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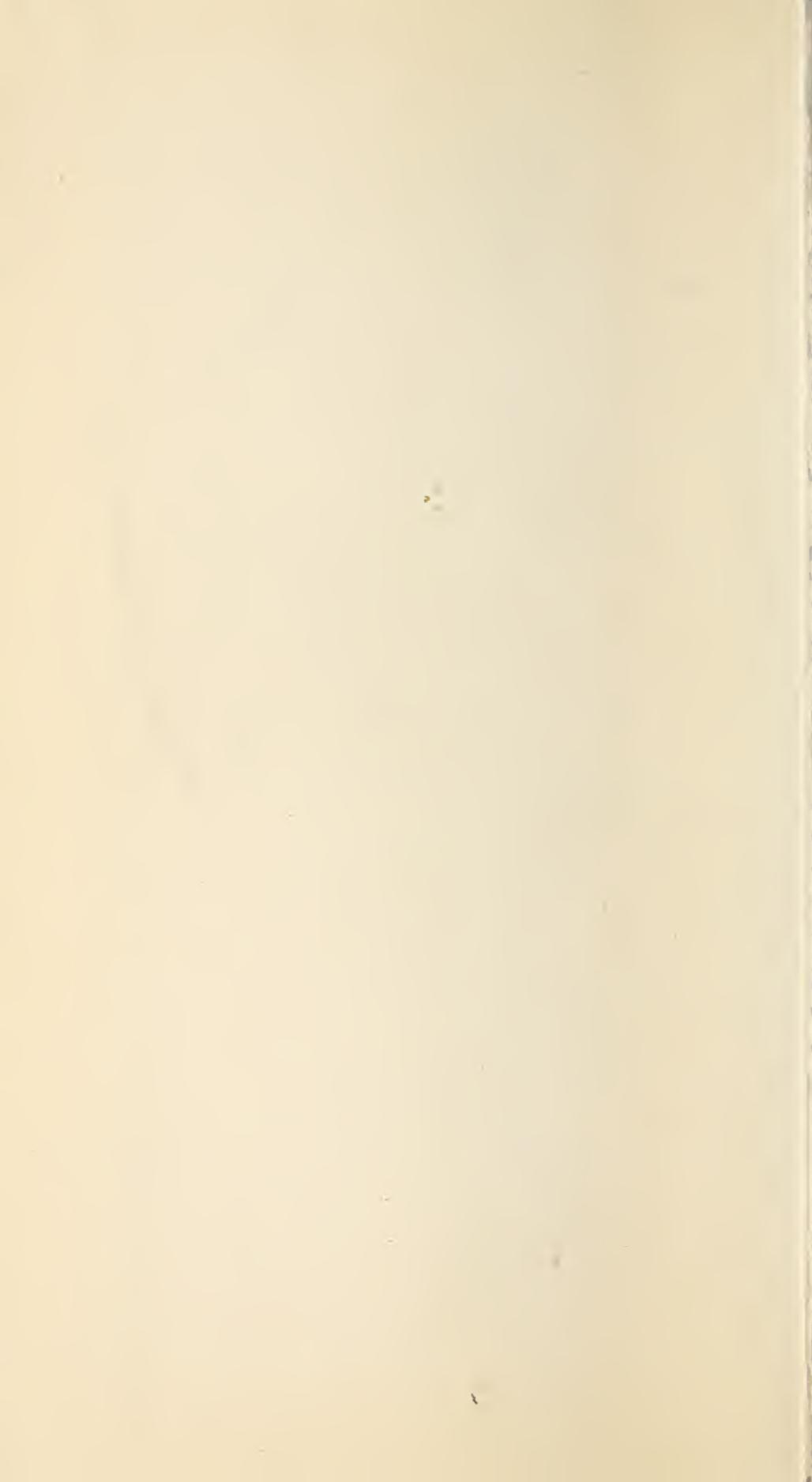
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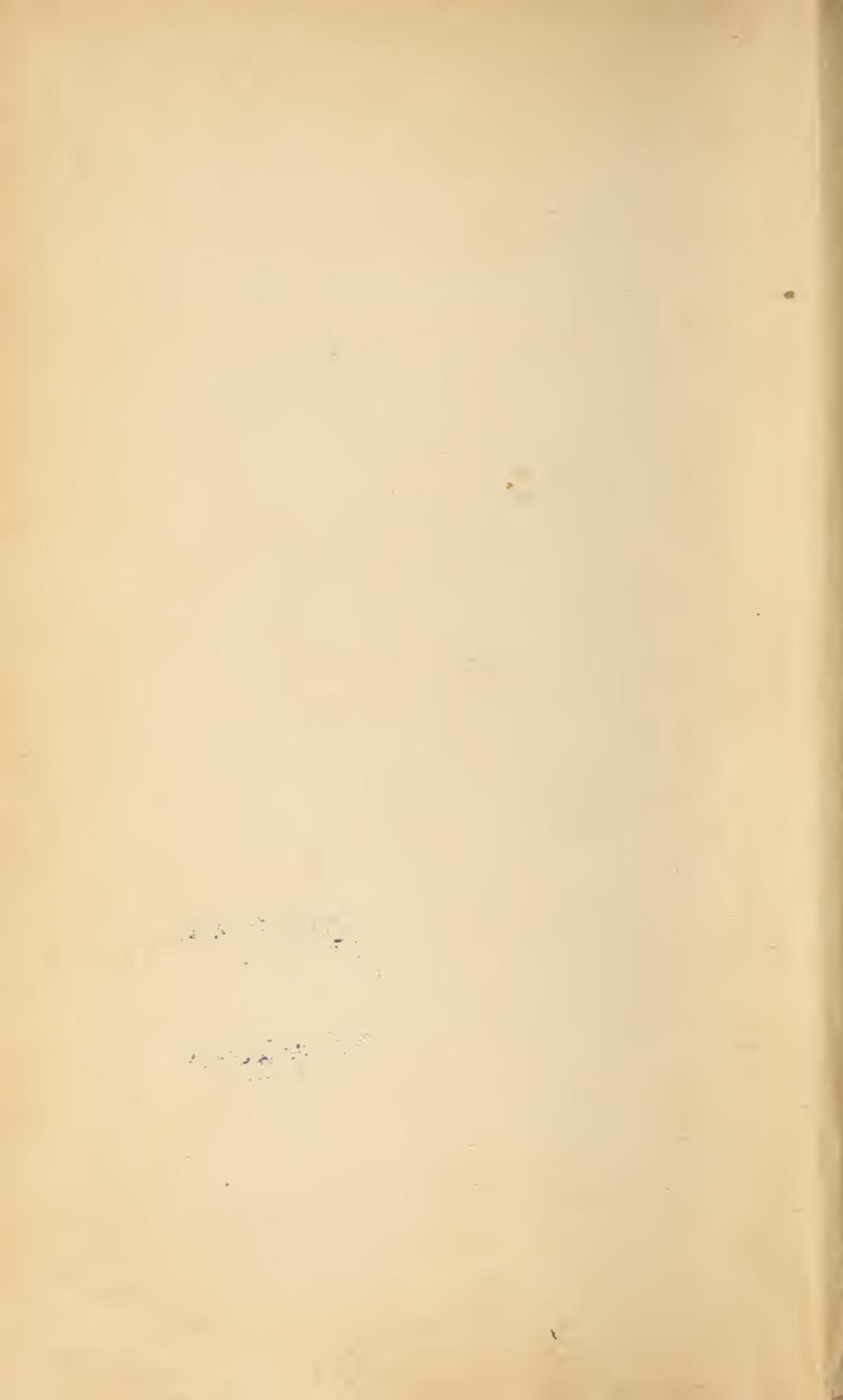












THE  
GARDENER'S  
MONTHLY VOLUME.

V. 11

THE APPLE;  
ITS CULTURE, USES, AND HISTORY.

BY GEORGE W. JOHNSON,

Author of "The Dictionary of Modern Gardening," "Gardener's  
Almanack," &c.; and

R. ERRINGTON,

Gardener to Sir Philip Egerton, Bart.

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# THE APPLE.

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## HISTORY.

IF popular language and the earliest products of the pictorial art were admissible authorities, the apple would be the earliest fruit of which we have any record, for they represent it as the cause of our first parents' fall. There is no foundation for such tradition, however; and as the Garden of Eden was probably in some hot latitude, "the fruit of the tree which was in the midst of the garden" reasonably may be concluded to have been some species not native of our European climate. It is quite true that, in our translation of the old Testament, both Solomon and the prophet Joel are represented as alluding to the apple-tree and its fruit, but it is more than doubtful whether that translation is correct. Dr. Parkhurst and other distinguished Hebraists consider that the *tappuach* of the Jewish Scriptures is the citron, and not the apple; and the terse epithets the sacred writers give to it are certainly most applicable to the former. It was a common object of cultivation, "a tree of the field" (*Joel* i. 12), which,

in Palestine, the citron is, but the apple is not. It is a noble tree, lofty and evergreen, such as the poet might justly take as an emblem of a bridegroom. (*Canticles* ii. 3.) But not so the apple-tree, which is there of ill-growth and unproductive, or, to use the language of Dr. Russell, an eye-witness, it is "very bad." (*Natural History of Aleppo*, 21.) Moreover, the fruit of the citron is juicy, refreshing, and fragrant (*Cant.* ii. 5, vii. 8), and of a golden colour, as described in *Proverbs* xxv. 11. Then, again, the frequency of the citron, and its habit of growth and dense evergreen foliage, render it a more fitting shelter than that afforded by the apple-tree. (*Cant.* viii. 5.)

The mention made of the apple in the holy writings being so apparently erroneous, we are justified in considering that Homer affords us the first certain notice of the apple; but he merely mentions it as a tenant, together with other fruit-trees, of the Garden of Alcinous.

Descending to the time of the Romans, we find the apple, and several varieties of it, noticed by their earliest writers on the culture of the soil. Cato, who wrote more than a century and a half before the Christian era, describes three varieties of the apple; one of which, the Quirinian, we may conclude derived its name from its first propagator. It would occupy more space than we can permit were we to even

merely glance over the directions given by Cato, Varro, Columella, and Palladius, for grafting and other portions of its cultivation. Much of their directions is very erroneous, but other parts of it are very correct, and may be adopted with advantage. It is not until we come to the time of Pliny that we find much relative to the biography of the apple, and then we obtain from his "Natural History" many statements that are highly interesting.

"There are many apple-trees," says Pliny, "in the villages near Rome that let for the yearly sum of 2000 sesterses," which is equal to £12 10s. of our money; "and some of them yield more profit to the owner than a small farm." "There are apples," he continues, "that have ennobled the countries from whence they came; and many apples have immortalized their first founders and inventors. Our best apples will honour the first grafters for ever; such as took their names from Martius, Cestius, Manlius, and Claudius." This author particularizes the quince apples, that came from a quince grafted upon an apple-stock, which, he says, smell like the quince, and were called Appiana, after Appius, who was of the Claudian house, and who was the first that practised this grafting. "Some apples," says he, "are so red that they resemble blood, which is caused by their being at first grafted upon a mulberry stock." But of all the apples he mentions, Pliny

says the one which took its name from Petisius, who reared it in his time, was the most excellent for eating, both on account of its sweetness and agreeable flavour. He mentions nine-and-twenty kinds of apples as being cultivated in Italy at about the commencement of the Christian era.

The practice of propagating the apple from seed is recommended by all the Roman writers we have mentioned, and was continued to be advocated by other Geoponic writers of the western empire in the fragments of their works which have escaped to us. A practice thus advocated to be adopted in the culture of a hardy and favourite fruit readily accounts for the vast number of varieties of the apple that have arisen.

No fruit-tree excels the apple in aptitude to give birth to seedling varieties; and when we find that these have continued to be raised in most parts of Europe for some two thousand years, it is no wonder that the number of recognized varieties amounts to more than 1400. It is certain, however, that the most ancient varieties mentioned in the above quotations long since have been obliterated. Even Pliny notices the decay of apple-trees in his time, and observes that the apple-tree becomes old sooner than any other, and that with old age the fruit becomes less, and is subject to be cankered and worm-eaten even while on the tree. (*Book 16, c. 27.*)

We quite agree with Mr. Knight, Dr. Martyn, and

other vegetable physiologists, in thinking that no kind of apple now cultivated appears to have existed more than two hundred years; and this term does not at all exceed the duration of a healthy tree, or of an orchard when grafted on crab-stocks, and planted in a strong tenacious soil. From the description Parkinson, who wrote in 1629, has given of the apples cultivated in his time, it is evident that those now known by the same names are different, and probably new varieties; and though many of those mentioned by Evelyn, who wrote between thirty and forty years later, still remain, they appear no longer to deserve the attention of the planter. The Moil, and its successful rival the Redstreak, with the Musts and Golden Pippin, are in the last stage of decay, and the Stire and Foxwhelp are hastening rapidly after them. (*Knight on the Apple*, 6.)

Except by some overwhelming convulsion—such as the Deluge—we believe that no species ever becomes extinct, but it is quite otherwise with varieties and hybrids. These, like all other devices of man, have their limited period of existence, beyond which by no ingenuity can it be protracted. Some authorities assert that grafting is a mode of thus protracting vegetable life, but from these we totally differ. It is happily quite true that grafting upon a young and vigorous stock imparts to the scion a supply of sap of which the parent stem is incapable, yet this failure is

only premonitory of the departure of power which will, after a transient increase of strength, occur to its removed member. Every subsequent scion, however frequently, and whilst in apparent health, removed to another youthful stock, will be found to have a period of renewed vigour and productiveness of shorter duration than its predecessor. The Golden Pippin is occasionally quoted as a contrary proof : but this example has no such weight ; for, supposing that this fruit yet exists, still it has not passed the age beyond which the period of unproductiveness and death in the apple-tree may be delayed by grafting ; for we have no mention of this fruit that at all justifies the conclusion, that the Golden Pippin existed much more than three centuries ago. A Pearmain apple is mentioned in records as old as King John (A.D. 1205) ; but the Pippin is not noticed by any authority earlier than the reign of Henry VIII. (1509). Lambard mentions that Tenham, in Kent, famous for its cherry-gardens and apple-orchards, was the place where Richard Harris, or Haines, that king's fruiterer, first planted cherries, Pippins, and the Golden Renate.

Supposing, then, that the Golden Pippin of our days is a genuine portion of the Tenham trees, handed down to us by successive graftings, yet still, though in extreme decrepitude, it has not exceeded the age assigned by naturalists as that beyond which the life

of the apple does not extend. But then another question will arise, supposing our Golden Pippin does not appear to survive the allotted period. Who will undertake to demonstrate that the Golden Pippin of Tenham still exists? It is quite certain that a majority of the apples for which the title of Golden Pippin is claimed have no pretensions to the distinction, and more than one old person with whom it was once a favourite fruit now declare that it is no longer obtainable. Be this as it may, even if the tree in question has not already departed, yet even those who maintain that it is still to be found lingering in our fruit gardens, acknowledge that it is in the last stage of decrepitude and decay: it is following the universal law of nature; no organized creature shall endure through all time. Grafting may postpone the arrival of death, as the transfusion of blood will revive for a while the sinking animal, but the postponement cannot be for a time indefinite: the day must come in both the animal and the scion, when its vessels shall be without the energy to propel or assimilate the vital fluid, though afforded to it from the most youthful and most vigorous source.

The history of the apple in Britain is traceable to the earliest period of which we have any written record. We are even fully warranted in believing that this fruit was known and cultivated by the Britons before the arrival of the Romans upon our shores,

for in the Welch, Cornish, Armorican, and Irish languages and dialects, it is denominated the Avall or Aball. The fruit therefore had a native name, from which our present name apple is evidently corrupted, and the Hædui, inhabitants of the modern Somersetshire, appear especially to have cultivated this fruit. Their chief town even derived its name from the circumstance of its being surrounded by plantations of the apple, for it was known as Avallonia (Apple Orchard) when first visited by the Romans. Glastonbury stands upon its ancient site. (*Richard's Chron.* 19.) The cultivation of the apple was not confined to our south-western districts, for another town named after it, Avallana, was in the north of England, and in the course of the third century we have decisive testimony that the Roman settlers had introduced fresh varieties of this fruit, and that its cultivation had become so extended that large apple orchards had been made as far north as the Shetland Islands. (*Solinus*, cap. xxii.) Traces of ancient orchards are still existing in those high northern localities, and one in the Hebrides, belonging to the Monastery of St. Columb, is described by Dr. Walker as having existed there, probably, from the 6th century. (*Essays*, ii. 5.) Others are mentioned by Camden and Leland. It is quite certain that in the middle ages the apple had become one of our staple vegetable products, for whenever the chroniclers speak of times

of dearth, apples are almost always mentioned as articles causing distress by their scarcity ; and in the Remembrance Office a M.S. exists in Henry the 7th's (1485—1509) own handwriting, in which he records that on one occasion apples were from one to two shillings each, a red one fetching the highest price.

