivort obtained this pear in 1851 at Jodoigne, Bel. Fruit variable in size but generally above medium, turbinate, swelled, obtuse, greenish-yellow, dotted all over and streaked with russet and often covered with black stains; flesh white, semi-

fine, rather soft, melting, gritty at center; juice abundant, sugary, acidulous, with a delicate, buttery flavor; first.

Adèle de Saint-Denis. 1. Leroy *Dict. Pom.* **1**:85, fig. 1867. **2.** Hogg *Fruit Man.* 469. 1884.

Adèle. **3.** Le Bon Jard. 356. 1882.

Raised by M. Guéraud, Saint-Denis, near Paris, about 1840. Fruit medium, obtuse-pyriform, greenish-yellow, strongly dotted and marked with fawn-colored russet; flesh yellowish, fine, melting, juicy, rather gritty around core, sugary, acidulous; first; Oct. and Nov.

Admirable. 1. *Mag. Hort.* **25**:207, fig. 13. 1859. **2.** Downing *Fr. Trees Am.* 655. 1869.

Raised by Francis Dana, Boston, Mass., and first exhibited before the Massachusetts Horticultural Society in 1853. Mr. Dana considered it one of his best seedlings. Fruit medium to large, globular-oval, largest diameter in middle, tapering to each end, rather swollen on one side, smooth, fine, yellow at maturity, with a circle of russet at the base of the stem and more or less traced and thickly dotted with russet; flesh yellowish-white, slightly coarse, melting, buttery, with a delicious perfume; good; Sept. and Oct.

Admiral Farragut. 1. Downing *Fr. Trees Am.* 655. 1869.

Farragut. **2.** *Mass. Hort. Soc. Rpt.* 44. 1866.

Raised by Dr. Shurtleff, Boston, Mass., and fruited first in 1862. Fruit large, pyriform, greenish-yellow, with many dots and mottled with fawn, blushed on the sunny side; flesh fine, melting, subacid, refreshing; good, handsome but rather lacking in

quality; late Sept.

Admiral Foote. 1. *Mass. Hort. Soc. Rpt.* 44. 1866.

Originated in Brookline, Mass. First fruited in 1862 or 1863. Fruit large, obovate, green; flesh melting, fine, with juice abundant, exceedingly rich, sweet, vinous; first; Sept.

Adolphe Cachet. 1. Leroy *Dict. Pom.* **1**:88, fig. 1867.

Obtained from seed in the trial grounds of André Leroy, Angers, France, and first fruited in 1864. Fruit medium, turbinate-obtuse, irregular, very bright brilliant yellow, dotted with russet and stained similarly on the side next the sun and around the stem; flesh white, fine, melting, gritty at center, juicy, sugary, acid, fresh, with a delicious savor of musk; first; Aug. and Sept.

Adolphe Fouquet. 1. Mas *Pom. Gen.* **4**:67, fig. 226. 1879.

Raised by M. Grégoire, Jodoigne, Bel. Fruit nearly medium, turbinate-conic, uniform in contour, water-green dotted with grayish-brown, often freely russeted, changing at maturity to dull citron-yellow; flesh white, with slight yellowish tint, rather fine, buttery, melting, with juice sufficient, sugary and vinous; good; Oct.

Adolphine Richard. 1. *Mag. Hort.* **26**:218. 1860. **2.** Leroy *Dict. Pom.* **1**:89, fig. 1867.

Reported by M. Bivort in the garden of the Van Mons Society, Geest-Saint-Rémy, Bel. Fruit small or medium, pyriform-obtuse, golden yellow, spotted, striped and mottled with russet; flesh whitish, firm, without grit, semi-melting, wanting in quality, with sugary juice, acidulous, aromatic, without any after-flavor; second; Oct. and Nov.

Aehrenthal. 1. Lauche *Deut. Pom.* **11**: No. 51, Pl. 51. 1883.

Dedicated by Dr. Diel of Stuttgart to the Baron von Aehrenthal of Prague sometime previous to 1833. Fruit medium, ventriculous-obovate-pyriform, bright green passing to yellow; flesh white, melting, juicy, buttery, aromatic; good; mid-Sept.

Agathe de Lescourt. 1. Leroy *Dict. Pom.* **1**:90, fig. 1867.

Agathe de Lescours. **2.** Mas. *Pom. Gen.* **5**:39, fig. 308. 1880.

Origin obscure. Cultivated in France in the middle of the last century and believed to have been introduced there from Belgium. Fruit medium and frequently very large, obtuse-pyriform, greenish-yellow, dotted and streaked with russet; flesh white, sweet, rather insipid; second; mid-Sept.

Aglaë Adanson. 1. Leroy *Dict. Pom.* **1**:91, fig. 1867.

Adanson Apothekerbirne. **2.** Dochnahl *Führ. Obstkunde* **2**:181. 1856.

Obtained from seed by Van Mons in 1816. Fruit small, pyriform but irregular, obtuse, greenish-yellow, finely dotted with russet, and washed with bright rose on the cheek next the sun; flesh white, coarse, breaking, with sufficient juice, scarcely any sugar but full of perfume and flavor; third; Aug. and Sept.

Aglaë Grégoire. 1. *Ann. Pom. Belge* **8**:69, fig. 1860. **2.** Leroy *Dict. Pom.* **1**:92, fig. 1867.

Obtained from seed about 1852 by X. Grégoire, Jodoigne, Bel., and placed on the market in 1855. Fruit below medium, obovate-obtuse-pyriform and

often nearly round, dark green changing to yellow at maturity; flesh melting, sugary, semi-fine and melting; juice abundant, vinous, with an agreeable perfume; first; Feb. and Mar.

Agnès. 1. Mas *Pom. Gen.* **7**:183, fig. 575. 1881.

Raised by M. Pariset, Curciat-Dongalon, Fr. First report of it given in 1869. Fruit medium or nearly large, turbinate-pyriform, even in outline, bright lively green sprinkled with brown dots all over, changing at maturity to clear yellow on the shaded side and warm gold on the side next the sun; flesh white, fine, altogether melting; juice sufficient, sweet, sugary, pleasantly perfumed; first; Dec. and Jan.

Agricola. 1. *Guide Prat.* 84. 1895.

Attributed to Mortillet, 1873. Fruit medium, turbinate, intense green, changing to decided yellow; flesh very fine, melting, highly aromatic; Sept. Tree vigorous and prolific. Recommended for wind-exposed situations.

Ah-Mon-Dieu. 1. Leroy *Dict. Pom.* **1**:93, fig. 1867. **2.** Hogg *Fruit Man.* 470. 1884.

This pear has had various names and is of ancient and obscure origin. Ah-Mon-Dieu is attributed to the exclamation of those words by King Louis XIV, who when visiting his gardens saw this pear tree heavily laden with fruit. Fruit small, obovate, lemon-yellow, dotted with russet, washed with lively rose on the side next the sun; flesh yellowish-white, coarse, breaking, not very juicy nor sugary, but full of perfume and flavor; good, but does not keep long after being gathered; Sept.

Agua de Valence (See page 250).

Aigue. 1. Leroy *Dict. Pom.* **1**:95, fig. 1867.

This variety is thought to have originated in the commune of Saint-Germain, Vendée, Fr., where the trees are to be found in abundance from 100 to 200 years old. Fruit small, ovate, generally a little pointed at the top, bronzed all over and rough to the touch, wrinkling freely at maturity; flesh yellowish, firm, breaking, somewhat gritty; juice sufficient, acidulous, deficient in sugar, almost insipid and sometimes having a delicate, musky flavor; third for dessert, second for kitchen use, but very variable; Nov. to Mar.

Aiken. 1. Mas *Pom. Gen.* **1**:69, fig. 35. 1872.

This is believed to be an American variety. Mas received it from Downing and thought it had been raised in the suburbs of Aiken, S. C. Fruit medium, obovate, entirely covered with a fine russet on which are some dots, but at maturity the russet changes to a rich gold and the cheek next the sun sometimes becomes blushed; flesh white, buttery, melting, free from granulations at the center, fairly sugary and vinous; not first class but good for preserving; Oct. and Nov.

Aime Ogereau. 1. Leroy *Dict. Pom.* **1**:96, fig. 1867.

Raised in the nurseries of André Leroy, Angers, Fr. It fruited for the first time in 1862. Fruit medium or small, obovate-obtuse, lemon-yellow, sprinkled with brown dots, seldom colored on the sun-exposed side; flesh white, melting, remarkable especially for its extreme fineness; juice abundant, sugary, acidulous, flavored with a delicious savor of musk; first; mid-Sept.

Aimée Adam. 1. *Guide Prat.* 75. 1895.

Raised by Simon Bouvier, Jodoigne, Bel. Fruit rather large, obtuse-pyriform; skin fawn; flesh yellowish, semi-melting, sugary, sprightly; third; latter half of Oct. Tree vigorous and fertile.

Akatsupo. 1. *Am. Gard.* **12**:10, fig. 6. 1891.

Japanese and common in neighborhood of Tokio. It is rather elongated in shape compared with other Japanese varieties, and heavily speckled with large dots; Aug.

Alamo. 1. Budd-Hansen *Am. Hort. Man.* **2**:232. 1903.

Originated by A. L. Bruce, Grayson County, Tex. Fruit medium to large, pale yellow, blushed with red; flesh buttery, melting; early.

Albertine. 1. Dochnahl *Führ. Obstkunde* **2**:115. 1856.
2. Mas *Pom. Gen.* **6**:131, fig. 450. 1880.

This seedling, raised by Van Mons, was sent by him to Poiteau, author of the *Pomologie Francaise*, who, in 1833, named it after his wife. Fruit small, pyriform-obovate; skin rather thick, firm, water-green, sprinkled with numerous very small gray-brown specks, the basic green changing to bright lemon-yellow on the side next the sun; flesh yellow, very fine, dense, buttery, melting; juice abundant, vinous, perfumed; first; Oct.

Alexander. 1. Downing *Fr. Trees Am.* 449. 1857.

Originated at the village of Alexander, Genesee County, N. Y., from seed planted about 1820 by a Mrs. Churchill. It was shown at the Fruit Growers' Society Exhibition held at Buffalo, N. Y., on Sept. 13, 1855. Although very similar to Gray Doyenné, it is distinct. Fruit medium, obovate-obtuse-pyriform, yellowish-green, nearly overspread with cinnamon-russet except in the shade, and having occasionally a

faint brownish blush in the sun; flesh white, rather coarse and somewhat gritty at the center, melting and very juicy, sugary; very good; Dec. to Feb.

Alexander Lucas. 1. *W. N. Y. Hort. Soct. Rpt.* 22. 1884. **2.** *Gard. Mon.* **28**:366. 1886.

Beurre Alexandre Lucas. **3.** Bunyard *Cat.* 37. 1913-14.

This pear was found in a forest in the department of Loire-et-Cher, Fr., in 1871. It was imported to the United States by Ellwanger & Barry, Rochester, N. Y., but never widely disseminated. Fruit large, golden yellow at maturity; flesh half-melting, juicy, vinous; quality good; Nov. to Jan.

Alexandre Bivort. 1. Mas *Le Verger* **1**:37, fig. 25. 1866-73. **2.** Leroy *Dict. Pom.* **1**:97, figs. 1867.

Obtained in 1848 by Louis Berckmans and named after Alexandre Bivort, founder of the Society of Van Mons, in Belgium. Fruit small to medium; the two types are spherical, or turbinate inclining to pyriform, respectively; skin smooth, shining green changing to yellow, dotted with russet; flesh white, fine-grained, tender, full of juice, sugary, with perfume of almond; variable in quality; Nov. to Jan.

Alexandre Chomer. 1. Mathieu *Nom. Pom.* 167. 1889.

Raised by M. Liabaud; introduced in 1887. Fruit large; in form similar to Bartlett shortened, clear green passing into yellow at maturity; flesh very fine, melting, juicy; first; Dec. and Jan.

Alexandre de la Herche. 1. Mathieu *Nom. Pom.* 167. 1889.

Raised by M. Sannier who named it after M. de la

Herche, a merchant of Beauvais, Oise, Fr. Fruit medium, globular-obtuse-pyriform, sometimes slightly cylindrical; flesh fine, with a pleasant perfume; late Oct. Tree is fairly vigorous and very fruitful and resisted the phenomenal frost in France in the winter of 1879-80.

Alexandre Lambré. 1. *Ann. Pom. Belge* **2**:94, fig. 1854. **2.** Hogg *Fruit Man.* 472. 1884.

A seedling of Van Mons which did not fruit until 1844, two years after the death of the great pomologist. Fruit medium, oblate, obtuse-pyriform, bright yellowish-green, sprinkled with minute russety dots and slight markings of russet, brownish-red on the side next the sun; flesh white, a little soft, melting, juicy, sweet, acid, free from grit and possessing a delicate, musk flavor; Nov.

Alexandre de Russie. 1. Lindley *Guide Orch. Gard.* 363. 1831.

Raised by M. Bouvier, Jodoigne, Bel., and named in honor of the Emperor Alexander of Russia. Fruit above medium, rather pyramidal, with an uneven surface, light green changing to yellowish-green, with a tinge of brownish-red on the side exposed to the sun where also it is somewhat stained with a fine, pale brown-russet, either in streaks or patches; flesh white, gritty, very juicy, buttery, with a rich, aromatic flavor. A good dessert pear; late Oct.

Alexandrina. 1. *Mag. Hort.* **25**:41, 502, fig. 50. 1859. **2.** Mas *Le Verger* **2**:27, fig. 12. 1866-73.

Raised by M. Bivort, Haelen and Louvain, Bel. Published in 1847. Fruit medium, rather variable, globular-ovate, bright green changing to a fine yellow at maturity, tinged with crimson on the side next the sun, strewed irregularly with minute, russet

dots; flesh yellowish-white, fine-grained, melting, juicy, sugary and perfumed; Sept.

Alexandrine Douillard. 1. *Ann. Pom. Belge* **2**:41, fig. 1854.

Raised by M. Douillard, Nantes, Fr., first harvested in 1849; placed in commerce in November, 1852. Fruit large, pyriform, turbinate or ovate; skin smooth and glossy, citron-yellow at maturity, nearly covered with russet-fawn, stained with dark brown and dotted with black and gray; flesh white, fine, melting; juice abundant, sugary and deliciously perfumed; excellent; Nov. and Dec.

Alexandrine Mas. 1. Mas *Le Verger* **1**:89, fig. 51. 1866-73.

This pear came from a seed of the Passe Colmar sown by M. Mas in 1850. Fruit medium, pyriform, irregular, with protuberances, obtuse, bright green changing at maturity to pale yellow, covered with very numerous and regularly spaced small, dark brown spots; flesh whitish, transparent, melting; juice sufficient and rich in sugar, perfumed after the manner of Passe Colmar; first; Apr. and May.

Alfred de Madre. 1. *Guide Prat.* 103. 1895.

A new variety sent out in 1895 by Daras de Naghin, Antwerp, Bel. Fruit medium, yellow, dotted with fawn, carmined on the side next the sun; flesh semi-melting, sweet, acidulous, with a very agreeable perfume; Oct.

Alice Payne. 1. Van Lindley *Cat.* 23. 1892.

Originated about 1843 near Salem, N. C. In 1892 the original tree was still growing when the variety was introduced by J. Van Lindley, Pomona, N. C.

Fruit medium to large, yellow-white; good; winter.

Allerton. 1. *Mass. Hort. Soc. Rpt.* 44. 1866.

A seedling raised by S. A. Shurtleff, Brookline, Mass., and submitted by him to the fruit committee of the Massachusetts Horticultural Society in 1866, it having first fruited in 1862. Fruit large and handsome, long-pyriform, bright yellow; flesh fine-grained, high flavor, rather acid; always markets well; late Oct.

Alliance franco-russe. 1. *Rev. Hort.* 116. 1900.

Raised from seed by Florimond Robitaillé, a horticulturist at Séclin, Fr., and placed on the market, in 1897. Recommended for trial by amateurs in 1900 by the President of the Pomological Society of France. Fruit medium to large, obovate-pyriform, rather similar to the Duchesse d'Angoulême, pale yellow sprinkled with red dots, deeper yellow on the side next the sun, and mottled with fawn and numerous russet dots at the base; flesh white, fine, melting, very juicy, sugary, acidulous, agreeably perfumed; almost very good; Oct. to Dec.

Alouette. 1. Leroy *Dict. Pom.* **1**:101, fig. 1867.

A chance seedling found by André Leroy in 1850 in the commune of Saulgé-l'Hôpital, Maine-et-Loire, Fr. The parent tree appeared at that time to be about 80 years old. The fruit was introduced in 1855. Fruit small, nearly obtuse, globular-pyriform, greenish-yellow, sprinkled with ash-colored spots, and slightly washed with carmine on the side toward the sun; flesh coarse, white, breaking and rather gritty; second; mid-Sept.

Alpha. 1. *Mag. Hort.* **9**:123. 1843.

Raised by Van Mons, Louvain, Bel., and named

and described in the London Horticultural Society's catalog of fruits in 1842. Fruit medium, obovate, slightly oblong; skin smooth, yellowish-green on the shaded side, and pale brown speckled with minute reddish dots on the cheek next the sun; flesh white, fine-grained, buttery; second quality dessert; Oct. Tree well adapted for standard or half-standard.

Alphonse Allegatière. 1. *Guide Prat.* 103. 1895.

Described by Simon-Louis Brothers, Metz, Lorraine, in 1895, as a new variety. Fruit large, clear yellow passing to butter-yellow at maturity; flesh white, very fine, melting, sugary; first; Oct. and Nov.

Alphonse Karr. 1. Leroy *Dict. Pom.* **1**:102, fig. 1867. **2.** Mas *Pom. Gen.* **3**:187, fig. 190. 1878.

Raised in the seed beds of Major Espéren. It was dated 1849 and in 1853 was included among trees of the Society Van Mons. Fruit above medium, pyriform-obtuse, depressed at the base, golden yellow, dotted and veined with fawn, stained with the same tint round the stem and calyx; flesh whitish, very fine, very melting, free from grittiness, juicy, fresh, sugary, acidulous, delicately perfumed; first; Nov. and Dec.

Amadotte. 1. Leroy *Dict. Pom.* **1**:104, fig. 1867. **2.** Mas *Pom. Gen.* **7**:37, fig. 499. 1881.

The Amadotte is of ancient origin and more than one variety appears to have borne the name. The one here described is that discussed by Le Lectier, 1620. Fruit medium and sometimes larger, pyriform-ovate, variable, orange-yellow, marbled and dotted with fawn, especially around the calyx and the stalk, and generally washed with carmine on the side of the sun; flesh slightly yellow, fine, buttery, gritty around

the core; juice abundant, sweet, with a slight flavor of musk; third for eating as dessert, second for cooking; Oct. to Jan.

Amande Double. 1. Downing *Fr. Trees Am.* 353. 1845.

Walker. **2.** *Ibid.* 877. 1869.

The name Amande signifies almond and has reference to its flavor. Amande Double is a seedling of Van Mons which probably derives its qualifying name from the fact that it has double kernels. In 1834-5 Van Mons sent it to Robert Manning of Salem, Mass., under the number 135, and how it acquired the name of *Walker* in this country is not known. Fruit medium, pyriform, slightly obtuse, golden yellow, slightly dotted with fawn, washed with carmine on the side exposed to the sun; flesh white, semi-fine, melting, gritty at center, juice sufficient, sugary, slightly acid, with a delicious flavor of almond; first; late Sept. to Nov.

Amandine. 1. Leroy *Dict. Pom.* **1**:109, fig. 1867.

Obtained about 1857 by M. Boisbunel, Rouen, Fr., from a seed-bed made in 1846. It was presented to the Horticultural Society of Rouen, September 19, 1858. Fruit medium to small, pyriform, obtuse, having one side more swelled than the other, greenish-yellow, speckled with fawn; flesh very white, semi-fine, melting, rarely gritty; juice abundant, sugary, full of flavor; first; Sept. and Oct.

Ambrette. 1. Langley *Pomona* 131, fig. IV. 1729. **2.** Duhamel *Trait. Arb. Fr.* **2**:186, Pl. XXXI. 1768.

Ambrette d'Hiver. **3.** Leroy *Dict. Pom.* **1**:112, fig. 1867.

A French dessert pear of ancient but uncertain

origin. It was mentioned by M. Le Lectier of Orléans in 1628 in his catalog, and was shown by him to have been cultivated under the name of *Trompe-Coquin*. It has also been thought to be the pear *Myrapia* mentioned by Pliny, and to have been so named because of the myrrh-like perfume. The name Ambrette was given to the variety on account of its musk-like flavor, resembling the scent of the flower which in France is called Ambrette. Fruit below medium, globular-oval, tapering toward stalk, yellowish-olive; flesh yellowish or greenish-white; formerly held in high esteem but now ranking only as second-rate; Nov. to Jan.

Ambrette d'Été. 1. Leroy *Dict. Pom.* **1**:111, fig. 1867.

This variety was first mentioned in 1628 by Le Lectier under the name *Besi de Mouillères*. Fruit small, spherical, narrowing a little at the summit, yellowish, often rough to the touch, speckled with gray dots and always washed with clear brownish-red on the side next the sun; flesh dull white, breaking, containing some grit around the core; juice sufficient, sugary, acidulous, rather delicately musky; second; Aug. and Sept.

Ambrosia. 1. *Jour. Hort.* N. S. **14**:326, fig. 1868. **2.** Hogg *Fruit Man.* 177. 1884.

Switser, writing in England in 1724, said that this variety was introduced to that country from France "among that noble collection of fruit that was planted in the Royal Gardens in St. James's Park soon after the Restoration, but is now cut down." No French author, however, appears to mention it under this name. It was formerly to be found in many old English gardens but now seems to have dropped out of favor. Fruit medium, globular-obovate, greenish-

yellow, slightly russeted and covered with small, gray specks; flesh buttery and in England possessing a high flavor, melting, rich, sugary, perfumed; first for dessert; Sept. but does not keep long.

Amédée Leclerc. 1. Leroy *Dict. Pom.* **1**:113, fig. 1867.

Raised by Léon Leclerc, Laval, Mayenne, Fr. It first bore fruit in 1849. Fruit medium, conic-cylindrical, often irregular in form and bossed, pale yellow, dotted, streaked and veined with russet; flesh white, fine, semi-melting; second; Feb.

Amélie Leclerc. 1. Mas *Le Verger* **3**: Pt. 2, 1, fig. 97. 1866-73. **2.** Leroy *Dict. Pom.* **1**:114, fig. 1867.

This excellent pear was raised by Léon Leclerc, Laval, Mayenne, Fr. The original tree first bore fruit in 1850, and appeared then to be 12 years old. Introduced to this country about 1868. Fruit medium, globular-ovate, somewhat uneven in outline, obtuse, pale yellow, dotted and veined with russet and washed with rose-carmine on the cheek next the sun; flesh white, fine, melting, full of juice, sugary, acidulous, perfumed; first; Sept. and Oct.

America. 1. *Mag. Hort.* **25**:205, fig. 12. 1859. **2.** Downing *Fr. Trees Am.* 658. 1869.

It was said of Francis Dana, the indefatigable pomologist of Boston, that he saved the seed of all good pears that he ate, and that from these he produced sixteen new, good varieties of which America was one. It is a handsome pear and in 1859 was considered an important acquisition because it ripens in the early part of the winter when the number of choice varieties is limited. Fruit very large, globular-ovate, somewhat angular, with an uneven surface, dull greenish-yellow, much clouded

with dull russet, and sprinkled heavily with large russet dots; flesh yellowish-white, rather coarse, semi-melting, sugary, buttery, pleasant, rich in flavor and having a refreshing aroma; good; keeps well; Dec.

Amie Verdier. 1. *Mass. Hort. Soc. Rpt.* 40. 1871.

One of a collection of 42 new varieties of pears exhibited by Marshall P. Wilder at the annual exhibition of the Massachusetts Horticultural Society in 1871, for which Mr. Wilder obtained the "first prize for new pears." Fruit medium, obovate, inclining to turbinate, yellow, with brownish-red cheek and some traces of russet; flesh white, very melting, juicy and rich. Promised to be fine.

Amiral. 1. Leroy *Dict. Pom.* **1**:115, fig. 1867. **2.** Hogg *Fruit Man.* 478. 1884. *Cardinale.* **3.** Prince *Pom. Man.* **1**:90. 1831.

A fine old French pear of unknown origin but mentioned by Olivier de Serres in his Theâtre d'agriculture in 1600. Fruit large, pyramidal, rather uneven in outline, dark greenish-yellow and washed with brilliant red on the side next the sun; flesh white, fine, tender, melting, free from grit, very juicy, rich and perfumed with anis; first rate dessert pear; seeds usually abortive; Sept. and Oct.

Amiral Cécile. 1. Leroy *Dict. Pom.* **1**:117, fig. 1867. **2.** Hogg *Fruit Man.* 478. 1884.

Admiral Cécile. **3.** Mathieu *Nom. Pom.* 166. 1889.

Raised by M. Boisbunel, nurseryman at Rouen, from seed sown in 1846; fruited for the first time in 1858. Fruit medium, globular-obovate, yellowish-green changing to lemon-yellow, thickly dotted and mottled with gray-russet; flesh fine, whitish, melting,

gritty at core, juicy, sweet and delicately perfumed; first rate dessert pear; Oct. to Dec.

Amiré Joannet. 1. Duhamel *Trait. Arb. Fr.* **2**:125, 1768. **2.** Hogg *Fruit Man.* 478. 1884.

An ancient pear written of in 1660 by Claude Mollet. It bears the name of Joannet because in some parts of France it ripens about St. John's Day, the 24th of June. Fruit small, regularly pyriform, slightly obtuse, smooth, pale greenish-yellow changing to a deep waxen-yellow, washed with pale rose; flesh white, semi-fine, tender, juicy, sugary, impregnated with a perfume of musk, quite agreeable; second; June and July.

Amlisberger Mostbirne. 1. Löschnig *Mostbirnen* 72, fig. 1913.

A perry pear found in Switzerland and first published in 1885. Fruit medium, globular, yellowish-green changing at maturity to light yellow, dotted with dark russet; excellent but not good for transportation; Sept. and Oct.

Amour. 1. Leroy *Dict. Pom.* **1**:120, fig. 1867.

Trésor. **2.** Duhamel *Trait. Arb. Fr.* **2**:236. 1768.

M. Duhamel du Monceau styled this the largest of all pears and sufficiently sweet to be eaten raw by those whose taste is not too exacting, but very good for cooking and far superior to the Catillac and Pound pears. Origin obscure. Fruit very large; form like that of the quince, much swelled at the middle, extremely mammillate at each pole; skin rough to the touch, dull yellow, dotted, striped and mottled with fawn and showing some brownish spots; flesh white, semi-melting, free from grit, juicy, very saccharine and well perfumed; second for dessert, first for the

kitchen; Nov. to Feb.

Amstettner Mostbirne. 1. Löschnig *Mostbirnen* 30, fig. 1913.

Lower Austria; perry pear. Fruit rather large, long-pyriform, obtuse, somewhat irregular, smooth, bright green turning yellow at maturity; flesh whitish, rather granular and sometimes rather bitter; Oct.

Ananas. 1. Christ *Handb.* 532. 1817. **2.** Leroy *Dict. Pom.* **1**:122, fig. 1867.

Ananas was originally introduced to Holland from France where it had been cultivated for many years under the name *De Bouchet*, a name given to it during the reign of Louis XIV, 1643-1715, by La Quintinye, Director of the Royal Gardens. Fruit medium; form rather variable, generally globular, height and breadth being equal; color bright green changing to yellowish-green at maturity, with some tinge of red on the side next the sun, strewed with brown-russet dots; flesh white, melting, somewhat gritty, juicy, sugary; first for dessert; Sept.

Ananas de Courtrai. 1. *Ann. Pom. Belge* **2**:13, fig, 1854. **2.** Leroy *Dict. Pom.* **1**:124, fig. 1867.

Ananas de Courtray. **3.** Mas *Pom. Gen.* **1**:79, fig. 40. 1872.

The origin of this variety is unknown, but it is believed to have been a chance seedling raised at Courtrai, Flanders, as M. Six, who established himself in that town in the business of a gardener about the year 1784, found it already extensively grown there. Fruit large, pyramidal and often inclining to oval, bright yellow changing to lemon-yellow and much dotted and splashed with light-colored russet; flesh

white, fine, juicy, well perfumed and with a flavor suggestive of cinnamon and musk; very good; Aug. and Sept.

Ananas d'Été. 1. Hogg *Fruit Man.* 480. 1884.

This is not the Dutch variety of Knoop but rather the type known in the British Isles as Ananas d'Éte or *King William* Pear. Fruit above medium, obtuse-pyriform, yellowish-green with brownish tinge next the sun and covered with large, rough, brown-russet dots; flesh delicate, buttery, melting, with a pleasant, perfumed flavor; first; mid-Sept.

Andouille. 1. Leroy *Dict. Pom.* **1**:126, fig. 1867. **2.** Mas *Pom. Gen.* **6**:111, fig. 440. 1880.

The origin of this variety is unknown beyond the fact that it was cultivated near Montfaucon, Maine-et-Loire, Fr., previous to 1850. At first it was known as the "*Polyforme*" owing to its very variable shape but was subsequently given its present name which is that of a twist of tobacco. Fruit medium or rather large, conic-pyriform, but often irregular and variable, sometimes much swelled below the middle, mammillate around the calyx, yellow, washed with fawn; flesh white, rather fine and buttery, gritty, melting; juice sweet and perfumed; second; late Sept.

Andrew Murray. 1. *Guide Prat.* 80. 1895.

Fruit small, ovate, yellow; flesh fine, melting, juicy; good; end of winter and spring. Tree fertile and moderately vigorous.

Andrews. 1. Hovey *Fr. Am.* **1**:97, Pl. 1851. **2.** Downing *Fr. Trees Am.* 451, fig. 1857.

Samuel Downer introduced this pear soon after the Massachusetts Horticultural Society was organized in 1829. He stated "that it originated in

Dorchester, and that the original tree was purchased about 60 years ago by John Andrews of Boston." Fruit rather large, pyriform, one-sided, pale yellowish-green, with a dull red cheek; flesh greenish-white, full of juice, melting, having a vinous flavor; first; early Sept.

Ange. 1. Duhamel *Trait. Arb. Fr.* **2**:138. 1768. **2.** Leroy *Dict. Pom.* **1**:131, fig. 1867. **3.** Hogg *Fruit Man.* 480. 1884.

This is one of the most ancient varieties in France. At a very early date it was dedicated to the "*Angels*" and later to the "Virgin Mary" and was known by the two names simultaneously from the sixteenth to the nineteenth century. Fruit small to medium, variable but generally more globular-turbinate than oblong or ovate, deep green changing to yellow, dotted with gray, washed with red-brown on the side to the sun; flesh white, melting, very juicy, sugary, acidulous, having a strong perfume of anis; first for dessert and also for preserves; Aug. and Sept.

Angel. 1. Thomas *Am. Fruit Cult.* 693. 1897.

Originated at Ghent, N. Y. Fruit large, handsome; poor, early.

Angeline. 1. Dochnahl *Führ. Obstkunde* **2**:134. 1856.

A seedling of Van Mons, 1852. Fruit medium, often rather ovate, light green changing to light yellow, somewhat blushed, finely dotted; flesh very fine, white, buttery, sweet, tartish, juicy; first for table and market; late Aug. The tree is best grown as a dwarf.

Angélique de Bordeaux. 1. Duhamel *Trait. Arb. Fr.* **2**:214, Pl. XLVII, fig. 5. 1768. **2.** Lindley *Guide*

Orch. Gard. 391. 1831. **3.** Leroy *Dict. Pom.* **1**:133, figs. 1867.

St. Martial. **4.** Prince *Pom. Man.* **1**:79. 1831.

Henri Manger thought this pear identical with the pear *Liceriana* or *Liciniana* of which Pliny spoke and which bears the name of Licinius, the Roman tribune and consul. In 1690 Jean Merlet described a pear under the name *Angélique* which appears to be the same, and said it was much esteemed in Languedoc under the name *Saint-Martial*. It remains that its origin is ancient and uncertain, though it seems quite likely, as M. Leroy thought, that it originated in Languedoc, Gironde, Fr. Switser considered it was introduced into England about 1708. For upwards of 100 years it was grown there under the name *Saint Martial*. It does not appear when it was first brought to this country. Fruit above medium to large, obtuse-pyriform, uneven in outline, glossy green changing as it ripens to pale yellow or greenish-yellow, the whole strewed with brown dots and a few patches of russet; flesh whitish, semi-fine, sweet and sugary, breaking, agreeable, not rich in perfume; second for dessert and cooking; Jan. to Apr.

Angélique Cuvier. 1. Mathieu *Norm. Pom.* 169. 1889. **2.** *Guide Prat.* 72. 1895.

Fruit medium, acute-pyriform, almost entirely covered with fawn on a yellow ground; flesh fine, melting, juicy; good; Sept. and Oct. Tree vigorous and fertile.

Angélique Leclerc. 1. Leroy *Dict. Pom.* **11**:137, fig. 1867. **2.** Mas *Pom. Gen.* **3**:7, fig. 100. 1878.

This variety was raised from seed by Léon Leclerc, Laval, Mayenne, Fr., about 1848. Fruit medium and often large, regular, long-ovate,

greenish-yellow, shaded with pale rose on the cheek next the sun and dotted with russet; flesh white, very closely grained, melting, rough or gritty round the core, juicy, sugary, acidulous, having a delicate aroma; first; Oct. to Dec.

Angélique de Rome. 1. Duhamel *Trait. Arb. Fr.* **2**:239. 1768. **2.** Leroy *Dict. Pom.* **1**:136, fig. 1867.

With the exception of M. Duhamel du Monceau, no pomologist of the sixteenth or seventeenth century mentioned this pear. Henri Manger writing in 1783, thought it identical with the "*pira Tiberiana*," a variety which Pliny tells us was a favorite with the Emperor Tiberius. Fruit medium, globular, obtuse-pyriform, darkish yellow, dotted with fine gray spots, always washed with rose on the side next the sun; flesh whitish, a little coarse, gritty around the core, full of rich, sugary juice; second; Oct to Dec.

Angleterre d'Hiver. 1. Duhamel *Trait. Arb. Fr.* **2**:198. 1768. **2.** Leroy *Dict. Pom.* **1**:138, fig. 1867.

According to Leroy this variety was grown in France in the middle of the seventeenth century, its grafts having been brought from England. Fruit medium, oblong-obovate-pyriform, pale yellow, spotted with fawn and slightly washed with red; flesh white, semi-fine, melting, rather gritty around the core, juicy, sugary, with a sweet and agreeable flavor; a good kitchen pear; Dec. to Mar.

Angleterre Nain. 1. Leroy *Dict. Pom.* **1**:140, fig. 1867. **2.** Downing *Fr. Trees Am.* 661. 1869.

This variety was raised from seed in 1832 at Paris by Edouard Sageret. It appeared first under the name

Angleterre parfumée and was so published in 1835, but for some reason was renamed. Fruit rather above than below medium, turbinate, obtuse, swelled and always more enlarged on one side than on the other; skin rough to the touch, dull green, uniformly dotted with clear russet; flesh whitish, fine, breaking, gritty at the center; juice abundant, fresh, sweet, with a musky savor; first; Sept. and Oct.

Angobert. 1. Leroy *Dict. Pom.* **1**:142, fig. 1867. **2.** Downing *Fr. Trees Am.* 661. 1869.

Á Gobert. **3.** Duhamel *Trait. Arb. Fr.* **2**:191. 1768.

Toward the end of the eighteenth century, 1780-83, Henri Manger claimed that he had identified the Angobert with the *Signina* or *Testacea* of Columella and Pliny. Fruit very large, variable but generally obovate-pyriform, distorted, enlarged around the calyx end, dull yellow, dotted and streaked with fawn, washed with red on the side of the sun; flesh white, coarse, juicy, sweet, having a rather agreeable after-flavor of musk; third for the table but first for the kitchen.

Angoisse. 1. Leroy *Dict. Pom.* **1**:145, fig. 1867.

Winter Bon Chretien. **2.** Hogg *Fruit Man.* 666. 1884.

This is one of the most ancient French pears having been described in the year 1094 in a chronological manuscript attributed to Geoffroy, the Prior of the Benedictine monastery of Vigeois in the Diocese of Limoges, in which it was stated to have derived its name from the village of Angoisse in the old Province of Limonsin, Fr. Fruit small to medium, turbinate, obtuse, swelled, golden-yellow, dotted, marbled with fawn and washed with brownish-red on the side to the sun; flesh whitish, slightly melting,

coarse, always very gritty at the center; juice excessively abundant, acidulous, sugary; third for dessert, second for cooking, first for cider; Dec. to Apr.

Angora. 1. Leroy *Dict. Pom.* **1**:147, fig. 1867. **2.** Mas *Pom. Gen.* **5**:35, fig. 306. 1880.

This is a member of a group of pears rather loosely termed Pound Pears. By some authors Angora is given as a synonym for *Belle Angevine* or *Uvedale's St. Germain*. In an account of a voyage he undertook in 1700 on command of King Louis XIV of France, M. Tournefort, the noted botanist, states that he saw at Beibasas, Asia Minor, the pears known in Constantinople as Angora. In 1832, Léon Leclerc imported it into France from Constantinople, having obtained it with difficulty through the French Ambassador at the Golden Horn. Fruit above medium to large, pyriform, obtuse, swelled around the center, rather irregular in form; skin thick, hard to cut, pale yellow, finely dotted with fawn and bearing some patches of fawn; flesh white, rather coarse, semi-melting, gritty at the center; juice plentiful and rich in sugar after the manner of sweet wine, little perfume; second; Oct. and Nov.

Angoucha. 1. *Guide Prat.* 82. 1876. **2.** Mas *Pom. Gen.* **7**:43, fig. 502. 1881.

Originated in the Department of the Aube, France. In the arrondisements of Troyes and Bar-sur-Seine it is also called *Courte queue* i. e. "Short Stem;" and by M. Baltet-Petit, it was described in the "Annales de Flore et Pomone," under the name *Belle Chaouce*, the name of the canton where it was very generally cultivated. Fruit medium, obtuse-conic-ovate, regular in contour, dark green sprinkled with numerous regularly spaced, brown dots often

comingled under a cloud of russet of same color, at maturity the green becomes an intense yellow, the russet golden, and on the side of the sun is a wash of light orange-red; flesh yellowish-white, semi-fine, dense, breaking; juice sufficient and rich in sugar; good for cooking, winter.

Anna Audusson. 1. *Pom. France* **3**:No. 110, Pl. 110. 1865. **2.** Leroy *Dict. Pom.* **1**:149. 1867.

Anna Audisson. 3. Downing *Fr. Trees Am.* 661. 1869.

In 1828 or 1830, M. Audusson, a nurseryman at Angers, Fr., obtained this variety from a bed of mixed seeds. Fruit medium or rather less, single or in pairs, rarely in clusters, turbinate-obtuse, always rather swelled, irregular, yellowish-green dotted with fawn and splashed with reddish markings on the side next the sun; flesh whitish, buttery, fine, melting, often mealy, gritty around the core, juicy, acidulous, only slightly saccharine or perfumed; third; Nov. to Jan.

Anna Nelis. **1.** Leroy *Dict. Pom.* **1**:150. 1867.

M. Grégoire, Jodoigne, Bel., raised this pear from a bed of mixed seeds made in 1835. It was first reported in 1849. Fruit second quality for dessert; maturity Apr. to May.

Anne de Bretagne. 1. Mathieu *Nom. Pom.* 169. 1889. **2.** *Guide Prat.* 84. 220. 1895. *Anne of Brittany*. **3. Gard. Chron.** 3rd Ser. **5**:18. 1889.

On trial with Simon-Louis Brothers, Metz, Lorraine, 1895. Fruit medium to large, yellow, glossy, sometimes colored with vermilion where exposed to the sun; flesh fine, melting, slightly acidulous; first; Nov. to Jan.

Anthony Thacher. 1. *Am. Pom. Soc. Rpt.* 102. 1875. **2.** *Ind. Hort. Soc. Rpt.* 42. 1875.

One of four varieties exhibited by Robert Manning at the Chicago meeting of the American Pomological Society in 1875 as the "Centennial Pears." The fruit grew upon a tree which was 235 years old that season. Fruit medium in size, ovate-pyriform, green, changing, to yellow at maturity; of tolerable quality; ripening early in Sept.

Antoine. 1. Mas *Pom. Gen.* **7**:180, fig. 572. 1881.

A seedling raised by M. Pariset in France in 1852 and first published in 1867. Fruit large, nearly cylindrical, truncated at both ends; bright green sown with numerous large, brown dots, a network of russet covering most of the surface, the basic green passing at maturity to lemon-yellow, the russet changing to gold, with the side next the sun often sprinkled with small specks of blood-red; flesh yellowish-white, fine, melting yet a little gritty near the core, full of saccharine juice richly perfumed; first; mid-winter.

Antoine Delfosse. 1. *Guide Prat.* 82. 1876. **2.** Baltet *Cult. Fr.* 320, 331, 332. 1908.

Raised by M. Grégoire of Jodoigne, Bel., about 1870. Fruit medium, ovate, truncated, dull green passing into dull yellow, covered with fawn spots; flesh fine, melting, juicy, saccharine, exquisite; late Nov.

Antoinette. 1. *U. S. D. A. Pat. Off. Rpt.* 397. 1858. **2.** *Guide Prat.* 82. 1876.

The parent tree was found in the commune of Camsegret, Fr., and is not to be confused with Beurré Antoinette, another and probably earlier variety.

Fruit medium size, handsome; flesh perfumed; Oct. and Nov. In the report of the Department of Agriculture for 1858 it was said in Massachusetts to make "a handsome pyramidal tree, promising well."

Anversoise. 1. *Guide Prat.* 84. 1895.

Introduced by Daras de Naghin, Antwerp, Bel., prior to 1895. Fruit rather large and very similar to Marie-Louise; flesh fine, juicy, sugary, pleasantly perfumed; Oct. and Nov. The tree is moderately vigorous and very prolific.

Apfelblättrige Azerolbirne. 1. Dochnahl *Führ. Obstkunde* **2**:197. 1856.

An apple-leaved variety; German. Fruit small, globular, yellow, blushed with red; flesh white, rather gritty, sweet, melting; seedless; third for dessert, first for kitchen; Aug.

Apothekerbirne. 1. Oberdieck *Obst-Sort.* 238. 1881.

To be found in the Rhine country and especially at Nüremberg. Fruit medium; ovate, smooth and shining, green changing to yellow, often with some light russet, and numerous russet dots; flesh yellowish-white, breaking, very tender, sweet, with an aroma of cinnamon and sweet flavor; very good for household purposes; Oct.

Apple. 1. Griffing Bros. *Cat.* 12, fig. 1909.

Said to have originated near Palatka, Fla., from a Japanese sort and introduced about 1909. Fruit large, roundish, light green becoming lemon-yellow; flesh white, crisp, juicy; ripens with Le Conte.

Apple Pear. 1. Prince *Pom. Man.* **1**:1831. **2.** Downing *Fr. Trees Am.* 662. 1869. *Poire-Pomme.* **3.** Mas *Pom. Gen.* **1**:173, fig. 87. 1872.

This variety is of ancient but unknown origin. Several varieties have been described under this name, but the pear here described is the German variety spoken of by J. V. Sickler about 1800 and extensively grown in the environs of Sachsenburg and Kanneburg. Fruit below medium, globular-oblate, not regular, olive-yellow, much dotted and russeted, and moderately washed with brownish-red on the side exposed to the sun; flesh yellowish-white, watery, fine and melting, granular around the core, without much perfume; second; Nov. and Dec.

Appoline. 1. *Guide Prat.* 82. 1876. **2.** Mas *Pom. Gen.* **5**:161, fig. 369. 1880.

Obtained from seed by President Parigot of Poitiers in 1845. It was propagated by M. Larclause but the date of its first introduction is unknown. Fruit rather small, nearly round or globular-ovate in form; color rather deep and dull green with a few small dots, and some traces of brown russet on both the summit and the base of the fruit; flesh white, tinted with green, fine, very melting, a little gritty about the core, full of sugary juice, slightly acid with an agreeable flavor.

Agua de Valence. 1. Mas *Pom. Gen.* **6**:25, fig. 397. 1880.

M. Mas received this pear from Adrien Sénéclauze, a nurseryman at Bourg-Argental, Loire, Fr. Fruit medium, irregular, globular, bright green passing to lemon-yellow, speckled with large and numerous deep green spots which are the more apparent on the side next the sun, well-exposed fruits washed with blood-red round the spots which become yellowish; flesh white, fine, tender, melting, juicy, sweet; good; Aug.

Aqueuse d'Esclavonie. 1. Mas *Pom. Gen.* **3**:63, fig. 128. 1878.

Count Bressler, Fernsee, Hung., sent this variety in 1842 to Liegel. Two years later Mas received it from Mr. Hartwill, Director of the gardens at Nikita in the Crimea, Rus., under the name *Achalzig I*. Fruit medium, obovate, acute-pyriform; color pale green, sown with numerous and distinct very small dots of a deeper shade; flesh whitish, rather coarse, melting, gritty around the core, abundant sweet juice, sugary, but without any appreciable perfume; Sept. and Oct.

Aqueusede Meiningen.. 1. Mas *Pom. Gen.* **4**:77, fig. 231. 1879.

This variety is cultivated in the neighborhood of Meiningen, central Germany, but its origin appears to be unknown. Fruit medium or nearly medium, globular, turbinate, very regular in contour; skin thick, very bright green sprinkled with numerous small dots of a darker shade, changing at maturity to pale yellow and more golden on the side exposed to the sun; flesh whitish, coarse, melting, fairly juicy, saccharine and only slightly perfumed; third; Sept.

Arabella. 1. Dochnahl *Führ. Obstkunde* **2**:134. 1856.

A seedling from Van Mons, 1852. Fruit below medium, pale green, slightly rough, much dotted with greenish cinnamon-russet; flesh whitish, very fine, sweet, vinous; first for dessert; Sept. and Oct.

Arbre Courbé. 1. *Gard. Chron.* 68. 1848. **2.** *Pom. France* **2**:No. 59, Pl. 59. 1864.

Krummholzige Schmalzbirne. **3.** Dochnahl *Führ. Obstkunde* **2**:67. 1856.

Bivort, successor of Van Mons in the Society's gardens at Louvain, stated that this variety was

gained by Van Mons about 1830. Fruit large, oblong-obtuse-pyriform; skin rough to the touch, being considerably covered with rough, scaly russet; color bright yellow or greenish-yellow, freely dotted with russet spots; flesh white, rather fine, melting, juicy, gritty around the core; a dessert pear, but hardly first-rate; Sept. and Oct.

Archduke of Austria. 1. *Mag. Hort.* **3**:50. 1837.

Manning in the Pomological Notices in the *Magazine of Horticulture* said: "This tree bears well every year; the fruit is handsome, but very dry and of inferior quality. Ripe in September. It may prove to have been received under a wrong name."

Archiduc Charles. 1. Leroy *Dict. Pom.* **1**:153, fig. 1867.

Raised by M. Duval, Hainaut, Bel. Fruit medium to large, short-pyramidal, bright yellow in France, brown-red next the sun, covered with large, dark-brown russet dots and patches; flesh fine, yellowish-white, juicy, with a very agreeable savor; first; Nov. and Dec.

Archiduc d'Été. 1. Leroy *Dict. Pom.* **1**:155, fig. 1867.

Ognonet. **2.** Duhamel *Trait. Arb. Fr.* **2**:135, Pl. VIII. 1768.

An old French variety described under various names at different times and places, the earliest being by Merlet in 1675. It acquired the synonym of *Ognonet* in the eighteenth century from its swelled onion-like form. Fruit small, obovate-obtuse-pyriform; pale lively green changing to yellowish-green as it ripens and covered with dark red next the sun with numerous russety dots and some patches of russet; flesh yellowish-white, semi-fine, juicy, gritty,

sugary, acid, with a slight flavor of anis; second; July and Aug.

Archiduc Jean d'Autriche. 1. Kenrick *Am. Orch.* 159. 1832. **2.** *Mag. Hort.* **21**:146. 1855.

Originated by Van Mons about 1817 and characterized by him as "admirable;" otherwise undescribed.

Archiduchesse d'Autriche. 1. Hogg *Fruit Man.* 483. 1884.

Raised by Van Mons. Fruit medium or below, globular-turbinate, green, yellowish-green when ripe, blushed with brownish-red, dots and stains of cinnamon-russet; flesh white, semi-melting, slightly gritty at core, juicy, sugary and rather rich flavor; second rate dessert; Sept.

Arendt Dechantsbirne. 1. Dochnahl *Führ. Obsikunde* **2**:92. 1856.

Raised from seed by Van Mons at Louvain, Bel. Reported in 1833. Fruit small, globular, uniformly greenish-yellow, thickly dotted; flesh aromatic, vinous; first for dessert; late Nov.

Argent. 1. Leroy *Dict. Pom.* **1**:156, fig. 1867.

Adrianus Junius, a Dutch botanist of the sixteenth century, identified the *pear of silver* or *the money pear* with the *Nardina* of the Romans, though his contemporary, Jacques Dalechamp of Normandy in his "*Histoire des plantes*," 1585, connected it with the *Liceriana* mentioned by Pliny. *Nardina* or *Nard* was an ointment smelling strongly of musk and lavender, from which the ancient pear no doubt took its name, but the flesh of Argent does not give out any such aroma. Henry Manger writing in 1783 thought that the *Poire d'Argent* which we have today is the

Liceriana of Pliny, agreeing with Dalechamp. Fruit small; form globular-obtuse-pyriform but usually mammillate at the summit, greenish-yellow, dotted with russet all over; flesh dead white, fine and melting, juicy, gritty at core; quality second; Aug. and Sept.

Argusbirne. 1. Dochnahl *Führ. Obstkunde* **2**:73. 1856.

Raised from seed by Von Muckenheim in Barmen, Rhenish Prussia, in 1832. Fruit medium, light green to citron-yellow without any red blush but rust-colored on the cheek next the sun, densely spotted with fine brown dots, without perfume; flesh granular, melting, acidulous, sweet, with cinnamon savor; second for dessert, first for kitchen use; late Oct.

Arkansas. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:25. 1908.

Arkansas Mammoth. **2.** *Mo. Hort. Soc. Rpt.* 37. 1896.

It has been suggested that this may be the *Uvedale's St. Germain* or *Pound* pear. Fruit large, long, obtuse-pyriform, tapering at both ends, green, tinged with yellow, very much marked with dots and patches of russet; stem medium long, stout, curved, inserted without cavity; calyx large, open; basin shallow; flesh white, moderately juicy, tough but crisp, astringent; quality poor; a late keeper.

Arlequin Musqué. 1. *Ann. Pom. Belge* **1**:105, fig. 1853. **2.** Leroy *Dict. Pom.* **1**:158, fig. 1867.

Raised from seed by Van Mons and noted in his catalog of 1825 under the number 1737. Fruit large, globular-obovate, even and regular in outline, dull or

olive-green which changes to lemon-yellow on maturity, dotted all over with brown spots, washed with fawn on the side next the sun; flesh white, buttery, melting, very sweet, acid, rather gritty around the core, juicy and having a savory perfume, sometimes of musk; second; in France Sept. and Oct.

Arlingham Squash. 1. Hogg *Fruit Man.* 484. 1884.

An English pear deriving its name from the village of Arlingham. It is in demand for the making of perry in the neighborhood of Hereford, Eng. Fruit globular, acute-pyriform, rather irregular in outline, dark green, with a brownish tinge on the side next the sun, a good deal russeted all over; flesh white, juicy, crisp, aromatic.

Armand Prévost. 1. Hogg *Fruit Man.* 484. 1884.

Origin unknown. Fruit medium, oblong-obovate, narrowing from the bulge to the calyx; even and regular in contour; a fine golden-yellow, with an orange cheek minutely dotted with russet; flesh half-melting, juicy, without much flavor; poor; Oct.

Arménie. 1. Leroy *Dict. Pom.* **1**:159, fig. 1867. **2.** *Guide Prat.* 82, 231. 1876.

Believed to have originated in Asia. Merlet wrote of it in 1675 and in 1690 when it had probably only recently been introduced into France. Fruit medium, globular, slightly flattened at the base and nearly always mammillate at the summit, clear green, passing into greenish-yellow at maturity, dotted all over with brown-russet and streaked with the same around the calyx; flesh yellowish, fine, tender, semi-breaking, gritty at the center, with juice sufficient, sugary, slightly musky, savory; second for dessert, first for cooking; Feb. to May.

Arnold. 1. *Ind. Hort. Soc. Rpt.* 103. 1892. **2.** *Mass. Hort. Soc. Rpt.* 249. 1893. **3.** *Ill. Hort. Soc. Rpt.* 142. 1898.

Raised from seed by Arnold & Frazier, Dansville, Ind. The name Arnold was conferred upon it at the meeting of the Indiana Horticultural Society, December, 1892, and in November, 1893, it received a first class certificate of merit from the Massachusetts Horticultural Society. In 1898, at the December meeting of the Illinois State Horticultural Society it was reported "a winter pear of good quality, apparently not ripe at this season; of local origin; a good keeper; an abundant bearer," and was recommended for trial in the experiment station of the State. Fruit medium size, oblong-pyriform, yellow russeted; flesh buttery, juicy, melting; good; very late.

Arthur Bivort. 1. Mas *Pom. Gen.* **6**:85, fig. 427. 1880. **2.** Leroy *Dict. Pom.* **1**:160, fig. 1867.

Raised from seed by Van Mons who died in 1842. The variety did not fruit till 1850. Fruit above medium, pyramidal, very long, obtuse, even and regular in contour, yellowish-green, slightly dotted with fawn, washed with pale red on the side next the sun; flesh whitish, a little coarse, juicy, melting, sugary, acid, delicately perfumed; first; Oct.

Arthur Chevreau. 1. *Rev. Hort.* 39. 1916.

Arthur Chevreau of Montreuil, a distinguished French horticulturist, obtained this variety and exhibited it to the Horticultural Society of France in December, 1915. It was described in the Journal of the Society after official testing and approval. Fruit large to very large, long and regular in form, very slightly bossed; stem short and set obliquely,

greenish-yellow passing to dark yellow, sprinkled with large, russet dots; flesh rather fine; firm, very juicy, slightly acidulous, with a very agreeable flavor; good or very good.

Arundell. 1. Parkinson *Par. Ter.* 593. 1629.

A very old English pear described by Parkinson as "most plentiful in Suffolke, and there commended to be a verie good peare."

Aspasie Aucourt. 1. *Guide Prat.* 84. 1895.

Origin unknown but thought to be European. Fruit medium, globular-obtuse, pale yellow; flesh fine, melting, very juicy, primrose in color, saccharine, slightly perfumed; one of the best of its season for the private garden; late July and Aug.

Aston Town. 1. Lindley *Guide Orch. Gard.* 352. 1831. **2.** Hogg *Fruit Man.* 485. 1884.

An old English variety raised at Aston in Cheshire, and largely cultivated there and in the neighboring counties, especially that of Hereford. Fruit medium sized, globular-turbinate, pyriform, pale green but changing on ripening to pale yellow, covered with numerous gray-russety specks; flesh yellowish-white, tender, buttery, and full of a most excellent saccharine, perfumed juice; it is a rich highly-flavored pear of the first rank; Oct. and Nov. A peculiarity of its growth is a tendency of the branches to twist.

Audibert. 1. Leroy *Dict. Pom.* **1**:163, fig. 1867.

Belle Audibert. **2.** Prince *Pom. Man.* **1**:119. 1831.

An old French pear raised in the Department of Bouches-des-Rhone, Fr., previous to the year 1814. Fruit medium, oblong-obovate-pyriform, greenish-

yellow, extensively dotted with fawn, washed with tender rose on the side next the sun and often bearing some small brownish stains on the shaded side; flesh very white, fine, juicy, melting, sugary, vinous, slightly acid, wanting in perfume; third as a fruit for dessert but first for the kitchen.

Augier. 1. Leroy *Dict. Pom.* 164, fig. 1867. **2.** Mas *Pom. Gen.* **6**:119, fig. 1880.

Raised in 1828 by M. Feraut, Cognac, Chareute, Fr. Fruit medium or nearly medium, ovate-pyriform, sometimes a little deformed, but more often regular in its contour, dark green, spotted with blackish-gray dots which are both numerous and prominent; flesh white, rather fine, breaking, with abundant sweet juice, often too astringent; medium; late winter.

Augustbirne. 1. Dochnahl *Führ. Obstkunde* **2**:56. 1856.

Meiningen, in central Germany, 1847; classed among the Zuckerbirne or sugar pears. Fruit small, obtuse-conic, greenish-yellow turning to yellow, often having a shining blush, gray and green dots; flesh semi-melting, gritty near the core, honey-sweet; second for dessert, first for kitchen and market; Aug.

Auguste de Boulogne. 1. Leroy *Dict. Pom.* **1**:166, fig. 1867. **2.** Mas *Pom. Gen.* **6**:179, fig. 474. 1880.

Probably a seedling of Van Mons. Fruit small, globular-ovate, bossed and generally contorted, clear yellow dotted with fawn around the stem and calyx; flesh white, semi-fine, extremely melting, very gritty around the core, juicy, saccharine, acidulous, with an excellent buttery flavor; first; Oct. and Nov.

Auguste Droche. 1. *Guide Prat.* 84. 1895.

Fruit rather large, globular, acute-pyriform, somewhat obovate; flesh fine, melting; Jan. and Feb. Tree vigorous and fertile.

Auguste Jurie. 1. *Pom. France* **1**:No. 4, Pl. 4. 1863. **2.** Mas *Le Verger* **2**:61, fig. 29. 1866-73.

Raised from a seed of the Beurré Giffard sown at the School of Horticulture, 1851. Fruit small, growing in clusters, sometimes ovate, sometimes short-pyriform, pale green speckled with numerous gray dots, lemon-yellow at maturity, washed with deep blood red, shaded with violet on the side next the sun; flesh white, slightly veined with yellow, fine, buttery; juice sufficient, sugary, vinous, musky; first; Aug.

Auguste von Krause. 1. Dochnahl *Führ. Obstkunde* **2**:127. 1856.

Raised from seed by Van Mons; fruited in 1852. Fruit large, obtuse-conic; skin rough, greenish turning to yellow; flesh very juicy; good; late Oct.

Auguste Miguard. 1. *Guide Prat.* 82. 1876. **2.** *W. N. Y. Hort. Soc. Rpt.* 25. 1896.

Introduced in France by M. Grégoire. Fruit rather large, oblong, somewhat resembling Louise Bonne de Jersey in shape and color, yellow, with dull red cheek on the sunny side; flesh melting, vinous, very juicy and of a pleasing flavor; first; Oct. to Dec.

Auguste Royer. 1. *Ann. Pom. Belge* **3**:11, fig. 1855. **2.** Leroy *Dict. Pom.* **1**:168, fig. 1867.

Raised by Van Mons and when brought under the notice of the royal Commission of Pomology in 1853 it was given the name of the President of the Commission. Fruit medium, obovate-obtuse-

pyriform, one side being habitually more swelled out than the other; color dull yellow, dotted with gray, and almost entirely covered with fawn; flesh whitish, fine, melting, juicy, gritty around the core, sugary, acid, with pleasant perfume; first; Nov. Tree very vigorous.

Augustine. 1. Dochnahl *Führ. Obstkunde* **2**:110. 1856. **2.** Mas *Le Verger* **2**:189, fig. 93. 1866-73.

Originated by Van Mons, 1823. Fruit medium, obovate-obtuse-pyriform, light green changing to yellowish-green, blushed with rose on the side next the sun, dotted with gray-green specks; flesh nearly white, slightly veined with yellow, fine, melting, full of sweet juice, delicately perfumed and refreshing; good; early Aug.

Augustine Lelieur. 1. Leroy *Dict. Pom.* **1**:169, fig. 1867. **2.** Mas *Pom. Gen.* **5**:43, fig. 310. 1880.

This variety is considered to be of Belgian origin. Leroy received it from the garden of the Society of Van Mons, Louvain, in 1854, and Mas received it at Bourg from a nurseryman at Wetteren, East Flanders, in 1859. Fruit above medium, oblong-obovate-pyriform, a little swelled, bossed, stalk bearing spines and implanted obliquely, greenish-yellow, russet and brown spots, stripes of fawn around the stalk; flesh white, fine, melting, gritty, sufficiently juicy, sugary, acid and delicate in flavor; first; Oct. and Nov.

Augustus Dana. 1. Downing *Fr. Trees Am.* 663. 1869.

Originated by Francis Dana of Boston, Mass. Fruit medium to rather large, globular-obtuse and varying from acute-pyriform to obtuse-pyriform, yellow, russeted; flesh whitish, juicy, melting, sweet, slightly

aromatic; first; Oct.

Aurate. 1. Duhamel *Trait. Arb. Fr.* **2**:122, Pl. III. 1768. **2.** Dochnahl *Führ. Obstkunde* **2**:26. 1856.

This ancient French pear appeared under the name *Muscat de Nancy* in Le Lectier's *Catalogue de son verger et plant* in 1628, and was sold in Nancy over 300 years ago. It is extensively grown in Germany in the valleys of the Rhine and in the plains of Coblenz and Mayence under the name of *Petit-Muscat rouge*, *Muscat d'été*, *Goldbirne*, etc. Fruit small, growing in clusters, turbinate, ventriculous, obtuse, regular in contour, dark green at first, dotted with fawn, streaked with brownish-red in the cavity and washed with rose where exposed to the sun; flesh yellowish-white, semi-fine and semi-melting, juicy, generally gritty, saccharine, vinous, delicately musky; first; late Aug.

Auray. 1. Leroy *Dict. Pom.* **1**:171, fig. 1867.

This was a chance seedling which originated in Brittany. Leroy states that he cultivated it in Anjou and first entered it in his catalog in 1851. Fruit rather large, ovoid, often more swelled on one side than on the other, bronze, with some greenish dots and patches, the skin rough to the touch; flesh whitish, semi-fine, semi-melting, gritty around the core; juice very abundant, sugary, vinous, sometimes astringent and sometimes also delicate and perfumed; second only on account of its variability, for in the same season it may produce some exquisite fruit, some only good and some only medium in quality.

Autocrat. 1. *Jour. Hort.* 3rd Ser. **3**:260. 1881.

Described in the Journal of Horticulture, London,

as a new and very large pear ripening at the end of October. It was a seedling from Beurré Capiaumont and is very hardy, robust and free, and quite distinct in growth and fruit.

Autumn Bergamot (English). **1.** *Pom. Mag.* **3**:120, Pl. 1830. **2.** Lindley *Guide Orch. Gard.* 352. 1831.

The English Autumn Bergamot or *Common Bergamot* is a distinct variety and not synonymous with the *Bergamotte d'Automne* of France. Writing in the early part of the eighteenth century, Switzer stated, and his statement was endorsed by Lindley in 1831, that the Autumn Bergamot was introduced into England in the days of Julius Caesar, that it was possibly the *Assyrian Pear* of Virgil, and was in that case to have been found in the "once celebrated and famous gardens of Alcinöus." This is a doubtful conjecture, though without doubt the variety is of very ancient origin. Fruit small, globular-obtuse, yellowish-green, dull brown where exposed to the sun and profusely speckled with gray russet; flesh greenish-white, tender, melting, somewhat gritty at the core, juicy, and of a rich flavor; a dessert pear of first quality; Oct. Tree vigorous, prolific, forms a handsome standard and succeeds on either quince or pear.

Autumn Colmar. 1. Lindley *Guide Orch. Gard.* 363. 1831. **2.** Hogg *Fruit Man.* 487. 1884.

De Bavay. **3.** Mas *Le Verger* **3**: Pt. 1, 175, fig. 86. 1866-73. **4.** Leroy *Dict. Pom.* **1**:184, fig. 1867.

This seedling of Van Mons was described in 1830 in the London Horticultural Society's Garden as a new Flemish pear. It was received there from Van Mons without a name and so became known in the

collection as Autumn Colmar from a fancied resemblance of its flavor to that of the old Colmar. Fruit large, obtuse-pyriform, rounded at the base, lemon-yellow, strewed with dots and patches of russet; flesh coarse, sweet, juicy, astringent, rather gritty at the core; second; Sept. and Oct.

Autumn Joséphine. 1. *Jour. Hort.* N. S. **20**:29, fig. 1871. **2.** Hogg *Fruit Man.* 488. 1884.

Obtained from seed of Joséphine de Malines by W. E. Essington, Ribbesford House, Bewdley, Eng. It first produced fruit in 1869. Fruit large, obovate-obtuse-pyriform; somewhat flattened at the crown, greenish-yellow when quite ripe, russeted in patches, flesh yellowish, with pale salmon tinge like that of Joséphine de Malines, tender, fine-grained, very juicy, juice rich, sugary, aromatic; first, though a little uncertain; Oct.

Autumn Nelis. 1. *Gard. Chron.* 124. 1864. **2.** Downing *Fr. Trees Am.* 664. 1869. **3.** Hogg *Fruit Man.* 488. 1884.

Graham Autumn Nelis. **4.** *Jour. Hort.* N. S. **5**:331. 1863.

Raised from seed by F. J. Graham, Cranford, Eng., about 1852 and exhibited before the British Pomological Society in 1858 under the name *Graham's Bergamot*. It was granted a first class certificate from the Royal Horticultural Society. Prior to being placed on the market in 1863 it was renamed Autumn Nelis because of the similarity of the tree and fruit to Winter Nelis. Fruit rather above medium and equal to a large Winter Nelis, obovate-pyriform, greenish-yellow, almost entirely covered with brown-russet; flesh yellowish, very tender, melting and buttery, with abundance of rich,

aromatic, sugary juice and having an exquisite flavor; a first class dessert fruit; Oct.

Avocat Allard. 1. Leroy *Dict. Pom.* **1**:173. 1867. **2.** *Jour. Hort.* N. S. **19**:284, 328. 1870.

Raised from seed of Doyenné Gris in 1842 by M. Grégoire, Jodoigne, Bel. Fruit small to medium, obovate-obtuse-pyriform, lemon-yellow, much marbled and spotted with russet; flesh yellowish-white and melting; juice very abundant, rich, spicy and very delicious; first rate for cooking; Oct. and Nov.

Avocat Nélis. 1. Leroy *Dict. Pom.* **1**:173, fig. 1867. **2.** Mas *Pom. Gen.* **5**:47, fig. 312. 1880.

Originated from the seed beds of M. Grégoire, Jodoigne, Bel., in 1846. Fruit medium, oblong-obovate-pyriform, compressed toward the summit, golden-yellow, dotted and veined with fawn or russet, slightly colored on the side of the sun; flesh whitish, semi-fine, semi-melting, juicy, apt to be gritty around the core, sweet and perfumed; second-rate; Jan. to Apr.

Avocat Tonnelier. 1. *Rev. Hort.* 19. 1893.

The parent tree of Avocat Tonnelier was raised at Nancy, Fr., about the year 1848. Fruit medium and above, globular-obtuse-pyriform, swelled at base, good yellow-orange at maturity, finely dotted with rose; flesh very dense, white, slightly tinted, melting or slightly breaking, juicy, very sugary, of sweet savor, rather recalling that of Bon Chrétien d'Hiver; first for cooking; all winter.

Ayer. 1. *U. S. D. A. Yearbook* 428, Pl. 52. 1911.

Originated about 1880 from a chance seedling which sprang up in a vineyard owned by O. H. Ayer,

Sibley, Kan. It came into bearing about 1888. Fruit medium, obovate, light greenish or pale lemon-yellow, frequently having a light scarlet blush on the exposed side, and numerous minute russet dots; flesh whitish or yellowish-white, fine, buttery, melting, juicy; very good; July and Aug.

Aylton Red. 1. Hogg *Fruit Man.* 489. 1884.

A perry pear cultivated in Herefordshire, Eng., and described as "growing in popularity." Fruit small, globular, turbinate; skin covered with rough, russet dots.

Azerole. 1. Leroy *Dict. Pom.* **1**:174, fig. 1867.

Azerole is an ancient pear though the date and the circumstances of its origin are unknown. Jean Bauhin mentioned it in his "*Historia Plantarum*" published in 1650. Fruit very small, oblong or turbinate, yellowish-orange, very finely dotted with fawn, and blushed on the cheek exposed to the sun; flesh yellowish, tender, fine, soft, perfumed, rather gritty around the core, juicy, sugary; third; Sept.

Baguet. 1. Mas *Pom. Gen.* **4**:15, fig. 200. 1879.

The origin of this pear is uncertain but a bulletin of the Society of Van Mons, 1866, placed the name of Baugniet in parenthesis, suggesting thereby that it was raised by M. Baugniet in Belgium. Fruit large to very large, oblong-obovate-pyriform, very bright green with grayish dots passing on ripening to bright lemon-yellow; flesh whitish, semi-fine, rather buttery, fair amount of sweet juice, acidulous, sprightly; of good quality when its acidity is not too much developed; Nov. and Dec.

Bakholda. 1. *Can. Hort.* **17**:291. 1894.

Described as a new Canadian variety in 1894.

Fruit large; oblong, yellow; flesh subacid; middle season.

Baking. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:28. 1908.

Originated in Massachusetts; an old baking variety. Season late.

Baldschmiedler. 1. Löschnig *Mostbirnen* 74, fig. 1913.

A perry pear found in Switzerland and the Austrian Tyrol. Fruit small to medium, globular-conic, greenish changing at maturity to yellow, dotted and speckled with russet; flesh granular, white and aromatic; good for transportation; beginning of Oct.

Balduinsteiner Kinderbirne. 1. Dochnahl *Führ. Obstkunde* **2**:165. 1856.

Originated in Nassau, Ger. Published in 1806 by Diel. Fruit small; ovate, light straw-yellow changing to lemon-yellow at maturity, finely dotted, and russeted on the side next the sun; flesh firm, breaking, juicy, very musky; first for kitchen use and market; beginning of Oct. for two weeks.

Balosse. 1. Leroy *Dict. Pom.* **1**:176, fig. 1867. **2.** *Le Bon Jard.* 362. 1882.

For many centuries Balosse has been grown in France on the banks of the Marne, especially in the neighborhood of Châlons where there existed in 1862 a specimen which was considered to be more than 300 years of age. On account of its abundant crops yielded without cultivation, the tree has been a favorite with the farmers of France. Fruit moderate size, obovate-obtuse-pyriform, orange-yellow dotted with fawn, washed with dull red on the side to the

sun; flesh whitish, coarse, breaking, gritty, juicy, saccharine; second for the table, first for the kitchen; Jan. to April.

Balsambirne. 1. Dochnahl *Führ. Obstkunde* **2**:15. 1856.

Raised from seed in the old German duchy of Franconia in 1801. Fruit medium, pyriform, yellow, blushed and russeted; flesh firm, juicy, mild and tender, musky; first for dessert and household; Aug.

Bankerbine. 1. Elliott *Fr. Book* 349. 1854.

Said to be of foreign origin. Fruit medium, obovate, greenish-yellow, with small, russet dots; flesh breaking, coarse; Oct.

Banks. 1. *Mass. Hort. Soc. Rpt.* 45. 1866.

A seedling raised by Dr. S. A. Shurtleff, Brookline, Mass., which first fruited in 1863. Fruit 2¾ in. in diameter, turbinate, rich yellow, with sunny side bright red; flesh melting, juicy, very sweet, with much character; keeps remarkably for an early pear, valuable for its great beauty and fine qualities and time of ripening; Aug.

Baptiste Valette. 1. *Guide Prat.* 85. 1895.

Fruit medium; flesh white, buttery, very fine, melting, juicy; matures early in the season. Tree vigorous, fertile, and pyramidal in form.

Barbancinet. 1. *Mag. Hort.* **26**:126. 1860. **2.** Leroy *Dict. Pom.* **1**:177, fig. 1867.

Found by Leroy in 1849 in the commune of Saulgé-l'Hôpital, Maine-et-Loire, Fr., and was introduced by him in 1852. Fruit medium, long, slightly obtuse, irregular pyriform, contorted at the upper end, greenish, mottled and dotted with fawn,

washed with rose on the side to the sun; flesh greenish, melting, fine, rather gritty around the core; juice sufficient, acidulous, saccharine, with a pleasant buttery flavor; first; Sept.

Barbe Nélis. 1. Mas *Le Verger* **2**:63, fig. 30. 1866-73. **2.** Leroy *Dict. Pom.* **1**:178, fig. 1867.

M. Grégoire, Jodoigne, Bel., obtained this variety in 1848. Fruit small to medium, globular-turbinate-obtuse, bright greenish-yellow dotted with gray and fawn, the basic green becoming lemon-yellow at maturity and washed with purple-red on the side exposed to the sun; flesh white, fine, very melting; juice saccharine, acidulous, and agreeably perfumed; first; Aug.

Barker. 1. Hooper *W. Fr. Book* 121. 1857.

An American variety introduced about 1856. Fruit medium, obovate, greenish-yellow; medium quality both for table and kitchen use; coarse; Sept. and Oct.

Barland. 1. Lindley *Guide Orch. Gard.* 414, 1831. **2.** Hogg *Fruit Man.* 489. 1884.

The parent tree of this variety grew in the parish of Bosbury, Hereford, Eng., and about 1830 was supposed to be 200 years old. It appears to have been extensively cultivated as early as 1674. Fruit small, obovate, dull green, much covered with gray russet; first class for perry; autumn.

Barnadiston. 1. *Gard. Chron.* 193. 1843. **2.** *Mag. Hort.* **17**:472. 1851.

The original tree grew in the grounds of Kedington Hall, Eng. The fruit was stated to be of good quality, and to keep till June, being about the size and form of a large Swan Egg. In September,

1851, Messrs. Hovey & Co. exhibited it at the twenty-third annual exhibition of the Massachusetts Horticultural Society.

Baron Deman de Lennick. 1. Leroy *Dict. Pom.* **1**:179, fig. 1867. **2.** *Guide Prat.* 108, 232. 1876.

The parent tree was raised in the grounds of the Society Van Mons at Geest-Saint-Rémy, Bel. In 1856 it was admitted by their pomological committee and was named after Baron Deman de Lennick. Fruit medium, globular, generally mammillate at summit, brilliant yellow, dotted and mottled with fawn; flesh whitish, a little coarse, melting, gritty around the core; juice excessively abundant, saccharine, vinous, acidulous, and delicately perfumed; second; Nov. and beginning of Dec.

Baron Leroy. 1. *Garden* **62**:387. 1902. **2.** Bunyard-Thomas *Fr. Gard.* 132. 1904. *Poire Baronne Leroy.* **3.** *Rev. Hort.* 61. 1889.

Raised from seed of Louise-Bonne de Printemps in 1859; first published in 1869 and placed in commerce in 1871. Fruit small to medium, globular-oval, dark green passing to bright yellow; flesh fine, white, juicy, very melting, sugary, with an agreeable flavor and perfume; first; Nov. and Dec.

Baron Trauttenberg. 1. *Guide Prat.* 82. 1876.

Fruit medium or rather large, globular, golden-yellow, spotted with russet; flesh rose-tinted, juicy, perfumed and of delicate flavor; first; Nov.

Baron Treyve. 1. *Mass. Hort. Soc. Rpt.* 96. 1873.

Exhibited at the annual meeting of the Massachusetts Horticultural Society, Aug., 1873, by W. C. Strong, the President. Fruit medium, obtuse-

pyriform, greenish-yellow, russeted with cinnamon; flesh juicy, melting, very sweet; good to very good; medium early season; shows a disposition to rot at the core.

Baronne de Mello. 1. Mas *Le Verger* **3**: Pt. 2, 137, fig. 165. 1866-73. **2.** Leroy *Dict. Pom.* **1**:180, fig. 1867.

A variety said to have been raised by Van Mons about 1830. Fruit rather large, globular-turbinate, tapering on one side with a dipping curve toward the stalk, sometimes the surface is bossed but generally even; color yellow-green, dotted with gray and mottled with russet; flesh yellowish-white or greenish, semi-fine, semi-melting, gritty at the center; juice very abundant, sugary, rich, vinous, delicately acid; first; Oct.

Baronsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:143. 1856. **2.** Oberdieck *Obst-Sort.* 242. 1881.

Baron d'hiver. **3.** *Guide Prat.* 82, 232. 1876.

Gröningen, Saxony, 1819. Fruit rather large; globular-conic, uneven, light yellow changing to golden-yellow, finely dotted; flesh breaking, fine, often semi-melting, sweet, highly aromatic; third for dessert, first for culinary use; Jan. to April.

Barry. 1. Leroy *Dict. Pom.* **1**:181. 1867. **2.** Downing *Fr. Trees Am.* 665. 1869.

This variety was found in his nurseries but was not originated by Leroy, Angers, Fr. It bore fruit first in 1851 and was then dedicated to P. Barry, Rochester, N. Y. Fruit medium to large, long, nearly cylindrical, narrowed toward the stalk, contorted, greenish-yellow, dotted, streaked and stained with fawn, washed with bright red on the side next the

sun; flesh white, semi-fine, melting, rather gritty at the center, extremely juicy, saccharine, vinous and deliciously perfumed; first; Oct. and Nov.

Barseck. 1. *W. N. Y. Hort. Soc. Rpt.* 175. 1890.

Bar Seckel. **2.** *Can. Hort.* **16**:184. 1893.

Columbia. **3.** Chase Bros. *Cat.* 15. 1907.

Originated with Jacob Moore, Brighton, N. Y., as a cross between Bartlett and Seckel. Tree hardy, vigorous, productive; fruit above medium in size, oblong-pyriform; skin yellow shaded with bright red; flesh juicy, melting, with a pleasant vinous flavor; quality good; Aug. and Sept.

Barthélemy du Mortier. 1. *Guide Prat.* 85. 1895.

Sent out by M. Daras de Naghin in 1886. Fruit large and handsome; flesh buttery, juicy, sweet, with a fine aroma; first; Nov. Tree moderately vigorous, holding its fruit well.

Bartram. 1. *Mag. Hort.* **5**:395. 1839. **2.** Downing *Fr. Trees Am.* 667. 1869.

A chance seedling which originated in the grounds of Miss Ann Bartram, Philadelphia. Fruit rather large, obovate-obtuse-pyriform, pale lemon-yellow, with numerous russet dots and occasional russet markings on the side; flesh white or greenish-yellow, fine grained, melting, rich, slightly vinous; very good; Sept.

Bartranne. 1. Leroy *Dict. Pom.* **1**:18, fig. 1867.

Believed to have originated in the garden of the Horticultural Society of Angers, Fr., date unknown. Fruit small, globular, obtuse-pyriform, very irregular; bright yellow, sprinkled with russet dots, and often stained with large patches of fawn; flesh white, fine,

juicy, melting, containing some grit around the core; juice excessive, not much sugar or flavor; third; Aug. and Sept.

Baseler Sommer-Muskatellerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:34. 1856.

Raised in Switzerland, 1809. Fruit medium, globular-ovate, tender skin, of a uniform yellow-green, dotted with green, often flecked with russet; fresh semi-melting, tender, aromatic; first for table, culinary uses and market; July.

Basiner. 1. Mas *Pom. Gen.* **7**:155, fig. 558. 1881. **2.** Hogg *Fruit Man.* 491. 1884.

Raised by M. J. de Jonghe, Brussels, in 1845 and first produced fruit in 1857. Hogg, the English pomologist, described it as "one of the best very late pears I have met with." Fruit medium, globular-turbinate, greenish-yellow much covered with pale cinnamon-brown russet, distributed in patches, particularly around the stalk and in dots which are interspersed with green dots over the surface; flesh yellowish-white, fine-grained, breaking, sweet, saccharine, wanting in perfume; good for kitchen use and recommended on account of its extraordinarily long season, spring into the summer.

Baudry. 1. Budd-Hansen *Am. Hort. Man.* **2**:234. 1903. **2.** Ont. Dept Agr. *Fr. Ont.* 147. 1914.

Bon Chretien Fred Baudry. **3.** *W. N. Y. Hort. Soc. Rpt.* 44. 1893.

Listed as a promising winter pear in Ontario, Can. Fruit large, oblong-pyriform, yellowish with russet patches; flesh yellow, tender, granular at the center, juicy, sweet, with a pleasant flavor; quality good; Feb. and Mar.

Beacon. 1. Ellwanger & Barry *Cat.* 20. 1892. **2.** Bunyard-Thomas *Fr. Gard.* 132, 456. 1904.

Fruit medium, long-ovate, very regular, smooth and shining, pale green, some russet, turning yellow, with a brown cheek; flesh firm, sweet; not first, but passable for its season; late July.

Beadnell. 1. *Gard. Chron.* 692. 1852. **2.** Elliott *Fr. Book* 357. 1854.

Raised by John Beadnell, West Green Road, Tottenham, Middlesex, Eng., and fruited for the first time about 1840. Fruit below medium, turbinate, even and regular in outline, bright green, with a dull red cheek where exposed to the sun; on ripening the basic green becomes yellow and the dull red crimson; where the two colors blend there are some stripes of crimson and on the colored side are numerous minute, gray dots; flesh melting, extremely juicy, sweet and richly flavored; a fine early pear; late Sept. but does not keep long.

Beau de la Cour. 1. Mas *Pom. Gen.* **7**:109, fig. 535, 1881.

Mentioned in the Bulletin of the Society Van Mons in 1855. Fruit small or nearly medium, globular-ovate, even in outline, light green covered with very numerous dark green spots changing at maturity to a brilliant pale yellow, though the spots remain green but less visible; the side next the sun is stained with vermilion; flesh coarse, dry, very saccharine, musky; good for cooking; Aug.

Beau Présent d'Artois. 1. Leroy *Dict. Pom.* **1**:185, fig. 1867. **2.** Mas *Pom. Gen.* **1**:175, fig. 88. 1872.

Present Royal of Naples. **3.** *Mag. Hort.* **4**:395. 1838.

Prévost, who died at Rouen in 1849, wrote of this pear that he considered it identical with the *Présent royal de Naples* which it is said obtained its name from the fact that the King of Naples about the end of the eighteenth century sent a number of these pears to Prince Charles of Württemberg to remind him to forward a promised white stag. Fruit large, by error classed by some as a Pound pear, oblong-obtuse-pyriform, greenish-yellow, covered with patches and dots of brown russet; flesh melting, juicy, sweet, and agreeably flavored and perfumed; first; Aug. and Sept.

Beaufort. 1. *Am. Pom. Soc. Rpt.* 153. 1885. **2.** Van Lindley *Cat.* 36. 1899.

Raised by Lucy Duke, Beaufort County, N. C., about 1884 probably from seed of Winter Nelis crossed with Bartlett. It is a twin of Lucy Duke, having been raised from seed of the same pear. Fruit medium to large, globular-obovate, dull green changing to yellow-green, russeted and dotted; flesh firm and sweet; first; late Oct.

Beauvalot. 1. Mas *Pom. Gen.* **3**:1, fig. 97. 1878.

This variety was obtained by M. Sageret from seed beds made from 1816 to 1820. Fruit medium, obovate-turbinate-pyriform; skin thick, rough to the touch, firm, intense green sown with spots of greenish-brown, at maturity turning more yellow and the side next the sun golden; flesh white, slightly tinged with yellow, fine, melting; juice sufficient, saccharine, but sometimes having little flavor; second; Nov.

Beier Meissner Eierbirne. 1. Dochnahl *Führ. Obstkunde* **2**:52. 1856.

Disseminated in Saxony and Bavaria in 1823.

Fruit medium, ovate-acute, often ventriculous-conic, somewhat uneven, yellow-green changing to light yellow, no blush but often dotted with red; flesh coarse-grained, semi-melting, sweet, with a rose-water savor; third for dessert, first for household and market; early Sept.

Belle Angevine. 1. Leroy *Dict. Pom.* **1**:188, 189, fig. 1867.

The Belle Angevine described by Leroy is a very beautiful pear, brilliant in color, of large size and handsome shape, but, unfortunately, not good for dessert and only second class for the kitchen. Properly Belle Angevine is a synonym of Pound or Uvedale's St. Germain, yet Leroy holds this Belle Angevine as distinct.

Belle des Arbrés. 1. *Guide Prat.* 108. 1876. **2.** Mathieu *Nom. Pom.* 172. 1889.

Introduced by M. Houdin, Châteaudun, Fr., about 1876. Fruit very large, of beautiful form, slightly washed with rose; flesh fine and smooth; first for cooking; Mar. to June.

Belle de Beaufort. 1. *Guide Prat.* 85. 1895.

Sent out by M. Louis Leroy of Angers and on trial with Messrs. Simon-Louis of Metz, Lorraine, in 1895. Tree fairly vigorous, a good grower. Fruit very large, of beautiful form and color; Oct. to Nov.

Belle Bessa. 1. Prince *Pom. Man.* **1**:120. 1831. **2.** *Le Bon Jard.* 363. 1882.

The editors of the "New Duhamel," 1825, said of this pear that it was of recent origin and as it had not been previously named they "dedicated it to M. Bessa as a testimony of satisfaction for the assiduity evinced by him in the completion of the designs of

that work." In *Le Bon Jardinier* it is classed among pears "remarkable for their size." Fruit large, globular, the two extremities diminishing very perceptibly, especially that next the stem, very light green faintly approaching yellow at full maturity and interspersed by some small, russet specks; flesh somewhat firm, bland and agreeable, not highly flavored; Nov. to Dec.

Belle de Bolbec. 1. *Guide Prat.* 109. 1876.

A French pear on trial with Messrs. Simon-Louis of Metz, Lorraine, in 1876. Reported at that time to be rather large and of first quality, but in 1895 it was placed by the firm on their list of varieties of doubtful or small merit; Oct. to Nov.

Belle et Bonne de Hée. 1. Kenrick *Am. Orch.* 135. 1841. **2.** *Mag. Hort.* **8**:165. 1842.

Fruit medium; flesh melting and perfumed; of superior excellence; ripens at Paris in Sept.

Belle et Bonne de la Pierre. 1. Leroy *Dict. Pom.* **1**:197, fig. 1867. **2.** Mas *Pom. Gen.* **4**:81, fig. 233. 1879.

This variety was obtained by M. A. de la Farge, Salers, Fr., at the foot of the mountains of the high Auvergne; it first bore fruit in 1861. Fruit medium, sometimes rather large, globular or ovate, with protuberances, always larger on one than on the other side, yellow-ochre dotted with gray and some stains of brown russet; flesh whitish, fine, melting, scented, without grit; juice sufficient, acidulous, extremely saccharine, full of delicate flavor; first; Nov. and Dec.

Belle de Brissac. 1. Leroy *Dict. Pom.* **1**:192, fig. 1867.

Jean-Henri Benoist, Brissac near Angers, Fr., obtained this variety from seed in 1832 or 1833. Fruit medium to large, oblong, extremely obtuse and ventriculous, always having one side more enlarged than the other, with pale yellow skin, thick and rough to the touch, dotted with russet and much covered with brown patches; flesh white, semi-fine, breaking, rather gritty; juice sufficient, saccharine, acidulous, perfumed; second for dessert, first for cooking; Feb. to April.

Belle de Bruxelles sans Pepins. 1. Leroy *Dict. Pom.* **1**:193, 194, fig. 1867.

Notwithstanding its name this variety is not certainly of Belgian origin. It was known in Normandy at the beginning of the nineteenth century under the name *Fanfareau*. In Germany it was cultivated before 1789 where it was called *Grosse-Bergamotte d'Été*. It appears most probably to have been of German origin. Fruit large and sometimes medium, spherical, depressed at both poles, generally more swelled on one side than on the other, yellow-green dotted and streaked with russet; flesh white, semi-fine, melting, interspersed with greenish specks, slightly gritty at the center, free from seeds or core; juice sufficient, saccharine, acidulous, slightly musky; second for the reason that it so easily becomes soft; Aug. and Sept.

Belle de Craonnais. 1. Leroy *Dict. Pom.* **1**:195, 196, fig. 1867.

This variety originated in the neighborhood of Craon in Mayenne, Fr. It was listed in the collection of the Horticultural Society of Angers in 1848, and in the following year was propagated for commerce by A. Leroy. Fruit large but sometimes smaller, oblong-pyriform, irregular, obtuse, golden-yellow, sown with

gray dots more numerous and larger on the side next the sun; flesh white, semi-fine, melting, juicy, rather gritty about the core; juice abundant, sweet and musky, without much savor; second for the table, first for cooking; Dec. to March.

Belle de la Croix Morel. 1. *Guide Prat.* 83. 1876.

Mentioned in the *Revue Horticole* of 1868. Fruit large, pyriform-ventriculous, greenish-yellow; flesh semi-melting, juicy, of an agreeable flavor; first; Dec.

Belle de Décembre. 1. *Guide Prat.* 103. 1895.

A very large and superb fruit; good to eat raw but first class for cooking. Listed as a new variety in 1895.

Belle de Féron. 1. Leroy *Dict. Pom.* **1**:198. 1867.

Probably originated in the town of Féron near Avesnes, Fr., and was considered to be a new fruit by the Horticultural Society of Angers in 1840. Fruit large to very large, globular-turbinate, bossed, one side always more swelled than the other, yellowish-green, dotted with gray, and stained with patches of brown-russet; flesh white, coarse, semi-melting; juice sufficient, fresh, sugary, vinous, and with a very agreeable tartness; second; Oct. and Nov.

Belle du Figuier. 1. Leroy *Dict. Pom.* **1**:199, fig. 1867.

Raised from seed in 1860 by M. Robert, Angers, Fr., and submitted to the Horticultural Society of Maine-et-Loire in December, 1861, when it was declared excellent. Fruit above medium, ovate, regular in form, but with protuberances, often depressed at the base, greenish-russet, rough to the touch and covered with well-marked fawn dots; flesh

fine, white, very melting and very juicy, saccharine, acidulous, aromatic; first; Dec. and Jan.

Belle-Fleurusienne. 1. Leroy *Dict. Pom.* **1**:200, fig. 1867. **2.** Hogg *Fruit Man.* 493. 1884.

Raised by M. Alexandre Bivort in 1849 at Saint-Rémy, Bel. Fruit medium, obtuse-pyramidal; skin smooth and somewhat shining, greenish-yellow, the whole surface being thickly strewed with large russet dots and specks, and washed with rose on the side next the sun; first; Dec. to Feb.

Belle Fondante. 1. Downing *Fr. Trees Am.* 454. 1857.

Originated by Robert Manning, Salem, Mass. Fruit medium, pyramidal-turbinate; skin pale yellow, clouded with green, irregularly patched with russet especially around the eye; flesh juicy, buttery, very fine grained, rich, with some astringency; Oct.

Belle de Forêts. 1. *Guide Prat.* 83, 234. 1876.

Esperen Waldbirne. **2.** Mathieu *Nom. Pom.* 212. 1889.

Fruit medium, pyriform, bright green; Sept. and Oct.

Belle de Guasco. 1. Mas *Pom. Gen.* **3**:57, fig. 125. 1878. Leroy *Dict. Pom.* **1**:202, 203, fig. 1867.

Cultivated in the garden of the Society of Van Mons in Belgium but did not originate there. It was sent out from there to France for further distribution in 1853. Fruit medium, oblong-obtuse-pyriform, lemon-yellow, greenish on the shaded side and washed with vermilion on the side exposed to the sun; flesh white, fine, melting, juicy, vinous, acid; third; late Aug. and early Sept.

Belle Guérandaise. 1. *Cat. Cong. Pom. France* 143, fig. 1906. **2.** *Rev. Hort.* 136, Pl. 1907.

M. Dion, Guérande, Fr., sowed in 1869 a bed of mixed seeds from which he obtained the variety here described. It first fruited in 1893 and was placed on the accepted list by the Pomological Society of France in 1904,. Fruit large, ovate, lemon-yellow, often covered with fawn; flesh fine, very saccharine, juicy, with a slight perfume of orange blossom; good; Oct. and Nov.

Belle Hugevine. 1. McIntosh *Bk. Gard.* **2**:459. 1855.

Fruit large and handsome; of excellent quality; Mar. and April.

Belle Isle d'Angers. 1. Hogg *Fruit Man.* 494. 1884.

Fruit medium, globular-oval, almost entirely covered with a coat of greenish dark brown russet which is very fine and smooth to the touch and covered with large, gray dots; on the shaded side the greenish-yellow ground-color is exposed, covered with large, russet dots; flesh white, rather coarse, semi-buttery, very juicy, sweet and slightly perfumed; second or third; Dec.

Belle d'Ixelles. 1. *Mag. Hort.* **26**:218. 1860. **2.** *Guide Prat.* 83. 1876.

First reported by Millet. On trial with the Society Van Mons in 1860. Fruit large, golden-yellow skin; flesh very melting and perfumed; Oct.

Belle de Juillet. 1. *Guide Prat.* 109. 1876.

Gained by M. Lampe at Pecq, Bel., about 1870, and reported to be superior to all other early pears and in particular to Beurré Giffard; fruit handsome and delicious, ripening about mid-July.

Belle Julie. 1. Elliott *Fr. Book* 350. 1854. **2.** Leroy *Dict. Pom.* **1**:204, 205, fig. 1867.

Alexandrine Hélie. **3.** *Guide Prat.* 81. 1876.

Raised by Van Mons and fruited first in 1842. Fruit medium, long-obovate-pyriform, greenish-yellow, much patched and netted with russet, dotted with bright fawn; flesh rather greenish-yellow, coarse, semi-melting, juicy, sugary, vinous, with a fine perfume; first; Oct. and Nov.

Belle de Kain. 1. *Guide Prat.* 83. 1876.

On trial with Messrs. Simon-Louis of Metz, Lorraine, in 1876. Fruit large, pyriform-truncate, brilliant lemon-yellow; flesh semi-melting; a good market variety.

Belle de Lorient. 1. Leroy *Dict. Pom.* **1**:205, 206, fig. 1867.

Belle de l'Orient. **2.** Downing *Fr. Trees Am.* 668. 1869.

This variety was growing in the old garden of the Horticultural Society of Angers about 1835, and probably originated in the environs of Lorient, Fr. Fruit large, oblong-ovate-pyriform, bossed at the summit, greenish-yellow, dotted all over with large and numerous specks of fawn; flesh wanting in fineness, half-breaking, white, gritty, fairly juicy, without perfume, sourish; second for the kitchen; Sept. and Oct.

Belle de Malines. 1. Leroy *Dict. Pom.* **1**:207, fig. 1867.

Received by Leroy, Angers, Fr., from Belgium in 1863 as a new variety and without statement of its origin. Fruit medium, turbinate-obtuse, ventriculous,

having one side larger than the other, bright yellow, dotted, streaked and stained with russet, washed with delicate rose on the side next the sun; fresh dull white, semi-fine, melting, gritty at center; juice sufficient, sweet, fresh, saccharine, musky; first; Aug. and Sept.

Belle de Martigny. 1. *Mag. Hort.* **8**:431. 1842.

Exhibited by Mantel at the first annual meeting of the New York Horticultural and Floricultural Society, held in New York, September, 1842. One fruit of this variety was reported as weighing 9 oz.

Belle-Moulinoise. 1. Leroy *Dict. Pom.* **1**:208, fig. 1867.

Raised from seed by Groler-Duriez, Lille, Fr.; it was placed on the market in 1864. Fruit large, oblong-obtuse-pyriform, somewhat ventriculous and bossed, greenish, rough to the touch, spotted with russet, washed with dark rose on the side next the sun; flesh whitish, fine, firm, scented, breaking, juice extremely abundant, saccharine, musky, with a delicious flavor; first; Feb. and Mar.

Belle de Noisette. 1. Mas *Pom. Gen.* **6**:17, fig. 393. 1880.

A French pear of unknown origin. Fruit large, obovate-obtuse-pyriform, short and thick, attaining its greatest breadth around its center; skin thick and rather rough, at first green sown with dots of grayish-brown, numerous and scattered regularly; at maturity the green passes into lemon-yellow and the side next the sun is clouded with red; flesh white, rather fine, breaking, with a small amount of sugary juice, acid and slightly perfumed; suited only for culinary purposes; keeps well through the winter; the tree is equally vigorous on quince or pear stock.

Belle Picarde. 1. *Rev. Hort.* 156, Pl. 1888.

Originated in the village of Charmes, Aisne, Fr., in the middle of the last century. Fruit large to very large, obovate-obtuse-pyriform, orange-red and speckled especially on the sunny side; flesh white, melting, very sugary; juice rather abundant, sweet and of a pleasant flavor; good for dessert but specially recommended for cooking; being large and attractive in appearance is well adapted for the market; Dec. to June.

Belle Rouennaise. 1. Leroy *Dict. Pom.* **1**:210, fig. 1867. **2.** *Jour. Hort.* N. S. **19**:328. 1870.

Raised from seed by M. Boisbunel, Rouen, Fr. It gave its first fruit in 1856. Fruit medium, long-pyriform, bossed around calyx, sides unequal; color greenish-yellow, dotted with russet, veined with fawn around the stem and often covered with russet markings; flesh semi-fine, white, juicy, melting, gritty at the core, refreshing, sweet, acid, possessing a delicious flavor; first; Aug. and Sept.

Belle de Stresa. 1. *Guide Prat.* 58. 1876. **2.** Mas *Pom. Gen.* **4**:213. 1879.

A wild seedling found at Stresa, on Lake Maggiore, Italy. Fruit nearly medium, ovate, rather short and thick, or pyriform, olive-green, washed with dark brownish-red on the side next the sun; flesh buttery, melting, juicy, saccharine, and with a delicate and refreshing perfume; handsome and of first quality; late Aug.

Belle Sucrée. 1. *Guide Prat.* 83. 1876.

Schöne Zuckerbirne. **2.** Mathieu *Nom. Pom.* 280. 1889.

Published in Germany previous to 1876; origin

unknown. Fruit large, variable in form; of a beautiful lemon-yellow, almost entirely washed with red; flesh semi-melting, very saccharine; Sept. and Oct.

Belle de Thouars. 1. *Gard. Chron.* 979. 1860. **2.** Leroy *Dict. Pom.* **1**:212, 213, fig. 1867.

Probably originated at Thouars, Fr. About 1839 the Horticultural Society of Angers received a pear called *Coulon de Saint-Marc* which was propagated under that name, but was proved to be identical with Belle de Thouars. It was subsequently propagated and sold by a nurseryman at Jersey, and acquired the name of *Belle de Jersey*. Fruit medium to large, long-obtuse-pyriform at both ends, somewhat bossed at summit; skin at first brownish-olive changing to a ferruginous brown as the fruit approaches maturity, somewhat rough, with russet dots; flesh white, firm, or half-breaking, with little juice and an acidulated, sugary flavor; good only for kitchen use; Nov. and Dec.

Belle Williams. 1. *Am. Pom. Soc. Rpt.* 110. 1862. **2.** Downing *Fr. Trees Am.* 669. 1869.

Of foreign origin, possibly English. Tree vigorous, very erect, hardy; young wood olive, slightly yellow, glossy. Fruit medium to large, oblong-pyriform, with a groove or sunken line from stem to calyx, yellowish, with marblings and tracings of russet; stem long, curved, set in a slight depression by a lip; calyx partially closed; flesh whitish, not juicy or rich; good for cooking; Dec. to Mar.

Bellissime d'Automne. 1. Leroy *Dict. Pom.* **1**:214. 1867. **2.** Hogg *Fruit Man.* 496. 1884.

First mentioned by Merlet under the name of *Belle-et-Bonne* in 1675. It lost its original name and became known by that of Bellissime d'Automne.

Fruit variable in size but more medium than small; long-acute-pyriform, occasionally slightly obtuse; skin smooth and shining, greenish-yellow, dotted with fawn on the shaded side and extensively washed with red-brown or fine, deep crimson on the side exposed to the sun, with stripes of the same color around the stalk; flesh white, fine, semi-melting; juice plentiful, sweet, with an aromatic flavor; second as a dessert fruit, but useful for culinary purposes; Oct.

Bellissime d'Hiver. 1. Duhamel *Trait Arb. Fr.* **2**:234. 1768. **2.** Hogg *Fruit Man.* 496. 1884.

An old French pear described by Duhamel du Monceau in 1768. By some, Merlet is believed to refer to it in 1690 when writing of the *Bellissime d'Hiver de Bur*, but this latter is regarded by Leroy as synonymous with Belle Angevine. Fruit very large, larger than the Catillac, globular, turbinate, mammillate; skin smooth, thick, green changing to dark yellow, washed on the side of the sun with a beautiful tint of bright carmine, strewed all over with large brown-russet dots; flesh white, fine grained, crisp, tender, juicy, sweet, musky; one of the very best culinary pears; all the winter till May.

Belmont. 1. Mas *Pom. Gen.* **6**:171, fig. 470. 1880. **2.** Hogg *Fruit Man.* 496. 1884.

An English cooking pear raised about the year 1840 by T. A. Knight, Downton Castle, Eng. Fruit medium, globular-oval, even and regularly shaped; skin rather rough to the touch, covered with a coating of somewhat rough russet except on the shaded side where it is greenish-yellow, and marked with patches and dots of dark-brown russet; on the side next the sun it shows a coppery-red glow; flesh yellowish, rather coarse, sugary, vinous, finely

flavored like Swan Egg; almost first; Oct. and Nov.

Beman. 1. *Can. Hort.* **26**:14. 1903. **2.** *Ibid.* **28**:219. 1905.

Originated at Newcastle, Ontario, Can., by E. C. Beman. Tree productive. Fruit large, juicy and delicious; Oct. and Nov.

Benadine. 1. Dochnahl *Führ. Obstkunde* **2**:109. 1856.

Raised from seed at Oberlausitz, Ger. Published in 1821. Fruit medium, pyriform, medium ventriculous, yellow, sprinkled all over with spots of yellow-ochre; flesh white, buttery, melting, juicy, delicate and full of aroma; first for dessert; Sept.

Benoist Nouveau. 1. Elliott *Fr. Book* 367. 1859. **2.** Ragan *Nom. Pear, B. P. I. Bul.* **126**:34. 1908.

Distributed by Ellwanger & Barry of Rochester, N. Y., about 1850 as a new foreign variety. Fruit medium, globular-obovate, greenish-yellow with brown cheek, dull russet marblings and indistinct brown specks; flesh breaking, juicy, rather astringent; requires careful ripening; Feb. to April.

Benoit Caroli. 1. *Guide Prat.* 103. 1895.

Introduced by Daras de Naghin, Antwerp, Bel., as a new variety in 1895. Fruit medium yellow, finely dotted, washed with reddish-brown on the cheek exposed to the sun; flesh white, greenish toward the upper part, buttery, almost melting, saccharine and pleasantly perfumed; Dec.

Bensell. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:34. 1908.

Originated by a Mr. Bensell, Philadelphia. Fruit large, globular, yellow; flesh buttery, sweet, juicy, acidulous; late.

Benvie. 1. *Mag. Hort.* **9**:130. 1843. **2.** Hogg. *Fruit Man.* 497. 1884.

A dessert pear adapted to the climate of Scotland where in some districts it produces immense crops of excellent fruit. Fruit small, obovate, yellow-green, sometimes tinged with dull, dingy red on the side next the sun, almost entirely covered with thin, delicate gray russet and thickly strewed with russety dots; flesh yellowish, buttery, juicy, perfumed; good; Aug. and Sept.

Béquesne. 1. Leroy *Dict. Pom.* **1**:220. 1867. **2.** Hogg *Fruit Man.* 497. 1884.

The origin of this ancient pear is unknown, though Henri Heissen, a German author, describing it in 1690 called it the *Béquesne of Anjou*. Fruit medium to rather large and handsome, long-obtuse-pyriform; skin of a fine bright golden-yellow on the shaded side, encrimsoned on the side next the sun, strewed all over with russet dots which give it a rough feel; flesh white, dry, semi-breaking, sweet, slightly perfumed, gritty round the core; an excellent cooking pear; Oct. to Jan.

Bergamot de Chantilly. 1. Brookshaw *Pomona* **2**:Pl. XLVIII. 1817. **2.** Brookshaw *Hort. Reposit.* **1**:63, Pl. 31. 1823.

A variety known in Covent Garden Market, London, in 1823. The fruit was classed as superior and fetched 9 pence apiece. Size medium, roundish-obtuse-pyriform, yellow with some blush on the side next the sun; flesh buttery, of excellent flavor; Sept., not a keeping pear.

Bergamot Louvain. 1. *Mag. Hort.* **21**:185. 1855.

Fruit medium, globular, yellow, with russet

specks; on the sunny side the specks are red, some blotches of russet; flesh white, tender, rather dry, with a pleasant flavor; Oct.

Bergamot Seckel. 1. Downing *Fr. Trees Am.* 671. 1869.

Raised by William Pitmaston, Eng. Fruit medium or below in size; roundish, regular; color reddish-brown, dotted with russet; flesh white, juicy, sugary, having all the spicy flavor of the Seckel.

Bergamot Winter. 1. Langley *Pomona* 131, Pl. 67. 1729.

Included in Langley's list of the best kinds of pears in England in 1729. Fruit medium, globular-obtuse; Sept.

Bergamote Arsène Sannier. 1. Mathieu *Nom. Pom.* 174. 1889. **2.** Baltet *Cult. Fr.* 343. 1908.

Probably of French origin. Fruit medium or rather large, globular-oblate, or onion-shaped, water-green clearing on maturity to Indian-yellow, clouded with ochre; flesh fine, melting, juicy, saccharine, slightly acidulous, with a characteristic aroma; first; Jan. to Mar.

Bergamote d'Automne Panachée. 1. Leroy *Dict. Pom.* **1**:225, fig. 1867.

Bergamotte Suisse. **2.** Hogg *Fruit Man.* 505. 1884.

A variegated form of the French Bergamotte d'Automne. Merlet, who described it in 1675 in his *Abrégé des bons fruits*, named it *Bergamote Suisse*, indicating thereby the country of its origin. Fruit medium, roundish and flattened, somewhat inclining to turbinate, regular, and having the summit always a little mammillate, color olive-yellow, occasionally

slightly tinged with dull red, spotted all over with large, fawn dots, and beautifully striped longitudinally with large bands of brownish-green passing into bright green on the side shaded from the sun; flesh white, melting and buttery, sugary, acidulous; first; Oct. and Nov.

Bergamote Balicq. 1. Mathieu *Nom. Pom.* 174. 1889.

Bergamotte Ballicq. **2.** *Guide Prat.* 85, 223. 1895.

Belgian. Fruit medium; flesh white, fine, semi-melting, juicy, saccharine; first; Dec. and Jan.

Bergamote Boussière. 1. Leroy *Dict. Pom.* **1**:227, fig. 1867.

Raised by Van Mons and fruited for the first time in 1844. Fruit above medium, obovate-obtuse-pyriform, regular, greenish-yellow, dotted and veined with fawn and clouded with reddish-brown around the stem; flesh whitish, half-fine, melting, very gritty around the core; juice abundant, vinous, sugary and slightly aromatic; second; Oct. to Dec.

Bergamote Hamdens. 1. Langley *Pomona* 131, Pl. 65, fig. 3. 1729.

Fruit medium, oblate; Aug. and Sept.

Bergamote de Hollande Panachée. 1. Leroy *Dict. Pom.* **1**:245. 1867.

Amoselle panachée. **2.** *Le Bon Jard.* 363. 1882.

Of interest on account of the curious variegation of its fruit and wood. The fruit differs from that of the Bergamotte d'Holland in the variegated green brown of its skin; flesh deficient in juice and wanting in delicacy and leaves an unpleasant taste behind; second for cooking; Dec. to April.

Bergamote Philippot. 1. Baltet *Cult. Fr.* 370. 1908.

Described by Baltet as, "A beautiful fruit, grey and bronzed; good for stewing."

Bergamote Rose. 1. Leroy *Dict. Pom.* **1**:256, fig. 1867.

This curious variety was raised by A. Bivort from seed beds in the garden of the Society Van Mons and first bore fruit in 1848. It is endowed with so pronounced a scent of rose that the producer hoped from it and another variety called Parfum de Rose it might be possible to create a new class of pears. Fruit small, oblate, bronze, strewed with grayish-white dots, some brownish stains, scaly; flesh white stained with carmine, scented, rather coarse, breaking, seldom gritty; juice sufficient, saccharine, having an odor and flavor similar to that of roses; third; Jan. and Feb.

Bergamotte d'Anvers. 1. *Guide Prat.* 85. 1895.

Introduced by Daras de Naghin of Antwerp (Anvers), Bel. Fruit medium or rather large, true Bergamot shape, green changing to yellow at maturity; flesh white; fine, buttery, sweet and well perfumed; Dec.

Bergamotte d'Automne. 1. Duhamel. *Trait. Arb. Fr.* **2**:165, Pl. XXI. 1768. **2.** Leroy *Dict. Pom.* **1**:223, fig. 1867.

Rote Bergamotte. **3.** Mathieu *Nom. Pom.* 271. 1889.

Authorities fail to agree on the origin of this pear. Benedictus Curtius, a Florentine author writing in 1536, thought it had birth at Bergamo in Lombardy. But in 1644, Jean Bodaeus, a Dutch physician, in his translation of the *Historia Plantarum* of Theophrastus,

states that the Bergamote came from Asia, whence the Romans had imported it to Italy and that it was known to them as the *Pirum Regium* or pear of Kings. If it originated in Asia, the probability is that its birth-place was Pergamum, a village of Asia Minor between the Ægean and Marmora seas. This view was accepted in the eighteenth century by such authorities as Lacour, Henri Manger and Ménage, and later by Leroy. Fruit medium; variable but usually globular-oblate, greenish-yellow, dotted and striped with russet, flesh whitish, fine, melting, generally gritty, sweet, savory; first; Oct. to Jan.

Bergamotte Bouvant. 1. *Guide Prat.* 103. 1895.

Listed as a new variety in 1895. Fruit medium; flesh fine, melting, juicy, well sweetened and pleasantly perfumed; Apr. and May.

Bergamotte Bufo. 1. Leroy *Dict. Pom.* **1**:228, fig. 1867. **2.** Hogg *Fruit Man.* 498. 1884.

Kröten Bergamotte. **3.** Mathieu *Nom. Pom.* 244. 1889.

Le Lectier says this pear was cultivated at Orleans in 1628 under the name of *Crapant* or Toad on account of the rough character of its skin. It was also known in Germany in 1690 under this latter name and as *Oignon rosat* by reason of its shape and the perfume of its juice. In 1846 in France, because of the supposed inelegance of the word “crapant,” its name was changed to Bufo, the Latin name of a toad. Fruit above medium, globular-oblate, even and regular like a true Bergamot; skin rough, dark yellow, dotted and marbled with fawn and usually also bearing some large brown stains; flesh white, melting, fine; juice sufficient, vinous, acidulous, sugary, savory, recalling the scent of the rose;

excellent dessert pear; late Oct.

Bergamotte Bugi. 1. Langley *Pomona* 131, Pl. 46. 1729. **2.** Mas *Pom. Gen.* **5**:9, fig. 293. 1880.

Bergamote du Bugey. **3.** Leroy *Dict. Pom.* **1**:229, fig. 1867.

This is a pear of ancient and uncertain origin. It has a large number of synonyms. Claude Saint-Etienne, writing in 1660, and La Quintinye, in 1690, two of the best describers of this pear, each called it by the name Bugi. Its synonym, *Pera Spina*, attributed to Merlet, appears to indicate an Italian origin to it. Fruit medium and sometimes larger, globular-turbinate, generally very regular, clear olive-green, covered with large, fawn dots intermingled with brownish patches; flesh yellowish-white, semi-melting, semi-fine, seldom gritty; juice sufficient, sprightly, saccharine but occasionally acid, with some perfume; second for dessert, first for cooking; Feb. to Apr.

Bergamotte de Coloma. 1. Hogg *Fruit Man.* 499. 1884.

Fruit below medium, globular-obovate; skin greenish-yellow, becoming bright yellow when it ripens, and with a pale tinge of red on the side next the sun, the whole surface covered with large, pale, brown-russet dots, with patches of russet around the calyx and stalk; flesh yellowish-white, fairly juicy, rather gritty, with a brisk but not rich flavor; quality inferior; late Oct.

Bergamotte de la Cour. 1. Dochnahl *Führ. Obstkunde* **2**:76. 1856.

Belgian, 1828. Fruit fairly large, globular-flattened, uneven in form, light green turning to light

lemon-yellow, often rather blushed with brownish-red on the sunny side, without any scent; flesh melting, delicate, very juicy; very good for the table, second for kitchen.

Bergamotte de Darmstadt. 1. *Guide Prat.* 76, 236. 1876. **2.** Mas *Pom. Gen.* **4**:25, fig. 205. 1879.

Germany. Probably it obtained its name from having been raised in the suburbs of the city of Darmstadt. Fruit rather small or nearly medium, globular or globular-cylindrical, and equally obtuse at both ends, yellow-green all over; flesh buttery, juicy, with a Bergamot scent; first; Nov.

Bergamotte de Donauer. 1. Mas *Pom. Gen.* **4**:119, fig. 252. 1879.

This pear was found in a garden in the suburbs of Coburg, Saxe-Coburg-Gotha, Ger. Fruit medium or large, globular-obtuse, sometimes a little conical, and often somewhat irregular in outline, very light green, dotted with fine points and with some brown-yellow spread around the summit and the calyx; flesh white, half-fine, buttery or half-buttery, juicy, sweet, a little vinous; quality only second; Sept.

Bergamotte Double. 1. *Guide Prat.* 83, 236. 1876.

Fruit medium, nearly round, greenish-yellow; flesh semi-melting, juicy; first; Sept. and Oct.

Bergamotte Dussart. 1. *Ann. Pom. Belge* **6**:39, fig. 1857. **2.** Downing *Fr. Trees Am.* 670. 1869.

Obtained at Jodoigne, Bel., by Dussart, a gardener; published in 1829. Fruit medium, obovate-pyriform, yellow-ochre, with gray dots and traces of russet; flesh white, melting, juicy, vinous, sugary, acidulous and aromatic; first; Dec. to mid-Jan.

Bergamotte Espéren. 1. *Ann. Pom. Belge* **5**:75, fig. 1857.

Bergamotte d'Esperén. **2.** Downing *Fr. Trees Am.* 670. 1869.

Raised from seed about 1830 by Major Espéren, Mechlin, Bel. Of his many pears this was the most valuable. It is a most delicious late pear and a good successor to Winter Nelis. Fruit medium, frequently above, round, flat at base, mammillate at summit, and often bossed near stalk; skin rough to the touch, dull greenish-yellow, dotted with russet, streaked with russet around the stalk and often marked with blackish stains; flesh yellowish, fine-grained, quite melting, very juicy and sugary, with a pleasant aroma; mid-Feb. to April.

Bergamotte Espéren Souvenir de Plantières. 1. *Guide Prat.* 83. 1895.

Produced by Simon-Louis Bros., nurserymen, Metz, Lorraine. The foliage of this variety is margined with yellow and does not scorch from the sun. The tree is not vigorous.

Bergamotte d'Été. 1. Duhamel *Trait. Arb. Fr.* **2**:161. 1768. **2.** Leroy *Dict. Pom.* **1**:237. 1867.

Summer Franc Réal. **3.** Downing *Fr. Trees Am.* 344, fig. 141. 1845.

Bergamotte d'Été is of ancient and unknown origin. Le Lectier wrote of it in 1628 as cultivated under the name of *Milan de la Beuverière*. Fruit medium, globular-turbinate or globular, bossed, narrowed towards the top which is usually mammillate, pale green slightly yellowish on the shaded side and tinted with tender rose color on the cheek exposed to the sun, and dotted all over with

fawn; flesh whitish, semi-fine, melting, rarely very gritty; juice abundant, rather tart, saccharine, with a very savory flavor; first; Aug. and Sept.

Bergamotte d'été de Lubeck. 1. *Guide Prat.* 83, 237. 1876. **2.** Mas *Pom. Gen.* **5**:97, fig. 337. 1880.

This variety is very much grown in the environs of Lubeck, Ger. Fruit medium, nearly round, color at first of a water-green, nearly covered with a russet of gray-brown; when ripening the russet brightens and some dots of whitish-gray become visible; flesh yellowish-white, fine, compact, buttery, rather gritty near the core, sugary and juicy; first; Aug. and Sept.

Bergamotte Fertile. 1. *Guide Prat.* 83, 237. 1876.

A Van Mons seedling; Belgium, 1828. Fruit medium, globular-turbinate, symmetrical, uniform light lemon-yellow all over, russeted; skin scentless; flesh granular, melting, sweet, aromatic; second for dessert, first for kitchen and market; late Sept.

Bergamotte la Gantoise 1. *Guide Prat.* 85. 1895.

Raised from seed of the Bergamotte Espéren, which it surpasses in size and quality, by Dervaes Bros., Wetteren, Bel. Fruit large, generally round; color green sprinkled with brown dots, passing into yellow on ripening; flesh white, very melting, juicy, slightly perfumed; first; Feb. and Mar.

Bergamotte Heimbourg. 1. *Mag. Hort.* **21**:189. 1855. **2.** Mas *Le Verger* **3**:Pt. 2, 159, fig. 176. 1866-73.

A seedling of Van Mons. Reported for the first time in 1847. Fruit medium, globular-conic; skin rough to the touch, olive-yellow, dotted, veined and stained with russet and slightly washed with pale red on the cheek exposed to the sun; flesh whitish, fine,

melting, rather gritty at center; juice sufficient, acidulous, sugary, delicately perfumed; first; Oct.

Bergamotte Hérault. 1. *Guide Prat.* 85. 1895. **2.** *Cat. Cong. Pom. France* 151, fig. 1906.

Obtained from seed in 1860 by M. A. Hérault, Angers, Fr. First fruited in 1870. Fruit large, altho sometimes only medium in size, irregular roundish-obconic and angular in outline; stem short to medium, thick and fleshy, usually obliquely inserted in cavity; calyx small, open or semi-closed; skin rather glossy, pale yellow, dotted with red; flesh whitish, slightly gritty at the center, fine-grained, melting, juicy, sweet, with delicate aroma; very good; Dec. and Jan.

Bergamotte Hertrich. 1. *Guide Prat.* 61, 237. 1876. **2.** Mas *Pom. Gen.* **5**:7, fig. 292. 1880. **3.** *Jour. Hort.* 3rd Ser. **2**:43, fig. 9. 1881.

Raised from seed of Fortunée by Herr Hertrich, a merchant at Colmar, Ger. It fruited first in 1853 and was placed in commerce in 1858. Fruit below medium, Bergamot-shaped, inclining to roundish-turbinate or obovate, even in outline, furrowed at stalk, grass-green ground seen through much ash-gray russet, with some brownish tinge on the side next the sun; flesh yellowish, with a greenish tinge under the skin, fine, melting, rich flavor, juicy and aromatic; delicious and a good keeper.

Bergamotte-d'Hiver de Furstenzell. 1. *Guide Prat.* 84, 237. 1876.

Probably of German origin. Fruit large, conic-obtuse, yellow, lightly washed with red; flesh very juicy; Oct. to Dec.

Bergamotte d'Hollande. 1. Duhamel *Trait. Arb. Fr.*

2:170. 1768. **2.** Downing *Fr. Trees Am.* 430. 1845.

Origin ancient and uncertain, but as the first name by which it was known was *Bergamote d'Alençon*, pomologists have deemed it to be French. Fruit medium and often larger, globular-flattened; olive-green turning as it ripens to clear yellow, dotted and streaked with russet, washed with brown on the side of the sun; flesh white, rather gritty, coarse-grained, semi-breaking, pleasantly flavored; second for the table but good for cooking; March to June.

Bergamotte Jars. 1. Mas *Le Verger* **3**:93, fig. 45. 1866-73.

Raised by M. Nérard, near Lyons, Fr. Fruit small or nearly medium, oblate, shaped very much like an apple, much depressed at base and summit, pale yellow; flesh buttery, white, fine, melting, rich in sugar, and well perfumed and vinous; altogether first class; Nov.

Bergamotte de Jodoigne. 1. Leroy *Dict. Pom.* **1**:246, fig. 1867. **2.** Hogg *Fruit Man.* 502. 1884.

Raised from seed by M. Grégoire, Jodoigne, Bel., in 1853. Fruit below medium or small, Bergamot-shaped, slightly mammillate at the summit, flat at base, yellow, sprinkled all over with russet dots, the yellow passing to orange on the side next the sun; flesh yellowish-white, fine, melting, rather gritty at center, juicy, sweet, and with an agreeable perfume; its greatest merit is its long keeping; Mar. to May.

Bergamotte Klinkhardt. 1. Mas *Pom. Gen.* **6**:149, fig. 459. 1880.

Raised by Van Mons and entered in his catalog

for 1823. Fruit small or medium, globular-ovoid, sometimes ovoid-pyriform, usually a little irregular in outline; skin slightly thin and tender, dull green with some indistinct dots, traces of russet irregularly disposed, but more condensed about the base and summit; flesh white, rather fine, buttery, melting, with abundant sugary and perfumed juice; first class except that it ripens too quickly; early Oct.

Bergamotte Laffay. 1. Mas *Pom. Gen.* **3**:157, fig. 175. 1878.

Origin uncertain, though it is not unlikely that it was raised by M. Laffay, a nurseryman at Paris. Fruit small or nearly medium, globular-ovate-obtuse, green, sprinkled with very numerous small, dark-green spots; flesh white, tinged with green, fine, melting, a little gritty at the center, full of juice, saccharine, acidulous, wanting in perfume; second, but keeps well; all winter.

Bergamotte Lesèble. 1. Leroy *Dict. Pom.* **1**:246, fig. 1867. **2.** Mas *Pom. Gen.* **3**:47, fig. 120. 1878.

A chance seedling found in a vineyard by Narcisse Lesèble, President of the Horticultural Society of Tours, Fr., in 1843. Fruit medium, globular-turbinate, swelled, obtuse, bossed at summit, golden-yellow, dotted with fawn, showing some russet markings and lightly washed with pale rose on the side turned to the sun; flesh whitish, rather coarse, melting, slightly gritty around the core; juice extremely abundant, sugary, agreeably perfumed leaving an after-flavor of anis; first; Oct.

Bergamotte Liabaud. 1. *Guide Prat.* 86. 1895.

Obtained by M. Liabaud. On trial with Simon-Louis Bros. of Metz, Lorraine, in 1895. Fruit above medium, globular-flattened, yellow-green, washed

with gray-fawn on the side exposed to the sun; flesh white, fine, melting, saccharine, vinous; Nov. and Dec.

Bergamotte Mico. 1. Hogg *Fruit Man.* 502. 1884.

Fruit above medium, globular, rather like a small Easter Beurré, greenish-yellow, covered with freckles and dots of cinnamon-colored russet; flesh coarse-grained, gritty, wanting in flavor; inferior; late Nov.

Bergamotte de Millepieds. 1. Leroy *Dict. Pom.* **1**:249, fig. 1867. **2.** Mas *Pom. Gen.* **3**:107, fig. 150. 1878.

Raised by M. Goubault, near Angers, Fr. First reported in 1852. Fruit medium, globular-ovate or sometimes globular-pyriform, olive-green, sprinkled with brownish dots and streaked with fawn around the calyx and stem, changing to pale yellow, with a glow on the side next the sun; flesh white, tender, buttery, melting, richly flavored; first; Sept. in Fr.; Nov. in America.

Bergamotte Nicolle. 1. Mas *Pom. Gen.* **7**:149, fig. 555. 1881.

Raised from seeds of Flemish Beauty in 1849 by M. Nicolle, a member of the Society of Horticulture of Rouen. Fruit medium, globular, attaining its greatest circumference around the middle, depressed at each pole, bright green sprinkled with distinct red dots, some russet patches; flesh white, slightly yellowish, fine, very melting; juice abundant, saccharine, perfumed; first; Oct.

Bergamotte Œuf de Cygne. 1. Mas *Pom. Gen.* **7**:55, fig. 508. 1881.

Fruit medium or rather large, globular, more or less depressed at both base and summit, regular in

outline, largest circumference around the middle, bright green, sprinkled with gray or greenish-gray dots; flesh white, tinted and veined with yellow, fine, melting, rather gritty about the core, with abundant, sweet juice, delicately perfumed; first; Oct. and Nov.

Bergamotte d'Oisan. 1. *Horticulturist* **13**:189. 1857.

Published in England in 1857 in the *London Illustrated News*, and described as a large pear weighing between two and three pounds, found in Algeria, and exhibited in London.

Bergamotte de Parthenay. 1. *Pom. France.* **4**:No. 146, Pl. 146. 1867. **2.** Mas *Pom. Gen.* **7**:5, fig. 483. 1881.

A chance seedling found in a wood on the outskirts of Parthenay, a town in the Department of Deuz-Sèvres, Fr. Fruit large, globular-turbinate, obtuse, often irregular in outline, greatest circumference around the middle, dull green, sprinkled with large, fawn dots, regular and evenly spaced, changing to greenish-yellow and more golden on the side next the sun; flesh white, semi-fine, semi-melting; juice fairly abundant, saccharine and without perfume, often astringent; first for cooking.

Bergamotte Picquot. 1. Downing *Fr. Trees Am.* 671. 1869. **2.** Mas *Pom. Gen.* **3**:131, fig. 162. 1878.

A French pear of uncertain origin. Fruit medium, globular-conic, very clear green changing to yellow, sprinkled with numerous indistinct dots of grayish-brown; flesh white, fine, buttery, melting, juicy, sugary; good, first if its season were more prolonged; Oct.

Bergamotte Ploskui. 1. *Ia. Hort. Soc. Rpt.* 61. 1880.

A variety grown on the Northern plains of the steppes of Russia where the summer is fully as dry and hot as that of Iowa and the winter far more severe. On trial at the College Farm, Ames, Iowa, in 1880. It seems to unite well with the apple when root- or top-grafted.

Bergamotte Poiteau. 1. Mas *Pom. Gen.* **3**:21, fig. 107. 1878.

Poiteau (*des Français*) **2.** Leroy *Dict. Pom.* **2**:538, fig. 1869.

This variety came from a seed bed made by M. Poiteau, Fr., and was first reported in 1851. Fruit medium, globular-obtuse, irregular in outline, golden yellow, sown with very numerous and extremely fine gray and brown dots, generally washed with dull red on the side next the sun; flesh very white, fine, melting, watery; juice very saccharine, slightly acid and musky, agreeable; first; Oct.

Bergamotte Pomme. 1. *Guide Prat.* 84. 1876.

Fruit rather large, globular-oblate, dull yellow; flesh very juicy, vinous; first; Oct. and Nov.

Bergamotte du Quercy. 1. Mas *Pom. Gen.* **1**:113, fig. 57. 1872.

Mas obtained grafts of this pear about 1847 from the Duke of Arenberg; he had seen a quotation from Van Mons catalog of 1823 in which it was described. Fruit medium or nearly medium, nearly globular, rather obtuse at the two ends, regular in outline, attaining its greatest thickness at the middle; skin slightly thickened, very pale green, sown with very small, brown dots scattered irregularly; flesh quite white, fine, firm yet melting, streaming with sweet juice, more or less perfumed according to the season;

end of Sept.

Bergamotte Reinette. 1. Leroy *Dict. Pom.* **1**:254, fig. 1867. **2.** Mas *Pom. Gen.* **3**:93, fig. 143. 1878.

Raised by M. Boisbunel, nurseryman at Rouen, Fr., who introduced it in 1857. Fruit small, Bergamot-shaped; skin at first bright green, marked with large, russet patches but changing to yellow as it ripens; flesh half-tender, with abundant sweet juice which has a brisk acidity, like the Reinette apple; quality hardly first-rate and variable, but to be recommended for its early and long season; late Aug.

Bergamotte de Rouen. 1. *Guide Prat.* 84. 1876.

Fruit large; recommended as being of good quality by the Society of Horticulture of Rouen; April to June. The tree is vigorous and fertile.

Bergamotte Rouge. 1. Duhamel *Trait. Arb. Fr.* **2**:162, Pl. XIX, fig. 6. 1768. **2.** Lindley *Guide Orch. Gard.* 334. 1831.

This pear is of ancient and unknown origin. It was mentioned by Le Lectier in 1628, Merlet in 1675, and Duhamel in 1768, but without history. Fruit rather large, globular, acute-pyriform, irregular, mammillate at calyx, greenish-yellow, washed with brownish-red on the side next the sun, and marked with stripes of the same color, the whole covered with fine, delicate, cinnamon-colored russet, sprinkled with large, gray dots; flesh white, coarse, melting, gritty; juice sufficient, with a slight musky perfume, sugary; first for both table and kitchen; Sept.

Bergamotte Rouge de Mayer. 1. Mas *Pom. Gen.* **4**:189, fig. 287. 1879.

Sent out by M. Jahn of Meiningen; it has a strong

resemblance to the Bergamotte Rouge of Duhamel. Fruit medium, sometimes pyriform-ovoid, and sometimes turbinate-ovoid, bright green, sprinkled with numerous very small dots of blackish-gray; on ripening the ground-green passes into dull yellow, sometimes colored with intense blood-red on the side next the sun; flesh whitish, coarse, half-melting, with not much juice, sugary, little perfume; of beautiful appearance, and recommended for household use; Aug.-Sept.

Bergamotte Sageret. 1. Downing *Fr. Trees Am.* 671. 1869. **2.** Mas *Pom. Gen.* **5**:129, fig. 353. 1880.

M. Sageret obtained this Bergamotte from seed; he first reported it in 1830. Fruit medium, nearly spherical, symmetrical in outline; skin rather fine and thin, water-green, sprinkled with very many and prominent, large dots becoming when ripe more yellow and the cheek next the sun golden; flesh white, fine, buttery, rather gritty near the core; juice sufficient, not very saccharine, deficient in perfume; a good second-rate dessert pear; Oct. to Jan.

Bergamotte Sanguine. 1. Mas *Pom. Gen.* **4**:65, fig. 225. 1879.

Entered in catalog of M. Jahn, 1864. Fruit medium or nearly medium, globular-turbinate, regular in contour, greatest circumference around middle, slightly pointed at base, obtuse at summit; color dull water-green, generally covered with a thick coating of a dark reddish-violet which on ripening assumes a more vivid tone on the side next the sun; flesh white, speckled with red, coarse, semi-melting, gritty at the core, not much juice; only second; interesting for amateurs on account of its remarkable color of violet red so dark as to be almost black; Sept.

Bergamotte Sannier. 1. *Guide Prat.* 53. 1895.

Produced by M. Arsène Sannier, Rouen, Fr. It is said to have resisted the severe freeze in France in the winter of 1879-80. Fruit medium in size, globular-conic; color green; flesh semi-fine, melting, juicy and of delicious flavor; first; end of winter and spring.

Bergamotte Silvange. 1. Mas *Le Verger* **3**:Pt. 1, 65, fig. 31. 1866-73.

Silvange. **2.** Leroy *Dict. Pom.* **2**:664, fig. 1869.

Bergamotte Silvange was found in the woods of the Metz district, Lorraine, about the middle of the eighteenth century. The fruit is very variable in form and quality so that writers have been led to speak of three sorts of pears called Silvange—the yellow, the long, and the green. Fruit medium, globular-turbinate or obovate or of Bergamot shape; skin rough, bright green on the shaded side, darker where exposed to the sun, sprinkled with large, gray dots and stained with dark patches; flesh tinged with greenish-white near the center and yellowish-green near the skin, tender and melting, full of perfumed juice, saccharine, acidulous and possessed of an exquisite flavor; first; Oct. and Nov.

Bergamotte de Souchait. 1. Mas *Pom. Gen.* **6**:99, fig. 434. 1880.

Of uncertain origin, though Mas suggests that it may have been raised in Germany. Fruit medium, globular-ovate, pale green, strewn with large, brown dots and stained with some patches of russet; on ripening the basic green becomes lemon-yellow and warm gold, the side next the sun being washed with vermilion on which are some grayish dots; flesh yellowish, half-tender, half-breaking, dry, sugary and

highly perfumed with musk; second or third; July and first of Aug.

Bergamotte de Soulers. 1. Duhamel *Trait. Arb. Fr.* **2**:168, Pl. XLIV, fig. 1. 1768. **2.** Hogg *Fruit Man.* 504. 1884.

Bonne de Soulers. **3.** Leroy *Dict. Pom.* **1**:487, fig. 1867.

This pear is an old French dessert fruit the first mention of which was by Merlet in 1675 who described it as a species of winter Bergamotte of good flavor and long keeping. Fruit medium, long-obovate, almost oval; skin smooth, shining, pale greenish-yellow, covered with dots of fawn and faintly tinged with brick-red on the side next the sun; flesh white, tender, melting, free from granulations, juicy, saccharine, slightly acidulous, with a characteristic and pleasant flavor; in France, of first quality and considered superior to Easter Beurré; in England only second, being too tender for the climate; Jan. to Mar. or Apr.

Bergamotte de Stryker. 1. Mas *Le Verger* **3**:Pt. 1, 69, fig. 33. 1866-73. **2.** Leroy *Dict. Pom.* **1**:261, fig. 1867.

This variety is generally attributed to M. Parmentier, Enghien, Bel. Fruit small, globular, slightly flattened at the base and mammillate at the summit, yellow-ochre, finely dotted with bright gray and stained with russet patches; flesh yellowish, tender, semi-melting and very full of juice which is watery, sweet and pleasantly aromatic; first in France, second in England; end of Sept. and Oct.

Bergamotte Suisse Rond. 1. Knoop *Fructologie* **1**:86, 134, Pl. 1771.

This pear resembles the ordinary Autumn Bergamot except in color which is green at first, becoming yellow as it attains maturity, streaked with yellow and red. Sept. and Oct.

Bergamotte Tardive Collette. 1. Mathieu *Nom. Pom.* 176. 1889. **2.** *Guide Prat.* 86. 1895.

Raised from a seed of Doyenné d'Alençon previous to 1870 and judged by the Horticultural Society of Rouen, Fr., to be of good quality; Apr. to end of June.

Bergamotte Thuerlinckx. 1. Mas *Pom. Gen.* **3**:149, fig. 171. 1878.

This pear was distributed by the Society Van Mons in whose bulletins it was published in the years 1857-58-60 and 1862, though without any statement as to its origin. Fruit medium or nearly medium, globular-turbinate, obtuse, of largest circumference at center, very pale green, sprinkled with numerous very small points of fawn; on ripening the basic green changes to very pale yellow, whitish and usually a little golden on the sunny side, without any trace of red; flesh quite white, half-fine, half-melting, without grit at the core, very juicy, sugary and perfumed; good; Oct.

Bergamotte de Tournai. 1. *Guide Prat.* 84, 238. 1876.

Beurré Vert de Tournai. **2.** Leroy *Dict. Pom.* **1**:438, fig. 1867.

Obtained by M. Dupont, at Tournai, Bel., from pips of Glou Morceau in 1830. Fruit large, globular-ovate, bossed at summit, olive-green passing into pale green on the shady side, covered with gray-russet dots; flesh greenish-white, semi-fine, melting,

juicy, sugary, sweet, without any pronounced aroma; second quality; Oct. and beginning of Nov., often extending to Dec.

Bergamotte de Tournay. 1. Mas *Pom. Gen.* **6**:35, fig. 402. 1880.

Obtained from seed by M. du Mortier, president of the Horticultural Society of Tournay, Fr., and approved by the Society in 1857. Fruit rather small, ovoid, short and swelled, obtuse at the summit, bright green, and sprinkled with dots of a very rich green; flesh yellowish, tender, buttery, melting, rather granular near the core; juice abundant, richly sugared and perfumed; first; beginning of Sept.

Bergamotte Volltragende. 1. Oberdieck *Obst-Sort.* 242. 1881.

German. Fruit turbinate-obtuse, typical Bergamot, smooth skin, yellowish-green turning to golden-yellow, without russet; flesh whitish, soft and melting, often half-melting, agreeable and sweet and of Bergamot flavor; good for the table and very good for the kitchen; mid-Sept.

Bergbirne. 1. Löschnig *Mostbirnen* 60, fig. 1913.

A perry pear growing in the mountains of Switzerland and the Austrian Tyrol. Fruit small to medium, turbinate-obtuse, greenish-yellow, much sprinkled with russet speckles and dots; flesh yellowish-white, almost fine; first half of Oct.

Bergen. 1. Downing *Fr. Trees Am.* 453. 1857. **2.** Mas *Pom. Gen.* **1**:143, fig. 72. 1872.

A chance seedling found at New Utrecht (now part of Brooklyn), L. I. Fruit large, elongated-obtuse-pyriform, sides often not symmetrical, angular; skin smooth, waxen, lemon-yellow flushed with crimson

and fawn where exposed to the sun and thickly sprinkled with brown and crimson dots; flesh whitish, veined with yellow, buttery, melting, juicy, with a sweet, aromatic flavor, delicately perfumed; good to very good; end of Sept.

Berlaimont. 1. Liegel *Syst. Anleit.* 132. 1825.

Belgium; a Van Mons seedling; 1825. Fruit large, ventriculous-conic, bossed, yellow-green, with dull blush, with numerous green-brown dots; flesh buttery, juicy, mild and tender; first for table and household use; mid-Sept.

Bernard. 1. *Gard. Chron.* 511. 1863. **2.** Leroy *Dict. Pom.* **1**:262, fig. 1867.

A French pear, probably originated in the middle of the last century, for it was growing at Lyons in 1855. Fruit below to medium, globular, mammillate and deeply depressed at both base and crown, golden-yellow, dotted and veined with fawn, slightly tinged with pale rose where exposed to the sun; flesh white, fine, melting; juice abundant, sugary, tart, very delicate and savory; first; Nov. to Feb.

Berriays. 1. Leroy *Dict. Pom.* **1**:263, fig. 1867. **2.** Downing *Fr. Trees Am.* 692. 1869.

M. Boisbunel, Rouen, Fr., raised this variety from seed in 1861. Fruit medium, sometimes larger, oblong, ventriculous, obtuse, bossed; color pale lemon-yellow, thickly sprinkled with greenish-russet dots; flesh very white, melting, juicy, rather gritty around the core, refreshing, sweet, acidulous, with a delicate aroma; first; Aug. and Sept.

Bertrand Guinoisseau. 1. *Guide Prat.* 84. 1876.

Bertrand Guinoisseau was obtained by M. Flon, Angers, Fr., in 1868, and was first exhibited in the

United States by Colonel M. P. Wilder. Fruit rather large, globular-oblate; skin smooth, yellow; flesh fine, very melting and excessively juicy; first; end of Nov.

Berzelius. 1. Liegel *Syst. Anleit.* 132. 1825. **2.** Dochnahl *Führ. Obstkunde* **2**:187. 1856.

Attributed to Van Mons. Fruit below medium, short-conic, bossed and uneven, lemon-yellow, densely spotted and partly covered with russet, thick skinned; flesh yellowish-white, firm, coarse grained, sweet, rather musky; third for the table, good for culinary and market purposes; early summer.

Besi de Caen. 1. Leroy *Dict. Pom.* **1**:264, fig. 1867.

The word Besi or Bezy is of Breton origin and signifies a wild pear. Fruit medium, turbinate-obtuse, often distorted and generally more swelled on one side than the other, green, strewn with russet dots and touched with fawn around the stem; flesh white, semi-fine, perfumed, juicy, melting, rather gritty around the center; first; beginning of Mar. to end of Apr.

Besi de Caffoy. 1. Miller *Gard. Dict.* **3.** 1807.

A wilding discovered in the forest of Caffoy, Britanny, Fr. Fruit small, oblong, yellowish, spotted with red; flesh melting; juice very rich; Dec. and Jan. The fruits are produced in large clusters at the extremity of the shoots.

Besi-Carême. 1. *Guide Prat.* 84, 238. 1876.

On trial with Simon-Louis Bros. of Metz, Lorraine, in 1876. Fruit large to very large; flesh melting; first; Mar. to May.

Besi Dubost. 1. Mas *Le Verger* **1**:29, fig. 13. 1866-73.

2. Leroy *Dict. Pom.* **1**:268, fig. 1867.

Obtained from a seed of Echasserie by M. Pariset, Curciat-Dongalon, Fr. It first bore fruit in 1845. Fruit medium, turbinate, very obtuse and swelled, generally a little bossed, golden-yellow, dotted and striped with russet; flesh white, semi-fine, melting, juicy, gritty around the core; second; Jan. to Mar.

Besi Espéren. 1. Mas *Le Verger* **3**:91, fig. 44. 1866-73. **2.** Leroy *Dict. Pom.* **1**:271, fig. 1867.

Obtained by Major Espéren, Mechlin, Bel., about 1838. Fruit medium to large; form varies from long turbinate-obtuse-pyriform to obovate-pyriform, with contorted outline, greenish-yellow, dotted all over with bright russet and occasionally washed with a deep tinge of red; flesh white, buttery, melting, juicy, sugary, perfumed; first, but does not keep long; Nov. and Dec.

Besi Goubault. 1. Leroy *Dict. Pom.* **1**:272, fig. 1867. **2.** Hogg *Fruit Man.* 506. 1884.

Raised by M. Goubault near Angers, Fr., and submitted to the notice of the Horticultural Society of Maine-et-Loire in 1846. Fruit large or sometimes medium, globular, bossed, flattened at the base, mammillate at the summit, with sides unequal, greenish-yellow, dotted and streaked with russet; flesh very white, very fine, melting, containing some small grits around the center; juice extremely abundant, saccharine, perfumed and having a delicate and agreeable flavor; first; Sept. to Nov.

Besi de Grieser de Böhmenkirsch. 1. Mas *Pom. Gen.* **5**:93, fig. 335. 1880.

Said to have been obtained in the Swabian Alps, S. W. Ger. Fruit nearly medium, ovoid-pyriform,

obtuse, bright green, sprinkled with very small and numerous gray dots; flesh white; fine, buttery; juice sufficient, sugary, and delicately perfumed; good; Aug.

Besi d'Héry. 1. Duhamel *Trait. Arb. Fr.* **2**:139. 1768. **2.** Hogg *Fruit Man.* 506. 1884.

Kümmelbirne. **3.** Dochnahl *Führ. Obstkunde* **2**:7. 1856.

A wilding discovered in the forest of Héry or Héric in Brittany in the sixteenth century. The Bretons presented a basket of this fruit to King Henry IV on his visit to Brittany in 1598. Fruit medium, globular; skin thin, very smooth, bright green at first, changing when it ripens to pale yellow, with blush of red on the side next the sun, strewed with very minute points; flesh white, fine, semi-melting, generally gritty; juice sufficient, sweet, with somewhat of a Muscat perfume; first-rate cooking pear; Oct. to Jan. A good bearer in rich soil.

Besi Liboutton. 1. Field *Pear Cult.* 278. 1858. **2.** Leroy *Dict. Pom.* **1**:277, fig. 1867.

Origin uncertain, but it was cultivated in the garden of the Horticultural Society of Angers, Fr., in 1844. Fruit medium, globular, regular in form, resembling an apple, deeply depressed at either pole, green turning slightly yellow at maturity, sprinkled with large dots and some fawn-colored stains; flesh white, fine, semi-melting, gritty; juice sufficient, sugary, vinous, rather pleasantly perfumed; second; mid-Aug. to mid-Sept.

Besi de Mai. 1. Leroy *Dict. Pom.* **1**:278, fig. 1867.

Raised by J. de Jonghe, Brussels, from a seed bed made in 1845. Fruit large, obovate, rather uneven

and irregular in its outline, bossed, greenish, streaked and dotted with brown fawn; flesh fine, white, melting, rather gritty; juice sufficient, sugary, acid, richly flavored; first; Apr. and May.

Besi de Moncondroiceu. 1. Mas *Pom. Gen.* **5**:65, fig. 321. 1880.

According to Oberdieck, this variety was brought to him from the Château of Herrenhausen near Hanover. Fruit small, globular-ovoid, or irregularly round, often higher on one side than on the other, pale green, sown with points of gray-fawn; flesh whitish, semi-fine, melting, a little granular about the core, juicy, sugary, not much perfume; quality good but unstable, depending much on the season; Oct.

Besi de Montigny. 1. Duhamel *Trait. Arb. Fr.* **2**:207, Pl. XLIV, fig. 6. 1768. **2.** Leroy *Dict. Pom.* **1**:279, fig. 1867. **3.** Downing *Fr. Trees Am.* 701. 1869.

The origin of this pear is ancient and uncertain. The monks of the Chartreuse at Paris, however, propagated and described it in 1752 and Duhamel du Monceau again wrote of it in 1768. Fruit medium, obovate but variable, one type being pyriform, ventriculous; color greenish-yellow, smooth, shining, sprinkled with exceedingly fine dots of fawn and russeted around both stem and calyx; flesh white, tender, buttery, semi-melting, gritty around the core; juice abundant, saccharine, acidulous, having a pleasant, musky flavor; first; end of Sept. occasionally to Nov.

Besi de la Motte. 1. Duhamel *Trait. Arb. Fr.* **2**:206, Pl. XLIV, fig. 5. 1768. **2.** Hogg *Fruit Man.* 507. 1884.

First reported by La Quintinye, the creator of the fruit gardens of Louis XIV of France, as having been found by him at the end of October, 1685. Tree hardy, vigorous, a prolific bearer. Fruit above medium to large, globular, more swelled generally on one side than on the other, greenish-yellow or bright green, sprinkled with large russet dots; flesh whitish, fine, melting, buttery, slightly gritty; juice very abundant and full of sugar, savory and delicate; first; Sept. and Oct. and sometimes later.

Besi de Naghin. 1. *Guide Prat.* 86. 1895.

On trial with Simon-Louis of Metz, Lorraine, in 1895. Fruit above medium, apple-shaped; in character it is an improvement on the Chaumontel but its flesh is less firm, finer and more piquant; its perfume is similar, and it has less bitterness than is often found in the older fruit; Jan.

Besi de la Pierre. 1. Leroy *Dict. Pom.* **1**:283, fig. 1867.

A gain of A. de la Farge, Salers, Fr., from a bed of mixed seeds made in 1847. Fruit medium and often less, ovate, regular in form, slightly swelled and bossed, lemon-yellow, partly covered with dots, marblings, and stains of fawn especially around the eye and the stem; flesh whitish, semi-fine, melting; juice extremely abundant, saccharine, vinous, very delicate; first; all Oct. to mid-Nov.

Besi de Quessoy. 1. Leroy *Dict. Pom.* **1**:285, fig. 1867. **2.** Hogg *Fruit Man.* 508. 1884.

Bezy de Caissoy. **3.** Duhamel *Trait. Arb. Fr.* **2**:178, Pl. XXIX. 1768.

Merlet stated in 1675 that this variety was said to have been found originally in the forest of Quessoy

near Saint-Brieuc. It was known locally as the *Rousette* or the *Petit Boeuré d'Hiver* and was propagated at the beginning of the seventeenth century. Fruit borne in clusters, small, globular or ovate; skin rough, yellowish-green, much russeted; flesh white, delicate, melting, gritty around the core, aromatic and savory; second; ripens in succession from Nov. or Dec. till Feb.

Besi de Saint-Waast. 1. Leroy *Dict. Pom.* **1**:286, 287, fig. 1867.

Bezi Vaet. **2.** Downing *Fr. Trees Am.* 702. 1869.

Van Mons was of the opinion that the Besi de Saint-Waast originated at the Benedictine Abbey of Saint-Vaast, Fr. Fruit above medium, obovate, obtuse, narrowing toward the stalk but variable; skin thick, yellow, dotted with fawn, extensively washed with red-brown on the side exposed to the sun; flesh rather white, fine, semi-breaking, very juicy, rather gritty at the center, saccharine, acid, with a pleasant aroma suggestive of the Chaumontel; a first-class dessert pear in Europe but hardly more than a good second-rate fruit in this country; Nov. to Jan.

Besi Sans Pareil. 1. *Guide Prat.* 78, 240. 1876.

Besi Incomparable. **2.** Leroy *Dict. Pom.* **1**:275, fig. 1867.

Besi Sanspareil. **3.** Downing *Fr. Trees Am.* 702. 1869.

Bonnefonds mentioned this pear in 1651 under the names of *San-Pair* or *Nonpareille*, as also did Saint-Étienne in 1660 and Olivier de Serres in 1608. Introduced to this country about the year 1850. Fruit medium, spherical or globular-oval, generally rather symmetrical, lemon-yellow, slightly greenish, dotted

and mottled with fawn, blushed with brownish-red on the side exposed to the sun; flesh white, semi-fine, rather melting, very juicy, vinous, saccharine, sourish, having an extremely agreeable aroma; first; Oct. to Feb.

Besi Tardif. 1. Leroy *Dict. Pom.* **1**:288, fig. 1867. **2.** Mas *Pom. Gen.* **7**:57, fig. 509. 1881.

Raised in 1845 by M. Goubault, Angers, Fr., this variety was described in 1846, and in 1847 was declared by the Horticultural Society of Maine-et-Loire to be worthy of cultivation. Fruit medium or below, globular, bossed, greenish-yellow, dotted, and russeted; flesh white, fine, melting, slightly gritty around the core; juice abundant, sugary, astringent; third or sometimes second; Nov. to Feb.

Besi de Van Mons. 1. Mas *Pom. Gen.* **5**:53, fig. 315. 1880.

A Belgian variety, cataloged in 1864 by M. Jahn. Whether it was obtained by Van Mons or merely dedicated to him is unknown. Fruit small, globular-conic, more or less short, regular in outline, bright green, sown with numerous small, gray-green spots; flesh white, rather granular, buttery, a little gritty at the core, with abundant, sweet juice, acid, distinct perfume; good; Nov.

Besi des Vétérans. 1. Mas *Le Verger* **1**:127, fig. 62. 1866-73. **2.** Leroy *Dict. Pom.* **1**:289, fig. 1867.

Veterans. **3.** Thomas *Am. Fruit Cult.* 716. 1897.

Raised from seed by Van Mons about 1830. Fruit large, turbinate, clear yellow, very much dotted with grayish-brown specks of different sizes; flesh white, semi-melting, fine, buttery, with sufficient sweet juice, slightly acid; second for dessert, but first for

stewing; ripens in Oct. and lasts occasionally even till Apr. The tree is a prolific bearer.

Besi de Vindré. 1. Leroy *Dict. Pom.* **1**:291, fig. 1867.

Was cultivated in the garden of the Horticultural Society of Angers in 1838. Fruit small, globular, rather more swelled on one side than on the other, greenish-yellow, dotted with russet and streaked with russet about the calyx, and marked with brownish-fawn about the stem; flesh whitish, semi-fine, semi-melting and containing some grits around the core; juice sweet, not acid, rather savory; second; Oct.

Besi de Wutzum. 1. Mas *Pom. Gen.* **7**:119, fig. 540. 1881.

Of uncertain origin. Fruit rather small, globular, regular in contour, largest circumference around center, forming short point at stem, pale green, sown with many fawn dots; on ripening the green changes to pale yellow and the sun-exposed side becomes golden and washed with red; flesh white, tinted with yellow, semi-fine, melting, rather gritty about the center, juicy, sugary; second; Oct.

Bessemianka. 1. *Mont. Hort. Soc. Rpt.* 53, fig. 1881-2. **2.** *Ia. Hort. Soc. Rpt.* 83. 1882. **3.** *Am. Pom. Soc. Cat.* 40. 1909.

A Russian variety recommended for cultivation by the American Pomological Society. It grows in Europe from the Gulf to the Volga as far north as Moscow and Kazan and is the most widely-known and most largely-grown pear in central Russia. J. L. Budd says, “This is beyond all doubt a true hybrid with a wild pear of Russia as the parent tree. The name means *seedless*, and it is rare, indeed, that more than the rudiment of a seed can be found.” Tree

upright; leaves large, dark, thick, very slightly crenate, almost entire, stands aridity well. Fruit large, round-obovate, greenish-yellow, with some russety-brown; flesh gritty at the core, juicy, with few or no seeds, mild, pleasant; early Oct.

Best Favorite. 1. *Ill. Hort. Soc. Rpt.* 178, 186. 1896. **2.** J. V. Cotta *Cat.* 12, fig. 1898.

From Winnebago County, Ill. Fruit medium, bronze-yellow, melting, juicy; good; ripening in Sept.

Bettina. 1. Dochnahl *Führ. Obstkunde* **2**:124, 1856.

A seedling of Van Mons, first published in 1851. Fruit medium, conic or ventriculous-turbinate, acute, symmetrical in contour, green changing to lemon-yellow, dotted and flecked with russet, often covered with russet; flesh yellowish-white, very fine, excellent; first for dessert; Oct.

Betzelsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:194. 1856.

A perry pear grown in Austria and Germany. Fruit rather large, globular, diminishing acutely to the stalk, grass-green, sprinkled with dark gray spots; flesh greenish-white, dense, juicy; very good for household use and perry; suitable for long-distance transport; Jan. to Apr.

Betzy. 1. Baltet *Cult. Fr.* 404. 1908.

A small, French fruit, good for market and household use, for cooking, preserving, or the making of wine.

Beurré Adam. 1. Leroy *Dict. Pom.* **1**:292, fig. 1867.

A rather poor French dessert pear known for 250 years. Fruit below medium, oblong-obtuse-pyriform, dark greenish-yellow, fawn, dotted with russeted, and washed with carmine on the cheek next the sun; flesh yellowish, veined with pale green, melting, sweet, fairly juicy, acidulous and aromatic; second, apt to rot at the core when ripe; Aug. to Oct.

Beurré Ad. Papeleu. 1. Mathieu *Nom. Pom.* 178. 1889. **2.** *Guide Prat.* 86. 1895.

Raised from seed of Glou Morceau, and placed on the market by Dervaes Brothers, Wetteren, Bel., in 1888. Fruit long, bright green; flesh white, sugary, very melting; Mar.

Beurré d'Adenaw. 1. *Guide Prat.* 84. 1876.

Found in the garden of the Convent of Schwarzenbruck. Fruit large, rather uneven, yellow; flesh buttery and pleasantly perfumed; good; through the winter.

Beurré Alexandre Lucas. 1. *Le Bon Jard.* 358. 1882. **2.** *Jour. Hort.* **18**:216. 1889.

The parent tree was a wilding found in 1836 in a wood of the Department of Loir-et-Cher, Fr., and in foliage and growth much resembles Doyenné Boussock. Fruit large to very large, handsome, pyriform, clear green, dotted with maroon or chestnut-colored spots; flesh fine, melting, perfumed, juicy, in flavor superior perhaps to Doyenné Boussock; first; Nov. to Jan.

Beurré Allard. 1. Leroy *Dict. Pom.* **1**:293, fig. 1867.

From the Horticultural Society of Maine-et-Loire whose Committee named it in 1852. Fruit below to medium, obovate-obtuse-pyriform, greenish-yellow, dotted and mottled with russet; flesh whitish, fine, soft, melting, not gritty, reddish under the skin, with very sugary juice, perfumed; first; Oct. and Nov.

Beurré Amandé. 1. Lucas *Tafelbirnen* 117. 1894. **2.** *Guide Prat.* 61, 228. 1895.

Raised by M. Sannier, Rouen, Fr. Fruit medium to large, variable in form, globular, narrowing toward the upper part and somewhat distorted near the stem, which is placed at right angles to the long axis of the fruit, bossed; skin fine, shining, greenish-yellow changing to a translucent canary-yellow; flesh white, very fine, altogether melting, and of a sweet, delicious and pronounced flavor of almond; Oct. and Nov.

Beurré d'Amanlis. 1. Leroy *Dict. Pom.* **1**:294, fig. 1867. **2.** Hogg *Fruit Man.* 509. 1884.

Pomologists differ as to the origin of this pear. Probably it takes its name from Amanlis, a village near Rennes, Fr. Fruit large, obtuse-pyriform, rather uneven in contour, bright green changing to yellowish-green, lightly washed with red-brown on the cheek exposed to the sun, dotted and marbled with fawn-russet; flesh greenish-white, fine, melting, tender, rich, very juicy, sugary, some acidity, agreeably perfumed; first; Sept. and Oct.

Beurré Ananas. 1. Hogg *Fruit Man.* 510. 1884.

Fruit small, pyriform, regular in outline, yellow, with red blush on side next the sun, and streaks of crimson; flesh yellowish, semi-buttery, melting, very

juicy and sweet, with a strong odor of musk; inferior; end of Oct.

Beurré d'Angleterre. 1. Duhamel *Trait. Arb. Fr.* **2**:197. 1768. **2.** Leroy *Dict. Pom.* **1**:297, fig. 1867.

Angleterre. **3.** Hogg *Fruit Man.* 481. 1884.

The first description of this pear was given by Le Lectier, Orléans, in 1628. The probability is that it was imported to France by Le Lectier early in the seventeenth century from England. It is grown extensively around Paris for the supply of the markets where it is in very general demand in September. Fruit medium, acute-pyriform, bright green-yellow, dotted very regularly with small, russet spots; flesh white, buttery, melting, very juicy, sugary and richly flavored; good dessert pear; Sept.

Beurré Antoine. 1. Mas *Pom. Gen.* **7**:180, fig. 572. 1881. **2.** Leroy *Dict. Pom.* **1**:299, fig. 1867.

Raised at Lyons, Fr., by M. Nérard, nurseryman, in 1822 from a bed of seeds of White Doyenné. Fruit about medium size, oblong-obovate-pyriform; color yellowish-green; flesh granulated, very melting, rich in sugar; early Sept.

Beurré Antoinette. 1. *Ann. Pom. Belge* **7**:61, fig. 1859. **2.** Leroy *Dict. Pom.* **1**:300, fig. 1867.

A gain of Alexandre Bivort at Geest-Saint-Rémy, Bel., in 1846. Fruit medium, sometimes larger, oblong-obtuse-pyriform; golden-yellow, dotted and mottled with brown, stained with fawn around the stem and often colored on the side next the sun; flesh greenish-white, semi-fine, semi-melting, gritty around the core; juice abundant, acid, sugary, aromatic; first; Oct.

Beurré Aqualine. 1. Dochnahl *Führ. Obstkunde* **2**:116. 1856.

A seedling of Van Mons published in 1833. Fruit medium, long-obtuse-oval, light green turning to yellow-green, dotted with whitish-gray; flesh semi-fine, white, extremely juicy; first class for all purposes; end of Dec.

Beurré de l'Assomption. 1. Leroy *Dict. Pom.* **1**:303, figs. 1867. **2.** *Pom. France* **4**: No. 166, Pl. 166. 1867.

M. Ruillié de Beauchamp, Goupillère, Nantes, Fr., obtained cions of a pear raised by an amateur. These grafts gave fruit in 1863. J. J. Thomas wrote briefly of it in the *American Fruit Culturist* in 1885. Fruit very large, pyramidal-obtuse, but rather variable, undulating and bossed, lemon-yellow, dotted and streaked with russet; flesh white, semi-fine, melting, juicy, slightly gritty around the core; juice abundant, saccharine, acidulous, vinous and delicately perfumed; first in France, rather disappointing in England; Aug.

Beurré Audusson. 1. Leroy *Dict. Pom.* **1**:305, fig. 1867.

Raised from seed by Anne-Pierre Audusson, Angers, Fr., in 1833 or 1834. Fruit below medium, pyriform, slightly obtuse, even in contour, greenish, sprinkled with large dots of brown and blushed on the side next the sun; flesh semi-fine, whitish, rather melting, gritty at the center; juice sufficient, saccharine, having little flavor or perfume; third; end of Aug.

Beurré des Augustins. 1. *Guide Prat.* 87. 1895.

Originally described in the *Pomone tournaisienne*

which is suggestive that the neighborhood of Tournai, Bel., was the place of its birth. Fruit medium, turbinate-obtuse; flesh buttery, very juicy; first; Nov. and Dec.

Beurré Aunénière. 1. Field *Pear Cult.* 277. 1859. **2.** Leroy *Dict. Pom.* **1**:308, fig. 1867.

Generally attributed to Van Mons. Fruit below medium and often small, conic-obtuse-pyriform, lemon-yellow, finely dotted with brown-russet, washed with bright rose on the side of the sun; flesh white, semi-fine, gritty at center; juice sufficient, sugary, agreeable; second; Oct. and Nov.

Beurré d'Automne de Donauer. 1. Mas *Pom. Gen.* **7**:173, fig. 567. 1881.

Liegel said he had received this variety as having come from seed beds of Van Mons. Fruit medium, conic, regular in contour, bright green; flesh white, tinted with yellow, melting, abounding in rich, sugary water, vinous and pleasantly perfumed; first; Nov. and Dec.

Beurré d'Avoine. 1. Leroy *Dict. Pom.* **1**:309, fig. 1867. **2.** Mas *Pom. Gen.* **5**:183, fig. 380. 1880.

M. Tuerlinckx, Mechlin, Bel., raised this variety. The date of its first fruiting is not known with certainty but it was probably about 1849. Fruit medium to rather large, oblong-cylindrical, irregular, flattened at base; color greenish-yellow, dotted with minute brown points; flesh white, coarse, generally gritty, very juicy, sugary; second as a dessert fruit but first for stewing.

Beurré d'Avril. 1. *Rev. Hort.* 66. 1911.

Raised from seed by Ernest Baltet and shown before the Pomological Society of France at Lyons in

March, 1909; it received great praise. Fruit medium to large, globular-obtuse-pyriform, green changing to yellow on ripening; flesh color of fresh butter, fine and melting, sugary, perfumed, vinous; good; Mar. to May.

Beurré Bachelier. 1. *Pom. France* **2**:No. 49, Pl. 49. 1864. **2.** Downing *Fr. Trees Am.* 673. 1869.

This splendid pear was obtained by Louis-François Bachelier, commune of Cappellebourg, Canton of Bourbourg, Fr., in 1845. Fruit large, oblong-turbinate, very obtuse and swelled, mammillate at summit, greenish-yellow, with brown dots, russeted and streaked with fawn around the stalk; flesh white, fine, melting; juice very abundant, sweet, acid, vinous, delicate and aromatic; first; Oct. to Dec.

Beurré Backhouse. 1. *Garden* **52**:309. 1898. **2.** *Ibid.* **76**:42, 54. 1912.

Raised by James Backhouse, York, Eng., about 1862. Fruit large, juicy and richly flavored; though larger it much resembles Beurré d'Amanlis; Sept. and Oct.

Beurré Bailly. 1. Leroy *Dict. Pom.* **1**:311, fig. 1867. **2.** Downing *Fr. Trees Am.* 673. 1869.

Raised from a seed bed of pips of a Doyenné made about 1836 by M. Bailly, a nurseryman near Lille, Fr. The parent tree first fruited in 1848. Fruit large, long, assuming generally that of the Calebasse, bossed, irregular; color golden-yellow, sown all over with greenish-gray dots and streaked with fawn around the calyx; flesh exceedingly white and fine, semi-melting, juicy, somewhat gritty around the core; juice abundant, sugary, lacking much perfume but delicate; first; Oct. and Nov.

Beurré Baltet Père. 1. *Guide Prat.* 109. 1876. **2.** Mas *Pom. Gen.* **7**:47, fig. 504. 1881. **3.** *Garden* **52**:356, 397. 1897.

Baltet Senior. **4.** Mathieu *Nom. Pom.* 171. 1889.

Obtained by Baltet Brothers, Troyes, Fr., about 1865. Fruit large, turbinate, yellowish-green; flesh very fine, melting, juicy and richly flavored; first, "there are few pears of better quality." (*Gard.* **52**:356.) Oct. and Nov.

Beurré Baud. 1. Mas *Pom. Gen.* **4**:1, fig. 193. 1879. **2.** Hogg *Fruit Man.* 512. 1884.

Attributed to Van Mons. Fruit medium to small, obovate, lemon-yellow, thickly mottled with cinnamon-colored russet; flesh whitish, sometimes veined with yellow, fine, buttery, melting; juice abundant and sugary, agreeable but not a remarkable flavor; hardly first-rate; Oct.

Beurré Beauchamp. 1. Downing *Fr. Trees Am.* 456. 1857. **2.** Mas *Le Verger* **3**:Pt. 1, 113, fig. 55. 1866-73.

Attributed by Van Mons in his catalog of 1823 to M. Beauchamp. Fruit medium to large; globular, bossed, pale yellow, dotted with fawn, strongly carmined on the side next the sun; flesh fine, white, excessively melting; juice sugary, perfumed, having a buttery flavor, delicate and agreeable; first; Nov.

Beurré Beaulieu. 1. Downing *Fr. Trees Am.* 673. 1869.

Fruit globular-pyriform, greenish-yellow, very much russeted; flesh whitish, rather coarse, buttery, melting, vinous; good; Oct.

Beurré Beek. 1. Mas *Pom. Gen.* **7**:69, fig. 515. 1881.

Whether this variety originated in the outskirts of Beek, a town of the Rhine, or whether it came from the neighborhood of the town of Beek in the Pays-Bas is uncertain. Fruit medium, globular-ovate, obtuse, bright green, sown with numerous strongly marked gray-green dots, russeted at summit and base; flesh white, melting; juice abundant and sugary; third-rate for the table but quite useful for the kitchen; Sept.

Beurré des Béguines. 1. Leroy *Dict. Pom.* **1**:314, fig. 1867. **2.** Mas *Pom. Gen.* **3**:133, fig. 163. 1878.

A posthumous gain of Van Mons at Louvain. Its first fruit was gathered in 1844. Fruit below medium size; oblate, more enlarged on one side than the other; skin entirely covered with a crust of cinnamon-brown russet; flesh greenish-white, rather coarse, very juicy and sweet, richly flavored, with perfume of the Seckel; quite a good pear; Oct.

Beurré Bennert. 1. *Ann. Pom. Belge* **5**:19, fig. 1857. **2.** Leroy *Dict. Pom.* **1**:315, fig. 1867.

Obtained from the seed beds of Van Mons at Louvain subsequent to his death in 1842. It first bore fruit in 1846. Fruit medium, globular-obtuse-pyriform, sides uneven; color golden-yellow, striped, veined and stained with fawn, dotted with fawn around the stem and washed with reddish-brown on the side next the sun; flesh white, fine, melting containing gritty concretions around the core; juice abundant, acid, vinous, with delicate aroma; first, Dec. to Feb.

Beurré Benoist. 1. Elliott *Fr. Book* 360. 1859. **2.** Mas *Le Verger* **3**:Pt. 1, 35, fig. 16. 1866-73. **3.** Downing *Fr. Trees Am.* 674. 1869.

Found on a farm at Brissac, Fr., and propagated

by Auguste Benoist about the middle of the last century. Fruit large, obovate-obtuse-pyriform; skin pale yellow-green strewed with dots and patches of pale brown-russet, the fundamental yellow-green passing, on ripening to bright yellow and the side well exposed to the sun often being tinted with orange-red; flesh white, fine-grained, melting, acidulous and very juicy, perfumed with a distinct Seckel aroma; first; Sept.

Beurré Berckmans. 1. Leroy *Dict. Pom.* **1**:316, fig. 1867. **2.** Downing *Fr. Trees Am.* 674. 1869.

Gained by Alexandre Bivort, Louvain, Bel. Fruit medium or above, long, obovate-obtuse-pyriform, yellow-ochre, generally covered with streaks and markings of fawn; flesh whitish, fine, very melting, seldom gritty; juice excessive, perfumed; refreshing and delicate; first; Nov. and Dec.

Beurré de Biseau. 1. *Jour. Hort.* N. S. **22**:311, fig. 1872.

Raised by A. de Biseau d'Hauteville, Binche, Bel., and sent by him in 1871 to the Royal Horticultural Society of London where the Fruit Committee awarded it a first class certificate. Fruit above middle size, oblong, unshapely and undulating in its outline; skin entirely covered with a thick coat of smooth, dark cinnamon-brown russet; flesh yellowish, tender, buttery and sweet with a rich flavor and excellent bouquet; first; Apr. and May.

Beurré Blanc Doré. 1. Mas *Pom. Gen.* **6**:93, fig. 431. 1880.

The first description of this pear was given in 1839 by Dittrich; its origin is uncertain. Fruit medium, globular-conic, pale water-green, dotted with gray-brown, the green becoming at maturity a

beautiful, warm, golden-yellow with the side next the sun washed with bright vermilion-red; flesh yellowish-white, semi-buttery, sugary and perfumed; good; Sept.

Beurré Blanc de Nantes. 1. Leroy *Dict. Pom.* **1**:317, fig. 1867. **2.** Mas *Pom. Gen.* **6**:31, fig. 409. 1880.

According to Prévost, writing of this pear in 1845, it probably came from Brittany or Anjou. Fruit below medium, turbinate-ovate or turbinate-spherical, yellowish-green, dotted with gray, mottled with fawn, and occasionally slightly colored with tender rose on the side next the sun; flesh yellowish-white, coarse, gritty, semi-melting; juice rather deficient, saccharine, but wanting in flavor and generally acid; third; Aug. and Sept.

Beurré Boisbunel. 1. Leroy *Dict. Pom.* **1**:318, fig. 1867. **2.** Hogg *Fruit Man.* 514. 1884.

Raised at Rouen, Fr., from a bed of mixed seeds in 1835 by L. M. Boisbunel; first fruited in 1846. Fruit medium, turbinate-obtuse or obovate, greenish-yellow, some russet; flesh yellowish, tender, melting, and gritty; juice plentiful, sweet, little perfume, refreshing but generally rather harsh; second and often third; Sept.

Beurré Bollwiller. 1. Leroy *Dict. Pom.* **1**:319, figs. 1867. **2.** Hogg *Fruit Man.* 514. 1884.

Raised by Baumann Brothers, Bollweiler, near Colmar, Alsace. Propagated in 1842. Fruit medium to large, obovate-obtuse-pyriform, golden-yellow, dotted with gray and brown and washed with tender rose on the side exposed to the sun; flesh very white, tender and melting; juice abundant, sugary, fresh,

exceedingly savory; first; Mar. to end of May.

Beurré de Bordeaux. 1. McIntosh *Bk. Gard.* **2**:463. 1855.

Recommended in 1855 by Thomas Rivers, a well-known English authority, as a very productive standard; fruit of medium size and first quality; Oct.

Beurré Bourbon. 1. Leroy *Dict. Pom.* **1**:322. 1867.

Raised by M. Parigot, a magistrate at Poitiers, Fr.; it came from a bed sown with various seeds in 1845. Fruit of first quality; Oct. and Nov.

Beurré de Brême. 1. *Guide Prat.* 86. 1895.

Published in Germany. Fruit small or medium, globular-turbinate, greenish-yellow; flesh fine, melting, juicy; first; Nov.

Beurré Bretonneau. 1. Leroy *Dict. Pom.* **1**:322, fig. 1867. **2.** Hogg *Fruit Man.* 515. 1884.

Raised by Major Espéren, Mechlin, Bel. Fruit large, obovate-obtuse-pyriform, greenish-yellow much covered with brownish-russet and washed with carmine on the side next the sun; flesh yellowish-white, semi-fine, semi-melting, juicy, acid, sweet, vinous, slightly perfumed; quality variable according to locality, but generally second rather than first; March to May.

Beurré de Brigné. 1. Mas *Pom. Gen.* **1**:93, fig. 47. 1872.

Poire des Nonnes. **2.** *Horticulturist* **7**:514. 1852. **3.** Leroy *Dict. Pom.* **2**:463, fig. 1869.

A wilding found in the commune of Brigné, Maine-et-Loire, Fr. It was introduced in 1832. Fruit below medium or medium, globular-oblate, bossed round the summit, pale yellow shaded with tender

green, sprinkled with large, gray-russet dots and some brownish stains; flesh whitish, very fine, melting; juice exceedingly abundant, saccharine, acidulous, having a musky perfume, delicious; first; Sept.

Beurré Bronzé. 1. Mas *Le Verger* **3**:Pt. 1, 57, fig. 27. 1866-73. **2.** Leroy *Dict. Pom.* **1**:324, figs. 1867.

Raised by Van Mons at Louvain and published by him in 1823 under the number 328. It was received in Germany soon after and named Beurre Bronzé. Fruit medium to small, ovate, greenish-bronze, marbled with bright green on the shady side and entirely bronzed and dotted with russet on the side exposed to the sun; flesh firm, juicy, sugary and aromatic; first; end of Oct.

Beurré de Brou. 1. Mas *Pom. Gen.* **7**:1, fig. 481. 1881.

A seedling of Van Mons grown about 1825. Fruit small or medium, turbinate-obtuse, very pale green, strewn with numerous minute points of gray-green; on ripening, the side next the sun becomes golden and the rest of the skin yellow; flesh white, melting, with abundant juice, sugary, agreeable; a fruit of good quality and ships well; end of Sept.

Beurré Brougham. 1. Leroy *Dict. Pom.* **1**:325, fig. 1867. **2.** Hogg *Fruit Man.* 538. 1884.

Raised from seed in 1831 or 1832 at Downton Castle, Hereford, Eng., by Thomas Andrew Knight. Fruit medium, globular-obovate, inclining to oval, yellowish-green, covered with large, brown-russet specks; flesh yellowish-white, tender and juicy, gritty at center; juice sweet, vinous, perfumed; second and often first; Oct. and Nov.

Beurré Bruneau. 1. Leroy *Dict. Pom.* **1**:326, fig. 1867. **2.** *Ann. Pom. Belge* **5**:11, fig. 1857.

Bergamotte Crassane d'Hiver. **3.** Mas *Le Verger.* **1**:19, fig. 8. 1866-73.

Raised at la Bourdiniere, in the commune of Chateau Thibaut, Fr., first reported about 1830. Fruit above medium, globular-turbinate, very obtuse and swelled, deeply depressed at each end, yellow-orange, dotted with gray and red-brown; flesh yellowish-white, semi-melting, rather gritty; juice abundant, acidulous, sugary, vinous, slightly perfumed, often sour; second; Nov. to Feb.

Beurré de Bruxelles. 1. Leroy *Dict. Pom.* **1**:327, fig. 1867.

Originated in Brabant, Bel., and first reported by Louis Noisette, Paris, Fr., in 1813. Fruit above medium, very long, bossed, rather obtuse and always swelled round the calyx; skin rough to the touch, greenish-yellow, dotted with bright brown and washed with rose on the side of the sun; flesh very white, fine, semi-melting, generally gritty around the core; juice abundant, sugary, acidulous, more or less perfumed, refreshing and very agreeable; first; beginning of Sept.

Beurré Burnicq. 1. Mas *Le Verger*. **3**:Pt. 1, 101, fig. 49. 1866-73.

From a seed bed of Major Espéren, Mechlin, Bel., first published in 1846. Fruit above medium, obovate-obtuse-pyriform; skin rough from a thick covering of russet, strewed with gray specks but showing some of the yellow of the ground color, often of a rather somber red color on the sunny side; flesh slightly greenish, very fine, melting, sugary, juicy, perfumed; quality in France first; end of Sept.

Beurré du Bus. 1. *Guide Prat.* 86. 1876.

Fruit medium, turbinate, yellow, stained with fawn; flesh buttery, melting, aromatic; first; Dec. and Jan.

Beurré Bymont. 1. Elliott *Fr. Book* 363. 1859.

Of foreign origin; described by Elliott as "new" in 1859. Fruit above medium, obovate-truncate, russety; flesh juicy, sweet, perfumed; said to be very good to best; Oct. to Dec.

Beurré de Caen. 1. Hogg *Fruit Man.* 515. 1884.

Fruit large, pyriform, narrow, long, yellow, heavily covered with brown-russet; flesh coarse; inferior; Feb.

Beurré Capiaumont. 1. Leroy *Dict. Pom.* **1**:330, fig. 1867. **2.** Downing *Fr. Trees Am.* 682. 1869.