We have now arrived at the era when our agricultural and horticultural literature commences, and we find that Fitzherbert, in his "Book of Husbandry," published in 1598, has many, and, in most instances, good directions for the culture of the apple. They are, unlike the works of his contemporaries and immediate successors, the evident result of experience, and not mere translations from the classic Geoponic writers. Thus, on grafting the apple, he says, "Graft that which is got of an old apple-tree first, for that will bud before the graft got on a young apple-tree late grafted in. For all manner of apples a crab-tree stock is good, but the apple-tree stock is much better."

The varieties of the apple had now largely increased, for Dodoens, writing in 1583, says they were so numerous "that it is not possible, neither necessary, to number all the kinds."

Gerard, writing of this fruit in his "Herball," during 1597, also speaks of the infinite varieties of the apple, but seems to attribute the variation much "to the soil and climate." "Kent," he goes on to

say, "doth abound in apples of most sorts. But I have seen in the pastures and hedge-rows about the grounds of a worshipful gentleman dwelling two miles from Hereford, called Mr. Roger Bodnome, so many trees of all sorts, that the servants for the most part drink no other drink but that which is made of the apples. The quantity is such that the parson hath for tithe many hogsheads of syder. The hogs are fed with the fallings, which are so many that they will not taste of any but the best." Though the varieties were so numerous, Gerard gives drawings of but six, which we may presume were the most in favour, and were the Pome-water, Baker's-ditch, King Apple, Queening or Queen Apple, Summer Pearmain, and Winter Pearmain. Heresbach, who wrote a little earlier (1570), says the "cheefe in price" were the Pippin, the Romet, the Pome-royal, and the Marligold.

Sir T. Haumer, writing about the year 1660, says the principle apples were "Summer Pepin, Holland Pepin, Russet Pepin, Kentish Pepin, the best supposed in England, Russeting, Gilliflower, Muscadine Queen, John Apple, King Apple, Golden Reinette, the Royal, Hollow-crowned, and Common Pearmain, Old Wife, Nonesuch, Figg Apple; all these are sold at 8d. the tree, except the Figg Apple, which is 5s." (*Gard. Chron.* 1843, 841.)

We have already noticed the Golden Pippin and its

probable age, and we mention it again to observe that it is said to be a native of Sussex, and to have been first reared at Barham Park, situated on the north side of the South Downs. The Dutch acknowledged it to be an English apple in their catalogue of fruits, where it is called the "Engelsche goud Pepping." The French call it "Pippin d'Or," which is a translation of the English name. Worlidge notices the Golden Pippin, and says, "it is smaller than the Orange-apple, else much like it in colour, taste, and long-keeping." Evelyn observes, in his Diary, 22nd October, 1685, that "at Lord Clarendon's seat at Swallowfield, Berks, there is an orchard of 1000 Golden and other cider Pippins." Catherine, Empress of Russia, was so fond of this apple, that she was regularly supplied with it from England; and in order that she might have it in the greatest perfection, each apple was separately enveloped in silver paper before it was packed. (*Phillips' History of Fruits*, 34.)

We have already noticed the early existence of apple orchards in the south-west of England, and we must not close this section without some further remarks upon that great cider district. Evelyn says that Herefordshire alone, in his time, was known to produce annually 50,000 hogsheads of cider, and, proceeding to remark on some of the apples employed in its manufacture, states that the Redstreak was a

pure wilding, and within the memory of some then (1676) living was named the Scudamore's Crab, and not much known save in the neighbourhood. It is to the perseverance of Lord Scudamore, thus commemorated, that the orchards in that district are indebted for some of their best varieties. He was our ambassador to the court of France during the reign of Charles I., and he lost no opportunity of collecting scions of the best apples he heard of on the continent, and transmitting them to his west-country estates.

Since then, Mr. Knight and many others have laboured most assiduously for the improvement of our cider fruits, but with comparatively little benefit. It is in vain that efforts are made to improve the varieties of our apples if the orchardist does not take commensurate pains to cultivate them carefully. We fear that that, too generally, is not the case, but that the following sketch of west-country orcharding is far too near to accuracy. It is from the pen of one of the best practical gardeners of the day, and we hope the satire may induce amendment rather than indignation at the exposure.

“The trees are planted, to a large extent, apparently without considering what sort of soil or situation is best, and without making any previous preparation ; a situation is chosen, a pit is dug with a curious clumsy bit of iron, having a large socket-hole at one end of it, in which is driven a large strong pole, which

answers for a handle ; it is worked with both hands over one knee ; the depth that the roots are buried does not seem to be of any moment, provided the trees are firmly fixed, so as to prevent the wind from driving them down. I have never observed any pruning performed, except such as is done by bullocks, horses, donkeys, &c. ; and as I have not observed any "horse-ladders" here in use, of course the pruning is not very effectively performed about the top part of the very lofty trees. The only digging or stirring the surface of the ground among the trees that I have observed is done by pigs, which are occasionally allowed to rove in some orchards at certain seasons of the year, with the rings taken from their snouts. In a moist season these intelligent animals occasionally turn up the ground in a tolerably regularly manner ; and where this is the case the good effects of their industry are obvious. However, it is only on rare occasions that they are allowed to perform this surface operation. The animals that do the pruning are the principal business-performing creatures, as, in addition to that operation, they tread down the under crop of grass, weeds, and other rubbish, take the fruit to the cider-mill, and the cider to the consumer ; besides, on rare occurrences, a little manure is conveyed by them, and placed over the roots, close to the trunks of the trees ; it is sometimes, although rarely, placed at the great distance of three or four feet from

the trunk. Bipedes, notwithstanding, perform some of the most interesting and essential parts, such as planting, collecting the fruit, consuming it in part, and assisting in making the cider ; together with shooting at the trees annually on Old Twelfth-night. Let it rain, hail, blow, or snow, this very essential and interesting ceremony is always commenced at 12 o'clock at night, a tremendous fire being kept up for several hours afterwards. They repeat or sing the following interesting song, with all the might which their lungs will permit. The juice of the fruit is generally made use of for many hours, pretty freely, previously to this interesting ceremony, so that a perfect ripeness of address and expertness in gunnery is the result. Guns and firelocks long laid by are on this remarkable occasion brought forward. The following is what I have heard sung on these occasions, although much more is added in some localities :—

“ Here’s to thee, old apple-tree,  
 Whence thou mayest bud, and whence thou mayest blow ;  
 And whence thou mayest bear apples enow ;  
     Hats full, caps full !  
     Bushel, bushel-sacks full !  
     And my pockets full too !  
 If thee does not bear either apples or corn,  
 We’ll down with thy top, and up with thy horn.”

(Here the natives shoot at the tree.)

Not being acquainted with the custom here on the

first Old Twelfth-night, I must acknowledge that I was somewhat alarmed at such a continual loud and rattling report of fire-arms in every direction, living as I did in a rather retired spot, away from any other residence. It was a cold, gloomy, dark, and still night, and being suddenly awoke by the loud reports of fire-arms, I could not guess the meaning of it at that untimely hour. I imagined at first that it was an affray with gamekeepers and poachers, or with smugglers and blockade-men; and, suddenly hearing a shrill vacant kind of hallo in a plantation close by, I fancied at first that it was some poor fellow who had been wounded in the affray: on getting up, however, I found that it was a couple of owls answering each other; they were as happy as could be, and the firing, I soon found, was in no particular spot, but went pop, bang, east and west, north and south. On making an early inquiry next morning, I was informed that it was the yearly custom. The apple-trees, with few exceptions, are entirely left to nature, consequently they are entirely covered from top to bottom with long moss and lichens; the wood and branches are as thick as those of a weeping-willow; the fruit is generally very small and corey. The varieties are not numerous: they seem all in this locality to cultivate the same kinds. I have sometimes thought other good sorts could be beneficially cultivated—some of the large, free-bearing, juicy varieties, such as the

Hawthornden, Keswich Codling, Kentish Beauty, Kentish Fill-basket, &c. When I make mention of those sorts, and a number of others, I am always informed that they will not answer hereabouts, although I have never met with one person that has ever attempted, or that had ever heard of any one else attempting to introduce them! I should be rather inclined to think that those large juicy kinds, cultivated for mixing with the little Bitter-sweets, would not be amiss, although I dare say, under the present system of cultivation, they would not be produced very large or juicy. The leaves of the trees show great poverty; they are small, thin, and are not much larger than damson leaves; they turn yellow, and fall off in some localities long before the fruit has arrived at perfection; and the abundance of long moss and lichen, in my opinion, to a certain extent indicates poverty.

“I will here attempt to describe three different orchards, under the management of three different persons. The first is an orchard of above 12 acres in size; the owner never digs, manures, or prunes himself, but leaves those operations to be performed by his cattle; he does not allow pigs to run in his orchard, therefore he has no digging done; and the consequence is, that he does not get a tree to bear fruit once in seven years. He lately informed me that he should not have apples enough this autumn to make four hogsheads of cider; that the seasons were

now so unfavourable he could get no apples, and were it not for the grazing for his cattle underneath the trees, he should have no return, which was now become a very poor one. I asked him why he did not manure the trees. In reply, he observed, that they have all that the cattle make among them ; he did not mow, or carry anything away from them. The second is a small orchard about one acre in extent, the owner of which manures about his trees every season ; here, however, there is no digging done. The trees are healthy, they grow and make wood, and produce large thick and dark-green leaves and strong buds ; they are not so thickly covered with moss and lichen, and rarely fail to bring forth a heavy crop of good fruit. This person's cider is much sought after, being good, and of course of more value. He makes a larger quantity of cider than the person mentioned above with his 12 acres. The last is a small orchard held by another individual, who keeps no other cattle besides pigs, which are allowed to rove at freedom about the orchard, and as the rings are taken out of their snouts in autumn, when the ground is nicely softened by the rains, and the worms are working near the surface, those worthy animals rout and turn up the surface in a tolerably regular way. From the digging and manuring by the pigs, and from what the holder can muster, this is the best bearing, healthy, orchard in the district. It produces the best cider and the least

moss and lichen. This shews how beneficial a little surface-stirring, with the addition of a little manure, is. A considerable quantity of cider made and consumed hereabouts is very poor; the visages of the men who are in the constant habit of drinking it are sallow and wrinkled." (*Gard. Chron.* 1844, 636.)

The criticism, of course, falls harmless upon some orchardists, whose practice offers a striking contrast to that of their more ignorant and careless neighbours; and to these we would add this warning, that, beyond all doubt, their ill-cultivation occasions the early decrepitude of good varieties, and the frequent occurrence of failing crops, far more than any ungenial vicissitudes of our climate, or any other natural causes.

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### BOTANICAL CHARACTERS.

PYRUS MALUS, the apple, belongs to the Icosandria Pentagynia class and order of Linnæus, and to the Rosaceæ of the natural system. The generic characters are, *Petals* flat and spreading; *Styles* five, somewhat united at the base; *Pome* usually globose and depressed, always umbilicate at the base; *Footstalks* simple, umbellate; *Leaves* simple, glandless.

The specific characters are, *Leaves* ovate or elliptic, acute, serrated, clothed beneath with white down, as well as on the calyxes, petioles, and footstalks; *Flowers* corymbose; *Styles* glabrous.

It is found wild in every part of the British isles and in most parts of Europe. In its cultivated forms, the leaves become larger, more downy, and thicker; the tree larger and more robust; and the fruit finer both in size, flavour, and beauty.

The first fruitful age of the wild apple or crab is usually from eight to ten years, but the periods which seedling apple-trees require to attain sufficient maturity to produce fruit appear to admit of much more variation. Some do not produce blossoms till they are sixteen years old; others have blossomed in the ninth and tenth year; and a few have been known to produce fruit at only five years old. These are very extraordinary instances of early maturity; Mr. Knight having two only thus precocious in more than twenty thousand seedling trees that came under his observation. (*Knight on the Apple*, 14.)

The apple-tree has many things in common with the pear-tree, but the leaf is more shortly mucronate, less manifestly serrate, and subhirsute underneath. The flowers tinged with red, and smelling very sweet. The peduncle shorter. The stamens usually from 19 to 25 (in the pear 22: Pollich assigns 19 as the limit in the apple, 21 in the pear). The fruit round, hollowed at the peduncle, depressed at top, less astringent but more acid than the pear, and of a softer texture. The apple has wood threads passing through it from the peduncle, ten of which are regularly dis-

posed round the capsules, and tend to the calyx. It is said that the fruit rots when these are broken. The pear also has them, but they are not so distinct on account of the calculary or stony congeries. In the apple they are placed very regularly, one at the point of each cell of the capsule, and one in the middle between the other five. They are very apparent on a transverse section of the fruit. The cells are differently shaped in the two fruits: in the apple they are narrow and pointed at both ends; in the pear they are obvate, broad exteriorly, and drawing to a point at the end next the centre of the fruit. The pear, however it may vary in shape, size, colour, taste, &c., by cultivation, is generally convex and lengthened out at the base; whereas in the apple it is always concave there. Besides this, the leaves of the apple are commonly wider in proportion to their length, of a yellower green above, and whitish underneath; whereas in the pear they are dark green above, and quite smooth on both sides: their vascular system is very different, being very loose in the apple, and very close in the pear; hence the leaves of the latter are much stouter and more permanent. Lastly, the growth of these trees is quite different; the pear being lofty and upright, the apple low and spreading. (*Martyn's Miller's Dict.*)

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## CHEMICAL COMPOSITION.

M. PAYENSTECHEr observes that the fruit of neither pears nor apples assume a blue colour when treated with iodine, shewing that they do not contain starch. It is obvious, from the black colour struck when they are cut with a knife, that they contain also tannin, or gallic acid, or both. They contain likewise pectic acid and malate of potash. The fermented juice of apples is called cider. It is specifically heavier than water, assumes a brown colour when concentrated by evaporation, and deposits a blackish-brown powder, and leaves a thick brown syrup. Cider contains alcohol, incrustalizable sugar, gum, extractive, malic acid, bimalate of potash, malate of lime, a trace of phosphate of lime, and of sulphates and muriates. (*Thomson's Vegetable Chem.* 892.)

Mr. Solly has made some slight examinations of several varieties of the apple, the results of which appear in the following table. The column exhibiting the quantity of organic matter in each may be considered, probably, as a true statement of their relative nutritive qualities. In which case the Golden Harvey is the most nutritious, and the Court of Wick the least so.

	Water.	Organic matter.	Inorganic matter.	Inorganic matter in dry plant.
Apple .. .. blossoms	8424	1478	98	627
— Dutch Mignonne, small unripe	8972	978	50	487
— Do. .. .. ripe	8559	1420	21	151
— Court of Wick, small unripe	8839	1114	47	411
— Do. .. .. ripe	8525	1438	37	252
— Nonpareil .. .. ripe	8012	1961	27	140
— Ribston Pippin .. ripe	7905	2051	44	214
— Golden Pippin, seedling	8024	1929	47	241
— Wellington .. .. ripe	8376	1595	29	184
— Blenheim Pippin .. ripe	8486	1491	23	157
— Golden Harvey .. .. ripe	7825	2140	35	162
— Golden Reinette .. .. ripe	8399	1578	23	146
— Canada Reinette .. .. ripe	8489	1481	30	198

(*Trans. Hort. Soc.* iii. 62, N.S.)

The ashes of the wood of the apple-tree have been analysed by MM. Fresenius and Will, and they found them to be thus constituted:—

Potash . . . . .	13.67
Soda . . . . .	0.32
Chloride of sodium (common salt) .	0.32
Lime . . . . .	45.19
Magnesia . . . . .	5.30
Phosphate of iron . . . . .	1.71
Silica . . . . .	0.93
Sulphuric acid . . . . .	0.66
Phosphoric acid . . . . .	2.95
Carbonic acid . . . . .	24.18
Carbon and sand . . . . .	2.03
Loss . . . . .	2.74

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100.00

The acids were, of course, combined with the potash, soda, lime, and magnesia, in the form of sulphates, phosphates, and carbonates.

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### VARIETIES.\*

*Agatje Rouje Nova*.—Red, conical, very large, kitchen; November to January.

*Achmore*.—Green and red, conical, middle-sized, table, second-rate; December and January.

*Adam, D'* (Seigeneur rouge).—Red, ribs very prominent, middle-sized, cider; November to January.

*Admiral Duncan, Newbold's*, see Rymer.

*Adam's Apple*.—Darkish red, oblong, middle-sized, indifferent; December to January.

*Avent, D*.

*Agat Rouge*.—Streaked, ovate, small, indifferent or bad; December; of no value.

*Agathe Grise*.—Palish yellow, ovate and oblong, middle-sized, indifferent; December.

*Alban*.—Greenish red, round, middle-sized, cider; December.

*Alcester Seedling*.

*Alderston Pippin*.—Palish yellow, ovate, small, table, second-rate; August.

*Alexander* (Emperor Alexander, Russian Emperor, Aporta).—Streaked, conical, large, kitchen, first-rate, September to December; moderate bearer, large and handsome. A Russian apple.

*Alfriston* (Newtown Pippin of many, Lord Gwydyr's Newtown Pippin, Baltimore of some, Oldaker's New).—Greenish yellow, roundish, large, first-rate; November to April; a valuable kitchen apple.

\* Authorities—*Catalogue of Fruits in Hort. Soc. Garden; Lindley's Guide to the Orchard, &c.*

*Althorp Pippin*, see Marmalade.

*American Mammoth*, see Gloria Mundi.

*American Peach*.—Reddish yellow, roundish, middle-sized, second-rate ; September.

*American Peach*, see Pigeonnet.

*American Pippin*.—Greenish red, round, middle-sized, kitchen ; January to July ; one of many having this vague name.

*American Plate*, see Golden Pippin.

*Amerique D'*, see Noir.

*Ange, D'*.—Green, roundish, small, cider ; October.

*Angleterre, D', Grosse*, see Reinette Wahre.

*Anglaise*, see Reinette Jaune Sucree.

*Anis, D'*, see Fenouillet Gris.

*Anis-seed* (Rival Golden Pippin).—Greenish yellow, oblate, small, table, second-rate ; October to January.

*Annette Black*.—Darkish red, ovate, middle-sized, kitchen and table, second-rate ; November to January.

*Api Gros*.—Oblate, middle-sized, kitchen, second-rate ; December to January.

*Api Noir*.—Darkish red, oblate, small, indifferent ; October to April.

*Api Panache* (Panachee).—Yellowish green, roundish, small, indifferent ; October to December ; more curious than useful.

*Api Petit* (Pomme Rose, Lady Apple of the Americans, Etoilee).—Yellowish red, oblate, small, table, second-rate ; October to April ; fruit very beautiful, but the tree is exceedingly subject to canker.

*Aporta*, see Alexander.

*Arabian Apple*, see Pigeon.

*Arley*, see Wyken Pippin.

*Argentee D'Angleterre*.

*Aromatic Pippin*.

*Aromatic Pippin, Edmonston's*, see Kerry Pippin.

*Ashby Seedling*.—Yellowish red, roundish, middle-sized, table, second-rate ; December to January.

*Ashmead's Kernel*.—Yellow, oblate, middle-sized, table, first-rate; November to May. Raised by Dr. Ashmead, of Ashmeads, Gloucestershire.

*Ashstead Park*.

*Astems, D'* (Streiffing d'Hiver).—Green-streaked, roundish, middle-sized, kitchen, second-rate; November to March.

*Astrachan Red*.—Red, conical, middle-sized, table, second-rate; August to September. Introduced from Sweden in 1816.

*Astrachan White* (*Pyrus Astracanicus*, *Pomme d'Astrachan*, *Transparent de Moscovie*, *Glace de Zelande*).—Palish yellow, conical, middle-sized, table, first-rate; August to September; good bearer. Introduced from Russia; said to grow wild near Astrachan.

*Assy, D', Grosse*.

*Augusæble*.

*Aunt's Apple*.—Streaked, roundish, large, kitchen, second-rate; November to March.

*Aurore*, see *Golden Reinette*.

*Autumn Bough*, see *Large Yellow Bough*.

*Avant Tout*, see *Summer Stibbert*.

*Baines's*.—Streaked, oblate, middle-sized, kitchen and table, second-rate; November to March; Ribston Pippin flavour, but not so rich.

*Baird's Favourite*.

*Balderston Seedling*.—Streaked, conical, second-rate; October to November.

*Baldwin* (*Red Baldwin*, *Butter's*, *Woodpecker*).—Greenish red, roundish oblong, large, kitchen, first-rate; November to April.

*De Bale*.

*Baleborodova*.—Palish yellow, ovate, large, indifferent; August; of no merit in this climate.

*Balgone Pippin*, see *Golden Pippin*.

*Balgowan*.

*Balmanno Pippin*.—Greenish brown, roundish, ovate, large, table, second-rate; October to December.

*Baltimore*.—Large, flat, brown-coloured and russet, middle quality. Raised by a Mr. Smith, at Baltimore.

*Baltimore* (of some), see Alfriston and Gloria Mundi.

*Bamporta*. *Barbarin, De*.

*Bardin*, see Fenouillet Rouge.

*Barossa*, see Bourassa.

*Barrow Court Pippin*.

*Barton's Favourite*.

*Bascombe Mystery*.

*Basselanery Pippin*.

*Bath*.—Yellow, roundish, large, kitchen, second-rate; November to December.

*Bay*, see Drap d'Or.

*Bayfordbury Pippin*, see Golden Pippin.

*Beachamwell* (Beachamwell Seedling, Motteux's Seeding).—Yellow, ovate, small, table, first-rate; December to March; an excellent table fruit. Raised by J. Motteux, Esq., of Beachamwell, Norfolk.

*Bean*.

*Beat's Pippin*.—Streaked, roundish, large, table; November to January.

*Beaufin Millmount*, see Norfolk Paradise.

*Beaufin, Norfolk* (Cat's-head of some, Cat's-head Beaufin, Read's Baker).—Darkish red, oblate, middle-sized, kitchen, first-rate; January to June; excellent for drying.

*Beaufin, Suffolk*.

*Beaufin, White*.

*Beaufinette*.—Red, oblate, large, kitchen; November to February.

*Beauty of Kent* (Kentish Pippin of some).—Streaked, roundish, large, kitchen, first-rate; October to February.

*Beauty of Newark, Smith's*.—Yellowish red, ovate, middle-sized, table ; September to October.

*Le Beau Rouge*, see Hollandbury.

*Beauty of the West*.

*Beauty of Wilts*.—Palish green, oblate, middle-sized ; November to December.

*Beauty of Wilts, Dredge's*, see Harvey's Pippin.

*Beauty of the World*.

*Bec de Lievre*.—Yellow, ovate, middle-sized, indifferent ; October to November.

*Bedfordshire Foundling* (Cambridge Pippin).—Yellow, roundish, oblong, large, kitchen, first-rate ; November to March ; very handsome, large and excellent.

*Belin, Pomme de*, see Court Pendu Musque.

*Belle Bonne*.—Streaked, conical, middle-sized, kitchen, first-rate ; November to April.

*Bel Ecossais*.

*Belle Fille*, see Reinette Grise.

*Belle Fleur*.—Yellowish red, roundish, small, indifferent ; November to December.

*Belle Fleur, Brabant*.—Yellowish red, roundish, large, kitchen, first-rate ; November to April.

*Belle Fleur, Double*.—Palish yellow, ovate, middle-sized, second-rate ; December.

*Belle Fleur, Egben*.—Russet, ovate, small, second-rate ; November to March.

*Belle Fleur, Hollandische*.—Green and yellowish red, oval, middle-sized, indifferent ; December.

*Belle Fleur, Westlandische*.—Streaked, ovate, small, second-rate ; December.

*Belle Fleur de Stoffels*.—Streaked, ovate, small, second-rate ; November to December.

*Belle Fleur Rouge*.—Red, ovate, small, indifferent ; December.

*Belle Fleur Yellow* (Belle Fleur, Belle Flower).—Yellow, oblong, large, kitchen, second-rate ; November to March.

*Belle Fleur, Zoete*.—Reddish yellow, oblong, middle-sized, second-rate; December to January.

*Belle Hervy* (De Jardy).—Green, roundish, large, kitchen, second-rate; November to March.

*Belle de Senard*.

*Bell's Scarlet*, see Scarlet Pearmain.

*Belledge Pippin*.—Yellow, ovate, middle-sized, table, second-rate; November to March.

*Benholm Pippin*.

*Ben Lomond*.—Greenish yellow, oblong, large, kitchen; October to December.

*Bennet*.—Greenish red, ovate, middle-sized, cider; November to December; a bitter-sweet.

*Benoni*.

*Bentleber Rose*.—Red, calville-shaped, middle-sized, kitchen, indifferent; October to December.

*Benwell's Large*.—Green, roundish, large, indifferent; December.

*Benzler*.—Streaked, ovate, middle-sized, cider; December to May.

*Bere Court Pippin*.—Greenish red, ovate, middle-sized, kitchen; September to October. Raised by Dr. Breedon, at Bere Court, Berks.

*Bess Pool* (Best Pool).—Greenish red, oblate, middle sized, kitchen, second-rate; December to April.

*Betsey*.—Yellowish russet, oblate, conical, middle-sized, table, first-rate; November to February; tender juicy flesh.

*Beverly Red*.

*Beurre a Cidre*.—Yellow, ovate, small, cider; December.

*Binet, De*.—Cider.

*Birmingham Pippin* (Brummage Pippin, Grummage Pippin).—Yellow russet, round, table, first-rate; January to June. A Warwickshire apple.

*Birnformiger*.—Yellowish red, pear-shaped, middle-sized, table, second-rate; November to February.

*Bishopstone Norman*.—Green and yellowish red, round, ovate, middle-sized, cider.

*Bitter Sweet*.—Cider.

*Bitter Sweet, Siberian*.—Yellow, ovate, small, cider, first-rate; September; great bearer and excellent for cider.

*Bitter Sweet, White*.                      *Black*.

*Black American*.—Darkish red, roundish, middle-sized, table, second-rate; November to December.

*Black Bess*.

*Black Crab* (Black Borsdorffer).—Darkish red, roundish, small, indifferent; November to January; curious on account of its colour, in other respects worthless.

*Black Grove*.—Greenish red, pear-shaped, middle-sized, indifferent.

*Black Pippin*.

*De Blanc*.

*Blanc Feuille*.

*Blundarine, Red*.

*Bland Rose*.—Yellowish red, roundish, middle-sized, table, second-rate.

*De Blangy*.—Yellow, ovate, small, cider; October.

*Blenheim Crab*.

*Blenheim Pippin* (Blenheim, Blenheim Orange, Woodstock Pippin, Northwick Pippin).—Yellow, roundish, large, kitchen and table, first-rate; November to February. Raised by a baker at Old Woodstock.

*Blinkbonny Seedling*.

*Blood Royal*.—Darkish red, roundish, large, kitchen, second-rate; September to November.

*Blumensaur*.

*Boatswain's Pippin*, see Queen Charlotte.

*De Bœuf*.—Green, oblate, middle-sized, kitchen; December to January.

*Bogmiln Favourite*.—Streaked, round, small, table, second-rate; November to January.

*Bois Panache, a.*—Yellowish green, oblong, middle-sized, kitchen; October to November.

*Bollaston Hill.*

*Bonne de Mai*, see *Drap d'Or*.

*Bonne Rouge*, see *Hollandbury*.

*Bonvier.*—Streaked, conical, middle-sized, table, second-rate; December.

*Borsdorffer* (Edler Winter Borsdorffer, Le Grand Bohemian Borsdorffer, Borstorffer, Reinette Batarde, Reinette Borsdorffer, Bursdoff, Winter Borsdorffer, Reinette de Misnie, King, King George, Queen's, Garret Pippin).—Yellowish red, oval, small, table, first-rate; November to March. A German apple, a great favorite with Queen Charlotte, who imported it in 1761.

*Borsdorffer, Black*, see *Black Crab*.

*Borsdorffer, Double.*

*Borsdorffer Ognoniforme.*—Greenish red, oblate, small, table, indifferent; October to January.

*Borsdorffer, Rother.*

*Borovitsky.*—Green-streaked, roundish, middle-sized, first-rate; August. A Russian apple, raised in the Taurida Gardens, near St. Petersburg, early this century.

*Bossom.*—Yellow, conical, large, kitchen, second-rate; December to January.

*Bostock Orange.*

*Bough, Large Yellow* (Autumn Bough).—Yellow, roundish, large, kitchen, first-rate; August.

*Bough Red.*                      *Boxford.*

*Brainge.*—Streaked, ovate, small, cider; November.

*Brainton, Symonds's.*—Yellow, roundish, middle-sized, cider.

*Bransby Pippin.*                      *Brazier's.*

*Bourassa* (Barossa).—Russet red, conical, middle-sized, kitchen and table, second-rate; October to December.

*Bower.*

*Brandy*, see Golden Harvey.

*Braune Mal.*—Brown, oblate, large, kitchen; December to March.

*Braunschweiger Milch.*—Pale yellowish red, roundish, middle-sized, table, second-rate; August.

*Brebis.*—Yellow, roundish, small, table, cider, second-rate; August.

*Breedon Pippin.*—Yellow, oblate, small, table, first-rate; October to November. Raised by Dr. Breedon, of Bere Court, Berks.

*Brentford Crab*, see Isleworth Crab.

*Bretagne, De*, see Reinette du Canada.

*Brickley Seedling.*—Greenish red, roundish, small, table, first-rate; January to April.

*Bridgewater Pippin.*—Yellow russet, calville-shaped, large, kitchen, second-rate; October to December.

*Bringewood Pippin.*—Yellow, oblate, small, table, second-rate; January to March. Hybrid between Golden Harvey and Golden Pippin, raised by Mr. Knight.

*Broad End* (Broading, Winter Broading).—Green, oblate, middle-sized, kitchen, first-rate; November to January. A Norfolk apple.

*Broad-Eyed Pippin.*—Yellow, oblate, large, kitchen, first rate; September to December.

*Brookes's.*—Yellow russet, ovate, small, table, first-rate; September to January.

*Broughton.*—Yellowish red, roundish ovate, small, table, first-rate; October to December.

*Brownite.*—Streaked, oblate, middle-sized, indifferent; December to January.

*Brown Apple of Burnt Island*, see Spice Apple.

*Brown Kenting.*

*Brown Spice*, see Spice Apple.

*Brummage Pippin*, see Birmingham Pippin.

*Buck's County* (Solebury Cider).—Yellowish red,

conical, large, cider; November to March; great bearer.

*Brundable.*

*Buchannan.*—Palish yellow, oblong, middle-sized, kitchen, second-rate; September to November.

*Buchannan's Long Keeper.*—Yellowish green, round, middle-sized, second-rate; January to April.

*Buckland, Devonshire* (Lily Buckland, White Lily, Dredge's White Lily).—Palish yellow, oblate, middle-sized, kitchen, first-rate; December to March; good bearer.

*Buckland, Yellow.*—Yellow, oblate, middle-sized, kitchen, indifferent; December to March.

*Buffcoat.*—Yellow russet, roundish, cider.

*Buissier.*—Cider.

*Bullock's Pippin,* see Sheep's Nose.

*Burchan Minna.*                      *Burgin.*

*Burns's Seedling.*—Yellowish red, roundish, large, kitchen, first-rate; October to January.

*Burnt Island Pippin,* see Spice Apple

*Burr Knot* (Burr Apple).—Yellow, roundish, large, kitchen, first-rate; October to January; strikes easily from cuttings. (See *Oslin.*)

*Bushan.*—Yellowish green, roundish, middle-sized, kitchen, second-rate; December to March.

*Byre End.*—Palish yellow, roundish, large, kitchen, second-rate; December.

*Byson Wood* (Byson Wood Russet).—Russet, roundish, small, table, first-rate; December to February.

*Caldwell,* see Rymer.

*Cadbury.*—Yellow, conical, small, cider.

*Calabria Pippin.*                      *Calander.*

*Calville, Autumn.*

*Calville Blanche d'Ete* (White Calville).—Palish yellow, calville shaped, middle-sized, kitchen, second-rate; August to September.

*Calville Blanche d' Hiver* (Rambour a Cotes Gros of some).—Palish yellow, calville-shaped, large, kitchen and table, first-rate ; January to April.

*Calville d' Angleterre*, see Winter Queening.

*Calville Bosc.*

*Calville Imperiale.*

*Calville Kops.*

*Calville, Large White.*

*Calville Malingre.*—Red, calville-shaped, large, kitchen, first-rate ; January to April ; great bearer, and keeps well.