A handsome Flemish pear raised from seed by M. Capiaumont, Mons, Bel., in 1787. Fruit medium, long-obtuse-pyriform, clear yellow, with cinnamon-red cheek and strewed with specks and markings of fawn; flesh white, with greenish filaments, fine-grained, buttery, melting; juice abundant, sweet, aromatic; first quality; good for dessert and also for the kitchen; Oct.

Beurré Caty. 1. Leroy *Dict. Pom.* 1:331, fig. 1867.

Obtained about 1858 by a Doctor Hélin, Ronquieres, Bel. Fruit under medium, globular-obtuse-pyriform, mammillate at summit and one side generally more bulged than the other, dull yellow, dotted and veined with bright brown; flesh fine, melting, a little gritty at center; juice plentiful, sourish, sweet, savory; first; Jan. to Mar.

Beurré Caune. 1. *Guide Prat.* 86. 1895.

Fruit rather large, water-green, touched with dull carmine; flesh melting, juicy, sugary, acidulated, recalling the agreeable perfume and acidity of the Beurré Gris; first; Sept.

Beurré du Cercle Pratique de Rouen. 1. Leroy *Dict. Pom.* **1**:332, fig. 1867. **2.** Hogg *Fruit Man.* 516. 1884.

From a seed bed made by M. Boisbunel, Rouen, Fr., in 1845. Fruit rather below medium size, pyramidal but much longer on one side than on the other; skin rough to the touch, lemon-colored, much covered with bronze-russet and strewed with gray dots; flesh greenish, fine, juicy, melting, very gritty, sweetish acid and of a very delicate flavor; first; end of Sept.

Beurré du Champ Corbin. 1. Mas *Pom. Gen.* **6**:59, fig. 414. 1880.

Obtained by Jacques Jalais from a bed of mixed seeds made in 1846. Fruit medium, globular-ovoid, water-green, sown with large, round dots; flesh yellowish, semi-fine, buttery, semi-melting, with abundant juice, sugary and having a rather agreeable perfume.

Beurré Charron. 1. Leroy *Dict. Pom.* **1**:334, fig. 1867. **2.** Hogg *Fruit Man.* 516. 1884.

Raised from seed at Angers, Fr.; fruited in 1838 by M. Charron. Fruit medium or below, globular, greenish-yellow, dotted with russet; flesh tender, juicy, watery, melting; juice very abundant, sweet, vinous, refreshing, deliciously perfumed; first; Oct.

Beurré Chatenay. 1. Leroy *Dict. Pom.* **1**:334, fig. 1867.

A French pear raised in the commune of Doué-la-

Fontaine, Maine-et-Loire, by Pierre Chatenay in 1846. Fruit small, ovate, bossed and contorted, yellowish-green, washed with bright red on the side exposed to the sun; flesh white, semi-fine, melting, juicy, sugary, highly perfumed; first; Nov.

Beurré Chaudy. 1. *Guide Prat.* 86. 1895.

Fruit very large, pyriform, bossed, bright green changing to pale yellow at maturity; flesh fine, melting, very juicy, perfumed; Oct. to Dec.

Beurré Christ. 1. Mas *Pom. Gen.* **3**:143, fig. 168. 1878.

Described in the Van Mons Catalog under the number 139; dedicated to the German pomologist Christ. Fruit medium, obovate, rather bossed in its outline, bright green, numerous small dots of gray-brown; quality good; flesh fine, buttery; Oct. and Nov.

Beurré Citron. 1. Downing *Fr. Trees Am.* 676. 1869. **2.** Mas *Pom. Gen.* **1**:133, fig. 67, 1872.

From a Van Mons' seed bed. Fruit small or medium, ovate, somewhat globular, lemon-yellow; flesh white, fine, breaking; juice sufficient, wanting in sugar, acidulous, without appreciable perfume; not of first quality but of some value on account of its prolonged period of maturity; Jan. to end of winter.

Beurré Clotaire. 1. Leroy *Dict. Pom.* **1**:337, fig. 1867.

The wilding, parent-tree of this variety was found in 1854 by M. Clot, Angers, Fr. Fruit medium, obovate-pyriform, obtuse, generally narrowed toward the summit, yellow-ochre color, much dotted with greenish-russet; flesh whitish, fine, watery,

melting, gritty round center; second; Sept.

Beurré de Coit. 1. Mas *Le Verger* **2**:243, fig. 120. 1866-73. **2.** Downing *Fr. Trees Am.* 722. 1869.

Originated with Colonel Coit, near Cleveland, Ohio. Fruit medium, obtuse-pyriform, dull green, sprinkled with numerous large brown points; flesh semi-fine, whitish, veined with yellow, buttery, melting, rich in sugary water, vinous and perfumed; good; Sept.

Beurré Colmar. 1. *Ann. Pom. Belge* **1**:67, fig. 1853. **2.** Hogg *Fruit Man.* 517. 1884.

Beurré d'Enghien. **3.** Mas *Pom. Gen.* **7**:23, fig. 492. 1881.

Raised in Belgium by Van Mons before 1823. Fruit large, ovate, bossed, irregular, obtuse at both ends, smooth, yellow, dotted with brown and fawn, with a tinge of orange-red on the side next the sun; flesh white, crisp, melting, juicy, some grit around the core; juice abundant, sugary, slightly perfumed; a dessert pear of first quality; mid-Oct. to Dec.

Beurré Coloma. 1. Leroy *Dict. Pom.* **1**:339, fig. 1867. **2.** Hogg *Fruit Man.* 517. 1884.

Obtained by Count Coloma, probably at Mechlin, Bel. Fruit large, oblong-obovate, obtuse, much reduced at both extremities; skin thin and tender, at first a lively green changing to golden-yellow on ripening, much russeted; flesh white, fine, dense; juicy, semi-melting, gritty at center, sugary and vinous flavor; second; end of Sept.

Beurré du Comte Marcolini. 1. Dochnahl *Führ. Obstkunde* **2**:115. 1856.

Upper Italy, 1839. Fruit medium, long, medium

ventriculous, shining pale green changing to whitish-green; flesh acidulous, sweet, and aromatic; second; end of Oct.

Beurré de Conitz. 1. Mas *Pom. Gen.* **1**:103, fig. 52. 1872.

A German variety at one time grown a good deal in the neighborhood of Danzig, where it was known by the name *Fondante de Conitz*. Fruit medium to large, conic-pyriform, lemon-yellow, washed with lively red; flesh white, fine, very melting, very sugary, pleasantly scented; good; middle of Aug.

Beurré Copretz. 1. Hogg *Fruit Man.* 517. 1884.

Fruit below medium, oval, regular in outline; skin smooth, greenish-yellow, having large patches and dots of russet; flesh greenish-white, coarse-grained, juicy and sugary, having but little flavor; inferior; Nov.

Beurré Dalbret. 1. Leroy *Dict. Pom.* **1**:343, fig. 1867. **2.** Downing *Fr. Trees Am.* 678. 1869.

This variety was obtained by Van Mons prior to 1832. Fruit medium or above, elongated-pyriform, rather indented and irregular, golden or greenish-yellow, dotted all over, mottled and spotted with bright red; flesh white, fine, juicy, melting, perfumed; first; Sept. and Oct.

Beurré Daras. 1. *Guide Prat.* 85. 1876.

Distributed by M. du Mortier, Tournai, Bel., who said that its fruit was very large, always of first quality; Dec. and Jan.

Beurré Daviss. 1. McIntosh *Bk. Gard.* **2**:460. 1855.

Fruit medium, obovate; good; Jan. and Feb.; somewhat resembling the Passe Colmar, but keeps

better.

Beurré Defays. 1. Leroy *Dict. Pom.* **1**:344, figs. 1867. **2.** Hogg *Fruit Man.* 518. 1884.

Raised by François Defays near Angers, Fr.; fruited first in 1839 or 1840. Fruit large, pyramidal-obtuse, pale golden yellow, with large, brown dots, and an orange tinge on side next the sun; flesh yellowish-white, delicate, melting, juicy, sugary, vinous; first; end of Nov. to Feb.

Beurré Degalait. 1. *Guide Prat.* 85. 1876.

Probably produced in the Tournai district, Bel., fruit medium, turbinate, greenish-yellow, very juicy; first; Oct. and Nov.

Beurré Delannoy 1. Mas *Le Verger* **3**:Pt. 1, 71, fig. 34. 1866-73. **2.** Leroy *Dict. Pom.* **1**:346, fig. 1867.

Obtained by Alexandre Delannoy, nurseryman, near Tournai, Bel. It was first made known in 1848. Fruit medium or large, turbinate-obtuse, bossed, one side generally more enlarged than the other, greenish-yellow, finely dotted with russet; flesh whitish, fine, juicy, melting, a little gritty around the core, sugary, acid, with a really exquisite savor; first; Oct. and Nov.

Beurré Delbecq. 1. *Guide Prat.* 58, 232. 1895.

Fruit medium, conic-pyriform, lemon-yellow; flesh very fine, melting, sweet; first; Oct.

Beurré Délicat. 1. Mas *Pom. Gen.* **3**:17, fig. 105. 1878.

Thought by Mas to have been raised by M. de Jonghe, Brussels. Fruit small, rather long-turbinate, even in contour, bright, clear green, covered with

extremely small and numerous fawn dots; flesh white, fine, melting, with abundant, sweet juice, perfumed.

Beurré Derouineau. 1. Leroy *Dict. Pom.* **1**:348, fig. 1867. **2.** Hogg *Fruit Man.* 518. 1884.

Raised from seed in 1840 by a gardener named Derouineau near Angers, Fr. Fruit small, obovate; skin rough to the touch, bronze, but brightening somewhat on the shady side and turning to yellow; flesh white, delicate, melting, juicy, sweet and aromatic; hardly first-class; Nov.

Beurré Dilly. 1. *Pom. France* **4**: No. 171, Pl. 171. 1867. **2.** *Guide Prat.* 159, 244. 1876.

Obtained about 1848 by M. V. Dilly near Tournai, Bel. Fruit rather large, pyriform-globular, obtuse; skin thick, rather rough and wrinkled, green changing to yellow, washed with dull red; flesh greenish, very fine, melting; juicy, sugary, perfumed; very good; Sept. and Oct.

Beurré Docteur Pariset. 1. Mas *Pom. Gen.* **7**:177, fig. 569. 1881.

Produced from a chance seedling in 1856 and cultivated by M. Pariset, Ain, Fr. Fruit large, conic-obtuse-globular or nearly globular, water-green, sprinkled with numerous very large, brown dots; flesh fine, buttery, melting; juice abundant and perfumed; somewhat like Beurré Diel which it surpasses in quality; Nov.

Beurré Doux. 1. Leroy *Dict. Pom.* **1**:352, fig. 1867.

Cultivated in France in the middle of the last century; its origin is unknown. Fruit medium to large, globular-turbinate, bossed, rough, yellowish-green, dotted all over with gray specks, extensively

tinged with vermilion on the side next the sun; flesh white, melting, gritty at center, juice sufficient and very sweet, vinous, sourish; third; Sept.

Beurré van Driessche. 1. Leroy *Dict. Pom.* **1**:434, fig. 1867.

Obtained from seed in 1858 by M. van Driessche, a horticulturist at Ledeberg, near Ghent, Bel. Fruit rather large, oblong-obtuse, dull yellow; flesh semi-melting, sugary and of a delicate savor, vinous and acid juice; first; Feb. to May.

Beurré Driessen. 1. *Mag. Hort.* **21**:146. 1855.

Driessen's Pomeranzenbirne. **2.** Dochnahl *Führ. Obstkunde* **2**:157. 1856.

A seedling of Van Mons, 1834. Fruit large, roundish, yellow, with a strong, reddish blush; flesh whitish-yellow, semi-melting, rather sour and sweet; good; Sept. and Oct.

Beurré Dubuisson. 1. *Gard. Chron.* 3rd Ser. **20**:789. 1896. **2.** *Cat. Cong. Pom. France* 177, fig. 1906.

Obtained about 1832 by Isidore Dubuisson, a gardener near Tournai, Bel. Fruit rather large, oblong, obtuse at base, flat at summit, greenish-yellow on shaded side, often washed with red on the side exposed to the sun, marked all over with russet spots and veinings; flesh white, fine-grained, melting, buttery, juicy, sweet, acid, perfumed; very good; Dec. to Feb.

Beurré Duhaume. 1. Hogg *Fruit Man.* 519. 1884.

Fruit turbinate, evenly shaped; skin yellow but almost entirely covered with brown-russet, some red and orange on side exposed to the sun; flesh firm, breaking, very juicy, sweet, rich, vinous; first; Dec. to

Feb.

Beurré Dumont. 1. Leroy *Dict. Pom.* **1**:353, fig. 1867. **2.** Hogg *Fruit Man.* 519. 1884.

Obtained from a seed-bed by Joseph Dumont, Esquelmes, Bel. It first bore fruit in 1833. Fruit rather large, globular-oval, greenish-yellow, speckled with brownish-russet on the shaded side and entirely washed with reddish-brown on the side of the sun; flesh juicy, melting, and richly flavored and aromatic; first; Nov. and Dec.

Beurré Dumortier. 1. *Pom. France* **3**:No. 100, Pl. 100. 1865. **2.** Leroy *Dict. Pom.* **1**:354, figs. 1867.

Attributed to Van Mons, about 1818. Fruit above medium, turbinate, more or less elongated, obtuse, bossed, yellowish-green, dotted and mottled with russet, and often tinged with pale rose on the side of the sun; flesh whitish, melting or semi-melting according to climate; juice very abundant, acidulous, sugary, with a delicious, perfumed flavor; first; Sept. to Dec.

Beurré Dupont. 1. Hogg *Fruit Man.* 519. 1884.

Fruit small, pyriform-curved, sides unequal, rich golden-yellow, speckled with patches of cinnamon russet; flesh tender, melting, juicy and sweet, without perfume and only a sweet-water flavor; second; end of Oct.

Beurré Duquesne. 1. Hogg *Fruit Man.* 520. 1884.

Fruit medium, obovate, yellowish-green changing to yellow, tinged with red next the sun, covered with heavy, brown dots; flesh white, tender, melting, sugary, rich; a good dessert pear; Oct.

Beurré Durand. 1. Leroy *Dict. Pom.* **1**:355; fig. 1867. **2.** Mas *Pom. Gen.* **4**:93, fig. 239. 1879.

Came from a seed bed made by M. Goubault near Angers, Fr., and was reported in 1854. Fruit above medium, obtuse-pyriform, long, golden-yellow, dotted and mottled with fawn; flesh very white, fine, melting, full of sugary, vinous juice, and having a pleasant flavor; first; Sept. and Oct.

Beurré Duval. 1. Leroy *Dict. Pom.* **1**:356, figs. 1867. **2.** Hogg *Fruit Man.* 520. 1884.

This variety was found among a collection of seedlings raised by M. Duval, Hainaut, Bel., some time before 1823. Fruit medium to large; short-pyramidal, bossed, greenish-yellow, covered with large, greenish-gray freckles and large, dark brown patches, often washed with red on the side exposed to the sun; flesh yellowish, melting and juicy, sugary and aromatic; first; Sept. to Nov.

Beurré d'Ellezelles. 1. *Guide Prat.* 109. 1876.

A Belgian pear sent out before 1876. Fruit flesh very fine, juicy, sweet, perfumed, musky; an exquisite pear; Oct.; tree never blighted.

Beurré Épine. 1. Leroy *Dict. Pom.* **1**:359, fig. 1867.

M. Bivort was the first to describe this pear which he did in 1850; it was disseminated from Belgium. Fruit above medium, long-obtuse-pyriform, even in contour; skin rough, lemon-yellow, mottled with fawn, heavily washed with brown-russet on the side next the sun; flesh whitish, semi-fine, melting, gritty around the core; juice abundant, vinous and saccharine, with a delicate, acid flavor; second; Nov.

Beurré d'Espéren. 1. McIntosh *Bk. Gard.* **2**:460. 1855.

Fruit large; good; tree hardy, healthy and succeeds well on quince stock; Jan.

Beurré d'Esquelmes. 1. *Guide Prat.* 77. 1895.

Raised by Joseph Dumont at Esquelmes near Toumai, Bel. Fruit rather large, globular-obovate or Doyenné-shaped, yellowish-green, washed with fawn; flesh fine, melting; good; Nov.

Beurré Eugène Furst. 1. *Guide Prat.* 86. 1876.

Fruit large; flesh melting; of first quality; Oct.

Beurré Fauve de Printemps. 1. Mas *Pom. Gen.* **5**:135, fig. 356. 1880.

Raised by Van Mons. Fruit medium or nearly medium, sometimes turbinate-conic, sometimes conic-ovate, water-green, speckled with numerous brown points, changes to bright lemon-yellow on ripening; flesh yellowish-white, buttery, sweet, generally musky; good; end of spring.

Beurré Favre. 1. Leroy *Dict. Pom.* **1**:360, fig. 1867.

Raised by François Maisonneuve, Nantes, Fr.; it was first reported in 1845. Fruit below medium, long-pyriform, obtuse, often mishapen, one side always longer than the other, yellow-ochre; flesh whitish, semi-melting, sweet, acid, juicy; second, sometimes third; beginning of Oct.

Beurré Fenzl. 1. Mas *Pom. Gen.* **3**:169, fig. 181. 1878.

First recorded by Denis Henrard, a horticulturist at Liege, Bel. Fruit medium, turbinate-globular, or turbinate-pyriform, irregular in contour, pale and dull green, speckled with dots of gray-green or green, on ripening becomes lemon-yellow or gold and washed with vermilion on the side of the sun; flesh

white, melting, sweet, refreshing; first-class; Nov.

Beurré de Février. 1. *Ann. Pom. Belge* **7**:93, fig. 1859. **2.** Leroy *Dict. Pom.* **1**:361, fig. 1867.

A seedling raised by M. Boisbunel at Rouen, Fr., in 1845. Fruit medium to large, oval-pyriform, enlarged toward its summit, green passing into yellow-green on ripening, finely dotted with gray; flesh very fine, greenish-white, very melting, buttery; juice abundant, sugary-acid, a little musky, very agreeable; first; mid-Jan. to early Mar.

Beurré Fidéline. 1. Leroy *Dict. Pom.* **1**:362, fig. 1867.

Raised from seed in 1861 by Robert and Moreau, horticulturists at Angers, Fr. Fruit below medium, ovate, green, much dotted with russet; flesh yellowish, melting; juice abundant, sugary and refreshing and delicately perfumed; first; Nov. and Dec.

Beurré Flon. 1. Leroy *Dict. Pom.* **1**:363, fig. 1867. **2.** *Gard. Chron.* N. S. **23**:308, 446, fig. 57. 1885.

Obtained at Angers by M. Flon; fruited for the first time in 1852. Fruit rather large, turbinate, very obtuse, bossed, usually having one side larger than the other; skin harsh to the touch, thick, lemon-yellow, entirely covered with red-gray spots, largely marbled and spotted on the side exposed to the sun; flesh white, rather delicate, tender, slightly gritty; juice abundant, sweet, aromatic, endowed with an agreeable and delicate acid flavor; first; mid-Sept, to mid-Oct.

Beurré Fouqueray. 1. *Gard. Chron.* N. S. **24**:622. 1885. **2.** *Guide Prat.* 87. 1895.

Obtained by M. Fouqueray, and introduced before 1885. Fruit very large, oblong, obtuse-pyriform, olive-green, speckled with brown spots; flesh white, tender, melting, sweet and perfumed; first; Oct. and Nov.

Beurré Gambier. 1. Mas *Le Verger* **1**:119, fig. 58. 1866-73.

Obtained by M. Gambier, Rhode Sainte-Genèse, Bel.; cataloged first in 1862. Fruit medium to rather large, obovate-pyriform, bright lemon-yellow, washed with red; flesh white, slightly veined with yellow, fine, buttery, melting; juice abundant, sweet, perfumed; below first; Jan. and Feb.

Beurré Gaujard. 1. *Guide Prat.* 72, 244. 1876.

Fruit medium, oblong-globular, yellow, covered with fawn russet; flesh fine, semi-melting, a distinctive and very pronounced perfume; Sept. and early Oct.

Beurré Van Geert. 1. *Guide Prat.* 75, 249. 1876.

Obtained by Jean Van Geert, Senior, horticulturist at Ghent, Bel. Fruit large, oblong-obovate, lively yellow, washed with vermilion; flesh very juicy, acidulous; a good fruit of brilliant coloring; Oct. and Nov.

Beurré Gendron. 1. Leroy *Dict. Pom.* **1**:365, figs. 1867. **2.** Downing *Fr. Trees Am.* 688. 1869.

Raised in the nurseries of M. Gendron at Châteaugontier, Fr.; gave its first fruit in 1849. Fruit large, variable, oblong-turbinate or nearly globular, but always irregular, bossed, obtuse and contorted, yellowish, speckled with brown, mottled with fawn around the calyx and stalk, lightly tinged with vermilion on the cheek exposed to the sun; flesh

white, coarse, firm, breaking, granular round the pips; juice sufficient, acidulous, sugary; second; Jan. to Mar.

Beurré de Germiny. 1. *Guide Prat.* 86. 1895.

First mentioned in *Pomone tournaisienne*. Fruit medium, oblong, dull yellow; flesh fine, buttery, sugary, very juicy, vinous; first; Oct. and Nov.

Beurré de Ghélin. 1. Leroy *Dict. Pom.* **1**:367, fig. 1867. **2.** Hogg *Fruit Man.* 520. 1884.

Raised by M. Fontaine de Ghélin, Mons, Bel., in 1858. Fruit large, globular-ovate irregular in form and bossed, pale yellow, much covered with fawn-russet; especially on the sun-exposed side; flesh yellowish, melting; juice most abundant, with a rich and delicious perfume; first; Oct. to Dec.

Beurré Gilles. 1. *Guide Prat.* 86. 1876.

On trial at the Experiment Farm, Agassiz, B. C., in 1900. Fruit large, pyramidal, brilliant yellow; flesh very fine, very juicy, sugary, aromatic; good; Nov. and Dec.

Beurré Goubault. 1. Leroy *Dict. Pom.* **1**:370, fig. 1867. **2.** Hogg *Fruit Man.* 521. 1884.

Obtained from seed in 1842 by M. Goubault, a nurseryman near Angers, Fr. Fruit medium, globular, inclining to turbinate, green even when ripe, uniformly sprinkled with grayish dots; flesh white, semi-fine, melting; juice very abundant, sugary, aromatic; first-class; Sept.

Beurré Graue Herbst. 1. Oberdieck *Obst-Sort.* 256. 1881.

Fruit variable in form, long and globular, sometimes long and pyriform, light green turning to

golden-green; flesh whitish, soft, melting, sugary with muscatel flavor; a very good dessert and good cooking pear; Oct.

Beurré Grétry. 1. *Guide Prat.* 87. 1895.

Distributed by M. Daras de Naghin, Antwerp, Bel. Fruit medium, brown-russet; of good quality; Oct. and Nov.

Beurré Gris. 1. Duhamel *Trait. Arb. Fr.* **2**:196, Pl. 38. 1768. **2.** *Pom. France* **2**:No. 68, Pl. 68. 1864. **3.** Leroy *Dict. Pom.* **1**:371, fig. 1867

Brown Beurré. **4.** Hogg *Fruit Man.* 538. 1884.

A very old French pear mentioned by Olivier de Serres, 1651; C. Mallet, 1652; Claude St. Étienne, 1670; and Merlet, 1690. It was mentioned by Rea in 1655 as being cultivated in England under the name of *Boeure de Roy*. Fruit large, oblong-obovate; color of skin varies very much, but usually yellowish-green, nearly covered with thin brown or olive-russet and tinged with reddish-brown on the side next the sun; flesh greenish-white under the skin, yellowish at center, melting, tender, buttery, with a rich, musky and subacid flavor.

Beurré-Gris d'Enghien. 1. *Guide Prat.* 109, 245. 1876.

A Belgian variety raised previous to 1870. A handsome and good fruit, the flesh having a delicious flavor; Mar.

Beurré de Grumkon. 1. *Rev. Hort.* 133. 1894.

Fruit large to very large, very irregular, obtuse-pyriform, bossed, tolerably convex; skin smooth, green, washed with light brown; flesh whitish, melting, juicy; first; Nov.

Beurré Grumkower. 1. Oberdieck *Obst-Sort.* 257. 1881.

Of Belgian origin; described early in the nineteenth century. Fruit medium, pyriform, light green turning to greenish-yellow; flesh whitish, granular, with a somewhat cinnamon flavor; very good; Nov.

Beurré Hamecher. 1. Leroy Dict. *Pom.* **1**:376, fig. 1867. **2.** Hogg *Fruit Man.* 521. 1884.

This was one of the last seedlings raised by Van Mons and ripened its first fruits in October, 1847. Fruit medium to large, globular-ovate, bossed at the stem and depressed at the summit, rather irregular, one side being much longer than the other, greenish-yellow, mottled with russet; flesh white, fine, melting, juicy, sugary, acid, slightly perfumed; second, at times, third; early Sept.

Beurré d'Hardenpont d'Automne. 1. Leroy *Dict. Pom.* **1**:377, fig. 1867. **2.** Downing *Fr. Trees Am.* 683. 1869. **3.** Mas *Pom. Gen.* **5**:95, fig. 336. 1880.

This pear has often been confused with Glou Morceau but erroneously; both were raised by Van Mons, but they differ in form and other characteristics. This variety was obtained from seed by Van Mons about 1802. Fruit medium to large, long-pyriform-obtuse, pale yellow, covered with large, bronze dots and patches of russet; flesh yellowish, fine, melting, generally gritty; juice abundant, sugary, vinous, very aromatic; first; end of Sept.

Beurré Hennau. 1. Mas *Pom. Gen.* **7**:3, fig. 482. 1881.

Probably Belgian. Fruit medium, ovate-pyriform; bright green, speckled with light brown dots; flesh whitish, fine, melting, very juicy, sweet and rather vinous; good; Oct.

Beurré Henri Courcelle. 1. *Gard. Chron.* 3rd Ser. **4**:602. 1888. **2.** *Guide Prat.* 52. 1895.

Raised by Arsène Sannier, Rouen, Fr., from seed of Bergamotte Espéren which it resembles in form. Fruit medium to small, oblong-pyriform, grayish-green; flesh very fine and of a distinctive and exquisite flavor; first; winter and spring; very fruitful.

Beurré Hillereau. 1. *Guide Prat.* 87. 1895.

Fruit large, pale yellow, ensanguined on the side exposed to the sun; flesh medium fine, very melting; first; Dec.

Beurré d'Hiver. 1. Noisette *Man. Comp. Jard.* **2**:534. 1860.

Introduced to France by Louis Noisette from Brabant, Netherlands, in 1806. Fruit green, does not change on ripening; flesh melting, sugary, perfumed; good; Jan.

Beurré d'hiver de Dittrich. 1. *Guide Prat.* 87. 1895.

Fruit rather large, conic, yellowish-green; flesh buttery, perfumed; first; Dec. and Jan.

Beurré d'Hiver de Kestner. 1. Hogg *Fruit Man.* 522. 1884.

Fruit medium, obovate, with a very long, straight stalk obliquely inserted, greenish, covered with pale russet; flesh yellowish, coarse, not juicy and rather disagreeable than otherwise; handsome but worthless; mid-Dec.

Beurré de Hochheim. 1. *Guide Prat.* 86. 1876.

Of German origin. Fruit medium, pyriform, clear green; flesh buttery, of a flavor recalling that of the Beurré Gris; first; Nov. and Dec.

Beurré Hudellet. 1. Mas *Pom. Gen.* **4**:95, fig. 240. 1879.

Origin uncertain, but probably it was raised from seed by Van Mons. Fruit medium, turbinate-conic, regular in form, water-green, speckled with very dark green spots; flesh whitish, rather fine, buttery, sufficiently juicy and sugary, vinous and agreeable; medium; Sept.

Beurré Jalais. 1. Leroy *Dict. Pom.* **1**:380, fig. 1867. **2.** Downing *Fr. Trees Am.* 692. 1869.

Raised from seed by Jacques Jalais, Nantes, Fr.; it was made known in 1848, and the Horticultural Society of Nantes awarded it a silver medal in 1861. Fruit large, globular-obovate-pyriform; skin oily, golden-yellow, finely dotted, striped and veined with brown-russet, reddened on the side of the sun; flesh whitish, fine, melting, generally gritty round the core, with vinous, sweet, savory, perfumed juice; first; Sept. to mid-Oct.

Beurré Jean Van Geert. 1. Leroy *Dict. Pom.* **1**:381, fig. 1867. **2.** Hogg *Fruit Man.* 522. 1884.

Raised from seed by Jean Van Geert, a nurseryman at Port de Bruxelles, Bel., and placed on sale in 1864. Fruit large, pyriform, curving toward the stalk, bright yellow, dotted and marbled and striped with fawn, washed with vermilion on the side of the sun; flesh whitish, semi-fine, melting, juicy, granular around the core; first, but of rather variable character; Nov.

Beurré Kennes. 1. Leroy *Dict. Pom.* **1**:383, fig. 1867. **2.** Hogg *Fruit Man.* 522. 1884.

From seed sown by Van Mons; yielded its first fruit in 1845. Fruit below medium, globular, obtuse-pyriform, yellow-ochre, dotted with gray specks, brick-red on the side next the sun; flesh yellow, coarse, semi-melting, juicy, sweet, and highly perfumed; first; Oct.

Beurré Kenrick. 1. *Mag. Hort.* **8**:64. 1842. **2.** Downing *Fr. Trees Am.* 692. 1869.

A seedling from Van Mons, named in honor of William Kenrick, the American pomologist. Fruit large and handsome, sometimes smaller, turbinate, greenish-yellow, with indistinct russet spots; flesh buttery, juicy, sweet; good, but variable; Sept.

Beurré Knight. 1. Leroy *Dict. Pom.* **1**:385, figs. 1867.

Obtained from seed by Van Mons and sent to the London Horticultural Society in 1817 bearing the name of "Knight" in honor of T. A. Knight, who was at that time President of the Society. Fruit medium or above; form varying from globular-ovate to globular-turbinate, always deeply depressed at the lower end and usually swelled near the stalk, yellow-green, dotted all over with fawn and extensively colored with dark carmine on the side of the sun; flesh whitish, rather coarse, melting; juice abundant, saccharine, refreshing, possessing a delicious perfume; first; Oct.

Beurré Knox. 1. Leroy *Dict. Pom.* **1**:387, figs. 1867. **2.** Hogg *Fruit Man.* 523. 1884.

Raised by Van Mons before 1819. Fruit large; form varies from true turbinate to globular-turbinate, bossed and contorted, smooth, shining pale green in

shade, tinged with red on the side next the sun; flesh whitish, semi-fine, melting, juicy, of agreeable flavor; second for eating, first for the kitchen.

Beurré de Koninck. 1. Mas *Le Verger* **3**:Pt. 2, 97, fig. 145. 1866-73. **2.** Leroy *Dict. Pom.* **1**:388, fig. 1867.

Obtained by Van Mons and dedicated to Laurent-Guillaume de Koninck. Fruit small to nearly medium, globular-turbinate, or turbinate-obtuse, somewhat bossed, olive-yellow, dotted and mottled with russet and on the side of the sun entirely covered with a clear brown wash; flesh greenish-white, semi-fine, melting, watery, generally gritty; juice abundant, saccharine, vinous, and only slightly perfumed; Oct.

Beurré Kossuth. 1. *Mag. Hort.* **18**:295, fig. 21. 1852. **2.** Leroy *Dict. Pom.* **1**:389, fig. 1867.

Received by André Leroy about 1849 among numerous varieties sent him by many persons for trial. Fruit large, variable in form but always turbinate, swelled at central circumference, surface very uneven, rough; skin thin, dull yellowish-green, traced and freckled with gray or bronze, dotted with specks of the same color; flesh whitish, very fine, melting, buttery, sugary; juice abundant, slightly acidulated; an excellent fruit of first quality; mid-Sept.

Beurré de Ladé. 1. *Rev. Hort.* 133. 1894.

Included about 1893 by M. Lucas, director of the Pomological Institute of Reutlingen, Ger., in his list of 100 best pears. Season Nov. and Dec.

Beurré Lagasse. 1. *Guide Prat.* 71. 1895.

A French variety which resisted the great frost of

1879-80. Fruit medium, oval-pyriform, yellowish-green: flesh fine, melting, juicy; good; late Sept.

Beurré Lamoyeau. 1. Hogg *Fruit Man.* 523. 1884.

Fruit large, long-pyriform, golden-yellow, speckled with russet, crimsoned on the side next the sun; flesh yellowish, fine-grained, rather firm, sweet, with a watery juice; inferior; Oct.

Beurré Langelier. 1. Hogg *Fruit Man.* 523. 1884.

Raised by Réné Langelier, Jersey, British Channel Islands, about 1840. Fruit medium, obtuse-pyriform, pale greenish-yellow, crimson blush on the side next the sun, covered with russet dots; flesh tender, buttery and melting, with rich and vinous flavor; excellent; Dec. and Jan.

Beurré de Lederbogen. 1. Mas *Pom. Gen.* **4**:51, fig. 218. 1879.

The parent tree of this variety was found about 1829 in the garden of M. Lederbogen near Magdeburg, Prussia. Fruit nearly medium, globular, conic, regular in form, clear bright green, speckled with numerous and regularly spaced, very fine, brown dots; flesh white, semi-fine, melting, with abundant, rich, sugary juice, delicately scented.

Beurré Lefèvre. 1. Downing *Fr. Trees Am.* 799. 1869. **2.** Hogg *Fruit Man.* 524. 1884.

This variety was distributed by M. Lefèvre of Mortefontaine near Paris in 1846. Fruit large, obovate and sometimes oval, greenish-yellow on the shaded side and much covered with russet, but brownish-orange on the side next the sun, with some streaks of red; flesh white, rather gritty at the core, melting, juicy, rich, aromatic and delicious, soon decays at the core; middle and end of Oct.

Beurré de Lenzen. 1. *Guide Prat.* 86, 247. 1876.

Fruit large, turbinate, meadow-green; flesh fine, melting, juicy; first; Oct.; tree vigorous.

Beurré Liebart. 1. Leroy *Dict. Pom.* **2**:342, figs. 1869. **2.** Mas *Pom. Gen.* **4**:107, fig. 246. 1879.

Beurré Liebart was raised from seed by Van Mons before 1817 and was dedicated to an amateur pomologist. Fruit large, globular-ovate but rather variable in form, clear yellow, dotted uniformly and streaked with brown-russet, extensively carmined on the side next the sun; flesh whitish, coarse, hard and breaking, rather gritty at the center; juice sufficient, with little sugar and generally acid and without perfume; second or third; end of Sept.

Beurré de Lindauer. 1. *Guide Prat.* 86. 1895.

Fruit large or very large, long-ovate, greenish passing into yellow; flesh melting, very fine, sugary, agreeable perfume; Nov. and Dec.

Beurré Loisel. 1. Leroy *Dict. Pom.* **1**:391, fig. 1867.

Obtained by M. Loisel, Fauquemont, Province of Limburg, Holland, and was distributed in France in 1853. Fruit under medium, conic-obtuse, always bossed, dark olive-yellow, dotted with fawn around the stem, streaked with pale red around the calyx, and washed with rose on the sun-exposed side; flesh white, melting, the juice being abundant, acid, sweet, vinous and very delicate; first; beginning of Oct.

Beurré de Longrée. 1. *Guide Prat.* 79. 1895.

A Belgian variety. Fruit small, globular, yellow-russeted; flesh melting, very sugary; of good quality; Jan. and Feb.

Beurré de Luçon. 1. *Ann. Pom. Belge* **7**:71, fig. 1859.

Beurré Gris d'Hiver Nouveau. **2.** Leroy *Dict. Pom.* **1**:374, fig. 1867.

Pomologists are agreed that this pear originated about 1830 at Luçon, Vendée, Fr. Fruit above medium to rather large, globular, irregular, bossed, and always more extended on one side than on the other; skin thick and wrinkled, grayish-green, and reddened on the sunny side and stained with large patches of fawn; flesh yellowish, fine, melting, gritty especially around the core; juice extremely abundant, sugary, vinous, aromatic; first; Nov. to Jan.

Beurré Luizet. 1. Hogg *Fruit. Man.* 524. 1884.

Fruit large, pyriform, pale yellow, speckled with russet dots; flesh tender, buttery, melting, sweet, with watery juice; inferior; Oct.

Beurré de Mans. 1. Hogg *Fruit Man.* 524. 1884.

Cultivated in England prior to 1863. Fruit small, roundish-ovate; green, changing to yellow, streaked and crimsoned on side next the sun; flesh yellow, crisp, very juicy, with a rich sweetness; excellent; end of August.

Beurré Mauxion. 1. *Mag. Hort.* **23**:259. 1857. **2.** Downing *Fr. Trees Am.* 693. 1869.

A seedling found in a garden at Orbigny, Indre-et-Loire, Fr. Fruit medium, ovate, inclining to pyriform, clear yellowish-green, with reddish spots in the shade, clear yellow in the sun, marbled and spotted with red, washed at maturity on fruits well exposed with golden red-brown on the side of the sun; flesh white, melting; juice very abundant, with a savory perfume, and rich in sugar; first; Sept.

Beurré Menand. 1. Leroy *Dict. Pom.* **1**:393, fig. 1867. **2.** Hogg *Fruit Man.* 525. 1884.

Raised by Leroy, Angers, Fr., and fruited first in 1863. Fruit medium, globular-obovate, pale lemon-yellow, strewed with brown dots; flesh tender, white, melting; juice sufficient, buttery, sweet; first; Oct.

Beurré Millet. 1. Leroy *Dict. Pom.* **1**:394, fig. 1867. **2.** Hogg *Fruit Man.* 525. 1884.

Raised by Leroy, Angers, Fr., in 1847. Fruit below medium, obovate, dark grass-green, much covered with russet; flesh whitish, tender; juice plentiful but watery; first; Oct.

Beurré Moiré. 1. Mas *Le Verger* **3**:Pt. 1, 83, fig. 40. 1866-73. **2.** Leroy *Dict. Pom.* **1**:395, figs. 1867.

A wilding found at Saint-Aubin-de-Luigné, near Angers, Fr., about 1836. Fruit medium or above, turbinate-pyriform, slightly obtuse, bossed and slightly contorted, greenish-yellow, covered in part with pale markings of russet and dots of brown-russet; flesh whitish, semi-fine, semi-melting, watery, granular at the center; juice excessive in amount, sweet, sugary, aromatic and having a very delicate savor; first; Nov.

Beurré Mondelle. 1. Mas *Le Verger* **3**:Pt. 1, 143, fig. 70. 1866-73. **2.** Leroy *Dict. Pom.* **1**:396, fig. 1867.

M. Bavay, Vilvorde, Bel., propagated this variety about 1850; origin unknown. Fruit medium, turbinate-obtuse, ventriculous, regular in form, greenish-yellow, dotted with fawn and nearly covered with marblings of russet; flesh white, semi-fine, compact, melting, granular at the core; juice very abundant, very saccharine, savory, possessing a

highly agreeable, musky perfume; first; all Sept.

Beurré de Mons. 1. Downing *Fr. Trees Am.* 684. 1869.

Foreign; of small value as it rots at the core. Fruit small, globular-obovate, yellowish, with a shade of brownish-red in the sun, many green and gray dots; flesh whitish, coarse, juicy, astringent; poor; Aug.

Beurré de Montgeron. 1. Mas *Le Verger* **2**:75, fig. 36. 1866-73. **2.** Leroy *Dict. Pom.* **1**:397, fig. 1867.

In 1830 M. Guyot found this pear in the commune of Saint-Leger, Department of Cher, Fr. Fruit medium and below, obovate-obtuse or globular-turbinate, smooth to touch, shining, golden-yellow, dotted with fawn, vermilioned extensively on the side next the sun; flesh fine, semi-melting, rather gritty around the core; juice sufficient, saccharine, vinous, with little perfume; second, but first rarely, when the juice is highly perfumed; end of Aug.

Beurré Morisot. 1. Mas *Pom. Gen.* **1**:7, fig. 4. 1872.

A hardy French pear of unknown origin, but published in M. de Bavay's Catalog, 1855-56. Fruit large, globular-conic, bright yellow all over; flesh white, semi-melting; juice abundant, sweet, slightly acid, of refreshing savor; good; toward end of winter and spring.

Beurré de Mortefontaine. 1. Leroy *Dict. Pom.* **1**:399, fig. 1867.

Beurré Beaumont. **2.** Hovey *Fr. Am.* **2**:89. 1851.

Obtained from seed about 1804 by M. Lefèvre, a Frenchman. It is quite probable that this is identical with Beurré Lefèvre, although slight differences

appear in the descriptions. Fruit large, often very large, globular-turbinate or spherical, generally irregular; skin rough, bronze, sprinkled with large, scaly dots of gray, and with brick-red stains on the cheek next the sun; flesh greenish-white, coarse, semi-breaking, doughy, very gritty around the core; juice deficient, acidulous, vinous; third for dessert, second for kitchen; end of Aug. and early Sept.

Beurré de Mortillet. 1. *Guide Prat.* 45. 1895.

Of unknown origin but obtained shortly before 1895, probably in France. Fruit large or very large, turbinate-pyriform, tender green, dotted with russet, generally blushed on the side next the sun; flesh white, very fine-grained, buttery, melting, juicy; first; Aug. and Sept.

Beurré Motte. 1. Leroy *Dict. Pom.* **1**:401, fig. 1867.

Raised about 1853 at Roubaix in the Department of the Nord, Fr. Fruit medium, oblong-pyriform, having always one side longer than the other, bronze, dotted with russet, washed with grayish-green on the side not exposed to the sun; flesh white, semi-fine, semi-melting, juicy, sugary, with a very agreeable, buttery flavor; second; Nov.

Beurré des Mouchouses. 1. Mas *Le Verger* **2**:9, fig. 3. 1866-73. **2.** Leroy *Dict. Pom.* **1**:402, fig. 1867.

This pear was procured from seed by M. Rongiéras near Périgueux, Dordogne, Fr. The tree ripened its fruit for the first time in 1841. Fruit above medium, globular-turbinate, very obtuse and much swelled, dark olive-yellow, stained with russet around the stem and dotted with the same color, tinted with brownish-red on the cheek next the sun;

flesh whitish, a little coarse, melting, watery, rarely very gritty; juice abundant, saccharine, vinous and with a savory aroma; second; Aug.

Beurré de Naghin. 1. *Rev. Hort.* 142. 1889. **2.** *Gard. Chron.* 3rd Ser. **42**:444, fig. 182. 1907.

Obtained about 1840 by M. Norbert Daras de Naghin, Tournai, Bel. Fruit above medium, globular-obtuse-pyriform, yellowish-green, more or less covered with minute, blackish spots; flesh white, melting, agreeable flavor, aromatic, juicy, free from grit.

Beurré de Nantes. 1. *Ann. Pom. Belge* **2**:17, fig. 1854. **2.** Mas *Le Verger* **2**:47, fig. 22. 1866-73. **3.** Leroy *Dict. Pom.* **1**:403, fig. 1867.

M. François Maisonneuve, Nantes, Fr., found this wilding and first published it in 1845. Fruit medium and often larger, oblong, very obtuse, generally bossed and a little contorted; very variable in both size and form; color tender green or yellowish-green, dotted and slightly mottled with fawn and sometimes colored with dull red on the side next the sun; flesh white, fine, melting, free from grit; juice sufficient, sugary, acidulous, without any pronounced perfume; second; early Sept.

Beurré de Nesselrode. 1. *Guide Prat.* 108, 247. 1876. **2.** Mas *Pom. Gen.* **3**:191, fig. 192. 1878.

Originated in the Crimea. Fruit medium, globular-ovate, bright green dotted with bright brown specks; flesh white, fine-grained, buttery, melting, abundant, with sugary juice, a subtle perfume, and distinct flavor; good; Oct.

Beurré Obozinski. 1. *Guide Prat.* 87. 1876. **2.** *Ibid.* 77. 1895.

Beurré Obozinski was listed by Messrs. Simon-Louis in 1876 as a "recent" gain of M. Grégoire of Jodoigne, Brabant, Bel. Fruit medium, truncate-turbinate; flesh greenish-white, semi-fine, deficient in juice and sugar, perfumed; fairly good; Nov.

Beurré Oudinot. 1. *Mag. Hort.* **19**:516. 1853. **2.** Leroy *Dict. Pom.* **1**:406. 1867.

Published by Leroy in 1849. Fruit above medium, turbinate-obtuse, swelled, irregular and bossed, rough to the touch, dull grayish-yellow, dotted with clear brown, slightly blushed on the side exposed to the sun; flesh white, very fine and melting, free from grit; juice abundant, sugary, vinous, of an exquisite flavor; first; Sept.

Beurré de Paimpol. 1. Leroy *Dict. Pom.* **1**:407, fig. 1867. **2.** Downing *Fr. Trees Am.* 695. 1869.

Beurré de Paimpol was a wilding found in the commune of Plowbazlance, Cotes-duNord, Fr., in 1825. Fruit medium, obtuse-pyriform, ventriculous, regular in contour; skin rough, thick, grass-green, sprinkled with numerous gray-russet dots especially around the stem; flesh white, semi-fine, breaking, granular around the center, juicy, saccharine, vinous, with an agreeable flavor; second; Sept.

Beurré de Palandt. 1. *Guide Prat.* 87. 1876.

A German variety. Fruit medium, pyriform, yellow, covered with cinnamon-russet; flesh fine, melting; first; Nov.

Beurré Pauline. 1. *Guide Prat.* 87. 1895.

The variety is supposed to have originated in the neighborhood of Tournai, Bel. Fruit medium, pyramidal, bright yellow; flesh fine, buttery, very juicy; Oct. and Nov.

Beurré Pauline Delzent. 1. Mas *Pom. Gen.* **5**:51, fig. 314. 1880.

Raised by M. Lefèvre-Boitelle at Amiens, Fr., about 1850. Fruit large, conic-ovate, sombre green and speckled with many large, gray-brown points; flesh whitish, slightly tinted with green under the skin, buttery, melting, rather granular at the core, sweet, juicy, vinous; good; Oct. and Nov.

Beurré Payen. 1. Leroy *Dict. Pom.* **2**:408, fig. 1869.

Raised by Adrien Papeleu at Wetteren near Ghent, Bel., who disseminated it in 1846. Fruit medium, obovate-obtuse-pyriform, grayish-russet, covered with strongly marked, whitish specks; flesh yellowish-white, semi-fine, melting; juice sweet and musky.

Beurré Perran. 1. *Gard. Chron.* 3rd Ser. **19**:209, fig. 28. 1896. **2.** *Jour. Hort.* N. S. **32**:91, fig. 14. 1896.

This variety was imported into England by the Worcester Nurseries about 1866, but was not much heard of until 1896 when it was exhibited before the Royal Horticultural Society and was awarded a certificate of merit. Fruit large, globular-obtuse, irregular surface, pale yellow but nearly covered with russet spots and blotches; in season immediately after Christmas and keeps till end of Feb.; for such a season the flavor is rich and good, flesh very melting.

Beurré Philippe Delfosse. 1. Leroy *Dict. Pom.* **1**:409, fig. 1867. **2.** Hogg *Fruit Man.* 518. 1884.

From a bed of seeds made in 1832 by M. Grégoire, Jodoigne, Bel. Fruit above medium, obovate-obtuse-pyriform, golden yellow, dotted, striped and marbled with fawn; flesh buttery,

whitish, very melting, slightly gritty at core; juice very abundant, acidulous, sugary, delicately perfumed; first; Nov. to Jan.

Beurré Pointillé de Roux. 1. Leroy *Dict. Pom.* **1**:410, fig. 1867. **2.** Mas *Pom. Gen.* 7:107, fig. 534. 1881.

Alexandre Bivort described this pear in 1851 and said that it had been raised by Van Mons. Fruit medium, long-turbinate-obtuse, meadow-green, mottled and dotted with russet; flesh greenish-white, semi-fine, semi-melting, gritty around the core; juice sufficient, saccharine, having little perfume; second; Oct.

Beurré de Popuelles. 1. *Guide Prat.* 87. 1895.

A Belgian variety. Fruit medium, green, russeted; first; Nov. and Dec.

Beurré Preble. 1. *Mag. Hort.* **8**:60. 1842. **2.** Downing *Fr. Trees Am.* 695. 1869.

A native variety raised from seed by Elijah Cooke, Raymond, Me. Fruit large, oblong-obovate, greenish-yellow, mottled with russet and green spots; flesh white, buttery and melting, with a rich, high flavor; good; Oct. and Nov.

Beurré Précoce. 1. Leroy *Dict. Pom.* **1**:413, fig. 1867. **2.** Hogg *Fruit Man.* 526. 1884.

Raised by M. Goubault, a nurseryman at Millepieds, near Angers, Fr., in 1850. Fruit medium, obovate, obtuse at stalk, yellowish-green, specked with russet, slightly reddened on the side exposed to the sun; flesh white, delicate, melting; juice abundant, sugary, vinous, sometimes disagreeably astringent; moderate; Aug.

Beurré Pringalle. 1. *Guide Prat.* 60. 1895.

Obtained by M. Célestin Pringalle, nurseryman near Tournai, Bel. Fruit medium, oval-oblong, gray; flesh very fine, buttery, melting, sweet and aromatic; first; Oct. and Nov.

Beurré de Quenast. 1. *Ann. Pom. Belge* **2**:15, fig. 1854. **2.** Leroy *Dict. Pom.* **1**:414, fig. 1867.

Appears to have originated at the village of Quenast, Brabant, Bel., but the date and circumstances of its origin are unknown. Fruit medium, turbinate, slightly obtuse, bossed, bright yellow-green, sprinkled with large dots of russet and some patches of darker russet; flesh whitish, semi-fine, semi-melting, juicy, gritty around the core, saccharine, acidulous, of good flavor; second; late Sept.

Beurré de Ramegnies. 1. *Guide Prat.* 87. 1876.

Fruit rather large, obovate-pyriform, yellowish-green, stained with fawn and washed with red; flesh buttery, very juicy; first; Oct.

Beurré de Rance. 1. *Ann. Pom. Belge* **3**:45. 1855. **2.** Hogg *Fruit Man.* 526. 1884.

Bon-Chrétien de Rance. **3.** *Pom. France* **3**:No. 107, Pl. 107. 1865.

Obtained from seed by Abbé Hardenpont at Mons, Bel.; the first fruiting of the parent tree was in 1762. Fruit medium to large; oblong-ovate, rounded at the stalk, usually ventriculous and bossed; skin very rough, dark green, bronzed, dotted and mottled with gray; flesh greenish-white, semi-fine, sometimes coarse, semi-melting, very juicy, always a little astringent but aromatic and vinous; first; Feb. to May.

Beurré Reine. 1. Leroy *Dict. Pom.* **1**:417. 1867.

A Belgian variety cultivated in the Royal fruit orchards of Vilvorde-lez-Bruxelles in 1850. Fruit very large, especially on espalier and pyramid; obovate, often approaching the form of the Beurré Diel; second; Oct. and Nov.

Beurré Richelieu. 1. Downing *Fr. Trees Am.* 696. 1869.

Fruit large; obtuse-pyriform-truncate; skin greenish, inclining to yellow, sprinkled with dots; flesh buttery, juicy, melting, with a fine, sweet, aromatic flavor, sometimes astringent; good to very good; Dec.

Beurré Roland. 1. *Gard Chron.* 3rd Ser. **1**:385. 1887.

Raised by M. Roland and described as a new seedling in 1887. Fruit medium, pyriform, regular, olive, much russeted; flesh melting, sugary, fragrant; Mar.

Beurré Romain. 1. Downing *Fr. Trees Am.* 364. 1845. **2.** Leroy *Dict. Pom.* **1**:420, figs. 1867.

Of uncertain origin; described by Diel in 1802. Fruit medium or below, variable in form from obovate-pyriform to oblong-obtuse-pyriform, greenish-yellow tinged with russet-red next the sun and covered with numerous dark gray spots; flesh whitish, semi-fine, melting, almost free from grit, juicy, acidulous, saccharine, with a slight and pleasant taste of anis; variable in quality; Sept. and Oct.

Beurré Rome Gaujard. 1. *Guide Prat.* 65. 1895.

Of Belgian origin. Fruit rather large, pyriform, green covered with brown-russet, changing to

yellowish-green on ripening; flesh white, rather firm, melting, perfumed; Jan. and Feb.

Beurré Rose. 1. Noisette *Man. Comp. Jard.* **2**:528. 1860.

Fruit medium, obovate, yellow washed with rose; flesh white, semi-melting, sweet; end of Oct.

Beurré Rouge d'Automne. 1. Leroy *Dict. Pom.* **1**:421, fig. 1867.

Raised about 1780 by the Chartreuse monks at Paris. Fruit medium and often below, obovate-obtuse-pyriform, yellow-ochre, dotted and stained with fawn around the calyx and washed with brownish-red on the side next the sun; flesh white, semi-fine or coarse, melting, rarely very juicy, granular at center, sugary, vinous, little perfume; quality variable.

Beurré Royal de Turin. 1. *Gard. Chron.* N. S. **21**:779. 1884.

Originated in Italy. Fruit large, globular, irregular, yellow, dotted with green; flesh melting, white, sugary, pleasantly acidulous.

Beurré de Saint-Amand. 1. *Ann. Pom. Belge* **4**:3, fig. 1856. **2.** Leroy *Dict. Pom.* **1**:423, fig. 1867.

Obtained from seed by M. Grégoire, near Fleurus, Bel., in 1853. Fruit medium, globular-ovoid, very obtuse, bright green passing to golden-yellow and stained with orange-red on the sunny side when ripe; flesh yellowish-white, fine, melting, juicy, some grit around the seeds; juice vinous, sweet, aromatic; first; Oct.

Beurré de Saint Arnaud. 1. *Mag. Hort.* **26**:219. 1860. **2.** Downing *Fr. Trees Am.* 685. 1869.

A Belgian variety, originated 1853; probably identical with Beurré de Saint-Amand. Fruit small or medium; globular-acute-pyriform, golden-yellow, marked with orange-red at maturity, striped with brownish-red in the sun; flesh white, fine, buttery; juice abundant, sugary, perfumed; first; Nov.

Beurré Saint-Aubert. 1. *Guide Prat.* 87. 1895.

Probably Belgian. Fruit medium, oval, lemon-yellow, speckled with fawn; flesh very melting, sugary and perfumed; first; Oct. and Nov.

Beurré Saint-François. 1. *Guide Prat.* 87. 1895.

Fruit rather large, oval-oblong, sombre yellow; flesh very melting, sugary, delicious, Nov.

Beurré Saint-Marc. 1. Leroy *Dict. Pom.* **1**:425, fig. 1867.

A French pear of uncertain origin. Fruit medium, roundish-ovate, greenish-yellow; washed with rose; flesh dense, very juicy, of exquisite flavor, sweet and acid; first; Dec. to Feb. Tree vigorous.

Beurré Samoyeau. 1. Leroy *Dict. Pom.* **1**:428, fig. 1867. **2.** Mas *Pom. Gen.* **4**:129, fig. 257. 1879.

A seedling of André Leroy, Angers, Fr.; fruited in 1863. Fruit below medium, turbinate, slightly obtuse, one side always more swelled than the other; skin greenish-yellow, sprinkled with large, russet spots and some stains of fawn, partly scaly; flesh white, fine, melting, rather granular above and below the core; juice fair in amount, saccharine, with a delicate perfume and highly agreeable, buttery flavor; first; Nov. and Dec.

Beurré Scheidweiller. 1. Hogg *Fruit Man.* 528. 1884.

A seedling of Van Mons, named by him after M. Scheidweiller, Professor of Botany at Ghent, Bel. Fruit medium, obtuse-pyriform, bright pea-green, strewed with minute, russet dots; flesh yellowish-white, coarse, sweet, very juicy; an agreeable pear, of moderate merit; end of Oct. and early Nov.

Beurré Seutin. 1. Dochnahl *Führ. Obstkunde* **2**:180. 1856. **2.** Downing *Fr. Trees Am.* 697. 1869.

Attributed to Van Mons and first published in 1847. Fruit medium, pyriform, inclining to oval, irregular or angular, light green turning yellowish at maturity, sprinkled with dots and speckles of russet, sometimes shaded with dull crimson; flesh coarse, not very juicy, semi-melting; third for dessert, first for cooking; Dec. and Jan.

Beurré de Silly. 1. Guide *Prat.* 87. 1895.

Fruit rather large; first; Sept. and Oct. Tree fertile.

Beurré Six. 1. Leroy *Dict. Pom.* **1**:429, fig. 1867. **2.** Downing *Fr. Trees Am.* 697. 1869.

Raised from seed about 1845 by a gardener named Six at Courtrai in Belgium. Fruit large, pyriform, smooth, pea-green changing to yellow; flesh greenish-white, fine, melting, firm, buttery, very juicy; first; Oct. to Dec.

Beurré Soulange. 1. *Horticulturist* N. S. **4**:81, fig. 1854.

Imported from Brussels to this country before the middle of the last century. Fruit medium to large, acute-pyriform, pale, clear yellow at maturity with some traces of russet; flesh melting and very juicy, with a rich and sugary flavor and a particularly pleasant aroma; very good; Oct. and Nov.

Beurré Spence. 1. Downing *Fr. Trees Am.* 697. 1869. **2.** Hogg *Fruit Man.* 529. 1884.

This name has been given to several varieties. The true Beurré Spence was raised by Van Mons who described it as follows: "Fruit shape and size of Brown Beurré. Skin green, handsomely streaked and marked with reddish-brown and reddish-purple. Flesh tender, juicy, sugary, and perfumed; Sept."

Beurré Stappaerts. 1. Mas *Le Verger* **1**:125, fig. 61. 1866-73.

A seedling of Van Mons. Fruit small to medium, nearly spherical or conic-spherical; skin thick and firm, pale green sprinkled with large, brownish dots regularly spaced, turning to dull, pale yellow and rather golden where exposed to the sun; flesh yellowish-white, semi-breaking; juice moderate in amount, very saccharine, highly perfumed, agreeable; second; Jan. and Feb.

Beurré Steins. 1. Mas *Pom. Gen.* **5**:175, fig. 376. 1880.

Cataloged by M. Jahn in 1864. Fruit medium, turbinate, regular in form, green, usually entirely or nearly covered with a fine coating of russet of a yellowish-brown, sown with very small and numerous gray dots; flesh whitish, fine, semi-buttery; juice sufficient, sweet and agreeable; Oct.

Beurré Sterckmans. 1. *Ann. Pom. Belge* **4**:51, fig. 1856. **2.** Hogg *Fruit Man.* 529. 1884.

Doyenné Sterckmans. **3.** Leroy *Dict. Pom.* **2**:89, fig. 1869.

Obtained by M. Sterckmans at Louvain, Bel., before 1820. Fruit medium, oblong-obovate-

pyriform, delicate greenish-yellow, largely washed with crimson on side next the sun, some traces of russet; flesh white, with a greenish tinge, semi-melting, buttery, rich, sugary, vinous, fine aroma; first; Jan. and Feb.

Beurré de Stuttgardt. 1. Leroy *Dict. Pom.* **1**:430, fig. 1867.

Obtained from seed at Stuttgart, Württemberg, Ger., in 1863. Fruit medium, long-ovoid, obtuse, yellow-ochre, sown with points of gray-russet and some brownish patches, generally colored with pale rose on the side exposed to the sun; flesh yellowish-white, fine, melting, juicy, sugary, vinous, possessing an extremely delicate flavor; first; Sept.

Beurré Sucré. 1. Mas *Pom. Gen.* **4**:109, fig. 247. 1879.

Considered to be a seedling of Van Mons. Fruit small, ovate-pyriform, pale green, speckled with brown dots, large and prominent; flesh greenish-yellow, melting, rather gritty at the core; juice rich in sugar, having the consistency of a syrup, from which the fruit received its name; good; Oct.

Beurré Thoury. 1. Hooper *W. Fr. Book* 132. 1857.

Said to have been exhibited before the Cincinnati Horticultural Society, 1855, by F. R. Elliott, of Cleveland. Tree handsome, vigorous. Fruit medium to above, round, obtusely turbinate, buttery, juicy; good; Aug. and Sept.

Beurré Triguer. 1. *Mag. Hort.* **18**:150. 1852.

"A small, roundish formed pear, of a yellow color, dotted with red spots, that has a short stem, and is sweet and juicy, of a half-breaking texture."

Beurré de Ulm. 1. Lucas *Tafelbirnen* 103. 1894.

A German pear published in the middle of the nineteenth century. Fruit medium, roundish, sometimes rather oval, yellowish-green, on ripening bright yellow; flesh yellowish-white, soft, melting, very agreeable; end of Oct.

Beurré Vanille. 1. *Guide Prat.* 62. 1895.

Disseminated by M. Proche, a pomologist at Slonpno, Bohemia. Fruit medium, pyriform, russet, with yellow and red on the sunny side; flesh fine, melting, very sugary and juicy; first; autumn.

Beurré Varenne de Fenille. 1. Mas *Le Verger* **1**:53, fig. 33. 1866-73.

Obtained by M. Pariset, Curciat-Dongalon, Fr. Fruit rather large, globular but irregular, pale green; flesh fine, very melting, buttery, abundant, with sweet juice and well perfumed, first; Dec. and Jan.

Beurré Vauban. 1. *Cat. Con. Pom. France* 195, fig. 1906.

Obtained by M. A. Varet in 1867. Fruit rather large to large, pyriform-obtuse, very irregular, mammillate at crown, bossed at base, bright green, russeted; flesh whitish, fine, melting, very juicy, sugary, with an agreeable perfume; very good; Jan. and Feb.

Beurré Vert d'Été. 1. Leroy *Dict. Pom.* **1**:435, figs. 1867.

A Prussian variety the exact place of origin of which is obscure. Fruit medium and often below medium, obovate-pyriform, contorted near the stem which is set obliquely to the axis of the fruit; skin rough, bright green in the shade, yellow-green in the

sun, entirely covered with large, gray, round dots and some patches of russet; flesh whitish, coarse, semi-melting, with little juice, which is very sweet and musky; third class; end of Aug.

Beurré Vert Tardif. 1. Mas *Le Verger* **1**:93, fig. 53. 1866-73. **2.** Leroy *Dict. Pom.* **1**:437, fig. 1867.

A variety well known in Belgium and Germany in the seventeenth century. Fruit medium, pyriform, very regular, generally obtuse, pale green, dotted and striped with fawn; flesh white, buttery, semi-melting; juice sufficient, vinous, little perfume; second; Dec. and Jan.

Beurré Wamberchies. 1. *Gard. Chron.* **19**:706. 1883. **2.** *Guide Prat.* 88. 1895.

Fruit rather large, roundish-obovate, dotted, deep green passing into yellow on ripening; flesh melting, with abundant, sugary juice, completely devoid of pips and grit; excellent; May and June.

Beurré de Wetteren. 1. Leroy *Dict. Pom.* **1**:439, fig. 1867. **2.** Hogg *Fruit Man.* 530. 1884.

Originated in Louis Berckman's garden at Heyst-op-den-Berg, Bel., and is supposed to have been one of the seedlings raised by Major Espéren, some of whose trees Berckmans obtained after the former's death. It was disseminated about 1848. Fruit rather large, globular-pyriform, lemon-yellow and shining, covered with large, russet spots, washed with dull red next the sun; flesh yellowish, coarse-grained, buttery, well sweetened and flavored, juicy; very good; Dec. and Jan.

Beurré Winter. 1. McIntosh *Bk. Gard.* **2**:460. 1855.

Raised by Rivers of Sawbridgeworth, Eng., from

seed of the Easter Beurré; must not be mistaken for either the *Black Achan* or *Chaumontel* for each of which the name *Beurré Winter* is synonymous. Fruit large; flesh very rich flavor and vinous; excellent; Feb. and Mar.

Beurré Witzhumb. 1. Kenrick *Am. Orch.* 190. 1832. **2.** *Ibid.* 158. 1841.

Possibly one of Van Mons' seedlings. Fruit oval, knobby, three and a half inches in diameter; skin rough, green, brownish-red or dark brown next the sun; flesh greenish-white, semi-transparent, melting, perfumed; Dec.

Beurré Woronson. 1. *Mag. Hort.* **20**:234. 1854. **2.** *Am. Pom. Soc. Rpt.* 158. 1860.

This pear, which has been known as *Beurré Woronson*, *Beurré Woronzow*, *Beurré Woronzon*, and *Woronson*, is credited to M. De Hartwiss of either France or Belgium. Tree very productive. Fruit medium, obovate, attractive, juicy; good; Oct. and Nov.

Beurré Zotman. 1. Mas *Pom. Gen.* **5**:69, fig. 323. 1880.

Cataloged by this name by the Society of Van Mons, though M. Jahn cataloged it in 1864 under the name *Franz-Madame von Duves*. Fruit small or rather small, like Calebasse in form, bright green, sprinkled with dots of greenish-gray, the green passing at maturity to bright lemon-yellow and washed on the side next the sun with a beautiful tender rose; flesh white, rather delicate, juicy, sweet; second, but its very fine appearance should merit it a place; July.

Beyer Martinsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:28. 1856.

Raised in Saxony in 1816. Fruit medium, light green changing to lemon-yellow, with reddish blush, scaly; flesh very juicy; good; beginning of Aug.

Beymont. 1. *Gard. Chron.* 895. 1860. **2.** Downing *Fr. Trees Am.* 474, fig. 1857.

May be identical with *Beurré Bymont*. Fruit about medium, oblate, even, and handsomely shaped; golden-yellow next the sun, greenish-yellow in the shade, russeted around the stalk; flesh tender, not very juicy; an inferior fruit; Nov.

Bezi Blanc. 1. Cole *Am. Fr. Book* 154. 1849. **2.** Elliott *Fr. Book* 391. 1854.

Of foreign origin. Fruit large, oblong-pyriform, yellowish; quality very similar to Bartlett, though hardly so good, but it is two weeks earlier; Aug.

Bezi de Naples. 1. Elliott *Fr. Book* 355. 1854.

Origin unknown, presumably European and Italian. Fruit medium, ovate-obovate, light yellowish-green, with blotches and stripes of darker hue, some russet patches and dots; flesh fine, buttery, juicy, sweet; first; end of Sept.

Bied-Charreton. 1. *Guide Prat.* 88. 1895.

A French variety distributed from Nantes before 1895. Fruit medium to large, coppery-colored; flesh semi-fine, melting, juicy, and has a delicate aroma; Oct.

Bierbaumer Mostbirne. 1. Löschnig *Mostbirnen* 76. 1913.

An Austrian perry pear. Fruit medium, obtuse-turbinate; skin fine, greenish-yellow, covered with small dots and specklings, slightly blushed; flesh yellow-white, firm, juicy; early half of Oct.

Big Productive. 1. Burbank *Cat.* 2. 1921.

Said to be a large fall pear, a cross between Bartlett and Le Conte.

Bijou. 1. *Guide Prat.* 69. 1895.

A French variety obtained by M. de Mortillet. Fruit small or medium, long, pale yellow, tinged with red; flesh melting, juicy, very refreshing; first half of Sept.

Bill Campbell. 1. Van Lindley *Cat.* 22. 1892.

Said to have been originated in Alabama by a colored man of the same name from seed of Duchesse d'Angoulême. Claimed to resemble its parent very much but to be larger and better in quality.

Binsce. 1. Parkinson *Par. Ter.* 593. 1629.

Described by Parkinson, 1629, as a good winter pear, of russet color, and a small fruit but a good keeper.

Birne von Turschud. 1. Dochnahl *Führ. Obstkunde* **2**:157. 1856.

A Levantine variety introduced into Germany in 1833. Fruit medium, smooth, yellow, without any redness or russet; flesh savorless, granular, breaking; Oct.

Bishop Thumb. 1. Parkinson *Par. Ter.* 592. 1629. **2.** *Am. Pom. Soc. Rpt.* 237. 1854. **3.** Leroy *Dict. Pom.* **1**:441, figs. 1867. **4.** Downing *Fr. Trees Am.* 702. 1869.

A long, oddly-shaped English pear of variable color and quality, rated as an excellent dessert pear by some; placed on the list of rejected fruits by the American Pomological Society. Tree hardy, very

abundant bearer. Fruit rather large, oblong, narrow, pyriform, undulating; color dark yellowish-green, covered with numerous large, russety dots and having a russet-red cheek; calyx small, open; stalk attached with no depression; flesh greenish-yellow, melting, juicy, vinous; good to very good; Oct.

Bivort Zuckerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:55. 1856.

A Belgian seedling, 1851. Fruit large, obovate, smooth, green changing to yellow, with bright red cheek; flesh melting, vinous, sweet and agreeable; good; beginning of Sept.

Black Hawk. 1. Mag. Hort. 1:437. 1845.

Exhibited before and reported on at various times by the Massachusetts and New Haven Horticultural Societies as a baking variety. Probably a seedling of Governor Edwards.

Black Huffcap. 1. Hogg *Fruit Man.* 531. 1884.

A well-known perry pear cultivated in Herefordshire and Worcestershire, Eng. Fruit quite small, pyriform or oblong-ovate, olive-green on the shaded side and covered with dull rusty red on the sun-exposed side; flesh yellowish-green, firm and very gritty.

Black Sorrel. 1. Parkinson *Par. Ter.* 593. 1629.

Described by Parkinson in 1629 as “a reasonable great long peare, of a darke red colour on the outside.”

Black Worcester. 1. Downing *Fr. Trees Am.* 429. 1845. **2.** *Ibid.* 702. 1869. **3.** Hogg *Fruit Man.* 531. 1884. **4.** Bunyard *Handb. Hardy Fruits* 160. 1920.

Worster. **5.** Parkinson *Par. Ter.* 592. 1629.

Black Pear of Worcester. 6. Langley *Pomona* 133, Pl. LXXI, fig. 2. 1729.

Livre. **7.** Duhamel *Trait. Arb. Fr.* **2**:235. 1768. **8.** Leroy *Dict. Pom.* **2**:346. 1869.

Iron Pear. **9.** Cole *Am. Fr. Book* 174. 1849.

The Romans cultivated a *Pound Pear* during the first century of the Christian era. In 1652 Claude Mollet describes a *Pound Pear*. Several subsequent writers describe the same pear as *Livre*, *De Livre*, or *Poire de Livre*. In Worcester, Eng., in the sixteenth century a pear known as *Black Worcester*, *Black Pear of Worcester*, or Parkinson's *Warden* came under general cultivation as a "Warden" or baking pear of which it forms the type. These two pears appear to be identical. Mas makes *Black Worcester* a synonym of *De Livre*, Hogg states that they very much resemble each other, the authors of *Guide Pratique de l'Amateur de Fruits* list them as synonymous, and Bunyard says that he believes that they are almost certainly identical. *Black Worcester* is retained as the name of the variety because it is now most commonly used. Tree vigorous, hardy, bears well as a standard; young shoots dark yellow-olive, diverging; branches inclining downward with the weight of the fruit. Fruit large, obovate; skin thick, green, rough, nearly covered with dark russet, occasionally with a dull tinge next the sun; calyx small, nearly closed, set in a wide and rather deep basin; stem about an inch long, very stout, woody, inserted without depression; flesh pale yellow, hard, crisp, coarse, flavorless, rather gritty; a good cooking pear; Nov. to Feb.

Blackeney Red. 1. Hogg *Fruit Man.* 531. 1884.

A second-rate perry pear much used in Herefordshire, Eng. Fruit medium, obovate, greenish-yellow, more or less deep red on the side next the sun; flesh firm, crisp, juicy and mildly acid.

Blanquet Anastère. 1. Leroy *Dict. Pom.* **1**:443, fig. 1867. **2.** Downing *Fr. Trees Am.* 703. 1869.

Raised by M. Goubault, a nurseryman at Angers, Fr., in 1840. Fruit small, pyriform but rather variable, form oblong to turbinate-ovoid, but always rather more swelled on one side than on the other; color pale green in the shade, dotted with gray but passing to greenish-yellow on the sun-exposed side which is also generally colored with vermilion; flesh white, half-fine, granular and breaking, juicy, sugary, with a delicate and characteristic aroma; second; July.

Blanquet Long. 1. Mas *Le Verger* **2**:217, fig. 107. 1866-73.

Obtained in the garden of the Horticultural Society of Angers, Maine-et-Loire, Fr. Fruit small, long-ovate, bright green passing at maturity to pale yellow, washed with blood-red on the side next the sun; flesh white, fine, almost buttery, with abundant, sweet juice, refreshing and perfumed; good; early July.

Blanquet à Longue Queue. 1. Duhamel *Trait. Arb. Fr.* **2**:131. 1768. **2.** Mas *Le Verger* **2**:233, fig. 15. 1866-73.

Of very ancient and unknown origin, mentioned by various French authors of the sixteenth and seventeenth centuries. Fruit small, ovate-pyriform, bossed and corrugated at summit, smooth, pale yellow, slightly streaked with tender rose on the sun-touched cheek; flesh white, semi-fine, melting,

seldom gritty, juicy, acidulous, sweet, with a slightly musky and delicate perfume; second; end of July and Aug.

Blanquet Précoce. 1. Leroy *Dict. Pom.* **1**:446, fig. 1867. **2.** Mas *Pom. Gen.* **7**:19, fig. 490. 1881.

This is an ancient and probably German variety. Fruit small, long-pyriform, very pale green changing to canary-yellow; flesh white, semi-melting, granular; juice moderate in amount, sweet, acid, musky; second; early July.

Blanquet de Saintonge. 1. Leroy *Dict. Pom.* **1**:447, fig. 1867.

Its name indicates that it was raised in the Basse Saintonge, Fr. Fruit small, oblong-obovate; bright lemon-yellow, dotted with grayish-white; flesh white, semi-fine, rather melting; juice sufficient, sweet, generally vinous, with some aroma; second; end of Aug.

Blanquette de Toulouse 1. Mas *Le Verger* **2**:229, fig. 113. 1866-73.

Origin unknown, through its name suggests Toulouse, Fr. Fruit small, short-pyriform, bright green passing on ripening to pale yellow, carmined on the side next the sun, with numerous gray dots; flesh white, granular, semi-melting, with abundant sweet juice; a fruit of good quality for the season; middle of July.

Bleeker Meadow. 1. Downing *Fr. Trees Am.* 355, fig. 149. 1845. **2.** *Mag. Hort.* **14**:339, fig. 33. 1848.

Found in a meadow by Aaron Feaster, Bucks County, Pa., about 1783. Fruit small or medium, globular, very regular; skin smooth, bright clear

yellow, sprinkled with crimson dots on the side next the sun; flesh very white, firm, with a musky and spicy taste, but mostly remains crisp and hard; good; Oct. and Nov.

Blessed. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:59. 1908.

Described by Dr. Mease in *Domestic Encyclopedia*, 1804. Fruit small; very good; medium early.

Blickling. 1. Bunyard *Cat.* 39. 1913.

Named from Blickling Hall, Norfolk, Eng., and supposed to have been introduced by monks from Belgium. Fruit greenish and russety; flesh melting, of rich flavor; excellent; Dec. and Jan.

Block. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:59. 1908.

Originated by A. Block, Santa Clara, Calif., before 1908. Fruit medium, globular-ovate; green-yellow, russeted; flesh melting; season medium.

Blodget. 1. Prince *Pom. Man.* **2**:216. 1832.

Raised from seed by David Blodget, Camden, Me., about 1800. Fruit medium, pyriform; flesh melting, juicy, with a pleasant, vinous flavor; Sept.

Blumenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:154. 1856.

A seedling of Van Mons, Bel., 1825. Fruit small, roundish-turbinate-obtuse, lemon-yellow, washed with red on the sunny side; flesh half-melting; good; end of Aug.

Blutbirne. 1. Dochnahl *Führ. Obstkunde* **2**:193. 1856. **2.** Löschnig *Mostbirnen* 218, fig. 1913.

Published in Germany in 1795 and regarded as a

perry pear in Austria. It is known as the *Flesh-pear* in Upper and Lower Austria and also as the *Sanguinol* in the former. Fruit small, globular-pyriform, obtuse, greenish-yellow, strongly blushed on the sun-exposed side; flesh yellowish-white, flushed with red especially on the side next the sun, rather coarse, subacid, little aroma; third; Oct.

Bocksbirne. 1. Dochnahl *Führ. Obstkunde* **2**:34. 1856.

Originated in Saxony 1833. Fruit small, turbinate, light yellow and blushed slightly on the side of the sun; flesh aromatic; good; Aug.

Bödiker Dechantsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:95. 1856.

A seedling of Van Mons, Belgium, 1852. Fruit medium, turbinate, green turning to greenish-yellow, speckled uniformly with russet spots; flesh yellowish-white, very soft and delicate; very good; Oct. and Nov.

Bogenäkerin. 1. Dochnahl *Führ. Obstkunde* **2**:195. 1856.

Originated in Württemberg, 1823. Fruit medium, oblique, sides unequal, grass-green changing to light yellow, russeted; good; Oct. and Nov.

Böhmische frühe Jakobsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:47. 1856.

Originated in Bohemia, 1852. Fruit small, yellowish-green, streaked with russet; flesh yellowish, vinous; good; end of July for two weeks.

Boieldien. 1. *Guide Prat.* 103. 1895.

A cross between Crassane and Louise-bonne Sannier. Fruit medium to large; flesh very fine and

perfumed; Oct. and Nov.

Bolarmud. 1. Dochnahl *Führ. Obstkunde* **2**:116. 1856.

An oriental variety introduced in 1833. Fruit fairly large, ventriculous-turbinate, of a uniform light green, blushed with red; tolerably sweet; Dec.

Bollweiler Butterbirne. 1. Dochnahl *Führ. Obstkunde* **2**:70. 1856.

A seedling raised by Bollweiler in Alsace, 1851. Fruit medium, short-turbinate, green changing to greenish-yellow, somewhat blushed, thick-scaled; flesh melting, sweet; Apr.

Bologna. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:59. 1908.

Originated by Van Mons. Fruit medium, yellow; good; late.

Bon-Chrétien d'Auch (Calvel). **1.** Hogg *Fruit Man.* 533. 1884.

Although bearing the same name this pear is quite distinct from the *Bon-Chrétien d'Auch* which is regarded as synonymous with the *Bon-Chrétien d'Hiver*, since the pear here discussed ripens in July and August. Fruit large to very large, like Calebasse in form, one side sometimes more swollen than the other, green becoming yellow on approaching maturity, bright vermilion on side exposed to the sun; flesh breaking; juice rich and sugary; good; July.

Bon-Chrétien d'Automne. 1. Langley *Pomona* 131. 1729. **2.** Knoop *Fructologie* **1**:82, Tab. II, fig. 1771.

Listed by Langley as ready to be gathered Aug. 20. Knoop stated in 1771 that it had the same

qualities as the Bon Chrétien d'été but that it ripens a little later. Fruit large; flesh soft and friable, but juicy, pleasant and aromatic.

Bon-Chrétien Bonnamour. 1. *Rev. Hort.* 76. 1898. **2.** *Cat. Cong. Pom. France* 196, fig. 1906.

Raised in 1895 by M. Guillot, Rhône, Fr., and placed on the market in 1898. Fruit large to very large, of typical Bartlett form, rather contracted at the lower end and obliquely hollowed around the stalk, smooth, shining, and covered with fawn-russet and often tinted on the side next the sun; flesh fine, melting, juicy, sweet, perfumed; first class.

Bon-Chrétien d'Espagne. 1. Duhamel *Trait. Arb. Fr.* **2**:216, Pl. 46. 1768. **2.** Mas *Le Verger* **1**:131, fig. 64. 1866-73.

Spanish Warden. **3.** Hogg *Fruit Man.* 648. 1884.

The origin of *Bon-Chrétien d'Espagne* or *Spanish Warden* is ancient and uncertain. Merlet described it in 1675, and so did La Quintinye, in 1692. It was well known; for Messrs. Simon-Louis of Metz, Lorraine, gave it some forty synonyms in their 1895 catalog. Fruit large, pyriform, very ventriculous in its lower half where it is more or less bossed, the upper part narrows to an obtuse end; skin thick, greenish-yellow changing to yellow, dotted and marked with fawn-russet, and highly colored with vivid red on the side exposed to the sun; flesh white, coarse, breaking, juicy, with a pleasant, brisk flavor and musky aroma; third for the table, first for the kitchen; Nov., Jan. and even Mar.

Bon-Chrétien d'été. 1. Duhamel *Trait. Arb. Fr.* **2**:217, Pl. XLVII, fig. 4. 1768. **2.** Leroy *Dict. Pom.* **1**:457, fig. 1867.

Origin ancient and unknown but was cultivated in French gardens about the end of the sixteenth century, being mentioned by Olivier de Serres in 1600, and by Le Lectier of Orléans in 1628. It has been cultivated all over Europe for over three centuries and has consequently acquired a number of synonyms. Fruit large, pyriform, irregular in form, yellow, with orange blush on side next the sun, and strewed with green specks; flesh yellowish, crisp, coarse-grained, very juicy and of a rich, sweet and pleasant flavor; second; early Sept.

Bon-Chrétien Fondant. 1. Downing *Fr. Trees Am.* 704. 1869. **2.** Mas *Pom. Gen.* **7**:113, fig. 537. 1881.

Bon-Chrétien de Bruxelles. **3.** Leroy *Dict. Pom.* **1**:453, fig. 1867.

An ancient Flemish pear which must not be confounded with Épine d'Été although *Bugiarda* has been used as a synonym for both. Fruit large, oblong-pyriform, green, sprinkled with small dots of deep green, the fundamental green changing to lemon-yellow on maturity; flesh whitish, very melting and juicy, sweet, delicately perfumed; good; Oct. and Nov.

Bon-Chrétien Frédéric Baudry. 1. *Guide Prat.* 88. 1895.

Fruit medium or large; flesh fine, sweet, perfumed; first; Feb. and Mar.

Bon-Chrétien d'Hiver. 1. Duhamel *Trait. Arb. Fr.* **2**:212, Pl. XLV. 1768. **2.** Mas *Le Verger* **1**:23 *bis*, fig. 18. 1866-73.

Bon-Chrétien d'Auch. **3.** Hogg *Fruit Man.* 533. 1884.

A volume might be filled with a record of the endeavors to determine the origin of this pear. As to its great antiquity all are agreed. It is established that it was imported into France from Italy in 1495 by Charles VIII on his conquest of the kingdom of Naples, but whether it was the *Crustuminum* of the Romans or whether it received its name at the beginning of Christianity remains uncertain. One explanation of the name was that François de Paul, the founder of a monkish order, being called to the court of Louis XI for the recovery of his health, was styled by that monarch "le bon Chrétien," and that he brought with him from Calabria some of this fruit which henceforth acquired the name it bears. That suggestion, however, is evidently erroneous as Saint François de Paul's visit to the King at Tours took place in 1483 whereas this pear was introduced to France in 1495. It is thought not improbable that the name is derived from the Greek panchresta, meaning "all good," of which the Latin *Crustuminum* of the Romans may also be a derivation. Fruit large and sometimes very large, variable in form, irregularly pyriform or obovate-turbinate, rather rough to the touch, dull greenish-yellow, some brown next the sun, and strewed with small, russet dots; flesh whitish, crisp, juicy, sweet, aromatic and vinous; a dessert pear of merit, first class for cooking; Dec. to Mar.

Bon-Chrétien d'Hiver Panaché. 1. Leroy *Dict. Pom.* **1**:467, fig. 1867.

Striped Bon Chrétien. **2.** Kenrick *Am. Orch.* 184. 1833.

A variegated form of Bon Chrétien d'Hiver propagated by Louis Noisette at Brunoy, Seine-et-Oise, Fr., in 1802. It differs only from its type in the

coloring of its skin which is bright green, finely dotted and stained with brownish-red and covered with large, yellow streaks extending from the stalk to the calyx, and in its flesh being more melting.

Bon-Chrétien Mathieu Joseph Lamarche. 1. *Ann. Pom. Belge* **3**:99, fig. 1855.

Said to have been raised about the middle of the eighteenth century in a Belgian monastic garden. Fruit large, irregular-pyriform, rough to the touch, bright green, striped with russet and sprinkled with black dots, becoming rich golden-yellow on maturity; flesh white, buttery, melting; juice very abundant, with a delicate savor of the peach and the aroma of the raspberry; first; end of Oct.

Bon-Chrétien Prevost. 1. *Guide Prat.* 88. 1895.

Fruit large; flesh semi-melting, juicy and has a very pleasant perfume; first; Dec. to Feb.

Bon-Chrétien du Rhin d'Automne. 1. Mas *Pom. Gen.* **3**:139, fig. 166. 1878.

Diel stated that he received this variety from the neighborhood of Dietz in the Duchy of Nassau without any account of its origin. Fruit large, ovate-pyriform, bossed and irregular, sides unequal, bright green, dotted with gray points, passing to bright lemon-yellow on ripening, with some red coloring on the fruits more exposed; flesh white, rather fine, semi-buttery, firm, with sufficient sweet juice which is vinous, acidulous and perfumed.

Bon-Chrétien Ricchiero. 1. Mas *Le Verger* **3**:Pt. 2, 139, fig. 166. 1866-73.

Obtained by M. de Mortillet, Meylan, Fr.; first published in 1865. Fruit medium to large, obovate-obtuse-pyriform, pale green, sown with brown spots;

flesh greenish-white, fine, melting, a little gritty at the core; juice abundant, sugary, vinous, highly scented; first; Oct.

Bon-Chrétien Vermont. 1. *Guide Prat.* 88. 1895.

A cross between Rousselet de Reims and la Belle Angevine obtained by M. Sannier. Fruit large; form that of Belle Angevine; flesh fine, juicy, scented and sweet; Oct.

Bon-Chrétien de Vernois. 1. Leroy *Dict. Pom.* **1**:469, fig. 1867.

Obtained by M. Henrard, nurseryman at Liege, Fr., about 1840. Fruit large, varying in form between ovate and turbinate-obtuse, bossed, greenish-yellow, touched with olive-russet and dotted with bright brown specks; flesh whitish, semi-fine, semi-melting, rather gritty at center; juice abundant, sweet, astringent and slightly aromatic; second; Nov. to Jan.

Bon Gustave. 1. *Gard. Chron.* 69. 1848. **2.** Leroy *Dict. Pom.* **1**:471, fig. 1867.

From a seed bed of Major Espéren, Mechlin, Bel., but it did not bear fruit till 1847. Fruit rather large, obovate-obtuse-pyriform, mammillate, bright green, marbled with russet; flesh greenish-yellow, buttery, sweet, perfumed; first; beginning of winter.

Bon Parent. 1. Leroy *Dict. Pom.* **1**:472, fig. 1867. **2.** Mas Pom. Gen. **3**:117, fig. 155. 1878.

Raised by Simon Bouvier of Jodoigne, Bel., in 1820. Fruit medium, regular pyriform, bossed at summit, smooth, lemon-yellow, dotted with gray-russet, washed with reddish-brown on the side next the sun; flesh white, fine, semi-melting, juicy, vinous, aromatic; hardly first; Oct.

Bon-Roi-René. 1. Leroy *Dict. Pom.* **1**:473, fig. 1867.

Raised from seed by Leroy and bore fruit first in 1864. Fruit medium to large, ovate, irregular, bossed, lively green, sprinkled all over with dark gray dots and vermilioned on the side exposed to the sun; flesh yellowish-white, fine and dense, watery, excessively melting, and a little gritty; juice abundant, sweet, vinous, with a delicious perfumed taste; first; Oct.

Bon Vicaire. 1. *Guide Prat.* 88. 1895.

The fruit of this variety resembles that of the Vicar of Winkfield and the tree, of moderate vigor, is similar to that of the Duchesse d'Angoulême. Fruit large or very large, long and like Calebasse in form, yellow, vermilioned on the sunny side; flesh very fine, melting; Sept.

Bonne d'Anjou. 1. Leroy *Dict. Pom.* **1**:474, fig. 1867.

Raised from seed by Leroy in 1864 at Angers, Fr. Fruit medium and sometimes large, ovate, irregular and much bossed, bright yellow, speckled all over with dark gray spots and washed with vermilion on the side next the sun; flesh yellowish-white, fine and dense, exceedingly melting, a little gritty; juice abundant, sugary, vinous, refreshing, deliciously perfumed; first; Oct.

Bonne-Antonine. 1. Leroy *Dict. Pom.* **1**:475, fig. 1867.

There is a great similarity between this variety and Beurré Flon. The origin is obscure. The Society of Van Mons distributed it before 1876 without description. Fruit large and often enormous, long-conic, obtuse, slightly bossed and generally somewhat contorted at the summit, dull golden-

yellow, mottled and dotted with russet; flesh yellowish-white, fine, dense, very melting, almost free from granulations; juice abundant, refreshing, sugary, with an exceedingly pleasant after flavor of anis; first; mid-Oct.

Bonne de Beugny. 1. *Rev. Hort.* 280. 1911.

A chance seedling, found at Sainte-Catherine-de-Fier-Bois, Fr., by M. Chivert in 1875. Fruit large to very large, globular-obtuse-pyriform, yellow, washed with russet especially round the stalk; flesh melting, juicy, sweet, and agreeably perfumed; first; Oct. to Jan.

Bonne Carmélite. 1. *Guide Prat.* 88. 1876.

Distributed from Tournai, Bel. Fruit semi-melting; like Calebasse in form; Mar. and Apr.

Bonne de la Chapelle. 1. Mas *Le Verger* **2**:231, fig. 114. 1866-73.

A wilding found by Jacques Jalais, Nantes, Fr., in 1845. It was described in this country by Downing in 1869. Fruit medium, turbinate, short and swelled, rather irregular in contour, green, sprinkled with dots of a deeper shade of green, some russet blush on the exposed side; flesh a little greenish, fine, buttery, melting, with abundant sweet juice, first; end of Aug.

Bonne Charlotte. 1. Leroy *Dict. Pom.* **1**:477, fig. 1867. **2.** Downing *Fr. Trees Am.* 705. 1869.

Obtained from seed in the garden of the Society of Van Mons at Geest-Saint-Rémy, Jodoigne, Bel., in 1849. Fruit medium, variable in form, but usually simply pyriform, bossed, pale yellow, with green dots, lightly washed with purple on the side exposed to the sun; flesh white, rather fine, more buttery than melting, sugary; juice sufficient and slightly musky;

good; Aug. and Sept.

Bonne d'Ezée. 1. *Ann. Pom. Belge* **5**:73, fig. 1857. **2.** *Pom. France* **1**:No. 34. Pl. 34. 1863.

Brockworth Park. **3.** Hogg *Fruit Man.* 535. 1884.

A wilding found at Ezée in the Touraine, Fr., by Dupuy about 1788. Fruit large, often medium, long-ovate-obtuse; skin rather thick, oily, lemon-yellow or golden, dotted and stained with bright russet; flesh white, very fine and melting; juice excessively abundant, sugary, acidulous, having an exquisite aroma; first; all Sept.

Bonne de Jalais. 1. Leroy *Dict. Pom.* **1**:480, fig. 1867.

Obtained from seed in 1857 at Nantes, Fr., by Jacques Jalais. Fruit small, globular-ovate, bossed, one side always more enlarged than the other; skin rough, pale yellow, dotted with clear brown and stained with russet markings; flesh whitish, semi-fine, melting, sometimes a little dry, slightly gritty at center; juice sufficient, very sugary and having an agreeable flavor; second; latter half of Sept.

Bonne-Jeanne. 1. Leroy *Dict. Pom.* **1**:481, fig. 1867.

Origin unknown, but in the middle of the nineteenth century it was extensively cultivated in the environs of Paris. Fruit medium to small, pyriform-obtuse, depressed at crown and stem, yellow-ochre, dotted and mottled with fawn and washed on the exposed side with brick-red or brilliant-violet-red; flesh greenish-white, semi-fine, and semi-melting, rather dry, very sweet and with a not unpleasant taste of fennel; third, middle of Aug.

Bonne Sophia. 1. Downing *Fr. Trees Am.* 706, fig. 1869.

Fruit medium, obovate-acute-pyriform, pale greenish-yellow, with a red cheek, a few patches and nettings of russet and numerous small, brown dots; flesh white, fine, melting, sweet and slightly perfumed; very good; Oct.

Bonne Thérèse. 1. Leroy *Dict. Pom.* **1**:488, fig. 295. 1867. **2.** Downing *Fr. Trees Am.* 797. 1869.

Probably originated by Nélis, Mechlin, Bel., previous to the year 1834. Fruit medium, regular, roundish-oval, greenish-yellow, marbled with dull red at the stalk; stalk short, straight; calyx small, open; flesh white, juicy, highly aromatic, sweet, melting; first; Oct.

Bonne des Zoes. 1. McIntosh *Bk. Gard.* **2**:463. 1855.

Described as a recent introduction in England in 1855. Fruit medium; first; Sept.; tree productive, making a good standard.

Bonners. 1. *Am. Pom. Soc. Rpt.* 51. 1869. **2.** *Ibid.* 119. 1873.

Originated in Hancock County, Ga., and was known in 1869 in Washington County, of that state, as the *Popé* pear. Fruit has a peculiar almond flavor; very good; Sept.

Bonneserre de Saint-Denis. 1. Leroy *Dict. Pom.* **1**:490, figs. 1867.

An exquisite pear raised from seed by Leroy, Angers, Fr., in 1863. Fruit medium or above, globular-obtuse-pyriform, regular in outline; a second type of the variety is rather contorted and bossed; color greenish-yellow, dotted, striped and stained with russet; flesh white, fine, melting, granular about the core; juice plentiful, sweet, acid, and endowed with a delicious perfume; first; Dec.

and Jan.

Bonnet Zuckerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:55. 1856.

A Belgian variety attributed to Van Mons. Fruit medium to small, long and convex, beautiful yellow, flushed with red on the side of the sun; flesh melting and sweet; first; Sept.

Boutoc. 1. *Guide Prat.* 69. 1895.

A very ancient variety cultivated in the Gironde, Fr., and often called *Poire d'Ange.* Fruit medium, obtuse, short, lemon-yellow, stained with gray and red; flesh fine, melting; good; end of Aug.

Bordine Musk. 1. Langley *Pomona* 131. 1729.

Considered one of the best pears in England in the early part of the eighteenth century. Fruit small, globular, musky; end of June for very short season.

Bouchamp. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:64. 1908.

A chance seedling in the garden of M. Penneton. Fruit medium, globular-obtuse-pyriform, green, yellow-russeted; flesh delicate, juicy, buttery, melting, sweet, vinous, perfumed; season medium.

Boucquia. 1. *Mag. Hort.* **9**:134, fig. 3. 1843. **2.** Downing *Fr. Trees Am.* 355. 1845.

A Flemish variety originated by Van Mons who sent cions of it to Manning in 1836. It bore fruit for the first time in the Pomological Garden, Salem, Mass., in 1841. Fruit large, oval, largest in the middle, tapering towards each end, pale yellow, tinged with pale red on the side next the sun, covered with blackish specks and some patches of russet; flesh yellowish-white, tender, melting, sweet,

rich, somewhat astringent at times, perfumed; Oct. and Nov.

Bourdon de Roi. 1. Hogg *Fruit Man.* 536. 1884.

Fruit small, globular, yellowish-green, changing to clear yellow, with some dark red blush next the sun; flesh white, very tender, semi-melting, of a refreshing, sweet, vinous and musky flavor; first; Nov.

Bouvier d'Automne. 1. Leroy *Dict. Pom.* **1**:491, fig. 1867.

A seedling of Van Mons, said to have been tasted by Bivort for the first time in 1845. Fruit below medium, ovate-obtuse-pyriform, golden-yellow, speckled with large dots of bright brown, mottled with fawn and generally bronzed on the side next the sun; flesh yellowish-white, semi-fine and semi-melting; juice abundant, sugary, acidulous, and having a delicate aroma; second; Oct.

Bouvier Bourgmestre. 1. Leroy *Dict. Pom.* **1**:492, fig. 1867. **2.** Hogg *Fruit Man.* 537. 1884.

Raised from a seed bed made in 1824 by Bouvier, Jodoigne, Bel. Fruit large, obtuse-pyriform, bright yellow, covered with small, gray dots, washed with fawn at each end; flesh very white and fine, melting, juicy, gritty around the core, vinous and sugary; second; Oct. and Nov.

Bouviers Herbstbirne. 1. Dochnahl *Führ. Obstkunde* **2**:65. 1856.

Originated by Van Mons, 1847. Fruit medium, oval, obtuse, green turning to yellow, marbled with dark brown and speckled; flesh semi-buttery, aromatic, sweet; first; latter half of Oct.

Bowdoin. 1. *Mag. Hort.* **3**:48. 1837.

Raised from seed in the neighborhood of Boston, Mass., early in the nineteenth century. Fruit large; skin thick; second; Sept.

Bowne Winter Russet. 1. Field *Pear Cult.* 272. 1858.

Originated at Flushing, Long Island, N. Y. Fruit large, greenish-yellow; good; Jan.

Boyken June. 1. *Am. Pom. Soc. Rpt.* 108. 1873.

Believed to have originated on the lower James River, Va. On trial and well regarded in 1873. Fruit medium, beautifully colored; good, may be shipped in early July, keeping qualities good, but rather deficient in flavor.

Braconot. 1. Leroy *Dict. Pom.* **1**:494, fig. 1867.

From a seed bed made in 1840 or 1841 by Leclerc in his garden at Épinal, Fr. Fruit large, oblong-obtuse, much swelled, bossed; skin greasy, golden-yellow, speckled all over with grayish-brown, washed with red on the side next the sun; flesh yellowish, fine, semi-melting, gritty around the core; juice moderate in amount, sweet, acid and deliciously perfumed; first; Oct. and Nov.

Brandes. 1. Leroy *Dict. Pom.* **1**:495, fig. 1867.

Raised by Van Mons, Louvain, Bel.; first reported in 1818. Fruit below medium, long-ovate-obtuse, greenish-yellow, dotted and marbled with russet and extensively washed with russet around the stem; flesh white, fine, excessively melting, gritty at center; juice sufficient, sweet, musky; first; mid-Nov. to mid-Dec.

Braunrote Speckbirne. 1. Mathieu *Nom. Pom.* 189. 1889.

Poire de Lard Brune. **2.** Mas *Pom. Gen.* **7**:145, fig. 553. 1881.

A German variety cultivated in Hanover where it is also known under the names *Poire Pendante* and *Poire Bourree de Hambourg*. Fruit medium or nearly large, obovate-pyriform, bright green, with very numerous dots of darker green but usually no trace of russet. On ripening, the fundamental green becomes bright yellow, brightened with reddish-brown on the side next the sun; early Sept.

Braunrothe Frühlingsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:4. 1856.

Of Belgian origin. 1832. Fruit medium, entirely covered with brown-russet; good; winter to March first.

Braunrothe Sommerrusselet. 1. Dochnahl *Führ. Obstkunde* **2**:42. 1856.

Rousselet d'été Brun Rouge. **2.** Mas *Le Verger* **2**:53, fig. 25. 1866-73.

Probably of ancient German origin. Published at Nassau, 1804. Fruit small, obtuse-conic, regular in outline, summit flat, smooth, pale green changing to bright greenish-yellow and extensively washed on the side next the sun with dull brownish-red on which are yellow-gray dots so prominent as to be rough to the touch; flesh yellow-white, rather breaking, melting, gritty around the core, sweet, refreshing, having the perfume characteristic of the Rousselet; first; Aug.

Brederode. 1. Dochnahl *Führ. Obstkunde* **2**:37. 1856.

Seeding of Van Mons, 1817. Fruit medium, long-turbinate, light greenish-yellow changing to light

lemon-yellow, slightly russeted; flesh granular, softish, very sweet; end of Sept. and early Oct.

Bremer Butterbirne. 1. Oberdieck *Obst-Sort.* 247. 1881.

Raised from seed by Herr Neuburg in Bremen, Ger. Fruit large, turbinate, green, turning to yellow-green and yellow on ripening; flesh yellowish-white, fine, melting, finely granular, musky; Dec.

Brewer. 1. Downing *Fr. Trees Am.* 708. 1869. **2.** Mas *Pom. Gen.* **5**:1, fig. 289. 1880.

Origin uncertain, but probably American. Fruit medium, obovate-pyriform; skin thin, tender, bright green dotted with very small, brown specks; flesh white, translucent, melting; juice sweet, very abundant, delicately and agreeably perfumed; good; Oct.

Brewster. 1. *Mass. Hort. Soc. Rpt.* 46. 1866.

A seedling fruited by Dr. S. A. Shurtleff of Brookline, Mass., in 1865. Fruit medium, yellow, melting and juicy; Nov.

Brialmont. 1. Leroy *Dict. Pom.* **1**:498, fig. 1867.

Origin uncertain, but it was described in the catalog of the Society of Van Mons. Fruit medium, globular-ovate, mammillate at summit, yellowish-green, covered with dots and patches of gray russet; flesh very white, dense, fine, semi-melting, some grit about the core; juice abundant, sweet and perfumed; second; Oct.

Brielsche Pomeranzenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:22. 1856.

Orange de Briel. **2.** Mas *Pom. Gen.* **6**:47, fig. 408. 1880.

Attributed to Holland about 1812 by Dochnahl. Fruit small or nearly small, globular-turbinate, sides uneven (Dochnahl), even contour (Mas), green passing at maturity to bright lemon-yellow, washed on the side next the sun with a beautiful vermilion, covered with numerous minute dots of fawn which change to yellow on the sunny side; flesh whitish, rather fine, semi-buttery, gritty, not very juicy, saccharine; first.

Briffaut. 1. *Gard. Chron.* 367. 1863.

Fruit medium, pyriform, smooth, shaded side green, other red; flesh greenish-white, fine, melting, sweet, perfumed; it is one of the most beautiful fruits of the summer, brilliant in coloring, but it decays rapidly; Aug.

Brindamour. 1. Leroy *Dict. Pom.* **1**:501, fig. 1867.

Originated in the Department of the Vienne, Fr., at the beginning of the nineteenth century. Fruit medium, obtuse-turbinate, rough to the touch, bronzed, dotted with fawn, some bright green around the stem, and marbled with the same color on the cheek exposed to the sun; flesh whitish, fine, soft, melting; juice extremely abundant, sweet, acidulous and very pleasantly perfumed; first; Nov. to the end of Jan.

Bringewood. 1. *Mag. Hort.* **9**:124. 1843. **2.** *Ibid.* **13**:153. 1847.

A foreign variety, probably English. Fruit medium, pyriform, yellowish-brown, almost covered with russet; flesh yellowish-white, somewhat gritty around the core, otherwise buttery, rich; first; end of Oct. to beginning of Dec.

British Queen. 1. *Jour. Hort.* N. S. **3**:546. 1862. **2.**

Hogg *Fruit Man.* 537. 1884.

Raised by Thomas Ingram from seed of Marie Louise at Frogmore, Eng., and first distributed in 1863. Fruit large, obovate-pyriform, bossed, golden, much covered with cinnamon-colored russet, encrimsoned on side next the sun; flesh yellowish-white, fine-grained, buttery, melting, rich, sugary, having the flavor of the Marie Louise; first; Oct.

Broncirte Winterbirne. 1. Dochnahl *Führ. Obstkunde* **2**:70. 1856.

Raised by Van Mons at Louvain, 1853. Fruit medium to small, obtuse-ventriculous, entirely covered with russet but somewhat blushed on the side next the sun; flesh very sweet; first; Jan. and Feb.

Bronx. 1. Downing *Fr. Trees Am.* 710. 1869.

Raised by James R. Swain, Bronxville, N. Y., about 1850. Fruit medium, obovate-pyriform, greenish-yellow, netted and stained with russet; flesh whitish, juicy, melting, sweet, slightly perfumed flavor; very good; first half of Sept.

Bronzée Boisselot. 1. *Guide Prat.* 88. 1895.

Fruit medium; flesh very melting, and of excellent flavor, sugary; first; Oct.

Bronzée d'Enghien. 1. Mas *Pom. Gen.* **5**:171, fig. 374. 1880.

Disseminated by the Society of Van Mons. Fruit medium, long-pyriform, well swelled around the center, golden-yellow, dotted and stained with light bronze; flesh fine, semi-melting, juicy, acidulous; Nov. to Jan.

Brookline. 1. *Mass. Hort. Soc. Rpt.* 45. 1866.

A seedling pear fruited by S. A. Shurtleff, Brookline, Mass., in 1862. Fruit above medium, turbinate, brown-russet; flesh sweet, juicy and buttery, with high flavor; very fine; Oct.

Broom Park. 1. *Gard. Chron.* 209, fig. 1845. **2.** Hogg *Fruit Man.* 538. 1884.

Raised by Thomas Andrew Knight at Downton Castle, Herefordshire, Eng.; it first bore fruit in 1831. Fruit small, globular-obovate; skin green and rough, largely covered with brown-russet; on the side next the sun it is tinged with dull red; flesh yellowish, melting, juicy, rich, with something of a melon flavor combined with pineapple. This singular commixture of flavors is its principal characteristic; an excellent dessert pear; Jan.

Brough Bergamot. 1. Hogg *Fruit Man.* 538. 1884.

A variety which succeeds well in the North of England. Fruit small, globular-turbinate tapering into the stalk; skin rough, yellowish-green, very much covered with brown-russet; flesh yellowish-white, rather coarse-grained, saccharine, very juicy, with a rich and highly perfumed flavor; first; Dec.

Brugmans. 1. *Mag. Hort.* **4**:395, 1838. **2.** Dochnahl *Führ. Obstkunde* **2**:100. 1856.

A seedling of Van Mons, 1821. In September, 1838, it was exhibited among “ninety varieties” by Manning, before the Massachusetts Horticultural Society. Fruit medium, conic, light green changing to light yellow at maturity, sometimes rather blushed; flesh aromatic and sweet; mid-Nov. for three weeks.

Brumbirne. 1. Dochnahl *Führ. Obstkunde* **2**:9. 1856.

Originated in Odenwald, Ger., 1847. Fruit

medium, turbinate, light yellow turning to lemon-yellow, striped with bright red; good; Sept. and beginning of Oct.

Brune Minême. 1. *Guide Prat.* 88. 1876.

Fruit rather large; first quality for cooking; Nov. and Dec; of doubtful merit. Tree vigorous and fertile, well suited for exposed situations.

Brunet. 1. Mas *Pom. Gen.* **7**:9, fig. 485. 1881.

Found growing wild at Houga, Department of Gers, Fr., about 1826. Fruit medium, globular, very bright green, dotted with numerous small, gray specks; at maturity the basic green passes to pale yellow, a little warmer on the side next the sun; flesh white, fine, melting; juice plentiful, sweet and agreeably musky; fair; end of Aug.

Brüsseler Herbstbergamotte. 1. Dochnahl *Führ. Obstkunde* **2**:76. 1856.

Raised by Van Mons in 1825. Fruit medium, obovate-turbinate, yellowish-green changing on maturity to lemon-yellow all over; flesh granular, soft, vinous and strongly musky; good; Nov.

Brute Bonne. 1. Miller *Gard. Kal.* 206. 1734.

Franzosische Zapfenbirne. **2.** Dochnahl *Führ. Obstkunde* **2**:139, 1856.

Fruit medium, thin-skinned, grass-green all over, flushed red on the side next the sun; flesh somewhat musky, sweet, acidulous; good; end of Oct.

Bryan Edwards. 1. *Trans. Lond. Hort. Soc.* **16**:395. 1826.

A seedling found growing early in the nineteenth century in the neighborhood of Southampton, Eng., by Bryan Edwards. Fruit globular-turbinate, pale

green changing at maturity to pale yellow; flesh melting, rich, sweet, pleasantly perfumed; of considerable excellence; beginning of Nov.

Buchanan. 1. *Am. Pom. Soc. Rpt.* 114. 1869.

Submitted for examination to the Fruit Committee of the American Pomological Society in January, 1869, by Isaac Buchanan of New York. Fruit medium, obovate-acute-pyriform, dull yellow, with considerable russet; flesh a little coarse-grained, melting, juicy, gritty next the core, moderately sweet, and of good flavor.

Buffalo. 1. Hooper *W. Fr. Book* 151. 1857.

Of foreign origin; "an early and abundant bearer; flesh a little coarse, but buttery, juicy, sugary and sprightly."

Bunte Mannabirne. 1. Dochnahl *Führ. Obstkunde* **2**:106. 1856.

A variegated form of the French *Colmar d'Hiver* or *Colmar*. Fruit greenish-yellow, with reddish-brown stripes; in other respects similar to its type.

Buntebirne. 1. Dochnahl *Führ. Obstkunde* **2**:106. 1856.

Originated in Hanover, Ger., 1852. Fruit medium to small, greenish-yellow turning to bright, light yellow; flesh fine, flushed, sweet; good; mid-Sept. and Oct.

Burchardt Butterbirne. 1. Dochnahl *Führ. Obstkunde* **2**:114. 1856.

Considered by Dochnahl to be a seedling raised in 1833. Fruit medium, rather variable, globular-ovate, uniformly bright lemon-yellow, sprinkled with fine russet; flesh rather yellowish, semi-melting,

aromatic, sweet; first; all Oct.

Buree Winter. 1. Langley *Pomona* 131. 1729.

Fruit medium, globular-obtuse-pyriform, somewhat depressed at both stalk and calyx, speckled all over; may be gathered early in September and in season Feb. to Apr.; first class.

Burgoyne. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:68. 1908.

Fruit large, oblong-pyriform, greenish-yellow, blushed with russet; flesh melting, juicy, sweet; good; season medium.

Burkett. 1. *Ill. Hort. Soc. Rpt.* 144. 1880. **2.** *Am. Pom. Soc. Rpt.* 236. 1911.

Reported to the Illinois Horticultural Society in 1880 by C. S. Capps of Mt. Pulaski who described it as a "miserable apology" for a pear, though exempt from blight. It was mentioned in a communication to the American Pomological Society in 1911 by Charles G. Patten, Charles City, Iowa, as a variety which originating in Illinois had resisted blight for a period of forty-five years in South Iowa. It has been suggested that this and *Sudduth* may be the same.

Burlingame. 1. *Mag. Hort.* **15**:344. 1849. **2.** Downing *Fr. Trees Am.* 711. 1869.

Raised from seeds of pears planted in 1790. In 1830 Dr. S. P. Hildreth, Marietta, Ohio, sent a description of the pear to the Massachusetts Horticultural Society which named it after Mrs. Burlingame of Marietta who had originally saved the seeds. Fruit below medium, globular-oblate, pale yellow, blushed with red on the sun-exposed side and covered with small, russet specks; flesh white, coarse, melting and juicy, rich, sugary, perfumed;

Aug. and Sept.

Burnett. 1. Kenrick *Am. Orch.* 139. 1841. **2.** Downing *Fr. Trees Am.* 712. 1869.

Raised by Joel Burnett, Southborough, Mass., in the early half of the nineteenth century. Fruit large, obtuse-pyriform, pale yellow, with much iron-russet and flushed on side next the sun; flesh greenish-white, rather coarse-grained but rich, musky, juicy, sweet; excellent; Oct. and Nov.

Butt Pear. 1. Hogg *Fruit Man.* 539. 1884.

A pear grown in England especially around Ledbury, Herefordshire, for the production of perry. Fruit small, globular-obovate, lemon-color, strewed with minute, russety dots; flesh yellowish, coarse-grained, granular, acidulous.

Butterartige Bergamotte. 1. Dochnahl *Führ. Obstkunde* **2**:79. 1856.

No. 33 in the Van Mons collection, 1834. Fruit small, long-globular, dark yellow, much covered with red-russet; flesh yellowish-white, semi-melting, sweet, firm, aromatic, suitable for espalier; beginning of Nov.

Büttner Sachsische Ritterbirne. 1. Dochnahl *Führ. Obstkunde* **2**:23. 1856.

Poire de Chevalier de Buttner. **2.** Mas *Pom. Gen.* **4**:145, fig. 265. 1879.

According to Diel this variety originated in the environs of Halle, Prussia. *Fruit* medium or nearly medium, globular-turbinate or globular-ovate, often irregular in contour, a lively green sprinkled with dots of gray-green changing to brilliant lemon-yellow at maturity, well-exposed fruits being extensively

washed with brownish-red; flesh white, tinted yellow under the skin, a little coarse, semi-breaking, fairly juicy, more or less perfumed according to the season; quality inconstant; Aug.

Cabot. 1. Prince *Pom. Man.* **2**:214. 1832. **2.** *Mag. Hort.* **10**:298, 299, fig. 1844. **3.** Downing *Fr. Trees Am.* 712. 1869.

Raised from seed of Beurré Gris planted in 1821 or 1822 by J. S. Cabot, Salem, Mass. Fruit medium, globular-ovate, slightly irregular; skin rough, bronze-yellow, almost covered with cinnamon-russet, some marbling of red on the side next the sun; flesh greenish-white, breaking, juicy, with a rich, subacid flavor; first; Sept. and Oct.

Cadeau. 1. Leroy *Dict. Pom.* **1**:507, fig. 1867.

Mainly cultivated in the neighborhood of Angers, Fr., where it probably originated. Fruit small, globular-ovate, one side always more swelled than the other; skin thick, greenish-yellow or pale yellow, dotted and striped with gray-brown; flesh yellowish, coarse, semi-melting, very granular, wanting in juice, sugary, not much flavor; third; end of July.

Cadet de Vaux. 1. Liegel *Syst. Anleit.* 132. 1825. **2.** Downing *Fr. Trees Am.* 712. 1869. **3.** Leroy *Dict. Pom.* **1**:508, fig. 1869.

It is claimed that Van Mons originated this variety. Tree very productive, an early and heavy bearer. Fruit large, obtuse-pyriform, ochre-yellow, dotted with brown and shaded with fawn and pale red in the sun; stem short, large, curved; calyx large; flesh yellowish-white, fine, breaking, sweet, juicy, perfumed; good; Dec. to Mar.

Caen de France. 1. *Mag. Hort.* **19**:102. 1853. **2.** *Ibid.*

21:188. 1855. **3.** *Am. Pom. Soc. Rpt.* 52. 1869.

Synonymous with No. 51 of Van Mons. It was introduced into this country in 1834 by R. Manning, Salem, Mass. Fruit large, pyriform; skin thick, yellow, overspread with russet; flesh yellowish-white, semi-melting, juicy, sweet, vinous, with a little astringency, slightly aromatic; "one of the very best of the late varieties, keeps without trouble, and may be put in barrels to ripen, and can be depended on from Jan. to Mar."

Caesar. 1. Prince *Pom. Man.* **1**:98. 1832.

Extensively cultivated in the French Department of Lorraine in the early part of the nineteenth century. Fruit large, obovate-pyriform, smooth, pale yellow in the shade, deeper next the sun and sometimes slightly tinged with red, sprinkled with minute specks; flesh very white, breaking, of a rich and rather musky flavor; on maturing becomes soft rapidly; Dec.

Caillot Rosat (English). **1.** Hogg *Fruit Man.* 540. 1884. **2.** Mathieu *Nom. Pom.* 191. 1889.

This is not the *Caillot Rosat* of the French which in England is known as the *Summer Rose*. Fruit above medium, pyriform, smooth, greenish-yellow, with a brownish-red cheek and streaks of brighter red on the side next the sun; flesh tender, very juicy, sweet, perfumed; good; Aug.

Caillot Rosat (French). **1.** Leroy *Dict. Pom.* **1**:509, fig. 1867. **2.** *Guide Prat.* 72, 254. 1876.

Summer Rose. **3.** Hogg *Fruit Man.* 652. 1884.

An ancient French pear of unknown origin. Writing of it in 1586 Jacques Daléchamp thought it

identical with the pear *Nard*, of the Greeks. This, however, has not been substantiated; but the pear was in early times spread generally through France under a variety of local names. One Jehan de Meung, a poet born near Orléans in 1280, wrote of it, as also did Gilles Ménage in 1694 who said it was "a kind of pears so called because of their hardness, their whiteness and their taste of rose." It is probable that it takes its name *Cailleau*, *Calliot*, *Caillou*, *Caillorosar*, *Caillot*, from the *caillou*, a pebble, because of the grit with which it is filled. Fruit medium, globular-oblate, yellowish, with stains of fawn-russet, washed with tender rose on the side of the sun and streaked with the same color around the stem; flesh white, scented, a little coarse, semi-melting, always gritty around the core; juice sufficient, sugary, acid, musky; second; Sept.

Calbasbirn. 1. Christ *Handb.* 497. 1817.

Graue Flaschenbirne. **2.** Dochnahl *Führ. Obstkunde* **2**:140. 1856.

Originated in Holland in 1758. Fruit large, gourd-shaped, irregular, bossed, yellow, with grayish-russet, becoming golden and washed with red; flesh yellowish-white, soft, granular, somewhat woody, musky, sweet; good; Nov. and Dec.

Calebasse. 1. Leroy *Dict. Pom.* **1**:512, fig. 1867. **2.** Downing *Fr. Trees Am.* 712. 1869.

Termed by Downing "a very grotesque looking Belgian fruit." Leroy considered it to have been raised in Brabant, Holland, early in the eighteenth century by Herman Knoop, a Dutch horticulturist. Fruit medium, long gourd-shaped, crooked and undulating in outline; skin rough, dull yellow, with thin, gray russet on the shaded side becoming

cinnamon- and orange-russet next the sun; flesh yellowish-white, semi-fine, semi-melting, crisp, juicy and sweet; second; Sept. and Oct.

Calebasse d'Anvers. 1. *Guide Prat.* 103. 1895.

Sent out by M. Daras de Naghin of Antwerp, Bel., and recommended in 1895 by Simon-Louis Brothers, Metz, Lorraine, as combining all the qualities requisite to render it a fruit suitable for commerce. Fruit large, long, more or less contracted at its center, canary-yellow, dotted with brown specks and stained with fawn at the summit; flesh rather fine, free from granulations, juicy, sugary and savory; good; Oct. and Nov.

Calebasse de Bavay. 1. Mas *Le Verger* **1**:35, fig. 24. 1866-73. **2.** Leroy *Dict. Pom.* **1**:514, fig. 1867.

Raised from seed at Mechlin, Bel., and distributed in 1849 by M. Tuerlinckx. Fruit rather large, long-pyriform, contracted at summit, concave on one side, the lower end being bent; color yellowish-green; flesh white, very fine; juice abundant, sweet, acid, having a delicate perfume; first; Nov. and Dec.

Calebasse Boisbunel. 1. *Mass. Hort. Soc. Rpt.* 41. 1871. **2.** *Guide Prat.* 65. 1895.

Obtained by M. Boisbunel of Rouen, France. Fruit large, like Calebasse in form, greenish-yellow, washed with red; flesh fine, yellowish-white, melting, very sweet; first quality; Feb. and Mar.

Calebasse Bosc. 1. Leroy *Dict. Pom.* **1**:515, fig. 1867. **2.** Hogg *Fruit Man.* 540. 1884.

3. Bunyard *Handb. Hardy Fr.* 162. 1920.

A chance seedling found in 1819 by Van Mons in the garden of M. Swates at Linkebeeke near Brussels,

Bel. Fruit medium to large, long-conical; skin rough to the touch and entirely covered with brown-russet, sprinkled with darker russet dots; flesh yellowish, semi-fine, melting, juicy, sweet and agreeably flavored; second; Oct.

Calebasse Delvigne. 1. Mas *Le Verger* **3**:Pt. 1, 141, fig. 69. 1866-73. **2.** Leroy *Dict. Pom.* **1**:517, fig. 1867.

Mas thinks Calebasse Delvigne was raised in Belgium and Leroy considers it to have originated in France. Fruit medium, pyriform, yellow, strewed with cinnamon-colored russet and richly colored with red on the sun-exposed side; flesh yellowish-white, rather coarse-grained, melting, juicy, sweet and fine flavor, strong musky aroma; second to first; Oct.

Calebasse d'Été. 1. Leroy *Dict. Pom.* **1**:518, fig. 1867. **2.** Hogg *Fruit Man.* 540. 1884.

A seedling obtained by Major Espéren of Mechlin, Bel. Fruit above medium and sometimes larger, long-pyramidal, obtuse, a little contorted at base, greenish-yellow, covered with brown-russet and with numerous russet spots; flesh white, semi-melting, rather gritty at center, sugary, slightly acid and having a delicate perfume; a good early pear; Sept.

Calebasse Fondante. 1. Kenrick *Am. Orch.* 140. 1841.

Described by Kenrick in 1841 as a new variety by Van Mons. Fruit very much lengthened, bossed, uniformly red; flesh melting, sugary, agreeable; Oct.

Calebasse d'Hiver. 1. *Gard. Chron.* 69. 1848. **2.** Mas *Pom. Gen. 6*:161, fig. 465. 1880.

Obtained by Major Espéren, Mechlin, Bel., and

described in 1848 as a new fruit. Fruit large, turbinate or ovate-pyriform and long, dark green, sprinkled with brown dots, the dark green becoming at maturity pale yellow and golden on the side of the sun; flesh semi-melting, white; juice abundant, sweet, and without any appreciable perfume; good for the purposes of the kitchen.

Calebasse Kickx. 1. *Guide Prat.* 89, 254. 1876. **2.** Hogg *Fruit Man.* 541. 1884.

This is No. 590 in the Van Mons catalog and was a seedling first described in 1823. Fruit below medium, obovate, rather uneven in outline, light greenish-yellow turning to lemon-yellow, with some patches of very thin, pale, cinnamon-colored russet; flesh whitish, coarse-grained, semi-melting, sweet, with an agreeable perfume; inferior, becoming pasty in the middle of October; early Oct.

Calebasse Leroy. 1. Leroy *Dict. Pom.* **1**:519, fig. 1867. **2.** Mas *Pom. Gen.* **4**:175, fig. 280. 1879.

Raised by Van Mons about 1830 and published for the first time in the *Catalogue Systematique* of Diel in 1833. Fruit medium, conic-pyriform, somewhat contracted around the middle, bright green, stained with russet patches and sown with some gray dots and generally blushed with pale red on the side of the sun; first; Sept.

Calebasse Oberdieck. 1. Oberdieck *Obst-Sort.* 285. 1881. **2.** Leroy *Dict. Pom.* **1**:520, fig. 1867.

A seedling raised by Leroy at Angers, France; it first fruited in 1863. Fruit large, very long, like Calebasse in form, more or less obtuse, bossed; color orange-yellow, very finely dotted with brown, marked with some fawn and blackish patches; flesh white, extremely fine, semi-melting, juicy, fresh,

sugary, aromatic; first; Oct.

Calebasse d'Octobre. 1. *Mass. Hort. Soc. Rpt.* 41. 1871. **2.** *Horticulturist* **27**:102. 1872.

Received by the Massachusetts Horticultural Society from M. Alexandre Bivort of Belgium and tested November, 1871. Fruit medium, acute-pyriform, long; skin smooth, pale yellow, traced with russet, with a fine ruddy tint on one side; flesh yellowish-white, melting, juicy and buttery, fine-grained; flavor vinous, rich, aromatic, sprightly, with a slight astringency.

Calebasse Rose. 1. Mas *Pom. Gen.* **7**:123, fig. 542. 1881.

Of uncertain origin. Fruit medium or rather large; obovate-pyriform, usually rather irregular or bossed in its outline, bright green, sown with dots of darker green; on ripening the fundamental green changes to a pale lemon-yellow, sometimes washed with rose; flesh whitish, buttery, melting, sufficient sweet juice, acidulous; good; Oct.

Calebasse Tougard. 1. *Ann. Pom. Belge* **3**:95, fig. 1855. **2.** Leroy *Dict. Pom.* **1**:521, fig. 1867.

Tougard. **3.** *Gard. Chron.* 415. 1863.

A posthumous seedling of Van Mons, first fruited in 1847. Fruit medium, pyriform, yellowish, covered with spots and patches of rough brown-russet; flesh has a pink tinge, half-melting, juicy, sugary and has a pleasant flavor; Oct. and Nov.

Calebasse Verte. 1. Leroy *Dict. Pom.* **1**:522, fig. 1867.

Attributed to Van Mons, date unknown, as also whether from Brussels or Louvain. Fruit medium to

large, obovate-obtuse-pyriform, bossed, bright green, sprinkled with russet dots, veined with grayish-brown around the calyx and stem; flesh greenish-white, fine, melting; juice sweet, abundant, acid, agreeable; first; Oct.

Calhoun. 1. *Mass. Hort. Soc. Rpt.* 5. 1843. **2.** *Mag. Hort.* **11**:252. 1845.

Raised by Governor Edwards, New Haven, Conn., and submitted by him to the Massachusetts Horticultural Society in 1843. Fruit medium, globular, obliquely oblate, yellowish, shaded with dull crimson, russetted; flesh white, coarse, granular, buttery, melting, pleasant; good; Oct.

Caliorosa. 1. *Mag. Hort.* **18**:151. 1852.

Described among new varieties of fruits. Fruit large, pyriform, greenish-yellow, with brown specks; not juicy, indifferent.

Calixte Mignot. 1. *Guide Prat.* 88. 1895.

Fruit large, pyriform, greenish, dotted with russet, passing to yellow at maturity; flesh very fine, melting, buttery, juicy; first; Oct. and Nov.

Calvillebirne. 1. Dochnahl *Führ. Obstkunde* **2**:72. 1856.

Originated by Van Mons, 1825. Fruit medium, obovate-conic, light green changing to lemon-yellow, washed with red on the sun-exposed side; flesh fine, granular, sweet, juicy, melting, vinous and musky; good; Feb. and Mar.

Calvin. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:71. 1908.

Originated by Calvin Throop in Washington, U. S. A. Fruit medium, ovate-pyriform yellow, blushed and

striped; flesh buttery, juicy, melting; good; medium.

Camak. 1. *Gard. Mon.* **2**:320. 1860. **2.** *Guide Prat.* 70. 1895.

Originated with J. Camak, Athens, Ga., and first reported in 1860. Fruit medium, obtuse-pyriform, yellowish-green, slightly washed with carmine; flesh fine, juicy, sugary; good; Sept.

Cambacérès. 1. Leroy *Dict. Pom.* **1**:523, fig. 1867.

Distributed by Charles Baltet, Troyes, Fr., about 1861, without any specification of origin. Fruit medium, obtuse-pyriform, one side generally more swelled than the other, golden yellow, dotted and marbled with russet; flesh whitish, semi-fine, melting; juice very abundant and very sweet, refreshingly acidulous, with a delicate aroma; first; Oct.

Camerling. 1. Leroy *Dict. Pom.* **1**:524, fig. 1867. **2.** *Guide Prat.* 108. 1876.

A seedling of Van Mons which first bore fruit in 1842. Fruit medium, oblong-obtuse-pyriform, bossed and somewhat swelled; skin thick, wrinkled, yellow-ochre, dotted with russet, much washed with gray-bronze and clouded with brown-red on the side next the sun; flesh whitish, often doughy; juice sweet, agreeable; more frequently third than second class; Oct.

Camille de Rohan. 1. Hogg *Fruit Man.* 542. 1884.

Fruit medium, pyriform, green changing to yellow-green on ripening, with numerous russety dots; flesh white, with a pinkish tinge, fine-grained, melting, vinous and of good flavor; Dec. and Jan.

Canandaigua. 1. *Mag. Hort.* **16**:36, 153. 1850. **2.**

Downing *Fr. Trees Am.* 714. 1869.

Judge Atwater of Canandaigua, New York, brought cions of this pear from Connecticut in 1806. It was exhibited at the Pomological Congress in New York in 1849 under the name *Catherine* but there being already one or more pears known by that name it was deemed well to change its name to avoid confusion. Fruit medium, irregular, elongated-acute-pyriform, lemon-yellow, sometimes red on the sunny side; flesh white, fine, melting and buttery, sugary, high flavor; handsome and excellent; Sept.

Canning. 1. McIntosh *Bk. Gard.* 460. 1855.

Fruit large, resembling Easter Beurré but the habit of the tree is more robust and hardy; Jan. and Feb.

Canourgues. 1. Mas. *Le Verger* **2**:77, fig. 37. 1866-73. **2.** Leroy *Dict. Pom.* **1**:526, fig. 1867.

A wilding found about the beginning of the nineteenth century by M. Lauzeral, Monestier, Fr. Fruit small, long-ovate, often more curved on one side than on the other, smooth and shining, bright yellow, sown with small dots of grayish-brown, colored with pale rose on the side of the sun; flesh white, fine, melting; juice very abundant, vinous, sugary, refreshing and aromatic; first; July.

Cantelope. 1. *Mag. Hort.* **4**:231, 466. 1838. **2.** Downing *Fr. Trees Am.* 714. 1869.

Raised by Governor Edwards of New Haven and presented to the Horticultural Society of New Haven in September, 1838, when it was reported to be worthy of cultivation. Fruit below medium, globular, pale yellow, sometimes blushed in the sun; flesh whitish, coarse, breaking, wanting in juice; good for

cooking; Oct.

Canton. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:72. 1908.

Originated in 1883 in Madison County, Miss. Fruit medium, ovate, green to yellow, blushed; flesh breaking, juicy, sprightly; very good; season medium.

Capsheaf. 1. *Mag. Hort.* **3**:52. 1837. **2.** *Ann. Pom. Belge* **7**:77, fig. 1859.

Introduced by S. H. Smith, an amateur horticulturist of Rhode Island where it was already much cultivated in 1837. Fruit medium, oblong-obovate-pyriform, deep yellow, with patches and traces of cinnamon-russet; flesh white, juicy, melting, not highly flavored but very sweet and agreeable; good; Sept. and Oct.

Capucine Van Mons. 1. Leroy *Dict. Pom.* **1**:528, fig. 1867. **2.** Mas *Pom. Gen.* **5**:145, fig. 361. 1880.

Obtained by Simon Bouvier, Jodoigne, Bel., a friend of Van Mons, to whom he dedicated the variety in 1828. Fruit above medium, oval-pyriform, bright green, dotted all over with fawn and slightly bronzed on the side next the sun; flesh yellowish or greenish, fine, semi-melting, crisp, rich, sugary; juice very abundant, vinous, having a delicate aroma; good to very good; Oct. to Dec.

Carasi. 1. *Guide Prat.* 80. 1876. **2.** Baltet *Cult. Fr.* 373. 1908.

This is a perry pear, widely distributed in Europe under variations of the same name. On the farms of Brie, France, it is known as the *Carisi*, the fruit being medium size or rather large, the juice perfumed, without color, rich in tannin. In the neighborhood of

Metz, Lorraine, it is called Carasi and in the district of Auge, France, *Carisy*. Bunyard and Thomas in their joint work, "The Fruit Garden," mention *Carisie-Gros* and *Carisie-Petit* as varieties for perry making, and they are probably two variations of the same pear, as too are the *Carisi rouge* and *Carisi blanc* of France. The Carasi, or *Rote Carisi*, of Austria is a beautiful fruit, large to very large, irregular in outline, pyriform, swelled at middle, somewhat truncated; skin tough, green, turning to lemon-yellow, richly blushed on the sunny side, dotted with red; flesh whitish, rather coarse, very juicy, subacid, aromatic; Oct.

Cardinal Georges d'Ambroise. 1. *Guide Prat.* 103. 1895.

Raised from Beurré Clairgeau crossed with Beurré Henri Courcelle. Fruit medium, curved, pyriform, the form of Beurré Clairgeau; flesh very fine, juicy, sugary; delicious; Nov. and Dec.

Carleton. 1. *Mass. Hort. Soc. Rpt.* 46. 1866.

This is one of the forty-five seedlings fruited by S. A. Shurtleff, Brookline, Mass., between the years 1862 and 1866. Fruit large, obovate, light green; flesh melting, juicy, slightly acid; good bearer, markets well; Oct.

Carmel. 1. *Am. Pom. Soc. Rpt.* 134. 1920.

Originated with N. W. Crawford, East Carmel, O., and introduced by him about 1850. Tree hardy, productive; fruit russet; flesh juicy, excellent; ripens early.

Carminbirne. 1. Dochnahl *Führ. Obstkunde* **2**:50. 1856.

Locality of origin Nassau, western Germany,

1812. Fruit medium, obovate, sides unequal; pronounced lemon-yellow, carmined on the side of the sun; good; Aug.

Caroline Hogg. 1. Hogg *Fruit Man.* 543. 1884. **2.** Nicholson *Dict. Gard.* **3**:51. 1900.

A seedling from John Mannington, Uckfield, Sussex, Eng., which first fruited in 1870. Fruit below medium, Bergamot-shaped, even and regular; skin covered with a thick, rather deep brown-russet, reddish on side exposed to the sun; flesh very tender, melting, rich, vinous, with plenty of finely perfumed juice; first quality, reminiscent in shape and flavor of Winter Nelis; Dec.

Carrière. 1. *Gard. Chron.* 1046. 1866. **2.** Leroy *Dict. Pom.* **1**:529, fig. 1867.

In 1866 the original tree was still existing at Poncet, Fr., being then about 200 years old. Fruit small, pyriform, golden-yellow, dotted with brown-gray on the shaded side and bright yellow on the side of the sun, washed with brilliant red; flesh yellowish-white, breaking, rather dry, sweet, acidulous, agreeable, without perfume; second; July and Aug.

Cartheurserbirne. 1. Dochnahl *Führ. Obstkunde* **2**:9. 1856.

French, 1845. Fruit very large, ovate-pyriform, bossed, green, changing to yellow, lightly blushed in the sun; flesh soft; winter.

Casimir. 1. Mas *Pom. Gen.* **7**:185, fig. 577. 1881.

A seedling from Beurré de Luçon, raised in 1859 by M. Pariset, Curciat-Dongalon, Fr. Fruit medium, ovate-pyriform; skin thin, tender, bright green,

sprinkled with numerous round, brown dots; on ripening the green becomes lemon-yellow, lightly washed with red-brown on the exposed side; flesh a little yellow, fine, melting, gritty around the core, juice sugary, abundant, vinous, acidulous and perfumed; good; Nov.

Cassante du Comice. 1. *Jour. Hort.* **20**:30, fig. 1871.

Raised from seed by the Horticultural Society of Angers, Fr., and distributed by Leroy of that city about 1870. Fruit medium, globular-oblate or Bergamot-shaped, dull yellow, much covered with rough, brown-russet which leaves large patches of the ground color apparent; flesh yellowish, coarse-grained, crisp, very juicy, with a rich, sweet, sugary flavor; first; Sept.

Cassante de Mars. 1. Mas *Le Verger* **1**:75, fig. 44. 1866-73. **2.** Leroy *Dict. Pom.* **1**:530, fig. 1867.

A little-known seedling raised by Major Espéren, Mechlin, Bel., about 1840. Fruit medium, globular-turbinate, orange-yellow, dotted, stained and marbled with fawn, bronzed on the side exposed to the sun; flesh whitish, semi-fine, breaking, gritty about the core; juice abundant, vinous, sugary, rather aromatic, richly flavored; second; winter and spring.

Cassel. 1. *Am. Pom. Soc. Rpt.* 134. 1920.

Probably a cross between Duchesse d'Angoulême and Kieffer. Introduced by Cassel Nursery, Cleveland, O., about 1914. Tree strong, upright, productive. Fruit large, resembling Duchesse d'Angoulême in shape, rich lemon-yellow; flesh yellowish, white, fine-grained, rich, juicy, sweet; Oct. to Dec.

Cassolette. 1. Duhamel *Trait. Arb. Fr.* **2**:160, Pl.

XVIII. 1768. **2.** Miller *Gard. Dict.* **3**: 1807. **3.** Leroy *Dict. Pom.* **1**:531. 1867.

An ancient pear deriving its name from an imagined resemblance to a perfuming-pot. Numerous synonyms have been locally given to it. Fruit small, globular, pyriform, whitish-green, sprinkled evenly all over with small dots; flesh white, semi-fine, breaking, very tender; juice sufficient, sugary, slightly musky; second; Aug. and Sept.

Cassolette (Knoop). 1. Knoop *Fructologie* **1**:104, 135, Pl. 5. 1771.

This is not the same variety as the *Cassolette* described by Leroy. Fruit medium, long-obtuse-pyriform; skin rather rough, brown or grayish on the fundamental green, on ripening becomes a little yellow; flesh soft, melting, with a very pleasant flavor; Aug. and Sept.

Castelline. 1. *Pom. France* **4**:151, Pl. 151. 1867. **2.** Leroy *Dict. Pom.* **1**:532, fig. 1867. **3.** *Guide Prat.* 49. 1895.

A Belgian variety obtained in 1835 by Florimond Castelain near Tournai, Bel. Fruit medium, turbinate-pyriform, yellowish-green, much covered with russet and speckled with fawn-russet, colored with dull red on the side of the sun; flesh yellowish, semi-fine, melting; juice sugary, acidulous and agreeably perfumed; first; Nov.

Catherine Gardette. 1. Downing *Fr. Trees Am.* 715. 1869. **2.** Thomas *Am. Fruit Cult.* 697. 1897.

From W. D. Brincklé, Philadelphia, in 1857. Fruit medium, globular-obovate, yellow, freely dotted with red spots on the sun-exposed side; flesh yellowish, coarse, buttery, sweet; good; Sept.

Catherine Lambré. 1. Leroy *Dict. Pom.* **1**:534, fig. 1867. **2.** Downing *Fr. Trees Am.* 716. 1869.

One of the last seedlings raised by Van Mons in his nursery at Louvain. Fruit large, oblong-obtuse-pyriform, greenish-yellow, covered with russet dots on the shaded side and blushed with tender rose on the sunny side; flesh whitish, semi-fine, juicy, melting, sweet, seldom gritty, having an exquisite savor recalling the perfume of the rose; very good; Oct. and Nov.

Catherine Royal. 1. Langley *Pomona* 131, Pl. LXII, fig. 5. 1729.

King Catherine. **2.** Parkinson *Par. Ter.* 592. 1629.

Catherine Royal is mentioned by Langley as one of "the best kinds of Pears in England," and is without doubt the *King Catherine Pear* described earlier by Parkinson. Fruit medium in size, obovate-obtuse-pyriform; July and Aug.

Catillac. 1. Duhamel *Trait. Arb. Fr.* **2**:233, Pl. LVIII, fig. 4. 1768. **2.** Leroy *Dict. Pom.* **1**:535, fig. 1867. **3.** Downing *Fr. Trees Am.* 716. 1869. **4.** Bunyard *Handb. Hardy Fr.* 162. 1920.

Grand Monarque. **5.** Knoop *Fructologie* **1**:125, 136, fig. 1771.

This old French baking pear with over sixty synonyms is supposed to have been found near Cadillac in the Gironde. Bonnefond in 1665 in the *Jardinier François* first described it under this name. The great size of the Catillac has often caused it to be confused with the *Pound* pear, and the latter's name has been applied as a synonym for the Catillac, but the two are distinct. Tree stout, vigorous, spreading, productive; leaf large, round, downy, serrate. Fruit

very large, broadly turbinate, dull green to yellow, with brownish-red blush; stem stout, an inch long, in a small cavity; calyx open, in a moderately deep, ribbed basin; flesh hard, rough; one of the best of stewing pears, cooking a deep red; Nov. to Mar.

Catinka. 1. Leroy *Dict. Pom.* **1**:537, fig. 1867. **2.** Hogg *Fruit Man.* 545. 1884.

Raised by Major Espéren from seed at Mechlin, Bel., about 1845. Fruit medium, obovate, lemon-yellow, thickly covered with large cinnamon-colored freckles and tracings of russet; flesh yellowish-white, juicy, sugary, with a rich, full flavor perfumed with rose; good; late autumn.

Cavaignac. 1. Dochnahl *Führ. Obstkunde* **2**:96. 1856.

Raised by Van Mons, 1852. Fruit medium; skin rough, green changing to yellowish-green, blushed with red on the sun-exposed side; devoid of scent and flavor; Sept.

Cavelier de la Salle. 1. *Guide Prat.* 103. 1895.

Raised from seed of Olivier de Serres fertilized with Vice-President Delbée; described in 1895 as a new variety. Fruit medium, having the appearance of Olivier de Serres; flesh extra fine, juicy, sugary, delicious, agreeably perfumed; Dec. Tree rather vigorous and very fertile, forming beautiful pyramids.

Cedarmere. 1. *Horticulturist* **18**:279, fig. 1863. **2.** Downing *Fr. Trees Am.* 716. 1869.

Raised from seed by William C. Bryant, the poet, at his country seat at Roslyn, N. Y., about 1860. Fruit small, globular-obovate, sides unequal, pale greenish-yellow, with small russet dots and nettings;

flesh white, juicy, melting, sweet, fine-grained, aromatic; very good; Aug.

Cels Butterbirne. 1. Dochnahl *Führ. Obstkunde* **2**:113. 1856.

A Van Mons seedling, 1804. Fruit medium, long, obtuse, golden-yellow, washed with reddish-brown; Sept.

Century. 1. *Mo. Hort. Soc. Rpt.* 77. 1883.

Dr. J. Stayman, Leavenworth, Kan., before the Missouri Horticultural Society in 1883 stated that the Century pear had stood over a hundred years at its home in Pennsylvania, had borne well and at that time showed no blight or disease. He also said it appeared to be blight-proof at Carthage, Mo.

Cerise Brune. 1. *Guide Prat.* 89. 1895.

Fruit medium, regular in form, greenish, passing into yellow at maturity, speckled with brown dots; flesh white, rather astringent, with a savor at once sour and sweet; July and Aug.

Cerise Double. 1. *Guide Prat.* 89. 1895.

Fruit medium, pyriform, slightly swollen about the middle, pale green changing to yellow on ripening, lightly dotted with brown; flesh white, breaking, with a slightly astringent flavor; Aug.

Cerruttis Durstlösche. 1. Mathieu *Nom. Pom.* 194. 1889. **2.** *Guide Prat.* 81. 1895.

Fruit medium, turbinate-obtuse; yellow; flesh breaking, very juicy, scented; good for cooking; Sept.

Certeau. 1. Baltet *Cult. Fr.* 404. 1908.

Baltet remarks of this pear that with it, in common with Catillac and certain other varieties, the flesh becomes red when cooked. Baltet also points out that pears with a gray skin are generally good for kitchen use.

Certeau d'Automne. 1. *Pom. France* **3**:No. 111, Pl. 111. 1865. **2.** *Guide Prat.* 66. 1895.

Described in 1661 by Bonnefond, in 1690 by Merlet and by La Quintinye in 1730, but its place and time of origin are unknown. Fruit small to medium, growing in clusters, long-pyriform, yellow, washed with brilliant orange-red and dotted with gray; flesh white, not fine, breaking, juicy, sugary, having a perfume of the Rousselet; good for kitchen use; Oct. to Dec.

Certeau d'Été. 1. Leroy *Dict. Pom.* **1**:539, fig. 1867.

In the sixteenth century this variety was also called the pear of *Champagne*, coming as it did, according to Charles Estienne, from that district in 1540. Its name may be referred to the Latin word *certo* signifying constant or certain. Fruit above medium, long, variable, sometimes rather like

Calebasse in form but more usually obtuse-conic, bright yellow though a little greenish, dotted all over with gray-brown and widely carmined on the side opposed to the sun; flesh whitish, semi-fine and melting; juice sufficient; saccharine, seldom much perfumed but with a delicate flavor; second; Aug.

Certeau d'Hiver. 1. Leroy *Dict. Pom.* **1**:540, fig. 1867. **2.** Duhamel *Trait. Arb. Fr.* **2**:248. 1768.

Certeau d'Hiver, like Certeau d'Été, originated, Charles Estienne, writing in 1540, tells us, in the environs of Vitry-le-Français, in the French champagne country. Fruit medium and sometimes less, long-turbinate, swelled and contracted at summit, sometimes gourd-like in form, bright yellowish-green, dotted with fawn, washed with brown-red on side touched by the sun; flesh yellowish-white, semi-fine, semi-breaking, gritty and somewhat astringent; juice abundant, sugary, perfumed; third; Dec. to Apr. or May.

Cesile. 1. Kenrick *Am. Orch.* 140. 1841.

Tree hardy, productive; fruit large, globular, flattened at the apex, red-russeted; flesh buttery; very good; Oct.

Chaigneau. 1. Leroy *Dict. Pom.* **1**:542, fig. 1867. **2.** *Guide Prat.* 57. 1895.

From a seed bed made in 1848 by Jacques Jalais, a nurseryman at Nantes, Fr., first published in 1858. Fruit medium, turbinate-obtuse, yellowish-green, dotted with brownish-gray; flesh white, melting; juice acidulous, sugary, refreshing, aromatic; first; Oct.

Chair-a-Dame. 1. Duhamel *Trait. Arb. Fr.* **2**:156, Pl. XVI. 1768. **2.** Leroy *Dict. Pom.* **1**:543, fig.

1867.

Le Lectier possessed in his garden at Orléans at the beginning of the seventeenth century two strains of the Chair-a-Dame. One he called *Chere-a-Dame tres-hastine*, and the other *Chere-a-Dame*. The first is very early in its ripening and the second much later. Fruit medium or less, oblong-pyriform, bossed, fairly regular; skin thin, bright yellow-green, very finely dotted with gray-russet and extensively carmined on the side next the sun; flesh white, semi-fine, breaking or semi-melting, watery, gritty at center; juice abundant, saccharine, vinous, rarely very aromatic, sometimes slightly acid; second; Aug. and Sept.

Chamness. 1. Clingman *Cat.* 8. 1921.

Originated with a Mr. Chamness of Timpson, Tex., possibly as a cross between Kieffer and Bartlett, and was introduced in 1913. Fruit medium, smooth, yellow; flesh melting, juicy, tender, sweet; ripens last of August.

Champ Riche d'Italie. 1. Duhamel *Trait. Arb. Fr.* **2**:232. 1768. **2.** Kenrick *Am. Orch.* 124. 1841. **3.** Leroy *Dict. Pom.* **1**:544, fig. 1867. **4.** Hogg *Fruit Man.* 545. 1884.

Probably of Italian origin. Diel of Stuttgart devoted many pages of his *Kernobstsorten* to it in 1805 at which time he had received it from the neighborhood of Paris, though it had already been known for a long while at Berlin. Fruit above medium and often large, pyriform, always rather swelled below the central circumference, contracted at the summit which is often nearly acute, greenish on the shady side, yellow-ochre on the face exposed to the sun, dotted all over with brown specks; flesh whitish, semi-melting or breaking, rather fine, free

from grit, juicy, sweet and perfumed; first rate for cooking and compotes but third for dessert.

Champagner Bratbirne. 1. *Guide Prat.* 89, 256. 1876. **2.** Löschnig *Mostbirnen* 8, fig. 1913.

Much valued in Germany for making champagne and perry. It was grown in Baden, Württemberg, and Hesse in 1797. Fruit small, globular-turbinate, even in outline, light green turning yellow without any blush, speckled with brown-russet and finely dotted; flesh white, coarse, nearly breaking; first for perry; autumn.

Chancelier de Hollande. 1. Mas *Pom. Gen.* **7**:31, fig. 496. 1881.

A seedling of Van Mons. Fruit medium to large, obovate-pyriform; skin rather thick and firm, becoming a little greasy, bright green speckled with green-gray dots; on ripening the original green becomes yellow and washed with red on the exposed side; flesh whitish, a little green under the skin, rather coarse, gritty at the center, semi-melting; juice plentiful, rich in sugar, acidulous, slightly perfumed, agreeable; third; Nov.

Chancellor. 1. *Mag. Hort.* **19**:65. 1853. **2.** Downing *Fr. Trees Am.* 717. 1869.

Said to have originated in Germantown, Pa., on the grounds of a Mr. Chancellor. At the Second Session of the American Pomological Congress in 1853 it was placed on the list of pears that promised well. Fruit rather large, obovate-obtuse-pyriform, greenish-yellow, sometimes blushed on the exposed side, dotted; flesh white, juicy, buttery, melting, sugary, perfumed; good; Oct. and Nov.

Chantry. 1. *Mag. Hort.* **9**:125. 1843.

Published in the London Horticultural Society's Catalogue of Fruits, 1842. Fruit medium size, globular, brown and russet; buttery; second; Dec. and Jan.

Chaploux. 1. Mas *Le Verger* **1**:169, fig. 83. 1866-73. **2.** Leroy *Dict. Pom.* **1**:547. 1867.

Distributed from nurseries at Vilvorde-lez-Bruxelles, Bel., in 1859. Fruit small, globular-turbinate, acute, the stem being perpendicular to and continuous with the fruit; color dark green, touched with brown russet; flesh yellowish-white, veined with green, fine, buttery, very sugary; first quality for cider and for drying; Dec. and Jan.

Chapman. 1. *Mag. Hort.* **14**:84. 1848. **2.** Downing *Fr. Trees Am.* 717. 1890.

Originated in Philadelphia or its vicinity. Shown at the exhibition of the Pennsylvania Horticultural Society held at Philadelphia, September, 1847. Fruit medium, obovate-pyriform, yellow, with brown and green dots; flesh white, semi-melting, astringent; Sept.

Chaptal. 1. Leroy *Dict. Pom.* **1**:547. 1867.

Raised in Paris by Michel-Christophe Hervy, about 1800. Fruit very large, oblong, obovate-obtuse-pyriform, yellow-ochre, dotted with greenish-brown, marbled with fawn, washed with dark red on the side facing the sun; flesh white, semi-fine and semi-melting, gritty at the center; juice sufficient, sugary, acidulous; second.

Charles Bivort. 1. Leroy *Dict. Pom.* **1**:549, fig. 1867. **2.** Mas *Pom. Gen.* **6**:151, fig. 460. 1880.

A seedling of Van Mons fruited prior to 1842. Fruit medium, globular-ovate-obtuse; bright green

changing to orange-yellow at maturity, marbled and dotted with bright brown, and clouded with olive-russet on the side of the sun; flesh whitish, coarse, semi-breaking, gritty at core; juice rather wanting, sugary, vinous; second; Oct.

Charles Cognée. 1. Bunyard-Thomas *Fr. Gard.* 367. 1904. **2.** Baltet *Cult. Fr.* 345, fig. 247. 1908.

Raised at Troyes, Fr. Fruit large or rather large, obtuse-pyriform; skin pinkish-yellow, lightly dotted with brown; flesh slightly granulous, sweet, perfumed, juicy, with a very agreeable flavor; first; Feb. and longer.

Charles Ernest. 1. *Rev. Hort.* 292. 1889. **2.** Baltet *Cult. Fr.* 328, fig. 224. 1908. **3.** Bunyard *Handb. Hardy Fr.* 163. 1920.

Obtained by Charles and Ernest Baltet, nurserymen of Troyes, Fr., and placed in commerce in 1879. Fruit large, shortened pyriform, obtuse, golden-yellow, encrimsoned on the side next the sun, dotted with gray on the bright side and with green on the shaded; flesh white, fine, melting, very juicy, sugary, rich, perfumed; first; Nov. and Dec.

Charles Frederickx. 1. *Ann. Pom. Belge* **2**:1, fig. 1854. **2.** Leroy *Dict. Pom.* **1**:550, fig. 1. 1867.

In 1840 or 1841 this pear was raised in the Van Mons nursery at Louvain, Bel. Fruit medium, globular-ovate-pyriform, slightly obtuse and bossed, golden-yellow, dotted and veined with fawn, shaded and mottled with red in the sun; flesh white, buttery, sweet, melting, juice sufficient, sugary, very savory and musky; first; Sept. and Oct.

Charles de Guelin. 1. *Gard. Chron.* 3rd Ser. **35**:79. 1904.

Described in the *Bulletins d'Arboriculture*, January, 1904. Fruit large, turbinate, smoky-brown; flesh yellowish-white, melting, perfumed and juicy; good; Jan. and Feb.

Charles Smet. 1. Downing *Fr. Trees Am.* 480. 1857. **2.** Leroy *Dict. Pom.* **1**:551, fig. 1867.

A seedling of Van Mons. Fruit large, globular, greenish-yellow, fine, dark green spots, stained with blackish-brown around the stalk; flesh white, coarse, breaking, gritty around the core; juice abundant, saccharine, with not much flavor; second; Jan. to Mar.

Charles van Hooghten. 1. *Mag. Hort.* **17**:472. 1851. **2.** *Horticulturist* **8**:30, fig. 1853.

Fruit large, even, roundish-oval, yellow, netted and patched with russet and with many russet dots; stem slender, fleshy at insertion; calyx open; basin shallow; flesh white, coarse-grained, gritty, not very juicy, sweet, rich, with a musky perfume; good; Oct.

Charles Van Mons. 1. *Mag. Hort.* **16**:295. 1850. **2.** *Am. Pom. Soc. Rpt.* 238. 1854. **3.** Hogg *Fr. Man.* 546. 1884.

Belgian, about 1847. At the second session of the Congress of Fruit Growers in 1850 this pear was placed on the rejected list, as also it was again by the American Pomological Society in 1854. Fruit large, oblong-obovate-obtuse, smooth, bright green, strewed with some minute dots; flesh yellowish, rather coarse-grained, with a cold acidity and not much flavor; of small merit; Oct. and Nov.

Charli Basiner. 1. Hogg *Fruit Man.* 546. 1884. **2.** *Guide Prat.* 89. 1895.

A production of J. de Jonghe of Brussels, Bel.,

about 1857. Fruit medium, obovate, pale green, dotted and clouded with brown-russet changing as it ripens to yellowish-green; flesh white, juicy and sugary; first; Sept. and Oct.

Charlotte de Brouwer. 1. *Ann. Pom. Belge* **3**:33. 1855. **2.** Mas *Le Verger* **3**:Pt. 1, 107, fig. 52. 1866-73.

One of Major Espéren's seedlings raised at Mechlin, Bel., and reported on in 1835. Fruit medium and above, globular-ovate, yellow ground of skin almost entirely covered with a coating of light brown-russet except on the shaded side; flesh yellowish-white, semi-fine, semi-melting; juice sufficient, sugary, vinous, acid and very astringent; second; Oct. and Nov.

Charlotte de Roucourt. 1. Mathieu *Nom. Pom.* 194. 1889. **2.** *Guide Prat.* 89. 1895.

Distributed by Daras de Naghin of Antwerp, Bel., about 1880. Fruit medium, obovate or obtuse-pyriform; flesh melting, very juicy, sugary, perfumed; Mar. and Apr.

Charnock. 1. Hogg *Fruit Man.* 547. 1884. **2.** Mathieu *Nom. Pom.* 194. 1889.

A Scotch dessert pear. Fruit small, pyriform, greenish-yellow in the shade and dark, dull red on the side next the sun; flesh yellowish, semi-buttery, juicy, sweet, aromatic; Sept.

Chat Brulé. 1. Duhamel *Trait. Arb. Fr.* **2:**247. 1768. **2.** Miller *Gard. Dict.* **3**: 1807. **3.** Leroy *Dict. Pom.* **1**:555, fig. 1867.

Duhamel du Monceau writing in 1768 mentions two varieties bearing the name *Chat Brulé* or *Burnt Cat*. Of these the second is the *Chat Brulé* described

under that name by Leroy, ripening in November and the first is the Dutch variety *Kamper Venus*, ripening late in the winter. Each of these has been known also as *Kamper Venus*. Fruit medium, globular-pyriform, smooth, shining, pale yellow where shaded, and washed with red where exposed to the sun; flesh very white, rather coarse, breaking; juice rather wanting, rarely very sweet, generally without perfume; good only for cooking; Nov. and Dec.

Chattanooga. 1. *Mass. Hort. Soc. Rpt.* 43. 1866.

Originated at Brookline, Mass., by S. A. Shurtleff; fruited first in 1863. Fruit medium to large, truncate, dark green; flesh fine, melting, juicy, sweet, perfumed; good; Oct.

Chaudfontaine. 1. Mas *Pom. Gen.* **7**:59, fig. 510. 1881. **2.** *Guide Prat.* 81. 1895.

Disseminated by M. Galopin, a nurseryman at Liege, Bel., in 1865. Fruit large or rather large, pyriform, a little swelled, water-green almost entirely covered with cinnamon-colored russet, changing to pale yellow on maturity and the russet to golden on the side to the sun; flesh whitish, semi-fine, semi-breaking, full of juice, sweet and musky; good for household use; Oct.

Chaumontel. 1. Downing *Fr. Trees Am.* 718. 1869. **2.** Bunyard *Handb. Hardy Fr.* 163. 1920.

Besi de Chaumontel. **3.** Duhamel *Trait. Arb. Fr.* **2**:199, Pl. XL. 1768. **4.** Leroy *Dict. Pom.* **1**:266, fig. 1867.

Merlet writing in his *L'Abrégé des bon fruits* of 1675 said that the Chaumontel pear originated from a wilding growing at Chaumontel, Fr. In 1765 Duhamel du Monceau saw the parent tree, at that

time more than a century old, bearing a fine crop. Fruit large; form variable, but always long, obtuse, bossed, pyriform, yellow or yellowish-green in the shade, dotted with numerous brownish-red spots and brownish-red or deep rich red on the side exposed to the sun; flesh white, semi-fine, melting, buttery, rich and sugary; juice abundant, vinous, highly perfumed; a high class dessert pear.

Chaumontel Gras. 1. *Rev. Hort.* 468, fig. 1888.

In 1845 seed of the Chaumontel was sown from which was obtained in 1859 fruit whose seed was in turn sown. A seedling grown from this latter seed bore fruit, which was reported about 1875 as follows: Fruit large or very large, obtuse-pyriform, swelled, bossed, bright yellow, very much covered with fine dots and gray marblings and on the sun-touched side often tinted with carmine or brick-red more or less intense; flesh white or yellowish, semi-fine, crisp, very melting, juicy, rich, sugary, perfumed; spring.

Chaumontel Swan Egg. 1. *Mag. Hort.* **5**:304. 1839.

Raised by John Williams, Pitmaston, Eng., from seed of Chaumontel impregnated with the pollen of Swan Egg. Fruit medium, obovate, russet; flesh rich and sugary; Oct.

Chaumontelle d'Été. 1. *Gard. Chron.* 1207. 1873. **2.** *Guide Prat.* 90. 1876.

Presumably a French pear, having been received in England from Orléans in the autumn of 1871. Fruit large or very large; flesh semi-melting or juicy, sugary and of a distinct perfumed flavor.

Chelmsford. 1. *Mag. Hort.* **6**:18. 1840. **2.** *Ibid.* **7**:169. 1841. **3.** Downing *Fr. Trees Am.* 719. 1869.

Originated on the farm of Zaccheus Wright, Chelmsford, Mass., early in the nineteenth century. It has been known also under the names *Tyngsboro* and *Mogul Summer*. Fruit of the largest size, globular-obtuse-pyriform, yellow, red cheek; flesh coarse, sweet; good for cooking; Sept.

Cher à Dames (Knoop). **1.** Knoop *Fructologie* **1**:105, 135, Pl. V. 1771.

This pear although illustrated by Knoop under the name *Chair à Dame* is not identical with the variety described under that name in this work or by Leroy. Fruit medium, somewhat oblong, diminishing toward the stalk and becoming acute, globular in lower half, flattened around the calyx which is not deeply sunken; when ripe the skin is uniformly yellow and blushed on the side of the sun with a beautiful red; flesh soft, rather gritty, succulent and of a very agreeable flavor; Aug. and Sept.

Cherroise. 1. Leroy *Dict. Pom.* **1**:557, fig. 1867. **2.** Mas *Pom. Gen.* **6**:169, fig. 469. 1880.

This wilding was found in a wood in the Commune of Cherré, Maine-et-Loire, Fr., and was first propagated about 1848. Fruit medium, ovate-obtuse, mammillate; skin rough to the touch, yellow-ochre, with patches of fawn-colored russet, washed when ripe with a blush of vermilion red on the side of the sun; flesh yellowish-white, semi-fine, breaking; juice sufficient, sugary, rather savory; second; Jan. and Feb.

Chesill. 1. Parkinson *Par. Ter.* 592. 1629.

Mentioned by John Parkinson in 1629 as a “delicate mellow pear, even melting as it were in the mouth of the eater, although greenish on the outside.”

Chilton. 1. *Mass. Hort. Soc. Rpt.* 45. 1866.

A seedling raised and fruited by S. A. Shurtleff, Brookline, Mass., and exhibited to the Fruit Committee of the Massachusetts Horticultural Society in 1866. Fruit medium, turbinate, brown-russet; flesh sweet, juicy and buttery, with high flavor; described by the promoter as very fine; Oct.

China. 1. *Gard. Chron.* 1095. 1867.

Of Chinese origin. Reported in 1867 to be full of promise in Queenstown, Australia, and to have been growing in the neighboring British Colony of New South Wales for many years. Fruit large, many weighing 16 or 17 ounces; shape variable, breadth being sometimes as great as the length, warm yellow ground dotted all over with russet; flesh crisp, juicy, sweet, the skin having something of a musky pineapple flavor; a handsome, fragrant fruit; first for cooking; a good keeper; summer.

Chio. 1. Miller *Gard. Dict.* **3**: 1807.

Commonly called, according to Miller, the *Little Bastard Musk Pear* to distinguish it from the *Little Musk Pear*. Fruit small, roundish, yellow when ripe, with a few streaks of red on the side next the sun; juice musky; good; July.

Choak-pear. 1. Miller *Gard. Dict.* **3**: 1807.

The fruit of this pear is so acrid that it produces a choking sensation. Its flesh is red and it is rarely cultivated.

Choisnard. 1. Leroy *Dict. Pom.* **1**:559, fig. 1867. **2.** *Guide Prat.* 80. 1895.

Found growing wild in the environs of Ormes-Sur-Vienne, Fr., about 1810. Fruit above to medium,

pyramidal-obtuse, rather wrinkled, dark yellow, dotted with fawn, large gray marblings which pass to dark brown on the exposed side; flesh yellowish, semi-melting, semi-fine, gritty at core; juice sufficient, sugary, tartish, savory, with a delicate, musky flavor; first; Jan. to Mar.

Cholwell. 1. *Mag. Hort.* **13**:451. 1847.

An English variety first described by the London Horticultural Society in 1847. Fruit medium, curved pyramidal; skin smooth, thin, yellowish-green in the shade and partly tinged and obscurely streaked with dull red next the sun where it is also speckled with pale dots; flesh yellowish-white, melting, buttery, very sugary and rich, musky; Oct.

Christmas. 1. Elliott *Fr. Book.* 371. 1859.

Originated in Cincinnati, O., and described as "new" in 1859. Fruit medium, ovate-rounded, rough, bronzed, russety; flesh a little gritty, juicy, sweet; very good; Dec. and Jan.

Christmas Beurré. 1. *Mass. Hort. Soc. Rpt.* 158. 1874.

A seedling of the White Doyenné shown in the Massachusetts Horticultural Society's rooms in 1874. Fruit full medium size, ovate-pyriform, dull green, with thin russet towards the stem and sometimes sprinkled with red next the sun; flesh rather gritty at core, juicy and rich; very good to best; Dec.

Church. 1. *Mag. Hort.* **23**:112, fig. 5. 1857. **2.** Downing *Fr. Trees Am.* 19. 1869.

Vanilla. **3.** Watson *Am. Home Gard.* 376, fig. 235. 1860.

Reported by Downing to have originated on land

belonging to Trinity Church at New Rochelle, N. Y., hence its name; but Dr. Brincklé, in the second reference, says that it was believed to be a seedling raised by an old Huguenot settler, and that the original tree still existed on the premises of L. P. Miller, and was presumed to be nearly 100 years old. In 1859 Dr. Brincklé and Prince and Ferris expressed the opinion that it was identical with *Platt's Bergamot* and Mr. Colt thought the *Clark* pear of Hartford was also the same. Fruit medium, globular-oblate, irregular, green becoming yellow at maturity, with minute dots; flesh fine, very buttery, melting, with a very rich, sweet and highly perfumed flavor; first; Sept.

Chypre. 1. Leroy *Dict. Pom.* **1**:561, fig. 1867. **2.** Hogg *Fruit Man.* 571. 1884.

Duhamel in 1768, Poiteau in 1848 and Dr. Hogg in 1884 make this pear synonymous with *Early Rousselet*. Leroy regards it as a separate variety. It is an ancient pear of uncertain origin. It was described by Merlet in 1675 and was cultivated even earlier by Le Lectier in his garden at Orléans. Probably it originated at the beginning of the seventeenth century, but whether it took its name from the Island of Cyprus or the cypress tree seems uncertain. Fruit small, globular-turbinate, bright grayish-green, stained with brownish-red on the side of the sun; flesh dense, rather coarse, semi-breaking; juice abundant, vinous, sugary, with a perfume recalling cinnamon; first as an early pear; July and Aug.

Cincincis. 1. *Ohio Hort. Soc. Rpt.* 12. 1874-5. **2.** *Cornell Sta. Bul.* **332**:451, 479, figs. 149, 154. 1913.

This oriental pear, possibly of French origin, was received from New York by S. F. Smith, Marietta, O.,

in 1854. It is the parent of numerous seedlings fruited by Mr. Smith. Fruit medium to small, oval, fairly regular, light greenish-russet, with numerous brown dots; skin slightly rough; flesh yellowish-white, juicy, breaking, crisp; devoid of flavor, poor; Oct.

Cincincis Seedling. 1. *Cornell Sta. Bul.* **332**:479. 1913.

Introduced by William Parry and very closely resembles, if it is not identical with, Cincincis. Fruit medium to large, oblong, largest at stem end, tapering to blossom end, smooth, creamy-yellow; flesh tender, crisp, juicy, lacking quality.

Cincinnatus. 1. *Cornell Sta. Bul.* **332**:479. 1913.

An oriental seedling produced by S. F. Smith from seed of Cincincis. Folette Smith, son of the originator, says, "The tree is vigorous, hardy, productive; fruit resembles Cincincis in color and shape but is quite distinct in quality; juicy, subacid, rich; flesh gritty."

Cinquantième Anniversaire. 1. *Guide Prat.* 89. 1895.

Raised by M. Grégoire of Jodoigne, Bel., who considered it one of his best gains. Fruit small to large; Nov.

Cire. 1. Leroy *Dict. Pom.* **1**:563, fig. 1867. **2.** *Guide Prat.* 108. 1876.

Wachsbirne. **3.** Dochnahl *Führ. Obstkunde* **2**:187. 1856.

One of Major Espéren's gains at Mechlin, Bel., about 1840. Fruit large, long-conic, obtuse, much swelled around the calyx; skin waxy yellow, bright,

rather thick, slightly tinged with rose on the side of the sun and some small stains of dark maroon; flesh whitish, semi-fine and semi-melting, extremely granular about the center; juice sufficient but wanting in perfume and in sweetness; third; Feb.

Cité Gomand. 1. *Guide Prat.* 74. 1895.

A gain of M. Grégoire, Jodoigne, Brabant. Fruit medium, turbinate-ovate, yellow with dots; flesh melting, juicy; good; Oct.

Citrina. 1. *Mass. Hort. Soc. Rpt.* 45. 1866. **2.** Downing *Fr. Trees Am.* 720. 1869.

One of S. A. Shurtleff's seedlings. First fruited in 1862. Fruit medium, short-pyriform, bright yellow, lumpy and nodular; flesh nearly white, coarse, gritty at core, of a pleasant, peculiar flavor; Sept.

Citron. 1. *Mag. Hort.* **4**:231. 1838. **2.** Downing *Fr. Trees Am.* 720. 1869.

A seedling of the late Governor Edwards. Fruit small, globular-turbinate, greenish, shaded with dull crimson; flesh greenish, rather coarse, juicy, melting, sugary, vinous, musky; good; Aug. and Sept.

Citron d'Hyver. 1. Miller *Gard. Dict.* **3**: 1807.

Fruit medium to large, "in shape and color very like an orange or citron;" flesh hard and dry, gritty; good baking pear; Dec. to Mar.

Citron de Saint Paul. 1. Leroy *Dict. Pom.* **1**:566. 1867. **2.** Mas *Pom. Gen.* **4**:29, fig. 207. 1879.

From a seed bed of M. de la Farge in the Commune of Salers, Cantal, Fr. It was first published in 1856. Fruit below medium, ovate, obtuse and bossed, golden-yellow, dotted all over with bright green; flesh whitish, fine, melting, juicy, rather

gritty; juice very abundant, sugary, sweet and deliciously perfumed; first; Sept.

Citron de Sierentz. 1. Knoop *Fructologie* **1**:103, 135, Pl. V. 1771. **2.** Mas *Pom. Gen.* **6**:101, fig. 435. 1880.

The Horticultural Society of Angers received some grafts of this variety in 1836 with the information that it originated in the small village of Sierentz, near Mulhausen, Alsace. Knoop, however, describing it in 1771 under the name of *Citron de Sirène* gives it various Flemish synonyms. Fruit small to medium, turbinate or globular-ovate and slightly pyriform, bright yellow or greenish-yellow, dotted with russet and some brownish-fawn markings passing often to olive-brown and slightly vermilion on the side of the sun; flesh white, coarse, breaking, juicy, sugary, acid, savory; second; July and Aug.

Citronnée. 1. Leroy *Dict. Pom.* **1**:568, fig. 1867. **2.** *Guide Prat.* 71, 245. 1895.

This is practically identical with the pear found by Diel and described by him in 1806 under the name *Rothbackige Citronatbirne*. Fruit below medium, globular, bossed at summit, lemon-yellow, dotted with russet and washed on the sun-exposed side with delicate rose; flesh white, fine, dense, very melting, gritty about the core; juice very abundant, sugary, slightly acid, aromatic, savory, leaving a slight flavor of musk; first; Sept.

Clap. 1. Downing *Fr. Trees Am.* 720. 1869.

Originated by Captain William Clap of Massachusetts. Fruit below medium, acute-pyriform, yellowish-green, with brownish blush in the sun; flesh whitish, buttery, juicy, aromatic; Aug.

Clara. 1. *Mag. Hort.* **8**:58. 1842. **2.** *Ibid.* **16**:295. 1850. **3.** Downing *Fr. Trees Am.* 720. 1869.

A Van Mons seedling placed on the list of "Rejected Fruits" at the second session of the Congress of Fruit Growers at New York in 1850. Fruit medium, long, light green, with some russet spots and patches; flesh white, juicy, good, rather too acid; Oct.

Clara Durieux. 1. Mas *Pom. Gen.* **1**:149, fig. 75. 1872. **2.** *Guide Prat.* 108. 1876.

A seedling of Von Mons. Fruit medium, globular, bright green, with dots of darker green, becoming golden-yellow on maturity, washed with red on the sun-kissed side; flesh whitish, rather fine, melting, juicy, sweet, vinous, perfumed; Oct.

Claretenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:195. 1856.

Northern Germany, first reported in 1773. Fruit large, roundish-turbinate, often unequal sides, bossed, yellow, somewhat blushed; flesh granular, sweet and astringent; good; Sept.

Clark. 1. *Mag. Hort.* **19**:518. 1853. **2.** *Ibid.* **24**:126. 1858.

Origin uncertain; cultivated in Hartford, Conn. The pear "bears a good deal of resemblance in form, texture, flavor and seed to the *Autumn Bergamot* of Col. Carr." Fruit above medium, short-pyriform or turbinate, as broad as it is high; flesh rather coarse, very tender, melting, juicy, with a refreshing and agreeable flavor; desirable; Oct.

Clarksville. 1. *Am. Pom. Soc. Rpt.* 134. 1920.

Original tree about 90 years old. Introduced by

Sunny Slope Nursery, Hannibal, Mo.

Claude Blanchet. 1. *Guide Prat.* 54. 1895. **2.** Baltet *Cult. Fr.* 405. 1908.

A gain of Claude Blanchet, Vienne, Fr., and listed in the *Journal de la Societe Nationale et Centrale d'Horticulture de France* in 1883. Fruit small or medium; ovate-obtuse and rather swelled, green washed with yellow; flesh whitish, semi-fine, juicy, sugary and acidulous; good; Aug.

Claude Mollet. 1. *Guide Prat.* 90. 1876.

Fruit large, oval-shortened; first; Aug. and Sept.

Clay. 1. *Mass. Hort. Soc. Rpt.* 5. 1843. **2.** *Mag. Hort.* **11**:437. 1845. **3.** Downing. *Fr. Trees Am.* 721. 1869.

One of Governor Edwards' seedlings, exhibited before the Massachusetts Horticultural Society in 1843. Fruit medium, roundish-oblate, sometimes pyriform, waxen-yellow, blushed with crimson and sprinkled with brown or crimson dots; flesh whitish, rather coarse, granular, juicy, sweet; good; Oct.

Clémence de Lavours. 1. Mas *Le Verger* **1**:71, fig. 42. 1866-73.

A wilding found in the Commune of Lavours, Department Ain, Fr. Fruit medium, pyriform, lemon-yellow; flesh melting, perfumed; first; winter.

Clémence van Rumbeck. 1. *Guide Prat.* 62. 1895.

Presumably Dutch. Fruit medium or large, nearly round, maroon-russet on yellow; flesh yellowish, fine, melting; first; Nov. and Dec.

Clément Bivort. 1. Leroy *Dict. Pom.* **1**:569, fig. 1867.

Obtained by Alexandre Bivort, director of the nurseries of the Society Van Mons at Geest-Saint-Rémy, in the gardens of the Company, and first placed on the market in 1858. Fruit medium, globular-oblate, orange-yellow, sprinkled with some gray dots, clouded with fawn especially on the side of the sun; flesh whitish, melting, juicy, sugary, acidulous and sourish, with a strong, agreeable perfume of anis; first; Nov. and Dec.

Clementine. 1. Dochnahl *Führ. Obstkunde* **2**:136. 1856. **2.** *Gard. Chron.* 1038, fig. 1859.

Seedling of Van Mons, 1833. Fruit large, obtuse-pyriform, golden-yellow, with dots of reddish-brown, slightly reddened on side next the sun; flesh white, moderately fine-grained, melting; juice abundant and perfumed; good; Sept.

Clinton. 1. *Mag. Hort.* **8**:60. 1842. **2.** *Ibid.* **17**:263. 1851.

Seedling of Van Mons. Fruit large, light yellow; flesh soft, buttery and good but not high flavored; Nov.

Cloche de Wittenberg. 1. *Guide Prat.* 90. 1876.

Fruit large, turbinate-obovate, dark lemon-yellow, lightly washed with red; flesh breaking; for kitchen use; Oct. and Nov.

Coit Beurré. 1. *Horticulturist* **19**:110, figs. 1, 2. 1864. **2.** Downing *Fr. Trees Am.* 722, fig. 1869.

Raised by Colonel Coit, near Cleveland, O. Fruit medium, obovate inclining to pyriform, yellow, deeply covered with russet, covered with dots which become crimson on exposed side, cheek often crimson; flesh buttery, juicy, spicy, melting, rich,

vinous; very good; Sept. and Oct.

Cole. 1. Budd-Hansen *Am. Hort. Man.* **2**:239. 1903.

Originated at Detroit, Kan., and variously known as *Cole's Seedless*, *Cole's Pear*, *Cole's Coreless* and *Cole's Seedless and Coreless*. Fruit medium, globular approaching acute-pyriform; color lemon-yellow, thickly sprinkled with minute russet dots; stem medium long, stout, inserted in a very small cavity; calyx small, open, in a small, shallow basin; flesh white, a little granular, moderately juicy, sweet, pleasant aroma; good. Often sold as "seedless" but frequently shows seeds.

Cole Winter. 1. *U. S. D. A. Pom. Rpt.* 37. 1895.