*Calville Normande* (Malingre d' Angleterre).—Red, calville-shaped, large, kitchen, second-rate ; January to March.

*Calville Pippin.*

*Calville Red* (of some), see Pomme Violette.

*Calville Rouge d' Anjou d' Hiver.*

*Calville Rouge d' Automne.*—Red, calville-shaped, large, kitchen, indifferent ; October to November.

*Calville Rouge d' Ete* (Calville d' Ete, Madeleine).—Red, calville-shaped, middle-sized, kitchen, second-rate ; July to August.

*Calville Rouge d' Hiver* (Calville Rouge Couronnee, Red Calville).—Red, calville-shaped, middle-sized, kitchen, indifferent ; November to December.

*Calville Rouge de Micond.*—Red, oblate, small, kitchen and table, second-rate ; July to November ; bears occasionally two crops a year. Originally from the Baroness Micond, raised at La Charite sur Loire.

*Calville Rouge de Pentecote.*—Red, calville-shaped, large, kitchen, second-rate ; January to April.

*Calville Rouge Precoce.*—Red, calville-shaped, small, kitchen, indifferent ; August.

*Calville Royale.*

*Calville, White*, see Calville Blanche d' Ete.

*Cambridge Pippin*, see Bedfordshire Foundling.

*Cambusnethan Pippin* (Winter Red Streak, Watch

Apple).—Yellowish red, oblate, middle-sized, table, first-rate; October to January.

*Cambridge Hive.*

*Cam House.*

*Campagne Doux.*—Russet, roundish, small, table, second quality; October to January.

*Campfield.*—Yellowish red, oblate, middle-sized, cider; December to January.

*Canadian Pippin.* *Canu.*

*Carel's Seedling,* see Pinner Seedling.

*Carle, Pomme,* see Male Carle.

*Capucine de Tournay.*—Yellowish red, calville-shaped, middle-sized, kitchen, second-rate; December.

*Carberry Pippin.*

*Cardinal Rouge.*—Red, roundish, middle-sized, table, second-rate; November to January.

*Carnation.*

*Carolina Pippin.*

*Caroline.*—Streaked, roundish, large, kitchen, first-rate; November to February. Named after Caroline Lady Suffield, of Blickling Hall, Norfolk.

*Carthouse,* see Gilpin.

*Carree.*—Pale yellow, oblong, small, kitchen, indifferent; November to January.

*Carree Blanche.*—Pale yellow, roundish, large, kitchen, second-rate; November.

*Carse of Gowrie, Early.*

*Carse of Gowrie, Late,* see Tower of Glammis.

*Catline* (Gregson, *Catline of Maryland*).—Yellowish red, oblate, small, table, second-rate; October to December.

*Catshead* (Costard, Coustard).—Pale green, oblong, large, kitchen, second-rate; October to January. This was a prevailing apple in the 16th century, so that dealers in apples were called *costard-mongers*, now *coster-monger*.

*Catshead*, see Norfolk Beaufin.

*Catshead, Round* (Tetedu Chat, of Jersey).—Yellow, roundish, large, kitchen, first-rate; December to March.

*Cellini*.—Greenish red; oblate, middle-sized, kitchen; October to November. Resembles the None-such.

*Chalcomb*.

*Chalmers's Large*, see Dutch Codlin.

*Chamæleon*.

*Chance*, see Reinette Jaune Sucree.

*Chapple*.

*Charlamowskischer Nallivia*.—Yellow, oblate, middle-sized, table, second-rate; October. A Persian apple, indifferent in this climate.

*Charlemagne*.—Red, roundish, small, indifferent; October.

*De Charles, Pomme*, see Male Carle.

*De Charlotte*.—Green, oblate, middle-sized, cider.

*Chataignier*.—Streaked, ovate, middle-sized, kitchen; two years; contains a very strong acid.

*Chataignier du Leman*.

*Chaudiere*.—Green, roundish, small, cider.

*Chauffard*.—Streaked, ovate, large; August to September.

*Chelston Pippin*.

*Cheese, Summer*.

*Cheese, Winter*.

*Chemise de Soie Blanche*.—Pale yellow, roundish, middle-sized, kitchen, second-rate; January to April.

*Christie's Pippin*.—Yellow, oblate, small, table, first-rate; December to February. Subject to canker.

*Chuchet Egg*.—Yellow, ovate, small, table, second-rate; September.

*Churchill's Seedling*.

*Cierge d'Hiver*.—Green, conical, small, cider; November to December.

*Citron*, see Reinette Jaune Sucree.

*Citron des Carmes*, see Reinette Jaune Hative.

*Citron de Saint Gall*.

*Clammy*.

*Claremont Pippin*, see Easter Pippin.

*Cley Pippin*.—Yellow, roundish, small, table, first-rate ; October to March.

*Claret*.—Red, conical, middle-sized, kitchen ; December to January.

*Coates's*, see Yorkshire Greening.

*Clove Pippin*.—Red-russet, oblate, middle-sized, table, second-rate ; August.

*Cluster Pippin*, see Cluster Golden Pippin.

*Cluster, Streaky*.

*Clydesdale*.

*Cobham*.—Greenish red, roundish, middle-sized, kitchen and table, second-rate ; November to January. Good bearer, allied to Ribston Pippin.

*Cob Thorn Greening*.

*Coccagee*.—Yellow, ovate, middle-sized, cider, first-rate ; October. One of the most esteemed old cider apples.

*Coccagee, New*.

*Cockle Pippin* (Nutmeg Cockle Pippin, Nutmeg Pippin, White Cockle Pippin).—Brownish yellow, ovate, middle-sized, table, first-rate ; January to April. Good bearer.

*Cockpit*.—Yellow, roundish, middle-sized, kitchen, second-rate ; December to March.

*Codlemay*.—Pale yellowish red, conical, middle-sized, second-rate.

*Codlin, Betley*.—Yellow and brownish red, conical, middle-sized ; October to January.

*Codlin, Carlisle*.—Yellow, conical, small, kitchen, first-rate ; August to December.

*Codlin, Clarke's*.—Yellow, conical, middle-sized, kitchen, indifferent ; November.

*Codlin, Dutch* (Chalmers's Large).—Yellow, roundish, large, kitchen, first-rate; August to September.

*Codlin, French*.—Yellow, conical, large, kitchen, second-rate; August to September.

*Codlin, Kentish*.—Greenish yellow, conical, large, kitchen, first-rate; August to September.

*Codlin, Keswick*.—Greenish yellow, conical, large, kitchen, first-rate; August to September. Fit for use almost before any other, and good bearer. Raised near Keswick, in Cumberland.

*Codlin, Kilkenny*.—Yellow, round, large, kitchen, first-rate; August to September.

*Codlin, Kinnoul*.

*Codlin, Knight's*, see Wormsley Pippin.

*Codlin, Manks* (Irish Pitcher, Irish Codlin).—Pale yellow, conical, large, kitchen, first-rate; August to October.

*Codlin, Nelson* (Nelson, Backhouse's Lord Nelson).—Greenish yellow, conical, large, kitchen; September to October.

*Codlin, Old English* (English Codlin).—Pale yellow, conical, middle-sized, kitchen, first-rate; August to October.

*Codlin, Round*.

*Codlin, Royal*.

*Codlin, Spring Grove*.—Palish yellow, conical, middle-sized, kitchen, second-rate; July to September. Raised by Sir J. Banks early this century.

*Codlin, Tarvey*.—Yellowish green, conical, large, kitchen; September to November. Raised from Manx Codlin seed by Sir G. I. Mackenzie, of Coul, N.B.

*Codlin, Tottenham Park*.

*Codlin, Transparent*.—Pale yellow, conical, large, kitchen, September. Brought into notice in 1805 by T. Tompson, Esq., of Norwich.

*Codlin, Winter*.—Green, conical, middle-sized, kitchen, first-rate; September to February; great bearer.

*Cœur d' Ane*.—Cider.

*Cœur de Bœuf*.—Darkish red, calville-shaped, large, kitchen, second-rate ; November to December.

*Cœur de Pigeon*, see Pigeonet.

*Coing*.

*Cole* (Scarlet Perfume).—Red, roundish, large, kitchen and table, second-rate ; August to September.

*Collin's Keeper*.—Greenish yellow, roundish, large, kitchen ; January.

*De Coloma*.—Streaked, oblate, small, table, second-rate ; September.

*Colonel Harbord's Pippin*.—Yellowish green, conical, large, kitchen, first-rate ; November to January. Raised by Col. Harbord, second Lord Suffield, of Blickling, Norfolk.

*Colonel Vaughan's*.

*Compote*, see Padley's Pippin.

*Concombre Ancien*.

*Concombre des Chartreux*.

*Conquest De Wigors*.—Pale yellow, roundish, middle-sized, table, second-rate ; January to March.

*Constanzer*.      *Constant Bearer*.

*Conway*.

*Copmanthorpe Crab*, see Dutch Mignonne.

*Coquerel Plat*.—Cider.

*Corianda Rose*, see Court-pendu Plat.

*Corlie's Sweet*.      *Corn*.

*Core*, Common.

*Cornish Aromatic*.—Russet red, roundish, large, table, second-rate ; October to January.

*Cornish Crab*.      *Corse's Favourite*.

*Corstorphine*.—Pale yellow, conical, middle-sized, second-rate ; September to October.

*Cos*.      *Costard*, see Catshead.

*Coul Blush*.—Yellowish red, conical, middle-sized, kitchen and table, second-rate ; October. A good bearer.

*Court-pendu Plat* (Court-pendu, do. Extra, do. Plat Rougeatre, do. Rond Gros, do. Rond tres Gros, do. Rond Rougeatre, do. Rose, do. Musque, do. Rouge Musque, Corianda Rose, Pomme de Berlin, Carnon's Apple, Wollaton Pippin, Russian, Princesse Noble Zoete.—Darkish red, oblate, middle-sized, table, first-rate; December to April; an excellent bearer, blossoms late, and thereby generally escapes spring frosts. The name (Court-pendu) was given because the fruit, owing to its very slender stalks, always hangs downwards.

*Court-pendu, Ayrshire.*

*Court-pendu Dore*, see Golden Reinette.

*Court-pendu Gris*, see Fenouillet Rouge.

*Court-pendu Noir*.—Darkish red, round, middle-sized, kitchen; December to March.

*Court-pendu Rouge.*

*Court-pendu Rouge et Gris.*

*Court of Wick* (Fry's Pippin, Golden Drop, Knightwick Pippin, Wood's Huntingdon, Phillips's Reinette, Wood's New Transparent, Week's Pippin, Yellow.)—Yellow, oblate, small, table, first-rate; October to March. A handsome regularly-formed dessert fruit of excellent quality. Raised from a Golden Pippin seed, at Court de Wick, in Somersetshire.

*Court of Wick, Scarlet.*

*Cousham.*

*Coussinette*, see Pigeonette.

*Coustard*, see Catshead.

*Cow's Snout*.—Greenish yellow, oblong, large, kitchen, second-rate; August to September.

*Craigie*.—Green and brownish red, oblate, large, kitchen; January to April.

*Cram Apple.*

*Cray Pippin*.—Straw-coloured, red on sunned side, below middle size, conical and rather angular, table,

first-rate; October and November. Raised in 1812 by R. Waring, Esq., at St. Mary's Cray, Kent.

*Creighton.*      *Crimson Pippin.*

*Crofton, Early*, see Irish Peach.

*Crofton, Scarlet* (Red Crofton).—Brownish red, oblate, middle-sized, table, first-rate; October to December. An Irish apple.

*Crofton, White* (White Summer Crofton, Early White Crofton).—Pale brownish red, oblate, middle-sized, table, second-rate; October.

*Croom Pippin.*—Yellow, roundish, small; December to January.

*Cumberen.*

*Cumberland Pippin.*—Palish green, calville-shaped, middle-sized, kitchen; December.

*Cumberland Spice.*      *Curtis.*

*Custard, White.*

*Cyder Sop.*—Yellow and brownish red, roundish, ovate, middle-sized, cider.

*Dainty*, see Hoary Morning.

*Damelot.*—Yellow, roundish, small, cider; October.

*Damelot Vert.*—Green, roundish, middle-sized, cider; January.

*Danziger Kantapfel.*—Darkish red, roundish, middle-sized, kitchen, second-rate; November to December.

*Darleston Pippin.*      *Davis's Pippin.*

*Darlington Pippin.*—Green, oblate, middle-sized, second-rate.

*Delaware*, see Trumpington.

*Deptford Inn.*—Brownish red, roundish, small, table, first-rate; November to January.

*Derbyshire.*—Pale yellowish red, ovate, middle-sized, kitchen; November to March.

*Descibus.*—Yellow, oblate, middle-sized, indifferent; November.

*Desjean Muscat*.—Tree cankers.

*Deux Ans, Hunt's*.—Green, conical, middle-sized, table, second-rate; 2 years.

*Deux Ans, Hambledon*.—Greenish red, roundish, large, kitchen and table, first-rate; January to May; a valuable sort for sound keeping.

*Deux Ans, Somersetshire*.—Reddish yellow, conical, small, cider.

*Deux Ans, Wickham's*.—Green and yellowish red, roundish, middle-sized, table, second-rate; January to May.

*Devonshire Docker's*.—Streaked, ovate, middle-sized, table, second-rate; December to January.

*Devonshire White Sour* (White Sour, Dredges Early Summer).—Greenish yellow, oblate, small; August.

*Dewit*, see Doctor.

*Diepe Koppis*, see Little Hollow Crown.

*Devonshire Wilding*.—Yellow, roundish, small, cider; December to January. Very acid.

*Dickson's Greening*.—Green, roundish, middle-sized, kitchen; December to February.

*Dimmock's Red*.

*Docker's Seedling*.—Streaked, ovate, middle-sized, table, second-rate; November to January.

*Doctor* (Dewit, White Doctor, Yellow Doctor).—Yellow-streaked, roundish, middle-sized, table, second-rate; October to January.

*Doctor Harvey*.

*Doctor Harvey* (of some,) see Waltham Abbey Seedling.

*Doctor, Red*.

*Dog's Snout*.

*Dolgoi Squoznoi*.—Pale green, pearmain-shaped, middle-sized, table, second-rate; August.

*Domine*.

*Dominiska*.

*Donallan's Seedling*.

*Donville.*

*Doonside.*

*Dore.*

*Double Blossomed.*

*Double Paradys.*—Streaked, roundish, middle-sized, indifferent.

*Double Pepin.*

*Double Rouge de Paradys.*—Round, ovate, small, indifferent; November to January.

*Double Sucre de Marseilles.*—Russet, roundish, small, table, second-rate; November to January.

*Double Bearing.*

*Douce de Bolwiller.*—Brownish red, pearmain-shaped, middle-sized, kitchen, cider, second-rate; November to December.

*Douce Morelle (Peau de Vache).*

*Douxveret Gris Gros.*—Greenish yellow, roundish, small, cider; December.

*Douxveret Dore.*

*Doux Amer.*—Pale yellow, roundish, small, cider; December.

*Doux Chair.*—Cider.

*Doux Eveque.*—Cider.

*Doux a Laquet.*—Cider.

*Doux, Le Gros.*—Cider.

*Doux a Trochet, Gros.*—Cider.

*Doux Saint Martin.*—Cider.

*Doux Vernet.*—Cider.

*Downton* (Knight's Golden Pippin, Elton Pippin, Elton Golden Pippin, Knight's Pippin, Saint Mary's Pippin).—Yellow, roundish, small, table, second-rate; November to January. Hybrid between Orange and Golden Pippins, raised by Mr. Knight.

*Dowell Pippin.*—In form like Ribston, green russeted, table, first-rate; October to January. Raised in 1810 by R. Dowell, Esq., of Braygrove, Berks.

*Downy,* see Hoary Morning.

*Doxey.*

*Doyenne.*—Yellow, roundish, large, cider ; October to January. Acid.

*Drap d'Or* (Bay Apple, Bonne de Mai).—Yellow, roundish, large, kitchen, second-rate ; October to December. Handsome, but proves of an inferior quality.

*Drap d'Or*, see Reinette Jaune Hative.

*Dredge's Beauty of Wilts*, see Harvey's Pippin.

*Dredge's Early Summer*, see Devonshire White Sour.

*Dredge's Emperor.*

*Dredge's Fair Maid of Wishford.*

*Dredge's Fame.*

*Dredge's Lord Nelson.*

*Dredge's White Lily*, see Devonshire Buckland.

*Duke d'Arzel*, see Old Nonpareil.