Received from Horticultural Gardens, Victoria, Australia, by T. J. Garden, Gardenia, Va. Fruit medium, short, pyriform, having a well-defined suture-like groove running from stem to calyx; color yellow, russeted; stem medium, in a small cavity; calyx large, open; flesh white, tender, melting, juicy, sprightly; very good; autumn.

Collins. 1. *Mag. Hort.* **17**:255, fig. 261. 1851. **2.** *Ibid.* **18**:149. 1852.

Raised from seed of the White Doyenné on the farm of a Mr. Collins in Watertown, Mass., and introduced in 1848. Fruit large, obovate, rather flattened, when ripe greenish-yellow, with a fine blush in the sun and speckled with russet dots; flesh white, fine, brisk, melting, juicy, vinous, sweet; good; Sept. and Oct.

Colmar. 1. Duhamel *Trait. Arb. Fr.* **2**:222, Pl. L. 1768. **2.** Leroy *Dict. Pom.* **1**:572, fig. 1867.

A highly esteemed pear of ancient and probably Belgian origin. Merlet mentions it in 1690 and La

Quintinye in 1730. Fruit above medium, obtuse-pyriform, smooth, pale green changing to yellow-ochre on ripening and sometimes washed with pale red on the side exposed to the sun; flesh yellowish-white, fine, semi-melting, watery, tender, with a rich, sugary flavor; juice very abundant, acidulous, and deliciously perfumed; first; Nov. to Mar.

Colmar d'Alost 1. Leroy *Dict. Pom.* **1**:574, fig. 1867.

Raised from a seed bed made in 1840 by M. Hellinckx, a nurseryman at Alost, Bel. Fruit large, oblong, very obtuse, enlarged on one side, bright green in the shade, yellowish-green on the side exposed to the sun, dotted with brown specks and covered with patches of fawn; flesh white, fine, semi-melting, juicy, gritty at the center, sweet, vinous, acidulous, savory: first; Oct. and Nov.

Colmar d'Arenberg. 1. *Ann. Pom. Belge* **3**:3, fig. 1855. **2.** Leroy *Dict. Pom.* **1**:575, fig. 1867.

Attributed to Van Mons and thought to have originated in 1821. Fruit very large; form rather variable, obovate, uneven and bossed in outline, yellow-ochre on the shaded side and russeted on the exposed face; flesh yellowish-white, semi-melting, juicy, sweet, slightly aromatic; a handsome but coarse pear; Oct.

Colmar Artoisenet. 1. Leroy *Dict. Pom.* **1**:577, fig. 1867.

Found by Simon Bouvier in the garden of M. Artoisenet at Jodoigne, Bel. Fruit medium to above, turbinate-obtuse, greenish-yellow, dotted and marbled with gray-russet on the shady side and entirely stained with fawn on the cheek exposed to the sun; flesh whitish, fine, semi-melting; juice rather wanting, little sugar, delicate; second; Nov.

Colmar d'Automne Nouveau. 1. Leroy *Dict. Pom.* **1**:578, fig. 1867. **2.** Mas *Pom. Gen.* **7**:45, fig. 503. 1881.

Originated in the garden of the Horticultural Society of Angers; first reported in 1851. Fruit above medium, conic-obtuse but sometimes almost cylindrical, russet-gray, lightly and uniformly clouded with orange-yellow; flesh white, fine, melting; juice abundant, sugary and strongly aromatic, occasionally a little acid; first; Sept. and Oct.

Colmar Bretagne. 1. Hogg *Fruit Man.* 549. 1884.

Growing in the gardens of the Caledonian Horticultural Society in Edinburgh, Scot., before 1884. Fruit medium pyramidal, swollen on one side; skin smooth, deep, clear yellow, tinged with green on the shaded side and bright vermilion on the side of the sun, covered all over with small, russety dots; flesh sweet, crisp, juicy and agreeably flavored; dessert fruit; Oct.

Colmar Charni. 1. *Ann. Pom. Belge* **8**:43, fig. 1857. **2.** Leroy *Dict. Pom.* **1**:579, fig. 1867. **3.** Hogg *Fruit Man.* 549. 1884.

In 1854 this ancient pear was introduced into the gardens of the Society of Van Mons at Geest-Saint-Rémy, Bel. Fruit medium, oval, dull yellow, dotted, veined and stained with fawn, with a vermilion blush on the side of the sun; flesh white, very fine, semi-melting, juicy, sweet, vinous, having a delicious aroma; first; Jan. to Mar.

Colmar Daras. 1. *Guide Prat.* 90. 1876. **2.** *Ibid.* 50. 1895.

Obtained by Daras de Naghin of Antwerp, Bel.

Fruit large, long and pyramidal, brilliant lemon-yellow, mottled with fawn; flesh very melting and juicy, very sugary; first; winter.

Colmar Delahaut. 1. *Ann. Pom. Belge* **5**:21, fig. 1857. **2.** Leroy *Dict. Pom.* **1**:581, fig. 1867.

Raised from seed by M. Grégoire, Jodoigne, Bel. Fruit medium, curved-pyriform, rather variable, greenish-yellow in the shade, brownish-yellow on the side of the sun, dots and patches of pale brown-russet; flesh whitish, semi-fine and semi-melting, wanting in juice, sugary, vinous, aromatic; second; Jan.

Colmar Demeester. 1. Leroy *Dict. Pom.* **1**:582, fig. 1867. **2.** Hogg *Fruit Man.* 550. 1884.

A seedling raised by Van Mons. Fruit medium, obtuse-pyriform, somewhat obovate, even and regular in outline, greenish-yellow, rather heavily dotted and with some small patches of brown-russet; flesh yellowish, coarse, semi-melting; juice abundant, sugary, acidulous, with an agreeable if often a rather cloying flavor; a second class dessert pear; Sept. and Oct.

Colmar Dewez. 1. Kenrick *Am. Orch.* 192. 1832. **2.** *Mag. Hort.* **5**:395. 1839.

Originated near Brussels, Bel., about 1825, and in 1839 was shown by R. Manning at the Massachusetts Horticultural Society. Flesh white, tender and very melting; juice abundant, mild, with an agreeable aroma.

Colmar Épine. 1. Mas *Le Verger* **3**:Pt. 2, 99, fig. 146. 1866-73. **2.** Downing *Fr. Trees Am.* 725. 1869.

Beurré Épine. **3.** Leroy *Dict. Pom.* **1**:359, fig. 1867.

Origin uncertain, possibly one of Van Mons' seedlings, distributed by M. Bouvier, Jodoigne, Bel. Fruit above medium, long-obtuse-pyriform, ventriculated in its lower part, symmetrical, pale green changing at maturity to lemon-yellow, mottled with fawn-russet and strongly washed with brownish-russet on the side opposed to the sun; flesh whitish, semi-fine, melting, gritty around the core; juice abundant, vinous and saccharine, with an acidulous flavor; second; Nov.

Colmar d'Été. 1. *Gard. Chron.* 875, 913. 1860. **2.** Leroy *Dict. Pom.* **1**:583, fig. 1867.

Attributed to Van Mons about 1825. Fruit small, obovate or globular-obovate, smooth, shining, greenish-yellow becoming quite yellow when ripe, sprinkled with brown dots, having in some seasons and places a cheek red and almost transparent; flesh yellowish, very melting; juice excessively abundant, of honey sweetness, rich flavor, acidulous, pleasantly aromatic; first; Aug. and Sept.

Colmar Flotow. 1. Mas *Pom. Gen.* **6**:65, fig. 417. 1880. **2.** *Guide Prat.* 79, 246. 1895.

Named by Oberdieck, who received it unnamed from Van Mons. Fruit medium, globular-conic, green, with numerous very small, brown dots changing to dull lemon-yellow on maturity; flesh whitish, semi-fine, buttery; juice plentiful, sweet and delicately perfumed; good; winter.

Colmar-Hirondelles. 1. Mas *Pom. Gen.* **1**:151, fig. 76. 1872.

A product of the Van Mons seed beds, catalogued in 1823. Fruit medium, pyriform and somewhat swelled around the middle, green, speckled with brown dots, changing to bright lemon-yellow on

ripening, the exposed side being blushed with a beautiful red; flesh yellow, semi-fine, semi-melting; juice abundant, sugary, vinous and slightly perfumed; second.

Colmar de Jonghe. 1. Downing *Fr. Trees Am.* 724. 1869. **2.** *Guide Prat.* 72. 1895.

J. de Jonghe of Belgium originated this variety and said of it, "Tree hardy, robust, vigorous and productive, rather upright; young wood nut brown, with a few gray specks." Fruit medium, pyriform, bright yellowish-green, washed with brown; flesh yellowish, very fine, semi-melting, juicy, perfumed; first; Sept. and Oct.

Colmar de Mars. 1. Leroy *Dict. Pom.* **1**:586, fig. 1867. **2.** Mas *Pom. Gen.* **4**:139, fig. 262. 1879.

Grown from seed by M. Nerad, Jr., nurseryman at Lyons, Fr., in 1853. Fruit medium, globular-ovate, golden-yellow, dotted, veined and slightly rayed with russet; flesh yellowish, fine, firm though melting, scented; juice abundant, refreshing, sugary, savory and having a slight taste of musk; first; May.

Colmar du Mortier. 1. *Guide Prat.* 89. 1895.

Fruit medium, ovate, bright lemon-yellow; flesh salmon, very fine, very melting, very sugary; first; Feb.

Colmar Navez. 1. Leroy *Dict. Pom.* **1**:586, fig. 1867. **2.** Hogg *Fruit Man.* 551. 1884.

Raised from seed by M. Bouvier, Jodoigne, Bel. The first fruits were yielded in 1837. Fruit large, globular-obovate, yellowish-green, slightly dotted with gray, clouded with brown-russet, and often washed with brick-red on the side exposed to the sun; flesh white, rather fine, semi-melting; juice

sufficient, sugary, acidulous, savory, having an aroma suggestive of musk and anis; first; Oct.

Colmar Neill. 1. Downing *Fr. Trees Am.* 821. 1869. **2.** Hogg *Fruit Man.* 551. 1884.

From a seed bed made by Van Mons in 1815. Fruit very large, obovate, smooth, glossy, pale yellow, sprinkled all over with russety dots and stained with some markings of cinnamon-colored russet; flesh white, buttery, sweet, juicy, vinous and of a musky flavor; good to very good; Oct.

Colmar Sirand. 1. Mas *Pom. Gen.* **7**:178, fig. 570. 1881. **2.** *Guide Prat.* 63. 1895.

From a seed bed of Winter Nelis made in 1856 by M. Pariset, Curciat-Dongalon, Department Ain, Fr. Fruit medium, globular-pyriform; skin thin and tender, pale green, with brown dots, yellow when ripe; flesh slightly yellow, fine, melting, having a decided scent of musk and rose; first; Dec.

Colmar Van Mons. 1. Kenrick *Am. Orch.* 192. 1832. **2.** Hogg *Fruit Man.* 551. 1884.

Colmar des Invalides. **3.** Leroy *Dict. Pom.* **1**:584, fig. 1867. **4.** Downing *Fr. Trees Am.* 725. 1890.

Raised at Enghien, Bel., in 1808 by M. Duquesne, a friend of Van Mons. Fruit medium, globular-turbinate, irregular; skin thick, dark green changing to yellow-green and washed with red on the side of the sun; flesh yellowish, buttery and melting, gritty about the core; juice watery; a cooking pear; Nov. to Jan.

Colmart. 1. Coxe *Cult. Fr. Trees* 200. 1817. **2.** Ragan *Nom. Pear, B. P. I. Bul.* **126**:83. 1908.

An old variety resembling Bon-Chrétien d'Hiver.

Fruit large, obovate-obtuse-pyriform; stalk planted in a deep hollow, bossed; skin smooth, green, dotted with brown spots, inclines to yellow on maturity; flesh yellowish, very fine, buttery and melting; juice very sweet and sprightly; Jan. to Apr.

Coloma Carmeliterbirne. 1. Dochnahl *Führ Obstkunde* **2**:12. 1856. **2.** Mathieu *Nom. Pom.* 197. 1889.

One of Count Coloma's Belgian seedlings, 1828. Fruit medium, conic, covered all over with dark brown-russet, with a dark blush when ripe; good for transportation; Dec.

Colorado Seedless. 1. Stark Bros. *Cat.* 30. 1913.

Originated near Paonia, Col. Tree vigorous, healthy, hardy, productive; fruit large, obovate-obtuse-pyriform; skin smooth, dull greenish-yellow, with green and russet dots and a distinct reddish blush; core small; seeds few, usually abortive; flesh yellowish-white, rather fine-grained, tender, melting, juicy, aromatic; good; Oct.

Colorée de Juillet. 1. Mas *Le Verger* **2**:43, fig. 20. 1866-73. **2.** Leroy *Dict. Pom.* **1**:589, fig. 1867.

Obtained by M. Boisbunel, Rouen, Fr., about 1857. Fruit medium, ovate, regular; skin oily, bright yellow, dotted with gray and dark red, vermilion on the side next the sun; flesh whitish, semi-fine and semi-breaking; juice never abundant, sweetish, wanting in sugar and perfume; second; July.

Columbia. 1. Downing *Fr. Trees Am.* 725. 1869. **2.** Hogg *Fruit Man.* 552. 1884.

The original tree grew on the farm of a Mr. Casser, Westchester County, N. Y. Fruit large, oblong-obovate, smooth, fine, pale green or golden-

yellow when ripe, with sometimes a soft orange tinge on its cheek and dotted with small, gray dots; flesh white, buttery, melting, sweet, perfumed; hardly good; Nov. to Jan.

Commandant Belaieff. 1. *Rev. Hort.* 463. 1906.

Placed on the market as a new pear by M. Bruant, Poitiers, Fr., in 1906. Fruit large, wrinkled and reddened all over; flesh rather fine, juicy, very sugary, strongly scented; first; end of Dec.

Commissaire Delmotte. 1. *Ann. Pom. Belge* **5**:15, fig. 1857. **2.** Leroy *Dict. Pom.* **1**:591, fig. 1867.

Gained by Xavier Grégoire, Jodoigne, Bel.; ripened first in 1852 or '53. Fruit medium and above, globular-turbinate-obtuse, slightly bossed; skin wrinkled, lemon-yellow, dotted and veined with fawn, shaded with gray-russet and with numerous very small, blackish-gray stains; flesh yellowish, coarse, semi-melting, gritty at core; juice abundant, sugary, acid, with a delicate scent; second; Nov. to Jan.

Commodore. 1. *Mag. Hort.* **8**:60. 1842. **2.** Downing *Fr. Trees Am.* 570. 1857.

Van Mons seedling No. 1218. Fruit medium, very regular, obovate, round and full at the crown, yellow, with patches of red and russet; flesh buttery, melting, rich, sweet and good; Oct. and Nov.

Compotbirne. 1. Dochnahl *Führ. Obstkunde* **2**:164. 1856. **2.** Mathieu *Nom. Pom.* 198. 1889.

Of French origin, attributed to 1675. Fruit medium, pyriform, pale yellow, entirely covered with fine, cinnamon-colored russet, becoming a dark golden green on ripening; good; Feb.

Compote d'Été. 1. Mas *Pom. Gen.* **5**:107, fig. 342. 1880.

Mas states he received this variety in France from T. Rivers, Sawbridgeworth, Eng. Fruit large, ovate, bright green, speckled with brown dots, turning to pale yellow on ripening; flesh white, rather fine, semi-buttery; juice scarcely sufficient but sugary, a little acid, slightly perfumed.

Comprette. 1. *Horticulturist* **2**:174. 1847. **2.** Downing *Fr. Trees Am.* 726. 1869. **3.** Hogg *Fruit Man.* 552. 1884.

A Flemish seedling. It was exhibited by M. P. Wilder, President of the Massachusetts Horticultural Society at the Society's meeting in 1844. Fruit small, obtuse-pyriform, smooth, greenish-yellow, becoming lemon-yellow, strewed with patches and dots of russet; flesh white, buttery, melting, juicy, sweet; not of high merit; Nov.

Comstock. 1. Elliott *Fr. Book* 393. 1859. **2.** Downing *Fr. Trees Am.* 727. 1869.

An American variety which originated in Dutchess County, N. Y. Fruit medium, obovate, smooth and glossy, bright yellow, with crimson cheek; flesh white, crisp and when well ripened has a sweet and sprightly flavor; a coarse, cooking pear; Nov. to Jan.

Comte Canal de Malabaila. 1. Mas *Pom. Gen.* **5**:139, fig. 358. 1880.

Origin uncertain, but probably German. Fruit rather large, globular-ovate or nearly conic, bright green, with brown dots, changing to lemon-yellow and rather golden on the side of the sun; flesh white, fine, buttery, sufficient sweet juice, agreeable; first;

through the winter.

Comte de Chambord. 1. *Guide Prat.* 110. 1876. **2.** *Cat. Cong. Pom. France* 215, fig. 1906.

Found at Nantes, Fr., towards the end of the nineteenth century. Fruit medium, turbinate-obtuse, enlarged at the summit, narrowed at base, yellow; flesh white, very fine, very melting and juicy, sugary and perfumed; very good; Sept. and Oct.

Comte d'Egmont. 1. Hogg *Fruit Man.* 552. 1884.

Fruit small, obovate or turbinate, lemon-yellow, entirely covered with dots of a fine reddish-brown russet, which in some parts are so dense as to form an irregular patch particularly around the calyx; flesh yellow, melting, rather gritty, very rich, sugary, delicious; first; Nov.

Comte de Flandres. 1. Leroy *Dict. Pom.* **1**:592, fig. 1867. **2.** Downing *Fr. Trees Am.* 727. 1869. **3.** Hogg *Fruit Man.* 552. 1884.

A seedling of Van Mons though it did not bear fruit till 1843. Fruit very large, obtuse-pyriform, mammillate at each end, rough to the touch, yellowish-green, heavily covered with cinnamon-colored russet; flesh yellowish-white, fine, extremely melting, juicy, perfumed, sugary, quite devoid of seeds; of the highest merit; Oct. to Dec.

Comte de Lambertye. 1. *Rev. Hort.* 542. 1894. **2.** *Guide Prat.* 89. 1895.

From seed of the Beurré Superfin sown by M. Tourasse; exhibited at Paris and Lyons in 1894, and obtained from the Pomological Congress of Lyons a first class certificate. Fruit globular-turbinate, blonde or light colored, dusted over with golden russet; flesh fine, melting, juicy, sprightly; Sept. and Oct.

Comte Lelieur. 1. *Guide Prat.* 47. 1895. **2.** Baltet *Cult. Fr.* 305, fig. 189. 1908.

Gained by Ernest Baltet, nurseryman at Troyes, Fr., in 1865. Fruit rather large, globular-oval, yellow, dotted with fawn and washed with carmine; flesh fine, very juicy, sugary, with a delicious aroma; first; Sept. and Oct.

Comte de Meladore. 1. *Mass. Hort. Soc. Rpt.* 40. 1871.

One of a collection of forty-two new varieties of pears exhibited by Marshall P. Wilder at the Exhibition of the Massachusetts Horticultural Society in 1871. Fruit medium, pyriform, yellow, with reddened cheek; flesh white, fine-grained, tolerably juicy.

Comte de Morny. 1. *Mass. Hort. Soc. Rpt.* 40. 1871.

Exhibited by Marshall P. Wilder among a collection of 42 new varieties of pears at the Exhibition of the Massachusetts Horticultural Society in 1871. Fruit medium, short-acute-pyriform, yellowish, with a red cheek a little obscured with russet; flesh yellowish-white, juicy, sweet and high flavored.

Comte de Paris. 1. Downing *Fr. Trees Am.* 727. 1869. **2.** Hogg *Fruit Man.* 553. 1884.

A Van Mons seedling. Fruit medium, oblong-obovate-obtuse, yellowish-green thickly dotted all over with large, gray-russet dots and patches, with an orange blush next the sun; flesh yellowish, juicy, brisk, sweet, aromatic; good; Oct. to Dec.

Comtesse d'Alost. 1. Leroy *Dict. Pom.* **1**:594, fig. 1867.

Origin uncertain, but it was being cultivated in France in 1840 and in Germany in 1854. Fruit medium, long-conic, rough to the touch, russeted, finely dotted with gray and partially covered with large, longitudinal stains; flesh yellowish-white, close-grained, very melting; juice very abundant, sugary, acidulous and having a very aromatic savor; first; Nov.

Comtesse de Chambord. 1. *Ann. Pom. Belge* **7**:13, fig. 1857. **2.** Leroy *Dict. Pom.* **1**:596, fig. 1867.

From seeds of Winter Nelis sown in 1847 by President Parigot, Poitiers, Depart. Vienne, Fr., and fruited for the first time in 1855. Fruit medium and above, obovate-obtuse-pyriform; skin rough, wrinkled, very bright green, sprinkled with dots of greenish-gray, brilliant yellow on the side touched by the sun, and sometimes washed with bright red; flesh yellowish-white, semi-fine, very melting, buttery, gritty at core; juice most abundant, sugary, refreshing, vinous and delicately aromatic; first; Nov. and Dec.

Comtesse Clara Frijs. 1. *Guide Prat.* 91. 1876. **2.** Mathieu *Nom. Pom.* 198. 1889.

Danish. Fruit medium to large, pale yellow, dotted; flesh white, melting, juicy, sugary, perfumed; good; Aug.

Comtesse de Grailly. 1. Mas *Pom. Gen.* **1**:165, fig. 83. 1872.

Introduced by Eugène des Nouhes, near Pouzanges, Vendée, Fr., in 1867. Fruit medium, globular-conic, flattened at the two poles, very bright green changing to a beautiful lemon-yellow on ripening, golden on the side of the sun, sprinkled

with numerous fawn dots; flesh white, fine, melting, rather granular at the core, with abundant sweet juice and a delicate perfume; Oct. and Nov.

Comtesse de Paris. 1. *Rev. Hort.* 242, fig. 89. 1898. **2.** *Cat. Cong. Pom. France* 218, fig. 1906.

Obtained by W. Fourcine, Dreux, Fr., about 1893. Fruit medium, long-pyriform, bent toward stem, greenish-yellow, tinted with fawn around the stem and calyx and dots of russet over the rest of the skin; flesh white, semi-fine, melting, extremely juicy, very sugary, mild flavor; good; Dec.

Condorcet. 1. Leroy *Dict. Pom.* **1**:597, fig. 1867.

Of unknown origin; named after the Marquis of Condorcet. Fruit below medium or small, turbinate, acute and undulating at base, but sometimes somewhat obtuse and mammillate, always mammillate at crown, bright yellow, dotted, streaked and patched with russet; flesh white, semi-fine, melting, slightly gritty at core; juice enough, sugary, aromatic, rather savory; second; Sept.

Conference. 1. Nicholson *Dict. Gard.* **3**:51. 1900. **2.** *Garden* **62**:367, fig. 1902. **3.** Bunyard *Handb. Hardy Fr.* 166. 1920.

Named after the National (British) Pear Conference of 1885. Originated by Rivers, the English pomologist, and introduced in 1894. It is now grown in enormous quantities in England for market purposes and is said to be one of the most regular cropping varieties. Tree a moderate grower, very productive. Fruit medium to above, slightly long-gourd-shaped, even, smooth, shining green, dotted with russet; stem long, woody; calyx open in a shallow basin; flesh pale yellow, slight pinkish tinge, melting, very juicy, sweet, good; Oct. and Nov.

Congrès de Gand. 1. *Guide Prat.* 73. 1895.

A Belgian variety distributed by Daras de Naghin of Antwerp. Fruit medium, pyriform, fawn color; flesh white, melting; good; Oct.

Congrès Pomologique. 1. Leroy *Dict. Pom.* **1**:598, fig. 1867. **2.** Downing *Fr. Trees. Am.* 728. 1869.

Raised by Boisbunel, Rouen, 1854. Fruit above medium, turbinate, globular and bossed; skin rough, olive-yellow, slightly dotted with brown, more or less clouded with pale red on the cheek next the sun; flesh yellowish-white, fine, melting, juicy, sugary, acidulous, having a pleasant flavor of musk; first; Nov. and Dec.

Conkleton. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:85. 1908.

Raised in Texas from seed of Le Conte. Cataloged as “new” in 1902.

Conklin. 1. Downing *Fr. Trees Am.* 728. 1869.

Originated in Westchester County, N. Y. Fruit medium large, oblate-obtuse-pyriform, greenish-yellow sprinkled with green and brown dots, russeted; flesh yellowish, coarse, half melting, sweet, juicy; good; Sept.

Connecticut. 1. Field *Pear Cult.* 272. 1858.

Raised in Connecticut. Fruit medium, oblate, yellowish-green; quality poor.

Conseiller de Hollande. 1. Hogg *Fruit Man.* 554. 1884.

Fruit large, pyramidal, golden-yellow, much covered with rather rough, cinnamon-colored russet, with a warm orange glow on the sun-exposed side,

with some streaks of crimson, and some green specks and large dots on the shaded side; flesh firm and crisp, yellowish, not melting, deficient in juice, sweet and with a musky aroma; handsome but third rate; Oct.

Conseiller Ranwez. 1. Leroy *Dict. Pom.* **1**:599, fig. 1867. **2.** Hogg *Fruit Man.* 554. 1884.

Raised by Van Mons; it fruited in 1841. Fruit large, pyramidal, bright green, covered with fawn dots, becoming yellow within a day or two of its ripening; flesh fine-grained, half-buttery, tender; juice plentiful, sugary, vinous and delicately perfumed; good but variable; Oct. and Nov.

Constant Claes. 1. *Guide Prat.* 108, 260. 1876. **2.** Mas *Pom. Gen.* **7**:91, fig. 526. 1881.

A Belgian variety distributed in 1863 by de Jonghe. Fruit medium or rather large, conic-pyriform; skin thin and slender, pale green, washed on ripening with light orange-red; flesh white, fine, melting; juice abundant, sweet, vinous and pleasantly scented; first; Sept.

Cooke. 1. Downing *Fr. Trees Am.* 484. 1857. **2.** Elliott *Fr. Book* 372. 1859.

Place of origin, King George County, Va. Introduced by H. R. Roby, Fredericksburg, Va. Fruit rather large, irregularly pyramidal, pale-yellow; flesh juicy, buttery, melting, sweet, rich, vinous; mid-season.

Copia. 1. McIntosh *Bk. Gard.* **2**:455. 1855. **2.** Downing *Fr. Trees Am.* 571. 1857. **3.** *Ibid.* 729. 1869.

Originated about the middle of last century at Philadelphia. Fruit large, yellow, with specks of

russet, broad-turbinate; flesh sugary, rather coarse, somewhat resembling the Beurré Diel in flavor; good; Sept. and Oct.

Cornélie Daras. 1. *Guide Prat.* 89. 1895.

Distributed by Daras de Naghin of Antwerp, Bel. Fruit medium, globular, lemon-yellow; flesh fine, melting, juicy, sugary and well perfumed; Nov. and Dec.

Cornemuse. 1. *Gard. Chron.* 335. 1862. **2.** Leroy *Dict. Pom.* **1**:602, fig. 1867.

This is one of the most ancient French pears and was cultivated in 1628 at Orléans, Le Lectier tells, under the name *Chair de Fille* but a little later under that of Cornemuse, it being described by Claude Saint-Etienne in 1670. Fruit below medium, long, somewhat gourd-shaped, narrow and undulating towards the stem, golden-yellow, shining, speckled with gray dots on the shaded side and with dull yellow on side exposed, and also extensively washed with carmine on the same side; flesh yellowish-white, fine, semi-melting; juice abundant, acidulous, sugary and aromatic; first; July.

Cornewell. 1. *Am. Pom. Soc. Rpt.* 59. 1858. **2.** *Mag. Hort.* **26**:64. 1860.

A variety of unknown origin which about 1830-5 was disseminated by the "Vermont grafters" who travelled the country setting grafts for those who desired. Fruit medium, globular, greenish-yellow, much russeted, and with many dark and purple specks; flesh yellowish-white, tender, melting, juicy, vinous, spicy and rather astringent; good; Sept.

Coter. 1. *Mag. Hort.* **12**:149. 1846. **2.** Downing *Fr. Trees Am.* 729. 1869.

One of Van Mons' seedlings. Fruit medium, varying from obtuse to acute-pyriform, light green or yellowish with russet dots and patches; flesh whitish, tender, juicy, vinous; good; Oct. to Dec.

Coule-Soif de Cerutti. 1. Mas *Pom. Gen.* **5**:15, fig. 296. 1880.

Origin unknown but was named after a druggist named Cerutti of Camburg, Saxe-Meiningen, Ger., who propagated it in the environs of that village. Fruit medium, turbinate, very bright green, speckled with dots of bright brown, changing to yellow on ripening; flesh whitish, a little transparent, coarse, semi-melting; juice very plentiful, sugary, refreshing; good; Sept.

Courte-queue d'Automne. 1. Leroy *Dict. Pom.* **1**:603, fig. 1867. **2.** *Guide Prat.* 91. 1876.

Raised by Leroy in his nurseries at Angers, it bore its first fruit in 1863. Fruit medium, globular, irregular, one side usually less swelled than the other, bright green, dotted with brown, much stained with russet and blushed with tender rose on the exposed side; flesh white, very fine, semi-melting; juice abundant, sugary, having a delicate scent and a most agreeable tartish flavor; first; Oct.

Courte-queue d'Hiver. 1. *Guide Prat.* 110. 260. 1876. **2.** *Ibid.* 66. 1895.

Obtained by Boisbunel, Rouen, Fr. Fruit large, gray; flesh fine, very melting, sugary and perfumed, slightly musky; Mar. to May.

Cousin Blanc. 1. Mas *Pom. Gen.* **5**:133, fig. 355. 1880.

Of Flemish origin. Cataloged by M. Jahn, 1864. Fruit medium, globular-conic, very pale green,

sprinkled with very fine points of fawn; flesh white, slightly tinted with yellow, semi-fine and melting, fairly full of richly saccharine juice having a fresh and pleasant flavor of almond.

Couteau. 1. Parkinson *Par. Ter.* 593. 1629.

Mentioned by John Parkinson in 1629 in a list of pears grown in England at that time as a pear that is "neither good one way nor other."

Craig. 1. *Ohio Hort. Soc. Rpt.* 177, fig. 1885-86.

Early Butter of Indiana. **2.** Hooper *W. Fr. Book* 154. 1857.

One of several seedling pear trees brought from Vincennes, Ind., by John Wright and planted at Vevay, Ind., in 1804. Fruit very small, globular-acute-pyriform, pale lemon-yellow, with faint indication of blush and many minute, russet dots; flesh white, juicy, rather firm, pleasant; fair, becomes mealy when fully ripe; June.

Craig Favourite. 1. Hogg *Fruit Man.* 554. 1884. **2.** Mathieu *Nom. Pom.* 199. 1889.

A valuable autumn dessert pear in Scotland; raised in the neighborhood of Perth, for which climate it is admirably adapted. Fruit medium, obovate-turbinate, yellowish-green in the shade, almost entirely covered with thin russet which is again covered with dots and patches of coarser russet and next the sun dull red, streaked with livelier red, mottled with orange and thickly strewed with large, gray-russety dots; flesh white, semi-buttery, juicy, sugary, perfumed; dessert; Sept.

Crassane. 1. Duhamel *Trait. Arb. Fr.* **2**:166, Pl. XXII. 1768. **2.** Downing *Fr. Trees Am.* 728. 1869.

Bergamotte Crassane. **3.** *Ann. Pom. Belge* **2**:61, fig. 1854. **4.** Leroy *Dict. Pom.* **1**:231, fig. 1867.

An ancient pear of obscure origin. In the middle of the seventeenth century it was introduced for cultivation in France by La Quintinye, gardener to King Louis XIV. It appears to have derived its name from the Latin word *crassus* which signifies thick. Some authorities have suggested it was named after the celebrated Roman Consul Marcus Lucinius Crassus who, with Julius Caesar and Pompey, formed the first triumvirate, and who died 53 B.C. The balance of authority is in favor of its having had a French origin. By Belgian and some French and German writers it is known as the *Bergamotte Crassane*. Fruit medium and above, globular, bossed, flattened at extremities, bright greenish-yellow, veined and dotted with fawn; flesh buttery, melting, tender, of a rich sugary flavor and perfume; a dessert pear of formerly high reputation but rather superseded; Oct. to Dec.

Crassane Libotton. 1. Mas *Pom. Gen.* **1**:13, fig. 7. 1872.

According to the catalog of Van Mons this is a gain of a M. Libotton and is probably Belgian. Fruit small, almost a globe, depressed at both poles; skin thick, intense green, dotted with black spots, sometimes blushed on ripening; flesh white, semi-fine and melting, sweet, vinous, agreeably perfumed; suitable for large orchards; Sept. and Oct.

Crassane du Mortier. 1. *Guide Prat.* 77. 1895.

Obtained by B. C. Mortier in France. Fruit rather large, turbinate, yellow marked with green; flesh very melting and juicy; first; Nov.

Crawford. 1. Downing *Fr. Trees Am.* 335. 1845. **2.**

Ibid. 729. 1869. **3.** Bunyard-Thomas *Fr. Gard.* 139. 1908.

Chalk. **4.** Bunyard *Handb. Hardy Fr.* 163. 1920.

This tree, probably of Scotch origin, grows to a large size in the orchards of Kent, Eng., and is often planted on the windy sides of plantations as a protection to other trees. Tree stout, remarkably productive. Fruit below medium, obovate, pale green, with faintest red blush; stem stout, medium short, fleshy; calyx open, in a shallow basin; flesh nearly white, mealy, sweet, juicy; flavor nil; Aug.

Crede Kegelförmige Zuckerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:48. 1856.

A German variety cultivated in Hesse and Franconia in 1828. Fruit medium, conic, covered with cinnamon-russet, somewhat blushed; flesh granular, sweet, with an agreeable cinnamon flavor; good; Sept.

Crede Sommerrusselet. 1. Dochnahl *Führ. Obstkunde* **2**:47. 1856.

Reported from Upper Hesse, Ger., in 1833. Fruit small, pyriform, light yellow, blushed with light red; flesh soft, aromatic; very fruitful, excellent; Sept.

Crisco. 1. *U. S. D. A. Rpt.* 288. 1893.

A seedling of Seckel raised in North Carolina by Robert Crisco. Fruit roundish, below medium in size, greenish-yellow, nearly covered with russet; dots numerous; calyx small, closed, in a moderately deep basin; stem medium, stout, fleshy at base; cavity small; flesh greenish-white, fine, juicy, mild subacid, almost sweet; good to very good.

Črnivka. 1. Löschnig *Mostbirnen* 10, fig. 1913.

A Russian wild pear. Fruit small, globular, rather acute toward stalk, yellowish-green, with some brown-russet; flesh white, agreeable; a good wild pear; Sept.

Crocker. 1. *U. S. D. A. Yearbook*, 497, Pl. LX. 1905.

Originated in an orchard planted by gold miners near Loomis, Cal., about 1850 and known locally as *Crocker Bartlett*. Fruit medium, oblong-obovate-pyriform, somewhat angular, golden-yellow, netted and russeted; stem medium to long, slender, obliquely inserted; calyx small, closed, in a deep, abrupt basin; flesh yellowish, buttery, juicy, mild subacid to sweet; very good; Jan. to Mar.

Croft Castle. 1. *Mag. Hort.* **8**:60. 1842. **2.** *Ibid.* **13**:154. 1847. **3.** Mas *Le Verger* **3**:Pt. 2, 121, fig. 157. 1866-73.

Raised by T. A. Knight, former President of the London Horticultural Society. Fruit medium, globular at the stalk end, greenish-yellow, covered with large, brown dots and russet markings; flesh whitish, a little gritty but melting, juicy, rich, sugary, and perfumed; an excellent dessert pear; Oct.

Cross. 1. *Mag. Hort.* **7**:132, fig. 8. 1841. **2.** *Ibid.* **20**:138. 1854.

Originated with a Mr. Cross, Newburyport, Mass. Fruit medium, globular-ovate, smooth, deep yellow, red on the sunny side, covered with russet dots, patches of russet around the eye; flesh yellowish-white, tender, juicy, of a rich, spicy flavor; a handsome and excellent fruit; Dec.

Crouch. 1. Downing *Fr. Trees Am.* 730. 1869.

Originated at Colchester, Conn. Fruit below medium, globular, inclining to oblate, pale yellow,

netted and patched with russet, many russet dots; flesh whitish, juicy, melting, sweet, pleasant; good; Sept.

Crow. 1. John S. Kerr *Cal.* 11. 1898.

Described by John S. Kerr, Sherman, Tex., as new in his catalog of 1898. Fruit said to be like Bartlett in shape and color; finest flavor; Sept.

Cullem. 1. Mas *Pom. Gen.* **4**:165, fig. 275. 1879.

From Van Mons. Fruit medium, pyriform-ovate, tender, green, dotted with fine specks of brown-fawn passing to pale whitish-yellow on ripening, with the cheek exposed to the sun blushed with red and golden hues; flesh yellowish-white, rather transparent, firm and yet melting; abundant juice with flavor recalling that of the old White Doyenné; good in quality, but a poor bearer; Oct. and Nov.

Cumberland. 1. Kenrick *Am. Orch.* 168. 1832. **2.** *Mag. Hort.* **26**:508. 1860. **3.** Leroy *Dict. Pom.* **1**:608, figs. 1867. **4.** Downing *Fr. Trees Am.* 730. 1869.

Alexandre Bivort and M. de Jonghe declared that this variety was one of Van Mons' seedlings while Downing, Kenrick and Manning affirmed it to be a native of Cumberland, R. I. The conflicting opinion is explained by the fact that the *Cumberland* of the first parties is really *Henkel*. Fruit large, obovate-pyriform, pale yellow on the shaded side and greenish-yellow on the side of the sun, dotted with gray-russet and having some russet patches; flesh white, semi-fine, dense, melting, very juicy, sugary, acidulous, rather pleasantly flavored, slightly perfumed; second; Sept.

Curé d'Oleghem. 1. Leroy *Dict. Pom.* **1**:613, fig. 1867. **2.** Mas *Pom. Gen.* **4**:171, fig. 278. 1879.

Probably of Belgian origin, having been described by Bivort in 1852 and placed in the General List of fruits cultivated in the garden of the Society of Van Mons in 1857. Fruit small, globular, bossed, larger on one side than on the other, greenish-yellow, dotted all over with russet and extensively washed with the same around the stem; flesh white, fine, melting, gritty at center; juice scanty, little sugar, no perfume, very acid; third; Oct.

Cushing. 1. Prince *Pom. Man.* **1**:144. 1832. **2.** Downing *Fr. Trees Am.* 730. 1869.

A native pear which originated on the farm of Col. Washington Cushing, Hingham, Mass. It was introduced to notice at the first annual show of the Massachusetts Horticultural Society in 1829. Fruit medium, somewhat variable according to cultivation and soil, obovate-obtuse, light greenish-yellow, sometimes blushed with dull red on the sunny side and sprinkled all over with russety dots; flesh fine, white, melting, juicy, agreeably sprightly, rich; very good, among the best autumn pears; Sept.

Czernowes. 1. Mas *Pom. Gen.* **7**:17, fig. 489. 1881.

Of unknown origin. Fruit medium, turbinate-obovate or pyriform-obovate, often bossed; when ripe is a brilliant lemon-yellow, with some dots except on the side of the sun which is tinged with light orange-red; flesh white, fine, buttery, melting, with abundant sugary juice, slightly musky, agreeable; first; Sept.

D'Amboise. 1. Decaisne & Naudin *Man. Amat. Jard.* **4**:464.

Fruit medium, oblate or turbinate, greenish-yellow, washed with very bright red, marked with brown around the stem; flesh very white, sweet,

without scent.

D'Arad. 1. Mas *Pom. Gen.* **5**:187, fig. 382. 1880.

A Hungarian variety; probably originated in the County of Arad in the west of Transylvania. Fruit medium, an almost perfect ellipsoid; skin rather thick, water-green, often nearly covered with brown-russet; flesh yellowish, semi-fine, buttery, melting, full of richly saccharine juice, vinous and perfumed; good; Sept.

D'Auch. 1. Lindley *Guide Orch. Gard.* 397. 1831. **2.** Decaisne & Naudin *Man. Amat. Jard.* **4**:473.

This pear greatly resembles *Colmar* in almost every respect and has often been confused with it. It is, however, more full next the stalk and arrives at maturity somewhat later and its flesh has a higher flavor. D'Auch was introduced into England before 1817 by the Duke of Northumberland. Fruit very large, long, bossed, irregular, obtuse; skin a lively yellow washed with orange-red; flesh breaking, sweet; not high in quality.

D'Œuf. 1. Duhamel *Trait Arb. Fr.* **2**:157. 1768. **2.** Leroy *Dict. Pom.* **2**:470, fig. 1869. **3.** *Guide Prat.* 55, 256. 1895.

A Swiss pear largely grown in the neighborhood of Basle. The botanist Valerius Cordus described it in 1561. Fruit small, oval, greenish-yellow, strewed with gray-russet dots, more or less tinged with red on the side of the sun; flesh white and semi-fine, semi-breaking or melting, rich, sugary, musky; juice abundant; second; Aug.

Daimyo. 1. *W. N. Y. Hort. Soc. Rpt.* 129. 1888. **2.** *Guide Prat.* 105. 1895.

A Japanese variety. Fruit medium, roundish-

pyriform, clear yellow with minute pale or brownish dots; stem long, curved, slender, set in a slight depression; calyx open, in a shallow basin; flesh white, coarse, crisp; poor; Oct. and Nov.

Dallas. 1. *Mag. Hort.* **11**:252. 1845. **2.** Downing *Fr. Trees Am.* 730. 1869.

In 1843 this, one of Governor Edwards' seedlings raised at New Haven, Conn., was exhibited to the Massachusetts Horticultural Society. Fruit medium, obovate-obtuse-pyriform, dull yellow, thickly interlaced with cinnamon-russet sprinkled with crimson and russet dots; flesh yellowish-white, fine, melting, buttery, juicy, aromatic; good; Oct. to Dec.

Dame. 1. Leroy *Dict. Pom.* **2**:1, fig. 1869. **2.** Mathieu *Nom. Pom.* 200. 1869.

For two and a half centuries this variety has been known in the Department of Maine-et-Loire under the name of Dame, though in one district it bore the name of *des Buhards*. Fruit medium, globular-ovate, mammillate around calyx; skin rough, grass-green, dotted with fawn at each end and sprinkled with gray specks; flesh whitish, semi-fine, tender, semi-melting, gritty; juice sufficient, sweet, acidulous, rather well flavored; third; Sept.

Dame-verte. 1. Leroy *Dict. Pom.* **2**:3, fig. 1869. **2.** Mas *Pom. Gen.* **1**:139, fig. 70. 1872.

Attributed to Van Mons about the beginning of the nineteenth century. Fruit above medium, obtuse-conic, skin thick, yellowish-olive, sprinkled with green dots changing to bright yellow and on the side of the sun occasionally touched with crimson; flesh yellowish-white, rather coarse, semi-melting, rather gritty at the center, with plenty of sweet juice, acid but rather savory; second; Aug.

Darimont. 1. Lindley *Guide Orch. Gard.* 369. 1831. **2.** Prince *Pom. Man.* **2**:200. 1832.

A Flemish pear new in the early part of the nineteenth century. Fruit medium, oblong, tapering somewhat toward the stalk, yellowish-gray-russet, sprinkled with numerous scabrous specks; flesh white, gritty, melting, with a saccharine, slightly musky and somewhat astringent juice; Sept. and Oct.

Darlington. 1. Downing *Fr. Trees Am.* 731. 1869.

An American variety; origin unknown. Fruit large, oblate-obtuse-pyriform, pale yellow, some crimson at times on the side of the sun, nettings and patches of russet and russet dots; flesh whitish, coarse, sweet; moderate quality; rots at core; Sept.

Dathis. 1. Leroy *Dict. Pom.* **2**:4, fig. 1869.

Origin not clear, but it was cultivated in France before the middle of the last century. Fruit large, turbinate and very swelled, one side being often more so than the other, bright yellow passing to grayish-yellow on the cheek touched by the sun, dotted with green; flesh whitish, semi-fine, half-breaking, gritty at center; juice deficient, sugary; second; Oct.

David. 1. *Guide Prat.* 91. 1876.

Fruit rather coarse, of handsome pyramidal form, yellowish-green washed with purple; flesh breaking; first quality for cooking purposes; Apr. and May.

David d'Angers. 1. *Guide Prat.* 91. 1876. **2.** Leroy *Dict. Pom.* **2**:6, fig. 1869.

Raised from seed by André Leroy in 1865. Fruit medium to large, turbinate-obtuse, rather pentagonal, mammillate at calyx, bright yellow,

finely dotted with fawn; flesh white, fine, melting, juicy, sugary, acidulous, savory, pleasantly perfumed; first; Feb. to Apr.

Davis. 1. *Mag. Hort.* **23**:107 1857. **2.** Downing *Fr. Trees Am.* 731. 1869.

A seedless native pear found about 1837 by a Mr. Davis, six miles from Philadelphia, on the Westchester Road. Fruit small; variable in form, sometimes globular, usually obtuse-pyriform, yellowish, much russeted; flesh buttery, aromatic, melting, sweet, rather coarse, somewhat vinous; good; Oct.

De Cerciaux. 1. Baltet *Cult. Fr.* 373. 1908.

A variety good for perry and for drying. The juice is amber-colored, perfumed and of an agreeable flavor; Oct. and Nov.

De Chasseur. 1. Mas *Pom. Gen.* **3**:89, fig. 141. 1878.

A seedling of Van Mons which produced fruit in 1842. Fruit medium, pyriform-ovate, slightly obtuse; skin rather thick and tough, pale green, sprinkled with gray-brown dots, becoming at maturity bright yellow, a good deal shaded with brown-russet; flesh white, slightly tinged with green, semi-fine, melting; juice plentiful, sweet, pleasantly perfumed; good; Sept. and Oct.

De Croixmare. 1. Baltet *Cult. Fr.* 372. 1908.

A good perry pear cultivated in France. Fruit small, very good, especially for the manufacture of alcohol; has little tannin. The juice is colorless; Sept. and Oct.

De Duvergnies. 1. *Gard. Chron.* 463. 1863. **2.** Leroy *Dict. Pom.* **2**:119, fig. 1869.

Köstliche Van Mons. **3.** Dochnahl *Führ. Obstkunde* **2**:124. 1856.

Originated by Van Mons; fruited in 1821. Downing describes this pear under the name *Delices Van Mons* and gives as a synonym *Delices de Mons*, but since these names are also synonyms of *Viconte de Spoelberg*, a very different variety, the name originally given by Van Mons is to be preferred. Fruit medium and often larger, obtuse, long-ovate, regular and bold in contour; surface uneven, slightly constricted near the top, and slightly mammillate; skin thin, rough to the touch, lemon-yellow, dotted all over with greenish-gray, generally vermilioned on the cheek exposed to the sun; flesh yellowish-white, fine or semi-fine, melting, granular around the core; juice abundant, saccharine, vinous, sourish, with a peculiar and delicious aroma; first; Oct.

De Fer. 1. Leroy *Dict. Pom.* **2**:152, fig. 1869.

According to Leroy this pear is at least four centuries old and originated in Germany, where Cordus described it about 1544 under the name of *Pear of Os*. Fruit above medium and often large; form variable, at times prolonged like Calebasse, more generally turbinate-ovate or turbinate-globular; stem obliquely planted; skin slightly wrinkled, bright yellowish-green, more or less vermilioned on the side next the sun, covered with large, gray dots and some streaks of brown-russet; flesh very white, semi-fine, hard and breaking, lacking in juice, sweetish, deficient in perfume; third; Jan. to Mar. or Apr.

De Fosse. 1. Leroy *Dict. Pom.* **2**:191, fig. 1869.

A very ancient French variety mentioned by Le Lectier in his catalog of 1628. Fruit below medium and often small, globular-turbinate, clear yellow

dotted and netted with russet; flesh white, semi-fine, firm, semi-breaking, scented; juice abundant, sugary, acidulous; very musky; second or third; Aug. and Sept.

De Lamartine. 1. Leroy *Dict. Pom.* **2**:325, fig. 1869.

Lamartine. **2.** Downing *Fr. Trees Am.* 797. 1869.

Raised by Bivort, director of the nurseries of the Society of Van Mons and first reported in 1850. Fruit small, globular or turbinate, flattened, often irregular and bossed, olive-green, dotted and very much covered with russet; flesh white, coarse, melting, generally gritty around the core; juice sufficient, sweet, musky and delicate; second, or third when the flesh is excessively gritty; Nov.

De Louvain. 1. Leroy *Dict. Pom.* **2**:363, fig. 1869. **2.** Downing *Fr. Trees Am.* 734. 1869.

Raised by Von Mons in 1827 and published in 1834. Fruit above medium, obtuse-turbinate, clear grass-green or dull yellow, much covered with fine dots of gray-russet and stains of russet; flesh whitish, semi-fine and semi-melting; juice abundant, saccharine, vinous, with a delicate flavor and perfume of musk; second; Sept.

De Prêtre. 1. Duhamel *Trait. Arb. Fr.* **2**:190. 1768. **2.** *Mag. Hort.* **9**:131. 1843. **3.** Leroy *Dict. Pom.* **2**:550, fig. 1869.

A very old French pear just mentioned by the pomologist Le Lectier of Orléans and for a long while known under the names of *Caillout*, *Caillolet* and *Caillot d'Hiver*. Le Lectier cultivated it in 1600 and cataloged it in 1628. In 1858 Decaisne coupled with it the ancient name of *Carmelite*. Fruit below medium, spherical but sometimes a little elongated

and narrowed toward the upper part; skin rather thick, clear brown-russet dotted all over on the side exposed to the sun with whitish points, but with ash-gray points on the other side; flesh white, semi-fine, breaking, gritty at center; juice moderate in amount, saccharine, acidulous, more or less musky; second or third for dessert, first for compotes; Jan. to Mar.

De Rachinquin. 1. Kenrick *Am. Orch.* 170. 1832.

Produced by M. Noisette. Fruit round, compressed, rough, brown; flesh melting buttery, sugary, highly flavored; Nov. and Dec.

Delcange. 1. *Guide Prat.* 91. 1876.

Fruit large; flesh melting; first quality; Sept.

Délices de la Cacaudière. 1. Leroy *Dict. Pom.* **2**:9, fig. 1869.

Gained by Count Eugène des Nouhes in 1846 near Pouzauges, Vendée, Fr. Fruit above medium, long-conic, slightly obtuse, mammillate at crown and irregular in contour, bright yellow, dotted with gray and greenish specks, colored with carmine on the cheek next the sun; flesh very white and fine, melting; juice abundant, acidulous, sugary, aromatic, rather savory; second; July and Aug.

Délices de Charles. 1. Leroy *Dict. Pom.* **2**:10, fig. 1869. **2.** *Guide Prat.* 74, 262. 1876.

Wredow. **3.** Downing *Fr. Trees Am.* 886. 1869.

Raised in 1826 by Simon Bouvier, Jodoigne, Bel. Fruit medium, turbinate-pyriform but inconstant in contour, dark lemon-yellow, dotted with russet; flesh white, fine, very melting, buttery, sweet, juicy, vinous and with a delicious tartness; good to very good; Oct. to Dec.

Délices de Chaumont. 1. *Guide Prat.* 72. 1876. **2.** Mas *Pom. Gen.* **7**:133, fig. 547. 1881.

Fruit rather large, conic-ovate, olive spotted with gray; flesh white, buttery, melting, wanting in juice, very sweet; second, cooking.

Délices Everard. 1. Hogg *Fruit Man.* 558. 1884.

Raised by Gabriel Everard, Tournay, Fr., in 1840. It was sent to England in 1865 and received a first-class certificate from the Royal Horticultural Society in 1875. Fruit small, globular-turbinate, smooth, shining, bright yellow, much speckled and marked with russet; flesh salmon tint, tender, buttery, melting, very juicy, sweet, delicious flavor and fine perfume; Oct. to Feb.

Délices de Froyennes. 1. Hogg *Fruit Man.* 558. 1884.

Raised by Isidore Degaud, Froyennes, Tournay, Fr. Fruit medium, oval, yellow covered with fawn-colored russet; flesh tender, melting, very juicy, sugary and perfumed, vinous; Oct. and Nov.

Délices d'Hardenpont. 1. Liegel *Syst. Anleit.* 99. 1825. **2.** Hogg *Fruit Man.* 558. 1884.

Raised by Abbe Hardenpont, Mons, Bel., in 1759. There has been much confusion between this and *Délices d'Hardenpont d'Angers* and the *Archiduc Charles* and *Charles of Austria*. Fruit large, oblong-obovate-obtuse; skin smooth, bright green changing to yellow, with pale brown-russet dots; flesh white, tender, buttery, melting, rich, sweet, perfumed; good; Nov.

Délices d'Hiver. 1. Mas *Pom. Gen.* **6**:61, fig. 415. 1880. **2.** *Gard. Chron.* N. S. **26**:210. 1886.

Distributed by M. Dauvesse, Orléans, Fr., early in the latter half of the nineteenth century. Fruit large; form variable from elongate-pyriform to globular-pyriform with short stalk set obliquely; skin thick, green, heavily dotted; flesh moderately fine, full of sugary juice, acid and delicately perfumed; Dec. to Jan.

Délices de Huy. 1. *Guide Prat.* 56, 251. 1895.

Fruit large, conic-pyriform, yellowish-green; flesh greenish-yellow, juicy, pleasantly perfumed; first; Sept.

Délices de Jodoigne. 1. Leroy *Dict. Pom.* **2**:15, fig. 1869. **2.** Hogg *Fruit Man.* 559. 1884.

Obtained by Simon Bouvier, Jodoigne, Bel., in 1826. Fruit medium, pyriform, irregular, slightly obtuse and larger on one side of the axis than the other, grass-green on the shaded side and reddish-gray on the exposed face, covered with numerous very fine dots of fawn; flesh white, firm, breaking, sweet, juicy, refreshing and aromatic; first; Oct.

Délices de Ligaudières. 1. *Guide Prat.* 60. 1895.

Fruit medium, of the style of White Doyenné, but the stem thicker and shorter; flesh fine, melting; first; Oct.

Délices de Lovenjoul. 1. *Ann. Pom. Belge* **6**:65, fig. 1858. **2.** Downing *Fr. Trees Am.* 734. 1869.

Jules Bivort. **3.** Leroy *Dict. Pom.* **2**:15, fig. 1869.

A seedling of Van Mons in whose catalog of 1828 it is No. 521. Fruit medium, obovate-obtuse-pyriform, greenish-yellow washed with orange-red, speckled all over with russet dots; color variable; flesh yellowish-white, fine, melting, semi-buttery;

juice abundant, sugary, with an acid flavor and delicious perfume, rich; first; Oct. and Nov.

Délices de la Meuse. 1. Field *Pear Cult.* 279. 1858. **2.** Leroy *Dict. Pom.* **2**:16, fig. 1869.

Laurent de Bavay, Director of the Royal Nurseries of Vilvorde, near Brussels, sent this pear out in 1850. Fruit medium and above, ovate, irregular, bossed, more enlarged on one side than the other, greenish-yellow, very finely speckled with green and brown dots; flesh dirty white, coarse, breaking, gritty at center; juice variable in amount, moderately sweet, acid, musky; second; Feb.

Délices de Naghin. 1. *Guide Prat.* 90. 1895.

Fruit rather large, turbinate, yellow, washed with fawn; flesh very juicy, very sweet; an exquisite pear; Nov.

Délices de Saint-Médard. 1. *Guide Prat.* 70. 1895.

Sent out from Belgium. Fruit medium or rather large, shining yellow touched with russet; flesh fine, melting, sweet; good quality; Sept.

Délices de Tirlemont. 1. *Guide Prat.* 90. 1895.

First placed in commerce by H. Millet, nurseryman at Tirlemont, Bel. Fruit medium or large; flesh melting; first; Jan. to Mar.

Délicieuse de Grammont. 1. *Guide Prat.* 92. 1876.

Raised by M. de la Croix d'Ogimont, Tournai, Bel. Fruit medium, long-pyriform, delicate yellowish-green; flesh white, very juicy; first; end of Aug.

Délicieuse de Swijan. 1. *Guide Prat.* 90. 1895.

Distributed by Baron de Trauttenberg, Prague, Bohemia. Tree very fertile and suitable for cold and

mountainous climates. Fruit medium, globular, yellowish-green, dotted; flesh yellowish-white, fine, melting, sugary; very good; Nov. and Dec.

Délisse. 1. *Guide Prat.* 72. 1895.

Fruit medium, oblong, of even contour, much covered with fawn-russet; flesh fine, melting, very juicy; good; Sept. and Oct.

Delpierre. 1. Leroy *Dict. Pom.* **2**:17, fig. 1869. **2.** *Guide Prat.* 70, 252. 1895.

A wilding found in the Canton of Jodoigne, Brabant, Bel. Fruit large, ovate-obtuse-pyriform, wrinkled, thick, olive-green clouded with dark yellow; flesh greenish-white, coarse, semi-melting; juice acid, rather sweet, vinous, abundant; second; Sept.

Delporte Bourgmestre. 1. *Guide Prat.* 90. 1895.

Fruit rather large, yellowish; first; Mar. and Apr.

Democrat. 1. *Mag. Hort.* **25**:69. 1859. **2.** Downing *Fr. Trees Am.* 734. 1869.

A seedling originated in Pennsylvania and introduced as new in 1859. Fruit medium or below, globular-obovate, greenish-yellow with nettings and patches of russet and dotted with russet and brown spots; flesh semi-melting, juicy, sweet, pleasant good; Sept.

Demorest. 1. *Wash. Nurs. Cat.* 5. 1921.

Reported as “luscious, larger, later and a better keeper than Bartlett.”

Dempsey. 1. Ont. Dept. Agr. *Fr. Ont.* 155. 1914.

A Canadian pear produced from a seed of Bartlett fertilized with Duchesse d’Angoulême. fruit large,

oblong-obovate-pyriform, smooth, yellowish-green with brownish-red cheek in sun; flesh white, fine-grained, tender, almost melting, with sweet, delicious flavor; Oct. and Nov.

Denis Dauvesse. 1. *Guide Prat.* 110. 1876.

Fruit medium to large, long-pyriform; flesh fine, melting, pleasantly perfumed; Sept.

Des Chartreux. 1. Mas *Le Verger* **2**:171, fig. 84. 1866-73.

Origin uncertain. Fruit small or nearly medium, obovate-obtuse-pyriform, light green, speckled with dots of a very deep green, washed with light red on the sunny side; flesh slightly yellow, fine, more firm than breaking; juice sugary, acidulous, slightly perfumed; second; Aug.

Des Deux Sœurs. 1. *Gard. Chron.* 463. 1863.

The original tree was found in the garden of the Misses Knopp of Mechlin, Bel. Fruit medium, oblong, lemon-yellow; flesh melting, juicy, sugary, slightly astringent but wanting in perfume and flavor; grown both in Belgium and France; not first class.

Désiré Cornélis. 1. Leroy *Dict. Pom.* **2**:18, fig. 1869. **2.** Hogg *Fruit Man.* 560. 1884.

The parent tree was from seed sown by Van Mons; first bore fruit in 1847. Fruit large, oblong-oval, obtuse; skin very fine, pale yellow and often orange-yellow, dotted and netted with greenish-gray; flesh very tender, buttery, melting; juice plentiful, sugary, deliciously perfumed; first; Sept.

Dessauer Weissbirne. 1. Dochnahl *Führ. Obstkunde* **2**:35. 1856.

North German, 1804. Fruit medium, smooth, pale

greenish-yellow changing to citron yellow, sometimes rather lightly blushed; flesh fine, somewhat soft, sweet, aromatic; good; Aug.

Deutsche Augustbirne. 1. Mathieu *Nom. Pom.* 202. 1889.

D'Aout Allemande. **2.** Mas *Pom. Gen.* **7**:65, fig. 513. 1881.

A German variety much cultivated in Saxony. Fruit small, ovate; skin rather thick, dull green, sprinkled with small and numerous gray dots, becomes yellow on ripening and somewhat blushed in the sun; flesh green and veined with green, semi-fine, buttery; juice sufficient, sugary, vinous, acid, pleasant; good; Aug.

Deutsche Glasbirne. 1. Dochnahl *Führ. Obstkunde* **2**:69. 1856.

German, 1811. Fruit medium, globular-turbinate, bent toward stalk, uniformly light yellow, blushed with russety-red on the side of the sun; flesh sweet; good; Sept.

Deutsche Kümmelbirne. 1. Dochnahl *Führ. Obstkunde* **2**:157. 1856.

German, 1802. Fruit small, globular, dirty yellow, washed with russet; flesh very tender, sweet, strongly aromatic and perfumed; good; Sept.

Deutsche Muskateller. 1. Liegel *Syst. Anleit.* 106. 1825. **2.** Mathieu *Nom. Pom.* 202. 1889.

Muscat Allemand d'Hiver. **3.** Leroy *Dict. Pom.* **2**:439, fig. 1869.

German Muscat. **4.** Downing *Fr. Trees Am.* 772. 1869.

An old pear of uncertain origin. La Quintinye

mentioned it without description in 1690, but in 1768 Duhamel du Monceau gave a careful description to distinguish between it and *Royale d'Hiver* which it somewhat resembles. Fruit medium or above, obovate-obtuse-pyriform, pale yellow, speckled with numerous large, gray dots; flesh yellowish, semi-fine, semi-melting, juicy, granular, sweet, slightly astringent; second; Mar. to May.

Deux Têtes. 1. Duhamel *Trait. Arb. Fr.* **2**:244. 1768. **2.** Leroy *Dict. Pom.* **2**:23, fig. 1869.

Zwibotzenbirne. **3.** Liegel *Syst. Anleit.* 162. 1825. **4.** Mathieu *Nom. Pom.* 303. 1889.

One of the most ancient pears cultivated in France. Charles Estienne described it in 1530 in his Seminarium, under the name *Pyra Bicipitia* or *Poirè a Deux-Testes*. It takes its name from its large and oval calyx being placed on two prominences. Fruit small to medium, globular, somewhat turbinate, pale yellowish-green in the shade, blushed on the side next the sun; flesh white, coarse, breaking, juicy, slightly perfumed, but often having an unpleasant acidity; an indifferent dessert fruit; Aug.

Devergnies. 1. *Ann. Pom. Belge* **6**:57, fig. 1858. **2.** Leroy *Dict. Pom.* **2**:24, fig. 1869.

Obtained from seed in 1817 in Hainaut by M. Devergnies of Mons. Fruit medium, turbinate-obtuse, much corrugated at summit, olive-green, nearly covered with gray-russet and slightly clouded with orange-red on the side next the sun; flesh yellowish-white, fine, melting, buttery; juice abundant, acidulous, sugary, aromatic; second; Nov. and Dec.

Dewey. 1. *Ill. Hort. Soc. Rpt.* 55. 1898. **2.** *Cornell Sta. Bul.* **332**:480, fig. 160. 1913.

An oriental pear, in form resembling Kieffer. Fruit medium, conical to globular-oval, rusty green with faint blush; skin rough; flesh white, juicy, coarse, gritty, fibrous; quality poor; Oct.

Dhommée. 1. Leroy *Dict. Pom.* **2**:25, fig. 1869.

A seedling raised by the Horticultural Society of Angers, Fr.; it first bore fruit in 1858. Fruit medium and often larger, long-ovate, bossed, one side always larger than the other, bright green, finely dotted and much mottled with russet; flesh white, firm, fine, melting, slightly gritty; juice abundant, sugary, acidulous, devoid of perfume; second; Oct. to Dec.

Dickerman. 1. Elliott *Fr. Book* 376. 1859. **2.** Downing *Fr. Trees Am.* 736. 1869.

Dikeman. **3.** Thomas *Am. Fruit Cult.* 700. 1897.

Obtained by S. D. Pardee, New Haven, Conn. Fruit medium, globular-oblate, often irregular in outline, yellowish, bright cinnamon on the sunny side, covered with minute dots; flesh white, fine, melting, sugary, perfumed; first; Sept.

Diego. 1. Parkinson *Par. Ter.* 592. 1629.

Described by John Parkinson in 1629 as a small pear growing in clusters, excellent, and musky in flavor.

Dienstbotenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:200. 1856.

Dutch, 1807. Fruit medium, pyriform, light greenish-yellow turning to bright yellow, with only an indistinct red blush, if any; flesh granular, aromatic and sweet; good; Oct.

Dieudonné Anthoine. 1. *Ann. Pom. Belge* **5**:85, fig. 1857. **2.** Leroy *Dict. Pom.* **2**:26, fig. 1869.

Obtained by Dieudonné Anthoine at Ecaussines-d'Enghien, Bel., and bore fruit at Brussels in 1850. Fruit medium and above, globular, slightly turbinate, bossed, flattened at both ends, greenish-yellow, dotted with brown, mottled with russet, becoming at maturity a brilliant yellow, washed with vermilion on the side of the sun; flesh very white and very fine, breaking; juice sufficient, sweet, often astringent and only slightly perfumed; second; Oct.

Diller. 1. *Am. Pom. Soc. Rpt.* 36. 1852. **2.** Downing *Fr. Trees Am.* 736. 1869.

This pear was approved at the American Pomological Congress in 1852, where it was reported to have been imported from Germany by the Diller family many years previously, but considered by others to be a native of Pennsylvania. Fruit below medium, globular-ovate, cinnamon-russet; flesh somewhat granular, whitish, buttery, melting; juicy with a fine aromatic flavor; good to very good; Aug. and Sept.

Diman. 1. *Mass. Hort. Soc. Rpt.* 43. 1866.

S. A. Shurtleff, Brookline, Mass., submitted this among other seedlings to the Fruit Committee of the Massachusetts Horticultural Society in 1866. Fruit 2½ in. in diameter, russet, with red cheek; flesh breaking, melting, very sweet and juicy; ripens soundly; all Oct. This pear has improved, year by year, in size and character; first-rate.

Directeur Alphand. 1. *Gard. Chron.* N. S. **17**:538. 1882. **2.** *Guide Prat.* 54. 1895.

Sent out in 1880 by Messrs. Croux and Son, Chatenay, Seine, Fr. Fruit very large, oblong-pyriform, yellowish-green passing into golden-green,

dotted and splashed with red; flesh white, semi-fine, generally gritty toward the center, sugary; very good for ornament and stewing; Feb. and Mar.

Directeur Hardy. 1. *Rev. Hort.* 542. 1894. **2.** *Ibid.* 500, fig. 153. 1894.

From the seed beds of M. Tourasse and promoted by M. Baltet of Troyes, Fr. It was submitted to the Tasting Committee of the Pomological Society of France in 1894 and declared to be very good. Fruit large or medium, turbinate, elongated, obtuse, slightly bent, golden-yellow, washed with red on the exposed side; flesh white, fine, melting, very juicy, sugary, vinous, slightly perfumed; Sept.

Directeur Tisserand. 1. *Rev. Hort.* 7. 1900.

Obtained by M. A. Sannier, Rouen, from Beurré d'Hardenpont fertilized with Doyenné du Comice; introduced in 1900. Fruit medium or rather large, ovate-turbinate; skin fine, shining, colored in the sun; flesh white, melting, juicy, sugary, having a peculiar flavor; good; Dec. and Jan.

Directeur Varenne. 1. *Rev. Hort.* 6. 1897.

A cross between Easter Beurré and Bergamote Espéren, introduced by M. Arsène Sannier, Rouen, Fr. Fruit large to very large, approaching Easter Beurré in form and color; stem short; flesh very fine, juicy, with a slight aroma.

Dirkjes Peer. 1. Mas *Pom. Gen.* **1**:25, fig. 13. 1872. **2.** *Guide Prat.* 92. 1876.

Dutch. Fruit medium, globular-conic, lemon-yellow streaked with brownish-red; flesh whitish, semi-breaking, agreeably acid and sugary; second; good for household use; Aug.

Dix. 1. Prince *Pom. Man.* **1**:142. 1831. **2.** Downing *Fr. Trees Am.* 737, fig. 1869.

Originated in the garden of Madame Dix, Boston, Mass.; it bore first in 1826. Fruit large, oblong or long-pyriform; skin rough, green, the exposed fruit becoming deep yellow when ripe, marked with distinct russet dots and sprinkled with russet around the stalk; flesh melting, rich, juicy, of a fine flavor and by some thought to be superior to the St. Germain; very good to best; Oct. and Nov.

Dixie. 1. Griffing Bros. *Cat.* 19, fig. 1915.

Originated in southern Georgia as a chance seedling, possibly a cross between Le Conte and the Sand Pear; and was introduced in 1914 by Griffing Brothers of Florida. Fruit medium to above, roundish, slightly oblong, light green, sweet, sprightly; Aug.

Doat. 1. Leroy *Dict. Pom.* **2**:29, fig. 1869. **2.** Mas *Pom. Gen.* **4**:19, fig. 202. 1879.

The parent tree was noticed by M. Doat in his garden near Fleurance, Gers, Fr. Fruit large, like Calebasse in form; skin rough to the touch, bright yellow dotted with fawn; flesh yellowish-white or greenish, semi-melting, gritty around the core; juice abundant, vinous, sugary, rather aromatic; second; Sept.

Docteur Andry. 1. Leroy *Dict. Pom.* **2**:31, fig. 1869. **2.** Hogg *Fruit Man.* 561. 1884.

Raised in the nurseries of M. Boisbunel, Jr., at Rouen, Fr., in 1849. Fruit medium, globular, Bergamot-shaped, bright yellow all over, with dots of russet around the stalk, and sprinkled with small brown specks; flesh very white, fine, melting,

somewhat gritty at center, juicy, sugary, with a delicate taste of musk; first; Nov.

Docteur Bénit. 1. Leroy *Dict. Pom.* **2**:31, fig. 1869.

Raised from seed by Van Mons in 1840. Fruit below medium, globular, larger on one side than the other, wrinkled, bronzed all over, dotted with bright grayish-green; flesh whitish, dense, semi-melting, veined with greenish-yellow; juice sufficient, rather sugary, vinous, slightly aromatic; third; Dec. and Jan.

Docteur Bourgeois. 1. *Guide Prat.* 62. 1895.

Obtained by M. Sannier, Rouen, Fr. Fruit medium, apple-shaped, lemon-yellow; flesh fine, somewhat granular at center, juicy, with agreeable perfume.

Docteur Bouvier. 1. Leroy *Dict. Pom.* **2**:33, fig. 1869. **2.** Downing *Fr. Trees Am.* 738. 1869.

An excellent French pear suitable for a mild climate. Fruit medium, globular-obovate-pyriform, greenish, more yellow at maturity, sprinkled, shaded and dotted with russet, sometimes with slight crimson and fawn on exposed cheek; flesh rather coarse, melting, juicy, vinous, having but little perfume; good to very good; Dec. to Mar.

Docteur Capron. 1. Leroy *Dict. Pom.* **2**:34, fig. 1869. **2.** *Guide Prat.* 62, 255. 1895.

Obtained by Van Mons in 1842. Fruit medium or rather large, ovate, lemon-yellow; flesh melting, yellow, buttery, sugary, juicy, of good flavor and scented with almond; first; Nov.

Docteur Chaineau. 1. *Guide Prat.* 91. 1895.

Fruit rather large; flesh melting; first; Oct.

Docteur Delatosse. 1. *Guide Prat.* 91. 1895.

Fruit exquisite; Oct. and Nov. Resisted the severe frost of 1879-80.

Docteur Gromier. 1. *Guide Prat.* 110. 1876.

First published in 1873. Fruit medium; flesh very fine, buttery, melting, juicy, with an aroma of mingled rose and musk; first; Oct.

Docteur Joubert. 1. *Rev. Hort.* 561. 1893.

Baltet Brothers, Troyes, Fr., introduced this pear in 1893. Fruit rather large, pyriform, clear green passing to pale yellow, dotted with fawn, rosy on the side of the sun; flesh melting; juice abundant, with a sugary taste and having a pleasant perfume; autumn.

Docteur Koch. 1. Leroy *Dict. Pom.* **2**:36, fig. 1869. **2.** Mas *Pom. Gen.* **4**:7, fig. 196. 1879.

Raised from seed by André Leroy in 1864. Fruit above medium, ovate, bossed, irregular, lemon-yellow, finely dotted and reticulated with russet, lightly washed with reddish-brown on the side exposed to the sun; flesh whitish, fine, firm, melting, rather gritty about the core, full of sugary juice, acid and pleasantly perfumed; first; Sept.

Docteur Lentier. 1. Leroy *Dict. Pom.* **2**:37, fig. 1869. **2.** *Guide Prat.* 74, 256. 1895.

From seed sown in 1847 by M. Grégoire, Jodoigne, Brabant. Fruit medium, ovate, somewhat elongated, smooth, greenish or lemon-yellow, splashed and dotted with cinnamon-russet; flesh whitish, fine-grained, tender, buttery, melting, juicy, exceedingly rich, sweet and perfumed; first, of the highest merit; Oct.

Docteur Lindley. 1. *Mass. Hort. Soc. Rpt.* 40. 1871. **2.** *Guide Prat.* 108. 1876.

Shown at the annual exhibition of the Massachusetts Horticultural Society in 1871. Fruit above medium, broadly turbinate, yellow, tinged with red and slightly traced with russet; flesh white, buttery, sweet, highly flavored; very good; Nov.

Docteur Meniere. 1. Leroy *Dict. Pom.* **2**:38, fig. 1869.

Raised from seed by André Leroy, Angers, Fr.; fruited first in 1864. Fruit large, cylindrical, slightly ovate; skin wrinkled, bright yellow, dotted with greenish-gray and partly covered with russet markings; flesh whitish, fine, melting, very juicy, sugary, slightly acid, agreeably-perfumed flavor; Sept.

Docteur Nélis. 1. *Ann. Pom. Belge* **4**:87, fig. 1856. **2.** Mas *Le Verger* **3**:Pt. 2, 129, fig. 161. 1866-73.

Obtained by M. Xavier Grégoire, Jodoigne, Bel.; first published in 1847. Fruit above medium or small, turbinate-obtuse, generally much more curved on one side than the other, clear dark lemon-yellow, thinly dotted with russet; flesh yellowish, fine-grained, very tender, melting, juicy and sweet, rather aromatic; second; Sept.

Docteur P. Bruzon. 1. *Rev. Hort.* 463. 1906.

Placed on the market as a new variety in 1906 by M. Bruant, Poitiers, Fr. Fruit very large, greenish-yellow, dotted and mottled with russet; flesh white, semi-fine but very juicy, very melting, sugary, pleasantly perfumed; good; Sept.

Docteur Pariset. 1. *Guide Prat.* 110. 1876.

Fruit large, nearly cylindrical, golden lemon-yellow; flesh buttery, melting, juicy, sugary and perfumed; first; Nov.

Docteur Pigeaux. 1. Leroy *Dict. Pom.* **2**:40, fig. 1869. **2.** *Guide Prat.* 92. 1876.

From a seed bed of Major Espéren of Mechlin, Bel., placed on the market in 1864. Fruit above medium and often rather large, globular-ovate, yellow tinged with rose; flesh fine, melting; good; Oct. to Dec.

Docteur Trousseau. 1. *Ann. Pom. Belge* **5**:89, fig. 1857. **2.** Downing *Fr. Trees Am.* 738. 1869.

One of the last of the seedlings of Van Mons; fruited in 1848. Fruit large, pyriform-obtuse, yellowish-green, dotted with bright fawn and stained with brown-russet around the stem; flesh white, buttery, melting, very juicy and aromatic; first; Nov.

Doctor Bachmann. 1. *Am. Pom. Soc. Rpt.* 190. 1867.

Produced at the Pomaria nurseries, South Carolina, from seed and reported to the American Pomological Society in 1867. Fruit medium, globular, green with dull red cheek; flesh juicy, vinous and refreshing.

Doctor Engelbrecht. 1. Lauche *Deut. Pom.* **11**:No. 70, Pl. 70. 1882.

German. Fruit rather large, pyriform-elongated, nearly smooth, shining, green, clouded with greenish-yellow; flesh yellowish-white, fine, softish, melting, sweet, vinous, with an agreeable cinnamon flavor.

Doctor Hogg Bergamot. 1. Hogg *Fruit Man.* 562. 1884.

Raised by T. Rivers, Sawbridgeworth, Eng., from seed of Gansel Late Bergamot; received a first-class certificate from the Royal Horticultural Society in

1878. Fruit produced in great clusters, small, size of Seckel, obovate, even in outline, grass-green, with a dull brownish cheek, changing to deep yellow and bright red cheek with an orange glow; flesh melting, remarkably sweet like honey, with a brisk acidulous flavor and perfume of lemon; one of the richest flavored pears; Sept.

Doctor Hoskins. 1. *Rural N. Y.* **44**:201, 203, figs. 120, 121. 1885.

According to correspondence with J. T. Macomber of Adams, Vt., this variety is a seedling of Flemish Beauty. It is said to be medium to above in size, roundish-obtuse, pyriform, pale yellow, red on the sunny side and "very good" in quality.

Doctor Howe. 1. Downing *Fr. Trees Am.* 2nd App. 146. 1876.

Originated in garden of Dr. John T. Howe, Birmingham, Conn., about 1890. Fruit medium, globular, inclining to pyriform, somewhat obtuse, greenish changing to light yellow, netted and patched with russet dots; flesh whitish, semi-fine, juicy, melting, sweet, rich, slightly-vinous flavor; promising in 1890; Oct.

Doctor Turner. 1. *Am. Pom. Soc. Rpt.* 210. 1862. **2.** Downing *Fr. Trees Am.* 740. 1869.

A pear of Connecticut origin. Tree of good growth, moderately spreading, rather an early and regular although not an over-abundant bearer; young wood a dark olive-brown. Fruit large, oblong-pyriform, with blunt neck; skin pale yellow, sometimes with a slight blush and thickly sprinkled with green and brown dots, a few traces of russet; stalk long, curved, set in a slight depression by a ring or lip; calyx closed; basin rather small; flesh white,

juicy, half melting, slightly vinous, somewhat astringent; good; Aug.

Dodge. 1. *Cornell Sta. Bul.* **332**:480, fig. 161. 1913.

A hybrid-oriental variety. Fruit medium, ovate-pyriform, narrowing rapidly to the stem, greenish-yellow, profusely dotted; skin thin but tough, russeted near stem; flesh white, juicy, melting, tender, free from grit; fair; Oct.

Doktorsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:61. 1856.

German, from the Rhine country, 1833. Fruit large, pyriform, smooth, light-yellow without russet, slightly blushed on side next the sun; flesh agreeable, sweet; good; Oct.

Donatienne Bureau. 1. *Guide Prat.* 91. 1895.

On trial in 1895 at Simon Louis's grounds at Metz, Lorraine. Fruit large, ovate-long, bright yellow stained with brown; flesh fine; first.

Dones. 1. *Guide Prat.* 92. 1876.

Fruit small; flesh melting, juicy; first; Sept. and Oct.

Donville. 1. Leroy *Dict. Pom.* **2**:42, fig. 1869. **2.** Mathieu *Nom. Pom.* 204. 1889.

An old French pear mentioned first by Merlet in 1675. Fruit medium to large, pyriform-obtuse, bright yellow when ripe, washed with dark red on the side of the sun; flesh-yellowish, semi-fine or coarse, breaking; juice deficient, sweet, no perfume; first for kitchen use; Jan. to Apr.

Doppelttragende gelbe Muskatellerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:11. 1856.

Originated in Thuringia, Ger., 1803. Fruit medium, conic, symmetrical, light greenish-yellow; flesh breaking, soft, mild, tender, aromatic; good; Aug.

Dörell Herbst Muskateller. 1. Dochnahl *Führ. Obstkunde* **2**:96. 1856. **2.** Mas *Pom. Gen.* **6**:1, fig. 385. 1880.

Fruit nearly medium, ovate-pyriform, pale yellow sprinkled with very small, very numerous and regularly-spaced fawn dots usually free from any trace of russet; at maturity the yellow passes into clear lemon-yellow and on well-exposed fruits is washed with vermilion; flesh white, rather fine, breaking, dense, not juicy but sugary and perfumed; good for culinary purposes; winter.

Dorothée Nouvelle. 1. *Guide Prat.* 92. 1876.

Belgian; highly recommended. Fruit of first quality; Oct. Tree very fertile.

Dorothée Royale Nouvelle. 1. Mas *Pom. Gen.* **7**:39, fig. 500. 1881.

Fruit small, pyriform, green changing to pale yellow, some russet markings and speckled with grayish dots; flesh whitish, melting, juicy, sugary, delicious; good; Oct. and Nov.

Dorr. 1. Cole *Am. Fr. Book* 154. 1849. **2.** Elliott *Fr. Book* 421. 1859.

Originated in New Hampshire. Fruit large, obtuse-pyriform, pale yellow, blushed with red; flesh rather coarse, deficient in juice, sweet, pleasant; cooking or eating; Aug.

Dorschbirne. 1. Löschnig *Mostbirnen* 148, fig. 1913.

An Austrian perry pear. Fruit small, obtuse-

turbinate, somewhat globular, green changing to yellow when ripe, dotted with yellow-brown and marked with cinnamon-russet, blushed on the sun-exposed side; flesh tough, light yellow, very astringent, subacid and very juicy; Oct.

Dosoris. 1. *Horticulturist* **22**:88. 1867. **2.** *Am. Pom. Soc. Rpt.* 100. 1869.

Found in a field at Glen Cove, L. I, about 1866. Fruit full medium, obtuse-pyriform, when ripe a beautiful yellow with two-thirds bright scarlet; flesh sweet, juicy, agreeable, though deficient in flavor; beginning of Aug.; good but not first quality.

Double d'Automne. 1. Lindley *Guide Orch. Gard.* 49. 1831. **2.** *Mag. Hort.* **9**:131. 1843.

Fruit medium, Bergamot-shaped, entirely cinnamon-russet, through which a little green appears, with numerous small, gray specks; flesh white, breaking, rather gritty but mellow; juice saccharine. New in 1831 and considered promising but in 1843 was discarded by the London Horticultural Society.

Double-Fleur. 1. Duhamel *Trait. Arb. Fr.* **2**:177. 1768. **2.** Mas *Pom. Gen.* **4**:123, fig. 254. 1879.

Double Blossom. **3.** Langley *Pomona* 132. 1729. **4.** Lindley *Guide Orch. Gard.* 412, 1831.

Of ancient and unknown origin. Mentioned by Nicholas de Bonnefonds in 1651 in his first edition of the *Jardinier Francais*, by Merlet in 1675 and Claude Saint-Etienne in 1660. Worth growing for ornament, its large, double flowers, with from twelve to fifteen petals, being very handsome. Fruit above medium, globular or globular-turbinate, generally enlarged on one side more than on the other, green but yellow

when ripe, dark red or pale purple on the side of the sun; flesh greenish, semi-fine, quite crisp, juicy, sweet, rather sugary; excellent culinary pear; Feb. to May.

Double de Guerre. 1. *Garden* **56**:426. 1899. **2.** Bunyard *Handb. Hardy Fr.* 167. 1920.

Introduced into England from Mechlin, Bel., about 1835. Tree hardy, productive. Fruit medium to above, pyriform, tapering to the stem, yellow-brown speckled with russet; stem short, stout, generally obliquely inserted; calyx open in a shallow basin; flesh yellow, firm, slightly acid; Dec. to Feb.

Double-Plouvier. 1. Leroy *Dict. Pom.* **2**:47, fig. 1869.

Origin and age uncertain. Fruit above medium, long-ovate, more or less bossed, greenish, dotted all over with gray-russet; flesh whitish, semi-fine, semi-melting, scented; juice moderate but sugary; first for the kitchen; Jan. to Mar.

Double Rousselet. 1. *Ann. Pom. Belge* **6**:21, fig. 1858. **2.** Leroy *Dict. Pom.* **2**:48, fig. 1869.

Raised by Major Espéren, Mechlin, Bel., about 1845. Fruit medium, globular-turbinate, regular in contour; skin fine, tender, green but almost entirely covered with cinnamon-colored russet; when ripe the russet becomes more golden and warmer in tint on the side next the sun; flesh white, very fine, melting, with abundant sugary juice, vinous, very agreeable; first; Oct.

Dow. 1. *Am. Pom. Soc. Rpt.* 92. 1858. **2.** Elliott *Fr. Book* 377. 1859. **3.** Downing *Fr. Trees Am.* 741. 1869.

Raised by Dr. Eli Ives, New Haven, Conn., in the

middle of the nineteenth century. Fruit above medium, obovate, acutely pyriform, sometimes turbinate; skin rough, yellowish-green, with russet patches and dots; flesh white, buttery, juicy, melting, vinous flavored sometimes slightly astringent; good; Sept. and Oct.

Dowler. 1. *Mag. Hort.* **4**:193. 1838.

Exhibited before the London Horticultural Society in 1838, under the name of *Dowler's seedling*. A small winter pear, described as one of the best and a good keeper.

Downton. 1. McIntosh *Bk. Gard.* **2**:455. 1855. **2.** Leroy *Dict. Pom.* **2**:50, fig. 1869.

Raised by T. A. Knight, Downton Castle, Eng., about 1840. Fruit medium or above, oval, somewhat irregular, greenish-yellow changing to lemon-yellow, a good deal russeted particularly on the side next the sun where it is completely covered and assumes a reddish-brown tinge; flesh whitish, not quite melting but tender, fine, free from grit, agreeably acidulous, sweet and juicy, with some taste of orange; first; Nov. and Dec.

Doyen Dillen. 1. *Ann. Pom. Belge* **4**:27, fig. 1853. **2.** Leroy *Dict. Pom.* **2**:51, fig. 1869.

From seed sown by Van Mons at Louvain in 1827. Fruit medium to large, pyriform-conic, yellow, much covered with dots and patches of russet; flesh white, buttery, melting, free from grit; juice rather abundant, sweet, rich and pleasantly perfumed; first; Nov.

Doyenné Bizet. 1. *Guide Prat.* 91. 1895.

Tree moderately vigorous, very fertile. Fruit large; good; Mar. to June.

Doyenné Blanc Long. 1. Mas *Le Verger* **3**:Pt. 1, 27, fig. 12. 1866-73. **2.** *Guide Prat.* 74. 1895.

Origin unknown. Fruit medium, growing often in bunches, pyriform; skin thin, fine, bright green changing to brilliant yellow, golden on the side next the sun, with some bright red shading; flesh white, fine, melting, musky; first; Oct.

Doyenné Boisnard. 1. *Guide Prat.* 91. 1895.

Fruit rather large; first; Dec.

Doyenné Boisselot. 1. Mathieu *Nom. Pom.* 205. 1889. **2.** *Garden* **50**:405. 1896.

A little-known pear, large in size, some of the fruit weighing a pound, Bergamot in form, maturing about Christmas.

Doyenné de Bordeaux. 1. *Pom. Fr.* **4**:No. 150, Pl. 150. 1865. **2.** Leroy *Dict. Pom.* **2**:57, fig. 1869.

Origin unknown but cultivated in the environs of Bordeaux about 1820. Fruit large, globular, flattened at each end; skin thick, wrinkled and oily, golden-yellow sown with large dots of greenish-russet and marbled with the same, some orange-red on side next the sun; flesh very white, coarse, breaking, gritty at center; juice sufficient, sweet; third for dessert, first for compotes; Oct. to Dec.

Doyenné Bouyron. 1. *Guide Prat.* 91. 1895.

Distributed from Bordeaux, Fr. Fruit of the size, form and color of the Doyenné Gris; flesh fine, juicy, somewhat acid; Aug.

Doyenné du Cercle. 1. Downing *Fr. Trees Am.* 742. 1869. **2.** Leroy *Dict. Pom.* **2**:59, fig. 1869.

A seedling obtained by M. Boisbunel, a nurseryman at Rouen, Fr.; first published in 1857.

Fruit medium, turbinate-globular, varying to irregular-ovate, pale yellow covered with very fine gray dots and stained with fawn, often encrimsoned on the side next the sun; flesh whitish, very melting, scented; juice abundant, sweet, highly vinous, with a delicate, tartish flavor; first; Nov.

Doyenné à Cinq Pans. 1. *Gard. Chron.* 3rd Ser. **25**:132. 1899.

A cross effected in 1879 between Duchesse de Bordeaux and Easter Beurré by M. Herault. Fruit medium, rather globular, smooth, yellow, spotted and flecked with fawn; flesh fine, melting, juicy, sweet, with an aroma of Pelargoniums; Oct. and Nov.

Doyenné Defays. 1. Mas *Le Verger* **3**:Pt. 1, 73, fig. 35. 1866-73. **2.** Leroy *Dict. Pom.* **2**:62. 1869.

Doyenné d'Effay. **3.** McIntosh *Bk. Gard.* **2**:461. 1855.

Obtained by M. François-André Defays in the field of Saint Martin, near Angers, Fr. Fruit about medium, globular-obovate or Doyenné-shaped, bossed at the stalk end and generally larger and longer on one side, yellow, much covered with cinnamon-russet on the side next the sun; flesh tender, buttery, melting, very juicy, rich, sugary, vinous, with musky aroma; one of the best; Dec.

Doyenné Downing. 1. Leroy *Dict. Pom.* **2**:63, fig. 1869. **2.** Hogg *Fruit Man.* 566. 1884.

A wilding found in a garden near Angers, Fr., by François Desportes, the noted nurseryman, in 1851; it was named after A. J. Downing. Fruit medium, globular or ovate, mammillate, one side always larger than the other, pale yellow, dotted and marbled with russet; flesh very white, tender, semi-

melting; juice sufficient, sweet, acidulous, with a pleasant flavor of anis; Sept.

Doyenné Flon Ainé. 1. Leroy *Dict. Pom.* **2**:65, fig. 1869. **2.** *Rev. Hort.* 133, 1894.

Obtained from seed by M. Flon, senior, of Angers, Fr., in 1859. Fruit large, globular, generally mammillate at summit, greenish-yellow and yellowish-brown on the side of the sun, marbled and dotted with brown; flesh white, fine, very melting, juicy, sugary, slightly tartish, with a pronounced flavor of roses; first; Nov. to Feb.

Doyenné Fradin. 1. *Guide Prat.* 93. 1876. **2.** Mas *Pom. Gen.* **6**:33, fig. 401. 1880.

Regarded as a gain of M. Parigot of Poitiers. Fruit medium, globular, depressed at both extremities, water-green, dotted with brown, becoming citron-yellow on ripening; flesh whitish, fine, melting, gritty at core, full of sweet juice, vinous and richly perfumed.

Doyenné Georges Boucher. 1. *Rev. Hort.* 496, fig. 1906. **2.** *Ibid.* 197. 1907.

Came from a seed bed of Doyenné du Comice made in 1884. Fruit large and very large, globular-turbinate, bossed at the extremities; skin rather thick, dark yellow, sprinkled with small dots and marbled with fawn, russeted and reddened on the sunny side; flesh yellowish-white, juicy, sugary; very good; Feb. to Apr.

Doyenné Goubault. 1. Leroy *Dict. Pom.* **2**:66, fig. 1869. **2.** Hogg *Fruit Man.* 566. 1884.

Raised by M. Goubault, Angers, Fr. Fruit above medium, obovate, inclining to pyriform, pale yellow with russet markings and dots; flesh melting, sugary,

vinous and highly perfumed; rich and excellent; Jan.

Doyenné de la Grifferaye. 1. Leroy *Dict. Pom.* **2**:68, fig. 1869. **2.** Mas *Pom. Gen.* **4**:11, fig. 198. 1879.

Obtained by M. le Gris, Angers, Fr.; gave its first fruit in 1853. Fruit medium, turbinate-oblate, very obtuse and irregular, greenish-yellow, finely dotted with russet and brown, stained with fawn; flesh white, fine, buttery, melting, full of sweet and perfumed juice; first; Sept. and Oct.

Doyenné Gris. 1. Duhamel *Trait. Arb. Fr.* **2**:208, Pl. XLVII, fig. 1. 1768. **2.** Leroy *Dict. Pom.* **2**:69, fig. 1869.

Doyenné Gray. **3.** Downing *Fr. Trees Am.* 745. 1869.

Red Doyenné. **4.** Hogg *Fruit Man.* 635. 1884.

An ancient pear attributed to the garden of the Chartreux Monastery at Paris about the middle of the eighteenth century. Fruit medium and above, globular, flattened at each extremity; skin rather thin and wrinkled, yellow-ochre, nearly covered with cinnamon-colored russet, so that little of the true color is visible, brownish-red toward the sun; flesh white, tender, melting, very buttery, rich and delicious; one of the best dessert pears; Oct.

Doyenné Guillard. 1. *Guide Prat.* 103. 1895.

Described as a new variety by Simon-Louis Bros., Metz, Lorraine, in 1895. Fruit rather glossy, brown, slightly dotted with green; flesh almost fine, white, very juicy, vinous; Nov. and Dec.

Doyenné des Haies. 1. Leroy *Dict. Pom.* **2**:71, fig. 1869.

A wilding found on the property of M. Bardi, Bwalt, Canton of Montastruc, Haute-Garonne, Fr., and first reported in 1855. Fruit medium, globular or globular-turbinate, flat at base, mammillate at summit, pale yellow, dotted and stained with fawn, blushed with tender rose on the side toward the sun; flesh white, fine, melting, juicy, rather gritty around the core; juice abundant, sweet, very sugary, tasting of musk; second; Oct.

Doyenné Hudellet. 1. Mas *Le Verger* **3**:Pt. 2, 101, fig. 147. 1866-73.

Obtained by M. Jules Hudellet at Ceyzeriat near Bourg, Ain, Fr.; it was first published in 1867. Fruit medium, globular-cylindrical, regular outline, bright green sprinkled with dots of gray-brown, passing to pale yellow, with some red on the side of the sun; flesh white, fine, melting, full of sweet juice, slightly musky; first; Nov.

Doyenné Jamin. 1. Leroy *Dict. Pom.* **2**:75, fig. 1869. **2.** Mas *Pom. Gen.* **5**:131, fig. 354. 1880.

Gained by Jamin & Durand, nurserymen at Bourg-la-Reine, near Paris, in 1859 from seed. Fruit medium, turbinate-conic or turbinate-ovate, irregular, greenish-yellow changing to yellow and washed with rose on the sunny side, dotted with russet; flesh whitish, semi-fine, buttery, full of sweet juice, vinous, astringent, without much perfume; second; Jan. and Feb.

Doyenné de Lorraine. 1. Mas *Pom. Gen.* **4**:17, 201. 1879.

Received by Diel, the eminent German pomologist, from a nurseryman at Metz under the name of *Doyenné d'Austrasie* by which it is mostly known to German authors. Fruit medium, globular,

depressed at each pole, water-green, with gray-brown dots, bright citron-yellow when ripe and golden on the side next the sun or sometimes washed with red; flesh white, semi-fine, semi-buttery; juice plentiful, sweet and slightly perfumed; good; Sept. and Oct.

Doyenné Louis. 1. Leroy *Dict. Pom.* **2**:79, fig. 1869.

Seedling of Van Mons, previous to 1820. Fruit small, turbinate-obtuse, regular in form, dark yellow, strewn with numerous gray-brown dots and carmined on the side next the sun; flesh yellowish, coarse, semi-melting, gritty at center; juice abundant, sugary, lacking in flavor; third; Sept. and Oct.

Doyenné de Montjean. 1. *Cat. Cong. Pom. France* 243, fig. 1906.

Obtained in 1848 by M. Trottier, Montjean, Department of Maine-et-Loire, Fr., and first published in 1858. Fruit large to very large, ovate, nearly equally rounded at its two poles; skin thin and rough, yellow, much russeted; flesh white, very fine, melting, very juicy, with a slightly vinous and sweet flavor, perfumed; very good; Jan. to Mar.

Doyenné Nérard. 1. Mas *Le Verger* **2**:237, fig. 117. 1866-73. **2.** *Guide Prat.* 68. 1895.

Obtained in 1850 by M. Bonnefoy, a nurseryman at Saint-Genis-Laval, near Lyons, Fr. Fruit small, globular-conic, yellowish-white, marbled with bright red; flesh semi-breaking, very sugary; good; Aug.

Doyenné Nouveau. 1. McIntosh *Bk. Gard.* **2**:461. 1855.

Fruit medium, obovate; flesh tender and juicy; excellent; Apr.

Doyenné Perrault. 1. *Guide Prat.* 110. 1876.

Fruit medium, rather oblate, resembling Easter Bergamot with a long stalk; flesh fine, firm, melting; first; winter.

Doyenné Picard. 1. *Guide Prat.* 93. 1876.

Fruit medium; flesh melting; first; Aug.

Doyenné Rahard. 1. *Guide Prat.* 91. 1895.

Fruit large or very large; flesh fine, melting, very sweet; Dec. to Jan.

Doyenné de Ramegnies. 1. *Gard. Chron.* N. S. **20**:85. 1883.

Raised by M. Norbert Bouzin of Ramegnies-Chin near Tournai, Bel. Fruit large, turbinate and very symmetrically shaped; olive-brown, russeted; flesh fine, buttery, vinous; Oct. and Nov.

Doyenné Robin. 1. Leroy *Dict. Pom.* **2**:81, fig. 1869.

Raised in 1840 at Angers, Fr., by a gardener named Robin. Fruit large, globular-ovate, yellowish, dotted and stained with bright russet; flesh melting, juicy, sweet, vinous, aromatic; first; Oct.

Doyenné Rose. 1. Leroy *Dict. Pom.* **2**:82, fig. 1869. **2.** Mas *Pom. Gen.* **5**:21, fig. 299. 1880.

From a seed bed made in 1820 by Edouard Sageret, author of *Pomologie physiologique*; it bore fruit first in 1830. Fruit above medium, globular, irregular, yellow-ochre on the shaded side and beautiful rose on the side of the sun; flesh very white, semi-melting, granular; juice scarcely sufficient, little perfume or flavor; second; Oct.

Doyenné Saint-Roch. 1. Leroy *Dict. Pom.* **2**:83, fig. 1869.

Largely grown in the Gironde, Fr., in the middle of the nineteenth century. Fruit above medium and sometimes larger, globular but variable, pale yellow dotted with russet passing to bright yellow on the side next the sun, where it is lightly washed with carmine; flesh white, semi-fine, melting or slightly breaking, juicy, sugary, acidulous, of delicate flavor; second; Aug. and Sept.

Doyenné de Saumur. 1. Leroy *Dict. Pom.* **2**:84, fig. 1869.

A French pear of uncertain origin but known in the districts of Saumur and Lyons early in the nineteenth century. Fruit medium and below, very variable in form, from ovate-elongated to turbinate-obtuse, bossed and swelled, pale greenish-yellow, dotted with gray-russet especially on the side next the sun; flesh white, very fine, melting, juicy, perfumed, having an after-taste of musk; first; Sept.

Doyenné Sentelet. 1. Leroy *Dict. Pom.* **2**:86, fig. 1869. **2.** Mas *Pom. Gen.* **3**:137, fig. 165. 1878.

A gain of Van Mons, 1823. Fruit about medium or below, turbinate-ovate-obtuse, often irregular, deep rich yellow, much mottled and speckled with cinnamon-colored russet; flesh yellowish-white, melting, juicy, sugary, vinous; good; Oct.

Doyenné Sieulle. 1. Leroy *Dict. Pom.* **2**:87, fig. 1869. **2.** Hogg *Fruit Man.* 567. 1884.

From a seed bed of Jean Sieulle, Vaux-Praslin, Fr.; it was placed on the market in 1815. Fruit above medium to medium, often globular and often Doyenné-shaped, deep rich yellow ground, mottled and speckled with cinnamon-colored russet; flesh very white, fine, semi-melting; juice sufficient, acidulous, sweet, with an agreeable almond flavor;

variable, from second to first; Nov.

Drapiez. 1. *Mag. Hort.* **9**:125. 1843. **2.** McIntosh *Bk. Gard.* **2**:461. 1855.

Of Belgian origin. Fruit medium, obovate, pale green, very much marbled with gray; flesh tender, sweet, acidulous, strongly perfumed; a very excellent autumn fruit; Oct. and Nov.

Drone. 1. Miller *Gard. Dict.* **3.** 1807. **2.** Prince *Pom. Man.* **1**:25. 1831.

Fruit middle sized, globular, light green dotted with darker shade of same color; flesh white, breaking, full of sweet, musky juice; Aug.

Du Breuil Père. 1. Mas *Le Verger* **2**:161, fig. 79. 1866-73.

Alphonse Du Breuil obtained this variety from seeds of Louise Bonne de Jersey sown in 1840. Fruit medium, nearly a true sphere, slightly depressed at the two poles, lemon-yellow, much russeted and at maturity mottled with blood-red on the side next the sun; flesh white, fine, melting, juicy; first; Sept.

Du Mirror. 1. Baltet *Trait. Cult. Fr.* 372. 1908.

A first-class French perry pear, grown in the Haute-Savoie, yielding from 800 to 1000 litres of perry per tree; the beverage is clear, very sweet, rather sparkling, and becomes stronger with age.

Du Roeulx. 1. *Guide Prat.* 92. 1895.

Tree hardy. Fruit medium, pyriform, short, yellow, mottled with fawn; flesh yellowish, very melting, juicy and sugary, with an exquisite aroma; first; Sept.

Dubrulle. 1. *Guide Prat.* 93, 267. 1876.

Fruit rather large, globular, yellowish-green and gray mottled with fawn; flesh melting, very juicy, sugary, highly perfumed and of a luscious flavor; first; Sept. and Oct.

Duc Alfred de Croy. 1. Mas *Pom. Gen.* **5**:163, fig. 370. 1880. **2.** Hogg *Fruit Man.* 567. 1884.

Propagated and disseminated by M. de Jonghe, Brussels. Fruit large, obtuse-pyriform, regular and handsome, smooth, yellowish-green, washed with pale brown on side next the sun; flesh white, tinted with green, not very juicy, but buttery, rich and with a fine spicy flavor and perfume; excellent; Nov.

Duc d'Aumale. 1. Leroy *Dict. Pom.* **2**:91, fig. 1869. **2.** Hogg *Fruit Man.* 568. 1884.

A product of the Van Mons nursery at Louvain where it first fruited in 1847. Fruit small, turbinate-obtuse-pyriform; skin rough, greenish-yellow mottled all over with cinnamon-colored russet; flesh whitish, melting and juicy, sugary, acidulous, perfumed; first; Sept. and Oct.

Duc de Brabant. 1. Leroy *Dict. Pom.* **2**:92, fig. 1869. **2.** Mas *Pom. Gen.* **7**:27, fig. 494. 1881.

Sent by Van Mons as No. 45 to Simon Bouvier in Jodoigne, Bel., in 1827. Fruit medium, pyriform-obtuse, greenish-yellow, dotted with russet, marbled with fawn, sometimes washed with red on the side next the sun; flesh white, semi-fine, semi-breaking; juice sufficient, sugary, acidulous; good; sometimes second; Oct.

Duc de Morny. 1. Leroy *Dict. Pom.* **2**:95, fig. 1869. **2.** Hogg *Fruit Man.* 568. 1884.

Raised by M. Boisbunel, Rouen, and first published in 1862. Fruit large, long-obtuse-pyriform,

bossed, green, mottled and dotted with russet; flesh whitish, tender, melting, very juicy, too acid, little sugar or perfume; second; Nov. to Jan.

Duc de Nemours. 1. Leroy *Dict. Pom.* **2**:96, fig. 1869. **2.** Hogg *Fruit Man.* 568. 1884.

Raised by Van Mons at Louvain in 1825. Fruit large and handsome, obovate, narrowing abruptly, bright greenish or lemon-yellow, even-dotted with russet and gray specks, sometimes reddened on cheek next the sun; flesh white, melting, rich, sweet, sprightly, juicy, perfumed; first; Oct. and Nov.

Duchesse d'Angoulême Bronzée. 1. *Guide Prat.* 110. 1876.

Duchess Bronze. **2.** *Am. Pom. Soc. Rpt.* 135. 1920.

A sub-variety of Duchesse d'Angoulême found in a garden of M. Weber, Dijon, Fr., and introduced in 1873. Fruit large to very large, differs from type by its skin being red-brown or bronze, this feature being perfectly constant; flesh fine, melting, juicy, sugary; first; Oct. to Dec.

Duchesse d'Angoulême Panachée. 1. Leroy *Dict. Pom.* **2**:102. 1869. **2.** Hogg *Fruit Man.* 569. 1884.

A variegated form of Duchesse d'Angoulême, the wood, leaves and fruit being mottled with yellow and green. In 1848 it was attributed to M. Audusson, who originated Duchesse d'Augoulême, but Leroy claims that it proceeded from his nursery in 1840.

Duchesse Anne. 1. Leroy *Dict. Pom.* **2**:102, fig. 1869.

Raised in 1861 by Jacques Jalais, Nantes, Fr. Fruit above medium, like Calebasse in form,

meadow-green, slightly yellowish, dotted with gray; flesh greenish-white, fine, melting; juice sufficient, sweet, acidulous, perfumed; first; Nov.

Duchesse d'Arenberg. 1. Leroy *Dict. Pom.* **2**:103, fig. 1869. **2.** Mas *Pom. Gen.* **7**:35, fig. 498. 1881.

Although distributed from the Royal Nurseries at Vilvorde-lez-Bruxelles without mention of origin its name suggests Belgium. Fruit medium and often larger, turbinate-obtuse-oblate, greenish-yellow passing to bright green on the side of the sun, dotted with gray-russet; flesh yellowish, coarse, melting, juicy, gritty around the core; sugary, perfumed, rather sour; second; Aug.

Duchesse de Berry d'Été. 1. Leroy *Dic. Pom.* **2**:104. fig. 1869. **2.** Hogg *Fruit Man.* 569. 1884.

Raised in a seed bed in the Commune of Saint-Herblain, Department of Loire-Inferieure, Fr., in 1827. Fruit medium, globular-turbinate, yellow, dotted with dark gray; flesh very white, semi-fine, melting; juice abundant, sugary, aromatic; first; Aug. and Sept.

Duchesse de Bordeaux. 1. Leroy *Dict. Pom.* **2**:105, fig. 1869. **2.** Hogg *Fruit Man.* 570. 1884. **3.** Bunyard *Handb. Hardy Fr.* 171. 1920.

Beurré Perrault. **4.** Mas *Le Verger* **1**:133, fig. 65. 1866-73.

Bordeaux. **5.** Cal. Com. Hort. *Pear Grow. Cal.* **7**:No. 5, 242. 1918.

M. Secher, in the Commune of Montjean, Department of Maine-et-Loire, Fr., bought in 1850 from M. Perrault, Montrevault, some pear trees. Ten years passed away and then one of the trees

produced the excellent fruit here described. M. Secher invited many persons to taste it, in particular MM. Perrault and Baptiste Desportes. Later the variety fruited with M. Perrault and was named by him *Beurré Perrault*. Secher affirmed he had properly given the variety the name of Duchesse de Bordeaux. Tree large, vigorous, upright. Fruit large, roundish-pyriform; skin thick, very tough, rough, greenish-yellow, with mottlings and patches of russet; stem rather long, thick, set in a moderately deep, acute cavity; calyx large, open, placed in a moderately deep basin; flesh yellowish-white, firm, granular, juicy, mild; good; Nov. and Dec.

Duchesse de Brabant. 1. Leroy *Dict. Pom.* **2**:107, fig. 1869. **2.** Hogg *Fruit Man.* 570. 1884.

A posthumous seedling of Van Mons, which gave its first fruit in 1853. Fruit medium, short-pyriform-obtuse; skin thin, smooth, shining, greenish-yellow; flesh yellowish-white, buttery, melting; juice abundant, sweet, savory; good; Oct.

Duchesse de Brabant (De Capeinick). **1.** Mas *Pom. Gen.* **5**:17, fig. 297. 1880.

This variety, obtained by M. Capeinick, received medals at Brussels and at Tournai in 1853. Fruit medium, regular pyriform, bright green and speckled with dots of gray-green, becoming lemon-yellow at maturity, washed with blood-red on the side of the sun; flesh white, rather fine, melting; juice abundant, sugary, refreshing; first; Sept.

Duchesse de Brissac. 1. Leroy *Dict. Pom.* **2**:108, fig. 1869.

Came from a seed bed of Auguste Benoist, Brissac, Maine-et-Loire, Fr., and ripened for the first

time in 1861. Fruit above medium, ovate, rather irregular, bright greenish-yellow, spotted with russet; flesh yellowish, melting, juicy, sugary, vinous, aromatic; first; Aug. and Sept.

Duchesse Grousset. 1. *Guide Prat.* 91. 1895.

Fruit large, elongated, very obtuse at base; bright yellow, speckled with brown dots; flesh fine, very melting, rather granular at center; Dec.

Duchesse Hélène d'Orléans. 1. Leroy *Dict. Pom.* **2**:109, fig. 1869.

From a seed bed made at Louvain, Bel., in 1839 by Van Mons; it first fruited in 1847. Fruit medium, ovate, always somewhat distorted, one side being longer than the other, yellowish-green, dotted and mottled with gray and russet, carmined on the cheek next the sun; flesh white, melting, very juicy, acidulous, sugary, good flavor; first; Sept.

Duchesse d'Hiver. 1. Downing *Fr. Trees Am.* 749. 1869.

Tardive de Toulouse. **2.** Leroy *Dict. Pom.* **2**:693, fig. 1869.

M. Barthère, Sr., a nurseryman of Toulouse, Fr., found this pear in 1845 near Calmont on one of his travels through southern France. Tree moderately vigorous, characteristically small and pyramidal. Fruit large, roundish-pyriform, light yellow; flesh white, juicy; matures in winter and late spring. Although not a pear of highest quality it is worthy of notice because of its large size and long keeping.

Duchesse Hybrid. 1. *Cornell Sta. Bul.* **332**:481. 1913.

Form resembles Kieffer, lemon-yellow; flesh

coarse; poor; Oct.

Duchesse de Mars. 1. Leroy *Dict. Pom.* **2**:110, fig. 1869. **2.** Hogg *Fruit Man.* 570. 1884.

Origin uncertain; generally attributed to Belgium. Fruit medium, obovate but variable, yellowish-green, russeted; flesh buttery, white, melting, juicy, sweet, perfumed, well flavored; first class dessert pear; Nov.

Duchesse de Mouchy. 1. Leroy *Dict. Pom.* **2**:112, fig. 1869.

From a wilding noted in 1862 by the curé of Breteuil, Oise, Fr. Fruit large, turbinate-obtuse, bright olive-yellow, dotted with gray-russet; flesh yellowish-white, a little coarse, semi-breaking, juicy, sugary, vinous, slightly perfumed; second; Apr. and May.

Duchesse Précoce. 1. Leroy *Dict. Pom.* **2**:113, fig. 1869.

Came from a seed bed of Duchesse d'Angoulême made in 1850 by André

Leroy. Fruit large and often very large, ovate, golden-yellow, sprinkled with large greenish dots, slightly carmined on the cheek exposed to the sun; flesh very white, breaking or semi-melting, with seeds usually absent, juicy, sweet; flavor agreeable; second; Aug.

Duchovaya. 1. *Am. Pom. Soc. Rpt.* 22. 1887.

Scented. **2.** *Ia. Hort. Soc. Rpt.* 232. 1885.

A Central-Russian pear. Fruit medium to above, obtuse-pyriform, yellow, russeted; flesh coarse, sweet, juicy; poor; mid-season.

Dudley. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:107.

1908.

Originated with Mr. Dudley, Boston Highlands, Mass. Fruit medium long; very good; mid-season.

Dumon-Dumortier. 1. Leroy *Dict. Pom.* **2**:115, fig. 1869.

From the Van Mons seed beds. Fruit medium, turbinate, yellowish-green, dotted with russet; flesh whitish, very fine, melting, juicy, sugary, acidulous, deliciously perfumed; first; Nov.

Dundas. 1. *Mag. Hort.* **8**:60. 1842. **2.** *Ibid.* **9**:132, fig. 1843. **3.** Downing *Fr. Trees Am.* 750. 1869.

Disseminated by Van Mons in 1834 in which year it was sent to America to both R. Manning and W. Kenrick. This pear is known in Europe mostly under the names of *Rousselet Jamin*, *Henri Nicaise* and *Héliote Dundas* or *Héloise Dundas*. Fruit medium, turbinate-obtuse, greenish-yellow or yellow-ochre, dotted with brown and gray and washed with beautiful carmine on the side of the sun; flesh white, with green veins, between breaking and melting; juice insufficient; very handsome but wanting in quality; Sept. and Oct.

Dunmore. 1. *Mag. Hort.* **13**:154. 1847. **2.** *Ibid.* **18**:159, fig. 1852.

One of the best seedling pears raised by Thomas Andrew Knight, Downton Castle, Wiltshire, Eng. It first fruited in 1822 being then reported in this country by C. M. Hovey. Fruit large, oblong-obovate; skin slightly rough, yellowish-green, with russet patches, brownish-red tinge next the sun; flesh yellowish, buttery, melting, rich, subacid, juicy, sprightly, vinous, perfumed and aromatic; excellent; Sept. and Oct.

Dupuy Charles. 1. Leroy *Dict. Pom.* **2**:118, fig. 1869. **2.** Downing *Fr. Trees Am.* 750. 1869.

Louis Berckmans, Augusta, Ga., raised this pear in 1847 from seed sent from Ghent, Bel. Fruit medium to above, like Calebasse in form, rough to the touch, bright green, dotted with russet; flesh greenish-white, very fine, melting; juice abundant, sugary, acidulous; flavor delicate and slightly musky; first; Oct. and Nov.

Durandeau. 1. *Mag. Hort.* **26**:129. 1860. **2.** *Am. Pom. Soc.* 111. 1862.

De Tongres. **3.** *Ann. Pom. Belge* **3**:15, fig. 1855. **4.** Downing *Fr. Trees Am.* 489. 1857.

Originated from seed with Charles Louis Durandeau, Tongres-Notre-Dame, a village in Hainaut, Bel., probably about 1825. Tree fairly vigorous, pyramidal, an early and abundant bearer. Fruit medium large, obovate-pyriform, generally irregular; skin thin, covered with fine golden russet, blushed with carmine on the exposed cheek; flesh yellowish-white, buttery, very juicy, vinous, sprightly, with an exquisite aroma and of first quality; Oct. and Nov.

Durée. 1. Downing *Fr. Trees Am.* 751. 1884.

A wilding found by Isaac Hicks, Westbury, N. Y., and introduced by him before 1869. Fruit medium, oblong-acute-pyriform, pale yellow, dotted and patched with russet; flesh whitish, semi-melting, juicy, sweet, slightly musky; good to very good; Oct.

Durst-Lösche. 1. Dochnahl *Führ. Obstkunde* **2**:155. 1856.

Thuringia, 1809. Fruit medium, globular-

turbinate, greenish-yellow turning to yellow; flesh breaking, soft, honey-sweet and aromatic; good; Sept.

Early Ely. 1. *Tex. Nursery Cat.* 10. 1913.

Originated on the grounds of Silas Ely of Sherman, Tex., and was introduced by the Texas Nursery Company about 1906. Said to be small, yellow and good for both table and market.

Early Green Sugar. 1. J. Van Lindley *Cat.* 51. 1921.

Fruit large, yellow, blushed; June.

Easter Bergamot. 1. Downing *Fr. Trees Am.* 751. 1869. **2.** Hogg *Fruit Man.* 572. 1884.

Bergamote de Pâques. **3.** Leroy *Dict. Pom.* **1**:250, fig. 1867.

An old French pear of which Merlet wrote in 1675, calling it *Bergamote de Pasques* or the *La Grillière*. This variety was early known in England according to Switzer who saw trees of it at Hampton Court growing against a wall said to have been erected by Queen Elizabeth and which had every appearance of having stood there since that time. Fruit medium, globular-turbinate, narrowing toward the stalk, grayish-green, dull, changing to pale yellow, thickly dotted with brown; flesh white, semi-fine, gritty, breaking; juice sweet, acid, with not much perfume or flavor; second only, on account of its extreme lateness; Mar. to May.

Eastern Belle. 1. *Mass. Hort. Soc. Rpt.* 32. 1870. **2.** Downing *Fr. Trees Am.* 1st App., 126, fig. 1872.

This pear originated with Henry McLaughlin, Bangor, Me. Tree hardy, vigorous, productive; fruit

of medium size, obovate-pyriform; skin pale yellow, with nettings and patches of russet and many russet dots, occasionally blushed with bright red; flesh whitish-yellow, coarse at center, juicy, half-melting, sweet, rich, with a peculiar piquant aroma; good; Sept.

Echasserie. 1. Duhamel *Trait. Arb. Fr.* **2**:187, Pl. XXXII. 1768. **2.** Downing *Fr. Trees Am.* 753. 1869.

Walnut. **3.** *Am. Pom. Soc. Rpt.* 90. 1856.

Besi de l'Echasserie. **4.** Leroy *Dict. Pom.* **1**:269, fig. 1867.

The wilding from which this variety was derived was probably noticed about 1660 and La Quintinye before 1690 spoke of it as having been in French gardens for twenty years. It appears to have been a native of Anjou, where there are three places bearing the name given to it. Probably it had been locally cultivated under other names for a long time previous to its official recognition. Fruit medium to small, globular-oval but variable, always obtuse and bossed; skin rough to the touch, lemon-yellow dotted with fawn and with some patches of grayish-brown russet; flesh white, fine, melting, with very small grits around the core; juice extremely abundant, acidulous, saccharine, with an after-taste of musk, very agreeable; first; Nov. through Jan.

Edle Sommerbirne. 1. Oberdieck *Obst-Sort.* 327. 1881.

Germany and Holland. Fruit small, pyriform and somewhat long-gourd-shaped, smooth yellowish-green changing to yellow at maturity, with reddish-brown on the side next the sun, dotted and speckled

with gray; flesh fine, semi-melting, with a sweet, agreeable, aromatic flavor of rose; good for dessert and first for kitchen use; Aug.

Edward Seedling St. Germain, 1. Downing *Fr. Trees Am.* 754. 1869. **2.** Mas *Pom. Gen.* **6**:155, fig. 462. 1880.

Raised by Dr. W. D. Brincklé, Philadelphia, Pa. Fruit medium or rather large, globular-pyriform-obtuse, a little irregular in form, with its greatest diameter at the center; skin somewhat thick and tender, intense green at first, sprinkled with grayish-black dots changing at maturity to bright citron-yellow, some russet nettings and patches; flesh whitish, semi-fine, slightly granular yet melting, full of saccharine juice, acidulous and delicately perfumed; good; Oct. to Dec.

Effie Holt. 1. J. Van Lindley *Cat.* 54. 1913.

Said to have originated on the farm of L. W. Holt near Burlington, N. C.; introduced by J. Van Lindley Nursery Company about 1907. Tree healthy, thrifty. Fruit large, greenish-yellow; flesh light yellow, rich, juicy; season about the same as Duchesse d'Angoulême.

Eliot Early. 1. *Am. Pom. Soc. Rpt.* 52. 1871. **2.** *Rural N. Y.* **51**:602, figs. 242, 243. 1892.

Said to have been raised by Judge Charles Eliot of Windsor, Ontario, Canada, from a cross between Madeleine and Doyenné d'Éte. Tree strong, vigorous, hardy, an early and productive bearer. Fruit small, pyriform, pale greenish-yellow, brownish-red next the sun; stem long, slender, curved; cavity small, russeted; calyx closed or partially open; base small; flesh whitish, half-fine, juicy, melting, sweet, slightly perfumed; good to very good; July.

Élisa d'Heyst. 1. Mas *Le Verger* **1**:99, fig. 56. 1866-73. **2.** Leroy *Dict. Pom.* **2**:125, fig. 1869.

Obtained by Major Espéren of Mechlin, Bel. Fruit small but sometimes medium, ovate, with an irregular outline, grass-green, dotted and stained with clear fawn; flesh greenish, coarse, semi-melting, very gritty around the core; juice sweet, abundant, sugary, slightly perfumed, little flavor; second; Mar.

Elizabeth (Edwards). 1. *Mass. Hort. Soc. Rpt.* **5**. 1843. **2.** *Mag. Hort.* **12**:441, fig. 34. 1846.

This pear was raised at New Haven, Conn., by Governor Edwards[32] and was first exhibited in 1845. Fruit of medium size, roundish-obtuse-pyriform, slightly angular; skin smooth, pale lemon-yellow, profusely sprinkled with very small, pale russet dots and a few grayish-russet patches; flesh white, somewhat coarse, melting, very juicy, slightly subacid, with a vinous flavor; Oct.

Elizabeth Maury. 1. Downing *Fr. Trees Am.* 2nd App., 147. 1876.

A chance seedling on the ground of Reuben Maury, Charlottesville, Va. Fruit small, oblate, slightly elevated, pale greenish-yellow, sometimes with a shade of brown in the sun, with many greenish dots; flesh whitish, semi-fine, tender, juicy, melting, sweet, slightly vinous; Aug.

Ellis. 1. *Mag. Hort.* **30**:370, fig. 13. 1864. **2.** Downing *Fr. Trees Am.* 755, fig. 1869.

Raised from seed of Seckel in 1843 by Annie E. Ellis, New Bedford, Mass. Tree vigorous, hardy, prolific. Fruit large, oblong-obovate-pyriform, truncate, slightly uneven, greenish-yellow, patched and mottled with russet, sprinkled with many russet

dots; stem rather long, rather stout, set in a small cavity; calyx large, open; basin uneven, slight; flesh whitish, juicy, melting, sweet, slightly vinous, aromatic; very good; Sept. and Oct.

Ellis (New York), **1.** Downing *Fr. Trees Am.* 756. 1869.

Downing says that there is another pear under the name of "Ellis" grown in western New York, entirely distinct from Ellis. The fruit is described as medium, acute-pyriform, greenish-yellow, shaded with crimson-red in sun, with very small brown dots; flesh white, juicy, melting, vinous, often astringent, disposed to rot at the core; good; Aug. and Sept.

Emerald. 1. Downing *Fr. Trees Am.* 756. 1869.

Belgian. Fruit medium, obtuse-pyriform, pale green, with pale brownish-red next the sun and covered with russety dots; flesh white, melting, buttery, richly flavored, subacid, vinous; good; Nov. and Dec.

Émile d'Heyst. 1. Leroy *Dict. Pom.* **2**:131, fig. 1869. **2.** Bunyard *Handb. Hardy Fr.* 173. 1920.

A seedling raised by Major Espéren, Mechlin, Bel., which fruited in 1847. Fruit medium and often larger, ovate, rather long, irregular, generally with sides unequal, bossed, bronzed, dotted with fine specks; flesh greenish, fine and dense, melting, scented, free from grit; juice very abundant, refreshing, sugary, slightly acid but very agreeably perfumed; first; Oct.

Enfant Nantais. 1. Mathieu *Nom. Pom.* 210. 1889. **2.** *Guide Prat.* 92. 1895.

Originated by M. Grousset of Nantes, Fr. Tree vigorous and productive. Fruit large, conic, gray;

flesh fine, buttery, juicy, aromatic but very slightly tart; Oct.

Enfant Prodigue. 1. Downing *Fr. Trees Am.* 385. 1845. **2.** Leroy *Dict. Pom.* **2**:133, fig. 1869.

Rousselet Enfant Prodigue. **3.** Downing *Fr. Trees Am.* 846. 1869.

Verschwenderin. **4.** Mathieu *Nom. Pom.* 293. 1889.

A Van Mons seedling of about 1830. Fruit medium to large, ovate but variable, greenish-yellow, largely obscured with cinnamon-colored russet, more or less carmined on the side of the sun; flesh greenish-white, dense, melting, juicy, sugary, aromatic, acidulous, astringent; second; Sept.

Épine d'Été. 1. Leroy *Dict. Pom.* **2**:138, fig. 1869. **2.** Downing *Fr. Trees Am.* 758. 1869.

An old pear grown in the gardens of the Monastery of Chartreux, Paris, and stated in the catalog of that institution, of 1736, to be identical with the pear *Bugiarda* of Italy. This Leroy has shown to be an error, the *Bugiarda* being the pear known in France as *Trompeur*. Le Lectier appears to have grown it in 1628 in his famous gardens at Orléans, though under the name of *Poire d'Espine*. Fruit above medium, pyriform, more or less obtuse, bright green, finely dotted with gray-russet and lightly colored with tender rose on the side of the sun; flesh yellowish, fine, melting, juicy, sugary and musky; a moderately good autumn pear; Sept.

Épine d'Été Rouge. 1. *Guide Prat.* 94, 270. 1876.

Rother Sommerdorn. **2.** Liegel *Syst. Anleit.* 108. 1825.

French, 1805. Fruit medium, ovate, slightly

bossed, light grass-green turning to yellow-green, dark blush, dotted; flesh finely-grained; juice somewhat deficient, aromatic; good for the table, kitchen and market; Sept.

Épine d'Hiver. 1. Langley *Pomona* 132. 1729. **2.** Duhamel *Trait. Arb. Fr.* **2**:184, Pl. XLIV, fig. 3. 1768.

Winter Thorn. **3.** Bradley *Gard.* 199. 1739. **4.** Lindley *Guide Orch. Gard.* 410. 1831.

A very old French pear, reported as early as 1675. Tree healthy, although not a strong grower, and bears well. Fruit medium to above, roundish-obovate, smooth, green becoming yellowish and irregularly covered with grayish-brown dots; stem rather long, fleshy at base, inserted without depression; calyx small, open, set in a rather shallow basin; flesh whitish, melting, tender, buttery, with a sweet and agreeable musky flavor; a dessert pear; Nov. to Jan.

Épine de Jernages. 1. *Guide Prat.* 94. 1876.

Fruit medium; first; Mar.

Épine du Mas. 1. *Pom. France* **1**:No. 31, Pl. 31. 1863. **2.** Leroy *Dict. Pom.* **2**:412, fig. 1869.

Belle Epine Dumas. **3.** Downing *Fr. Trees Am.* 668. 1869.

Dumas. **4.** *Rural N. Y.* **45**:480, figs. 292, 293. 1886.

A wilding found about 1760 by a M. Chemison in the forest of Rochechouart near Mas, Department of Haute-Vienne, Fr. Fruit medium, obtuse-pyriform, lively yellow or lemon-yellow, finely dotted with brown and washed with carmine on the sun-exposed

cheek; flesh white, fine, tender, melting, sweet, gritty at center, juicy, acid, musky; good; Nov. and Dec.

Épine Royale. 1. Downing *Fr. Trees Am.* 758. 1869.

Of French origin. Fruit medium, pyriform, yellowish, blushed with bright red on the side next the sun; flesh fine, melting, juicy, sweet, vinous; Oct.
Épine-Royale de Courtray. 1. Mas *Pom. Gen.* **4**:127, fig. 256. 1879.

Origin not clear though mentioned in the Bulletin of the Society of Van Mons in 1858. Fruit medium or large, pyriform-obtuse, green sprinkled with numerous brown dots, changing to pale yellow at maturity, with some red on the side next the sun; flesh white, semi-fine, buttery, juicy, sugary, pleasant; handsome and good for transportation; Aug.

Ermsinde. 1. Dochnahl *Führ. Obstkunde* **2**:69. 1856. **2.** Leroy *Dict. Pom.* **2**:143, fig. 1869.

A chance seedling found in the garden of M. Bouvier, Jodoigne, Bel., and reported in 1851. Fruit above medium, in form variable from pyramidal to turbinate, lemon-yellow, dotted and marked with brown-russet, and blushed with dark red on the exposed cheek; second; early Oct.

Ernestine Auzolle. 1. Downing *Fr. Trees Am.* 758. 1869.

Of French origin. Fruit small, globular-pyriform, sometimes acute-pyriform, greenish-yellow, with a shade of brown in the sun, often netted and patched with russet; flesh rather coarse, yellowish, moderately juicy, semi-melting, sweet; good; Sept. and Oct.

Eseme. 1. *Ia. Soc. Hort. Rpt.* 61. 1880.

Cultivated on the northern steppes of Russia and introduced to this country by J. L. Budd of Iowa in 1880.

Esperine. 1. *Ann. Pom. Belge* **4**:73, fig. 1856. **2.** Downing *Fr. Trees Am.* 759. 1869.

By Van Mons from an undated seed bed; it was first reported in 1826 and dedicated to Major Espéren, the enthusiastic and distinguished pomologist of Mechlin. Fruit large, obtuse-ovate, yellow with greenish tinge, much dotted with greenish-gray-russet, clouded with tender rose on the side of the sun; flesh white, semi-melting, full of juice, sugary, vinous, refreshing, perfumed; first; Oct. and Nov.

Esperione. 1. Thomas *Am. Fruit Cult.* 561. 1885.

Fruit medium, obovate, slightly pyriform, yellow, juicy, melting, perfumed; Sept.

Essex. 1. Downing *Fr. Trees Am.* 759. 1869.

Originated in the garden of W. Flack, Essex, N. Y., before 1869. Fruit below medium, oblong-obtuse-pyriform, greenish-yellow, with many brown and green dots, marbled with carmine in the sun; flesh whitish, juicy, melting, granular, sweet; good; Sept.

Esther Comte. 1. Mas *Pom. Gen.* **6**:39, fig. 404. 1880.

Cataloged by Dauvesse of Orléans in 1857. Fruit medium, ovate-pyriform, bright green changing to yellow, dotted with russet; flesh whitish, rather fine, semi-melting, juicy, sugary, delicately perfumed; good; winter.

Estranguillon. 1. Leroy *Dict. Pom.* **2**:146, fig. 1869.

According to Charles Estienne, 1530, this pear

was at that time well known to French gardeners. First rate for making perry. Fruit small, ovate, yellowish, dotted with gray and slightly tinted with rose on the cheek exposed to the sun; flesh whitish, rather coarse, breaking or semi-melting, very juicy, without perfume; Sept.

Esturion. 1. Downing *Fr. Trees Am.* 759. 1869. **2.** Mas *Pom. Gen.* **6**:41, fig. 405. 1880.

Origin unknown. Fruit rather small, conic, pale green changing to yellow, tinged with light red on the side of the sun; flesh yellowish, fine, melting; juice abundant, sweet and perfumed.

Eugène Appert. 1. Leroy *Dict. Pom.* **2**:148, fig. 1869. **2.** *Am. Pom. Soc. Rpt.* 130. 1881.

Raised from seed by André Leroy, Angers, Fr., and first gave fruit in 1862. It was introduced to this country about 1881, in which year it was described as of "very superior quality" and one of the "best of the kinds recently introduced." Fruit medium, globular, bossed, unequal, grass-green, with grayish stains and large dots; flesh yellowish-white, very fine and melting, very full of sugary, acidulous juice, having an exquisite aroma; first; Aug. and Sept.

Eugène Furst. 1. Mas *Pom. Gen.* **6**:167, fig. 468. 1880.

A gain of Van Mons. Fruit medium, globular-conic, very obtuse, green changing to lemon-yellow, dotted with brown and more or less washed with red-brown on the side of the sun; flesh white, fine, buttery, melting, juicy, sugary, acidulous, with a characteristic perfume; first; Nov. and Dec.

Eugène Maisin. 1. *Guide Prat.* 94. 1876.

Under trial in the nurseries of Simon-Louis Bros. of Metz, Lorraine, in 1876. Fruit medium; skin rough and grayish; flesh melting; first; Dec. and Jan.

Eugène des Nouhes. 1. Leroy *Dict. Pom.* **2**:148, fig. 1869. **2.** Mas *Pom. Gen.* **3**:65, fig. 129. 1878.

M. Parigot, President of the Imperial Court of Poitiers, Fr., obtained this variety which he dedicated in 1856. Fruit above medium, obtuse-turbinate, dark yellow, dotted and stained with gray-russet, slightly vermilioned on the side of the sun; flesh whitish, melting, juicy, vinous, sweet, delicately perfumed; first; Sept.

Eugène Thirriot. 1. *Guide Prat.* 94. 1876.

Produced and placed on the market in 1868 by Thirriot Bros. Fruit large, pyriform, pale greenish-yellow; flesh melting, buttery, very juicy, sugary, perfumed; first; Oct. and Nov.

Euratsfelder Mostbirne. 1. *Löschnig Mostbirnen* 78, fig. 1913.

An Austrian perry pear. Fruit medium to large, globular; skin smooth, light yellow when ripe, sprinkled with rather fine dots, and russet speckles; flesh rather white, not very coarse, agreeably subacid, very juicy; Oct. and Nov.

Eureka. 1. A. M. Augustine *Cat.* 45. 1916.

According to correspondence with A. M. Augustine, Normal, Ill., the introducer of this pear, it was fruited in 1900 by a Mr. Dickinson of Eureka, Ill.; a chance cross between Seckel and Kieffer and shows characteristics of both parents. Tree reported similar to Kieffer in leaf, habit of growth and resistance to and recovery from blight. Fruit medium, shaped like Seckel; skin delicate, waxy,

bright yellow, slightly russeted, with a bright red cheek; flesh flavor of Seckel, more solid, longer keeper.

Eva Baltet. 1. *Rev. Hort.* 312, fig. 1898.

From a seed bed of Bartlett fertilized with Flemish Beauty. It was exhibited at the International Exhibition of St. Petersburg in 1893. Fruit very large, pyriform-truncated; skin fine, light cream passing into yellow, dotted with brown, extensively blushed with bright carmine; flesh white, fine, juicy, sugary and aromatic; first; Nov. but variable.

Excellente de Moine. 1. Mas *Pom. Gen.* **5**:59, fig. 318. 1880.

Distributed by Burgomaster Rossy of Schönburg, in Moravia, Austria, in 1835. Fruit medium or rather large, globular-ovate, grass-green, dotted with gray-green specks; flesh white, rather greenish especially just under skin, buttery, juicy, delicately perfumed; good; latter half of August.

Excelsior. 1. *Am. Pom. Soc. Rpt.* 158. 1867. **2.** Downing *Fr. Trees Am.* 759. 1869.

A seedling of Francis Dana, Boston, Mass., raised about 1860. Fruit medium, obovate-obtuse-pyriform, greenish-yellow, with some russet and many brown dots; flesh juicy, melting, sweet, pleasant; good to very good; Sept.

Eyewood. 1. Leroy *Dict. Pom.* **2**:149, fig. 1869. **2.** Downing *Fr. Trees Am.* 759. 1869.

Raised from seed by T. A. Knight about 1822 at Downton, Wiltshire, Eng. Fruit medium, globular; skin very thick, greenish-yellow, tinged with brown next the sun, much covered with pale brown-russet and large dots; flesh yellowish, very tender and melting, juicy, sweet, with a sprightly, vinous flavor and fine aroma; first, but sometimes has too little perfume; Oct.

Fall. 1. *Am. Pom. Soc. Rpt.* 102. 1875.

A natural tree planted at least as early as 1650 by Gov. Prince at Eastham, on Cape Cod. Fruit about the size of a hen's egg, tapering towards both ends, green, nearly covered with thin russet, of inferior quality. In 1836 it was a flourishing, lofty tree, producing an average of fifteen bushels of fruit.

Fall Beurré d'Arenburg. 1. *Am. Pom. Soc. Rpt.* 119. 1875. **2.** Downing *Fr. Trees Am.* 3rd App. 175. 1881.

Exhibited by Asahel Foote, Williamstown, Mass., at the Boston meeting of the American Pomological Society in 1875 as one of his seedlings. Fruit medium, globular-oblate, inclining to obtuse-pyriform, pale greenish-yellow, tinged with orange where well exposed, sometimes blushed on the cheek next the sun, slightly patched and netted and much dotted with russet; flesh whitish, rather coarse, juicy, melting, sweet, vinous, musky; very good; Oct.

Famenga. 1. *Mass. Hort. Soc. Rpt.* 59. 1844. **2.** Downing *Fr. Trees Am.* 759. 1869.

A foreign variety exhibited in 1843 by R. Manning, Salem, Mass. Fruit medium, obovate, greenish-yellow; Sept.

Faurite. 1. *Gard. Chron.* 69. 1848.

Fruit medium, oblong-obovate, yellow, shining, tinged with red next the sun, and having numerous reddish dots; flesh yellowish-white, semi-melting, slightly perfumed; keeps nearly a year.

Fauvanelle. 1. *Rev. Hort.* 146. 1911.

Considered by M. Chasset, Secretary-general of the Pomological Society of France, to be the finest of

all cooking pears. Fruit long-pyriform, bright green, largely covered with fawn, and rayed or washed with red on the sun-exposed cheek; flesh yellowish-white, very sugary, giving a good red wine tone to the cooked fruit, with an agreeable aroma; very good for kitchen use.

Favorite Joanon. 1. *Cat. Cong. Pom. France* 259, fig. 1906.

Obtained in 1833 by M. Joanon, at Saint-Cyr-an-Mont-d'Or, Rhône. Fruit medium to large, turbinate; skin smooth, bright yellow, dotted with gray, flushed with rose at maturity; flesh white, very fine, melting, very juicy, sweet, acidulous, perfumed; very good; Aug. and Sept.

Favorite Morel. 1. *Guide Prat.* 110. 1876.

Obtained from a seed of Bartlett by M. Morel, a nurseryman at Lyons, Fr., in 1874. Fruit rather large, obtuse-pyriform, suggesting in form a long Bartlett, somewhat bossed in outline; skin a little rough, passing from greenish-yellow to golden-yellow, mottled with fawn; flesh white, fine, melting, compact, juicy, fresh, vinous, acidulous; first; Oct.

Feast. 1. Downing *Fr. Trees Am.* 759. 1869.

Originated with Samuel Feast, Baltimore, Md., from seed of Seckel. Fruit medium, obovate-pyriform, greenish-yellow, with brown dots; flesh whitish, juicy, sweet; good; Sept.

Félix de Liem. 1. Leroy *Dict. Pom.* **2**:151, fig. 1869. **2.** Downing *Fr. Trees Am.* 759. 1869.

A posthumous variety from the seedlings of Van Mons at Geest-Saint-Rémy, 1853. Fruit below medium, turbinate, generally obtuse, greenish-yellow, very much mottled with dirty or dusky

brown, much speckled bronze-russet on side next the sun and some traces of crimson streaks; flesh yellowish, fine, melting, juicy, sugary, slightly perfumed; second; early Nov.

Félix Sahut. 1. *Rev. Hort.* 151. 1902. **2.** *Am. Pom. Soc. Rpt.* 135. 1920.

From Passe Colmar crossed with Bartlett by Arsène Sannier; new in 1902. Fruit similar in appearance to Passe Colmar; flesh fine, juicy, melting, sugary, with a very agreeable perfume; very good; Nov. to Jan.

Ferdinand Gaillard. 1. *Guide Prat.* 103. 1895.

Fruit large or very large; skin smooth, brilliant yellow all over; flesh yellowish-white, fine, tender, very melting, juicy, very sugary; good or very good; Nov. to Jan.

Ferdinand de Lesseps. 1. Leroy *Dict. Pom.* **2**:154, fig. 1869.

Raised by André Leroy in 1864. Fruit medium, ovate, not very regular, bright yellow, extensively washed and marbled with brown-russet; flesh white, very fine, melting; juice very abundant, acidulous, very sugary, with an exquisite flavor; first; early Oct.

Fertility. 1. *Jour. Hort.* N. S. **1**:555, fig. 100. 1880. **2.** Bunyard *Handb. Hardy Fr.* 174. 1920.

Raised by T. Rivers, Sawbridgeworth, Eng., in 1875, from Beurré Goubault. Fruit medium, obovate, even and regular, entirely covered with a bright cinnamon coat of russet, tinged with orange on the side next the sun; flesh semi-melting or crackling, very juicy, sweet, with a rich, highly-perfumed flavor; good; Oct.

Figue. 1. Duhamel *Trait. Arb. Fr.* **2**:183. 1768. **2.** Hogg *Fruit Man.* 576. 1884.

The pear described under this name by Duhamel in 1768 is quite different from the pear *Figue d'Alençon* with which it has been confused, the *Green fig* of Biedenfeld or *Longue Verte* of Leroy. Origin uncertain. Fruit medium, long-pyriform, green and next the sun of a dull dark red, entirely covered with numerous dots and patches of brown-russet; flesh white, tender, buttery, melting; juice sweet, sugary, perfumed; excellent early dessert pear; Sept.

Figue d'Alençon. 1. Leroy *Dict. Pom.* **2**:156, fig. 1869. **2.** *Rural N. Y.* **45**:233, figs. 150, 151. 1886.

Obtained about 1829 near Alençon, Department Orne, Fr. Fruit above medium, sometimes large, long, very similar to the fig in form and color; flesh greenish-white, semi-fine and melting, sugary, acidulous and perfumed; first but requiring a favorable soil and climate; Oct. and Nov.

Figue de Naples. 1. Hogg *Fruit Man.* 577. 1884.

This has been confused with *Figue d'Alençon* but is a distinct variety. Fruit above medium, oblong, greenish-yellow, entirely covered with thin, delicate russet, dark reddish-brown on the side next the sun; flesh greenish-white, buttery, melting, with a rich, sugary flavor; excellent; Nov.

Figueira. 1. *Rev. Hort.* 463. 1906.

A variety introduced as new in 1906 by M. Bruant, Poitiers, Fr. Fruit of good size, having rather the form of a large fig, brilliant yellow, colored with purple on the side of the sun, of magnificent appearance; flesh very white, fine, melting, juicy,

very sugary, with an agreeable perfume; first, one of the best of the season; July and Aug.

Fin Juillet. 1. *Rev. Hort.* 477, fig. 169. 1898.

Obtained by M. Hérault, Angers, Fr., from Beurré Giffard crossed with Joyau de Septembre in 1879. Fruit medium, turbinate, ovate, enlarged at center, russeted all over; flesh fine, very melting, rather subject to mellowness, excessively juicy, very sugary, slightly acidulous and with a delicate, musky savor; good; Aug.

Fin-Or d'Orleans. 1. Leroy *Dict. Pom.* **2**:160, fig. 1869.

Fine Gold of Summer. **2.** Downing *Fr. Trees Am.* 760. 1869.

An old pear mentioned by the earliest French writers. Fruit small, turbinate, swelled, obtuse, golden-yellow, dotted with carmine on the shaded side and bright red on the other cheek; flesh greenish, semi-fine and melting, juicy, sugary, sourish, rather delicate; second; Aug.

Fin-Or de Septembre. 1. Duhamel *Trait. Arb. Fr.* **2**:156. 1768. 2. Hogg *Fruit Man.* 577. 1884.

Under the names of *Finor* and *Finoin* Claude Saint-Etienne wrote of this pear in 1670. Fruit medium, pyriform-obtuse, yellowish-green speckled with brown-fawn dots, orange-yellow and brick-red on the side of the sun; flesh white, tender, semi-breaking; juice moderate, sugary, slightly acid, without pronounced perfume; third; Oct.

Fitzwater. 1. *Am. Pom. Soc. Rpt.* 73. 1895.

Originated in New York. It resembles Lawrence. Fruit small, obtusely pyriform, yellow partly covered

with russet; flesh very fine-grained and melting; fair; winter.

Flemish Bon Chrêtien. 1. Downing *Fr. Trees Am.* 761. 1869.

Bon-Chrétien de Vernois. **2.** Leroy *Dict. Pom.* **1**:469, figs. 1867.

Of Flemish origin. It was widely propagated in England in 1840. Fruit medium, obovate, green changing to yellow; flesh yellowish-white, crisp, sweet, perfumed; an excellent stewing pear; Nov. to Mar.

Fleur de Neige. 1. Leroy *Dict. Pom.* **2**:163, fig. 1869.

Henri Van Mons. **2.** Downing *Fr. Trees Am.* 782. 1869.

Obtained by Van Mons between 1830 and 1835. Fruit rather large, pyriform, narrowed toward the stalk, greenish-yellow, stained with russet and washed with dark brick-red on the cheek next the sun and dotted with carmine and maroon; stem long, slender; calyx open in a small basin; flesh white, melting, abounding in sugary juice, with a pleasant perfume; good to very good; Sept. and Oct.

Florent Schouman. 1. Downing *Fr. Trees Am.* 762. 1869. **2.** Mas *Pom. Gen.* **1**:153, fig. 77. 1872.

A posthumous gain of Van Mons propagated by the Society Van Mons. Fruit nearly large, globular-turbinate, clear green, speckled with large, round, gray-brown spots; flesh white, fine, melting, sugary; juice abundant, vinous, acidulous; good; Oct.

Florida Bartlett. 1. *Mich. Sta. Sp. Bul.* **30**:28. 1905.

Received for trial in Michigan in 1900 from Stark Bros., Louisiana, Mo. Fruit large, roundish-oval,

tapering at both ends, yellow, with dark brown dots; flesh greenish, firm, juicy, half-breaking, granular, mild, almost sweet, perfumed; fair; Dec. and Jan.

Fluke. 1. *Ia. Hort. Soc. Rpt.* 174. 1909. **2.** *Ibid.* 289. 1910.

Disseminated by N. K. Fluke. Reported as hardy, blight-resistant and better than Kieffer.

Fondante Agréable. 1. *Horticulturist* **4**:83. 1854. **2.** *Guide Prat.* 94. 1876.

Belgian; described as new in 1854 by M. P. Wilder. Fruit medium, globular-ovate, dull yellowish-green slightly russeted; flesh tender, juicy and melting, pleasant, refreshing, with a delicate aroma; very good; Aug.

Fondante Albert. 1. Mas *Le Verger* **3**:Pt. 2, 81, fig. 137. 1866-73. **2.** Downing *Fr. Trees Am.* 762. 1869.

Obtained by Albert Boucqueau, Belgium. It was propagated in France in 1853. Fruit medium, globular-conic, depressed at the poles, green turning to yellow, with large dots and markings of fawn, flesh white; semi-fine, breaking, granular about the center; juice deficient, but delicate, vinous and aromatic; second; Sept.

Fondante d'Angers. 1. Mas *Pom. Gen.* **7**:79, fig. 520. 1881.

Origin unknown, probably French. Fruit medium or rather large, turbinate; skin fine yet a little firm, clear green, dotted with greenish-gray, passing to yellow at maturity; flesh white, fine, entirely melting; juice abundant and sugary, vinous, acidulous; first; Oct.

Fondante de Bihorel. 1. *Rev. Hort.* 547. 1888.

Fruited in France about 1866 from seed of a common French country pear. Tree hardy. Fruit small or medium, pyriform, deep green passing to bright yellow, speckled with gray dots, touched with carmine on the side of the sun; flesh delicate, melting, buttery, without grit; juice sufficient, sugary, acid, well perfumed; quality good; July.

Fondante de Brest. 1. Leroy *Dict. Pom.* **2**:169, fig. 1869. **2.** Hogg *Fruit Man.* 579. 1884.

Mentioned by Claude Saint-Etienne in 1670 under the name of *Inconnue du Chesneau*. Fruit medium or nearly medium, ovate-pyriform, more or less swelled, smooth, shining, bright green changing to yellowish-green on the shaded side as it ripens, and red, mottled dark blood-red next the sun, covered with small gray dots; flesh white, rather coarse, breaking, gritty, juicy, sugary, perfumed, rose-water flavor; second; Oct.

Fondante de Charleville. 1. *Guide Prat.* 92. 1895.

Fruit large, pyriform, regular in outline, of a beautiful color; flesh melting, buttery, of an agreeable flavor; Nov. and Dec.

Fondante de Charneau. 1. Leroy *Dict. Pom.* **2**:170, fig. 1869. **2.** Hogg *Fruit Man.* 579. 1884.

A wilding found by M. Légipont growing on his property at Charneau, in the Province of Liège, Bel., at the beginning of the last century. Fruit large, sometimes very large, pyriform but uneven in outline, pale greenish-yellow, thickly dotted with large gray specks and sometimes vermilioned on the side next the sun; flesh white, fine, very melting, juicy, scented, sugary and rich; excellent; Sept. to

Nov.

Fondante de Cuerne. 1. *Ann. Pom. Belge* **2**:5, fig. 1854. **2.** Bunyard *Handb. Hardy Fr.* 175. 1920.

This variety was found by Reynaert Beernaert in the environs of Courtrai, Bel., but the time of its first production is unknown. Fruit large, conic-pyriform, rather irregular in outline, lemon-yellow, with numerous ash-gray dots; flesh yellowish-white, semi-fine and melting, rather gritty about the core, very juicy, sugary, vinous, slightly aromatic; second; Sept.

Fondante des Emmurées. 1. *Guide Prat.* 110. 1876.

Obtained from a seed of Doyenné Boussock by M. Sannier, Rouen, Fr., and placed on the market in 1873. Fruit medium, turbinate, clear yellow, dotted with gray; flesh yellowish, sugary, perfumed; good; Sept.

Fondante d'Ingendal. 1. Downing *Fr. Trees Am.* 763. 1869.

Belgian. Raised by M. Gambier and first published in 1856. Fruit medium, pyriform, greenish-yellow, touched with gray and with red; flesh fine, melting; good to very good; Sept. to Nov.

Fondante de Ledeberg. 1. *Guide Prat.* 103. 1895.

Belgian. Raised about 1890. Fruit pale green, dotted with brown; flesh very melting, white and slightly perfumed; first; Mar. and Apr.

Fondante de la Maitre-École. 1. Leroy *Dict. Pom.* **2**:175, fig. 1869. **2.** Downing *Fr. Trees Am.* 764. 1869.

Produced in the gardens of Robert & Moreau, growers at Angers, Fr.; first tested in 1861. Fruit medium, oblong, golden or orange-yellow, dotted

and mottled with fawn; flesh fine, yellowish, breaking, juicy, vinous, sugary and perfumed; second; Dec. and Jan.

Fondante de Malines. 1. *Mag. Hort.* **14**:209. 1848. **2.** *Ann. Pom. Belge* **6**:9, fig. 1858.

Raised by Major Espéren at Mechlin (Malines), Bel., in 1842. Fruit large, globular-turbinate, smooth, of a deep golden-yellow with a crimson cheek in the sun, spotted with crimson dots; flesh white, a little coarse, buttery, juicy, sugary, tart, good but somewhat variable; Oct. and Nov.

Fondante de Mars. 1. Leroy *Dict. Pom.* **2**:177, fig. 1869.

Origin uncertain. Fruit above medium, globular, irregular, more or less bossed; skin rough, greenish, mottled and dotted with brown; flesh whitish, semi-fine, breaking, granular, wanting in juice and sugar; third; Dec. and Jan.

Fondante de Moulins-Lille. 1. Leroy *Dict. Pom.* **2**:178, fig. 1869.

Obtained in 1858 by M. Grolez-Duriez, Rouchin-lez-Lille, Fr., from a seed of the pear Napoleon. Fruit above medium, obtuse-pyriform, pale greenish-yellow; flesh white, coarse, melting, juicy, sugary, acidulous, with a delicious flavor; first; Nov.

Fondante de Nees. 1. Hogg *Fruit Man.* 580. 1884.

Fruit large, long-obovate, fine deep yellow, mottled and dotted all over with pale brown-russet; flesh yellowish, buttery, lacking sufficient juice, with a sprightly flavor; second; Oct.

Fondante du Panisel. 1. *Pom. France* **3**:No. 92, Pl. 92. 1865.

Délices d'Hardenpont d'Angers. **2.** Leroy *Dict. Pom.* **2**:13, fig. 1869.

Delices d'Angers. **3.** Hogg *Fruit Man.* 558. 1884.

Raised about 1762 by the Abbé Hardenpont, Mons, Bel. Fruit medium to large, globular or conic-ovate; skin rough, thick, tender, green, almost entirely covered with marblings of olive-gray and dark green, the basic green changing to golden-yellow, and the stains to a russet-fawn on the side of the sun; flesh citrine, fine or semi-fine, melting, very juicy, with a sugary flavor and a very agreeable perfume; very good; Nov. and Dec.

Fondante des Prés. 1. *Horticulturist* **9**:80, fig. 1854. **2.** Leroy *Dict. Pom.* **2**:179, 180, fig. 1869.

Belgische Pomeranzenbirne. **3.** Dochnahl *Führ Obstkunde* **2**:159. 1856.

A seedling of Van Mons, Belgium, 1850. Fruit turbinate, inclining to pyriform, broad across the middle, yellowish-green changing to clear lemon-yellow, sometimes tinged with red next the sun; flesh white, melting, sweet, juicy, aromatic; very good; Oct.

Fondante de la Roche. 1. Leroy *Dict. Pom.* **2**:180, fig. 1869. **2.** Hogg *Fruit Man.* 580. 1884.

Found on the property of M. Chesneau of la Haugrenière, in the Commune of Sainte-Gemmes-sur-Loire and named by the Horticultural Society of Maine-et-Loire. Fruit above medium, ovate, irregular, clear russet, washed with tender rose on the exposed cheek; flesh white, fine, melting, juicy, sugary, acidulous, aromatic, with an agreeable musky taste; first; Oct. and Nov.

Fondante de Rome ou Sucré Romain. 1. Mas *Pom.*

Gen. **6**:45, fig. 402. 1880.

Origin uncertain. Fruit under medium, conic-pyriform, bright green changing to a beautiful golden-yellow, washed on the side of the sun with crimson-red; flesh yellowish, somewhat coarse, breaking, sweet and juicy; second; Aug.

Fondante de Saint-Amand. 1. *Guide Prat.* 94. 1876.

Belgian. Fruit medium, nearly spherical, orange-yellow slightly touched with russet; flesh fine, sugary, perfumed; first; Oct.

Fondante-de-Septembre. 1. *Horticulturist* **15**:68. 1860. **2.** Mas *Pom. Gen.* **4**:133, fig. 259. 1879.

Gained by Van Mons about 1824 or somewhat later. Fruit medium, globular-pyriform, dull green, speckled with very fine brown dots, changing to yellow and crimson at maturity; flesh green, transparent, very fine and melting, semi-buttery, full of sugary juice, pleasant and perfumed; first; Sept.

Fondante Sickler. 1. Mas *Pom. Gen.* **1**:17, fig. 9. 1872. **2.** Hogg *Fruit Man.* 581. 1884.

Raised by Van Mons. Fruit small, ovate, sometimes a little pyriform; skin rather thick and firm, clear green, speckled with dots of a darker shade, passing when ripe to lemon-yellow and golden on the side of the sun, without any tinge of red; flesh yellowish-white, semi-fine, semi-buttery, gritty about the core; juice sufficient, sugary and musky; second; Sept. to Nov.

Fondante de Thines. 1. Mas *Pom. Gen.* **5**:185, fig. 381. 1880.

Distributed by the Society of Van Mons. Fruit medium, long-pyriform, very bright green changing

to pale yellow, with a rosy blush; flesh white, with a tinge of yellow, very melting, plenty of sugary juice, with a delicate and agreeable flavor of musk; good; Oct.

Fondante Thirriot. 1. *Guide Prat.* 47, 266. 1895. **2.** Bunyard *Handb. Hardy Fr.* 175. 1920.

Obtained in 1858 by M. Thirriott, Charleville, Ardenne, Fr. Fruit rather large, pyriform, pale greenish-yellow, dotted with gray-brown; flesh white, semi-fine, melting, juicy, with an excellent flavor; first; Dec.

Fondante Van Mons. 1. *Mag. Hort.* **12**:289, fig. 15. 1846. **2.** Hogg *Fruit Man.* 581. 1884.

Raised by Van Mons and introduced to this country by R. Manning, Salem, Mass. Fruit medium, globular, somewhat depressed; skin thin, delicate, smooth, removable like that of an orange when the pear is fully ripe and having a peculiar perfume and flavor, very agreeable to some persons; pale yellow, mottled with thin cinnamon-colored russet; flesh yellowish-white, buttery, sweet, melting, juicy, with a musky perfume; good; Oct. and Nov.

Fondante de Wollmet. 1. Hogg *Fruit Man.* 581. 1884.

Origin unknown. Fruit has some resemblance both in shape and color to Beurré de Rance, has the same coarseness of flesh, which has a greenish tinge under the skin, very juicy, rather crisp, with a fine brisk, vinous flavor; excellent; Nov.

Fontarabie. 1. Leroy *Dict. Pom.* **2**:182, fig. 1869.

A French pear mentioned by Le Lectier of Orléans in 1628, and Merlet in 1675. Fruit above medium, turbinate, obtuse, enlarged around the center, bright

yellow, dotted with fine points of russet and extensively carmined on the side next the sun; flesh white, rather coarse, breaking, gritty at core, juicy, sugary, with an after-taste of musk; second, cooking only; Feb. to Apr.

Foote Seckel. 1. *Am. Pom. Soc. Rpt.* 99. 1869. **2.** Downing *Fr. Trees Am.* 765. 1869.

Raised from seed of Seckel by Asahel Foote, Williamstown, Mass. Fruit small, oblate, obtuse-pyriform, yellow tinged with brownish-crimson on the side of the sun; flesh whitish, fine, juicy, melting, sugary, slightly vinous; very good; Sept.

Ford. 1. *Ford Seed Co. Cat.* 52, fig. 1914.

Originated with M. P. Ellison, Naples, N. Y., and was introduced by the Ford Seed Company about 1914. The tree is reported as healthy, a rapid grower, and an early and productive bearer; the fruit is similar in appearance to Bartlett and as large, practically free from seeds, with no core to speak of, rich, sweet, juicy, ripening three weeks later than Bartlett.

Forme de Bergamotte Crassane. 1. Leroy *Dict. Pom.* **2**:186, fig. 1869. **2.** Downing *Fr. Trees Am.* 766. 1869.

A seedling of Van Mons which gave its first fruits in 1844. Fruit above medium, turbinate, slightly obtuse, yellowish-green, speckled with large gray-russet dots; flesh yellowish, rather fine, melting, juicy, sugary, vinous, aromatic; good; early Nov.

Forme de Curtet. 1. Mas *Pom. Gen.* **3**:9, fig. 101. 1878.

A gain of Van Mons. Fruit small, exactly

turbinate; skin fine, thin, bright green, sprinkled with very small grayish-green dots, changes on ripening to lemon-yellow, lightly tinged with red; flesh white, semi-fine and breaking; juice sufficient, sweet, slightly perfumed; second; Sept. and Oct.

Forme de Délices. 1. Downing *Fr. Trees Am.* 388. 1845. **2.** Hogg *Fruit Man.* 582. 1884.

A Flemish pear. Fruit medium, obovate, yellow, almost entirely covered with rather rough brown-russet; flesh tender, buttery, melting, with a rich, sweet flavor; an excellent dessert pear; Oct. and Nov.

Fortune. 1. *Mass. Hort. Soc. Rpt.* 143. 1866.

One of Dr. Shurtleff's seedlings raised at Brookline, Mass.; first fruited in 1866. Fruit small, turbinate, golden-yellow, with russet spots; flesh white, melting, juicy and very sweet; first; Oct.

Fortunée. 1. Downing *Fr. Trees Am.* 436. 1845.

Bergamotte Fortunée. **2.** *Ann. Pom. Belge* **8**:29, fig. 1857.

Fortunée de Printemps. **3.** Leroy *Dict. Pom.* **2**:188, fig. 1869.

A Belgian wilding found near Enghien in Hainaut; disseminated about 1830. Fruit small, globular or globular-turbinate; skin rough to the touch, deep yellow, covered with flakes and lines of brown-russet; flesh semi-melting, juicy, sweet; a cooking pear; May and June.

Fortunée Boisselot. 1. Leroy *Dict. Pom.* **2**:187, fig. 1869.

Raised from a bed of seeds of Fortunée by Auguste Boisselot, Nantes, Fr.; it gave its first fruit in 1861. Fruit large or above medium, turbinate, very

obtuse and enlarged around center; skin thick and rough, greenish-yellow or yellow-ochre; flesh white, fine, melting, gritty around the core, juicy, sugary, delicate, somewhat aromatic; first; Jan. and Feb.

Fortunée Supérieure. 1. Leroy *Dict. Pom.* **2**:190. 1869.

This was obtained by M. Flon, Angers, Fr., about 1850 from a bed of seeds of Fortunée. In 1854 M. Flon submitted it to the Horticultural Society of Maine-et-Loire which found its flesh "very fine, very melting, agreeably perfumed and more free from acidity than the old pear Fortunée," and therefore gave it the name Fortunée Supérieure; Jan. to Apr.

Fourcroy. 1. Leroy *Dict. Pom.* **2**:192, fig. 1869.

Raised by Van Mons about 1810. Fruit medium, ovate-pyriform; skin thick, rather rough to the touch, yellow or yellowish-green, covered with gray-russet dots; flesh white, very sugary, agreeably perfumed; good and sometimes first; winter.

Fouron. 1. Mas *Pom. Gen.* **7**:135, fig. 548. 1881.

French. Fruit medium, globular-ovate, dark olive-green, dotted with grayish-white spots, large and numerous; flesh yellowish, fine, melting, with abundant sugary juice, vinous, sprightly and musky; good; Oct.

Franc-Réal. 1. Duhamel *Trait. Arb. Fr.* **2**:180. 1768. **2.** Leroy *Dict. Pom.* **2**:194, fig. 1869.

Franc Réal d'Hiver. **3.** Downing *Fr. Trees Am.* 766. 1869.

Mentioned by Charles Estienne in 1540, and other French authorities of the seventeenth century. Fruit above medium and often larger, globular-

turbinate and bossed, golden-yellow, strewed with large russet dots, and some brownish-red patches; flesh very white, breaking, juicy, hardly sweet, rather acid, without perfume; first for cooking; Nov. to Feb.

Frances. 1. *Mag. Hort.* **11**:252. 1845.

A seedling raised by the Hon. H. W. Edwards of New Haven, Conn., and first published in 1845. Similar to Virgouleuse, rather large, and not so sweet.

Franchimont. 1. Downing *Fr. Trees Am.* 766. 1869.

Supposed French origin. Fruit below medium, globular-oblate, yellow shaded with red in the sun, netted and patched with russet, many russet dots; flesh yellowish, juicy, semi-melting, sweet, slightly aromatic; good or very good; Sept. and Oct.

Franchipanne. 1. Duhamel *Trait. Arb. Fr.* **2**:210, Pl. XLVII, fig. 2. 1768. **2.** Hogg *Fruit Man.* 582. 1884.

Frangipane. **3.** Leroy *Dict. Pom.* **2**:196, fig. 1869.

This is the Franchipanne of Duhamel but not of Merlet, 1690, as Hogg and Leroy prove. Its origin is uncertain. Fruit medium or above, obtuse-pyriform, yellowish-green or lemon-yellow, dotted and veined with russet, dark deep red next the sun; flesh greenish-white, semi-fine and semi-melting, juicy, tender, buttery, perfume supposed to resemble Frangipani, a scent invented by the Marquis of that name; a dessert pear; Oct. and Nov.

Francis. 1. *Mass. Hort. Soc. Rpt.* 43. 1866.

A seedling raised by Dr. Shurtleff, Brookline, Mass., which fruited in 1862. Fruit medium, turbinate; skin tough and rather liable to crack, dark

green; flesh fine-grained, white and delicate, with a flavor inclining to that of White Doyenné; first; Nov.

Francis Dana. 1. *Mass. Hort. Soc. Rpt.* 80. 1877.

One of several seedling plants given by Francis Dana to Eliphalet Stone who in 1877 showed its fruit. Fruit medium, globular-acute-pyriform, clear lemon-yellow, with tracings of thin russet; flesh buttery, juicy, good quality but not up to best; Sept.

François Hutin. 1. *Guide Prat.* 92. 1895.

Fruit very large, long-turbinate, dark yellow; flesh fine, white, melting, juicy, sugary, acid; Oct.

Frangipane d'Hiver. 1. Mas *Pom. Gen.* **7**:105, fig. 533. 1881.

Origin unknown. Is not to be confused with Franchipanne, a smaller ball pear. Fruit large, turbinate, much swelled at center; skin thin, intense green, sprinkled with numerous dots of a darker shade, changing to lemon-yellow at maturity, with some blush of brown-red or orange-red; flesh white, breaking, not very sweet, somewhat acidulous, with an aromatic flavor; suitable for kitchen use; all through the winter.

Frankenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:173. 1856.

Würtemberg, Germany, 1830. Fruit medium, oval-obtuse, variable, bossed, grass-green changing to golden-yellow, blushed with reddish-brown; flesh whitish, breaking, fairly soft, very aromatic, acidulous, sweet; good; Sept.

Frankfurter Birne. 1. Dochnahl *Führ. Obstkunde* **2**:145. 1856.

Baden, Germany, 1847. Fruit large, variable in

form, often oblique, dirty yellow, brilliant red on the sun-touched side; flesh breaking, coarse-grained, very sweet and juicy; good; Sept.

Frau Louise Goethe. 1. *Gard. Chron.* 3rd Ser. **25**:132. 1899.

Raised from a seed of Bergamotte Espéren, in the Horticultural School of Geisenheim in 1882. Fruit medium, Bergamot-shaped; skin thick, coarse, dark green, covered with fine warts, becoming a clouded yellow when ripe, with russety patches; flesh clouded yellow, sometimes salmon colored, juicy, sweet, aromatic, with an aroma reminiscent of the orange; winter.

Frederic Leclerc. 1. Leroy *Dict. Pom.* **2**:198, fig. 1869. **2.** Hogg *Fruit Man.* 583. 1884.

Raised in 1846 at Ghent, Bel., by Louis Berckmans. Fruit below medium, short-pyriform-obtuse, one side always less curved than the other, greenish-yellow, dotted, striped, veined and stained with fawn; flesh whitish, fine, semi-melting, slightly gritty; juice sugary, rich; second and sometimes first when its juice is abundant; Dec. and Jan.

Frédéric de Wurtemberg. 1. Kenrick *Am. Orch.* 173. 1832. **2.** Leroy *Dict. Pom.* **2**:199, fig. 1869.

Médaille d'Or. **3.** *Ann. Pom. Belge* **1**:91, fig. 1853.

Herbstsylvester. **4.** Lauche *Deut. Pom.* **2**:No. 82, No. 82. 1883.

Van Mons raised this variety from seed of the fourth generation about 1812 and named it *Sylvester d'Hiver* after a secretary by the name of Sylvester. Upon the request of Frederick I, King of Württemburg, the pear was dedicated to that monarch and named Frédéric de Wurtemberg. Still

further confusion arose in America when Knight of England sent to the Hon. John Lowell of Massachusetts this fruit, by mistake, under the name of *Capiaumont*. It was cultivated in the vicinity of Boston by that name for some time. Tree vigorous, upright, an early and excellent bearer; leaves roundish, broad, flat, entire. Fruit large, one-sided, obtuse-pyriform, deep yellow, marbled and dotted with red on the shaded side and of a most beautiful, bright crimson next the sun; stem medium, sometimes appearing a continuation of the fruit; calyx medium, partially open, placed even with the surface; flesh white, fine, juicy, melting, sweet and when in perfection buttery and good; Sept.

Frederica Bremer. 1. *Mag. Hort.* **16**:24, fig. 1. 1850. **2.** *Ann. Pom. Belge* **7**:81, fig. 1859.

Introduced by J. C. Hastings of Oneida Co., N. Y., in 1848 at the exhibition of the Pomological Convention of New York. Fruit above medium, globular-turbinate; skin very smooth, shining, dull green reminding one of many poor pears but on ripening becomes a fine citron, dotted with brown-russet and slightly colored with red on the side of the sun; flesh white, fine, buttery, sweet and vinous, slightly perfumed; one of the best; Oct.

Fremion. 1. Dochnahl *Führ. Obstkunde* **2**:73. 1856.

French, 1807. Bergamot type. Fruit small, globular, symmetrical, light green changing to light lemon-yellow, faintly blushed; flesh agreeable, buttery, gritty near the center, aromatic, sweet, acidulous; good; Oct.

Frensdorff rothe Flaschenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:140. 1856.

Nassau, Bel., 1833. Fruit medium, smooth and shining, light yellow, blushed; flesh very juicy, sweet, with flavor of cinnamon; good; Sept.

Florimond Parent. 1. Leroy *Dict. Pom.* **2**:164, fig. 1869. **2.** Downing *Fr. Trees Am.* 762. 1869.

A seedling of Van Mons raised about 1846. Fruit large, long, more or less obtuse, always contracted near the summit and much swelled in its lower part, dark yellow clouded with pale green, dotted and mottled with fawn and slightly washed with dark violet-red on the side exposed to the sun, sometimes also covered with small, black and scaly stains; flesh whitish, coarse, rather melting, gritty at center; juice abundant, sweet, sugary, wanting in perfume; third; Sept.

Frühe Backhausbirne. 1. Dochnahl *Führ. Obstkunde* **2**:161. 1856.

Nassau, Bel., 1806. Fruit medium, globular-ovate, yellowish, light green changing to pale yellow, often blushed; flesh granular, rather astringent, sourish, musky, good for any situation; Aug. and Sept.

Frühe Schweizer Bergamotte. 1. Dochnahl *Führ. Obstkunde* **2**:76. 1856. **2.** Oberdieck *Obst-Sort.* 241. 1881.

Holland, 1804. Fruit fairly large, variable in form, often ovate, ventriculous-turbinate, and often pyriform, yellowish-light green changing to lemon-yellow, sprinkled with green and yellow-gray dots, marked with russet and often with fine yellow-gray russet on the side exposed to the sun; flesh snow-white, buttery, melting, very juicy, acidulous and aromatic; first; Aug.

Fuller. 1. *Gard. Mon.* 302. 1885. **2.** *Ill. Hort. Soc. Rpt.*

213. 1897.

Originated in Madison, O., about 1885. Fruit similar in size, form and season to Beurré Giffard but not quite so good. It is, however, claimed that it is a better grower and less liable to crack; greenish-yellow; Aug.

Fullero. 1. *Montreal Hort. Soc. Rpt.* 82. 1886.

Fruit rather large, greenish, with some dull red on the sunny side; first; early summer.

Fulton. 1. Prince *Pom. Man.* **2**:214. 1832. **2.** Downing *Fr. Trees Am.* 768, fig. 1869.

Originated on the farm of a Mr. Fulton in Brunswick, Me. Exhibited before the Massachusetts Horticultural Society in 1829. Fruit medium, globular-turbinate, dark yellow, russeted; flesh, if picked and matured in the house, buttery, melting, full of rich juice. If allowed to remain on the tree it becomes breaking, dry and without flavor. A peculiarity of this pear first discovered by Manning in 1840 is that the fruits after they have attained half their size, are in good eating condition after lying a day or two; second; Oct.

Fusée d'Automne. 1. Leroy *Dict. Pom.* **2**:203, figs. 1869.

Origin ancient and obscure, but probably the neighborhood of Eisleben, Saxony. Fruit often above medium and often much less, very long, conic, bossed, golden-yellow or clear yellow, rather greenish, dotted with russet; flesh whitish, semi-fine and semi-melting, exempt from grit; juice rather lacking, sweet; third; Sept.

Fusée d'Hiver. 1. Leroy *Dict. Pom.* **2**:205, fig. 1869.

First described by Merlet in 1690. Fruit above medium and sometimes less, long and bossed, somewhat obtuse, wrinkled, clear green, freely dotted, mottled with gray-russet; flesh white, semi-melting; juice abundant, rather sugary, slightly acid, without pronounced scent; third; Feb. and Mar.

Gabourell Seedling. 1. Field *Pear Cult.* 280. 1858. **2.** Leroy *Dict. Pom.* **2**:208, fig. 1869.

Originated in early half of last century. Fruit below medium, globular, bossed, mammillate, yellowish-green, speckled with gray dots; flesh yellowish, coarse, breaking, gritty; juice rather lacking, sweet, vinous, slightly perfumed; third; Nov. to Jan.

Gakovsky. 1. Budd-Hansen *Am. Hort. Man.* **2**:246. 1903.

Introduced from Russia in 1879. Tree extremely hardy. Fruit medium, pyriform, greenish-yellow, stem long; flesh dingy white, fine-grained, buttery, juicy, mild, vinous, but not rich; good.

Galston Muirfowl Egg. 1. Hogg *Fruit Man.* 583. 1884.

Scotch. Fruit below medium, short-obovate, flattened at calyx, greenish-yellow, covered with thin, pale-brown russet, mottled with red on the side of the sun; flesh yellowish, tender, sweet and juicy, with a peculiar aroma; excellent; Sept.

Gans. 1. *U. S. D. A. Rpt.* 390, Pl. VII. 1891.

Found by Joseph Gans in a wood near Cheviot, O., in 1871. Fruit large, pyriform, yellow, with faint brownish cheek on sunny side; stem slender, rather long, in a slight depression; calyx open, in a shallow basin; flesh tender, melting, juicy; Aug.

Gänsekopf. 1. Dochnahl *Führ. Obstkunde* **2**:148. 1856.

North German, 1773. Fruit medium, conic, smooth and shining, green, changing to yellow, with brownish-red blush; flesh breaking, juicy, sweet, aromatic; first; Oct. and Nov.

Gansel Bergamot. 1. Brookshaw *Pomona* **2**:Pl. L. 1817. **2.** *Pom. Mag.* **1**:35, Pl. 1828.

Diamant-peer. **3.** Knoop *Fructologie* **1**:92, 135. 1771.

Bergamote Gansel. **4.** Leroy *Dict. Pom.* **1**:239, fig. 1867.

Raised from seed of Autumn Bergamot by Lieutenant-General Gansel near Colchester, Eng., in 1768. Fruit medium, globular-oblate, greenish-yellow on the shaded side, reddish-brown on the side of the sun, dotted and marbled with russet, sometimes washed with red; flesh white, buttery, melting, a little gritty around the core; juice abundant, sugary, vinous, slightly musky and acid; first; Oct. and Nov.

Gansel Late Bergamot. 1. Elliott *Fr. Book* 369. 1854. **2.** Hogg *Fruit Man.* 294. 1866.

Bergamotte Tardive de Gansel. **3.** Mas *Le Verger* **3**:Pt. 1, 125, fig. 61. 1866-73.

Gansel Late Bergamot was raised from seed by a Mr. Williams, Pitmaston, Eng. Fruit similar in shape and size to Gansel Bergamot, green, thickly covered with russet dots and freckles which sometimes form patches, yellow-green when ripe, flesh white, rather coarse and gritty, not very juicy nor melting in England; in France and America, however, it seems to become more juicy, melting and rich, vinous and highly perfumed; good to very good; Nov. and Dec.

Garnier. 1. Leroy *Dict. Pom.* **2**:209, fig. 1869.

Besi Garnier. **2.** Hogg *Fruit Man.* 506. 1884.

From a seed bed made by M. Garnier, Bouvardière, near Nantes, Fr.; first published in 1851. Fruit large, pyriform-obtuse, skin rough, thick, green, orange-yellow when ripe, washed with brick-red on the side of the sun; dotted and mottled with brown-russet; flesh white, semi-fine, breaking, rather granular, juicy, sugary; second.

Garnons. 1. Kenrick *Am. Orch.* 161. 1841.

Fruit large, oblong, greenish-yellow, flesh buttery and excellent; second; Jan.

Gassenbirne. 1. Löschnig *Mostbirnen* 150, fig. 1913.

An Austrian perry pear. Fruit medium, obtuse-pyriform, symmetrical in contour, green changing to yellow at maturity, covered with gray-brown russet, dotted with brown-russet; flesh yellowish-white, rather coarse texture, very juicy and subacid; Oct. to Dec.

Gaston du Puys. 1. *Guide Prat.* 93. 1895.

Distributed by M. Daras de Naghin, Antwerp, Bel. Fruit medium; flesh white, very fine, melting, sufficiently sweet and perfumed; good; Nov.

Gaudry. 1. Hogg *Fruit Man.* 585. 1884.