*Duchess of Hamilton.*

*Duchess of Oldenburgh.*—Streaked, roundish, middle-sized, table, first-rate ; September. Of Russian origin.

*Duchess of York's Favourite.*—Yellowish red, oblate, small, table, second-rate ; November to December.

*Dutch Pippin.*

*Duke of Beaufort's Pippin.*—Streaked, conical, middle-sized, kitchen, second-rate ; Oct. to December.

*Duke of Gloucester, Hunt's* (Hunt's Nonpareil).—Russet, roundish, ovate, small, table, first-rate ; November to March. Raised from a Nonpareil seed by Dr. Fry, of Gloucester.

*Duke of York's, Newbold's*, see Rymer.

*Dumbarton Pippin.*

*Dumelow's Seedling.*—Yellow and red, roundish, large, kitchen, first-rate ; November to March. An excellent kitchen apple, not apt to shrivel, nor loose its briskness. Raised by Mr. Dumelow, nurseryman, Derby.

*Duncan* (Lord Duncan).—Yellowish red, roundish, middle-sized, kitchen, second-rate; October to January.

*Dundee*, see Golden Reinette.

*Duquesnay*.

*Dutch Mignonne* (Reinette Doree of the Germans, Pomme de Laak, Grosser Casseler Reinette, Pater-noster Apfel, Stettin Pippin, Copmanthorpe Crab).—Yellowish red, roundish, middle-sized, kitchen and table, first-rate; December to April. Great bearer, and of first-rate quality. A Dutch apple, imported about 50 years ago.

*Dwarf Apple of Armenia*.

*Early Almond* (White Codlin).

*Early Bowhill* (Lucombe's Early Bowhill).

*Early Cleandrinking*.

*Early Harvest* (Prince's Harvest, Yellow Harvest, Large Early, July Early Pippin, Early French Reinette of the Americans).—Palish yellow, roundish, middle-sized, table, first-rate; August. Flesh white, crisp, tender, with brisk rich flavour.

*Early Gowie*.

*Early Julien*.—Yellow, conical, small, table, second-rate; August. A Scotch dessert apple.

*Early Marrow*.

*Early Red*.—Red, oblate, large, kitchen, second-rate; September to October.

*Early Red Streak*.

*Early Sweet Red Streak*.

*Early Wax*.—Yellow, oblong, small, table, second-rate; August.

*Easter, White* (Paasch Apfel).—Palish yellow, conical, middle-sized, kitchen and table, second-rate; January to April.

*Easter Pippin* (French Crab, Young's Long Keeper, Claremont Pippin, Ironstone Pippin).—Green, roundish, middle-sized, kitchen and table, second-rate; 2

years. Probably a French apple, but known in England full 50 years.

*Ecarlatine.*

*D' Eclat.*

*Edel Konig* (Roi tres Noble).—Red, calville-shaped, middle-sized, kitchen ; October to November.

*Edinburgh Cluster* (Sir Walter Blacket's Favourite).—Yellow, ovate, middle-sized, kitchen, second-rate ; November to January.

*Egg*, see White Paradise.

*Eikenhagar, Willers.*

*Elizabet*, see Golden Reinette.

*Eldon Pippin*.—Yellow and brownish red, roundish, middle-sized, table, first-rate ; January to April.

*D' Ete.*

*Embroidered Pippin* (Reinette Brodee).—Yellow and brownish, roundish, small, table, second-rate ; November to January.

*Emperor Alexander*, see Alexander.

*Englise Pippin*, see Golden Reinette.

*Enkhing*.—Palish green and red, ovate, small, indifferent ; December to March.

*Enkhuizer Aagtie, Soete*.—Yellowish red, ovate, middle-sized, second-rate ; October to January.

*Epine d' Ete.*

*D' Espagne*, see Reinette Blanche d' Espagne.

*Essex Pippin*.—Yellow, round, small, table, first-rate ; October to February. Allied to the Golden Pippin.

*Evans's Valuable.*

*Eve Apple* (of Ireland), see Early Red Margaret.

*Eve Apple*, see Trumpington.

*D' Eve, Pomme.*

*Everlasting*.—Streaked, roundish, small, indifferent, January to May.

*Everlasting Bearer.*

*Eyelet, Yellow*.—Pale yellow, oval, middle-sized, cider ; October to February.

*Faaremules.*

*Fail me Never*, see Margil.

*Fair Circassian.*

*Fair Maid of France.*—Streaked, roundish, middle-sized, indifferent.

*Fair Maid of Taunton.*—Yellowish red, ovate, oblate, small, table, second-rate; November to January.

*Fall Pippin*, see Reinette Blanche d' Espagne.

*Fall Pippin, Cobbett's*, see do.

*Fall Pippin, Large*, see do.

*Fall Pippin, Sudlow's*, see Franklin's Golden Pippin.

*Fallowater.*—Green and brownish red, conical, large, table and kitchen, second-rate; January; possesses, in some degree, a Newtown Pippin flavour.

*Famagusta.*

*Fameuse*, see De Neige.

*Fame.*

*Fanarike.*—Green, ovate, middle-sized, indifferent.

*Farleigh Pippin.*—Yellowish green, ovate, middle-sized, table, first-rate; January to April. Obtained by Mr. Kirpe, from Farleigh, in Kent.

*Farthing's Pippin.*—Green, oblate, small, indifferent; November.

*Faros, Grand.*—Yellowish red, oblong, large, indifferent; November to January.

*Faros, Gros (Faros).*—Red, oblate, middle-sized, table, second-rate; December to March.

*Faros, Petit.*

*Faux Varin.*—Cider.

*Fearn's Pippin (Ferris Pippin, Clifton Nonesuch).*—Red, oblate, middle-sized, table and kitchen, first-rate; November to February; a good bearer.

*Fenouillet Gris (Fenouillet d'Or Gros, Pomme d'Anis).*—Russet, roundish, small, table, second-rate; January to April; has a perfumed anise flavour. A French apple.

*Fenouillet Jaune*, Yellow Fenouillet.

*Fenouillet Rouge* (Bardin, Court-pendu Gris, Fenouillet Gris of some).—Russet red, roundish, small, table, first-rate; November to March.

*Fer, De*, see Iron Apple.

*Feuille d'Aucuba*.

*Figue*.

*Figue sans Pepins*, like Reinette Jaune Sucree.

*Finale, Pomme*, see Male Carle.

*Five Crown Pippin*, see London Pippin.

*Five Pound*.

*Flander Pippin*.

*Flat Anderson*.

*Flax*.

*Fletcher's Kernel*.—Yellow, roundish, middle-sized, table, first-rate; November to January.

*Fletcher's Abingdon Pippin*.

*Flower of Kent*.—Greenish red, oblate, large, kitchen; November to January.

*Fleur de Praireal*.—Yellow and green, oblate, middle-sized, cider; November to January.

*Formosa Pippin*, see Ribston Pippin.

*Forc's Seedling*.

*Flower of the Town* (Flowery Town, Red Streak of Blackhouse).—Streaked, roundish, middle-sized, kitchen, second-rate; September to November; indifferently in quality, though a good bearer.

*Forest Pippin*.—Yellowish red, ovate, oblate, middle-sized, kitchen.

*Forman's Crew*.—Yellow russet, conical, small, table, first-rate; November to April; very subject to canker. Raised by T. S. Forman, Esq., near Merthyr Tydvil, in Glamorganshire.

*Fouillet, De*.—Pale greenish red, conical, large, kitchen; January to April.

*Foxley*.—Yellow, oval, small, cider.

*Foxley Pippin*.—Orange, roundish, small, cider, table; November to February.

*Foxley Queening.*

*Fox Whelp.*—Dark red, ovate, middle-sized, cider, first-rate.

*Framboise.*—Streaked, calville-shaped, middle size, kitchen, second-rate; November to March.

*Francatu.*

*Franché Pepin.*—Yellow, roundish, middle-sized, table, first-rate; November to March.

*French Crab*, see Easter Pippin.

*French Crab, American (Metoisee).*—Streaked, roundish, middle-sized, kitchen, second-rate; December to April.

*French Pippin*, see French Russet.

*French Sussex.*

*Frequin Blanc.*

*Fry's Pippin*, see Court of Wick.

*Fulwood (Fulwood Green).*

*Fulwood Dutch (Late Fulwood).*—Green, oblong, large, kitchen, first-rate; December to May.

*Fulwood, Early.*

*Ganges.*

*Garnon's Apple*, see Court-pendu Plat.

*Garret Pippin*, see Borsdorffer.

*Geache's Favourite.*

*Geant.*

*Gelee d'Ete.*—Pale yellow, conical, middle-sized, table, second-rate; August.

*General Wolf.*—Brownish yellow and green, flat, conical, large, kitchen and table, second-rate; November to January. Resembles Reinette du Canada.

*George the Fourth, Burgess's.*

*George the Fourth, Myatt's.*

*Gestreifter Sommer Cousinos.*

*Gestreifter Sommer Zimptapfel.*—Yellowish red, ovate, small, table, first-rate; August to September.

*Giant.*

*Gilliflower.*—Streaked, roundish, middle-sized, kitchen, second-rate; October to February.

*Gilliflower, Cornish* (Cornish July flower, Pomme Regelans).—Dark-green and yellow, ovate, middle-sized, table, first-rate; December to May. The best of apples, but a bad bearer. Discovered in a cottage garden near Truro about 1812.

*Gilliflower, Summer* (Summer July Flower, Russian.—Streaked, roundish, large, table, second-rate; September; a great bearer.

*Gilpin* (Carthouse).

*Girdler's Large*.

*Girkin Pippin*, see Wyken Pippin.

*Glace, De* (Transparente).

*Glace Blanche*.—Pale green, conical, middle-sized, cider; December.

*Glace Rouge*, see Barcelona Pearmain.

*Glace de Zelande*, see White Astrachan.

*Glamis Castle*, see Tower of Glamis.

*Glasbury, Norman*.—Pale yellow, ovate, small, cider.

*Gloria Mundi* (American Gloria Mundi, New York Gloria Mundi, Glazenwood Gloria Mundi, Monstrous Pippin, American Mammouth, Baltimore of some).—Greenish yellow, roundish, large, kitchen, first-rate; November to January.

*Glory of Boughton*.—Yellow, round, large, kitchen; October.

*Glory of England*.

*Glory of the West*.

*Glory of York*, see Ribston Pippin.

*Gloucester, White*, of Virginia.

*Gogar Pippin* (Stone Pippin of some).—Pale green, oblate, middle-sized, table, second-rate; November to March. A Scotch apple, from Gogar, near Edinburgh.

*Golde Gulderling*.

*Golden Ball*.—Yellowish red, roundish, large, kitchen, second-rate; August to September.

*Golden Burr*.

*Golden Drop*, see Court of Wick.

*Golden Drop, Coe's*.—Yellow, ovate, small, table, first-rate; January to May. An excellent dessert apple.

*Golden Harvey* (Brandy).—Russet, yellow, roundish, small, table and cider, first-rate; December to May; exceedingly rich. The original Harvey apple was green, and named after the celebrated Dr. Gabriel Harvey.

*Golden Harvey, Pitmaston*.

*Golden Harvey, Siberian*.

*Golden Janet*.

*Golden Knob*.—Russet, conical, small, table, second-rate; December to February.

*Golden Mundi*.

*Golden Mundi*, see Golden Russet.

*Golden Noble*.—Yellow, round, large, kitchen, second-rate; September to October. Handsome.

*Golden Pippin* (Old Golden Pippin, English Golden Pippin, Balgone Pippin, Balgone Golden Pippin, Milton Golden Pippin, Bayfordbury Pippin, Russet Golden Pippin, Herefordshire Golden Pippin, London Golden Pippin, Warter's Golden Pippin, American Plate, Pepin d'Or, Pomme d'Or, Koenig's Pippelin, Reinette d'Angleterre).—Yellow, roundish, small, table, first-rate; November to April. Requires a wall in most situations, and its superior richness deserves such protection.

*Golden Pippin, Boyer's*, see Boyer's Russet.

*Golden Pippin, Camberwell*.

*Golden Pippin, Cluster* (Cluster Pippin, Turin Cluster Pippin, Thickset).—Yellow, oval, small, table, second-rate; November to March. Fruits often joined in pairs.

*Golden Pippin, Elford*.

*Golden Pippin, Elton*, see Downton.

*Golden Pippin, Franklin's* (Sudlow's Fall Pippin).

—Yellow, oval, small, table, second-rate ; October to December. Good bearer. An American apple, raised early in this century.

*Golden Pippin, Hughe's* (Hughe's New Golden Pippin).—Yellow, roundish, small, table, first-rate ; December to February. Deserves high recommendation.

*Golden Pippin, Kirke's*, see New Golden Pippin.

*Golden Pippin, Knight's*, see Downton Pippin.

*Golden Pippin, New* (Kirke's Golden Pippin, New Cluster Golden Pippin, Dredge's Golden Pippin).—Yellow, roundish, small, second-rate ; December to March. A great bearer, but inferior in quality. Raised by Mr. Kirke, of Brompton Nursery, about 1820.

*Golden Pippin, Rival*, see Aniseed.

*Golden Pippin, New Taunton*.

*Golden Pippin, Scarlet*.

*Golden Pippin, Screveton*.—Yellowish red, roundish, small, table, first-rate ; November to April.

*Golden Pippin, Seedling*.—Yellow, roundish, small, table ; October to February.

*Golden Pippin, Summer* (Summer Pippin, of some).—Yellow, ovate, small, table, first-rate ; August to September ; an excellent summer dessert apple.

*Golden Pippin, Tunbridge*.

*Golden Pippin, Winyard*.—Like the Golden Pippin, but not so rich.

*Golden Worcester*.—Orange, roundish, middle-sized, cider ; December to January.

*Golding*.      *Goodyear Pippin*.

*Gooseberry*.—Yellow, roundish, oblate, large, kitchen, first-rate ; November to August.

*Graafen*.

*Grandessen*.—Pale greenish red, ovate, middle-sized, second-rate ; September ; a sort of pigeonnet.

*Grand Sachelm*.

*Grange*.—Yellow, roundish, small, second-rate; October to February.

*Grange's Pippin*, see Grange's Pearmain.

*Grauch, Aigre*.—Cider.

*Grauch Douce*.—Streaked, roundish, large, cider; October to November.

*Gravenstein* (Grave Slije, Sabine of the Flemings).—Streaked, roundish, large, kitchen, first-rate; October to December. About a century old; first raised at Gravenstein in Holstein.

*Great Milton Pippin*.

*Greasley's Seedling*.

*Green*.—Green, round, middle-sized, kitchen, first-rate; January to June; keeps very sound; less acid than the Easter Pippin or French Crab, but not so juicy.

*Green Balsam*.—Yellowish green, roundish, middle-sized, kitchen; December to January.

*Green Cosings*, see Rymer.

*Green Everlasting*.—Green, roundish, small, indifferent; March to April.

*Green Eyelet*.—Green, roundish, small, cider.

*Green Longlast*.

*Green Pippin*.                      *Green Virgin*.

*Gregaire*,

*Gregson*, see Catline.

*Grey House*, see House.

*Gribble*.

*Grimshaw's Crab*.

*Grimsteen*.—Yellow, conical, small, second-rate.

*Grise*.—Green russet, roundish, table, first-rate; November to March.

*Gros Binet*.

*Gros Bondy*, see de Rateau.

*Gros Bohu*.

*Grosse Verte*.—Green, roundish, large, kitchen; October to February.

*Grosse Bonne.*

*Grosse a Cuire.*—Yellow, roundish, middle-sized, kitchen; November to February.

*Grosse Pomme d' Amerique.*

*Grosse Pomme Noir d' Amerique.*

*Grosse Pomme d' Automne.*

*Grosser Edler Prinzessin.*

*Grosser Rheinischer Bohn Apfel.*

*Grosser Wiener.*

*Grunmage*, see Birmingham Pippin.

*Grunken Bergers Krachappel.*

*Guillot Roger.*—Cider

*Grushovy Naliv.*—Pale yellow, ovate, middle-sized, table, second-rate; August. A transparent Russian apple.

*Halliday's Pippin.*

*Hall Door.*—Yellowish red, oblate, middle-sized, table, second-rate; December to March.

*Hall's Watlington Seedling.*

*Hamilton Pippin.*

*Hampshire Greening.*

*Hampstead Sweeting.*—Greenish yellow, ovate, middle-sized, cider.

*Hampshire Yellow*, see King of the Pippins.

*Hampton Candied Heart.*

*Hanging-down.*—Cider.