Fruit small, globular-ovate, even in outline, straw-colored, covered with russet dots and patches; flesh white, melting, juicy, brisk, vinous and sweet, with a pleasant rose-water flavor; good; Oct. and Nov.

Géant. 1. Field *Pear Cult.* 280. 1858. **2.** Leroy *Dict. Pom.* **2**:210, fig. 1869.

Probably of French origin. Cataloged in this country by T. W. Field in 1858. Fruit medium, globular-turbinate; skin wrinkled, thick, dark green speckled with gray-russet and almost entirely stained with brown; flesh whitish, coarse, breaking, watery, very gritty around the core; juice sugary, vinous, slightly perfumed; third.

Gefleckte Pomeranzenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:156. 1856.

Hesse, Germany, 1833. Fruit small, globular, flattened at poles; skin rough, yellow, often green, marbled with russet, blushed, dotted with russet; semi-melting, granular, very aromatic; Sept.

Gefleckte Sommerrusselet. 1. Dochnahl *Führ. Obstkunde* **2**:42. 1856.

Nassau, Bel., 1807. Fruit small, globular, shortened, blunt, symmetrical; skin rough, often entirely covered with russet and blushed; flesh very juicy, coarse-grained, sweet and acid, melting and aromatic; first; Sept.

Gefundene. 1. Dochnahl *Führ. Obstkunde* **2**:91. 1856.

Belgian, Van Mons, 1833. Fruit small, light yellow, often entirely covered with russet, free from dots; flesh fine, strongly aromatic, with scent of cinnamon, sweet; Sept.

Geigenschnabel. 1. Dochnahl *Führ. Obstkunde* **2**:195. 1856.

Württemberg, Ger., 1830. Fruit medium, pyriform, uneven in outline, entirely covered with yellowish-gray russet; good; Oct.

Geishirtle. 1. Christ *Handb.* 548. 1817.

Fruit large, shaped like Winter Rousselet, green

with brownish-red blush on the sun-touched side; flesh soft, breaking, sweet, juicy, with perfume of the Rousselets; Aug.

Gelbe frühe Sommerapothekerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:177. 1856.

Of French origin, 1807. Fruit medium and above; skin glazed and smooth, greenish-yellow changing to lemon-yellow, with red blush on the side of the sun; flesh yellowish-white, gritty, soft; good; Aug.

Gelbe Fürsten-Tafelbirne. 1. Dochnahl *Führ. Obstkunde* **2**:54. 1856.

Widely diffused in Germany. Probably originated in that country about 1766. Fruit medium, rather shortened-pyriform, whitish-yellow changing to golden-yellow, with pale blush, green dots; flesh yellowish-white, mild, breaking, full of juice and sugar; first; Sept.

Gelbe Heckenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:161. 1856.

Grown along the Rhine, Germany. Fruit small, turbinate, broad, light green changing to yellowish-green, often lightly blushed, russeted; flesh greenish-white, rather granular, acid, vinous, breaking; first; Sept.

Gelbe Holzbirne. 1. Löschnig *Mostbirnen* 80, fig. 1913.

An Austrian perry pear. Fruit medium, globular-conic; skin firm, shining yellow when ripe, speckled with numerous green markings and finely dotted with russet; flesh yellowish-white, granular, very juicy, astringent, subacid; good for transportation; Oct.

Gelbe Landlbirne. 1. Löschnig *Mostbirnen* 152, fig. 1913.

An Austrian perry pear. Fruit small to medium, long-pyriform, rather obtuse; skin firm, green turning yellow, dotted with russet; flesh whitish, coarse, very juicy, astringent and subacid; good for transportation; Oct. and Nov.

Gelbe langstielige Alantbirne. 1. Dochnahl *Führ. Obstkunde* **2**:140. 1856.

German Rheinland. Fruit medium and above, somewhat gourd-shaped; skin smooth and thin, uniformly lemon-yellow, somewhat marked with russet; flesh yellowish-white, wanting in juice, sweet, aromatic; third for table, good for market; Sept.

Gelbe Laurentiusbirne. 1. Mathieu *Nom. Pom.* 218. 1889.

Saint-Laurent Jaune. **2.** Mas *Pom. Gen.* **4**:39, 212. 1879.

This pear was known in Saxony early in the nineteenth century. Fruit medium, conic, uniform in contour, its largest diameter being below the center; skin rather thick, green at first sprinkled with dots of gray-green changing at maturity to bright citron-yellow, golden on the side of the sun of fruits well exposed, washed with a blush of dull red; flesh white, coarse, semi-breaking, gritty near the core, juicy, sweet, saccharine, but little flavor; second; Aug.

Gelbe Leutsbirne. 1. Löschnig *Mostbirnen* 106, fig. 1913.

A Lower-Austrian perry pear. Fruit small, long-pyriform, diminishing to the stalk, sides unequal; light green turning yellow when ripe, russet dots;

flesh juicy and subacid; first for keeping and transportation; Oct.

Gelbe Scheibelbirne. 1. Löschnig *Mostbirnen* 82, fig. 1913.

An Austrian pear producing a good and clear perry. Fruit medium to large, globular, flattened at both poles, green changing to yellow at maturity, dotted with grayish-white; flesh yellow-white, coarse-grained, with a sweet and acid flavor; good; Oct. and Nov.

Gelbe Wasserbirne. 1. Löschnig *Mostbirnen* 12, fig. 1913.

A perry pear grown in Lower Austria. Fruit small to medium, globular-obtuse but diminishing toward stalk in upper part, yellow-green, slightly blushed on the sun-touched side, and speckled on the shaded side with dark green dots; flesh whitish, juicy, very sweet and slightly acidulous; good for transportation; Sept.

Gelbmostler. 1. Löschnig *Mostbirnen* 108, fig. 1913.

A perry or wine pear grown in Austria and northern Switzerland. Fruit medium to fairly large, globular and diminishing rather acutely to the stalk, greenish-yellow changing to light yellow, often slightly blushed, speckled with russet dots; flesh yellowish-white, coarse-grained, juicy, very astringent, quickly becomes over-ripe; Sept.

Gemeine Kochbirne. 1. Löschnig *Mostbirnen* 154, fig. 1913.

An Austrian perry pear. Fruit small, globular-conic, green changing to greenish-yellow at maturity, occasionally with a dark red blush on the sun-

exposed side; flesh yellowish-white, very juicy, saccharine, astringent and acidulous; Oct. and Nov.

Gemeine Pfundbirne. 1. Dochnahl *Führ. Obstkunde* **2**:187. 1856.

Upper-Austria, 1851. Fruit above medium, globular-turbinate, medium convex, bossed, green turning to light yellow; flesh breaking, wanting in juice, sweet; third for dessert, best for culinary use; Oct. to Dec.

Général de Bonchamp. 1. Leroy *Dict. Pom.* **2**:211, fig. 1869. **2.** *Horticulturist* **30**:2. 1875.

A seedling found on the estate of M. Panneton, Coteau, Maine-et-Loire, Fr. Fruit medium, variable in form, oblong-pyriform or globular-turbinate, dull greenish-yellow, dotted with russet; flesh white, melting, buttery, fine-grained, juicy, sweet, rich, aromatic; good to first; Aug.

Général Bosquet. 1. Leroy *Dict. Pom.* **2**:213, fig. 1869. **2.** Downing *Fr. Trees Am.* 770. 1869.

Obtained by M. Flon-Grolleau, Angers, Fr. The seed bed from which the tree sprang was made in 1845. Fruit large, conic, very long, rather swelled at the base and narrowed at the upper end; skin thick, grass-green, dotted and mottled with fawn and often bearing some small brownish stains; flesh whitish, fine, semi-melting or melting, rather granular at center; juice abundant, sweet, vinous, delicate; second; Sept. and Oct.

Général Canrobert. 1. Leroy *Dict. Pom.* **2**:214, fig. 1869. **2.** Downing *Fr. Trees Am.* 770. 1869.

From a bed of the seeds of Saint-Germain made about 1843 by M. Robert, Angers, Fr. Fruit medium, long-conic and irregular, golden-yellow, dotted,

marbled and stained with russet, washed with brown around the calyx and stem; flesh white, fine, melting and juicy, the juice being abundant, sweet, acid, rich and aromatic; first, though very exceptionally second when it has no flavor; Jan. and Feb.

Général Delage. 1. Mas *Pom. Gen.* **4**:155, fig. 270. 1879.

A gain of Van Mons about 1823. Fruit medium, conic-pyriform, clear green, speckled with gray, changing to pale yellow at maturity, tinged with dark red on the side of the sun; flesh white, fine, buttery, melting, full of slightly sugary juice, refreshing and somewhat musky.

Général Dutilleul. 1. Leroy *Dict. Pom.* **2**:215, fig. 1869. **2.** Hogg *Fruit Man.* 585. 1884.

A seedling of Van Mons. Fruit medium to large, pyramidal, uneven in outline, deep golden yellow, extensively washed with bright crimson where it is exposed to the sun; flesh firm, not very juicy, sweet, of good flavor; good; Sept.

Général Duvivier. 1. Leroy *Dict. Pom.* **2**:217, fig. 1869.

Beurré Duvivier. **2.** Downing *Fr. Trees Am.* 688. 1869.

Raised from seed by M. Boisbunel, Rouen, Fr., in 1845. Fruit medium, long-conic, slightly obtuse, greenish-yellow, finely dotted and reticulated with russet, washed sometimes with dark red on the side facing the sun; flesh whitish, fine, semi-melting, watery, not gritty; juice plentiful, sugary, acidulous, aromatic, delicate; first; Mar.

General Kearney. 1. *Mass. Hort. Soc. Rpt.* 43. 1866.

A seedling raised by S. A. Shurtleff, Brookline, Mass., which fruited in 1862. Fruit large, pyriform, greenish-yellow; flesh fine-grained, juicy, of rather high flavor; a good market pear; Sept.

General Lamoricière. 1. *Mag. Hort.* **18**:296, fig. 22. 1852.

According to Leroy this name is synonymous with *Beurré Citron*. Mas, however, thought that *Beurré Citron* was quite different. Fruit medium, obtuse-pyramidal, greenish-yellow, much reticulated and spotted and patched with russet; flesh greenish-white, fine, melting, tender, buttery; juice abundant, sugary, vinous and perfumed; first; Sept. to Nov.

General Sherman. 1. *Mass. Hort. Soc. Rpt.* 43. 1866.

A seedling of Dr. Shurtleff's submitted to the committee on fruits of the Horticultural Society of Massachusetts in 1866. "Fruited in 1856. Diam. 2¾ in.; flesh white, melting, breaking and juicy; November to December, turbinate."

General Taylor. 1. *Mag. Hort.* **20**:75, 269. 1854.

Introduced by L. N. Rogers, Baltimore, Md., the original tree having been found by him at Franklin, Md., in 1854. Fruit medium or under, obovate-obtuse-pyriform, yellow but practically all cinnamon-russet; flesh yellowish-white, granular, buttery, melting, sweet, highly flavored; good to very good; Oct. and Nov.

Général Thouvenin. 1. *Guide Prat.* 93. 1895.

Origin unknown. Fruit medium, greenish; flesh rather yellow, fine, melting, juicy, very sugary and pleasantly perfumed; Dec.

Général Totleben. 1. *Ann. Pom. Belge* **8**:57, fig.

1860. **2.** Bunyard *Handb. Hardy Fr.* 177. 1920.

M. Fontaine de Ghélin, Mons, Bel., raised this variety from a seed bed made in 1839. Fruit large or very large, pyriform, slightly contorted, one side often rather longer than the other, yellow, covered with dots and patches of russet; flesh tinted with salmon-rose, melting, juicy, with a rich, sugary and perfumed juice; excellent; Nov. to Jan.

General Wauchope. 1. *Gard. Chron.* 3rd Ser. **30**:474, fig. 144. 1901.

Raised about 1888 by Charles Ross, gardener to Captain Carstairs, Welford Park, Newbury, Eng., from a cross of Nec Plus Meuris and Duchesse d'Angoulême. Fruit moderate size, obtuse-pyriform, very regular, yellowish-green, with fine spotting; flesh soft, free from grit, rich, sweet, somewhat of the flavor Nec Plus Meuris; Dec.

Gensbirne. 1. Löschnig *Mostbirnen* 32, fig. 1913.

An Austrian perry and wine pear. Fruit medium, long-pyriform, diminishing toward the stalk from the center; skin tolerably fine and shining yellow when ripe, densely and finely dotted with russet; flesh white, coarse-grained, juicy, subacid, astringent; Sept.

George Augustus. 1. *Mass. Hort. Soc. Rpt.* 91. 1872.

A seedling exhibited to the Massachusetts Horticultural Society in 1872 by Francis Dana. Fruit similar to Winter Nelis, but larger and more oblong, and not quite so rich.

Georges Delebecque. 1. *Guide Prat.* 104. 1895.

Raised from seed of Joséphine de Malines and distributed by Daras de Naghin, Antwerp, Bel. Fruit

medium, having some resemblance to Urbaniste, yellow, dotted with fawn and bronzed around the stem; flesh sometimes very salmon-colored, melting, with a slight perfume of rose; a good pear for the amateur; tree of moderate vigor and very fertile; Dec. and Jan.

Gerando. 1. *Mag. Hort.* **23**:161, fig. 9. 1857.

Received by C. M. Hovey in 1845 from M. Jamin of Paris. Fruit large, globular-obovate; skin rather rough, dull greenish-russet, with a mottled yellow and light russet tinge when mature, thickly covered with conspicuous dark russet specks; flesh yellowish-white, coarse, melting and juicy, rich, sugary and slightly perfumed; good; Sept. and Oct.

Gérardine. 1. Mas *Pom. Gen.* **3**:119, fig. 156. 1878.

Obtained by M. Grégoire, Jodoigne, Bel., early in the nineteenth century. Fruit medium, turbinate, more or less short and swelled, reducing to a point at the top; skin thick, firm, intense green dotted with large brown specks, changing to dark yellow at maturity, with golden-russet on the side of the sun and some red blush; flesh white, rather fine, buttery, melting, gritty about the center, full of rich sugary juice, vinous and highly scented; Nov.

Gerdessen. 1. Mas *Pom. Gen.* **4**:61, fig. 223. 1879.

According to Diel, this variety was obtained by the Pastor Gerdessen of Weigsdorf, in the Oberlausitz, Ger. Fruit rather small or nearly medium, almost spherical, even in contour, the greatest diameter being at the center, intense and somber green, without any russet; flesh yellow, rather fine, buttery; juice sufficient in quantity and richly saccharine, vinous and highly perfumed; first; Sept.

Gerippte Pomeranzenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:156. 1856.

Nassau, Bel., 1833. Fruit small, orange-form, ribbed, a good yellow, lightly blushed with red; flesh juicy, semi-melting, cinnamon-flavored, sweet; second for dessert, good for the market; Sept.

Gernröder Pomeranzenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:160. 1856.

Central Germany, 1773. Fruit small, flattened, green changing to yellowish, faintly blushed, speckled with gray; flesh greenish-white, tender; good; Oct. and Nov.

Gestreiffe Winter-Apothekerbirne. 1. Liegel *Syst. Anleit.* 132. 1825.

Fruit large; form that of Bon-Chrétien d'Été, light yellow, streaked, aromatic, sugary; good; Feb. to Apr.

Ghellinck de Walle. 1. *Gard. Chron.* 3rd Ser. **11**:24. 1892.

Raised in the garden of M. Ghellinck de Walle near Ghent, Bel., described as new. Fruit medium, oblong-obovate, yellowish, speckled with russet; flesh creamy-white, melting, juicy, sugary, slightly acid and delicately perfumed. Said by M. Pynaert to be one of the best autumn pears; Nov.

Gibb. 1. *Cornell Sta. Bul.* **332**:482. 1913.

Raised from seed sent by Charles Gibb from Mongolia to Prof. Budd at Ames, Ia. Said to be very hardy and productive, coming into bearing when young. Fruit about the size of Bartlett, pyriform, nearly equal to Bartlett in quality, according to Prof. Budd. Seems to be of a better quality than most oriental pears.

Gilain. 1. *Guide Prat.* 71. 1876. **2.** Mas *Pom. Gen.* **3**:33, fig. 113. 1878.

A gain of M. Grégoire, Jodoigne, Bel. Fruit medium, pyriform, pale green changing to yellow, a warm gold and sometimes red on the side next the sun; flesh white, fine, buttery, melting, rather gritty near the core; juice sufficient, sugary and perfumed; good; Sept.

Gilles ô Gilles. 1. Leroy *Dict. Pom.* **2**:222, fig. 1869. **2.** Mathieu *Nom. Pom.* 219. 1889.

Girogile. **3.** Bunyard *Handb. Hardy Fr.* 177. 1920.

A French pear of very ancient and uncertain origin. Jean Bauhin in his *Historia Plantarum*, 1580, wrote of a pear which appears to be identical with this and said that in Burgundy it was styled a *Poire de Livre* or *Pound Pear*. Le Lectier in his catalog of 1628 and Merlet as well as Claude Saint-Etienne and La Quintinye also mention it though spelling it variously. Fruit large to very large, nearly spherical; calyx large, open, set in deep basin; skin thick, pale dull green, washed with brown-red on the face exposed to the sun, much covered with thin brown-russet; flesh greenish-white, semi-fine and semi-breaking, rarely gritty, very juicy, saccharine and sweet, without much perfume, occasionally spoiled by too much acerbity; third; cooking; Nov. to Feb.

Giram. 1. Mas *Le Verger* **2**:151, fig. 74. 1866-73.

A wilding found on the estate of Giram at Uryosse, Fr., and propagated by Dr. Doat. Fruit nearly medium, pyriform, sometimes rather turbinate; skin thick and firm, green, sprinkled with large dots of greenish-brown, becomes yellowish-green at maturity and blushed with red on the sun-exposed side; flesh very fine, tender, melting, very

juicy, sugary and agreeably perfumed; first; Aug.

Girardon. 1. Leroy *Dict. Pom.* **2**:225, fig. 1869.

According to Diel this pear was raised in Paris by a M. Girandoux whose name Leroy identifies with Girardon. It seems to have dated from about the beginning of the nineteenth century. Fruit below medium, globular, flattened and deeply depressed at both poles, one side rather less swelled than the other; skin wrinkled, yellowish-green, dotted with clear brown and almost entirely mottled and reticulated with dark russet; flesh white, semi-fine and semi-melting, rather granular; juice very abundant, saccharine, acidulous, very musky; second; late Sept.

Glace d'Hiver. 1. Mas *Pom. Gen.* **5**:67, fig. 322. 1880.

Winter Eisbirne. **2.** Mathieu *Nom. Pom.* 300. 1889.

Belgian. Fruit medium, globular-conic; skin rather thick, a lively green sprinkled with brown dots, changing to lemon-yellow, often golden on the side of the sun; flesh whitish, fine, breaking; juice sufficient, sugary, without appreciable perfume; good; end of winter.

Glastonbury. 1. *Jour. Hort.* N. S. **22**:73, 99, 126. 1872. **2.** Bunyard-Thomas *Fr. Gard.* 140. 1904.

The *Benedictine* of the English or Glastonbury pear, apparently originated as a wilding with W. G. L. Lovell, Glastonbury, Eng., but Bunyard believes it to be an old sort introduced by the monks. Grafts were first taken from the tree in 1862. Fruit large, oblong-obovate, russeted; flesh yellowish, melting, juicy, aromatic; Oct.

Gleck. 1. *Guide Prat.* 93. 1895.

Distributed by M. Niemetz, Winnitsa, Russia, and on trial with Simon-Louis Bros. at Metz in 1895. Fruit medium or large, green changing to yellow at maturity; flesh rather tart in flavor, juicy, good for drying as it diminishes little in volume; it makes good cider; Sept. and Oct.

Gliva. 1. *Ia. Hort. Soc. Rpt.* 61. 1880.

A Russian pear imported by J. L. Budd, from the northern steppes where the summers are "fully as dry and hot as ours and the winter far more severe." It shows marked traces of the Chinese forms of the pear in shape, serration, thickness and size of leaf and in the peculiar enlarged character of the scaly, terminal buds.

Gloire de Cambron. 1. Leroy *Dict. Pom.* **2**:226, fig. 1869. **2.** Downing *Fr. Trees Am.* 772. 1869.

Probably derives its name from the famous Abbey of Cambron near Mons in Hainaut, Bel. It was in France early in the nineteenth century. Fruit below medium, acute-pyriform, generally rather contorted in the lower part, yellow-ochre in color, dotted with very fine gray-russet points; flesh white, semi-fine, breaking, dry and gritty, sweet and rather delicate in flavor; third; Nov.

Gloward. 1. Field *Pear Cult.* 280. 1858. **2.** Leroy *Dict. Pom.* **2**:228, fig. 1869.

Possibly of English origin. It was cultivated in the garden of the Horticultural Society of Angers, Fr., in 1838. Fruit medium and above; form rather variable but always ovate, more or less long, irregular, bossed, clear green sprinkled with grayish dots and a little stained with russet; flesh white, semi-fine,

melting, watery, some grit around the core; juice sugary, very refreshing, rather savory; second; Oct.

Gnoico. 1. Leroy *Dict. Pom.* **2**:229, fig. 1869.

Italian, with the place of its origin in the old principality of Parma. Fruit below medium, long, obtuse-pyriform, whitish-gray on the shaded side, very clear dull green on the other face, dotted with russet, washed occasionally with fawn around the stalk and partially covered with a light bluish efflorescence; flesh greenish-white, fine, dense, breaking or semi-breaking, watery, almost exempt from grit; juice abundant and sugary, with a flavor of anis; Aug.

Goat-herd. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:131. 1908.

On trial in the experimental orchard at Agassiz, B. C., in 1900. Fruit small, acute-pyriform, green, russeted, flesh red, buttery, juicy, subacid; mid-season.

Gogal. 1. *Am. Pom. Soc. Rpt.* 135. 1920.

Originated by N. E. Hansen, Brookings, S. D., from Parrot crossed by *Pyrus ovoidea*, and introduced by him in 1919.

Gold Dust. 1. *Cornell Sta. Bul.* **332**:482. 1913.

Fruit of Bergamot shape, with slender stem; skin very rough; Oct.

Gold Nugget. 1. Stark Bros. *Cat.* 28, fig. 1916.

This pear originated with F. H. Davis, Esmeralda, Cal., in the early seventies. A few years ago Stark Bros., Louisiana, Mo., secured control of the variety and introduced it to the trade in 1916. Tree vigorous, healthy, productive; fruit large, roundish-obovate-

pyriform; skin thick; flesh fine-grained, juicy, with a honey-sweet flavor; ripens late.

Goldbirne. 1. Christ *Handb.* 544. 1817. **2.** Dochnahl *Führ. Obstkunde* **2**:48. 1856.

Austrian, 1851. Fruit small, conic, beautiful light yellow; skin thin, light red blush; flesh semi-breaking, sweet, with muscatel flavor; best; beginning of Oct.

Goldbordirte Holzbirne. 1. Dochnahl *Führ. Obstkunde* **2**:196. 1856.

Classed by Dochnahl among varieties of special character. The tree has its leaves bordered with gold. Fruit small; flesh firm, insipid.

Golden Bell. 1. *Mass. Hort. Soc. Rpt.* 43. 1866.

A seedling fruited by S. A. Shurtleff, Brookline, Mass., in 1862. Tree prolific. Fruit medium, pyriform, golden-yellow; flesh fine, with good flavor; Sept.

Golden Beurré of Bilboa. 1. Kenrick *Am. Orch.* 177. 1832. **2.** Hovey *Fr. Am.* **1**:99, Pl. 1851.

Beurré Doré de Bilboa. **3.** Leroy *Dict. Pom.* **1**:351, fig. 1867.

Imported to this country from Bilboa, Spain, in 1821 by J. Hooper, Marblehead, Mass. Fruit medium to large, obovate-pyriform, golden-yellow, speckled evenly with small, brown dots, and slightly marked with russet; flesh yellowish-white, fine, melting, very buttery, vinous and excellent flavor; first; Sept.

Golden June. 1. *Am. Pom. Soc. Rpt.* 135. 1920.

Originated with Joe Houghlin, near Bloomfield, Ky., and introduced by Sunny Slope Nursery,

Hannibal, Mo. Tree reported about 75 years old. Fruit said to have a small core, to be delicious and to ripen about June 20th.

Golden Knap. 1. Hogg *Fruit Man.* 587. 1884.

Grown extensively in the orchards of the border countries of Scotland. The name is a corruption of Golden Knob, the shape being that of a small knob. Fruit very small, globular-turbinate, russety, of no particular merit.

Golden Queen. 1. Hogg *Fruit Man.* 587. 1884.

Raised at the Royal Gardens, Frogmore, near Windsor, Eng., and was first exhibited in 1872. Fruit small, obovate, straw-colored, strewed with a few minute dots; flesh very tender and extremely juicy, sweet and highly perfumed; a delicious pear but when ripe speedily rots at the core; Sept.

Golden Russet. 1. Hogg *Fruit Man.* 587. 1884.

A seedling raised at the Royal Gardens, Frogmore, near Windsor, Eng., and first exhibited in 1863; entirely distinct from Japan Golden Russet, which bears the same name as a synonym. Fruit small, obtuse-obovate, bright cinnamon-russet; flesh yellow, fine-grained, buttery and melting, juicy, sweet and with a flavor resembling that of Marie Louise; an excellent little pear; Oct.

Goldwörther Lederbirne. 1. Löschnig *Mostbirnen* 156, fig. 1913.

An Austrian perry pear. Fruit small to medium, turbinate, diminishing rather acutely to the stalk, green covered with dark brown-russet; flesh yellow-green, coarse, saccharine, with an unpleasant acidity; very good for transport; Oct. and Nov.

Gönnersche Birne. 1. Dochnahl *Führ. Obstkunde* **2**:28. 1856.

Hesse, Ger., 1806. Fruit almost medium, turbinate, light green changing to greenish-yellow, often with a rather pale blush; flesh granular and rather coarse; second; Sept.

Goodale. 1. Downing *Fr. Trees Am.* 773, fig. 1869. **2.** Ont. Dept. Agr. *Fr. Ont.* 163, figs. 1914.

Raised by E. Goodale, Saco, Me., from seed of the McLaughlin. Fruit large, oblong-obovate-pyriform, green, yellowing at maturity, shaded with crimson and fawn in the sun, slightly netted and patched with russet and sprinkled with small russet dots; flesh white, fine, rather gritty at core, juicy, sweet, pleasant, perfumed, slightly vinous; fair for dessert; first for market; Oct.

Got. 1. Field *Pear Cult.* 280. 1858. **2.** Leroy *Dict. Pom.* **2**:231, fig. 1869.

Origin unknown. According to Leroy this variety has been cultivated in Belgium ever since 1855. Fruit above medium; form rather variable, passing from long-conic and slightly obtuse to ovate, a little swelled; skin rough, fine, dark green; flesh white, semi-fine, breaking or semi-melting, granular around the core; juice sufficient, sugary, aromatic, rather delicate; second; Sept. and Oct.

Governor Carver. 1. *Mass. Hort. Soc. Rpt.* 45. 1866.

Fruited in 1863 by S. A. Shurtleff from seed. Fruit "Diam. 3 in.; flesh firm and very rich in flavor; keeps perfectly until June or July of following year, and ripens well; fine flavor, and a valuable pear. Turbinate."

Grabenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:159. 1856. **2.** Löschnig *Mostbirnen* 64, fig. 1913.

A German and Austrian pear, common in middle Franconia. Fruit small to medium, turbinate or conic; skin smooth, shining, yellow-green turning yellow, with green marblings, sometimes slightly blushed, dotted; flesh whitish, coarse-grained, breaking, juicy, saccharine, without any perceptible acid; mid-Oct.

Graf Moltke. 1. *Guide Prat.* 95. 1876. **2.** Lauche *Deut. Pom.* **II**:No. 80, Pl. 80. 1882.

Named after A. Von Moltke, a Prime Minister of Denmark, 1850. Fruit rather large, irregular in form although handsome; skin rough, yellowish-green covered with russet; flesh yellowish-white, fine, melting, very juicy, aromatic; quality variable; a table fruit; Oct.

Grand Bretagne. 1. Knoop *Fructologie* **1**:83, Tab. II. 1771. **2.** Downing *Fr. Trees Am.* 774. 1869.

Origin French or Belgian. Fruit large, obtuse-obovate, greenish-yellow, dotted with brown; flesh fine, juicy, buttery and melting; moderately good; Dec. to Feb.

Grand Isle. 1. Downing *Fr. Trees Am.* 3rd App., 176, fig. 1881. **2.** *Rural N. Y.* **44**:242, figs. 135, 136. 1885.

Raised by Benjamin Macomber, Grand Isle, Vt. Tree vigorous, upright, somewhat alternate in bearing. Fruit medium, roundish-oblong, straw color, covered with many small russet dots; stem medium long, rather slender; calyx small, open, in a small basin; flesh whitish, half-fine, juicy, melting, sweet, slightly vinous; very good; Sept. and Oct.

Grand-Soliel. 1. Leroy *Dict. Pom.* **2**:233, fig. 1869. **2.**

Hogg *Fruit Man.* 588. 1884.

Introduced by Major Espéren, Mechlin, Bel., in the early half of the nineteenth century. Fruit medium, globular-turbinate, more or less bossed; skin rough to the touch, yellow, almost covered with gray-russet, blushed with red on the side next the sun; flesh whitish, semi-fine, rather stringy, melting, vinous, sugary, with a particularly delicate aroma; first; Dec. and Jan.

Grant. 1. *Mass. Hort. Soc. Rpt.* 45. 1866.

A seedling fruited by S. A. Shurtleff, Brookline, Mass, in 1862. Fruit large, obtuse-pyriform; greenish-yellow; flesh sweet, fine, rich; first; Oct.

Graslin. 1. *Pom. France* **3**:No. 106, Pl. 106. 1865. **2.** Downing *Fr. Trees Am.* 775. 1869.

A wilding found in the Commune of Flée, Sarthe, Fr.; introduced about 1840. Fruit large, oblate, somewhat irregular, larger on one side than the other, yellow-ochre, dotted and marbled with gray-russet, and stained with large markings of fawn; flesh fine, white, veined with greenish-yellow, very melting, juicy, sugary, acidulous, perfumed, delicate; first; Oct. and Nov.

Grasshoff Leckerbissen. 1. Oberdieck *Obst-Sort.* 305. 1881. **2.** Mathieu *Nom. Pom.* 222. 1889.

German. Fruit medium, pyriform, often rather ovate, inclined or bent at the head; skin smooth, grass-green changing to yellow-green, thickly dotted, not much russet; flesh yellowish-white, rather gritty around the core, melting, fine, juicy, good flavor; very good for dessert and good for household use; early Oct.

Gratiola. 1. Parkinson *Par. Ter.* 592. 1629.

"The Gratiola peare is a kinde of Bon Cretien, called the *Cucumber peare*, or *Spinola's peare*."

Graue Herbstrusselet. 1. Dochnahl *Führ. Obstkunde* **2**:42. 1856.

German, Upper Hesse, 1802. Fruit medium, ventriculous, uneven, rough, entirely covered with russet, changing at maturity to dull red on the side next the sun; flesh very juicy, coarsely granular and woody, sugary and musky; first for household purposes; Sept.

Graue Holzbirne. 1. Löschnig *Mostbirnen* 110, fig. 1913.

A perry pear grown throughout Austria under various names. Fruit medium, globular, diminishing toward the stalk; skin firm, rough, grayish-green turning at maturity to a dirty greenish-yellow, dotted with grayish-brown-russet; flesh yellowish-white, coarse-grained, very juicy, astringent and subacid; mid-Oct.

Graue Honigbirn. 1. Lauche *Deut. Pom.* **2**: No. 84, Pl. 84. 1883.

German. Published by Oberdieck in 1865. Fruit medium, turbinate; skin thin, rough, yellowish-green or yellow, blushed, and dotted and marked with cinnamon-russet; flesh yellowish-white, fine grained, breaking, tender, semi-melting, sweet, with an aromatic flavor of cinnamon.

Graue Pelzbirne. 1. Löschnig *Mostbirnen* 158, fig. 1913.

An excellent Austrian perry pear. Fruit medium, turbinate, inclining to pyriform; skin firm, rough, yellow ground when ripe, with cinnamon-brown-russet marking and grayish-brown dots, blushed on

the sun-exposed side; flesh whitish, coarse grained, very juicy, subacid, with very little aroma; Oct.

Graue Speckbirne. 1. Dochnahl *Führ. Obstkunde* **2**:188. 1856.

Reported from Germany, 1801. Fruit large, long, broad, conic, yellow, strongly and thickly dotted with gray; calyx small; stem fleshy; flesh granular, somewhat aromatic, sweet; third; Sept.

Graue Zuckerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:40. 1856.

Dutch, 1758. Fruit small, rather oviform, smooth, greenish-yellow, dotted with green; flesh yellowish, semi-breaking, melting, very sweet, vinous, juicy; second for dessert, good for the market; Aug.

Grazbirne. 1. Löschnig *Mostbirnen* 184, fig. 1913.

Grazbirne is a variety of wild pear well distributed in Lower Austria. Fruit medium, globular, regular in form, green, dotted and heavily marked with russet; flesh subacid, vinous, astringent, wanting in juice; inferior; early Oct.

Great Cassolette. 1. Prince *Pom. Man.* **1**:32. 1831.

There appear to be several varieties of Cassolette three or four of which bear the synonym of *Lechfrion*. The Cassolette is so named from its resemblance to a small vessel made of copper and silver in which pastilles were burnt. Fruit small, globular-turbinate, 2-1/6 inches in height and 2¼ inches in breadth, entirely light green even at maturity, dotted all over with numerous green specks; flesh melting, of a very peculiar acid flavor which however, is not disagreeable when the fruit is ripe; Aug.

Great Citron of Bohemia. 1. Downing *Fr. Trees Am.*

775. 1869.

Fruit small, oblong, yellow; flesh sugary, juicy, a little coarse-grained, having little flavor; Sept.

Great Mammoth. 1. *Ill. Hort. Soc. Rpt.* 239, 240. 1869.

Grown in pioneer days in Indiana, Illinois, and neighboring states.

Green Chisel. 1. Langley *Pomona* 132. 1729. **2.** Hogg *Fruit Man.* 588. 1884.

Guenette. **3.** Leroy *Dict. Pom.* **2**:261, fig. 1869.

The origin of this ancient early summer variety is unknown, but it was described by Mawe and Abercrombie in 1778, and was also mentioned by Philip Miller in 1734 as being still “in prime” in July in England. Under the name of *Guenette* it was described by Merlet in articles written in 1675, and 1690 and appears to have been well known in English and French gardens. Hogg deems Chisel to be a corruption of the French name Choiseul. Fruit small or very small, growing in clusters, globular-turbinate, green or rarely yellowish-green, with sometimes a brownish tinge next the sun, sprinkled with small russet dots; flesh white, slightly green, fine, semi-breaking, sweet, slightly gritty around centre; juice ample in amount, sugary, acid, slightly aromatic; second; Aug.

Green Mountain Boy. 1. Elliott *Fr. Book* 386. 1859.

A native variety. Fruit medium, globular-obovate, or obovate-pyriform, golden yellow, with russety-brown specks; flesh yellowish, melting, juicy, sweet; very good; Oct.

Green Pear of Yair. 1. *Trans. Lond. Hort. Soc.* **4**:214.

1822. **2.** Downing *Fr. Trees Am.* 776. 1869.

Green Yair. **3.** Hogg *Fruit. Man.* 589. 1884.

An old Scotch pear raised at Yair on the Tweed, Peeblesshire. Fruit below medium, obovate, smooth, dark green changing to yellow, patched and dotted with russet; flesh tender, juicy, sugary; good; Sept.

Grégoire Bordillon. 1. Leroy *Dict. Pom.* **2**:237, fig. 1869. **2.** Bunyard *Handb. Hardy Fr.* 178. 1920.

Raised by Leroy in 1855 from seed of Graslin, and fruited for the first time in 1866. Fruit large, ovate, rather larger on one side than the other, pale yellow on shaded side and dark yellow on the exposed cheek, mottled, striped, and dotted with brown; flesh yellowish, fine, very melting, very juicy and sugary; first; Aug.

Grey Good-Wife. 1. Mawe-Abercrombie *Univ. Gard. Bot.* 1778.

Fruit medium, globular, brown-red, moderately tender and of good flavor; Oct. to Dec.

Grise-Bonne. 1. Duhamel *Trait. Arb. Fr.* **2**:245. 1768. **2.** Leroy *Dict. Pom.* **2**:238, fig. 1869.

Französische Gute Graue Sommerbirne. **3.** Dochnahl *Führ. Obstkunde* **2**:16. 1856.

The Dutch pomologist Pierre Van den Hoven writing in the middle of the eighteenth century affirmed that the Grise-Bonne was the *Sucrée Grise de Hollandaise* and the *Pirum Falernum* of the Romans. It may be noted that in 1586 Jacques Daléchamp thought he had found the *Falernum* in the French *Autumn Bergamote*; and, again, in 1783 Henri Manger declared it to be still cultivated under the name *Bourdon*, the *Orange Musquée*; similarly Sickler wrote

in 1802 that the *Bergamote d'Été* appeared to him to be the *Falernum*. Fruit medium; form variable, sometimes irregular-turbinate, long and ventriculous, at other times regular-turbinate, clear green, russeted with gray, clouded with pale yellow on the shaded side and covered with large dots of golden or orange-yellow; flesh white, fine, dense, semi-breaking, watery, free from grit; juice very abundant, sugary, acidulous, musky; second; Aug.

Groom Prince Royal. 1. *Gard. Chron.* 54, 161. 1841. **2.** Hogg *Fruit Man.* 589. 1884.

Bergamotte Éliza Mathews. **3.** Leroy *Dict. Pom.* **1**:235, fig. 1867.

Princesse-Royale. **4.** Leroy *Dict. Pom.* **2**:561. 1869.

A Mr. Groom, a nurseryman at Clapham near London, introduced this pear in 1841. Fruit medium, globular or Bergamot-shaped, greenish-brown, with a tinge of yellow and slight traces of gray-russet; flesh melting, buttery, sometimes rather gritty, sweet, vinous, perfumed; a good second-rate pear; Jan. to Mar.

Gros Blanquet Long. 1. Leroy *Dict. Pom.* **2**:241, fig. 1869.

Large Blanquet. **2.** Hogg *Fruit Man.* 602. 1884.

Kreiselförmige Blankette. **3.** Mathieu *Nom. Pom.* 244. 1889.

This is one of a group of pears which in the seventeenth century were designated by various pomologists with names such as *Blanquet à longue queue*, *Blanquet d'hiver*, etc. Their origin is ancient, possibly Roman. The variety here described is the largest of the Blanquettes and was said by Olivier de Serres in 1600 to be also named *de Florence* from

which it might be adduced that it came originally from Tuscany. Fruit below medium and often small, obtuse-pyriform, smooth, of a beautiful yellow color, dotted with bright green and sometimes carmined on the cheek next the sun; flesh white, semi-fine, breaking, sweet, full of sugary juice possessing a musky-anis flavor; a dessert pear, second; July and Aug.

Gros Blanquet Rond. 1. Leroy *Dict. Pom.* **2**:242, fig. 1869.

An ancient dessert pear mentioned by Claude Saint-Etienne in the seventeenth century and by Mawe and Abercrombie in their *Universal Gardener and Botanist* in 1778. Fruit below medium, globular-ovate, pale yellow covered with very fine russet dots, more or less washed with rose on the side of the sun; flesh yellow-white, breaking, rather coarse, almost exempt from grit; juice abundant, sugary, sourish, musky; third for dessert; Sept.

Gros-Hativeau. 1. Leroy *Dict. Pom.* **2**:245, fig. 1869.

This pear has been supposed to belong to a class identified with the *Pira Hordearia* of Columella and of Pliny, and was mentioned by various French and German writers from the sixteenth century onward; if its origin is not clear it is at any rate one of the three varieties of the pear bearing the name of *Hativeau* in the seventeenth century, *H. blanc*, or *Bergamotte d'Été*, and the *Petit-H.* being the other two. Fruit below medium, turbinate-obtuse; skin fine, yellowish-green, delicately dotted with olive-gray, washed with bright vermilion on the side next the sun; flesh whitish, coarse, breaking, gritty; juice rarely abundant, sugary, astringent and slightly aromatic; third; end of July.

Gros Loijart. 1. *Mag. Hort.* **9**:126. 1843.

Fruit large, irregular-obovate, green and yellow; flesh breaking, tough but neither gritty nor austere; for cooking purposes; Apr. and May.

Gros Lucas. 1. Leroy *Dict. Pom.* **2**:246, fig. 1869.

The fruit garden of the Horticultural Society of Angers, Fr. was formed in 1832 and the Gros Lucas soon afterwards appeared in its catalog. Fruit large, obtuse-ovate-globular, irregular and much bossed; skin rather thick, yellow, sprinkled with very small dots of green color, stained with patches of russet; flesh white, semi-fine, semi-breaking, spongy, gritty at the center; juice rather deficient, without perfume or much sugar; second, but good for kitchen use; Jan. and Feb.

Gros Muscat Rond. 1. Leroy *Dict. Pom.* **2**:248, fig. 1869.

Although the origin of this variety is doubtful it is almost certainly French. Diel received it from Holland but German pomologists appear to have regarded it as French. Claude Saint-Etienne described it in 1670. Fruit medium, globular-ovate, mammillate at summit, one side always more convex than the other, grayish-green on the shaded side and pale yellow on that exposed to the sun, dotted and slightly stained with gray-russet; flesh whitish, semi-fine and semi-breaking, watery, rarely very gritty; juice plentiful, very saccharine, acidulous and aromatic; second; Aug.

Gros Rousselet. 1. Leroy *Dict. Pom.* **2**:250, fig. 1869. **2.** Hogg *Fruit Man.* 590. 1884.

Roi d'Été. **3.** Downing *Fr. Trees Am.* 843. 1869.

Mentioned by Rea as being cultivated in England

in 1665 under the name of *Great Russet of Remes*, under which name it was also known in France, there being known these two varieties, the *Gros Rousselet de Rheims* and the *Petit-Rousselet*. Father Rapin, a French Jesuit, who wrote in 1666 the poem *Hortorum*, mentioned the pears of Rousselet in the Valley of Amiterne at the foot of the Apennines. In 1783 the German pomologist Henri Manger wrote that he believed the French *Rousselet* was none other than the Roman *Favonianum* mentioned by Pliny. Fruit medium, obtuse-pyriform, yellowish or bright green changing to bright lemon-yellow, covered with numerous small brown spots, red on the side next the sun; flesh yellowish, semi-melting, semi-breaking, rich in sugary and perfumed juice; variable in quality, requires a warm, sheltered position; Aug. and Sept.

Gros Rousselet d'Aout. 1. *Ann. Pom. Belge* **8**:53, fig. 1860. **2.** Downing *Fr. Trees Am.* 776. 1869.

Rousselet d'Aout. **3.** *Pom. France* **2**:No. 83, Pl. 83. 1863.

This was one of the first seedlings raised by Van Mons and is 201 in his catalog of 1823. Fruit medium, pyriform, yellow washed with rose-red; flesh fine, melting, juicy, sugary, acidulous, with an agreeable perfume; a very good early fruit, ripening in August in Belgium.

Gros Trouvé. 1. *Guide Prat.* 95. 1876.

This seedling was found by Gabriel Everard in a garden at Tournai, Bel. Fruit very large, fusiform, washed with red on the side next the sun; flesh breaking; first for kitchen purposes; keeps until the autumn of the year following.

Grosse Eisbirne. 1. Dochnahl *Führ. Obstkunde* **2**:188. 1856.

Reported in 1802. Fruit medium, onion-shaped; skin very smooth, shining and greasy, yellowish-green changing to light citron-yellow, often somewhat blushed; flesh coarse, solid and dry; third for the table, first for culinary use; Oct.

Grosse Figue. 1. *Guide Prat.* 95, 278. 1876.

Fruit large, obtuse-pyriform, yellow stained with brown; flesh semi-melting, juicy, well perfumed; first; Nov.

Grosse gelbe Weinbirne. 1. Dochnahl *Führ. Obstkunde* **2**:49. 1856.

Nassau, 1805. Fruit below medium, globular, obtuse-conic, often turbinate, light lemon-yellow, dotted with fine brown spots, somewhat russeted; flesh extremely juicy, vinous, mingled sweet and sour; third for dessert, very good for the kitchen.

Grosse-Herbst-Bergamotte. 1. Dochnahl *Führ. Obstkunde* **2**:169. 1856.

Reported in middle Germany, 1806. Fruit medium, long-pyriform, round, yellowish-green, russeted, speckled with gray dots; flesh breaking, firm, white, juicy, sweet; third for dessert, good for household use; Oct.

Grosse Landlbirne. 1. Löschnig *Mostbiren* 66, fig. 1913.

A perry pear grown throughout Austria. Fruit medium, turbinate, otherwise short-pyriform; skin smooth, shining, yellow when ripe, blushed on the side opposed to the sun, sprinkled with numerous dots of cinnamon-brown; flesh coarse-grained,

yellow-white, very juicy, sweet, astringent and without aroma; excellent; Oct. to Dec.

Grosse Leutsbirne. 1. Löschnig *Mostbirnen* 112, fig. 1913.

An Austrian perry pear. Fruit medium, long-pyriform, green covered all over with gray-russet; flesh very juicy, astringent, saccharine, with a sourish after-taste; good for transportation; Oct.

Grosse-Louise. 1. Leroy *Dict. Pom.* **2**:253, fig. 1869.

A chance seedling found in a garden of the town of Tourcoing, Fr. Fruit large, conic-turbinate-obtuse, bossed and generally mammillate at summit, yellow, slightly greenish, dotted all over with russet and having some small brown stains; flesh white, very fine, dense, free from grit; juice very abundant, sugary, sweet, delicately perfumed; first; Sept.

Grosse Mostputzer. 1. Löschnig *Mostbirnen* 114, fig. 1913.

A perry pear grown throughout Austria. Fruit medium but variable in size, globular, turbinate, otherwise pyriform; skin firm, leaf-green turning bright yellow at maturity, with large russet dots; flesh yellow-white, coarse-grained, very juicy, subacid and strongly astringent; very good for transportation on account of its prolonged season of maturity; Oct. to Dec.

Grosse Petersbirne. 1. Dochnahl *Führ. Obstkunde* **2**:168. 1856.

Reported in Thuringia, 1804. Fruit medium, obtuse-conic, yellow, blushed, some russet, dotted with green, thin-skinned; flesh sweet, deficient in juice; third for dessert, good for household use, good for the market.

Grosse Poire d'Amande. 1. *Ann. Pom. Belge* **4**:97, fig. 1856.

Grosse Angleterre de Noisette. **2.** Noisette *Man. Comp. Jard.* **2**:524. 1860.

Belgian. Fruit large, long-conic or obtuse-pyramidal, grayish-green becoming yellow at maturity, slightly bronzed on the side next the sun, speckled all over with numerous brown dots; flesh yellowish-white, fine, melting, buttery; juice very plentiful, sugary; flesh sweet and tasting strongly of almond; first; Sept. and Oct.

Grosse Poire de Vitrier. 1. Prince *Pom. Man.* **1**:107. 1831.

Fruit large, turbinate, yellow, with red blush, perfumed; Nov. and Dec.

Grosse Queue. 1. Leroy *Dict. Pom.* **2**:257, fig. 1869.

This variety probably originated about 1653 when Nicolas de Bonnefond named it in his *Jardinier francais*. In 1675, however, Merlet gave a rather complete description of it and a few years later it was admitted by La Quintinye into the orchard of Louis XIV at Versailles. Fruit medium, rather variable, always globular in the lower part, bossed and more or less conic near the summit, a little wrinkled especially on the side next the sun, olive-yellow, finely rayed and dotted with clear green, and washed with carmine on the exposed face; flesh very white, semi-fine, breaking or semi-melting, juice deficient, sweet mingled with sourness, musky; third; Sept. and Oct.

Grosse Rommelter. 1. *Guide Prat.* 96. 1876.

A French pear valued for perry making. Fruit medium, globular, green; first for perry; Oct. Tree

very vigorous, extraordinarily fertile and succeeding everywhere.

Grosse schöne Jungfernbirne. 1. Liegel *Syst. Anleit.* 124. 1825.

German. Reported 1805. Fruit below medium, ventriculous-pyriform, sides rather unequal; skin extremely smooth, light yellowish-green turning to greenish-yellow, often washed with a slight brownish blush; second for dessert, first for the kitchen; end of Aug. for two weeks.

Grosse September Birne. 1. Mathieu *Nom. Pom.* 226. 1889.

Belle de Septembre. **2.** Leroy *Dict. Pom.* **1**:211, fig. 1867.

An old variety originated in Prussia and cultivated chiefly in the north of Germany and especially in Pomerania. Fruit above medium and sometimes large, oblong or globular-turbinate, generally having unequal sides, pale yellow, stained with fawn, finely dotted with gray and sometimes washed with brown-red on the cheek exposed to the sun; flesh greenish, fine, semi-melting, rarely gritty; juice abundant, saccharine, perfumed, delicate but rather astringent; second; end of Sept.

Grosse Sommer-Zitronenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:24. 1856.

Reported in Saxony in 1803. Fruit medium, long-turbinate, sides uneven; skin extremely shining, light green changing to lemon-yellow, spotted with gray, rather rust-colored on the side next the sun; flesh coarse, melting, rather yellow in the interior, very aromatic, tender and juicy; first for dessert, household and market; end of Aug. for 14 days.

Grosse Sommersirene. 1. Dochnahl *Führ. Obstkunde* **2**:49. 1856.

Holland, 1804. Fruit small, ventriculous-pyriform, smooth, shining lemon-yellow, without any russet, watery, with a tart sweetness; third for dessert; best for market.

Grosse späte Weinbirne. 1. Dochnahl *Führ. Obstkunde* **2**:196. 1856.

Switzerland. Reported first in 1848. Fruit above medium, ventriculous-turbinate, green-yellow, blushed with a brownish tint, spotted with white, and marked with russet; flesh coarse-grained, very juicy, astringent, vinous and sourish; very good for perry; Oct.

Grosser Roland. 1. Dochnahl *Führ. Obstkunde* **2**:4. 1856.

First reported from Treves, Prussia, in 1801. One of the group of Volema or Pound Pears. Fruit large, bent and uneven in form, light green changing to yellowish, blushed; flesh breaking, aromatic, juicy; first for household use; Sept.

Groveland. 1. Budd-Hansen *Am. Hort. Man.* **2**:248. 1903.

A native variety grown in Alabama and southeastern States. Fruit large, obovate, obtuse-pyriform, greenish-yellow, with brownish cheek, washed, netted and speckled nearly all over with russet; flesh creamy-white, tender, buttery, juicy, vinous; good; autumn.

Grubbirne. 1. Löschnig *Mostbirnen* 116, fig. 1913.

An Austrian perry pear. Fruit rather large, irregular in form, diminishing toward the stem

almost acutely, yellow-green slightly blushed, dotted and speckled with russet; flesh coarse-grained, juicy, astringent, saccharine and with an agreeable flavor; good for keeping and transporting; Oct.

Grumkow. 1. Leroy *Dict. Pom.* **2**:260, fig. 1869.

Discovered by M. Koberstein at Rügenwald, Basse-Pomerania, Prussia. Diel, first to describe it, placed its origin at about 1806. Fruit medium, very irregular, long, pyramidal, always obtuse, contorted and much warted, pale green, sprinkled with a few gray specks, more or less colored with brown-red on the sunny side; flesh whitish, fine, breaking, or semi-breaking; juice abundant, saccharine, acidulous, with a musky flavor; second; Oct. to Dec.

Grunbirne. 1. Dochnahl *Führ. Obstkunde* **2**:10. 1856.

A German pound pear. Originated in Württemberg and reported in 1830. Fruit medium, long, sides unequal, dark green, with dark red blush on ripening; flesh greenish-white, breaking, granular, glutinous, juicy, aromatic; first for kitchen; Aug.

Grüne Confesselsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:193. 1856.

Thuringia, 1797. Fruit small, obtuse-conic, grass-green changing to yellowish-green, green dots; flesh yellow, firm, insipid; second for table, good for household; May to Aug.

Grüne frühe Gewurzbirne. 1. Dochnahl *Führ. Obstkunde* **2**:32. 1856.

Nassau, 1816. Fruit small, turbinate, yellowish grass-green often rather blushed, very fine spotting, thick-skinned; flesh granular, semi-melting, aromatic, musky; second for dessert, good for domestic and market use; early Sept. for 8 days.

Grüne fürstliche Tafelbirne. 1. Dochnahl *Führ. Obstkunde* **2**:135. 1856.

Wetterau, 1797. Fruit small, globular, thin-skinned, light green changing to yellowish-green, seldom blushed; flesh white, buttery, melting, juicy, full of flavor; first for table and market; Aug.

Grüne gesegnete Winterbirne. 1. Dochnahl *Führ. Obstkunde* **2**:174. 1856.

Holland, 1802. Fruit medium, globular, light green changing to yellowish-green, dotted with small brown specks; flesh coarse-grained near centre, breaking, juicy, very sweet; good for culinary use; Jan. to Mar.

Grüne langstielige Winterhirtenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:83. 1856.

Said to be a Belgian variety, published by Diel in 1802. Fruit medium, globular-oblate, bossed, dark green changing to light green, a rather brownish blush, fine gray dots; flesh greenish-white, buttery, melting; first for table and household; Feb.

Grüne Pfundbirne. 1. Dochnahl *Führ. Obstkunde* **2**:6. 1856.

Poire Livre Verte. **2.** Mas *Pom. Gen.* **3**:11, fig. 102. 1878.

A German Rhineland Pound pear, 1826. Fruit very large, regular in form, five inches long by three and a half broad, uniform green turning to yellow-green, covered with dense star-like brown spots; flesh breaking, juicy, aromatic; first for kitchen; Oct.

Grüne Pichelbirne. 1. Löschnig *Mostbirnen* 118, fig. 1913.

A perry pear extensively grown under a variety of

names throughout Austria. Fruit medium, globular-ovate, shining dark green, yellowish when ripe, white dots; flesh coarse-grained, yellow-white turning more yellow on ripening, juicy and astringent; Oct. and Nov.

Grüne Sommer-Bergamote. 1. Dochnahl *Führ. Obstkunde* **2**:9. 1856.

Saxony, 1803. A Volema or Pound pear. Fruit medium, globular, dark green changing to yellowish-green, blushed with streaks of brown; flesh glutinous, juicy, aromatic; first for household; Sept.

Grüne Sommer-Citronenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:156. 1856.

Thuringia, 1841. Fruit small, ventriculous, rather variable, shining light green becoming a uniform light greenish-yellow, russeted with gray, specked with gray dots; flesh granular near the centre, melting, acid, sweet, strongly scented with musk; first for table and household.

Grüne Wiedenbirne. 1. Löschnig *Mostbirnen* 120, fig. 1913.

A perry pear grown throughout Austria. Fruit medium, turbinate, otherwise short-pyriform, irregular; skin smooth, shining green turning greenish-yellow when ripe, with numerous very fine green dots; flesh whitish, coarse, juicy, not particularly firm when ripe, astringent, sourish and saccharine; mid-Oct. for fourteen days.

Grüne Winawitz. 1. Löschnig *Mostbirnen* 122, fig. 1913.

A perry pear grown under a variety of names in Upper and Lower Austria. Fruit medium, long-ovate, greatest diameter at its center, light green turning

yellowish at maturity, covered with russet and green dots; flesh yellowish, coarse and juicy, saccharine, astringent; good for transport; Oct. and Nov.

Grünmostler. 1. Löschnig *Mostbirnen* 84, fig. 1913.

A perry pear widely distributed in Switzerland and Austria. Fruit fairly large, globular-oblate, ventriculous, one side larger than the other; flesh greenish-white, coarse, juicy, saccharine and acidulous; mid-Oct., for about two weeks.

Gulabi. 1. *Guide Prat.* 93. 1895.

Sent out and recommended as one of the best sorts in the Caucasus by M. Niemetz of Winnitza in the former Government of Polish-Russia. The varieties of the Caucasus are for the most part highly saccharine, rather coarse, and the vegetation very vigorous.

Guntershauser Holzbirne. 1. Dochnahl *Führ. Obstkunde* **2**:196. 1856.

Württemberg, Ger., 1848. Fruit medium, turbinate, uniform whitish-green, russet dots; flesh fine-grained, very juicy, vinous, astringent, sweet; good; Oct.

Gustave Bivort. 1. Downing *Fr. Trees Am.* 776. 1869.

French. Fruit medium, globular, pale yellow, with stains and nettings of russet, blushed on side next the sun; flesh white, juicy, semi-melting, sweet, slightly perfumed; good or very good; Aug.

Gustave Bourgogne. 1. Leroy *Dict. Pom.* **2**:262, fig. 1869. **2.** Downing *Fr. Trees Am.* 776. 1869.

Gained by Van Mons at Louvain about 1840. Fruit large or medium, turbinate-ovate, flattened at both

poles, whitish-green, speckled with fine fawn dots, some bronze-green on the side next the sun; flesh white, semi-fine, almost melting; juice very abundant and sugary, delicately perfumed, refreshing, and agreeable; second for both eating and cooking; Sept.

Gustin Summer. 1. Downing *Fr. Trees Am.* 575. 1857. **2.** *Ibid.* 776. 1869.

Originated in New Jersey. Fruit small, globular, yellow, sweet without much flavor; Sept.

Gute Grüne. 1. Christ *Handb.* 524. 1817.

German. Fruit medium, globular, green changing to yellowish, blushed; flesh tender, melting; beginning of Sept. for several weeks.

Habichtsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:146. 1856.

Rhineland. Described by Diel in 1804. Fruit very large, 5 in. x 3 in., hook-nosed or like the beak of a bird, crooked, uniformly light green, densely speckled with light brown dots and marked with russet; flesh coarse-grained, semi-melting, breaking; third for table and good for cooking; Nov. and Dec.

Hacon Incomparable. 1. *Gard. Chron.* 20. 1841. **2.** Hogg *Fruit Man.* 591. 1884.

About the year 1792 a Mrs. Rayner sowed the seeds of a Rayner's Norfolk Seedling at Norfolk, Eng. Subsequently, about 1814, one of the resultant trees was propagated from grafts by a Mr. Hacon of the same place. The hardy and productive tree renders it particularly valuable for climates similar to that of England. The blossoms bear the sharpest frosts without injury but the tree cannot be made to bear until it is eight to ten years old. Fruit medium, globular-oblate, flattened and depressed at both

poles, pale yellowish-green, covered with numerous russety spots and markings; flesh yellowish-white, melting, buttery with a rich, vinous, sweet, musky flavor; Nov. to Jan.

Haddington. 1. *Mag. Hort.* **13**:274. 1847.

In 1828 J. B. Smith, a farmer near Haddington, Philadelphia, raised this pear from seed of a Pound pear. Fruit above medium, obovate-pyriform, greenish-yellow, with a brownish cheek and minute russet dots and patches; flesh yellowish, juicy, aromatic; texture varies, some being quite melting, others inclined to break; good; Jan. to Apr.

Haffner Butterbirne. 1. Mathieu *Nom. Pom.* 230. 1889.

Beurré Haffner. **2.** Mas *Le Verger* **3**:Pt. 1, 77, fig, 37. 1866-73.

A variety found as a chance seedling near Nuremberg, Bavaria, by the Brothers Haffner; first published in 1854 by Biedenfeld. Fruit medium, ovate-pyriform, pale yellow, speckled and stained with russet; flesh white, sometimes a little yellow, rather granular but fine, slightly gritty at center, full of sugary, vinous juice, and has a perfume similar to that of the Beurré Gris; good; Oct.

Hagar. 1. Downing *Fr. Trees Am.* 777. 1869.

French, according to Downing. Fruit medium, obovate-obtuse-pyriform, pale yellow, shade of red in sun, some russet; flesh coarse, dry, sweet; poor; Oct.

Haight. 1. Downing *Fr. Trees Am.* 777. 1869.

An American variety. Fruit medium, globular-pyriform, yellow, shaded and mottled with red in the sun, with small brown dots and traces of russet; flesh

white, pink at center, a little coarse, breaking, juicy, sweet and pleasant; good; Oct.

Hallische gelbe Honigbirne. 1. Dochnahl *Führ. Obstkunde* **2**:149. 1856.

Saxony. Fruit small, oblate, flattened, sides unequal, yellowish-green changing to light yellow; flesh breaking, coarse-grained, very juicy and sweet; second for dessert, good for kitchen; Sept.

Hamburg. 1. *Can. Hort.* **14**:12, fig. 2. 1891.

Russian. Fruit medium, yellow-green; flesh juicy, perfumed; Sept.

Hamburger Birne. 1. Dochnahl *Führ. Obstkunde* **2**:5. 1856.

A North German Pound pear; published in 1816. Fruit medium, turbinate or conic-obtuse, light green changing to light yellow, with dark russet markings; flesh breaking, juicy, aromatic; first for the kitchen; Oct.

Hamilton. 1. Downing *Fr. Trees Am.* 777. 1869.

Originated in South Carolina, where it is said to be of good quality. Fruit medium, oblate; skin rough, yellowish, some stains and numerous dots of russet; flesh yellowish, coarse, wanting in juice; Nov.

Hammelsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:170. 1856.

Thuringia, 1794. Fruit below medium, ovate, yellow-green changing to citron-yellow, numerous small dots, thick-skinned; flesh granular, sweet; third for dessert, not of much value for culinary use.

Hamon. 1. Leroy *Dict. Pom.* **2**:264, fig. 1869. **2.** Downing *Fr. Trees Am.* 777. 1869.

Raised by M. Nérard, a nurseryman at Vaise near Lyons, Fr., from seed sown by him in 1834. Fruit medium, irregular-ovate, often a little bossed, pale green, covered with large fawn dots; flesh slightly greenish, coarse, melting, juicy, sugary, acerb, with an agreeable flavor; second; Aug.

Hampden Bergamot. 1. Hogg *Fruit Man.* 591. 1884.

An old variety of uncertain origin and possessing many synonyms. Fruit large, globular, narrowing abruptly to the stalk, even and regular in outline, pale greenish-yellow, with traces of thin russet and greenish dots, sometimes a tinge of brownish-red next the sun; flesh white, rather coarse-grained, buttery, sweet, agreeable; handsome, but hardly more than second class; Sept.

Hampton Bergamot. 1. Downing *Fr. Trees Am.* 778. 1869.

Originated with W. C. Hampton, Mount Victory, Ohio. Fruit small, globular-oblate, yellow, netted and sprinkled with russet and green dots; flesh whitish, coarse, juicy, semi-melting, vinous; good; Sept.

Hampton Cluster. 1. Downing *Fr. Trees Am.* 778. 1869.

Raised by W. C. Hampton, Mount Victory, Ohio. Fruit borne in clusters, very small, globular, greenish-yellow, shaded with dull red on the sun-exposed side, netted with russet; flesh juicy, melting, sweet; very good; Sept.

Hampton Virgalieu. 1. Elliott *Fr. Book* 388, fig. 1859. **2.** Downing *Fr. Trees Am.* 778. 1869.

Originated with W. C. Hampton, Mount Victory, Ohio, from a seed of the White Doyenné. Tree

vigorous, hardy and productive. Fruit medium, globular, or slightly obtuse-pyriform, yellowish-green at maturity, with many russet dots and marblings of russet, the latter becoming reddish-brown in the sun; flesh white, buttery, juicy, rich, vinous, brisk; core small; very good; Oct. and Nov.

Hancock. 1. *Mass. Hort. Soc. Rpt.* 44. 1866.

A seedling fruited by S. A. Shurtleff, Brookline, Mass., in 1861. Fruit 4½ in. long, 3 in. wide, obovate, light green; flesh breaking and juicy, a great bearer, and an excellent cooking pear, always sells readily; Sept.

Hangelbirne. 1. Dochnahl *Führ. Obstkunde* **2**:145. 1856.

Holstein, published 1788. Fruit large, long-gourd-shaped, yellow-green, yellow on the sunny side; flesh breaking, coarse-grained, fairly juicy, sweet; third for dessert, good for kitchen; Nov. to Apr.

Hannover'sche Jakobsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:172. 1856. **2.** Lauche *Deut. Pom.* **II**:No. 27, Pl. 27. 1882.

Hanover, Prussia, 1851. Fruit medium, obtuse-pyriform, dull grass-green changing to yellow, with a brownish blush, dotted with green on the yellow and with bright yellow on the flush; flesh whitish, fine, sweet, becoming mealy when over ripe; third for dessert, good for culinary use and market; July.

Hannover'sche Margarethenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:40. 1856.

Hanover, Prussia, 1851. Fruit medium, turbinate, light green turning to light yellow; flesh yellowish-white, breaking, soon becoming mealy when ripe; second for table, good for kitchen use; end of July for

2 weeks.

Hanover. 1. Downing *Fr. Trees Am.* 779. 1869.

From Hanover Furnace, N. J. Fruit below medium, globular-obovate, green, with dull green-russet markings, and a brown cheek; flesh greenish-yellow, exceedingly melting and juicy; flavor pleasant, good; Oct.

Hardenpont frühe Colmar. 1. Dochnahl *Führ. Obstkunde* **2**:100. 1856. **2.** *Guide Prat.* 96, 280. 1876.

This is not the *Passe Colmar* of Hardenpont, although regarded as such by Dochnahl. It ripens in August and September whereas Passe Colmar is in season during November and December. Fruit medium, globular-turbinate, a beautiful uniform yellow; flesh fine-grained, musky; Aug. and Sept.

Harigelsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:172. 1856.

Württemberg, 1830. Fruit medium, obtuse-conic, light green changing to golden yellow, with a dark blush; flesh rather astringent, sweet, breaking, aromatic; third for table, not of much account for cooking; Oct.

Harnard. 1. *N. J. Hort. Soc. Rpt.* 11. 1877.

Shown before the New Jersey State Horticultural Society in 1877. Said to be “a seedling from the farm of John Harnard, Springfield,” N. J., and to have originated about 30 years previously. A cooking pear, valued for its regular and abundant bearing and keeping qualities.

Harris (Georgia). **1.** Downing *Fr. Trees Am.* 779. 1869.

Disseminated from Georgia. Fruit medium, obovate-obtuse to obovate-acute-pyriform, pale yellow, deep red in the sun, many green and brown dots; flesh whitish, buttery, not juicy, sweet; good; Sept.

Harris (Massachusetts). **1.** *Mass. Hort. Soc. Rpt.* 153. 1874. **2.** Downing *Fr. Trees Am.* 2nd App., 149, fig. 1872.

Raised by Lemuel Clapp, Dorchester, Mass., from Urbaniste crossed with Beurré Bosc. Fruit above medium, ovate-pyriform, resembling Beurré Hardy; stem medium long; flesh yellowish-white, fine grained, very tender, melting, juicy, rich, vinous, spirited, aromatic; very good to best; Oct.

Harrison Large Fall. 1. Downing *Fr. Trees Am.* 575. 1857.

Rushmore. **2.** Leroy *Dict. Pom.* **2**:608, fig. 1869.

A fine old baking pear of American origin. Fruit large, irregular, inclined, obovate-obtuse-pyriform, pale yellow with a red cheek; Aug. to Oct.

Hartberger Mostbirne. 1. Löschnig *Mostbirnen* 14, fig. 1913.

A perry pear grown in Hungary and Austria. Fruit medium, globular and irregular, somewhat acute toward the stalk, dark green turning to yellow-green, finely dotted and much covered with russet; flesh greenish-white, abnormally large core and seeds, firm and juicy; Oct.

Harte Neapolitanerin. 1. Dochnahl *Führ. Obstkunde* **2**:192. 1856.

Although cultivated mainly at Naples, Italy, in the middle of the last century and called the pear of

Naples, it appears to have been first published in France in 1802. Fruit medium, turbinate, medium ventriculous, light green changing to lemon-yellow, blushed; flesh firm, sweetish, aromatic; very good for culinary uses; Jan. to summer.

Harvard. 1. McIntosh *Bk. Gard.* **2**:457. 1855. **2.** Downing *Fr. Trees Am.* 779. 1869. *Belle de Flushing.* **3.** Leroy *Dict. Pom.* **1**:201, fig. 1867.

Originated at Cambridge, Mass. In 1851 it was taken from America to France without a label by Parsons, a nurseryman at Flushing, N. Y., and was named *Belle de Flushing* by Leroy. Fruit rather large, oblong-pyriform, russety olive-yellow, with a brownish-red cheek; in France it seems to develop a vivid red on the side exposed to the sun, finely dotted with fawn; flesh white, semi-fine, tender, melting, slightly gritty; juice abundant, saccharine, acidulous and agreeably musky; second; a fine commercial variety; Aug. and Sept.

Harvest. 1. Downing *Fr. Trees Am.* 779. 1869.

An American variety. Fruit below medium, globular, pale yellow, tinged with brown-red on exposed side, brown and green dots; flesh whitish, not very juicy or melting, but sweet, pleasant; good; July.

Hassler. 1. Cal. Com. Hort. *Pear Grow. Cal.* **7**:No. 5, 260, figs. 52, 53. 1918.

Originated as a chance seedling with J. E. Hassler, Placerville, Cal. Fruit large, obtuse-pyriform, greenish-yellow, with russet dots; calyx open: basin large, deep, irregular; stem heavy, medium long, inclined in a deep cavity; flesh, fine, juicy, buttery, pleasant; very good; Feb. and Mar.

Hausemerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:194. 1856.

German, published 1847. Fruit medium, turbinate-obtuse, light green changing to whitish-yellow, blushed, with brown spots; flesh firm, somewhat aromatic; good for kitchen use; Dec. to Mar.

Hautmonté. 1. Leroy *Dict. Pom.* **2**:266, fig. 1869.

Origin unknown but was propagated in the Garden of the Horticultural Society of Angers in 1840. Fruit medium, long-turbinate, yellowish-green spotted with russet and washed with rose-carmine on the side next the sun; flesh whitish, coarse, breaking, juicy, gritty at center; second for dessert, first for stewing; Feb. to Apr.

Hawaii. 1. *Mich. Hort. Soc. Rpt.* 84. 1880. **2.** *Cornell Sta. Bul.* **332**:482. 1913.

A Japanese pear; date of introduction unknown. Fruit medium, apple-shaped, light lemon-yellow, with rough, russet dots; flesh hard, gritty, wanting in flavor, subacid; Oct.

Hawes Winter. 1. Downing *Fr. Trees Am.* 506. 1857. **2.** Elliott *Fr. Book* 389. 1859.

Originated on the farm of the Hawes family in King and Queen County, Virginia. Fruit large, globular, slightly flattened, dull yellow at maturity, with russet spots; flesh a little coarse, very juicy, rich, sweet, vinous; Nov. to Jan.

Hawkesbill. 1. Parkinson *Par. Ter.* 593. 1629.

"The Hawkes bill peare is of a middle size, somewhat like unto the Rowling pears."

Hays. 1. *Mass. Hort. Soc. Rpt.* 61. 1844. **2.** *Am. Pom.*

Soc. Rpt. 238. 1854.

Exhibited, from the Pomological Garden, Salem, Mass., at the sixteenth annual meeting of the Massachusetts Horticultural Society, September, 1844. Placed on the rejected list of the American Pomological Society in 1854.

Heathcot. 1. *Mag. Hort.* **12**:438, fig. 33. 1846.

Raised in 1812 on the estate of Governor Gore in Waltham, Mass. Fruit medium, obovate, greenish-yellow becoming lemon-yellow, very few dots and a few russet streaks, slightly browned on the sunny side; flesh yellowish-white, fine, very melting, buttery and juicy; in flavor it is rich, sprightly, juicy and excellent, with little perfume; Oct.

Hebe. 1. *Horticulturist* **21**:198, fig. 84. 1866.

Raised by William Sumner of Pomaria, S. C. Fruit large; specimens have often weighed 28 ounces, 6 of fair size of this pear generally weigh 8 lbs., globular, obovate, with irregular protuberances, lemon-yellow inclined to greenish, dotted with russet specks and blotches; flesh melting, sprightly, buttery, slightly vinous, has no matured seeds, and seldom forms seeds at all; Dec. in South Carolina.

Hedwig von der Osten. 1. Mathieu *Nom. Pom.* 231. 1889.

Hedwige d'Osten. **2.** Mas *Pom. Gen.* **3:**173, fig. 183. 1878.

Herr Schmidt, Blumberg, received this variety from Van Mons under Number 51 and dedicated it to the daughter of a zealous pomologist of his country. Fruit rather large, long-pyriform, rather deformed in contour, water-green changing to dull pale yellow, usually rather golden on the face next the sun; flesh

whitish, fine, buttery, very melting, very juicy and delicately perfumed; good for amateurs; Sept. and Oct.

Hegeman. 1. Downing *Fr. Trees Am.* 780. 1869.

Hagerman. **2.** Thomas *Am. Fruit Cult.* 275. 1867.

Originated on the farm of Andrew Hegeman, North Hempstead, Long Island. Fruit medium, globular-ovate, rather variable in form and color, greenish-yellow, netted and dotted with russet; flesh yellowish, juicy, melting, sweet; good to very good; Sept.

Heilige Angelika-Birne. 1. Dochnahl *Führ. Obstkunde* **2**:108. 1856.

Coblenz, 1792; published by Diel, 1806. Fruit rather large, obtuse-conic, with unequal sides, pale green changing to light yellowish-green, dotted with rusty gray, and rather russeted on the side touched by the sun; flesh whitish, with light green veinings, fine-grained, buttery; first for dessert and household use; Nov. and Dec.

Hélène Grégoire. 1. *Ann. Pom. Belge* **4**:79, fig. 1856. **2.** Leroy *Dict. Pom.* **2**:270, fig. 1869.

Xavier Grégoire, a tanner at Jodoigne, Bel., obtained this pear in 1840 from a bed of the seeds of the pear Pastorale. Fruit large or very large, ovate, inclined to be contorted at times, smooth, shining, dotted and veined with russet, stained with the same around the stem and calyx; flesh white, fine, melting, semi-buttery, green under the skin, free from grit, full of sweet juice, delicate and possessed of an exquisite buttery flavor; first; early Oct.

Hellmann Melonenbirn. 1. Koch *Deut. Obst.* 481. 1876. **2.** Lauche *Deut. Pom.* **II**:No. 39, Pl. 39.

1882.

German; first published in 1860. Fruit large, globular-obtuse, very variable; skin thick, dark green becoming citron-yellow at maturity, large russet dots, slightly washed with red on the sunny side; flesh yellowish-white, melting, agreeably sweet and vinous, very juicy and having a muscatel flavor; Nov. and Dec.

Hemminway. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:143. 1908.

Madame Hemminway. **2.** Ellwanger & Barry *Cat.* 18. 1900.

Introduced by Ellwanger and Barry. American. Fruit large, obovate-blunt-pyriform, green turning yellow, russeted; stem long, thick, in a small, narrow cavity; flesh yellowish, melting, sweet, juicy; good; Oct.

Henkel. 1. *Mag. Hort.* **13**:61, fig. 5. 1847. **2.** Downing *Fr. Trees Am.* 781, fig. 1869.

Henkel d'Automne. **3.** Leroy *Dict. Pom.* **2**:272, fig. 1869.

Van Mons raised this pear before 1834 and in 1835 or 1836 it was introduced at Boston by Kenrick and Manning. This is the *Cumberland* of the Belgians. Fruit rather large, broad-obtuse-pyriform, greenish-yellow, netted and patched with russet, sprinkled with green and brown dots; stem rather stout, inclined, inserted by a ring or lip; calyx partially open; flesh whitish, juicy, melting, rich, slightly vinous; very good to best; Sept.

Henri Bivort. 1. *Mag. Hort.* **20**:462. 1854. **2.** Leroy *Dict. Pom.* **2**:273, fig. 1869.

Poire Henri. **3.** Mas *Le Verger* **2**:137, fig. 67. 1866-73.

Issued from the last seed beds made at Louvain by Van Mons and bought in 1844 by Bivort who transplanted the seedlings to Geest-Saint-Rémy near Jodoigne, Bel. Fruit large or above medium, obtuse-pyramidal, smooth, olive-yellow, dotted with brown, striped and mottled with greenish russet; flesh yellowish-white, fine, semi-buttery, rather melting, rarely very gritty, juice plentiful, sweet, acid, aromatic and delicate; first; end of Aug.

Henri Bouet. 1. Leroy *Dict. Pom.* **2**:274, fig. 1869.

Obtained in 1861 by Henri Bouet, a nurseryman at Fougereuse, Deux-Sèvres, Fr., from Duchesse d'Angoulême fertilized by Jargonelle (French). Fruit large, turbinate-ovate, bossed, mammillate at crown and generally somewhat contorted, pale yellow, dotted and striated with fawn, spotted with greenish-russet around stalk; flesh very white and fine, melting, gritty around the core, extremely juicy, sugary, perfumed, acidulous and possessing a delicious flavor; first; Oct. and Nov.

Henri de Bourbon. 1. Mathieu *Nom. Pom.* 232. 1889. **2.** Ragan *Nom. Pear, B. P. I. Bul.* **126**:64. 1908.

Published in Germany in 1881. In Experimental Orchard at Agassiz, B. C., 1900. Fruit medium, pyriform, green changing to yellow, some brown; flesh juicy, melting, sweet; good to very good; mid-season.

Henri Capron. 1. Leroy *Dict. Pom.* **2**:275, fig. 1869. **2.** Hogg *Fruit Man.* 592. 1884.

Stated by Baron Biedenfeld in 1854 to have

issued from a seed bed of Van Mons, it was propagated by the Horticultural Society of Angers in 1848. Fruit medium, long-ovate-acute passing at the top into the stem; skin rough to the touch, gray-green, clouded with dark yellow and dotted with russet; flesh white, semi-fine, melting or semi-melting, inclined to decay before falling, very juicy, sugary, aromatic, often rather astringent; variable in quality; Sept.

Henri Decaisne. 1. *Guide Prat.* 96. 1876. **2.** *Le Bon Jard.* 362. 1882.

On trial with Simon-Louis, Metz, Lorraine, in 1876. Fruit large, pyriform, greenish-yellow, handsomely washed with vermilion at maturity; flesh melting, and of agreeable flavor; first; Sept. and Oct.

Henri Desportes. 1. Leroy *Dict. Pom.* **2**:276, fig. 1869. **2.** Downing *Fr. Trees Am.* 782. 1869.

Raised by Leroy, Angers, Fr., it fruited first in 1862. Fruit large or below, turbinate-obtuse, ventriculous, strongly bossed, generally irregular and much less curved on one side than the other; skin thick, orange-yellow dotted with gray-russet, slightly vermilioned on the side next the sun; flesh white, fine, very melting; juice abundant, vinous, sugary; first; Aug.

Henri Grégoire. 1. *Guide Prat.* 96. 1876. **2.** *Ibid.* 93. 1895.

On trial with Simon-Louis at Metz, Lorraine, in 1876, and in 1895 and was “very much recommended” by the firm in both of those years. Fruit medium; first; Nov. and Dec.

Henri Ledocte. 1. *Guide Prat.* 96. 1876.

One of M. Grégoire’s seedlings. Fruit medium

size; flesh melting; first; Dec. and Jan.

Henri Quatre. 1. *Mag. Hort.* **12**:173, fig. 6. 1846. **2.** Leroy *Dict. Pom.* **2**:277, fig. 1869.

Henry the Fourth. **3.** Downing *Fr. Trees Am.* 782. 1869.

On the authority of Diel it appears that this pear was originated by M. de Witzthumb before 1815, and was afterward described by the Vicomte Vilain XIV, mayor of Ghent under Napoleon I. Fruit below medium, obtuse-pyriform, rather variable, often contorted and always has one side larger than the other, greenish-white, becoming deep lemon-yellow as it reaches maturity, much covered with fine cinnamon-russet on which are small greenish dots; flesh yellowish, coarse or semi-fine, breaking, gritty at center, very rich, sweet, juicy and with an aromatic flavor; good; Oct.

Henrietta. 1. *Mag. Hort.* **4**:231. 1838. **2.** *Ibid.* 487, fig. 42. 1847.

A seedling of Governor Edwards, New Haven, Conn. Fruit a medium-sized and pretty pear, obovate, inclining to oval, tapering towards each end and rather obtuse at the stem; skin fair, smooth, dull yellow, tinged with red in the sun; flesh white, rather coarse, melting, juicy; good; Sept.

Henriette. 1. *Ann. Pom. Belge* **6**:37, fig. 1858. **2.** Hogg *Fruit Man.* 593. 1884.

Raised from seed by Simon Bouvier, Jodoigne, Bel., and produced its first fruit in 1825. Fruit small or medium, globular-turbinate; skin rough, almost entirely washed with russet, colored and stained with red-brown, carmined on the side next the sun; flesh white, rather fine, melting, full of sugary juice, of an

agreeable perfume.

Henriette Van Cauwenberghe. 1. Mas *Pom. Gen.* **1**:171, fig. 86. 1872.

From Lievin Van Cauwenburghe, a business man at Audenarde, Bel., where it bore fruit for the first time about 1827. Fruit medium or nearly large, pyriform-ovate, globular, a little bossed; skin rather thick and firm, pale water-green and whitish, dotted with gray-brown specks; at maturity it becomes dull or orange-yellow and golden on the side of the sun; flesh white, fine, melting, abounding in sweet juice, vinous and pleasantly perfumed; good; Oct.

Henry (Connecticut). **1.** *Cultivator* N. S. **2**:175, fig. 7. 1845.

A seedling raised by the Hon. H. W. Edwards, Governor of Connecticut and described by him to the Pomological Society of New Haven in 1845. Fruit small, turbinate, green turning to yellow, with a coppery blush; flesh juicy, melting and exceedingly rich and sweet, not surpassed by any in richness; Sept.

Henry (Illinois). **1.** *Ill. Hort. Soc. Rpt.* 302. 1895. **2.** *Phoenix Nurs. Cat.* 13. 1906.

Originated from French pear seed planted in 1871 by Henry C. Henry, Effingham County, Ill. Said to be a hardy and long-keeping pear of good quality. Fruit large, resembling Bartlett in shape and flavor.

Herbelin. 1. *Guide Prat.* 96. 1876.

Fruit medium, having the appearance of Bartlett; flesh fine, a little dense, very sugary; Sept.

Herbin. 1. *Guide Prat.*. 96. 1876. **2.** Baltet *Trait. Cult. Fr.* 360. 1908.

A French winter pear cultivated particularly at Saint-Erme, Department Aisne. Fruit medium, long, red; first; Feb. and Mar.

Herborner Schmalzbirne. 1. Dochnahl *Führ. Obstkunde* **2**:189. 1856.

Nassau, Bel. Published by Diel in 1806. Fruit medium, nearly pyriform; skin smooth, with fine scales, light yellow turning to citron-yellow, without russet; flesh granular, gritty, sweet and acid; good for kitchen use; Sept.

Herbst-Citronenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:156. 1856.

Thuringia, published in 1810. Fruit small, globular, yellow-green changing to citron-yellow, dotted with green, lightly blushed; flesh yellowish-white, breaking, acidulous, sweet; second for dessert, first for culinary use; Sept. and Oct.

Herbst-Klöppelbirne. 1. Dochnahl *Führ. Obstkunde* **2**:159. 1856.

A seedling of Van Mons, 1852. Fruit small, turbinate-ventriculous, sides unequal, green turning to yellowish, blushed on the sunny side with brown; flesh yellowish-white, fine, semi-melting; second for the table, first for the kitchen; Sept. and Oct.

Herbsteierbirne. 1. Dochnahl *Führ. Obstkunde* **2**:190. 1856.

Thuringia and Saxony; earliest report 1801. Fruit small, somewhat swelled, green-yellow, dotted with dark green, often strongly blushed with brown, with yellow dots; flesh greenish-white, sweet; third for the table, very good for kitchen use; Sept.

Herbstlanger. 1. Löschnig *Mostbirnen* 36, fig. 1913.

A perry pear growing in the Voralberg and in Switzerland. Fruit large, long-pyriform, almost like Calebasse in form, greenish-yellow changing to lemon-yellow, finely dotted; flesh yellow-white, juicy, saccharine, with a slightly aromatic flavor; Sept.

Héricart. 1. *Mag. Hort.* **8**:87. 1842. **2.** Downing *Fr. Trees Am.* 783. 1869.

Cions of this variety were received in 1834 and 1835 by Manning and Kenrick from Van Mons of Belgium. It was placed on the list of rejected fruits by the American Pomological Society in 1854. Tree vigorous and productive. Fruit medium, obovate, often rather oblong, yellow, russety; stem medium long, rather slender, set in a small cavity; basin shallow; flesh white, fine-grained, buttery, not rich, peculiarly aromatic, gritty, slightly astringent; good; Sept.

Héricart de Thury. 1. *Mag. Hort.* **19**:102. 1853. **2.** Downing *Fr. Trees Am.* 783. 1869. **3.** Leroy *Dict. Pom.* **2**:281, fig. 1869.

Thury Schmalzbirne. **4.** Dochnahl *Führ. Obstkunde* **2**:66. 1856.

Raised from seed by Van Mons and dedicated to M. Héricart de Thury, president of the Society of Horticulture of France. Tree a good grower, rather pyramidal, neither an early nor a profuse bearer. Fruit medium or above, obtuse-ovate-pyriform, yellow, thinly shaded with red in the sun, slightly netted, thickly sprinkled with russet dots; stem long, rather slender, curved, set in a small cavity; calyx closed, set in a small, uneven, basin; flesh white, not very juicy, slightly astringent; good; Nov. and Dec.

Herkimer. 1. Downing *Fr. Trees Am.* 783. 1869.

Originated on the farm of S. Earl, Herkimer, New York, previous to 1869. Fruit medium to large, globular-oblate, pale greenish-yellow, clouded with dull red in the sun; flesh white, rather coarse-grained at center, juicy, sweet, melting and agreeable; good; Sept. and Oct.

Herr Late Winter. 1. *W. N. Y. Hort. Soc. Rpt.* 117. 1880.

Described as a new fruit in 1879 by Barry. It was raised by A. G. Herr of Louisville, Ky. Fruit medium to large, good in quality and a long keeper, sometimes until May and June of the following year.

Hert. 1. Mas *Le Verger* **1**:145, fig. 71. 1866-73.

From Thomas Rivers, Sawbridgeworth, near London, Eng. Fruit medium or nearly medium, ovate-pyriform; skin thick, firm, very pale green, sprinkled with gray-brown dots, citron-yellow when ripe and often golden on the side of the sun; flesh white, fine, semi-melting, sufficient juice which is sugary, refreshing, agreeable; good, for the season; end of winter and spring.

Hessenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:146, 1856.

German; Hesse, 1815. Fruit medium and above, curved, thin-skinned, greenish-yellow changing to yellow, with a vivid blush, often mottled with yellowish-brown; flesh sweet, juicy, becoming mealy; second for dessert, first for kitchen; Sept. and Oct.

Hessle. 1. Hogg *Fruit Man.* 593. 1884. **2.** Bunyard *Handb. Hardy Fr.* 180. 1920.

Hessle is an old English pear, and takes its name from the village of Hessle in Yorkshire where it was first discovered. Fruit rather small, turbinate,

greenish-yellow, much covered with large russety dots, giving it a freckled appearance; flesh nearly white, tender, with an agreeable, aromatic juice; a good market-garden pear; Oct.

Hewes. 1. *Mag. Hort.* **20**:269. 1854. **2.** *Am. Pom. Soc. Rpt.* 93. 1852.

Raised at Brandywine, Del., from seed of the White Doyenné which it much resembles though smaller. In 1852 it was in possession of Aaron Hewes and was said then to have been in bearing about 28 years. Fruit medium, globular-obovate, yellow; Sept.

Heyer Zuckerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:55. 1856.

Sucrée d'Heyer. **2.** Mas *Pom. Gen.* **4**:85, fig. 235. 1879.

A Van Mons seedling sent in 1838 to his friend Herr Heyer, a grafter at Luneburg, Hanover, Ger. Fruit medium, long-turbinate, sides unequal, slightly bossed, light green turning to yellow, often flushed with vermilion, speckled with russet; second for the table, first for kitchen; Sept.

Hilda. 1. *Guide Prat.* 104. 1895.

Distributed by Daras de Naghin of Antwerp, Bel. Fruit resembles Joséphine de Malines; flesh yellowish-white tinted with green near the stalk, melting, very juicy, having the flavor of the Beurré Gris; Nov. and Dec.

Hildegard. 1. Dochnahl *Führ. Obstkunde* **2**:172, 1856.

A seedling of Van Mons; published in 1852. Fruit medium, turbinate-ventriculous, light green turning yellow, washed with brown, sometimes rusty red on

the side of the sun; flesh fine, free from grit, very sweet; very good for general household use; all winter to April.

Hildesheimer Bergamotte. 1. Liegel *Syst. Anleit.* 132. 1825. **2.** Mas *Le Verger* **3**:Pt. 1, 13, fig. 5. 1866-73.

Bergamote d'Hildesheim. **3.** Leroy *Dict. Pom.* **1**:242, fig. 1867.

Central Germany, 1825. Fruit medium, oblate, medium-ventriculous, sides unequal, light green turning to citron-yellow, without any red blush but a good deal russeted: flesh melting, very juicy; a good dessert pear; end of Sept. for 2 weeks.

Hildesheimer Späte Sommerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:189. 1856.

A seedling of Cludius, Hildesheim, Ger., 1821. Fruit medium, pyriform-ventriculous, sides unequal, yellowish-green, washed with rusty russet on the side of the sun; flesh rosaceous, spongy, sweet, wanting in flavor; third for table, first for culinary use; Sept.

Hildesheimer Winterbirn. 1. Christ *Handb.* 496. 1817.

German. Fruit medium, Bergamot-shaped, of excellent flavor; Nov. to Mar.

Hingham. 1. Downing *Fr. Trees Am.* 783. 1869.

Originated in Hingham, Mass. Fruit medium, obovate-acute-pyriform, pale yellow, tinged with red on the side next the sun, freely dotted with brown specks; flesh whitish, melting, juicy, vinous; good; Oct.

Hirschbirne. 1. Löschnig *Mostbirnen* 16, fig. 1913.

An Austrian perry pear, raised from a wilding in Styria. Fruit one of the larger perry or wine pears, globular and Bergamot in form, greenish-yellow, brownish-red flush on the side opposed to the sun, brown dots; flesh yellow-white, fairly firm, juicy; good; Oct.

Hirsenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:36. 1856.

Middle Rhineland, Germany, 1802. Fruit small, pyriform, rounded at the top, sides unequal, light green turning yellowish, often rather brown-blushed, some russet markings; flesh fine-grained, very juicy; second for the table, first for the kitchen; Aug.

Hitzendorfer Mostbirne. 1. Löschnig *Mostbirnen* 86, fig. 1913.

An Austrian perry pear. Fruit large, globular, somewhat like Bergamot in form, light green, blushed with a beautiful brown-red on the cheek next the sun, tender, dotted; flesh greenish-white, firm and very juicy; end of Sept. for two weeks.

Hoe Langer Hoe Liever. 1. Knoop *Fructologie* **1**:93, Tab. III. 1771.

Dutch. Fruit medium, long-pyriform, somewhat ventriculated toward the lower end, often rather deformed, pale green or yellowish-white; flesh fine, gritty, juicy, agreeable, savory, when eaten exactly at the right time, otherwise it is insipid; Sept. and Oct.

Hofsta. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:145. 1908.

Sweden. C. Gibb called it a fine culinary variety. Fruit medium, pyriform; good; mid-season.

Holland Green. 1. Coxe *Cult. Fr. Trees* 190, fig. 26.

1817. **2.** Kenrick *Am. Orch.* 137. 1832.

An old variety described by William Coxe in 1817, and stated by him to have been imported from Holland by William Clifton of Philadelphia. It was sometimes called the *Holland Table* pear. Fruit rather large, irregular or turbinate in form, green, with numerous indistinct spots and small cloudings of russet; flesh melting, sprightly, greenish-white and juicy; thought much of at the beginning of the nineteenth century, but considered by Manning to be worthless in this country. Was discarded by the London Horticultural Society before 1837; Sept. and Oct.

Holländische Butterbirne. 1. Dochnahl *Führ. Obstkunde* **2**:136. 1856.

North Germany, 1804, at Bremen. Fruit medium or below, sides unequal, light yellow changing to golden-yellow at maturity, blushed with cinnamon on the sunny side and speckled with brown dots; flesh white, melting, buttery, juicy and full of flavor; first for dessert; Sept. and Oct.

Holländische Gewürzbirne. 1. Dochnahl *Führ. Obstkunde* **2**:14. 1856.

Holland, 1849. Fruit medium, ventriculous-turbinate, covered with rough russet; flesh semi-melting, very juicy and aromatic; second for the table, very good for cooking; end of Sept.

Holländische Zuckerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:33. 1856.

Possibly of Dutch origin but reported in Thuringia, 1799. Fruit small, globular but variable, light yellow, blushed and dotted with yellowish specks becoming greenish at maturity, thin-skinned;

flesh breaking, musky, aromatic; third for dessert, first for kitchen; Aug.

Holmer. 1. Hogg *Fruit Man.* 594. 1884.

A well-known perry pear in Herefordshire, Eng. Fruit very small, globular-turbinate, even and regular in outline, dull greenish-yellow when ripe, and thickly covered with russet dots, so as to form a kind of crust on the surface; flesh yellowish, firm, crisp, and very astringent.

Homestead. 1. Downing *Fr. Trees Am.* 2nd App., 150. 1876.

Raised by Asahel Foote, Williamstown, Mass., from seed of White Doyenné. Fruit medium or above, oblong-obtuse-pyriform, greenish-yellow, often pale yellow when fully matured, sometimes a shade of brownish-red where exposed, slightly netted and patched with russet and many russet dots; flesh whitish, rather coarse around the core, semi-fine, melting, sweet, juicy, slightly vinous and aromatic; Nov. and Dec.

Honey. 1. Prince *Pom. Man.* **2**:216. 1832. **2.** Downing *Fr. Trees Am.* 784. 1869.

Deux Fois L'An. **3.** Leroy *Dict. Pom.* **2**:20, fig. 1869.

Although known in this country as Honey, its original European name is *Deux Fois l'An*, or Two Times a Year, on account of its flowering twice in the season, the second crop ripening in September or October. It is of ancient and uncertain origin, but Le Lectier at Orléans possessed it in his immense orchard in 1598, and Merlet described it in 1675. Fruit medium or below, globular-pyriform, rarely very obtuse, generally much swelled in the lower

part, diminishing abruptly toward the stem, rather bright greenish-yellow, stained and dotted with gray chiefly on the side exposed to the sun where it is also rayed and washed with carmine; flesh yellowish, coarse, semi-breaking, granular around the core; juice sufficient, sugary and possessing a pleasant, musky flavor; Aug.

Honey (Russia). **1.** *Am. Pom. Soc. Rpt.* 21. 1887. **2.** Ragan *Nom. Pear, B. P. I. Bul.* **126**:146. 1908.

Introduced from Russia in 1879 under the Russian name *Gliva Medovaya*. Fruit small, globular-pyriform, yellow, blushed red; flesh coarse, juicy, sweet; mid-season.

Honey Dew. 1. Stark Bros. *Cat.* 55. 1921.

Originated by Mr. Raabe of Illinois and introduced by Stark Bros. in 1921. Fruit large, roundish, golden-yellow, almost covered with rich russet; flesh tender, crisp, very juicy, sweet; early fall.

Honigbergamotte. 1. Dochnahl *Führ. Obstkunde* **2**:78. 1856.

Nassau, 1833. Fruit medium, globular, symmetrical; skin smooth, uniformly greenish-yellow, brownish-red on the side next the sun; flesh semi-melting, aromatic; second for dessert; first for general culinary uses; Sept.

Honnelbirne. 1. Löschnig *Mostbirnen* 38, fig. 1913.

A perry pear grown in Lower Austria. Fruit fairly large, long-pyriform; skin rather smooth and shining, greenish-yellow changing to yellow; flesh whitish, coarse-grained, very juicy, saccharine, rather astringent and feebly aromatic; Oct.

Hoosic. 1. *W. N. Y. Hort. Soc. Rpt.* 116. 1880. **2.** Ont. Dept. Ag. *Fr. Ont.* 166. 1914.

Raised by A. Foote, Williamstown, Mass., from seed of Hacon Incomparable, and distributed by him about 1870. Fruit large to very large, obtuse-pyriform, somewhat one-sided, yellow, with russet dots and light red blush in the sun; flesh fine, white, tender, moderately juicy, with a rich almond flavor; quality ranking as "best" for all purposes; first class for near market; Oct.

Hopfenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:190. 1856.

Hesse, Germany, 1801. Fruit small, obtuse-conic; skin smooth, pale yellow, blushed with a dark glow; flesh rosy, fine, acid, juicy; third for the table, first for kitchen; end of Aug.

Hosenschenk. 1. *Horticulturist* **8**:458. 1853. **2.** Downing *Fr. Trees Am.* 784. 1869.

Raised from seed about the year 1803 by John Schenk, Weaver Township, Pa. Fruit medium, roundish-oblate, light yellowish-green, rarely blushed; flesh rather coarse, tender, juicy, melting, slightly vinous, with a mild and pleasant flavor; first; end of Aug.

Housatonic. 1. Downing *Fr. Trees Am.* 2nd App., 151. 1876.

Originated in the garden of John J. Howe, Birmingham, Conn. Fruit rather large, globular-pyriform; surface uneven, greenish-yellow, with many green and brown dots; flesh white, semi-fine, juicy, melting, rich, vinous; Nov.

Houser. 1. *Mo. Hort. Soc. Rpt.* 38. 1896.

A native pear reported to the Missouri State Horticultural Society in 1896.

Hovey. 1. Leroy *Dict. Pom.* **2**:284, figs. 1869. **2.** Downing *Fr. Trees Am.* 784. 1869.

Propagated by André Leroy in 1853 and dedicated by him to the American pomologist Hovey. Fruit medium or above, conic-pyriform or turbinate-obtuse-pyriform, variable but always very long; skin fine and very smooth, bright yellow, finely dotted with gray and stained with patches of russet; flesh yellowish-white, semi-fine, melting, watery and slightly granular; juice abundant, sugary, acidulous, and possessing a musky perfume; first; Nov.

Howard. 1. Downing *Fr. Trees Am.* 785. 1869.

Disseminated by D. W. Coit, Norwich, Conn. Fruit medium, globular-obovate, pale yellow, with patches of russet and thickly sprinkled with russet dots; flesh white, melting, juicy, sweet, rich, slightly perfumed, pleasant; very good; Sept.

Howe Winter. 1. Field *Pear Cult.* 273. 1858.

Said to have originated in Virginia. Fruit large, globular, yellow-russeted; good; late.

Hubert Grégoire. 1. *Guide Prat.* 97. 1876.

In the trial orchards of Simon-Louis Bros. at Metz, Lorraine, in 1876. Fruit rather large; first; Jan.

Huffcap. 1. Lindley *Guide Orch. Gard.* 415. 1831. **2.** Prince *Pom. Man.* **2**:209. 1832.

Of several varieties of the Huffcap perry pears such as the Brown, Red, and Yellow, growing in Herefordshire, Eng., this is the best. Fruit middle sized, ovate, pale green marked with gray russet.

Hüffel Bratbirne. 1. Dochnahl *Führ. Obstkunde* **2**:3.

1856.

Upper Hesse, Prussia, 1819. A variety of the Volema class. Fruit large, broad-turbinate, with unequal sides, light green turning to yellowish, often faintly blushed, numerous russet spots; flesh aromatic, breaking, juicy; first for household use; Dec. to Apr.

Huggard. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:147. 1908.

Originated at Whitby, Ontario, Can., from Beurré Clairgeau crossed with Beurré d'Anjou. Fruit large, obtuse-pyriform, yellow with red blush; flesh sweet, juicy, good; medium late.

Huguenot. 1. Downing *Fr. Trees Am.* 394. 1845.

Originated by a Mr. Johonnot of Salem, Mass. Rejected by the American Pomologica. Society, October, 1850. Fruit medium, globular, smooth, pale yellow, sprinkled with large spots of bright red; flesh white, fine-grained, semi-breaking, sweet but wanting in flavor and juice; poor; Oct.

Huhle de Printemps. 1. Mas *Pom. Gen.* **5**:159, fig. 368. 1880.

This pear was received in France by M. Papeleu from M. Hartwiss, director of the Imperial Gardens at Nikita, Southern Russia, about 1860. Fruit medium, cylindrical-ovate, rather in form like a small cask or keg, even in contour; skin thick, firm, more or less intense green, dotted with brownish-gray specks, very small and numerous and mingled with small strokes of russet over nearly all the surface; flesh yellowish-white, coarse, semi-breaking, rather gritty near the core, sufficiently juicy, with a refreshing and agreeable flavor; cooking; end of winter.

Hull. 1. *Mag. Hort.* **9**:432. 1843. **2.** *Ibid.* **10**:211. 1844.

The original tree was found in Swansey, Mass., about 1815. Fruit medium, obovate, yellowish-green, russeted, some dull red on the sunny side; flesh yellowish-white, coarse, melting, juicy, gritty at core, pleasantly perfumed; good to very good; Oct.

Hungerford Oswego. 1. Downing *Fr. Trees Am.* 786. 1869.

From Oswego, N. Y. Fruit medium, globular, yellow, with brown dots; flesh white, buttery, melting, juicy, gritty, sweet; good; Oct.

Hunt Connecticut. 1. *Mag. Hort.* **12**:305. 1846. **2.** Downing *Fr. Trees Am.* 575. 1857.

An American cooking pear. Rejected by the American Pomological Society in 1854. Fruit medium, oblate, yellowish-green, coarse, dry, and sweet.

Huntington. 1. *Mag. Hort.* **23**:111, fig. 4. 1857. **2.** Mas *Le Verger* **2**:155, fig. 76. 1866-73.

A wilding found by James Huntington, New Rochelle, N. Y. In 1857 it was considered to be 20 or 30 years old. Fruit under medium, globular-obovate, yellow, with numerous russet dots and sometimes a red cheek; flesh fine texture, buttery, slightly vinous, with a delicate aroma; very good; Sept.

Hurbain d'Hiver. 1. Hogg *Fruit Man.* 594. 1884.

Fruit small, Bergamot-shaped, even and handsome in outline, fine golden yellow in the shade, strewed and mottled with patches of thin cinnamon-colored russet, with a patch of russet around the stalk, washed with bright red on the side

next the sun; flesh yellowish, melting, rather coarse, juicy, sweet, without much perfume; second; Nov.

Hussein Armudi. 1. Hogg *Fruit Man.* 594. 1884.

An oriental pear, published in 1832. Fruit below medium, obovate, smooth, bright green at first changing to greenish-yellow, strewed with russety dots of brown and some traces of russet; flesh whitish, gritty at core, tender, melting, very juicy, with a rich, vinous, sweet flavor; first for table; Sept.

Hutcherson. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:148. 1908.

Reported in the experimental orchard at Agassiz, B. C., in 1900. Fruit medium, obtuse-pyriform, greenish-yellow; flesh melting, juicy, sweet; mid-season.

Huyshe Prince Consort. 1. *Jour. Hort.* **12**:89, fig. 1867. **2.** Bunyard *Handb. Hardy Fr.* 180. 1920.

Fruited in 1864 by the Rev. John Huyshe of Cullompton, Devon, Eng., from Beurré d'Arenberg fertilized by Passe Colmar. Fruit very large, oblong, uneven and bossed in outline, grass-green becoming sometimes yellowish-green, thickly covered with large russet dots; flesh yellow, with a greenish tinge, melting, rather crisp, very juicy, sweet, vinous, with a very powerful and peculiar flavor unlike any other pear; a first quality, delicious fruit; Nov.

Huyshe Prince of Wales. 1. *Gard. Chron.* 51. 1864. **2.** *Jour. Hort.* **1**:392, fig. 72. 1880.

Huyshe Bergamot. **3.** *Gard. Chron.* **4**:836, fig. 1. 1857. **4.** *Mag. Hort.* **24**:276. 1858.

Of the same origin as Huyshe Victoria. First fruited in 1856 and named *Huyshe Bergamot* but later

changed to Huyshe Prince of Wales. Fruit large, globular-oval, even in outline, lemon-yellow covered with a finely reticulated cinnamon-colored russet; flesh yellowish-white, tender, melting, juicy and richly flavored; first; end of Nov. to Jan.

Huyshe Princess of Wales. 1. *Gard. Chron.* 8. 1863. **2.** Bunyard *Handb. Hardy Fr.* 180. 1920.

This pear, first fruited in 1863, is of the same origin as Huyshe Victoria. Fruit medium, oblong, even in outline, abrupt at the stalk, lemon-yellow sprinkled with patches, veins and dots of pale cinnamon-russet; flesh of a deep yellow, fine, very melting, abundantly juicy, richly flavored and highly aromatic; very excellent; Nov.

Huyshe Victoria. 1. *Jour. Hort.* **4**:76. 1863. **2.** Bunyard *Handb. Hardy Fr.* 181. 1920.

Victoria. **3.** *Gard. Chron.* 836, fig. 2. 1857.

Victoria d'Huyse. **4.** *Pom. Gen.* **7**:33, fig. 497. 1881.

Rev. John Huyshe, a clergyman at Clysthydon Rectory, near Cullompton, Devon, Eng., raised, about 1833, three plants from pips of one fruit from Marie Louise, hybridized with Gansel Bergamot. Of these three plants one produced fruit in 1854 or 1855 and was named Huyshe Victoria. The other two fruited in subsequent years and were named Huyshe Prince of Wales and Huyshe Princess of Wales, respectively; these three together with a fourth, Huyshe Prince Consort, being known as the *Royal Pears*. Tree vigorous, spreading, very productive. Fruit medium in size, ovate-pyriform or ovate-acute-pyriform, yellow, freckled and veined with thin, smooth cinnamon-russet; stem medium in length, stout, generally inclined and inserted without depression;

calyx open; flesh yellowish, juicy, melting, vinous; good to very good; Nov.

Hyacinthe du Puis. 1. *Guide Prat.* 93. 1895.

In trial orchards of Simon-Louis, Metz, Lorraine, in 1895. Fruit medium; flesh rather fine, salmon tinted, savory, juicy; Nov. and Dec.

Ickworth. 1. Kenrick *Am. Orch.* 194. 1832.

Originated by T. A. Knight, President of the London Horticultural Society, who in 1832 sent cions to Mr. Lowell and the Massachusetts Agricultural Society. Fruit melting, rich, rose-flavored; Mar. and Apr.

Ida. 1. *Guide Prat.* 97. 1876.

On trial with Messrs Simon-Louis, Metz, Lorraine, in 1876. Fruit large, Doyenné-shaped, yellowish-green washed with red-brown; flesh buttery; first; Oct.

Ilinka. 1. *Guide Prat.* 94. 1895. **2.** *Gard. Chron.* 3rd Ser. **36**:368. 1904.

This variety was published by Messrs. Simon-Louis, of Metz, Lorraine, in 1895 as having been received by them from M. Niemetz, Winnitza, European Western Russia. Fruit medium to large, yellow, blushed with red on the side of the sun; medium quality; end of July.

Impériale à Feuilles de Chêne. 1. Duhamel *Trait Arb. Fr.* **2**:228, Pl. LIV. 1768. **2.** Leroy *Dict. Pom.* **2**:287, fig. 1869.

Oak-Leaved Imperial. **3.** Downing *Fr. Trees Am.* 822. 1869.

Impériale. **4.** Hogg *Fruit Man.* 596. 1884.

The origin of this pear is unknown but it was propagated by the Chartreux Monks of Paris in 1752. The tree is very vigorous and hardy and the leaves are singular in that, due to their peculiar indenting and puckering, they have the appearance of being sinuated like those of the oak. Fruit large, ovate, irregular, mammillate at the summit and always having one side larger than the other, dull yellow, covered with large reddish dots; flesh whitish, coarse, semi-breaking, juicy, gritty at center, sugary, almost without perfume; first for cooking, third for dessert; Feb. to May.

Incommunicable. 1. Lindley *Guide Orch. Gard.* 376. 1831. **2.** *Mag. Hort.* **9**:131. 1843.

Flemish. In a list of pears grown in France and the Netherlands sent by Joseph Parmentier to the London Horticultural Society in 1824. Fruit above medium, pyramidal and compressed toward the stalk, pale grass-green, thickly sprinkled with small gray-russety specks; stem short, stout, inclined; flesh yellowish-white, tinged near the core with a light shade of orange, a little gritty, melting, juicy, saccharine, with a slight musky perfume; latter half of Oct.

Incomparable de Beuraing. 1. *Guide Prat.* 97. 1876.

A French pear, presumably, published first by Grégoire and on trial in the trial-orchard of Messrs. Simon-Louis in 1876. Fruit very large; flesh fine, melting, juicy; of rather good quality; Nov.

Indian Queen. 1. *Mass. Hort. Soc. Rpt.* 32. 1870. **2.** *Am. Pom. Soc. Rpt.* 66. 1875.

Exhibited by Henry McLaughlin, Bangor, Me., before the Massachusetts Horticultural Society in 1870. Fruit rather large, long-pyriform, greenish-

yellow with a brown cheek; flesh coarse, semi-melting, sweet, not rich, insipid; good for market only; Sept.

Infortunée. 1. Mas. *Pom. Gen.* **3**:69, fig. 131. 1878.

Said to have been shown at the Exhibition of Gotha, Ger., in 1857. Fruit medium, turbinate-ovoid, ordinarily regular in contour; skin rather thick, clear green spotted with gray specks, round, small, numerous; at maturity the basic green becomes a dull pale yellow and golden on the side next the sun; flesh yellowish, semi-fine and melting, gritty round the core; juice sufficient and sweet; second; Aug.

Ingénieur Wolters. 1. *Guide Prat.* 94. 1895.

Sent out by M. Daras de Naghin, Antwerp, Bel. Fruit medium; flesh fine, very sugary, perfumed; first; Oct.

Innominée. 1. Prince *Pom. Man.* **2**:213. 1832. **2.** Kenrick *Am. Orch.* 155. 1832.

Raised by Van Mons who in 1831 sent cions of it to the Massachusetts Horticultural Society. Fruit over 4 inches in length and nearly 3½ in breadth, rather pyramidal, swollen at the middle; skin light green, mottled with pale fawn color, partially yellow at maturity; flesh delicate, melting, sweet, and full of a pleasant odor; good; between summer and autumn.

International. 1. *Guide Prat.* 94. 1895.

Reported in the trial orchards of Messrs. Simon-Louis at Metz, Lorraine, in 1895. Fruit medium; first; Dec. to Feb.

Iris Grégoire. 1. *Mag. Hort.* **23**:155. 1857. **2.** Leroy *Dict. Pom.* **2**:290, fig. 1869.

A seedling raised by Xavier Grégoire, Jodoigne,

Bel., it fruited for the first time in 1853. Fruit variable in size, sometimes below medium, long-conic, swelled at base, bossed, and corrugated at apex, a clear golden-yellow, finely dotted and streaked with gray, washed with fawn at either pole; flesh white, semi-fine and melting, rather dry and gritty; juice insufficient, sweet, having a pleasant aroma; second or even third when especially deficient in juice; Nov. and Dec.

Isabella. 1. *Mass. Hort. Soc. Rpt.* 46. 1866.

A seedling raised by S. A. Shurtleff, Brookline, Mass.; it fruited first in 1866. Fruit medium, pyriform, light green blushed with red on the side next the sun; flesh white, juicy, sprightly, agreeable; Oct.

Isabelle de Malèves. 1. *Guide Prat.* 97. 1876. **2.** Mas *Pom. Gen.* **5**:81, fig. 329. 1880.

This pear is No. 43 in *Les fruits du jardin Van Mons* by M. Bivort but is stated by Mas to have been obtained by Grégoire, Jodoigne, Bel. Fruit small or nearly medium, fig-like in form, i. e., ovate-conic, regular in contour, a lively green speckled with gray dots, some russet around each pole; at maturity the green becomes yellowish; flesh whitish, melting, juicy, vinous, refreshing; first; end of July and early Aug.

Island. 1. Field *Pear Cult.* 273. 1858. **2.** Downing *Fr. Trees Am.* 788. 1869.

Originated with Cornelius Bergen on Bergen Island adjoining Long Island about 1848. Fruit medium, short-pyriform inclining to turbinate, often turbinate or Bergamot-shaped, pale yellow, netted, sprinkled, and patched with russet, covered thickly with small brown spots and slightly shaded with

crimson where exposed to the sun; flesh white, a little granular, juicy, melting, with a sprightly, perfumed, somewhat aromatic flavor; very good; Sept. and Oct.

Italienische Winterbergamotte. 1. Dochnahl *Führ. Obstkunde* **2**:74. 1856.

Italy, 1819. Fruit medium, turbinate, slightly bossed, light green changing to yellowish-green, often blushed with brown, speckled with numerous fine, brown dots; flesh yellowish, coarse-grained, juicy, melting and sweet; third for the table, first for kitchen; Apr. and May.

Ives. 1. Field *Pear Cult.* 273. 1858. **2.** Downing *Fr. Trees Am.* 788. 1869.

Raised by Dr. Eli Ives, New Haven, Conn. Fruit small to medium, rather globular, greenish, brownish-red cheek; flesh melting, sugary, juicy; good; Sept.

Ives August. 1. Downing *Fr. Trees Am.* 788. 1869.

Raised by Dr. Eli Ives. Fruit medium, oblong-obtuse-pyriform, green, with a brownish-red cheek; flesh greenish-white, semi-melting, juicy, rather astringent; good; Aug.

Ives Bergamotte. 1. Field *Pear Cult.* 273. 1858. **2.** Downing *Fr. Trees Am.* 788. 1869.

Originated by Dr. Eli Ives. Fruit medium or small, globular, greenish-yellow with some traces of russet; flesh rather coarse, buttery, melting, juicy, vinous; good; Sept.

Ives Seedling. 1. Field *Pear Cult.* 273. 1858. **2.** Elliott *Fr. Book* 392. 1859.

Raised by Dr. Eli Ives. Fruit nearly medium,

rather globular, greenish-yellow, shaded with crimson; flesh whitish, coarse and granular, melting, juicy, with a refreshing sugary flavor, perfumed; good; Sept.

Ives Virgalieu. 1. Field *Pear Cult.* 273. 1858. **2.** Elliott *Fr. Book* 392. 1859.

Raised by Dr. Eli Ives. Fruit below medium, pyriform, greenish blushed with dull crimson; flesh whitish, granular, juicy, sweet, vinous, buttery and melting; good to very good; Oct.

Ives Winter. 1. Downing *Fr. Trees Am.* 575. 1857. **2.** *Ibid.* 789. 1869.

Raised by Dr. Eli Ives. Fruit medium, depressed-pyriform, yellowish, sprinkled with russet spots; flesh white, coarse, granular; cooking; Dec.

Ives Yale. 1. Downing *Fr. Trees Am.* 789. 1869.

Raised by Dr. Eli Ives. Fruit medium, globular, mammillate at base of stem, dull greenish-yellow, blushed with brownish-crimson in the sun; flesh greenish-white, moderately juicy; good; early Aug.

Jablousky. 1. Dochnahl *Führ. Obstkunde* **2**:28. 1856.

Originated at Wittenberg, Ger., in 1799. Fruit small, nearly round, symmetrical; skin smooth and polished, greenish-yellow turning to light waxy yellow, often slightly blushed; flesh semi-melting and rather coarse, having a musky aroma; second for the table, first for culinary uses, first for market; Sept.

Jackson. 1. Downing *Fr. Trees Am.* 512. 1857. **2.** Elliott *Fr. Book* 392. 1859.

Origin, New Hampshire. Fruit medium, obovate, short-pyriform, pale yellow, somewhat russeted; flesh white and juicy, brisk, vinous; good to very good;

Sept.

Jackson Elizabeth. 1. Downing *Fr. Trees Am.* 789. 1869.

Originated with S. S. Jackson, Cincinnati, Ohio. Fruit medium, globular-obovate-pyriform, greenish-yellow, tinged with crimson on the sunny side and thickly dotted with russet; flesh whitish, juicy, melting, sweet, pleasant and slightly aromatic; good to very good; Sept.

Jacqmain. 1. Leroy *Dict. Pom.* **2**:292, fig. 1869.

From Simon Bouvier, Jodoigne, Bel., about 1835. Fruit above medium, long-turbinate, obtuse, swelled at middle circumference, smaller on one side than the other; skin rugose, thick, greenish, dotted with clear gray and sometimes vermilioned on the side exposed to the sun; flesh greenish-white, coarse, semi-breaking, gritty; juice sufficient, sugary without any pronounced perfume; third; Oct.

Jacques Chamaret. 1. Leroy *Dict. Pom.* **2**:293, fig. 1869.

From the last seed beds made at Laval, France, in 1837 or 1838 by Léon Leclerc. Fruit above medium, turbinate, slightly obtuse, mammillate at base, bossed at summit, clear yellow, dotted and stained with russet; flesh white, fine, semi-melting, watery, rather granular at center; juice abundant, sweet, very sugary and perfumed; first; Nov.

Jacques Mollet. 1. *Guide Prat.* 97. 1876.

Published by Boisbunel in 1866. Fruit medium or large, oblong; first; Nov. to Feb.

Jakobsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:15. 1856.

Reported from Wetterau. Fruit medium, long, green, changing to yellow, some brown-russet and very fine dots; flesh very sugary, balsamic, mild and tender; first for dessert, domestic and market uses; Sept.

Jalousie. 1. Duhamel *Trait. Arb. Fr.* **2**:211, Pl. XLVII, fig. 3. 1768. **2.** Hogg *Fruit Man.* 596. 1884.

This is one of the oldest French pears, having been mentioned by the naturalist Daléchamp before 1586 and thought by him to have come from the Romans. Merlet mentioned it in 1667. Fruit rather large, obovate and sometimes obtuse-pyriform; skin rough to the touch, yellowish-green, very much covered with cinnamon-colored russet, ruddy on the sun-exposed side, and singularly marked with conspicuous, lighter-colored specks, which are slightly raised; flesh white, melting, juicy, sugary, sourish, having a pleasant flavor; hardly first class; Oct.

Jalousie de la Réole. 1. *Guide Prat.* 97. 1876.

Fruit medium; flesh fine, very melting, very sugary; delicious; Nov. to Jan.

Jalousie Tardive. 1. Leroy *Dict. Pom.* **2**:297, fig. 1869.

Origin unknown, but it was among the first trees planted in the garden of the Horticultural Society of Maine-et-Loire, Fr., on its creation in 1833. Fruit large, variable, long-turbinate, more or less obtuse, or very long-ovate, bossed and contorted, depressed at both poles, clear russet extensively washed with red-brown; flesh breaking; first for cooking; Feb. and Mar.

Jalvy. 1. Leroy *Dict. Pom.* **2**:299, fig. 1869.

Fruit above medium, long, slightly obtuse, swelled at the middle, contracted at both ends especially at the summit; skin rough to the touch, yellowish-green, dotted and reticulated with gray, washed with clear brown-russet on the side next the sun and bearing some black stains; flesh whitish, fine, semi-melting, free from grit, but apt to rot quickly; juice abundant, refreshing, sugary; second; Jan.

Jaminette. 1. Kenrick *Am. Orch.* 195. 1832. **2.** *Pom. France* **3**:No. 116, Pl. 116. 1865.

From a seedling in the garden of M. Pyrolle early in the nineteenth century. Fruit medium, turbinate-obtuse, pale yellowish-green, dotted and reticulated all over with gray-russet; flesh yellowish, semi-fine and semi-melting, very juicy, sugary, vinous and aromatic on light soils, but insipid and without perfume on clayey and humid land; first; Nov. to Jan.

Jansemine. 1. *Gard. Chron.* 271. 1865. **2.** Leroy *Dict. Pom.* **2**:302, fig. 1869.

The origin of Jansemine is unknown but it has been cultivated in the neighborhood of Bordeaux for some 300 years. Fruit below medium or rather small, short-turbinate or globular-conic, grass-green, dotted with gray-russet and clouded with clear maroon on the side of the sun; flesh greenish-white, semi-fine, granular at the center, slightly breaking, juicy, sugary and pleasantly perfumed; rather good, but not first; July.

Japan. 1. *Horticulturist* **23**:71, fig. 34. 1868.

Raised by Gideon Ross, Westfield, N. J., from

seeds found in the trunk of his nephew who died on his way from Japan. Fruit medium, oblate; skin rough, reddish-russet-yellow with large light-colored specks; flesh coarse, gritty, firm, with a consistence and flavor much like that of a delicate quince; of no value for dessert; Oct. to Feb.

Japan Golden Russet. 1. Thomas *Am. Fruit Cult.* 770. 1903.

Golden Russet. **2.** *Cornell Sta. Bul.* **332**:482, fig. 162. 1914.

Canners Japan. **3.** *Huntsville Nurs. Cat.* 5. 1915.

Said to closely resemble Gold Dust and Japan Wonder. Tree very hardy and a young bearer, often blossoming the first year and setting the fruit the second. Fruit large to medium, apple-shaped, rather flat, regular, light lemon-yellow, with many fine dots, russeted, especially about the stem; flesh juicy, aromatic, slightly sweetish; poor; texture coarse; Oct.

Japan Wonder. 1. *Cornell Sta. Bul.* **332**:483. 1913.

Japanese, introduced to this country by Doctor Whitaker, who says of it: “the fruit is rather flat, large, apple-like; color light yellow, with many white dots covering the entire surface; flesh white, brittle, juicy, poor in quality. Tree an open grower.”

Japanese Sand. 1. *Cornell Sta. Bul.* **332**:483. 1913.

Fruit medium, apple-shaped, lemon-yellow, with russet dots; flesh hard, flavor much like Daimyo; poor; late Oct.

Jargonelle d’Automne. 1. *Guide Prat.* 97. 1876.

On trial with Messrs. Simon-Louis at Metz, Lorraine, in 1876. Fruit medium, fusiform, long, yellow, sometimes washed with red; flesh very fine,

very melting and juicy; excellent; Oct. and Nov.

Jaune Hâtive. 1. *Guide Prat.* 282. 1876. **2.** Duhamel *Trait. Arb. Fr.* **2**:244. 1768.

Gelbe Frühbirne. **3.** Dochnahl *Führ. Obstkunde* **2**:41. 1856.

French. Fruit small, pyriform, flattened at the lower end, obtuse at the apex, yellow-green; flesh white, coarse, sprightly, slightly perfumed; juice deficient; of value only on account of its early season; July.

Jaune de Merveillon. 1. Mas *Pom. Gen.* **7**:189, fig. 581. 1881.

An old French variety. Fruit very small, turbinate, pale green, free from dots or marks, changing at maturity to pale yellow, golden on the side next the sun; flesh white, tinted with yellow beneath the skin, fine, semi-breaking, possessing sufficient juice, sugary, and refreshing, with an agreeable perfume of musk; good; beginning of July.

Jean Baptist. 1. Dochnahl *Führ. Obstkunde* **2**:61. 1856. **2.** Leroy *Dict. Pom.* **2**:305, fig. 1869.

A seedling raised at Ath, Hainaut, Bel.; first described in 1833. Fruit large, obtuse-conic; skin rough, grass-green, spotted with clear brown and stained with gray-russet; flesh yellowish, semi-melting and semi-fine, juicy, sugary, scented and delicate; second for the table, first for culinary purposes; Oct. and Nov. (Leroy); Jan. and Feb. (Dochnahl).

Jean-Baptiste Bivort. 1. *Ann. Pom. Belge* **6**:45, fig. 1858. **2.** Downing *Fr. Trees Am.* 780. 1869.

Originated at Geest-Saint-Rémy in 1847. Fruit

rather large, regular turbinate, bright green becoming partially yellow at maturity, marked and dotted with gray-russet; flesh white, melting, buttery, juicy, sugary and highly aromatic; Nov.

Jean-Baptiste Dediest. 1. Mas *Pom. Gen.* **6**:23, fig. 396. 1880.

Obtained by M. Xavier Grégoire, Jodoigne, Brabant; first reported in 1839. Fruit medium, globular; flesh fine, juicy, sugary; good; spring until July.

Jean Cottineau. 1. *Guide Prat.* 97. 1876. **2.** *Ibid.* 68. 1895.

On trial in the orchards of Messrs. Simon-Louis, Metz, Lorraine, in 1876 and rated by them in 1895 as a third-class summer pear. Fruit medium, globular, yellowish-green, spotted with red on the sun-exposed side; flesh white, sugary; good; mid-Aug.

Jean Laurent. 1. *Guide Prat.* 97. 1876. **2.** *Ibid.* 94. 1895.

On trial with Messrs. Simon-Louis at Metz in 1895. Tree of remarkable fertility; suitable for large orchards. Fruit small or medium; flesh breaking; first for culinary purposes; Dec. to June.

Jean Sano. 1. *Guide Prat.* 94. 1895.

Sent out by M. Daras de Naghin, Antwerp, Bel., and on trial in the orchards of Messrs. Simon-Louis, Metz, Lorraine, in 1895. Fruit medium or rather large; flesh semi-fine, very sugary and aromatic; Nov. and Dec.

Jean de Witte. 1. *Mag. Hort.* **7**:286. 1841. **2.** Leroy *Dict. Pom.* **2**:307, fig. 1869.

Passe Colmar François. **3.** *Ann. Pom. Belge* **8**:7, fig. 1860.

Raised at Brussels early in the nineteenth century by M. Witzthumb, director of the Botanical Garden. Fruit below but sometimes up to medium, globular or turbinate, irregular, surface bossed and undulated, greenish, dotted and marbled with a more or less gray-russet; flesh white, semi-fine, melting, extremely juicy, sugary, perfumed, with a buttery flavor, quite delicious; first; Dec.

Jeanne. 1. *Guide Prat.* 94. 1895.

On trial with Messrs. Simon-Louis, Metz, Lorraine, in 1895, having been received by them from M. Daras de Naghin, Antwerp, Bel. Fruit large or very large, oblong-obovate; flesh semi-melting, nearly breaking, juicy, sugary and aromatic; Nov.

Jeanne d'Arc. 1. *Rev. Hort.* 518, fig. 1904.

Obtained by A. Sannier, Rouen, Fr., from a seedling of Beurré Diel fertilized with the Doyenné du Comice. Placed in commerce in 1893, and recommended by the Pomological Society of France ten years later. Fruit large, obtuse, rather of the aspect of the Duchesse d'Angoulême; skin slightly rough, pale lemon-yellow, tinted with rose on the side exposed to the sun, speckled with rose, some marks of fawn color; flesh white, granular about the core, fine, melting, very juicy, saccharine, acidulous, agreeable, only slightly perfumed; good; Oct. and Nov.

Jefferson. 1. Downing *Fr. Trees Am.* 791. 1869. **2.** *Am. Pom. Soc. Rpt.* 119. 1873.

In a Report from Georgia to the American Pomological Society in 1873, P. Barry wrote of a

Jefferson pear as a native of Alabama and an early summer fruit. Downing gives the following description of a pear of the same name originating in Mississippi. Fruit large, roundish-obtuse-pyriform, straw-color, shaded with red in the sun, and dotted with small green dots; flesh white, not juicy, sweet, coarse, decays quickly at core, not highly flavored; Aug.

Jersey Gratioli. 1. Hogg *Fruit Man.* 598. 1884. **2.** Bunyard *Handb. Hardy Fr.* 182. 1920.

In the Island of Jersey this is known as the *Gratioli* and was at the beginning of the nineteenth century grown in England under that name. But as *Gratioli* is the Italian name of Bon Chrétien d'Été, the name was changed in England to "Jersey Gratioli." Fruit above medium, globular-obovate, greenish-yellow, covered with large, rough, russet spots, tinged with pale brown next the sun; flesh yellowish-white, very melting, rich, sugary, vinous, sprightly; a dessert pear of the highest excellence.

Jerusalem. 1. Parkinson *Par. Ter.* 593. 1629.

"The peare of Jerusalem, or the stript pear, whose barke while it is young, is as plainly seene to be stript with greene, red, and yellow, as the fruit it selfe is also, and is of a very good taste: being baked also, it is as red as the best Warden, whereof Master William Ward of Essex hath assured mee, who is the chiefe keeper of the King's Granary at Whitehall."

Jeschil Armudi. 1. Kenrick *Am. Orch.* 133. 1841.

A Turkish variety, probably of small value. Fruit medium, pyriform, greenish-yellow; flesh sweet, perfumed; mid-season.

Jewel. 1. *Am. Pom. Soc. Rpt.* 135. 1920.

Originated with Captain Bankhead near Edgewood, Mo., about 1860. Said to be productive and not to have blighted.

Jewess. 1. Leroy *Dict. Pom.* **2**:311, fig. 1869. **2.** Hogg *Fruit Man.* 598. 1884.

From a seedling raised by Major Espéren, Mechlin, Bel., and so named because the tree grew on a wall fronting the Rue des Juifs (street of the Jews). It first fruited in 1843. Fruit medium, ovate, always a little bossed and more swelled on one side than on the other, uniformly pale yellow, dotted, veined, and mottled with gray-russet and often slightly roseate on the side next the sun; flesh yellowish, buttery, melting, very juicy, sugary and rich; first; Nov. to Feb.

John Cotton. 1. *Mass. Hort. Soc. Rpt.* 32. 1862. **2.** *Ibid.* 45. 1866.

A seedling raised by S. A. Shurtleff, Brookline, Mass., and fruited in 1862. Fruit below medium, turbinate, green; flesh fine-grained, slightly acid; good market pear, ripens well and bears abundantly; Sept.

John Griffith. 1. Downing *Fr. Trees Am.* 791. 1869.

Originated in Westchester Co., N. Y. Fruit medium, globular-obovate-obtuse-pyriform, greenish-yellow, with numerous brown dots, nettings and patches of russet; flesh whitish, coarse, wanting in juice, melting, sweet, pleasant; good; Sept.

John Monteith. 1. Hogg *Fruit Man.* 598. 1884.

A good quality pear esteemed highly in Perthshire, Scotland. Fruit medium, angular toward the calyx where it becomes rather foursided; skin bright green changing to yellowish-green at

maturity; flesh greenish-yellow, melting, buttery, sweet and pleasantly flavored; good.

John Williams. 1. *Am. Pom. Soc. Rpt.* 111. 1873. **2.** *Ibid.* 37, 136. 1875.

An old American variety but not propagated until about 1870. In 1875 it was reported to be the best winter pear for Tennessee. Fruit large, pyriform, clear yellow washed with red; flesh white, very juicy, sugary, vinous and perfumed; good; Nov. and Dec.

Johonnot. 1. Kenrick *Am. Orch.* 177. 1832. **2.** *Mag. Hort.* **13**:484, fig. 40. 1847.

Raised by George S. Johonnot, Salem, Mass., and first came unto bearing about 1823. Fruit medium, globular-obovate, irregular, swollen on one side, hardly tapering to the stem; skin slightly rough, very thin, pale greenish-yellow, partially covered with dull russet, and a little browned on the sunny side; flesh white, coarse, melting and very juicy, rich, brisk, with a delicious, musky aroma; core large and slightly gritty; good; Sept.

Joie du Semeur. 1. *Guide Prat.* 94. 1895.

Issued from a seed bed of Joséphine de Malines, which fruit it resembles in size and form, and was disseminated by M. Daras de Naghin, Antwerp, Bel. Flesh fine, melting, saccharine and aromatic; Nov.

Jolie Lille de Gust. 1. Downing *Fr. Trees Am.* 792. 1869.

Belgian. Fruit small, globular, acute-pyriform, pale yellow shaded with crimson; flesh white, coarse, dry; of no value except for its beauty; Sept.

Joly de Bonneau. 1. *Guide Prat.* 97. 1876. **2.** Hogg *Fruit Man.* 599. 1884.

First published by de Jonghe. Fruit medium or above, curved obovate, pale green, strewed with spots and veins of brown-russet; flesh reddened, or white with a pink tinge, fine, melting, juicy, sugary, vinous; first; Dec.

Jonah. 1. *Mag. Hort.* **15**:70. 1849.

Known early in the last century in the city of New Haven, Conn., and said to be one of the parents of Howell. Fruit, "a very hard and tough winter pear, producing enormous crops every year that seldom becomes mellow and fit for dessert fruit, but when it does, it is very good, being full of rich, subacid, slightly astringent juice."

Jones. 1. Downing *Fr. Trees Am.* 515. 1857. **2.** *Ibid.* 79, fig. 1869.

Originated at Kingsessing, near Philadelphia. Fruit medium or below, pyriform, broad at calyx, tapering to the stem which meets it by a fleshy junction; yellow shaded with russet, bright cinnamon on the sunny side; flesh coarse, granular, buttery, sugary, brisk and vinous; very good; were it a little larger would be one of the most valuable; Oct.

Joseph Lebeau. 1. *Guide Prat.* 97. 1876.

Originated by Dr. Nelis. Fruit large; flesh melting; first; Mar. and Apr.

Joseph Staquet. 1. Leroy *Dict. Pom.* **2**:309, fig. 1869. **2.** Downing *Fr. Trees Am.* 793. 1869.

Obtained by Bivort from a seed bed made at Fleurus, Bel., in 1844. Fruit medium, often smaller, pyriform, somewhat obtuse; skin fine, tender, dull green passing to dark yellow, dotted, veined and stained with fawn; flesh whitish, fine, melting; juice sufficient, sugary, with a rather delicate aroma;

second; end of Aug. and early Sept.

Joséphine de Binche. 1. *Guide Prat.* 110. 1876.

Described in 1869. Fruit medium, globular-turbinate, bright yellow ground washed with brown; flesh semi-melting, very juicy, sugary, with an exquisite flavor; first; Nov. and Dec.

Joséphine de Maubrai. 1. *Gard. Chron.* N. S. **18**:183. 1882.

Fruit medium, globular-turbinate; flesh fine, melting, juicy, sugary; first; Nov. to Jan.

Josephsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:166. 1856.

Austrian. Published in 1819. Fruit medium, obtuse-conic, light green turning to yellowish, often somewhat blushed; flesh granular, semi-melting, sweet; third for table, first for kitchen; Sept.

Joyau de Septembre. 1. *Rev. Hort.* 501, fig. 152. 1897.

Obtained by A. Hérault, Angers, Fr., and first published in 1870. Fruit medium, turbinate, obtuse, curved, golden yellow at maturity, slight greenish near the summit, dotted with gray and often marbled with bronze-russet; flesh white, fine, free from grit, melting, very juicy, sugary, pleasantly acid and perfumed; first; Sept. and Oct.

Judge Andrews 1. Downing *Fr. Trees Am.* 794. 1869.

Originated in Pennsylvania. Fruit medium, oblong-obovate-pyriform, yellowish, traced and mottled with red in the sun; flesh coarse, breaking, dry; of no value; Sept.

Jules d'Airoles (Grégoire). **1.** Mas *Pom. Gen.* **1**:105, fig. 53. 1872.

Raised by M. Xavier Grégoire, Jodoigne, Bel, and first published in 1857. Fruit medium or rather large, spherical but somewhat irregular, often a little bossed or deformed in contour; skin rather firm and rough to the touch, bright green speckled with very numerous, irregular, blackish dots; at maturity the basic green becomes whitish-yellow; flesh white, semi-fine, buttery, melting, gritty at center; juice abundant, sugary, slightly acid and perfumed; good; Oct.

Jules d'Airolles (Leclerc). **1.** Leroy *Dict. Pom.* **2**:312, fig. 1869. **2.** Hogg *Fruit Man.* 599. 1884.

Obtained in 1836 by Léon Leclerc, Laval, Mayence, Fr. Fruit rather large, long-conic, greenish-yellow washed with carmine; flesh semi-melting, very sugary, juicy and perfumed; first; beginning of winter.

Jules Blaise. 1. Leroy *Dict. Pom.* **2**:315. 1869. **2.** *Guide Prat.* 73. 1876.

Stated to have been a gain of M. Millet, Nancy, Fr., and to have been known also as the *Bonne-Gris de Nancy*. Fruit small or medium, pyriform, mottled and dotted all over with fawn; flesh yellowish, buttery, melting, juicy, sugary, perfumed, refreshing; first; Oct.

Jules Delloy. 1. Hogg *Fruit Man.* 600. 1884.

Fruit rather small, globular-obovate, yellow covered with speckles and network of cinnamon-russet; flesh melting, pasty, flavorless; inferior; Dec.

Julie Duquet. 1. Leroy *Dict. Pom.* **2**:316, fig. 1869.

Originated at Châlons-sur-Marne, Fr., about the year 1860. Fruit medium, globular-oblate, dark yellow stained and dotted with fawn; flesh whitish, breaking, granular; juice sufficient, insipid; third for dessert, second for the cuisine; end of Apr. to end of June.

Julienne. 1. Downing *Fr. Trees Am.* 340. 1845. **2.** *Ibid.* 794. 1869.

A beautiful and productive fruit and profitable for the market. Fruit medium but varying on different soils, obovate, regularly formed, very smooth, skin fair, clear bright yellow all over; flesh white, rather firm at first, semi-buttery, sweet, moderately juicy, rich, sprightly; should be gathered a few days before ripe and kept in the house; Aug.

Juvardeil. 1. Leroy *Dict. Pom.* **2**:317, fig. 1869.

Originated at Juvardeil, Maine-et-Loire, Fr.; its age is unknown. Fruit below medium though occasionally rather larger, turbinate, regular in form, slightly obtuse, swelled at the base, pale yellow, evenly dotted with russet and slightly tinged with rose on the side next the sun; flesh white, semi-fine and breaking, gritty about the core; juice plentiful, sugary, acidulous and scented; second; Nov. and Dec.

Kaestner. 1. *Guide Prat.* 97. 1876.

Belgian. Raised by Van Mons. Fruit medium to small, oval, lemon-yellow, without russet, small light brown spots; skin scentless; flesh fine-grained, melting, very juicy, acid, sweet and aromatic; good; Sept.

Kalchbirne. 1. Löschnig *Mostbirnen* 40, fig. 1913.

A perry pear grown throughout Austria and the Northern Tyrol though under various names. Fruit

fairly large to very large, long-pyriform, crooked toward the stalk; skin smooth and shining, green turning lemon-yellow at maturity, with a rather shining red blush, fine green dots; flesh whitish, coarse, very juicy, saccharine, aromatic, rather astringent, slightly acid; among the richest of the wine pears; Sept.

Kalmerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:53. 1856.

Dutch, published 1758. Fruit large, conic, slightly obtuse, yellow flecked with brown; flesh rather tender and succulent, sweet and agreeable; second for table, first for culinary use; Aug.

Kamper-Venus. 1. Oberdieck *Obst-Sort.* 300. 1881. **2.** Mas *Pom. Gen.* **7**:49, fig. 505. 1881.

Camperveen. **3.** Leroy *Dict. Pom.* **1**:556, fig. 1867.

Of ancient and unknown origin. The Kamper-Venus has been cultivated in Holland for some centuries and a Dutch writer, De Lacour, writing in 1752, said, as M. Leroy thinks, that "the Romans possessed it and called it the *Pear of Venus*." Fruit large, pyriform, obovate, smooth, shining, very pale green, sprinkled with dark brown spots; at maturity the green changes to a beautiful bright lemon-yellow, marbled on the side of the sun with red; flesh white, rather fine, firm, melting; juice abundant, vinous, acidulous, perfumed; first class for kitchen use; winter.

Kathelenbirne. 1. Oberdieck *Obst-Sort.* 301. 1881.

German. Fruit small, in form of an orange and Bergamot; surface polished, grass-green becoming rather golden, russeted, without any red blush; flesh yellowish-white, juicy, aromatic; best for household

use; Oct. and Nov., 6 weeks.

Katy. 1. *Pearfield Nursery Cat.* 5. 1910.

Said to have originated at New Ulm, Tex., and to be a seedling of Le Conte. It is reported that the tree is a rapid, upright grower, and an early and abundant bearer; and that the fruit resembles Howell in size, shape, and color, and is very juicy, buttery and refreshing, with a pleasant vinous flavor.

Keiser. 1. Lindley *Guide Orch. Gard.* 377. 1831.

Fruit medium, turbinate, gradually tapering from the middle to the stalk, pale green becoming yellowish-green, thickly sprinkled with small, gray-russety specks, and russet around the stalk; flesh greenish-white, a little gritty, melting, juicy, saccharine, without any particular flavor; keeps some weeks from mid-Oct.; hardy, and bears plentifully upon an open standard.

Kelsey. 1. *Horticulturist* **23**:363, fig. 106. 1868. **2.** Downing *Fr. Trees Am.* 794. 1869.

About 1853 a pear seedling came up in the garden of William Kelsey, Columbus, Ohio, and was named Kelsey. Fruit above medium to large, globular-obovate, surface uneven, dull green becoming yellow at maturity, traces of russet all over the fruit, many small dark green spots; flesh greenish-yellow, melting, sweet, buttery, juicy, vinous, slightly aromatic; good; Oct. to Feb., ripening gradually.

Kennedy. 1. *Cal. Bd. Hort. Rpt.* 74. 1891. **2.** Ragan *Nom. Pear, B. P. I. Bul.* **126**:156. 1908.

Originated by General Bidwell, Rancho Chico, Cal. Fruit globular-oblate, small, russet; flesh tough,

gritty; mid-season.

Kentucky. 1. *Mich. Sta. Sp. Bul.* **27**:22. 1904.

Fruit small, turbinate, obovate, yellow, russeted; flesh white, melting, granular, mild; very poor; Sept.

Kenyon. 1. *Ia. Hort. Soc. Rpt.* 523. 1904.

Originated at McGregor, Iowa, about 1894. Fruit 2 to 2½ inches in diameter, globular, begins to drop in September or October and then apparently of no account, but if picked then and properly cared for until the middle of November or later, changes in color from a dark green to a golden yellow or straw color and is tender, juicy, and sweet, with a very fine flavor.

Kermes. 1. Dochnahl *Führ. Obstkunde* **2**:141. 1856.

Raised by Van Mons, 1827. Fruit medium; gourd-shaped, green becoming yellowish-green, speckled with russet; flesh yellowish-white, semi-melting, full of juice; second for dessert, first for domestic use; Sept.

Kilwinning. 1. *Mag. Hort.* **9**:131 1843. **2.** Hogg *Fruit Man.* 600. 1884.

Fruit medium, oblong, dark green, strewed all over with gray dots, with some patches of russet, brownish-red next the sun, changing at maturity to yellowish-green and a livelier red; flesh yellowish-white, tender, pleasant, with a strong perfume; second; Oct.

King. 1. Downing *Fr. Trees Am.* 794. 1869.

Originated at Oswego, N. Y. Fruit medium or below, globular-oblate-pyriform, greenish-brown in the sun, with many green and brown dots; flesh whitish, coarse, semi-melting, sweet; good; Sept. and

Oct.

King Edward. 1. Leroy *Dict. Pom.* **2**:319, fig. 1869. **2.** Hogg *Fruit Man.* 601. 1884. **3.** Bunyard *Handb. Hardy Fr.* 182. 1920.

An English variety cataloged by the Horticultural Society of London in 1842. Fruit enormous, sometimes 5½ in. long and 3½ wide, pyriform, gradually tapering to the stalk; skin smooth and shining, of a beautiful grass-green changing to yellow, speckled with dark green dots on the shaded side, red on the exposed cheek; flesh yellowish, buttery, melting, very juicy, sweet and acidulous, with a slight rose-water perfume; good for cooking; Sept. to Nov.

King Seedling. 1. Downing *Fr. Trees Am.* 795. 1869. **2.** Thomas *Am. Fruit Cult.* 770. 1903.

Origin uncertain but probably American. Fruit medium, oblate, uneven, yellowish-green, rough; flesh granular, whitish-green, juicy, sugary, aromatic, perfumed; good; Sept. and Oct.

King Sobieski. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:156, 232. 1908.

Fruit medium, obtuse-pyriform, yellow, with red blush; flesh juicy, sweet, perfumed; good; mid-season.

Kirtland. 1. *Mag. Hort.* **16**:112. 1850. **2.** *Horticulturist* **4**:476, fig. 409. 1850.

In 1819 Professor Kirtland, Cleveland, Ohio, raised several trees on his farm in Poland, Ohio, of which this is one. Fruit medium, globular-ovate, rich crimson-russet, varying to a dull green; flesh white, fine, melting, juicy, rich, sweet, aromatic; first; Sept.

Klein Landlbirne. 1. Löschnig *Mostbirnen* 68, fig. 1913.

A perry pear known as *Landlbirne* in Lower Austria, *Green Landlbirne* in Upper and Lower Austria, and by other names in Upper Austria and Istria. Fruit small to medium, globular or turbinate and very even in contour, leaf-green changing to greenish-yellow when ripe, densely sprinkled with very fine russet spots; flesh whitish, fine-grained, juicy, astringent, saccharine, acidulous; good for transportation; end of Oct. to Dec.

Kleine Fuchselbirne. 1. Löschnig *Mostbirnen* 160, fig. 1913.

A pear used for perry in Lower Austria. Fruit small, turbinate to ovate, very regular in contour, yellow when ripe, covered with cinnamon-russet and finely dotted with green specks, some red on the sunny side; flesh white, tolerably fine, juicy, highly saccharine, only slightly astringent, very aromatic; Sept.

Kleine gelbe Bratbirne. 1. Dochnahl *Führ. Obstkunde* **2**:41. 1856.

Rhineland. Reported in Diel in 1812. Fruit small, ovate, pale yellow-green turning to waxy yellow, dotted with fine, green specks; flesh granular, very juicy, sweet; second for table, first for kitchen; Aug.

Kleine gelbe Hessenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:31. 1856.

Hesse, Ger. Reported in 1804 by Diel. Fruit small, pyriform, symmetrical, yellowish light-green changing to lemon-yellow, very fine dots; flesh breaking, white, granular, wanting in juice; first for culinary use; Sept.

Kleine gelbe Maukelbirne. 1. Dochnahl *Führ. Obstkunde* **2**:31. 1856. **2.** Mathieu *Nom. Pom.* 241. 1889.

Hesse, Ger. Published by Diel in 1804. Fruit small, round-ovate, symmetrical, smooth, light green changing to yellowish green, often lightly blushed; flesh snow white, buttery, semi-melting, musky, aromatic; first for the table, household and market purposes; Sept.

Kleine gelbe Sommer-Zuckerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:39. 1856.

German. Published by Sickler, 1801. Fruit medium, variable in form, obtuse-conic, greenish-yellow turning to yellow, with very minute green and gray specks; flesh semi-breaking, very white, very sweet; second for table, first for cuisine, good for market; Aug.

Kleine gelbe Sommermuskatellerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:29. 1856.

Petite Bergamotte Jaune d'Été. **2.** Mas *Pom. Gen.* **4**:185, fig. 285. 1879.

Nassau. Published by Diel, 1805. Fruit very small, turbinate, shining skin, lemon-yellow, seldom blushed, very finely dotted with light green; flesh yellowish-white, coarse, semi-melting, musky, aromatic; first for household, good for market; mid-July.

Kleine grüne Backbirne. 1. Dochnahl *Führ. Obstkunde* **2**:189. 1856.

German. Published by Diel, 1802. Fruit small, ovate, symmetrical, light green turning to yellow-green, very finely dotted, rather russeted; flesh glutinous, very sugary, aromatic; first for household

use; end of Sept. for two weeks.

Kleine Lange Sommer-Muskatellerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:39. 1856. **2.** Mathieu *Nom. Pom.* 241. 1889.

Petite Muscat Long d'Été. **3.** Mas *Pom. Gen.* **4**:151, fig. 268. 1879.

Thuringia, Ger., 1798. Fruit small, sometimes ovate-turbinate, sometimes conic-ovate, regular in contour; skin thick and firm, clear green at first, sprinkled with dots of a darker shade changing to lemon-yellow with the dots little visible, orange-red on the side of the sun; flesh white, tinted with yellow, rather fine, semi-buttery, very sugary and musky; moderately good; early Aug.

Kleine Leutsbirne. 1. Mathieu *Nom. Pom.* 241. 1889. **2.** Löschnig *Mostbirnen* 162, fig. 1913.

A perry pear grown in Upper Austria under the name of *Holzbirne* and by that of Kleine Leutsbirne and other names in Lower Austria. Fruit below medium, variable in form, mostly long-obtuse-pyriform, gray-green with dark green streaks downward from the stalk, changing to yellow-green when ripe, densely covered with minute dots; flesh whitish, moderately fine, juicy, acidulous, saccharine, unusually astringent; Nov. and Dec.

Kleine Pfalzgrafin. 1. Christ *Handb.* 563. 1817. **2.** Dochnahl *Führ. Obstkunde* **2**:46. 1856.

Petite Comtesse Palatine. **3.** Mas *Pom. Gen.* **4**:5, fig. 195. 1878.

Appears to be an ancient and perhaps Roman variety. Reported in Germany in 1794. Fruit small, conic-ovate or ovate-pyriform, water-green dotted with small brown points; flesh yellowish, semi-fine,

breaking, gritty near the center; juice sufficient and rich in sugar and perfume; good for the table, and first class for all the purposes of the cook; Sept. and Oct.

Kleine Pfundbirne. 1. Christ *Handb.* 559. 1817. **2.** Dochnahl *Führ. Obstkunde* **2**:186. 1856.

Wetterau, Ger., 1789. Fruit large, globular-turbinate, grass-green changing to yellowish-green, rough, dotted with gray; flesh tender, pleasant, good for household; Oct. to Dec.

Kleine runde Haferbirne. 1. Dochnahl *Führ. Obstkunde* **2**:162. 1856.

Thuringia, Ger., 1804. Fruit small, globular, light green changing to pale lemon-yellow, strongly blushed with dark red, dotted; flesh yellowish-white, coarse-grained, rather astringent, sourish; good for cooking, early Sept.

Kleine schlesische Zimmbirne. 1. Dochnahl *Führ. Obstkunde* **2**:46. 1856.

German. Published 1801. Fruit small, pyriform, yellow-green with vivid red blush, finely dotted with gray and yellow-green; flesh breaking, very aromatic and sweet; second for table, first for cooking; Aug.

Kleine Sommer-Zuckerratenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:31. 1856.

Rhineland, 1805, Dr. Diel. Fruit medium, turbinate, often rather conic, yellow-green turning to lemon-yellow, with dark red blush; flesh gritty, sugary, aromatic; second for dessert, first for kitchen; Sept.

Kleine Zwiebelbirne. 1. Dochnahl *Führ. Obstkunde* **2**:171. 1856.

Reported in Thuringia, 1819. Fruit small, bulbous or globular-turbinate, lemon-yellow, blushed, dotted with gray, splashed with gray-russet; flesh whitish, sweet, firm, breaking, juicy; good for culinary use; autumn.

Kloppelbirne. 1. Dochnahl *Führ. Obstkunde* **2**:8. 1856. **2.** Mathieu *Nom. Pom.* 242. 1889.

Hesse, Ger. Reported by Diel, 1805. One of the Volemas. Fruit medium, almost round, yellowish-white, changing to lemon-yellow with pale blush; flesh breaking, aromatic, juicy, perfumed; second for table, first for cooking; Dec.

Knabenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:32. 1856.

German. Published by Diel, 1805. Fruit medium, turbinate, swelled, sides unequal; skin polished, light green changing to greenish yellow, often has a dark blush, green dots; flesh granular, very juicy, sweet and acid; second for dessert, first for household; end of Aug.

Knausbirne. 1. Dochnahl *Führ. Obstkunde* **2**:172. 1856. **2.** Mathieu *Nom. Pom.* 242. 1889. **3.** Löschnig *Mostbirnen* 42, fig. 1913.

A perry pear grown under a variety of names in Austria and Germany. Fruit large, obtuse-pyriform, sides unequal, greenish light-yellow, washed and streaked with reddish-brown; flesh yellow-white, breaking, astringent, saccharine, with little flavor or aroma; third for the table, but good for cooking use, perry or drying; end of Sept.

Knechtchensbirne. 1. Dochnahl *Führ. Obstkunde* **2**:2. 1856.

Thuringia, Ger., 1797. Fruit small, round pear-

shaped, yellow, russet dots, blushed; flesh firm, insipid; good for cooking; Aug. and Sept.

Knight. 1. *Mag. Hort.* **13**:449. 1847. **2.** Downing *Fr. Trees Am.* 796. 1869.

Raised by William Knight of Cranston, R. I., and first exhibited before the Massachusetts Horticultural Society in 1835. Fruit medium, oblate-pyriform, yellowish pale-green with grayish specks; flesh melting, juicy, sweet, rich, aromatic; Sept. and Oct.

Knollbirne. 1. Löschnig *Mostbirnen* 186, fig. 1913.

A perry pear of Swiss origin introduced into Austria about 1885. Fruit medium to rather large, long-ovate; skin leaf-green turning to yellow-green at maturity, half the fruit on the sun-exposed side often being a dark brown-red; flesh yellowish-white, coarse, very juicy, saccharine and astringent; good for transporting; Oct. and Nov.

Knoops Simmtbirne. 1. *Guide Prat.* 98, 283. 1876. **2.** Mathieu *Nom. Pom.* 242. 1889.

Poire Canelle. **3.** Mas *Pom. Gen.* **7**:143, fig. 552. 1881.

Origin uncertain, possibly Dutch. Dr. Diel received it from Harlem under the name of *Franse Canneel-Peer*. Knoop described under the name *Fondante de Brest*, a variety to which he gave the synonym *Franse Canneel-Peer*, but it is not the *Fondante de Brest* of Duhamel and other French authors. Fruit medium, nearly short-conic, and sometimes conic and somewhat pyriform; skin fine and thin, clear green sown with numerous small, brown dots changing to dull yellow; flesh white, slightly tinted with yellow, buttery or semi-buttery, gritty around the core, juice sufficient, sweet and

perfumed; good for eating raw and very good for cooking; Sept.

Kolmasbirne. 1. Löschnig *Mostbirnen* 164, fig. 1913.

An Austrian perry pear. Fruit small, globular or longish-pyriform, smooth, shining, dirty greenish-yellow, golden on the sun-exposed side, dotted with red; flesh yellowish-white, coarse, very juicy, saccharine, astringent; late Sept.

Kolstuck. 1. Mas *Pom. Gen.* **6**:113, fig. 441. 1880.

Koolstock. **2.** Ragan *Nom. Pear, B. P. I. Bul.* **126**:158. 1908.

Origin unknown. Reported on trial at the Experiment Station, Agassiz, B. C, in 1900. Fruit medium or nearly medium, obtuse-conic-pyriform, rather like Calebasse in form, often a little irregular in contour, clear green on which, in parts, are visible very small specks of gray-black; at maturity the basic green changes to pale yellow and the cheek exposed to the sun is extensively washed or flamed with bright vermilion; medium early.

König Karl von Württemberg. 1. Mathieu *Nom. Pom.* 242. 1889. **2.** Lucas *Tafelbirnen* 239, fig. 98. 1894.

Roi Charles de Wurtemberg. **3.** *Guide Prat.* 61. 1895.

Obtained about 1886 by Herr Müller, gardener to the King of Württemberg. Fruit large to very large, oval, bossed, obtuse, pale yellow, speckled with russet and brown dots; flesh fine, nearly melting, agreeably perfumed, juicy, good for dessert and is decorative for the table; Oct. and Nov.

Königliche Weissbirne. 1. Dochnahl *Führ.*

Obstkunde **2**:35. 1856.

Holland, 1804. Fruit medium, obtuse-conic, rounded at the apex, regular; skin shining, smooth, light green turning to greenish-yellow, green dots; flesh breaking, white, sweet, aromatic, fairly melting; second for dessert, first for cuisine; early Sept.

Königsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:142. 1856.

North German, 1773. Fruit large, sides unequal, smooth, light green turning to yellow, dotted with fine gray; flesh breaking, tender, sweet; second for table, first for household; Aug. and Sept.

Konstanzer Langler. 1. Löschnig *Mostbirnen* 44, fig. 1913.

A perry pear grown in the Voralberg, Austria, and in Bavaria, Baden and other parts of Germany. Fruit medium to large, long-pyriform, greenish, speckled with brownish-red dots and patches of russet; flesh greenish-white, juicy, of a saccharine and acidulous flavor; end of Sept.

Kraft Sommer Bergamotte. 1. Mathieu *Nom. Pom.* 244. 1889.

Bergamotte d'été de Kraft. **2.** *Guide Prat.* 102. 1895.

Fruit small, spherical-oblate, fine, bright yellow; flesh breaking, sugary; end of Aug. and beginning of Sept.

Krauelbirne. 1. Dochnahl *Führ. Obstkunde* **2**:162. 1856.

Reported in Holstein, Ger., 1788. Fruit small, globular, wrinkled and uneven; flesh granular, sweet, wanting in juice; third for dessert, good for culinary use; Nov. to Whitsuntide.

Kreiselförmige Flegelbirne. 1. Dochnahl *Führ. Obstkunde* **2**:5. 1856.

Upper Hesse, Ger., 1806. Reported by Diel. Fruit large, turbinate, entirely covered with russet, with very dark dots, breaking, fragrantly scented; first for household; Jan.

Kriegebirne. 1. Dochnahl *Führ. Obstkunde* **2**:2. 1856.

Switzerland, Schwaben, published 1804. Fruit small, globular, yellow-green, shining, dark blush with gray specks; first for household and market; Oct.

Krivonogof. 1. *Can. Hort.* **27**:291. 1894.

Originated in the Province of Toula, Russia. Tree very hardy. Fruit of good quality.

Krockhals. 1. Dochnahl *Führ. Obstkunde* **2**:101. 1856.

Nassau, 1806. Published by Diel. Fruit medium, pyriform, bent or acutely sloping, lemon-yellow, cinnamon-russeted, often having a dark blush, heavily dotted; flesh rather white, granular, buttery, melting, juicy and extremely aromatic; first for table and cooking; Nov. and Dec.

Krull. 1. *Mo. Hort. Soc. Rpt.* 36, 112. 1890. **2.** Budd-Hansen *Am. Pom. Man.* **2**:252. 1903.

Krull Winter. **3.** *Mo. Hort. Soc. Rpt.* 330. 1888.

Originated on the farm of Mr. Krull, St. Charles, Mo., about 1808, and brought to notice by C. T. Mallinckrodt in 1888. Fruit type of Lawrence, medium, obovate-obtuse-pyriform, green with a tinge of yellow; stem short, thick, in a shallow cavity; calyx open, in a shallow basin; flesh yellowish, firm, granular, tough, rather dry, sweet,

flat; poor to above; keeps into winter.

Krummgestielte Feigenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:191. 1856.

Saxony, 1807. Fruit medium, pyriform, thick-skinned, yellow-green with brown blush and rather rust-colored on the side next the sun, speckled with very fine dots; flesh yellowish-white, glutinous, very sweet, wanting in flavor; third for dessert, first for domestic use; Oct.

Kuhfuss. 1. Mathieu *Nom. Pom.* 245. 1889.

Pied-de-Vache. **2.** Mas *Pom. Gen.* **4**:35, fig. 210. 1879.

The origin of this pear, probably German, is not definitely known, but according to Oberdieck it was cultivated in almost all the large gardens of Hanover, and bore the name of *Pfundbirn* or *Pound Pear* at Hildesheim, Göttingen and Cassel. Fruit large, globular-turbinate; skin rather thick, of an intense green, speckled with dots of a darker shade, the green turning to yellow at maturity; flesh white, tinted with green, coarse, semi-melting; juice abundant, saccharine, acidulous and refreshing; good; Aug.

Kurskaya. 1. *Neb. Hort. Soc. Rpt.* 30. 1890.

Introduced from Russia in 1879. Fruit oblong-obtuse-pyriform, brownish-green changing partially to deep yellow when fully ripe; stem set in a narrow, shallow depression; calyx open in a rather wide, smooth basin; flesh nearly white, tender, not very juicy, nearly sweet; fair; Oct.

L'Inconnue Van Mons. 1. *Mag. Hort.* **17**:67. 1851. **2.** Hogg *Fruit Man.* 596. 1884.

Unbekannte Von Mons. **3.** Oberdieck *Obst-Sort.* 334. 1881.

Fruit large, pyriform, rough to the touch, greenish-yellow, covered with large gray dots and patches of cinnamon-russet; flesh yellowish, firm, very juicy, rich and sugary, with an agreeable aroma; first; Feb.

L'Inconstante. 1. Mas *Pom. Gen.* **5**:63, fig. 530. 1880.

Inconstant. **2.** Downing *Fr. Trees Am.* 788. 1869.

A seedling raised either by Van Mons or by his successor, Bivort. Fruit medium, conic or conic-pyriform, a little variable in form; skin thin, tender, pale green, sprinkled with very small and inconspicuous dots of gray fawn; on ripening the basic green changes to clear yellow, often preserving a green tint on the side next the sun, sometimes tinted with light red; flesh whitish, semi-fine, very melting, rather granular near the core; juice abundant, saccharine and more or less perfumed; good; Oct.

La Béarnaise. 1. *Guide Prat.* 94. 1895.

Obtained by P. Tourasse, Pau, Basses Pyrénées, Fr. Fruit above medium or large, well colored; flesh melting, juicy; first; Nov.

La Cité Gomand. 1. Mas *Pom. Gen.* **3**:105, fig. 149. 1878.

Attributed by Van Mons to M. Grégoire, Jodoigne, Bel. Fruit small, short-obtuse-turbinate, usually regular in outline, very clear green, whitish, speckled with very small dots not clearly visible; at maturity the basic color changes to pale yellow, slightly golden or washed with a suggestion of red on the

side next the sun; flesh white, rather fine, semi-buttery; juice slightly deficient, sugary, faintly perfumed; second; end of Sept.

La France. 1. *Gard. Chron.* 3d Ser. **27**:350. 1900. **2.** *Cat. Cong. Pom. Fr.* 282, fig. 1906.

Obtained by Claude Blanchet, Vienne, Isere, Fr., about 1864. Fruit medium or rather large, globular-conic, irregular, strongly bossed, greenish, sometimes pale yellow, freely dotted with gray; flesh white, fine or nearly fine, very melting; juice very saccharine, perfumed; very good; Oct. and Nov.

La Moulinoise. 1. Downing *Fr. Trees Am.* 797. 1869.

A foreign variety, probably French. Fruit large, oblong-pyriform, greenish-yellow, partially netted and patched with russet and thickly sprinkled with brown-russet dots; flesh yellowish, juicy, melting, sweet, slightly vinous; first; Sept.

La Quintinye. 1. Leroy *Dict. Pom.* **2**:570, fig. 1869.

Raised from a bed made in 1846 by M. Boisbunel, a nurseryman at Rouen, Fr.; first published in 1860. Fruit above medium or sometimes less, globular, irregular, bossed, sides unequal, pale yellow, thickly dotted and shaded with gray-russet, and sometimes reddened on the side next the sun; flesh white, fine, semi-melting; juice abundant, saccharine, slightly aromatic but agreeably tart; second and sometimes first when the flesh is well perfumed; Mar. to May.

La Savoureuse. 1. Mas *Le Verger* **1**:25, fig. 19. 1866-73. **2.** Downing *Fr. Trees Am.* 797. 1869.

Probably of German origin. Fruit nearly medium, globular-oblate, intense green with greenish-brown dots; flesh greenish-white, buttery, sweet, fine, agreeably refreshing, perfumed like the Bergamots, a

little gritty around the center, third; all winter.

La Solsticiale. 1. *Guide Prat.* 95. 1895.

Reported on trial in the orchards of Messrs. Simon-Louis at Metz, Lorraine, in 1895. Fruit rather large, elongated, obtuse, yellowish tinted with russet; flesh saffron in hue, semi-breaking, very sugary and strongly perfumed; May to July.

La Vanstalle. 1. Kenrick *Am. Orch.* 178. 1832.

"Fruit perfectly pyramidal; highly colored with red; of medium size; flesh granulous, becoming insipid, and finally soft; it keeps till the middle of October. I did not find this fruit excellent; it is however, better than the Doyenné, (St. Michael)."

Lacroix. 1. *Gard. Chron.* 3d Ser. **1**:442. 1887.

Published in *Revue Horticole* in 1887. Fruit medium, regular pyriform, yellow blushed and spotted with red on the exposed side; flesh white, flavor said to be like that of Easter Beurré; Dec. and Jan.

Lady Clapp. 1. *Ill. Hort. Soc. Rpt.* 178. 1896. **2.** Ellwanger & Barry *Cat.* 17. 1900.

Fruit large, yellow; flesh juicy, melting, vinous; first; Sept., following Bartlett.

Lafayette. 1. Downing *Fr. Trees Am.* 796. 1869. **2.** Mas *Pom. Gen.* **4**:13, fig. 199. 1879.

Originated in Connecticut. Fruit small, globular-pyriform, pale yellow, stained with russet, passing at maturity to lemon-yellow and the russet becoming golden, numerous dots of gray-brown; flesh yellowish, rather fine, melting, slightly gritty at the core, buttery, very juicy, sweet but lacking flavor; medium; Oct.

Lahérard. 1. Leroy *Dict. Pom.* **2**:324, fig. 1869.

Origin uncertain, but attributed to Van Mons. Fruit above medium, ovate, mammillate at summit, sometimes rather elongated but generally more swelled at the middle, thin-skinned, yellow-ochre or greenish-yellow, vermilioned on the face exposed to the sun, dotted with fine specks and stains of gray especially around the calyx; flesh white, fine, melting, juicy, rather granular around the core; juice abundant, very sugary, acid, and having an exquisite savor; first; Oct.

Lammas. 1. Lindley *Guide Orch. Gard.* 418. 1831. **2.** Hogg *Fruit Man.* 601. 1884.

Originated possibly in the Highlands of Scotland, being recommended for that district by Lindley. Grown also in England. Fruit below medium, pyramidal, regular pale yellow, streaked with red next the sun; flesh melting, tender, juicy, agreeable; good; Aug.

Lämmerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:54. 1856.

German. Franken, Bavaria, 1809. Fruit below medium, ovate-conic, whitish-green; flesh hard, juicy, somewhat aromatic, and sweet and acid; third for table, first for cooking and market; July.

Lancaster. 1. *Mass. Hort. Soc. Rpt.* 119. 1875.

A seedling grown by T. S. Lancaster, Gloucester, Mass., and exhibited in 1875. Fruit medium, oblong-pyriform, yellow, with brown-russet; flesh coarse, juicy, buttery; hardly good; late autumn.

Landsberger Malvasier. 1. Dochnahl *Führ. Obstkunde* **2**:126. 1856.

Raised by Burchardt at Landsberg, Ger., 1851. Fruit medium, often large, conic, even sides, dark yellow, speckled with russet dots; flesh rather white, buttery, melting; very valuable, first for dessert and market; Nov. and Dec.

Langbirne. 1. Dochnahl *Führ. Obstkunde* **2**:2. 1856. **2.** Mathieu *Nom. Pom.* 245. 1889.

D'Ane. **3.** Leroy *Dict. Pom.* **1**:129, fig. 1867.

Switzerland and Germany, 1804; particularly popular in the former country where it is very generally cultivated, and often known as the *Étrangle*. Fruit medium or above, very long, like Calebasse in form, greenish-yellow turning to lemon-yellow, somewhat blushed, and speckled with dots of greenish-gray; first for culinary use; end of Aug.

Lange gelbe Bischofsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:140. 1856.

Holland, 1804. Fruit medium, oblong; sides unequal; skin smooth, yellowish-green turning to light yellow, sometimes slightly blushed, dotted with yellow; flesh spongy, lacking juice, glutinous, sweet and scented with rose; third for table, first for kitchen and market; end of Aug.

Lange Gelbe Muscatellerbirne. 1. *Guide Prat.* 98. 1876. **2.** *Ibid.* 68. 1895.

German. Tree vigorous, fertile, resisted the phenomenal frost in Europe 1879-1880. Fruit small, yellow, dotted with carmine; of moderate quality; second half of Aug.

Lange Grüne Winterbirne. 1. Mathieu *Nom. Pom.* 245. 1889.

Longue Verte d'Hiver. **2.** Mas *Pom. Gen.* **7**:137, fig.

549. 1881.

A German variety cultivated especially in Saxony and Thuringia. Fruit medium or nearly so, conic-pyriform, often rather deformed, one side being longer than the other at either end; skin firm, water-green, sprinkled with numerous indistinct dots regularly spaced, the basic green changing to greenish or yellowish-white; flesh white, rather fine, semi-melting; juice plentiful, sweet, sugary, agreeable but wanting in perfume; good; autumn and early winter.

Lange Mundnetzbirne. 1. Dochnahl *Führ. Obstkunde* **2**:112, fig. 1856. **2.** Mathieu *Nom. Pom.* 246. 1889.

Thuringia, 1794. Fruit medium, ventriculous, grass-green turning to greenish-yellow, often faintly blushed, dotted with green; very good for dessert, good for household and market; Aug.

Lange Sommer-Bergamotte. 1. Dochnahl *Führ. Obstkunde* **2**:39. 1856.

Thuringia, 1794. Fruit below medium, long-turbinate, yellow-green turning to whitish-yellow, rough, heavily dotted with brown, slightly russeted, thick-skinned; flesh yellowish-white, breaking, granular becoming glutinous; first for table; Aug.

Lange Wasserbirne. 1. Löschnig *Mostbirnen* 46, fig. 1913.

This perry pear is found spread throughout Upper and Lower Austria. Fruit medium, long-pyriform, very regular in contour; skin fine, smooth, shining, yellow-green when ripe, very densely dotted with fine spots, some cinnamon-brown russet around the stem and calyx; flesh whitish, coarse-grained, juicy,

sweet but insipid and without aroma; Sept.

Langstieler. 1. Dochnahl *Führ. Obstkunde* **2**:171. 1856. **2.** Mathieu *Nom. Pom.* 246. 1889.

Switzerland, Baden and Württemberg, published 1830. Fruit small, pyriform, grass-green, russeted on the side next the sun, gray dots; flesh yellowish-white, fine-grained, tartish; third for the table, first for cider and culinary use; Oct. Suitable for every situation.

Langstielige Pfaffenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:43. 1856.

Germany. Published by Diel in 1825. Fruit medium, pyriform, otherwise conic; skin rough and entirely covered with cinnamon-colored russet, often faintly blushed; second for table; third for household; Sept.

Langstielige Zuckerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:141. 1856.

German. Published by Diel, 1833. Fruit medium, long-pyriform or even gourd-shaped, light green changing to light yellow, without russet or red blush, semi-melting, fine, juicy, sweet, with cinnamon flavor; second for dessert, first for culinary use; Nov.

Lansac. 1. Duhamel *Trait. Arb. Fr.* **2**:241, Pl. LVII. 1768. **2.** Leroy *Dict. Pom.* **2**:326, 327, fig. 1869. **3.** Hogg *Fruit Man.* 602. 1884.

Herbstbirne ohne Schale. **4.** Dochnahl *Führ. Obstkunde* **2**:86. 1856.

Originated at Hazé near Tours, Fr. Merlet described it in 1667. In the catalog of the Chartreuse Fathers, Paris, there occurs in 1736 the following passage. “The Pear *de Lansac*, or *Dauphin*, which

many authors name *Satin* ... was presented for the first time to Louis XIV ... by Madame de Lansac....” As King Louis ascended the throne in 1638 the pear would seem to have been originated between that year and 1857, the year in which Madame de Lansac died. Fruit medium, sometimes less, globular-turbinate, dull yellow, sprinkled with numerous minute, russet dots; flesh fine, yellowish-white, melting, juicy, sweet, rich, aromatic, with an after-flavor of anis; second, but first when the flesh is well perfumed; Oct. to Dec.

Large Duchess. 1. *Ala. Sta. Bul.* **30**:12. 1891.

A variety of Oriental type planted at the Agricultural Experiment Station at Auburn, Ala., in 1885. It was reported in 1891 as free from blight, and still on trial.

Larissa. 1. *Mag. Hort.* **19**:517. 1853.

Submitted to the Pennsylvania Horticultural Society in 1853 as a seedling by a Mr. Ladd of Philadelphia. Fruit small, obovate-pyriform, greenish-yellow, a good deal russeted, with a mottled red cheek; flesh rather dry, saccharine and pleasant; scarcely good.

Laure Gilbert. 1. *Guide Prat.* 95. 1895.

Distributed by M. Gilbert, Antwerp, Bel., in 1886. The fruit bears much resemblance to that of the Chaumontel, but its flesh is much more melting and its flavor more sprightly; Oct.

Laure de Glymes. 1. Leroy *Dict. Pom.* **2**:328, fig. 1869.

The parent tree was raised from a seed bed made by Van Mons in 1827 at Louvain. Fruit ovate, or more or less globular and swelled, nearly always

mammillate at summit; skin thick, bronzed, having on the side next the sun some orange-yellow; flesh white, semi-melting, watery, gritty about the core; juice sufficient, sweet, vinous, perfumed; second; Sept.

Laxton Bergamot. 1. *Gard. Chron.* **26**:497. 1886. **2.** *Jour. Hort.* **13**:339. 1887.

A new seedling pear shown by a Mr. Laxton, Bedford, Eng., at the Royal Horticultural Society's meeting at South Kensington in October, 1886. Tree fertile and the fruits are not easily blown off by the wind. Fruit small, exceedingly juicy and rich; a delicious pear.

Le Breton. 1. Downing *Fr. Trees Am.* 798. 1869.

Origin unknown. Fruit medium, obovate, obtuse-pyriform, irregular, yellow, netted and patched with russet, with numerous russet dots; flesh yellowish, rather coarse at core, melting, juicy, sweet, aromatic; good; Nov. to Jan.

Le Brun. 1. Leroy *Dict. Pom.* **1**:503, fig. 1867. **2.** Bunyard *Handb. Hardy Fr.* 183. 1920.

M. Gueniot, nurseryman at Troyes, Fr., sowed seeds the plants from which fruited in 1862. One of these he named Le Brun. Fruit above medium to large, oblong-conic, slightly obtuse and generally bossed and rather contorted about the summit, bright yellow, sprinkled with bright brown spots, and largely stained with fawn about calyx and stem and often also on the side next the sun; flesh yellowish-white, semi-fine, and dense, melting, seldom gritty and rarely has seeds; juice abundant, sugary, acidulous, savory but often with an excessive taste of musk, spoiling its delicacy; first; end of Sept.

Le Congo. 1. *Guide Prat.* 95. 1895.

Distributed by M. Daras de Naghin, Antwerp, Bel., and in the trial orchards of Messrs. Simon-Louis, Metz, Lorraine, in 1895. Tree vigorous and fairly prolific. Fruit medium; flesh semi-fine, very saccharine and highly scented; Nov. and Dec.

Le Lecher. 1. *Gard. Chron.* 3rd Ser. **4**:334. 1888.

This seedling, raised by A. Lesuer, Ypres, Bel., resulted from Bartlett fertilized with Fortunée. Fruit large, pyriform, yellow, spotted with drab spots; flesh white, juicy, sugary, brisk and perfumed, free from grit; Jan. to Mar.

Leclerc-Thouin. 1. Leroy *Dict. Pom.* **2**:330, fig. 1869.

Raised by M. André Leroy at Angers, Fr., and fruited first in 1867. Fruit above medium, conic, very obtuse and generally more curved on one side than on the other; skin uneven, clear yellow, clouded with green and partially covered with russet on which appear small specks of gray; flesh whitish, semi-fine, watery, very melting, granular around the core; juice sugary, vinous and slightly acid, perfumed flavor; first; Sept.

Lederbirne. 1. *Mass. Hort. Soc. Rpt.* 89. 1845. **2.** Löschnig *Mostbirnen* 202, fig. 1913.

An Austrian perry pear. Fruit medium, truncated-pyriform, somewhat bossed and irregular in outline, leaf-green turning greenish-yellow, gray russet dots, blushed on the sunny side; flesh yellow-white, coarse-grained, very juicy, subacid; Oct. to Dec.

Lee. 1. Elliott *Fr. Book* 375. 1854.

Originated at Salem, Mass. Fruit small to medium, globular-oval, greenish-russet, brown in the

sun; flesh white, coarse, juicy, good; Sept.

Lee Seckel. 1. Thomas *Am. Fruit Cult.* 565. 1885.

Fruit medium to large, obovate, rich russet; flesh buttery, rich, perfumed; very good; Sept.

Léger. 1. *Guide Prat.* 95. 1895.

Obtained from a seed bed of Winter Nelis by M. Sannier. Tree of moderate vigor, fertile and suitable for all forms of culture. Fruit medium, globular-ovate; flesh fine, acidulous; Oct.

Lehoferbirne. 1. Löschnig *Mostbirnen* 126, fig. 1913.

A perry pear widely distributed in Upper and Lower Austria under various names. Fruit medium to large, globular-pyriform, leaf-green turning yellow at maturity, dotted and marked with russet, well-exposed fruit blushed; flesh yellow-white, coarse-grained, very juicy, astringent, saccharine, acidulous; mid-Oct. and keeps in storage till end of Nov.

Leipziger Rettigbirn. 1. Lauche *Deut. Pom.* **II**:No. 92, Pl. 92. 1883.

Radis de Leipsick. **2.** Mas *Le Verger* **2**:125, fig. 61. 1866-73.

Leipsic Radish. **3.** *Can. Exp. Farms. Rpt.* 379. 1902.

Originated at Duben near Leipsic, Saxony. It was published by Diel in 1807. Fruit small, nearly spherical or spherical-ovate, a little more constricted at the stem end then toward the calyx, light green turning to yellow-green and slightly golden on the cheek next the sun, brown around the summit, and with numerous light brown dots; flesh yellowish-white, buttery, juicy, very pleasantly perfumed, having a slight Bergamot flavor; good for dessert, first for cuisine; Aug. to Oct.

Lemon (Massachusetts). **1.** *Mass. Hort. Soc. Rpt.* 43. 1866.

A seedling of S. A. Shurtleff, Brookline, Mass.; first fruited in 1862. Fruit large, turbinate, yellow.

Lemon (Russia). **1.** *Ind. Hort. Soc. Rpt.* 82. 1886. **2.** *Ia. Hort. Soc. Rpt.* 170. 1894.

Imported from Russia in 1879. It was reported in 1894 to have fruited in Iowa, and collectively with some other varieties was described as "generally 'off' in color, coarse, some of them leathery and corky, and all without melting qualities or flavor."

Lenawee. 1. *Am. Pom. Soc. Rpt.* 106. 1856. **2.** Field *Pear Cult.* 273. 1858.

Origin unknown. Distributed in Lenawee County, Mich., in 1856; it was named by the Adrian Horticultural Society. At that time it was supposed to have been introduced from western New York some twenty-five years previously. Fruit medium to large, oblate-pyriform, one side generally being larger than the other; surface frequently irregular, lemon-yellow, with small russet specks, washed with bright vermilion on the side next the sun; flesh yellowish-white, tender, buttery, with a high and peculiar, aromatic flavor; very good; early to mid-Aug.

Leochine de Printemps. 1. *Mag. Hort.* **20**:236. 1854. **2.** *Guide Prat.* 98. 1876.

On trial with Messrs. Simon-Louis, Metz, Lorraine, in 1876. Fruit medium, obovate-pyriform, yellow, netted and patched with russet, sprinkled with russet dots; flesh melting, white, firm, not very juicy; a beautiful and good fruit; Feb. and Mar.

Léon Dejardin. 1. *Guide Prat.* 98. 1876.

Obtained at Boussoir, Maubeuge, Nord, Fr. Fruit medium, pyriform, ventriculous, resembles the Beurré Bollwiller, semi-melting, juicy, sugary, refreshing; good for its season; May and June.

Léon Grégoire. 1. *Ann. Pom. Belge* **4**:63, fig. 1856. **2.** Leroy *Dict. Pom.* **2**:618, fig. 1869.

This variety was gained by Xavier Grégoire, Jodoigne, Bel., and was fruited first in 1852. Fruit large, sometimes medium, oblong-obtuse-pyriform, sometimes more or less globular, dull yellow, dotted and marbled with fawn on its shaded side and entirely stained with grayish-russet on the exposed face, becoming pale yellow and golden at maturity; flesh yellowish-white, coarse, semi-melting, sweet, watery, acidulous, vinous, agreeable; second, inconstant in quality, sometimes good; Dec. and Jan.

Léon Leclerc Épineux. 1. Leroy *Dict. Pom.* **2**:333, fig. 1869.

In the bulletin of the Society Van Mons, 1857, this variety is stated to have been obtained by Van Mons, though some doubt has been raised as to its origin. Fruit large, ovate-pyriform, often rather contorted; skin rough, thick, grayish-yellow, finely dotted with russet and stained with the same around the calyx and stalk and sometimes clouded and streaked with red on the face exposed to the sun; flesh yellowish-white, coarse, breaking, granular at the center; juice sufficient, vinous and sugary; third for dessert, first for cooking; Nov.

Léon Leclerc de Laval. 1. *Pom. France* **3**:No. 99, Pl. 99. 1865. **2.** Hogg *Fruit Man.* 603. 1884.

This, which is different from Léon Leclerc (Van Mons), was obtained at Louvain in 1825 by Van

Mons. Fruit large, turbinate-obtuse-pyriform, yellow-ochre, finely dotted with gray-russet and marked with some tracing of russet, occasionally washed with a little red; flesh very white, semi-melting or semi-breaking, watery, gritty, juicy, sweet, slightly perfumed; third for dessert, first for stewing; Jan. to May.

Léon Recq. 1. *Guide Prat.* 95. 1895.

On trial with Messrs. Simon-Louis, Metz, Lorraine, in 1895, who received it from M. Daras de Naghin, Antwerp, Bel. Fruit large or nearly large, pyriform, lemon-yellow when ripe; flesh fine, slightly acid, sugary, perfumed; Nov. and Dec.

Léon Rey. 1. Leroy *Dict. Pom.* **2**:336, fig. 1869.

In 1856, M. Rey, Toulouse, Fr., sowed seeds of the best French pears, and in the following year selected the most promising seedlings, one of which received the name Léon Rey. Fruit medium and sometimes rather larger, turbinate, very round in its lower part, and conic-obtuse at the top, golden-yellow, finely dotted and stained with fawn and nearly always washed with tender rose on the face exposed to the sun; flesh very white and fine, melting, free from grit; juice very abundant, sugary, acidulous, having a delicious flavor; first; Oct.

Léonce de Vaubernier. 1. *Guide Prat.* 72. 1876.

Tree vigorous on quince, very fertile. Fruit rather large, ovate, very pale green, touched with russet and washed with dark carmine; flesh yellowish, fine, dense, of a highly agreeable flavor; third; second half of Sept.

Léonie. 1. *Guide Prat.* 95. 1895.

Sent out by M. Daras de Naghin, Antwerp, Bel.

Fruit medium, of Doyenné form, globular-obovate; flesh melting, sugary; good.

Léonie Bouvier. 1. *Guide Prat.* 56. 1895.

Obtained by M. Simon Bouvier, Jodoigne, Bel. Tree vigorous on quince, fertile. Fruit medium, pyriform, whitish-yellow blushed with orange-red; flesh fine, very melting and juicy, sugary, vinous, perfumed; a very beautiful and excellent fruit; Sept.

Léonie Pinchart. 1. Downing *Fr. Trees Am.* 800. 1869.

Described in 1869 as a new Belgian variety. Fruit medium, globular-obovate, greenish-yellow, much covered, netted, and patched with yellow-russet and minute russet dots; flesh whitish, juicy, sweet, melting; very good; Sept. and Oct.

Léontine Van Exem. 1. *Guide Prat.* 108. 1876. **2.** Mas *Pom. Gen.* **3**:181, fig. 187. 1878.

Obtained by Henri Grégoire, Beurechin, Bel. Fruit small, turbinate or conic-turbinate, very clear green changing to pale yellow at maturity, dotted with specks of darker green; some clear russet covers the calyx and the summit, and the side next the sun becomes golden; flesh white, fine, melting, full of juice rich in sugar and perfume of the almond; Oct.

Leopold I. 1. Downing *Fr. Trees Am.* 518. 1857. **2.** Leroy *Dict. Pom.* **2**:338, fig. 1869.

A posthumous gain of Van Mons which gave its first fruit in 1848. Fruit above medium, ovate, regular, swelled in the lower part, obtuse, grass-green, often yellowish, dotted, streaked, and stained with russet; flesh white, with some yellow tinge, fine, very melting, juicy, sweet, vinous, aromatic and delicate; good to very good; Nov.

Leopold Riche. 1. Downing *Fr. Trees Am.* 801. 1869. **2.** Hogg *Fruit Man.* 603. 1884.

One of M. de Jonghe's seedlings. Fruit rather large, obovate, yellow, thickly sprinkled with large cinnamon-russet dots; flesh rather coarse-grained, crisp, buttery, melting; juice abundant, rich, thick and sugary, with a fine almond flavor; a very richly flavored pear; Nov.

Lepine. 1. Downing *Fr. Trees Am.* 801. 1869.

Tree of moderate growth but very productive. Fruit small, oblate, yellowish, shaded with crimson, slightly russeted; flesh coarse, granular, melting, juicy, brisk, vinous, good; Nov. and Dec.

Lesbre. 1. *Gard. Chron.* 415. 1863. **2.** Leroy *Dict. Pom.* **2**:339, fig. 1869.

Raised from seed at Boulogne-sur-Mer, before 1838, by M. Bonnet. Fruit medium or above, turbinate, very obtuse and swelled, nearly always mammillate at the top; skin rough, olive-yellow, sprinkled with many large russet dots and small brownish stains; flesh white, fine and melting, juicy, rather granular at the core; juice abundant, sugary, vinegary, with a delicate scent of anis; first; end of Aug.

Levard. 1. Leroy *Dict. Pom.* **2**:340, fig. 1869.

Grown on the seed beds of M. Leroy, Antwerp, Bel., and fruited in 1863. Fruit below medium, globular-turbinate, irregular, bossed and always less swollen on one side than on the other; color yellowish-green, dotted with brown and fawn, and entirely covered with bronze-russet on the cheek exposed to the sun; flesh greenish-white, fine, melting and juicy, gritty around the core, sugary,

acidulous, musky and very rich in flavor; first; Nov.

Levester Zuckerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:172. 1856.

Hanover, 1852. Fruit small, obtuse-turbinate, sides unequal, light green changing to greenish-yellow, often streaked with red and finely dotted with greenish-russet; flesh fine, deficient in juice, granular near the center, highly aromatic; first for household and market purposes; Sept. and Oct.

Lewes. 1. Parkinson *Par. Ter.* 592. 1629.

Described by John Parkinson in 1629, in England, as "brownish greene pears, ripe about the end of September, a reasonable well rellished fruit, and very moist."

Lewis. 1. Prince *Pom. Man.* **1**:140. 1831. **2.** Downing *Fr. Trees Am.* 801. 1869.

Originated on the farm of John Lewis, Roxbury, Mass., about 1811. Fruit below medium, globular, obovate, obtuse, dark green in autumn, pale green at maturity, with numerous russet specks; flesh yellowish-white, rather coarse, melting, juicy and rich in flavor, with a slight spicy perfume; Nov. to Feb.

Lexington. 1. *Ill. Hort. Soc. Rpt.* 187. 1896. **2.** Budd-Hansen *Am. Hort. Man.* **2**:253. 1903.

Originated in Kentucky and is said to resemble Bartlett, but to ripen two weeks earlier. Hardy and free from blight, but described as "too poor" in quality.

Liberale. 1. *Mag. Hort.* **21**:519. 1855. **2.** Downing *Fr. Trees Am.* 801. 1869.

Belgian. Introduced to this country as a new

variety about 1850. Fruit large, obtuse-pyramidal or truncate-pyriform; skin fair, smooth, yellowish-green, very thickly dotted with large, conspicuous, russety specks, and patched with russet; flesh yellowish-white, a little coarse, melting, juicy, sweet, rich, with a peculiar almond, aromatic perfume; a very handsome and fine fruit; Oct.

Liegel Honigbirne. 1. Mathieu *Nom. Pom.* 248. 1889.

Poire de Miel de Liegel. **2.** Mas *Pom. Gen.* **1**:47, fig. 24. 1872.

Origin uncertain, probably German. Fruit medium, ovate-pyriform; skin fine and smooth, at first pale green turning to pale yellow, more golden on the side next the sun and very rarely touched with rose; flesh yellow, fine, melting, full of sugary juice, vinous, and with a distinct savor of musk; first; Oct.

Lieutenant Poidevin. 1. Leroy *Dict. Pom.* **2**:344, fig. 1869. **2.** Hogg *Fruit Man.* 604. 1884.

Flon-Grolleau, a Frenchman, obtained this variety in 1853. Fruit large, obovate and undulating; skin fine, yellow-ochre dotted with gray; flesh yellowish-white, semi-fine, breaking, gritty around the center, sugary, vinous; second for dessert, first for cooking; Mar. and Apr.

Limon. 1. *Mag. Hort.* **8**:57. 1842. **2.** Downing *Fr. Trees Am.* 802. 1869.

A Van Mons seedling. Fruit rather small, obovate, yellow, with a faint red cheek; flesh white, buttery, melting and juicy, with a sprightly flavor; very good; mid-Aug.

Linzer Mostbirne. 1. Löschnig *Mostbirnen* 188, fig. 1913.

A perry pear taking its name from the town of Linz near Hauptstadt in Upper Austria. Fruit medium, globular to pyriform, yellow, strongly carmined on the sun-exposed side and dotted with red; flesh yellow-white, coarse-grained, with a saccharine, astringent flavor; Oct.

Livingston Virgalieu. 1. Downing *Fr. Trees Am.* 803. 1869.

An old variety, grown to some extent along the Hudson River. Fruit globular-obovate, greenish-yellow, patched and dotted with russet; flesh whitish, juicy, nearly melting, sweet, pleasant; good; Sept.

Locke. 1. *Mag. Hort.* **3**:52. 1837. **2.** Downing *Fr. Trees Am.* 442. 1845.

Raised from seed in the garden of James Locke, West Cambridge, Mass., in 1830. Fruit medium, globular-obovate, full at the crown, ending obtusely at the stem; skin fair, slightly rough, yellowish-green changing to lemon-yellow when ripe, spots of darker hue mingled with russet, tinged with red on the sunny side; flesh yellowish-white, coarse, melting and juicy, rich, sweet and perfumed; good; Dec.

Lodge. 1. Kenrick *Am. Orch.* 178, 179. 1832. **2.** Downing *Fr. Trees Am.* 803. 1869.

A native of Pennsylvania and understood to have originated near Philadelphia. Fruit medium, pyriform, tapering to the stem and larger on one side than on the other, greenish-brown, the green becoming a little paler at maturity and much covered with patches of dull russet; flesh whitish, a little gritty at the core, juicy, melting, with a rather rich flavor, relieved by a pleasant acid; Sept. and Oct.

Loire-de-Mons. 1. Mas *Pom. Gen.* **3**:109, fig. 151.

1878.

A gain of M. Loire, at Mons, Bel. Fruit medium, turbinate, or globular-turbinate, usually regular in contour; skin rather fine and tender, clear and bright green, sprinkled with gray-green dots; at maturity the green becomes clear lemon and golden on the side of the sun; flesh white, fine, very melting, full of juice, acidulous, delicately perfumed; first; end of Sept.

London Sugar. 1. Lindley *Guide Orch. Gard.* 343. 1831. **2.** Hogg *Fruit Man.* 605. 1884.

English. Much cultivated in Norfolk for the Norwich market. Fruit below medium, turbinate, pale green approaching lemon-yellow at maturity, with a slight brownish tinge; flesh tender, melting; juice saccharine and of a rich, musky flavor; an excellent early fruit; end of July.

Long Green. 1. Downing *Fr. Trees Am.* 803. 1869.

Belgische Zapfenbirne. **2.** Dochnahl *Führ. Obstkunde* **2**:139. 1856.

Longue-Verte. **3.** Leroy *Dict. Pom.* **2**:349, fig. 1869.

Grüne Lange Herbstbirne. **4**. Mathieu *Nom. Pom.* 228. 1889.

This French pear is distinct from the *Verte Longue* which is synonymous with *Verte Longue d'Automne*, though these two pears have been confused and have various names in common. It has been cultivated in France for the last 100 years. *Longue Verte* has ten French synonyms. Fruit above medium, very long, fig-like in form, narrowed from middle to stalk, acute, grass-green passing to brownish-green on the face exposed to the sun, uniformly sprinkled with dots of gray-russet; flesh greenish-white, fine or

semi-fine, melting, rather granular around the seeds; juice abundant, saccharine, sweet, with a characteristic perfume, often very slight; second; Sept.

Long Green of Autumn. 1. Downing *Fr. Trees Am.* 804. 1869.

Verte-Longue d'Automne. **2.** Leroy *Dict. Pom.* **2**:729, fig. 1869.

Lange grüne Herbstbirne. **3.** Liegel *Syst. Anleit.* 112. 1825.

The Long Green of Autumn, better known abroad as the *Verte-Longue d'Automne* or *Verte-Longue*, must be distinguished from the Long Green or *Longue-Verte*. It is of very ancient origin and mentioned in the catalog, published by Le Lectier, King's Attorney, in 1628, of the immense nursery he created in 1598. The German author Henri Manger, 1783, considered the *Verte-Longue* identical with the *Viridium* of Pliny. Fruit medium to large, turbinate, slightly obtuse, often larger on one side than on the other, green clouded with pale yellow, speckled with large gray spots and very rarely blushed on the exposed side; flesh white, fine, melting, very full of a saccharine, well-flavored, musky juice; first when its juice is well perfumed, but rather variable; Oct.

Long Green of Esperin. 1. Downing *Fr. Trees Am.* 804. 1869.

Belgian. Fruit medium, oblong-ovate-pyriform, greenish-yellow, blushed with crimson on the cheek next the sun, patched and netted with russet, with numerous brown dots; flesh yellowish-white, juicy, semi-melting, vinous; good; Sept.

Longland. 1. Lindley *Guide Orch. Gard.* 415. 1831.

2. Hogg *Fruit Man.* 605. 1884.

A very old English perry pear chiefly grown in Herefordshire. Fruit small, turbinate, even, rather handsomely shaped, bright gold, tinged and mottled all over with a lively russety orange, the side next the sun having a pale red cheek; flesh yellow, very astringent.

Longue du Bosquet. 1. Leroy *Dict. Pom.* **2**:348, fig. 1869.

A seedling raised by Leroy. It was reported in 1863. Fruit medium, conic, elongated, regular, obtuse and round at the top, greenish-yellow, dotted with gray, washed with brown at the extremities; flesh greenish, semi-fine, melting, rather gritty at the center; juice abundant, very saccharine, acidulous and deliciously perfumed; first; Sept.

Longue-garde. 1. *Guide Prat.* 98. 1876.

On trial in the orchards of Messrs. Simon-Louis at Metz, Lorraine, in 1876. Fruit large, highly perfumed; in season until May.

Longue-Sucrée. 1. Mas *Pom. Gen.* **4**:49, fig. 217. 1879.

Either German or Austrian. Cataloged by Jahn in 1864. Fruit nearly medium, conic-pyriform, dark green, dotted with gray-brown, changing to pale yellow, clouded with red on the side of the sun, speckled with whitish-gray; flesh whitish, fine, breaking, deficient in juice and sugar, acidulous, with an unpleasant perfume; third; end of Aug.

Longueville. 1. Hogg *Fruit Man.* 605. 1884.

Much grown in the South of Scotland. It has been conjectured that the tree was brought to Scotland

from France by Douglas when Lord of Longueville in the fifteenth century. Fruit large, obovate, regular in outline and handsome, greenish-yellow, with a tinge of pale red next the sun, covered with numerous gray-russet specks, so numerous sometimes as to appear like network; flesh yellowish, breaking, tender, very juicy, sweet and richly flavored; good.

Longworth. 1. *Ill. Hort. Soc. Rpt.* 172. 1892. **2.** *Am. Pom. Soc. Cat.* 41. 1909.

Originated at Dubuque, Iowa. Its great hardiness and freedom from blight make it valuable in breeding for the North though its fruit is not of such quality as to recommend it where choice varieties can be grown. Fruit medium to large, obtuse-ovate, green turning to yellow; good; mid-season.

Lorenzbirne. 1. Dochnahl *Führ. Obstkunde* **2**:47. 1856.

Saxony, 1803. Fruit medium, obtuse-conic, light green, blushed with dark brown on the sunny side changing to light yellow, washed with vivid red, green dots and some cinnamon-russet; flesh yellowish-white, melting, rather gritty around the center; first for kitchen and market, second for dessert; Sept.

Loriol de Barny. 1. Leroy *Dict. Pom.* **2**:351, fig. 1869.

A gain of Leroy from his seed beds at Angers, Fr.; it fruited for the first time in 1862. Fruit medium or above, very long ovate-pyriform, often bossed in its contour; skin thin, yellow-ochre, speckled with minute gray dots and showing some stains of russet; flesh white, fine, melting, almost free from grit; juice very abundant and sugary having a delicate aroma; first; end of Aug. and beginning of Sept.

Lothrop. 1. *Mass. Hort. Soc. Rpt.* 46. 1866.

A seedling raised by S. A. Shurtleff, Brookline, Mass.; it first fruited in 1866. Fruit diameter 2½ in., yellow with russet; flesh white, with good flavor; mid-Sept.

Loubiat. 1. *Guide Prat.* 98, 285. 1876.

This variety bears the name of the owner of the parent tree living in the Dordogne. Fruit large, of handsome appearance; flesh yellow; third, yet of good quality for its season; spring until July.

Louis Cappe. 1. *Guide Prat.* 98. 1876.

A seedling of Easter Beurré and of similar quality. On trial in the orchards of Messrs. Simon-Louis, Metz, Lorraine, in 1876. Tree very fertile and vigorous. Fruit medium to large, Bergamot in form; Nov. and Dec.

Louis Grégoire. 1. Mas *Le Verger* **2**:147, fig. 72. 1866-73. **2.** Hogg *Fruit Man.* 606. 1884.

M. Xavier Grégoire, Jodoigne, Bel., obtained this pear from a seed bed made in 1832. Fruit below medium, obtuse-turbinate, irregular in form, much larger on one side than on the other, rather rough to the touch, greenish-yellow, dotted and mottled with russet and generally stained with fawn on the side of the sun; flesh whitish, semi-fine and semi-melting, juicy, sugary, highly acid, often rather astringent, slightly musky, and sometimes rather delicate; second and sometimes third when the astringency of its juice is too pronounced; Oct.

Louis Noisette. 1. *Guide Prat.* 98. 1876.

Published by Boisbunel in 1867. Tree very vigorous and fertile. Fruit rather large, globular-

turbinate; flesh fine, very melting and very juicy, sugary and sprightly; first; Nov. and Dec.

Louis Pasteur. 1. *Rev. Hort.* 223. 1909.

Obtained by Arsène Sannier, Rouen, Fr. Fruit smooth and fine, clear yellow, strongly washed with fawn on one face and covered with patches of the same color on the other side; flesh yellowish-white, the yellow being more noticeable near the skin, very fine, melting, and sugary, sprightly and perfumed; very good; Dec.

Louis-Philippe. 1. Kenrick *Am. Orch.* 169. 1841. **2.** Leroy *Dict. Pom.* **2**:354, fig. 1869.

Origin uncertain, though it was described by Prévost, Rouen, Fr., in 1848. Fruit large, turbinate, very obtuse and very irregular in form, swelled, especially on one side on its lower half; skin rough and bronzed all over on a basis of gray-green, sprinkled with numerous large, prominent, brownish dots; flesh white, semi-fine and semi-breaking; juice not abundant, more or less acid, wanting in sugar, slightly perfumed; second; early Oct.

Louis Van Houte. 1. *Guide Prat.* 108. 1876.

Classed by Messrs. Simon-Louis, Metz, Lorraine, with varieties of doubtful or little merit.

Louis Vilmorin. 1. Leroy *Dict. Pom.* **2**:355, fig. 1869. **2.** Downing *Fr. Trees Am.* 1st App., 128. 1872.

Originated from seed of Beurré Clairgeau about 1863 by André Leroy, Angers, Fr. Tree vigorous, rather spreading, very productive. Fruit medium to large, pyriform, variable, yellow, netted and dotted with russet, sometimes shaded with red; stem short, curved; calyx large, open; basin medium, uneven, russeted; flesh white, half fine, juicy, melting, sweet,

slightly perfumed; good to very good; Dec.

Louise-Bonne. 1. Leroy *Dict. Pom.* **2**:357, fig. 1869. **2.** Hogg *Fruit Man.* 606. 1884.

Merlet the French pomologist was the first to write of this pear in 1675. Fruit above medium, variable in form, ovate-obtuse and swelled in lower half, or long-pyriform, narrowed toward the stalk; skin thick, smooth, bright green changing as it ripens to yellowish-green, strewed with small dots and some markings of russet; flesh greenish-white, coarse, semi-melting, gritty at center, juicy, only slightly saccharine, generally sweetish and deficient in perfume; variable for dessert, but first for compotes; Dec.

Louise Bonne d'Avanches Panachée. 1. Hogg *Fruit Man.* 607. 1884.

A variegated form of Louise Bonne de Jersey, the wood and fruit being marked with golden stripes. It originated as a bud sport.

Louise-Bonne de Printemps. 1. Leroy *Dict. Pom.* **2**:359, fig. 1869. **2.** Downing *Fr. Trees Am.* 804. 1869.

Obtained by M. Boisbunel, Rouen, Fr., and first published in 1857. Fruit above medium, long obtuse-pyriform, regular in contour, mammillate at summit and slightly bossed at base, yellow-ochre, dotted with greenish-gray; flesh semi-fine and semi-melting, white, gritty around the center, very juicy, rarely sugary, slightly sweet and slightly aromatic; grafted on pear and trained on espalier in a good situation it is a pear of high merit; Feb. to Apr.

Louise Bonne Sannier. 1. *Guide Prat.* 110. 1876. **2.** *Cat. Cong. Pom. France* 291, fig. 1906.

M. Sannier, Rouen, Fr., obtained this pear; it was first reported in 1868. Fruit rather small or medium, oval, obliquely obtuse near the stem, dark yellow, touched with bright red; flesh yellow, juicy, melting, remarkably saccharine, sprightly and perfumed; good to very good; Oct. to Dec.

Louise de Boulogne. 1. Barry *Fr. Garden* 317. 1851. **2.** Leroy *Dict. Pom.* **2**:361. 1869.

Described by Barry in 1851 among "new and rare pears, recently introduced, that give promise of excellence." Leroy wrote of it as a seedling of Van Mons. Fruit large, breaking, keeps through the winter.

Louise Dupont. 1. *Ann. Pom. Belge* **2**:59, fig. 1854. **2.** *Mag. Hort.* **23**:301. 1857.

Louise Dupont was the product of one of the last seedlings raised by Van Mons and was harvested for the first time in 1853. Fruit rather large, sometimes of Doyenné form but usually longer and more turbinate; skin thin, dull green passing to golden yellow at maturity, colored with russet-fawn on the sunny side, dotted and marked with fawn all over; flesh white, semi-fine, melting, full of juice, saccharine and well perfumed; first; Oct. and Nov.

Louise d'Orléans. 1. *Horticulturist* **1**:140. 1846. **2.** *Ann. Pom. Belge* **2**:35, fig. 1853.

From seed sown by Van Mons in 1827 at Louvain and first bore fruit in 1843. Fruit medium, oblong-obtuse; skin is of a fine bronzed-green, covered with gray speckles; flesh very white, fine grained and very melting; juice exceedingly rich, sugary and delicious; early Nov.

Louise de Prusse. 1. Leroy *Dict. Pom.* **2**:362, fig.

1869.

Obtained by Van Mons and published by him in September, 1832, but it had already been reported in 1826. Fruit large, turbinate-obtuse, more or less long, considerably swelled toward its lower end; skin thick and rough, yellow-ochre clouded with green, speckled with fine gray dots and stained with light brown around the calyx and stem; flesh white, semi-fine, breaking or semi-breaking, granular at center; juice abundant, very saccharine, acidulous, pleasantly perfumed; second; Sept.

Louison. 1. Prince *Pom. Man.* **1**:86. 1831.

French. Fruit large, oblong and almost conical, terminated obtusely; skin delicate and smooth, sometimes washed on the sunny side, and in other cases pretty deeply tinged with red, speckled with brownish-red dots, the other side being of a beautiful yellow, scattered with specks of russet; flesh very white, melting, full of very pleasant juice, slightly perfumed but not of high flavor; early Oct.

Lovaux. 1. *Ohio Hort. Soc. Rpt.* 48. 1871.

Reported by the Committee on Foreign Fruits of the Ohio State Horticultural Society as a new variety which they recommended. Fruit large to medium, juicy, sweet, melting; good; Sept.

Lübecker Prinzessin Birne. 1. Mathieu *Nom. Pom.* 249. 1889.

Princesse de Lubeck. **2.** *Guide Prat.* 103. 1876.

German; extensively cultivated about Lubeck, Ger. Fruit medium, long-pyriform, beautiful yellow, extensively covered with brilliant crimson; flesh breaking, juicy; good; beginning of Aug.

Lubin. 1. Mas *Pom. Gen.* **7**:187, fig. 579. 1881.

A seedling found by M. Pariset of Curciat-Dongalon, Ain, Fr.; first reported in 1869. Fruit medium, conic-pyriform, regular in its contour, obtuse, having its largest circumference well below its middle; skin fine, delicate, at first a clear and bright green, sprinkled with very numerous round, small, brown dots only very slightly visible on the side of the sun; at maturity the basic green passes to lemon-yellow, with a golden hue on the exposed side; flesh whitish, very fine, melting, juicy, saccharine, slightly vinous, acidulous; good; winter.

Lucie Audusson. 1. *Pom. France* **4**:No. 172, Pl. 172. 1865.

Obtained by Alexis Audusson, Angers, Fr.; first published in 1861. Fruit large, long, nearly cylindrical, obtuse and slightly narrowed toward the stem, grass-green, finely dotted and speckled with fawn-colored russet; flesh yellowish-white, fine or semi-fine, melting; juice abundant, sugary, vinous, delicately perfumed; first; mid-Nov. to end of Dec.

Lucien Chauré. 1. *Guide Prat.* 95. 1895.

Obtained by Arsène Sannier, Rouen, Fr. Tree healthy, vigorous and adaptable for all forms of growth. Fruit medium, grayish-yellow; flesh melting, juicy, fine and sugary; Oct. and Nov.

Lucien Leclercq. 1. Leroy *Dict. Pom.* **2**:366, fig. 1869. **2.** Downing *Fr. Trees Am.* 806. 1869.

From a seed bed made by Van Mons in 1829, but it did not bear fruit till after his death in 1844. Fruit below medium and sometimes rather larger, globular-ovate, regular, rarely bossed, pale yellow on the shaded side and darker yellow where exposed,

dotted all over with fine gray and green spots; flesh white, coarse, semi-melting and juicy, sugary, acidulous, and aromatic, very gritty around the core; second; latter half of Aug.

Lucné Hative. 1. Noisette *Man. Comp. Jard.* **2**:525. 1860.

Tree vigorous and productive. Fruit medium, elongated, pale green; flesh semi-melting, sugary, moderately perfumed; good; Sept.

Lucy Grieve. 1. Hogg *Fruit Man.* 607. 1884.

English; bore fruit first in 1873. Named in honor of the little girl who planted and tended the seed, but died before the tree fruited. Fruit large, oval, rather uneven in outline, bossed around the waist and about the calyx, lemon-yellow, with occasionally a brownish-red blush on the side next the sun, sprinkled with cinnamon-colored dots; flesh white, tender, melting, very juicy and richly flavored; first; Oct.

Luola. 1. *Am. Pom. Soc. Rpt.* 135. 1920.

Said to be a cross between Seckel and Dana Hovey originated by W. C. Eckard, Watervliet, Mich., about 1907. Fruit very small, globular, greenish-yellow, with faint blush, very rich; excellent; Oct.

Lutovka. 1. *Me. Pom. Soc. Rpt.* 62, 63. 1899.

Russian. Introduced in 1882. Fruit large; good; mid-season.

Lutzbirne. 1. Dochnahl *Führ. Obstkunde* **2**:190. 1856.

German, published in 1801. Fruit medium, obtuse-conic, dull greenish-yellow, slightly blushed, strongly dotted, marked with russet, and covered with rusty russet on the sun-exposed side; flesh

granular, gritty near center, semi-melting, aromatic; first for culinary uses; Sept.

Luxemburger Mostbirne. 1. Löschnig *Mostbirnen* 128, fig. 1913.

A perry pear widely distributed in France, Luxemburg, Germany and Austria. Fruit large, globular-oblate, like Bergamot in form, gray-green turning yellow-green when ripe sprinkled with large russet dots and specklings; flesh whitish, coarse-grained, unusually juicy, astringent and sweet flavor; end of Sept.

Lycurgus. 1. *Horticulturist* **12**:365. 1857. **2.** Downing *Fr. Trees Am.* 806, fig. 1869.

Originated with George Hood, Cleveland, Ohio, from seed of Winter Nelis. The tree is productive, and of rather spreading growth. Fruit small, oblong-pyriform, greenish-yellow, much covered with thin brownish-russet, many large grayish dots; flesh yellowish, juicy, melting, sweet, rich, rather aromatic, having some perfume; first, one of the best in quality of late winter pears; Dec. to Feb.

Lydie Thiérard. 1. Downing *Fr. Trees Am.* 806. 1869. **2.** *Guide Prat.* 99. 1876.

Originated from a seed of Crassane by Jules Thiérard, Bethel, Fr. Fruit rather large, Bergamot-shaped, clear green, dotted; flesh fine, very melting, sugary, perfumed; first; Jan. to Mar.

Lyerle. 1. *Am. Pom. Soc. Rpt.* 44. 1897.

Raised by a Mr. Lyerle, Union County, Ill., in 1881 from seed of Bartlett. Fruit medium, pyriform, yellowish-green, with numerous patches of russet; flesh sugary; good; early July, four weeks ahead of Bartlett.

Lyon. 1. Downing *Fr. Trees Am.* 807. 1869.

Originated at Newport, R. I. Fruit medium, oblong-obovate or Doyenné-shaped, yellow, thick and smooth skin, finely dotted, blushed; flesh coarse, a little gritty at core, vinous; very good; Oct.

Mace. 1. *Mass. Hort. Soc. Rpt.* 50. 1860.

Francis Dana showed this among other seedlings of his to the Fruit Committee of the Massachusetts Horticultural Society in 1860. Fruit medium, oval, russet; flesh has something of the honeyed sweetness as well as some external resemblance to Dana Hovey.

Machländer Mostbirne. 1. Löschnig *Mostbirnen* 48, fig. 1913.

An Austrian perry pear. Fruit large, pyriform, green turning to yellowish-green, russeted; flesh granular, green under the skin, subacid; Sept. and Oct.

Mackleroy. 1. *South. Nurs. Cat.* 4. 1921.

This variety, introduced by the Southern Nursery Company, Winchester, Tenn., in 1921, is said to have been brought to Tennessee by Davis Mackleroy from South Carolina over 100 years ago.

McLaughlin. 1. *Mag. Hort.* **8**:62. 1842. **2.** *Ibid.* **13**:251. 1847. **3.** Downing *Fr. Trees Am.* 807, fig. 1869.

In October, 1831, General Wingate of Portland, Me., stated “That a person in Oxford County, many years since raised a number of pear trees from seeds, all of which produced inferior fruit, with the exception of one tree; and from that tree, the scions were taken and engrafted by a Mr. McLaughin, of Scarborough.” Fruit large, obtuse-pyriform; skin

slightly rough, bright cinnamon-russet, tinged with brownish-red on the sunny side, with some traces of a bright yellow ground on the shaded side; flesh yellowish, rather coarse, melting, juicy, rich, sugary; Nov. to Jan.

Macomber. 1. *Rural N. Y.* **44**:263, figs. 145, 146. 1885.

Raised by J. T. Macomber, Grand Isle, Vt. Fruit medium, pyriform, green changing to yellow, blushed; flesh buttery, melting, juicy, sweet; very good; Oct. and Nov.

McVean. 1. *Horticulturist* **9**:340. 1854. **2.** Downing *Fr. Trees Am.* 807. 1869.

Originated in Monroe County, N. Y., about 1850 or earlier. Fruit large, obovate-acute-pyriform, yellow, with nettings and patches of russet, and numerous green and brown dots; flesh coarse, not juicy, or melting, sweet; good; Sept.

Madame Alfred Conin. 1. Leroy *Dict. Pom.* **2**:371, fig. 1869.

Raised by André Leroy, Angers, Fr., in 1867. Fruit medium, turbinate, obtuse, much swelled around central circumference, fairly regular, clear yellow often covered all over with a layer of bronze on which are scattered, uniformly, numerous grayish-brown dots, scarcely visible; flesh whitish, fine, melting, watery, rarely gritty around the center; juice abundant, sugary, with an extremely delicious perfume; first; late Sept.

Madame André Leroy. 1. Leroy *Dict. Pom.* **2**:372, fig. 1869. **2.** Hogg *Fruit Man.* 608. 1884.

Obtained from his seed beds by M. André Leroy at Angers, Fr.: first published in 1862. Fruit medium

to large, long-conic, slightly obtuse, irregular, more or less misshapen, yellowish-green, entirely dotted, especially at its extremities, with small points and slight patches of gray; flesh greenish-white, fine or semi-fine, very melting, slightly granular at center, juicy, sugary, vinous, with a very delicate flavor; first; end of Sept.

Madame Antoine Lormier. 1. *Guide Prat.* 57. 1895.

Obtained by M. Sannier, Rouen, Fr. Tree vigorous and fertile. Fruit medium or large, regular pyriform, yellow, dotted; flesh fine, melting, very sugary; first; Sept. and Oct.

Madame Appert. 1. Leroy *Dict. Pom.* **2**:373, fig. 1869. **2.** Hogg *Fruit Man.* 608. 1884.

Raised by M. André Leroy at Angers, Fr., in 1861. Fruit medium, long pyriform, slightly obtuse, largest circumference around its middle, much reduced at the extremities, especially at the summit, yellow, with gray-russet, and numerous fawn-colored dots on the side of the sun and around the stem; flesh whitish, fine, very melting, rarely gritty, juicy, sugary, with a delicate flavor of almond, acidulous; first; early Oct.

Madame Arsène Sannier. 1. *Guide Prat.* 95. 1895.

Obtained by M. Sannier, Rouen, Fr. Fruit medium to large; flesh sugary, slightly perfumed and of a pleasant flavor; Oct.

Madame Ballet. 1. *Cat. Cong. Pom. France* 292, fig. 1906.

Obtained by M. Ballet, nurseryman at Parenty, Fr., and was placed on the market in 1894. Fruit large, ovate, yellow, dotted with gray, and

brightened with a rose blush on the side next the sun; very good; Jan. to Mar.

Madame Baptiste Desportes. 1. Leroy *Dict. Pom.* **2**:374, fig. 1869. **2.** Hogg *Fruit Man.* 608. 1884.

A seedling from the nurseries of André Leroy at Angers, Fr., which ripened for the first time in 1863. Fruit above medium, globular-ovate, rather regular, often a little bossed about the base; skin rather fine, yellow-ochre, mottled, stained, and dotted with gray-russet; flesh fine or semi-fine, melting, excessively juicy, saccharine, vinous, with a very agreeable flavor; first; early Oct.

Madame Blanchet. 1. *Guide Prat.* 76. 1895.

Fruit medium, greenish-yellow covered with fawn; flesh fine, buttery, of a delicate flavor; good; Oct. and Nov.

Madame Bonnefond. 1. Mas *Le Verger* **3**:Pt. 2, 135, fig. 164. 1866-73.

Obtained in 1848 by M. Bonnefond, Rhône, Fr., and placed on the market for the first time in 1867. Fruit large, like Calebasse in form, often irregular in contour; skin fine, delicate, clear yellow-green, sprinkled with very small points of darker green; flesh white, slightly greenish under the skin, fine, very melting and juicy, delicately perfumed; very good; end of autumn.

Madame Charles Gilbert. 1. *Guide Prat.* 95. 1895.

On trial with Messrs. Simon-Louis at Metz, Lorraine, in 1895. Fruit medium sized, having much in common with Winter Nelis; Jan. to Apr.

Madame Chaudy. 1. *Gard. Chron.* N. S. **18**:211.

1882. **2.** *Cat. Cong. Pom. France* 296, fig. 1906.

Obtained by M. Chaudy at Chaponost, Rhône, Fr., from a seed bed made in 1861. Fruit large, sometimes of the form of the Bartlett, generally turbinate, swelled and bossed in its circumference; skin slightly rough, pale yellow, dotted with gray, reddened on the side next the sun, marbled and washed with clear fawn around the two ends; flesh rather white, granular at center, rather fine, melting, very juicy, saccharine, and agreeably acid and perfumed; very good; Nov.

Madame Cuissard. 1. Leroy *Dict. Pom.* **2**:375, fig. 1869.

Cuissard and Barret, nurserymen at Ecully-les-Lyon, Fr., obtained this variety in 1865 and placed it on the market in 1867. Fruit above medium, oblong and obtuse, swelled at its lower part and generally more enlarged on one side than on the other; skin fine, golden-yellow, sprinkled with large gray dots and some russet markings, and more or less stained with clear brown around the stem; flesh white, semi-fine, melting, gritty at the center; juice deficient; rather savory, but slightly acerb; second; mid-Aug.

Madame Delmotte. 1. *Mass. Hort. Soc. Rpt.* 139. 1871. **2.** Mas *Pom. Gen.* **3**:73, fig. 133. 1878.

Obtained by M. Grégoire, Jodoigne, Bel. Fruit medium, obtuse-pyriform, dull green dotted with greenish-gray; flesh white, or slightly tinted with yellow, very fine, buttery, melting, full of sweet juice, delicately perfumed.

Madame Ducar. 1. Leroy *Dict. Pom.* **2**:376, fig. 1869. **2.** Downing *Fr. Trees Am.* 808. 1869.

This was a posthumous gain of Major Espéren,

Mechlin, Bel., dating from 1846. Fruit medium, globular-ovate, regular in form, slightly undulating around the summit; skin fine, rather dull yellow, finely dotted and streaked with fawn; flesh white, coarse, semi-melting, very gritty; juice sufficient, sugary, sweet, almost without perfume but having a certain delicacy of taste; second; end of Aug.

Madame Duparc. 1. Mas *Pom. Gen.* **4**:149, fig. 267. 1879.

Gained by M. Bessard-Duparc, near Savenay, Fr., and fruited first about 1845. Fruit medium, ovate-obtuse-pyriform, regular in contour; skin rather thick, lively green, speckled with indistinct darker green spots, the green becoming brighter at maturity, a rather dense russet sometimes covering the calyx and the summit; flesh white, coarse, semi-buttery, gritty around the core; juice rather deficient, sugary and only slightly scented; indifferent; Oct. and Nov.

Madame Durieux. 1. Leroy *Dict. Pom.* **2**:377, fig. 1869. **2.** Hogg *Fruit Man.* 609. 1884.

A variety which came from the seed beds of Van Mons but did not fruit till 1845. Fruit medium, globular, rather Bergamot-shaped, grayish or greenish-yellow, covered with patches of thin cinnamon-colored russet, yellowish, semi-fine, very melting, buttery, juicy, sugary, vinous, aromatic; first; Oct.

Madame Élisa. 1. *Ann. Pom. Belge* **4**:31, fig. 1856. **2.** Downing *Fr. Trees Am.* 808, fig. 1869.

Raised in the seed beds of Van Mons and first bore fruit in 1848. Fruit large, obtuse-pyriform, often rather irregular in its upper half, greenish-yellow passing to lemon-yellow at maturity, with numerous small blackish-gray dots; flesh white, a little yellow

next the skin, fine, melting, free from grit, full of rich saccharine juice, vinous; first; Sept. to Nov.

Madame Élisa Dumas. 1. Mas *Pom. Gen.* **5**:19, fig. 298. 1880.

A seedling raised by M. Bonnefoy, near Lyons, Fr. He disseminated it in 1857. Fruit medium, conic-ovate, regular in contour; skin thick, at first whitish-green speckled with grayish-black dots, changing to pale yellow, and more golden on the side next the sun; sometimes stains of rough brown-russet are dispersed over its surface; flesh white, only slightly firm without being breaking, rather gritty around the center, full of sugary juice, vinous and refreshing; handsome and of good quality; Aug.

Madame Ernest Baltet. 1. Baltet *Trait. Cult. Fr.* 317, fig. 208. 1908.

French. Fruit large, obtuse-pyriform, reddish-brown-yellow, with light russet; flesh very fine, melting, very juicy, sugary, sprightly; very good; Sept. and Oct.

Madame Favre. 1. Leroy *Dict. Pom.* **2**:379, fig. 1869.

Obtained by M. Favre, president of the section of Arboriculture of the Agricultural Society of Shalon-sur-Marne, Fr.; it first fruited in 1861. Fruit above medium and often larger, globular surface unequal and bossed; skin rough, greenish-yellow, dotted, streaked, marbled, stained with gray-russet and vermilioned on the cheek next the sun; flesh white, very fine, melting; juice abundant, very sugary, vinous, deliciously perfumed; first; end of Aug.

Madame Flon. 1. *Guide Prat.* 99. 1876.

Published by M. Flon in 1868. Fruit medium,

globular, yellow and gray-russet; flesh very melting and juicy, saccharine, sprightly, perfumed; first; end of Dec.

Madame Grégoire. 1. *Ann. Pom. Belge* **8**:97, fig. 1860. **2.** Downing *Fr. Trees Am.* 809. 1869.

Obtained in 1860 by M. Grégoire, Jodoigne, Bel., and was published the same year. Fruit medium to large, long-oval, obtuse; skin greasy, clear green becoming yellow at maturity, marked with gray-russet, especially around the stem, and some dots of whitish-gray; flesh yellowish-white, fine, melting, very juicy, sugary, vinous, perfumed and acidulous; good or very good; Dec. and Jan.

Madame Henri Desportes. 1. Leroy *Dict. Pom.* **2**:380, fig. 1869. **2.** Hogg *Fruit Man.* 609. 1884.

Raised by Leroy, Angers, Fr.; first fruited in 1863. Fruit large, turbinate, uneven in outline, yellow, covered with russety dots and patches; flesh yellowish-white, very fine and very melting, seldom gritty, very juicy, saccharine, acidulous, with a decided aroma and delicious flavor; excellent; first; Oct.

Madame Loriol de Barny. 1. Leroy *Dict. Pom.* **2**:381, fig. 1869. **2.** *Mass. Hort. Soc. Rpt.* 92. 1872.

Raised by Leroy in 1866 at his nurseries at Angers, Fr., from seed of Bartlett. Fruit large, ovate and nearly cylindrical, always rather irregular, clear yellow clouded with green, more or less streaked and mottled with russet, covered with large, grayish-brown or greenish dots and often stained with fawn around the calyx and stem; flesh yellowish-white, excessively melting and fine, juicy, rarely gritty,

sugary, perfumed, with a tart flavor and a delicate and agreeable after-taste of musk; first; Nov.

Madame Lyé-Baltet. 1. *Cat. Cong. Pom. France* 301, fig. 1906. **2.** Bunyard *Handb. Hardy Fr.* 185. 1920.

Obtained by Ernest Baltet, nurseryman at Troyes, Fr.; placed on the market in 1877. Fruit medium or rather large, turbinate, obtuse, swelled, truncated at base; skin fine, green or yellow-green all over, dotted with russet and touched with fawn; flesh white, fine, melting, juicy, sugary and perfumed; very good; Dec. and Jan.

Madame de Madre. 1. *Guide Prat.* 95. 1895. **2.** *Gard. Chron.* 3rd Ser. **30**:271. 1901.

Sent out by Daras de Naghin, Antwerp, Bel., who raised it from Délices d'Hardenpont, in 1881. Fruit medium, pyriform, rather elongated, contracted at the lower end terminating in an oblique cone at the base, compressed on two sides at the narrow end, rounded at the upper end, citron-yellow lightly speckled with rust-red; flesh amber-white, very delicate, melting, very juicy, sweet, with a pleasant perfume, nutty and rather spicy; very good; Oct.

Madame Millet. 1. Leroy *Dict. Pom.* **2**:382, fig. 1862. **2.** Hogg *Fruit Man.* 610. 1884.

Raised by Charles Millet of Ath, Bel., in 1840. Fruit large, short-obovate or turbinate, rather uneven in its outline; flesh tender, semi-melting, juicy, richly flavored; first; Mar. and Apr.

Madame Morel. 1. *Guide Prat.* 99. 1876.

Published by M. Morel in 1872. Fruit large; flesh very fine, compact, very melting, juicy, sugary, vinous, sprightly; first; Oct. and Nov.

Madame Planchon. 1. *Guide Prat.* 99. 1876.

Belgian. Fruit large or very large, in form similar to Bartlett, golden yellow dotted with russet; flesh granular, very juicy; cooking; end of Oct. and beginning of Nov.

Madame Du Puis. 1. *Rev. Hort.* 147. 1891. **2.** *Cat. Cong. Pom. France* 298, fig. 1906.

A gain of Daras de Naghin, Antwerp, Bel., in 1878. Fruit rather large or large, long, obtuse-pyriform, rounded at lower end, yellow but nearly covered with smooth fawn-russet; flesh very fine, melting, very juicy, sugary, sprightly and perfumed; very good; Dec. to Feb.

Madame de Roucourt. 1. *Guide Prat.* 58. 1895.

Distributed by Daras de Naghin, Antwerp, Bel. Fruit medium to large, yellowish, dotted with dark brown; flesh fine, saccharine, perfumed; good; Oct.

Madame Stoff. 1. *Gard. Chron.* **2**:220. 1887.

Obtained from seed by M. Stoff. Fruit large or medium, regular-pyramidal, olive-green speckled with red; flesh fine, melting, buttery, delicate and brisk in flavor; Feb.

Madame Torfs. 1. *Guide Prat.* 104. 1895.

Described as a new variety and distributed by Daras de Naghin, Antwerp, Bel., in 1895. Fruit medium to large, greenish-yellow, sprinkled with patches of fawn-russet; flesh fine and juicy, white around center, clouded with green toward the skin, very sugary; Oct.

Madame Treyve. 1. Leroy *Dict. Pom.* **2**:383, fig. 1869. **2.** Bunyard *Handb. Hardy Fr.* 185. 1920.

Souvenir de Madame Treyve. **3.** *Pom. France* **2**:No.

63, Pl. 63. 1864.

From seed sown in 1848 by M. Treyve, Trévaux, Fr. Fruit large, obtusely obovate, bossed and always very much swelled around its lower part, greenish-yellow, dotted, streaked, and often touched with fawn on the shaded side, but brilliantly encrimsoned on the side exposed to the sun and dotted on that side with gray; flesh white, semi-fine, melting, very juicy, saccharine, acidulous, with a delicate and fine aroma; first, a delicious dessert pear; Sept.

Madame Vazille. 1. Leroy *Dict. Pom.* **2**:384, fig. 1869. **2.** Hogg *Fruit Man.* 610. 1884.

From the seed beds of M. Leroy, Angers, Fr.; first fruit in 1866. Fruit above medium, conic-obtuse, fairly regular in outline but always having one side larger than the other; skin thick, somewhat uneven, bronzed all over, sprinkled with dots widely apart and only slightly visible; flesh whitish, fine, melting or semi-melting, very juicy, saccharine, vinous, having a very pleasant flavor; first; Sept.

Madame Verté. 1. Leroy *Dict. Pom.* **2**:385, fig. 1869.

Origin uncertain, but it was first sent out by M. de Jonghe, Brussels, Bel., and then extensively propagated in France. Fruit medium, globular-ovate, irregular, yellowish-green, much washed with brown-fawn and speckled with small ashen-gray dots; flesh yellowish, semi-fine, semi-melting, granular at center; juice abundant, sugary, acidulous, with a somewhat savory perfume and after taste of anis; second, variable; from end of Nov. to Jan.

Madame Von Siebold. 1. Guide Prat. 115. 1876. **2.** *Cornell Sta. Bul.* **332**:485. 1913.

Japan. The following description was made on

the grounds of Messrs. Simon-Louis Bros., Metz, Lorraine: "Madame Von Siebold.—Fruit very large, rounded, a little narrow toward the cavity, where it is angular; truncated at the base and indented at the circumference.... Skin rather smooth, of a pretty brown color, dotted with large gray specks which are very regular and very apparent. Flesh white, slightly yellowish, medium fine, crisp, juicy, sweet, perfumed like quinces, almost eatable raw. The most beautiful of the Japanese—Simon-Louis Frères."

Madeleine d'Angers. 1. Leroy *Dict. Pom.* **2**:386, fig. 1869.

From the environs of Segré or of Beaupreau, districts in the same department (Maine), where it has been generally grown for 150 years. Fruit medium and sometimes below, conic and very elongated, somewhat contorted at the upper end, grass-green passing to greenish-yellow on the part near the stalk and dotted with gray-russet; flesh white, semi-fine or coarse, rather melting, watery and gritty; juice abundant, sugary, more or less acid, and only slightly perfumed; third; end of July.

Mademoiselle Blanche Sannier. 1. *Guide Prat.* 96. 1895.

A French variety. Fruit large, oblong-pyriform; flesh fine, melting, perfumed, juicy; Oct.

Mademoiselle Marguerite Gaujard. 1. *Guide Prat.* 104. 1895.

Obtained by M. Gaujard at Ghent, Fr.; described as a new variety in 1895. Fruit oblong, rather gourd-shaped in form, covered with gray-russet and slightly blushed on the exposed side; flesh melting, of a sprightly taste, perfumed; Jan. to Mar.

Mademoiselle Solange. 1. *Jour. Hort.* N. S. **15**:120. 1888.

Described by the Fruit Committee of the Royal Horticultural Society of England in 1887 as a new variety. Fruit small, nearly globular, green, juicy and of good flavor.

Magherman. 1. *Guide Prat.* 110. 1876.

Tree very vigorous, beautiful in aspect and extremely fertile. Fruit large or very large, long-pyriform, regular in outline, yellow streaked with carmine; flesh yellowish, excessively melting and very juicy, sugary and having an exquisite perfume; first; second half of Sept.

Magnate. 1. Hogg *Fruit Man.* 610. 1884. **2.** Bunyard *Handb. Hardy Fr.* 186. 1920.

A seedling raised by Rivers of Sawbridgeworth, Eng., from Louise Bonne de Jersey prior to 1880. Fruit large, obtuse-pyriform, even and symmetrical in outline, yellow covered with rather dark brown-russet, thickly strewed with large russet freckles, blushed and streaked with crimson; flesh yellow, tender, melting, rather gritty at the core, richly flavored, and with a slight perfume of rose-water; very good; Oct. and Nov.

Magnolia. 1. *Am. Pom. Soc. Cat.* 41. 1909. **2.** *Cornell Sta. Bul.* **332**:484. 1913.

An oriental hybrid which originated in southern Georgia. Fruit large, globular to pyriform, smooth, yellowish-russet, with numerous irregular dots; flesh white, crisp, tender, juicy, mild, subacid; fair; “three or four weeks later than Kieffer in the South.”

Malconnaître d’Haspin. 1. Downing *Fr. Trees Am.* 810. 1869.

Tree vigorous, hardy and productive. Fruit large, globular-obovate, dull yellow, with brownish-red cheek, stippled with coarse dots, and russeted at the calyx; flesh juicy, tender, and melting, rich, subacid, perfumed; Oct. and Nov.

Malvoisie de Landsberg. 1. Mas *Pom. Gen.* **3**:171, fig. 182. 1878.

Obtained by Judge Burchardt, Landsberg, Brandenbourg, Ger. Fruit rather large, pyriform, more or less swelled, even in contour, but often irregular in form; skin somewhat firm, at first water-green, dotted with gray, the green changing to yellow and the side next the sun being at maturity slightly washed with rosy red; flesh white, rather fine, buttery, juicy, sweet, acidulous, having a sprightly and somewhat musky flavor; good; Oct.

Manchester. 1. Downing *Fr. Trees Am.* 810. 1869.

Originated in Providence, R. I. Fruit medium, obovate-pyriform, yellow, with traces and numerous dots of russet; flesh white, moderately juicy, semi-melting, sweet, agreeable; good; Oct.

Mandelblättrige Schneebirne. 1. Dochnahl *Führ. Obstkunde* **2**:199. 1856.

A French wilding; published 1810. Tree dwarf. Fruit small, globular-turbinate, green, smooth; flesh firm, astringent; winter.

Manning. 1. *Mass. Hort. Soc. Rpt.* 43. 1866.

A seedling raised by S. A. Shurtleff of Brookline, Mass. Fruited in 1866. Fruit large, obovate, yellow with russet streaks and dots; flesh fine-grained, white, juicy, with a rich, pleasant flavor; first; Sept.

Mannsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:187.

1856.

Württemberg, Ger., 1830. Classed among the Pound pears or Libralia. Fruit large, globular-turbinate, dull green changing to yellowish-green, blushed, both ends covered with russet, rusty dots; third for table, first for kitchen; Nov. and Dec.

Mansfield. 1. Downing *Fr. Trees Am.* 811. 1869.

A native variety of uncertain origin. Fruit medium, globular-oblate, yellowish-green, with considerable russet and many green and brown dots; flesh whitish, coarse, buttery, melting, sweet, a little astringent; good; Sept.

Mansuette. 1. Duhamel *Trait. Arb. Fr.* **2**:220, Pl. LVIII, fig. 1. 1768. **2.** Hogg *Fruit Man.* 611. 1884.

Solitaire. **3.** Christ *Handb.* 534. 1817.

Origin unknown. Fruit large, long-obovate, irregular, obtuse, pale green, spotted with brown and much covered with the same color on the shaded side, and tinged with red on the side exposed to the sun; flesh white, semi-melting, moderately fine, inclined to grow soft, juicy, pleasantly acid and well flavored; a dessert pear; Sept. and Oct.

Mansuette Double. 1. Leroy *Dict. Pom.* **2**:388, fig. 1869.

This French cooking pear was first described in 1805. Fruit sometimes considerable, rather variable in form, often conic, obtuse, very swelled in the lower part and slightly bossed, sometimes very long ovate having one side near the base larger than the other, dark yellow, much covered with cinnamon-russet and large dots of ashy gray; flesh greenish-

white, coarse, juicy, semi-breaking or breaking, very gritty at the core; juice abundant, deficient in sugar, wanting in perfume, often too acid; second; Oct. to Dec.

Marasquine. 1. Mas *Le Verger* **2**:123, fig. 1866-73. **2.** *Guide Prat.* 99. 1876.

Raised by Major Espéren, Mechlin, Bel. Fruit medium, regular-pyriform, tender green, sprinkled with grayish dots, golden at maturity; flesh very white, fine, buttery, melting, slightly gritty at the center; juice sufficient, having a characteristic perfume; end of Aug.

March Bergamot. 1. Downing *Fr. Trees Am.* 811. 1869. **2.** Hogg *Fruit Man.* 611. 1884.

Raised by T. A. Knight, President of the Horticultural Society of London. Fruit small or medium, globular, green or yellowish-brown, partially covered with russet; flesh yellowish-white, buttery, slightly gritty at the core, but very rich; in Europe it is a dessert pear of high merit; in this country, however, it seems to be of small worth; Mar. and will keep later.

Maréchal de Cour. 1. Leroy *Dict. Pom.* **2**:390, fig. 1869. **2.** Hogg *Fruit Man.* 612. 1884.

A seedling of Van Mons of which he sent grafts to Alexandre Bivort, five months before his death, in April, 1842. Fruit large, sometimes very large, oblong-pyriform or obtuse-turbinate, one side always smaller than the other, thickly encrusted with russet so that but little of the yellow ground is visible; flesh white, semi-fine, melting, gritty at center, extremely juicy, sugary, vinous, perfumed; first; Sept. to Nov.

Maréchal Dillen. 1. Leroy *Dict. Pom.* **2**:391, fig.

1869. **2.** Hogg *Fruit Man.* 612. 1884.

Raised by Van Mons in 1818 and was published by him in 1820. Fruit very large, obtuse-obovate, yellowish-green, mottled with patches and dots of brown-russet; flesh white, fine, melting, juicy, very saccharine, having a very agreeable flavor of vinegar and musk; first, an excellent dessert pear; Oct. and Nov.

Maréchal Pelissier. 1. Downing *Fr. Trees Am.* 523. 1857. **2.** Leroy *Dict. Pom.* **2**:393. 1869.

This pear was raised by M. Flon, Senior, the well-known horticulturist, of Angevin, Fr., in 1845. Fruit medium, ovate, yellow, blushed with red on the side next the sun; flesh tender, juicy; Sept. and Oct.

Maréchal Vaillant. 1. Leroy *Dict. Pom.* **2**:393, fig. 1869. **2.** Hogg *Fruit Man.* 612. 1884.

A seedling of M. Boisbunel of Rouen, Fr., gained in 1864. Fruit very large, obovate, uneven in outline, yellowish-green, mottled and dotted with russet; flesh whitish, rather fine, semi-melting; juice sufficient, sugary, vinous, richly flavored and musky; an excellent pear; mid-Dec. to end of Jan.

Margarethenbirne. 1. Liegel *Syst. Anleit.* 119. 1825. **2.** Dochnahl *Führ. Obstkunde* **2**:30. 1856.

German. Reported in 1789. Fruit small, turbinate, greenish-yellow and heavily dotted with green, seldom blushed; flesh semi-breaking, juicy and aromatic; third for dessert, first for kitchen and market; mid-July.

Marguerite d'Anjou. 1. Leroy *Dict. Pom.* **2**:394, fig. 1869.

M. Flon, Angers, obtained this from a seedling in

1863. Fruit above medium, irregular-ovate, and bossed, more enlarged on one side than on the other and often slightly contorted, clear yellow, slightly tinted with pale rose on the side next the sun; flesh white, fine, dense, melting, watery, free from grit; juice abundant, highly saccharine, acidulous, possesses a delicious flavor recalling the perfume of the violet; first; Oct.

Marguerite Chevalier. 1. *Guide Prat.* 99. 1876.

Fruit medium, nearly spherical, almost entirely covered with fawn-russet; flesh fine, melting, juicy, sprightly; good; end of autumn.

Marguerite Marillat. 1. *Guide Prat.* 45. 1895. **2.** Bunyard *Handb. Hardy Fr.* 186. 1920.

Similar to Souvenir du Congrès but of brighter golden hue, obtained by M. Marillat, Craponne, near Lyons, Fr., 1874. Fruit large, pyriform-turbinate, pale yellow touched with fawn-russet, blushed with red on the side next the sun, sometimes a rich golden yellow at maturity; flesh yellowish-white, semi-fine, very juicy, saccharine, acidulous, aromatic, slightly musky, very rich; second; early Sept.

Maria. 1. *Guide Prat.* 96. 1895.

Sent out by M. Daras de Naghin, Antwerp, Bel. Fruit rather large, oblong-ovate; flesh yellowish, very agreeable; Feb. and Mar.

Maria de Nantes. 1. *Ann. Pom. Belge* **2**:39, fig. 1854. **2.** Downing *Fr. Trees Am.* 812. 1869.

Raised by M. Garnier near Nantes, Fr., and reported in 1853. Fruit nearly medium, globular-turbinate or oval-turbinate, greenish-yellow covered with fawn-russet; flesh fine, buttery, melting; juice saccharine, highly perfumed, and acidulous; first;

Oct. to Dec.

Maria Stuart. 1. Dochnahl *Führ. Obstkunde* **2**:69. 1856.

Belgian, 1851. A Van Mons seedling. Fruit large, conic, bent, with unequal sides, lemon-yellow, covered densely with gray dots, lightly russeted; very good for all purposes; Oct.

Marianne de Nancy. 1. Leroy *Dict. Pom.* **2**:396, fig. 1869. **2.** Downing *Fr. Trees Am.* 812. 1869.

A seedling of Van Mons who sent cuttings of it a few days before his death to M. Millot, a pomologist at Nancy, Fr. Fruit medium, obtuse-turbinate, very regular and even in contour, grass-green, stained with brown-russet; flesh whitish, fine, melting or semi-melting; juice abundant, very sugary, acidulous; second, though sometimes first when its flesh is very melting and its juice full of flavor; mid-Aug.

Marie Benoist. 1. Leroy *Dict. Pom.* **2**:397, fig. 1869. **2.** Bunyard *Handb. Hardy Fr.* 187. 1920.

Obtained from seed by Auguste Benoist, Brissac, Maine-et-Loire, Fr., in 1853. Fruit large, turbinate, very irregular, obtuse and mammillate at the summit, globular at the base and generally much more enlarged on one side than on the other, clear green, dotted and veined with russet, stained with fawn especially around the calyx and stem; flesh white, fine, melting, a little gritty; juice abundant, saccharine, vinous, delicately perfumed; first; Dec. to Feb.

Marie Guisse. 1. Leroy *Dict. Pom.* **2**:398, fig. 1869. **2.** Hogg *Fruit Man.* 613. 1884.

Grown from seed of St. Germain in 1834, near Metz, Lorraine. Fruit medium, obovate-oblong-

pyriform, surface uneven, yellow, with shades of red in the sun, and large, dull dark specks; flesh yellowish-white, granular, melting, sweet, vinous; Dec. to Feb.

Marie Henriette. 1. *Guide Prat.* 96. 1895.

Sent out by Daras de Naghin, Antwerp, Bel. Fruit small or medium, globular; flesh granular, very juicy and sugary; first; Oct.

Marie Jallais. 1. *Guide Prat.* 100. 1876.

Obtained by Jules Buneau, 1868. Fruit medium, form variable; flesh melting, juicy, very sugary and perfumed, of a sprightly flavor; first; Oct. to Dec.

Marie Louise Nova. 1. Downing *Fr. Trees Am.* 400. 1845. **2.** *Ibid.* 813. 1869.

Sent by Van Mons to Mr. Manning, and though in some seasons very good, it cannot compare with Marie Louise. Fruit medium, regular-acute-pyriform, yellow, with a brownish-red cheek; flesh at first melting, juicy, but quickly decays; good; end of Sept.

Marie Louise d'Uncle. 1. *Gard. Chron.* 1060, 1179. 1865. **2.** Bunyard *Handb. Hardy Fr.* 187. 1920.

Marie Louise d'Uncle is a seedling of Marie Louise raised by M. Gambier, a neighbor and contemporary of Van Mons. It produced its first fruits in 1846. Fruit rather large, pyriform, pale cinnamon-colored russet, rather similar to Marie Louise; flesh very fine, very melting, buttery, saccharine, very juicy and richly flavored; good to very good; Sept. and Oct.

Marie Mottin. 1. *Guide Prat.* 96. 1895.

On trial with Messrs. Simon-Louis at Metz, Lorraine, in 1895. Fruit large; flesh melting; first; Oct.

Marie Parent. 1. Leroy *Dict. Pom.* **2**:401, fig. 1869. **2.** Downing *Fr. Trees Am.* 814. 1869.

Raised by Bivort, director of the nurseries of the Society Van Mons at Geest-Saint-Rémy, Bel., from a seed bed formed in 1844 from seeds of the last generation of Van Mons' seedlings. Fruit above medium, oblong, more or less cylindrical and bossed, or turbinate, very much swelled at the base and bossed at either extremity; skin fine ochre or golden yellow, dotted and stained with russet, washed with brick-red on the cheek next the sun; flesh white, fine, melting or semi-melting, containing numerous small grits around the core, juicy, sugary, vinous, perfumed; first; Oct., often till Dec.

Marietta. 1. *Cornell Sta. Bul.* **332**:484. 1913.

An oriental hybrid. Tree is said to be inclined to grow tall, with a single main stem. Fruit light yellow, with red blush; Oct.

Mariette de Millepieds. 1. Leroy *Dict. Pom.* **2**:403, fig. 1869. **2.** Hogg *Fruit Man.* 614. 1884.

A very late pear which came from the seed beds of Maurice Goubalt, a nurseryman in the suburbs of Angers, Fr., fruiting after his death, in 1854. Fruit large, ovate, irregular and bossed or turbinate, slightly obtuse, one side larger than the other, rough to the touch, rather thick, yellowish-green, washed with dark russet on the cheek next the sun; flesh white, very fine, melting, juicy and scented, refreshing, sugary, acidulous, having an exquisite flavor; first; Mar. often till May.

Markbirne. 1. Dochnahl *Führ. Obstkunde* **2**:103. 1856.

Mid-Germany, 1797. Fruit fairly large,

ventriculous, faint light green turning to pale green, often blushed and dotted with greenish-gray specks and marked with russet; flesh white, fairly soft, buttery, melting, full of flavor; very good for the table and good for culinary purposes; Dec. and Jan.

Marksbirne. 1. Dochnahl *Führ. Obstkunde* **2**:162. 1856.

Thuringia, Ger., 1799. Fruit small, globular, flattened, greenish-yellow, speckled with yellowish-gray and greenish dots; flesh firm, breaking, juicy and acidulous; first for household; Sept.

Marmion. 1. Downing *Fr. Trees Am.* 814. 1869. **2.** Mas *Pom. Gen.* **3**:29, fig. 111. 1878.

According to the Bulletin of the Société Van Mons this was either obtained or propagated by M. Bivort in Belgium. Fruit nearly medium, turbinate, dull water-green, sprinkled with numerous and rather large brown spots, the basic green passing at maturity to lemon-yellow and warmly golden on the side of the sun; flesh white, rather fine, breaking, fairly juicy, saccharine and sprightly; dessert; Sept.

Marquise. 1. Duhamel *Trait. Arb. Fr.* **2**:221, Pl. XLIX. 1768. **2.** Hogg *Fruit Man.* 614. 1884.

Of French origin. Merlet described it in 1675 in his *Abrégé des bons fruits*. Fruit above medium, turbinate, globular in the lower part, conic and slightly obtuse in the upper, bright green changing to yellowish, with a brownish tinge on the side next the sun, thickly covered with dots, which are green on the shaded side and brown or gray on the other; flesh white, semi-fine, breaking, full of sugary juice, slightly acid and musky, and very delicate; a good dessert pear; Nov. and Dec.

Marquise de Bedman. 1. Downing *Fr. Trees Am.* 814. 1869.

Foreign. Fruit medium or below, roundish-pyriform, pale greenish-yellow, with a few traces and patches of russet and many green and brown dots; flesh white, sweet, rather firm; good; Sept.

Marsaneix. 1. Leroy *Dict. Pom.* **2**:406, fig. 1869.

A cooking pear of no particular merit which originated at the market town of Marsaneix, Department of Dordogne, Fr., and was cultivated on the farms of that country in the middle of the eighteenth century. Fruit small, globular, regular in form; skin rough, entirely russeted, dotted with yellowish-gray; flesh whitish, semi-fine, breaking, scented, gritty; juice abundant but deficient in sugar, insipid; second and for cooking only; Jan. and Feb.

Marshall. 1. Downing *Fr. Trees Am.* 3rd App. 179. 1881.

Said to have originated on the farm of William Marshall, Cambridge, N. Y., some years previous to 1881. Fruit medium, globular, inclining to obtuse-pyriform, yellow, netted and patched with russet over nearly the whole surface and thickly sprinkled with russet dots; flesh white, semi-fine, juicy, semi-melting, slightly vinous and slightly aromatic; very good; end of Sept.

Marshall Wilder. 1. Leroy *Dict. Pom.* **2**:407, fig. 1869. **2.** *Horticulturist* **27**:150. 1872.

Originated in the nurseries of M. Leroy at Angers, Fr., in 1866. Fruit large, long-conic, very irregular, somewhat like Calebasse in form, more or less bossed; skin rough, clear green slightly yellowish, dotted with gray-russet, marbled with brown and

scaly; flesh yellowish-white, fine or semi-fine, juicy, very melting, sugary, deliciously perfumed and refreshing; first; Oct. and Nov.

Martha Ann. 1. *Mag. Hort.* **16**:547. 1850.

A seedling raised by Francis Dana, Roxbury, Mass. Fruit medium or below, obovate-obtuse-pyriform, yellowish-green, with patches and dots of russet; flesh coarse, juicy, astringent; poor; Oct.

Martin. 1. *Kans. Hort. Soc. Rpt.* 171. 1886.

Originated in Cowley, Kans., and reported as a new fruit and a good substitute for the Vicar of Winkfield. Fruit medium to large, oblate-pyriform, irregular, greenish changing to yellowish-white, smooth; flesh firm, fine grained, buttery, juicy; fair; Jan.

Martin-Sec. 1. Leroy *Dict. Pom.* **2**:408, fig. 1869. **2.** Hogg *Fruit Man.* 615. 1884.

Trockener Martin. **3.** Löschnig *Mostbirnen* 216, fig. 1913.

Hogg tells us that this and the Martin Sire are among the earliest varieties known to have been grown in England, for they are mentioned among the fruits delivered into the Treasury by the fruiterer of Edward I in 1292. In 1530 Charles Estienne of Paris wrote of it as being cultivated in France and affirmed the Pears of Saint Martin were so named because their time of ripening coincided with the Festival of that Saint. Again, in 1675 Merlet in his *Abrégé des bons fruits* spoke of the Martin-Sec of Provins or of Champagne. Fruit medium or above, long-pyriform-obtuse, regular in form, yellowish and russeted, dotted with gray points and extensively washed with carmine on the face exposed to the sun; flesh

whitish, semi-fine, very breaking, rather dry, but sweet and perfumed, very gritty when grafted on quince; third; mid-Nov. to Feb.

Martin-Sire. 1. Duhamel *Trait. Arb. Fr.* **2**:145, Pl. XIX, fig. 5. 1768. **2.** Leroy *Dict. Pom.* **2**:410, fig. 1869. **3.** Hogg *Fruit Man.* 615. 1884.

This pear, sometimes known as *Lord Martin Pear*, was grown in England in the thirteenth century. By Claude Saint-Étienne in 1628 it was mentioned under two of its most ancient names, Martin-Sire and *Ronville*. In the eighteenth century Mayer in the *Pomona franconica* said the name Martin-Sire which was the most generally recognized of its many names originated from a former Lord of Ronville whose name was Martin. Fruit medium, pyriform, obtuse and very regular; skin fine, smooth and shining, bright green changing to a fine deep yellow, dotted and marked with fawn, carmined on the side next the sun; flesh whitish, semi-fine, breaking, fairly juicy, sweet, perfumed and often with an after-taste of musk; more fit for stewing than dessert; Dec. to Feb.

Marulis. 1. *Mag. Hort.* **9**:388. 1843. **2.** Elliott *Fr. Book* 397. 1854.

Foreign. Fruit small, globular, greenish-yellow; poor; Sept.

Mary (Case). 1. Downing. *Fr. Trees Am.* 815. 1869

Originated in the grounds of William Case, Cleveland, Ohio. Fruit small to medium, globular-pyriform, greenish-yellow, slight blush in the sun and many minute brown dots; flesh white, juicy, almost buttery, sweet and acid; very good; last of July.

Mary (Van Mons). **1.** Leroy *Dict. Pom.* **2**:411, fig. 1869.

A seedling obtained by Van Mons, which gave its first fruit at Brussels about the year 1818. Fruit medium and often above medium, ovate, obtuse, rather regular but generally a little depressed on one side at the calyx, yellow-ochre stained with fawn-brown around the stem and sprinkled with light marblings and large dots of green and russet, very numerous around the base; flesh whitish, very fine, melting; juice very abundant, sugary, with a vinegary flavor both delicate and refreshing; first; mid-Oct.

Mascon Colmar. 1. Dochnahl *Führ. Obstkunde* **2**:106. 1856.

Originated from seed at Nassau, Ger., 1825. Fruit medium, obtuse-conic, distorted in form, light green turning yellowish-green at maturity, free from any red blush, but much russeted and dotted; flesh white, buttery, melting, juicy, full of flavor; good for dessert and culinary purposes; Feb.

Masselbacher Mostbirne. 1. Dochnahl *Führ. Obstkunde* **2**:193. 1856.

A perry pear. Württemberg, Ger., 1847. Fruit small, almost a sphere, green turning to yellow, much covered with russet; flesh firm, granular, acidulous; very good for perry and good for household use; end of Sept. and early Oct.

Masuret. 1. Baltet *Cult. Fr.* 374. 1908.

One of the best French perry pears suitable for commercial and amateur growers; good for the production of sparkling perry; juice clear and very full of perfume; end of Nov.

Mather. 1. *Am. Pom. Soc. Rpt.* 82. 1856. **2.** Downing

Fr. Trees Am. 815. 1869.

The Mather pear originated with John Mather, Jenkintown, Pa., from seed planted by him about 1810. Fruit below medium, obovate, yellow, with occasionally a red mottled cheek and russeted at the insertion of the stem; flesh rather coarse, buttery, of delicate flavor and agreeable; good; Aug.

Mathilde. 1. Dochnahl *Führ. Obstkunde* **2**:55. 1856.

A Van Mons seedling, 1852. Fruit medium, ovate, greenish changing to greenish-yellow, blushed, and speckled with gray dots; flesh semi-melting, granular, sweet, vinous; second for dessert, first for kitchen and market purposes; end of Aug. for 14 days.

Mathilde Gomand. 1. *Guide Prat.* 100. 1876.

Published by Grégoire, Jodoigne, Bel. Fruit medium; skin russeted; flesh melting; first; Jan.

Mathilde Recq. 1. *Guide Prat.* 96. 1895.

On trial with Messrs. Simon-Louis, at Metz, Lorraine, in 1895. Tree vigorous and fertile. Fruit, flesh fine, very saccharine and highly perfumed; Nov.

Mathilde de Rochefort. 1. *Guide Prat.* 96. 1895.

On trial with Messrs. Simon-Louis at Metz, Lorraine, in 1895. Tree vigorous, forming good pyramids. Fruit small, ovate, covered with russet; flesh fine, melting, very juicy and sugary; Dec.

Matou. 1. Leroy *Dict. Pom.* **2**:414, fig. 1869.

A variety, known also as *Chat-Grillé* and *Chat-Rôti* in France and which must not be confounded with the *Chat-Brûlé*, already described, which ripens in December. Its origin is unknown. Fruit medium, obtuse-pyriform and enlarged around central circumference, golden-yellow, dotted and marbled

with gray-russet, washed with carmine on the face exposed to the sun; flesh whitish, semi-fine, breaking, watery, very granular at the center; juice rather abundant, rarely very saccharine, astringent, almost devoid of perfume; third; mid-Aug.

Matthews. 1. *Am. Pom. Soc. Rpt.* 82. 1903. **2.** *Hopedale Nurs. Cat.* 17. 1913.

Brought from New Jersey about 1835 by a Mr. Chiever and planted at Delavan, Ill. Tree long-lived, a late bearer. Fruit medium to large, apple-shaped, green turning yellow, sweet, juicy; Oct. to Feb.

Maud Hogg. 1. *Jour. Hort.* **20**:30. 1871. **2.** Hogg *Fruit Man.* 615. 1884.

Raised by John Mannington, Uckfield, in the Weald of Sussex, Eng.; bore fruit in 1871 for the first time. Fruit above medium, oblong-obovate; skin entirely covered with a crust of warm brown-russet like that of the Beurré Gris, and has a slight orange glow on the side exposed to the sun, very much like the Chaumontel, no yellow or ground color visible; flesh yellowish-white, tender and buttery, very juicy, sweet, richly flavored; a dessert pear of the first quality; Oct. to Dec.

Maude. 1. *Guide Prat.* 100. 1876.

A French perry pear abundantly cultivated in the Haute-Savoie, Fr. Fruit medium, globular, grayish-green washed with red; flesh coarse, remarkably juicy.

Maurice Desportes. 1. Leroy *Dict. Pom.* **2**:415, fig. 1869.

This came from the seed beds of M. André Leroy, Angers, Fr., and first fruited in 1863. Fruit medium, oblong-conic, yellow, dotted with gray, blushed on

the sunny side; stem long, rather stout, continuous with the fruit; calyx small, open, in a large cavity; flesh white, rather fine and rather melting, slightly granular, juicy, sweet; first; Sept.

Mausebirne. 1. Dochnahl *Führ. Obstkunde* **2**:138. 1856.

Hanover, Ger., 1852. Fruit medium to large, variable in form, distorted, bossed; skin fine, greenish turning to yellow when ripe, almost entirely covered with cinnamon-russet, sprinkled with green spots; flesh yellowish-white, sweet and scented with rose; first for the table and kitchen use; Oct.

Mayflower. 1. *Mass. Hort. Soc. Rpt.* 44. 1866.

A seedling raised by Dr. Shurtleff, Brookline, Mass., which fruited first in 1863. Fruit "short diameter 2½ inches, long diameter 3 inches; flesh rather dry and firm; skin yellow, with red cheek; keeps soundly without extra care until May. A most prolific bearer. Short pyriform."

Maynard. 1. Downing *Fr. Trees Am.* 52. 1857. **2.** *Ibid.* 815. 1869.

Origin unknown but thought to have been first grown in Lancaster County, Pa. Fruit medium, obovate-pyriform, yellow with russet dots and a crimson cheek; flesh white, juicy and sugary; moderately good; end of July.

Mayr frühzeitige Butterbirne. 1. Dochnahl *Führ. Obstkunde* **2**:113. 1856.

Reported at Gratz, Styria, Austria, 1833. Fruit medium, turbinate-pyriform, uniformly light yellow, slightly russeted on the side next the sun, often with no russet; flesh white, soft, melting, full of flavor,

keeps well; first for dessert, good for culinary use and market; Sept. and Oct.

Max. 1. *Am. Pom. Soc. Rpt.* 73. 1895.

A seedling of Flemish Beauty grown in Ohio. Fruit medium, globular-pyriform, yellow brightly blushed, flavor vinous, subacid; good; Sept. in Ohio.

Mecham. 1. *Am. Pom. Soc. Rpt.* 195. 1867.

A seedling pear reported from St. George, Utah, in 1867. Fruit very large, bright green, ripens in Oct.

Medaille d'Été. 1. *Guide Prat.* 100. 1876.

On trial with Messrs. Simon-Louis of Metz, Lorraine, in 1876. Fruit large, ovate-pyramidal, lemon-yellow; flesh semi-breaking, very juicy, highly perfumed; Aug.

Medofka. 1. *Can. Hort.* **17**:292. 1894.

Russian. Fruit very small, conical, clear yellow; flesh very melting, agreeable.

Meissner Grossvatersbirne. 1. Dochnahl *Führ. Obstkunde* **2**:34. 1856.

Reported to be of Saxon origin, 1833. Fruit small, turbinate, almost entirely covered with light brown-russet, and sprinkled with round red spots; flesh juicy, semi-melting, having a strong aroma of cinnamon.

Meissner Hirschbirne. 1. Dochnahl *Führ. Obstkunde* **2**:7. 1856.

Saxony, 1803. Fruit medium, conic, bossed, pale light green changing at maturity to light lemon-yellow, often washed extensively with dark blood-red, numerous reddish dots, scentless; flesh breaking, juicy, aromatic; first for household and market; Aug.

Meissner langstielige Feigenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:167. 1856.

Saxony, 1805. Fruit medium, obtuse-pyriform, ventriculous and flat, crooked, somewhat uneven, light green changing to yellowish-green, often blushed with dark red, without dots, marked with russet; flesh yellowish-green white, coarse-grained, sweet, firm, breaking; third for dessert, first for kitchen; Oct.

Meissner Liebchensbirne. 1. Dochnahl *Führ. Obstkunde* **2**:167. 1856.

German, chiefly found in Saxony. Fruit small, globular-ventriculous-conic; skin shining, lemon-yellow, becoming highly polished, strongly dotted with round red spots, often marked with fine russet on the side next the sun; flesh yellowish-white, coarse-grained, firm, breaking, wanting in juice; third for the table, first for kitchen and market.

Meissner Zwiebelbirne. 1. Dochnahl *Führ. Obstkunde* **2**:34. 1856.

Saxony, 1833. Fruit small, globular, light yellow, speckled with numerous fine russety spots; flesh often melting, with musky aroma, fine-grained; first for table and very good for culinary purposes; end of Aug. for three weeks.

Mélanie Michelin. 1. Mas *Pom. Gen.* **6**:55, fig. 412. 1880.

Gained by M. Boisbunel, Junior, Rouen, Fr. Fruit medium, ovate-pyriform, even in contour; skin rather thick, whitish-green, sprinkled with fairly numerous and rather large green spots, scarcely visible and often absent altogether; when ripe the basic green takes a more yellow tone on the side of the sun, and

in the case of well-exposed fruits is blushed with a very light rosy red; flesh whitish, slightly tinted with green, tender, a little soft, melting, full of sweet juice and delicately perfumed; good; mid-July.

Mellish. 1. Downing *Fr. Trees Am.* 815. 1869.

Fruit below medium, globular-pyriform, pale yellow, netted, patched and dotted with russet; flesh whitish, juicy, melting, sweet, pleasant; good to very good; Oct.

Melon. 1. Knoop *Fructologie* **1**:77, Tab. 1. 1771. **2.** Leroy *Dict. Pom.* **2**:417, fig. 1869.

Of Dutch origin; first described in the Pomology of Knoop in 1766. Fruit medium, typically pyriform, slightly obtuse, regular in outline, sometimes a little uneven and crooked, greenish-yellow when ripe and more or less marked with black, or dark brown, stains, of poor appearance; flesh delicate and gritty, rather succulent and savory but having no particular flavor, not sprightly nor does it justify its name; Aug. and Sept.

Melon de Hellmann. 1. Mas *Pom. Gen.* **5**:83, fig. 330. 1880.

Grown by M. Hellmann, Meiningen, Ger. Fruit large, spherical, even in outline, intense green passing to decided yellow when ripe and warmly golden on the side of the sun, numerous dark green spots; flesh white, coarse, semi-breaking; juice sugary, perfumed and agreeable; second, good for cooking; Sept.

Ménagère Sucrée de Van Mons. 1. Mas *Pom. Gen.* **3**:127, fig. 160. 1878.

A seedling of Van Mons who distributed it without name. Fruit medium, conic-turbinate; skin

thick, at first very clear green sprinkled with gray dots, numerous, very small but clearly visible; towards maturity the green changes to brilliant lemon-yellow and warmly golden on the side next the sun; flesh whitish, semi-fine, semi-buttery and distinctly perfumed with clove; Oct.

Mendenhall. 1. *Ia. Hort. Soc. Rpt.* 88. 1900.

Mentioned as one of the "newer" varieties of pears, having given its first ripe specimens on July 5th, 1900. Fruit small, pyriform, yellow, much better in quality than Early Harvest.

Meresia Nevill. 1. Hogg *Fruit Man.* 616. 1884.

A seedling of John Mannington, Uckfield, Sussex, Eng.; first fruited in 1872. Fruit below medium, roundish-obovate or oval, even and regular in outline, entirely covered with thick, dark-brown russet; flesh semi-melting, crisp, juicy, sweet, with a rich vinous flavor; an excellent dessert pear; Dec. and Jan.

Merlet 1. Leroy *Dict. Pom.* **2**:418, fig. 1869.

Merlet came from the nurseries of M. Boisbunel, Rouen, Fr.; it fruited first in 1861. Fruit medium, turbinate, slightly obtuse and bossed; skin smooth, fine and shining, yellowish-green, delicately dotted with gray; flesh greenish-white, semi-fine, melting, watery, granular around the core; juice abundant and saccharine, refreshing and having a highly delicate flavor; first; Aug.

Merriam. 1. Downing *Fr. Trees Am.* 524. 1857. **2.** Thomas *Am. Fruit Cult.* 284. 1867.

Originated at Roxbury, Mass.; popular in Boston in 1867. Fruit large, globular, somewhat flattened at base and crown, smooth, rich yellow, covered with

pale russet around the stem and calyx, and netted with russet all over; flesh yellowish, rather coarse, melting, juicy, sugary, perfumed, very good; Sept. and Oct.

Méruault. 1. Mas *Pom. Gen.* **7**:184, fig. 576. 1881.

Obtained by M. Pariset from a seed bed of the Easter Beurré made in 1856. Fruit medium, ovate, shortened and thick, water-green sown with dots of fawn-brown, more often almost wholly covered with russet of fawn color; on ripening the basic green changes to an intense lemon-yellow, the russet clears, and the side next the sun becomes golden; flesh whitish, fine, buttery, melting, without grit; juice abundant, rich in sugar, delicately perfumed with musk; first; throughout winter.

Merveille de Moringen. 1. *Guide Prat.* 100. 1876.

Originated in the environs of Moringen, Ger., where it is very well thought of. Tree large, very fertile, resisted the phenomenal frost of 1879-1880 in Europe. Fruit small, turbinate, a beautiful lemon-yellow; flesh breaking; for cooking; Oct.

Messire Jean. 1. Duhamel *Trait. Arb. Fr.* **2**:173, Pl. XXVI. 1768. **2.** Hogg *Fruit Man.* 616. 1884.

Of ancient and untraceable origin, but mentioned by Venette, Rochelle, Fr., in 1678 and 1683. Fruit medium, turbinate, sometimes slightly obovate, surface slightly bossed; skin rough, thick, dark green, passing to buff, washed with dark red on the side of the sun, strewed with speckles of darker russet; flesh white, slightly tinged with lemon, rather fine, breaking, juicy, richly saccharine, perfumed, sprightly; good, either for dessert or kitchen use; Nov. and Dec.

Messire Jean Goubault. 1. Leroy *Dict. Pom.* **2**:422, fig. 1869.

This variety dates from 1847 and came from a seed bed of M. Goubault, Angers, Fr. Fruit large or medium, turbinate, more or less globular, often irregular, bossed and much larger on one side than on the other; skin fine and wrinkled and entirely reddened and dotted with large grayish spots; flesh whitish, coarse, semi-melting, always doughy and containing some grit around the core; juice rather scanty, sugary, tart, slightly perfumed and very agreeable; second; Nov.

Michaelmas Nelis. 1. *Gard. Chron.* N. S. **30**:272, fig. 82. 1901. **2.** Bunyard *Handb. Hardy Fr.* 188. 1920.

A seedling from Winter Nelis, which Messrs. Bunyard, nurserymen, Maidstone, Eng., found by chance in a cottage garden, and sent out in 1901. It was given an award of merit at a meeting of the Fruit Committee of the Royal Horticultural Society in October, 1902. Fruit medium, pyriform, very shapely, light greenish skin, somewhat russety; flesh white, melting, very little grit, juicy and of delicious flavor; end of Sept.

Michaux. 1. *Mag. Hort.* **6**:45. 1840. **2.** *Am. Pom. Soc. Rpt.* 239. 1854.

Origin not clear but R. Manning, Salem, Mass., stated that he had received it from a town in Alsace, Fr. Fruit medium, nearly globular-pyriform, light yellowish-green changing to yellow, with a slight blush of red; flesh white, coarse, semi-buttery, juicy, sweet; second; Sept. and Oct.

Mignonne d'Été. 1. *Guide Prat.* 111. 1876.

Obtained by M. Boisbunel, Rouen, Fr., and placed in commerce in 1874. Fruit medium to large, like Calebasse in form; skin glossy and yellow, finely dotted and streaked with gray-russet; flesh fine and melting; Aug.

Mignonne d'Hiver. 1. Downing *Fr. Trees Am.* 816. 1869.

An old Belgian variety. Fruit medium, obovate to oblong-ovate-pyriform, light yellow, mostly covered with thick, rough russet, and veined with crimson and fawn; flesh yellowish, rather granular, juicy, melting, sweet, vinous, aromatic; good; Nov. and Dec.

Mikado. 1. *Guide Prat.* 115. 1876. **2.** *Cornell Sta. Bul.* **332**:449, 484. 1913.

Among the most successful importers of oriental plants was Freiherr V. Siebold who maintained a nursery and botanic garden in Leyden, Holland, during the first half of the nineteenth century. Of the pears imported by him, Mikado was one. This was procured from Von Siebold's nursery in 1873 by Messrs. Simon-Louis, Metz, Lorraine. Fruit rather large, globular-ovoid; skin rough to the touch, yellowish-olive, dotted with gray specks; flesh white, fine, breaking, rather juicy, perfumed, with a pronounced quince flavor, subacid; poor, uneatable raw; end of Sept.

Milan d'Hiver. 1. Leroy *Dict. Pom.* **2**:424, fig. 1869.

A very old pear described in 1675 by Merlet, the French pomologist. Fruit large, globular-turbinate, usually mammillate at the summit and very regular; skin thick and rough to the touch, gray-russet, sprinkled around the stalk with large whitish-gray

dots; flesh yellowish, fine, semi-melting, granular at the core; juice rarely plentiful, only slightly saccharine, acidulous, feebly aromatic; third; Nov. to Jan.

Milan de Rouen. 1. Leroy *Dict. Pom.* **2**:425, fig. 1869. **2.** Hogg *Fruit Man.* 617. 1884.

Gained by M. Boisbunel, Rouen, Fr.; distributed in 1859. Fruit medium, globular, a little conic toward the summit, slightly bossed and one side less swelled than the other; skin thick, dull yellow, dotted and streaked with fawn, much stained with gray around the stem; flesh yellowish, semi-fine, and semi-melting, juicy, rather granular at the core, sugary; juice aromatic, often spoiled by an unpleasant acerbity; second; end of Aug.

Miller. 1. Leroy *Dict. Pom.* **2**:426, fig. 1869.

Raised from seed by André Leroy; first reported in 1864. Fruit medium and sometimes larger; in form it passes from rounded conic to globular, slightly flattened especially at the base; skin rough to touch, bronzed all over, dotted with russet, and dotted and mottled with greenish-yellow; flesh white, fine, melting, a little granular at the core, juicy, sugary, sourish, with a delicious aroma; first; Oct.

Millot de Nancy. 1. Leroy *Dict. Pom.* **2**:427, fig. 1867.

Produced in the nurseries of Van Mons at Louvain; first reported in 1843. Fruit medium, ovate, very obtuse, more or less regular and bossed, often rather globular, yellow-ochre dotted with gray-russet, mottled with olive-brown, sometimes washed with clear fawn on the cheek exposed to the sun; flesh whitish, semi-fine, melting or semi-melting, gritty at the center; juice rarely abundant, but very

saccharine, aromatic and full of flavor, sometimes a little too acid; second; Oct.

Milner. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:181. 1908.

Cataloged by Silas Wharton in 1824 under the name of *Milner's Favorite*. Fruit small, pyriform; good.

Mima Wilder. 1. *Mass. Hort. Soc. Rpt.* 152. 1874. **2.** *Ibid.* 120. 1875.

A seedling of Colonel Wilder, in a collection of new pears shown by him in 1874. In November of the following year it was found to have retained its previous good quality.

Ministre Bara. 1. *Ga. Hort. Soc. Rpt.* 49. 1892. **2.** *Guide Prat.* 96. 1895.

A gain of Grégoire, Jodoigne, Bel. It was exhibited by P. J. Berckmans of Augusta, Georgia, before the Georgia State Horticultural Society in 1892 and 1893.

Ministre Pirmez. 1. *Guide Prat.* 111. 1876.

Published by Grégoire, Jodoigne, Bel. Fruit medium to large; flesh melting; first; Jan. and Feb.

Ministre Viger. 1. *Rev. Hort.* 113. 1901.

Raised by Messrs. Baltet of Troyes, Fr., from seed of the Pierre Tourasse. It was much noticed at the International Exhibition at Paris in 1900. Fruit large, turbinate, bossed, tender yellow clouded with ochre, washed with rosy gray and salmon on the side next the sun, with speckles of fawn; flesh fine, melting, very juicy, saccharine, with perfume noticeable on the skin, and flavor recalling that of the Duchesse d'Angoulême; mid-Dec. to mid-Jan.

Minot Jean Marie. 1. *Guide Prat.* 100. 1876.

A seedling of Grégoire, Jodoigne, Bel. Fruit large, pyriform, shortened, covered with russet on a yellow foundation; flesh yellowish, breaking, very juicy, sugary; first; Dec. to Feb.

Missile d'Hiver. 1. Kenrick *Am. Orch.* 169. 1841.

A foreign variety recommended by M. Dalbret and M. Jamin, well known pomologists. Fruit large, buttery, valuable according to M. Jamin; Nov. and Dec.

Mission. 1. *Am. Pom. Soc. Rpt.* 73. 1895.

Originated at the old mission near Capistrano, California. Fruit medium, acutely pyriform, long, yellow, nearly covered with russet; flesh very fine and buttery; very mild or sweet; ripe in Sept. in southern California.

Mr. Hill's Pear. 1. Langley *Pomona* 132, Pl. LXIII, figs. 2, 4. 1729.

Mentioned by Batty Langley, Twickenham, Eng., as bearing two crops in the year. Fruit rather small, obtuse-pyriform, usually distorted at the upper end, grows in clusters; in 1727 the first crop matured on Aug. 24, and the second crop on Oct. 1.

Mitchell Russet. 1. Downing *Fr. Trees Am.* 525. 1857. **2.** *Ibid.* 817. 1869.

Originated at Belleville, Ill. Fruit medium or small, obovate inclining to conic; skin rough, dark russet, thickly covered with gray dots; flesh juicy, melting, rich and highly perfumed, astringent; scarcely good; Oct.

Mitschurin. 1. *Can. Hort.* **17**:292. 1894.

Probably Russian. Fruit very large; a good kitchen

fruit; mid-season.

Moccas. 1. *Gard. Chron.* 717. 1841. **2.** Hogg *Fruit Man.* 617. 1884.

Raised from seed by Thomas Andrew Knight, Downton Castle, Eng. Fruit medium, oval, uneven, and bossed in outline, lemon-colored, marked with patches and veins of thin pale brown-russet and strewed with russet dots; flesh yellowish, fine, melting, tender, full of rich vinous juice, musky in flavor; a delicious dessert pear.

Mollet Guernsey Beurré. 1. *Gard. Chron.* 36, 85. 1842.

Raised from seed by Charles Mollet of Guernsey, Channel Islands, who died in 1819. Fruit medium, obovate or somewhat pyramidal, with a remarkable fleshy extension of about ½ inch at the insertion of the stalk, surface of the pear uneven, yellow, but much obscured with ferruginous russet, sometimes equally scattered, but often disposed in broad, longitudinal stripes; flesh yellowish, very melting, buttery, with a rich Chaumontel flavor though distinct; Dec.

Monarch. 1. Hogg *Fruit Man.* 312. 1866. **2.** Bunyard *Handb. Hardy Fr.* 188. 1920.

Knight Monarch. **3.** Downing *Fr. Trees Am.* 796. 1869.

Raised by Thomas Andrew Knight, Downton Castle, Eng., in 1830. Bunyard says: “Tree easily recognized in winter by its very large oval buds, which stand out like those of a red currant.” Fruit medium, globular, yellowish-green, much covered with brown-russet and strewed with gray-russet specks; flesh yellowish, buttery, melting and very

juicy, with a rich, vinous, sugary, and agreeably-perfumed flavor; first, one of the most valuable; Dec. and Jan.

Monchallard. 1. Leroy *Dict. Pom.* **2**:429, fig. 1869. **2.** Bunyard *Handb. Hardy Fr.* 189. 1920.

Found about 1810 by M. Monchallard at Valeuil, Dordogne, Fr. Fruit above medium to large, long-obovate, very obtuse; skin delicate, yellow, clear and dull, speckled uniformly with greenish dots and often washed with dark red on the cheek next the sun; flesh very white, fine or semi-fine, extremely melting, juicy, saccharine, acidulous, slightly aromatic and of delicious flavor; first; end of Aug. and Sept.

Mongolian. 1. *Ill. Hort. Soc. Rpt.* 215. 1896. **2.** *Cornell Sta. Bul.* **332**:482. 1913.

Considered by Budd of Iowa to be the best of the oriental varieties yet tested in this country. Obtained from seed at Ames, Iowa. Fruit medium to large, globular-oval, narrowing at both ends, with its greatest diameter near the middle, similar to Kieffer in shape, inclined to ridging near the apex, greenish, with blushed cheeks and russet dots; flesh tender, melting, juicy; good when ripened indoors.

Monseigneur Affre. 1. Leroy *Dict. Pom.* **2**:430, fig. 1869. **2.** Hogg *Fruit Man.* 618. 1884.

Raised by Van Mons though the tree did not produce fruit until 1845, three years after his death. Fruit medium, form variable, globular-obtuse-truncate, pyriform, greenish-yellow; flesh white, reddish under the skin, very melting, juicy, sugary, acidulous, aromatic, with a fine flavor; first; Nov.

Monseigneur des Hons. 1. Leroy *Dict. Pom.* **2**:431,

fig. 1869.

M. Gibey-Lorne, Troyes, Fr., raised this pear from seed in 1856. Fruit below medium and often small, usually turbinate, rather long and obtuse, but sometimes cylindrical and bossed, olive-green dotted with russet on the shaded side, golden on the exposed face, sometimes blushed with carmine; flesh yellowish-white, fine, melting; juice abundant, saccharine, acidulous, aromatic; second; end of Aug.

Monseigneur Sibour. 1. Leroy *Dict. Pom.* **2**:432, fig. 1869. **2.** Downing *Fr. Trees Am.* 817. 1869.

Originated at Jodoigne, Bel., from a bed made by Xavier Grégoire; it dates from 1855. Fruit above medium but often less, ovate, swelled in its lower half, yellowish-green, dotted, marbled and streaked with gray-russet and more or less washed with brown-fawn on the side of the sun; flesh whitish, rather coarse, semi-melting, juicy, containing numerous grits around the core; juice saccharine, vinous and aromatic; second; end of Oct.

Moon. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:183. 1908.

Cultivated by Silas Wharton in 1824. Its synonyms, *Moon's Pound*, and *Pound, Moon's*, are significant of its size. Fruit described by Ragan as medium sized, yellow; flesh melting, juicy; good; late.

Moorcroft. 1. Hogg *Fruit Man.* 619. 1884.

Often called in England the *Malvern* pear, being much grown about that place; esteemed for perry. Fruit small, globular, even and regular in outline, greenish-yellow on the shaded side, and with a brownish tinge on the side next the sun, strewed all

over with large ashy gray freckles of russet; flesh breaking.

Moorfowl Egg. 1. Lindley *Guide Orch. Gard.* 361. 1831.

Muirfowl Egg. **2.** Hogg *Fruit Man.* 619. 1884.

An old Scotch dessert pear partaking somewhat of the character of Swan Egg. Fruit below medium, globular, dull green changing to yellow-green, mottled with red next the sun, and thickly strewed with pale brown-russety dots; flesh yellowish, semi-buttery, tender, sweet and with a slight perfume; Oct.

Morel. 1. *Mag. Hort.* **21**:151. 1855. **2.** Leroy *Dict. Pom.* **2**:434, fig. 1869.

Propagated by Alexandre Bivort, successor of Van Mons, and can be traced earlier than 1843. Fruit below medium or small, ovate, sensibly hexagonal, flattened at either extremity, and one side usually more enlarged than the other, yellowish-green, dotted and marbled with russet; flesh yellowish, fine, breaking, rather granular at the center; juice abundant, wanting in sweetness, insipid and of a very unpleasant astringency; second, but good only for cooking; Apr.

Morgan. 1. *Horticulturist* **14**:250, fig. 1859. **2.** *Mag. Hort.* **25**:541. 1859.

Originated on the farm of a Mr. Morgan in New Hanover County, North Carolina. Fruit large, oblate varying to obtuse-pyriform, greenish-yellow, speckled with gray-russet intermingled with some tracery of the same; flesh white, a little gritty, juicy, sweet, slightly vinous; very good, nearly best; Oct.

Morley. 1. Parkinson *Par. Ter.* 593. 1629.

Mentioned in Parkinson's list of orchard pears as a "very good peare, like in forme and colour unto the Windsor but somewhat grayer."

Morosovskaja. 1. *Ia. Hort. Soc. Rpt.* 61. 1880.

Mentioned in a paper read by Mr. J. L. Budd before the Horticultural Society of Iowa in 1880. It is a Russian variety, having gritty, thorn-like wood.

Moskovka. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:184. 1908.

A Russian variety said to be largely grown for cooking. Fruit small, pyriform, juicy; early season.

Mostbirne. 1. Dochnahl *Führ. Obstkunde* **2**:173. 1856.

Nassau, Ger., 1802. Fruit medium, pyriform, sides rather unequal, whitish-yellow skin changing to lemon-yellow, without any blush, dotted indistinctly, russeted; flesh yellow, breaking, coarse-grained, juicy, aromatic, sweet; third for dessert, but first for cooking and perry; Sept. and Oct.

Moyamensing. 1. *Mag. Hort.* **13**:274. 1847. **2.** Downing *Fr. Trees Am.* 818. 1869.

Supposed to be a native. The original tree stood in 1847 in the garden of J. B. Smith of Philadelphia. Fruit medium, variable in form, some globular, others obovate, uniform light yellow, with patches and dots of russet; flesh whitish, buttery, melting, coarse, sweet; with a rich, spicy and delicious flavor; good to best; Aug. and Sept.

Mrs. Seden. 1. *Garden* **76**:36, figs. 1912.

A cross between Seckel and Bergamotte Espéren; exhibited by James Veitch and Sons, Chelsea, Eng., before the Royal Horticultural Society in January,

1912, and received an award of merit. Fruit small, round, yellow, toning to a bright crimson on the sunny side; flesh is free from the grittiness which sometimes characterizes the fruits of Bergamotte Espéren; the flavor is remarkably fine; Jan.

Muddy Brook. 1. *Mass. Hort. Soc. Rpt.* 45. 1866.

A seedling from S. A. Shurtleff of Brookline, Mass., which fruited in 1862. Fruit diameter 2¼ inches, short pyriform; skin dark green; flesh white, melting and juicy, with good flavor; great bearer and good market pear; Sept.

Muir Everbearing. 1. *Am. Pom. Soc. Rpt.* 135. 1920.

Originated with Hal Muir, Bloomfield, Ky., about 1870. Reported as "delicious; August to November."

Mungo Park. 1. Dochnahl *Führ. Obstkunde* **2**:160, 1856. **2.** *Guide Prat.* 100. 1876.

A seedling of Van Mons named after the celebrated Scotch voyager. Fruit small, turbinate-pyriform or globular-ovate, very pale green sprinkled with fawn dots, very small, numerous, and feebly visible, the basic green passing at maturity to pale whitish-yellow and becoming a little golden on the side of the sun; flesh white, very fine, melting, free from grit, full of sugary juice, sprightly and agreeably perfumed; first; Oct.

Munz Apothekerbirne. 1. *Gard. Chron.* 3rd Ser. **30**:370. 1891.

Presumably German. A medium-sized pear, obovate, oblong, with a stalk rather more than an inch long, continuous with the fruit, yellowish; flesh white; of good flavor; Aug.

Muscadine. 1. *Mag. Hort.* **1**:364. 1835. **2.** Downing *Fr. Trees Am.* 818. 1869.

The original tree is supposed to have grown on the farm of a Dr. Fowler near Newburgh, N. Y., and the pear was introduced to notice by Downing. Fruit medium, globular-obovate, regular in form, pale

yellowish-green, thickly sprinkled with brown dots; flesh white, buttery, semi-melting, with an agreeable rich, musky flavor; good to very good, a valuable late summer variety; end of Aug. and beginning of Sept.

Muscat Allemand d'Automne. 1. Leroy *Dict. Pom.* **2**:437, fig. 1869. **2.** Mathieu *Nom. Pom.* 256. 1889.

Found in the Horticultural Society's Garden at Angers, Fr., in 1833. Its origin is uncertain but the name indicates that it came from Germany. Fruit medium and sometimes below, rather variable in form, from long-pyriform, slightly obtuse and regular in contour, to irregular-ovate and strongly bossed, somber yellow, dotted with clear gray, extensively washed with russet, and vermilioned on the side exposed to the sun; flesh white, semi-fine, melting, rather granular, watery; juice abundant and saccharine, vinous, musky and almost always marred by too great an acidity; second; Oct.

Muscat Fleuri d'Été. 1. Duhamel *Trait. Arb. Fr.* **2**:121. 1768. **2.** Leroy *Dict. Pom.* **2**:441, fig. 1869.

Known at Orléans at the end of the sixteenth century under the name *Muscat à longue queue*. Fruit small, globular-turbinate or turbinate slightly ovate, olive-yellow finely dotted with fawn and washed with red-brown on the cheek next the sun; flesh yellowish, coarse, semi-breaking, juicy, saccharine, acidulous, musky; second; end of July.

Muscat Robert. 1. Duhamel *Trait. Arb. Fr.* **2**:120, Pl. II. 1768. **2.** Downing *Fr. Trees Am.* 818. 1869.

This pear was mentioned by Le Lectier in 1628 and by la Quintinye in 1690 under the name of *Pucelle de Saintonge*. Its name of Muscat Robert dates

from about 1672 and Merlet wrote of it in 1675 as the *Amber Pear* or Muscat Robert. It has also been widely known as the *Amber Pear*. Fruit small, globular, very round in all its lower part but slightly conic at its other extremity where it is a little wrinkled, yellowish-green, finely and uniformly dotted with olive-brown and sometimes rather carmined on the cheek exposed to the sun; flesh whitish, semi-fine, breaking or semi-breaking, inclined to rot before ripe, granular, very juicy, sugary, very musky; second; mid-July.

Muscat Royal. 1. Duhamel *Trait. Arb. Fr.* **2**:120. 1768. **2.** Leroy *Dict. Pom.* **2**:444, fig. 1869.

An old French pear growing in kitchen garden at Versailles planted about 1670 by La Quintinye for Louis XIV. It was then called *Muscat fleuri d'Autumne* or *Muscat à longue queue*, on account of its long stem. Fruit small, globular in its lower half but somewhat conic-obtuse in its upper half; skin fine, grayish-yellow, dotted with clear brown and partly covered with russet which often passes into brownish-red of a somber hue on the side next the sun; flesh white, semi-fine, melting or semi-melting, watery, rather granular round the seeds; juice abundant, very saccharine, more or less acid and having a pleasant flavor; second; Sept.

Muscat Royal de Mayer. 1. Mas *Le Verger* **2**:225, fig. 111. 1866-73.

This is the Muscat Royal described by the German Mayer in his *Pomona Franconia*, 1779, and by Diel in 1804, and must not be confused with the Muscat Royal of Duhamel. Fruit small or nearly medium on a pruned tree, globular-turbinate, largest circumference around the middle, very obtuse; skin thick, green, covered with a sort of white bloom

which dulls it, sprinkled with numerous round, whitish-gray dots, especially apparent on the side next the sun where they are nearly white; at maturity the green brightens somewhat; by the time it becomes yellow the fruit is already over ripe; flesh greenish, coarse, gritty at the core, semi-buttery, fairly full of sugary juice, with an agreeable musky flavor; third, should be eaten promptly on ripening; end of July.

Muscat Roye. 1. Prince *Pom. Man.* **1**:134. 1831.

Fruit small, oblong; skin rough to the touch, yellowish-green on the shaded side, and of a "pleasant red" next the sun; flesh breaking and perfumed; end of Aug.

Muscatelle. 1. Leroy *Dict. Pom.* **2**:448, fig. 1869.

One of the last gains of Major Espéren, Mechlin, Bel., who died in 1847. Fruit small, nearly globular or globular-conic, at first water-green dotted with numerous round points brown in color, changing to lemon-yellow; flesh yellowish, transparent, semi- or nearly melting, full of sugary juice strongly scented with musk; first; Feb. and Mar.

Musette d'Anjou. 1. Leroy *Dict. Pom.* **2**:446, fig. 1869.

Claude Saint-Étienne wrote of this pear briefly in 1687, being the first writer to mention it. Probably it originated in the old province of Anjou. Its name and form recall the rural bag-pipes which the Breton country folk play, and dance to. Fruit below medium, very elongated, flattened at its extremities, constricted at the middle, the upper part being often bent so as to make it resemble the musical instrument after which it is named, lemon-yellow or yellow-ochre, dotted uniformly with gray and brown

points; flesh white, coarse and breaking, watery and gritty; juice sufficient, rarely very saccharine, more or less astringent, slightly perfumed, and with a disagreeable after-taste; third; Sept.

Musette de Nancy. 1. Hogg *Fruit Man.* 621. 1884.

Fruit large, pyramidal and handsome, with an uneven and undulating outline, shaped like Beurré de Rance, lemon-yellow covered with a fine, warm, orange-brown or bright cinnamon-colored russet; flesh yellowish-white, rather crisp like the texture of Passe Colmar; juice abundant, rich, saccharine and very finely perfumed; first; end of Oct. and beginning of Nov.

Muskateller-Bergamotte. 1. Dochnahl *Führ. Obstkunde* **2**:21. 1856.

Origin uncertain, probably German. Fruit small, globular, light grass-green changing to yellowish-green, uniform in color, washed with brown on the side exposed to the sun, strongly dotted with brown; flesh melting, extremely musky; first for the table; Oct.

Muskingum. 1. Cole *Am. Fr. Book* 153. 1849. **2.** Downing *Fr. Trees Am.* 819. 1869.

Origin uncertain, but probably either Ohio or Connecticut is its native habitat. Fruit medium, globular to obovate, greenish-yellow, with dark specks and much russet; flesh breaking, yellow-white, with many dark specks and much russet, juicy, sprightly, vinous, pleasantly perfumed, aromatic flavor; good; middle and last of Aug.

Muskirte Wintereirbirne. 1. Christ *Handb.* 508. 1817. **2.** Dochnahl *Führ. Obstkunde* **2**:57. 1856.

A Dutch variety, published in 1801. Fruit small, ovate, medium ventriculous; skin fine and smooth, light straw-yellow changing to a waxy lemon-yellow and often washed with a golden blush; flesh semi-breaking, sweet, having a musky aroma; second for dessert, first for household; Dec. to Feb.

Musquée d'Espéren. 1. Leroy *Dict. Pom.* **2**:448, fig. 1869.

A seedling of Major Espéren; probably first reported in 1845. Fruit medium, variable in form, passing from ovate rounded at each end to ovate nearly cylindrical and more or less bossed; greenish-yellow, dotted and streaked with russet; flesh whitish, fine, breaking, perfumed; juice very abundant, saccharine, acidulous and very musky in flavor and agreeable; first; beginning of Feb. and through Mar.

Mussette. 1. Dochnahl *Führ. Obstkunde* **2**:169. 1856.

A Normandy perry pear. Fruit medium, rather long-pyriform; skin a dirty greenish-yellow changing to brown-green; flesh gritty, juicy, sweet, sharp and vinous; good for household use, first class for perry; end of Oct.

Mützchensbirne. 1. Dochnahl *Führ. Obstkunde* **2**:162. 1856.

German, 1807. Fruit small, in clusters, short-turbinate, upper end flat, greenish-yellow, covered with cinnamon and dotted; flesh whitish-yellow, tender, sweet, vinous; third for dessert, first for culinary use; Oct.

Naegelgesbirn. 1. *Guide Prat.* 80. 1876.

A Rhenish-Prussian perry pear which is

exceedingly prolific but produces a perry of inferior quality.

Nain Vert. 1. *Gard. Chron.* 914. 1860. **2.** Leroy *Dict. Pom.* **2**:450, fig. 1869. **3.** *Jour. Hort.* N. S. **32**:256. 1896.

This strange variety was obtained from seed by M. de Nerbonne, in the commune of Huillé (Maine-et-Loire), Fr., and first fruited in 1839. The tree forms a bush between 3 and 4 feet high; it is remarkable for its dwarf habit, and its erect, thick, fleshy branches, Fruit medium and sometimes larger, globular, irregular, but variable in form; skin thin, slightly rough, yellowish-green, uniformly covered with large gray-russet dots; flesh white, semi-fine and semi-melting, rather dry; juice deficient, sugary, sweet, almost without perfume; third; Oct.

Napa. 1. *Am. Pom. Soc. Rpt.* 68. 1895.

Originated in California and was introduced by Leonard Coates in 1886. Fruit very large, mid-season.

Naples. 1. Leroy *Dict. Pom.* **2**:451, fig. 1869. **2.** Hogg *Fruit Man.* 621. 1884.

This old variety known in France for many centuries and described by Claude Saint-Étienne in 1670 was also known as the *Feuille de chêne* or *Oak leaf*. Its name indicates that it came from Italy. Henri Manger said in 1780 that it appeared to him to be identical with the pear *Picentia* described by Pliny. Fruit medium and often less, turbinate-obtuse much swelled at central circumference, and more or less bossed at both extremities, olive-yellow or bright green at first, changing to a beautiful lemon-yellow, finely dotted with fawn, brownish-red next the sun, changing to bright red as the ground color changes; flesh whitish, semi-fine, semi-breaking, almost free

from grit; juice plentiful, sweet and sugary, possessing usually a slight after-taste of anis; second; Jan. to Mar.

Napoleon. 1. Downing *Fr. Trees Am.* 819. 1869. **2.** Bunyard *Handb. Hardy Fr.* 189. 1920.

Napoleon I. **3.** Leroy *Dict. Pom.* **2**:453, fig. 1869.

Napoleon Butterbirne. **4.** Mathieu *Nom. Pom.* 257. 1889.

Napoleon was raised in 1808 by M. Liard, a gardener at Mons, Bel. Fruit large, obtuse-pyriform, swelled toward the base; skin thin, smooth, bright green changing to greenish-yellow, covered with numerous brown dots, seldom blushed; flesh white and fine, tender, melting, rather granular, very juicy, with a very saccharine, refreshing and aromatic flavor; first, a valuable dessert pear; mid-Oct. or nearly Nov. to Dec.

Napoleon Savinien. 1. *Ann. Pom. Belge* **4**:71, fig. 1856. **2.** Downing *Fr. Trees Am.* 819. 1869.

Obtained in the garden of the Society Van Mons at Geest-Saint-Rémy, Bel., in 1854. Fruit medium, turbinate-ventriculous or pyriform-ventriculous, acute at the top which passes into the stalk; greenish-yellow, dotted with gray-russet; flesh white, semi-fine, melting, juicy and perfumed, saccharine; juice musky, delicate; Oct. to Mar.; the long period of its ripening is its very valuable quality.

Napoleon III. 1. Leroy *Dict. Pom.* **2**:457, fig. 1869. **2.** Hogg *Fruit Man.* 622. 1884.

The seedling which bore this beautiful fruit came from the seed beds of André Leroy. It was first reported in 1864. Fruit large, obovate, obtuse, uneven, deep yellow, dotted and streaked with

russet, and marked with numerous brownish stains; flesh white, fine, juicy and vinous, saccharine, tastes sourish; an excellent pear, first; Sept.

Naquette. 1. Mas *Le Verger* **2**:109, fig. 53. 1866-73.

Under the name Naquette this pear was described by Claude Saint-Étienne in 1670. After that time it appears to have been classed in the Caillot family with the name *Caillot*. Later still it received among other names that of *Bergamot Early* (Lindley) and *Bergamote Précoce* (Calvel). Fruit medium or smaller, spherical, flattened at both poles; skin thin, smooth, grass-green dotted with fawn, when ripe clouded with yellow on the shaded side and washed or streaked with red on the cheek next the sun; flesh white, rather transparent, fine, melting, full of sugary juice, acidulous, pleasantly perfumed, very delicate; first; mid-Aug.

Nassau Ehre. 1. Dochnahl *Führ. Obstkunde* **2**:47. 1856.

Belgian, 1823. Fruit medium, pyriform, blushed, somewhat streaked with vermilion, slightly russeted; flesh semi-breaking, fine, cinnamon-flavored, sweet; second for dessert, first for household use; end of Aug.

Naudin. 1. *Guide Prat.* 101. 1876.

Published in the *Revue Horticole*, Fr., in 1869. Fruit medium, long-pyriform, grass-green stained with gray; flesh extremely melting, very juicy, pleasantly relieved with a fresh savor; first; Aug. to Oct.

Naumkeag. 1. Kenrick *Am. Orch.* 149. 1841.

Originated at Salem, Mass., by George Johonnot; derives its name from the old Indian name of Salem.

Fruit medium, globular, yellow-russet; flesh juicy, melting but rather astringent in flavor; good; Oct.

Navez Peintre. 1. Hogg *Fruit Man.* 622. 1884.

Received by Hogg, the English pomologist, from M. Papeleu, Wetteren, Bel., in 1857. Fruit medium, ovate, even and regular in form, yellowish-green on the shaded side and marked with bands of brown-russet, but with a blush of brownish-red next the sun; flesh yellowish, melting, very juicy, piquant and sugary, with a fine aroma; a very fine pear; end of Sept.

Neapolitan. 1. Brookshaw *Hort. Reposit.* **2**:Pl. 72. 1823.

Described by Brookshaw in 1823 as a valuable acquisition to English collections. Fruit thin-skinned, green changing to yellow when quite ripe, rich in flavor, and so juicy that it cannot be pared without a considerable quantity of the juice running from it; Nov.

Nec Plus Meuris. 1. Hogg *Fruit Man.* 622. 1884. **2.** Bunyard *Handb. Hardy Fr.* 189. 1920.

This is not the Nec Plus Meuris of France which is our Beurré d'Anjou. The origin is uncertain. Fruit small, round-oval, uneven, greenish-yellow, nearly covered with rough brown-russet; stem very short, stout, continuous with the fruit; calyx large, open, in a small basin; flesh pale, yellow, melting, deliciously perfumed; Feb. and Mar.

Nectarine. 1. Hogg *Fruit Man.* 622. 1884.

Fruit medium, globular-obovate, yellow covered with large dots and patches of pale brown-russet; flesh yellowish, buttery, rich, with a fine, brisk, acidulous flavor and agreeable aroma; first-rate, with

a good deal of the character of the Passe Colmar; Oct.

Negley. 1. *Mag. Hort.* **26**:267, 397. 1860. **2.** Downing *Fr. Trees Am.* 820. 1869.

Introduced in 1860 by J. S. Negley, Pittsburg, Pa. Fruit above medium, obtusely obovate, nearly regular, sometimes a perfect pyriform, rich lemon shaded with bright crimson in the sun, sprinkled with minute brown-russet dots; flesh white, a little coarse, moderately melting, juicy, richly saccharine, vinous, slightly aromatic; good to very good; Sept.

New Bridge. 1. Prince *Pom. Man.* **2**:204. 1832.

Described in the London Horticultural Society's catalog in 1832 as having been produced in the Horticultural Garden at Chiswick. Fruit below medium, turbinate, dull gray covered with thin gray-russet, and light, lively, shining brown on the sunny side; flesh melting, a little gritty, with a sugary juice, but without flavor; Oct.

New Haven. 1. *Mag. Hort.* **3**:327. 1837.

A seedling raised in the garden of Dr. Ives, New Haven, Conn. It was said to partake of the habit of White Doyenné, to be a good cropper, and of excellent quality.

New Meadow. 1. Hogg *Fruit Man.* 623. 1884.

A perry pear, grown in Herefordshire, England. Fruit very small, turbinate, covered with brownish-gray russet, and a brownish cheek next the sun.

Newhall. 1. *Mass. Hort. Soc. Rpt.* 37. 1867. **2.** Downing *Fr. Trees Am.* 820. 1869.

A seedling of F. and L. Clapp, exhibited before the Massachusetts Horticultural Society in 1867. Fruit

large, obtuse-pyriform, inclining to oval, surface rather uneven, yellow at maturity, with some traces of russet, occasionally blushed on the side next the sun; flesh melting, buttery, tender, very juicy, sweet, with a musky aroma; very good; Oct.

Newtown. 1. Downing *Fr. Trees Am.* 820. 1869.

Originated at Newtown, Long Island. Fruit medium, globular-obovate, lemon-yellow, netted and patched with russet; flesh whitish, rather coarse, semi-melting, sweet, and pleasant; good; Sept.

Nicholas. 1. *Mass. Hort. Soc. Rpt.* 10. 1869.

A seedling shown by Messrs. F. and L. Clapp in November, 1869. Fruit medium, obovate; skin thin, yellow; very juicy and highly flavored.

Nickerson. 1. Downing *Fr. Trees Am.* 820. 1869.

Originated from seed planted at Readfield, Me. Fruit large, oblong-pyriform, greenish-yellow, with a dull red cheek on the side next the sun; flesh white, juicy, melting, vinous, sweet; good; Oct.

Nicolas Eischen. 1. *Guide Prat.* 101. 1876.

Reported in 1876 by Messrs. Simon-Louis as on trial in their nurseries at Metz, Lorraine. It was said to be a beautiful fruit, speckled and very musky like the Bartlett, but more perfumed; Dec. to Feb.

Niell d'Hiver. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:189. 1908.

Shown at a meeting of the Cincinnati Horticultural Society in 1855. A late variety, acid in flavor.

Nikitaer Grüne Herbst-Apothekerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:182. 1856.

Bon-Chrétien de Nikita. **2.** *Guide Prat.* 282. 1895.

German, published 1852. Fruit medium, conic, light green changing to light green-yellow, without any blush, numerous fine dots, russeted on the sun-exposed side; flesh yellowish-white, sweet, vinous; first for household purposes; Oct., eight weeks.

Niles. 1. *Mag. Hort.* **20**:76. 1854. **2.** Downing *Fr. Trees Am.* 821. 1869.

This variety was imported from France about 1850 by the Hon. J. M. Niles, Hartford, Conn., without a name. It was consequently designated "Niles." Some pomologists have considered it to be the Easter Beurré, but it appears to be more oblong in form, more yellow in color, to have a longer stem and to be earlier in time of maturity. Fruit large, obtuse-pyriform, yellow thickly covered with russet dots; flesh juicy, buttery, sweet and pleasant; Dec.

Niochi de Parma. 1. *Guide Prat.* 101. 1876.

A summer variety highly esteemed in Piedmont, Italy. It is suitable for cultivation on a large scale and is hardy, having resisted the phenomenal European frost of 1879-1880.

Noir Grain. 1. Kenrick *Am. Orch.* 180. 1832.

A variety very highly esteemed in Flanders in the early part of the last century. Fruit is of medium size and matures in Sept., the flesh being buttery as is indicated by its synonym *Beurré noire graine*.

Noire d'Alagier. 1. *Guide Prat.* 96. 1895.

A Caucasian variety sent out by M. Niemetz, Winnitsa, Podolia, Russia. On trial with Messrs. Simon-Louis of Metz, Lorraine, in 1895. The fruit is said to resemble Winter Nelis, gray, bronze-russeted,

rough; flesh fine, juicy.

Nonpareil. 1. Downing *Fr. Trees Am.* 821. 1869.

A seedling raised by Judge Livingston, of New York. Fruit globular-oblate, russety-yellow, mostly overspread and shaded with red in sun, and bright fawn-russet in shade; flesh yellowish-white, melting, juicy, sweet, perfumed; Nov.

Nordhäuser Winter-Forellenbirne. 1. *Deutschland Obst.* **2**:Pt. 6, Pl. 1906.

A North German variety of the Forelle or Trout Pear. It is known as the *Winter Forelle* or *Northern Forelle*. Fruit medium, conic-obtuse; skin smooth and shining, greenish-yellow, speckled and washed with red on the side next the sun, dotted all over on the shaded face with fine brownish-red; flesh white, melting, sweet, aromatic and agreeable; Jan. to Mar.

Norfolk County. 1. *Mass. Hort. Soc. Rpt.* 44. 1866.

A seedling raised by S. A. Shurtleff of Brookline, Mass., and submitted by him to the Fruit Committee of the Horticultural Society of that state in 1866. Fruit, long diameter 3¾ inches, short diameter 3¼ inches, long turbinate, green with dots, good grain, juicy, with pleasant flavor, ripens well, a handsome fruit and large bearer; Oct. 11.

Normännische Ciderbirne. 1. Löschnig *Mostbirnen* 168, fig. 1913.

This pear was found growing wild in Normandy, Fr., and in Upper Austria, and is excellent for making perry and for distillation. Fruit very small, turbinate, greenish-yellow covered with cinnamon-russet and ashy-gray dots; flesh yellowish-white, rather dry, sweet but with some sprightliness; Sept.

Notaire Lepin. 1. *Rev. Hort.* 449. 1889.

Notaire Lepin was obtained by M. Rollet, a horticulturist at Villefranche, Rhône, Fr., about 1860 and was placed on the market in 1879. Fruit large or very large, variable in size, obtuse-pyramidal but variable, skin fine, somewhat rough to the touch, yellow, dotted with russet, marbled with fawn, flesh white, granular around the core, fine, melting, very juicy, saccharine, slightly but agreeably perfumed; its quality very variable, rather good, and rarely very good; Jan. to Apr.

Notaire Minot. 1. Leroy *Dict. Pom.* **2**:465, fig. 1869. **2.** Downing *Fr. Trees Am.* 821. 1869.

A posthumous gain of Van Mons of only very moderate merit. It fruited in nurseries at Geest-Saint-Rémy, Jodoigne, Bel., in 1844. Fruit medium, rather variable in form, but usually irregular ovate-globular or very obtuse-turbinate and ventriculous; skin thick and rather rough, grass-green, dotted all over with fawn and blushed with dark red on the side of the sun; flesh yellowish, semi-fine and semi-melting, very gritty around the core; juice insufficient, saccharine, aromatic, having a disagreeable astringency; third; Oct.

Nouveau Doyenné d'Hiver. 1. Mas *Pom. Gen.* **1**:9, fig. 5. 1872.

Stated by Diel to have been a gain of Van Mons. Fruit medium, spherical or spherical-conic, slightly depressed at the two poles, even in its outline; skin thick and firm, of a very clear green, sprinkled with small brown dots regularly placed in a characteristic manner; at maturity the basic green passes to pale yellow and the side next the sun becomes a little golden; flesh white, rather fine, compact, breaking or

semi-breaking; juice deficient, saccharine but wanting in perfume; not very desirable; end of winter.

Nouveau Poiteau. 1. Leroy *Dict. Pom.* **2**:466, fig. 1869. **2.** Bunyard *Handb. Hardy Fr.* 190. 1920.

According to Leroy this was a seedling of Van Mons raised in his nursery at Louvain from a bed made in 1827. Fruit large and sometimes enormous, oblong or irregular-ovate, always much bossed, swelled around the middle and often more so on one side than on the other, grass-green, covered with numerous fawn dots, and with some squamose patches of brown-russet on the side of the sun; flesh white, greenish near the core, very fine, melting, juicy, saccharine, acidulous, savory; first; Oct.

Nouvelle Aglaé. 1. *Guide Prat.* 101. 1876.

Obtained by M. Grégoire, Jodoigne, Brabant. Fruit medium, long-obtuse-oval, dark yellow touched with fawn; flesh fine, juicy; first; end of autumn.

Nouvelle Fulvie. 1. *Ann. Pom. Belge* **4**:59, fig. 1857. **2.** Bunyard *Handb. Hardy Fr.* 190. 1920.

Belle de Jarnac. **3.** Leroy *Dict. Pom.* **1**:203, fig. 1867.

A gain of M. Grégoire, Jodoigne, Bel. First reported in 1854. Fruit large or very large, pyramidal-pyriform, strongly bossed, lemon-yellow when ripe, colored with vivid red on the side exposed to the sun, marked and dotted with russet; flesh yellowish-white, very fine, melting, buttery; juice very abundant, sugary, having an exquisite perfume; good; Nov. to Feb.

Nussbirne. 1. Dochnahl *Führ. Obstkunde* **2**:162. 1856.

Schwarben, Thuringer Wald, Ger., 1800. Fruit small, globular-turbinate, green, thick skin; flesh firm, breaking, vinous and acidulous; first for household; end of Aug.

Nypse. 1. *Guide Prat.* 101. 1876.

A winter pear received by Messrs. Simon-Louis, Metz, Lorraine, from Italy, and on trial in that firm's orchards in 1876.

Oakley Park Bergamotte. 1. *Mag. Hort.* **13**:152. 1847.

Raised from seed by T. A. Knight, Downton Castle, Eng. former President of the London Horticultural Society. Fruit medium, globular-obovate, greenish-yellow, with russet; flesh buttery, melting; good; Oct.

Ochsenherz. 1. Dochnahl *Führ. Obstkunde* **2**:185. 1856.

Cœur-de-Boeuf. **2.** *Guide Prat.* 90, 258. 1876.

South Germany, 1801. Fruit large, pyriform, crooked, light green turning to lemon-yellow, almost entirely blushed with dull light red, dotted with green; flesh pulpy and tender, not juicy, very sweet and musky; third for table, first for household and market; end of Oct.

Ockletree. 1. *Hist. Mass. Hort. Soc.* 37. 1880.

This was a seedling brought from Pittsburg, Pa., in 1804 and planted near Vincennes, Ind. In 1837 it produced 140 bushels of pears, the largest crop recorded from it. In 1855 it measured ten and one-half feet in circumference at the smallest place below the limbs, seventy-five feet across the top, and sixty-five feet in height. In 1867 it was split down by a

tornado, and seven or eight years later the trunk also died. It took its name from Mr. Ockletree its owner. The fruit was of inferior quality.

Octave Lachambre. 1. Leroy *Dict. Pom.* **2**:469, fig. 1869.

M. Octave Lachambre, Loudon, Vienne, Fr., found this variety in the orchard of the Château of Guérinière about 1825. M. Lachambre propagated it and offered it to Leroy who placed it on the market in 1860. Fruit medium or less, globular-ovate, bossed, flattened at the top, and always smaller on one side than on the other, dull yellow, finely dotted and streaked with russet, slightly mottled with fawn on the cheek exposed to the sun and around the calyx and stalk; flesh whitish, fine, melting or semi-melting, rather granular around the core; juice extremely abundant, acidulous and saccharine, more or less aromatic but always full of flavor; first; May.

Oesterreichische Muskatellerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:24. 1856.

Austria, 1851. Fruit medium, globular, medium ventriculous; skin thick, greenish-yellow, somewhat blushed with brown and without russet; flesh firm, somewhat gritty, very melting and juicy; first for dessert, household and market; Sept.

Œuf de Woltmann. 1. Mas *Le Verger* **2**:221, fig. 109. 1866-73.

Of German origin. Fruit small to medium, exactly ovate, bright green, sprinkled with numerous dots, some gray and some dark green; at maturity the basic green changes to pale yellow the dots becoming less visible and on well-exposed fruits the side next the sun is slightly blushed with earthy-red on which are some dots of whitish-gray; flesh very

white, semi-fine, semi-breaking, sugary, with a refreshing and agreeable perfume; good; end of July.

Ogereau. 1. *Mich. Sta. Bul.* **177**:39. 1899.

Believed to be European. Fruit obovate-oblong-pyriform, yellow blushed with red, some russet; flesh white, buttery, vinous, medium quality, for market; Oct. and Nov.

Ognon. 1. *Guide Prat.* 70. 1895.

Sent out by M. Gilbert, Antwerp, Bel. Fruit small to medium, globular, irregular, green covered with russet; third class; Sept.

Ognonnet. 1. Baltet *Cult. Fr.* 375. 1908.

A cider pear used in France for the production of alcohol by distillation.

Oignon. 1. Leroy *Dict. Pom.* **2**:473, fig. 1869. **2.** Bunyard *Handb. Hardy Fr.* 191. 1920.

This is a variety which Leroy found cultivated in the western Departments of France which he thought might be the same as the pear called by Le Lectier in 1628 *Oignon d'Été de Bretagne*. In England it is one of the most fertile pears grown. Fruit above medium, spherical, much flattened at both ends and often smaller on one side than on the other; skin thick and rough, gray-fawn, entirely covered with large grayish dots; flesh whitish, coarse, breaking, rather granular around the core; juice moderate in amount, sweet, saccharine, only slightly perfumed; second; end of Sept.

Oignonet de Provence. 1. Leroy *Dict. Pom.* **2**:474, fig. 1869.

The origin of this pear is unknown, but it was propagated by M. Urbain Audibert, a nurseryman

near Tarascon in the South of France. In 1812 M. Audibert sent it to M. Loiseleur-Deslongchamps who later published at Paris the *Nouveau Duhamel*. In this work it was described and illustrated in 1815. Fruit small, globular or ovate, decidedly rounded; skin fine and thin, grass-green, covered with small gray dots, generally speckled with fawn and washed with clear reddish-russet on the side of the sun; flesh greenish-white, fine or semi-fine, melting, gritty at the center; juice sufficient, saccharine, vinegary, with a rather agreeable taste of anis; second; end of July.

Oken. 1. Dochnahl *Führ. Obstkunde* **2**:21. 1856. **2.** Leroy *Dict. Pom.* **2**:475, fig. 1869. *Winter Oken.* **3.** Hogg *Fruit Man.* 668. 1884.

A seedling of Van Mons which fruited about 1826. Fruit medium, nearly globular or globular-ovate; skin fine, tender, pale green sprinkled with gray, extensively stained with fawn and slightly vermilioned on the side next the sun; flesh very white and fine, melting, watery, rather granular around the core; juice abundant, saccharine and having an exquisite aroma; first; mid-Oct. to end of Nov.

Oldfield. 1. Prince *Pom. Man.* **2**:210. 1832. **2.** Hogg *Fruit Man.* 624. 1884.

This is one of the most popular English perry pears, and took its name from the field where it was raised near Ledbury in Herefordshire. Fruit small, globular, even and regularly formed; skin uniform yellow, covered with minute dots, and with a patch of russet around the stalk; flesh yellowish, firm, breaking and very astringent.

Olivenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:188. 1856.

German Rhineland, 1806. Fruit medium or small, globular-turbinate, dark olive-green turning to dull yellowish, dotted, and somewhat blushed with brownish-red; flesh white, fine, cinnamon-flavored, gritty toward center; third for dessert, first for household; Nov.

Oliver Russet. 1. *Mag. Hort.* **10**:212. 1844. **2.** Downing *Fr. Trees Am.* 579. 1857.

Oliver Russet originated about 1832 and was shown before the Massachusetts Horticultural Society in the autumn of 1843 by G. W. Oliver, Lynn, Mass., in whose garden the parent tree was found growing. Fruit medium or below, obovate, obtuse; skin fair cinnamon-russet on a yellow ground, with a blush; flesh yellowish, coarse, melting, juicy without much flavor; Oct.

One-third. 1. *Iowa Hort. Soc. Rpt.* 219. 1879.

Reported to be growing on the Iowa State College Farm and to have been called One-third, from the fact that it is the third generation from seeds originally sown in Wisconsin.

Oneida. 1. Downing *Fr. Trees Am.* 823. 1869.

Originated in western New York. Fruit medium or below, globular, pale yellow, partially netted and patched with light russet; flesh white, coarse, juicy, semi-melting, agreeable; good; Sept.

Onion. 1. Mawe-Abercrombie *Univ. Gard. Bot.* 1778.

La Grosse Oignonette. **2.** Brookshaw *Pomona* **2**:Pl. LIII. 1817.

The Onion, or La Grosse Oignonette, is a rare pear and is distinct from Oignonet de Provence. Fruit medium, globular, brown-skinned; flesh sweet, well

flavored but rather dry, and when too ripe becomes pithy; Sept.

Orange, 1. *Mass. Hort Soc. Rpt.* 44. 1866.

A seedling fruited by S. A. Shurtleff of Brookline, Mass., in 1862. Fruit diameter 3½ inches, globular; skin tough and bright yellow, with dots; flesh fine-grained, keeps well and is a good cooking pear; end of Dec.

Orange-Bergamot. 1. Bradley *Gard.* 199. 1739. **2.** Brookshaw *Horticultural Repository* **1**:63, Pl. 31. 1823. **3.** Hogg *Fruit Man.* 625. 1884.

Of English origin. Tree hardy, free bearer, succeeding on either pear or quince stock. Fruit small, globular-turbinate; skin smooth, pale green changing to yellow or yellow-green at maturity, blushed with dull red on the side next the sun, strewed with whitish-gray dots; flesh white, semi-melting, juicy, with a sweet, orange flavor; dessert pear; early Sept.

Orange d'Hiver. 1. Duhamel *Trait. Arb. Fr.* **2**:144, Pl. XIX, fig. 4. 1768. **2.** Downing *Fr. Trees Am.* 824. 1869.

Winter Pomeranzenbirne. **3.** Christ *Handb.* 507. 1817.

Winter Orange. **4.** Lindley *Guide Orch. Gard.* 390. 1831.

This is a very old pear, probably of French origin. Tree rather vigorous, said to be a late but heavy bearer. Fruit medium, round, somewhat flattened at base and apex, bright yellow, covered all over with numerous brown dots and lined with russet; stem medium long, stout, inserted in a small, oblique cavity; calyx small, open, set in a small, round, very

shallow depression; flesh white, rather gritty, firm, crisp, very juicy, with a pleasant, slightly musky, aromatic flavor; a good cooking pear and a fair dessert pear; Feb. to Apr.

Orange Mandarine, 1. Leroy *Dict. Pom.* **2**:483, fig. 1869. **2.** Hogg *Fruit Man.* 625. 1884.

Raised from seed by Leroy at Angers, Fr., and fruited first in 1863. Fruit below medium and sometimes a little larger, globular, rather regular in outline, more or less mammillate at the summit, pale yellow, passing to clear russet on the cheek exposed to the sun, and covered with minute brown dots; flesh white, very fine and very melting, slightly gritty at the center; juice abundant, saccharine, acidulous, endowed with an exquisite perfume; first; Oct.

Orange Musquée. 1. Duhamel *Trait. Arb. Fr.* **2**:140, Pl. X. 1768. **2.** Hogg *Fruit Man.* 625. 1884.

Müskierte Pomeranzenbirne. **3.** Mathieu *Nom. Pom.* 255. 1889.

This is an old pear of uncertain origin, though probably French or Italian. Fruit medium, globular, more or less bossed, flattened at both ends though sometimes rather conic and obtuse at the top; smooth skin punctured like an orange, yellow-green changing to fine lemon, with a lively red next the sun but rather variable; flesh white, coarse, breaking, gritty at center; juice not very abundant, rather saccharine, sweet, possessing a musky flavor and perfume; quality variable, on the whole, good; end of Aug.

Orange Rouge. 1. Duhamel *Trait Arb. Fr.* **2**:141. 1768. **2.** Leroy *Dict. Pom.* **2**:486, fig. 1869.

Red Orange. **3.** Hogg *Fruit Man.* 636. 1884.

An old variety of obscure origin. Henri Manger wrote in 1783 that it appeared to him to be the *Favonianum Rubrum* mentioned by Pliny, but it appears according to M. Leroy more likely to have originated at Poitiers, and to be the *Rousette* or *Orange du Poitou* or *Poire de Poitiers*. Fruit medium, round, even, regular or inclining to turbinate; skin thick, clear grayish-yellow, clouded with green on the shaded side, sprinkled with pale gray dots and extensively washed and streaked with a lively dark red; flesh whitish, semi-fine; juice abundant, more or less saccharine, acidulous and musky; second, often third; end of Aug.

Orange Tulipée. 1. Duhamel *Trait. Arb. Fr.* **2**:202, Pl. XLI. 1768. **2.** Leroy *Dict. Pom.* 488, fig. 1869.

An old French pear grown in the south of France and sold in Paris at a very low price. It is known to have been cultivated for some three centuries, but is not worth growing today. Described in the *Jardinier François* in 1665. Fruit medium and often below, globular-ovate, or turbinate-rounded, with one side larger than the other; skin thick and rough, yellow-green, sprinkled with large, gray, scaly dots, and well colored with red-brown on the side next the sun, and numerous carmine streaks and marks on the other side; flesh white, semi-fine and semi-melting, more or less granular around the core; juice sufficient, saccharine, slightly astringent, with a slight perfume of fennel; third; Sept.

Orange de Vienne. 1. *Guide Prat.* 101. 1876.

Wiener Pomeranzenbirne. **2.** Dochnahl *Führ. Obstkunde* **2**:150. 1856.

A Van Mons seedling, 1825. Fruit small to

medium, short-turbinate, clear yellow, with light brown dots; flesh granular, semi-melting, very sweet and sugary, having a Bergamot flavor; first for table and all purposes; mid-Sept.

Ordensbirne. 1. Dochnahl *Führ. Obstkunde* **2**:132. 1856.

Originated in Nassau, a former German duchy, 1806. Fruit medium, even-sided; skin smooth and tender, yellowish-green turning to light yellowish and light green, seldom blushed, grass-green dots; flesh white, juicy, semi-buttery; very good for dessert and good for cooking and the market; mid-Aug.

Orel 15. 1. *Ill. Hort. Soc. Rpt.* 187. 1896. **2.** *Am. Pom. Soc. Rpt.* 41, 42. 1915.

Introduced from Russia about 1880 by Professor Budd of the Iowa Agricultural College. Free from blight and apparently valuable as a stock for top-grafting.

Orpheline Colmar. 1. *Ann. Pom. Belge* **2**:77, fig. 1854. **2.** Mathieu *Nom. Pom.* 260. 1889.

The Orpheline Colmar was a gain of Van Mons a few years before his death and is a beautiful and handsome fruit. Fruit very large, pyriform and obtuse-pyramidal, clear green becoming yellow at maturity, streaked and dotted with grayish-brown and black and stained with russet-fawn on the side of the sun and around the calyx; flesh yellowish-white, fine, melting, rather granular around the core, full of saccharine juice and pleasantly perfumed; good.

Osband Summer. 1. *Horticulturist* **1**:211, fig. 59. 1846. **2.** Leroy *Dict. Pom.* **2**:492, fig. 1869.

Originated in the vicinity of Palmyra in Wayne

County, N. Y., about 1840 and was at first known as *Summer Virgalieu* and so published in the *Genesee Farmer* in 1845 or 1846. Fruit small, obovate-pyriform, clear yellow, thickly dotted with small greenish and brown dots, with a warm cheek on the side next the sun and with some traces of russet especially around the stem and calyx; flesh white, juicy, melting, with a rich sugary flavor and agreeable perfume of musk; first in quality and appearance; early in Aug.

Osborne. 1. *Mag. Hort.* **12**:338. 1846. **2.** Downing *Fr. Trees Am.* 825. 1869.

A native variety which originated on the farm of John Osborne, Economy, Ind. It was introduced by Ernst, and published in the *Western Farmer and Gardener* (Vol. 5), having first fruited in Ernst's nursery in 1844. Fruit small, short-pyriform, stem planted on one side; skin thin, yellowish-green, with numerous gray dots; flesh white, tender, juicy, brisk, sweet, vinous, with a slight astringency and highly-perfumed flavor; first; Aug. and Sept.

Oswego Beurré. 1. Downing *Fr. Trees Am.* 825. 1869.

Raised by Walter Read, Oswego, N. Y. Tree vigorous, hardy, and productive. Fruit medium, oblate, sometimes inclining to conic, yellowish-green, streaked and mottled with thin russet; flesh melting, buttery, juicy, with a fine, sprightly, vinous and aromatic flavor; good; Oct. and Nov.

Oswego Incomparable. 1. Downing *Fr. Trees Am.* 826. 1869.

Originated at Oswego, N. Y. Fruit rather large, obtuse-obovate-pyriform, yellow, slightly netted and patched with russet, a tinge of crimson in the sun

and many russet dots; flesh whitish, coarse, semi-melting, sweet, juicy, agreeable; moderate quality, sometimes good; Sept.

Ott. 1. *Mag. Hort.* **14**:424. 1848. **2.** Downing *Fr. Trees Am.* 826. 1869.

Ott is a seedling of Seckel and was originated by Samuel Ott, Montgomery County, Pa., and introduced to the Massachusetts Horticultural Society by Dr. Brincklé of Philadelphia in the summer of 1848. Fruit small, globular-obovate, regular, largest about the middle, rounding off to the calyx end and narrowing to the stem where it is obtuse; skin slightly rough, dull green changing to yellow when mature, some russet, bronzy-red on the sunny side and dotted with russet specks intermixed with some greenish spots; flesh greenish-white, coarse, melting, very juicy, rich, sugary, with a spicy aroma resembling the Seckel; very good; end of Aug.

Owen. 1. Cole *Am. Fr. Bk.* 174. 1849. **2.** Downing *Fr. Trees Am.* 826. 1869.

Originated in the garden of John Owen, Cambridge, Mass. Fruit small, globular-obtuse-pyriform, dark green, shaded with dull red in the sun and thickly sprinkled with green and light dots; flesh tender, delicious and finely colored; one of the finest cooking pears in its season; Oct. to Dec.

Owener Birne. 1. Dochnahl *Führ. Obstkunde* **2**:10. 1856.

Württemberg, 1830. Fruit globular-turbinate, greenish-yellow, with rather dark blush, russeted all over; flesh yellowish-white, astringent, juicy, breaking, aromatic, first for household use and the making of perry; end of Sept.

Ozark. 1. *U. S. D. A. Pom. Rpt.* 38. 1895.

Originated about 1845 from seed taken by a Mr. Rooks from Kentucky to Polk County, Missouri. Fruit large, oblate, greenish-yellow, with a few russet veinings and patches, dots numerous, minute, russet; stem medium long, in a large, deep basin; calyx large, open; flesh white, with yellow veins, buttery, granular, mild subacid; good; Aug.

Paddock. 1. Downing *Fr. Trees Am.* 530. 1857. **2.** *Ibid.* 826. 1869.

Sent out by Chauncey Goodrich, Burlington, Vt. Fruit rather below medium, oblong-ovate-pyriform, light yellow, sometimes with a faint blush; flesh fine-grained, melting, sweet, but not very highly flavored; good; end of July.

Pailleau. 1. *Mag. Hort.* **8**:58. 1842. **2.** Downing *Fr. Trees Am.* 826. 1869.

Attributed to Van Mons, Belgium. Fruit large, oblong, greenish-yellow, rough, with brown and green dots and patches of russet; flesh juicy, sweet, rich, good, but rather coarse-grained; excellent quality; early Sept.

Pain-et-Vin. 1. Leroy *Dict. Pom.* **2**:494, fig. 1869.

Cultivated in Normandy early in the nineteenth century under the two names of *Pain-et-Vin* and *Chêne-Vert* or *Green-Oak*. Fruit medium, ovate, rather long and swelled; skin thin, rough, dark yellow ground covered with bronze, freely stained and dotted with gray and reddened on the side of the sun; flesh yellowish-white, semi-fine, very firm, although semi-melting, rather gritty at core, very juicy, saccharine, acid, very vinous, with a particularly pleasant flavor; second; about mid-Sept,

to beginning of Oct.

Palmischbirne. 1. Dochnahl *Führ. Obstkunde* **2**:171. 1856. **2.** Löschnig *Mostbirnen* 190, fig. 1913.

A perry pear grown in Germany and Upper Austria and known in different localities by various names. It was published in Germany in 1823. Fruit small, turbinate, regular in contour, greenish-yellow turning to light yellow, often with a dark blush, covered all over with large gray spots; flesh whitish, coarse-grained, very juicy, acidulous and saccharine, aromatic; third for the table, but first for perry; Sept.

Paradiesbirne. 1. Christ *Handb.* 525. 1817. **2.** Dochnahl *Führ. Obstkunde* **2**:182. 1856.

Thuringia, Ger., 1797. Fruit small to medium, conic, yellow-green changing to golden yellow, slightly blushed, and dotted with brown, thin skin; flesh yellowish-white, very sweet, juicy; second for dessert, first for household; end of Oct.

Pardee. 1. Downing *Fr. Trees Am.* 530. 1857.

Raised by S. D. Pardee, New Haven, Conn. Fruit small, globular, greenish-yellow, much covered with russet; flesh coarse, granular, buttery, juicy, melting, with a high vinous flavor, strongly perfumed; Oct.

Parfum d'Aout. 1. Duhamel *Trait. Arb. Fr.* **2**:136. 1768. **2.** Leroy *Dict. Pom.* **2**:496, fig. 1869.

The Parfum d'Aout described here is the variety described under that name by Jean Merlet in 1675 and 1690 and afterwards by Duhamel in 1768. It probably originated in the village of Berny, not far from Paris. Fruit small, long, nearly pyriform, enlarged on one side more than the other at the lower end; skin smooth, pale yellow, slightly tinged

with green, covered with dots and small speckles of fawn, tinged with a beautiful red on the side exposed to the sun; flesh white, semi-fine, breaking or semi-breaking, some grit around the core; juice rarely abundant, saccharine, sweet, with a perfume of musky-anis; second; end of Aug.

Parfum d'Hiver. 1. *Mass. Hort. Soc. Rpt.* 151. 1846. **2.** Leroy *Dict. Pom.* **2**:497, fig. 1869.

As early as 1600, this variety was grown in France under the name *Bouvert Musqué*. Tree rather vigorous, very productive. Fruit medium, roundish-turbinate, olive-yellow washed with bright red; stem rather long; calyx large, partially open; flesh brittle, juicy; good for cooking; Feb. to Apr.

Parfum de Rose. 1. Mas *Le Verger* **3**:Pt. 1, 185, fig. 91. 1866-73.

Obtained by Bivort and first introduced in 1849. Fruit small, long-pyriform, rather irregular in contour; skin fine, a little thick, water-green and whitish at first, sprinkled with small dots of grayish-green, combined with many stains of the same color, passing at maturity to dull yellow; flesh nearly white, very fine, buttery, melting; juice sufficient, having a distinct perfume of rose, which is its chief distinguishing feature; end of Sept.

Parfumé. 1. Miller *Gard. Dict.* **3**: 1807.

Fruit medium, globular; skin rather thick and tough, of a deep red color, spotted with brown; flesh melting, but dry and has a perfumed flavor; end of Aug.

Parfumée. 1. Mas *Pom. Gen.* **7**:186, fig. 578. 1881.

French. Gained by M. Pariset, Courciat-Dongalon, Fr., and fruited for the first time in 1869. Fruit

medium, globular-ovate, short and thick; skin thick, pale green, sprinkled with numerous greenish-gray dots only slightly visible on the side next the sun, at maturity pale yellow and the exposed cheek more or less warm gold; flesh white tinted with yellow, fine, melting, gritty around the center; juice abundant, sugary and perfumed; first; beginning of winter.

Parrot. 1. Bunyard-Thomas *Fr. Gard.* 140. 1904.

Introduced in England about 1900. Fruit like Bergamot in form; very richly flavored; Oct.

Parsonage. 1. Downing *Fr. Trees Am.* 530. 1857. **2.** *Ibid.* 828. 1869.

Originated at New Rochelle, N. Y. Fruit medium to large, obovate-obtuse-pyriform, often inclined, orange-yellow, rough, generally shaded with dull crimson, netted and patched with russet and thickly sprinkled with russet dots; flesh white, slightly coarse, somewhat granular, juicy, melting, with a refreshing vinous flavor; good; Sept.

Passa-tutti. 1. Christ *Handb.* 497. 1817. **2.** *Guide Prat.* 101. 1876.

An Italian autumn pear. Fruit medium, obtuse-pyriform, greenish-yellow, much covered with yellowish-gray russet, lighter yellow on the sunny side, with some red blush; flesh agreeable, with a Muscat flavor; third; Nov. and Dec.

Passans du Portugal. 1. *Mag. Hort.* **4**:390. 1838. **2.** Hogg *Fruit Man.* 626. 1884.

Passans du Portugal would seem from its name to be of Portuguese origin. It should not be confused with Summer Portugal although the two varieties have various synonyms in common and have some qualities in common. Fruit medium, oblate, flattened

after the Bergamot type, lively green changing to pale yellow on ripening, red next the sun brightening toward maturity to a more vivid shade; flesh white, breaking, juicy, with a fine sugary and perfumed flavor; an excellent dessert pear; Aug.

Passe-Colmar des Belges. 1. Leroy *Dict. Pom.* **2**:502. 1869.

Origin unknown but was found growing under this name in the collection of the Horticultural Society of Angers early in the last century. Fruit above medium, turbinate-obtuse and bossed, yellow, dotted and streaked with russet; flesh white, coarse, semi-breaking, wanting in juice and sugar, sharp and acidulous; third; Nov.

Passe Colmar d'Été. 1. *Guide Prat.* 101. 1876.

French. Fruit small, turbinate, olive-green; flesh very juicy; good; Sept.

Passe Colmar Musqué. 1. *Ann. Pom. Belge* **5**:45, fig. 1857. **2.** Hogg *Fruit Man.* 627. 1884.

Obtained by Major Espéren, Mechlin, Bel., from a bed of mixed seeds he made about 1831. It yielded its first fruit and was published in 1845. *Passe Colmar Musqué* is also known as *Autumn Colmar* but is distinct from the variety most usually known by that name. Fruit medium and sometimes less, turbinate, otherwise obtuse-conic, rather variable in form; skin thick, tender, green changing to golden-yellow, dotted, mottled and patched with pale cinnamon-russet and often washed on the side next the sun with a light transparent red; flesh slightly yellowish, very fine, melting, very saccharine, richly flavored, aromatic and scented; first; Nov.

Passe Crassane. 1. *Pom. France* **2**:No. 82, Pl. 82.

1863. **2.** Bunyard *Handb. Hardy Fr.* 192. 1920.

This winter pear was raised by M. Boisbunel, a nurseryman at Rouen, Fr., from a bed of mixed seeds which he made in 1845; it bore fruit and was first published at Rouen in 1855. Fruit medium or rather large, turbinate or globular-conic, flattened in Bergamot fashion; skin rough, thick, of a dull pale green, mottled with russet markings and passing to yellow on the side turned to the sun; flesh white, fine, melting, very juicy, saccharine, perfumed, and agreeably sprightly; very good; Jan. to Mar.

Passe-Goemans. 1. Mas. *Pom. Gen.* **3**:111, fig. 152. 1878.

Goemans Gelbe Sommerbirne. **2.** Dochnahl *Führ. Obstkunde* **2**:91. 1856.

Belgian, and probably from Van Mons in 1825. Fruit medium, globular, ventriculous, sides unequal, very obtuse, uniformly citron-yellow, blushed with cinnamon on the sun-exposed side; flesh very full of flavor; first; end of Sept.

Passe Madeleine. 1. *Mag. Hort.* **9**:131. 1843.

Probably a French variety. Tree vigorous and very productive. Fruit medium, long, lemon-yellow, lightly tinted with gray on the side next the sun; flesh melting, sugary, rather perfumed; beginning of Sept.

Passe-Tardive. 1. Leroy *Dict. Pom.* 506. fig. 1869. **2.** Downing *Fr. Trees Am.* 829. 1869.

Obtained by Major Espéren of Mechlin, Bel., and first published in 1843. Fruit above medium to large, turbinate, regular, bossed and much swelled in all its lower part and greatly contracted at the summit;

flesh white, semi-fine and semi-melting, gritty around the core; juice seldom abundant, sugary, agreeable, though but slightly perfumed; second or third for dessert, first for the kitchen; Apr. to June.

Pastor. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:197. 1908.

Reported in the Experimental orchard at Agassiz, Br. C., in 1900 and at various Canadian Experiment Farms in 1902. Fruit medium, oblate-pyriform, yellow; flesh melting, sugary, juicy, perfumed flavor; good; late season.

Pastorale, 1. Duhamel *Trait. Arb. Fr.* **2**:231, Pl. LV. 1768. **2.** Hogg *Fruit Man.* 628. 1884.

Mayer, director of the gardens of the Grand Duke of Wurtzburg, Bavaria, described this pear in his *Pomona franconica* in 1776 and 1801, and Duhamel du Monceau wrote of it in 1768. Earlier still Le Lectier spoke of its cultivation before 1628 under the name *Musette d'Hiver rosate*, Merlet called it *Pastorale* in 1675, and La Quintinye named it *Pastourelle* and *Musette d'Autumne* in 1688. Fruit above medium, pyriform, slightly obtuse, much puckered at the summit and generally larger on one side than on the other; skin greenish, nearly covered with gray-russet, sprinkled with large brown dots, vermilioned on the side of the sun; flesh whitish, semi-fine, more or less gritty around the core; juice abundant, rather sugary, slightly acid; Nov. to Jan.

Pater Noster. 1. Downing *Fr. Trees Am.* 532. 1857. **2.** *Ann. Pom. Belge* **6**:33, fig. 1858.

Mentioned in the Van Mons catalog of fruits cultivated from 1798 to 1823. Fruit above medium, and often large, variable in form, oblong or long-turbinate, slightly obtuse, contorted and bossed,

clear olive-yellow; flesh white, fine, melting or semi-melting, watery; juice abundant, saccharine, very vinous, acidulous, with an agreeable aroma; first; Nov.

Paul Ambre. 1. Downing *Fr. Trees Am.* 830. 1869. **2.** *Guide Prat.* 101. 1876.

A Belgian variety resembling Nec Plus Meuris; origin unknown. Fruit globular or globular-oval, pale greenish-yellow, shaded with crimson on the side next the sun, dots and markings of russet; flesh whitish, buttery, melting, juicy, sweet; good to very good; Oct.

Paul Bonamy. 1. Mas *Le Verger* **2**:215, fig. 106. 1866-73.

M. Bonamy, a nurseryman at Toulouse, Fr., obtained this pear and named it after his son. It was first published in 1865. Fruit large, ovate, bossed; skin fine, thin, oily and scented at maturity; flesh white, semi-fine, a little fibrous when the fruit is too ripe, melting or semi-melting, streaming with sugary juice, sprightly, highly perfumed; good; Sept.

Paul Coppieters. 1. *Guide Prat.* 97. 1895.

Sent out by M. Daras de Naghin, Antwerp, Bel., previous to 1895. Fruit rather large, pyriform-turbinate, yellow, dotted and heavily marbled with reddish-yellow; flesh white, very fine, free from granulations, buttery, saccharine and aromatic; beginning of Nov.

Paul d'Hoop. 1. *Guide Prat.* 104. 1895.

Sent out in 1895 as a new variety by M. Daras de Naghin, Antwerp, Bel. Fruit medium, covered with fawn-russet; flesh fine, yellowish-white, buttery,

vinous, saccharine, having a delicious aroma; Jan. and Feb.

Paul Thielens. 1. Leroy *Dict. Pom.* **2**:510, fig. 1869. **2.** Downing *Fr. Trees Am.* 830. 1869.

Paul Thielens came from a seed bed made by Van Mons in 1829 in his nursery at Louvain, Bel. Fruit large, ovate, very irregular, bossed and swelled, or ovate, nearly globular; skin a little rough, transparent greenish-yellow, dotted and marked with grayish-russet, slightly blushed with dull red on the side next the sun; flesh white, semi-fine and semi-melting, gritty at the center; juice rarely abundant, more or less saccharine, slightly aromatic; second; Oct.

Pauls Birne. 1. *Guide Prat.* 102. 1876.

Poire de Paul. **2.** Mas *Pom. Gen.* **7**:15, fig. 488. 1881.

Fruit large or rather large, globular-conic or conic-obtuse, dull water-green, usually entirely covered with a wash of cinnamon color which at maturity becomes golden, and the side exposed to the sun is blushed with a garnet red on which are numerous small gray dots; flesh white tinted with yellow, rather fine, breaking, gritty about the core, juicy, sugary, vinous, slightly perfumed; first for cooking; winter, lasting well toward the end.

Payen. 1. Leroy *Dict. Pom.* **2**:511, fig. 1869.

Raised by M. Boisbunel, a nurseryman at Rouen, Fr., from a mixed seed bed made in 1845. It was reported on in 1860 and propagated in 1863. It is distinct from both Beurré Payen and Président Payen. Fruit medium, obovate-pyriform, bright greenish-yellow, mottled with fawn and covered with

large and numerous brownish dots; flesh white, fine, melting, juicy, sweet; first class; Oct.

Payenche. 1. Leroy *Dict. Pom.* **2**:512, fig. 1869. **2.** Downing *Fr. Trees Am.* 830. 1869.

Paquency. **3.** Downing *Fr. Trees Am.* 404. 1845.

Found in a hedge at the village of Payenche in Périgord, Fr. It was taken to Paris in 1805. Fruit nearly medium, oblong-ovate-pyriform, light yellow stained or marbled and dotted with gray-russet and colored with brick-red on the side of the sun; flesh white, semi-fine, melting or semi-melting, some grit around the core; juice extremely abundant, very saccharine, acidulous, with a savory perfume and a slight after-taste of anis; first; Oct.

Payton.

According to letters from Nicholas Hallock, Queens, N. Y., this variety originated on the premises of a Mr. Payton of Flatbush, L. I., and had been known locally as Payton for some time previous to 1898. Fruit obovate-obtuse-roundish, about the size of Doyenné Boussock, dull green becoming yellow, thickly sprinkled with small brownish dots; stem short, stout, set in a rather shallow, russeted cavity; calyx open, placed in a shallow, wide basin; flesh not coarse, not gritty, not stringy, white, moderately juicy, good but not highly flavored; Sept., later than Bartlett.

Peach. 1. Downing *Fr. Trees Am.* 533. 1857. **2.** Hogg *Fruit Man.* 629. 1884.

Pêche. **3.** Leroy *Dict. Pom.* **2**:513, fig. 1869.

A variety obtained by Major Espéren, Mechlin, Bel., from a bed of mixed seeds he made in 1836,

and first reported in 1845. Fruit small to medium, globular-obovate; skin smooth, pale greenish-yellow when ripe, occasionally tinted with a faint blush of red on the side toward the sun, dotted and mottled with brown; flesh white, citrine, fine, very melting, very juicy, sweet, richly flavored and delicately perfumed; first in France, but variable according to climate; Aug.

Pei-li. 1. *Ia. Hort. Soc. Rpt.* 376. 1881.

Pei-li or *Snow pears*: A race of pears grown in northwestern China; globular, white, juicy and generally regarded as the best fruits in the country.

Pemberton. 1. Downing *Fr. Trees Am.* 831. 1869.

A seedling of S. A. Shurtleff, Boston, Mass. Fruit medium, inclining to oval, light green, thickly sprinkled with dark dots, yellowish on the side of the sun, with sometimes a red cheek; flesh somewhat coarse, but juicy, sweet; good; Feb. and Mar.

Penderson. 1. Downing *Fr. Trees Am.* 831. 1869.

Raised by Samuel Penderson, New Haven, Conn. Fruit medium, globular, greenish-yellow; flesh white, breaking, semi-melting, brisk, rather astringent; good; Oct.

Pendleton Early York. 1. *Mag. Hort.* **14**:381, fig. 41. 1848.

York-précoce de Pendleton. **2.** *Guide Prat.* 114, 313. 1876.

Originated by Mrs. Jeremiah York, Connecticut, about 1826 from seed of Rousselet Hâtif. Fruit medium or below, obovate, varying to obtuse-pyriform, pale greenish-yellow, with russet specks, sometimes with a faint blush; flesh white, tender,

sweet, melting, slightly perfumed; good; last of July.

Pengethley. 1. Kenrick *Am. Orch.* 197. 1832.

Raised by T. A. Knight, President of the London Horticultural Society, who, in February, 1832, sent cions of the variety to Mr. Lowell and the Massachusetts Agricultural Society. Fruit medium, inclining to oval, obovate, pale green, covered with dark dots, changing to yellow as it ripens, sometimes having a red cheek; flesh somewhat coarse, but juicy, sweet, and good; Feb. and Mar.

Penn. 1. *Horticulturist* **18**:58, fig. 1863. **2.** Downing *Fr. Trees Am.* 831. 1869.

The original tree was planted at the beginning of the last century close to the old Penn Manor in Pennsylvania and on the margin of land which became the track of the Camden and Amboy Railroad. Inasmuch as its position was so close to the railway the company threatened to cut it down. Hence it acquired the name of *Railroad Fuss* by which it was known for many years. Fruit medium, oblate, sometimes globular-oblate, angular, pale lemon-yellow, thickly sprinkled with small grayish and russet dots, sometimes with a few patches and dots of russet around the calyx; flesh white, a little coarse, very juicy, melting, with a sweet, pleasant, refreshing flavor, slightly aromatic, with a little musky perfume; good to very good; Oct.

Pennsylvania. 1. *Mag. Hort.* **10**:213. 1844. **2.** Downing *Fr. Trees Am.* 832. 1869.

A seedling found on the ground of J. B. Smith of Pennsylvania. In 1845 the original tree was stated to be nearly forty feet high, of a pyramidal form and remarkably robust habit. Fruit medium, obovate, tapering toward the stem, obtuse, brown-russet on

dull yellow ground, ruddy on the sunny side; flesh yellowish-white, coarse, melting, juicy, rich, sugary, slightly perfumed and with a musky flavor; good but not strictly first rate; as an American fruit it may be ranked with Buffum, Cushing and Fulton; Oct.

Pepin. 1. Leroy *Dict. Pom.* **2**:515, fig. 1869. **2.** Hogg *Fruit Man.* 629. 1884.

This pear was growing in the orchard of Le Lectier in Anjou, Fr., in the year 1600 and was described by Claude Saint-Étienne in 1670. Fruit below medium and sometimes small, globular, bossed, always mammillate at the summit, meadow-green, clouded with pale yellow, dotted with gray and extensively washed with brick red on the side turned to the sun; flesh whitish, fine or semi-fine, breaking, watery; at the center are numerous granulations; juice very saccharine, sweet and savory; second; mid-Aug.

Perpetual. 1. Downing *Fr. Trees Am.* 832. 1869.

Said to have originated on Long Island, N. Y. Disseminated by Messrs. Berckmans, Augusta, Ga. Fruit medium, obovate-obtuse-pyriform, green and yellow, beautifully blushed in the sun; flesh whitish, firm, moderately juicy, sweet; good; keeps till May.

Perrier. 1. *Guide Prat.* 111. 1876.

Obtained by M. Morel in 1873. Fruit medium, globular, green; flesh fine, melting, juicy; good; beginning of Aug. Tree vigorous and fertile.

Pertusati. 1. Leroy *Dict. Pom.* **2**:516, fig. 1869.

Raised in the nurseries of M. André Leroy, Angers, Fr., in 1867. Fruit medium, globular-ovate, irregular, having one side larger than the other; skin rough, golden-yellow, finely dotted with gray,

marbled with clear brown around the calyx and the stem; flesh white, fine, melting; juice abundant, very saccharine, with an acidulous flavor, very pleasant and delicately perfumed; first; Nov.

Petersbirne. 1. Dochnahl *Führ. Obstkunde* **2**:33. 1856.

Petite Poire de Pierre. **2.** Mas *Pom. Gen.* **4**:101, fig. 243. 1879.

Kleine Petersbirne. **3.** Mathieu *Nom. Pom.* 242. 1889.

Altenburg, Ger., 1799. Fruit small, clear green, sprinkled with numerous minute blackish-green dots, turning to dull yellow at maturity and washed over a large area of its surface with dark red, on which the dots are of a darker red; flesh greenish-white, very fine, semi-breaking, sufficiently juicy and agreeably perfumed; a good fruit to preserve or to dry; Aug.

Petit-Blanquet. 1. Duhamel *Trait. Arb. Fr.* **2**:132, Pl. VI. 1768. **2.** Leroy *Dict. Pom.* **2**:517, fig. 1869.

Little Blanquet. **3.** Downing *Fr. Trees Am.* 802. 1869.

Small Blanquet. **4.** Hogg *Fruit Man.* 646. 1884.

This variety was known in French gardens in the middle of the sixteenth century under the name *Poire Perle*, and some years later also by that of *Petit-Blanquet*. Fruit small or very small; form rather inconstant, slightly obtuse-pyriform, or more obtuse-ovate; skin smooth and transparent and shining, clear pale yellow or of a white, waxy and pearl-like tone, sprinkled with greenish dots, with occasionally a blush of tender rose on the side next the sun; flesh very white, semi-fine, breaking and firm; juice rarely abundant, saccharine, savory although only slightly

perfumed; a second class dessert pear; Aug.

Petit Catillac. 1. Mas *Pom. Gen.* **3**:3, fig. 98. 1878.

Kleiner Katzenkopf. **2.** Mathieu *Nom. Pom.* 242. 1889.

This pear is probably of German origin. It has points of resemblance in common with the old French Catillac but is distinguished by its size, being often less than that of the latter, its time of maturity being earlier, its flesh being less breaking, more saccharine and without any tartness. Fruit large, ovate-pyriform and much swelled, even in contour, green at first, sprinkled with large, regularly spaced, prominent, brown dots, the green passing to lemon-yellow at maturity, with a blush of red-brown on well-exposed fruits on the side next the sun; flesh white, coarse, semi-buttery; juice abundant, rather vinous and without any appreciable perfume; good for the kitchen; Oct. and Nov.

Petit-Chaumontel. 1. Leroy *Dict. Pom.* **2**:519, fig. 1869.

From the old garden of the Horticultural Society of Angers, Fr., and sometimes erroneously confused with Oignon which ripens some six weeks earlier. Fruit medium, globular, very bossed and irregular in form, clear green, dotted, veined with russet and extensively washed with carmine on the side turned to the sun; flesh very white, semi-fine, breaking, gritty at center; juice sufficient, saccharine, vinous, slightly astringent; second; latter half of Aug.

Petit-Hâtiveau. 1. Leroy *Dict. Pom.* **2**:520, fig. 1869.

A variety of ancient and unknown origin, but cultivated among a group of pears termed *Hâtiveau* for over the last five centuries. It was called by the

name *Petit-Hâtiveau* by Claude Saint-Étienne in 1670 to distinguish it from the *Gros-Hâtiveau*. Fruit small, ovate, obtuse and more or less globular; skin smooth and fine, lemon-yellow, dotted with exceedingly minute greenish points and more or less stained with gray-russet around the calyx and stem; flesh whitish, breaking, semi-fine, scented, juicy and gritty, juice sugary, acid, and slightly musky; third; July.

Petit-Muscat. 1. Knoop *Fructologie* **1**:75, Tab. 1. 1771. **2.** Leroy *Dict. Pom.* **2**:522, fig. 1869.

Little Muscat. **3.** Downing *Fr. Trees Am.* 802. 1869.

Jean Mayer, director of the gardens of the Grand Duke of Wurtzburg, Bavaria, in his *Pomona franconica* published in 1801 showed that the Petit-Muscat was the antique pear *Superba* described by Pliny. Various other pomologists wrote of it prior to Mayer as for instance Jacq. Daléchamp, 1615; Jean Jonston, 1662; and Henri Manger, 1783. Charles Estienne was the first to write of it in France, 1530, and he named it *Musquette*. Fruit very small, turbinate, more or less obtuse and sometimes globular-turbinate; the eye is placed in a regular-formed cavity and is always naked in consequence of the segments of the calyx falling off, pale greenish-yellow, finely dotted and slightly clouded with rose on the side of the sun (in France); flesh yellowish, semi-fine, breaking, not very juicy, sugary, acidulous and with a pleasant musk flavor; second; June.

Petit-Oin. 1. Leroy *Dict. Pom.* **2**:524, fig. 1869.

Winterwunder. **2.** Christ Handb. 497. 1817.

Müskirte Schmeerbirne. **3.** Dochnahl *Führ. Obstkunde* **2**:13. 1856.

Merveille d'Hiver. **4.** Hogg *Fruit Man.* 616. 1884.