*Hanovre, De*, see Pearson's Plate.

*Haggerston Pippin.*—Greenish red, roundish, middle-sized, table, first-rate; November to April.

*Hanwell Souring.*—Greenish yellow, conical, middle-sized, kitchen; December to March. Believed to have been raised at Hanwell, near Banbury.

*Hard Pippin.*—Green and palish red, ovate, small, cider.

*Harrison.*

*Harrison's Newark.*—Yellowish red, conical, small, cider.

- Harvey's Pippin*, Dredge's Beauty of Wilts.  
*Harvey, Red.*  
*Hative Pomme*, see Summer Stibbert.  
*Hautbois.*  
*Hans Mutterchen*, see Mere de Menage.  
*Haute Bonte.*  
*Hawthornden* (White Hawthornden, Red Hawthornden).—Pale yellow, roundish, large, kitchen, first-rate; October to December; abundant and early bearer. The original tree is still at Hawthornden, near Edinburgh.  
*Hawthornden, Irish.*  
*Haynes's Pippin.*  
*Hay's Early*.—Yellow streaked, oblate, middle-sized, kitchen; August.  
*Heathfield's French Apple.*  
*Hebe.*  
*Heidelocher*, see Hoskreiger.  
*Herefordshire Goose.*  
*Herefordshire Monster*.—Yellow, roundish, small, cider; December.  
*Hesketh's Pippin*.—Yellow, conical, large, kitchen, October to January.  
*De Herison*.—Cider.  
*Hen and Chickens.*  
*Henhouse.*  
*Henry's Weeping Pippin*.—Yellow, oval, small, table, second-rate; December to February.  
*Herbert Pippin.*  
*Hermitage Pippin.*  
*De Heron.*  
*Hick's Fancy*, see Early Nonpareil.  
*Hieville Rouge.*  
*Hillingdon Seedling.*  
*Hill's Seedling*.—Pale green, oblate, large, kitchen, second-rate; August to September.  
*Himbeerapfel.*

*Hanberry, Pippin*, see Hollandbury.

*D' Hiver*.—Yellow, oblate, middle-sized, kitchen, second-rate; January to April.

*Hoare's Seedling*.—Pale greenish red, roundish, large, kitchen; December to January.

*Hoary Morning* (Dainty, Downy, Sam Rawlings).—Streaked, roundish, large, kitchen, second-rate; October to March. A native of Somersetshire.

*Hogshead*.—Greenish yellow, ovate, cider.

*Hollandbury* (Hawberry Pippin, Howberry Pippin, Horsley Pippin, Le Beau Rouge, Bonne Rouge, Kirke's Scarlet Admirable).—Reddish yellow, roundish, large, kitchen, second-rate; November to January; handsome.

*Holland Kruger*.—Yellow and greenish red, roundish, middle-sized, kitchen, second-rate; December to February.

*Holland Pippin*.—Yellow, roundish, oblate, large, kitchen, first-rate; November to March.

*Holbein*.

*Hollow Crowned Pippin* (Hollow Eyed Pippin).—Yellow, roundish, middle-sized, kitchen; November to February.

*Horne's Large*.—Streaked, roundish, large, kitchen; October to December.

*Honey Greening*.

*Hormead Pippin*, see Hormead Pearmain.

*Hood's Seedling*.

*Horner's Bitter Sweet*.—Cider.

*Horselin*.—Pale yellow, ovate, middle-sized, table, second-rate; November to December.

*Hoskreiger* (Heidelocher).—Green, roundish, large, kitchen, first-rate; November to April; good bearer.

*House* (Grey House).—Greenish red, oval, small, cider; January.

*How's Pippin*.—Russet, oblate, middle-sized, table, second-rate; October to December.

*Howberry Pippin*, see Hollandbury.

*Horsley Pippin*, see Hollandbury.

*Hanau, Pomme de*, see Rosackerle.

*Hunt's*.

*Hunt's Fine Green Pippin*.

*Hunthouse*. — Pale yellow, oblong, middle-sized, kitchen; December to March. Good bearer.

*Hunthouse Large*.

*Huntingford*. — Red, conical, middle-sized, kitchen; January to April. Very bright colour.

*Hutching's Seedling*, see Sugarloaf Pippin.

*Hutching's Late Seedling*.

*Hutchinson's Spotted*. — Yellowish red, oblate, small, table, first-rate; November to December.

*Hyde Park*.      *Hyde Pippin*.

*Imperial, Livesey's*.

*Incomparable*. — Greenish yellow, calville-shaped, large, kitchen; October.

*Incomparable, Barton's*.

*Incomparable, Egremont's*.

*Incomparable, Hay's*.

*Incomparable, Ives's*.

*Incomparable, Kirk's*.

*Incomparable, Lewis's*. — Yellowish red, conical, large, table, second-rate; December to February.

*Incomparable, Sharp's*.

*Ironstone Pippin*, see Easter Pippin.

*Ingestrie, Red*. — Yellowish red, ovate, small, table, first-rate; October to November. This and the next were raised by Mr. Knight in 1800, being hybrids between the Orange and Golden Pippin.

*Ingestrie, Yellow*. — Yellow, oval, small, table, second-rate; September to October. Good bearer.

*Irish Pitcher*, see Mank's Codlin.

*Inimitable*.

*Iron Apple (Pomme de Fer)*. — Brownish green, small, kitchen and table, second-rate; a year.

*Isle of Wight Pippin* (Isle of Wight Orange, Orange Pippin).—Yellow, oval, small, table, first-rate, September to January.

*Isleworth Crab* (Brentford Crab).—Pale yellow, roundish, middle-sized, second-rate; October.

*Isted's Plate Apple* (Isted's).

*D'Italie, Pomme*, see *Massavis*.

*Ives's Seedling*.—Streaked, roundish, middle-sized, kitchen, second-rate; November to January.

*Ivory Pippin*.

*Jackson's Pippin* (Middleton Pippin). — Yellow, roundish, oblate, small, indifferent; August.

*Janurca*, see *Reinette du Canada*.

*De Jardy*, see *Belle Hervey*.

*Jeannette*.

*Jean Hure*.—Yellow, pear-shaped, middle-sized, cider; January.

*Jeffrey's Seedling*.—Yellow, oblate, large, kitchen, October to January.

*Jennet, Golden*.—Cider.

*Jenny Sinclair*.—Brownish red, roundish, middle-sized, table.

*Jersey*.—Red, conical, small, cider; November to December; a bitter-sweet.

*Jersey Pippin, Saunders's*.

*Jersey Greening*.

*Jerusalem, Pomme de*, see *Pigeon*.

*Jerwin's Seedling*.

*John Apple*.—Green and yellowish red, pearm, small, cider, first-rate; December to February. A very old variety.

*John Apple*, see *Northern Greening*.

*Jollyfield Pippin*.

*Jolty Kutofsky Naliff*.—Pale yellow, conical, small, table, indifferent; August.

*Jonathan*.

*Jordbaeraeble*. — Streaked, ovate, middle-sized,

table; August to September. Danish Strawberry apples.

*Jordbaeraeble, Kantet*.—Red, calville-shaped, middle-sized, kitchen.

*Jubilee Pippin*.—Conical, above middle size, cream coloured, specked with brown, table and kitchen; Mic. to Christmas. Raised by M. Bland, Esq., from seed sown in 1809.

*July Early Pippin*, see Early Pippin.

*July Flower*, see Gilliflower.

*July Flower, Cornish*, see Cornish Gilliflower.

*July Flower, Summer*, see Summer Gilliflower.

*July Pippin*.

*Juneating, American Red*.

*Juneating, Early Red*, see Early Margaret.

*Juneating, Early Striped*, see Early Red Margaret.

*Juneating, Large White*.

*Juneating, Red*, see Early Red Margaret.

*Juneating, Red and Green*.

*Juneating, Striped*, see Early Red Margaret.

*Juneating, White* (Owen's Golden Beauty).—Pale yellow, roundish, small, table, first-rate; July to August. A handsome early apple.

*Kaiserschumer*.—Greenish red, conical, large, kitchen, second-rate; January to February.

*Kantjis Apfel*.—Russet red, oblate, middle-sized, kitchen, second-rate; January to February.

*Keiser*.—Brownish green, conical, middle-sized, indifferent.

*Kempster*.

*Kenrick's Red Autumn*.

*Kentish Fill-basket* (Lady de Grey's, Potter's Large, Kentish Pippin of some).—Yellow, green and brown, roundish, large, kitchen, first-rate; November to January.

*Kentish Giant*.

*Kentish Pippin*.—Pale yellow and brown, conical, middle-sized, kitchen, first-rate; October to January.

*Kentish Pippin* (of some), see Beauty of Kent and Kentish Fill-basket.

*Kerkam.*

*Kernel.*—Cider.

*Kernel, Dollar's.*—Streaked, ovate, small, cider ; October to November.

*Kernel, Knotted.*—Streaked, ovate, small, cider ; October to November.

*Kernel, Skerm's.*—Streaked, ovate, small, cider ; October to April.

*Kerry Pippin.*—Reddish yellow, oval, middle-sized, table, first-rate ; September to October. Good bearer. Long known in the county of Kerry.

*Keston Pippin.*—Reddish yellow, roundish, small, table, second-rate ; October to December.

*Kew Admirable.*

*King,* see Borsdorffer.

*Knick Pepin.*

*Kinellan.*—Pale green, slightly dotted, yellow red on sunned side, table, good ; December to March. Raised by Sir G. I. Mackenzie, of Coul, N.B.

*Kinfaun's Pippin.*—Streaked, roundish, middle-sized, second-rate.

*King George,* see Borsdorffer.

*King Harry.*—Russet, pearm, middle-sized, table, first-rate ; November to January.

*King of the Pippins* (Hampshire Yellow).—Reddish yellow, pearm, middle-sized, kitchen, first-rate ; October to January. A good bearer, and very handsome. Brought into notice by Mr. Kirke, of Brompton.

*King Robert.*

*Kingston Black.*

*Kirke's Fame.*

*Kirkton Pippin.*

*Kisking.*

*Kleiner Fleiner.*

*Knifty Naliff.*

*Knight's Pippin*, see Downton.

*Knight's Large*.—Yellowish red, roundish, large, kitchen ; September to October.

*Knight, Pomme.*

*Knightwick Pippin*, see Court of Wick.

*Kœning's Pippelin*, see Golden Pippin.

*Konigliche Taubling*, see Pigeonet.

*Koppel.*

*Korishnory.*

*Krappe Kruin*.—Russet, conical, middle-sized, kitchen, first-rate ; October to March.

*Krizapfel*.—Pale green, conical, middle-sized, table, second-rate ; December. A Russian apple, somewhat transparent.

*De Laak*, see Dutch Mignonne.

*Lady Apple* (of the Americans), see Api Petit.

*Lady de Grey's*, see Kentish Fill-basket.

*Lady's Finger*, see White Paradise.

*Lady Louisa Pippin*.—Pale yellow, oblate, small, indifferent ; December.

*Lady of the Wemys.*

*Lancashire Crab*, see Minshul Crab.

*Lancashire Gap* (Shireling).—Yellow, oblate, middle-sized, kitchen ; November to February.

*Lancashire Witch*.—Yellowish red, oblate, middle-sized, kitchen, second-rate ; October to December ; handsome.

*Lancaster Crab*, see Minshul Crab.

*De Lande* (Fleur de Prairial).—Streaked, oblong, large, kitchen ; September to October.

*Langer Rother Himbeer Apfel*, see White Queen-ing.

*Larden.*

*Large Early*, see Early Harvest.

*Large Yellow*, see Early Harvest.

*Large Re, New.*

*Late Bloomer*.—Cider.

*Lavendel Pippin*.

*Lawman's*.—Yellow and brownish red, ovate, middle-sized, table, second-rate ; March to June.

*Lawrence's New White Pippin*.—Pale green, conical, middle-sized, second-rate ; December to February.

*Leadington, Green*.—Green, conical, middle-sized, kitchen, second-rate ; September to October.

*Leadington, Grey*.—Yellowish brown, oval, middle-sized, kitchen, second-rate ; October.

*Leadington, Large*.—Green, oblong, large, kitchen.

*Leadington, Monstrous* (Green Codlin).—Green, oblong, large, kitchen, first-rate ; October to January.

*Leadington, Red*.

*Leadington, Scarlet*.—Red, oblong, middle-sized, kitchen and table, second-rate ; November to February.

*Leadington, Stoup*.—Yellowish green, oblong, large, kitchen ; September to November.

*Leadington, Summer*.

*Leather-coat*, see Royal Russet.

*Leicester Early*.

*Leisham's Pippin*.

*Leixlip Pippin*.

*Lemon*.—Yellow, roundish, middle-sized, table, second-rate ; December to January.

*Lemon Pippin* (Kirke's Lemon Pippin).—Yellowish green, oval, middle-sized, kitchen and table, first-rate ; October to April.

*Lemon Pippin, Knight's*.—Yellow, roundish, middle-sized, kitchen and table, first-rate ; November to February.

*Lettsom's American*.—Reddish yellow, oblate, middle-sized, table, second-rate ; November to January.

*Leyden Pippin*.—Pale greenish red, roundish, middle-sized, table, first-rate ; August to September. A great bearer, and a good early apple, resembling White Astrachan.

*Liestal.*

*Lievre.*

*Lily Buckland*, see Devonshire Buckland.

*Limonella*.—Greenish yellow, oval, large, table, second-rate; October; requires a warm climate.

*Lincolnshire Holland Pippin* (Striped Holland Pippin).—Streaked, roundish, small, kitchen, second-rate; November to February. A Dutch apple.

*Little Beauty*.—Yellow, oblate, small, indifferent; October to November.

*Little Hollow Crown* (Diepe Hopjis).—Yellow, oval, small, second-rate; November to December.

*Lock's Seedling*.—Streaked, ovate, middle-sized, table, second-rate; December to January.

*London Pippin* (Five Crown Pippin, New London Pippin, Royal Somerset).—Yellow, oblate, middle-sized, kitchen and table, first-rate; November to April; does not shrivel. This is a Norfolk apple.

*Long-bois, De* (Toilet).—Yellow, conical, small, cider; October; a bitter-sweet.

*Long Early.*

*Long Hanger, Parson's*.—Cider.

*Long Keeper, Mogg's*.—Streaked, oblate, middle-sized, cider; January to March.

*Long Keeping Seedling.*

*Long Keeping Yellow, Kew.*

*Long Keeping, Young's*, see Easter Pippin.

*Long May*, see White Paradise.

*Long Tom*, see Sheep's Nose.

*Longue.*

*Longville's Kernel* (Sam's Crab).—Pale brownish red, oblate, middle-sized, cider, indifferent. A native of Herefordshire.

*Lord Bateman's Dumpling*.—Streaked, oval, middle-sized, table, cider, second-rate; August to September; a great bearer.

*Lord Duncan*, see Duncan.

*Lord Nelson, Backhouse's*, see Nelson Codlin.

*Lord Nelson, Dredge's*.

*Lord Nelson, Kirke's*.—Red, roundish, large, table, second-rate ; November to February ; very handsome, but deficient in briskness.

*Lord Northwick's Dutch*.

*Lourmont Pippin*.

*Loveden's Pippin*, see Old Nonpareil.

*Lucombe's Seedling*.—Streaked, roundish, large, kitchen, first-rate ; October to February ; a good kitchen apple. Raised by Mr. Lucombe, of Exeter.

*Lud's Summer*.

*Lud's Winter*.

*Luffness Pippin*.

*Luiken*.

*Lushington Pippin*.

*Lustree, Pomme*.—Red, roundish, small, kitchen, indifferent ; November to January.

*Madame, Nouvelle*.

*Maclean's Favourite*.—Yellow, roundish, middle-sized, table ; October to January ; of the highest excellence.

*Madame, Pomme*, see Reinette Grosse d'Angleterre.

*Madeleine*, see Calville Rouge d'Ete.

*Mætapfela Fleurs Tardives*, see Spatbluhende.

*Maid of the Mill*.

*Maiden*.—Greenish red, roundish, large, second-rate ; November to December.

*Maiden's Blush*.—Yellowish red, oblate, large, kitchen and table, second-rate ; September to October ; partially overspread with fine red.

*Make-him-rich*.

*Malapias*.

*Malcolm's Seedling*.

*Male Carle* (Mela di Carlo, Pomme de Charles, Pomme Carle, Pomme Finale).—Greenish red, roundish, middle-sized, table, first-rate ; November to March ;

requires a south wall; and on this it comes short of perfection. An Italian apple, exported largely from Genoa.