Valerius Cordus was the first to describe this pear which originated in Germany and belongs to the Schmeerbirne or greasy class. About 1650 it was cultivated in France under the name of *Oing* or *Oin*, the French equivalent of the German *speck* or *lard*. Fruit medium or less, globular-ovate or turbinate, slightly obtuse at summit, with thick but smooth and greasy skin, dull yellow-green, more or less gray, dotted and flecked with greenish-russet; flesh whitish, granular, scented, exceedingly melting and juicy, very saccharine, free from acid and having an exquisite flavor; third; Sept. to Nov.

Petite Charlotte. 1. *Guide Prat.* 102. 1876.

French. Fruit small, pyramidal, greenish-yellow, highly colored on the side of the sun; flesh breaking, juicy, vinous; excellent; Aug. and Sept.

Petite Fondante. 1. Mas *Pom. Gen.* **6**:153, fig. 461. 1880.

Kleine Schmalzbirne. **2.** Mathieu *Nom. Pom.* 242. 1889.

Origin unknown. Fruit small, nearly spherical, sometimes depressed at both poles, even in contour; skin rather thick and yet tender, pale water-green, sown with numerous very faint, very small, brown dots; at maturity the basic green whitens a little and the side next the sun of fruits well exposed becomes a lighter yellow; flesh whitish, semi-fine, semi-melting, rather gritty around the core, highly saccharine, vinous and sprightly; good; end of Aug.

Petite Marguerite. 1. Leroy *Dict. Pom.* **2**:526, fig. 1869. **2.** Bunyard *Handb. Hardy Fr.* 192. 1920.

Raised in the nurseries of M. André Leroy, Angers, Fr., in 1862 and propagated in 1863. Fruit

medium, irregular ovate, bossed, swelled at the base and having one side always larger than the other, grass-green, dotted with gray and brown and slightly bronzed on the cheek exposed to the sun; flesh greenish-white, fine and very melting, slightly gritty at the center; juice extremely abundant and saccharine, acidulous, with a very pleasant perfume; first; Aug.

Petite Tournaisienne. 1. *Guide Prat.* 111. 1876.

A variety on trial with Messrs. Simon-Louis, Metz. Fruit medium, oval, oblong, yellow; flesh very fine, semi-melting; Apr. and May.

Petite Victorine. 1. Leroy *Dict. Pom.* **2**:528, fig. 1869.

A seedling of M. André Leroy raised in 1863. Fruit below medium, globular, flattened at the base but slightly conic at its other extremity, greenish, dotted and marbled with russet; flesh white, fine, melting, generally free from grit; juice sufficient, saccharine, acidulous, with a specially exquisite, musky flavor; first; Dec. and Jan.

Petre. 1. *Mag. Hort.* **2**:437. 1836. **2.** *Ibid.* **3**:83. 1838.

This valuable variety was raised by John Bartram, the proprietor of a botanic garden near Philadelphia, from seed received in a letter from Lord Petre of England about the year 1735. The tree still stands, although becoming decrepit. Fruit medium, obovate, truncate at both ends; skin thin, greenish-yellow, with small pale spots; flesh white, soft, juicy and buttery, with a delicious flavor, very slightly musky and vinous; very good; mid-Sept. to Dec.

Pfaffenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:193. 1856.

Württemberg and Baden, Ger., 1847. Fruit small, turbinate, yellow, tinted with a dark cinnamon-colored blush on the side next the sun; the summit is covered with russet, thickly sprinkled with gray dots; flesh firm and tasteless.

Pfingstbirne. 1. Dochnahl *Führ. Obstkunde* **2**:96. 1856.

German seedling, 1851. Fruit medium, globular, green turning yellowish-green, speckled and dotted with gray; skin thin and scentless; flesh rather white, sweet and musky; first for table, household and market; early summer.

Philiberte. 1. *Guide Prat.* 111. 1876.

French. Fruit rather large, nearly globular, a beautiful lemon-yellow; flesh very fine, melting, very juicy, agreeably perfumed; first; Dec. and Jan.

Philippe-Le-Bon. 1. Mas *Pom. Gen.* **1**:161, fig. 81. 1872.

Philipp der Gute. **2.** Dochnahl *Führ. Obstkunde* **2**:4. 1856.

According to the catalog of Van Mons of 1823 this was one of his seedlings. Fruit hardly medium, ovate, or turbinate-ovate, short and thick, usually even in outline; skin thick, firm, glossy, pale green, whitish-brown dots; at maturity the basic green passes to pale dull yellow, washed with some clear cerise-red; flesh white, rather coarse, buttery, not much juice, but vinous and perfumed; good; Sept. and Oct.

Philippe Couvreur. 1. Mathieu *Nom. Pom.* 264. 1889. **2.** *Guide Prat.* 72. 1895.

Of Belgian origin. Fruit medium to large, orange-

yellow dotted with russet; flesh white, tinted with salmon, fine, juicy, perfumed; good; beginning of Oct.

Philippe Goes. 1. *Ann. Pom. Belge* **3**:51, fig. 1855. **2.** Downing *Fr. Trees Am.* 833. 1869.

A posthumous gain from the seed beds of Van Mons. The parent tree gave its first fruit in 1846. Fruit above medium, obovate, uneven and undulating in outline; skin rough to the touch, of a dark olive, much covered with a bright russet; flesh semi-melting, gritty, sweet, rather granular at the center, juice rarely abundant, saccharine, vinous and fairly well perfumed; second; Dec.

Philippot. 1. Leroy *Dict. Pom.* **2**:530, fig. 1869.

Originated with M. Philippot, a nurseryman at Saint-Quentin, Aisne, Fr. In 1852 it fruited for the first time and was propagated in 1860. Fruit large to very large, globular-conic, obtuse, swelled and fleshy at the base; skin yellowish, in part dotted and marbled with brownish-fawn; flesh very white, coarse, semi-breaking, watery; juice abundant, sweet, having little sugar or perfume although rather delicate; third for dessert, first for cooking; Jan. to Mar.

Philopena. 1. *W. N. Y. Hort. Soc. Rpt.* 24. 1904.

A chance variety brought to notice by Reuben Ragan of Indiana, about 1850 and named Philopena by him. Fruit small to medium, oblong-pyriform, yellow, with purple blush; calyx open, in a small, shallow basin; stem short, cavity small or absent; quality medium; three or four weeks after Bartlett.

Picciola. 1. Downing *Fr. Trees Am.* 833. 1869.

Of Belgian origin. Fruit small, globular-oblate,

greenish-yellow, sometimes slightly blushed in the sun, with traces of russet; flesh whitish, very juicy, melting, with a vinous flavor; good to very good; Sept.

Pie IX. 1. *Mag. Hort.* **20**:86. 1854. **2.** Leroy *Dict. Pom.* **2**:531, fig. 1869.

Pius IX. **3.** Hogg *Fruit Man.* 631. 1884.

The parent tree of Pie IX sprang from seed sown in 1834 by Van Mons in his nurseries at Louvain, Bel. Fruit large, turbinate, more or less obtuse and elongated, much swelled at the middle, bossed and contorted at its summit, lemon-yellow, dotted and striped with fawn; flesh white, coarse or semi-fine, juicy and melting, rather gritty at the center, saccharine, sour, fairly well perfumed, sometimes disagreeably astringent; second; Sept.

Pierre Corneille. 1. *Guide Prat.* 104. 1895.

Pierre Corneille was obtained by M. Sannier, Rouen, Fr., from a seedling of Beurré Diel crossed with Doyenné du Comice; introduced about 1894. The fruit has the appearance of Duchesse d'Angoulême. Tree vigorous, fertile and pyramidal in form. Fruit large globular-obovate, greenish-yellow; flesh fine, melting, juicy, sugary, deliciously perfumed; Dec. and Jan.

Pierre Curie. 1. *Rev. Hort.* 174. 1907.

This is a seedling from Doyenné d'Alençon crossed with Beurré Henri Courcelle by M. Arsène Sannier, a nurseryman at Saint-Sever-Rouen, Fr., and placed on the market in 1907. Fruit medium, oval, of the form of the Doyenné d'Alençon; skin gray; flesh extremely fine, with a very agreeable perfume; Jan. to Mar.

Pierre Macé. 1. *Guide Prat.* 102. 1876.

French, attributed to André Leroy. Tree vigorous and fertile. Fruit rather large, globular-turbinate, yellow dotted with fawn; flesh fine, melting, juicy, highly perfumed; first; second half of Sept. and early Oct.

Pierre Paternotte. 1. *Guide Prat.* 60. 1895.

Raised from seed of the Marie-Louise by Pierre Paternotte, at Molenbeck-Saint-Jean, near Brussels, Bel. Tree vigorous and fertile. Fruit large, long, yellow, dotted and marbled with gray; flesh white, fine, melting, juicy; first; Oct. and Nov.

Pierre Pépin. 1. Leroy *Dict. Pom.* **2**:532, fig. 1869.

A seedling raised by Leroy, Angers, Fr., and first reported in 1868. Fruit large, obtuse-pyriform, bossed, and swelled in its lower half, more or less hollowed at either end, lemon-yellow, slightly clouded with green and much speckled and spotted with brown; flesh whitish, fine, melting, some grit around the core; juice abundant, saccharine, vinous, and agreeably perfumed; first; mid-Sept.

Pierre Tourasse. 1. *Rev. Hort.* 542. 1894.

Exhibited in France by M. Tourasse, its originator, in 1894. Tree vigorous, upright, stocky, productive. Fruit of good size, broadly turbinate, spotted with brilliant fawn color upon a clear yellow ground, washed with orange and saffron; flesh fine, melting, very juicy, rich in sugar; last of Sept. and first of Oct.

Pimpe. 1. Parkinson *Par. Ter.* 593. 1629.

“The Pimpe peare is as great as the Windsor peare, but rounder, and of a very good rellish.”

Pinneo. 1. *Cultivator* 304. 1845. **2.** Downing *Fr. Trees*

Am. 833. 1869.

Hebron. **3.** *Mag. Hort.* **24**:419. 1858.

Boston. **4.** *Ibid.* 500. 1858.

The parent tree of this variety was found growing in a woodland, New Haven, Conn., by Dea. Pinneo who transplanted it to a spot near his dwelling about the year 1745. It was propagated and distributed over many farms and found a good market in Boston. By error it acquired also the names of *Boston* and *Virgalieu*. Fruit medium or below, globular-oblate, slightly pyriform, pale yellow, netted, patched, and dotted with russet, slightly blushed on the sunny side; flesh yellowish-white, fine, melting, juicy, rich, sugary, brisk, with a refreshing and delicious aroma; good; Aug.

Piton. 1. Leroy *Dict. Pom.* **2**:533, fig. 1869.

A seedling found by M. Piton who lived at Cholet, Maine-et-Loire, Fr. The Horticultural Society of Angers described it in its Pomology, and it was named after its propagator. Fruit large to very large, long-turbinate-obtuse, depressed at each pole, clear dull green, sown with large russet dots; flesh white, semi-breaking and semi-fine, watery, containing some grit below the core; juice rather vinous, sugary, and more or less perfumed; second for dessert, first for compotes.

Pitson. 1. *Gard. Mon.* **27**:14. 1885.

A handsome pear from Stone and Wellington, Fonthill, Ont. Fruit medium, regularly pyriform, brown inclining to russet; good; Jan.

Pius X. 1. *Gard. Chron.* 3rd Ser. **37**:309. 1905.

Described in 1905 as a new pear raised by the

Alexiens Brothers at Tirlemont, Bel. Fruit large, somewhat cylindric, greenish-olive, with a few brown spots; flesh creamy-white, perfumed; reported to be of first rate quality; Oct.

Plantagenet. 1. Leroy *Dict. Pom.* **2**:534, fig. 1869. **2.** Downing *Fr. Trees Am.* 834. 1869.

The Plantagenet was raised from seed by the old Horticultural Society of Maine-et-Loire, The parent tree gave its first fruit in 1858 in the Society's garden at Angers. Fruit above medium, irregular-ovate, bossed, swelled at the central circumference, of a uniform bright green, some russet around the calyx and sprinkled with numerous dark brown dots; flesh whitish, fine or semi-fine, extremely melting; juice very abundant, extremely saccharine, acidulous, possessing a delicious perfume which gives an after-taste of musk; first; end of Sept. and early Oct.

Plascart. 1. *Guide Prat.* 102. 1876. **2.** Mas *Pom. Gen.* **3**:37, fig. 115. 1878.

Sent out by the Society Van Mons, Bel., without any account of its origin. Fruit below medium, turbinate-ovate, even in outline; skin firm, pale water-green, covered with numerous large, brown dots, very prominent, the green changing at maturity to a beautiful golden yellow, washed on the side next the sun with a lively vermilion on which the dots are golden yellow; flesh yellowish, semi-fine, rather firm and breaking; juice rich in sugar and perfumed; good; Oct.

Platt. 1. Downing *Fr. Trees Am.* 535. 1857. **2.** *Ibid.* 834. 1869.

Originated on the farm of Thomas Tredwell, Beekmantown, Clinton County, N. Y. Fruit medium, globular-oblate, pale yellow, netted and patched

with russet and sprinkled with russet dots; flesh whitish, juicy, buttery, semi-melting, agreeable; good; Oct.

Platte Honigbirne. 1. Dochnahl *Führ. Obstkunde* **2**:189. 1856.

Nassau, 1801. Fruit medium, obtuse-turbinate, light yellow-green, with a pale blush, numerous gray dots, marked with russet; flesh coarse-grained, aromatic; third for dessert, first for household; Sept.

Pocahontas. 1. *Mag. Hort.* **13**:525. 1847. **2.** Downing *Fr. Trees Am.* 834. 1869.

Originated at Quincy, Mass., and was exhibited before the Horticultural Society of that State in October, 1847. Fruit below medium, obovate-pyriform, yellow, netted, patched, and dotted with russet, sometimes shaded in the sun with bright crimson; flesh white, juicy, melting, sweet, slightly musky; pleasant; good to very good; Sept.

Pöckelbirne. 1. Löschnig *Mostbirnen* 192, fig. 1913.

A perry pear grown in Lower Austria. Fruit small to medium, globular-turbinate; skin tough, shining, smooth, green changing to greenish-yellow, blushed and streaked with red on the sunny side, dotted with yellow-brown; flesh yellowish-white, coarse-grained, juicy, subacid; good; Nov.

Poëte Béranger. 1. Leroy *Dict. Pom.* **2**:536, fig. 1869.

A seedling of Leroy which first fruited in 1867 and was placed in commerce in 1870. Fruit medium; form rather inconstant, nearly always having unequal sides, globular, or obtuse-turbinate; skin fine, rough, bright yellow shaded with green, dotted with gray and almost entirely washed and mottled

with brown-russet, more or less scaly; flesh greenish-white especially under the skin, fine, extremely melting, free from grit; juice very abundant, saccharine, acidulous, vinous, with a delicate perfume; first; mid-Sept.

Poire d'Abbeville. 1. *Guide Prat.* 81. 1876. **2.** Mas *Pom. Gen.* **5**:99, fig. 338. 1880.

The Poire d'Abbeville probably originated at the city of that name in the Department of the Somme, Fr.; for M. Jamin, Senior, propagated it about 1837 when he received it from M. Bennet of Boulogne-sur-Mer, who stated it was very well known and esteemed in the neighborhood of Abbeville. Fruit large, globular-conic but irregular, water-green sprinkled with numerous and large dots of fawn; at maturity the green changes to lemon-yellow; flesh white tinted with yellow, coarse, breaking, slightly gritty at the core, not very juicy or perfumed; first for culinary purposes, keeps easily for a long period; winter.

Poire d'Ange de Meiningen. 1. Mas *Pom. Gen.* **5**:105, fig. 341. 1880.

This pear has been in much request in the neighborhood of Meiningen, Ger., for many years and should be distinguished from the ancient *Poire d'Ange*, now called Boutoc, which it does not resemble. Fruit small, ovate or ovate-pyriform, even in contour; skin fine, delicate, bright green changing to beautiful bright lemon-yellow, the side next the sun being blushed and streaked with vermilion; the very numerous brown dots change on the blushed part to yellow; flesh tinted with yellow, rather fine, semi-breaking; juice sweet and agreeably perfumed but rather deficient; second; latter half of Aug.

Poire d'Avril. 1. Downing *Fr. Trees Am.* 536. 1857. **2.** Hogg *Fruit Man.* 488. 1884.

Stated by Messrs. Simon-Louis, Metz, Lorraine, to have been received by them from England under this name. Fruit large, pyramidal, obtuse; skin smooth and shining, of a lively dark green, with a brown tinge next the sun, and patches of gray-russet on the shaded side, the whole surface being covered with very large pale-colored specks; flesh crisp, juicy and sweet; first class for cooking according to Messrs. Simon-Louis; Mar. and Apr.

Poire Brune de Gasselin. 1. *Pom. France* **4**:No. 165, Pl. 165. 1867.

Gained by M. Durand-Gasselin, architect at Nantes, Fr., from a seed bed made in 1845. Fruit medium, ovate-pyramidal, yellow washed with fawn-russet; flesh very tender, juicy, very sugary and perfumed; first; Oct. and Nov.

Poire de Casserole. 1. *Guide Prat.* 89. 1876.

Casserule. **2.** Downing *Fr. Trees Am.* 715. 1869.

Of foreign origin, probably French. Fruit large, obovate-pyriform, yellow, with much russet and brown on cheek; flesh whitish, coarse, granular, breaking, very juicy, rich, with high aroma; first quality for cooking; Oct. and Nov.

Poire des Chartriers. 1. Mas *Pom. Gen.* **6**:133, fig. 451. 1880.

This variety is mentioned by Van Mons in his Catalog and is therein considered to be of Belgian origin. Fruit medium, globular-pyriform, irregular and bossed; skin a little thick at first, water-green, rather dark, sprinkled with very small and numerous

dots of gray-brown, the basic green becoming brilliant lemon-yellow and on maturity covered on the side next the sun with golden russet; flesh yellow, very fine, firm, buttery, melting, full of saccharine juice, vinous, perfumed; first; Oct.

Poire des Chasseurs. 1. *Ann. Pom. Belge* **5**:31, fig. 1857.

Des Chasseurs. **2.** Downing *Fr. Trees Am.* 735. 1869.

A posthumous gain of Van Mons tasted for the first time in 1842 and reported on by M. Simon Bouvier of Jodoigne, Bel. Fruit medium to large, ovate-pyriform, greenish, dotted with russet, and much stained with russet on the sun-exposed side; flesh yellowish, coarse, watery, melting, granular; juice vinous, agreeably perfumed; first; Oct.

Poire de Coq. 1. Leroy *Dict. Pom.* **1**:600, fig. 1867.

This variety is distinct from the *Poire de Coq* synonymous with the Beurré de Bruxelles, and is of unknown origin. It was cultivated for many years in the old gardens of the Horticultural Society of Angers. Fruit large, long-turbinate, bossed, strongly mammillate at apex, citron-yellow, dotted and stained with dark gray, and washed with bright carmine on the side exposed to the sun; flesh white, semi-fine and melting; juice sweet with slight perfume but delicate flavor; second; Sept.

Poire de Graisse. 1. Knoop *Pomologie* **1**:111, Tab. IV. 1771.

Probably of Belgian or French origin. In Holland it is known as the *Smeer-Peer*. Fruit medium, oblong, terminating acutely toward the stalk, greenish and speckled with blackish-brown; flesh rather gritty,

soft, with a slightly spicy flavor; not of much value.

Poire de gros queue. 1. Miller *Gard. Dict.* **3.** 1807.

Fruit large, taking its name from its very thick stalk, globular, yellow, flesh breaking; wanting in juice, having a very musky flavor.

Poire de Hert. 1. Mas *Le Verger* **1**:145, fig. 71. 1866-73.

Mas states he received this variety from Thomas Rivers, the well known English nurseryman of Sawbridgeworth near London, Eng. Fruit medium or nearly medium, ovate-pyriform, symmetrical in contour; skin thick, firm, very pale green all over, sprinkled with dots of gray, changing when ripe to lemon-yellow; flesh white, fine, semi-melting; juice sufficient, flavor refreshing, agreeable; good, of real merit for the season; end of winter and spring.

Poire de Houblon. 1. Mas *Pom. Gen.* **1**:101, fig. 51. 1872.

Origin unknown, but cultivated for a long time in many localities in Germany. Fruit small, ovate or globular-ovate, swelled, usually regular in contour, bright green, sown with grayish dots, passing to golden yellow on the side of the sun; flesh whitish, a little yellow near the center, coarse, semi-breaking, fairly full of sweet juice, with a fresh perfume of rose; second rate for eating raw but an excellent variety to dry; end of Aug.

Poire de Klevenow. 1. Mas *Le Verger* **2**:121, fig. 59. 1866-73.

Originated in the environs of Klevenow, a village of Pomerania, Prussia. Fruit small or nearly medium, regular pyriform, sombre green and yellow blushed with carmine; flesh white, slightly greenish, fine,

buttery; juice very sugary and abundant, vinous, perfumed; good; mid-Aug.

Poire Noire à Longue Queue. 1. Mas *Pom. Gen.* **7**:165, fig. 563. 1881.

Origin thought to be German. Fruit nearly medium, ovate-pyriform, symmetrical in outline; skin thick, firm, dull green covered with a network of gray-russet, through which a light yellow shows at maturity; on the shaded side are some gray dots and on the sun-exposed side are numerous large black-red spots; flesh white, transparent, semi-fine, buttery; juice sufficient, saccharine, slightly acid; good for cooking; Aug.

Poire du Pauvre. 1. *Guide Prat.* 102. 1876. **2.** *Rev. Hort.* 163. 1889.

This pear was raised from seed of the Urbaniste sown in 1846. Fruit medium or large, oval, pyriform, ventriculous; skin fine and shining, white tinted with green, much covered with fawn around the two ends; flesh white, rather fine, a little gritty around the center, very melting; juice abundant, saccharine, and pleasantly perfumed, with a fresh flavor and agreeable astringency; Oct. and Nov.

Poire des Peintres. 1. *Guide Prat.* 111. 1876.

Described by Messrs. Simon-Louis, Metz, Lorraine, in 1876 as a new variety. Tree vigorous and very fertile. Fruit rather large, oval-pyriform, dark yellow, extensively washed with lively red; flesh melting, juicy, saccharine and highly perfumed; end of Aug. and Sept.

Poire de Pendant. 1. Prince *Pom. Man.* **1**:84. 1831.

“It is from the long stem by which this pear is suspended, which is near two inches in length, that it

obtains its title." The *Pendar* of La Quintinye, and the *Hanging pear* of Evelyn, although quoted as synonyms of this pear, are probably not the same as they are said to ripen in October. It is also very doubtful whether the synonyms of *Pendar* and *Knaves' pear* given by Miller and Forsyth apply to this fruit. Fruit, "The entire height of the fruit is twenty-eight lines, and its breadth two inches, and sometimes a line more;" turbinate; skin is ash-colored, approaching russet, and dotted over with small points of russet; flesh greenish-white, melting, sweet, and partially perfumed; end of Sept.

Poire de Preuilly. 1. *Guide Prat.* 111. 1876.

Published in the French *Revue Horticole*, 1870. Tree vigorous and very fertile. This is a very large fruit used for decorative purposes. In form it is similar to the Bartlett; skin yellow-green, speckled; flesh breaking.

Poire de Rateau. 1. Noisette *Man. Comp. Jard.* **2**:532. 1860.

Tree very vigorous when grafted on pear. Fruit very large, turbinate, greenish-white, reddish and sown with russet dots on the side next the sun; flesh breaking, slightly saccharine and perfumed; eatable raw, and good for cooking; mid-Dec.

Poire Rigoleau. 1. *Mag. Hort.* **20**:136. 1854.

Introduced in 1854 as a new variety. Origin unknown. Fruit small, nearly globular; skin thick, greenish-yellow, covered with russet specks, little russet at either stem and calyx; flesh white, tender, juicy, of a very pleasant flavor; first part of Nov.

Poire du Roeulx. 1. *Guide Prat.* 104. 1876.

On trial with Messrs. Simon-Louis, Metz, Lorraine, in 1876; it was published in the *Revue de l'Arboriculture* in France. Fruit medium, pyriform, short, irregular, yellow clouded with fawn; flesh yellowish, very melting, exceedingly juicy, very saccharine and with a very exquisite perfume; first; latter half of Sept.

Poire Souvenir d'Hortolès Père. 1. *Pom. France* **4**:No. 173, Pl. 173. 1865.

A variety unpublished previous to 1865 but cultivated in France, where it had already existed for more than sixty years. Fruit small, pyriform, usually growing in clusters strongly attached to the tree, green, dotted, passing to yellow and washed with dark brilliant red on the side of the sun; flesh white, firm, melting, slightly gritty; juice abundant, with a strong perfume of Muscatel; good; July.

Poire Thouin. 1. Mas *Pom. Gen.* **6**:177, fig. 473. 1880.

According to Diel, Poire Thouin was obtained by Van Mons. Fruit medium, ovate, more or less short, usually symmetrical in contour, largest circumference at center; skin a little thick and firm, bright green, sprinkled with numerous inconspicuous spots of a darker shade, changing to pale yellow, and washed with orange-red on the side next the sun of well-exposed fruits; flesh white, coarse, breaking, full of saccharine juice, perfumed; third, for the season of its maturity; early Sept.

Poire de Torpes. 1. *Guide Prat.* 107. 1876.

Tree hardy, very productive. Fruit rather large, globular, yellow stained with russet; flesh fine, melting; good; Oct. to Dec.

Poire des Trois Fréres. 1. *Guide Prat.* 71, 308. 1876.

A wilding found near Maizieres-les-Metz, Fr. It was propagated by Messrs. Maline and placed in commerce in 1863. Tree vigorous, very fertile, and suitable especially for wind-blown situations. Fruit medium, long, green; flesh whitish, buttery, sugary and perfumed; first; end of Aug.

Poire des Trois Jours. 1. Kenrick *Am. Orch.* 149. 1841.

Trois Jours. **2.** *Cultivator*, 340. 1847.

Kenrick says: "New and large; beurrée; of first-rate excellence, ripening at Paris in November, according to M. Jamin."

Poire de Vitrier. 1. Duhamel *Trait. Arb. Fr.* **2**:139, Pl. XLIV, fig. 4. 1768. **2.** Leroy *Dict. Pom.* **2**:746, fig. 1869.

This is probably a variety of German origin, for Valerius Cordus, who was a native of Hesse and died in 1544, spoke of it as abounding in Saxony, in the suburbs of Eisleben, and very common in all Germany. Duhamel du Monceau described it in France in 1768. Fruit medium, rather regular-ovate, wrinkled and mammillate at the summit, dull yellow, much clouded over with gray-russet, dotted with light brown, and vermilioned on the side toward the sun; flesh whitish, watery, semi-fine and semi-melting, gritty around the center; juice sufficient, sugary, vinous, slightly musky; second; Nov. and Dec.

Poire du Voyageur. 1. *Guide Prat.* 107, 311. 1876.

Originated by M. Boisbunel of Rouen, Fr. Tree vigorous and fertile. Fruit medium, pyriform,

yellowish-green; flesh juicy, granular around the core; third; summer.

Poirier de Jardin. 1. Duhamel *Trait. Arb. Fr.* **2**:143, Pl. XIX, fig. 3. 1768.

Garden Pear. **2.** Downing *Fr. Trees Am.* 770. 1869.

Origin unknown; probably French. Fruit large, globular-oblate, orange-shaped, surface a little bossed, on the side of the sun a beautiful deep red, spotted with golden-yellow, the shaded side being streaked and rayed with bright red on yellow; flesh semi-breaking, a little coarse and somewhat gritty around the core; juice sugary and of a very good flavor; good; Dec.

Poiteau. 1. Leroy *Dict. Pom.* **2**:537, fig. 1869.

Raised by Van Mons, and first fruited at Louvain, Bel., in 1823. Fruit above medium, long-ovate, variable in form, sometimes being short-ovate and ventriculous, orange-yellow, dotted with brown, stained with greenish-russet around the calyx and stem, and mottled with the same on the cheek next the sun; flesh whitish, rather coarse, melting, gritty, full of saccharine juice, sometimes astringent, without pronounced perfume; second; Oct.

Polish Lemon. 1. *Am. Pom. Soc. Rpt.* 61. 1887.

Known as *Cytrymova* in Poland. It was received in 1882 by the Iowa State Agricultural College, and was subsequently propagated and distributed by the College.

Polk. 1. *Mag. Hort.* **11**:252. 1845.

A seedling raised by H. W. Edwards, New Haven, Conn., at one time Governor of that state. It came into bearing in 1844. Fruit larger than the Seckel,

like Bergamot in form; flesh juicy, melting, subacid, sweet and rich; first; Sept to Nov.

Pollan. 1. Downing *Fr. Trees Am.* 834. 1869.

A Pennsylvania pear. Fruit below medium, nearly globular, greenish-yellow, with a shade of brown in the sun; flesh whitish, a little coarse, moderately juicy, vinous, pleasant; good; Aug.

Pollvaskaja. 1. *Iowa Hort. Soc. Rpt.* 61. 1880.

A Russian variety growing on the Iowa State College Farm in 1880, and having thorny wood; it unites very imperfectly with the apple. It shows "marked traces of the Chinese forms of the pear in shape, serration, thickness and size of leaf, and in the peculiar enlarged character of the scaly terminal buds."

Polnische grüne Krautbirne. 1. Dochnahl *Führ. Obstkunde* **2**:155. 1856.

Galicia, 1819. Fruit small, globular-flattened, distorted, grass-green changing to yellowish grass-green and often with a dark blush and brown-russet on the side next the sun; scentless skin; flesh coarse-grained, melting, vinous, very juicy, acidulous; second for dessert, first for household; mid-Sept.

Polnische Seidenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:145. 1856.

Galicia, 1812. Fruit medium to large, regular in form, light lemon-yellow, often rather blushed, sprinkled with numerous small, prominent, light brown and often greenish dots; flesh breaking, and coarse-grained, sweet, Muscatel in flavor; third for dessert, very good for household purposes; Sept.

Pomeranzenbirn von Zabergäu. 1. Löschnig

Mostbirnen 90, fig. 1913.

A perry pear found in Germany and Upper Austria. Fruit large, globular-turbinate; skin smooth, shining, of a light leaf-green changing when ripe to light greenish-yellow, finely dotted, without russet; flesh yellow-white, rather coarse-grained, with small grits around the center, very juicy, saccharine, acidulous, having a strong scent; Oct.

Pomme d'Été. 1. Leroy *Dict. Pom.* **2**:539, fig. 1869.

The origin of the Pomme d'Été is uncertain, except that M. Leroy of Angers received it from the old garden of the Horticultural Society of Angers about 1849. Fruit medium and below, globular, much flattened and similar to the form of Caillot rosat and Naquette, yellow-ochre, entirely covered with gray dots; flesh white, fine and breaking, watery, rather granular around the core; juice abundant, saccharine, sweet and very musky; second; end of Sept.

Pope Quaker. 1. Downing *Fr. Trees Am.* 834. 1869.

Origin, Long Island, N. Y. Fruit very fair, medium-size, oblong-pyriform, smooth, yellows-russet; flesh melting, juicy and pleasant; hardly good; Oct.

Pope Scarlet Major. 1. *Mag. Hort.* **3**:15. 1837. **2.** Downing *Fr. Trees Am.* 834. 1869.

Origin, Long Island, N. Y. Fruit nearly large, obovate, yellow, blushed on exposed side with bright red; flesh white, breaking, rather dry; very indifferent; Oct.

Portail. 1. Miller *Gard. Dict.* **3.** 1807. **2.** Christ *Handb.* 503. 1817.

Origin unknown beyond the fact that it was discovered in the old province of Poitou, Fr., and was held in high esteem there. Fruit "longer than it is round," greenish; flesh yellowish, dry, gritty and hard unless in very favorable seasons and upon very good soil, but may at times be tender and have an unforgetable musky aroma; it bakes well; Jan. to Mar.

Porter. 1. *Mass. Hort. Soc. Rpt.* 44. 1866.

A seedling raised by S. A. Shurtleff, Brookline, Mass. No. 16. Fruited in 1862 Diameter 2½ inches, melting, sweet and juicy; ripens soundly; good market pear; Oct.

Portingall. 1. Parkinson *Par. Ter.* 592. 1629.

"The Portingall peare is a great peare, but more goodly in shew then good indeed."

Posey. 1. *Am. Pom. Soc. Rpt.* 44. 1897.

Found in a fence row on the farm of Jacob Grabel, where it originated about 1880. It was reported by A. R. Ryman, Cedar Grove, Ind. Fruit medium, pyriform, moderately smooth, lemon-yellow, with small brown spots; flesh whitish, buttery, mild subacid; good to very good; Sept. to Dec.

Prager Schaferbirne. 1. Oberdieck *Obst. Sort.* 321. 1881.

Germany. Fruit medium (3½ x 2½ in.), ovate and pyriform, smooth, greenish turning to lemon-yellow blushed on the sunny side, very finely dotted; flesh yellowish-white, tender, agreeably aromatic and sweet; first for kitchen and household purposes; Oct. to end of Jan.

Prairie du Pond. 1. Downing *Fr. Trees Am.* 835. 1869.

Introduced by A. H. Ernst, Cincinnati, Ohio. Fruit small, nearly globular, greenish-yellow, with many brown and green dots; flesh whitish, moderately juicy, semi-melting, vinous, astringent; poor; Sept.

Pratt. 1. *Horticulturist* **1**:210, fig. 58. 1846. **2.** Leroy *Dict. Pom.* 2:542, fig. 1869.

The Pratt pear was first brought into notice by Owen Mason, Providence, R. I., who obtained cions from the original tree at Scituate, R. I., and distributed them in the spring of 1844. It appears to have originated at Johnson, R. I. Fruit above medium, obovate, greenish-yellow, sprinkled with numerous gray dots and russet spots; flesh white, tender, melting, fine-grained, abounding with saccharine, well-flavored juice; second; Sept.

Pratt Junior. 1. *Am. Pom. Soc. Rpt.* 151. 1862.

Another native which originated on the same farm as the preceding variety and named by the Rhode Island Society in order to designate its origin; in appearance similar to Winter Nelis.

Pratt Seedling. 1. *Chico Nurs. Cat.* 13. 1904.

Originated in Salem, Oregon, with Captain Pratt. Shape and color of Sheldon; keeps until Mar.

Precilly. 1. Downing *Fr. Trees Am.* 835. 1869.

Belgian. Fruit medium to large, obovate-acute-pyriform, greenish-yellow, netted and patched with russet and sprinkled with brown dots; flesh yellowish-white, coarse, breaking, juicy; good for cooking; Oct.

Précoce de Celles. 1. *Guide Prat.* 111. 1876.

Described by Messrs. Simon-Louis, Metz, Lorraine, in 1876 as a new variety received from Belgium. Fruit medium, like Bergamot in form; very good in quality for its season; early summer.

Précoce de Jodoigne. 1. *Mas Pom. Gen.* **5**:101, fig. 339. 1880.

Obtained by M. Grégoire, Jodoigne, Brabant, Bel., and first published in 1865. Fruit rather small or nearly medium, ovate-pyriform, regular in contour, vivid green covered with a sort of whitish bloom and sprinkled with green dots of a darker shade, changing to yellow and occasionally tinged with red on the side of the sun; flesh whitish, fine, buttery, melting, full of sweet juice, saccharine but not highly flavored; fairly good quality; July.

Précoce de Tivoli. 1. *Guide Prat.* 102. 1876.

Fruit medium, pyriform, pale yellow, flesh white, gritty, semi-breaking, saccharine; good; Aug.

Précoce de Trévoux. 1. *Cat. Cong. Pom. France* 328. 1906.

Obtained by M. Treyve, Trévoux, Ain, Fr., and first published in 1862. Fruit full medium size, pyriform-truncate, fine and tender skin of a vivid yellow, very finely dotted with green and washed and streaked with carmine on the side next the sun; flesh white, fine, melting, juicy, sugary and richly flavored, agreeable perfume; good to very good; beginning of Aug.

Précoce Trottier. 1. *Rev. Hort.* 352. 1912.

A French pear described by M. de la Bastie in the *Journal of the Pomological Society of France* in 1890. Fruit medium or a little above medium, turbinate-ventriculous; at first the skin is a very bright green

changing to pale yellow with some green markings, and blushed with somber red on the side next the sun, dotted with brown; flesh white, semi-fine, nearly melting, juicy, saccharine, agreeably perfumed; good to very good; mid-July.

Premature. 1. Kenrick *Am. Orch.* 157. 1832.

Originated in Scotland about 1830. Fruit below medium; flesh very juicy and delicious, superior to the Crawford, of Scotland, reputed a most superior early fruit; early Aug.

Prémices d'Écully. 1. Leroy *Dict. Pom.* **2**:544, fig. 1869. **2.** Hogg *Fruit Man.* 632. 1884.

Obtained by M. Luizet, a nurseryman at Écully-lez-Lyon, Rhône, Fr., from a bed of mixed seeds made in 1847. Fruit rather large, irregular ovate, round and bossed, yellow, with here and there a green tinge, thickly spotted and stained with small blotches of brown-russet; flesh tender, whitish, fine, melting, juicy, easily becoming soft, sweet, saccharine, with a flavor of musk; Sept.

Prémices de Wagelwater. 1. Downing *Fr. Trees Am.* 836. 1869.

Fruit below medium, globular-obovate-pyriform, sides unequal, yellow with a few traces of russet and thickly sprinkled with brown dots; flesh whitish, melting, juicy, very sweet; good to very good; Oct.

Premier. 1. Hogg *Fruit Man.* 632. 1884.

Raised at the Royal Garden, Frogmore, Eng., and first exhibited in 1871. Fruit above medium, oblong, terminating abruptly and bluntly at the stalk, undulating in outline and contracted with a waist at the middle; skin covered with cinnamon-colored

russet; flesh semi-melting, very juicy, sweet, and brisk, with a flavor resembling pineapple; good; Nov.

Premier Président Métivier. 1. Leroy *Dict. Pom.* **2**:545, fig. 1869.

A variety raised in Leroy's nurseries at Angers, Fr., in 1867. Fruit above medium or large, globular, flattened at the poles, more enlarged on one side than on the other; skin rough, grass-green, dotted and veined with olive-russet on the shaded side, and bronzed and dotted with bright fawn on the face exposed to the sun; flesh very white, melting, fine or semi-fine, free from granulations, very juicy, acidulous, highly saccharine, with delicious perfume and flavor; first; Oct.

Présent de Van Mons. 1. Leroy *Dict. Pom.* **2**:546, fig. 1869.

A seedling of Van Mons raised at Louvain, Bel., but which first fruited with General Delaage at Angers, Fr., in 1844. Fruit large, turbinate, shortened and ventriculous in its lower part, very much narrowed and slightly constricted at the top which is rarely very obtuse, lemon-yellow, strewn with large gray dots, fully colored with dull red on the side exposed to the sun; flesh white, fine, or semi-fine, melting, gritty below the core; juice abundant; saccharine, sourish and vinous, with an aromatic flavor; first; Feb. to Apr.

President. 1. *Mass. Hort. Soc.* Rpt. 44. 1865. **2.** Downing *Fr. Trees Am.* 836. 1869. A seedling raised by S. A. Shurtleff, Brookline, Mass., and fruited in 1861. Fruit very large, globular-obovate, somewhat irregular; skin slightly rough, greenish-yellow, pale red in the sun, considerable russet next the base of the stalk

and traces of russet and conspicuous dots all over; flesh yellowish-white, rather coarse, melting, juicy, slightly vinous; good; early Nov.

Président Barabé. 1. *Guide Prat.* 97. 1895. **2.** Bunyard *Handb. Hardy Fr.* 193. 1920.

First fruited in 1870 from a seed of Bergamotte Espéren with M. Sannier, Rouen, Fr. Fruit medium to below, short-turbinate, deep golden in color; flesh white, fine, melting, a little acid, juicy and of exquisite flavor; Jan. to Mar.

Président de la Bastie. 1. Mathieu *Nom. Pom.* 265. 1889. **2.** *Cat. Cong. Pom. France* 330, fig. 1906.

Originated with M. Boisselot, Nantes, Fr. Fruit large, shape of Bartlett; flesh white, fine, melting; good to very good; Feb. and Mar.

Président Boncenne. 1. *Guide Prat.* 97. 1895.

On trial with Messrs. Simon-Louis, Metz, Lorraine, in 1895. This firm had received it from Poitiers. Tree very vigorous and makes a shapely pyramid. Fruit medium, pyramidal, greenish, slightly blushed with red on the side next the sun; flesh white, semi-fine, melting, very juicy, perfumed, saccharine and with a flavor of almond; beginning of Sept.

Président Campy. 1. *Guide Prat.* 102. 1876.

On trial with Messrs. Simon-Louis, Metz, Lorraine, in 1876 and stated to have been received from Belgium.

President Clark. 1. *Am. Pom. Soc. Rpt.* 98. 1881.

This was a hybrid produced from the crossing of Seckel with Belle Lucrative. It was raised by Francis

Dana, who, before he died, put several seedlings into the hands of Colonel Stone, Dedham, Mass., saying he thought there might be some very good varieties among them. This variety was among them, and was named after the first President of the Massachusetts Agricultural College. Fruit full medium, turbinate, somewhat irregular and variable, clear lemon-yellow, with a carmine cheek next the sun; flesh white, fine-grained, very melting, juicy, slightly astringent, sweet and rich; very good to best; a little later in season than Bartlett.

Président Couprie. 1. *Guide Prat.* 102. 1876.

French. Fruit medium, oval; flesh yellow, very tender, melting, juicy, highly saccharine and perfumed; Sept. and Oct.

Président Deboutteville. 1. *Guide Prat.* 102. 1876.

Published by M. Boisbunel. On trial with Messrs. Simon-Louis, Metz, Lorraine, in 1876. Fruit rather large; first; Dec.

President Dr. Ward. 1. *N. J. Hort. Soc. Rpt.* 157. 1905.

Awarded a premium by the New Jersey Horticultural Society in 1905.

President d'Estaintot. 1. *Guide Prat.* 111. 1876.

Obtained at Rouen, Fr., from a seed of Soldat-Laboureur, and published by Collette. The fruit is of first quality and is in season from Aug. to Oct.

President Felton. 1. Downing *Fr. Trees Am.* 836. 1869.

Originated with W. D. Brincklé, Philadelphia, Pa. Fruit medium, globular-oblate, pale yellow, with a crimson cheek in sun, nettings and tracings of russet,

and many brown and gray dots; flesh fine, juicy, yellowish, semi-melting, slightly vinous, sweet; good; Oct.

Président Fortier. 1. *Guide Prat.* 98. 1895.

Obtained by M. Sannier, Rouen, Fr. Fruit medium, ovate, slightly swelled; flesh white, very fine, melting, sugary, perfumed; Jan. to Apr.

Président Héron 1.. *Rev. Hort.* 6. 1897.

A new pear placed on the market in 1897 by Arséne Sannier, a nurseryman at Rouen, Fr. Fruit medium; form recalling that of Urbaniste, obovate or oblong-obovate; flesh very fine, juicy, and perfumed.

Président Mas. 1. Downing *Fr. Trees Am.* 836. 1869.
2. *Cat. Cong. Pom.* France 333, fig. 1906.

First reported in 1865 as having been raised by M. Boisbunel, horticulturist at Rouen, Fr., and adopted by the Pomological Congress of France. Fruit large, sometimes very large, ovate-conic-obtuse and bossed round the stalk; skin rough, yellowish-green, much dotted with russet, marbled with fawn around the eye; flesh whitish, fine, melting, juicy with a sugary flavor, vinous and very pleasantly perfumed; very good; Nov. to Jan.

Président Muller. 1. *Guide Prat.* 102. 1876.

Published by M. Grégoire, Jodoigne, Brabant, and on trial with Messrs. Simon-Louis, Metz, Lorraine, in 1876. Fruit large; first; Nov.

Président Olivier. 1. *Guide Prat.* 111. 1876.

Gained by M. Grégoire, Jodoigne, Bel., not long previous to 1876.

Président d'Osmonville. 1. Leroy *Dict. Pom.* **2**:547,

fig. 1869. **2.** Bunyard *Handb. Hardy Fr.* 194. 1920.

This variety was a posthumous gain of M. Léon Leclerc, Laval, Fr., in 1834, an amateur well known among French pomologists. Fruit medium, ovate-pyriform; skin smooth, fine and tender, very pale green changing to pale yellow, more golden on the side of the sun, or occasionally washed on the more-exposed fruits with a suggestion of rosy red; flesh yellow, very fine, entirely melting, filled with saccharine juice, vinous, and penetrated with a lively musk flavor; first; Oct.

Président Parigot. 1. Leroy *Dict. Pom.* **2**:548, fig. 1869.

A variety originated by Count Nouhes near Pauzauges in the Vendée, Fr., where the seedling gave its first fruit in 1852. Fruit above medium, long-conic, narrowed in its upper part and bossed; skin rather rough, orange-yellow, dotted with greenish-gray and extensively washed with clear gray; flesh whitish, semi-fine, melting, watery, granular around the core; juice abundant, very saccharine, vinous and with a delicious flavor; first; Oct.

Président Payen. 1. Leroy *Dict. Pom.* **2**:549. 1869.

This pear issued in 1860 from a seed bed made by M. Briffaut, Sévres, Fr. It was awarded a silver medal in 1861 by the Horticultural Society of Paris. Fruit medium, long-pyriform, golden-russet sometimes washed with a red blush; flesh fine, melting, juicy, saccharine, perfumed, and of good flavor; of moderate merit; beginning of winter.

Président Pouyer-Quertier. 1. *Guide Prat.* 111. 1876.

A French pear dedicated to a President of the Horticultural Society of Rouen. Fruit medium, rather long, covered with gray-russet; flesh very fine, juicy, saccharine; first; Dec. and Jan.

Président Royer. 1. Leroy *Dict. Pom.* **2**:549, fig. 1869.

M. Xavier Grégoire, the Belgian tanner of Jodoigne, obtained this pear in 1762 when it fruited for the first time. Fruit medium; form recalling that of the quince, very bossed, rather obtuse, base flat, bright yellow, dotted, streaked and mottled with russet and extensively washed with tender rose on the side of the sun; flesh fine, firm although quite melting, rather granular at core; juice abundant, saccharine, highly perfumed, possessing a slight acidity which renders it agreeable and refreshing; first; Oct.

Président Le Sant. 1. *Guide Prat.* 102. 1876.

Tree vigorous and fertile. Fruit medium, Bergamot-shaped; skin oily, symmetrical, yellow dotted with fawn; flesh fine, melting, juicy, saccharine, with an agreeable aroma; first; Oct. and Nov.

Président Watier. 1. *Guide Prat.* 98. 1895.

Obtained about 1880 by the Chevalier de Biseau d'Hauteville, at Binche, Bel. Fruit long-gourd-shaped; flesh salmon-colored, melting, saccharine, well-flavored; Nov.

Présidente Senente. 1. *Guide Prat.* 98. 1895.

Obtained by M. Sannier, Rouen, Fr. On trial in 1895. Tree healthy, of moderate vigor and pyramidal. Fruit small to medium, globular-oblate; flesh melting, perfumed, very juicy with a pleasant

acidity; Dec. and Jan.

Prévost. 1. Leroy *Dict. Pom.* **2**:552, fig. 1869. **2.** Hogg *Fruit Man.* 633. 1884.

Obtained by Alexandre Bivort, director of the nurseries of the Society Van Mons at Geest-Saint-Rémy, Jodoigne, Bel, in 1847. Fruit above medium, rather irregular-ovate, bossed, often much swelled in the lower half, lemon-yellow or golden, dotted and a little speckled with bright maroon, carmined on the cheek turned to the sun; flesh white, semi-fine and semi-melting, having a pleasant muscat flavor; second; Jan. to Mar.

Pricke. 1. Parkinson *Par. Ter.* 593. 1629.

"The peare pricke is very like unto the Greenfield peare, being both faire, great, and good."

Primating. 1. Parkinson *Par. Ter.* 592. 1629.

Mentioned by John Parkinson in 1629, as "a good moist peare, and early ripe."

Prince Albert. 1. *Pom. France* **4**:No. 141, Pl. 141. 1865. **2.** Downing *Fr. Trees Am.* 836. 1869.

This was a seedling of the eighth generation raised by Van Mons at Louvain, Bel., sown about 1840. Fruit medium, conic, obtuse and irregular, often contorted, sides unequal, greenish, striped and dotted with fawn, washed with russet around the stem; flesh white, semi-fine and semi-breaking, gritty; juice abundant, saccharine, aromatic, rather savory; second; Nov. and Dec.

Prince Harvest. 1. Downing *Fr. Trees Am.* 837. 1869.

Raised by William Prince, Flushing, L. I., N. Y. Fruit small, ovate-pyriform, pale yellow, rarely a

brownish blush, red cheek in the sun, sprinkled with brown dots, and sometimes patched with russet; flesh white, firm, breaking, moderately juicy, sweet, slightly musky; good; end of July.

Prince Impérial. 1. *Guide Prat.* 65. 1876.

Obtained by M. Grégoire, Jodoigne, Brabant, Bel., in 1850. Tree vigorous and fertile. Fruit large, ovate, bright yellow all over; flesh salmon-colored, buttery, rather juicy, saccharine and having an agreeable perfume; first; Oct. and Nov.

Prince Impérial de France. 1. Leroy *Dict. Pom.* **2**:554, fig. 1889. **2.** Downing *Fr. Trees Am.* 837. 1869.

M. Grégoire, the well-known Belgian seedsman, obtained this variety at Jodoigne in 1850 from seed of Pastorale sown in 1835. Fruit above medium, irregular-ovate and rather swelled, having one side usually more enlarged than the other, bright green, dotted, streaked, patched and spotted with fawn-russet; flesh white, fine, juicy, melting, slightly gritty below the core; juice abundant, refreshing, saccharine, acidulous, perfumed; first; Sept.

Prince de Joinville. 1. Downing *Fr. Trees Am.* 837. 1869.

Belgian; first fruited in 1848. Fruit medium, globular, green changing to golden yellow, with a vivid blush on the cheek next the sun, brown spots and some russet; flesh yellowish-white, semi-fine, melting, acidulous, sweet, agreeably aromatic; first for dessert, household and market; Nov.

Prince Napoléon. 1. Leroy *Dict. Pom.* **2**:556, fig. 1869. **2.** Downing *Fr. Trees Am.* 837. 1869.

Raised by M. Boisbunel, Rouen, Fr., from seed of the Passe Crassane in 1864. Fruit medium and sometimes above, globular, rarely regular and often mammillate at the top, olive-yellow, covered largely with mottlings of brown and sprinkled with indistinct gray dots; flesh white-greenish or yellowish, semi-fine, semi-melting; juice sufficient, saccharine, vinous, with a delicate perfume; first; Feb. and Mar.

Prince d'Orange. 1. *Mag. Hort.* **21**:146. 1855.

Raised by Van Mons at Louvain and numbered 891 in his Catalog of 1823, second and third series, and regarded by J. de Jonghe, Brussels, as one of Van Mons' more remarkable fruits; form and flavor of Passe Colmar.

Prince de Printemps. 1. Kenrick *Am. Orch.* 198. 1832.

A Flemish pear imported by a Mr. Braddick in 1819. Fruit small, turbinate, green; flesh buttery, sweet; good; very late.

Prince Saint-Germain. 1. Downing *Fr. Trees Am.* 447, fig. 207. 1845.

Raised by William Prince, Flushing, Long Island, N. Y., and known also as *Brown Saint Germain*. Fruit medium, obovate inclining to oval-pyriform, green nearly covered with brownish-russet and blushed with dull red on the side next the sun; flesh yellowish-white, melting, juicy, with a vinous and very agreeable flavor; very good; Nov. to Mar.

Prince Seed Virgalieu. 1. Mas *Pom. Gen.* **7**:163, fig. 562. 1881.

Origin unknown. Fruit medium, turbinate-conic and ventriculous, usually regular in form, pale green,

slightly tinted with yellow, sprinkled with brownish-gray dots, small but numerous; at maturity the basic green becomes brilliant lemon-yellow and the side exposed to the sun washed with pale red; flesh white, fine, buttery, very melting; juice sufficient, saccharine; good; Oct.

Princess. 1. *Jour. Hort.* N. S. **3**:260. 1882. **2.** Bunyard *Handb. Hardy Fr.* 194. 1920.

Raised by Messrs. Rivers, Sawbridgeworth, Eng., from seed of Louise Bonne de Jersey. Growth compact, upright, free bearer, valuable for market culture, and one to be depended upon in poor seasons; fine as a cordon. Fruit medium, long-pyriform, tapering almost to stalk, not very symmetrical, smooth and shining, rarely russety, green and pale green with a brownish tinge, dark green dots under the skin; flesh white, juicy and melting, briskly acid; very good; Oct. to Christmas, rather variable in season.

Princess Maria. 1. Downing *Fr. Trees Am.* 580. 1857.

A seedling from Van Mons. Fruit medium or below, pyramidal, yellow, considerably covered with rough, dull russet, and thickly sprinkled with dots; flesh whitish, rather coarse, juicy, melting, vinous, aromatic; good; Sept.

Princesse Charlotte. 1. Leroy *Dict. Pom.* **2**:558, fig. 1869. **2.** Hogg *Fruit Man.* 633. 1884.

A pear raised in 1846 by Major Espéren, Mechlin, Bel. Fruit medium, variable in form, much bossed and rather contorted, turbinate-obtuse to globular-ovate, grass-green with brown or orange glow on the sunny side, dotted and marbled with russet; flesh white, semi-fine, semi-melting, watery and gritty, but

juicy, saccharine, acidulous, with a fine aroma; a fine pear, evidently of the Passe Colmar race, but quite distinct from that variety; Nov. and later.

Princesse Marianne. 1. Leroy *Dict. Pom.* **2**:559, fig. 1869.

Calebasse Princesse Marianne. **2.** *Ann. Pom. Belge* **5**:67, fig. 1857.

Although very similar in color and form, this pear is distinct from Calebasse Bosc with which it has been confused. It was obtained by Van Mons at the Fidélité nursery near Brussels before 1817 from a graft of a wilding. Fruit large, pyriform and gourd-shaped, swelled in its lower part, more or less contracted near the summit and not very obtuse; skin rough, greenish-russet, dotted with clear gray and marbled or speckled with brown, flesh white or semi-fine, melting, some grit around the core, juicy, very saccharine, vinous and with a highly delicate aroma; first; Oct.

Princesse d'Orange. 1. Leroy *Dict. Pom.* **2**:560. 1869. **2.** Hogg *Fruit Man.* 634. 1884.

According to Van Mons this was found by Count de Coloma in the garden of the Riches-Claires Nunnery at Mechlin, Bel, about 1788, but remained unnamed for forty years. Fruit medium, globular or globular-ovate, bossed, seldom very regular in form, lemon-yellow, largely covered with reddish-brown russet, and more or less carmined on the side next the sun; flesh white and fine, melting or semi-melting, juicy, vinous, saccharine, slightly perfumed with anis; a first-class dessert pear; Oct.

Princière. 1. Leroy *Dict. Pom.* **2**:562, fig. 1869.

Of uncertain origin. Leroy received it in 1864

from Charles Baltet, Troyes, Fr., who also described it in the *Revue Horticole* that year. Fruit above medium, globular, irregular, bossed, often much contorted and usually mammillate at the summit, golden yellow or bright yellow covered all over with large russet dots, streaked with fawn around the calyx; flesh white, fine, melting, full of juice, only slightly saccharine, vinous and slightly aromatic; second; Oct.

Priou. 1. Leroy *Dict. Pom.* **2**:563, figs. 1869.

This pear which is one of the best ripening in spring-time was made known in 1863 by M. Priou, a miller at Rondard, near Brissac, Maine-et-Loire, Fr. The parent tree stood in an open pasturage, and was then about fifty years old. Fruit above medium, rather inconstant in form, globular-ovate, irregular, bossed, mammillate at the summit, and pentagonal at its base or almost completely globular, bright yellow, dotted and streaked with gray-russet; flesh white, fine and juicy, melting, slightly gritty at the center, saccharine, agreeably acid, with a delicious perfume; first; May.

Professeur Barral. 1. Leroy *Dict. Pom.* **2**:565, fig. 1869.

M. Boisselot, Nantes, Fr., a well known seedsman, obtained this pear from seeds of Bartlett, in 1862. Fruit very large, globular, rather irregular and bossed; skin thick, orange-yellow, dotted with gray and lightly washed with bright russet on the exposed side; flesh whitish, fine or semi-fine, melting, watery; juice abundant, sugary, vinous, acidulous and full of flavor; first; Oct. and beginning of Nov.

Professeur Bazin. 1. *Rev. Hort.* 494. 1898.

A posthumous variety raised from a seed bed of

M. Tourasse and placed on the market in 1898 by M. Baltet, Troyes, Fr. Fruit large, often very large, pyramidal, ventriculous at the middle, water-green, passing to lemon-yellow, mottled with fawn-brown; flesh extremely fine and melting, juicy, saccharine, with a delicate perfume; very good; Dec. and Jan.

Professeur Dubreuil. 1. *Pom. France* **3**:No. 97, Pl. 97. 1865. **2.** Hogg *Fruit Man.* 634. 1884.

Obtained by M. Dubreuil, professor of horticulture, from a bed of seeds of Louise-Bonne de Jersey made at the Botanical Garden of Rouen in 1840. Fruit medium, pyriform, more or less swelled; skin rather thick, oily, green changing to lemon-yellow, dotted with russet and carmined on the side of the sun; flesh white, fine, buttery, full of sugary juice, with an agreeable perfume; first; end of Aug. and early Sept.

Professeur Grosdemange. 1. Baltet *Cult. Fr.* 340, 342, fig. 243. 1908.

Fruit large, obovate-pyriform; coloring bright yellow with vermilion blush; flesh of good quality; Jan. to Mar.

Professeur Hennau. 1. *Ann. Pom. Belge* **8**:77, fig. 1860.

M. Xavier Grégoire, a tanner at Jodoigne, Bel., obtained this variety from seed. Fruited in 1860. Fruit above medium, ovate, more or less irregular, swelled and bossed, often a little contorted in its lower part, olive-yellow dotted with ashen gray, veined or speckled with fawn and washed with golden russet on the cheek exposed to the sun; flesh white, rather coarse, semi-melting, watery, very granular around the center; juice abundant, saccharine, tartish, delicate although slight perfume;

second; Nov.

Professeur Hortolès. 1. *Guide Prat.* 57. 1895.

Raised by M. F. Morel, a horticulturist at Lyons, Fr. Tree vigorous and fertile, suitable for all forms of growth. Fruit rather large, pyriform-ventriculous, greenish-yellow, blushed with brownish-red on the side next the sun; flesh white, fine, melting, very juicy; first; Sept. and Oct.

Professeur Opoix. 1. *Rev. Hort.* 532, fig. 240. 1901.

A seedling from the establishment of Baltet Brothers, Troyes, Fr. Reported in 1901. Fruit rather large, globular, slightly oval, a little bossed, bright green passing to whitish-yellow, dotted with brown; flesh fine, yellow-butter tinted, very juicy, melting, saccharine, with a pleasant aromatic perfume; excellent; Jan. to Mar.

Professeur Willermoz. 1. *Guide Prat.* 98. 1895.

Obtained by M. Joanon at Saint-Cyr near Lyons, Fr. Fruit large or rather large, pyriform ventriculous; flesh very fine, juicy, melting, saccharine and perfumed; Aug. and Sept.

Prud'homme. 1. *Guide Prat.* 98. 1895.

Published in the *Journal of the National Society of Horticulture* of France in 1875. Tree vigorous and very fertile. Flesh saccharine, very sprightly; Sept. to Dec.

Pudsey. 1. *Am. Pom. Soc. Rpt.* 97. 1875.

A native of Nova Scotia which compares "favorably in flavor, richness, and other qualities with some of the most popular sorts at present cultivated."

Puebla. 1. Leroy *Dict. Pom.* **2**:568, fig. 1869.

A seedling of M. André Leroy, Angers, Fr., reported in 1863. Fruit large, ovate, rather ventriculous and much bossed, with one side nearly always less swelled than the other; skin thick and rough, yellow, covered with large patches of russet and grayish dots; flesh very white and very fine, melting, with some grit at the center, full of sugary juice, with an acid taste and agreeable perfume; first; Oct.

Pulsifer. 1. *Horticulturist* **8**:460, fig. 1853.

Dr. John Pulsifer of Hennepin, Ill., in the spring of 1843 planted in his garden a pear seed which produced a tree bearing fruit of great merit. An early and prolific bearer, hardy, vigorous. Fruit hardly medium, pyriform, dull golden-yellow, covered with an open network of slight russet; flesh white, melting, juicy, sweet, and delicious, much like Louise Bonne de Jersey, but superior to it; Aug.

Pushkin. 1. *Am. Pom. Soc. Rpt.* 135. 1920.

Pyrus ovoidea x R. & K. 533, a Russian pear. Originated by N. E. Hansen, Brookings, S. D., and introduced by him in 1919.

Queen Jargonelle. 1. *Gard. Chron.* 3d Ser. **2**:369. 1887.

Of unknown origin but it appears to have been disseminated by the Rev. W. Kingsley, Thirsk, Yorkshire, Eng. Fruit soft, juicy and agreeable; Aug.

Queen Victoria. 1. Hogg *Fruit Man.* 635. 1884.

Raised by Mr. W. Willison, a florist at Whitby, Yorkshire, Eng. Fruit medium, obovate, even in its contour, greenish-yellow at maturity, with a crust of cinnamon-russet on the side next the sun; flesh tender, juicy, sweet, and with an almond flavor; end

of Aug.

Quiletette. 1. *Mag. Hort.* **9**:388. 1843. **2.** Downing *Fr. Trees Am.* 840. 1869.

This is a Van Mons seedling, and was exhibited at the fifteenth annual exhibition of the Massachusetts Horticultural Society in September, 1843, by R. Manning of Salem. Fruit nearly medium, globular, a little flattened, greenish, nearly covered with dull iron-colored russet; flesh white, buttery, melting, rich, sweet and perfumed; an odd-looking fruit, scarcely good; Nov. **Quince. 1.** *Mass. Hort. Soc. Rpt.* 46. 1866.

A seedling raised by S. A. Shurtleff, Brookline, Mass., and fruited in 1862. Fruit diameter 3 inches; skin lumpy and nodular; flesh fine-grained, juicy and sweet; great bearer; Sept.

Quinn. 1. *Horticulturist.* **22**:42, 117, fig. 25. 1867.

P. T. Quinn, Newark, N. J., submitted specimens of this pear to the Committee of the Farmers' Club of the American Institute which issued a report upon it on January 2d, 1867. The pear had been imported by Professor Mapes and the name lost, and at a previous meeting the Committee had named it Quinn. Fruit below medium, pyriform, tapering rapidly toward the stem end; skin inclined to golden-russet; flesh rich and juicy and in flavor and aroma occupies the first rank; good; Jan. and keeps till Mar.

Rainbirne. 1. Dochnahl *Führ. Obstkunde* **2**:166. 1856.

Hesse, Ger., 1816. Fruit medium, ovate, somewhat swelled; skin polished, pale light green turning to lemon-yellow, without any red blush, sprinkled with numerous fine light brown dots, fine

russet on the side next the sun; flesh granular, vinous and highly aromatic; first for culinary use; mid-Oct.

Rallay. 1. Elliott *Fr. Book* 382. 1854.

An old variety of unknown origin. Fruit small to medium, globular-acute-pyriform; skin rough, dull yellow, dull reddish cheek, dotted all over with russet; flesh yellowish-white, breaking, juicy, gritty; good; Nov. and Dec.

Rameau. 1. *Am. Pom. Soc. Rpt.* 239. 1854. **2.** Leroy *Dict. Pom.* **2**:572, fig. 1869.

Silberästige Gewürzbirne. **3.** Dochnahl *Führ. Obstkunde* **2**:15. 1856.

A seedling of Van Mons distinct from *Besi des Veterans.* Fruit above medium, oblong-oval; skin thick, rough, greenish, gray or bronzed on sunny side, stained and dotted with dark russet; flesh yellowish-white, very fine, melting, juicy, sweet, acidulous, aromatic; inferior.

Ramilies. 1. Kenrick *Am. Orch.* 165. 1841. **2.** Bunyard *Handb. Hardy Fr.* 195. 1920.

Described in 1842 in the London Horticultural Society's Catalog of Fruits. Fruit large, obovate, yellow obscured with russet, red next the sun, beautiful in appearance; flesh breaking; very good for cooking; Nov. to Feb.

Rankin. 1. *Van Lindley Nurs. Cat.* 53. 1913.

Introduced by J. Van Lindley Nursery Company about 1905 and said to be a seedling of Duchesse d'Angoulême picked up from the side of the Southern Railway by W. H. Rankin, Guilford County, N. C. Tree strong, hardy. Fruit similar to Duchesse d'Angoulême but two weeks earlier.

Rannaja. 1. *Iowa Hort. Soc. Rpt.* 61. 1880.

Imported by Professor Budd from the northern steppes of Russia, where the summers are fully as dry and hot and the winters far more severe than those of Iowa; said to unite well with the apple when root or top grafted.

Rapelje. 1. *Horticulturist* **1**:239, fig. 62. 1846.

A native variety introduced by Professor Stephens, Astoria, Long Island. Fruit medium, obovate, sometimes obtuse, and sometimes acute-pyriform, yellowish, covered with cinnamon-russet; flesh whitish, somewhat granular, juicy, melting, with a sweet, vinous, aromatic flavor; variable, sometimes poor; Sept.

Rastlerbirne. 1. Löschnig *Mostbirnen* 18, fig. 1913.

Found in Northern Tyrol and the Austrian Province of the Voralberg. Fruit large, globular-turbinate, almost acute, green turning yellow-green when ripe, faintly blushed; flesh granular, greenish-white; a very good perry pear and suitable for baking; Oct. and Nov.

Rateau Blanc. 1. *Pom. France* **4**:No. 155, Pl. 155. 1865.

A variety of unknown origin, but cultivated from very early times in the Gironde, Fr., and much esteemed in the markets of the Pyrenees. Fruit above medium, irregular in form, usually pyramidal or long-ovate, sides unequal; skin rough to the touch, orange-yellow, shaded with green, whitish on the cheek opposed to the sun, stained with fawn around the stalk and covered, particularly on the lower part, with russet and large gray dots; flesh whitish, coarse, semi-breaking; juice rather deficient, slightly

acidulous, somewhat saccharine; second for the table, first for the kitchen; Mar.

Ravenswood. 1. *Am. Pom. Soc. Rpt.* 196. 1858.

Ravenswood was a seedling found in the woods of Astoria, L. I., and transplanted to the grounds of Charles Ehrard. Fruit small, obovate-pyriform, pale yellow, with sometimes a tinge of red in the sun and thickly sprinkled with green dots; flesh whitish, slightly coarse, extremely full of vinous, carbonated juice, with a rich aromatic flavor; good to very good, superior to most pears of its period; mid-July to mid-Aug.

Ravut. 1. *Guide Prat.* 71. 1876.

Ravu. **2.** *Mag. Hort.* **25**:256. 1859.

Described by M. Baltet, Troyes, Fr., as a new fruit, in 1859. Tree moderately vigorous and very productive. Fruit medium, turbinate, pale yellow, dotted with russet; flesh fine, melting, sugary, remaining sound when ripe; Aug. and Sept.

Raymond. 1. Kenrick *Am. Orch.* 183. 1832.

Raised by Joseph Wight, Raymond, Me. Fruit medium, obovate-pyriform, yellow, marked with russet near the stalk and tinged with a little red toward the sun, thickly sprinkled with russet dots; flesh white, buttery, melting, juicy, sweet, aromatic; good to very good; Sept.

Raymond de Montlaur. 1. *Guide Prat.* 103. 1876.

On trial with Messrs. Simon-Louis, Metz, Lorraine, in 1876, and in 1895 placed in their list of pears of little value. Fruit very large, beautiful in form and color; flesh very white, fine, melting and very juicy, saccharine, and agreeably aromatic; Oct.

Raymould. 1. *Ohio Hort. Soc. Rpt.* 8. 1895.

Mentioned in a report of the Committee on New Fruits of the Ohio State Horticultural Society in 1895. Fruit fair but not of sufficient size or quality to be recommended for cultivation.

Re Umberto primo. 1. *Rev. Hort.* 224. 1896.

Published in France in 1896 as a new Italian variety. Fruit ovate, lemon-yellow, dotted with small rough points; flesh rather breaking, slightly acidulous, very saccharine and highly perfumed.

Reading. 1. *Mag. Hort.* **19**:173. 1853. **2.** Downing *Fr. Trees Am.* 841. 1869.

A native variety, new about 1853. Introduced by Charles Kessler. Originated in Oley Township, Reading, Pa. Fruit medium to large, obovate-pyriform, tapering to the crown, yellow, thickly dotted with brown points and sprinkled with russet; flesh greenish-white, abounding in juice of a mild and agreeable flavor, melting, vinous; good; Jan. to Mar.

Recq de Pambroye. 1. *Guide Prat.* 104. 1895.

Messrs. Simon-Louis, Metz, Lorraine, in 1895 classed this among “new varieties” and stated that they had received it from M. Daras de Naghin, Antwerp, Bel. Tree rather vigorous, forward according to accounts, fertile. Fruit medium or rather large, bronze in color, washed with red on the side exposed to the sun; flesh fine, juicy, sugary, vinous; Jan.

Red Garden. 1. Downing *Fr. Trees Am.* 841. 1869.

Raised by Josiah Youngken, Richlandtown, Pa. Fruit medium, obovate-pyriform, pale yellow, shaded

and mottled with a few crimson dots on the side next the sun, netted and patched with russet and thickly sprinkled with brown dots; flesh whitish, a little coarse, juicy, melting, sweet, pleasant; good to very good; Sept.

Red Pear. 1. Hogg *Fruit Man.* 636. 1884.

A perry pear grown largely in Herefordshire, Eng. Fruit small, globular, even and regular in outline, inclining to turbinate, almost entirely covered with rather bright red, yellow around the stalk where shaded, sprinkled all over with pale gray dots; flesh quite yellow, firm, dry and gritty.

Redfield. 1. *Am. Pom. Soc. Rpt.* 195. 1867.

Raised from seed by J. W. Crosby, St. George, Utah, and first fruited in 1861. Fruit in size, shape and color resembles Bartlett, but is a little more tapering at the stem, yellowish-green, with a brownish-red cheek; flesh sweet, sprightly, melting; ripens a little later than Bartlett.

Refreshing. 1. *Rural N. Y.* 242, figs. 133, 134. 1885.

Raised by Benjamin Macomber, Grand Isle, Vt. Fruit below medium, bright golden yellow; stem stout, medium long, in a small cavity; flesh whitish, juicy, melting, sweet; very good; Sept.

Regina Margherita. 1. *Rev. Hort.* 224. 1896.

An Italian pear published in 1896 as a new variety. Fruit in form similar to that of Passe Crassane, greenish-yellow, washed with green; flesh very saccharine, somewhat acid, buttery, perfumed.

Régine. 1. Downing *Fr. Trees Am.* 841. 1869.

A Van Mons seedling. Fruit medium, globular-pyriform, greenish-yellow, with slight nettings of

russet and thickly sprinkled with green and brown dots; flesh white, juicy, melting, sweet, pleasant; good; Sept.

Regnier. 1. *Am. Pom. Soc. Rpt.* 185. 1854.

A native variety which originated with Madame Regnier, Philadelphia, Pa. Reported by the Committee on Fruits of the American Pomological Society in 1854. Fruit above medium, ovate, yellow, with usually a colored cheek; very good.

Reichenäckerin. 1. Dochnahl *Führ. Obstkunde* **2**:10. 1856.

Württemberg, Ger., 1847. Fruit medium, globular, dark green, with brownish blush, gray dots; first for household; mid-Dec. and Jan.

Reine des Belges. 1. Leroy *Dict. Pom.* **2**:578, fig. 1869.

A seedling raised by Van Mons at Louvain, Bel., in 1832, Fruit above medium, ovate, tending to globular, always slightly mammillate at the top; skin fine and shining, pale yellow, sprinkled with very small russet dots, and slightly blushed with tender rose on the side exposed to the sun; flesh very white, a little coarse, melting or semi-breaking, watery, rather granular at center; juice saccharine, vinous, perfumed; second; Sept.

Reine d'Hiver. 1. Downing *Fr. Trees Am.* 841. 1869.

Fruit small, globular-oblate, yellow, with a brownish tinge on the cheek exposed to the sun and with nettings, patches and dots of russet; flesh yellowish, melting, juicy, sweet, pleasant; good; Nov.

Reine des Poires. 1. Manning *Book of Fruits* 84. 1828. **2.** Leroy *Dict. Pom.* **2**:581, fig. 1869.

The Count de Coloma came into possession of the garden of the Nunnery of the Riches-Claires, Mechlin, Bel., directly after the suppression of the order in 1786 and two years later made seed beds from which were raised, among other good varieties, the Reine des Poires. Fruit below medium, turbinate-ovate but irregular in form; skin rather thick and yet tender, green dotted with small brown points, changing to yellow, much covered with a brownish-red russet; flesh whitish, semi-fine, melting; juice abundant, saccharine and acidulous, with an exquisite perfume; first; Oct.

Reine des Précoces. 1. Mas *Le Verger* **2**:201, fig. 99. 1866-73.

Probably of Belgian origin. Fruit small, globular-turbinate or nearly globular, regular in contour; skin thick, at first intense green sprinkled with numerous large, prominent, gray-green dots; the basic green changes to yellow on the shaded side and intense brownish-red on the side of the sun; flesh white, rather coarse, semi-buttery, a little gritty at the center, little juice or sugar, rather agreeable; second; end of July.

Reine des Tardives. 1. *Guide Prat.* 104. 1876.

Published by M. Bruant in 1865. Fruit rather large, vivid yellow; flesh juicy, saccharine; easily keeps till June.

Reine Victoria. 1. Downing *Fr. Trees Am.* 842. 1869.

Said to be a seedling from Van Mons. Fruit medium, obovate-acute-pyriform, greenish-yellow, with shades and patches of fawn; flesh white, tinted with rose, fine, melting, juicy, sweet; Dec.

Reliance. 1. *Ga. Hort. Soc. Rpt.* 24. 1890.

Introduced by P. J. Berckmans to the Georgia State Horticultural Society and accepted by that Society in 1890. It was raised from seed sown in 1857, and named Reliance "because it bears every year." Fruit small; a dessert pear almost as good as Seckel, rated as very good; summer season.

Remy Chatenay. 1. *Guide Prat.* 98. 1895.

Obtained by M. Sannier, Rouen, Fr. Tree healthy and of fair vigor, very fertile, and suitable for all forms of cultivation. Fruit of the form and appearance of Beurré d'Arenberg though not so large or delicate; matures in the spring.

René Dunan. 1. *Guide Prat.* 98. 1895.

On trial with Messrs. Simon-Louis at Metz, Lorraine, in 1895 and at Agassiz, British Columbia and other Canadian Experiment Stations in 1900. The tree pyramidal and very fertile. Fruit very large, lemon-yellow, vermilioned on the side of the sun; flesh fine, melting, acidulous, recalling the flavor of the Beurré Gris; Nov. and Dec.

Rettigbirne. 1. Christ *Handb.* 527. 1817. **2.** Dochnahl *Führ. Obstkunde* **2**:34. 1856.

Of German origin. Reported in 1815. Fruit small, globular-pyriform, medium ventriculous, light yellow, dotted with gray, and speckled with brown; flesh acid and aromatic; first for all purposes; beginning of Sept. for three weeks.

Reuterbirne. 1. Dochnahl *Führ. Obstkunde* **2**:189. 1856.

Nassau, Prussia, 1807. Fruit almost small, ovate, ventriculous, uneven in outline, pale yellow-green turning to light lemon-yellow, often covered with

thin russet on the side of the sun; flesh dense, juicy, wanting in flavor, sweet and acidulous; third for dessert, first for household; Oct.

Rewell. 1. Parkinson *Par. Ter.* 593. 1629.

"The good Rewell is a reasonable great peare, as good to bake as to eate rawe, and both wayes it is a good fruit."

Reymenans. 1. Dochnahl *Führ. Obstkunde* **2**:152. 1856.

A Van Mons seedling. Belgium, 1825. Fruit small, turbinate-globular, even in contour, light green turning to lemon-yellow, without any red blush, sprinkled with fine dots, with delicate russet on the cheek next the sun; skin without scent; flesh semi-melting, sweet, aromatic; second for dessert, first for household and market; Feb. and Mar.

Reynaert Beernaert. 1. *Mag. Hort.* **26**:220. 1860. **2.** Mas *Pom. Gen.* 6:21, fig. 395. 1880.

Obtained by M. Bivort, director of the Society Van Mons, Bel. Fruit medium or nearly large, globular, flattened at both poles, regular in contour; skin rather thick, water-green, sprinkled with numerous large and regularly-spaced, gray dots, turning at maturity to dull yellowish-green and the side next the sun golden or orange colored; flesh whitish, coarse, semi-melting, wanting in juice and sugar, vinous but without appreciable perfume; second; Nov.

Rheinische Birne. 1. Dochnahl *Führ. Obstkunde* **2**:6. 1856.

Westphalia, a province of Prussia, 1802. Fruit large, ovate, light green turning pale yellow, without any blush, strongly dotted; flesh breaking, juicy,

aromatic; first for household use; Oct.

Rheinische Herbstapothekerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:178. 1856.

Nassau, Prussia, 1805. Fruit very large, conic, often very irregular in form, light yellow-green turning to pale light yellow, often stained blood-red, covered with very numerous and minute spots, speckled and marked with russet; flesh whitish, granular, semi-melting, sweet and aromatic; second for table, first for cooking.

Rheinische Paradiesbirne. 1. Dochnahl *Führ. Obstkunde* **2**:169. 1856.

Thuringia, Ger., 1801. Fruit large, conic, yellow, blushed and streaked with light red, dotted with yellow; flesh yellow, gritty around the center, sweet; third for the table, first for culinary use; end of Oct. and Nov.

Rhenser Schmalzbirne. 1. Dochnahl *Führ. Obstkunde* **2**:63. 1856.

The German Rhineland, 1833. Fruit fairly large, pyriform, smooth, yellow, blushed with blood-red, covered with fine dots; flesh yellowish, breaking, sweet, aromatic; third for dessert, first for kitchen; Jan. to Mar.

Richards. 1. *Mag. Hort.* **22**:540. 1856. **2.** Downing *Fr. Trees Am.* 842. 1869.

Originated at Wilmington, Del. It was placed on the list of the American Pomological Society in 1856 at its biennial session at Rochester. Fruit medium, obovate-acute-pyriform, yellow sprinkled with numerous small russet dots and patches of russet; flesh buttery, melting, granular, with a sweet, pleasantly vinous flavor; good; Oct.

Richardson. 1. Thomas *Am. Fruit Cult.* 570. 1885.

Fruit rather large, obovate; flesh melting, sprightly, pleasant; Oct.

Riche Dépouille. 1. Prince *Pom. Man.* **2**:205. 1832.

A French variety introduced early in the last century. Its name may be translated Rich-skinned. Fruit large, oblong-obovate, rather irregular in its outline and resembling in form the Saint Germain, clear lemon-yellow, with a tinge of scarlet on the side exposed to the sun, a little mottled with russet, and the whole skin rough like the skin of an orange; flesh white, melting, without perfume but sweet and pleasant; late autumn or winter.

Ridelle. 1. *Mass. Hort. Soc. Rpt.* 87. 1845. **2.** Downing *Fr. Trees Am.* 842. 1869.

Shown at the seventeenth annual exhibition of the Massachusetts Horticultural Society in September, 1845, by the President of the Society. Fruit medium, oblate-turbinate, remotely pyriform, yellow covered nearly all over with bright red; flesh semi-fine, rather juicy, not melting or delicate in flavor; scarcely good; Sept.

Riocreux. 1. *Guide Prat.* 104. 1876.

Probably French. Fruit rather large, like Calebasse in form, symmetrical, yellowish-green; flesh fine, extremely melting, juicy, with an exquisite perfume; first; Aug. and Sept.

Ritson. 1. Ont. Dept. Agr. *Fr. Ont.* 175, figs. 1914.

Originated at Oshawa, Ontario, Can. W. E. Wellington stated that his grandmother, Mrs. John Ritson, planted the seeds from a pear sent to her from Boston, and that the tree had stood on the

homestead as long as he could remember. Fruit medium, obovate-pyriform, usually one-sided, yellow, shaded with golden-russet and numerous minute dots of a darker hue; flesh medium, creamy-white, fine, tender, buttery, juicy, sweet, delicately perfumed; dessert, very good to best; Oct.

Ritter. 1. *Mag. Hort.* **23**:106. 1857.

Dr. Brincklé, chairman of the Committee on Native Fruits of the American Pomological Society, reported in 1857 that specimens had been received from Louis Ritter, Reading, Pa. The tree from which they were obtained was purchased in the spring of 1851 for Seckel, but the tree instead of having a rounded head is pyramidal in growth. Fruit small, obovate, greenish-yellow, a good deal russeted, with occasionally a faint brown cheek; flesh fine texture, melting and buttery, saccharine, with the full Seckel aroma; best; Oct.

Rival Dumont. 1. *Guide Prat.* 111. 1876. Fruit rather large, oval-turbinate, russet washed with yellow; flesh melting, buttery-juicy, aromatic; first; Nov. and Dec.

Rivers. 1. Leroy *Dict. Pom.* **2**:583, fig. 1869. **2.** Hogg *Fruit Man.* 637. 1884.

A delicious pear raised in 1864 by Leroy at Angers, Fr., and dedicated by him to Thomas Rivers, the distinguished English pomologist. Fruit medium, turbinate, regular in outline, greenish, dotted with brown and almost entirely covered with bright brown-russet; flesh very melting, white, fine, juicy, saccharine, vinous, refreshing, with a delicate musky perfume; first; Sept.

Robert Hogg. 1. Leroy *Dict. Pom.* **2**:584, fig. 1869. **2.** Hogg *Fruit Man.* 637. 1884.

Raised by Leroy, Angers, Fr., and named after Doctor Robert Hogg, the English horticulturist. It first fruited in 1868. Fruit above medium, ovate, more or less irregular and generally rather swelled in its lower part; skin slightly rough, rather deep green, much covered with fawn-colored mottles of russet and small gray dots; flesh whitish, watery, semi-fine, melting; juice very abundant, saccharine, richly flavored, aromatic, with an agreeable acidity; first; Sept. and Oct.

Robert Treel. 1. *Guide Prat.* 104. 1876.

Published by J. de Jonghe, Bel. Tree very fertile. Fruit medium; flesh melting; first; Feb.

Robine. 1. Duhamel *Trait. Arb. Fr.* **2**:174, Pl. XXVII. 1768. **2.** Hogg *Fruit Man.* 637. 1884.

This is an ancient pear of unascertained origin, though the pomologists Turpin and Poiteau and others have regarded it as French. It is often known as the *Royale d'Été*, and has had various other synonyms. Fruit below medium, globular-turbinate, bright green changing to yellow, dotted with greenish-gray; flesh white, fine or semi-fine, almost breaking, rather dry, very saccharine, sweet and having an agreeable musky flavor; second; mid-Aug.

Robitaillié père. 1. *Rev. Hort.* 463. 1906.

A French pear raised at the beginning of the present century by M. Robitaillié. Fruit very large; skin yellow, dotted with green and fawn, becoming golden at full maturity; flesh fine, saccharine, acidulous, very juicy; first; season late and prolonged until Jan.

Rockeneirbirne. 1. Dochnahl *Führ. Obstkunde* **2**:2. 1856.

South Germany, 1847. Fruit small, smooth and shining; flesh yellow-white, somewhat blushed; first, for household use and perry; Sept.

Roe Bergamot. 1. Downing *Fr. Trees Am.* 843. 1869.

Bergamotte de Roe. **2.** Mas *Pom. Gen.* **1**:117, fig. 59. 1872.

Raised by William Roe, Newburgh, N. Y. Fruit medium in size, form oblate or Bergamot-shaped, rather irregular; skin smooth, yellow, with minute yellow dots on the shaded side, washed with red on the side of the sun; flesh rather coarse, sweet, rich, perfumed flavor suggestive of Gansel Bergamot but much more sugary; good to very good; Sept. Tree fairly vigorous and prolific.

Rogers. 1. *Am. Pom. Soc. Rpt.* 157. 1867.

Reported as a new pear in 1867. Fruit said to be similar to the Louise Bonne de Jersey in shape and size but like the Washington in dots, markings and flavor; end of Sept.

Roggenhoferbirne. 1. Löschnig *Mostbirnen* 170, fig. 1913.

A perry pear which came first probably from Lower Austria. Fruit small to medium, turbinate to pyriform, the apex being rather acute; skin firm, grass-green turning to greenish-yellow, blushed on the sunny side, dotted all over with numerous gray-brown dots; flesh whitish, coarse-grained, fairly juicy, subacid; good for cider and drying; end of Aug.

Roi-Guillaume. 1. Mas *Pom. Gen.* **4**:91, fig. 238. 1879.

Gained by Van Mons. Fruit medium, ovate, uneven on all its surface; skin at first pale water-

green, sprinkled with brown dots, changing to lemon-yellow, more golden on the side next the sun and often washed with orange-red; flesh-white, coarse, granular, rather gritty at core; juice saccharine and perfumed but rather wanting in amount; third for the table, good for the kitchen; Sept.

Roi de Rome. 1. *Ann. Pom. Belge* **6**:51, fig. 1858. **2.** Downing *Fr Trees Am.* 843. 1869.

The Abbé Duquesnes, to whom we are beholden for many good fruits, found this pear in Hainaut, Bel. Fruit very large, pyriform, pyramidal, olive-green, with dark gray shading around the stalk and calyx, strongly blushed with orange-red and dotted with bright gray on the side next the sun, and yellow at maturity on the shaded cheek, with brown-black dots; flesh fine, semi-melting, yellowish-white; juice abundant, saccharine, with an agreeable perfume; second for table, first for household; Sept.

Roitelet. 1. Downing *Fr. Trees Am.* 843. 1869.

A Flemish pear. Fruit small, globular, yellow,—netted, shaded and sprinkled with russet; flesh whitish, semi-melting, juicy, sweet; good; Sept.

Rokeby. 1. Downing *Fr. Trees Am.* 844. 1869. **2.** Mas *Pom. Gen.* **1**:73, fig. 37. 1872.

Gained by M. Bivort, Bel., and first published in 1848. Fruit medium or below, pyriform, swelled in lower half, lower end flat, bright green turning to bright yellow in the shade and blood-red on the cheek exposed to the sun; flesh white, semi-fine, juicy, wanting in quality; second; Aug. and Sept.

Rolmaston Duchess. 1. *Horticulturist* **29**:148. 1874.

Published in 1874. Fruit medium, pyriform, yellow-green; flesh fine, melting, juicy, vinous; very good; Oct.

Ronde du Bosquet. 1. Leroy *Dict. Pom.* **2**:586, fig. 1869.

Raised from seed and bore the name of the place where the parent tree, which was first described in 1863, grew in M. Leroy's grounds, Angers, Fr. Fruit below medium, irregularly globular and strongly bossed, bright yellow, dotted with brown, much mottled with russet; flesh whitish, watery, very fine, melting, rarely gritty; juice abundant, vinous, saccharine, possessing a delicious perfume; first; Oct.

Rondelet. 1. *Mag. Hort.* **12**:340. 1846. **2.** *Ibid.* **18**:436, fig. 32. 1852.

Obtained in France by M. François Dehove. Fruit medium, remarkably oblate, with a slightly uneven surface, much flattened at each end; skin fair, smooth, green turning yellow at maturity, faintly blushed on the side next the sun, and thickly dotted with russet intermixed with a few greenish specks; flesh yellow-white, buttery, melting, juicy, saccharine and musky; first; Oct.

Ropes. 1. *Mag. Hort.* **12**:500. 1846. **2.** Downing *Fr. Trees Am.* 844. 1869.

Originated with Mr. Ropes, Salem, Mass., about 1846. Fruit medium, obovate, cinnamon-russet; stem short; cavity inclined; calyx small, open, set in a shallow basin; flesh whitish, coarse, melting, juicy, sugary, aromatic; good; Oct. and Nov.

Rorreger Mostbirne. 1. Löschnig *Mostbirnen* 50, fig. 1913.

An Austrian perry pear. Fruit large, globular-

turbinate to pyriform; skin smooth, shining green turning yellow, numerous small green dots; flesh whitish, rather coarse-grained, subacid and very juicy; mid-Oct. and Nov.

Rosabirne. 1. *Horticulturist* **8**:65. 1853.

A foreign pear introduced to this country as a new variety in the middle of the last century. Fruit medium, obovate-acute-pyriform, surface uneven, dull greenish-yellow, almost entirely overspread with russet; flesh white, melting and juicy, with a delicious, brisk, subacid flavor, vinous, resembles Brown Beurré; promised to be very good, one of the best; Oct. and Nov.

Rosalie Wolters. 1. *Guide Prat.* 98. 1895.

Published in 1878. Fruit medium, oblong, whitish yellow; flesh yellowish, fine, very saccharine; first; Oct.

Rosanne. 1. Mas *Pom. Gen.* **4**:69, fig. 227. 1879.

Origin unknown; Diel states he had received it from Strasland, Prussia. Fruit medium, ovate-pyriform, symmetrical in contour, green marked with gray dots, changing at maturity to lemon-yellow, extensively washed on the side next the sun with wine red, over which are scattered numerous very distinct, brighter-red dots, giving the pear a great resemblance to Vermont Beauty; flesh whitish, rather fine, buttery; juice somewhat deficient but pleasantly acid; good; mid-Aug.

Rose Doyenné. 1. Thomas *Am. Fruit Cult.* 713. 1897.

Fruit rather large, obovate, yellow and crimson; flesh coarse, granular, flavor poor, rots at core; Oct.

Rose Water. 1. Parkinson *Par. Ter.* 592. 1629.

An old English pear. Fruit medium, globular, rough skin, brownish-red; flesh breaking, of a fine and delicate flavor; of fair quality but superseded; mid-Sept.

Rosenhofbirne. 1. Löschnig *Mostbirnen* 92, fig. 1913.

An Austrian perry pear. Fruit medium, globular-oblate; skin tough, shining, light yellow when ripe, blushed slightly on the sunny side, with numerous fine dots; flesh yellow-white, coarse-grained, juicy, very astringent; Oct.

Rosenwasserbirne. 1. Dochnahl *Führ. Obstkunde* **2**:41. 1856.

Rheinfalz, Bavaria. Fruit medium, long-turbinate, even in outline; tender skin, green turning yellowish-white, without dots, often flecked with dark specks; flesh juicy, with a rose-like aroma, very white, semi-melting, very good; mid-Aug.

Rosinenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:73. 1856.

On the Rhine, Ger., 1802. Fruit small, globular-flattened, light green turning to yellow-green, without any blush, covered with small dots and russet on the side next the sun, often flecked with dark russet; flesh breaking, fine, very sweet and aromatic; third for dessert and first for kitchen; Nov.

Roslyn. 1. Downing *Fr. Trees Am.* 844. 1869.

A wilding found on the land of W. C. Bryant, Roslyn, L. I. Fruit medium, almost spherical, yellow, netted, patched and dotted with russet; flesh whitish, melting, juicy, slightly vinous; good to very good; end of Aug.

Ross. 1. Kenrick *Am. Orch.* 165. 1841.

A seedling introduced by Thomas Andrew Knight in 1832. Fruit large, obovate, yellowish-green interspersed with russet; flesh inclining to yellow, gritty near the center, rich, juicy, saccharine; second-class dessert pear; Jan.

Rossney. 1. *Pioneer Nurs. Co. Cat.* fig. 1898. **2.** *U. S. D. A. Yearbook* 402, Pl. LII. 1904.

Raised in Salt Lake City, Utah, from a mixed lot of Winter Nelis and Bartlett seed planted for stocks by William Woodberry about 1881, and introduced by the Pioneer Nurseries Company, Salt Lake City, in 1898. Fruit medium to large, oval-pyriform, somewhat angular and ribbed towards the apex, golden yellow, blushed with scarlet and thinly overspread with a bluish-white bloom; dots numerous, minute, russet; stem rather long, moderately stout; calyx closed; flesh yellowish, buttery, juicy, subacid; good; ten days later than Bartlett.

Rostiezer. 1. Manning *Book of Fruits* 72. 1838.

Origin uncertain. It was, however, received from A. N. Baumann, Bollweiler, Alsace, by R. Manning, Salem, Mass., in 1834 or 1835. Often called *Early Seckel* in the west. Fruit medium or below, pyriform, regular in form, grass-green on the shaded side, reddish on the exposed face and sprinkled with small gray dots; flesh greenish-white, fine, melting, rather granular below the core; juice very abundant, vinous, acidulous, very saccharine, with a most delicate flavor; first; last of Aug.

Rote Hanglbirne. 1. Löschnig *Mostbirnen* 196, fig. 1913.

An Austrian perry pear. Fruit small to medium, spherical; skin tough, lemon-yellow when ripe, no blush, dotted with russet; flesh yellowish-white, coarse-grained, juicy, subacid; very good for transportation; Nov.

Rote Holzbirne. 1. Löschnig *Mostbirnen* 198, fig. 1913.

An Austrian perry pear. Fruit medium, globular-turbinate, greenish to citron-yellow, slightly blushed on the sunny side and densely dotted with cinnamon; flesh yellowish, rather coarse-grained, very juicy, subacid; Oct.

Rote Kochbirne. 1. Löschnig *Mostbirnen* 200, fig. 1913.

An Austrian perry pear. Fruit small, globular-turbinate, greatest diameter at center, flat at base; skin tough, rough, grayish-green, dull blush on the exposed side; flesh yellowish-white, very firm, juicy, excessively astringent, subacid; Nov. and Dec.

Rote Pilchelbirne. 1. Löschnig *Mostbirnen* 52, fig. 1913.

An Austrian perry pear of second quality. Fruit fairly large, pyriform-obtuse, also conic, golden yellow when ripe, red on the sunny side, plentifully sprinkled with small dots; flesh yellowish, coarse-grained, very juicy, with subacid flavor; Sept. and Oct.

Rote Scheibelbirne. 1. Löschnig *Mostbirnen* 94, fig. 1913.

An Austrian perry pear. Fruit small to fairly large, flattened-globular, symmetrical in outline, smooth, polished, dark green changing to greenish-yellow, blushed on the sunny side, densely and finely dotted; flesh whitish, coarse, with an aroma peculiar to itself, subacid and very juicy; Oct.

Rote Winawitz. 1. Löschnig *Mostbirnen* 204, fig. 1913.

An Austrian perry pear. Fruit small to medium, turbinate to pyriform, very variable; skin firm and rough, yellow when ripe, without any blush, dotted with numerous fine, russet spots; flesh yellow-white, coarse-grained, very juicy, subacid, aromatic; Oct. and Nov.

Rotfleischige Mostbirne. 1. Löschnig *Mostbirnen* 220, fig. 1913.

An Austrian perry pear. Fruit small, globular-turbinate, calyx end flat, leaf-green, dotted with russet and flecked with red; flesh under the skin firm but near the core softer, coarse-grained, juicy, subacid; Oct. to mid-Nov.

Rothbackige Sommerzuckerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:49. 1856.

Germany, 1801. Fruit small, pyriform, smooth, pale green turning to shining lemon-yellow, lightly blushed on the sunny side, dotted; flesh rose-tinted, saccharine, semi-melting, granular, deficient in flavor; second for dessert, first for cuisine and market; Sept.

Rothe Confesselsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:14. 1856.

German, published in 1766. Fruit medium, oblong, somewhat swelled, skin thick, gray-green with brown russet; flesh yellowish, semi-melting, juicy, aromatic, tender; second for table, good for culinary use; Oct.

Rothe Jakobsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:48. 1856.

Nassau, Ger., 1806. Fruit small, ovate, light green turning yellow-green, with brownish-red russet; flesh granular, agreeable, sweet; second for the table, good

for household and market purposes; July.

Rothe langstielige Honigbirne. 1. Dochnahl *Führ. Obstkunde* **2**:11. 1856.

Originated near the Rhine, Ger., 1804. Fruit medium, pyriform, ventriculous and bent, obtuse, sides unequal, light green, changing to dark red with indistinct yellow and light red spots; flesh tender, juicy, aromatic; second for the table; good for cooking.

Rothe oder grosse Pfalzgrafinbirne. 1. Christ *Handb.* 538. 1817. **2.** Dochnahl *Führ. Obstkunde* **2**:60. 1856.

Germany, 1797. Fruit medium, conic, entirely covered with dark blush, densely sprinkled with gray dots and dark speckles; flesh yellow-white, honey-sweet, semi-melting, aromatic; third for the table, first for kitchen and market; Sept.

Rothe Rettigbirne. 1. Dochnahl *Führ. Obstkunde* **2**:34. 1856.

Altenburg, Ger., 1821. Fruit small, spherical, yellow-green, covered all over with dirty red, densely dotted and speckled with russet; flesh whitish-yellow, granular, melting, juicy; first for table and cuisine; Aug.

Rothe Winterkappesbirne. 1. Dochnahl *Führ. Obstkunde* **2**:167. 1856.

German, 1805. Fruit medium, long-turbinate, often spherical, flattened and sides unequal, green turning to lemon-yellow, firm and shining, blushed with red, dotted with gray; flesh rather white, coarse-grained, acidulous; good for the kitchen; Dec. to Feb.

Rothe Winterkochbirne. 1. Dochnahl *Führ. Obstkunde* **2**:192. 1856.

Germany, on the Main, 1805. Fruit medium, obtuse-conic, symmetrical in contour, smooth and shining, light green turning to a beautiful lemon-yellow, finely dotted with gray, flecked with russet on the side opposed to the sun; flesh coarse, saccharine, juicy, wanting in aroma; third for dessert, very good for household use and market; Nov. and Dec.

Rothe Zucherlachsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:49. 1856.

Nassau, Germany, 1805. Fruit medium, obtuse-long-conic, yellowish light green, dark red blush, changing to light lemon-yellow with carmine cheek, mottled and flecked with brown-russet; flesh semi-melting, granular, gritty near core, very sweet, vinous and acidulous; second for the table, very good for kitchen and market; Aug.

Rother Winterhasenkopf. 1. Dochnahl *Führ. Obstkunde* **2**:147. 1856.

Nassau, Ger., 1806. Fruit large, irregular in form, sides unequal, crooked, yellowish pale green turning yellow, with dark blush, very prominent brown dots; flesh breaking, sweet, acidulous, vinous; third for table, good for household use; considered by Messrs. Simon-Louis to be analogous to the Catillac; Jan. to Mar.

Rothgraue Kirchmessbirne. 1. Dochnahl *Führ. Obstkunde* **2**:109. 1856.

Hesse, Ger., 1804. Fruit medium to rather large, conic, slightly bossed, sides unequal; skin rough and covered with brownish-gray russet, often faintly

blushed; flesh yellowish-green, coarse-grained, sweet, acidulous and musky; second for dessert, first for kitchen; mid-Sept.

Rougeaude. 1. Prince *Pom. Man.* **1**:88. 1831.

Fruit medium, pyramidal, fairly regular, skin yellowish on the shaded side, but about three-fourths of the fruit is of a darker or lighter shade of red; flesh firm, dry, with some sweetness but insipid and wanting in flavor; indifferent; Jan.

Rouget. 1. Noisette *Man. Comp. Jard.* **2**:537. 1860. **2.** Baltet *Cult. Fr.* 404, 405. 1908.

The flesh of this small French pear becomes red when cooked and the confectioners of Paris use large quantities of it obtained from the neighborhood of Etampes. It is also considered a first class pear for perry.

Roulef. 1. *Can. Hort.* **17**:292, fig. 684. 1894.

Raised from seed by Mr. Mitschurin, Tambow, Russia. Fruit medium, yellow, firm, vinous; good.

Rouse Lench. 1. Kenrick *Am. Orch.* 165. 1841. **2.** Bunyard *Handb. Hardy Fr.* 195. 1920.

Raised by T. A. Knight, and first fruited in 1820. In 1850 it was placed on the "Rejected Fruits" list by the second Congress of Fruit Growers at New York. Fruit large, long-oval, uneven, pale yellow-green, with thin russet; no depression at base of very long woody stem; calyx open, basin shallow; flesh pale yellow, juicy; fair; Jan. and Feb.

Rousselet Aelens. 1. *Ann. Pom. Belge* **4**:92, fig. 1856. **2.** Downing *Fr. Trees Am.* 844. 1869.

A Belgian pear of unknown origin. Fruit small to medium, turbinate, obtuse-pyriform, golden yellow

at time of maturity, faintly colored on the sunny side, patches of russet, and dots of grayish red; flesh yellowish-white, rather fine, melting; juice abundant, sweet and possessing a decided perfume of the Rousselets; quality would be first class if the flesh were less granular; Nov.

Rousselet d'Anvers. 1. *Guide Prat.* 58. 1895.

A variety raised by M. Daras de Naghin, Antwerp, Bel. Tree vigorous and fertile, hardy, resisted the great European frost of 1879-1880. Fruit medium, globular-ovate, yellowish-green, slightly tinged with dark red; flesh semi-fine, melting, saccharine and well flavored; first; Oct.

Rousselet Baud. 1. Mas *Pom. Gen.* **3**:177, fig. 185. 1878.

Gained by Dr. Van Mons and mentioned in his Catalog of 1823. Fruit small or rather small, ovate, more or less swelled, even in outline; skin a little thick, at first water-green with many very numerous and small dots, sometimes much covered with cinnamon-colored russet, changing to citron-yellow and the russet becoming golden on the side next the sun; flesh yellow-white, rather fine, dense, buttery, melting; juice sufficient, richly saccharine and perfumed; Oct. and Nov.

Rousselet Bivort. 1. *Ann. Pom. Belge* **4**:9, fig. 1856. **2.** Downing *Fr. Trees Am.* 845. 1869.

Raised from a bed of the seeds of Simon Bouvier made in the grounds of the Society Van Mons at Geest-Saint-Rémy, Bel., in 1840. Fruit small, turbinate; skin smooth, bright green turning to lemon-yellow, shaded and mottled with russet-fawn especially on the side exposed to the sun, dotted with brown-black and brown-russet; flesh yellowish-white,

fine, melting, semi-buttery; juice abundant, saccharine and agreeably perfumed recalling the scent of the Rousselets; good, suitable for large collections; Oct. to Jan.

Rousselet Blanc. 1. Mas *Pom. Gen.* **5**:37, fig. 307. 1880.

Raised by Van Mons and cataloged by him in 1823. Fruit rather small, globular-turbinate, even in contour, bright green, whitish, a few very small, bright, gray dots, no russet, at maturity it becomes pale yellow and the side next the sun is blushed extensively with bright blood-red, a white bloom covering the whole surface of the fruit and numerous very small dots of golden-yellow appearing on the red; flesh whitish, rather fine, semi-buttery; juice sufficient, sugary, vinous, with the agreeable perfume of the Rousselets; first; Aug.

Rousselet de la Cour. 1. Leroy *Dict. Pom.* **2**:589, fig. 1869.

A wilding found on a farm which adjoined M. Leroy's nurseries of La Cour at Angers, Fr. Fruit below medium, turbinate, regular, acute, one side usually larger than the other; skin rough and thick, bronzed all over and covered with gray or white dots; flesh white, fine, breaking, watery; juice abundant, saccharine, sourish, with an agreeable perfume; second; end of Sept. and beginning of Oct.

Rousselet Decoster. 1. Downing *Fr. Trees Am.* 845. 1869.

Raised by Van Mons. Tree of medium vigor but very weak on quince stock. Fruit small to medium, globular-ovate, pale yellow, mottled with golden-russet and tinted with brownish-red; flesh yellowish, buttery, very saccharine, with the characteristic

perfume of the Rousselets; first; Oct. and Nov.

Rousselet Doré d'Hiver. 1. Leroy *Dict. Pom.* **2**:590, fig. 1869.

Origin unknown, though Leroy, Angers, Fr., possessed it about 1845. Fruit below medium, variable in form, turbinate, slightly obtuse, or turbinate and spherical and nearly always larger on one side than on the other; skin thick and rough, shining, some bright and golden-russet, some small, brown and green spots; flesh whitish, fine, semi-melting, juicy, saccharine, vinous, fairly well perfumed; second; Feb. and Mar.

Rousselet Hâtif. 1. Duhamel *Trait. Arb. Fr.* **2**:148. 1768. **2.** Downing Fr. Trees Am. 846. 1869.

Early Rousselet. **3.** Hogg *Fruit Man.* 571. 1884.

The origin of this pear is uncertain though it was probably French, for in 1600 it was under cultivation at Orléans, Fr., according to Le Lectier. Fruit small, pyriform, slightly obtuse, sides often unequal; skin fine, lemon-yellow on the shaded side, and vivid red sprinkled with gray spots on the side next the sun; flesh yellowish, fine, semi-breaking and crisp; juice well perfumed, saccharine, abundant and aromatic; second; mid-July.

Rousselet de Janvier. 1. Leroy *Dict. Pom.* **2**:594, fig. 1869. **2.** Downing *Fr. Trees Am.* 845. 1869.

Gained by Alexandre Bivort, director of the nurseries of the Society Van Mons at Geest-Saint-Rémy, Bel., in 1848. Fruit medium, generally regular-ovate; skin slightly rough, lemon-yellow in the shade, washed with red-brown on the other cheek; flesh yellowish; very fine, melting; juice sufficient and fairly saccharine, vinous and richly

perfumed; second; Dec. and Jan.

Rousselet Jaune d'Été. 1. Mas *Pom. Gen.* **3**:23, fig. 108. 1878. *Gelbe Sommerrusselet.* **2.** Christ *Handb.* 546. 1817.

French, 1801. Fruit small; skin rough, almost entirely covered with brilliant red, densely covered with small gray dots, scentless; flesh granular, melting, saccharine, sweet; second for table, first for household; Sept.

Rousselet de Jodoigne. 1. Mas *Pom. Gen.* **6**:69, fig. 419. 1880.

Described in 1876 as a "recent" gain of M. Grégoire, Jodoigne, Bel. Fruit small globular-turbinate, obtuse at apex; skin rather firm, bright and vivid green, sprinkled with numerous very small dots of gray-green, russeted around the calyx and lower part of the fruit; flesh white, tinted with green, semi-fine, semi-buttery; juice abundant, saccharine, acidulous, having the characteristic Rousselet perfume.

Rousselet de Jonghe. 1. Hogg *Fruit Man.* 639. 1884.

Fruit small, obovate, curved, uneven and irregular in its outline; skin smooth, of a uniform lemon; flesh yellow, fine-grained, firm, melting and juicy, with a very rich, sugary flavor; its delicious flavor compensates for its small size; Nov. and Dec.

Rousselet de Meestre. 1. Hogg *Fruit Man.* 639. 1884.

Fruit large, obtuse-pyriform or pyramidal; skin smooth and shining, golden yellow, thickly dotted all over with large brown-russet freckles; flesh semi-buttery, firm, fairly juicy, and well flavored; of indifferent quality.

Rousselet Panaché. 1. *Guide Prat.* 80. 1876. A variegated variety of French origin and new about 1825. Fruit small, short-ovate, greenish-yellow, with light and dark streakings; first for dessert and household; end of Sept.

Rousselet de Pomponne. 1. Mas *Pom. Gen.* **6**:67, fig. 418. 1880.

Obtained by MM. Pradel, nurserymen at Montauban, Fr. Fruit small, globular-ovate or nearly globular, even in outline, pale green at first, sprinkled with numerous large, regularly spaced dots of gray circled with darker green, changing at maturity to pale yellow and washed on the side opposed to the sun with bright rosy-red on which the dots are blood-red; flesh white, semi-breaking; juice sufficient, saccharine, with little flavor; second; mid-Aug.

Rousselet Précoce. 1. *Mag. Hort.* **18**:151. 1852. 2. Mas *Pom. Gen.* **6**:91, fig. 430. 1880.

This is the variety known in Germany as *Frühe Geishirtlebirne* and must be distinguished from the *Rousselet hâtif* or *Poire de Chypre* of Duhamel. It was classed in 1851 by Mr. Cabot, President of the Massachusetts Horticultural Society, among the new or recently introduced fruits. Fruit rather small, pyriform, regular in contour, vivid green slightly touched with yellow, sprinkled with very numerous, very small, gray dots, changing at maturity to lemon-yellow, preserving sometimes a tone of green, the side next the sun being washed with blood-red spots having yellow centers; flesh whitish, fine, tender, semi-buttery, juicy, saccharine, and scented with the perfume of the Rousselets; good; mid-July.

Rousselet de Rheims. 1. Duhamel *Trait. Arb. Fr.*

2:147, Pl. XI. 1768. **2.** Bunyard *Handb. Hardy Fr.* 196. 1920.

This pear is of very ancient and uncertain origin. Many authors have endeavored to trace it back to the days of the Romans. But Pliny and the other Latin horticulturists did not give descriptions of their fruits sufficiently technical to enable us to make identification of their varieties with ours certain. It is, however, clear that the Rousselet de Rheims has existed, particularly around the city of Reims, Fr., for some centuries. Fruit small, turbinate, regular in form, rarely very obtuse, bright green or yellow-green, sprinkled with large and small gray-russet dots and extensively shaded with reddish-brown on the side opposed to the sun; flesh white, fine or semi-fine, almost melting, not very juicy, rich in sugar, acidulous, refreshing, highly perfumed; one of the best early pears for dessert, very good for candying; Sept.

Rousselet de Rheims Panaché. 1. Leroy *Dict. Pom.* **2**:597, fig. 1869. **2.** Hogg *Fruit Man.* 639. 1884.

A variety similar in all respects to the preceding, of which it is a bud sport, except that the leaves and fruit are striped with yellow and green. Its propagation antedates 1830.

Rousselet Royal. 1. *Guide Prat.* 104. 1876.

On trial with Messrs. Simon-Louis, Metz, Lorraine, in 1876. Fruit medium; first; Sept.

Rousselet Saint Nicolas. 1. Mas *Le Verger* **3**:Pt. 2, 13, fig. 103. 1866-73.

Obtained by M. Bivort. Fruit small, turbinate-ventriculous, gray-green tinted with yellow,

sprinkled with large brown or green dots, numerous and evenly distributed, changing at maturity to pale yellow, the side exposed to the sun being washed with brown-red on which are blackish-red dots; flesh yellowish, very fine, melting, rather gritty at the center, full of sweet juice, saccharine, agreeably perfumed; good; Oct.

Rousselet Saint-Quentin. 1. Mas *Pom. Gen.* **7**:53, fig. 507. 1881.

De Quentin. **2.** Hogg *Fruit Man.* 635. 1884.

Gained by M. Van Dooren, a former director of the middle school at Namur, Bel. Fruit small or medium on a pruned tree, globular-ovate or globular-conic, symmetrical in its contour, somber green sprinkled with large, widely spaced gray dots, changing to yellow, and well colored with brownish-red on the side next the sun; flesh white, slightly greenish, fine, buttery; juice sufficient, saccharine, having the characteristic perfume of the Rousselets; first; Sept. and Oct.

Rousselet Saint Vincent. 1. *Mag. Hort.* **16** 296. 1850. **2.** Leroy *Dict. Pom.* **2**:598, fig. 1869.

The origin of this pear is uncertain. It seems probable to Leroy that it was raised by Van Mons. In this country it was placed on the Rejected List by the second Congress of Fruit Growers at New York in 1850. Fruit above medium, globular-ovate, irregular in outline especially at the summit, bright yellow, dotted with russet; flesh white, fine, juicy, saccharine, acidulous, of a delicate flavor though not recalling in the least that of the Rousselets; first; Oct.

Rousselet de Stuttgardt. 1. Hogg *Fruit Man.* 639. 1884.

Des Chevriers de Stuttgardt. **2.** Leroy *Dict. Pom.* **1**:558, fig. 1867.

Stuttgarter Geisshirtel. 3. Oberdieck *Obst-Sort.* 289. 1881.

It is said that this was a wilding found by a shepherd in the neighborhood of Stuttgart, Ger., before 1779. Fruit below medium, pyriform, fine, tender, at first dark water-green sprinkled with very numerous large dots of a darker shade, changing to yellow-green, tinged on the side next the sun with brownish-red on which the dots become yellow; the surface is covered with a characteristic sort of grayish-white bloom which passes to a rosy-violet on the bright parts; flesh greenish, not very fine but tender, buttery, sufficiently juicy, aromatic; first; Aug.

Rousselet Thaon. 1. Mas *Pom. Gen.* **4**:73, fig. 229. 1879.

The Bulletin of the Van Mons Society appears to indicate that Rousselet Thaon was a gain of M. Bivort. Fruit small, short-turbinate, symmetrical in outline; skin thick, firm, bright green dotted with darker green changing to pale yellow, the side next the sun being more golden and washed with brown-red on fruits well exposed; flesh white, coarse, semi-buttery; juice moderate in amount but saccharine and perfumed with musk; second; Sept. and Oct.

Rousselet Theuss. 1. Mas *Le Verger* **2**:37, fig. 17. 1866-73.

In his abridged descriptive Catalog published at Louvain in 1823 Van Mons stated that the Rousselet Theuss was raised by him. Fruit small or nearly medium, ovate-turbinate; skin rather thick and firm, at first bright water-green, sprinkled with gray-green

dots turning pale yellow and encrimsoned on the side next the sun, sometimes very vividly on well-exposed fruits; flesh white, slightly yellow under the skin, semi-fine, melting, full of saccharine juice, acidulous, well perfumed with the characteristic Rousselet scent; owing to its excellence and beauty this pear deserves a place in the fruit garden as well as in the large orchard; Aug.

Rousselet Vanderwecken. 1. *Ann. Pom. Belge* **3**:41, fig. 1855.

Raised by M. Grégoire, Jodoigne, Bel. Tree pyramidal, of good vigor, very productive. Fruit small, turbinate to ovoid, yellow; stem short, curved, rather thick; calyx large for the size of the fruit, open; flesh white, fine, melting, very juicy, very sweet, musky, strongly aromatic; first; Nov.

Rousseline. 1. Duhamel *Trait. Arb. Fr.* **2**:153, Pl. XV. 1768. **2.** Downing *Fr. Trees Am.* 847. 1869.

Merlet, the French pomologist, writing in 1675 appears to have been the first to describe this pear and he said it was well named Rousseline being so similar to Rousselet in the buttery character of its flesh and its extraordinarily musky flavor. Fruit below medium, pyriform inclining to obovate, swollen in the middle and narrowing obtusely toward the calyx and more acutely toward the stalk, dull green dotted with brown scales and partly covered with large russet stains intermingled with gray mottlings; flesh white, fine, semi-melting, some grit around the center; juice rarely abundant, highly saccharine, vinous and musky; second; Nov. and Dec.

Rousselon. 1. Leroy *Dict. Pom.* **2**:601, fig. 1869. **2.** Downing *Fr. Trees Am.* 847. 1869.

This variety was gained by Major Espéren of

Mechlin, Bel.; it fruited for the first time in 1846. Fruit medium and above, ovate, much swelled in its lower part and contracted near its summit; skin very shining, yellow-ochre, dotted with gray-russet, stained with the same at either extremity and carmined on the cheek touched by the sun; flesh yellow-white, semi-fine, semi-breaking, granular around the core; juice rather deficient, saccharine, sweet, more or less perfumed, rather delicate; second; Feb. to Apr.

Roux Carcas. 1. *Gard. Chron.* 55. 1865. **2.** Leroy *Dict. Pom.* **2**:602, fig. 1869.

This pear bears the name of a nurseryman at Carcassone, Aude, Fr., who raised it in 1863. Fruit below medium or small, globular, flattened at both poles and often slightly bossed, yellow-green dotted with small gray points, slightly marbled with russet; flesh whitish, coarse, semi-melting, gritty at center; juice abundant, musky, and saccharine, possessing a rather astringent after-taste; second; end of Aug.

Rové. 1. *Guide Prat.* 83. 1895.

A perry pear which originated in the neighborhood of Metz, Lorraine, and is in much request there. Fruit rather large, orange-yellow, well colored with red; flesh breaking, juicy, saccharine, of an agreeable flavor; of first quality for perry and for cooking and also rather good to eat; end of winter and spring.

Rowling. 1. Parkinson *Par. Ter.* 592. 1629.

"The Rowling peare is a good peare, but hard, and not good before it bee a little rowled or bruised, to make it eate the more mellow."

Royal. 1. Downing *Fr. Trees Am.* 847. 1869.

Raised from seed by Thomas R. Peck, Waterloo, N. Y. Fruit medium, globular-pyriform, yellow largely covered with thin crimson on the side next the sun, sprinkled with brown and russet dots; flesh white, melting, juicy, sweet, slightly aromatic; good to very good; Sept.

Royal d'Hiver. 1. Duhamel *Trait. Arb. Fr.* **2**:191, Pl. XXXV. 1768. **2.** Hogg *Fruit Man.* 640. 1884.

The origin of the Royal d'Hiver is uncertain. In 1704 Le Gentil, director of the orchard at the Chartreux Convent of Paris, said that it was a new pear and had been brought from Constantinople for the King (Louis XIV). The Turkish origin of the pear, however, was probably based on not much more than hearsay. Fruit large, turbinate-obtuse, bossed; skin fine, dull lemon-yellow, washed with orange-red on the side next the sun, dotted and marbled with fawn; flesh yellow-white, fine, melting or semi-melting, juicy, saccharine, sweet and having a pleasant, musky flavor; good; Nov. to Jan.

Royale Vendée. 1. Leroy *Dict. Pom.* **2**:607, fig. 1869.

Count Eugene of Nouhes obtained this variety from seed at la Cacaudière, in the commune of Pouzauges, Vendée, Fr., in 1860. Fruit medium, globular-ovate, bossed; skin rough, dark yellowish-green, lightly marbled with gray and bright fawn; flesh citrine, fine, very melting and juicy, with a saccharine, sprightly flavor and delicate perfume; very good; Jan. to Mar.

Ruhschiebler. 1. Löschnig *Mostbirnen* 96, fig. 1913.

An Austrian perry pear. Fruit small to medium, globular-turbinate, yellow-green, with large and small russet dots; flesh coarse, juicy, with a strong acid taste; good for transportation; end of Sept. and

Oct.

Rummelter Birne. 1. Dochnahl *Führ. Obstkunde* **2**:193. 1856. **2.** Löschnig *Mostbirnen* 98, fig. 1913.

A perry pear grown extensively in Austria and Germany. Fruit medium, turbinate-oblate, light green, heavily sprinkled with gray dots, turning orange-yellow, with russet on the exposed side; flesh white, very coarse, subacid; end of Sept. to Nov.

Runde gelbe Honigbirne. 1. Dochnahl *Führ. Obstkunde* **2**:162. 1856.

Saxony, 1804. Fruit medium, turbinate-oblate, light green turning white and straw color with a vivid light blush, fine light brown dots; flesh yellow-white, coarse-grained, gritty near center, astringent, honey-sweet; very good for household use and perry; end of Sept. for three or four weeks.

Runde Sommerpomeranzenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:150. 1856.

Trieste, Austria, 1805. Fruit small, globular-ovate, flattened, sides unequal, yellowish light green turning to light lemon-yellow tinged with green and often slightly blushed with dull red; flesh semi-melting, aromatic; first for dessert, household and market; beginning of Sept. for fourteen days.

Russbirne. 1. Dochnahl *Führ. Obstkunde* **2**:173. 1856.

Thuringia, Ger., 1803. Fruit medium, globular-turbinate, variable in form; skin rough, almost entirely covered with cinnamon-russet, often with light brown blush; flesh whitish, coarse-grained, saccharine, breaking, juicy; third for the table, first

for household; Nov. and Dec.

Russelet Petit. 1. Langley *Pomona* 132, Pl. LXIV. 1729.

Fruit small, pyramidal, irregular; stem set on one side obliquely; late Aug.

Russet Bartlett.

About 1893 Robert McHinds, Clarksville, N. Y., planted 700 Bartlett pear trees. When these trees came into bearing, one was found to produce russet-colored fruits, whence the name Russet Bartlett. The tree is an exact counterpart of Bartlett in manner of growth and the fruit differs from Bartlett only in the russet skin. It is, therefore, not improbable that the variety is a bud sport of Bartlett.

Russet Catherine. 1. Parkinson *Par. Ter.* 592. 1629.

"The Russet Catherine is a very good middle sized peare."

Rylsk. 1. *Can. Hort.* **27**:292. 1894.

Russian. Fruit medium yellow; flesh breaking, sweet; very late.

S. T. Wright. 1. *Garden* **66**:299, fig. 1904.

This English pear raised by Messrs. Veitch, was introduced in 1904 at the Royal Horticultural Society's fruit show in London. It is the product of Beurré Bachelier and Bartlett. Fruit medium, oblate-pyriform, rather swelled; skin rich golden; of good flavor; Oct.

Sabine. 1. Leroy *Dict. Pom.* **2**:610, fig. 1869.

The parent tree of this variety was acquired by Van Mons from a garden at Schaerbeek, Bel., and ripened its fruit first in 1817. Fruit medium,

sometimes irregular-conic, sometimes ovate-pyriform and often rather deformed in contour; skin rather rough, bright green, dotted uniformly with dark gray changing to lemon-yellow, washed with thin yet vivid crimson; flesh white tinted with yellow, fine, melting, rather gritty around the core, full of sweet juice and delicately perfumed; first; Dec. and Jan.

Sabine d'Été. 1. Lindley *Guide Orch. Gard.* 348. 1831.

Raised in 1819 by M. Stoffels of Mechlin, Bel. Fruit pyramidal, broadest at the base and tapering to a round, blunt point at the stalk; skin smooth and even, yellow on the shaded side, and of a fine scarlet, minutely dotted when exposed to the sun; flesh white, melting, juicy, highly perfumed; Aug.

Sacandaga. 1. Downing *Fr. Trees Am.* 849. 1869.

The parent tree was found on the farm of William Van Vranken, Edinburgh, N. Y. Fruit small, nearly globular, pale greenish-yellow, shaded with brownish-crimson, and netted and dotted with russet; flesh white, juicy, melting, sweet, rich, slightly perfumed; good to very good; Sept.

Sächsische Glockenbirne. 1. Liegel *Syst. Anleit.* 130. 1825.

Saxony. First published in 1816. Fruit medium, spherical, light citron-yellow turning golden yellow, blushed; flesh firm, coarse-grained, sweet and musky; third for dessert, good for kitchen purposes; Oct.

Sächsische Lange Grüne Winterbirne. 1. Mathieu *Nom. Pom.* 274. 1889.

Longue Verte d'Hiver. **2.** Mas *Pom. Gen.* **7**:137, fig. 549. 1881.

A pear of German origin and cultivated especially in Thuringia and Saxony. Fruit medium or nearly medium, conic-pyriform, water-green, sown with dots of a darker green, passing to greenish-white or yellowish-white at maturity; flesh white, rather fine, semi-melting, full of sweet, saccharine juice but without any appreciable perfume; good; autumn and early winter.

Safran. 1. Leroy *Dict. Pom.* **2**:611, fig. 1869.

An old French pear known in the seventeenth century as the *Saffran d'Hyver*. Fruit medium and sometimes less, variable in form, usually ovate, very globular and irregular or slightly long-conic; skin rather rough, saffron-yellow, shaded with gray, dotted, veined and marked with brown-russet; flesh yellowish, semi-melting, and semi-fine, granular; juice sufficient, saccharine, acidulous, with a perfume resembling that of fennel rather than of musk; third; Oct. to Jan.

Saint André. 1. Hovey *Fr. Am.* **1**:79, fig. 1851. **2.** Leroy *Dict. Pom.* **2**:613, fig. 1869.

The origin of this pear is unascertainable but it was introduced to this country by R. Manning, Salem, Mass., who imported cions of it from Messrs. Baumann, nurserymen, Bollwiller, Fr. (Bollweiler, Alsace), in 1834 or 1835. Fruit medium or below, ovate, rather symmetrical, bossed and sometimes a little ventriculated in its lower half; skin fine and smooth, yellow-green, dotted and streaked with gray, very rarely colored on the cheek next the sun; flesh greenish-white, fine and most melting, extremely juicy, sweet, saccharine, slightly vinous, delicate and highly perfumed; first; Oct.

Saint Andrew. 1. Langley *Pomona* 131. 1729.

Described in 1729 as one of the best pears in England. Fruit large, oblong, very obtuse, greatest diameter two-thirds down toward the base, diminished only slightly toward the stem; Sept.

Saint Aubin sur Riga. 1. McIntosh *Bk. Gard.* **2**:461. 1855.

"A New Jersey pear of much excellence either as a wall or standard." Fruit large; flesh melting, tender, of rich flavor; excellent; Jan. and Feb.

Saint-Augustin. 1. Duhamel *Trait. Arb. Fr.* **2**:230, Pl. LVIII, fig. 3. 1768. **2.** Leroy *Dict. Pom.* **2**:614, fig. 1869.

An old French pear published in 1650 by Ménage. Fruit below medium, pyriform-ovate, rather regular in form, slightly obtuse, dirty yellow, dotted with gray, stained with fawn around both poles and sometimes slightly clouded with brown-red on the side next the sun; flesh white, semi-fine, breaking; juice rather wanting, sweet, saccharine, slightly musky and pleasant; second; Feb. to Apr.

Saint Denis. 1. Downing *Fr. Trees Am.* 849. 1869.

Fruit small, turbinate and uneven in its outline, pale yellow, with a crimson cheek and thickly dotted with crimson dots; flesh semi-melting, very juicy and sweet, with a fine aroma; good; Aug. and Sept.

Saint Dorothée. 1. *Mag. Hort.* **14**:110. 1848. **2.** Downing *Fr. Trees Am.* 849. 1869.

A variety received in this country from France and fruited here for the first time in 1847. Fruit large, fusiform or spindle-shaped, bright lemon-yellow; flesh fine, buttery, with a saccharine, sprightly and highly perfumed flavor; good; Oct. and

Nov.

Saint François. 1. Leroy *Dict. Pom.* **2**:616, fig. 1869.

Until 1675 when Merlet described it this variety was little known and he then called it *de Grillon* or *Bonne-Amet* but in 1690 on re-printing and completing his work he spoke of it as the Saint François. Fruit above medium and sometimes very large, long-conic, slightly obtuse and bossed, one side more swelled than the other, dull greenish-yellow, finely dotted with brown, widely stained with fawn around the stem and more or less flecked with the same and slightly carmined on the side of the sun; flesh white, extremely fine, semi-breaking, rarely gritty; juice scanty and wanting in sugar, musky, delicate in flavor; third for eating raw, first for cooking; mid-Nov. to end of Jan.

Saint Gallus Weinbirne. 1. Dochnahl *Führ. Obstkunde* **2**:194. 1856.

Germany, on the Rhine, Württemberg and Baden. First published in 1830. Fruit small, apple-shaped, often flat-turbinate, medium swelled, uneven; skin very firm, green, almost entirely covered with a dark, dirty red blush, scarcely dotted at all; good for household use and perry; Jan. to Mar.

Saint George. 1. Leroy *Dict. Pom.* **2**:617, fig. 1869.

The Saint George was described by Diel, Stuttgart, Ger., in 1812, as a French pear originated on the Moselle. Fruit above medium and often larger, very long and always variable, often of Calebasse form, obtuse and contorted, sometimes ovate and regular in outline; skin thin, rough, greenish, much stained with gray around the calyx and covered with large brown dots and scaly patches of russet; flesh white, fine, melting, juice abundant, saccharine, acid

and vinous, pleasantly perfumed; first; mid-Sept.

Saint Germain. 1. Duhamel *Trait. Arb. Fr.* **2**:225, Pl. LII. 1768. **2.** Bunyard *Handb. Hardy Fr.* 196. 1920.

Merlet, the French pomologist, wrote in 1680 that this pear originated from a wilding on the banks of the Fare, a little river in the parish of Saint Germain d'Areé. Fruit medium or large, long-pyriform, slightly swelled, often irregular in contour; skin rather thick and rough, greenish-yellow, dotted with russet, slightly golden on the cheek exposed to the sun; flesh whitish, fine, very melting, very juicy, rich in sugar with an agreeable, perfumed flavor; very good, but is gritty and worthless if grown on cold, moist soil; Nov. to Mar.

Saint Germain Gris. 1. Leroy *Dict. Pom.* **2**:623, fig. 1869.

Found by M. Prévost, long president of the Horticultural Society of Seine-Inférieure, Fr., in the ancient garden of the Friars of Saint-Ouen, at Rouen, about the year 1804. Fruit medium to large, long-ovate, irregular in its upper part and often bossed and elevated more on one side of the stalk than on the other, grayish-green dotted with brown; flesh yellowish, semi-fine, melting, saccharine, juicy, slightly acidulous, with a deliciously scented flavor; first; mid-Dec. and Jan.

Saint Germain Panaché. 1. Leroy *Dict. Pom.* **2**:625. 1869.

This variegated variety of Saint Germain is of French origin; the date of its publication is about 1819. Fruit simply a variegated form of the Saint Germain, covered with rather large bands of bright yellow sometimes extending from stem to calyx.

Saint Germain de Pepins. 1. Downing *Fr. Trees Am.* 850. 1869.

Foreign. Origin unknown. Fruit medium, nearly globular or obovate, slightly pyriform, pale yellow, lightly shaded or mottled with crimson in the sun, netted and patched with russet and thickly sprinkled with russet dots; flesh yellowish, coarse and gritty, with a hard core; good; Feb.

Saint Germain Puvis. 1. Leroy *Dict. Pom.* **2**:625, fig. 1869.

M. Pariset, Curciat-Dongalon, Fr., obtained this variety in 1842. Fruit above medium, long-conic, obtuse, irregular, much bossed, grass-green, clouded with olive-yellow, sprinkled with small gray dots; flesh whitish, semi-fine, watery and melting, almost free from granulations; juice rather deficient, saccharine, acidulous, agreeable; second; end of Sept. and Oct.

Saint Germain du Tilloy. 1. Leroy *Dict. Pom.* **2**:626, fig. 1869.

The origin of this pear is unknown though Leroy thought that its name indicated origin in the Department of the Nord where it formerly existed in important nurseries and where are two towns bearing the name Tilloy. Fruit medium and above, long-conic or cylindrical-conic, very obtuse, rather variable, golden-yellow, clouded with olive-yellow, covered with gray dots and speckles, always rather squamose, more or less washed with cinnamon-russet on the side next the sun; flesh white, semi-fine and semi-melting, gritty at center; juice abundant, sugary, acidulous, aromatic; first; mid-Oct. to end of Nov.

Saint Germain Van Mons. 1. Leroy *Dict. Pom.*

2:628, fig. 1869.

Van Mons Hermannsbirne. **2.** Dochnahl *Führ. Obstkunde* **2**:60. 1856.

The parent tree of this variety was a seedling raised by Van Mons at Brussels which fruited for the first time in 1819. Fruit rather above medium or medium, obovate-pyriform, one side habitually more swelled than the other, yellow-ochre, sprinkled with numerous gray and green dots; flesh yellowish, semi-fine and semi-melting, very granular at the core; juice rarely abundant, sugary, acidulous, rather savory; second; Oct.

Saint Ghislain. 1. Hovey *Fr. Am.* **2**:45, fig. 1851. **2.** Leroy *Dict. Pom.* **2**:629, fig. 1869.

This pear was raised at the village of Jammapes, Hainaut, Bel., by M. Dorlain and was propagated by Van Mons and others. Fruit medium; form irregular, globular gourd-shaped and swelled in its lower part or elongated gourd-shaped and sometimes regular-turbinate, always, however, diminishing acutely to the stalk; skin rather thick and rough, grass-green, covered all over with large gray dots and shaded with dull red on the side exposed to the sun; flesh white, fine or semi-fine, melting or semi-melting, watery; juice very saccharine, vinous, with a delicious perfume and an after-taste of musk; first; end of Aug.

Saint Herblain d'Hiver. 1. Mas *Pom. Gen.* **1**:147, fig. 74. 1872.

The Saint Herblain d'Hiver was propagated by M. Bruneau, a nurseryman, Nantes, Fr., where it was raised, cultivated and much appreciated. Fruit medium, conic-ovate, usually symmetrical in outline; skin rather thick and firm, at first bright green

sprinkled with brown dots very regularly spaced and prominent, changing to citron-yellow with the side next the sun a little golden; flesh white, semi-fine, dense, semi-breaking, full of sweet juice, saccharine, refreshing, more tender when eaten at its extreme maturity; a good winter, cooking pear; end of winter.

Saint Lézin. 1. Leroy *Dict. Pom.* **2**:632, fig. 1869. **2.** Hogg *Fruit Man.* 642. 1884.

First among French pomologists to mention it was Claude Saint-Étienne, in 1670. Fruit large to very large, pyriform but variable, green clouded with pale yellow, dotted with small gray specks; flesh white, semi-fine, semi-breaking; juice plentiful, but deficient in sugar and without perfume; second for dessert, but good for stewing; Sept. and Oct.

Saint Louis. 1. Leroy *Dict. Pom.* **2**:634, fig. 1869.

Found in the ancient fruit garden of the Horticultural Society of Angers, Fr., and without any record of origin. Fruit medium or below, globular-ovate, somewhat bossed, yellow-ochre all over, sprinkled with dots and very small specks of fawn, more or less carmined on the face turned to the sun; flesh white, rather coarse, semi-melting; juice abundant, rather saccharine, sweetish, without any appreciable perfume; third; latter part of Aug.

Saint Luc. 1. Mas *Pom. Gen.* **7**:29, fig. 495. 1881.

Origin unknown. Fruit rather small, ovate-pyriform, symmetrical in contour, having its largest diameter somewhat below the center; skin rather thick though tender, at first pale water-green, with dots of green-gray, changing at maturity to pale golden-yellow, tinged with very light red on the cheek opposed to the sun; flesh whitish, fine, buttery; juice fairly abundant, very saccharine and slightly

perfumed; good; Aug.

Saint Luke. 1. *Garden* **66**:305. 1904.

Introduced by Rivers, Sawbridgeworth, Eng., about 1900. At the Royal Horticultural Society's show of hardy fruits at Westminister in 1904 it was regarded as a valuable introduction, able to compete with the best, owing to its rich mellow flavor and melting flesh, and perfect shape and finish. Fruit rough, russety, deep cinnamon-brown with green patches; flesh melting, juicy, rich, sweet; Oct.

Saint Menin. 1. *Mag. Hort.* **22**:231, fig. 16. 1856. **2.** Mas *Le Verger* **2**:187, fig. 92. 1866-73.

Omer-Pacha. 1. *Mag. Hort.* **21**:87. 1855. **4.** Leroy *Dict. Pom.* **2**:478, fig. 1869.

Received in America from Leroy about 1855 under the name *Omer-Pacha*. It was known, however, as early as 1846 in this country under the name of *Saint Menin*. Fruit rather large, obovate-obtuse, pale yellow, slightly brown in the sun, netted and patched with russet, and thickly dotted with conspicuous russet dots; flesh whitish, fine, melting; juice abundant, saccharine, vinous, with a delicate aroma; first; Sept.

St. Michel Archange. 1. *Pom. France* **1**:No. 41, Pl. 41. 1863. **2.** Hogg *Fruit Man.* 324. 1866.

A French pear originated in the neighborhood of Nantes in the middle of the last century. Fruit medium or rather large, turbinate but irregular in form, sometimes obovate, sometimes long-pyriform; skin fine, smooth, greenish-yellow, much dotted with gray-russet, washed with orange-red on the side next the sun; flesh yellow-white, fine, melting, very juicy, tender, agreeably perfumed; very good; Sept. and

Oct.

Saint Patrick. 1. *Mass. Hort. Soc. Rpt.* 45. 1866.

Raised from seed by S. A. Shurtleff, Brookline, Mass., and fruited in 1863. Fruit, diameter 2½ inches, short-pyriform, green, with dots and some blush; keeps well, and ripens perfectly, with a pleasant flavor; Feb. 15.

Saint Père. 1. Leroy *Dict. Pom.* **2**:638, fig. 1869.

Poire de Saint Père. **2.** *Guide Prat.* 82, 253. 1895.

The origin of Saint Père is ancient and indeterminate. Without accepting the doubtful synonyms of *Bugiada d'Hiver des Italiens* and *Brute-Bonne de Rome* which have been applied to it, we may judge from its name, *Holy Father*, that it came from Italy. Fruit above medium and often larger, sometimes conic-pyriform and sometimes ovate-pyriform, but irregular in outline, yellow, much mottled with gray-russet, sprinkled with very many and rather large brown dots; flesh white, coarse, watery, semi-breaking, juicy, wanting in sugar, often acrid, without perfume; first for cooking purposes; Feb. to Apr.

St. Swithin. 1. *Jour. Hort.* **35**:149, fig. 20. 1878. **2.** Bunyard *Handb. Hardy Fr.* 196. 1920.

Raised by Rivers, Sawbridgeworth Nurseries, Eng., from seed of Calebasse Tougard. Fruit below medium, obovate or pyriform; skin smooth, grass-green, thickly dotted and mottled with russet and sometimes with a faint blush on the side next the sun; flesh yellowish-white, with a greenish tinge, tender, juicy and sweet, with a fine, brisk flavor; good, superior to Doyenne d'Été; July and Aug.

Saint Vincent de Paul. 1. Leroy *Dict. Pom.* **2**:641,

fig. 1869. **2.** Downing *Fr. Trees Am.* 851. 1869.

M. Flon-Grolleau, a nurseryman, Angers, Fr., obtained this pear which was first tasted when ripe in mid-January, 1853. Fruit above medium, regular-obtuse-turbinate, meadow-green, sprinkled with yellow dots and russet, washed with fawn around the stem and on the cheek exposed to the sun; flesh whitish, fine, breaking and gritty, juicy, having little sugar, rather astringent and without perfume; third for dessert, second for cooking; Oct.

Sainte Anne. 1. *Guide Prat.* 99. 1895.

Obtained by M. Joanon at Saint-Cyr near Lyons, Fr. Fruit medium, oval, rounded at either end, greenish-yellow, washed with rose on the side next the sun; flesh white, rather fine, buttery, very juicy, melting, saccharine; matures after Beurré Giffard, about the beginning of Aug.

Sainte Thérèse. 1. Leroy *Dict. Pom.* **2**:642, fig. 1869.

Raised by André Leroy, Angers, Fr. It first fruited in 1863. Fruit medium and often larger, ovate, irregular and rather long, always larger on one side than on the other, water-green, dotted and mottled with russet and stained with patches of fawn; flesh white, fine, melting; juice very abundant, very saccharine, perfumed and possessing an agreeably acid flavor; latter half of Oct.

Salisbury. 1. Downing *Fr. Trees Am.* 541. 1857.

A native of western New York. Fruit depressed-pyriform; skin rough, somewhat covered with russet and thickly sprinkled with russet dots; flesh coarse; of only moderate quality; Oct.

Salviati. 1. Duhamel *Trait. Arb. Fr.* **2**:137, Pl. IX. 1768. **2.** Hogg *Fruit Man.* 643. 1884.

Merlet, French pomologist, described this pear in *L'Abrégé des bon fruits* in 1675. Fruit below medium to medium; form variable from obtuse-turbinate to slightly long ovate-turbinate; skin thin, wax-yellow, dotted with greenish spots, sometimes much stained with scaly russet and sometimes tinted with reddish-brown on the side touched by the sun; flesh whitish, coarse, semi-melting, gritty at the center; juice scanty, rather saccharine, sweet, but with a strong and disagreeable odor of musk; third; Sept.

Salzburger von Adlitz. 1. Dochnahl *Führ. Obstkunde* **2**:14. 1856.

A pear much esteemed in Bavaria, Württemberg, and Upper Austria. Fruit nearly medium, short-conic, even in outline, greenish-yellow, handsomely blushed, densely dotted with fine points; skin without scent; flesh mild, tender, melting; first for dessert, especially good for household and market; beginning of Sept.

Sam Brown. 1. Downing *Fr. Trees Am.* 2nd App. 134, fig. 1872.

Originated with Samuel Brown, Junior, Walnut Hills, Md. Exhibited at Philadelphia in 1869. Fruit full medium size or under, globular, obtuse-pyriform, a little uneven, pale yellow partly covered with thin russet, resembling Brown Beurré somewhat in appearance and very much in flavor, sometimes rather brownish in the sun; flesh white, a little coarse, melting, juicy, vinous and rich; very good, nearly best; Sept.

Samenlose. 1. *Ia. Hort. Soc. Rpt.* 382. 1885.

A Russian pear from the province of Vilna, which seems to be a near relative of the Bessemianka, but differs in expression of tree. Fruit above medium, of Bergamot type and good in quality.

Sanguine d'Italie. 1. Leroy *Dict. Pom.* **2**:647, fig. 1869.

Imported into France about the beginning of the last century. Fruit medium, turbinate and regular, rather obtuse, grass-green, dotted with gray on the shaded side and with yellow-red on the sun-exposed side; flesh breaking, gritty, coarse, dull yellow, veined with red especially about the core where the yellow almost entirely disappears under the blood-red; juice never abundant, saccharine, sweet, without much perfume; third; Aug. and Sept.

Sanguinole. 1. Downing *Fr. Trees Am.* 851. 1869. **2.** Bunyard *Handb. Hardy Fr.* 197. 1920.

Sanguine de France. 3. Leroy *Dict. Pom.* **2**:645, fig. 1869.

This old pear is of consequence only on account of the color of its flesh. According to Claude Mollet, 1810, it was imported to France from Switzerland. It was known in Germany in 1500. Fruit below medium or small, variable in form, turbinate-obtuse, or globular, bossed; skin rather thick and rough, green dotted with gray and red, sprinkled with streaks and patches of russet, and sometimes slightly carmined on the face exposed to the sun; flesh transparent, red, semi-fine, semi-breaking, juicy, saccharine, acidulous, more or less musky, agreeable; second, sometimes third, the flesh decomposing rapidly; Aug. and Sept.

Sanguinole de Belgique. 1. Downing *Fr. Trees Am.*

852. 1869.

Belgische Blutbirne. **2.** Dochnahl *Führ. Obstkunde* **2**:67. 1856.

Raised by M. Berckmans, a Belgian nurseryman who came to the United States but also maintained the original establishment, where this seedling was produced in 1851. It is of interest only on account of its rose-tinted flesh. Fruit medium, long-ovate, vivid yellow, blushed and dotted with red, with some brown-russet; flesh yellowish-white, tinted with red, semi-melting, saccharine and highly aromatic; second for the table; Oct. and early Nov.

Sans-Pareille du Nord. 1. Leroy *Dict. Pom.* **2**:648, fig. 1869.

Unvergleichliche. **2.** Mathieu *Nom. Pom.* 291. 1889.

A French variety described first in 1847. Its origin is unknown. Fruit large and sometimes very large, very long, cylindrical and contorted, often slightly constricted in the middle like Calebasse; skin thin, lemon-yellow, sprinkled with large gray dots, some fine patches of fawn, more or less tinted with vivid rose on the face opposed to the sun; flesh very white, semi-breaking and semi-fine; juice never abundant, sweetish, rather saccharine, wanting in perfume, but yet having a slight characteristic flavor; third for dessert, first for compotes; Nov. to Jan.

Sans Peau. 1. Duhamel *Trait. Arb. Fr.* **2**:150, Pl. XIII. 1768. **2.** Hogg *Fruit Man.* 644. 1884.

Skinless. **3.** Downing *Fr. Trees Am.* 856. 1869.

Of ancient and uncertain origin; the first certain French description was written by La Quintinye in 1690. Fruit below medium or small, ovate, more or

less long but always regular; skin exceedingly thin, and slightly rough to the touch, yellow-white, sprinkled with dots of darker green and often washed with pale rose on the sun-exposed side on which the dots are gray; flesh yellowish, coarse, melting, watery; juice sufficient, saccharine, acidulous, feebly perfumed; second; Aug.

Santa Anna. 1. *Am. Pom. Soc. Rpt.* 68. 1895.

Originated in Santa Anna, California. Fruit large, obtuse-pyriform, yellow-russeted; flesh tough, highly perfumed; first; season late.

Santa Claus. 1. *Garden* **67**:17, 35. 1905. **2.** Bunyard *Handb. Hardy Fr.* 197. 1920.

Colonel Brymer, Dorchester, Eng., introduced this pear to the notice of the Royal Horticultural Society in 1905 explaining that the parent tree had come originally from Belgium some thirty years previously. Fruit medium, conical, slightly pyriform, fairly even, slightly rough, dull brown-red, practically covered with russet; stem long, slender; calyx partially open, in an even basin; flesh pale yellowish, melting, deliciously flavored; Dec.

Santa Rosa. 1. *Am. Pom. Soc. Rpt.* 68. 1895.

Originated in California. Fruit large, pyriform; flesh buttery, vinous; mid-season.

Sapieganka. 1. *Mont. Hort. Soc. Rpt.* 56, fig. 1881-2. **2.** Cal. Com. Hort. *Pear Grow. Cal.* **7**:No. 5, 179. 1914.

Bergamotte Sapieganka. **3.** *Ia. Hort. Soc. Rpt.* 83. 1882.

Originated in northern Poland and introduced into this country in 1879. There is a suspicion that it

may be the Bergamotte d'Été renamed after a Polish nobleman. It has been found tender in Manitoba and the Northwest, but perfectly hardy at Ottawa and in Muskoka. Fruit medium, oblate, often somewhat flattened, brownish-yellow, with brownish-red in the sun, with numerous small dots; flesh white, coarse, somewhat firm and juicy; poor quality both for dessert and cooking, third for market; Aug.

Sarah. 1. *Mass. Hort. Soc. Rpt.* 37. 1867.

Raised by Thaddeus Clapp of Dorchester, Mass. It was exhibited at the Massachusetts Horticultural Society's rooms in 1867. Fruit medium size, globular-obovate-pyriform, greenish-yellow, partially netted and patched with russet, and thickly sprinkled with brown dots; flesh white, fine, juicy, melting, sweet, rich, aromatic; very good; Oct.

Sarrasin. 1. Duhamel *Trait. Arb. Fr.* **2**:249. 1768. **2.** Hogg *Fruit Man.* 644. 1884.

Duhamel du Monceau was the first writer to mention this pear, the origin of which is unknown. Fruit medium, turbinate, more or less obtuse and elongated, dull yellow, slightly greenish, dotted all over with bright russet, seldom mottled but amply washed with rose on the cheek exposed to the sun; flesh white, semi-fine and semi-breaking; juice abundant, saccharine, acidulous, having a taste of anis; second as a fruit to eat raw, first for compotes; Duhamel terms it the longest keeping of all pears; Mar. to June.

Sary-Birne. 1. Dochnahl *Führ. Obstkunde* **2**:56. 1856.

Published in Germany in 1851. Also known as *Sary Armud* and the *Turkish Musk Summer Pear*. Fruit small, ventriculous-conic, often somewhat bossed, greenish-yellow turning yellow, seldom blushed,

dotted with fine russet points; flesh very sweet, semi-melting, granular, without any particular aroma; second for table, good for kitchen and market; Aug.

Säuerliche Margarethenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:165. 1856.

Marguerite-Acidule. **2.** Mas *Pom. Gen.* **1**:43, fig. 22. 1872.

Obtained by Diel in the neighborhood of Nassau, Ger. Fruit small, usually globular-turbinate and sometimes ovate-pyriform, yellowish light green changing to pale light yellow, often blushed with brownish-red on the side of the sun, on which are numerous dots; flesh granular, white, semi-melting; juice sufficient, moderately sweet, refreshing; third; end of July.

Schellesbirne. 1. Dochnahl *Führ. Obstkunde* **2**:172. 1856. *Württemberg, Ger. First published in 1830. Fruit medium, turbinate, rather bossed* and unequal-sided; skin testaceous, light green turning to yellow-green, light blood-red marblings, sprinkled with dark, grayish-green, round dots; third for the table; good for perry; beginning of Oct.

Schmalblättrige Schneebirne. 1. Dochnahl *Führ. Obstkunde* **2**:199. 1856.

Germany, 1809. Fruit grows in bunches, small, spherical; skin thick, yellow-green, dotted and speckled with brown; flesh coarse; third; Dec. and Jan.

Schmotzbirne. 1. Löschnig *Mostbirnen* 136, fig. 1913.

A perry pear known under many names in

different parts of Austria. Fruit below medium, globular-ovate, often turbinate, smooth, yellow when ripe, thickly dotted with russet; flesh yellow-white, coarse-grained, very juicy, subacid; Oct.

Schnackenburger Winterbirne. 1. Oberdieck *Obst-Sort*. 338. 1881.

Published in Germany. Fruit rather large, flattened, globular-yellow washed with brownish-red; flesh breaking; a cooking pear; winter.

Schöberlbirne. 1. Löschnig *Mostbirnen* 100, fig. 1913.

An Austrian perry pear. Fruit medium, Bergamot-form to short-turbinate, light green turning to greenish-yellow, dotted with russet; flesh very white, rather coarse, very juicy, subacid; mid-Oct. to Dec.

Schöne Müllerin. 1. Dochnahl *Führ. Obstkunde* **2**:173. 1856.

Nassau, Ger., published in 1805. Fruit very small, turbinate, or blunt-conic, grass-green turning to yellow-green, often with dark red blush and having brown dots changing to green, light brown-russet markings; flesh fine-grained, with sweet, cinnamon flavor, breaking and juicy; third for dessert, very good for household; end of Sept. to beginning of Oct. for five to six weeks.

Schönebeck Tafelbirne. 1. Dochnahl *Führ. Obstkunde* **2**:50. 1856.

Germany, on the Rhine, 1816. Fruit small, conic; skin polished, greenish-yellow turning to lemon-yellow, blushed with red, heavily dotted with green; flesh marrowy, acid, vinous; second for the table, good for household and market; beginning of Sept. for two weeks.

Schönerts Omsewitzer Schmalzbirne. 1. Liegel *Syst. Anleit.* 108. 1825.

Fondante de Schönert. **2.** Mas *Le Verger* **2**:223, fig. 110. 1866-73.

According to Diel this pear was raised at the village of Omsewitz, near Dresden, by a farmer named Schönert. Fruit hardly medium, long-conic-pyriform, its greatest diameter being below its center; skin rather thick and firm, pale green changing to very pale yellow, without any blush, sprinkled with small gray-green dots; flesh white, fine, rather firm yet melting, full of saccharine juice, acidulous, refreshing, and delicately perfumed; first for household; Sept.

Schönlin Stuttgarter späte Winterbutterbirne. 1. Dochnahl *Führ. Obstkunde* **2**:133. 1856.

Raised from seed at Württemberg, Ger., and first published in 1825. Fruit large, oblong, slightly bossed, light green turning lemon-yellow, red dots, marked with russet, thick-skinned; flesh white, buttery, melting, juicy, aromatic and excellent in flavor; first for dessert, household and market; Feb. to Apr.

Schuman. 1. Downing *Fr. Trees Am.* 852. 1869.

A native of Bucks County, Pa. Fruit medium, globular-obovate, pale yellow, tinted with red on the cheek next the sun; flesh coarse, pasty; poor; Sept.

Schwarze Birne. 1. Dochnahl *Führ. Obstkunde* **2**:170. 1856.

Saxony. First published in 1804. Fruit medium, globular-turbinate, grass-green turning yellowish, almost entirely covered with dark russet, often blushed with dirty brown red on the side next the

sun; flesh yellowish-white, firm, breaking, aromatic, sweet and vinous; first for household purposes; Jan. to Apr.

Schweizer Wasserbirne. 1. Oberdieck *Obst-Sort.* 338. 1881. **2.** Löschnig *Mostbirnen* 206, fig. 1913.

Weingifterin. **3.** Dochnahl *Führ. Obstkunde* **2**:162. 1856.

Used in Austria and Switzerland for the making of perry. Fruit rather large, very globular, somewhat flattened at both poles; skin fairly rough, green-yellow, tinged with dull washed-out red, numerous dots and flecks of russet over the whole fruit; late Sept. to mid-Oct. for four weeks.

Sdegnata. 1. Leroy *Dict. Pom.* **2**:653, fig. 1869.

Major Espéren, the Belgian pomologist, raised this pear from seed, but at what date appears to be unknown. Fruit long-ovate, irregular and bossed; skin rather rough, greenish-yellow, dotted with russet and changing to meadow-green on the side exposed to the sun, marbled with gray-russet; flesh white, fine or semi-fine, juicy, dense although very melting, rather granular at the core; juice extremely abundant, saccharine, acidulous, with a characteristic flavor, deliciously perfumed; first; Aug.

Seal. 1. Downing *Fr. Trees Am.* 852. 1869.

Originated in Pennsylvania. Fruit medium or below, globular, pale yellow, lightly shaded with crimson in the sun and thickly sprinkled with green and russet dots; flesh white, coarse, moderately juicy, melting, slightly astringent; good; end of Aug.

Sébastien. 1. Mas *Pom. Gen.* **7**:181, fig. 573. 1881.

Raised by M. Pariset, Ain, Fr., in 1852, and first published in 1867. Fruit medium, cylindrical-ovate, even in its outline; skin rather thin but firm, at first intensely green, sprinkled with brown dots, large and prominent, changing to a brighter green at maturity with russet coloring on the side next the sun; flesh white, slightly tinted with green, especially under the skin, very fine, entirely melting, full of sweet juice, saccharine, with an agreeable perfume; first; Dec.

Sebastopol. 1. Leroy *Dict. Pom.* **2**:655, fig. 1869. **2.** Downing *Fr. Trees Am.* 852. 1869.

M. Minot, Jodoigne, Bel., obtained Sebastopol, which ripened for the first time in 1858. Fruit below medium, ovate-turbinate, symmetrical, green tinted with dull yellow, dotted with brown and mottled with russet; flesh white, rather coarse, semi-melting and watery, having some grit around the core, juice abundant, saccharine, acidulous, rarely much perfumed; second; mid-Aug.

Seckel Seedling No. 1. 1. *Iowa Hort. Soc. Rpt.* 131. 1915.

Mentioned in a report of the Supervising Committee of the Iowa Horticultural Society as a valuable seedling raised by Charles G. Patten. “The fruit is larger than the old Seckel, of excellent quality, and the tree is vigorous, hardy and free from blight.”

Secrétaire Maréschal. 1. Mathieu *Nom. Pom.* 281. 1889. **2.** *Guide Prat.* 99. 1895.

Obtained by M. Sannier, Rouen, Fr.; published in 1886. Fruit medium, resembling Beurré Clairgeau; flesh very fine, juicy, perfumed; Nov. and Dec.

Secrétaire Rodin. 1. Mathieu *Nom. Pom.* 281. 1889.

2. *Guide Prat.* 99. 1895. Obtained by M. Sannier, Rouen, Fr. It was first published in 1881. Fruit medium to large recalling in appearance the Duchesse d'Angoulême; flesh yellow, vinous, of an agreeable perfume and distinctive flavor; Nov. and Dec.

Seigneur Daras. 1. *Guide Prat.* 99. 1895.

Tree very fertile, not very vigorous and best cultivated on wild stock. Fruit medium, of the form of the Doyenné; flesh fine, juicy, saccharine, perfumed; Oct.

Seigneur d'Été. 1. Lindley *Guide Orch. Gard.* 348. 1831.

An old Flemish pear sent to England by M. Stoffels of Mechlin and exhibited by the Horticultural Society of London in 1819. Fruit above medium, obtuse-oval; skin fine orange, with bright scarlet on the sunny side, sprinkled with small brown spots and partially marked with larger ones of the same color; flesh melting, with an extremely small core, and a rich, highly flavored juice; beginning and middle of Sept.

Selleck. 1. Downing *Fr. Trees Am.* 854. 1869.

The origin of Selleck is unknown. Some thirty years ago the oldest known bearing tree of the variety was standing on the grounds of Columbus Selleck, Sudbury, Vermont, and was then still healthy and very productive. Fruit large, obovate-obtuse-pyriform, surface uneven; skin a fine yellow, with a crimson cheek and thickly sprinkled with russet dots; flesh white, a little coarse, juicy, melting, sweet, aromatic; good to very good; Sept. and Oct.

Semis d'Echasserie. 1. Mas *Pom. Gen.* **7**:188, fig.

580. 1881.

Obtained by M. Pariset, Ain, Fr., from a seed bed made in 1840. It was first published in 1862. Fruit below medium, globular-ovate, symmetrical in contour; skin rather thick and rough to the touch, yellow-green passing to bright yellow at maturity, tinged with earthy-red on fruits well exposed to the sun; flesh a little coarse, semi-breaking, rather full of saccharine juice, slightly gritty about the core, insufficiently perfumed; second; Dec. and Jan.

Semis Léon Leclerc. 1. Mas *Pom. Gen.* **4**:173, fig. 279. 1879.

Sent out by M. Bivort from Belgium about the year 1859. Fruit small or nearly medium on a well-pruned tree, ovate, often ventriculous, symmetrical in its contour; skin thin, smooth, green sprinkled with dots of darker green, changing at maturity to whitish-yellow, rather deeper on the side next the sun, sometimes washed with light red on which the dots are grayish or yellow; flesh white, semi-fine, melting, full of saccharine juice and pleasantly perfumed; good for its season; beginning of Aug.

Sénateur Préfet. 1. *Guide Prat.* 111. 1876.

Published in France by M. Boisbunel. Tree vigorous and very fertile. Fruit medium or large, oval-pyriform; flesh white, fine, melting, juicy, saccharine, vinous; first; March to May.

Sénateur Vaisse. 1. *Pom. France* **4**:No. 169, Pl. 169. 1867.

M. Lagrange, a nurseryman of Lyons, Fr., grew this pear from seed in 1861. Tree pyramidal, rather vigorous, productive. Fruit rather large, obovate, pale yellow, with a rosy tint on the sunny side; flesh

crisp, juicy, very sweet, slightly gritty; good; Sept.

Seneca. 1. *Guide Prat.* 104. 1895.

A wildling found by James Payne and nurtured by A. C. Clark, both of Tyre, N. Y., and reported as about twelve years old in 1896. Similar to Bartlett but of higher quality, better color, and later season. Fruit large, obovate-pyriform, light yellow, with blushed cheek, green mottling and black dots on shady side; flesh white, vinous, sprightly; very good; Oct. and Nov.

Senfbirne. 1. Dochnahl *Führ. Obstkunde* **2**:183. 1856.

Hanover. First published in 1852. Fruit medium, ventriculous and conic, often somewhat turbinate, unattractive green turning yellowish, often darkly blushed, spotted; flesh rather coarse, fairly juicy, sweet; first for household use; Oct. and Nov. for six weeks.

Seringe. 1. *Gard. Chron.* 1045. 1866.

M. Nérard, a nurseryman at Lyons, Fr., obtained Seringe, which was published first in 1864. Fruit medium, oval, inclining to obovate, a little depressed at the ends; skin citron or pale yellow, smooth, with some russet specks; flesh white, very melting and sugary; Aug.

Serrurier. 1. Downing *Fr. Trees Am.* 543. 1857. **2.** Leroy *Dict. Pom.* **2**:660. 1869.

Van Mons obtained this variety from seed at Louvain, Bel., about 1825. Fruit large; form rather inconstant, passing from irregular ovate, swelled and much bossed, to ovate more or less globular, and mammillate at the summit; skin thick, olive-yellow, closely dotted with gray, stained with fawn around the calyx and touched with some brown-russet and

occasionally vermilioned on the side exposed to the sun; flesh whitish, melting or semi-melting, juicy, vinous and saccharine, possessing a tartish flavor and a particularly pleasant aroma; first; Oct. and Nov.

Seutin. 1. Downing *Fr. Trees Am.* 854. 1869.

Poire Seutin. **2.** Mas *Pom. Gen.* **5**:143, fig. 360. 1880.

According to Bivort the pear Seutin was obtained by M. Bouvier, Jodoigne, Bel. Fruit medium, ovate-pyriform, more or less long, sometimes symmetrical, sometimes rather angular in its contour; skin thick, firm, at first bright green sprinkled with dots of green-gray, changing to lemon-yellow tinged with golden-russet on the side next the sun; flesh whitish, rather fine, gritty at the center, semi-buttery, fairly juicy, sweet, and delicately perfumed; winter.

Sha Lea. 1. *Ia. Hort. Soc. Rpt.* 303. 1879. **2.** *Cornell Sta. Bul.* **332**:485. 1913.

Chinese Sand. **3.** Downing *Fr. Trees Am.* 851. 1869.

A Chinese sand pear imported from China by Wm. R. Prince, Flushing, N. Y. about 1820. Fruit medium, globular-pyriform, dull yellow, covered with a rough, sandy-like russet; flesh firm, moderately juicy; cooks well and acquires a fine flavor; Sept.

Shawmut. 1. *Mag. Hort.* **25**:209, fig. 14. 1859.

Originated with Francis Dana, Roxbury, Mass. Fruit large, obtuse-pyriform, regular; skin fair, nearly smooth, dull yellow at maturity, dotted with large, round, russet specks, most numerous on the sunny side; flesh yellowish, coarse, melting, very juicy, rich, vinous, sprightly, with a pleasant musky

perfume; Oct.

Shenandoah. 1. *Mass. Hort. Soc. Rpt.* 43. 1866.

A seedling raised by S. A. Shurtleff, Brookline, Mass. It fruited first in 1862. Fruit "Skin yellow; flesh fine-grained and sweet, keeps well, and is a good market pear; pyriform."

Sheppard. 1. Downing *Fr. Trees Am.* 855. 1869.

Raised by James Sheppard, Dorchester, Mass. Fruit large, obovate-pyriform; skin rough, yellow, sometimes with a brownish-red cheek, slightly sprinkled with russet dots and with some patches of russet; flesh whitish, coarse and granular, buttery, melting, juicy, vinous, perfumed; good to very good; end of Sept. and first of Oct.

Sheridan. 1. *Mass. Hort. Soc. Rpt.* 44. 1866.

A seedling raised by S. A. Shurtleff, Brookline, Mass. "Fruited in 1864. Short diam. 3 inches; long diam. 3½ inches; good grain, juicy, rather vinous in flavor; color dark green; ripens soundly. Large bearer, and good market pear. Turbinate."

Shindel. 1. *Am. Pom. Soc. Rpt.* 44. 1897.

This pear has been locally grown about Emigsville, Pa., since the early part of the last century, and up to 1897 was reported never to have been affected with blight. Fruit medium, globular-obovate; skin rather smooth, lemon-yellow, with thin golden-russet patches and veining; flesh whitish, rather fine, granular, moderately juicy, mild, sugary, moderately rich; good; Aug. and Sept.

Shobden Court. 1. Hogg *Fruit Man.* 646. 1884.

Raised by T. A. Knight, President of the Horticultural Society of London. Fruit below

medium, oblate, symmetrical in form, deep rich yellow, blushed with red on the side next the sun, sprinkled all over with rough, russety dots; flesh white, coarse-grained, juicy, briskly acid and sweet, not highly flavored; second; Jan. and Feb.

Shurtleff. 1. *Mass. Hort. Soc. Rpt.* 44. 1866.

A seedling raised by S. A. Shurtleff, Brookline, Mass. "Fruited in 1863. Short diam. 2½ inches; long diam. 3 inches; flesh rather dry, and firm; skin yellow with red cheek; keeps soundly without extra care until May. A most prolific bearer. Short pyriform."

Sieboldii. 1. *Guide Prat.* 115. 1876. **2.** *Cornell Sta. Bul.* **332**:485. 1913.

Japan. Sieboldii is a variety distinct from *Madame von Siebold* and was described by Messrs. Simon-Louis of Metz, Lorraine, as follows: "Medium to large pyriform with elongated tendency, angled and irregular; ... color slightly red on sunny side, grayish in shade; flesh white, breaking, sweet, perfumed; cannot be eaten raw with pleasure."

Sievenicher Mostbirne. 1. Löschnig *Mostbirnen* 208, fig. 1913.

A perry pear grown in Austria and Germany. Fruit medium to fairly large, globular, short, diminishing somewhat acutely to the stalk; yellow-green, blushed with brown; flesh coarse, subacid and dry; end of Sept. and beginning of Oct.

Sikaya. 1. *Cornell Sta. Bul.* **332**:485. 1913.

An Oriental variety. Fruit medium to small, oblate, symmetrical, buff, russeted; skin tough, almost covered with large russet dots; flesh yellowish-white, coarse, poor, insipid, subacid,

melting, gritty; late.

Simon Bouvier. 1. Leroy *Dict. Pom.* **2**:666, fig. 1869. **2.** Hogg *Fruit Man.* 646. 1884.

Souvenir de Simon Bouvier. 3. *Guide Prat.* 108, 305. 1876.

Raised by Simon Bouvier, Jodoigne, Bel. Fruit medium, symmetrical, ovate, always swelled toward the base, green shaded with dull yellow, dotted and stained with russet; flesh whitish, fine, juicy and melting, almost free from granulations; juice extremely abundant and saccharine, very acidulous, highly perfumed, having an after taste of musky-anis which adds to its delicacy; first; Sept.

Sinai'sche Buschelbirne. 1. Dochnahl *Führ. Obstkunde* **2**:198. 1856.

Mount Sinai, Persia, 1815. Fruit very small, globular, flattened, greenish, blushed, very finely dotted; flesh hard, coarse-grained, juiceless, sour, but sweet when ripe; third; winter.

Sinclair. 1. Dochnahl *Führ. Obstkunde* **2**:74. 1856. **2.** Hogg *Fruit Man.* 646. 1884.

Raised by Van Mons. Fruit large and handsome, long-turbinate, very wide at the base and tapering abruptly by deep concave curves to a narrow point near the stalk, even and symmetrical in shape, smooth, fine, clear lemon-yellow, with a faint blush of red next the sun; flesh fine-grained, buttery, melting, very juicy and sweet, with a rich, vinous flavor and a slight musky perfume; very good for dessert and also for household and market purposes; Sept. and Oct.

Sirningers Mostbirne. 1. Löschnig *Mostbirnen* 210, fig. 1913.

An Austrian perry pear. Fruit medium to large, long-conic; skin firm, green turning yellowish-russet; flesh greenish-white, very firm, rather acid flavor; Oct.

Slavonische Wasserbirne. 1. Dochnahl *Führ. Obstkunde* **2**:183. 1856.

Originated at Siebenbürgen, Ger. First published in 1851. Fruit below medium, ventriculous-conic, green turning greenish-yellow, with light brown wash on the sunny side; flesh coarse, saccharine, firm, very juicy and sweet; third for the table, first for household use; beginning of Sept.

Slutsk. 1. Ragan *Nom. Pear, B. P. I. Bul.* **126**:231. 1908.

Originated in Minsk, Russia, and received in this country about 1890. Fruit large, symmetrical, roundish-obtuse-pyriform, yellow, largely overspread with bright red and thickly sprinkled with brown dots; stem long, slender, in a deep cavity; calyx open; flesh moderately juicy, somewhat astringent, not sugary; good; Oct.

Smet Fils Unique. 1. *Guide Prat.* 106. 1876.

Fruit large, Doyenné in form; flesh fine, melting, juicy; first; end of autumn.

Smith. 1. *Cornell Sta. Bul.* **332**:485, fig. 1913.

An oriental variety or hybrid, very similar to Le Conte but blooms later. Fruit medium to large, oval, truncate at basin end; skin yellowish-green, smooth, with patches of russet; flesh white, firm, insipid, dry, mealy; poor; Oct.

Smith Beauty. 1. *Cornell Sta. Bul.* **332**:485. 1913.

An oriental hybrid, similar to Le Conte, with no

blush, shorter than Dewey. Variety name has been listed as *Smith's Winter Beauty*.

Smith Duchess. 1. *Ia. Hort. Soc. Rpt.* 101. 1883.

An American hybrid of the Chinese Sand Pear.

Snow. 1. *Ia. Hort. Soc. Rpt.* 149. 1873.

Originated with Suel Foster, Muscatine, Ia. Reported in 1873 as "better than Vicar except for size and keeping. Its flesh is very white; valuable for cooking."

Sœur Grégoire. 1. Leroy *Dict. Pom.* **2**:667, fig. 1869.

Xavier Grégoire, the well-known Belgian seedsman, Jodoigne, Brabant, obtained this variety. It bore its first fruit in 1858. Fruit large, in form variable from irregular long gourd-shaped to long-cylindrical, usually rather bossed; skin thick and rough, yellow-ochre, dotted and stained with gray-russet and shaded with dark red on the cheek next the sun; flesh yellowish, semi-fine, melting, granular at the core; juice rarely abundant but very aromatic, saccharine and with a delicate flavor; first when sufficiently juicy, otherwise second; Nov. and Dec.

Soldat Bouvier. 1. Mas *Pom. Gen.* **4**:37, fig. 211. 1879.

Raised by Xavier Grégoire, Jodoigne, Bel. Fruit nearly medium, globular-conic, regular in outline; skin rather firm, at first a dark green, sprinkled with dots of a darker shade, brightening to yellowish at maturity and extensively colored with blood-red on the cheek next the sun; flesh whitish, rather fine, buttery, melting; juice sufficient, saccharine and delicately perfumed; good to first; Sept.

Soldat Laboureur. 1. *Ann. Pom. Belge* **3**:31, fig.

1855. **2.** Bunyard *Handb. Hardy Fr.* 198. 1920.

Soldat Laboureur was obtained from a seed bed made about 1820 by Major Espéren, Mechlin, Bel. Fruit medium to large, ovate-pyriform or turbinate, bossed; skin smooth, rather thick, bright green passing to golden-yellow when perfectly ripe, dotted and shaded with fawn; flesh yellowish-white, semi-fine, melting; juice abundant, saccharine, perfumed, and, on land suiting it, very vinous; very good, highest quality; Oct. and Nov.

Sommer-Russelet. 1. Dochnahl *Führ. Obstkunde* **2**:46. 1856.

Thuringia, 1807. Fruit medium, pyriform, light yellow, blushed all over; flesh breaking, juicy, with a flavor of cinnamon; second for table, first for household and market; beginning of Aug.

Sommer-Zuckerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:53. 1856.

Thuringia, Ger. Published in 1798. Fruit medium, long-pyriform, obtuse, yellowish-green turning a lighter tint at maturity, with dark blush on the side of the sun and yellow dots which turn green; flesh yellowish-white, breaking, saccharine; second for dessert and good for household and market purposes; Aug.

Sommeralantbirne. 1. Dochnahl *Führ. Obstkunde* **2**:14. 1856.

Poire d'Aunée d'Été. **2.** Mas *Pom. Gen.* **5**:77, fig. 327. 1880.

Upper Hesse, Prussia; first published in 1802. Fruit medium, long-conic; skin fine, light green turning yellowish, with dark red blush and very fine dots; wanting in juice, buttery, mild and tender,

aromatic; first for table, household and market; Aug. and Sept.

Sommerkönigin. 1. Dochnahl *Führ. Obstkunde* **2**:109. 1856.

Nassau, Ger.; published in 1804. Fruit above medium, obtuse-conic, inclined to one side at the top, yellowish-green turning to light yellow, with a pale blush, greenish dots and flecked with russet; flesh white, juicy, buttery, melting and full of flavor; Sept.

Sommerwachsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:50. 1856.

Nassau, Ger.; published in 1805. Fruit medium, pyriform, symmetrical; skin smooth, straw-white turning to a waxy light yellow, with often a faint blush, light green dots turning red, without scent; flesh semi-melting, very juicy and saccharine; third for table, good for household purposes; first of Sept.

Sophie de l'Ukraine. 1. Hogg *Fruit Man.* 647. 1884.

Fruits rather large, obovate, even and regular, in shape rather resembling White Doyenné; pale yellow, covered with minute dots on the shaded side and with a tinge of warm orange on the side opposed to the sun; flesh neither melting nor juicy, only sweet; an inferior pear; soon becomes soft; Nov.

Sotschnaja. 1. *Ia. Hort. Soc. Rpt.* 61. 1880.

A northern European variety reported by J. L. Budd as imported by him and on trial at the Iowa State College. Shows marked traces of the Chinese forms of the pear in shape, serration, thickness and size of leaf. The wood is gritty and thorn-like and unites very imperfectly with the apple.

Soueraigne. 1. Parkinson *Par. Ter.* 592. 1629.

"The Soueraigne peare, that which I have seene and taste, and so termed unto me, was a small brownish yellow peare, but of a most dainty taste; but some doe take a kind of Bon Chretien, called the *Elizabeth* peare, to be the Soueraigne; how truly let others judge."

Soutmann. 1. Dochnahl *Führ. Obstkunde* **2**:130. 1856.

Holland, 1821. Fruit medium, globular-oblong, light green turning to yellowish-green, without any blush, small brown dots; flesh white, buttery, melting, juicy, and with a sweet aromatic flavor of cinnamon; very good dessert fruit; Dec.

Souvenir de l'Abbé Lefebvre. 1. *Guide Prat.* 100. 1895.

Obtained by M. Sannier, Rouen, Fr. Tree of moderate vigor, fertile and adapts itself to all forms of growth. Fruit medium in size; flesh very fine, perfumed and excellent; Nov. and Dec.

Souvenir de du Breuil Père. 1. Pom. France **4**:No. 159, Pl. 159. 1867.

Poire du Breuil Père. **2.** *Rev. Hort.* 202. 1889.

Obtained from a bed of seeds of Louise Bonne de Jersey made by A. du Breuil, Rouen, Fr., in 1840. Fruit medium or rather large, sub-spherical, more often inclined by the oblique truncation of its wide top; skin very fine, yellow at maturity, much mottled and dotted with bright russet all over, the russet becoming purple on the side next the sun; flesh white, melting, very juicy, saccharine, pleasantly perfumed and sprightly; excellent; Nov. to Jan.

Souvenir Deschamps. 1. *Rev. Hort.* 182. 1891. **2.** *Gard. Chron.* 3rd Ser. **9**:57. 1891.

Described in 1891 as a newly introduced seedling raised in the State School of Horticulture, Ghent, Bel. Fruit large, elongated, like Calebasse in form, sometimes spindle-form and straight, slightly constricted about the middle, greenish-yellow, marked with brown spots; flesh yellowish, delicate, melting, juicy, good; Sept. and Oct.

Souvenir Désiré Gilain. 1. *Guide Prat.* 108. 1876.

Stated in a Bulletin of the Society Van Mons to have been a gain of M. Grégoire, Jodoigne, Bel. Fruit medium, ovate-pyriform, symmetrical in outline, having its greatest diameter well below the centre; skin rather firm, pale green, sown with dots of darker green, turning pale yellow when ripe, rather golden on the side next the sun and touched with a tinge of red; flesh white, fine, breaking, juicy, saccharine, vinous, with a flavor difficult to describe; Aug.

Souvenir d'Espéren de Berckmans. 1. Mas *Pom. Gen.* **3**:151, fig. 172. 1878.

Obtained by M. Berckmans at his establishment in this country and should not be confounded with the Souvenir d'Espéren raised by M. Bivort. Fruit medium or rather large, conic-pyriform, often a little irregular in contour; skin fine, thin, water-green, sprinkled with large brown dots, both numerous and prominent and patches of russet, changing to lemon-yellow at maturity, the russet becoming golden; flesh white, a little tinted with yellow, rather fine, buttery, melting; juice sufficient in amount and highly saccharine and perfumed; good; Oct.