*Malingre d'Angleterre*, see Calville Normande.

*Margaret Early Red* (Margaret, Margaret Early, Marguerite, Red Juneating, Early Red Juneating, Striped Juneating, Early Striped Juneating, Striped Quarrenden, Eve Apple of Ireland, Summer Traveller).—Streaked, ovate, middle-sized, table, first-rate; August; one of the best early apples. This is first noticed in 1688 by Ray.

*Margaret*, of Miller, (Summer Pippin).

*Margaret, Yellow* (White Margaret, Yorkshire Margaret).

*Margil* (Never-fail, Munche's Pippin).—Yellowish red, ovate, small, table, first-rate; November to February. Good bearer; approaches the Ribston Pippin flavour.

*Malingre*, see Calville Malingre.

*Marin Onfroi*.—Cider.

*Marmalade Pippin* (Althorp Pippin).—Yellow, oblong, middle-sized, kitchen, second-rate; October to January.

*Marmorister Sommer Pepping*.—Red streaked, ovate, middle-sized, kitchen, second-rate; September.

*Marygold*.

*Marygold Pippin*.—Yellow, ovate, middle-sized, indifferent; October to November.

*Mary Greed's*.

*Master's Seedling*.—Pale yellow, conical, small, table, second-rate; January to March.

*Mason's White* (Mason's Early).—Pale yellow, conical, middle-sized, table, second-rate; August.

*Massavis* (Pomme d'Italie).—Greenish brown, ovate, small, cider. A good bearer.

*Matchless*, see Newton Spitzemberg.

*Maucher Rother*.

*May*, see White Paradise.

*Maude's Seedling Pippin*.

*May Bloom*.

*Megginch Favourite*, see Golden Reinette.

*Melrose, White*.

*Melville Pippin*.

*Mere de Menage*.—Red, roundish, large, kitchen, first-rate; October to January.

*Menegere*, Hans Mutterchen.

*Merveille de Portland*.—Yellow, conical, middle-sized, kitchen, indifferent; January to April.

*Meuris*.

*Meuris Pepin*.

*Michael Henry Pippin*.—Yellow, ovate, large, kitchen and table, second-rate; November to February.

*Miche, De*.—Yellow, ovate, small, cider; December.

*Middleton Pippin*, see Jackson's Pippin.

*Miller's Glory*.—Streaked, ovate, middle-sized, kitchen, second-rate; December to January.

*Millfield*.—Like Golden Reinette.

*Minkler's*.

*Minchall Crab* (Lancashire Crab, Lancaster Crab).—Yellow, oblate, middle-sized, kitchen, second-rate; December to February; good bearer. Raised at Minchall, in Cheshire.

*Moncrieffe*.

*Moncrieffe, White*.

*Monkland Pippin*.—Yellow, oval, small, indifferent; November; very hardy, and of peculiar form.

*Monteith, White*.

*Mollet's Guernsey Pippin*.—Yellow, oblate, small, table, second-rate; December to February; resembles a Golden Pippin.

*Monstrous Pippin*, see Gloria Mundi.

*Moore's Large Red Winter Sweeting*, see Red Sweet Pippin.

*Morchin's Crab*.—Cider.

*Morden Bloom*.—Yellowish red, oblate, middle-sized, kitchen, indifferent; August to September.

*Morden Round*.—Yellow russet, round, small, table, indifferent; December to March. Handsome, but not juicy.

*Morden Striped*.—Streaked, roundish, middle-sized, kitchen, second-rate; November to January.

*Moreton*.—Cider.

*Morgan*.

*Molasses*, see New England Sweeting.

*Mortimer*.

*Mouse*.

*Motoisee*, see American French Crab.

*Mother Apple*.—Yellow, ovate, small, cider; December; a bitter-sweet. (See *Oslin*).

*Motteux's Seedling*, see Beachamwell.

*Mount Stewart*.—Greenish red, oblate, large, kitchen; November to January.

*Moulin a Vent*.—Yellow, ovate, middle-sized, cider; December.

*Moxhay Pippin*.—Pale yellow, conical, small, indifferent; October.

*Mouche's Pippin*, see Margil.

*Munster Pippin*.—Pale green, conical, large, kitchen; October to January.

*Murphy*.

*Museau de Lievre*, see Pigeonette.

*Mussellier*.

*Naked Apple*.

*Nanny*.

*Negre Dore*.

*De Neige* (Pomme Fameuse, Sanguineus).—Pale greenish red, roundish, middle-sized, table, second-rate; November to January; very white flesh. A Canadian apple, named after the village where it was raised.

*Nelson*, see *Nelson's Codlin*.

*Nelquin*, see *Reinette d'Aizerna*.

*Never-fail*, see *Margil*.

*Newark King*.—Greenish red, pear-shaped, middle-sized, table, second-rate; November to February.

*Newark Yellow Pippin*.

*New England Seek-no-further*.

*New England Sweeting* (Molasses).—Cider.

*Newman's Kernel*.—Cider.

*Newtown Pippin* (American *Newton Pippin*, Large *Newtown Pippin*, *Petersburgh Pippin*, *Green Newton Pippin*).—Greenish yellow, roundish, middle-sized, table, first-rate; January to May. Excellent, but requires a wall or good situation. Sent from New York about 1830.

*Newtown Pippin*, see *Alfriston*.

*Newton Pippin*, *Lord Gwydir's*, see *Alfriston*.

*Newton Pippin*, *Hunt's Green*.

*Newton Pippin*, *Yellow* (Large *Yellow Newton Pippin*).—Yellow, roundish, large, table, first-rate; December to March. Ripens better than the *Green* in this climate.

*New Rock Pippin*.—Green, round, middle-sized, table, first-rate; January to May. Raised by Mr. Pleasance, of Barnwell, near Cambridge.

*New York*.

*New York, Early*.

*New York, Gloria Mundi*, see *Gloria Mundi*.

*New York Pippin*.

*Noblesse de Gand*.—Pale yellow, ovate, middle-sized, second-rate; December to January.

*No Core Apple*.

*Noire* (*Pomme d'Amerique*).

*Nonpareil*, see *Old Nonpareil*.

*Nonpareil, American*.—Greenish-brown, roundish, middle-sized, table, second-rate; December to February.

*Nonpareil d'Angleterre*, see Old Nonpareil.

*Nonpareil, Antrim*.—Streaked, roundish, small, table, second-rate; December to March.

*Nonpareil, Braddick's* (Ditton Nonpareil).—Green, roundish, small, table, first-rate; January to April. Keeps sound; abundant bearer. Raised by J. Braddick, Esq., of Thames Ditton.

*Nonpareil, Cockfield*.

*Nonpareil Codlin*.

*Nonpareil, Early* (Stagg's Nonpareil, Hick's Fancy, New Nonpareil).—Greenish yellow, oblate, small, table, first-rate; October to December. Brisk flavoured. Raised about seventy years ago by Stagg, a nurseryman at Caister, Norfolk.

*Nonpareil, English*, see Old Nonpareil.

*Nonpareil, Downton*.—Green, russet, roundish, middle-sized, table, first-rate; December to April. Sharp rich flavoured.

*Nonpareil, Fair's*.—Greenish yellow, oval, small, table, first-rate; November to February.

*Nonpareil, Flat*.—Russet, oblate, small, table, first-rate; January to April.

*Nonpareil, Formosa*.

*Nonpareil, Frogmal*.

*Nonpareil, Golden*.—Yellow, russet, round, small, table, first-rate; December to February. Handsome.

*Nonpareil, Golden Russet*.

*Nonpareil, Green* (New Green Nonpareil).—Green, round, small, table, second-rate; January to April.

*Nonpareil, Hare's*.

*Nonpareil, Hunt's*, see Duke of Gloucester.

*Nonpareil, Martin*.—Yellow, russet, ovate, small, table, second-rate; December to March. Received as a Crabstock in 1795, by Rev. G. Williams, of Martin Hussington, near Worcester.

*Nonpareil, New*, see Early Nonpareil.

*Nonpareil, Old* (Nonpareil, English Nonpareil),

Nonpareil d'Angleterre, Duc d'Arsel, Hunt's Nonpareil, Loveden's Pippin, Grune Reinette, Pomme Poire of some, Reinette Nonpareil). — Greenish yellow, roundish, small, table, first-rate; January to May. Peculiar and excellent flavour; bears well as a standard in a favourable situation, otherwise deserves a wall. Probably of French origin, but known here in Queen Elizabeth's reign.

*Nonpareil, Petworth.*

*Nonpareil, Pitmaston.*—Pale green russet, roundish, middle-sized, table, first-rate; December to February. Raised by J. Williams, Esq., of Pitmaston, near Worcester.

*Nonpareil, Redding's.*—Russet, green, roundish, small, table, first-rate; December to March. Abundant bearer, brisk flavour.

*Nonpareil, Ross.*—Russet, red, roundish, small, table, first-rate; November to February. Fenouillet flavour. An Irish apple.

*Nonpareil, Royal.*—Greenish red, roundish, middle-sized, table, second-rate; November to January.

*Nonpareil, Russet-coated,* see Pitmaston Nonpareil Russet.

*Nonpareil St. John's.*—Yellowish green and brown, ovate, middle-sized, table, second-rate; November to January.

*Nonpareil Scarlet* (New Scarlet Nonpareil).—Red, roundish, middle-sized, table, first-rate; January to March. Very handsome. Raised in 1773, from an Old Nonpareil seed, sown in a public-house garden at Esher, Surrey.

*Nonpareil, Stagg's,* see Early Nonpareil.

*Nonpareil, Stubton.*—Greenish yellow, roundish, small, table, first-rate; January to March. Rich and sugary.

*Nonpareil, Sweeny.*—Brownish red, roundish, middle-sized, kitchen and table, second-rate; January to

April. Rather acid, but a good bearer. Raised in 1807, by J. N. Parker, Esq., of Sweeny, Shropshire.

*Nonpareil, Symonds's.* — Green, russet, oblate, middle-sized, table, first-rate; December.

*Nonpareil, Taunton.*

*Nonpareil, Vale Mascall.*

*Nonpareil, Waterford.*

*Nonpareil, White.* — Pale green, russet, roundish, middle-sized, table, first-rate; December to February.

*Nonnette* (Rumsche Kruger).

*Nonesuch.* — Green streaked, oblate, middle-sized, kitchen, first-rate; September. Excellent for apple jelly.

*Nonesuch, Bowes's.* — Green streaked, roundish, middle-sized, kitchen; October.

*Nonesuch, Biggs's.*

*Nonesuch, Clifton,* see Fearn's Pippin.

*Nonesuch, Greengrass's.*

*Nonesuch, Round Winter.* — Streaked, round, large, kitchen, first-rate; November to March. Good bearer.

*Nonesuch, Hubbardston.*

*Nonesuch, Royal Winter.*

*Nonesuch, Watson's New,* see Summer Thorle.

*Nonesuch Park Apple.* — Yellow, roundish, small, table, first-rate; November to February. Resembles the Golden Pippin.

*Norfolk Beaufin,* see Beaufin.

*Norfolk Colman,* see Winter Colman.

*Norfolk Paradise* (Milmount Beaufin). — Red, oblate, middle-sized, kitchen; November to April.

*Norfolk Pippin,* see Adams's Pearmain.

*Norfolk Storing,* see Winter Colman.

*Norman Knotted.* — Streaked, roundish, middle-sized, cider; December to February.

*Norman Red.* — Yellowish brown and red, ovate, large, cider, first-rate; November. A bitter-sweet.

*Norman Styre*.—Yellowish red, round, small, cider, October to December.

*Norman, Yellow*.—Yellow, small, cider.

*Normandie, De*.—Yellow, roundish, small, cider; November.

*Normandy Pippin*.—Yellow and brownish red, roundish, middle-sized, cider.

*Normanton Wonder*, see Dumelow's Seedling.

*North's Crab*.—Cider.

*Northern Greening* (John Apple of some, Cowarn Queening ditto, Walmer Court).—Green, oval, middle-sized, kitchen, cider, first-rate; November to April. Keeps sound without shrivelling.

*Northwick Pippin*, see Blenheim Pippin.

*Norton Seedling*.

*Norwich Jubilee*.—Yellow, roundish, middle-sized, kitchen; November to December. Very acid.

*Nostrate Blanche*.—Pale green, ovate, large, cider; December.

*Nottidge's Seedling* (Nottige's Favourite).

*Nottingham*.—Yellow, ovate, middle-sized, kitchen, second-rate; November to January.

*De Notre Dame*, see Rambour Franc d'Ete.

*Nutmeg*.

*Nutmeg Pippin*, see Cockle Pippin.

*Oaks*.—Streaked, conical, middle-sized, indifferent, November to February.

*Æillet*.—Cider.

*Ognon*.—Greenish red, oblate, middle-sized, second-rate; January.

*Oldaker's New*, see Alfriston.

*Old King*.

*Old Maids*, see Knobby Russet.

*Old Park Pippin*.—Reddish green, ovate, small, indifferent; November to January.

*Olive Pippin*.

*Oliver's*.—Yellow russet, oblate, middle-sized, table, second-rate; December to February.

*Orange*.—Yellow, oblate, middle-sized, kitchen, second-rate; October.

*Orange, American*.

*Orange, Blenheim*, see Blenheim Pippin.

*Orange, Isle of Wight*, see Isle of Wight Pippin.

*Orange Pippin*, see Isle of Wight Pippin.

*Orack Elma*.—Red, oblate, large, table, second-rate; October. A Persian apple.

*Orange Long Laster* (Orange Long Yester).

*Ord's Apple*.—Brown and greenish red, ovate, table, second-rate; January to May. Brisk juice. Raised by Mrs. Simpson, sister of John Ord, Esq., near Fulham.

*Orleans*.

*Orme*.—Pale green, oblate, middle sized, table, second-rate; February to April.

*Ornament de la Table*.

*Orpolin*.

*Ortley*, see Woolman's Long.

*D'Or, Pomme*, see Golden Pippin.

*D'Or, Pepin*, see Golden Pippin.

*Orwell Pippin*.

*Oslin* (White Oslin, Arbroath Pippin, Mother Apple, Original).—Pale yellow, roundish, middle-sized, table, first-rate; August to September. Particularly rich aroma. By several of the professional gardeners in the neighbourhood of Edinburgh it is styled the Mother Apple, by others the Golden Apple, and in different parts of England, as well as in the works of some eminent horticulturists, it is denominated the Bur Knot apple. The last of these names is evidently derived from the appearance of the tree, for it in general abounds with a particular sort of burs or knots. The appellation of Oslin is supposed to be derived from its being first brought into Britain from a village of the name of Oslin, in France. The denomination of the Golden apple has, in all probability, been given it from its beautiful

yellow colour. But of all the names by which it has been distinguished, that of "the original" appears to be the most characteristic; for, from its easy propagation by branches, a bur on them being placed beneath the soil, it may be considered as a mother or original apple. Said to have been raised at Arbroath, in Forfarshire, or introduced by the monks of the Abbey there.

*Ostend Pippin.*

*Ostogotha.*

*Outre-passe*, see *Passe Pomme d'Automne*.

*Owen's Golden Beauty*, see *White Juneating*.

*D'Ozanne*.—Cider.

*Pasch Apfel*, see *Easter Apple*.

*Packhorse*.—Yellowish red, roundish, middle-sized, table, first-rate; November to March.

*Padley's Pippin* (Compote).—Brown and reddish yellow, roundish, middle-sized, table, first-rate; December to January. Apt to shrivel. Raised in 1811 by Mr. Padley, Royal gardener at Hampton Court.

*Painted Lady*.—Streaked, roundish, middle-sized, table, second-rate; October to November.

*Pampadura*.

*Panachee*, see *Api Panache*.

*Paper*.

*Paradise*.

*Paradise* (of some), see *Summer Thorle*.

*Paradise, White* (*Paradise Pippin*, *Egg*, *Lady's Finger*, *Long May*, *May*).—Yellow, oblong, small, table, second-rate; November to December.

*Paradis Franc*.—Cider.

*Paradis Rouge d'Hiver*.—Streaked, ovate, middle-sized, kitchen, second-rate; November to January.

*Paradis, Summer Sweet*.

*Paradis, Winter Sweet*.

*Parmentier*.—Russet, conical, middle-sized, table, kitchen, first-rate; November to April.

*Parsonag Pippin*.—Streaked, oblate, small, table, second-rate ; November.

*Passe Pomme*.