Souvenir Favre. 1. *Ann. Pom. Belge* **8**:65, fig. 1860. **2.** Downing *Fr. Trees Am.* 2nd App. 134. 1872.

Originated by M. Favre, Chalons, Fr., from seed of Glou Morceau planted in 1850. Fruit medium to below, conic-pyriform, pale yellow, dotted with many brown and green dots; stem short, rather stout, in a slight cavity; calyx open; basin small, uneven, slightly russeted; flesh whitish, slightly coarse, half-melting, juicy, sweet, aromatic; good to very good; Oct.

Souvenir de Gaëte. 1. Leroy *Dict. Pom.* **2**:671, fig. 1869.

M. Ruillé de Beauchamp obtained the Souvenir de Gaëte from seed of the Beurré de l'Assomption. It received the recommendation of the pomological committee of the Horticultural Society of Paris. Fruit above medium and sometimes large, irregular-turbinate or ovate, mammillate at the top and ventriculated at the middle, bright yellow, finely dotted and streaked with fawn and extensively washed with tender rose on the cheek opposed to the sun; flesh white, very fine, melting and free from granulations; juice very abundant, saccharine, refreshing and vinous with a characteristic perfume and flavor; first; Oct.

Souvenir de Julia. 1. *Guide Prat.* 60. 1895.

Sent out by M. Daras de Naghin of Antwerp, Bel. Tree vigorous and fertile. Fruit medium, globular, whitish-yellow, blushed with rose; flesh fine, semi-melting, saccharine, juicy; first; Oct. and Nov.

Souvenir de Leroux-Durand. 1. Mathieu *Nom. Pom.* 285. 1889. **2.** *Guide Prat.* 100. 1895.

Published in Germany in 1879. Tree vigorous and fertile. Fruit large or very large, oblong, bright yellow, stained with golden-russet; flesh very melting, vinous, highly saccharine and very

agreeably perfumed; first; Oct.

Souvenir de Lydie. 1. *Guide Prat.* 58. 1895.

A Belgian variety disseminated by Daras de Naghin of Antwerp. Fruit rather large, Doyenné in form, greenish-yellow; flesh semi-fine, melting, highly saccharine; first; Oct.

Souvenir de Madame Charles. 1. Mathieu *Nom. Pom.* 285. 1889. **2.** *Guide Prat.* 100. 1895.

Raised by M. Sannier, Rouen, Fr., from seed of Serrurier. Tree vigorous, fertile and suitable for all forms of cultivation. Fruit medium to large, having the form of the Passe Colmar, gray; flesh very fine, melting, saccharine and perfumed; Dec. and Jan.

Souvenir de la Reine des Belges. 1. Leroy *Dict. Pom.* **2**:673, fig. 1869. **2.** Downing *Fr. Trees Am.* 857. 1869.

Xavier Grégoire, Jodoigne, Bel., obtained this pear in 1855. Fruit above medium, turbinate, rather obtuse, ventriculous and symmetrical in its lower part and much contorted and bossed in its upper, pale yellow, dotted with gray, mottled with russet, especially over the side exposed to the sun; flesh yellowish, rather coarse, melting, juicy, gritty at the core; juice abundant, saccharine, slightly acidulous, with a delicate flavor and aroma; first and often second when the fruit is devoid of perfume; Oct.

Souvenir de Renault Père. 1. *Rev. Hort.* 397, fig. 126. 1893.

M. Renault, Bulgnéville, Vosges, Fr., observed that the lower branches of an Easter Beurré produced foliage variegated with white while the remainder were of a beautiful green. Grafts from the variegated branches in due course perpetuated the variegation

and produced a fruit similar to that of Easter Beurré but with the skin striped longitudinally from pole to pole, the variegation being more or less distinct according to the season and the vigor of the tree. Fruit large, obovate; skin hard to the touch, green turning to a golden yellow at maturity, variegated; flesh very white, fine, rather melting, fairly juicy, highly saccharine, rather gritty around the center; a good dessert pear; Jan. to Mar.

Souvenir de Sannier père. 1. *Guide Prat.* 100. 1895.

Obtained by M. Sannier, Rouen, Fr. Tree moderately vigorous. Fruit medium, dark yellow, tinted with rose; first; Oct.

Souvenir de Simon Bouvier. 1. Leroy *Dict. Pom.* **2**:674, fig. 1869.

Obtained by Xavier Grégoire, Jodoigne, Bel., and first reported in 1846. Fruit below medium, turbinate, even in outline, rather swelled in all the lower part and somewhat obtuse at the summit; color pale yellow, dotted with gray and green, stained with brown-fawn and vermilioned on the cheek opposed to the sun; flesh white, juicy, semi-fine and semi-melting; juice very abundant, vinous, saccharine and strongly musky; second; Oct.

Souvenir du Vénérable de la Salle. 1. *Rev. Hort.* 236. 1886.

Said to have been originated by M. Sannier, Rouen, Fr. Tree of good vigor, medium productive. Fruit medium, resembling Bon-Chrétien d'Hiver in form; flesh fine, melting, sweet; of first quality; Oct. and Nov.

Souveraine de Printemps. 1. Downing *Fr. Trees Am.* 544. 1857.

Of foreign origin. Fruit medium, oblate, obscurely pyriform, angular, yellow, sprinkled with russet; flesh white, melting, coarse, granular, juicy, somewhat astringent, with a brisk vinous flavor; Mar.

Spae. 1. Leroy *Dict. Pom.* **2**:676, fig. 1869.

Obtained by M. Spae, Ghent, Bel., and was propagated in 1861. Fruit above medium, long-turbinate, obtuse, rather contorted at the base and always having one side larger than the other, dull yellow, shaded with bright green, dotted, with more or less brown-russet on the cheek next the sun; flesh semi-fine or semi-breaking, white, juicy, sweet, saccharine, rather deficient in perfume but delicate; second; Oct.

Späte Rotbirne. 1. Löschnig *Mostbirnen* 54, fig. 1913.

An Austrian perry pear. Fruit medium to large, pyriform, dull green changing to greenish-yellow with widely spread dark blush, thickly speckled with whitish dots; flesh white, fine, aromatic; Nov. and Dec.

Späte Sommerbirne ohne Schale. 1. Dochnahl *Führ. Obstkunde* **2**:38. 1856.

Holland, 1806. Fruit very small, conic but variable, even sides; skin tender, greenish-yellow turning lemon-yellow, densely sprinkled with dark green dots; flesh very juicy, coarse, melting; second for dessert, first for household; mid-Aug.

Späte Todemannsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:146. 1856.

Nassau, Ger., 1806. Fruit large, shallow-bossed, sides unequal, pyriform, light green turning to light lemon-yellow, often blushed, dotted, often speckled

with russet and russeted on the side next the sun; flesh breaking, wanting in juice; third for dessert, very good for household; Dec. and Jan.

Späte Wasserbirne. 1. Dochnahl *Führ. Obstkunde* **2**:194. 1856.

Württemberg, Ger., 1830. Fruit medium, turbinate, rather obtuse, light green turning dirty pale yellow, dull red blush, large gray dots; flesh firm, very juicy, tasteless; good for household purposes and perry; Sept.

Spätes Graumänchen. 1. Oberdieck *Obst-Sort.* 291. 1881.

Bohemia. Fruit small, obtuse-pyriform, green changing at maturity to yellowish-green, very much russeted; flesh fine-grained, semi-melting, aromatic, cinnamon savor, sugary; good table fruit; Oct. to Jan.

Speckbirne. 1. Löschnig *Mostbirnen* 138, fig. 1913.

An Austrian perry pear. Fruit large, turbinate; skin smooth, light leaf-green turning to dull greenish-yellow at maturity, dotted with russet; flesh yellowish-white, very juicy, subacid, rather coarse-grained; Oct. to Dec.

Speedwell. 1. *Mass. Hort. Soc. Rpt.* 43. 1866.

A seedling raised and fruited in 1863 by Dr. S. A. Shurtleff, Brookline, Mass. Fruit, “Short diam. 2¼ inches, long diam. 3 inches; color green; flesh melting, juicy, with rich flavor; ripens soundly Sept. 1; quality fine; obovate.”

Spillingsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:150. 1856.

Germany, 1806. Fruit small, globular-turbinate, even in contour, pale green changing to light lemon-

yellow, more golden on the side of the sun, with light green dots; flesh snow-white, breaking and coarse-grained, vinous, acidulous and saccharine; second for dessert, first for household; Aug.

Spindelförmige Honigbirne. 1. Dochnahl *Führ. Obstkunde* **2**:143. 1856.

Grown in the middle Rhine country, Germany. Fruit medium, long-conic, regular, greenish-yellow, entirely covered with cinnamon-russet; flesh breaking and coarse, often semi-melting, saccharine and musky; very good for household use; Sept.

Spindelförmige Rehbirne. 1. Dochnahl *Führ. Obstkunde* **2**:132. 1856.

Westphalia, 1828. Fruit large, oblong, shallow-bossed; skin rough, light cinnamon-russet all over, dotted with whitish-gray; flesh granular, aromatic, with sweet wine flavor; first for table and household use; Sept. and Oct.

Spinka. 1. Mas *Pom. Gen.* **6**:89, fig. 429. 1880.

Origin uncertain, though Oberdieck thought it came originally from Bohemia. Fruit nearly medium, ovate, more or less shortened; skin thick and very firm, pale water-green, taking a white tint long before maturity, sprinkled with brown dots, changing to pale yellow and the side next the sun more or less warmly golden; flesh yellow-tinted, fine, semi-buttery; juice sufficient, saccharine and agreeably perfumed; fairly good; Sept.

Spreeuw. 1. Leroy *Dict. Pom.* **2**:676. 1869. *A rather worthless pear raised by Van Mons at Brussels which gave its first fruit* in 1815. Fruit small, globular-ovate, green turning yellow, dotted with yellowish-red and blushed; flesh

greenish-white, rather gritty, saccharine; in Germany is reckoned as second for dessert and first for household purposes; in France it appears to possess little merit; Oct. and Nov.

Star of Bethlehem. 1. *Horticulturist* **24**:334, fig. 1869.

Originated at Bethlehem, Pa., and described in 1869 as a new variety. Tree resembles a persimmon tree with a low and spreading habit; branches never upright, very enduring and able to bear heavy weights; very productive and regular in bearing. Fruit very large, similar in form to the Beurré d'Anjou, obovate-pyriform-obtuse, regular; skin smooth, deep yellow, slightly russeted, with a handsome red cheek on the side exposed to the sun; flesh yellowish-white, somewhat coarse, buttery, melting, fine, sweet, rich and excellent flavor; highly spoken of at the time; Sept.

Steinbirne. 1. Löschnig *Mostbirnen* 56, fig. 1913.

A perry pear found in Austria and Switzerland. Fruit medium, globular-pyriform, greenish changing to yellowish-green when ripe, on the sun-exposed side washed with dull red, speckled with russet spots; flesh granular, firm; good for transportation; Nov. and Dec.

Steinmitz Catharine. 1. Downing *Fr. Trees Am.* 858. 1869.

Originated in Pennsylvania. Fruit small to medium, oblong-pyriform, greenish, with a tinge of brown in the sun; flesh white, moderately juicy, semi-melting, vinous; good; Sept.

Stevens Genesee. 1. Cole *Am. Fr. Bk.* 157. 1849.

Originated on the farm of M. F. Stevens, Lima, N.

Y. Fruit large, globular-obovate, yellow; flesh white, tender, rather buttery, of a rich, excellent, aromatic flavor; good to very good; Sept. and Oct. but in some districts as early as Aug.

Sterling. 1. *Mag. Hort.* **13**:443, 444, fig. 36. 1847.

Raised by a Mr. Sterling in the neighborhood of Buffalo, N. Y., from seed brought from Connecticut about 1828. Fruit medium, almost spherical, slightly oval, yellow, with occasionally a few small patches of russet and on the sun-exposed cheek a mottled crimson blush; flesh rather coarse, juicy, melting, with a saccharine, brisk flavor; very good; Sept.

Stone. 1. *Mag. Hort.* **9**:24, fig. 1843.

Grew in the garden of a Mr. Stone, Cincinnati, O., and named in his honor. Fruit large, broad-pyriform, sides uneven, globular toward lower end and gradually diminishing toward the stem; bright yellow at maturity with a bright red cheek next the sun, beautifully intermixed with yellow streaks and specks; flesh white, somewhat buttery, rather melting, slightly astringent; Aug.

Stout. 1. *U. S. D. A. Pom. Rpt.* 39. 1895.

Originated at Monrovia, Ind., about 1840. Fruit large, obtuse-pyriform, green changing to yellow; flesh buttery, melting, juicy, subacid; very good; mid-season.

Strassburger Sommerbergamotte. 1. Dochnahl *Führ. Obstkunde* **2**:40. 1856.

Thuringia, 1766. Fruit medium, turbinate, medium ventriculous, greenish-yellow turning yellowish-white at maturity, with rather grayish spots; flesh semi-melting, very white, sweet, acid, aromatic; first for household use and market; Aug.

Stribling. 1. *S. C. Sta. Rpt.* 16. 1914.

A seedling believed to be of French origin brought to notice in 1912 by J. C. Stribling, Pendleton, S. C. Considered likely to prove one of the most valuable pears for the South because blight resistant. Fruit large, cordate, sides unequal, base rounded, apex flattened, light yellow, almost entirely covered with light russet; skin smooth, thin, tough, sprinkled with numerous light russet dots, indistinct, large at base, smaller and more numerous at apex; flesh coarse-grained, very juicy, slightly subacid, peculiar pineapple flavor with after nutty effect, rich, distinctive aroma; fair quality; Oct. and Nov.

Stümplerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:190. 1856.

Supposed to have originated on the shores of Lake Constance between Germany and Switzerland. It was first published in 1805. Fruit small, oval, green changing to light yellow, almost covered with cinnamon-russet; flesh yellowish, dry, becoming mealy, without much flavor; good for kitchen use; Aug.

Sturges.

Originated with Mrs. Mary S. Sturges, Baker, Ore., about 1905. Fruit medium to large, obtuse-obovate-pyriform; stem short, thick, set in a very shallow, narrow, russeted cavity; calyx small, partly open, set in a shallow but broad basin; color dull green, considerably mottled with patches and flecks of russet; dots small, conspicuous; flesh yellowish, slightly granular, tender, juicy, good; Sept.

Styer. 1. *Horticulturist* **8**:31, 32, fig. 1853.

Originated about 1837 with Charles Styer, White

Plain township, Montgomery County, Pa. Fruit medium, globular, green changing to yellow, with many russet dots and markings; flesh yellowish-white, somewhat gritty at the core, buttery, melting; exceedingly rich and perfumed; good; Sept.

Styrian. 1. *Jour. Hort.* **5**:267, fig. 1863.

Beurré Keele Hall. **2.** *Guide Prat.* 87. 1895.

Received in England by the Horticultural Society from M. Bosc of Paris about 1824. Fruit large, long-obovate or pyriform, fairly even and regular in outline; skin even and shining, of a clear lemon-yellow, with a bright vermilion cheek next the sun, appearing as if varnished; flesh yellowish, very fine-grained, tender, buttery, melting and extremely juicy, sweet, brisk and having a fine flavor of vanilla; a first-rate and delicious dessert fruit; Oct.

Sucré-Vert. 1. Duhamel *Trait. Arb. Fr.* **2**:189. Pl. XXXIV. 1768. **2.** Leroy *Dict. Pom.* **2**:677, fig. 1869. **3.** Hogg *Fruit Man.* 649. 1884.

Said to have come from Barmont, a chateau situated on the border of Burgundy. It was well known in Paris in 1670. Fruit medium or below, globular-turbinate; skin shining, intense green, dotted with numerous gray and green dots, a little whitened on the shaded side, yellowish when ripe; flesh yellowish-white, buttery, melting, semi-fine, some grit about the center; juice plentiful, sugary, slightly perfumed; excellent but variable; Oct.

Sucrée de Hoyerswerda. 1. Downing *Fr. Trees Am.* 582. 1857.

Sucré-Vert d'Hoyerswerda. **2.** Leroy *Dict. Pom.* **2**:679, fig. 1869.

According to Diel this variety was a new pear in the first years of the last century found in the village of Hoyerswerda, Saxony. Fruit always below medium, turbinate-obtuse or globular-ovate, rather irregular; skin a little thick, bright yellow shaded with dull yellow, sprinkled all over with gray-russet dots on the shaded side and greenish-brown dots on the sun-exposed side on which it is also much encrimsoned; flesh greenish-white, semi-fine, breaking, watery, granular around the pips; juice sufficient, highly saccharine, acidulous, with an agreeable musky perfume; second; Aug.

Sucrée de Montluçon. 1. *Guide Prat.* 48, 294. 1895. **2.** Bunyard *Handb. Hardy Fr.* 198. 1920.

Found in a hedge at Montluçon, Fr., about 1812, by M. Rochet. Fruit medium, oval-conic, uneven, lemon-yellow; stem medium long, rather short and woody; calyx large, closed, in a narrow, shallow basin; flesh palest yellow, transparent, extremely juicy, well flavored, very delicious; Oct.

Sucrée Blanche. 1. Mas *Pom. Gen.* **1**:191, fig. 96. 1872.

Obtained by M. Boisbunel, a nurseryman at Rouen, Fr. It was first published in 1856. Fruit rather large, long-pyriform or sometimes somewhat gourd-shaped; skin rather thick and firm, at first very bright green covered with a light white bloom on which are very small and faint dots, brightening still more at maturity but even in coloring all over the fruit; flesh white, semi-fine, melting; juice sufficient, saccharine, pleasant; good but not rich enough to be first class; Aug. or a little earlier.

Sucrée du Comice. 1. Leroy *Dict. Pom.* **2**:680, fig. 1869. **2.** Downing *Fr. Trees Am.* 861. 1869.

Raised by the old Horticultural Society of Angers, Fr., and first fruited in 1855. Fruit above medium, more or less obtuse, turbinate, irregular, much swelled in its lower half; color golden yellow, entirely sprinkled with reddish dots and generally rayed with fawn around the calyx; flesh white, semi-fine and semi-melting, watery, very granular around the core; second; Sept. and Oct.

Sucrée Van Mons. 1. Leroy *Dict. Pom.* **2**:683, fig. 1869.

Brüssler Zuckerbirne. **2.** Liegel *Syst. Anleit.* 114. 1825.

A seedling raised by Van Mons. Fruit medium to large, ovate, irregular, sometimes nearly spherical; skin thick, very bright green, mottled with pale yellow, sprinkled with numerous large, grayish spots, turning a fine lemon-yellow at maturity and rather golden on the side next the sun; flesh white, semi-fine, semi-buttery and melting, saccharine, vinous, slightly perfumed; quality variable, due perhaps to differences of soil and climate; second to third; Oct. and Nov.

Sucrée de Zurich. 1. Leroy *Dict. Pom.* **2**:684, fig. 1869.

Züricher Zuckerbirne. **2.** Mathieu *Nom. Pom.* 303. 1889.

Of doubtful origin but we may fairly assume it was Switzerland and probably Zurich. Fruit small, turbinate, slightly obtuse or ovate and even in contour, bright greenish-yellow, dotted uniformly with gray-russet; flesh whitish, fine, melting, juicy, very saccharine, acidulous, with a slight and agreeable scent of cinnamon; second; Sept.

Suet Lea. 1. *Cornell Sta. Bul.* **332**:486. 1913.

An oriental hybrid. Fruit medium to small, apple-shaped to oblong, regular in contour; light yellow, with large, rough, russet dots; flesh greenish-white, deficient in juice, hard and gritty, breaking; poor; late.

Suffolk Thorn. 1. *Gard. Chron.* 816. 1841. **2.** Hogg *Fruit Man.* 649. 1884.

Wilding aus Suffolk. **3.** Mathieu *Nom. Pom.* 298. 1889.

Raised by Andrew Arcedeckene, Clavering Hall, Suffolk, Eng., from seed of Gansel Bergamot. Fruited first about 1841. Fruit medium, globular-turbinate, pale lemon-yellow, covered with numerous small dots and irregular patches of pale ashy-gray russet which are most numerous on the side next the sun; flesh yellowish-white, exceedingly melting, buttery and juicy, with a rich, sugary juice, exactly similar in flavor to Gansel Bergamot; first; Oct.

Sugar Top. 1. *Mag. Hort.* **3**:49. 1837.

Said to be a native fruit and is called also July or Harvest Pear. Fruit globular, top-shaped, skin smooth, yellow; flesh juicy, breaking, sweet, with but little flavor; July.

Sülibirne. 1. Mathieu *Nom. Pom.* 288. 1889. **2.** Löschnig *Mostbirnen* 172, fig. 1913.

A perry pear found in Austria and Germany. Fruit small, globular-pyriform, greenish-yellow, flecked and dotted with russet all over the fruit, frequently somewhat tinted with a brownish blush; flesh yellowish-white, coarse-grained, very acid; Oct.

Sullivan. 1. *Mag. Hort.* **8**:57. 1842.

A seedling sent to this country by Van Mons and named by Manning. Fruit medium, pyriform, smooth green skin, with russet specks; flesh greenish-white, fine-grained, tender, very juicy, pleasant but not highly flavored; second; Sept.

Summer Beurré d'Arenberg. 1. *Jour. Hort.* **13**:315. 1867. **2.** Bunyard *Handb. Hardy Fr.* 199. 1920.

Raised by Rivers of Sawbridgeworth, Eng., about 1860 and produced its first fruit in 1863. Fruit rather small, turbinate, even and smooth in outline; skin clear and very thin; flesh very fine throughout, scarcely any core, no trace of grit, melting, yellowish, buttery, tender, very juicy, with a sweet, rich and distinctive flavor; excellent; Sept.

Summer Hasting. 1. Parkinson *Par. Ter.* 593. 1629.

"The Summer Hasting is a little greene peare, of an indifferent good rellish."

Summer Popperin. 1. Parkinson *Par. Ter.* 592. 1629.

"Both of them are very good dry firme peares somewhat spotted, and brownish on the outside."

Summer Portugal. 1. Hogg *Fruit Man.* 651. 1884.

Fruit quite small, pyriform, bright grass-green, with a brownish blush on the side next the sun and dotted all over with dark green dots, at maturity becoming clear yellow, with a red cheek; flesh yellowish, tender, breaking, very juicy, sweet and pleasantly flavored; Aug.

Summer Saint Germain. 1. Downing *Fr. Trees Am.* 347. 1845.

Saint Germain d'Été. **2.** Leroy *Dict. Pom.* **2**:622, fig. 1869.

Of French origin. Imported to France from Belgium or Holland by Louis Noisette previous to 1830. It is better known in this country and in England as the *Summer Saint Germain*. Fruit below medium, obovate-pyriform, generally irregular, bright greenish-yellow, dotted with russet on the shaded side and extensively washed with vivid rose on the other cheek where it is sprinkled with gray points; flesh white, fine, soft, semi-melting, slightly gritty at the center; juice sufficient, saccharine, often rather astringent but always full of flavor; second and sometimes third; Sept. and Oct.

Summer Virgalieu. 1. Downing *Fr. Trees Am.* 864. 1869.

Virgalieu d'été. **2.** Mas *Pom. Gen.* **1**:5, fig. 3. 1872.

Origin unknown. Tree moderately vigorous, productive. Fruit roundish, pyriform, yellow, slightly netted and patched with russet, thickly sprinkled with russet dots; stem rather long, set in a small cavity; calyx open; segments recurved; basin shallow, uneven; flesh yellowish, juicy, melting, slightly vinous; good; Aug.

Superfondanta. 1. Kenrick *Am. Orch.* 153. 1841.

Received by Simon-Louis Bros., Metz, Lorraine, from Italy. Fruit medium, obovate, smooth, pale yellow, marked with a few dots and sometimes marked with russet; flesh white, buttery, melting, very good; Oct.

Suprême Coloma. 1. Mas *Le Verger* **3**:Pt. 2, 49, fig. 121. 1866-73.

Kopertscher. **2.** Downing *Fr. Trees Am.* 796. 1869.

Count Coloma, Mechlin, Bel., made seed beds in 1786. From these beds came the Suprême Coloma, a

fruit of exquisite flavor. Fruit above medium, ovate, shortened, obtuse; skin delicate, olive-yellow, always mottled with greenish-russet and thickly covered with brown dots; flesh whitish, fine, melting, nearly free from grit, very full of saccharine juice, acidulous, with a special perfume of much delicacy; first; Oct.

Surpasse Crassane. 1. Leroy *Dict. Pom.* **2**:687, fig. 1869. **2.** Hogg *Fruit Man.* 652. 1884.

A seedling of Van Mons obtained about 1820 in his nursery at Louvain, Bel. Fruit medium, globular or globular-turbinate, flattened at the base, mammillate at the summit; skin dark olive-yellow, much covered with russet and tinted with dark red on the cheek touched by the sun; flesh whitish, fine, melting, juicy, granular around the center; juice abundant, very saccharine, highly perfumed, with an agreeable tartish taste; first; Oct. to Dec.

Surpasse Meuris. 1. Leroy *Dict. Pom.* **2**:688, fig. 1869. **2.** Hogg *Fruit Man.* 653. 1884.

The Surpasse Meuris was gained by Van Mons at Brussels before 1818. Fruit large, pyriform or turbinate-obtuse, always ventriculated toward the base and generally rather bossed; skin rough, olive-yellow dotted with gray, mottled with fawn and often colored with brown-red on the side next the sun; flesh white, tinged with yellow, semi-fine and semi-melting; juice extremely abundant, very saccharine, tartish and savory; first, sometimes second when the juice is slightly perfumed; Sept.

Surpasse St. Germain. 1. Kenrick *Am. Orch.* 198. 1833.

A seedling of Van Mons imported in 1819. Fruit rather large and oblong, rounded at the base and

tapering toward the stalk, irregular in outline, green and brown; winter.

Surpasse Virgalieu. 1. Downing *Fr. Trees Am.* 416, fig. 189. 1845. **2.** Leroy *Dict. Pom.* **2**:868, fig. 1869.

The origin of this variety is unknown. Andrew Parmentier introduced it from his nursery at Brooklyn under this name about 1800. Fruit rather large, obovate; skin smooth, pale lemon-yellow with a very few minute dots and rarely a little faint red on the sunny side; flesh white, exceedingly fine-grained and buttery, abounding with delicious highly flavored, aromatic juice, differing from that of the Doyenné; first; Oct.

Surprise. 1. *Am. Pom. Soc. Rpt.* 41. 1916.

Surprise is a valuable blight-resistant variety belonging to Pyrus communis and promises to make a blight-resistant stock on which to top-work commercial varieties.

Süsse Margarethenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:53. 1856.

Germany; first published in 1833. Fruit medium, pyriform, light yellow, often, blushed with light red and thickly dotted; flesh semi-melting, granular, sweet, agreeably cinnamon-flavored; second for dessert, good for household and market; Aug.

Süsse Sommerlahnbirne. 1. Dochnahl *Führ. Obstkunde* **2**:52. 1856.

German; published in 1805. Fruit fairly large, variable in form, ovate, often conic and ventriculous-pyriform, sides rather unequal, dull greenish-yellow turning to a fine citron-yellow, without any blush but russeted on the side next the sun, indistinct dots;

flesh not juicy, saccharine, with flavor of black currant; second for dessert, very good for kitchen use and market; Aug.

Suwanee. 1. Griffing Bros. *Cat.* 13, fig. 1909.

Originated in southern Georgia and introduced by Griffing Brothers Company in 1909. Fruit large, oblong, tapering towards both ends, blunt; skin tough, dark golden-russet over a yellow ground, with a slight tinge of red; flesh white, crisp, tender; good.

Suzanne. 1. Mas. *Pom. Gen.* **3**:129, fig. 161. 1878.

Received by Oberdieck from Van Mons without a name. Fruit rather small, ovate, short and ventriculous, symmetrical in contour with its greatest diameter about the center; skin delicate, bright green, sprinkled with extremely numerous small brown spots, changing to pale yellow, golden on the side next the sun or sometimes touched with red; flesh white, tinted with yellow, very fine, buttery, melting, sufficiently juicy, saccharine and delicately perfumed; good; Sept.

Suzette de Bavay. 1. *Pom. France* **2**:No. 80, Pl. 80. 1863. **2.** Downing *Fr. Trees Am.* 865. 1869.

Major Espéren of Mechlin, Bel., obtained this long-season pear. It fruited first in 1843. Fruit small or medium, globular, generally mammillate at the top; skin rough, pale yellow, dotted with greenish-brown and speckled with russet and reddish stains; flesh white, semi-fine, melting or semi-melting, juicy, almost free from grit; juice abundant, saccharine, acidulous, more or less perfumed with anis; Jan. to Apr.

Swan Egg. 1. Langley *Pomona* 132, Pl. LXIV. 1729.

An English variety recommended by Lindley as

suitable in the Highlands of Scotland. Fruit medium, globular-ovate; skin smooth, yellowish-green on the shaded side and clear brownish-red on the cheek exposed to the sun and covered with pale brown-russet; flesh yellowish-white, tender, very juicy, with a sweet and piquant flavor and musky aroma; good; Oct.

Sweater. 1. Parkinson *Par. Ter.* 593. 1629.

"The Sweater is somewhat like the Windsor, for colour and bigeness but nothing neare of so good a taste."

Sylvie de Malzine. 1. *Guide Prat.* 100. 1895.

Sent out by Daras de Naghin, Anvers, Bel. Tree vigorous and fertile. Fruit medium, globular; flesh rather fine, melting, recalling the Beurré d'Angleterre by its flavor; Nov. and Dec.

Taglioretti. 1. Mas *Pom. Gen.* **7**:73, fig. 517. 1881.

Tree bell-shaped, pyramidal; leaves bluish-green and dull, characteristically folded; stipules remarkably short. Fruit medium in size, ovoid, short, broad, resembling the Bergamotte d'Été and the Vallée Franche; skin rather firm, bright lemon-yellow to golden; dots conspicuous; calyx medium, open; basin narrow, rather deep; flesh white, medium fine, medium breaking, juicy; good; Aug.

Takasaki. 1. *Ga. Hort. Soc. Rpt.* 49, 54. 1892.

Exhibited by P. J. Berckmans at the Georgia State Horticultural Society Meeting in 1892. Said to be a Japanese pear.

Talmadge. 1. *Horticulturist* **25**:125. 1870.

Northford Seckel **2.** *Am. Pom. Soc. Rpt.* 123. 1881.

Originated in the garden of Levi Talmadge at Northford, Conn., as a chance seedling of Seckel. Tree hardy and vigorous, with spreading head, very symmetrical, attaining double the size of the Seckel, very productive. Fruit larger and more uniform than Seckel, almost identical in form, with the same russet ground, slightly less ruddy coloring; flesh white, juicy, melting; inferior to Seckel; ripens with Seckel.

Tardive d'Ellezelles. 1. *Guide Prat.* 111. 1876.

Probably originated in Belgium. Fruit large, grayish-green, pleasantly aromatic; heat resistant; Apr. and May.

Tardive Garin. 1. *Guide Prat.* 111. 1876.

Tree very vigorous and very productive. Fruit large, roundish, grayish-yellow; flesh medium, melting, juicy, sweet; May and June.

Tardive de Mons. 1. Hogg *Fruit Man.* 331. 1866. **2.** *Ibid.* 654. 1884.

Fruit medium in size, oblong-obovate, even and regularly formed; skin uniformly yellow, orange tinge next the sun; dots large and russet; calyx large, open; stem rather slender, obliquely inserted without depression; flesh white, tender, buttery, melting, very juicy, rich, sugary; rated as an "excellent pear;" Nov.

Tardive de Montauban. 1. *Guide Prat.* 107. 1876.

Tree very productive. Fruit medium to small, rather long, reddish on the sunny side; flesh fine, yellow, sweet, medium melting; first; very late.

Tardive de Solesne. 1. *Guide Prat.* 100. 1895.

Tree vigorous and very productive. Fruit large to very large; flesh breaking, very sweet; first; Jan. and

Feb.

Tatnall Harvest. 1. *Mag. Hort.* **19**:424. 1853.

The Pennsylvania Horticultural Society rated specimens of this variety submitted to it by Thomas Hancock, Burlington, N. J., as "scarcely good."

Tavernier de Boulogne. 1. Field *Pear Cult.* 283. 1858. **2.** Leroy *Dict. Pom.* **2**:696, fig. 1869.

Found in 1836 by M. Tavernier in a woods near Trelaze, Fr. Tree scraggly, productive, a good orchard tree. Fruit medium to above, longish-conic, greenish-yellow; flesh white, firm; of first quality for cooking; late spring and early summer.

Taylor. 1. *Am. Pom. Soc. Rpt.* 112. 1852. **2.** *U. S. D. A. Pat. Off. Rpt.* 282. 1853.

Mr. Merriweather, Charlottesville, Va., is credited with having originated this pear, although it may have come from France about 1780. Tree vigorous, young wood olive; productive; fruit medium, roundish-oblate; skin light green, mottled with dark green; stalk rather long, fleshy at its termination in a very slight depression; calyx very small, set in a wide, superficial basin; flesh fine in texture, buttery; flavor vinous, with a delicate vanilla aroma; very good; Nov. to Feb.

Taynton Squash. 1. Hogg *Fruit Man.* 654. 1884.

Squash. **2.** Thacher *Am. Orch.* 191. 1822.

An old pear which originated in Gloucestershire, Eng., previous to the year 1805 and which is widely known as a remarkably fine perry pear much grown in Herefordshire. It is early, tender of flesh, and "if it drops ripe from the tree it bursts from the fall, whence probably the name." Fruit medium to below,

turbinate, dull greenish-yellow on the shaded side and dull brownish-red next the sun, covered with rough, russet dots; calyx open; stem slender; flesh white, with a brisk, sweet flavor.

Tea. 1. *Mag. Hort.* **16**:154. 1850. **2.** *Ibid.* **20**:466, fig. 22. 1854.

Mrs. Ezra Merchant, Milford, Conn., found seed from which this pear was raised in a pound of tea which she purchased, hence the name. Similar to White Doyenné, if not identical with it. Tree vigorous, with bright yellow wood and deep green foliage. Fruit medium, obtuse-pyramidal, with often a suture on one side, yellowish-green becoming blushed in the sun; stem short, stout, fleshy at the base; calyx open; flesh whitish, melting, juicy, vinous; very good to best; Sept.

Templiers. 1. Leroy *Dict. Pom.* **2**:697, fig. 1869.

The place of origin is uncertain but the time is at least prior to 1838. Fruit large, short-turbinate, dull yellow, spotted with ashy gray; of first quality for cooking, beginning of Sept.

Tepka. 1. Löschnig *Mostbirnen* 24, fig. 1913.

A perry pear common to lower Styria, Carniola, and the maritime regions of Austria. Fruit Bergamot-shape, pale green becoming yellowish-green; calyx large, open, star-shape; stem brown, medium short, often bent; flesh juicy, sprightly; rots at the core and keeps poorly in storage; Sept.

Test. 1. *Am. Pom. Soc. Rpt.* 135. 1920.

Reported by Luther Burbank, Santa Rosa, Cal., as "A large pear, being four inches long by two and one-half across. In form much like Bartlett and in quality more like Le Conte, but far better and far

more prolific than either. Ripens four weeks later than Le Conte. When canned is firm and white and fully equal to or better than Bartlett."

Tettenhall. 1. *Gard. Chron.* 733. 1841.

"This pear, supposed only to flourish in the parish of Tettenhall, near Wolverhampton, though a very profuse bearer, has fruit almost worthless; but as a forest tree it is remarkable for its beauty, far surpassing in size, shape and masses of deep green foliage any other Pear-tree I ever saw."

Teutsche Augustbirne. 1. Christ *Handb.* 563. 1817. **2.** Dochnahl *Führ. Obstkunde* **2**:51. 1856.

Reported from the regions of Thuringia, Hesse, and Württemberg about 1799. Fruit medium in size, oblong-oval, bright yellow, dotted, thick-skinned; calyx star-shape; stem fleshy; flesh breaking, sweet; fair, a good commercial variety; Aug.

Texas. 1. Ragan *Fr. Recom. by Am. Pom. Soc., B. P. I. Bul.* **151**:41. 1909.

This is a whitish-yellow, medium-large, pyriform pear of good quality, at one time considered promising along the Gulf Coast; said to have originated in Texas.

The Dean. 1. J. Van Lindley *Cat.* 34. 1899.

"A very large pear that has been bearing regularly near Oak Ridge, Guilford County, N. C., for more than 40 years. In appearance it resembles both Bartlett and Duchesse [d'Angoulême], and is as large as Duchesse and better in quality. Ripens between Bartlett and Duchesse, making a very valuable pear and of good quality."

Theilersbirne. 1. Dochnahl *Führ. Obstkunde* **2**:195.

1856. **2.** Löschnig *Mostbirnen* 174, fig. 1913.

A perry pear said to have appeared in Switzerland about 1848 as a wilding. Tree spreading, large, vigorous, strong, productive. Fruit small, ovate, yellowish-green becoming yellow, dotted strongly with russet; calyx open; stem medium long; flesh dull white, juicy, piquant, without aroma.

Theodor Körner. 1. Dochnahl *Führ. Obstkunde* **2**:126. 1856.

A seedling raised by Van Mons of Belgium about 1851. Tree rather vigorous, an early and good bearer. Fruit medium to above, conic, greenish-yellow; calyx star-shaped; segments long; flesh melting, juicy, vinous; first; Sept.

Theodore. 1. Dochnahl *Führ. Obstkunde* **2**:16. 1856.

According to Dochnahl this pear may have originated in Belgium about 1833. Fruit medium large, 2 inches wide and 2½ inches long, smooth, bright yellow, sunny side washed with red; dots numerous; sweet, vinous; last of Aug.

Theodore Van Mons. 1. *Am. Pom. Soc. Rpt.* 164, 234. 1854. **2.** *Ann. Pom. Belge* **4**:29, fig. 1856.

Originated by Van Mons in 1827. Tree vigorous, pyramidal, productive. Fruit medium to above, obovate-pyriform to oblong-pyriform, greenish-yellow, russeted; dots gray-green, numerous; stem curved, about an inch long; cavity slight; calyx open; flesh yellowish-white, rather coarse, juicy, melting, vinous; good to very good; Sept. and Oct.

Theodore Williams. 1. Stark Bros. *Year Book* **5**:40. 1914.

A seedling of Kieffer raised by Theodore

Williams, and introduced by Stark Brothers Nurseries & Orchard Company about 1914. Tree hardy, is reported to have stood a temperature of 40 degrees below zero without injury. Fruit medium, yellowish-green, sweet, juicy.

Théophile Lacroix. 1. Mathieu *Nom. Pom.* 290. 1889. **2.** *Guide Prat.* 50. 1895.

Tree productive and of good vigor. Fruit large to very large, pyriform, similar to the type of Beurré Diel, deep yellow, plentifully spotted and marbled with cinnamon-red; flesh yellowish, fine, juicy, with an aroma suggestive of orange, a little gritty about the core; first; Dec. and Jan.

Thérèse. 1. *Guide Prat.* 111. 1876.

Fruit rather large, Bergamot-shape, yellowish-green; flesh very melting, delicately aromatic; first; Oct.

Thérèse Appert. 1. Leroy *Dict. Pom.* **2**:699, fig. 1869. **2.** Downing *Fr. Trees Am.* 2d App. 136, fig. 1872.

First fruited in 1861 from seed of Beurré Clairgeau by André Leroy, Angers, Fr. Tree vigorous, productive. Fruit medium, oblong, turbinate, yellowish-orange, washed with vermilion; stem short, a trifle inclined; cavity small; calyx open; basin shallow; flesh whitish-yellow, very juicy, very sweet, aromatic; very good; Sept.

Theveriner Butterbirne. 1. Dochnahl *Führ. Obstkunde* **2**:125. 1856.

Said to have originated in France about 1852. Fruit medium large, turbinate, bright green becoming greenish-yellow, somewhat clouded and

striped with red, covered with russet; calyx star-shaped; stem thick, one inch long; seeds mostly abortive; flesh yellowish, sweet, vinous; Oct.

Thibaut Butterbirne. 1. Dochnahl *Führ. Obstkunde* **2**:126. 1856.

According to Dochnahl this is a seedling from Van Mons which originated in Belgium in 1851. Fruit medium large, turbinate, irregular and ill-shapen, bright green becoming yellowish-green, with gray dots, and spotted with russet; skin thin; calyx small, erect; stem slender, 2 inches long, fleshy at the base; core and seeds small; sweet, aromatic; very good; Oct.

Thick Stalked Pear. 1. Mawe-Abercrombie *Univ. Gard. Bot.* 1778.

Mentioned in the reference cited as a minor variety of winter pear having a very large, roundish fruit.

Thimothée. 1. *Mas Pom. Gen.* **7**:181, fig. 574. 1881.

This variety was raised from seed by M. Pariset, a seedsman of Ain, Fr., about 1852. Tree rather vigorous, upright, symmetrical. Fruit medium, roundish-pyriform, regular, greenish becoming pale yellow; calyx almost closed; stem very short, rather stout; flesh whitish, very fine, very melting, subacid, refreshing; good; Nov. and Dec.

Thompson (Eng.). 1. *Mag. Hort.* **8**:64. 1842. **2.** *Pom. France* 4:156, Pl. 156. 1867.

Said to be a seedling of Van Mons originated about 1819. R. Manning, Salem, Mass., received cions in 1841. Tree vigorous, productive; fruit medium, obovate, lemon-yellow, russeted around the stem; stem short; almost no cavity; calyx medium,

open, slightly depressed in a small basin; segments often united; flesh whitish-yellow, buttery, juicy; flavor rich, sugary, aromatic; seeds large, long; Oct.

Thompson (N. H.). 1. Kenrick *Am. Orch.* 198. 1833. **2.** *Mag. Hort.* **3**:51. 1837.

Originated on the farm of Judge Thompson, Portsmouth, N. H. Fruit medium to below, turbinate, quite russeted; "esteemed for its extraordinary productiveness and long keeping" by those in the vicinity of its origin but regarded by R. Manning, Salem, Mass., as "unfit for cultivation."

Thooris. 1. *Ann. Pom. Belge* **6**:27, fig. 1858. **2.** Downing *Fr. Trees Am.* 868. 1869.

This Belgian pear fruited for the first time in 1854 in the garden of the Society Van Mons. Fruit medium to below, round ovoid to oval, or Bergamot-shape; skin yellow, shaded and striped with grayish-red. Alexander Bivort gives, "flesh yellowish-white, half fine, melting; juice abundant, sugary, and with an agreeable perfume ... of first quality," whereas Downing says, "flesh white, coarse, dry, sweet, and poor ... unworthy of cultivation." Sept.

Thuerlinckx. 1. Downing *Fr. Trees Am.* 553. 1857.

Beurré Thuerlinckx. **2.** Hogg *Fruit Man.* 529. 1884.

This pear was found in 1848 upon an estate purchased by M. Thuerlinckx, Mechlin, Bel. It is said to be a very large, coarse, showy pear of long-obovate shape, with a somewhat tender and juicy flesh but without any aroma, and very soon becoming mealy; Oct. to Dec.

Thurston Red. 1. Hogg *Fruit Man.* 655. 1884.

Hogg says, "a new Herefordshire perry pear of

some repute." Fruit small, turbinate, even in outline, greenish-yellow, with a thin red cheek and a large patch of thin, pale-brown russet, especially around the calyx; calyx small and open; stem an inch and a quarter long, slender; cavity none; flesh yellow.

Tiffin. 1. *U. S. D. A. Rpt.* 289. 1893.

Originated with Henry Loose, Tiffin, O. Fruit described as large, broad-ovate, smooth, greenish-yellow; dots numerous, brown; stem medium long, slender, curved, inserted with no depression; basin wide, russeted; calyx small, open; skin thin; core large; seeds large, plump, brown; flesh white, buttery, subacid; good; Oct.

Tigrée de Janvier. 1. Mas *Pom. Gen.* **1**:141, fig. 71. 1872.

Raised by L. J. Berckmans from seed produced by Major Espéren and obtained by the former after the latter's death. Tree vigorous, rather slender. Fruit small to below medium, ovoid-pyriform, yellowish; stem long; flesh yellow, medium fine, melting, very juicy, vinous; not of the most beautiful appearance yet of the highest flavor; Dec. and Jan.

Tillington. 1. *Trans. Lond. Hort. Soc.* **4**:521. 1822. **2.** Downing *Fr. Trees Am.* 868. 1869.

Exhibited by Thomas Andrew Knight before the London Horticultural Society in 1820 as "a Seedling Pear raised from a seed of the Autumn Bergamot impregnated with the pollen of the Jargonelle." Tree hardy, productive. Fruit medium, short-pyriform, greenish-yellow, with light brown russet dots; stalk short; calyx open; flesh yellowish, tender, buttery, melting, not juicy, vinous, aromatic; good; Oct.

Timpling. 1. Buckman *Fruit Var. in Ex. Orch.* 6.

1901.

Included in the list of varieties in the experimental orchard of Benjamin Buckman, Farmingdale, Ill. Mr. Buckman reports that it was from Ludwig Hencke, Collinsville, and that he received it in 1893. Mr. Hencke brought the Timpling with him from Germany. According to Mr. Buckman the tree is rather free from blight, moderately productive, and still in good shape at the age of 27 years. Fruit medium; good quality and color.

Tindall Swan Egg. 1. *Trans. Lond. Hort. Soc.* **6**:396. 1826.

Specimens of a new variety of Swan Egg pear were sent to the meeting of the London Horticultural Society in 1824 by George and William Tindall, Beverley, Yorkshire, Eng. "It is larger and browner than the Common Swan's Egg, and equal to it in flavor. It keeps well till the end of January, and sometimes later."

Tollbirne. 1. Löschnig *Mostbirnen* 214, fig. 1913.

A very productive perry pear of Europe with fruit notable because of its beautiful color. Tree vigorous, upright. Fruit medium, round-obovate, very uniform; skin tough, smooth, glossy, green changing to yellow, side next the sun blushed with bright carmine and dotted heavily with brown-russet dots, russeted at top and bottom; calyx small, open; stem medium long, slender; flesh almost white, juicy, tart; mid-Oct. to Dec.

Tolstoy. 1. *Am. Pom. Soc. Rpt.* 135. 1920.

Originated by N. E. Hansen, Brookings, S. D., from Clapp Favorite x Pyrus ovoidea, and introduced

by him in 1919.

Tom Strange. 1. Buckman *Fruit Var. in Ex. Orch.* 6. 1901.

This variety is found in the experimental orchard at Farmingdale, Ill., of Benjamin Buckman, who writes: "The 'Tom Strange' pear is a small local variety received from a person of that name, not worthy of disseminating under a name and had better be dropped."

Tonkovietka. 1. *Mont. Hort. Soc. Rpt.* 53. 1882.

Limbertwig. **2.** *Ia. Hort. Soc. Rpt.* 321. 1885.

Thintwig. **3.** *Am. Pom. Soc. Rpt.* 59. 1887.

One of the Russian pears imported by Prof. J. L. Budd from Dr. Regel, Petrograd, Russia, about 1879 and known by the Iowa Agricultural College under the numbers 513 and 14 m. Chas. Gibb, Abbottsford, Can., says this is the hardiest pear tree which bears edible fruit of which he knows. The name means slender stalk. Tree hardy, fine, productive. Fruit medium, conical, yellow, with red on the sunny side; flesh porous; ripens beginning of Aug. and keeps until Sept.; commendable for commercial orchards.

Tonneau. 1. Duhamel *Trait. Arb. Fr.* **2**:237, Pl. LVIII, fig. 5. 1768. *2.* Hogg *Fruit Man.* 656. 1884.

Fassbirne. **3.** Christ *Handb.* 564. 1817.

This large cooking pear has been confused by Leroy and others with *Uvedale St. Germain*, but Hogg and Mas agree that the two are quite distinct. The French word *tonneau* and the German word *fass* are both translated "cask," a term which describes the shape of this pear very well. Tree vigorous; shoots upright; leaves pubescent, light green, young leaves

yellowish-green. Fruit very large, oblong-ovate or cask-shaped; skin clear yellow; calyx large, open; basin deep, wide; stalk an inch long, straight, woody; cavity deep, irregular; flesh very white, rather dry; flavor brisk; more an ornament than a dessert fruit; Nov. to Feb.

Toronto Belle. 1. *Ont. Fr. Gr. Assoc. Rpt.* 82. 1882.

"We tested the fruit late in December and found it in grand condition; in quality it is equal to Beurré Bosc, and almost identical in form and color. The tree is a slow grower but a heavy and regular bearer. It is without doubt the finest winter pear we know of, opening, as it does, a new era in the quality of winter pears."

Totten Seedling. 1. *Mag. Hort.* **14**:109. 1848. **2.** Downing *Fr. Trees Am.* 868. 1869.

Raised by Col. Totten, New Haven, Conn. Tree vigorous. Fruit small to medium, roundish-pyriform to obovate, pale yellow, slightly tinged with red in the sun; stalk long; calyx open; flesh white, sweet, perfumed; Sept. and Oct.

Tournay d'Hiver. 1. *Guide Prat.* 111. 1876.

Tree vigorous and productive, upright. Fruit large to very large, broadly turbinate; flesh buttery, melting, fine, vinous; first; Jan. and Feb.

Tout-il-faut. 1. Mas *Pom. Gen.* **1**:107, fig. 54. 1872.

One of Van Mons' seedlings. The pear does not possess all the qualities that the name indicates. Tree hardy, productive, of medium vigor, early bearing. Fruit medium, regular, conic-pyriform, yellowish-green mostly covered by a brilliant crimson, very beautiful; flesh white, tender, sweet, rather juicy,

agreeably aromatic; mid-Aug.

Träublesbirne. 1. Dochnahl *Führ. Obstkunde* **2**:194. 1856. **2.** Löschnig *Mostbirnen* 140, fig. 68. 1913.

This perry pear, named Träublesbirne because of the racemose or bunch-like manner in which the fruit develops, is said to have had its origin in Württemberg about 1830. Tree rather vigorous, broad-pyramidal, scantily foliaged, thrifty, early bearing, productive. Fruit long-pyriform to oval, somewhat blunt at the base, greenish, russeted at both base and apex; dots fine; calyx open; stem long; flesh white, juicy; good; Oct.

Tressorier Lesacher. 1. Mathieu *Nom. Pom.* 290. 1889. **2.** *Guide Prat.* 101. 1895.

Tree of moderate vigor, very fertile. Fruit medium, resembling White Doyenné; flesh very fine; of highest quality; Oct.

Trinkebirne. 1. Christ *Handb.* 518, 562. 1817. **2.** Dochnahl *Führ. Obstkunde* **2**:14. 1856.

Originated in Saxony, Ger., about 1802. Twigs thick and long, heavily dotted; buds small; leaves round. Fruit medium, large, conical, yellowish, somewhat blushed, very juicy; good; last of Sept.

Triomphe de Jodoigne. 1. *Mag. Hort.* **14**:112. 1848. **2.** Leroy *Dict. Pom.* **2**:706, fig. 1869. **3.** Bunyard *Handb. Hardy Fr.* 200. 1920.

Raised by Simon Bouvier, Jodoigne, Bel., in 1830. Fruit large, oval-pyriform, tapering markedly toward stem, uneven, green becoming lemon-yellow; calyx small, open, in a small, uneven basin; stem rather long, stout, woody, fleshy at insertion; flesh whitish, coarse, juicy, half-melting, sweet; good to very good;

Oct.

Triomphe de Louvain. 1. Kenrick *Am. Orch.* 154. 1841. **2.** Leroy *Dict. Pom.* **2**:880, fig. 1889.

Originated by Van Mons about 1820. Fruit medium, roundish-oblate, rather rough, greenish-yellow, mostly covered with dull russet, many brown russet dots; stem rather short, stout; calyx large, open; flesh whitish, coarse, not juicy, sweet; good; Sept.

Triomphe de Touraine. 1. *Guide Prat.* 104. 1895.

From the name, one infers that this variety originated near Touraine, Fr. Tree vigorous, very productive. Fruit large to very large, green, reddish on the side next the sun, clear yellow at maturity; flesh firm, fine, juicy, sweet, similar in taste to Duchesse d'Angoulême but of better quality; Nov.

Triomphe de Tournai. 1. *Gard. Chron.* **20**:760, fig. 139. 1883. **2.** *Rev. Hort.* 512, fig. 1905.

M. Daras de Naghin, Tournai, Bel., originated this fruit from seed produced in 1868. The Pomological Committee of Tournai after testing it in 1882 and 1883 unanimously awarded its raiser a bronze medal. Tree vigorous and productive, pyramidal, upright. Fruit medium, turbinate to long-pyriform, symmetrical, uniformly green becoming yellow, faintly pitted; stem short, stout; calyx medium, open; basin shallow; flesh white, melting, juicy, sweet; good to very good; Jan. and Feb.

Triomphe de Vienne. 1. *Can. Hort.* **11**:261. 1888. **2.** *Soc. Nat. Hort. France Pom.* 446, fig. 1904.

Triumph. **3.** *Can. Hort.* **25**:442, fig. 1902.

Raised in 1864 by M. Jean Colland, Vienne, Fr.,

and first distributed in 1874, this pear has been the recipient of several awards of merit. Tree vigorous, heavy-cropper, pyramidal. Fruit large, obovate-pyriform, rather irregular, greenish-yellow, with russet patches, often blushed with red; calyx open; core small; seeds usually imperfect; flesh white, melting, juicy; flavor rich, sweet, spicy; very good; Sept. and early Oct.

Trompetenbirne. 1. Dochnahl *Führ. Obstkunde*. **2**:140. 1856.

Poire Trompette. **2.** Mas *Pom. Gen.* **1**:97, fig. 49. 1872.

Diel obtained this variety at Schaumburg, Westphalia, but it appears to have originated at Nassau, Prussia. Published in 1805. Fruit medium, pyriform-conic, often irregular in form and uneven on the surface; skin rather thick and firm, light green changing to light yellow, covered with numerous small, round, brown spots and on the side next the sun blushed with wine-red; flesh whitish, semi-melting, granular; juice sufficient in quantity, very vinous but a little too astringent; third for dessert, first for household; Oct.

Troppauer Goldgelbe Sommermuskatellerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:41. 1856.

Troppauer Muskateller. **2.** Mathieu *Nom. Pom.* 291. 1889.

Said to have originated about 1851 in Troppau, Silesia, Austria. Fruit medium large, roundish, regular, bright yellow, frequently strongly russeted, flecked and dotted with brown; stem thin, medium long; flesh coarse, very sweet and somewhat musky; Aug.

Truchsess. 1. Dochnahl *Führ. Obstkunde* **2**:20. 1856.

Dochnahl credits this pear with having originated from seed in Dietz on the Lahn River, Ger., about 1826. Tree large and very fruitful; twigs long, glabrous; lenticels long; leaves ovate, entire. Fruit produced in clusters, medium large, roundish-ovate, bright green becoming yellowish, frequently russeted, strongly dotted; Nov.

Truckhill Bergamot. 1. *Mag. Hort.* **11**:327. 1845. **2.** Downing *Fr. Trees Am.* 869. 1869.

Probably of English origin. Fruit medium or above, roundish-oblate, yellow with crimson and fawn in the sun, sprinkled with gray and green dots; stalk rather short; cavity deep; calyx open; basin deep, abrupt, uneven; flesh half-melting, somewhat coarse and gritty, moderately juicy; good; Sept. and Oct.

Tsar. 1. *Can. Hort.* **17**:293. 1894.

This is a Russian variety and may be synonymous with *Czar* and *Tsarskaya*. It has been grown successfully in the Russian Province of Tambow, 53° north latitude. Tree very firm and wonderfully productive, pyramidal. Fruit moderate in size, conical, yellow, red on the sunny side; flesh soft, mellow, agreeable; flavor mild; Aug. and Sept.

Tudor. 1. *Am. Pom. Soc. Rpt.* 157. 1867.

Said to be a seedling of Fulton and to resemble it very closely. Fruit peculiarly shaped, russeted; stem short; flesh melting, juicy; first; Sept. and Oct.

Turban. 1. Mas *Pom. Gen.* **1**:121, fig. 61. 1872.

A beautiful early pear the origin of which is unknown. Tree vigorous, dependably productive,

hardy, late in coming into bearing. Fruit medium in size, spherical-turbinate, green becoming pale yellow, covered with brown around base and apex; dots very large, dark green; calyx small; stem characteristically very short and very thick; flesh white, streaked with yellow, very fine, melting, juicy, sweet, aromatic; Aug.

Türkische müskirte Sommerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:19. 1856.

The origin of this pear is ascribed to the Orient about the year 1832. Tree vigorous and productive; twigs glabrous; buds long and pointed. Fruit medium large, bulging, blunt, roundish, solid yellowish-green, sprinkled with russet; dots fine and bright-brown; calyx usually closed; stem woody, medium long; seeds numerous; flesh buttery; quality of the best; Sept.

Turnep. 1. Parkinson *Par. Ter.* 593. 1629.

"The Turnep pear is a hard winter peare, not so good to eat rawe, as it is to bake."

Twice flowering Pear-tree. 1. Mawe-Abercrombie *Univ. Gard. Bot.* 1778.

"It often produces blossom twice a year, the first in the spring, and the second in autumn, so is preserved in many gardens as a curiosity." Classified as an autumn pear.

Tyler. 1. *Mass. Hort. Soc. Rpt.* 5. 1843. **2.** Downing *Fr. Trees Am.* 869. 1869.

Probably one of Gov. Edwards' seedlings which originated at New Haven, Conn., about 1840. Tree moderately vigorous; young wood reddish-yellow-brown. Fruit below medium, roundish-pyriform, yellow, netted and patched and dotted with russet;

stem long, slender, in a moderate cavity, surrounded by russet; calyx open; basin shallow and uneven; flesh white, coarse, granular, buttery, melting, juicy, brisk, vinous; fair to good; Oct.

Ulatis. 1. *Am. Pom. Soc. Rpt.* 135. 1920.

A seedling of Bartlett originated by R. E. Burton, Vacaville, Cal., and introduced in 1916. Fruit medium, pyriform, yellow; flesh white, fine, sweet; good; Sept.

Unterlaibacher Mostbirne. 1. Löschnig *Mostbirnen* 142, fig. 69. 1913.

This perry pear is a native of Carniola and probably gets its name from the city of Laibach in that region. Tree of moderate growth, upright, tall, with strong wood, a late and alternate bearer, long-lived. Fruit round, large, greenish-yellow, russeted about the calyx end, finely dotted; calyx open, wide; basin shallow; stem short, thick, brownish-yellow, set at an angle; flesh yellowish-green, granular; Oct.

Upper Crust. 1. *Horticulturist* **4**:276. 1849. **2.** Downing *Fr. Trees Am.* 870. 1869.

A seedling introduced by Col. Wm. Sumner, Pomaria, S. C., in 1849. Tree pyramidal, with "switchey" limbs and gray bark. Fruit below medium, roundish, green, covered with distinct, irregular, russet patches; stalk rather short, stout; cavity broad, shallow; calyx large, open; flesh granular, not juicy, rots at core; poor; Aug.

Ursula. 1. Dochnahl *Führ. Obstkunde* **2**:7. 1856. **2.** Downing *Fr. Trees Am.* 872. 1869.

Said to have originated in Belgium about 1826. Tree vigorous and very productive; twigs green, thickly dotted; buds small, long; leaves ovoid. Fruit

below medium to above, oblong-acute-pyriform, yellowish mostly covered with golden-russet; stem long, curved; calyx open; basin shallow; flesh white, juicy, melting; good to very good; late Aug.

Uwchlan. 1. *Horticulturist* **6**:35, fig. 3. 1856. **2.** Leroy *Dict. Pom.* **2**:714, fig. 1869.

Originated on the premises of Widow Dowlin, near the Brandywine, in Uwchlan Township, Pa. It fruited first in 1851. Tree of good growth, productive, pyramidal. Fruit below medium, roundish, inclining to obovate, pale whitish-yellow, shaded, mottled and dotted with crimson, and thickly covered with conspicuous brown dots; stem curved, inclined; cavity shallow, sometimes lipped; calyx partially closed; basin abrupt, large, deep; flesh white, very juicy, very sweet, melting, aromatic; good to very good; Sept.

Valentine. 1. Downing *Fr. Trees Am.* 872. 1869.

Said to have originated on Long Island. Fruit above medium, oblong-acute-pyriform, pale yellowish-green, tinge of red in the sun; flesh white, juicy, melting, sweet, pleasant; good; Aug.

Vallée Franche. 1. Duhamel *Trait. Arb. Fr.* **2**:74. 1768. **2.** Hogg *Fruit Man.* 658. 1884.

Poire de Vallée. **3.** Mas *Le Verger* **2**:113, fig. 55. 1866-73.

A pear of ancient and unknown origin. It was grown in France in the fourteenth and fifteenth centuries. Tree very large, exceedingly vigorous, very hardy, a regular bearer. Fruit medium or below, obovate or obtuse-pyriform, smooth, shining yellowish-green, sprinkled with small russet dots; flesh white, breaking, medium fine, very juicy,

sweet, slightly musky; well reported from the Old World but as "unworthy of cultivation" from the New; last of Aug.

Valley. 1. Brookshaw *Hort. Reposit.* **2**:185, Pl. XCVII, fig. 2. 1823.

Possibly of English origin. Fruit oval or lemon-shape, yellow, strewn with fine dots; skin thick; flesh soft, buttery; flavor very pleasant; mid-Aug.

Van Assche. 1. *Am. Pom. Soc. Rpt.* 55. 1852. **2.** *Horticulturist* **3**:60, fig., front. 1853.

Van Assene. **3.** *Mag. Hort.* **8**:58. 1842. **4.** *Ibid.* **13**:60, fig. 4. 1847.

M. Bouvier, Jodoigne, Bel., originated this pear about 1828. M. Manning received cions of the variety from Van Mons in 1835 under the name *Van Assene*, and this has led to incorrect statements in America that Van Assche is a seedling of Van Mons and should be called *Van Assene*. Tree productive, vigorous, erect, an early bearer. Fruit rather large, roundish-obovate-pyriform, pale yellow, covered with rather large russet specks; stem long, slender, curved; cavity medium deep; calyx closed; basin abrupt, deep flesh white, juicy, melting, sweet, pleasant; good to very good; Sept.

Van Buren. 1. *Mass. Hort. Soc. Rpt.* 5. 1843. **2.** Downing *Fr. Trees Am.* 873. 1869.

A cooking pear raised from seed by Governor Edwards of New Haven, Conn. Fruit medium, roundish-oblate, yellow, with a rich orange-red blush next the sun, regularly dotted with conspicuous brownish specks; flesh white, crisp, sweet; Oct.

Van Deventer. 1. Downing *Fr. Trees Am.* 873. 1869.

Originated in New Jersey. Tree very vigorous, very productive, an early bearer. Fruit rather small, oblong-ovate-pyriform, greenish-yellow, shaded with brownish-red in the sun, with many gray and green dots; stem inclined, inserted by a lip and sometimes rings; calyx partially closed; basin shallow; flesh whitish, juicy, tender, half-melting, sweet, pleasant, good; mid-Aug.

Van Marum. 1. *Pom. France* **3**:No. 125, Pl. 125. 1865. **2.** Downing *Fr. Trees Am.* 873. 1869.

Calebasse Grosse. **3.** Hogg *Fruit Man.* 541. 1884.

Originated by Van Mons in 1823. Tree vigorous, productive. Fruit very large, sometimes measuring six inches long, oblong-pyriform, yellow; stem rather long, slender; cavity flattened; calyx large; basin shallow, regular; flesh white, apt to rot at the core, half-melting, not especially juicy, sweet, aromatic; fair to good; Oct.

Van Mons frühe Pomeranzenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:159. 1856.

Originated by Van Mons about 1852. Fruit broadly turbinate, light green becoming yellow, thickly dotted, specked with russet; stem thick, one inch long; flesh half-melting; second-rate in quality; Aug.

Van Mons Sommer Schmalzbirne. 1. Dochnahl *Führ. Obstkunde* **2**:142. 1856.

Originated by Van Mons of Belgium about 1852, from seed. Tree vigorous and productive. Fruit medium large, 2 inches wide, 3½ inches high, with protuberances, light green becoming greenish-yellow, without red, spotted with russet; calyx open, star-shaped; stem curved, medium long; flesh fine,

moderately melting; last of Aug.

Van Mons späte Wirthschaftbirne. 1. Dochnahl *Führ. Obstkunde* **2**:187. 1856.

Said to be a seedling of Van Mons originated about 1854. Twigs long, red; leaves small. Fruit oval, 2¾ inches wide, 3½ inches high, with the bulge in the middle, green becoming yellowish-green; dots black; calyx almost closed; segments erect; stem woody, 1 inch long; flesh breaking, sweet; last of Nov.

Van Mons süsse Haushaltsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:182. 1856.

Said to have been originated by Van Mons about 1852. Fruit conic-pyriform, 2½ inches wide, 3 inches tall, bright green becoming lemon-yellow, sometimes striped with red, more or less flecked with russet; dots not conspicuous; basin shallow; stem thick, ¾ inch long, inclined; flesh yellowish-white, fine, smooth, sweet; Sept. and Oct.

Van Tertolen Herbst Zuckerbirne. 1. Dochnahl *Führ. Obstkunde* **2**:89. 1856.

Sucré de Tertolen. **2.** Mas *Le Verger* **3**:Pt. 1, 129, fig. 63. 1868.

Tertolen Herbst Zuckerbirne. **3.** Mathieu *Nom. Pom.* 289. 1889.

Of Dutch origin. Tree light green; petioles long and very slender; leaves curved and sharply acuminate. Fruit nearly medium, globular-turbinate; skin rather thick, green, with large brown spots; flesh white, granular, buttery, rather gritty around the core, acidulous, perfumed; first; Nov.

Van de Weyer Bates. 1. *Mag. Hort.* **18**:417. 1852. **2.**

Mas *Pom. Gen.* **5**:71, fig. 324. 1880.

Said to have been originated by Van Mons about 1823. Tree vigorous, large, rather tall, an early and good bearer. Fruit below medium; roundish-obovate, pale yellow, covered with small brown dots and a few brown veins; stem short, rather stout; calyx large, open; flesh yellowish, buttery, juicy, rich, sugary, pleasantly aromatic; a fine late pear; Mar. to May.

Vanderveer. 1. Prince *Pom. Man.* **1**:156. 1831.

Originated from seed of White Doyenné with Dr. Adrian Vanderveer of Long Island, and was named after the originator by William Prince. Tree vigorous, very productive. Fruit medium, yellow, with a tinge of russet; flesh melting, buttery; Sept.

Varuna. 1. *Mass. Hort. Soc. Rpt.* 44. 1866.

A seedling fruited by S. A. Shurtleff, Brookline, Mass., in 1862. Tree productive. Fruit turbinate, 3½ inches wide, 4 inches long, greenish-yellow; core small; flesh white, juicy, slightly acid; Sept.

Vauquelin. 1. *Mag. Hort.* **14**:112. 1848. **2.** Leroy *Dict. Pom.* **2**:723, fig. 889. 1869.

Saint-Germain Vauquelin. 3. *Pom. France* 2:No. 65, Pl. 65. 1864.

Raised by M. Vauquelin, Rouen, Fr., from seed sown about 1816. Tree vigorous, pyramidal. Fruit medium to above, obovate-pyriform to oblong-obovate-pyriform, undulating in outline, yellow, brownish next the sun, with patches and traces of russet and russet dots; stem inserted without depression; calyx large, open; flesh white, very juicy, brisk; good; Dec. and Jan.

Venusbrust. 1. Dochnahl *Führ. Obstkunde* **2**:178. 1856.

Said to have originated in Thuringia about 1796. Tree upright, leafy, very productive; leaves large, truncate. Fruit roundish-turbinate, rather large, beautiful bright yellow, usually red next the sun, dotted with fine brown dots, russeted at both ends; calyx segments short; flesh coarse-grained, granular, aromatic, sweet; Dec. to Apr.

Vergoldete oder wahre graue Dechantsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:92. 1856.

Said to have originated in Austria about 1836. Tree an early bearer. Fruit small to above, roundish-turbinate, greenish-gray becoming golden, russeted and dotted with gray, very agreeable; Nov.

Verguldete Herbstbergamotte. 1. Christ *Handb.* 551. 1817.

A German variety. Fruit large, Bergamot-form; skin rough, yellow-brown and gray, golden-yellow when ripe; flesh tender, breaking and somewhat musky; end of Sept.

Verlaine d'Été. 1. *Ann. Pom. Belge* **7**:29, fig. 1859.

Verlain. **2.** Downing *Fr. Trees Am.* 874. 1869.

First reported in 1823 as a seedling of Van Mons. The name *Verlaine d'Été* has been applied to two other varieties, Flemish Beauty and *Bergamotte Heems*. The pear here described is distinct from the former but resembles the latter somewhat closely. Tree vigorous, productive, carrying its branches horizontal. Fruit medium, oblong, obovate-pyriform, pale yellow-orange in the sun, with patches and dots of brownish-red; stalk slender, inserted in a small cavity; calyx with short, stiff segments; flesh white,

half-fine, melting, juicy, sweet, vinous; Sept.

Vermillion d'en Haut. 1. Leroy *Dict. Pom.* **2**:726, fig. 1869. **2.** Downing *Fr. Trees Am.* 874. 1869.

Originated by M. Boisbunel, Rouen, Fr., and first reported in 1858. Tree moderately vigorous, productive, pyramidal. Fruit medium, turbinate-pyriform, olive-yellow, shaded with red in the sun; stem short, stout, inserted without depression; calyx large, open; flesh fine, melting, juicy, sweet; Sept.

Vermont. 1. Downing *Fr. Trees Am.* 874. 1869.

Supposed to be a seedling which is said to have been taken from Vermont to Oswego, N. Y., where it fruited. Tree upright. Fruit medium or below, obovate-pyriform, pale whitish-yellow, slight red in the sun, traced, netted and dotted with russet; stalk slender; cavity deep; calyx with erect segments; flesh whitish, juicy, melting, sweet, pleasant; good to very good; Oct.

Vernusson. 1. Leroy *Dict. Pom.* **2**:727, fig. 1869.

In 1694 this variety was mentioned as having been named after the place Vernusson in Anjou, near Angers, Fr. Fruit medium in size, turbinate, pale yellow, shaded with rose on the side next the sun, covered at the base and apex with brown; calyx medium, open; flesh white, very fine, melting, juicy, sweet, aromatic; of first quality; Dec. to middle of Feb.

Verte-longue panachée. 1. Duhamel *Trait. Arb. Fr.* **2**:195, Pl. XXXVII. 1768. **2.** *Ann. Pom. Belge* **1**:65, fig. 1853.

Long Green Panache. **3.** Downing *Fr. Trees Am.*

804. 1869.

A striped variety of Long Green of Autumn, differing from the original in having the wood and fruit striped with green and yellow bands, and in having the leaves occasionally striped with yellow.

Verte-Longue de la Sarthe. 1. Leroy *Dict. Pom.* **2**:732, fig. 1869.

Grosse Verte-Longue Précoce de la Sarthe. 2. Mas *Pom. Gen.* 5:79, fig. 1880.

A variety well known and esteemed for many years in the country around Mans in France. Fruit nearly medium, globular-conic, obtuse, bright green, speckled with grayish dots, often rather russeted toward the poles; at maturity the green changes to greenish-yellow; flesh whitish, fine, very melting, full of sugary juice, vinous and relieved with a refreshing savor; good; end of July.

Verulam. 1. *Gard. Chron.* 805, fig. 1855. **2.** Bunyard *Handb. Hardy Fr.* 202. 1920.

A very old pear the origin of which is uncertain. Tree hardy, forming a round, spreading head, productive. Fruit rather large, almost oval, rough, entirely covered with yellowish-brown russet appearing almost black; stem woody; calyx open; flesh crisp, coarse-grained, assuming a fine red when cooked; seldom better than cooking quality; Jan. to Mar.

Vezouzière. 1. *Am. Pom. Soc. Rpt.* 88. 1856. **2.** Leroy *Dict. Pom.* **2**:734, fig. 1869.

Bergamotte von Vezouzière. **3.** Mathieu *Nom. Pom.* 177. 1889.

From information gathered by André Leroy from

M. Hutin, manager of the nurseries of M. Léon Leclerc of Laval, it would seem that this variety was found by Léon Leclerc in a field near the Château de la Vezouzière, Mayenne, Fr. Tree vigorous, productive. Fruit medium to below, roundish-turbinate, yellowish, sprinkled with minute gray and green dots; stalk long, curved, inserted in a broad, shallow cavity; calyx open, persistent, in a wide, uneven basin; flesh very juicy, melting, sweet; agreeable; good to very good; Sept.

Vicar Junior. 1. *Mass. Hort. Soc. Rpt.* 92. 1872.

Hon. M. P. Wilder notes: "A seedling of my own from the Vicar of Winkfield. Large, long, ovate-pyriform, color dull yellow, with a few traces of russet, and a brownish, red cheek; in shape and color resembling Louise Bonne de Jersey more than its parent. Flesh melting, very juicy and tender, flavor acidulous and rich. 'Very good.' Season the whole month of October."

Vice-Président Coppiers. 1. *Gard. Chron.* 3rd Ser. **37**:69. 1905.

A chance seedling raised by M. Coppiers of France. Fruit medium, regular-pyriform, brown, assuming an orange tint at maturity; stem moderately long; calyx slightly depressed; flesh delicate, with a slight almond flavor; Sept. and Oct.

Vice-Président Decaye. 1. Mathieu *Nom. Pom.* 294. 1889. **2.** *Guide Prat.* 101. 1895.

Tree of medium vigor, very productive. Fruit medium in size; flesh very fine, highly flavored, sweet; Sept. and Oct.

Vice-Président Delbée. 1. Mathieu *Nom. Pom.* 294. 1889. **2.** *Guide Prat.* 64. 1895.

Originated by M. Sannier, Rouen, Fr. Tree productive, of good vigor. Fruit medium to large, resembling Passe Crassane, borne in clusters; flesh fine, melting, of a peculiar flavor; through the winter.

Vice-Président Delehoye. 1. Mas *Pom. Gen.* **1**:53, fig. 27. 1872.

Originated by M. Grégoire, Jodoigne, Bel. Tree of good vigor, an early bearer. Fruit medium, oval to oblong-turbinate, clear bright yellow; flesh melting, juicy, delicately aromatic; first; Oct. and Nov.

Victor. 1. *Mo. Hort. Soc. Rpt.* 235. 1886.

Miller Victor. **2.** *Mo. Hort. Soc. Rpt.* 235. 1886.

W. P. Stark of Missouri, one of the introducers of this variety, states that he received it from Judge S. Miller, who said that it originated in Chester County, Pa., about 1856. Tree said to be little affected by blight. Fruit large, pyriform, smooth, greenish-yellow, slightly blushed; dots numerous, small; flavor subacid to sweet; Sept.

Victoria de Williams. 1. *Guide Prat.* 112. 1876.

Of English origin. Tree hardy. Fruit large, turbinate, lemon-yellow, with patches of brownish-red; stem fleshy; flesh fine, very tender, melting, buttery, very juicy, richly flavored, finely perfumed; first; Oct.

Victorina. 1. *Am. Pom. Soc. Rpt.* 59, 60. 1887. **2.** *Ia. Hort. Soc. Rpt.* 170. 1894.

A Russian sort received from Russia by the Iowa Station in 1879 and again in 1882. It is described as a hardy tree free from blight or sun scald and is given two stars for productiveness and quality by Dr.

Fischer of Voronesh, a German pomologist. In this country it is said to be of no commercial importance.

Vigne. 1. Duhamel *Trait. Arb. Fr.* **2**:242, Pl. LVIII, fig. 2. 1768. **2.** Leroy *Dict. Pom.* **2**:736, fig. 1869.

Vine Pear. **3.** Mawe-Abercrombie *Univ. Gard. Bot.* 1778.

Lady. **4.** Prince *Pom. Man.* 1:59. 1831.

Demoiselle. **5.** Mas *Le Verger* **3**:Pt. 2, 145, fig. 169. 1866-73.

Said to have originated in France, possibly near Anjou, prior to 1675. Tree large, vigorous, scraggly, very productive. Fruit small, turbinate, rough, dull red, covered with gray specks; calyx large, open; stem long, slender; flesh yellowish, slightly granular, juicy, well perfumed; Oct.

Villain XIV. 1. Dochnahl *Führ. Obstkunde* **2**:40. 1856.

Said to have originated in Belgium in 1825. Tree an early and heavy bearer. Fruit medium in size, variable, oblong-turbinate, unequal, greenish-yellow, strewn with fine russet dots; calyx small, open; stem thick, medium in length; flesh melting, gritty near the core, sweetly perfumed; Sept.

Villéne de Saint-Florent. 1. Leroy *Dict. Pom.* **2**:739, fig. 1869.

It is said that this variety, which was known prior to 1846, may have been originated near and named after the village of Saint-Florent near Saumur, Fr. Tree of medium productiveness. Fruit large, variable in shape from ovoid to globular, unequal, green dotted with reddish-gray; flesh breaking; a cooking

pear; Oct.

Vin de Anglais. 1. Leroy *Dict. Pom.* **2**:740, fig. 899. 1869.

An old pear of uncertain origin. Tree vigorous, very productive. Fruit small, turbinate, greenish-yellow, largely washed with bright red; flesh juicy, very sweet, high in quality; Aug.

Vineuse. 1. *Pom. France* **4**:No. 148, Pl. 148. 1859.

Vineuse Esperen. **2.** *Ann. Pom. Belge* **7**:89, fig. 1859.

Raised by Major Espéren, Mechlin, Bel., and introduced about 1840. Tree vigorous, productive. Fruit medium, pyriform, pale yellowish-green, patched and netted with russet, dotted with many small, brown and green dots; calyx large, open; stem short, fleshy; flesh yellowish-white, half-fine, melting, very juicy, vinous, delicately perfumed; good; Oct.

Vingt-cinquième Anniversaire de Léopold Ier. 1. *Ann. Pom. Belge* **7**:17, fig. 1859. **2.** Leroy *Dict. Pom.* **2**:742, fig. 901. 1869.

Twenty-fifth Anniversaire de Leopold I. **3.** Downing *Fr. Trees Am.* 869. 1869.

Souvenir de Leopold Ier. **4.** Mas *Pom. Gen.* **7**:171, fig. 566. 1881.

Obtained by Xavier Grégoire, Jodoigne, Bel., in 1855. Fruit medium, spherical; skin fine, thin, soft, very pale green sprinkled with small, faint grayish dots, few in number and unequally spaced, changing to jonquil-yellow; flesh very white, fine, semi-melting, only fairly juicy, but saccharine, with a flavor of sweet wine; first; Oct.

Virginale du Mecklembourg. 1. Mas *Pom. Gen.* **4**:43, fig. 214. 1879.

Originated, probably in Mecklenburg, previous to 1864. Tree pyramidal, vigorous, moderately productive. Fruit medium, regularly conic to conic-pyriform, bright yellow, sown with gray dots; calyx large, open; stem rather long, continuous with the base of the fruit; flesh white, half-fine, breaking, rather abundant in a rich sugary juice, agreeably high-flavored; Aug.

Virginie Baltet. 1. *Rev. Hort.* 546. 1903. **2.** *Ibid.* 92, fig. 1905.

Raised, and introduced in 1904, by Charles Baltet, Troyes, Fr. Tree vigorous, pyramidal, very productive. Fruit large to very large, club-shaped, oblique at the base, yellowish, blushed with red; stem short; flesh melting, juicy, sugary, delicately perfumed; very good; Nov. and Dec.

Virgouleuse. 1. Duhamel *Trait. Arb. Fr.* **2**:224, Pl. LI. 1768. **2.** Brookshaw *Hort. Reposit.* **1**:Pl. XLIX, fig. 1. 1823. **3.** Hogg *Fruit Man.* 661. 1884.

This variety originated at the village of Virgouleé, near Limoges, of which the Marquis Chambrette was the baron, and by whom it was first introduced about 1650. From this circumstance it has often been called *Chambrette*, after the marquis. The tree is strong and vigorous but is a late and indifferent bearer and is apt to drop its fruit before ripe. It is said that the fruit is very susceptible to absorbing odors and flavors and must be stored near materials which will improve rather than impair the flavor. In Europe it is regarded as an excellent dessert pear, but in this country it has not met with great success. Fruit medium to large, pyriform, rounded towards the eye

and tapering thickly towards the stalk; skin smooth, delicate, lively green becoming a beautiful pale lemon-yellow, sprinkled with numerous gray and red dots; calyx small, open, set in a small shallow basin; stem an inch long, fleshy at the base, attached with no depression; flesh yellowish-white, delicate, buttery, melting, very juicy, with a sugary and perfumed flavor; Nov. to Jan.

Vital. 1. *Rev. Hort.* 271, 425, figs. 110, 111. 1891.

Beurré Vital. **2.** Mathieu *Nom. Pom.* 185. 1889.

Found near Pontoise, Fr., prior to 1890 by M. Vital. Tree vigorous, productive, an annual bearer. Fruit 3¼ in. long, 3 in. broad, resembling White Doyenné, unequal, sloping towards both top and bottom but more towards the stem end; skin beautiful golden-yellow in color; stem short; flesh whitish, melting, slightly granular, sweet, agreeably perfumed; sometimes keeping as late as May.

Vitrier. 1. Duhamel *Trait. Arb. Fr.* **2**:139, Pl. XLIV, fig. 4. 1768. **2.** Prince *Pom. Man.* **1**:106. 1831.

Valerius Cordus, a botanist, who died in 1544, mentions a *Pyrum Vitreum* common in Saxony, and it may be, then, that Vitrier is of this origin. Fruit large, oval, deep red speckled with brown points on the sunny side and light green dotted with deeper green on the shady side; stem moderately large, an inch long; flesh white but not very delicate, agreeable; Nov. and Dec.

Volkmarserbirne. 1. Dochnahl *Führ. Obstkunde* **2**:13. 1856. **2.** Lauche *Deut. Pom.* **II**:No. 96. Pl. 96. 1883.

Volkmarsen. **3.** Leroy *Dict. Pom.* **2**:750, fig. 1869.

It is thought that this pear may have originated near the town of Volkmarsen, Ger., prior to 1795. Tree large, vigorous, hardy, very productive. Fruit small, oval, yellow, almost entirely covered with brown, sprinkled with numerous dots of a brighter color; calyx open; flesh half-melting, juicy, piquant, sweetish; Sept.

Von Zugler. 1. Downing *Fr. Trees Am.* 877. 1869.

Said by Downing in 1869 to be a new Belgian variety. Tree slender, productive. Fruit medium, roundish-acute-pyriform, yellow, nearly covered with cinnamon-russet; stem rather short, inclined in a slight depression by a fleshy lip; calyx small, open; segments short, erect; basin small; flesh white, juicy, melting, sweet, slightly aromatic; very good; Sept.

Voscovoya. 1. *Ia. Hort. Soc. Rpt.* 320, 323. 1885. **2.** *Am. Pom. Soc. Rpt.* 60, 61. 1887.

Waxy. 3. *Ia. Hort. Soc. Rpt.* 323. 1885.

A Russian variety introduced by the Iowa Agricultural College from P. J. Tretjakoff, Orel, Russia, about 1883, and said to be “an extra fine pear.” Professor Budd thought it identical with *Vosovoya* or *Waxen*.

Vosschanka. 1. *Can. Hort.* **17**:291. 1894.

A variety grown by M. Mitschurin, one of the most celebrated Russian horticulturists, in the Russian Province of Tambow, 53 north latitude. Fruit

medium, yellow; “flavor excellent, ripens in the month of August, and keeps till October.”

Wade. 1. *Am. Pom. Soc. Rpt.* 135. 1920.

Grown by I. C. Wade, Cornelia, Ga. Fruit rather large, roundish, short-pyriform, irregular, yellow; dots raised, russet, very prominent; stem short, very stout, fleshy, inserted in a round, very small, shallow, abrupt, russeted cavity; calyx small, closed, in shallow, abrupt basin; flesh white with yellow fibers, moderately juicy, tender, rather coarse, nearly sweet; good; mid-season.

Wadleigh. 1. Cole *Am. Fr. Book* 154. 1849.

Originated in New Hampshire. Tree rather hardy, moderately vigorous. Fruit medium, almost globular, yellow, slightly netted and patched with russet; stem short, stout, inserted in a slight cavity, sometimes by a fold or lip; basin slight; calyx with small short lobes; flesh white, fine, a little gritty, juicy, melting, pleasant; good; Sept.

Wahre Canning. 1. Dochnahl *Führ. Obstkunde* **2**:56. 1856.

Said by Dochnahl to have originated in England about 1842. Tree vigorous and very productive. Fruit medium large, obovate, bright green becoming greenish-yellow, often blushed with bright brown, sparsely dotted; stem thin, 1¾ inches long; flesh non-aromatic, not juicy, sweet, becoming mealy; Aug. and Sept.

Wahre Faustbirne. 1. Dochnahl *Führ. Obstkunde* **2**:3. 1856.

According to Dochnahl this pear originated in Germany about 1801. Tree very large and productive. Fruit very large, pyriform, regular, even

yellow, flecked and dotted with russet; calyx large, deep set; stem an inch long; Oct.

Wahre Schneebirne. 1. Dochnahl *Führ. Obstkunde* **2**:199. 1856

Probably a wild pear of Austria, first mentioned in 1810. Fruit round, green becoming yellow, somewhat blushed on the sunny side; dots yellowish; stem thick, flesh very sour becoming sweeter; Dec.

Wallis Kieffer. 1. Stark Bros. *Year Book* **5**:40. 1914.

The introducers of this pear, Stark Brothers Nurseries and Orchards Company, received it from Henry Wallis of St. Louis County, Missouri. It is reported as a strong-growing tree, blight resistant, and a heavy bearer, fruit of better quality than Kieffer and two weeks earlier.

Warner. 1. *Ind. Hort. Soc. Rpt.* 123. 1885.

Originated in Indiana in 1832. Tree said to be blight-resistant. Fruit medium, symmetrical, light yellow; flesh buttery, melting, mild; fair to good; last of Aug. and first of Sept.

Washington. 1. Kenrick *Am. Orch.* 187. 1832. **2.** *Mag. Hort.* **10**:296, fig. 1844.

Robertson. **3.** *N. E. Farmer* **7**:259. 1830.

Discovered in a thorn hedge at Naaman's Creek, Del., about 1801, by General Robertson or Robinson, the owner of the land, and said to have been named by him in honor of his friend and commander, George Washington. Tree vigorous, not large, an abundant bearer. Fruit medium, obovate, ending very obtusely at the stem, regular, smooth, clear yellow with a sprinkling of reddish dots on the sunny side; stem an inch and a half long, inserted in a slight

depression; calyx small, partly closed, set in a shallow basin; flesh white, very juicy, melting, sweet, agreeable; very good; Sept.

Waterloo. 1. Hogg *Fruit Man.* 663. 1884.

Fruit medium, turbinate, broad at the apex, pale green becoming brownish-red, with a few streaks of brighter red next the sun, thickly covered with gray russety dots; stem rather short, inserted in a small round cavity; calyx open, in a deep, wide, even basin; flesh yellowish, crisp, juicy, sugary, perfumed; second-rate; Sept.

Watson. 1. *Mag. Hort.* **10**:212. 1844. **2.** Downing *Fr. Trees Am.* 878. 1869.

Originated in Plymouth, Mass., on the farm of William Watson prior to 1843. Tree productive. Fruit below medium to above, roundish to obtusely obovate, yellowish, covered mostly with russet; flesh whitish, coarse, moderately juicy, sweet; of low quality; early Sept.

Webster. 1. Downing *Fr. Trees Am.* 878. 1869.

Said to have originated at Hudson, N. Y. Tree a moderate grower, productive. Fruit medium, globular-obtuse-pyriform, yellow with traces and nettings of russet and many brown dots; stem long, slender, inclined, set in a small russeted cavity; calyx open, segments long, reflexed; flesh white, juicy, melting, sweet, slightly aromatic; good to very good; Nov.

Weeping Willow. 1. *Mass. Hort. Soc. Rpt.* 37. 1867.

A seedling by Asahel Foot “called Weeping Willow, from the remarkably pendulous habit of the tree, but the fruit is of third quality.”

Weidenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:189. 1856.

Said to have originated in Germany about 1807. Fruit medium large, pyriform, uneven, bright green becoming golden yellow, often blushed with red and strongly dotted with gray, flecked with dark spots; calyx large, open; stem crooked, an inch and a half long; flesh firm, fine-grained, sweet, aromatic; Sept.

Weidenblättrige Herbstbirne. 1. Dochnahl *Führ. Obstkunde* **2**:15. 1856.

Said to have originated in Württemberg, Ger., about 1830. Tree of medium size. Fruit in clusters, medium large, pyriform, pale greenish-yellow, becoming somewhat striped with red or marked by reddish dots; Sept.

Weihmier Sugar. 1. *Hopedale Nurs. Cat.* 18. 1912.

It is said by the Hopedale Nursery Company, introducer of this variety, that it is not a new pear but an unknown old one renamed. Tree thrifty, blights somewhat. Fruit medium to large and regarded by some as of "highest possible flavor."

Weiler'sche Mostbirn. 1. *Guide Prat.* 107. 1876. **2.** Löschnig *Mostbirnen* 178, fig. 1913.

A native of Austria and valued highly for perry. Tree vigorous, an early and heavy bearer. Fruit small, globular, greenish-yellow, dotted, russet at the apex; stem medium in length, somewhat curved and set in a slight depression; calyx open; flesh yellowish-white, firm, with a sweet, aromatic flavor; Oct. and Nov.

Weisse Fuchsbirne. 1. Löschnig *Mostbirnen* 180, fig. 1913.

A perry pear probably of Austrian origin. Tree rather vigorous, pyramidal, becoming more spreading. Fruit medium, usually turbinate, light yellowish-green, covered with numerous fine dots, flaked with russet around stem and calyx; calyx small, open; stem long, same color as the fruit and continuous with it; flesh white, rather fine-grained, juicy, sweet; Oct.

Weisse Hangelbirne. 1. Löschnig *Mostbirnen* 70, fig. 1913.

A perry pear probably of Austrian origin. Tree vigorous, broadly pyramidal, large, a late but regular and heavy bearer. Fruit small, round, greenish-yellow, covered with numerous fine, brown-russet dots and small russet splotches; calyx small, open; stem short, inserted without depression; flesh pure white, granular, very juicy, slightly acid; Oct.

Weisse Kochbirne. 1. Löschnig *Mostbirnen* 102, fig. 1913.

A perry pear of unknown origin. Tree pyramidal, not a dependable bearer. Fruit medium to above, globular, light-yellow, covered with numerous russet dots; calyx open, set in a narrow, abrupt basin; stem medium, brown; flesh pure white, slightly granular, very juicy, pleasantly sweet; Oct.

Weisse Pelzbirne. 1. Löschnig *Mostbirnen* 144, fig. 1913.

A perry pear of Austria. Tree moderately vigorous, compact, an early and regular bearer. Fruit medium, variable, turbinate, greenish-yellow to yellowish-white, heavily dotted and splotched with russet, especially about stem and calyx, often marked with scab spots; calyx open; stem medium, strong, set with little or no depression; flesh yellowish-white,

slightly granular, juicy, sweetish, sometimes slightly bitter; Sept. and Oct.

Welbeck Bergamot. 1. *Mass. Hort. Soc. Rpt.* 89. 1845. **2.** Hogg *Fruit Man.* 663. 1884.

Bergamotte Welbeck. 3. Mas *Pom. Gen.* 5:87, fig. 332. 1880.

Fruit above medium, roundish, uneven in outline, bossed about the stalk, smooth, shining, lemon-yellow, thickly sprinkled with large russet specks, blushed with light crimson on side next the sun; calyx small, open, set in a shallow depression; stem medium, inserted in an uneven cavity; flesh white, rather coarse-grained, half-melting, very juicy, sugary, without flavor; inferior; Oct. and Nov.

Wellington. 1. *Mass. Hort. Soc. Rpt.* 43. 1864. **2.** Downing *Fr. Trees Am.* 879. 1869.

This, with other seedlings, was imported from France about 1854 by A. Wellington, Braintree, Mass. It was exhibited before the Massachusetts Horticultural Society in 1864. It may be that there is a second Wellington pear, or even a third, for in 1852 there was exhibited before the Massachusetts Horticultural Society “Wellington, (two varieties).” A description of a Wellington pear is given in the *Magazine of Horticulture* of the following year, while in 1854 the American Pomological Society included a variety of similar name in its list of rejected fruits. At all events, the pear herein described is the one now known as Wellington. Fruit large, similar in shape to Beurré d’Anjou, but longer, yellow, clouded with green; calyx small, open, with short, stiff, slightly incurved lobes, basin shallow; stem very short, set in a slight cavity; flesh yellowish-white, somewhat coarse, juicy, melting, sweet, with a

peculiar “confectionery” flavor or aroma; Nov.

Welsche Bratbirne. 1. Dochnahl *Führ. Obstkunde* **2**:2. 1856. **2.** Löschnig *Mostbirnen* 26; fig. 1913.

A perry pear of first rank which is said to have originated in Württemberg about 1823. Tree a very late yet regular and productive bearer. Fruit medium, roundish-oval to turbinate, whitish, splotched with yellowish-green, covered with numerous fine russet dots; calyx large, open, star-shaped; stem medium, rather stout, set in a small cavity as though stuck into the fruit; flesh greenish-white, granular, slightly firm, juicy, sweet; last of Sept. and Oct.

Weltz. 1. *Am. Pom. Soc. Rpt.* 52. 1871.

A seedling introduced by Leo Weltz, Wilmington, Ohio. Fruit large, oblong-obovate-pyriform, good for cooking only.

Wendell. 1. *Mag. Hort.* **16**:460. 1850. **2.** Downing *Fr. Trees Am.* 879. 1869.

The name given, in honor of H. Wendell, Albany, N. Y., to one of Van Mons’ seedlings which fruited in the Pomological Garden at Salem previous to 1850. Tree moderately vigorous, upright, productive. Fruit rather small to medium, roundish-pyriform, yellow, having a somewhat russety skin, tinged with red on the sunny side, sprinkled with dots; calyx small, partially open; stem short, stout; flesh whitish, fine-grained, juicy, melting, buttery, sweet, pleasant; good; Sept.

Wesner. 1. *N. J. Hort. Soc. Rpt.* 32. 1886.

A pear from W. D. Wesner, Prairiesville, Ark., which is said to be a very productive early variety and one that may be valuable for shipping.

Westcott. 1. *Mag. Hort.* **13**:515. 1847. **2.** *Mag. Hort.* **17**:261, fig. 30. 1851.

Trescott. 3. *Horticulturist* 2:241, 287. 1847.

The Westcott, or *Wescott*, and the *Trescott* are the same. Through a typographical error in the description of Westcott, later corrected, the name *Trescott* first appeared. Westcott originated on the farm of Niles Westcott in Cranston, R. I., previous to 1847. Tree vigorous, an early bearer, productive. Fruit medium, roundish-obovate, occasionally slightly flattened laterally, greenish-yellow becoming a light orange-yellow, covered with numerous minute russet dots and with many conspicuous specks of the same color; calyx medium, open, set in a shallow basin; stem very long, rather slender, curved, inserted by a fleshy nob in a shallow cavity; flesh whitish, rather coarse, melting, juicy, sweet, agreeable; good; last of Sept. and early Oct.

Westphälische Melonenbirne. 1. Dochnahl *Führ. Obstkunde* **2**:116. 1856.

First reported from Westphalia and Thuringia, Ger., about 1803. Tree very productive. Fruit oblong-obovate, pale green becoming pale yellow; dots grayish; skin thick; calyx open; stem rather short; flesh yellowish, deliciously melon-flavored; Jan. and Feb.

Westrumb. 1. Liebel *Syst. Anleit.* 132. 1825. **2.** Leroy *Dict. Pom.* **2**:754, fig. 1869.

Raised by Van Mons about 1825. Tree very productive. Fruit medium, turbinate, greenish-yellow, overcast with bronze and netted with gray; heavily dotted; stem very short, thick, continuous with the fruit; flesh very juicy, of a very savory perfume; of highest quality; Sept.

Wetmore. 1. Downing *Fr. Trees Am.* 879. 1869.

Raised by E. B. Wetmore, Westmoreland, N. Y. Tree upright, vigorous. Fruit small, roundish-oval, pale yellow, with nettings and patches of russet, and thickly sprinkled with russet dots; stem long, slender, set in a small cavity, sometimes by a lip; calyx open; lobes short, erect; basin shallow, slightly corrugated; flesh white, juicy, melting, sweet, aromatic; good to very good; Oct.

Wharton Early. 1. Downing *Fr. Trees Am.* 560. 1857.

Précoce de Wharton. **2.** *Guide Prat.* 113. 1876.

Origin unknown. Fruit medium, oblong-acute-pyriform, pale yellow, with traces of russet, and thickly sprinkled with russet dots; stem long, curved, rather slender, set in a slight cavity, sometimes by a lip; calyx open in a small basin; flesh whitish, juicy, melting, sweet, slightly musky; good to very good; Aug.

Wheeler. 1. *Mag. Hort.* **24**:505, fig. 21. 1858. **2.** Downing *Fr. Trees Am.* 880. 1869.

About 1836 a maiden lady of Greenwich, R. I., planted the core of a Gardener pear, from which sprang a tree, fruit of which was brought to the attention of the Massachusetts Horticultural Society by Dr. Wheeler of Greenwich in 1851. The Society named the pear in honor of Dr. Wheeler. Tree vigorous, upright. Fruit medium, roundish-obovate, pale yellowish-green, mottled with greenish patches and dotted with numerous gray and green dots; stem medium, set in a small contracted cavity; calyx open, set in an uneven, abrupt basin; flesh white, juicy, melting, sweet, pleasant; good; Aug.

Whieldon. 1. *U. S. D. A. Rpt.* 127, fig., Pl. XI. 1863.

McLellan. **2.** *Am. Pom. Soc. Rpt.* 151. 1862.

Originated in the garden of Wm. W. Whieldon, Concord, Mass., and first brought to notice about 1862. Tree moderately vigorous, upright-spreading, a profuse bearer. Fruit medium or above, obtuse-obovate, yellowish-green, tinged with red in the sun, dotted and netted with russet, stem long, slender, slightly inclined, set in a shallow cavity; calyx open, set in a medium sized, uneven basin; segments recurved; flesh whitish, a little gritty near the core, juicy, melting, buttery, sweet, pleasant, slightly aromatic; good to very good; Sept.

White Genneting. 1. Parkinson *Par. Ter.* 593. 1629.

"The White Genneting is a reasonable good peare, yet not equall to the other."

White Longland. 1. Hogg *Fruit Man.* 664. 1884.

Said to be a good stewing pear, cooking to a splendid red color, but coarse and rough in flavor; also used for perry. Fruit medium, turbinate, even, regular, yellowish-green, pale red next the sun, thickly sprinkled with large russet dots, with lines of russet and a patch round the stalk; calyx open, set in a shallow basin; stem rather short, straight, inserted in a narrow, shallow cavity; flesh yellowish, firm, coarse-grained, with a brisk, sweet juice.

White Seedling. 1. *Mag. Hort.* **19**:522. 1853. **2.** Downing *Fr. Trees Am.* 881. 1869.

Semis de White. **3.** *Guide Prat.* 75, 292. 1895.

A native of New Haven, Conn., exhibited in 1853. Tree vigorous, very productive. Fruit medium, roundish-obovate to oblong-obovate, greenish-

yellow, sometimes with a brownish-blush in the sun, considerably netted and patched with russet, sprinkled with many russet dots; stem long, inclined, set in a shallow cavity, often by a fleshy lip; calyx open, with short, erect lobes, set in a small, uneven basin; flesh yellowish, juicy, melting; sweet, aromatic; good to very good; Oct. to Feb.

White Squash. 1. Hogg *Fruit Man.* 664. 1884.

A Herefordshire, Eng., perry pear. Fruit medium, roundish-turbinate, even and regular in outline, yellowish-green, strewn with small russety dots, with here and there a patch of russet, but always russety round the stalk and the calyx; calyx open, set in a saucer-like basin; stem medium, inserted without depression and with a fleshy swelling on one side; flesh coarse, crisp, very juicy, harshly astringent.

White Star. 1. *Spring Hill Nurs. Cat.* 10, fig. 1921.

Tree reported as hardy, productive and fruit as of the size of Bartlett, keeping until May and June, and good for dessert.

Whitfield. 1. *Cultivator* 66. 1839. **2.** *Mag. Hort.* **16**:296. 1850.

Placed on the list of Rejected Fruits by the second Congress of Fruit Growers in 1850. Tree a good bearer. Fruit medium, oblong-obovate, yellowish-brown, buttery, very good; Oct. and Nov.

Wiest. 1. *Mag. Hort.* **18**:492. 1852. **2.** Downing *Fr. Trees Am.* 882. 1869.

Reported from Pennsylvania in 1852. Tree vigorous, an early bearer, inclined to be alternate. Fruit medium or below, roundish-obovate, green, shaded with dull red and sprinkled with green and

gray dots; stem rather stout, medium in length; calyx small, closed; lobes connivent; flesh whitish-green, juicy, melting, subacid; good; Sept.

Wilbur. 1. *Mag. Hort.* 10:211. 1844. **2.** Downing *Fr. Trees Am.* 882. 1869.

Early Wilbur. **3.** *Mass. Hort. Soc. Rpt.* 4. 1843.

The original tree, which was found growing wild in a piece of mowing land on the farm of D. Wilbur, Jr., in Somerset, Mass., was said in 1844 to be 66 years old. Shoots slender, light olive-brown. Fruit below medium, roundish-obovate, dull green, becoming pale yellow, slightly netted and patched with russet, and thickly sprinkled with russet dots; stem small, set in a small cavity; calyx open; segments long; basin small; flesh yellowish, juicy, melting, slightly astringent; good; Sept.

Wilde Filzbirne. 1. Dochnahl *Führ. Obstkunde* **2**:1. 1856.

A wild pear reported from Belgium about 1800. Fruit small, roundish, greenish, becoming yellowish, dotted with gray; stem long; flesh acid, becoming sweetish; poor; fall and winter. May be used for dwarfing.

Wilde Herrnbirne. 1. Dochnahl *Führ. Obstkunde* **2**:188. 1856.

Reported from Germany about 1804. Tree very large. Fruit medium, broad, bright green becoming yellowish-green, often somewhat blushed on the sunny side, often flecked and patched with russet; dots light gray; stem rather long, inserted by a fleshy protuberance; flesh white, slightly musky, sweet; fair and below; Sept.

Wilde Holzbirne. 1. Dochnahl *Führ. Obstkunde*

2:196. 1856.

Reported as wild and widely disseminated as early as 1641; its seedlings are said sometimes to be used for stocks. Tree very large and productive. Fruit small, round, green, dotted with light russet; seeds numerous, dark brown; flesh very acid; Oct.

Wilder Sugar. 1. *Am. Pom. Soc. Rpt.* 135. 1920.

Reported by Orange County Nursery Company, Anaheim, Cal., as "Medium large, greenish yellow shaded brown, excellent quality. Vigorous and productive. August."

Wilding von Einsiedel. 1. Dochnahl *Führ. Obstkunde* **2**:2. 1856. **2.** Löschnig *Mostbirnen* 182, fig. 1913.

This perry pear, which has also been recommended as a street tree, was reported from Württemberg about 1832. Tree very vigorous, pyramidal, not leafy, very productive. Fruit bluntly conic pyriform, small, greenish-yellow, brownish on side next the sun; covered with characteristic brown to reddish-brown dots, russeted about stem and calyx; calyx half open; stem short, thick; flesh juicy, firm, acid; Oct.

Wilding von Gronau. 1. Dochnahl *Führ. Obstkunde* **2**:96. 1856.

Reported from Hesse, Ger., about 1844. Fruit small, blunt, broad-conic-pyriform, yellow, blushed on the sunny side, flecked and dotted with gray, russeted about base and apex; calyx closed; stem short; flesh sweet-scented, sweet; end of Sept.

Wilford. 1. Parkinson *Par. Ter.* 592. 1629.

"A good and fair pear."

Wilkinson. 1. Kenrick *Am. Orch.* 187. 1832. **2.** *Mag. Hort.* **20**:470, fig. 25. 1854.

This pear, one of the oldest American kinds, was introduced by the exhibition of specimens before the Massachusetts Horticultural Society, in October, 1829, and given the name "Wilkinson," in compliment to the owner of the farm on which the tree originated and was then growing, Mr. Jeremiah Wilkinson, Cumberland, R. I., brother of the noted Jemima Wilkinson. Tree thrifty, hardy, a regular bearer; shoots long, upright, stout, olive-yellow, with oblong white specks. Fruit medium, ovoid, obtuse at both ends, smooth, glossy, yellow dotted with brown points; stem rather long, rather stout, inserted obliquely in a rather wide and deep cavity; calyx medium, open, set in a shallow basin; flesh very white, juicy, melting, sweet, rich, with a slight perfume; good; Oct. to Dec.

Wilkinson Winter. 1. *Ill. Hort Soc. Rpt.* 113. 1876. **2.** *Ibid.* 83. 1880.

A variety raised near Peoria, Ill., from seed planted by A. Wilkinson, and first reported before the Illinois State Horticultural Society about 1876. Tree said to be hardy, vigorous, productive, blight-resistant. Fruit said to be large, golden; very good; season until spring.

Willermoz. 1. *Mag. Hort.* **20**:86, 461. 1854. **2.** Leroy *Dict. Pom.* **2**:756, fig. 1869.

Fruited with M. Bivort, Jodoigne, Bel., in 1848. Tree an extremely good grower, forming a fine pyramidal growth, with young shoots dark, dull, olive-brown, very productive. Fruit large, obtuse-pyriform, greenish-yellow, tinged with red, with nettings and some large patches of russet and with

many small russet dots; stem medium, rather stout, inclined, set in a small cavity; calyx open or partially closed, set in an abrupt basin; flesh whitish, buttery, juicy, melting, coarse at core, slightly vinous; good to very good; Nov. to Jan.

William. 1. *Cultivator* 175, fig. 8. 1845. **2.** *Mag. Hort.* **11**:252. 1845.

William Edwards. **3.** Downing *Fr. Trees Am.* 420. 1845.

This seedling pear is said to be a "species of Virgoulouse," and was raised by Governor H. W. Edwards of New Haven, Conn., previous to 1845. Tree very productive. Fruit medium, obtuse-pyriform, terminating rather abruptly at the stalk, yellow, becoming profusely dotted with red and russet points or dots on the sunny side; flesh yellowish-white, sweet, buttery, not juicy or melting enough for dessert purposes but good for baking; Sept.

William Prince. 1. Mag. Hort. **17**:472. 1851. **2.** Downing *Fr. Trees Am.* 883. 1869.

Other than that this variety was reported from the United States about 1848, nothing of its origin is known. Tree vigorous, upright, productive. Fruit medium, roundish-pyriform, greenish-yellow, shaded with crimson in the sun, covered with many brown dots; stem medium to below; calyx open, set in a shallow basin; flesh white, juicy, melting, sweet; good to very good; Sept. and Oct.

Williams Double Bearing. 1. Prince *Pom. Man.* **2**:215. 1832.

Raised from a seed of the Saint Germain, in the garden of Mrs. Williams, Salem, Mass. Tree said to

bear two crops, the fruit of the first of the size herein mentioned and ripening in early October, that of the second much smaller and ripening from two to four weeks later. Fruit large, resembles its parent but greater in diameter; flesh of fine quality, melting, but not highly flavored.

Williams Early. 1. *Mag. Hort.* **3**:51. 1837. **2.** *Ibid.* **14**:344, fig. 37. 1848.

Originated with Aaron Davis Williams on his farm in Roxbury, Mass., probably about 1830. Tree a moderate grower, young shoots brownish red. Fruit medium to below, roundish-pyriform, ending obtusely at the stem, yellow, covered with bright crimson and thickly sprinkled with scarlet dots on the sunny side; stem rather long, stout, slightly fleshy at the base, inserted without any cavity; calyx open, slightly sunken in a furrowed basin; flesh yellowish-white, a little coarse-grained at first, becoming juicy, half buttery, with a slight musky flavor; good; middle of Sept.

Williams d'Hiver. 1. Leroy *Dict. Pom.* **2**:760, figs. 1869. **2.** *Am. Jour. Hort.* **9**:219, fig. 1871.

Williams Winter. **3.** *Can. Exp. Farms Rpt.* 380. 1902.

Raised by M. Leroy, Angers, Fr., and first fruited in 1862. Tree vigorous, productive. Fruit blunt-pyriform, variable in shape, somewhat bossed, yellow, finely dotted and veined with yellow in basin, with lightish gray about stalk and on face next the sun; stem short, strong, thick, set rather obliquely and often to one side of the axis; calyx medium, half-closed, slightly sunken; flesh white, very fine, very melting, very juicy, sugary, acidulated, with a fine, fresh perfume, Dec. to Feb.

Williams panachée. 1. *Guide Prat.* 80, 312. 1876.

From the name, it is to be supposed that this is merely a striped-leaf variety of Bartlett.

Williamson. 1. *Horticulturist* **6**:494. 1851. **2.** Downing *Fr. Trees Am.* 883. 1869.

This seedling sprang up in a piece of woodland belonging to Nicholas Williamson on the south side of Long Island. Tree hardy, vigorous, a good bearer. Fruit medium, roundish-obovate to roundish-oblate, obtuse at stem, greenish-yellow, sprinkled with russet dots and considerably russeted at both ends; stem short, stout, set in a medium sized cavity; calyx open, often wanting, set in a deep, rather narrow basin; flesh yellowish-white, rather coarse, half-melting, juicy, sugary, vinous; good to slightly above; Oct.

Wilmington. 1. *Am. Pom. Soc. Rpt.* 90. 1856. **2.** *Horticulturist* **12**:111, fig. 1857.

This is a seedling of Passe Colmar, raised in 1847 by Dr. Brincklé of Philadelphia, and first fruited in 1855. Tree a moderate grower, late bearer; young wood dull yellowish-brown. Fruit medium, obtuse-pyriform to roundish-ovate, greenish-yellow, netted and patched with russet, thickly sprinkled with russet dots; stem long, curved, inserted obliquely in a small cavity, often by a lip; calyx medium, open, set in a wide, moderately deep basin; flesh whitish green, juicy, buttery, melting, sweet, pleasant, slightly aromatic; good to very good; Sept.

Windsor. 1. Parkinson *Par. Ter.* 592, fig. 10. 1629. **2.** Bunyard *Handb. Hardy Fr.* 204. 1920.

Madame. **3.** Leroy *Dict. Pom.* 2:369, fig. 1869.

Summer Bell. **4.** Thomas *Am. Fruit Cult.* 571. 1885.

According to Leroy this variety originated in Holland, and was published in 1771 under the name *Hallemine Bonne* by Knoop. In French gardens it received the name *Madame*. In England, Windsor is often called *Cuisse Madame*. A "Windsor," which appears to be identical with the Windsor of Knoop, is described by English writers as early as 1629. Hogg quotes an English writer as saying, "It was raised from seed of the *Cuisse Madame*, by a person of the name of Williamson ..." before 1750. Moreover, it is mentioned in 1592 as being cultivated about Naples, and 1563 in England. What the origin is appears undeterminable. Tree one of the strongest growers, upright, tall, a regular and abundant bearer; shoots remarkably stout, perfectly upright, dark brown. Fruit large, pyriform or bell-shaped, very smooth, greenish becoming pale yellow; stem long, fairly stout, inserted without depression; calyx open, set on level with prominent ribs around; flesh white, tender, buttery, rather coarse-grained, slightly acid, somewhat astringent; rots at the core; Aug.

Winship. 1. *Mag. Hort.* **10**:212. 1844. **2.** *Ibid.* **13**:485, fig. 41. 1847.

Originated in the nurseries of the Messrs. Winship, Brighton, Mass., about 1832. Tree vigorous, an early and productive bearer; young wood yellowish-reddish-brown. Fruit medium, oblong-acute-pyriform, greenish-yellow with traces and patches of russet; stem long, rather slender, inserted with no cavity; calyx large, closed, set in a small, corrugated basin; flesh white, rather coarse, not juicy, not melting; poor to fair; Aug.

Winslow. 1. *Mass. Hort. Soc. Rpt.* 45. 1866.

A seedling pear fruited by S. A. Shurtleff, Brookline, Mass., in 1865, and described by him as,

"Diam. 2½ inches; color, brown russet; flesh, sweet, juicy, buttery and high flavored; ripens well. Oct. 21. Roundish."

Winter. 1. *Am. Pom. Soc. Rpt.* 60. 1887. **2.** *Ia. Sta. Bul.* **3**:74. 1888.

Osimaya. **3.** *Am. Pom. Soc. Rpt.* 60. 1887.

Received by the Iowa Agricultural College in 1879 from R. Shroeder, Moscow, Russia. The tree is said to be hardy and free from blight and the fruit to be large than Bessemianka, quite as good in quality, and in season in central Russia the last days of September.

Winter Jonah. 1. *N. J. Hort. Soc. Rpt.* 214. 1889. **2.** *Can. Exp. Farms Rpt.* 422. 1903.

Tree a medium grower. Fruit medium, roundish, pale yellow with a faint blush on the sunny side, a few small, dark greenish-yellow spots, and many small, gray dots; stem medium, short, set in a very slight depression; calyx large, open, set in a narrow and shallow basin; winter.

Winter Pear. 1. *Mag. Hort.* **20**:75. 1854.

Sent to the Fruit Committee of the Pennsylvania Horticultural Society in 1854 by Charles Kessler, Reading, Pa. Fruit medium, roundish, yellow, scarcely "good" in quality.

Winter Popperin. 1. Parkinson *Par. Ter.* 592. 1629.

One of two "very good dry firme peares, somewhat spotted, and brownish on the outside."

Winter Rousselet. 1. Mawe-Abercrombie *Univ. Gard. Bot.* 1778.

Rousselet d'Hiver. **3.** Leroy *Dict. Pom.* **2**:593, fig. 1869.

An ancient French pear of unknown origin, though it was described by Claude Saint-Étienne in 1670 and by Duhamel in the eighteenth century. Fruit small, turbinate, more or less obtuse, usually somewhat contracted toward the top, and often depressed on one side and mammillate on the other, yellow-green dotted with gray russet and blushed with reddish-brown on the face exposed to the sun; flesh white, semi-breaking, watery, rather granular, juice abundant, saccharine, rarely having much aroma and sometimes acid; second; Feb. and Mar.

Winter Seckel. 1. Downing *Fr. Trees Am.* 562. 1857.

Said to have originated near Fredericksburg, Va., and to have been introduced by H. R. Roby. Fruit small, obovate, yellow, with a brownish cheek in sun, patched and netted with russet, and covered with many large and brown dots; stem slender; calyx large, open; flesh white, a little coarse at core, juicy, half-melting.

Winter Sweet Sugar. 1. Brookshaw *Hort. Reposit.* **2**:151, Pl. 81. 1823.

Tree productive. Fruit turbinate, greenish, juicy, sweet, not very richly flavored; will keep till March.

Winter Williams. 1. *Garden* **67**:18. 1905.

A cross between Bartlett and Glou Morceau shown before the Royal Horticultural Society in 1905 by Messrs. James Veitch & Sons, England. Fruit said to resemble Glou Morceau in shape; skin yellow; flavor like Bartlett; later than Bartlett.

Winterbirne. 1. Dochnahl *Führ. Obstkunde* **2**:70. 1856.

Reported from northern Germany about 1773. Fruit medium, turbinate, smooth, bright green,

dotted with gray; stem long; flesh yellowish, half breaking, sweetish; Dec. to Apr.

Winterliebesbirne. 1. Mathieu *Nom. Pom.* 301. 1889.

Poire d'Amour d'Hiver. **2.** Mas *Pom. Gen.* **6**:15, fig. 392. 1880.

This pear is of German origin and bears also the name of *Kirschbirnen* or *Church Pear*. Fruit small or nearly medium, conic or globular-conic, sometimes short and sometimes long; skin thick, firm, rough, water-green with numerous and conspicuous brown dots; changing to pale yellow covered over a large area of the side next the sun with a vivid currant red on the central part and more brown on the borders; flesh white, coarse, breaking, a little gritty around the core, juice sufficient in quantity and sweet, vinous and musky; good for kitchen purposes and keeps a long time; Oct. and Nov.

Winterrobine. 1. Christ *Handb.* 500. 1817. **2.** Dochnahl Führ. *Obstkunde* **2**:111. 1856.

Thuringia, Ger., 1799. Fruit fairly large, ventriculous-conic, obtuse; apex inclined, sides unequal, green turning yellow-green, often somewhat blushed, dotted with dark green, speckled with russet; flesh gritty near the center, whitish-yellow, sweet, musky, buttery, melting, aromatic; first for all purposes; Jan. to Mar.

Witte Princesse. 1. Knoop *Pomologie* 96, 139, fig. 1771.

An old pear, probably of French origin. Tree vigorous, productive. Fruit medium to above, oblong-pyriform, drawn to a point at the stem; whitish-yellow or whitish-green, dotted with pale

brown dots and occasionally patched here and there with brown; stem medium to above in length; flesh mellow, gritty, agreeably but not highly flavored; Aug. and Sept.

Wolfsbirne. 1. Dochnahl *Führ. Obstkunde* **2**:2. 1856. **2.** Löschnig *Mostbirnen* 104, fig. 1913.

A perry pear common to Württemberg from an early date. Tree medium vigorous, large, roundish, a late but good bearer. Fruit medium, roundish, yellow, covered with russet dots, devoid of red; calyx large, open; stem very long, set obliquely without depression; flesh yellowish-white, firm, acid; Oct.

Woodbridge Seckel. 1. *Am. Pom. Soc. Rpt.* 121. 1860. **2.** Downing *Fr. Trees Am.* 885. 1869.

In 1860 a Mr. Woodbridge, Detroit, Mich., exhibited a seedling known as No. 2 before the Fruit Committee of the American Pomological Society. This seedling was subsequently named Woodbridge Seckel. Tree moderately vigorous. Fruit small, pyriform, pale yellow, shaded and marbled with crimson in the sun, thickly sprinkled with brown and crimson dots; stem long, slender; calyx open; flesh yellowish, juicy, melting, sweet, vinous; very good, but rapidly decays at the core; Sept.

Woodstock. 1. *Am. Pom. Soc. Rpt.* 201. 1856. **2.** Elliott *Fr. Book* 416. 1859.

Said to have originated at Woodstock, Vt., and first reported about 1856. Tree a moderate grower, very productive; young wood olive-brown. Fruit medium to below, roundish-obtuse to obovate-pyriform, pale yellow, netted and patched, and thickly sprinkled with russet dots; stem long, rather slender, inserted in a small cavity, often by a lip; calyx large, open, placed in a rather deep, abrupt

basin; lobes long, slender, persistent; flesh white, juicy, melting, sweet, pleasant, slightly musky; good to very good; Sept.

Worden Meadow. 1. *Cultivator* N. S. **2**:340. 1845.

Schuyler Worden, who originated the Worden grape, stated in 1845 that he had raised this pear in Oswego, N. Y., from grafts given him by an old countryman. Tree vigorous, productive. Fruit medium to large, shape variable and surface uneven; skin yellow at maturity; flesh fine-grained, melting, juicy, sweet, with a musky flavor; ripens about the middle of Sept.

Wörlesbirne. 1. Dochnahl *Führ. Obstkunde* **2**:194. 1856.

A perry pear reported from Württemberg about 1830. Tree not vigorous, large, long-lived, very productive. Fruit small, oval or pyriform, solid bright green, turning lemon-yellow, numerously dotted with gray, somewhat flecked with russet; calyx in a slight depression; flesh juicy, acid, bitter.

Wormsley Grange. 1. Kenrick *Am. Orch.* 187. 1832.

This is a variety which is said to have been sent to the Hon. John Lowell by Mr. Knight with the remarks that it requires to be gathered before it is quite ripe and that it is a variety of first-rate excellence in Herefordshire, Eng. In 1842 it was listed as having been removed from the gardens of the London Horticultural Society because of inferior merit.

Wurzer. 1. Liegel *Syst. Anleit.* 114. 1825.

Wurzer d'Automne. **2.** *Mag. Hort.* **16**:296. 1850. **2.** *Am. Pom. Soc. Rpt.* 240. 1854.

Reported from Belgium about 1821. Tree vigorous, leafy, thorny. Fruit rather large, pyriform, solid green, becoming covered with russet, heavily dotted with reddish-brown; calyx small, set in a shallow basin; stem medium long, fleshy, set in a rather deep cavity; flesh pithy, sweet, vinous; Nov.

Yat. 1. Lindley *Guide Orch. Gard*. 351. 1831. **2.** Leroy *Dict. Pom*. **2**:762, fig. 1869.

Gute Graue. **3.** Liegel *Syst. Anleit.* 124. 1825.

Beurré Gris d'Été de Hollande. **4.** Mas *Le Verger* **2**:85, fig. 41. 1866-73.

Beurré Gris d'Été. **5.** *Guide Prat.* 70, 245. 1876.

This pear is said to have been brought to England from Holland about 1770 by Thomas Harvey. It is not to be confused with the Grise-Bonne. Tree large, vigorous, hardy, very productive. Fruit variable, small to above medium, obovate-pyriform to oblong-turbinate, green, thickly covered with russet, sprinkled with numerous gray specks, sometimes colored brownish-red when exposed to the sun; calyx small, open, set in a shallow basin; stem rather long, slender, obliquely inserted without depression and often by a fleshy protuberance; flesh white, tender, melting, juicy with a rich, sugary and highly perfumed flavor; rated as of little value by Downing, of first quality by Mas, as highly estimable by the Germans, and as an excellent early pear by Hogg; Aug. and Sept.

Yellow Huff-cap. 1. Hogg *Fruit Man.* 669. 1884.

A Herefordshire perry pear. Fruit quite small, obovate or turbinate, entirely covered with rough brown russet, and with only portions of the ground color showing through in specks; calyx small, open,

with short horny segments, set even with the surface; stem rather long, inserted without depression; flesh yellowish, with a greenish tinge.

Youngken Winter Seckel.

According to correspondence this pear was raised from seed of Seckel by David Youngken, Richlandtown, Pa., about 1868. The tree is reported as being upright and prolific, and the fruit as keeping through the winter.

Zache. 1. *Mich. Sta. Bul.* **177**:39. 1899. **2.** *Ibid.* **187**:75. 1901.

A Chinese sand pear, of value only as a novelty, grown at the South Haven Substation of the Michigan Agricultural Experiment Station in 1894. Tree a fine, strong grower with large, thick, glossy leaves. Fruit roundish oblate, resembling an apple in appearance, orange with many light yellowish dots and specks; flesh coarse, crisp; poor; winter.

Zapfenbirn. 1. Christ *Handb.* 559. 1817.

Tree large, very productive. Fruit long-acute-pyriform, yellow, finely dotted; flesh breaking, not juicy, musky; used for drying and for cooking; early winter.

Zarskaja. 1. *Ia. Hort. Soc. Rpt.* 61. 1880.

Reported by J. L. Budd to be a Russian variety which has gritty thorn-like wood and which therefore does not unite well when grafted upon apple stock.

Zénon. 1. Mathieu *Nom. Pom.* 302. 1884. **2.** *Guide Prat.* 62. 1895.

Of European origin, first reported in 1884. Tree moderately vigorous, producing excellent fruit upon

quince stock. Fruit medium, of the form of White Doyenné; flesh very fine, juicy, sweet, agreeable, slightly aromatic, granular near the core; first; end of autumn.

Zéphirin Grégoire. 1. *Horticulturist* **9**:78, fig. 1854. **2.** *Ann. Pom. Belge* **3**:79, fig. 1855. **3.** Bunyard *Handb. Hardy Fr.* 205. 1920.

M. Grégoire, pomologist, Jodoigne, Bel., raised this variety supposedly from seeds of Passe Colmar about 1831. Tree pyramidal, vigorous, very productive, succeeds best upon pear stock; young wood smooth, light olive-yellow-brown. Fruit medium to above, roundish-obovate, pale greenish-yellow, becoming uniform pale waxen-yellow, covered with patches of russet and many green and gray dots, often reddish in the sun; stem medium in length, fleshy, very fleshy at insertion, set obliquely without depression; calyx small, open, set in a slight depression; lobes long; flesh yellowish-white, buttery, melting, juicy, rich, sugary, vinous, highly aromatic; good to very good; Nov. to Feb.

Zéphirin Louis. 1. *Ann. Pom. Belge* **4**:95, fig. 1856. **2.** Downing *Fr. Trees Am.* 886. 1869.

This pear was raised by M. Xavier Grégoire, Jodoigne, Bel. It was first reported in 1849. Tree a moderately healthy grower, rather scraggly, moderately productive. Fruit medium or below, roundish, slightly obovate, greenish-yellow, rusty-red becoming bright vermilion in the sun, thickly sprinkled with large dark brown-russet patches and dots; stem very short, inserted in a small round cavity; calyx small, open, set in a deep basin; flesh yellowish-white, tinged with green, coarse-grained, crisp, rather half melting, juicy, sweet, slightly aromatic; good; Dec. and Jan.

Zieregger Mostbirne. 1. Löschnig *Mostbirnen* 146, fig. 1913.

A perry pear which is said to have sprung from seed in Styria. Tree medium, roundish, a rather late and rather light bearer. Fruit roundish-oblate, medium in size, similar to Rummelter Birne but smaller, greenish-yellow, finely dotted, russeted; stem short, thick, brown; calyx half open to open, with erect lobes; flesh granular, whitish-green, not especially juicy, rich in sugar; Oct.

Zimmtfarbige Schmalzbirne. 1. Dochnahl *Führ. Obstkunde* **2**:58. 1856.

Middle Germany; first published in 1826. Fruit rather large, pyramidal, often obtuse, slightly ribbed; skin rough, entirely covered with light cinnamon russet, without dots; flesh granular and pulpy, sweet; third for dessert, very good for household use; Oct.

Zink Pfalzgrafenbirne. 1. Mathieu *Nom. Pom.* 302. 1889.

Weisse Pfalzgrafenbirne. **2.** Dochnahl *Führ. Obstkunde* **2**:49. 1856.

Reported from Germany about 1766. Tree a late but productive bearer. Fruit medium, bulging pyriform, irregular, greenish-yellow, becoming lemon yellow, often blushed, dotted with yellow, later dotted with brown and green; stem thick, fleshy, rather long; calyx open; lobes long; flesh sweet, perfumed; fair; early Sept.

Zoar Beauty. 1. *Mag. Hort.* **13**:110. 1847. **2.** Elliott *Fr. Book* 347, fig. 1854.

Belle de Zoar. 3. *Guide Prat.* 112, 234. 1876.

Originated at Zoar, Ohio. Tree vigorous, an early

and abundant bearer; shoots dark brown. Fruit medium or below, acute-pyriform, light yellow, thickly dotted with minute green dots, beautiful crimson or carmine in the sun with deep red dots; stem long, curved, slender, fleshy at insertion, often by a ring or lip, in a small cavity; calyx large for size of fruit, open; lobes erect or recurved; flesh white, granular, half breaking, moderately juicy, sweet, aromatic; good; early Aug.

Zoé. 1. *Ont. Fr. Gr. Assoc. Rpt.* 72. 1883. **2.** *Guide Prat.* 101. 1895.

A foreign sort, probably French. Tree very vigorous, thrifty. Fruit very large, oblong, deep green; flesh tender, melting, sweet; Dec. and Jan.

BIBLIOGRAPHY AND REFERENCES, WITH ABBREVIATIONS USED

The list of books which follows contains all American pomological works in which the pear is discussed at any length. Only such European books are listed, however, as were found useful in writing *The Pears of New York*. Only periodicals are listed to which references are made in the text of the book. The reports and bulletins of experiment stations and horticultural societies are not included since the abbreviations used for such publications will be recognized by all. The date of copyright has been

preferred to that of publication, though sometimes it has been necessary to use the latter, as when there were several editions from the same copyright.

Aepfel u. Birnen

Aepfel und Birnen. Die wichtigsten deutschen Kernobstsorten. Herausgegeben im engen Anschlusse an die "Statistik der deutschen Kernobstsorten" von R. Goethe, H. Degenkolb und R. Mertens und unter der Leitung der Obstund Weinbau-Abteilung der Deutschen Landwirtschafts-Gesellschaft. (*Illustrirt.*) Berlin: 1894.

Am. Gard

American Gardening. An Illustrated Journal of Horticulture and Gardener's Chronicle. New York: 1892-1904. Copyright, 1903. (Before its union with Popular Gardening in 1892, the publication was known as The American Garden. Both Popular Gardening and The American Garden resulted from the union or absorption of several other horticultural periodicals.)

Am. Gard. Mag.

The American Gardener's Magazine, and Register of Useful Discoveries and Improvements in Horticulture and Rural Affairs. See Mag. Hort.

Am. Hort. An.

American Horticultural Annual. A Year-

book of Horticultural Progress for the Professional and Amateur Gardener, Fruit-grower, and Florist. (*Illustrated.*) New York: 1867. Copyright, 1867. New edition. New York: 1870. Copyright, 1869.

Am. Jour. Hort.

The American Journal of Horticulture and Florist's Companion. (*Illustrated.*) Volumes 1-5. Boston: 1867-1869. Copyrights, 1867-1869. Continued as Tilton's Journal of Horticulture and Floral Magazine. (*Illustrated.*) Volumes 6-9. Boston: 1869-71. Copyrights, 1869-1871.

Am. Pom. Soc. Rpt.

Proceedings of the American Pomological Society. Issued usually biennially from 1850 to date. First published as the Proceedings of the National Convention of Fruit Growers in 1848.

Ann. Hort.

Annal of Horticulture and yearbook of information on practical gardening. 5 Volumes. London: 1846-1850.

Ann. Pom. Belge

Annales de Pomologie Belge et Étrangère; publiées par la Commission royale de Pomologie Instituée par S. M. le Roi des Belges. (*Illustré.*) Huit Tomes.

Bruxelles: 1853-1860.

Bailey, Ann. Hort.

Annals of Horticulture in North America for the Years 1889-1893. A Witness of Passing Events and a Record of Progress. By L. H. Bailey. New York: 1890-1894. Copyrights, 1889, 1891-1894.

Baltet, Cult. Fr.

Traité de la Culture Fruitière Commerciale et Bourgeoise. Par Charles Baltet. (*Illustré.*) Quatrième Édition. Paris: 1908.

Barry, Fr. Garden

The Fruit Garden. By P. Barry. (*Illustrated.*) New York: 1852. Copyright, 1851. Revised Edition, 1896. Copyright, 1883.

Black, Cult. Peach & Pear

The Cultivation of the Peach and the Pear, on the Delaware And Chesapeake Peninsula; with a Chapter on Quince Culture and the Culture of Some of the Nut-Bearing Trees. By John S. Black, M. D. (*Illustrated.*) Wilmington: 1886. Copyright, 1886.

Bradley, Gard.

New Improvements of Planting and Gardening, both Philosophical and Practical. In three parts. By Richard Bradley. (*Illustrated.*) Seventh Edition with Appendix. London: 1739.

Bridgeman, Gard. Ass't.

The Young Gardener's Assistant, in three parts. By Thomas Bridgeman. New Edition, with an Appendix. New York: 1857. Copyright, 1847.

Brookshaw, Hort. Reposit.

The Horticultural Repository, containing Delineations of the best Varieties of the Different Species of English Fruits. By George Brookshaw. (*Illustrated.*) In Two Volumes. London: 1823.

Brookshaw, Pom. Brit.

Pomona Britannica, or A Collection of the Most Esteemed Fruits at present Cultivated In Great Britain; selected principally from the Royal Gardens At Hampton Court, and the remainder from The Most Celebrated Gardens Round London; Accurately Drawn and Colored from Nature, with Full Descriptions of their Various Qualities, Seasons, &c. By George Brookshaw. Volumes I and II. London: 1817. Vol. II. The Pear.

Budd-Hansen, Am. Hort. Man.

American Horticultural Manual. By J. L. Budd, assisted by N. E. Hansen. (*Illustrated.*) In Two Volumes. Volume 2, New York and London: 1903. Copyright, 1903.

Bunyard, Handb. Hardy Fr.

A Handbook of Hardy Fruits more commonly grown in Great

Britain. Apples and Pears. By Edward A. Bunyard. London: 1920.

Bunyard-Thomas, Fr. Gard.

The Fruit Garden. By George Bunyard and Owen Thomas. (*Illustrated.*) London and New York: 1904.

Can. Hort.

The Canadian Horticulturist. (*Illustrated.*) Toronto and Peterboro: 1878 to date.

Cat. Cong. Pom. France

Société Pomologique de France Catalogue Descriptif des Fruits Adoptés par le Congrès Pomologique. Lyon: 1887. Ibid.: 1906.

Cecil, Hist. Gard. Eng.

A History Of Gardening In England. By the Hon. Mrs. Evelyn Cecil. Third and enlarged edition. (*Illustrated.*) New York: 1910.

Christ, Handb.

Handbuch über die Obstbaumzucht und Obstlehre. Von J. L. Christ. Vierte, sehr verbesserte und vermehrte Auflage. Frankfurt: 1817.

Cole, Am. Fr. Book

The American Fruit Book; containing directions for Raising, Propagating, and Managing Fruit Trees, Shrubs and Plants; with a description of the Best Varieties

of Fruit, including New and Valuable Kinds. By S. W. Cole. (*Illustrated.*) Boston: 1849. Copyright, 1849.

Country Gent.

The Country Gentleman. Albany: 1853-1865. The Cultivator & Country Gentleman. Albany: 1866-1897. The Country Gentleman. Albany and Philadelphia: 1898 to date.

Coxe, Cult. Fr. Trees

A View of the Cultivation of Fruit Trees, and the Management of Orchards and Cider; with accurate descriptions of the most estimable varieties of Native and Foreign Apples, Pears, Peaches, Plums and Cherries, cultivated in the middle states of America. By William Coxe. (*Illustrated.*) Philadelphia: 1817. Copyright, 1817.

Cultivator

The Cultivator. Albany: 1834-1865. In 1866 united with The Country Gentleman.

Cult. & Count. Gent.

The Cultivator & Country Gentleman. See Country Gent.

De Candolle, Or. Cult. Plants

Origin of Cultivated Plants. By Alphonse de Candolle. Geneva [Switzerland]: 1882. New York: 1885.

Decaisne & Naudin, Man. Amat. Jard

Manuel de L'Amateur Des Jardins Traité Général D'Horticulture. Par Jh. Decaisne et CH. Naudin. (*Illustré.*) Quatre Tomes. Paris. Vol. 4. Pears.

Deut. Obstsorten

Deutschland's Obstsorten bearbeitet von Müller-Diemitz, Grau-Körbelitz, Bissmann-Gotha unter Mitwirkung hervorragender Fachmänner. Sechs Bände; Hefte 1-18. Stuttgart: 1905-10.

Dochnahl, Führ. Obstkunde

Der sichere Führer in der Obstkunde auf botanisch-pomologischen Wege oder Systematische Breschreibung aller Obstsorten. Von F. J. Dochnahl. Vier Bände. Nürnberg: 1855-60. Vol. 2, 1856. Pears.

Downing, Fr. Trees Am.

The Fruits and Fruit Trees of America: or the culture, propagation, and management, in the garden and orchard, of fruit trees generally; with Descriptions Of All The Finest Varieties Of Fruit, Native and Foreign, Cultivated In This Country. By A. J. Downing. (*Illustrated.*) New York & London: 1845. Copyright, 1845. Second edition, same text, with colored plates, 1847. First revision, by Charles Downing. New York: 1857. Copyright, 1857. Second revision by Charles Downing.

New York: 1869. First appendix, 1872. Second appendix, 1876. Third appendix, 1881.

Downing, Selected Fr.

Selected Fruits: from Downing's Fruits And Fruit-Trees of America. With Some New Varieties: including Their Culture, Propagation, and Management in the Garden and Orchard. By Charles Downing. (*Illustrated.*) New York: 1872. Copyright, 1871.

Duhamel, Trait. Arb. Fr.

Traité Des Arbes Fruitiers; Contenant Leur Figure, Leur Description, Leur Culture, &c. Par M. Duhamel Du Monceau. (*Illustré.*) Tomes I et II. Paris: 1768. Édition publié en 1872, en trois tomes. Nouvelle Édition en six tomes, 1807-1835.

Elliott, Fr. Book

Elliott's Fruit Book; or, the American Fruit-Grower's Guide in Orchard and Garden. By F. R. Elliott. (*Illustrated.*) New York: 1858. Copyright, 1854. Revised edition, 1859.

Field, Pear Cult.

Pear Culture. A Manual for the Propagation, Planting, Cultivation, and Management of The Pear Tree. By Thos. W. Field. (*Illustrated.*) New York: 1859. Copyright, 1858.

Flor. & Pom.

The Florist And Pomologist: A Pictorial Monthly Magazine of Flowers, Fruits, and General Horticulture. Conducted at first by Robert Hogg and John Spencer, later by Thomas Moore and William Paul. (*Illustrated.*) London: 1862-1884.

Forsyth, Treat. Fr. Trees.

A Treatise on the Culture and Management of Fruit Trees. By William Forsyth. London: 1802. Same with an Introduction and Notes, by William Corbett. Albany: 1803. Seventh edition [English] London: 1824.

Gard. Chron.

The Gardener's Chronicle. (*Illustrated.*) London: 1841 to date.

Gard. & For.

Garden And Forest. A Journal of Horticulture, Landscape Art and Forestry. Conducted by Charles S. Sargent. (*Illustrated.*) Volumes I-X. New York: 1888-1897. Copyrights, 1888-1897.

Gard. Mon.

The Gardener's Monthly and Horticultural Advertiser. Edited by Thomas Meehan. (*Illustrated.*) Philadelphia: 1859-1887.

Garden

The Garden. (*Illustrated.*) London: 1872 to date.

Gaucher, Pom. Prak. Obst.

Pomologie des Praktischen Obstbaumzüchters. Von N. Gaucher. (*Illustrirt.*) Stuttgart: 1894.

Gen. Farmer

The Genesee Farmer. Edited by Luther Tucker, Rochester: 1831-1839. Then consolidated with the Cultivator. Another periodical of the same name was published in Rochester from 1845 to 1865. Also New Genesee Farmer and Monthly Genesee Farmer.

Gerarde, Herball

The Herball or Generall Historie of Plantes. By John Gerarde. Enlarged and amended by Thomas Johnson. London: 1633. Reprinted without alteration, 1636.

Guide Prat.

Guide Pratique de L'Amateur De Fruits. Description Et Culture Des Variétés De Fruits classées par séries de mérite Composant Les Collections Pomologiques De L'Etablissement Horticole des Frères Simon-Louis. A Plantières-Les-Metz (Lorraine Annexée) Suivi D'Une Table Générale Alphabétique de Tous Les Synonymes Connus, Français et Étrangers, appartenent à chaque variété. Par O. Thomas. Nancy: 1876. Deuxième Édition. Paris et Nancy: 1895.

Hoffy, N. Am. Pom.

Hoffy's North American Pomologist, containing numerous Finely Colored Drawings, accompanied by letter press descriptions, &c., of Fruits of American Origin. Edited by William D. Brincklé. Book No. 1. Philadelphia: 1860. Copyright, 1860.

Hoffy, Orch. Com.

The Orchardist's Companion. Alfred Hoffy, Editor and Publisher. A quarterly journal. Vol. I, 1841-2; Vol. II, 1842-3. Philadelphia.

Hogg, Fruit Man.

The Fruit Manual: A Guide to the Fruits and Fruit Trees of Great Britain. By Robert Hogg. First edition, London: 1860. Second edition, 1861. Third edition, 1866. Fourth edition, 1873. Fifth edition, 1884.

Hort. Reg. (Am.)

Horticultural Register and Gardener's Magazine. Edited by T. G. Fessenden and J. E. Teschemacher. Volume I. Boston: 1835.

Hort. Reg. (Eng.)

The Horticultural Register and General Magazine. By Joseph Paxton and Joseph Harrison. Vol. I. London: 1833.

Horticulturist

The Horticulturist and Journal of Rural Art and Rural Taste. Founded

and first edited by A. J. Downing. (*Illustrated.*) Volumes 1 to 30. Albany, Philadelphia and New York: 1846-1875.

Hovey, Fr. Am.

The Fruits of America, containing Richly Colored Figures, and full Descriptions of all the choicest Varieties cultivated in the United States. By C. M. Hovey. Volume I. Boston and New York: 1852. Volume II. Boston: 1856. Copyright, 1851.

Jour. Hort.

The Journal of Horticulture: Began as The Cottage Gardener; or Amateur's and Cottager's Guide to out-door gardening and spade cultivation. 25 Volumes. London: 1849-1861. Continued as The Journal of Horticulture, Cottage Gardener, and Country Gentleman. A Journal of Horticulture, Rural and Domestic Economy, Botany and Natural History. New Series. 38 Volumes. London: 1861-1880. Continued as The Journal of Horticulture, Cottage Gardener, and Home Farmer. A Chronicle of Country Pursuits and Country Life, including Poultry, Pigeon, and Bee-keeping. Third Series. 59 Volumes. London: 1880-1909.

Jour. Roy. Hort. Soc.

The Journal of the Royal Horticultural Society. London: 1846 to date.

Vols. 1-9, 1846-55, bear the title of The Journal of the Horticultural Society of London.

Kenrick, Am. Orch.

The New American Orchardist. By William Kenrick. Boston: 1833. Copyright, 1832. Second edition. Boston: 1835. Copyright, 1835. Seventh edition, enlarged and improved, with a supplement. Boston: 1845. Copyright, 1841.

Knoop, Fructologie

Part I. Pomologie, ou Description des meilleures sortes de Pommes et de Poires. Part II. Fructologie, ou Description des Arbres Fruitiers. Par Jean Herman Knoop. (*Illustré.*) Amsterdam: 1771.

Koch, Deut. Obst.

Die Deutschen Obstgehölze. Vorlesungen gehalten zu Berlin im Winterhalbjahr 1875-76. Von Karl Koch. Stuttgart: 1876.

Kraft, Pom. Aust.

Pomona austriaca, Abhandlung von den obstbäumen worinn ihre gestalt, erziehung und pflege angezeigt und beschrieben wird. Von Johann Kraft. Zwei Theile. Vienna: 1792.

Langley, Pomona

Pomona, or the Fruit Garden Illustrated. By Batty Langley. London: 1729.

Lauche, Deut. Pom.

Deutsche Pomologie. Chromolithographische Abbildung, Beschreibung und Kulturanweisung der empfehlenswerthesten Sorten Aepfel, Birnen, Kirschen, Pflaumen, Aprikosen, Pfirsche und Weintrauben. Nach den Ermittelungen des Deutschen Pomologen-Vereins herausgegeben von W. Lauche. (*Illustrirt.*) Bände I-VII. Berlin: 1882-3. Vol. II. Pears.

Le Bon Jard.

Le Bon Jardinier. 126e Édition Almanach Horticole, 1882 et 129e Édition, 1884. Paris.

Leroy, Dict. Pom.

Dictionnaire de Pomologie. Par André Leroy. (*Illustré.*) Six Tomes. Paris: 1867-1879. Vols. 1 & 2. Pears.

Liegel, Syst. Anleit.

Systematische Anleitung zur Kenntniss der vorzüglichsten Sorten des Kern-, Stein-, Schalen- und Beerenobster. Von Georg Liegel. Passau: 1825.

Lindley, Guide Orch. Gard.

A Guide to the Orchard And Kitchen Garden; or, an account of the most valuable fruit and vegetables cultivated In Great Britain: with Kalendars of the Work Required in the Orchard and Kitchen Garden during every month in the year. By George

Lindley. Edited by John Lindley. London: 1831.

Lindley, Pom. Brit.

Pomologia Britannica; or, Figures and Descriptions of the most important Varieties of Fruit cultivated in Great Britain. By John Lindley. Three Volumes. London: 1841. Vol. 2. Pears.

Lond. Hort. Soc. Cat.

A Catalogue of the Fruits Cultivated in the Garden of the Horticultural Society of London. London: 1826. Second edition, 1831. Third edition, 1842. A supplement was published in 1853.

Loudon, Enc. Gard.

An Encyclopedia Of Gardening. By J. C. Loudon. (*Illustrated.*) New edition. London: 1834.

Lucas, Handb. Obst.

Vollständiges Handbuch der Obstkultur. Von Ed. Lucas. (*Illustrirt.*) Stuttgart: First edition, 1880; second edition, 1886; third edition, 1893. Third edition edited by Fr. Lucas, 1894.

McIntosh, Bk. Gard.

The Book of the Garden. By Charles McIntosh. (*Illustrated.*) Two Volumes. London: 1853-5.

McMahon, Am. Gard. Cal.

The American Gardener's Calendar. By Bernard McMahon. Philadelphia:

1806.

Mag. Hort.

The Magazine of Horticulture. Boston: 1837-1868. First published as The American Gardener's Magazine, 1835-6. Edited by C. M. Hovey with P. B. Hovey, Jr., associate editor during 1835-6.

Manning, Book of Fruits

Book of Fruits. By Robert Manning. (*Illustrated.*) Salem: 1838. Copyright, 1838.

Mas, Le Verger

Le Verger ou Histoire, Culture Et Description avec planches coloriées Des Variétés De Fruits Les Plus Généralement Connues. Par M. Mas. Huit Tomes. Paris: 1866-73. Vols. 1-3. Pears.

Mas, Pom. Gen.

Pomologie Générale. Par M. Mas. (*Illustré.*) Douze Tomes. Paris: 1872-83. Vols. 1 & 3-7. Pears.

Mathieu, Nom. Pom.

Nomenclator Pomologicus. Von Carl Mathieu. Berlin: 1889.

Mawe-Abercrombie, Com. Gard.

The Complete Gardener. By Thomas Mawe and John Abercrombie. London: 1829.

Miller, Gard. Dict.

The Gardener's Dictionary. By Philip Miller. Sixth edition. London:

1752. Revised edition. By Thomas Martyn. London: 1807.

Nat. Nur.

The National Nurseryman. Published by The National Nurseryman Publishing Co. (*Illustrated.*) Rochester: 1893 to date.

Noisette, Man. Comp. Jard.

Manuel Complet du Jardinier; Maraicher, Pépiniériste, Botaniste, Fleuriste et Paysagiste. Par M. Louis Noisette. Quatre Tomes. Paris: 1860. Vol. 2. Pears.

Oberdieck, Obst-Sort.

Deutschlands beste Obst-Sorten. Von F. G. C. Oberdieck. Leipzig: 1881.

Parkinson, Par. Ter.

Paradisi in Sole. Paradisus Terrestris. By John Parkinson. (*Illustrated.*) London: 1629.

Phillips, Com. Orch.

The Companion for the Orchard. An Historical And Botanical Account of Fruits Known In Great Britain. By Henry Phillips. New Edition. London: 1831.

Pom. France

Pomologie De La France ou Histoire Et Description de tous Les Fruits Cultivés En France Et Admis Par Le Congrès Pomologique. (*Illustré.*) Tomes I-VIII. Lyon: 1863-1873. Vols. 1-4. Pears.

Pom. Mag.

The Pomological Magazine; or, Figures And Descriptions of the Most Important Varieties Of Fruit cultivated in Great Britain. Three Volumes. London: 1828-30. This work has also been published under the title Pomona Brittanica.

Popular Gard.

Popular Gardening. An Illustrated periodical devoted to Horticulture in all its branches. Volume I. Buffalo: 1886. Continued as Popular Gardening and Fruit Growing. Volumes II-IV. Buffalo: 1887-1891. Consolidated with The American Garden and continued as American Gardening. New York: 1892-1904.

Prince, Cat. Fr. Trees

Catalogue of Fruit And Ornamental Trees & Plants, Bulbous Flower Roots, Green-House Plants, &c. &c. Cultivated at the Linnæan Botanic Garden, William Prince, Prop. Twenty-second edition. New York: 1823.

Prince, Pom. Man.

The Pomological Manual: or, A Treatise on Fruits. By William Robert Prince, aided by William Prince. Second Edition. Part I. New York: 1832. Copyright, 1831. Part II. New York: 1832. Copyright, 1832.

Prince, Treat. Hort.

A Short Treatise on Horticulture. By William Prince. New York: 1828. Copyright, 1828.

Prince, Treat. Trees & Plants

A Treatise on Fruit and Ornamental Trees And Plants, cultivated at the Linnæan Botanic Garden, Flushing, Long Island, near New-York. By William Prince. New York: 1820.

Ragan, Nom. Pear. B. P. I. Bul.

Nomenclature of the Pear; A Catalogue-Index of the Known Varieties Referred to in American Publications from 1804 to 1907. Complied by W. H. Ragan. Issued as U. S. Dept. Agr. Bur. Pl. Ind. Bul. 126: 1908.

Rea, Flora

Flora: Seu, De Florum Cultura; or A Complete Florilege. By John Rea. 3 Books. London: 1676. Book 3. Pears.

Rev. Hort.

Revue Horticole. Journal D'Horticulture Pratique (*Illustré.*) Paris: 1829 to date.

Rural N. Y.

The Rural New-Yorker. A Journal for the Suburban and Country Home. (*Illustrated.*) Rochester and New York: 1850 to date.

Soc. Nat. Hort. France Pom.

Société Nationale D'Horticulture De France. Section Pomologique. Les Meilleurs Fruits au début du XXe siècle. (*Illustré.*) Paris: 1904.

Thacher, Am. Orch.

The American Orchardist. By James Thacher. Boston: 1822. Copyright, 1822.

Thomas, Am. Fruit Cult.

The American Fruit Culturist. By John J. Thomas. (*Illustrated.*) First Edition. Geneva and Auburn, N. Y.: 1846. Copyright, 1846. Revised Edition. Auburn, N. Y.: 1851. Copyright, 1849. Revised Edition. New York: 1869. Copyright, 1867. Revised Edition. New York: 1885. Copyright, 1875-1885. Twentieth Edition, Revised and Enlarged. New York: 1897. Copyright, 1897; Twenty-first Edition, Revised and Enlarged. New York: 1911. Copyright, 1903.

Thompson, Gard. Ass't.

The Gardener's Assistant; Practical and Scientific. By Robert Thompson. (*Illustrated.*) Two Volumes. London: 1859. Same, revised by William Watson. Six Volumes. London: 1901.

Tilton, Jour. Hort.

Tilton's Journal of Horticulture and Floral Magazine. See Am. Jour. Hort.

Trans. Lond. Hort. Soc.

Transactions of the Horticultural Society of London. Volume I. London: 1815. Volume II. London: 1817. Volume III. London: 1820. Volume IV. London: 1822. Volume V. London: 1824. Volume VI. London: 1826.

U. S. D. A. Rpt.

Reports of the United States Department of Agriculture: 1862-1894.

U. S. D. A. Yearbook

Yearbook of the United States Department of Agriculture: 1894 to date.

U. S. Pat. Off. Rpt.

Reports of the Agricultural section of the United States Patent Office: 1837 to 1861.

Wickson, Cal. Fruits

The California Fruits and How To Grow Them. By Edward J. Wickson. (*Illustrated.*) Second Edition. San Francisco: 1891. Copyright, 1889. Fourth Edition. Los Angeles: 1909. Copyright, 1908. Seventh Edition. San Francisco: 1914. Copyright, 1914.

Willich, Dom. Enc.

Domestic Encyclopedia or a Dictionary of Facts. By A. F. M. Willich. First American edition with additions by James Mease. In five volumes. Volume 4. Philadelphia: 1803.

Wilson, Nat. W. China

A Naturalist In Western China with Vasculum, Camera, and Gun. Being some account of Eleven Years' Travel, Exploration, and Observation in the More Remote Parts of the Flowery Kingdom. By Ernest Henry Wilson. Two Volumes. New York: 1913.

INDEX

Á Gobert (syn. of Angobert), 248

A. J. Cook, 236

Aarer Pfundbirne, 236

Abbé Fétel, 236

Abbé Pérez, 236

Abbott, 236

Abbott, Mrs. T., orig. of Abbott, 236

Abdon Birne, 236

Abele de St. Denis, 236

Abercromby, 236

Achalzig, 237

Achan, 237

Acidaline, 237

Acme, 237

Adams, 237

Adams, Dr. H., orig. of Adams, 237

Adanson Apothekerbirne(syn. of Aglaë Adanson), 239

Adélaïde de Rèves, 237

Adèle (syn. of Adèle de Saint-Denis), 237

Adèle Lancelot, 237

Adèle de Saint-Denis, 237

Admirable, 238

Admiral Cécile (syn. of Amiral Cécile), 245

Admiral Farragut, 238

Admiral Foote, 238

Adolphe Cachet, 238

Adolphe Fouquet, 238

Adolphine Richard, 238

Aehrenthal, 238

Agathe de Lescours (syn. of Agathe de Lescourt), 238

Agathe de Lescourt, 238

Aglaë Adanson, 239

Aglaë Grégoire, 239

Agnès 239

Agricola, 239

Agua de Valence, 250

Ah-Mon-Dieu, 239

Aigue, 239

Aiken, 239

Aime Ogereau, 240

Aimée Adam, 240

Akatsupo, 240

Alamo, 240

Albertine, 240

Alcinöus, pear in garden of, 4

Alexander, 240

Alexander Lucas, 240

Alexandre Bivort, 240

Alexandre Chomer, 241

Alexandre de la Herche, 241

Alexandre Lambré, 241

Alexandre de Russie, 241

Alexandrina, 241

Alexandrine Douillard, 241

Alexandrine Hélie (syn. of Belle Julie), 265

Alexandrine Mas, 241

Alexiens Bros., orig. of Pius X, 500

Alfred de Madre, 242

Alice Payne, 242

Allerton, 242

Alliance franco-russe, 242

Alouette, 242

Alpha, 242

Alphonse Allegatière, 242

Alphonse Karr, 242

Amadotte, 243

Amande Double, 243

Amandine, 243

Ambrette, 243

Ambrette d'Été, 243

Ambrette d'Hiver (syn. of Ambrette), 243

Ambrosia, 244

Amédée Leclerc, 244

Amelanchier, relationship of, to pear, 57

Amélie Leclerc, 244

America, 244

America, arrival of pear in, 40;
climate of, uncongenial to pears, 38;
importation of European pear varieties into, 52;
pear in, 37

American pear culture, influence of Oriental pears on, 55

American pear districts, 38

Amie Verdier, 244

Amiral, 244

Amiral Cécile, 245

Amiré Joannet, 245

Amlisberger Mostbirne, 245

Amoselle panachée (syn. of Bergamote de Hollande Panachée), 269

Amour, 245

Amstettner Mostbirne, 245

Ananas, 245

Ananas de Courtrai, 245

Ananas de Courtray (syn. of Ananas de Courtrai), 245

Ananas d'Été, 246

Andenken an den Congress (syn. of Souvenir du Congrès), 218

Andouille, 246

André Desportes, 122

Andrew Murray, 246

Andrews, 246

Ange, 246

Angel, 246

Angeline, 246

Angélique de Bordeaux, 247

Angélique Cuvier, 247

Angélique Leclerc, 247

Angélique de Rome, 247

Angers, Horticultural Society of, orig. of Cassante du Comice, 329;
Colmar d'Automne Nouveau, 342;

Dhommée, 359;
Gros Lucas, 404;
Sucrée du Comice, 555

Angleterre (syn. of Beurré d'Angleterre), 284

Angleterre d'Hiver, 247

Angleterre Nain, 247

Angobert, 248

Angoisse, 248

Angora, 248

Angoucha, 248

Angouleme (syn. of Duchesse d'Angoulême), 154

Anjou (syn. of Beurre d'Anjou), 127

Anna Audisson (syn. Anna Audusson), 249

Anna Audusson, 249

Anna Nelis, 249

Anne de Bretagne, 249

Anne of Brittany (syn. of Anne de Bretagne), 249

Ansault, 123

Anthoine, Dieudonné, orig. of Dieudonné Anthoine, 359

Anthony Thacher, 249

Antoine, 249

Antoine Delfosse, 249

Antoinette, 249

Anversoise, 250

Apfelblättrige Azerolbirne, 250

Apothekerbirne, 250

Apple, 250

Apple Pear, 250

Apples, relationship to pears, 58

Appoline, 250

Aqueuse d’Esclavonie, 250

Aqueuse de Meiningen, 251

Arabella, 251

Arbre Courbé, 251

Arcedeckene, Andrew, orig. of Suffolk Thorn, 556

Archduke of Austria, 251

Archiduc Charles, 251

Archiduc d’Été, 251

Archiduc Jean d’Autriche, 251

Archiduchesse d’Autriche, 251

Arendt Dechantsbirne, 252

Argent, 252

Argusbirne, 252

Arkansas, 252

Arkansas Mammoth (syn. of Arkansas), 252

Arlequin Musqué, 252

Arlingham Squash, 252

Armand Prévost, 253

Arménie, 253

Arnold, 253

Arnold & Frazier, orig. of Arnold, 253

Arthur Bivort, 253

Arthur Chevreau, 253

Arundell, 253

Aspasie Aucourt, 253

Aspidiotus perniciosus on pear, 117

Aston Town, 254

Audibert, 254

Audusson, Alexis, orig. of Lucie Audusson, 453

Audusson, Anne-Pierre, orig. of Beurré Audusson, 284

Augier, 254

Augustbirne, 254

Auguste de Boulogne, 254

Auguste Droche, 254

Auguste Jurie, 254

Auguste von Krause, 254

Auguste Miguard, 255

Auguste Royer, 255

Augustine, 255

Augustine Lelieur, 255

Augustus Dana, 255

Aurate, 255

Auray, 255

Autocrat, 256

Autumn Bergamot, parent of Gansel Bergamot, 391

Autumn Bergamot (English), 256

Autumn Colmar, 256

Autumn Joséphine, 256

Autumn Nelis, 256

Avocat Allard, 257

Avocat Nélis, 257

Avocat Tonnelier, 257

Ayer, 257

Ayer, O. H., orig. of Ayer, 257; Douglas, 150

Aylton Red, 257

Azerole, 257

B. S. Fox (syn. of Fox), 168

Bachelier, Louis-François, orig. of Beurré Bachelier, 285

Bacillus amylovorous, cause of pear blight, 112

Backhouse, James, orig. of Beurré Backhouse, 285

Bacterium tumefaciens, cause of crown-gall on pears, 116

Baguet, 257

Bailly, orig. of Beurré Bailly, 285

Bakholda, 258

Baking, 258

Baldschmiedler, 258

Balduinsteiner Kinderbirne, 258

Ballet, orig. of Madame Ballet, 456

Balosse, 258

Balsambirne, 258

Baltet, Charles, introd. of Roosevelt, 213;
orig. of Virginie Baltet, 573

Baltet, Ernest, orig. of Beurré d'Avril, 285;
Comte Lelieur, 346;
Madame Lyé-Baltet, 458

Baltet Bros., orig. of Beurré Baltet Père, 286;
Charles Ernest, 334;
Docteur Joubert, 361;
Guyot, 174;
Ministre Viger, 473;
Professeur Opoix, 514

Baltet Senior (syn. of Beurré Baltet Père), 286

Bankerbine, 258

Bankhead, Capt., orig. of Jewel, 430

Banks, 258

Baptiste Valette, 258

Bar Seckel (syn. of Barseck) 260

Barbancinet, 258

Barbe Nélis, 259

Barker, 259

Barland, 259

Barnadiston, 259

Baron Deman de Lennick, 259

Baron d'hiver (syn. of Baronsbirne), 260

Baron Leroy, 259

Baron Trauttenberg, 259

Baron Treyve, 259

Baronne de Mello, 260

Baronsbirne, 260

Barry, 260

Barry, Patrick, biography of, 203

Barry, William Crawford, biography of, 204

Barseck, 260

Barthélemy du Mortier, 260

Barthère, discov. of Duchesse d'Hiver, 372

Bartlett, 124

Bartlett, Enoch, dissem. of Bartlett, 125

Bartlett, parent of Barseck, 260;
Big Productive, 309;
Dempsey, 357;
Eva Baltet, 379;
Favorite Morel, 381;
Félix Sahut, 381;
Le Lecher, 444;
Lucy Duke, 194;
Lyerle, 454;
Professeur Barral, 514;
S. T. Wright, 533;
Ulatis, 567;
Winter Williams, 584

Bartlett and Kieffer leading commercial pears, 84

Bartram, 260

Bartram, Ann, orig. of Bartram, 260

Bartram, John, orig. of Petre, 497

Bartranne, 260

Baseler Sommer-Muskatellerbirne, 261

Basiner, 261

Bassin (syn. of Jargonelle (French)), 178

Baudry, 261

Baumann Brothers, orig. of Beurré Bollwiller, 288

Beacon, 261

Beadnell, 261

Beadnell, John, orig. of Beadnell, 261

Beau de la Cour, 261

Beau Présent d'Artois, 261

Beauchamp, orig. of Beurré de l'Assomption, 284;
Beurré Beauchamp, 286;
Souvenir de Gaëte, 550

Beaufort, 262

Beauvalot, 262

Beernaert, Reynaert, discov. of Fondante de Cuerne, 384

Beier Meissner Eierbirne, 262

Belgische Blutbirne (syn. of Sanguinole de Belgique), 540

Belgische Pomeranzenbirne (syn. of Fondante des Prés), 385

Belgische Zapfenbirne (syn. of Long Green), 449

Belgium, pear in, 16

Belle Angevine, 262; parent of Bon-Chrétien Vermont, 315

Belle Angevine (syn. of Pound), 208

Belle après Noël (syn. of Fondante de Noël), 164

Belle des Arbrés, 262

Belle Audibert (syn. of Audibert), 254

Belle de Beaufort, 262

Belle Bessa, 262

Belle de Bolbec, 263

Belle et Bonne de Hée, 263

Belle et Bonne de la Pierre, 263

Belle de Brissac, 263

Belle de Bruxelles sans Pepins, 263

Belle de Craonnais, 263

Belle de la Croix Morel, 263

Belle de Décembre, 264

Belle Epine Dumas (syn. of Épine du Mas), 377

Belle de Esquermes (syn. of Fontenay), 165

Belle de Féron, 264

Belle du Figuier, 264

Belle de Flanders (syn. of Flemish Beauty), 163

Belle-Fleurusienne, 264

Belle de Flushing (syn. of Harvard), 412

Belle Fondante, 264

Belle de Forêts, 264

Belle de Guasco, 264

Belle Guérandaise, 264

Belle Hugevine, 265

Belle Isle d’Angers, 265

Belle d’Ixelles, 265

Belle de Jarnac (syn. of Nouvelle Fulvie), 483

Belle de Juillet, 265

Belle Julie, 265

Belle de Kain, 265

Belle de Lorient, 265

Belle Lucrative, 125;
parent of P. Barry, 203;
President Clark, 509

Belle de Malines, 265

Belle de Martigny, 265

Belle-Moulinoise, 265

Belle de Noël (syn. of Fondante de Noël), 164

Belle de Noisette, 266

Belle de l'Orient (syn. of Belle de Lorient), 265

Belle Picarde, 266

Belle Rouennaise, 266

Belle de Septembre (syn. of Grosse September Birne), 406

Belle de Stresa, 266

Belle Sucrée, 266

Belle de Thouars, 266

Belle Williams, 267

Belle de Zoar (syn. of Zoar Beauty), 588

Bellissime d'Automne, 267

Bellissime d'Été (syn. of Jargonelle (French)), 178

Bellissime d'Hiver, 267

Belmont, 267

Beman, 267

Benadine, 267

Benoist, Auguste, orig. of Duchesse de Brissac, 372;
Marie Benoist, 463;
prop, of Beurré Benoist, 287

Benoist, Jean-Henri, orig. of Belle de Brissac, 263

Benoist Nouveau, 267

Benoit Caroli, 268

Bensell, 268

Bensell, orig. of Bensell, 268

Benvie, 268

Béquesne, 268

Berckmans, Louis, orig. of varieties, 240, 308, 373, 389, 540, 549, 563

Bergamot de Chantilly, 268

Bergamot Louvain, 268

Bergamot Seckel, 268

Bergamot Winter, 268

Bergamote Arsène Sannier, 268

Bergamote d'Automne Panachée, 269

Bergamote Balicq, 269

Bergamote Boussière, 269

Bergamote du Bugey (syn. of Bergamotte Bugi), 270

Bergamote Espéren, parent of Directeur Varenne, 360

Bergamote Gansel (syn. of Gansel Bergamot), 391

Bergamote Hamdens, 269

Bergamote d'Hildesheim (syn. of Hildesheimer Bergamotte), 418

Bergamote de Hollande Panachée, 269

Bergamote Lucrative (syn. of Belle Lucrative), 126

Bergamote de Pâques (syn. of Easter Bergamot), 374

Bergamote de la Pentecôte (syn. of Easter Beurré), 159

Bergamote Philippot, 269

Bergamote Rose, 269

Bergamotte d'Anvers, 269

Bergamotte d'Automne, 270

Bergamotte Ballicq (syn. of Bergamote Balicq), 269

Bergamotte Bouvant, 270

Bergamotte Bufo, 270

Bergamotte Bugi, 270

Bergamotte de Coloma, 270

Bergamotte de la Cour, 271

Bergamotte Crassane (syn. of Crassane), 350

Bergamotte Crassane d'Hiver (syn. of Beurré Bruneau), 289

Bergamotte de Darmstadt, 271

Bergamotte de Donauer, 271

Bergamotte Double, 271

Bergamotte Dussart, 271

Bergamotte Éliza Mathews (syn, of Groom Prince

Royal), 403

Bergamotte Espéren, 271;
parent of Beurré Henri Courcelle, 297;
Bergamotte la Gantoise, 272;
Président Barabé, 508

Bergamotte d’Espéren, parent of Frau Louise Goethe, 389

Bergamotte d’Espéren (syn. of Bergamotte Espéren), 271

Bergamotte Espéren Souvenir de Plantières, 271

Bergamotte d’Été, 271

Bergamotte d’été de Kraft (syn. of Kraft Sommer Bergamotte), 438

Bergamotte d’été de Lubeck, 272

Bergamotte Fertile, 272

Bergamotte Fortunée, parent of Le Lecher, 444

Bergamotte Fortunée (syn. of Fortunée), 387

Bergamotte la Gantoise, 272

Bergamotte Heimbourg, 272

Bergamotte Hérault, 272

Bergamotte Hertrich, 272

Bergamotte-d’Hiver de Furstenzell, 273

Bergamotte d’Hollande, 273

Bergamotte Jars, 273

Bergamotte de Jodoigne, 273

Bergamotte Klinkhardt, 273

Bergamotte Laffay, 273

Bergamotte Lesèble, 273

Bergamotte Liabaud, 274

Bergamotte Mico, 274

Bergamotte de Millepieds, 274

Bergamotte Nicolle, 274

Bergamotte Œuf de Cygne, 274

Bergamotte d’Oisan, 274

Bergamotte de Parthenay, 274

Bergamotte Picquot, 275

Bergamotte Ploskui, 275

Bergamotte Poiteau, 275

Bergamotte Pomme, 275

Bergamotte du Quercy, 275

Bergamotte Reinette, 275

Bergamotte de Roe (syn. of Roe Bergamot), 522

Bergamotte de Rouen, 276

Bergamotte Rouge, 275

Bergamotte Rouge de Mayer, 276

Bergamotte Sageret, 276

Bergamotte Sanguine, 276

Bergamotte Sannier, 276

Bergamotte Sapieganka (syn. of Sapieganka), 541

Bergamotte Silvange, 276

Bergamotte de Souchait, 276

Bergamotte de Soulers, 277

Bergamotte de Stryker, 277

Bergamotte Suisse (syn. of Bergamote d'Automne Panachée), 269

Bergamotte Suisse Rond, 277

Bergamotte Tardive Collette, 277

Bergamotte Tardive de Gansel (syn. of Gansel Late

Bergamot), 391

Bergamotte Thuerlinckx, 277

Bergamotte de Tournai, 277

Bergamotte de Tournay, 278

Bergamotte von Vezouzière (syn. of Vezouzière), 571

Bergamotte Volltragende, 278

Bergamotte Welbeck (syn. of Welbeck Bergamot), 577

Bergbirne, 278

Bergen, 278

Bergen, Cornelius, orig. of Island, 425

Berlaimont, 278

Bernard, 278

Berriays, 278

Bertrand Guinoisseau, 278

Berzelius, 279

Besi de Caen, 279

Besi de Caffoy, 279

Besi-Carème, 279

Besi de Chaumontel (syn. of Chaumontel), 335

Besi Dubost, 279

Besi de l'Echasserie (syn. of Echasserie), 374

Besi Espéren, 279

Besi Garnier (syn. of Garnier), 392

Besi Goubault, 279

Besi de Grieser de Böhmerkirsch, 279

Besi d'Héry, 280

Besi Incomparable (syn. of Besi Sans Pareil), 281

Besi Liboutton, 280

Besi de Mai, 280

Besi de Moncondroiceu, 280

Besi de Montigny, 280

Besi de la Motte, 280

Besi de Naghin, 281

Besi de la Pierre, 281

Besi de Quessoy, 281

Besi de Saint-Waast, 281

Besi Sans Pareil, 281

Besi Sanspareil (syn. of Besi Sans Pareil), 281

Besi Tardif, 281

Besi de Van Mons, 282

Besi des Vétérans, 282

Besi de Vindré, 282

Besi de Wutzum, 282

Bessard-Duparc, orig. of Madame Duparc, 457

Bessemianka, 282

Best Favorite, 282

Bettina, 282

Betzelsbirne, 283

Betzy, 283

Beurré Ad. Papeleu, 283

Beurré Adam, 283

Beurré d'Adenaw, 283

Beurré Alexandre Lucas, 283

Beurré Alexandre Lucas (syn. of Alexander Lucas), 240

Beurré Allard, 283

Beurré Amandé, 283

Beurré d’Amanlis, 283

Beurré Ananas, 284

Beurré d’Angleterre, 284

Beurré d’Anjou, 127;
parent of Huggard, 421;
place in commercial pear culture, 84

Beurré Antoine, 284

Beurré Antoinette, 284

Beurré d’Apremont (syn. of Beurré Bosc), 130

Beurré Aqualine, 284

Beurré d’Arenberg, 129;
confusion of, with Glou Morceau, 129

Beurré d’Arenberg (syn. of Glou Morceau), 172

Beurré de l’Assomption, 284;
parent of Souvenir de Gaëte, 550

Beurré Audusson, 284

Beurré des Augustins, 285

Beurré Aunénière, 285

Beurré d’Automne de Donauer, 285

Beurré d’Avoine, 285

Beurré d’Avril, 285

Beurré Bachelier, 285;
parent of S. T. Wright, 533

Beurré Backhouse, 285

Beurré Bailly, 285

Beurré Baltet Père, 286

Beurré Baud, 286

Beurré Beauchamp, 286

Beurré Beaulieu, 286

Beurré Beaumont (syn. of Beurré de Mortefontaine), 301

Beurré Beek, 286

Beurré des Béguines, 286

Beurré Bennert, 286

Beurré Benoist, 287

Beurré Berckmans, 287

Beurré de Biseau, 287

Beurré Blanc Doré, 287

Beurré Blanc de Nantes, 287

Beurré Boisbunel, 287

Beurré Bollwiller, 288

Beurré de Bordeaux, 288

Beurré Bosc, 130;
parent of Harris, 412;
place of, in commercial pear culture, 84

Beurré Bourbon, 288

Beurré de Brême, 288

Beurré Bretonneau, 288

Beurré de Brigné, 288

Beurré Bronzé, 288

Beurré de Brou, 288

Beurré Brougham, 289

Beurré Bruneau, 289

Beurré de Bruxelles, 289

Beurré Burnicq, 289

Beurré du Bus, 289

Beurré Bymont, 289

Beurré de Caen, 289

Beurré Capiaumont, 289

Beurré Caty, 290

Beurré Caune, 290

Beurré du Cercle Pratique de Rouen, 290

Beurré du Champ Corbin, 290

Beurré Charron, 290

Beurré Chatenay, 290

Beurré Chaudy, 290

Beurré Christ, 290

Beurré Citron, 290

Beurré Clairgeau, 132;
parent of Cardinal Georges d’Ambroise, 328;
Huggard, 421;
Louis Vilmorin, 451;
Thérèse Appert, 562;
place of, in commercial pear culture, 84

Beurré Clotaire, 290

Beurré de Coit, 291

Beurré Colmar, 291

Beurré Coloma, 291

Beurré du Comte Marcolini, 291

Beurré de Conitz, 291

Beurré Copretz, 291

Beurré Curtet (syn. of Lamy), 184

Beurré Dalbret, 291

Beurré Daras, 291

Beurré Daviss, 291

Beurré Defays, 292

Beurré Degalait, 292

Beurré Delannoy, 292

Beurré Delbecq, 292

Beurré Délicat, 292

Beurré Derouineau, 292

Beurré Diel, 133;
parent of Jeanne d’Arc, 429;
Pierre Corneille, 499

Beurré Dilly, 292

Beurré Docteur Pariset, 292

Beurré Doré de Bilboa (syn. of Golden Beurré of Bilboa), 398

Beurré Doux, 292

Beurré van Driessche, 293

Beurré Driessen, 293

Beurré Dubuisson, 293

Beurré Duhaume, 293

Beurré Dumont, 293

Beurré Dumortier, 293

Beurré Dupont, 293

Beurré Duquesne, 293

Beurré Durand, 293

Beurré Duval, 294

Beurre Duvivier (syn. of Général Duvivier), 395

Beurré d'Ellezelles, 294

Beurré d'Enghien (syn. of Beurré Colmar), 291

Beurré Épine, 294

Beurré Épine (syn. of Colmar Épine), 343

Beurré d’Espéren, 294

Beurré d’Esquelmes, 294

Beurré Eugène Furst, 294

Beurré Fauve de Printemps, 294

Beurré Favre, 294

Beurré Fenzl, 294

Beurré de Février, 294

Beurré Fidéline, 295

Beurré Flon, 295

Beurré Fouqueray, 295

Beurré Gambier, 295

Beurré Gaujard, 295

Beurré van Geert, 295

Beurré Gendron, 295

Beurré de Germiny, 295

Beurré de Ghélin, 296

Beurré Giffard, 134;
parent of August Jurie, 254;
Fin Juillet, 382

Beurré Gilles, 296

Beurré Goubault, 296;
parent of Fertility, 381

Beurré Graue Herbst, 296

Beurré Grétry, 296

Beurré Gris, 296;
parent of Cabot, 323

Beurré-Gris d'Enghien, 296

Beurré Gris d'Été (syn. of Yat), 586

Beurré Gris d'Été de Hollande (syn. of Yat), 586

Beurre Gris d'Hiver Nouveau (syn. of Beurré de Luçon), 300

Beurré de Grumkon, 296

Beurré Grumkower, 296

Beurré Haffner (syn. of Haffner Butterbirne), 410

Beurré Hamecher, 297

Beurré d'Hardenpont, parent of Directeur Tisserand, 360

Beurré d'Hardenpont (syn. of Glou Morceau), 172

Beurré d'Hardenpont d'Automne, 297

Beurré Hardy, 135

Beurré Hennau, 297

Beurré Henri Courcelle, 297;
parent of Cardinal Georges d'Ambroise, 328;
Pierre Curie, 499

Beurré Hillereau, 297

Beurré d'Hiver, 297

Beurré d'hiver de Dittrich, 297

Beurré d'Hiver de Kestner, 297

Beurré de Hochheim, 297

Beurré Hudellet, 297

Beurré Jalais, 298

Beurré Jean Van Geert, 298

Beurré de Jonghe, 136

Beurré Keele Hall (syn. of Styrian), 554

Beurré Kennes, 298

Beurré Kenrick, 298

Beurré Knight, 298

Beurré Knox, 298

Beurré de Koninck, 298

Beurré Kossuth, 299

Beurré de Ladé, 299

Beurré Lagasse, 299

Beurré Lamoyeau, 299

Beurré Langelier, 299

Beurré de Lederbogen, 299

Beurré Lefèvre, 299

Beurré de Lenzen, 299

Beurré Liebart, 299

Beurré de Lindauer, 300

Beurré Loisel, 300

Beurré de Longrée, 300

Beurré de Luçon, 300;
parent of Casimir, 329

Beurré Luizet, 300

Beurré de Mans, 300

Beurré Mauxion, 300

Beurré Menand, 300

Beurré de Mérode (syn. of Doyenné Boussock), 152

Beurré Millet, 300

Beurré Moiré, 300

Beurré Mondelle, 301

Beurré de Mons, 301

Beurré de Montgeron, 301

Beurré Morisot, 301

Beurré de Mortefontaine, 301

Beurré de Mortillet, 301

Beurré Motte, 302

Beurré des Mouchouses, 302

Beurré de Naghin, 302

Beurré de Nantes, 302

Beurré de Nesselrode, 302

Beurré Obozinski, 302

Beurré Oudinot, 302

Beurré de Paimpol, 302

Beurré de Palandt, 303

Beurré Pauline, 303

Beurré Pauline Delzent, 303

Beurré Payen, 303

Beurré Perran, 303

Beurré Perrault (syn. of Duchesse de Bordeaux), 371

Beurré Philippe Delfosse, 303

Beurré Pointillé de Roux, 303

Beurré de Popuelles, 303

Beurré Preble, 303

Beurré Précoce, 304

Beurré Pringalle, 304

Beurré de Quenast, 304

Beurré de Ramegnies, 304

Beurré de Rance, 304

Beurré Reine, 304

Beurré Richelieu, 304

Beurré Robert (syn. of Doyenné du Comice), 153

Beurré Roland, 304

Beurré Romain, 304

Beurré Rome Gaujard, 305

Beurré Rose, 305

Beurré Rouge d’Automne, 305

Beurré Rouppé (syn. of Easter Beurré), 159

Beurré Royal de Turin, 305

Beurré de Saint-Amand, 305

Beurré de Saint Arnaud, 305

Beurré Saint-Aubert, 305

Beurré Saint-François, 305

Beurré Saint-Marc, 305

Beurré de Saint-Nicolas (syn. of Duchesse d’Orléans), 156

Beurré Samoyeau, 305

Beurré Scheidweiller, 306

Beurré Seutin, 306

Beurré de Silly, 306

Beurré Six, 306

Beurré Soulange, 306

Beurré Spence, 306

Beurré Stappaerts, 306

Beurré Steins, 306

Beurré Sterckmans, 306

Beurré de Stuttgardt, 307

Beurré Sucré, 307

Beurré Superfin, 137;
parent of Comte de Lambertye, 346

Beurré Thoury, 307

Beurré Thuerlinckx (syn. of Thuerlinckx), 563

Beurré Triguer, 307

Beurré de Ulm, 307

Beurré Vanille, 307

Beurré Varenne de Fenille, 307

Beurré Vauban, 307

Beurré Vert d'Été, 307

Beurré Vert Tardif, 308

Beurré Vert de Tournai (syn. of Bergamotte de Tournai), 277

Beurré Vital (syn. of Vital), 574

Beurré Wamberchies, 308

Beurré de Wetteren,

308

Beurré Winter, 308

Beurré Witzhumb, 308

Beurré Woronson, 308

Beurré Zotman, 308

Beyer Martinsbirne, 308

Beymont, 308

Bezi Blanc, 309

Bezi de Naples, 309

Bezi Vaet (syn. of Besi de Saint-Waast), 281

Bezy de Caissoy (syn. of Besi de Quessoy), 281

Bidwell, General, orig. of Kennedy, 434

Bied-Charreton, 309

Bierbaumer Mostbirne, 309

Big Productive, 309

Bijou, 309

Bill Campbell, 309

Binsce, 309

Birn von Fontenay (syn. of Fontenay), 166

Birne von Turschud, 309

Biseau d'Hauteville, A. de, orig. of Beurré de Biseau, 287

Biseau d'Hauteville, Chevalier de, orig. of Président Watier, 511

Bishop Thumb, 309

Bivort, Alexandre, orig. of varieties, 237, 241, 264, 269, 284, 287, 303, 326, 340, 355, 431, 464, 465, 475, 490, 511, 520, 523, 528, 530, 531, 544, 581; work as pear breeder, 19

Bivort Zuckerbirne, 309

Black Hawk, 310

Black Huffcap, 310

Black mold of pear, 117

Black Pear of Worcester (syn. of Black Worcester), 310

Black Sorrel, 310

Black Worcester, 310

Blackeney Red, 310

Blanchet, Claude, orig. of Claude Blanchet, 340; La France, 440

Blanquet Anastère, 310

Blanquet Long, 311

Blanquet à Longue Queue, 311

Blanquet Précoce, 311

Blanquet de Saintonge, 311

Blanquette de Toulouse, 311

Bleeker Meadow, 311

Blessed, 311

Blickling, 311

Blight, pear, control of, 113;
notes on, 111

Blight resistance of *Pyrus ovoidea*, 81;
Pyrus ussuriensis,78

Blight resistant pear varieties, 112

Block, 311

Block, A., orig. of Acme, 237;
Block, 311

Blodget, 312

Blodget, David, orig. of Blodget, 312

Bloodgood, 138

Bloodgood, James, introd. of Bloodgood, 139

Bloodgood's Sommerbirne (syn. of Bloodgood), 138

Blooming season of pear varieties, 88

Blooming time of pears, notes on, 87

Blumenbirne, 312

Blutbirne, 312

Bocksbirne, 312

Bödiker Dechantsbirne, 312

Bogenäkerin, 312

Böhmische frühe Jakobsbirne, 312

Boïeldien, 312

Boisbunel, orig. of varieties, 200, 243, 245, 266, 275, 278, 287, 290, 295, 324, 344, 347, 349, 361, 366, 370, 395, 427, 440, 451, 452, 462, 469, 470, 471, 472, 491, 493, 505, 509, 510, 512, 544, 555, 570

Boisselot, orig. of Fortunée Boisselot, 387;
Président de la Bastie, 509;
Professeur Barral, 514

Bolarmud, 312

Bollweiler, orig. of Bollweiler Butterbirne, 312

Bollweiler Butterbirne, 312

Bologna, 312

Bonamy, orig. of Paul Bonamy, 492

Bon-Chrétien d'Auch (syn. of Bon-Chrétien d'Hiver), 314

Bon-Chrétien d'Auch (Calvel), 312

Bon-Chrétien d'Automne, 313

Bon-Chrétien Bonnamour, 313

Bon-Chrétien de Bruxelles (syn. of Bon-Chrétien Fondant), 313

Bon-Chrétien d'Espagne, 313

Bon-Chrétien d'été, 313

Bon-Chrétien Fondant, 313

Bon-Chrétien Fred Baudry (syn. of Baudry), 261

Bon-Chrétien Frédéric Baudry, 313

Bon-Chrétien d'Hiver, 314

Bon-Chrétien d'Hiver Panaché, 314

Bon-Chrétien Mathieu Joseph Lamarche, 314

Bon-Chrétien de Nikita (syn. of Nikitaer Grüne Herbst-

Apothekerbirne), 482

Bon-Chrétien Prevost, 314

Bon-Chrétien de Rance (syn. of Beurré de Rance), 304

Bon-Chrétien du Rhin d'Automne, 314

Bon-Chrétien Ricchiero, 314

Bon-Chrétien Vermont, 315

Bon-Chrétien de Vernois, 315

Bon-Chrétien de Vernois (syn. of Flemish Bon-Chrétien), 382

Bon-Chrétien Williams' (syn. of Bartlett), 124

Bon Gustave, 315

Bon Parent, 315

Bon-Roi-René, 315

Bon Vicaire, 315

Bonne d'Anjou, 315

Bonne-Antonine, 315

Bonne de Beugny, 316

Bonne Carmélite, 316

Bonne de la Chapelle, 316

Bonne Charlotte, 316

Bonne-Ente (syn. of White Doyenné), 228

Bonne d'Ezée, 316

Bonne de Jalais, 316

Bonne-Jeanne, 316

Bonne Louise d'Avranches (syn. of Louise Bonne de Jersey), 193

Bonne de Malines, parent of Léger, 444

Bonne de Malines (syn. of Winter Nelis), 232

Bonne Sophia, 316

Bonne de Soulers (syn. of Bergamotte de Soulers), 277

Bonne Thérèse, 317

Bonne des Zoes, 317

Bonnefond, orig. of Madame Bonnefond, 456

Bonnefoy, orig. of Doyenné Nérard, 368;
Madame Élisa Dumas, 457

Bonners, 317

Bonneserre de Saint-Denis, 317

Bonnet, orig. of Beurré Hardy, 136;

Lesbre, 447

Bonnet Zuckerbirne, 317

Bordeaux (syn. of Duchesse de Bordeaux), 371

Bordine Musk, 317

Borers on pear, 120

Bosc, introd. of Styrian, 554

Bosc (syn. of Beurré Bosc), 130

Bosc's Butterbirne (syn. of Beurré Bosc), 130

Bosc's Flaschenbirne (syn. of Beurré Bosc), 130

Boston (syn. of Pinneo), 499

Botany, structural, of pear, 58

Bouchamp, 317

Boucqueau, Albert, orig. of Fondante Albert, 383

Boucquia, 317

Bouet, Henri, orig. of Henri Bouet, 415

Bourdon de Roi, 317

Boussock (syn. of Doyenné Boussock), 152

Boutoc, 317

Bouvert Musqué (syn. of Parfum d'Hiver), 490

Bouvier, Simon, orig. of varieties, 184, 240, 241, 315, 318, 328, 343, 355, 356, 378, 416, 426, 446, 545, 546, 565, 568;
work as pear breeder, 19

Bouvier d'Automne, 318

Bouvier Bourgmestre, 318

Bouviers Herbstbirne, 318

Bouzin, Norbert, orig. of Doyenné de Ramegnies, 369

Bowdoin, 318

Bowne Winter Russet, 318

Boyken June, 318

Braconot, 318

Brandes, 318

Brandywine, 140

Braunrote Speckbirne, 318

Braunrothe Frühlingsbirne, 319

Braunrothe Sommerrusselet, 319

Brederode, 319

Breeding pears, Van Mons' theory of, 18

Bremer Butterbirne, 319

Brewer, 319

Brewster, 319

Brialmont, 319

Brielsche Pomeranzenbirne, 319

Briffaut, 319

Briffaut, orig. of Président Payen, 510

Brincklé, Dr. W. D., orig. of Catherine Gardette, 330;
Edward Seedling St. Germain, 375;
President Felton, 509;
Wilmington, 582

Brindamour, 320

Bringewood, 320

British Queen, 320

Brockworth Park (syn. of Bonne d'Ezée), 316

Broncirte Winterbirne, 320

Bronx, 320

Bronzée Boisselot, 320

Bronzée d'Enghien, 320

Brookline, 320

Broom Park, 320

Brough Bergamot, 320

Brown, Samuel, orig. of Sam Brown, 539

Brown Beurré (syn. of Beurré Gris), 296

Brown-Blotch of pear, 116

Bruant, introd. of Figueira, 382;
orig. of Commandant Belaieff, 345

Bruce, A. L., orig. of Alamo, 240

Bruderbirne (syn. of Pound), 208

Brugmans, 321

Brumbirne, 321

Brune Minême, 321

Brunet, 321

Brüsseler Herbstbergamotte, 321

Brüssler Zuckerbirne (syn. of Sucrée Van Mons), 555

Brute Bonne, 321

Bryan, Edwards, 321

Bryant, mention of fruits in California by, 54;

orig. of Cedarmere, 331

Brymer, Col., introd. of Santa Claus, 540

Buchanan, 321

Buchanan, Isaac, orig. of Buchanan, 321

Buckman, Benjamin, orig. of Timpling, 563

Bud-moth on pear, 120

Budd, J. L., introd. of Russian pears, 56;
orig. of Gibb, 396

Buffalo, 321

Buffam (syn. of Buffum), 141

Buffum, 141

Bugiarda (syn. of Bon-Chrétien Fondant), 313;
(Épine d'Été), 377

Buneau, Jules, orig. of Marie Jallais, 464

Bunte Mannabirne, 321

Buntebirne, 321

Burbank, Luther, orig. of Test, 560

Burchardt, Judge, orig. of Malvoisie de Landsberg, 461

Burchardt Butterbirne, 322

Buree Winter, 322

Burgoyne, 322

Burkett, 322

Burlingame, 322

Burlingame, Mrs., orig. of Burlingame, 322

Burnett, 322

Burnett, Joel, orig. of Burnett, 322

Burton, R. E., orig. of Ulatis, 567

Butt Pear, 322

Butterartige Bergamotte, 322

Butterbirne von Saint-Nicolas (syn. of Duchesse d'Orléans), 156

Büttner Sachsische Ritterbirne, 322

Cabot, 323

Cabot, J. S., orig. of Cabot, 323

Cadeau, 323

Cadet de Vaux, 323

Caen de France, 323

Caesar, 323

Caillot (syn. of Naquette), 480

Caillot Rosat (English), 323

Caillot Rosat (French), 323

Calbasbirn, 324

Calebasse, 324

Calebasse Abbé Fétel (syn. of Abbé Fétel), 236

Calebasse d’Anvers, 324

Calebasse de Bavay, 324

Calebasse Boisbunel, 324

Calebasse Bosc, 324

Calebasse Delvigne, 325

Calebasse d’Été, 325

Calebasse Fondante, 325

Calebasse Grosse (syn. of Van Marum), 569

Calebasse d’Hiver, 325

Calebasse Kickx, 325

Calebasse Leroy, 325

Calebasse Oberdieck, 325

Calebasse d'Octobre, 326

Calebasse princesse Marianne (syn. of Princesse Marianne), 513

Calebasse Rose, 326

Calebasse Tougard, 326

Calebasse Verte, 326

Calhoun, 326

California, first commercial pear orchard in, 54

Caliorosa, 326

Caliroa cerasi on pear, 119

Calixte Mignot, 326

Calliot (syn, of Caillot Rosat (French)), 324

Calvillebirne, 326

Calvin, 326

Camak, 326

Camak, J., orig. of Camak, 326

Cambacérès, 327

Camerling, 327

Camille de Rohan, 327

Camperveen (syn. of Kamper-Venus), 433

Canandaigua, 327;
parent of Ontario, 202

Canners Japan (syn. of Japan Golden Russet), 428

Canning, 327

Canning pears, 109

Canourgues, 327

Cantelope, 327

Canton, 327

Capeinick, orig. of Duchesse de Brabant, 372

Capiaumont, orig. of Beurré Capiaumont, 289

Capsheaf, 328

Capucine Van Mons, 328

Carasi, 328

Carcas, orig. of Roux Carcas, 532

Cardinal Georges d'Ambroise, 328

Cardinale (syn. of Amiral), 244

Carleton, 328

Carmel, 328

Carminbirne, 328

Caroline Hogg, 328

Carpocapsa pomonella on pear, 118

Carrière, 329

Cartheurserbirne, 329

Case, William, orig. of Mary (Case), 467

Casimir, 329

Cassante du Comice, 329

Cassante de Mars, 329

Cassel, 329

Cassel Nurs. Co., introd. of Cassel, 329

Casser, orig. of Columbia, 344

Casserule (syn. of Poire de Casserole), 502

Cassolette, 329

Cassolette (Knoop), 329

Castelain, Florimond, orig. of Castelline, 330

Castelline, 330

Catch crops for pear orchards, 102

Caterpillars on pear, 120

Catherine Gardette, 330

Catherine Lambré, 330

Catherine Royal, 330

Catillac, 330

Catinka, 330

Cato, mention of pear by, 7

Cauwenberghe, Lievin Van, orig. of Henriette Van Cauwenberghe, 416

Cavaignac, 330

Cavelier de la Salle, 331

Cecil, Mrs. Evelyn, mention of pears by, 31

Cedarmere, 331

Cels Butterbirne, 331

Century, 331

Cephalothecium roseum, cause of pink-rot of pear, 117

Cerise Brune, 331

Cerise Double, 331

Cerruttis Durstlösche, 331

Certeau, 331

Certeau d’Automne, 331

Certeau d’Été, 331

Certeau d’Hiver, 332

Cesile, 332

Chænomeles, relationship of, to pear, 57

Chaigneau, 332

Chair-a-Dame, 332

Chalk (syn. of Crawford), 350

Chambers (syn. of Early Harvest), 158

Chambrette, Marquis, introd. of Virgouleuse, 573

Chamness, 332

Chamness, orig. of Chamness, 332

Champ Riche d’Italie, 332

Champagner Bratbirne, 333

Chancelier de Hollande, 333

Chancellor, 333

Chancellor, orig. of Chancellor, 333

Chantry, 333

Chaploux, 333

Chapman, 333

Chaptal, 333

Charlemagne, promotion of pear culture by, 12

Charles Bivort, 333

Charles Cognée, 334

Charles Ernest, 334

Charles Frederickx, 334

Charles de Guelin, 334

Charles Smet, 334

Charles van Hooghten, 334

Charles Van Mons, 334

Charli Basiner, 334

Charlotte de Brouwer, 334

Charlotte de Roucourt, 335

Charnock, 335

Charon, orig. of Beurré Charon, 290

Chat Brulé, 335

Chatenay, Pierre, orig, of Beurré Chatenay, 290

Chattanooga, 335

Chaudfontaine, 335

Chaudy, orig. of Madame Chaudy, 456

Chaumontel, 335;
parent of Chaumontel Gras, 335

Chaumontel Gras, 335

Chaumontel Swan Egg, 336

Chaumontelle d'été, 336

Chelmsford, 336

Cher à Dames (Knoop), 336

Cherroise, 336

Chesill, 336

Chesneau, discov. of Fondante de la Roche, 385

Chevreau, Arthur, orig. of Arthur Chevreau, 253

Chilton, 336

China, 336

Chinese Pear. (See *Pyrus serotina*)

Chinese Sand (syn. of Sha Lea), 545

Chio, 337

Choak-pear, 337

Choisnard, 337

Cholwell, 337

Christmas, 337

Christmas Beurré, 337

Church, 337

Churchill, Mrs., orig. of Alexander, 240

Chypre, 337

Cincincis, 338

Cincincis Seedling, 338

Cinquantième anniversaire, 338

Cire, 338

Cité Gomand, 338

Citrina, 338

Citron, 338

Citron des Carmes (syn. of Madeleine), 195

Citron d'Hyver, 339

Citron de Saint Paul, 339

Citron de Sierentz, 339

Citronnée, 339

Clairgeau, Pierre, orig. of Beurré Clairgeau, 132

Clairgeau (syn. of Beurré Clairgeau), 132

Clairgeau's Butterbirne (syn. of Beurré Clairgeau), 132

Clap, 339

Clap, William, orig. of Clap, 339

Clapp, F. & L., orig. of Newhall, 481;
Nicholas, 481

Clapp, Lemuel, orig. of Dorset, 149;
Frederick Clapp, 169;
Harris (Massachusetts), 412

Clapp, Thaddeus, orig. of Clapp Favorite, 143;
Sarah, 541

Clapp Favorite, 142;

parent of Tolstoy, 564;
place of, in commercial pear culture, 84

Clapp No. 22 (syn. of Frederick Clapp), 169

Clapp's Favourite (syn. of Clapp Favorite), 142

Clapp's Liebling (syn. of Clapp Favorite), 142

Clara, 339

Clara Durieux, 339

Claretenbirne, 339

Clark, 339

Clarksville, 340

Claude Blanchet, 340

Claude Mollet, 340

Clay, 340

Clean culture versus sod for pear orchards, 102

Clémence de Lavours, 340

Clémence van Rumbeck, 340

Clément Bivort, 340

Clementine, 340

Climate adapted to pear culture, 85

Climate of America uncongenial to pears, 38

Clinton, 340

Clion (syn. of Vicar of Winkfield), 227

Cloche de Wittenberg, 340

Clot, orig. of Beurré Clotaire, 290

Cludius, orig. of Hildesheimer Späte Sommerbirne, 418

Codling moth on pear, 118

Cœur-de-Boeuf (syn. of Ochsenherz), 484

Coit, Colonel, orig. of Beurré de Coit, 291;
Coit Beurré, 340

Coit Beurré, 340

Cold resistant pears, 86

Cold storage of pears, 109

Cole, 341

Cole Winter, 341

Colland, Jean, orig. of Triomphe de Vienne, 566

Collins, 341

Colmar, 341

Colmar d’Alost, 341

Colmar d’Arenberg, 341

Colmar Artoisenet, 341

Colmar d’Automne Nouveau, 342

Colmar Bretagne, 342

Colmar Charni, 342

Colmar Daras, 342

Colmar Delahaut, 342

Colmar Demeester, 342

Colmar Dewez, 342

Colmar Épine, 342

Colmar d’Été, 343

Colmar Flotow, 343

Colmar-Hirondelles, 343

Colmar des Invalides (syn. of Colmar Van Mons), 344

Colmar de Jonghe, 343

Colmar de Mars, 343

Colmar du Mortier, 343

Colmar Navez, 343

Colmar Neill, 344

Colmar Sirand, 344

Colmar Van Mons, 344

Colmart, 344

Coloma, Count de, orig. of Beurré Coloma, 291;
Coloma Carmeliterbirne, 344;
Reine des Poires, 519;
Suprême Coloma, 557

Coloma Carmeliterbirne, 344

Coloma's Herbst Butterbirne (syn. of Urbaniste), 224

Colonel Wilder, 143

Colorado Seedless, 344

Colorée de Juillet, 344

Columbia, 144

Columbia (syn. of Barseck), 260

Comet (syn. of Lawson), 186

Cometbirne (syn. of Lawson), 186

Comice (syn. of Doyenné du Comice), 153

Comice Horticole, originator of Doyenné du Comice, 154

Commandant Belaieff, 345

Commercial varieties of pears, 84;
in New York, 101

Commissaire Delmotte, 345

Commodore, 345

Compotbirne, 345

Compote d'Été, 345

Comprette, 345

Comstock, 345

Comte Canal de Malabaila, 345

Comte de Chambord, 345

Comte d'Egmont, 346

Comte de Flandres, 346

Comte de Lambertye, 346

Comte de Lamy (syn. of Lamy), 184

Comte Lelieur, 346

Comte de Meladore, 346

Comte de Morny, 346

Comte de Paris, 346

Comtesse d’Alost, 346

Comtesse de Chambord, 346

Comtesse Clara Frijs, 347

Comtesse de Grailly, 347

Comtesse de Paris, 347

Condorcet, 347

Conference, 347

Congrès de Gand, 347

Congrès Pomologique, 347

Conkleton, 348

Conklin, 348

Connecticut, 348

Conseiller de Hollande, 348

Conseiller Ranwez, 348

Constant, Thomas, orig. of Sudduth, 220

Constant Claes, 348

Constitutional characters of pear-trees, 59

Cooke, 348

Cooke, Elijah, orig. of Beurré Preble, 303

Coolidge, D. W., introd. of Winter Bartlett, 231

Copia, 348

Coppiers, orig. of Vice-Président Coppiers, 572

Cordus, discussion of pears by, 20

Cornélie Daras, 348

Cornemuse, 348

Cornewell, 349

Cost of growing pears, 110

Coter, 349

Coule-Soif de Cerutti, 349

Courte-queue d'Automne, 349

Courte-queue d'Hiver, 349

Cousin Blanc, 349

Couteau, 349

Coxe, experimental orchards of, 52;
first American pomology by, 52

Craig, 349

Craig Favourite, 350

Crassane, 350; parent of Boïeldien, 312; Lydie Thiérard, 454

Crassane Libotton, 350

Crassane du Mortier, 350

Crawford, 350

Crawford, N. W., orig. of Carmel, 328

Crede kegelförmige Zuckerbirne, 350

Crede Sommerrusselet, 350

Crescenzi, discussion of pear by, 11

Crisco, 351

Crisco, Robert, orig. of Crisco, 351

Črnivka, 351

Crocker, 351

Croft Castle, 351

Crosby, J. W., orig. of Redfield, 518

Cross, 351

Cross, orig. of Cross, 351

Crouch, 351

Crow, 351

Crown-gall on pear, 116

Cuissard and Barret, orig. of Madame Cuissard, 456

Cuisse Madame, parent of Windsor, 583

Cuisse Madame (syn. of Jargonelle (French)), 178

Cullem, 351

Culture, pear, notes on, 83

Cumberland, 351

Curé (syn. of Vicar of Winkfield), 227

Curé d'Oleghem, 352

Curtet's Butterbirne (syn. of Lamy), 184

Cushing, 352

Cushing, Col. Washington, orig. of Cushing, 352

Cydonia, relationship of, to pear, 57

Czernowes, 352

D'Amboise, 352

D'Ane (syn. of Langbirne), 441

D'Aout Allemande (syn. of Deutsche Augustbirne), 358

D'Arad, 352

D'Auch, 352

D'Œuf, 352

Daimyo, 353

Dallas, 353

Dame, 353

Dame-verte, 353

Dana, Francis, orig. of varieties, 146, 238, 244, 255, 380, 388, 396, 455, 466, 509, 545

Dana Hovey, 146; parent of Luola, 454

Dana's Hovey (syn. of Dana Hovey), 146

Dana's No. 16 (syn. of Dana Hovey), 146

Danas Hovey (syn. of Dana Hovey), 146

Daras de Naghin, orig. of varieties, 242, 250, 260, 268, 269, 296, 324, 335, 342, 347, 348, 392, 396, 418, 424, 429, 444, 446, 458, 459, 463, 464, 492, 493, 517, 527, 550, 559, 565

Darimont, 353

Darlington, 353

Dathis, 353

Dauvesse, orig. of Esther Comte, 378

David, 353

David d'Angers, 353

Davis, 354

Davis, orig. of Davis, 354;
Gold Nugget, 399

De Bavay (syn. of Autumn Colmar), 256

De Cerciaux, 354

De Chasseur, 354

De Croixmare, 354

De Duvergnies, 354

De la Farge, A., orig. of Belle et Bonne de la Pierre, 263;
Besi de la Pierre, 281;
Citron de Saint Paul, 339

De Fer, 354

De Fosse, 354

De Jonghe, J., introd. of varieties, 450;
orig. of varieties, 261, 280, 292, 334, 343, 348, 370, 447, 522;
work of, as pear breeder, 19

De Jonghe's Butterbirne (syn. of Beurré de Jonghe), 136

De Lamartine, 355

De Longueval, orig. of Louise Bonne de Jersey, 193

De Louvain, 355

De Nelis, work of, as pear breeder, 19

De Prêtre, 355

De Quentin (syn. of Rousselet Saint-Quentin), 530

De Rachinquin, 355

De Serres, discussion of the pear by, 14

De Tongres (syn. of Durandeau), 373

Dearborn, 147

Dearborn, Gen. H. A. S., biography of, 147;
orig. of Dearborn, 147

Dearborn's Seedling (syn. of Dearborn), 147

Dechantsbirne von Alençon (syn. of Doyenné d'Alençon), 150

Defays, François, orig. of Beurré Defays, 292; Doyenné Defays, 366

Degaud, Isidore, orig. of Délices de Froyennes, 356

Dehove, François, orig. of Rondelet, 523

Delannoy, Alexandre, orig. of Beurré Delannoy, 292

Delcange, 355

Délices d'Angers (syn. of Fondante du Panisel), 385

Délices de la Cacaudière, 355

Délices de Charles, 355

Délices de Chaumont, 356

Délices Everard, 356

Délices de Froyennes, 356

Délices d'Hardenpont, 356

Délices d'Hardenpont d'Angers (syn. of Fondante du Panisel), 385

Délices d'Hiver, 356

Délices de Huy, 356

Délices de Jodoigne, 356

Délices de Ligaudières, 356

Délices de Lovenjoul, 356

Délices de la Meuse, 357

Délices de Naghin, 357

Délices de Saint-Médard, 357

Délices de Tirlemont, 357

Délicieuse de Grammont, 357

Délicieuse de Swijan, 357

Délisse, 357

Delpierre, 357

Delporte Bourgmestre, 357

Democrat, 357

Demoiselle (syn. of Vigne), 572

Demorest, 357

Dempsey, 357

Denis Dauvesse, 358

Derouineau, orig. of Beurré Derouineau, 292

Dervaes Bros., orig. of Bergamotte la Gantoise, 272

Des Chartreux, 358

Des Chasseurs (syn. of Poire des Chasseurs), 502

Des Chevriers de Stuttgardt (syn. of Rousselet de Stuttgardt), 531

Des Deux Sœurs, 358

Deschamps, Monseigneur, orig. of Beurré d'Arenberg, 129

Description blank for pear, opposite 68

Désiré Cornélis, 358

Desportes, François, orig. of Doyenné Downing, 366

Dessauer Weissbirne, 358

Deutsche Augustbirne, 358

Deutsche Glasbirne, 358

Deutsche Kümmelbirne, 358

Deutsche Muskateller, 358

Deux Fois l'An (syn. of Honey), 420

Deux Têtes, 359

Devergnies, 359

Devergnies, orig. of Devergnies, 359

Dewey, 359

Dhommée, 359

Diamant-peer (syn. of Gansel Bergamot), 391

Dickerman, 359

Dickinson, orig. of Eureka, 379

Diego, 359

Diel (syn. of Beurré Diel), 133

Diel's Butterbirne (syn. of Beurré Diel), 133

Dienstbotenbirne, 359

Dieudonné Anthoine, 359

Dikeman (syn. of Dickerman),

359

Diller, 360

Dilly, V., orig. of Beurré Dilly, 292

Diman, 360

Dion, orig. of Belle Guérandaise, 264

Directeur Alphand, 360

Directeur Hardy, 360

Directeur Tisserand, 360

Directeur Varenne, 360

Dirkjes Peer, 360

Diseases of the pear, 110

Dix, 360

Dix, Madame, orig. of Dix, 360

Dixie, 360

Doat, 361

Doat, orig. of Doat, 361

Docteur Andry, 361

Docteur Bénit, 361

Docteur Bourgeois, 361

Docteur Bouvier, 361

Docteur Capron, 361

Docteur Chaineau, 361

Docteur Delatosse, 361

Docteur Gromier, 361

Docteur Joubert, 361

Docteur Jules Guyot (syn. of Guyot), 173

Docteur Koch, 361

Docteur Lentier, 362

Docteur Lindley, 362

Docteur Meniere, 362

Docteur Nélis, 362

Docteur P. Bruzon, 362

Docteur Pariset, 362

Docteur Pigeaux, 362

Docteur Rhéder (syn. of Reeder), 211

Docteur Trousseau, 362

Doctor Bachmann, 362

Doctor Engelbrecht, 363

Doctor Hogg Bergamot, 363

Doctor Hoskins, 363

Doctor Howe, 363

Dr. Jules Guyot, 173

Doctor Reeder (syn. of Reeder), 211

Doctor Turner, 363

Dodge, 363

Dodoens, mention of pear varieties by, 16

Doktorsbirne, 363

Donatienne Bureau, 363

Dones, 363

Donville, 363

Doppelte Philippsbirne (syn. of Doyenné Boussock), 152

Doppelttragende gelbe Muskatellerbirne, 364

Dörell Herbst Muskateller, 364

Dorlain, orig. of Saint Ghislain, 536

Dorothée Nouvelle, 364

Dorothée Royale Nouvelle, 364

Dorr, 364

Dorschbirne, 364

Dorset, 149

Dosoris, 364

Double d’Automne, 364

Double Blossom (syn. of Double-Fleur), 364

Double-Fleur, 364

Double de Guerre, 365

Double-Plouvier, 365

Double Rousselet, 365

Douglas, 150

Douillard, orig. of Alexandrine Douillard, 241

Dow, 365

Downer, Samuel, introd. of Andrews, 246

Dowler, 365

Downton, 365

Doyen Dillen, 365

Doyenné (syn. of White Doyenné), 228

Doyenné d'Alençon, 150;
parent of Bergamotte Tardive Collette, 277;
Pierre Curie, 499

Doyenné Bizet, 365

Doyenné Blanc (syn. of White Doyenné), 228

Doyenné Blanc Long, 366

Doyenné Boisnard, 366

Doyenné Boisselot, 366

Doyenné de Bordeaux, 366.

Doyenné Boussoch (syn. of Doyenné Boussock), 152

Doyenné Boussock, 152;
parent of Fondante des Emmurées, 384

Doyenné Boussock Nouvelle (syn. of Doyenné Boussock), 152

Doyenné Bouyron, 366

Doyenné du Cercle, 366

Doyenné à Cinq Pans, 366

Doyenné du Comice, 153;
parent of Directeur Tisserand, 360;
Doyenné Georges Boucher, 367;
Jeanne d'Arc, 429;
Pierre Corneille, 499

Doyenné Defays, 366

Doyenné Downing, 366

Doyenné d'Effay (syn. of Doyenné Defays), 366

Doyenné d'Été, parent of Eliot Early, 375

Doyenné d'Été (syn. of Summer Doyenné), 221

Doyenné Flon Ainé, 367

Doyenné Fradin, 367

Doyenné Georges Boucher, 367

Doyenné Goubault, 367

Doyenné Gray (syn. of Doyenné Gris), 367

Doyenné de la Grifferaye, 367

Doyenné Gris, 367

Doyenné Gris, parent of Avocat Allard, 257

Doyenné Guillard, 367

Doyenné des Haies, 367

Doyenné d'Hiver (syn. of Easter Beurré), 159

Doyenné Hudellet, 368

Doyenné Jamin, 368

Doyenné de Juillet (syn. of Summer Doyenné), 221

Doyenné de Lorraine, 368

Doyenné Louis, 368

Doyenné de Mérode (syn. of Doyenné Boussock), 152

Doyenné de Montjean, 368

Doyenné Nérard, 368

Doyenné Nouveau, 368

Doyenné Perrault, 368

Doyenné Picard, 368

Doyenné Rahard, 369

Doyenné de Ramegnies, 369

Doyenné Robin, 369

Doyenné Rose, 369

Doyenné Saint-Roch, 369

Doyenné de Saumur, 369

Doyenné Sentelet, 369

Doyenné Sieulle, 369

Doyenné Sterckmans (syn. of Beurré Sterckmans), 306

Drapiez, 369

Driessche, orig. of Beurré van Driessche, 293

Driessen's Pomeranzenbirne (syn. of Beurré Driessen), 293

Drone, 370

Drouard (syn. of Président Drouard), 210

Du Breuil, Alphonse, orig. of Du Breuil Père, 370; Souvenir de du Breuil Père, 549

Du Breuil Père, 370

Du Mirror, 370

Du Mortier, orig. of Bergamotte de Tournai, 278

Du Roeulx, 370

Dubreuil, orig. of Professeur Dubreuil, 514

Dubrulle, 370

Dubuisson, Isidore, orig. of Beurré Dubuisson, 293

Duc Alfred de Croy, 370

Duc d’Aumale, 370

Duc de Brabant, 370

Duc de Morny, 370

Duc de Nemours, 370

Duchess of Angoulême (syn. of Duchesse d’Angoulême), 154

Duchess Bronze (syn. of Duchesse d’Angoulême Bronzée), 371

Duchess of Orleans (syn. of Duchesse d’Orléans), 156

Duchesse d’Angoulême, 154;
parent of Bill Campbell, 309;
Cassel, 329;
Dempsey, 357;
Douglas, 150;
Duchesse Précoce, 372;
General Wauchope, 395;
Henri Bouet, 415;
place of, in New York pear culture, 85

Duchesse d’Angoulême Bronzée, 371

Duchesse d’Angoulême Panachée, 371

Duchesse Anne, 371

Duchesse d’Arenberg, 371

Duchesse de Berry d’Été, 371

Duchesse de Bordeaux, 371;
parent of Doyenné à Cinq Pans, 366

Duchesse de Brabant, 372

Duchess de Brabant (De Capeinick), 372

Duchesse de Brissac, 372

Duchesse Grousset, 372

Duchesse Hélène d'Orléans, 372

Duchesse d'Hiver, 372

Duchesse Hybrid, 372

Duchesse de Mars, 372

Duchesse de Mouchy, 372

Duchesse d'Orléans, 156

Duchesse Précoce, 372

Duchovaya, 373

Dudley, 373

Dudley, mention of pears by, 45;
orig. of Dudley, 373

Duhamel (syn. of Duhamel du Monceau), 157

Duhamel du Monceau, 157

Duhamel's Butterbirne (syn. of Duhamel du Monceau), 157

Duke, Lucy, orig. of Beaufort, 262;
Lucy Duke, 194

Dumas (syn. of Épine du Mas), 377

Dumon-Dumortier, 373

Dumont, Joseph, orig. of Bergamotte de Tournai, 277;
Beurré Dumont, 293;
Beurré d'Esquelmes, 294

Dundas, 373

Dunmore, 373

Dupuy Charles, 373

Duquesne, Abbé, orig. of Colmar Van Mons, 344;
Marie Louise, 198

Durand-Gasselin, orig. of Poire Brune de Gasselin, 501

Durandeau, 373

Durandeau, Charles Louis, orig. of Durandeau, 373

Durée, 374

Durst-Lösche, 374

Dussart, orig. of Bergamotte Dussart, 271

"Dutch Jacob", discoverer of Seckel, 215

Duval, orig. of Archiduc Charles, 251;
Beurré Duval, 294

Dwarfing, best pear varieties for, 95;
of pears, 94

Earl, S., orig. of Herkimer, 417

Early Ely, 374

Early Green Sugar, 374

Early Harvest, 158

Early Butter of Indiana (syn. of Craig), 349

Early Rousselet (syn. of Rousselet Hâtif), 528

Early Wilbur (syn. of Wilbur), 580

Early Wilder (syn. of Wilder Early), 230

Easter Bergamot, 374

Easter Beurré, 159;
parent of Directeur Varenne, 360;
Louis Cappe, 451;
Souvenir de Renault Père, 550

Eastern Belle, 374

Echasserie, 374

Eckard, W. C., orig. of Luola, 454

Economic considerations in pear culture, 94

Edle Sommerbirne, 375

Edward Seedling St. Germain, 375

Edwards, Bryan, orig. of Bryan Edwards, 321

Edwards, Henry W., biography of, 375;
orig. of varieties, 326, 327, 338, 340, 353, 375, 388, 416, 567, 568, 581

Effie Holt, 375

Eliot, Judge Charles, orig. of Eliot Early, 375

Eliot Early, 375

Élisa d'Heyst, 375

Elizabeth, 161

Elizabeth (Edwards), 375

Élizabeth de Manning (syn. of Elizabeth), 161

Elizabeth Maury, 376

Ellis, 376

Ellis, Annie E., orig. of Ellis, 376

Ellis (New York), 376

Ellison, M. P., orig. of Ford, 386

Ellwanger, George, biography of, 205

Ellwanger & Barry, introd. into America of Alexander Lucas, 240

Ely, Silas, orig. of Early Ely, 374

Emerald, 376

Émile d'Heyst, 376

Endicott pear tree, 41

Enfant Nantais, 376

Enfant Prodigue, 376

England, pear in, 29

English and American pear-growing compared, 37

Épargne (syn. of Jargonelle), 177

Épine d'Été, 377

Épine d'Été Rouge, 377

Épine d'Hiver, 377

Épine de Jernages, 377

Épine du Mas, 377

Épine Royale, 377

Épine-Royale de Courtray, 378

Eriophyes pyri on pear, 119

Ermsinde, 378

Ernestine Auzolle, 378

Ernst, A. H., introd. of Prairie du Pond, 506

Eseme, 378

Espéren, Major, orig. of varieties, 165, 180, 219, 242, 271, 279, 288, 289, 315, 325, 329, 330, 334, 338, 362, 365, 375, 376, 384, 400, 430, 457, 462, 477, 478, 491, 492, 494, 513, 531, 542, 548, 558, 563, 573;
work of, as a pear breeder, 19

Esperen Waldbirne (syn. of Belle de Forêts), 264

Esperen's Herrenbirne (syn. of Belle Lucrative), 126

Esperine, 378

Esperione, 378

Essex, 378

Essington, W. E., orig. of Autumn Joséphine, 256

Esther Comte, 378

Estienne, list of pears given by, 13

Estranguillon, 378

Esturion, 378

Eugène Appert, 379

Eugène Furst, 379

Eugène Maisin, 379

Eugène des Nouhes, 379

Eugène Thirriot, 379

Euratsfelder Mostbirne, 379

Eureka, 379

Europe, eastern and central, pear in, 19

European pear varieties imported into America, 52

Eva Baltet, 379

Everard, Gabriel, orig. of Délices Everard, 356

Excellente de Moine, 380

Excelsior, 380

Eyewood, 380

Fabraea maculata, cause of leaf-blight, 115

Fall, 380

Fall Beurré d'Arenburg, 380

Famenga, 380

Farragut (syn. of Admiral Farragut), 238

Fassbirne (syn. of Tonneau), 564

Faurite, 380

Fauvanelle, 380

Favorite de Clapp (syn. of Clapp Favorite), 142

Favorite Joanon, 380

Favorite Morel, 381

Favre, orig. of Madame Favre, 458;
Souvenir Favre, 550

Feast, 381

Feast, Samuel, orig. of Feast, 381

Feaster, Aaron, orig. of Bleeker Meadow, 311

Félix de Liem, 381

Félix Sahut, 381

Feraut, orig. of Augier, 254

Ferdinand Gaillard, 381

Ferdinand de Lesseps, 381

Fertility, 381

Fertility of pear, 99

Fertilizers for pears, 98

Feuille de chêne (syn. of Naples), 479

Figue, 381

Figue d'Alençon, 382

Figue de Naples, 382

Figueira, 382

Fin Juillet, 382

Fin-Or d'Orléans, 382

Fin-Or de Septembre, 382

Fine Gold of Summer (syn. of Fin-Or d'Orléans), 382

Fitzwater, 382

Flack, W., orig. of Essex, 378

Fleming, Mrs. Maria, orig. of Lincoln, 191

Flemish Beauty, 163;
parent of Bergamotte Nicolle, 274;
Doctor Hoskins, 363;

Eva Baltet, 379;
Max, 469

Flemish Bon Chrêtien, 382

Flon, orig. of Bertrand Guinoisseau, 278;
Beurré Flon, 295;
Doyenné Flon Ainé, 367;
Fortunée supérieure, 387;
Maréchal Pelissier, 462

Flon-Grolleau, orig. of Général Bosquet, 394;
Lieutenant Poidevin, 448;
Saint Vincent de Paul, 538

Florelle (syn. of Forelle), 167

Florent Schouman, 383

Florida Bartlett, 383

Florimond Parent, 390

Flower-buds of pear, characteristics of, 62

Flowers of pear, characteristics of, 62

Fluke, 383

Fluke, N. K., introd. of Fluke, 383

Fondante Agréable, 383

Fondante Albert, 383

Fondante d'Angers, 383

Fondante d'Automne (syn. of Belle Lucrative), 126

Fondante de Bihorel, 383

Fondante des Bois (syn. of Flemish Beauty), 163

Fondante de Brest, 383

Fondante de Charleville, 384

Fondante de Charneau, 384

Fondante de Cuerne, 384

Fondante des Emmurées, 384

Fondante d'Ingendal, 384

Fondante de Ledeberg, 384

Fondante de la Maitre-École, 384

Fondante de Malines, 384

Fondante de Mars, 384

Fondante de Moulins-Lille, 385

Fondante de Nees, 385

Fondante de Noël, 164

Fondante du Panisel, 385

Fondante des Prés, 385

Fondante de la Roche, 385

Fondante de Rome ou Sucré Romain, 385

Fondante de Saint-Amand, 385

Fondante de Schönert (syn. of Schönerts Omsewitzer Schmalzbirne), 542

Fondante-de-Septembre, 385

Fondante Sickler, 386

Fondante de Thines, 386

Fondante Thirriot, 386

Fondante Van Mons, 386

Fondante de Wollmet, 386

Fontaine de Ghélin, orig. of Général Totleben, 395

Fontarabie, 386

Fontenay, 165

Foote, Asahel, orig. of Fall Beurré d'Arenburg, 380;
Foote Seckel, 386;
Homestead, 420;
Hoosic, 420;
Weeping Willow, 576

Foote Seckel, 386

Ford, 386

Forelle, 167

Forellenbirne (syn. of Forelle), 167

Forme de Bergamotte Crassane, 387

Forme de Curtet, 387

Forme de Délices, 387

Fortune, 387

Fortunée, 387;
parent of Bergamotte Hertrich, 272;
Fortunée Boisselot, 387;
Fortunée supérieure, 387;
Olivier de Serres, 200

Fortunée Boisselot, 387

Fortunée de Printemps (syn. of Fortunée), 387

Fortunée supérieure, 387

Foster, Suel, orig. of Snow, 547

Fouqueray, orig. of Beurré Fouqueray, 295

Fourcine, W., orig. of Comtesse de Paris, 347

Fourcroy, 387

Fouron, 387

Fowler, Dr., orig. of Muscadine, 476

Fox, 168

Fox, Bernard S., biography of, 168;
orig. of Colonel Wilder, 144;
Fox, 168;
P. Barry, 203

Franc-Réal, 388

Franc Réal d'Hiver (syn. of Franc-Réal), 388

France, pear in, 12;
rapid increase in pear varieties in, 15

Frances, 388

Franchimont, 388

Franchipanne, 388

Francis, 388

Francis Dana, 388

François Hutin, 388

Frangipane (syn. of Franchipanne), 388

Frangipane d'Hiver, 388

Frankenbirne, 389

Frankfurter Birne, 389

Französische Gute Graue Sommerbirne (syn. of Grise-Bonne), 403

Französische Zapfenbirne (syn. of Brute Bonne), 321

Frau Louise Goethe, 389

Frederic Leclerc, 389

Frédéric de Wurtemberg, 389

Frederica Bremer, 389

Frederick Clapp, 169

Fremion, 390

French, connection of the, with history of pear in America, 46

French pear stocks, notes on, 95

Frensdorff Rothe Flaschenbirne, 390

Frühe Backhausbirne, 390

Frühe Schweizer Bergamotte, 390

Fruit characters of pomes, 63

Fruit setting of pears, discussion of, 99

Fuller, 390

Fullero, 390

Fulton, 390;
parent of Tudor, 567

Fulton, orig. of Fulton, 390

Fumago vagans, cause of black mold of pear, 117

Fusée d'Automne, 390

Fusée d'Hiver, 391

Gabourell Seedling, 391

Gakovsky, 391

Gallo, mention of pears by, 12

Galopin, orig. of Chaudfontaine, 335

Galston Muirfowl Egg, 391

Gambier, orig. of Beurré Gambier, 295;
Fondante d'Ingendal, 384;
Marie Louise d'Uccle, 464

Gans, 391

Gans, Joseph, discoverer of Gans, 391

Gänsekopf, 391

Gansel, Lieutenant-General, orig. of Gansel Bergamot, 391

Gansel Bergamot, 391; parent of Gansel Seckel, 170

Gansel Late Bergamot, 391;
parent of Doctor Hogg Bergamot, 363

Gansel Seckel, 170

Gansel-Seckle (syn. of Gansel Seckel), 170

Garber, 171;
place of, in commercial pear culture, 84

Garber, J. B., orig. of Garber, 171

Garber's Hybrid (syn. of Garber), 171

Garden, pomological, of Robert Manning, 53

Garden, T. J., introd. of Cole Winter, 341

Garden Pear (syn. of Poirer de Jardin), 505

Garnier, 392

Garnier, orig. of Garnier, 392;
Maria de Nantes, 463

Garnons, 392

Gassenbirne, 392

Gaston du Puys, 392

Gaudry, 392

Gaujard, orig. of Mademoiselle Marguerite Gaujard, 460

Géant, 392

Gefleckte Pomeranzenbirne, 392

Gefleckte Sommerrusselet, 392

Gefundene, 392

Geigenschnabel, 392

Geishirtle, 392

Gelbe Frühbirne (syn. of Jaune Hâtive), 428

Gelbe frühe Sommerapothekerbirne, 392

Gelbe Fürsten-Tafelbirne, 393

Gelbe Heckenbirne, 393

Gelbe Holzbirne, 393

Gelbe Landlbirne, 393

Gelbe langstielige Alantbirne, 393

Gelbe Laurentiusbirne, 393

Gelbe Leutsbirne, 393

Gelbe Scheibelbirne, 393

Gelbe Sommerrusselet (syn. of Rousselet Jaune d'Été), 529

Gelbe Wasserbirne, 393

Gelbmostler, 394

Gellert's Butterbirne (syn. of Beurré Hardy), 135

Gemeine Kochbirne, 394

Gemeine Pfundbirne, 394

Gendron, orig. of Beurré Gendron, 295

Général de Bonchamp, 394

Général Bosquet, 394

Général Canrobert, 394

Général Delage, 394

Général Dutilleul, 394

Général Duvivier, 395

General Kearney, 395

General Lamoricière, 395

General Sherman, 395

General Taylor, 395

Général Thouvenin, 395

Général Totleben, 395

General Wauchope, 395

Gensbirne, 395

George Augustus, 396

Georges Delebecque, 396

Gerando, 396

Gerarde, mention of pears by, 32

Gérardine, 396

Gerdessen, 396

Gerdessen, Pastor, orig. of Gerdessen, 396

Gergonell(syn. of Jargonelle), 177

Gerippte Pomeranzenbirne, 396

German Muscat (syn. of Deutsche Muskateller), 358

Germany, pomological literature of, 20

Gernröder Pomeranzenbirne, 396

Gestreiffe Winter-Apothekerbirne, 396

Ghélin, Fontaine de, orig. of Beurré de Ghélin, 296

Ghellinck de Walle, 396

Ghellinck de Walle, orig. of Ghellinck de Walle, 396

Gibb, 396

Gibb, introd. of Russian pears by, 56

Gibey-Lorne, orig. of Monseigneur des Hons, 474

Giffard (syn. of Beurré Giffard), 134

Giffard's Butterbirne (syn. of Beurré Giffard), 134

Gilain, 397

Gilles ô Gilles, 397

Giram, 397

Girandoux, orig. of Girardon, 397

Girardon, 397

Girogile (syn. of Gilles ô Gilles), 397

Glace d'hiver, 397

Glastonbury, 397

Gleck, 398

Gliva, 398

Gloire de Cambron, 398

Glou Morceau, 172;
confusion with Beurre d'Arenberg, 129;
parent of Bergamotte de Toumai, 277;
Beurré Ad. Papeleu, 283;

Souvenir Favre, 550;
Winter Williams, 584

Glout Morceau (syn. of Glou Morceau), 172

Gloux Morceau (syn. of Glou Morceau), 172

Gloward, 398

Gnoico, 398

Goat-herd, 398

Goemans Gelbe Sommerbirne (syn. of Passe-Goemans), 491

Gogal, 398

Gold Dust, 399

Gold Nugget, 399

Goldbirne, 399

Goldbordirte Holzbirne, 399

Golden Bell, 399

Golden Beurré of Bilboa, 398

Golden June, 399

Golden Knap, 399

Golden Queen, 399

Golden Russet, 399

Golden Russet (syn. of Japan Golden Russet), 428

Goldwörther Lederbirne, 399

Gönnersche Birne, 399

Goodale, 400

Goodale, E., orig. of Goodale, 400

Goodrich, Chauncey, orig. of Paddock, 489

Gore, Gov., orig. of Heathcot, 413

Got, 400

Goubault, Maurice, orig. of varieties, 138, 274, 279, 281, 293, 296, 304, 310, 367, 465, 471

Governor Carver, 400

Grabel, Jacob, orig. of Posey, 506

Grabenbirne, 400

Grading of pears, 108

Graf Moltke, 400

Grafting pears, 106

Graham, F. J., orig. of Autumn Nelis, 256

Graham Autumn Nelis (syn. of Autumn Nelis), 256

Grand Bretagne, 400

Grand Isle, 400

Grand Monarque (syn. of Catallac), 330

Grand-Soliel, 400

Grant, 401

Graslin, 401

Grasshoff Leckerbissen, 401

Gratiola, 401

Graue Flaschenbirne (syn. of Calbasbirn), 324

Graue Herbstrusselet, 401

Graue Holzbirne, 401

Graue Honigbirn, 401

Graue Pelzbirne, 401

Graue Speckbirne, 401

Graue Zuckerbirne, 402

Grazbirne, 402

Great Cassolette, 402

Great Citron of Bohemia, 402

Great Mammoth, 402

Greece, ancient, pear in, 3

Greeks, monographs on husbandry by, 7

Green, Charles A., introd. into America of Président Drouard, 210

Green Chisel, 402

Green Mountain Boy, 402

Green Pear of Yair, 402

Green Yair (syn. of Green Pear of Yair), 402

Gregoire, Xavier, orig. of varieties, 238, 239, 249, 255, 257, 259, 273, 302, 303, 304, 338, 342, 345, 362, 396, 397, 414, 415, 425, 429, 432, 440, 445, 446, 451, 457, 458, 467, 473, 474, 483, 507, 510, 511, 512, 514, 529, 531, 547, 548, 549, 550, 551, 572, 573, 587;
work as pear breeder, 19

Grégoire Bordillon, 403

Grey Good-Wife, 403

Gris, M. le, orig. of Doyenné de la Grifferaye, 367

Grise-Bonne, 403

Grolez-Duriez, orig. of Belle-Moulinoise, 265;
Fondante de Moulins-Lille, 385

Groom, introd. of Groom Prince Royal, 403

Groom Prince Royal, 403

Gros Blanquet Long, 403

Gros Blanquet Rond, 403

Gros-Hativeau, 404

Gros Loijart, 404

Gros Lucas, 404

Gros Muscat Rond, 404

Gros Rousselet, 404

Gros Rousselet d’Aout, 405

Gros Trouvé, 405

Grosse Angleterre de Noisette (syn. of Grosse Poire d’Amande), 406

Grosse Eisbirne, 405

Grosse Figue, 405

Grosse gelbe Weinbirne, 405

Grosse-Herbst-Bergamotte, 405

Grosse Landlbirne, 405

Grosse Leutsbirne, 405

Grosse-Louise, 405

Grosse Mostputzer, 405

Grosse Petersbirne, 406

Grosse Poire d'Amande, 406

Grosse Poire de Vitrier, 406

Grosse Queue, 406

Grosse Rommelter, 406

Grosse schöne Jungfernbirne, 406

Grosse September Birne, 406

Grosse Sommer-Zitronenbirne, 407

Grosse Sommersirene, 406

Grosse späte Weinbirne, 407

Grosse Verte-Longue Précoce de la Sarthe (syn. of Verte-Longue de la Sarthe), 571

Grosser Roland, 407

Grousset, orig. of Enfant Nantais, 376

Groveland, 407

Grubbirne, 407

Grumkow, 407

Grunbirne, 407

Grüne Confesselsbirne, 407

Grüne frühe Gewurzbirne, 407

Grüne fürstliche Tafelbirne, 407

Grüne gesegnete Winterbirne, 408

Grüne Lange Herbstbirne (syn. of Long Green), 449

Grüne langstielige Winterhirtenbirne, 408

Grüne Magdalene(syn. of Madeleine), 195

Grüne Pfundbirne, 408

Grüne Pichelbirne, 408

Grüne Sommer-Bergamote, 408

Grüne Sommer-Citronenbirne, 408

Grüne Sommer-Magdalene (syn. of Madeleine), 195

Grüne Wiedenbirne, 408

Grüne Winawitz, 408

Grünmostler, 408

Guenette (syn. of Green Chisel), 402

Gueniot, orig. of Le Brun, 443

Guéraud, orig. of Adèle de Saint-Denis, 237

Guillot, orig. of Bon-Chrétien Bonnamour, 313

Gulabi, 409

Guntershauser Holzbirne, 409

Gustave Bivort, 409

Gustave Bourgogne, 409

Gustin Summer, 409

Gute Graue (syn. of Yat), 586

Gute Grüne, 409

Gute Louise von Avranches(syn. of Louise Bonne de Jersey), 193

Guyot, 173

Habichtsbirne, 409

Habit of growth of pear-trees, 59

Habitat of *Pyrus auricularis*, 73;
Pyrus betulaefolia, 79;
Pyrus calleryana, 80;
Pyrus communis, 70;
Pyrus nivalis, 72;

Pyrus serotina, 75;
Pyrus serotina culta, 76;
Pyrus serrulata, 78;
Pyrus ussuriensis, 77

Hacon Incomparable, 409;
parent of Hoosic, 420

Haddington, 409

Haffner Bros., orig. of Haffner Butterbirne, 410

Haffner Butterbirne, 410

Hagar, 410

Hagerman (syn. of Hegeman),

414

Haight, 410

Hallische gelbe Honigbirne, 410

Hamburg, 410

Hamburger Birne, 410

Hamilton, 410

Hammelsbirne, 410

Hamon, 410

Hampden Bergamot, 410

Hampton, W. C., orig. of Hampton Bergamot, 411;
Hampton Cluster, 411

Hampton Bergamot, 411

Hampton Cluster, 411

Hampton Virgalieu, 411

Hancock, 411

Hancock, Thomas, orig. of Tatnall Harvest, 559

Hangelbirne, 411

Hannover'sche Jakobsbirne, 411

Hannover'sche Margarethenbirne, 411

Hanover, 411

Hansen, N. E., orig. of Pushkin, 515;
Tolstoy, 564

Hardenpont, Abbé, efforts in breeding pears by, 16;
orig. of varieties, 172, 206, 304, 356, 385

Hardenpont frühe Colmar, 411

Hardenpont's Winter Butterbirne (syn. of Glou Morceau), 172

Hardy (syn. of Beurré Hardy), 135

Harigelsbirne, 412

Harnard, 412

Harnard, John, orig. of Harnard, 412

Harris (Georgia), 412

Harris (Massachusetts), 412

Harrison Large Fall, 412

Hartberger Mostbirne, 412

Harte Neapolitanerin, 412

Hartwiss, M. De, orig. of Beurré Woronson, 308

Harvard, 412

Harvest, 412

Harvesting pears, 106

Harvey, Eli, owner of original tree of Brandywine, 140

Hassler, 413

Hassler, J. E., orig. of A. J. Cook, 236;
Hassler, 413

Hastings, J. C., introd. of Frederica Bremer, 389

Hausemerbirne, 413

Hautmonté, 413

Hawaii, 413

Hawes Winter, 413

Hawkesbill, 413

Hays, 413

Heat resistant pears, 86

Heathcot, 413

Hebe, 413

Hebron (syn. of Pinneo), 499

Hedwig von der Osten, 413

Hedwige d'Osten (syn. of Hedwig von der Osten), 413

Hegeman, 414

Hegeman, Andrew, orig. of Hegeman, 414

Heilige Angelika-Birne, 414

Hélène Grégoire, 414

Hélin, Dr., orig. of Beurré Caty, 290

Hellinckx, orig. of Colmar d'Alost, 341

Hellman, orig. of Melon de Hellman, 470

Hellmann, Melonenbirn, 414

Hemminway, 414

Henkel, 414

Henkel d'Automne (syn. of Henkel), 414

Henrard, Denis, orig. of Beurré Fenzl, 294;
Bon-Chrétien de Vernois, 315

Henri Bivort, 414

Henri Bouet, 415

Henri de Bourbon, 415

Henri Capron, 415

Henri Decaisne, 415

Henri Desportes, 415

Henri Grégoire, 415

Henri Ledocte, 415

Henri Quatre, 415

Henri Van Mons (syn. of Fleur de Neige), 382

Henrietta, 416

Henriette, 416

Henriette Van Cauwenberghe, 416

Henry, Henry C., orig. of Henry (Illinois), 416

Henry (Connecticut), 416

Henry (Illinois), 416

Henry the Fourth (syn. of Henri Quatre), 415

Hérault, A., orig. of Bergamotte Hérault, 272;
Fin Juillet, 382;
Joyau de Septembre, 432

Herbelin, 416

Herbin, 416

Herborner Schmalzbirne, 416

Herbst-Citronenbirne, 417

Herbst-Klöppelbirne, 417

Herbstbirne ohne Schale (syn. of Lansac), 443

Herbsteierbirne, 417

Herbstlanger, 417

Herbstsylvester (syn. of Frédéric de Wurtemberg), 389

Héricart, 417

Héricart de Thury, 417

Herkimer, 417

Herr, A. G., orig. of Herr Late Winter, 417

Herr Late Winter, 417

Hert, 417

Hertrich, orig. of Bergamotte Hertrich, 272

Hervy, Michel-Christophe, orig. of Chaptal, 333

Herzogin von Angoulême (syn. of Duchesse d'Angoulême), 154

Hessenbirne, 418

Hessle, 418

Hewes, 418

Heyer Zuckerbirne, 418

Hicks, Isaac, orig. of Durée, 374

Higginson, mention of pears by, 45

Hilda, 418

Hildegard, 418

Hildesheimer Bergamotte, 418

Hildesheimer späte Sommerbirne, 418

Hildesheimer Winterbirn, 418

Hingham, 419

Hirschbirne, 419

Hirsenbirne, 419

History of pear, long lapse in, 11

Hitzendorfer Mostbirne, 419

Hochfeine Butterbirne (syn. of Beurré Superfin), 137

Hoe Langer Hoe Liever, 419

Hofsta, 419

Holland Green, 419

Holländische Butterbirne, 419

Holländische Gewürzbirne, 419

Holländische Zuckerbirne, 419

Holmer, 420

Holt, L. W., orig. of Effie Holt, 375

Holzfarbige Butterbirne (syn. of Flemish Beauty), 163

Home ripening of pears, 109

Homer, mention of pear by, 4

Homestead, 420

Honey, 420

Honey (Russia), 420

Honey Dew, 420

Honigbergamotte, 420

Honnelbirne, 420

Hood, George, orig. of Lycurgus, 454

Hoosic, 420

Hopedale Nurs. Co., introd. of Weihmier Sugar, 576

Hopfenbirne, 421

Hosenschenk, 421

Houdin, orig. of Belle des Arbrés, 262

Houghlin, Joe, orig. of Golden June, 399

Housatonic, 421

Houser, 421

Hovey, 421

Howard, 421

Howe, Dr. John P., orig. of Doctor Howe, 363

Howe, John J., orig. of Housatonic, 421

Howe Winter, 421

Howell, 174;
place in commercial pear culture, 84

Howell, Thomas, orig. of Howell, 175

Howell's Seedling (syn. of Howell), 174

Hubert Grégoire, 421

Hudellet, Jules, orig. of Doyenné Hudellet, 368

Huffcap, 421

Hüffel Bratbirne, 421

Huggard, 421

Huguenot, 422

Huhle de Printemps, 422

Hull, 422

Hungerford Oswego, 422

Hunt Connecticut, 422

Huntington, 422

Hurbain d'Hiver, 422

Hussein Armudi, 422

Hutcherson, 422

Huyshe, Rev. John, orig. of "Royal Pears," 423

Huyshe Bergamot (syn. of Huyshe Prince of Wales), 423

Huyshe Prince Consort, 423

Huyshe Prince of Wales, 423

Huyshe Princess of Wales, 423

Huyshe Victoria, 423

Hyacinthe du Puis, 423

Ickworth, 423

Ida, 423

Idaho, 175

Ilinka, 424

Impériale à Feuilles de Chêne, 424

Incommunicable, 424

Incomparable de Beuraing, 424

Inconstant, 424

Indian Queen, 424

Infortunée, 424

Ingénieur Wolters, 424

Ingram, Thomas, orig. of British Queen, 320

Innominée, 424

Insects affecting pear, 117

International, 425

Iris Grégoire, 425

Iron Pear (syn. of Black Worcester), 310

Isabella, 425

Isabelle de Malèves, 425

Island, 425

Italienische Winterbergamotte, 425

Ives, 425

Ives, Dr. Eli, orig. of Dow, 365;
Ives, 425;
Ives August, 425;
New Haven, 481

Ives August, 425

Ives Bergamotte, 426

Ives Seedling, 426

Ives Virgalieu, 426

Ives Winter, 426

Ives Yale, 426

Jablousky, 426

Jackson, 426

Jackson, S. S., orig. of Jackson Elizabeth, 426

Jackson Elizabeth, 426

Jacqmain, 426

Jacques Chamaret, 426

Jacques Mollet, 427

Jakobsbirne, 427

Jalais, Jacques, orig. of Beurré du Champ Corbin, 290;
Beurré Jalais, 298;
Bonne de Jalais, 316;
Chaigneau, 332;
Duchesse Anne, 371

Jalousie, 427

Jalousie de Fontenay (syn. of Fontenay), 166

Jalousie de Fontenay Vendée (syn. of Fontenay), 165

Jalousie de la Réole, 427

Jalousie Tardive, 427

Jalvy, 427

Jamin & Durand, origs. of Doyenné Jamin, 368

Jaminette, 427

Jansemine, 427

Japan, 428

Japan Golden Russet, 428

Japan Wonder, 428

Japanese Pear. (See *Pyrus serotina*)

Japanese Sand, 428

Jargonelle, 177;
ancient names of, 177

Jargonelle (French), 178;
parent of Henri Bouet, 415

Jargonelle d’Automne, 428

Jaune Hâtive, 428

Jaune de Merveillon, 428

Jean Baptist, 428

Jean-Baptiste Bivort, 428

Jean-Baptiste Dediest, 429

Jean Cottineau, 429

Jean Laurent, 429

Jean Sano, 429

Jean de Witte, 429

Jeanne, 429

Jeanne d’Arc, 429

Jefferson, 429

Jersey Gratioli, 430

Jerusalem, 430

Jeschil Armudi, 430

Jewel, 430

Jewess, 430

Joanon, orig. of Favorite Joanon, 380;
Professeur Willermoz, 514;
Sainte Anne, 538

John Cotton, 430

John Griffith, 430

John Monteith, 430

John Williams, 430

Johonnot, 431

Johonnot, G. S., orig. of Huguenot, 422;
Johonnot, 431;
Naumkeag, 480

Joie du Semeur, 431

Jolie Lille de Gust, 431

Joly de Bonneau, 431

Jonah, 431;
parent of Howell, 175

Jones, 431

Joseph Lebeau, 431

Joseph Staquet, 431

Joséphine de Binche, 431

Joséphine de Malines, 179;
parent of Autumn Joséphine, 256;
Georges Delebecque, 396;
Joie du Semeur, 431

Joséphine de Maubrai, 431

Joséphine von Mecheln (syn. of Joséphine de Malines), 179

Josephsbirne, 432

Josselyn, mention of pears by, 45

Joyau de Septembre, 432;
parent of Fin Juillet, 382

Judge Andrews, 432

Jules d’Airoles (Grégoire), 432

Jules d’Airolles (Leclerc), 432

Jules Bivort (syn. of Délices de Lovenjoul), 356

Jules Blaise, 432

Jules Delloy, 432

Juli Dechantsbirne (syn. of Summer Doyenné), 221

Julie Duquet, 432

Julienne, 432

Juneberry, relationship of, to pear, 57

Juvardeil, 432

Kaestner, 433

Kalchbirne, 433

Kalmerbirne, 433

Kamper-Venus, 433

Kathelenbirne, 433

Katy, 433

Keiffer (syn. of Kieffer), 180

Keiser, 433

Kelsey, 434

Kelsey, William, orig. of Kelsey, 434

Kennedy, 434

Kenrick, William, introd. into America of Beurré Bosc, 131;

Doyenné Boussock, 152

Kentucky, 434

Kenyon, 434

Kermes, 434

Kessler, Charles, introd. of Reading, 517

Kieffer, 180;
parent of Cassel, 329;
Douglas, 150;
Eureka, 379;
Theodore Williams, 561

Kieffer, Peter, orig. of Kieffer, 181

Kieffer and Bartlett leading commercial pears, 84

Kieffer's Hybrid (syn. of Kieffer), 180

Kilwinning, 434

King, 434

King Catherine (syn. of Catherine Royal), 330

King Edward, 434

King Seedling, 434

King Sobieski, 435

Kingsessing, 182

Kirtland, 435

Kirtland, Prof., orig. of Kirtland, 435

Klein Landlbirne, 435

Kleine Fuchselbirne, 435

Kleine gelbe Bratbirne, 435

Kleine gelbe Hessenbirne, 435

Kleine gelbe Maukelbirne, 435

Kleine gelbe Sommer-Zuckerbirne, 435

Kleine gelbe Sommermuskatellerbirne, 435

Kleine grüne Backbirne, 435

Kleine Lange Sommer-Muskatellerbirne, 436

Kleine Leutsbirne, 436

Kleine Petersbirne (syn. of Petersbirne), 495

Kleine Pfalzgrafin, 436

Kleine Pfundbirne, 436

Kleine runde Haferbirne, 436

Kleine schlesische Zimmbirne, 436

Kleine Schmalzbirne (syn. of Petite Fondante), 497

Kleine Sommer-Zuckerratenbirne, 436

Kleine Zwiebelbirne, 437

Kleiner Katzenkopf (syn. of Petit Catallac, 496)

Kloppelbirne, 437

Knabenbirne, 437

Knausbirne, 437

Knechtchensbirne, 437

Knight, 437

Knight, Thomas Andrew, orig. of varieties, 289, 320, 351, 365, 373, 380, 423, 462, 473, 474, 484, 494, 524, 527, 546, 563

Knight, William, orig. of Knight, 437

Knight Monarch (syn. of Monarch), 474

Knollbirne, 437

Knoop, Herman, orig. of Calebasse, 324

Knoop, Misses, orig. of Des Deux Sœurs, 358

Knoops Simmtbirne, 437

Kolmasbirne, 438

Kolstuck, 438

König Karl von Württemberg, 438

Königliche Weissbirne, 438

Königsbirne, 438

Konstanzer Langler, 438

Koolstock, 438

Koonce, 183

Kopertscher (syn. of Suprême Coloma), 557

Köstliche Van Mons (syn. of De Duvergnies), 354

Kraft Sommer Bergamotte, 438

Krauelbirne, 438

Kreiselförmige Blankette (syn. of Gros Blanquet Long), 403

Kreiselförmige Flegelbirne, 438

Kriegebirne, 439

Krivonogof, 439

Krockhals, 439

Kröten Bergamotte (syn. of Bergamotte Bufo), 270

Krull, 439

Krull, orig. of Krull, 439

Krull Winter (syn. of Krull), 439

Krummgestielte Feigenbirne, 439

Krummholzige Schmalzbirne (syn. of Arbre Courbé), 251

Kuhfuss, 439

Kümmelbirne (syn. of Besi d'Héry), 280

Kurskaya, 439

L'Inconnue Van Mons, 439

L'Inconstante, 439

La Béarnaise, 440

La Bonne Malinoise (syn. of Winter Nelis), 232

La Cité Gomand, 440

La France, 440

La Grosse Oignonette (syn. of Onion), 486

La Moulinoise, 440

La Quintinye, 440

La Savoureuse, 440

La Solsticiale, 440

La Vanstalle, 440

Lachambre, Octave, orig. of Octave Lachambre, 484

Lacroix, 441

Lady (syn. of Vigne), 572

Lady Clapp, 441

Lafayette, 441

Lagrange, orig. of Sénateur Vaisse, 544

Lahérard, 441

Lamartine (syn. of De Lamartine), 355

Lammas, 441

Lämmerbirne, 441

Lampe, orig. of Belle de Juillet, 265

Lamy, 184

Lancaster, 441

Lancaster, T. S., orig. of Lancaster, 441

Landsberger Malvasier, 441

Langbirne, 441

Lange gelbe Bischofsbirne, 442

Lange Gelbe Muscatellerbirne, 442

Lange grüne Herbstbirne (syn. of Long Green of Autumn), 449

Lange grüne Winterbirne, 442

Lange Mundnetzbirne, 442

Lange Sommer-Bergamotte, 442

Lange Wasserbirne, 442

Langelier, Réné, orig. of Beurré Langelier, 299

Langstieler, 442

Langstielige Pfaffenbirne, 442

Langstielige Zuckerbirne, 442

Lansac, 443

Large Blanquet (syn. of Gros Blanquet Long), 403

Large Duchess, 443

Larissa, 443

Laure Gilbert, 443

Laure de Glymes, 443

Lawrence, 185;
place of, in New York pear culture, 85

Lawson, 186

Lawson, owner of original tree of, 186

Laxton, orig. of Laxton Bergamot, 443

Laxton, Bergamot, 443

Le Breton, 443

Le Brun, 443

Le Congo, 444

Le Conte, 187;
parent of Big Productive, 309;
Conkleton, 348

Le Curé (syn. of Vicar of Winkfield), 227

Le Lecher, 444

Le Lectier, 188

Le Lectier, improvement of pears by, 14

Leaf-blight of pear, notes on, 115

Leaf-buds of pear, characteristics of, 61

Leaf-spot of pear, notes on, 115

Leaves of pear, characteristics of, 61

Leclerc, Léon, orig. of varieties, 190, 244, 247, 318,

426, 432, 510

Leclerc-Thouin, 444

Lederbirne, 444

Lederbogen, orig. of Beurré de Lederbogen, 299

Lee, 444

Lee Seckel, 444

Leech, Isaac, owner of original tree of Kingsessing, 182

Lefèvre, orig. of Beurré de Mortefontaine, 301

Lefèvre-Boitelle, orig. of Beurré Pauline Delzent, 303

Léger, 444

Lehoferbirne, 444

Leipsic Radish (syn. of Leipziger Rettigbirn), 444

Leipziger Rettigbirn, 444

Lemon (Massachusetts), 445

Lemon (Russia), 445

Lenawee, 445

Leochine de Printemps, 445

Léon Dejardin, 445

Léon Grégoire, 445

Léon Leclerc (Van Mons), 189;
parent of Rutter, 214

Léon Leclerc Épineux, 445

Lèon Leclerc de Laval, 446

Lèon Recq, 446

Léon Rey, 446

Léonce de Vaubernier, 446

Léonie, 446

Léonie Bouvier, 446

Léonie Pinchart, 446

Léontine Van Exem, 446

Leopold I., 446

Leopold Riche, 447

Lepine, 447

Leptothyrium pomi, cause of brown-blotch of pear, 116

Leroy, André, discussion of increase in pear varieties by, 15;
introd. of varieties, 258, 260, 262;

orig. of varieties, 122, 123, 157, 238, 240, 242, 299, 300, 304, 315, 325, 349, 354, 362, 372, 379, 381, 403, 415, 421, 447, 450, 451, 455, 456, 458, 459, 466, 468, 472, 479, 486, 495, 497, 499, 501, 506, 508, 515, 521, 523, 528, 539, 562, 582

Lesbre, 447

Lesèble, Narcisse, orig. of Bergamotte Lesèble, 273

Lesuer, A., orig. of Le Lecher, 444;
Le Lectier, 188

Levard, 447

Levester Zuckerbirne, 447

Lewes, 447

Lewis, 447

Lewis, John, orig. of Lewis, 447

Lexington, 447

Liabaud, orig. of Alexandre Chomer, 241;
Bergamotte Liabaud, 274

Liard, orig. of Napoleon, 479

Liberale, 448

Libotton, orig. of Crassane Libotton, 350

Liegel Honigbirne, 448

Lieutenant Poidevin, 448

Limbertwig (syn. of Tonkovietka), 564

Limon, 448

Lincoln, 190

Lincoln Coreless, 192

Linzer Mostbirne, 448

Little Blanquet (syn. of Petit-Blanquet), 495

Little Muscat (syn. of Petit-Muscat), 496

Livingston, Judge, orig. of Nonpareil, 482

Livingston Virgalieu, 448

Livre (syn. of Black Worcester), 310

Locations and soils for pears, 91

Locke, 448

Locke, James, orig. of Locke, 448

Lodge, 448

Loire, orig. of Loire-de-Mons, 449

Loire-de-Mons, 449

Loisel, orig. of Beurré Loisel, 300

London Sugar, 449

Long Green, 449

Long Green of Autumn, 449

Long Green of Esperin, 449

Long Green Panache (syn. of Verte-longue panachée), 571

Longland, 449

Longue du Bosquet, 450

Longue-garde, 450

Longue-Sucrée, 450

Longue-Verte (syn. of Long Green), 449

Longue Verte d'Hiver (syn. of Lange Grüne Winterbirne), 442;
(Sächsische Lange Grüne Winterbirne), 534

Longueville, 450

Longworth, 450

Loose, Henry, orig. of Tiffin, 563

Lorenzbirne, 450

Loriol de Barny, 450

Lothrop, 450

Loubiat, 450

Louis Cappe, 451

Louis Grégoire, 451

Louis Noisette, 451

Louis Pasteur, 451

Louis-Philippe, 451

Louis Van Houte, 451

Louis Vilmorin, 451

Louise (syn. of Louise Bonne de Jersey), 193

Louise-Bonne, 451

Louise Bonne d'Avanches Panachée, 452

Louise Bonne de Jersey, 193;
parent of Du Breuil Père, 370;
Magnate, 460;
Princess, 512;
Professeur Dubreuil, 514;
Souvenir de du Breuil Père, 549

Louise Bonne of Jersey (Syn. of Louise Bonne de Jersey), 193

Louise-Bonne de Printemps, 452;
parent of Baron Leroy, 259

Louise Bonne Sannier, 452; parent of Boieldien, 312

Louise de Boulogne, 452

Louise Dupont, 452

Louise d'Orléans, 452

Louise de Prusse, 452

Louison, 453

Lovaux, 453

Lovell, W. G. L., orig. of Glastonbury, 397

Lowell, John, introd. into America of Forelle, 167;
Marie Louise, 198;
Winter Nelis, 233

Lübecker Prinzessin Birne, 453

Lubin, 453

Lucie Audusson, 453

Lucien Chauré, 453

Lucien Leclercq, 453

Lucné Hative, 454

Lucrative (syn. of Belle Lucrative), 126

Lucy Duke, 194

Lucy Grieve, 454

Luizet, orig. of Prémices d'Écully, 508

Luola, 454

Lutovka, 454

Lutzbirne, 454

Luxemburger Mostbirne, 454

Lycurgus, 454

Lydie Thiérard, 454

Lyerle, 454

Lyerle, orig. of Lyerle, 454

Lyon, 454

Mace, 455

Machländer Mostbirne, 455

Mackleroy, 455

Mackleroy, Davis, orig. of Mackleroy, 455

McLaughlin, 455;
parent of Goodale, 400

McLaughlin, Henry, orig. of Eastern Belle, 374;
Indian Queen, 424

McLellan (syn. of Whieldon), 579

Macomber, 455

Macomber, Benjamin, orig. of Grand Isle, 400;
Refreshing, 518;
prop. of Vermont Beauty, 226

Macomber, J. T., orig. of Macomber, 455

McVean, 455

Madame (syn. of Windsor), 583

Madame Adélaïde de Rêves (syn. of Adélaïde de Rèves), 237

Madame Alfred Conin, 455

Madame André Leroy, 455

Madame Antoine Lormier, 455

Madame Appert, 456

Madame Arsène Sannier, 456

Madame Ballet, 456

Madame Baptiste Desportes, 456

Madame Blanchet, 456

Madame Bonnefond, 456

Madame Charles Gilbert, 456

Madame Chaudy, 456

Madame Cuissard, 456

Madame Delmotte, 457

Madame Ducar, 457

Madame Duparc, 457

Madame Durieux, 457

Madame Élisa, 457

Madame Élisa Dumas, 457

Madame Ernest Baltet, 458

Madame Favre, 458

Madame Flon, 458

Madame Grégoire, 458

Madame Hemminway (syn. of Hemminway), 414

Madame Henri Desportes, 458

Madame Loriol de Barny, 458

Madame Lyé-Baltet, 458

Madame de Madre, 458

Madame Millet, 459

Madame Morel, 459

Madame Planchon, 459

Madame Du Puis, 459

Madame de Roucourt, 459

Madame Stoff, 459

Madame Torfs, 459

Madame Treyve, 459

Madame Vazille, 459

Madame Verté, 460

Madame Von Siebold, 460

Madeleine, 195;
parent of Eliot Early, 375

Madeleine d’Angers, 460

Mademoiselle Blanche Sannier, 460

Mademoiselle Marguerite Gaujard, 460

Mademoiselle Solange, 460

Magherman, 460

Magnate, 460

Magnolia, 461

Maine-et-Loire, Horticultural Society of, orig. of Plantagenet, 500

Maisonneuve, François, orig. of Beurré Favre, 294

Malassis, Abbé, orig. of Doyenné d'Alençon, 151

Malconnaître d'Haspin, 461

Malines (syn. of Joséphine de Malines), 179

Malus, relationship to pear, 58

Malvoisie de Landsberg, 461

Manchester, 461

Mandelblättrige Schneebirne, 461

Manning, 461

Manning, Robert, biography of, 162;
introd. into America of varieties, 131, 162;
orig. of varieties, 264;
pomological garden of, 53

Manning's Elizabeth (syn. of Elizabeth), 161

Mannington, John, orig. of Caroline Hogg, 328;
Maud Hogg, 468;
Meresia Nevill, 470

Mannsbirne, 461

Mansfield, 461

Mansuette, 461

Mansuette Double, 462

Mapes, Prof., orig. of Quinn, 516

Marasquine, 462

March Bergamot, 462

Maréchal de Cour, 462

Maréchal Dillen, 462

Maréchal Pelissier, 462

Maréchal Vaillant, 462

Margaret, 196

Margarethenbirne, 463

Marguerite-Acidule (syn. of Säuerliche Margarethenbirne), 541

Marguerite d’Anjou, 463

Marguerite Chevalier, 463

Marguerite Marillat, 463

Maria, 463

Maria de Nantes, 463

Maria Stuart, 463

Marianne de Nancy, 463

Marie Benoist, 463

Marie Guisse, 464

Marie Henriette, 464

Marie Jallais, 464

Marie Louise, 197;
parent of British Queen, 320;
Marie Louise d'Uccle, 464;
Pierre Paternotte, 499

Marie-Louise Delcourt (syn. of Marie Louise), 197

Marie Louise Nova, 464

Marie Louise d'Uccle, 464

Marie Mottin, 464

Marie Parent, 464

Marietta, 464

Mariette de Millepieds, 465

Marillat, orig. of Marguerite Marillat, 463

Markbirne, 465

Marketing pears, 106

Markets, local, pears for, 101

Marksbirne, 465

Marmion, 465

Marmorirte Schmalzbirne (syn. of Doyenné d'Alençon), 150

Marquise, 465
Marquise de Bedman, 465

Marsaneix, 465

Marshall, 466

Marshall, William, orig. of Marshall, 466

Marshall Wilder, 466

Martha Ann, 466

Martin, 466

Martin-Sec, 466

Martin-Sire, 466

Marulis, 467

Mary (Case), 467

Mary (Van Mons), 467

Mary (syn. of Margaret), 196

Mas, orig. of varieties, 241

Mascon Colmar, 467

Masselbacher Mostbirne, 467

Masuret,

467

Mather, 467

Mather, John, orig. of Mather, 467

Mathilde, 467

Mathilde Gomand, 467

Mathilde Recq, 467

Mathilde de Rochefort, 467

Matou, 468

Matthews, 468

Maud Hogg, 468

Maude, 468

Maurice Desportes, 468

Maurier, discov. of Duchesse d’Orléans, 156

Maury, Reuben, orig. of Elizabeth Maury, 376

Mausebirne, 468

Max, 469

Mayflower, 468

Maynard, 468

Mayr frühzeitige Butterbirne, 469

Mecham, 469

Medaille d’été, 469

Medaille d’Or (syn. of Frédéric de Wurtemberg), 389

Medicine, pears used for, 10

Medlar, relationship of, to pear, 57

Medofka, 469

Meissner Grossvatersbirne, 469

Meissner Hirschbirne, 469

Meissner langstielige Feigenbirne, 469

Meissner Liebchensbirne, 469

Meissner Zwiebelbirne, 469

Mélanie Michelin, 469

Mellish, 470

Melon, 470

Melon de Hellmann, 470

Ménagère Sucrée de Van Mons, 470

Mendenhall, 470

Merchant, Mrs. Ezra, orig. of Tea, 560

Meresia Nevill, 470

Merlet, 470

Merriam, 470

Merriweather, orig. of Taylor, 560

Méruault, 471

Merveille d'Hiver (syn. of Petit-Oin), 496

Merveille de Moringen, 471

Mespilus, relationship of, to the pear, 57

Messire Jean, 471

Messire Jean Goubault, 471

Meuris, discov. of Beurré Diel, 133

Michaelmas Nelis, 471

Michaux, 471

Mignonne d'été, 471

Mignonne d'Hiver, 472

Mikado, 472

Milan d'hiver, 472

Milan de Rouen, 472

Miller, 472

Miller, Judge S., introd. of Victor, 572

Miller Victor (syn. of Victor), 572

Millet, orig. of Jules Blaise, 432

Millet, Charles, orig. of Madame Millet, 459

Millot de Nancy, 472

Milner, 472

Mima Wilder, 472

Ministre Bara, 473

Ministre Pirmez, 473

Ministre Viger, 473

Minot, orig. of Sebastopol, 543

Minot Jean Marie, 473

Missile d'Hiver, 473

Mission, 473

Mitchell Russet, 473

Mite on pear, 119

Mitschurin, 473

Mitschurin, orig. of Roulef, 527;
Vosschanka, 575

Moccas, 473

Mollet, Charles, orig. of Mollet Guernsey Beurré, 473

Mollet Guernsey Beurré, 473

Monarch, 474

Monchallard, 474

Monchallard, discov. of Monchallard, 474

Mongolian, 474

Monseigneur Affre, 474

Monseigneur des Hons, 474

Monseigneur Sibour, 474

Moon, 475

Moorcroft, 475

Moore, Jacob, orig. of Barseck, 260

Moorfowl Egg, 475

Morel, 475

Morel, Francois, orig. of Favorite Morel, 381;
Perrier, 495;
Professeur Hortolès, 514;
Morgan, 475;
Souvenir du Congrès, 218

Morgan, orig. of Morgan, 475

Morley, 475

Morosovskaja, 475

Mortier, M. du, orig. of Beurré Daras, 291

Mortillet, M. de, orig. of Agricola, 239;
Bijou, 309;
Bon-Chrétien Ricchiero, 314

Moskovka, 475

Mostbirne, 475

Mount Vernon, 199;
value of for local market in New York, 101

Moyamensing, 475

Mr. Hill's Pear, 473

Mrs. Seden, 476

Muddy Brook, 476

Muir, Hal, orig. of Muir Everbearing, 476

Muir Everbearing, 476

Muirfowl Egg (syn. of Moorfowl Egg), 475

Mulkey, Mrs., orig. of Idaho, 176

Müller, orig. of König Karl von Württemberg, 438

Mungo Park, 476

Munz Apothekerbirne, 476

Muscadine, 476

Muscat Allemand d'Automne, 476

Muscat Allemand d'Hiver (syn. of Deutsche Muskateller), 358

Muscat Fleuri d'Été, 476

Muscat Robert, 477

Muscat Royal, 477

Muscat Royal de Mayer, 477

Muscat Roye, 477

Muscatelle, 477

Musette d'Anjou, 477

Musette de Nancy, 478

Muskateller-Bergamotte, 478

Müskierte Pomeranzenbirne (syn. of Orange Musquée), 487

Muskingum, 478

Müskirte Schmeerbirne (syn. of Petit-Oin), 496

Muskirte Wintereirbirne, 478

Musquée d'Espéren, 478

Mussette, 478

Mützchensbirne, 478

Mycosphærella sentina, cause of pear leaf-spot, 115

Naegelgesbirn, 479

Nain Vert, 479

Napa, 479

Naples, 479

Napoleon, 479;
parent of Fondante de Moulins-Lille, 385

Napoleon I. (syn. of Napoleon), 479

Napoleon III., 479

Napoleon Butterbirne (syn. of Napoleon), 479

Napoléon Savinien, 479

Naquette, 480

Nassau Ehre, 480

Naudin, 480

Naumkeag, 480

Navez Peintre, 480

Neapolitan, 480

Nec Plus Meuris, 480;
parent of General Wauchope, 395

Necplus Meuris (syn. of Beurré d'Anjou), 127

Nectarine, 480

Negley, 481

Negley, J. S., orig. of Negley, 481

Nelis, Jean Charles, orig. of Joseph Lebeau, 431;
Winter Nelis, 233

Nélis d'Hiver (syn. of Winter Nelis), 232

Nérard, orig. of Bergamotte Jars, 273;
Beurré Antoine, 284;
Colmar de Mars, 343;
Hamon, 410;
Seringe, 545

Nerbonne, M. de, orig. of Nain Vert, 479

Neuburg, orig. of Bremer Butterbirne, 319

New Bridge, 481

New England, introduction of pear in, 45

New Haven, 481

New Meadow, 481

Newhall, 481

Newtown, 481

Nicholas, 481

Nickerson, 481

Nicolas Eischen, 481

Nicolle, orig. of Bergamotte Nicolle, 274

Niell d'Hiver, 481

Nikitaer grüne Herbst-Apothekerbirne, 482

Niles, 482

Niles, J. M., orig. of Niles, 482

Nina (syn. of Elizabeth), 161

Niochi de Parma, 482

Noir Grain, 482

Noire d’Alagier, 482

Noisette, Louis, introd. of Beurré d’Hiver, 297;
Summer Saint Germain, 556;
orig. of Bon-Chrétien d’Hiver Panaché, 314;
De Rachinquin, 355

Nonpareil, 482

Nordhäuser Winter-Forellenbirne, 482

Norfolk County, 482

Normännische Ciderbirne, 482

Northford Seckel (syn. of Talmadge), 559

Notaire Lepin, 483

Notaire Minot, 483

Nouhes, orig. of Délices de la Cacaudière, 355;
Président Parigot, 510;
Royale Vendée, 532

Nouveau Doyenne d’Hiver, 483

Nouveau Poiteau, 483

Nouvelle Aglaé, 483

Nouvelle Fulvie, 483

Nussbirne, 483

Nypse, 484

Oak-Leaved Imperial (syn. of Impériale à Feuilles de Chêne), 424

Oakley Park Bergamotte, 484

Occidental pears, description of species of, 69

Ochsenherz, 484

Ockletree, 484

Ockletree, orig. of Ockletree, 484

Ockletree pear tree, 49

Octave Lachambre, 484

Oesterreichische Muskatellerbirne, 484

Œuf de Woltmann, 484

Ogereau, 484

Ognon, 485

Ognonet (syn. of Archiduc d'Été), 251

Ognonnet, 485

Oignon, 485

Oignonet de Provence, 485

Oken, 485

Oldfield, 485

Olivenbirne, 485

Oliver, G. W., orig. of Oliver Russet, 485

Oliver Russet, 485

Oliver, discov. of Président Drouard, 210

Olivier de Serres, 200;
parent of Cavelier de la Salle, 331

Omer-Pacha (syn. of Saint Menin), 537

One-third, 486

Oneida, 486

Onion, 486

Onondaga, 201

Ontario, 202

Orange, 486

Orange-Bergamot, 486

Orange de Briel (syn. of Brielsche Pomeranzenbirne), 319

Orange County Nurs. Co., introd. of Wilder Sugar, 580

Orange d’Hiver, 486

Orange Mandarine, 486

Orange Musquée, 487

Orange pear tree, old, 42

Orange Rouge, 487

Orange Tulipée, 487

Orange de Vienne, 487

Orchards, pear, care of, 97;
catch crops for, 102

Orchards of mixed varieties of pears, 100

Ordensbirne, 487

Orel 15, 487

Oriental pears, descriptions of species of, 74;
influence of, on American pear culture, 55

Orpheline Colmar, 488

Orpheline d’Enghien (syn. of Beurré d’Arenberg), 129

Osband Summer, 488

Osborne, 488

Osborne, John, orig. of Osborne, 488

Osimaya (syn. of Winter), 583

Oswego Beurré, 488

Oswego Incomparable, 488

Ott, 488

Ott, Samuel, orig. of Ott, 488

Owen, 488

Owen, John, orig. of Owen, 488

Owener Birne, 489

Oyster-shell scale on pear, 120

Ozark, 489

P. Barry, 203

Pacific states, introduction of pear-growing in, 53

Paddock, 489

Padres, early growers of pears, 54

Pailleau, 489

Pain-et-Vin, 489

Palmischbirne, 489

Papeleu, Adrien, orig. of Beurré Payen, 303;
Navez Peintre, 480

Paquency (syn. of Payenche), 493

Paradiesbirne, 489

Pardee, 489

Pardee, S. D., orig. of Dickerman, 359;
Pardee, 489

Parfum d'Aout, 490

Parfum d'Hiver, 490

Parfum de Rose, 490

Parfumé, 490

Parfumée, 490

Parigot, orig. of Appoline, 250;
Beurré Bourbon, 288;
Comptesse de Chambord, 347;
Doyenné Fradin, 367;
Eugène des Nouhes, 379

Pariset, orig. of varieties, 239, 249, 279, 292, 307, 329, 344, 453, 471, 490, 536, 543, 544, 562

Parkinson, discussion of pears by, 32

Parkinson's pears known at present, 36

Parmentier, Andrew, introd. of Surpasse Virgalieu,

557;
orig. of Bergamotte de Stryker, 277

Parrot, 490

Parry, William, orig. of Cincincis Seedling, 338

Parsonage, 490

Passa-tutti, 490

Passans du Portugal, 491

Passe Colmar, 205;
parent of Alexandrine Mas, 241;
Félix Sahut, 381;
Wilmington, 582;
Zéphirin Grégoire, 587

Passe-Colmar des Belges, 491

Passe Colmar d'été, 491

Passe Colmar François (syn. of Jean de Witte), 429

Passe Colmar Musqué, 491

Passe Crassane, 491;
parent of Prince Napoléon, 512

Passe-Goemans, 491

Passe Madeleine, 491

Passe-Tardive, 492

Pastor, 492

Pastorale, 492

Pastorenbirne (syn. of Vicar of Winkfield), 227

Pater Noster, 492

Patemotte, Pierre, orig. of Pierre Patemotte, 499

Patten, Charles G., orig. of Seckel Seedling No. 1, 543

Paul Ambre, 492

Paul Bonamy, 492

Paul Coppieters, 492

Paul d'Hoop, 493

Paul Thielens, 493

Pauls Birne, 493

Payen, 493

Payenche, 493

Payne, James, discov. of Seneca, 544

Payton, 493

Payton, orig. of Payton, 493

Peach, 494

Pear, adaptability of the, to soils and locations, 92;
black mold of the, 117;
brown-blotch of the, 116;
codling moth on the, 118;
crown-gall on the, 116;
descriptive blank of the, opposite 68;
fertility of the, 99;
history of the, 1;
leaf-blight of the, 115;
leaf-spots of the, notes on, 115;
oyster-shell scale on the, 120;
pink-rot of the, 117;
San Jose scale on the, 117;
structural botany of the, 58

Pear-blight, control of, 113;
early occurrence of, in America, 51;
notes on, 111

-borers, 120

-breeding, Van Mons' theory of, 18

-characteristics of the, unchanged since time of Pliny, 9

-culture, climate adapted to, 85;
economic considerations important to, 94;
importance of stocks in, 94;
notes on, 83;
statistics of, 83

Pear-diseases, 110

-districts in America, minor, 51

-growing, a comparison of English and American, 37

-insects, 117

-mites, 119

-orchards, care of, 97;
catch crops for, 102;
sod versus clean culture for, 102;
tillage of, 102

-psylla, 118

-scab, 114;
treatment of, 114

-slug, 119

-stocks, notes on, 95

-thrips, 121

-trees, characters of, 59;
description of leaf-buds and leaves of, 61;
description of trunk and branches of, 60;
flower-buds and flowers of, 62;
age of, 40;
setting of, notes on, 101

-varieties, adaptability of, for dwarfing, 95;
blight resistant, 112;
blooming season of, 88;
ripening season of, 88

Pears, canning of, 109;

cold storage of, 109;
commercial, leading varieties of, 84;
cost of growing, 110;
descriptions of species of, 69;
discussion of the setting of fruit of, 99;
fertilizers for, 98;
grading of, 108;
grafting of, 106;
hardy, notes on, 86;
harvesting and marketing of, 106;
home ripening of, 109;
local market for, 101;
methods of planting of, 99;
mixed varieties of, in orchards, 100;
occidental, description of species of, 69;
oriental, description of species of, 74;
pruning of, 103;
self-fertile varieties of, 100;
self-sterile varieties of, 100;
soils and locations for, 91;
wild, 1;
wild, species of, 2

Pêche (syn. of Peach), 494

Peck, Thomas R., orig. of Royal, 532

Pei-li, 494

Pemberton, 494

Penderson, 494

Penderson, Samuel, orig. of Penderson, 494

Pendleton Early York, 494

Pengethley, 494

Penn, 494

Pennsylvania, 494

Pepin, 495

Perpetual, 495

Perrier, 495

Perry, William, introd. of Lincoln Coreless, 192

Pertusati, 495

Pests, damage to American pears by, 38

Petersbirne, 495

Petit-Blanquet, 495

Petit Catillac, 496

Petit-Chaumontel, 496

Petit-Hativeau, 496

Petit-Muscat, 496

Petit-Oin, 496

Petite Bergamotte Jaune d'Été (syn. of Kleine gelbe Sommermuskatellerbirne), 435

Petite Charlotte, 497

Petite Comtesse Palatine (syn. of Kleine Pfalzgrafin), 436

Petite Fondante, 497

Petite Marguerite, 497

Petite Muscat Long d'Été (syn. of Kleine Lange Sommer-Muskatellerbirne), 436

Petite Poire de Pierre (syn. of Petersbirne), 495

Petite Tournaisienne, 497

Petite Victorine, 497

Petre, 497;
first variety to originate in America, 51

Pfaffenbirne, 497

Pfingstbirne, 498

Philiberte, 498

Philipp der Gute (syn. of Philippe-Le-Bon), 498

Philippe-Le-Bon, 498

Philippe Couvreur, 498

Philippe Goes, 498

Philippot, 498

Philippot, orig. of Philippot, 498

Philopena, 498

Picciola, 498

Pickering, or Warden pear tree, 44

Pickering (syn. of Pound), 208

Pie IX, 498

Pied-de-Vache (syn. of Kuhfuss), 439

Pierre Corneille, 499

Pierre Curie, 499

Pierre Macé, 499

Pierre Paternotte, 499

Pierre Pépin, 499

Pierre Tourasse, 499

Pimpe, 499

Pink-rot of pear, 117

Pinneo, 499

Pitmaston, 207

Pitmaston, William, orig. of Bergamot Seckel, 268

Pitmaston Duchess (syn. of Pitmaston), 207

Pitmaston Duchesse d'Angoulême (syn. of Pitmaston), 207

Piton, 500

Piton, discov. of Piton, 500

Pitson, 500

Pius IX (syn. of Pie IX), 498

Pius X, 500

Plantagenet, 500

Planting methods for pears, 99

Plascart, 500

Platt, 500

Platte Honigbirne, 500

Pliny, medicinal qualities ascribed to pears by, 10;
mention of pear varieties by, 8;
pear characteristics given by, 9

Plutarch, discussion of the pear in Greece by, 4

Pocahontas, 500

Pöckelbirne, 501

Poëte Béranger, 501

Poire d'Abbeville, 501

Poire d'Amour d'Hiver (syn. of Winterliebesbirne), 584

Poire d'Ange de Meiningen, 501

Poire d'Aunée d'Été (syn. of Sommeralantbirne), 548

Poire d'Avril, 501

Poire Baronne Leroy (syn. of Baron Leroy), 259

Poire du Breuil Père (syn. of Souvenir de du Breuil Père), 549

Poire Brune de Gasselin, 501

Poire Canelle (syn. of Knoops Simmtbirne), 437

Poire de Casserole, 502

Poire des Chartriers, 502

Poire des Chasseurs, 502

Poire de Chevalier de Buttner (syn. of Buttner Sachsische Ritterbirne), 322

Poire de Coq, 502

Poire Dingler (syn. of Lamy), 184

Poire de Graisse, 502

Poire de gros queue, 502

Poire Henri (syn. of Henri Bivort), 414

Poire de Hert, 502

Poire de Houblon, 502

Poire de Klevenow, 503

Poire de Lard Brune (syn. of Braunrote Speckbirne), 318

Poire Livre Verte (syn. of Grüne Pfundbirne), 408

Poire de Miel de Liegel (syn. of Liegel Honigbirne), 448

Poire Noire à Longue Queue, 503

Poire des Nonnes (syn. of Beurré de Brigné), 288

Poire de Paul (syn. of Pauls Birne), 493

Poire du Pauvre, 503

Poire des Peintres, 503

Poire de Pendant, 503

Poire-Pomme (syn. of Apple Pear), 250

Poire de Preuilly, 503

Poire de Rateau, 503

Poire Rigoleau, 504

Poire du Roeulx, 504

Poire de Saint Père (syn. of Saint Père), 538

Poire Seutin (syn. of Seutin), 545

Poire Souvenir d'Hortolès Père, 504

Poire Thouin, 504

Poire de Torpes, 504

Poire des Trois Fréres, 504

Poire des Trois Jours, 504

Poire Trompette (syn. of Trompetenbirne), 566

Poire des Urbanistes (syn. of Urbaniste), 224

Poire de Vallée (syn. of Vallée Franche), 568

Poire de Vitrier, 504

Poire du Voyageur, 505

Poirer de Jardin, 505

Poirier sauger. (See *Pyrus nivalis*)

Poiteau, 505

Poiteau, orig. of Bergamotte Poiteau, 275

Poiteau (*des Français*) (syn. of Bergamotte Poiteau), 275

Polish Lemon, 505

Polk, 505

Pollan, 505

Pollvaskaja, 505

Polnische grüne Krautbirne, 505

Polnische Seidenbirne, 505

Pome, definition of, 58;
fruit characters of, 63

Pomeranzenbirn von Zabergäu, 506

Pomme d'Été, 506

Pomological garden of Robert Manning, 53

Pomology, first American by Coxe, 52

Pope Quaker, 506

Pope Scarlet Major, 506

Portail, 506

Porter, 506

Portingall, 506

Posey, 506

Pound, 208

Pradel Bros., orig. of Rousselet de Pomponne, 529

Prager Schaferbirne, 506

Prairie du Pond, 506

Präsident Drouard (syn. of Président Drouard), 210

Pratt, 507

Pratt Junior, 507

Pratt Seedling, 507

Precilly, 507

Précoce de Celles, 507

Précoce de Jodoigne, 507

Précoce de Tivoli, 507

Précoce de Trévoux, 507

Précoce Trottier, 507

Précoce de Wharton (syn. of Wharton Early), 579

Premature, 508

Prémices d'Écully, 508

Prémices de Wagelwater, 508

Premier, 508

Premier Président Métivier, 508

Present Royal of Naples (syn. of Beau Présent d'Artois), 261

Présent de Van Mons, 508

President, 508

Président Barabé, 508

Président de la Bastie, 509

Président Boncenne, 509

Président Campy, 509

President Clark, 509

Président Couprie, 509

Président Deboutteville, 509

President Dr. Ward, 509

Président Drouard, 210

Président d'Estaintot, 509

President Felton, 509

Président Fortier, 509

Président Héron, 510

Président Mas, 510

Président Muller, 510

Président Olivier, 510

Président d’Osmonville, 510

Président Parigot, 510

Président Payen, 510

President Pouyer-Quertier, 510

Président Royer, 510

Président le Sant, 511

Président Watier, 511

Présidente Senente, 511

Preul’s Colmar (syn. of Passe Colmar), 205

Prévost, 511

Pricke, 511

Primating, 511

Prince, William, introd. of Sha Lea, 545;
orig. of Prince Harvest, 511;

Saint-Germain, 512

Prince Albert, 511

Prince Harvest, 511

Prince Impérial, 511

Prince Impérial de France, 512

Prince de Joinville, 512

Prince Napoléon, 512

Prince d’Orange, 512

Prince de Printemps, 512

Prince Saint-Germain, 512

Prince Seed Virgalieu, 512

Princess, 512

Princess Maria, 513

Princesse Charlotte, 513

Princesse de Lubeck (syn. of Lübecker Prinzessin Birne), 453

Princesse Marianne, 513

Princesse d’Orange, 513

Princesse-Royale (syn. of Groom Prince Royal,) 403

Princière, 513

Pringalle, Célestin, orig, of Beurré Pringalle, 304

Priou, 513

Priou, discov. of Priou, 513

Professeur Barral, 514

Professeur Bazin, 514

Professeur Dubreuil, 514

Professeur Grosdemange, 514

Professeur Hennau, 514

Professeur Hortolès, 514

Professeur Opoix, 514

Professeur Willermoz, 514

Prud’homme, 515

Pruning pears, 103

Psylla, pear, 118

Pudsey, 515

Puebla, 515

Pulsifer, 515

Pulsifer, Dr. John, orig. of Pulsifer, 515

Pushkin, 515

Pyrolle, orig. of Jaminette, 427

Pyrus, characters of, 57

Pyrus amygdaliformis, note on, 73

Pyrus auricularis, habitat of, 73;
specific description of, 73

Pyrus betulaefolia, habitat of, 79;
specific description of, 79

Pyrus calleryana, habitat of, 80;
specific notes on, 80

Pyrus communis, behavior of, as a wild pear, 2;
habitat of, 70;
specific description of, 69

Pyrus communis cordata, specific notes on, 72

Pyrus communis longipes, specific notes on, 72

Pyrus communis mariana, specific notes on, 72

Pyrus communis pyraster, specific notes on, 71

Pyrus communis sativa, specific notes on, 72

Pyrus elæagrifolia, relationship of, to *Pyrus nivalis*, 73

Pyrus heterophylla, note on, 73

Pyrus kotschyana, relationship of, to *Pyrus nivalis*, 73

Pyrus lindleyi, relationship of, to *Pyrus serotina*, 75

Pyrus nivalis, behavior of, as a wild pear, 2;
habitat of, 2, 72;
specific description of, 72

Pyrus ovoidea, blight resistance of, 81;
parent of Tolstoy, 564;
specific description of, 80

Pyrus pashia, distinction of, from *Pyrus variolosa*, 82

Pyrus salicifolia, note on, 74

Pyrus salvifolia, relationship of, to *Pyrus nivalis*, 73

Pyrus serotina, behavior of, as a wild pear, 2;
habitat of 3, 75;
specific description of, 74;
value of, as a pear stock, 96

Pyrus serotina culta, habitat of, 76;
specific description of, 75

Pyrus serotina stapfiana, note on, 75

Pyrus serrulata, habitat of, 78;
specific notes on, 78

Pyrus sinensis, relationship of, to *Pyrus serotina*, 74

Pyrus syriaca, note on, 74

Pyrus ussuriensis, blight resistance of, 78;
habitat of, 77;
specific description of, 77

Pyrus variolosa, notes on, 81

Queen Jargonelle, 515

Queen Victoria, 515

Quiletette, 515

Quince, 515

Quince, Japanese, relationship of, to the pear, 57

Quince stocks for pear, 96

Quinn, 515

Quintinye, La. (See La Quintinye)

Raabe, orig. of Honey Dew, 420

Radis de Leipsick (syn. of Leipziger Rettigbirn), 444

Ragan, Reuben, discov. of Philopena, 498

Rahm, Rev. W. L., introd. into England of Vicar of Winkfield, 227

Rainbirne, 516

Rallay, 516

Rameau, 516

Ramilies, 516

Rankin, 516

Rankin, W. H., discov. of Rankin, 516

Rannaja, 516

Rapelje, 516

Rastlerbirne, 516

Rateau Blanc, 516

Ravenswood, 517

Ravu (syn. of Ravut), 517

Ravut, 517

Raymond, 517

Raymond de Montlaur, 517

Raymould, 517

Rayner, Mrs., orig. of Hacon Incomparable, 409

Re Umberto primo, 517

Read, Walter, orig. of Oswego Beurré, 488

Reading, 517

Recq de Pambroye, 517

Red Doyenné (syn. of Doyenné Gris), 367

Red Garden, 518

Red Muscadel (syn. of Jargonelle (French)), 178

Red Orange (syn. of Orange Rouge), 487

Red Pear, 518

Redfield, 518

Reeder, 211

Reeder, Dr. Henry, orig. of Reeder, 211

Reeder's Seedling (syn. of Reeder), 211

Refreshing, 518

Regentin (syn. of Passe Colmar), 205

Regina Margherita, 518

Régine, 518

Regnier, 518

Regnier, Madame, orig. of Regnier, 518

Reichenäckerin, 518

Reine des Belges, 518

Reine d’Hiver, 519

Reine des Poires, 519

Reine des Précoces, 519

Reine des Tardives, 519

Reine Victoria, 519

Reliance, 519

Remy Chatenay, 519

René Dunan, 519

Rettigbirne, 519

Reuterbirne, 520

Rewell, 520

Rey, orig. of Léon Rey, 446

Reymenans,

520

Reynaert Beernaert, 520

Rheinische Birne, 520

Rheinische Herbstapothekerbirne, 520

Rheinische Paradiesbirne, 520

Rhenser Schmalzbirne, 520

Richards, 520

Richardson, 521

Riche Dépouille, 521

Ridelle, 521

Riehl, Edwin H., discov. of Riehl Best, 212

Riehl Best, 212

Riocreux, 521

Ripening of pears in the home, 109

Ripening season of pear varieties, 88

Ritson, 521

Ritson, Mrs. John, orig. of Ritson, 521

Ritter, 521

Ritter, Louis, discov. of Ritter, 521

Rival Dumont, 521

Rivers, 521

Rivers, Thomas, orig. of varieties, 308, 345, 347, 363, 381, 417, 460, 502, 512, 537, 538, 556

Robert, orig. of Belle du Figuier, 264;
Général Canrobert, 394

Robert & Moreau, orig. of Beurré Fidéline, 295;
Fondante de la Maitre-École, 384

Robert Hogg, 521

Robert Treel, 522

Robertson (syn. of Washington), 575

Robin, orig. of Doyenné Robin, 369

Robine, 522

Robitaillié, orig. of Robitaillié père, 522

Robitaillié père, 522

Roby, H. R., introd. of Winter Seckel, 584;
orig. of Cooke, 348

Rockeneirbirne, 522

Roe, William, orig. of Roe Bergamot, 522

Roe Bergamot, 522

Rogers, 522

Roggenhoferbirne, 522

Roi Charles de Wurtemberg (syn. of König Karl von Württemberg), 438

Roi d'Été (syn. of Gros Rousselet), 404

Roi-Guillaume, 522

Roi de Rome, 523

Roitelet, 523

Rokeby, 523

Roland, orig. of Beurré Roland, 304

Rollet, orig. of Notaire Lepin, 483

Rolmaston Duchess, 523

Rome, ancient, pear in, 7

Ronde du Bosquet, 523

Rondelet, 523

Rongiéras, orig. of Beurré des Mouchouses, 302

Rooks, orig. of Ozark, 489

Roosevelt, 213

Ropes, 523

Ropes, orig. of Ropes, 523

Rorreger Mostbirne, 523

Rosabirne, 523

Rosalie Wolters, 524

Rosanne, 524

Rose Doyenné, 524

Rose Water, 524

Rosenhofbirne, 524

Rosenwasserbirne, 524

Rosinenbirne, 524

Roslyn, 524

Ross, 524

Ross, Charles, orig. of General Wauchope, 395

Ross, Gideon, orig. of Japan, 428

Rossney, 524

Rostiezer, 525

Rote Bergamotte (syn. of Bergamotte d’Automne), 270

Rote Hanglbirne, 525

Rote Holzbirne, 525

Rote Kochbirne, 525

Rote Pilchelbirne, 525

Rote Scheibelbirne, 525

Rote Winawitz, 525

Rotfleischige Mostbirne, 525

Rothbackige Sommerzuckerbirne, 525

Rothe Confesselsbirne, 526

Rothe Jakobsbirne, 526

Rothe langstielige Honigbirne, 526

Rothe oder grosse Pfalzgrafinbirne, 526

Rothe Rettigbirne, 526

Rothe Winterkappesbirne, 526

Rothe Winterkochbirne, 526

Rothe Zucherlachsbirne, 526

Rother Sommerdorn (syn. of Épine d’Été Rouge), 377

Rother Winterhasenkopf, 526

Rothgraue Kirchmessbirne, 527

Rougeaude, 527

Rouget, 527

Roulef, 527

Rouse Lench, 527

Rousselet Aelens, 527

Rousselet d’Anvers, 527

Rousselet d’Aout (syn. of Gros Rousselet d’Aout), 405

Rousselet Baud, 527

Rousselet Bivort, 527

Rousselet Blanc, 528

Rousselet de la Cour, 528

Rousselet Decoster, 528

Rousselet Doré d’Hiver, 528

Rousselet Enfant Prodigue (syn. of Enfant Prodigue), 377

Rousselet d’été Brun Rouge (syn. of Braunrothe Sommerrusselet), 319

Rousselet Hâtif, 528

Rousselet d'Hiver (syn. of Winter Rousselet), 584

Rousselet de Janvier, 528

Rousselet Jaune d'Été, 529

Rousselet de Jodoigne, 529

Rousselet de Jonghe, 529

Rousselet de Meestre, 529

Rousselet Panaché, 529

Rousselet de Pomponne, 529

Rousselet Précoce, 529

Rousselet de Reims, parent of Bon Chrétien Vermont, 315

Rousselet de Rheims, 530

Rousselet de Rheims Panaché, 530

Rousselet Royal, 530

Rousselet Saint Nicolas, 530

Rousselet Saint-Quentin, 530

Rousselet Saint Vincent, 530

Rousselet de Stuttgardt, 531

Rousselet Thaon, 531

Rousselet Theuss, 531

Rousselet Vanderwecken, 531

Rousseline, 531

Rousselon, 531

Roux Carcas, 532

Rové, 532

Rowling, 532

Royal, 532

Royal d’Hiver, 532

Royale Vendée, 532

Ruhschiebler, 532

Rummelter Birne, 533

Runde gelbe Honigbirne, 533

Runde Sommerpomeranzenbirne, 533

Rushmore (syn. of Harrison Large Fall), 412

Russbirne, 533

Russelet Petit, 533

Russet Bartlett, 533

Russet Catherine, 533

Russian pears, introduction into America, 56

Rutter, 214

Rutter, John, orig. of Rutter, 214

Rylsk, 533

S. T. Wright, 533

Sabine, 533

Sabine d'Été, 534

Sacandaga, 534

Sächsische Glockenbirne, 534

Sächsische Lange Grüne Winterbirne, 534

Safran, 534

Sage-leaved Pear. (See *Pyrus nivalis*)

Sageret, orig. of Angleterre Nain, 247;
Beauvalot, 262;
Bergamotte Sageret, 276;
Doyenné Rose, 369

Saint André, 534

Saint Andrew, 534

Saint Aubin sur Riga, 534

Saint-Augustin, 535

Saint Denis, 535

Saint Dorothée, 535

Saint François, 535

Saint Gallus Weinbirne, 535

Saint George, 535

Saint Germain, 535;
parent of Marie Guisse, 464;
Williams Double Bearing, 582

Saint Germain Gris, 536

Saint Germain Panaché, 536

Saint Germain de Pepins, 536

Saint Germain Puvis, 536

Saint Germain du Tilloy, 536

Saint Germain Van Mons, 536

Saint-Germain Vauquelin (syn. of Vauquelin), 570

Saint Ghislain, 536

Saint Herblain d’Hiver, 537

Saint-Laurent Jaune (syn. of Gelbe Laurentiusbirne), 393

Saint Lézin, 537

Saint Louis, 537

Saint Luc, 537

Saint Luke, 537

St. Martial (syn. of Angélique de Bordeaux), 247

Saint Menin, 537

Saint-Michael (syn. of White Doyenné), 228

St. Michel Archange, 538

Saint-Nicolas (syn. of Duchesse d’Orléans), 156

Saint Patrick, 538

Saint Père, 538

St. Swithin, 538

Saint Vincent de Paul, 538

Sainte Anne, 538

Sainte Germain d’Été (syn. of Summer Saint Germain), 556

Sainte Madelaine (syn. of Madeleine), 195

Sainte Thérèse, 539

Salisbury, 539

Salviati, 539

Salzburger von Adlitz, 539

Sam Brown, 539

Samenlose, 539

San Jose scale on pear, 117

Sand Pear. (See *Pyrus serotina*)

Sand pear, Chinese, parent of Garber, 171;
Kieffer, 181;
Le Conte, 187

Sanguine de France (syn. of Sanguinole), 539

Sanguine d'Italie, 539

Sanguinole, 539

Sanguinole de Belgique, 540

Sannier, Arséne, orig. of varieties, 241, 276, 283, 297, 315, 360, 361, 381, 429, 451, 452, 453, 455, 456, 499, 508, 509, 510, 511, 519, 543, 549, 550, 551, 572

Sans-Pareille du Nord, 540

Sans Peau, 540

Santa Anna, 540

Santa Claus, 540

Santa Rosa, 541

Sapieganka, 541

Sarah, 541

Sarrasin, 541

Sary-Birne, 541

Säuerliche Margarethenbirne, 541

Scab, pear, 114;
treatment of, 114

Scale insects on pear, 120

Scented (syn. of Duchovaya), 573

Schellesbirne, 541

Schenk, John, orig. of Hosenschenk, 421

Schmalblättrige Schneebirne, 542

Schmotzbirne, 542

Schnackenburger Winterbirne, 542

Schöberlbirne, 542

Schöne Angevine (syn. of Pound), 208

Schöne Müllerin, 542

Schöne Zuckerbirne (syn. of Belle Sucrée), 266

Schönebeck Tafelbirne, 542

Schönerts Omsewitzer Schmalzbirne, 542

Schönlin Stuttgarter späte Winterbutterbirne, 542

Schönste Sommerbirne (syn. of Jargonelle (French)), 178

Schuman, 542

Schwarze Birne, 542

Schweizer Wasserbirne, 543

Sdegnata, 543

Seal, 543

Sébastien, 543

Sebastopol, 543

Secher, orig. of Duchesse de Bordeaux, 371

Seckel, 215;
parent of Adams, 237;

Barseck, 260;
Eureka, 379;
Feast, 381;
Gansel Seckel, 170;
Luola, 454;
President Clark, 509;
Worden Seckel, 234;
Youngken Winter Seckel, 586;
place of, in commercial pear culture, 84

Seckel Seedling No. 1, 543

Seckle (syn. of Seckel), 215

Secrétaire Maréschal, 543

Secrétaire Rodin, 543

Seigneur (syn. of Belle Lucrative), 126

Seigneur Daras, 544

Seigneur d'Espéren (syn. of Belle Lucrative), 126

Seigneur d'Été, 544

Self-fertile and self-sterile pears, 100

Selleck, 544

Semis d'Echasserie, 544

Semis Léon Leclerc, 544

Semis de White (syn. of White Seedling), 579

Sénateur Préfet, 544

Sénateur Vaisse, 544

Seneca, 545

Senfbirne, 545

Seringe, 545

Serrurier, 545

Seutin, 545

Sha Lea, 545

Shawmut, 545

Sheldon, 217;
place of, in commercial pear culture, 84

Sheldon, Major, owner of original tree of Sheldon, 217

Shenandoah, 545

Sheppard, 546

Sheppard, James, orig. of Sheppard, 546

Sheridan, 546

Shindel, 546

Shobden Court, 546

Shroeder, R., introd. of Winter, 583

Shurtleff, 546

Shurtleff, Dr. S. A., orig. of varieties, 238, 242, 258, 319, 320, 328, 335, 336, 338, 360, 387, 388, 395, 399, 400, 401, 411, 425, 430, 445, 450, 461, 468, 476, 482, 486, 494, 506, 508, 515, 538, 545, 546, 552, 570, 583

Sieboldii, 546

Sieulle, Jean, orig. of Doyenné Sieulle, 369

Sievenicher Mostbirne, 546

Silberästige Gewürzbirne (syn. of Rameau), 516

Silvange (syn. of Bergamotte Silvange), 276

Sikaya, 546

Simon Bouvier, 546;
parent of Rousselet Bivort, 527

Sinai'sche Buschelbirne, 547

Sinclair, 547

Sirningers Mostbirne, 547

Six, orig. of Beurré Six, 306

Size and habit of pear-trees, 59

Skinless (syn. of Sans Peau), 540

Slavonische Wasserbirne, 547

Slug on pear, 19

Slutsk, 547

Small Blanquet (syn. of Petit-Blanquet), 495

Smet Fils Unique, 547

Smith, 547

Smith, J. B., orig. of Haddington, 409;
Moyamensing, 475;
Pennsylvania, 494

Smith, S. F., orig. of seedling pears, 338

Smith, W. & T., orig. of Ontario, 202

Smith Beauty, 547

Smith Duchess, 547

Snow, 547

Snow Pear. (See *Pyrus nivalis)*

Society Van Mons, distrib. of varieties, 264, 320, 500;
orig. of varieties, 259, 316, 479, 527

Sod versus clean culture for pear orchards, 102

Sœur Grégoire, 547

Soils and locations for pears, 91

Soldat Bouvier, 548

Soldat Laboureur, 548;
parent of Président d'Estaintot, 509

Solitaire (syn. of Mansuette), 461

Sommeralantbirne, 548

Sommerdechantsbirne(syn. of Summer Doyenné), 221

Sommerkönigin, 548

Sommer-Russelet, 548

Sommerwachsbirne, 548

Sommer-Zuckerbirne, 548

Sophie de l'Ukraine, 548

Sotschnaja, 549

Soueraigne, 549

Soutmann, 549

Souvenir (syn. of Souvenir du Congrès), 218

Souvenir de l'Abbé Lefebvre, 549

Souvenir de du Breuil Père, 549

Souvenir du Congrès, 218

Souvenir Deschamps, 549

Souvenir Désiré Gilain, 549

Souvenir d'Espéren, 219

Souvenir d'Espéren (syn. of Fondante de Noël), 165

Souvenir d'Espéren de Berckmans, 549

Souvenir Favre, 550

Souvenir de Gaëte, 550

Souvenir de Julia, 550

Souvenir de Leopold Ier (syn. of Vingt-cinquième Anniversaire de Léopold Ier), 573

Souvenir de Leroux-Durand, 550

Souvenir de Lydie, 550

Souvenir de Madame Charles, 550

Souvenir de Madame Treyve (syn. of Madame Treyve), 459

Souvenir de la Reine des Belges, 550

Souvenir de Renault Père, 551

Souvenir de Sannier père, 551

Souvenir de Simon Bouvier, 551

Souvenir de Simon Bouvier (syn. of Simon Bouvier), 546

Souvenir du Vénérable de la Salle, 551

Souveraine de Printemps, 551

Spae, 551

Spae, orig. of Spae, 551

Spanish Warden (syn. of Bon-Chrétien d'Espagne), 313

Sparbirne (syn. of Jargonelle), 177

Späte Rotbirne, 551

Späte Sommerbirne ohne Schale, 551

Späte Todemannsbirne, 552

Späte Wasserbirne, 552

Spätes Graumänchen, 552

Species of oriental pears, descriptions of, 74

Species of pears, 57;
characters of, 57;
descriptions of, 69

Speckbirne, 552

Speedwell, 552

Spillingsbirne, 552

Spindelförmige Honigbirne, 552

Spindelförmige Rehbirne, 552

Spinka, 552

Spreeuw, 553

Squash (syn. of Taynton Squash), 560

Stair, discoverer of Bartlett, 125

Star of Bethlehem, 553

Stark, W. P., introd. of Victor, 572

Stark Bros., introd. of Florida Bartlett, 383

Statistics of pear culture, 83

Steinbirne, 553

Steinmitz Catharine, 553

Stephens, Prof., discov. of Rapelje, 516

Sterckmans, orig. of Beurré Sterckmans, 307

Sterility of pear, 99

Sterling, 553

Sterling, orig. of Sterling, 553

Stevens, M. F., orig. of Stevens Genesee, 553

Stevens Genesee, 553

Stocks for pears, importance of, 94;
notes on, 95

Stoff, orig. of Madame Stoff, 459

Stoffels, orig. of Sabine d'Été, 534

Stone, 553

Stone, orig. of Stone, 553

Stone & Wellington, orig. of Pitson, 500

Stout, 553

Strassburger Sommerbergamotte, 553

Stribling, 554

Stribling, J. C., introd. of Stribling, 554

Striped Bon Chrétien (syn. of Bon-Chrétien d'Hiver Panaché), 314

Structural botany of pear, 58

Stümplerbirne, 554

Sturges, 554

Sturges, Mrs, Mary S., orig. of Sturges, 554

Stuttgarter Geisshirtel (syn. of Rousselet de Stuttgardt), 531

Stuyvesant, pear tree in garden of, 49

Styer, 554

Styer, Charles, orig. of Styer, 554

Styrian, 554

Sucré de Tertolen (syn. of Van Tertolen Herbst Zuckerbirne), 569

Sucré-Vert, 554

Sucré-Vert d'Hoyerswerda (syn. of Sucrée de Hoyerswerda), 555

Sucrée Blanche, 555

Sucrée du Comice, 555

Sucrée d'Heyer (syn. of Heyer Zuckerbirne), 418

Sucrée de Hoyerswerda, 555

Sucrée de Montluçon, 555

Sucrée Van Mons, 555

Sucrée de Zurich, 555

Sudduth, 220

Sudduth, Titus, dissem. of Sudduth, 220

Suet Lea, 556

Suffolk Thorn, 556

Sugar Top, 556

Sülibirne, 556

Sullivan, 556

Summer Bell (syn. of Windsor), 583

Summer Beurré d'Arenberg, 556

Summer Franc Réal (syn. of Bergamotte d'Été), 271

Summer Hasting, 556

Summer Popperin, 556

Summer Portugal, 556

Summer Saint Germain, 556

Summer Virgalieu, 557

Summer, Col. William, introd. of Upper Crust, 567; orig. of Hebe, 413

Superfin (syn. of Beurré Superfin), 137

Superfondanta, 557

Superstitions based on pears, 10

Suprême Coloma, 557

Surpasse Crassane, 557

Surpasse Meuris, 557

Surpasse St, Germain, 557

Surpasse Virgalieu, 557

Surprise, 558

Süsse Margarethenbirne, 558

Süsse Sommerlahnbirne, 558

Suwanee, 558

Suzanne, 558

Suzette de Bavay, 558

Swain, James R., orig. of Bronx, 320

Swan Egg, 558

Swan's Orange (syn. of Onondaga), 201

Sweater, 558

Sylvie de Malzine, 559

Taglioretti, 559

Takasaki, 559

Talmadge, 559

Talmadge, Levi, orig. of Talmadge, 559

Tardive d’Ellezelles, 559

Tardive Garin, 559

Tardive de Mons, 559

Tardive de Montauban, 559

Tardive de Solesne, 559

Tardive de Toulouse (syn. of Duchesse d’Hiver), 372

Tatnall Harvest, 559

Tavernier de Boulogne, 559

Taylor, 560

Taynton Squash, 560

Tea, 560

Templiers, 560

Tepka, 560

Tertolen Herbst Zuckerbirne (syn. of Van Tertolen Herbst Zuckerbirne), 569

Test, 560

Tettenhall, 560

Teutsche Augustbirne, 561

Texas, 561

Thacher, Anthony, pear tree, 43

The Dean, 561

Theilersbirne, 561

Theodor Körner, 561

Theodore, 561

Theodore Van Mons, 561

Theodore Williams, 561

Théophile Lacroix, 561

Theophrastus, mention of pear by, 5

Thérèse, 562

Thérèse Appert, 562

Theveriner Butterbirne, 562

Thibaut Butterbirne, 562

Thick Stalked Pear, 562

Thiérard, Jules, orig. of Lydie Thiérard, 454

Thimothée, 562

Thintwig (syn. of Tonkovietka), 564

Thirriot, orig. of Fondante Thirriot, 386

Thirriot Bros., orig. of Eugène Thirriot, 379

Thompson, Judge, orig. of Thompson, 562

Thompson (Eng.), 562

Thompson (N. H.), 562

Thooris, 562

Thorp (syn. of White Doyenné), 228

Thouin (syn. of Winter Nelis), 232

Thrips on pear, 121

Throop, Calvin, orig. of Calvin, 326

Thuerlinckx, 563

Thurston Red, 563

Thury Schmalzbirne (syn. of Héricart de Thury), 417

Tiffin, 563

Tigrée de Janvier, 563

Tillage of pear orchards, 102

Tillington, 563

Timpling, 563

Tindall, George & William, orig. of Tindall Swan Egg, 563

Tindall Swan Egg, 563

Tollbirne, 564

Tolstoy, 564

Tom Strange, 564

Tonkovietka, 564

Tonneau, 564

Toronto Belle, 564

Totten, Col., orig. of Totten Seedling, 564

Totten Seedling, 564

Tougard (syn. of Calebasse Tougard), 326

Tourasse, orig, of Comte de Lambertye, 346;
Directeur Hardy, 360;
La Béarnaise, 440;
Pierre Tourasse, 499;
Professeur Bazin, 514

Tournay d'hiver, 565

Tout-il-faut, 565

Träublesbirne, 565

Tredwell, Thomas, orig. of Platt, 500

Trees, pear, characters of, 59

Trescott (syn. of Westcott), 578

Trésor (syn. of Amour), 245

Tressorier Lesacher, 565

Treyve, orig. of Madame Treyve, 459;
Précoce de Trévoux, 507

Trinkebirne, 565

Triomphe de Jodoigne, 565

Triomphe de Louvain, 565

Triomphe de Touraine, 565

Triomphe de Tournai, 565

Triomphe de Vienne, 566

Triumph (syn. of Triomphe de Vienne), 566

Trockener Martin (syn. of Martin-Sec), 466

Trompetenbirne, 566

Troppauer Goldgelbe Sommermuskatellerbirne, 566

Troppauer Muskateller (syn. of Troppauer Goldgelbe Sommermuskatellerbirne), 566

Trottier, orig. of Doyenné de Montjean, 368

Trois Jours (syn. of Poire des Trois Jours), 504

Trout Pear (syn. of Forelle), 167

Truchsess, 566

Truckhill Bergamot, 566

Tsar, 566

Tudor, 567

Turban, 567

Türkische müskirte Sommerbirne, 567

Turnep, 567

Turner, mention of pears by, 32

Tusser, mention of pears by, 32

Tussock moth caterpillars on pear, 120

Twenty-fifth Anniversaire de Leopold I (syn. of Vingt-cinquième Anniversaire de Léopold Ier), 573

Twice flowering Pear-tree, 567

Tyler, 567

Tyson, 222;
value of, for local market in New York, 101

Tyson, Jonathan, owner of original tree of Tyson, 223

Ulatis, 567

Unbekannte Von Mons (syn. of L'Inconnue Van Mons), 439

Union (syn. of Pound), 208

Unterlaibacher Mostbirne, 567

Unvergleichliche (syn. of Sans-Pareille du Nord), 540

Upper Crust, 567

Urbaniste, 224; parent of Harris, 412;
Poire du Pauvre, 503

Urbanister Sämling (syn. of Urbaniste), 224

Ursula, 567

Uvedale, Dr., orig. of Pound, 209

Uvedale's St. Germain (syn. of Pound), 208

Uwchlan, 568

Valentine, 568

Vallée Franche, 568

Valley, 568

Van Assche, 568

Van Assene (syn. of Van Assche), 568

Van Buren, 568

Van Deventer, 568

Van Dooren, orig. of Rousselet Saint-Quentin, 530

Van Geert, Jean, orig. of Beurré Jean van Geert 298;
Beurré Van Geert, 295

Van Lindley, J., introd. of Alice Payne, 242

Van Marum, 569

Van Mons, Dr., discov. of var., 533;
orig. of varieties, 131, 152, 161, 221, 237, 239, 240, 242, 243, 246, 251, 252, 253, 254, 255, 260, 265, 269, 272, 273, 278, 279, 282, 284, 285, 286, 288, 290, 291, 293, 297, 298, 299, 305, 307, 308, 312, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 330, 331, 333, 334, 339, 340, 341, 342, 343, 344, 345, 346, 348, 349, 351, 353, 354, 355, 356, 358, 361, 362, 365, 368, 369, 370, 372, 373, 377, 378, 379, 381, 383, 385, 386, 387, 390, 392, 394, 405, 409, 413, 414, 415, 417, 418, 433, 434, 441, 443, 444, 445, 446, 448, 452, 457, 462, 463, 464, 467, 470, 472, 474, 476, 483, 485, 487, 488, 489, 491,

492, 493, 498, 502, 505, 508, 511, 512, 513, 515, 516, 518, 519, 520, 522, 527, 528, 531, 536, 545, 547, 553, 555, 556, 557, 558, 561, 562, 565, 569, 570, 578;
prop. of var., 160;
theory of, in pear breeding, 18;
work of, in pear breeding, 17

Van Mons Butterbirne (syn. of Léon Leclerc (Van Mons)), 189

Van Mons frühe Pomeranzenbirne, 569

Van Mons Hermannsbirne (syn. of Saint Germain Van Mons), 536

Van Mons Sommer Schmalzbirne, 569

Van Mons späte Wirthschaftbirne, 569

Van Mons süsse Haushaltsbirne, 569

Van Tertolen Herbst Zuckerbirne, 569

Van Vranken, William, discov. of Sacandaga, 534

Van de Weyer Bates, 569

Vancouver, mention of fruits in California by, 54

Vanderveer, 570

Vanderveer, Dr. Adrian, orig. of Vanderveer, 570

Varet, A., orig. of Beurré Vauban, 307

Varro, fifty monographs of husbandry by Greeks named by, 7;
forerunner of modern pear management, 7

Varuna, 570

Vauquelin, 570

Vauquelin, orig. of Vauquelin, 570

Veitch, Messrs., orig. of S. T. Wright, 533

Venturia pyrina, cause of pear scab, 114

Venusbrust, 570

Vereins Dechantsbirne (syn. of Doyenné du Comice), 153

Vergoldete oder wahre graue Dechantsbirne, 570

Verguldete Herbstbergamotte, 570

Verlain (syn. of Verlaine d'Été), 570

Verlaine d'Été, 570

Vermillion d'en Haut, 570

Vermont, 571

Vermont Beauty, 225;
place of, in New York pear culture, 85;
possibility of, being identical with Forelle, 167

Vernusson, 571

Verschwenderin (syn. of Enfant Prodigue), 377

Verte-Longue d'Automne (syn. of Long Green of Autumn), 449

Verte-longue panachée, 571

Verte-Longue de la Sarthe, 571

Verulam, 571

Veterans (syn. of Besi des Vétérans), 282

Vezouzière, 571

Vicar (syn. of Vicar of Winkfield), 226

Vicar Junior, 571

Vicar of Winkfield, 226

Vice-Président Coppiers, 572

Vice-Président Decaye, 572

Vice-Président Delbée, 572

Vice-Président Delehoye, 572

Vice-Président Delbée, parent of Cavelier de la Salle, 331

Victor, 572

Victoria (syn. of Huyshe Victoria), 423

Victoria d'Huyse (syn. of Huyshe Victoria), 423

Victoria de Williams, 572

Victorina, 572

Vigne, 572

Villain XIV, 572

Villéne de Saint-Florent, 573

Vin de Anglais, 573

Vine Pear (syn. of Vigne), 572

Vineuse, 573

Vineuse Esperen (syn. of Vineuse),

573

Vingt-cinquième Anniversaire de Léopold Ier, 573

Virgalieu (syn. of White Doyenné), 228

Virgalieu d'été (syn. of Summer Virgalieu), 557

Virginale du Mecklembourg, 573

Virginie Baltet, 573

Virgouleuse, 573

Vital, 574

Vital, discov. of Vital, 574

Vitrier, 574

Volkmarsen (syn. of Volkmarserbirne), 574

Volkmarserbirne, 574

Von Muckenheim, orig. of Argusbirne, 252

Von Zugler, 574

Voscovoya, 574

Vosschanka, 575

Wachsbirne (syn. of Cire), 338

Wade, 575

Wade, I. C., orig. of Wade, 575

Wadleigh, 575

Wahre Canning, 575

Wahre Faustbirne, 575

Wahre Schneebirne, 575

Walker, Samuel, owner of original tree of Mount Vernon, 199

Walker (syn. of Amande Double), 243

Wallis, Henry, orig. of Wallis Kieffer, 575

Wallis Kieffer, 575

Walnut (syn. of Echasserie), 374

Wälsche Birne (syn. of Jargonelle), 177

Warden pear tree, 44

Warner, 575

Warwicke (syn. of White Doyenné), 228

Washington, 575

Waterloo, 576

Watson, 576

Watson, William, orig. of Watson, 576

Waxy (syn. of Voscovoya), 574

Weber, orig. of Duchesse d'Angoulême Bronzée, 371

Webster, 576

Weeping Willow, 576

Weidenbirne, 576

Weidenblättrige Herbstbirne, 576

Weihmier Sugar, 576

Weihnachtsbirne (syn. of Fondante de Noël), 164

Weiler'sche Mostbirn, 576

Weingifterin (syn. of Schweizer Wasserbirne), 543

Weisse Fuchsbirne, 576

Weisse Hangelbirne, 577

Weisse Herbst Butterbirne (syn. of White Doyenné), 228

Weisse Kochbirne, 577

Weisse Pelzbirne, 577

Weisse Pfalzgrafenbirne (syn. of Zink Pfalzgrafenbirne), 587

Welbeck Bergamot, 577

Wellington, 577

Wellington, A., introd. of Wellington, 577

Welsche Bratbirne, 577

Weltz, 578

Weltz, Leo, introd. of Weltz, 578

Wendell, 578

Wesner, 578

Westcott, 578

Westphälische Melonenbirne, 578

Westrumb, 578

Wetmore, 578

Wetmore, E. B., orig. of Wetmore, 578

Wharton Early, 579

Wheeler, 579

Wheeler, Dr., discov. of Wheeler, 579

Whieldon, 579

Whieldon, Wm. W., orig. of Whieldon, 579

White Beurré (syn. of White Doyenné), 228

White Doyenné, 228;
parent of Beurré Antoine, 284;
Christmas Beurré, 337;
Collins, 341;
Hewes, 418;
Homestead, 420;
Vanderveer, 570

White Genneting, 579

White Longland, 579

White Seedling, 579

White Squash, 580

White Star, 580

Whitfield, 580

Wiegel, Christopher, orig. of Margaret, 197

Wiener Pomeranzenbirne (syn. of Orange de Vienne), 487

Wiest, 580

Wight, Joseph, orig. of Raymond, 517

Wilbur, 580

Wilbur, Jr., D., orig. of Wilbur, 580

Wilcomb and King, introd. of Lawrence, 185

Wild Pears. (See Pears, Wild)

Wilde Filzbirne, 580

Wilde Herrnbirne, 580

Wilde Holzbirne, 580

Wilder, Col. Marshall P., biography of, 128;
introd. into America of varieties, 127, 472, 571

Wilder (syn. of Wilder Early), 230

Wilder Early, 230

Wilder Sugar, 580

Wilding von Einsiedel, 581

Wilding von Gronau, 581

Wilding aus Suffolk (syn. of Suffolk Thorn), 556

Wilford, 581

Wilkinson, 581

Wilkinson, A., orig. of Wilkinson Winter, 581

Wilkinson, Jeremiah, orig. of Wilkinson, 581

Wilkinson Winter, 581

Willamette Valley, introduction of pear culture in, 54

Willermoz, 581

William, 581

William Edwards (syn. of William), 581

William Prince, 582

Williams, orig. of Gansel Late Bergamot, 391;
Gansel Seckel, 170;
prop. of Bartlett, 125

Williams, Aaron Davis, orig. of Williams Early, 582

Williams, John, orig. of Chaumontel Swan Egg, 336;
Pitmaston, 207

Williams, Mrs., orig. of Williams Double Bearing, 582

Williams, Theodore, orig. of Theodore Williams, 561

Williams (syn. of Bartlett), 124

Williams' Apothekerbirne (syn. of Bartlett), 124

Williams' Bon Chrétien (syn. of Bartlett), 124

Williams Christbirne (syn. of Bartlett), 124

Williams Double Bearing, 582

Williams Early, 582

Williams d'hiver, 582

Williams panachée, 582

Williams Winter (syn. of Williams d'hiver), 582

Williamson, 582

Williamson, Nicholas, orig. of Williamson, 582

Willison, W., orig. of Queen Victoria, 515

Wilmington, 582

Windsor, 583

Winship, 583

Winship, Messrs., orig. of Winship, 583

Winslow, 583

Winter, 583

Winter Bartlett, 231

Winter Bell (syn. of Pound), 208

Winter Bon Chrétien (syn. of Angoisse), 248

Winter Dechantsbirne (syn. of Easter Beurré), 159

Winter Doyenné, parent of Doyenné à Cinq Pans, 366

Winter Eisbirne (syn. of Glace d'hiver), 397

Winter Jonah, 583

Winter Meuris (syn. of Beurré d'Anjou), 127

Winter Nelis, 232;
parent of Colmar Sirand, 344;
Comptesse de Chambord, 347;
Lycurgus, 454;
Michaelmas Nelis, 471;
Reeder, 211;
place of, in commercial pear culture, 84

Winter Oken (syn. of Oken), 485

Winter Orange (syn. of Orange d'Hiver), 486

Winter Pear, 583

Winter Pomeranzenbirne (syn. of Orange d'Hiver), 486

Winter Popperin, 584

Winter Rousselet, 584

Winter Seckel, 584

Winter Sweet Sugar, 584

Winter Thorn (syn. of Épine d'Hiver), 377

Winter Williams, 584

Winterbirne, 584

Winterliebesbirne, 584

Winterrobine, 584

Winterwunder (syn. of Petit-Oin), 496

Witte Princesse, 585

Witzthumb, orig. of Jean de Witte, 429

Wolfsbirne, 585

Woodberry, William, orig. of Rossney, 524

Woodbridge, orig. of Woodbridge Seckel, 585

Woodbridge Seckel, 585

Woodstock, 585

Worden, Schuyler, orig. of Worden Meadow, 585

Worden, Sylvester, orig. of Worden Seckel, 234

Worden (syn. of Worden Seckel), 234

Worden Meadow, 585

Worden Seckel, 234

Wörlesbirne, 585

Wormsley Grange, 585

Wormy pear, cause of, 118

Worster (syn. of Black Worcester), 310

Wredow (syn. of Délices de Charles), 355

Wright, Zaccheus, orig. of Chelmsford, 336

Wurzer, 586

Wurzer d'Automne (syn. of Wurzer), 586

Yat, 586

Yellow Huff-cap, 586

York, Mrs. Jeremiah, orig. of Pendleton Early York, 494

York-précoce de Pendleton (syn. of Pendleton Early York), 494

Youngken, David, orig. of Youngken Winter Seckel, 586

Youngken, Josiah, orig. of Red Garden, 518

Youngken Winter Seckel, 586

Zache, 586

Zapfenbirn, 586

Zarskaja, 587

Zénon, 587

Zéphirin Grégoire, 587

Zéphirin Louis, 587

Zieregger Mostbirne, 587

Zimmtfarbige Schmalzbirne, 587

Zink Pfalzgrafenbirne, 587

Zoar Beauty, 588

Zoé, 588

Züricher Zuckerbirne (syn. of Sucrée de Zurich), 555

Zwibotzenbirne (syn. of Deux Têtes), 359

FOOTNOTES:

[1] *The Odyssey*, Book VII. Translated by S. H. Butcher and A. Lang.

[2] Pliny *Nat. Hist.* **XV**: 15. From a translation made for the writer by Professor H. H. Yeames; Hobart College, Geneva, N. Y.

[3] Goderonne: From godron, a sculptural ornament having the shape of an elongated egg.

[4] Cordus, Valerius *Hist. Pl.* **3**:176-182. 1561.

The writer is indebted to Professor H. H. Yeames, Hobart College, Geneva, N. Y., for the translation of this chapter from the original text.

[5] *A Hist. of Gard. in Eng.* 35-37. 1910.

[6] *Mass. Hist. Soc. Collections* 1st Ser. **1**:118.

[7] *Mass. Records* **1**:24.

[8] *Mass. Hist. Collections* 3d Ser. **23**:337.

[9] *Hist. Mass. Hort. Soc.* p. 16. 1829-1878.

[10] *Report of Me. Pom. Soc.* **7**:1873.

[11] Prince, William *Cat.* 1771.

[12] For a brief account of the life and work of John Bartram, see *The Grapes of New York*, page 97.

[13] For an account of the life and work of Coxe, see *The Peaches of New York*, page 254.

[14] For an account of the life and work of Budd, see *The Plums of New York*, page 145.

[15] Rehder, Alfred *Proc. Amer. Acad. Arts & Sci.* **50**:228. 1915.

[16] Wilson, E. H. *Jour. Inter. Gar. Club 598.* 1918.

[17] Galloway, B. T. *Jour. Her.* 11:29. 1920.

[18] Rehder, Alfred *Proc. Amer. Acad. Arts & Sci.* **50**:237. 1915.

[19] Reimer, F. C. *Bull. Com. Hort. Calif.* **5**:167-172. 1916.

[20] Galloway, B. T. *Jour. Her.* **11**:32. 1920.

[21] Reimer, F. C. *Reprint from 1916 annual report of Pacific Coast Association of Nurserymen*, 7. 1916.

[22] Some very good preliminary work on harvesting and storing pears has been done by the Oregon Experiment Station, and is reported in Bulletin 154, June, 1918, from that Station.

[23] For costs and profits in growing apples see Bulletin 376, New York Agricultural Experiment Station.

[24] Hesler and Whetzel. *Manual of Fruit Diseases* 330-331. 1917.

[25] Marshall P. Wilder contributed to all fields of American horticulture as an ardent amateur grower and as a most generous patron. But it was as a pomologist and especially as a grower of grapes and pears that he established

a permanent place for himself in the horticulture of the country. He was born in New Hampshire in 1798 and died in Boston in 1886, having lived in Dorchester, a suburb of Boston, for upwards of a half century. By vocation a merchant, he was a captain of industry in his day, yet most of his life, especially after the prime had been passed, was devoted to the avocation of horticulture. He was one of the founders of the American Pomological Society and had the great honor of being its president, excepting a single two-year term, from the first meeting in 1850 until his death. During the last years of his presidency, Wilder actively engaged in the reform of pomological nomenclature which the Society was then carrying on. He was an active member of the Massachusetts Horticultural Society for fifty-six years and its president from 1841 to 1848. He was also one of the founders of the Massachusetts Board of Agriculture, of the Massachusetts Agricultural Society, of the United States Agricultural Society, and was a trustee of the Massachusetts Institute of Technology. Besides membership and activity in these agricultural organizations, he served as colonel and commander in a military company and as president of the New England Historic and Genealogical Society from 1868 until his death. Wilder was a zealous collector and introducer of flowers. He specialized in camellias, azaleas, orchids, and roses. A rose bearing his name is still a garden favorite. Many floral novelties of his day owe their origin or introduction to Marshall P. Wilder. He was ever enthusiastic over American grapes

and tested all of the many new varieties introduced about the middle of the last century. But the pear was even more to his fancy than the grape, and he endeavored to grow every native variety of any promise whatsoever. All told, he tested over 1200 varieties, and in 1873 exhibited more than 400 varieties. He originated several new pears and to him is due the honor of having introduced the Beurre d'Anjou in 1844. At his death he left the American Pomological Society $1000 for Wilder medals for new fruits and $4000 for general purposes. To the Massachusetts Horticultural Society, he left $1000 to encourage the introduction of new American pears and grapes. Among many distinguished American pomologists who sought to improve the pear, Marshall P. Wilder deserves most of any recognition for his services and a place is therefore accorded him for his likeness in the frontispiece of *The Pears of New York* and the book is thereby dedicated to him.

[26] The name is spelled by many writers Beurré d'Aremberg.

[27] General Henry Alexander Scammell Dearborn, who followed the vocation of a soldier, statesman, and author, chose as his avocation horticulture and in several of its fields became eminent. A native of New England (1783-1851), son of General Henry Dearborn of Revolutionary fame, he was early educated to the profession of law and pursued that vocation until the war with Great Britain in 1812. Services in this war brought him the rank and title of general. After the war he

served as Collector of the Port of Boston, in Congress, and as Mayor of Roxbury, Massachusetts, which office he held at the time of his death. But it is as a patron, friend, and lover of horticulture that the life and work of General Dearborn interest pomologists. He was one of the charter members in the Massachusetts Horticultural Society and a prime mover in its organization. He was elected its first president March 17, 1829. In the history of the Society published in 1880, of all the famous members of this truly remarkable organization, General Dearborn's portrait was chosen for the frontispiece. He was early interested in experimental gardens and rural cemeteries. The plans for experimental gardens advocated by him were never fully carried out, but no doubt his enthusiasm for such gardens, with his own garden as a model, did much to stimulate the planting in America in the early half of the nineteenth century of the many famous gardens which adorned and enriched every center of culture along the Atlantic seaboard. He helped to establish the Mount Auburn and Forest Hills cemeteries, famous among Boston cemeteries, and the first of rural cemeteries in this country. His life-long devotion to rural art as exemplified in gardens and cemeteries knew no bounds. On these subjects and on pomology he contributed many articles to the agricultural and horticultural papers of his time. Few men, it can be said, could better concentrate their thoughts and feelings on paper than he seems to have done. Besides the many papers from his own pen he published several translated treatises from the

French, chief of which was a monograph on the Camellia in 1838 and another on *Morus multicaulis* in 1830, the "Mulberry Craze" being in full swing at this time. General Dearborn was an ardent pear-grower and helped to test the hundreds of seedlings then being brought from Belgium and France and grew as well considerable numbers from his own seed-beds. Of all his seedlings, however, only Dearborn survives.

[28] The fame of Robert Manning as an accurate and discriminating American pomologist will long endure. Few Americans, one conceives, as his life is reviewed, have rendered greater service in any field of the nation's agriculture. The quantity of his work was not remarkably large, but the quality was superfine. Systematic pomology in particular owes him much for his painstaking descriptions of fruits, and his corrections in nomenclature. Born in Salem, Mass., July 18, 1784, he made the town of his birth famous as a pomological center in America, where, at the time of his death, October 10, 1842, his garden probably contained a larger collection of fruits than had ever before been brought together in America. Manning began collecting fruits in 1823 when he established his "Pomological Garden" at Salem for the purpose of introducing and testing new varieties of fruits. He attempted to bring together all of the varieties of fruits that would thrive in eastern Massachusetts, and when his garden was fullest had about 2000 fruits, of which 1000 kinds were pears, to which fruit he gave most attention. He had many English, French, and Belgian

correspondents from whom he received the most notable fruits grown in their countries. He is said to have had a most remarkable memory and could carry in mind the names, tree-habits, and qualities of any fruit he had ever seen and could identify it at sight. In whatever group of pomologists he chanced to be, his identifications and decisions on nomenclature were accepted as correct. Small wonder, therefore, that the *Book of Fruits*, published by Manning in 1838, at once took the place of authority for descriptions of tree-fruits and for such small-fruits, trees, and shrubs as the author described. It was the first, and is almost the only, American pomology in which the descriptions were all made with fruit in hand. The author intended this book to be the first of a series, but the books to follow never appeared. He was one of the founders of the Massachusetts Horticultural Society. Pear-growers are indebted to Manning for the work he did in testing the seedlings sent out by Van Mons, the famous Belgian breeder, most of whose pears came to American orchards through the agency of the Salem Pomological Garden. He also received and introduced valuable pears from the London Horticultural Society. His achievements mark Manning among the most notable American pomologists, of whom no other labored as devotedly for the attainment of better pears.

[29] Bernard S. Fox was a pioneer nurseryman and fruit-grower in California who gave much time to improving the pear through seedlings. During his stay of thirty years in the state of his adoption he was noted for his

energy and enterprise in every industry that had to do with fruit-growing. Fox was an Irishman who came to America in 1848 and began work in the garden and nurseries of Hovey and Company of Boston. A few years later he emigrated with the gold-seekers to California where, shortly, he settled at San Jose as a nurseryman and fruit-grower. Eventually he became possessed of a considerable amount of land the increasing value of which made him a very wealthy man, and he took pleasure in being a patron of horticulture as well as a worker in its several fields. Early in his career at San Jose his interest was aroused in the production of new pears from seed. He was a most conscientious selecter and only the best survived in his orchards. He was at all times extremely anxious not to cumber the list of pears with worthless varieties. Out of a great number of seedlings, only three finally received his approval, P. Barry, Fox, and Colonel Wilder. All have high places in the pear lists of California and the United States, and do honor to an enthusiastic and painstaking breeder of pears. For many years before his death in July, 1880, he was the Vice President of the American Pomological Society for California. Bernard S. Fox was one of the first fruit-growers to bring fame to California, and Californians are justly proud of him.

[30] Peter Kieffer, a nurseryman of good reputation in his state, deserves pomological honors because of his keenness of vision in selecting for distribution the pear which bears his name. Few men would have recognized merit in the seedling from which the Kieffer

pear came. Peter Kieffer was born in Alsace in 1812, whence he emigrated to America in 1834. In Europe he had worked for twelve years in the garden of the King of France and upon his arrival in America sought employment as a gardener which he found on the estate of James Gowen at Mt. Airy, near Philadelphia. In 1853 he started a small nursery at Roxborough, a short distance from Philadelphia. Much of his stock was imported from Europe, most of which came from Van Houtte, the famous Belgian nurseryman. From Van Houtte, Kieffer obtained seeds of the Chinese Sand pear from which came the Kieffer pear as described in the history of the variety. As a token of his faith in his new variety, Kieffer planted an orchard of this pear, some of the trees of which still live and bear. Peter Kieffer died in 1890, having made an important contribution to horticulture even though the variety sent out by him is far from perfect and has been much over-praised and over-planted.

[31] Patrick Barry, one of the founders of the firm of Ellwanger and Barry, whose Mount Hope Nurseries at Rochester, New York, were long of national and international reputation, was born in Belfast, Ireland, in 1816 and died in Rochester, N. Y., in 1890. Besides contributing to the fame of the nursery company he helped to found, Barry was for many years one of the leading pomological editors and authors of the country. New York, especially western New York, is greatly indebted to George Ellwanger and Patrick Barry for the horticultural services of their firm. It is not an exaggeration to say that they

introduced fruit-growing in western New York, a region now famous for its fruits. So, also, the parks and home grounds of the many beautiful cities, towns, and villages in western New York are adorned and enriched by ornamental trees, shrubs and vines from the nurseries of Ellwanger and Barry. Patrick Barry came to America in 1836 and with George Ellwanger founded the Mount Hope Nurseries in 1840. Here for a half century he devoted himself to the introduction and distribution of fruit and out-of-door ornamental plants. In the early life of the nursery company many importations were made from Europe and at a time when there were no railroads, telegraph wires, nor ocean steamboats. It was during this early period that the Mount Hope Nurseries began the importation of pears and soon built up one of the largest collections in the country and one which was maintained long after the famous collections farther east had disappeared. At one time or another over 1000 varieties of pears were tested on the grounds of this nursery. For a half century, fruit-growers have studied with pleasure and profit the exhibits of pears made by Ellwanger and Barry at the State and National exhibitions of note. From 1844 to 1852, Patrick Barry edited *The Genesee Farmer*, one of the best agricultural papers of its day and succeeded A. J. Downing in the editorship of *The Horticulturist* which he brought to Rochester in 1855 where it was published until 1887. Barry's *Treatise on the Fruit-Garden* appeared in 1851 and at once became one of the most popular books on pomology. In 1872 the "Treatise" was rewritten and published as

Barry's Fruit Garden. Another notable work of which he was author was *The Catalogue of Fruits of the American Pomological Society* which was compiled by him. Patrick Barry was one of the founders of the Western New York Horticultural Society, for many years the leading horticultural organization of the continent, and of which he was president for more than thirty years. Patrick Barry ranks with Coxe, Kenrick, the Downings, Warder, Eliot, and Thomas as a great leader in pomology of the time in which he lived.

William Crawford Barry, son of Patrick Barry of the preceding sketch, was born in Rochester, New York, in 1847. As a boy he attended parochial schools at Rochester and at Seton Hall, South Orange, New Jersey. As a young man he studied in Berlin, Heidelberg, and the University of Louvain in Belgium. Upon returning to America he took a position in a seed house in New York that he might have practical knowledge of the seed business to bring to the firm of Ellwanger and Barry of which he was soon to become a member. After serving an apprenticeship in the seed business he returned to Rochester to enter the firm which his father and George Ellwanger had founded. From the time of entrance in this company he took a prominent part in its affairs, and for many years before his death, December 12, 1916, he was president of the corporation. Of his horticultural activities, he may be said to have been an organizer and promotor—one of the captains in the industry. For twenty-six years he was president of the Western New York Horticultural Society,

having succeeded his father to this office. He was the first president of the American Rose Society, and in 1882 was president of the Eastern Nurserymen's Association. For three years he was president of the Board of Control of the New York Agricultural Experiment Station. He helped to establish and took a leader's part in developing the parks of Rochester which have made that city famous among lovers of landscapes. Highland Park was almost a creation of the firm of Ellwanger and Barry. In 1888 the firm gave the city twenty acres of land adjoining the Highland reservoir as the first step in establishing a park system for Rochester. Mr. Barry was chairman of the committee of the park board having in charge Highland Park from the creation of the board until the year before his death when it passed out of existence. Besides these horticultural activities, Mr. Barry was either president or an officer in six banks and trust companies in Rochester. His was a commanding figure in the horticulture of New York. No one attending the meetings of the Western New York Horticultural Society during the twenty-six years he was president can forget Mr. Barry. His knowledge in every division of horticulture, his devotion to grape and pear culture, his genial manner and pleasant greeting to all members, and his force and tact as a presiding officer fitted him so preëminently well for the place that he was unopposed for the presidency during twenty-six terms following the death of his father and until his death.

George Ellwanger, one of the founders and thereafter until his death one of the partners in

the Mount Hope Nurseries, Rochester, New York, was born in Germany in 1816 and died in Rochester, New York, in 1906. He came to the United States in 1835, having been educated as a horticulturist in Stuttgart, although possibly the training he received throughout his youth from his father, a grower of grapes and fruits, taught him most, for Ellwanger often said that it was from his father that he acquired his love of horticulture and was by him persuaded to devote his life to the vocation of nurseryman. Ellwanger settled in Rochester in 1839, and the next year joined with Patrick Barry in forming the nursery and seed firm of Ellwanger and Barry, calling their place of business "Mount Hope Nurseries." Ellwanger was one of the founders of the American Pomological Society, and of the Western New York Horticultural Society and throughout his life took an active interest in both organizations. Mr. Ellwanger had large business interests in Rochester and western New York and helped most materially to develop the city and the country about. His chief contributions to horticulture were made through the Mount Hope Nurseries, the influence of which is briefly set forth in the sketch of the life of Patrick Barry.

[32] Henry Waggoman Edwards, at one time Governor of Connecticut, was a pioneer American pear breeder credited with making the first systematic attempt to grow new pears in this country. He was a grandson of the eminent theologian, Jonathan Edwards, was born at New Haven, Conn., in 1779, graduated at Princeton College in 1797, studied law at the Litchfield School and almost immediately

entered into public life shortly to become prominent and famous in state and nation. He served Connecticut with honors as its Governor, and in the nation he distinguished himself as Representative in the House from Connecticut, Speaker of the House and as Senator. But it is as a pomologist that his career is of concern to the reader. Always interested in pomology, and no doubt especially interested in pears through the spectacular work of Van Mons, he planted pear seeds in the fall of 1817 with the aim of obtaining new and superior varieties of this fruit. Great success did not attend his attempts at pear breeding, but Governor Edwards made a start in work which Manning, Wilder and a score of others were to carry forward with more striking results. Out of many seedlings, at least five were named and were grown for a longer or shorter time by the pear-growers of a century ago. These are Elizabeth, Calhoun, Dallas, Henrietta and Citron, all described among the minor varieties of this text. While hardly to be considered among the foremost pomologists of the country, Governor Edwards is in the front rank of the lesser men whose combined work has done so much to give weight and impulse to American pomology.

Transcriber's Notes:

Illustrations were relocated to correspond to their references in the text, therefore page numbers listed in the INDEX TO ILLUSTRATIONS are not accurate

anymore.

Obvious printer errors corrected and inconsistent spellings have been kept, including inconsistent use of hyphen (e.g. "after-flavor" and "after flavor"), accents (e.g. "Müskirte" and "Muskirte"), capitalisation (e.g. "Nec plus Meuris" and "Nec Plus Meuris"), and proper names (e.g. "Luxemburg" and "Luxembourg").

Index entries that do not match their referenced text corrected (except where the text is an obvious printer error) and if necessary moved to the correct position according to alphabetical order, e.g. "Langstielege Zuckerbirne" corrected to be "Langstielige Zuckerbirne". Index entries that refer to non-existent text have been deleted.

Page 247, word "it" removed from sentence "...though it it seems...."

Page 284, word "it" removed from sentence "...where it it is...."

*** END OF THE PROJECT GUTENBERG EBOOK
THE PEARS OF NEW YORK ***

Updated editions will replace the previous one—
the old editions will be renamed.

Creating the works from print editions not
protected by U.S. copyright law means that no
one owns a United States copyright in these
works, so the Foundation (and you!) can copy
and distribute it in the United States without
permission and without paying copyright
royalties. Special rules, set forth in the General
Terms of Use part of this license, apply to
copying and distributing Project Gutenberg™
electronic works to protect the PROJECT
GUTENBERG™ concept and trademark. Project
Gutenberg is a registered trademark, and may
not be used if you charge for an eBook, except
by following the terms of the trademark license,
including paying royalties for use of the Project
Gutenberg trademark. If you do not charge
anything for copies of this eBook, complying
with the trademark license is very easy. You
may use this eBook for nearly any purpose such
as creation of derivative works, reports,
performances and research. Project Gutenberg
eBooks may be modified and printed and given
away—you may do practically ANYTHING in the
United States with eBooks not protected by U.S.
copyright law. Redistribution is subject to the
trademark license, especially commercial
redistribution.

START: FULL LICENSE

THE FULL PROJECT GUTENBERG™ LICENSE

PLEASE READ THIS BEFORE YOU DISTRIBUTE OR USE THIS WORK

To protect the Project Gutenberg™ mission of promoting the free distribution of electronic works, by using or distributing this work (or any other work associated in any way with the phrase “Project Gutenberg”), you agree to comply with all the terms of the Full Project Gutenberg License available with this file or online at www.gutenberg.org/license.

Section 1. General Terms of Use and Redistributing Project Gutenberg electronic works

1.A. By reading or using any part of this Project Gutenberg electronic work, you indicate that you have read, understand, agree to and accept all the terms of this license and intellectual property (trademark/copyright) agreement. If you do not agree to abide by all the terms of this agreement, you must cease using and return or destroy all copies of Project Gutenberg electronic works in your possession. If you paid a fee for obtaining a copy of or access to a Project Gutenberg electronic work and you do not agree to be bound by the terms of this agreement, you may obtain a refund from the person or entity to whom you paid the fee as set forth in paragraph 1.E.8.

1.B. “Project Gutenberg” is a registered trademark. It may only be used on or associated in any way with an electronic work by people who agree to be bound by the terms of this agreement. There are a few things that you can do with most Project Gutenberg electronic works even without complying with the full terms of this agreement. See paragraph 1.C below. There are a lot of things you can do with Project Gutenberg electronic works if you follow the terms of this agreement and help preserve free future access to Project Gutenberg electronic works. See paragraph 1.E below.

1.C. The Project Gutenberg Literary Archive Foundation (“the Foundation” or PGLAF), owns a compilation copyright in the collection of Project Gutenberg electronic works. Nearly all the individual works in the collection are in the public domain in the United States. If an individual work is unprotected by copyright law in the United States and you are located in the United States, we do not claim a right to prevent you from copying, distributing, performing, displaying or creating derivative works based on the work as long as all references to Project Gutenberg are removed. Of course, we hope that you will support the Project Gutenberg mission of promoting free access to electronic works by freely sharing Project Gutenberg works in compliance with the terms of this agreement for keeping the Project Gutenberg name associated with the work. You can easily comply with the terms of this agreement by keeping this work in the same format with its attached full Project Gutenberg License when you share it without

charge with others.

1.D. The copyright laws of the place where you are located also govern what you can do with this work. Copyright laws in most countries are in a constant state of change. If you are outside the United States, check the laws of your country in addition to the terms of this agreement before downloading, copying, displaying, performing, distributing or creating derivative works based on this work or any other Project Gutenberg work. The Foundation makes no representations concerning the copyright status of any work in any country other than the United States.

1.E. Unless you have removed all references to Project Gutenberg:

1.E.1. The following sentence, with active links to, or other immediate access to, the full Project Gutenberg License must appear prominently whenever any copy of a Project Gutenberg work (any work on which the phrase “Project Gutenberg” appears, or with which the phrase “Project Gutenberg” is associated) is accessed, displayed, performed, viewed, copied or distributed:

> This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project

Gutenberg™ License included with this eBook or online at www.gutenberg.org. If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.

1.E.2. If an individual Project Gutenberg electronic work is derived from texts not protected by U.S. copyright law (does not contain a notice indicating that it is posted with permission of the copyright holder), the work can be copied and distributed to anyone in the United States without paying any fees or charges. If you are redistributing or providing access to a work with the phrase “Project Gutenberg” associated with or appearing on the work, you must comply either with the requirements of paragraphs 1.E.1 through 1.E.7 or obtain permission for the use of the work and the Project Gutenberg trademark as set forth in paragraphs 1.E.8 or 1.E.9.

1.E.3. If an individual Project Gutenberg electronic work is posted with the permission of the copyright holder, your use and distribution must comply with both paragraphs 1.E.1 through 1.E.7 and any additional terms imposed by the copyright holder. Additional terms will be linked to the Project Gutenberg License for all works posted with the permission of the copyright holder found at the beginning of this work.

1.E.4. Do not unlink or detach or remove the full Project Gutenberg License terms from this work,

or any files containing a part of this work or any other work associated with Project Gutenberg.

1.E.5. Do not copy, display, perform, distribute or redistribute this electronic work, or any part of this electronic work, without prominently displaying the sentence set forth in paragraph 1.E.1 with active links or immediate access to the full terms of the Project Gutenberg License.

1.E.6. You may convert to and distribute this work in any binary, compressed, marked up, nonproprietary or proprietary form, including any word processing or hypertext form. However, if you provide access to or distribute copies of a Project Gutenberg work in a format other than “Plain Vanilla ASCII” or other format used in the official version posted on the official Project Gutenberg website (www.gutenberg.org), you must, at no additional cost, fee or expense to the user, provide a copy, a means of exporting a copy, or a means of obtaining a copy upon request, of the work in its original “Plain Vanilla ASCII” or other form. Any alternate format must include the full Project Gutenberg License as specified in paragraph 1.E.1.

1.E.7. Do not charge a fee for access to, viewing, displaying, performing, copying or distributing any Project Gutenberg works unless you comply with paragraph 1.E.8 or 1.E.9.

1.E.8. You may charge a reasonable fee for copies of or providing access to or distributing Project Gutenberg electronic works provided that:

- You pay a royalty fee of 20% of the gross profits you derive from the use of Project Gutenberg works calculated using the method you already use to calculate your applicable taxes. The fee is owed to the owner of the Project Gutenberg trademark, but he has agreed to donate royalties under this paragraph to the Project Gutenberg Literary Archive Foundation. Royalty payments must be paid within 60 days following each date on which you prepare (or are legally required to prepare) your periodic tax returns. Royalty payments should be clearly marked as such and sent to the Project Gutenberg Literary Archive Foundation at the address specified in Section 4, “Information about donations to the Project Gutenberg Literary Archive Foundation.”

- You provide a full refund of any money paid by a user who notifies you in writing (or by e-mail) within 30 days of receipt that s/he does not agree to the terms of the full Project Gutenberg™ License. You must require such a user to return or destroy all copies of the works possessed in a physical medium and discontinue all use of and all access to other copies of Project Gutenberg™ works.

- You provide, in accordance with paragraph 1.F.3, a full refund of any money paid for a work or a replacement copy, if a defect in the electronic work is discovered and reported to you within 90 days of receipt of the work.

- You comply with all other terms of this agreement for free distribution of Project

Gutenberg™ works.

1.E.9. If you wish to charge a fee or distribute a Project Gutenberg™ electronic work or group of works on different terms than are set forth in this agreement, you must obtain permission in writing from the Project Gutenberg Literary Archive Foundation, the manager of the Project Gutenberg™ trademark. Contact the Foundation as set forth in Section 3 below.

1.F.

1.F.1. Project Gutenberg volunteers and employees expend considerable effort to identify, do copyright research on, transcribe and proofread works not protected by U.S. copyright law in creating the Project Gutenberg™ collection. Despite these efforts, Project Gutenberg™ electronic works, and the medium on which they may be stored, may contain “Defects,” such as, but not limited to, incomplete, inaccurate or corrupt data, transcription errors, a copyright or other intellectual property infringement, a defective or damaged disk or other medium, a computer virus, or computer codes that damage or cannot be read by your equipment.

1.F.2. LIMITED WARRANTY, DISCLAIMER OF DAMAGES - Except for the “Right of Replacement or Refund” described in paragraph 1.F.3, the Project Gutenberg Literary Archive Foundation, the owner of the Project Gutenberg™ trademark, and any other party distributing a Project Gutenberg™ electronic work under this agreement, disclaim all liability

to you for damages, costs and expenses, including legal fees. YOU AGREE THAT YOU HAVE NO REMEDIES FOR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR BREACH OF CONTRACT EXCEPT THOSE PROVIDED IN PARAGRAPH 1.F.3. YOU AGREE THAT THE FOUNDATION, THE TRADEMARK OWNER, AND ANY DISTRIBUTOR UNDER THIS AGREEMENT WILL NOT BE LIABLE TO YOU FOR ACTUAL, DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE OR INCIDENTAL DAMAGES EVEN IF YOU GIVE NOTICE OF THE POSSIBILITY OF SUCH DAMAGE.

1.F.3. LIMITED RIGHT OF REPLACEMENT OR REFUND - If you discover a defect in this electronic work within 90 days of receiving it, you can receive a refund of the money (if any) you paid for it by sending a written explanation to the person you received the work from. If you received the work on a physical medium, you must return the medium with your written explanation. The person or entity that provided you with the defective work may elect to provide a replacement copy in lieu of a refund. If you received the work electronically, the person or entity providing it to you may choose to give you a second opportunity to receive the work electronically in lieu of a refund. If the second copy is also defective, you may demand a refund in writing without further opportunities to fix the problem.

1.F.4. Except for the limited right of replacement or refund set forth in paragraph 1.F.3, this work is provided to you ‘AS-IS’, WITH NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR

IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.

1.F.5. Some states do not allow disclaimers of certain implied warranties or the exclusion or limitation of certain types of damages. If any disclaimer or limitation set forth in this agreement violates the law of the state applicable to this agreement, the agreement shall be interpreted to make the maximum disclaimer or limitation permitted by the applicable state law. The invalidity or unenforceability of any provision of this agreement shall not void the remaining provisions.

1.F.6. INDEMNITY - You agree to indemnify and hold the Foundation, the trademark owner, any agent or employee of the Foundation, anyone providing copies of Project Gutenberg™ electronic works in accordance with this agreement, and any volunteers associated with the production, promotion and distribution of Project Gutenberg™ electronic works, harmless from all liability, costs and expenses, including legal fees, that arise directly or indirectly from any of the following which you do or cause to occur: (a) distribution of this or any Project Gutenberg work, (b) alteration, modification, or additions or deletions to any Project Gutenberg work, and (c) any Defect you cause.

Section 2. Information about the Mission of Project Gutenberg

Project Gutenberg is synonymous with the free

distribution of electronic works in formats readable by the widest variety of computers including obsolete, old, middle-aged and new computers. It exists because of the efforts of hundreds of volunteers and donations from people in all walks of life.

Volunteers and financial support to provide volunteers with the assistance they need are critical to reaching Project Gutenberg's goals and ensuring that the Project Gutenberg collection will remain freely available for generations to come. In 2001, the Project Gutenberg Literary Archive Foundation was created to provide a secure and permanent future for Project Gutenberg and future generations. To learn more about the Project Gutenberg Literary Archive Foundation and how your efforts and donations can help, see Sections 3 and 4 and the Foundation information page at www.gutenberg.org.

Section 3. Information about the Project Gutenberg Literary Archive Foundation

The Project Gutenberg Literary Archive Foundation is a non-profit 501(c)(3) educational corporation organized under the laws of the state of Mississippi and granted tax exempt status by the Internal Revenue Service. The Foundation's EIN or federal tax identification number is 64-6221541. Contributions to the Project Gutenberg Literary Archive Foundation are tax deductible to the full extent permitted by U.S. federal laws and your state's laws.

The Foundation's business office is located at 41

Watchung Plaza #516, Montclair NJ 07042, USA, +1 (862) 621-9288. Email contact links and up to date contact information can be found at the Foundation's website and official page at www.gutenberg.org/contact

Section 4. Information about Donations to the Project Gutenberg Literary Archive Foundation

Project Gutenberg™ depends upon and cannot survive without widespread public support and donations to carry out its mission of increasing the number of public domain and licensed works that can be freely distributed in machine-readable form accessible by the widest array of equipment including outdated equipment. Many small donations ($1 to $5,000) are particularly important to maintaining tax exempt status with the IRS.

The Foundation is committed to complying with the laws regulating charities and charitable donations in all 50 states of the United States. Compliance requirements are not uniform and it takes a considerable effort, much paperwork and many fees to meet and keep up with these requirements. We do not solicit donations in locations where we have not received written confirmation of compliance. To SEND DONATIONS or determine the status of compliance for any particular state visit www.gutenberg.org/donate.

While we cannot and do not solicit contributions from states where we have not met the

solicitation requirements, we know of no prohibition against accepting unsolicited donations from donors in such states who approach us with offers to donate.

International donations are gratefully accepted, but we cannot make any statements concerning tax treatment of donations received from outside the United States. U.S. laws alone swamp our small staff.

Please check the Project Gutenberg web pages for current donation methods and addresses. Donations are accepted in a number of other ways including checks, online payments and credit card donations. To donate, please visit: www.gutenberg.org/donate.

Section 5. General Information About Project Gutenberg electronic works

Professor Michael S. Hart was the originator of the Project Gutenberg concept of a library of electronic works that could be freely shared with anyone. For forty years, he produced and distributed Project Gutenberg eBooks with only a loose network of volunteer support.

Project Gutenberg eBooks are often created from several printed editions, all of which are confirmed as not protected by copyright in the U.S. unless a copyright notice is included. Thus, we do not necessarily keep eBooks in compliance with any particular paper edition.

Most people start at our website which has the main PG search facility: www.gutenberg.org.

This website includes information about Project Gutenberg, including how to make donations to the Project Gutenberg Literary Archive Foundation, how to help produce our new eBooks, and how to subscribe to our email newsletter to hear about new eBooks.