*Passe Pomme d'Automne* (Pomme Generale, Outre-passe).—Red, calville-shaped, middle-sized, kitchen, second-rate ; September to October.

*Passe Pomme Blanche*.—Pale red, calville-shaped, middle-sized, kitchen, second-rate ; September to October.

*Passe Pomme du Canada*.—Those having the name of *Passe Pomme* are chiefly of the Calville nature, with soft white flesh.

*Passe Pomme du Canada Grise*, see Royal Russet.

*Passe Pomme Rouge*.

*Passe Pomme Rouge d'Automne*.

*Passe Rose Plate*.

*Paternoster*.

*Paternoster*, see Dutch Mignonne.

*Paternoster sans Pepins*.

*Patersonian*.

*Patriot*.

*Pawson*.—Cider.

*Peach Apple*.

*Peach Apple, Irish* (Early Crofton).—Green and brownish red, roundish, middle-sized, table, first-rate ; August to September. An excellent early fruit.

*Peach Apple, Oxford*, see Scarlet Pearmain.

*Pear Apple*.—Green, obovate, small, cider, indifferent ; November.

*Pearmain, Adam's* (Norfolk Pippin).—Yellowish red, pear-shaped, middle-sized, table, first-rate ; November to February. Very handsome.

*Pearmain, American*, see Royal Pearmain.

*Pearmain*, see Herefordshire Pearmain.

*Pearmain, American Summer*.

*Pearmain, American Winter Sweet*.

*Pearmain, Arundel*, see Hormead Pearmain.

*Pearmain Augustus*.—Green streaked, pear-shaped, middle-sized, table, second-rate; November to January.

*Pearmain, Autumn* (Royal Pearmain of some, Summer Pearmain ditto, American Pearmain).—Yellowish red, pear-shaped, middle-sized, kitchen and table, second-rate; September to October; rich yellow flesh.

*Pearmain, Barcelona* (Speckled Golden Reinette, Kleiner Casseler Reinette, Reinette Rouge, Reinette Rousse, Reinette de Carmes, Glace Rouge).—Yellowish red, pear-shaped, middle-sized, table, second-rate; November to January. Good bearer.

*Pearmain, Baxter's*.—Yellowish red, pear-shaped, middle-sized, kitchen and table, second-rate; December to March. A good bearer; scarcely so rich as the Herefordshire Pearmain, which it resembles. A Norfolk apple.

*Pearmain, Benwell's*.—Middle-sized, oblong, dullish green with red dashes, good, table; Michaelmas to Christmas. Raised by Mr. Benwell, of Henley-on-Thames.

*Pearmain, Bernard's*.      *Pearmain, Blue*.

*Pearmain, Bright's* (Wick Pearmain).

*Pearmain, Capper's*.—Streaked, pear-shaped, large, table, second-rate; December to March; handsome.

*Pearmain, Chester*.—Streaked, oblate, middle-sized, second-rate.

*Pearmain, Claygate*.—Yellowish red, pear-shaped, middle-sized, table, first-rate; November to March; an excellent dessert apple, having somewhat of Ribston Pippin flavour. Raised at Claygate, near Thames Ditton.

*Pearmain, English Winter Gold*.

*Pearmain, Federal*.—Greenish red, pear-shaped, small, table, first-rate; December to March.

*Pearmain Foulden* (Horrex's Pearmain).—Yellowish red, pear-shaped, middle-sized, kitchen and table, first-rate; November to March. Raised by Mrs. Horrex, of Foulden, Norfolk.

*Pearmain, Grange's* (Grange's Pippin).—Yellow and greenish red, pear-shaped, large, table, first-rate; November to February. Good bearer.

*Pearmain, Golden* (Ruckman's Pearmain).—Russet red, oblate, pear-shaped, middle-sized, kitchen, cider, second-rate; November to March.

*Pearmain, Hammond's.*

*Pearmain, Herefordshire* (Old Pearmain, Parmain, Royal Pearmain of some, Royal d'Angleterre).—Yellow and greenish red, pear-shaped, large, kitchen and table, first-rate; November to March. An old and very excellent sort.

*Pearmain Hornead* (Arundel Pearmain, Hornead Pippin).—Yellow, pear-shaped, middle-sized, kitchen and table, first-rate; October to March. A good bearer.

*Pearmain, Hubbard's* (Golden Vining of some).—Pale russet, pear-shaped, table, first-rate; November to April. Very rich. A Norfolk apple.

*Pearmain Gilliflower.*—Yellowish red, pear shape, middle-sized, table, second-rate; November to March.

*Pearmain, Kilkenny.*

*Pearmain, Knight's Seedling.*

*Pearmain, Lamb Abbey.*—Green and yellowish red, pear-shaped, middle-sized, table, first-rate; January to April. Keeps well without shrivelling. Raised by Mrs. Malcolm, of Lamb Abbey, Kent.

*Pearmain, Large Red Sweet-winter.*

*Pearmain, Loan's.*—Green and yellowish red, roundish, middle-sized, table, first-rate; November to January.

*Pearmain, London.*

*Pearmain, Lord Powlet's.*

*Pearmain, Mickleham.*

*Pearmain, Pawson's.*—Greenish brown, pear-shape, middle-sized, table, cider, second-rate; December to March.

*Pearmain, Parry's*. — Pale greenish red, ovate, middle-sized, table, second-rate; December to March.

*Pearmain, Pike.*                      *Pearmain, Royal.*

*Pearmain, Royal*, see Autumn Pearmain.

*Pearmain, Ruckman's*, see Golden Pearmain.

*Pearmain, Russet Table.*

*Pearmain, Scarlet* (Bell's Scarlet, Oxford Peach).

—Yellow, pear-shaped, middle-sized, table, first-rate; September to January; Good bearer.

*Pearmain, Spanish.*

*Pearmain, Striped.*

*Pearmain, Summer Golden.*

*Pearmain, Summer.*

*Pearmain, Sussex Scarlet*.—Red, pear-shaped, middle-sized, table; December to March.

*Pearmain, Sweet.*

*Pearmain, Teraughtie.*

*Pearmain, Vale Mascal*.—Red, ovate, middle-sized, table, first-rate; December to February.

*Pearmain, Vermont Autumn.*

*Pearmain, Wick.*

*Pearmain, Winter*.—Green and yellowish red, pear-shaped, middle-sized, kitchen and table, second-rate; December to March; resembles the Herefordshire Pearmain, but not so rich.

*Pearmain, Young's.*

*Pearson's Plate*.—Yellow and greenish red, oblate, small, table, first-rate; December to March; handsome, and excellent dessert apple.

*Peau de Vache*, see Douce Morelle.

*Pear Sweeting.*

*Peckman.*

*Pelican.*

*Pencaitland Pippin.*

*Pennock's Red Winter* (Pennock's Large Red Winter, Pennock Red).—Greenish red, oblate, large, kitchen, November to March; not apt to shrivel.

*Pennington Seedling*.—Yellow russet, oblate, middle-sized, kitchen and table, first-rate; November to March; an excellent variety.

*Pepin Cels*.

*Pepin Flagelle*.

*Pepin Knick*.

*Pepin Kork*.

*Pepin Noble*.—Reddish yellow, roundish, middle-sized, table, second-rate; December to January.

*Pepin a Porte*.

*Pepin Ringler*.

*Pepin Steuchal*.—Streaked, ovate, middle-sized, table, first-rate; November to January.

*Peruvian*.

*Petworth Seedling*.—Brownish green, roundish, middle-sized, table, second-rate; November to January.

*Petersburgh Pippin*, see Newtown Pippin.

*Petit Jean*.—Red, roundish, small, indifferent; November to March; very abundant bearer; would perhaps do for cider. Native of Isle of Jersey.

*Petit Thouars*.

*Phlamboot*.—Red, roundish, large, kitchen, second-rate.

*Pigeon* (Arabian Apple, Pomme de Jerusalem, Pigeonnet Rouge, Konigliche Taubling).—Pale greenish red, conical, small, table, second-rate; December to January.

*Pigeonnet* (Pigeonnet Blanc, Pigeonnet Blanc d'Ete, Pigeonnet Gros de Rouen, Cœur de Pigeon, Museau de Lievre, American Peach of some).—Pale greenish red, ovate, small, table, second-rate; August to September.

*Pigeonnet Blanc d'Hiver, Mayer's*.—Pale yellow, conical, middle-sized, indifferent; December to April.

*Pigeonnet Hatif*.

*Pigeon's Egg*.

*Pine Apple, Lucombe's* (Pine Apple, Pine Apple Pippin).—Yellow, roundish, small, table, first-rate; September to October.

*Pine Apple Pippin, Summer.*

*Pinner Seedling* (Carel's Seedling). — Greenish yellow russet, roundish, middle-sized, table, first-rate; December to April. Raised by J. Carrel, nurseryman, of Pinner, Middlesex.

*Pitmaston Golden Pippin.*—Very like the Pine-apple.

*Pitminster Crab.*—Streaked, ovate, small, indifferent; November to December.

*Plack.*

*Polnischer Morouki.*—Green, roundish, middle-sized; November to February; requires a warm climate.

*Pomme Generale,* see *Passe Pomme d' Automne.*

*Pomme-poire.*—Russet, roundish, small, table, first-rate; January to May; not so good as the Old Nonpareil, which it resembles.

*Pomme-poire,* see *Old Nonpareil.*

*Pomme-poire, Blanche.*

*Pomme Rose,* see *Api Petit.*

*Pomme-poire Grosse.*

*Pomeroy, Early.*—Streaked, conical, middle-sized, table, second-rate; October.

*Pomeroy, New.*—Russet, ovate, middle-sized, table, second-rate; November to December.

*Pomeroy, Old* (Pomeroy, Taunton). — Brownish yellow, conical, middle-sized, table, first-rate; November to February.

*Pompion.*

*Ponto Pippin.*—Brownish red, conical, small, table, second-rate; November to February.

*Poor Man's Profit.*

*Porte Tulipee.*—Brownish yellow, oblate, middle-sized, table, second-rate; November.

*Porter.*

*Portugal*, see Reinette du Canada.

*Post Apfel.*—Yellowish red, oval, middle-sized, kitchen, second-rate; November to January.

*Post Captain.*

*Postophe d'Ete.*—Red, calville-shaped, small, indifferent; August.

*Postophe d'Hiver.*—Yellowish red, pear-shaped, middle-sized, kitchen, second-rate; December to January.

*Potter's Large*, see Kentish Fill Basket.

*Prager*, see Reinette Grise.

*Pound.*—Yellow and brownish red, oblong, large, kitchen; November to January.

*Pound Sweeting.*

*Povshon.*

*Prague.*

*Priestley* (Priestley's American).—Yellowish red, roundish, oblate, large, kitchen and table, second-rate; December to April. Spicy flavour; apt to canker.

*Prince's Harvest*, see Early Harvest.

*Prince.*

*Prince Royal.*—Streaked, oblate, middle-sized, indifferent: December to January.

*Prince de Waterloo.*

*Prince's Pippin.*

*Princesse Anne.*

*Princesse Noble Zoete* (Princesse).—Pale green, conical, middle-sized, kitchen, indifferent; December. The Princesse Noble apples are all very indifferent in this climate.

*Princesse Noble Zoete*, see Court-pendu Plat.

*Princesse Noble Zuure* (Princesse Noble).—Pale yellow, oblong, middle-sized, indifferent; October.

*Princesse Victoria*, Kirke's.

*Prinzen.*—Pale yellowish red, oblong, middle-sized, indifferent; October.

*Prior's Red.*

*Profit Apple.*—Streaked, conical, middle-sized, kitchen, second-rate; October to December.

*Pursemouth.*

*Purton's Pippin.*

*Pupicher.*

*Quarrenden, Devonshire* (Red Quarrenden, Sark Apple).—Red, oblate, middle-sized, table, first-rate; August; good bearer.

*Quarrenden, Striped,* see Early Red Margaret.

*Quarrenden White.*

*Queen's,* see Borsdorffer.

*Queen Anne.*

*Queen Charlotte* (Queen, Boatswain Pippin).—Greenish red, conical, middle-sized, indifferent. A large sort of Crab.

*Queening Cowarn,* see Northern Greening.

*Queening Crab.*

*Queening Crab, Knight's.*—Cider.

*Queening, Crimson* (Scarlet Queening, Summer Queening, Red Queening, Herefordshire Queening).—Red, calville-shaped, middle-sized, kitchen, second-rate; September to November.

*Queening, Grey.*—Green, russet, oval, middle-sized, table, second-rate; December to February.

*Queening Summer* (of some,) see Summer Stibbert.

*Queening, Winter* (Calville d'Angleterre, Langer Rother Himbeer Apfil).—Red, conical, middle-sized, table and kitchen, second-rate; December to March. Not so rich as the Cornish Gilliflower.

*Quince Apple. Quoit.*

*Rabine.*

*Rabine d'Ete.*

*Raboulink.*—Red, conical, large, kitchen, second-rate; November to March.

*Raboulink Blanc.*—Pale greenish red, roundish, middle-sized, kitchen; December to January.

*Rambo* (Romanite, American Seek-no-further).—Yellow, oblate, middle-sized, kitchen, second-rate; December to January.

*Rambour* (Rambour Franc d'Hiver).—Greenish-red, oblate, large, kitchen; October to January.

*Rambour a Cotes Gros*, see Calville Blanche d'Hiver.

*Rambour Franc* (Rambour Gros).—Pale yellowish red, roundish, large, kitchen; Sept. to October. Many varieties are confused under the name of Rambour.

*Rambour Frac d'Ete* (Rambour Raye, Pomme de Notre Dame).

*Rangi*.—Red, oblate, middle-sized, kitchen; November to February.

*Rangi, Faux.*

*Rangi, Vrai.*

*Raspberry.*

*Rateau, De* (Gros Bondy).

*Rather Ripe*.—Yellow, oblate, small, table, second-rate; August.

*Raule's Janet.*

*Ravelston Pippin*.—Yellowish red, roundish, middle-sized, table, second-rate; August.

*Rawling's Pippin.*

*Rawson.*

*Red Bough.*

*Red Everlasting.*

*Red Must*.—Cider.

*Red Streak, Devonshire*.—Streaked, roundish, middle-sized, cider, table; September. Blossoms late.

*Red Streak, Dorsetshire*.—Streaked, conical, small, cider. A good bearer.

*Red Streak, Eaton*.—Cider.

*Red Streak, Herefordshire* (Scudamore's Crab).—Streaked, roundish, middle-sized, first-rate; excellent for cider.

*Red Streak, Irish.*

*Red Streaked, Keeping*.—Streaked, roundish, middle-sized, kitchen; December to April. A handsome firm apple.

*Red Streak, Moccas*.—Streaked, roundish, small, cider.

*Red Streak, Parson's*.—Cider.

*Red Streak, Scotch Winter*.

*Red Streak, Winter*, see Cumbusnethan Pippin.

*Redondelle*.—Cider.

*Redondelle Nuche*.—Yellow, oblate, small, cider; October.

*Red Sweet Pippin* (Sweet Pippin of the Americans, Moore's Large Red Winter Sweeting, Large Red Winter Sweeting).—Red, oblate, middle-sized, second-rate; November to February.

*Red's Baker*, see Norfolk Beaufin.

*Regelans, Pomme*, see Cornish Gilliflower.

*ReINETTE d' Aix*, see Golden Reinette.

*ReINETTE d' Aizerna* (Reinette d' Breda, Reinette Nelguin, Nelguin).—Brownish yellow, roundish, middle-sized, table, first-rate; January to March.

*ReINETTE d' Astrachan*.

*ReINETTE Batarde*, see Borsdorffer.

*ReINETTE Baumann*.—Red, oblate, middle-sized, table, second-rate; December to March. Not apt to shrivel.

*ReINETTE de Bentem*.

*ReINETTE Bernard*.

*ReINETTE Bischoffs*.

*ReINETTE Blanche*.

*ReINETTE Blanche d' Espagne* (Reinette d' Espagne, D'Espagne, Fall Pippin, Cobbet's Fall Pippin).—Pale greenish red, roundish, large, kitchen and table, first-rate; November to March. One of the largest sized apples. Trees subject to canker.

*ReINETTE Borsdorffer*, see Borsdoffer.

*ReINETTE Bosc*.

*Reinette, Brame.*                      *Reinette de Bretagne.*

*Reinette Brodee*, see Embroidered Pippin.

*Reinette, Calville.*

*Reinette du Canada* (*Reinette du Canada Blanche*, *Reinette Grosse du Canada*, *Du Canada*, *Reinette du Caen*, *Reinette du Canada a Cotes*, *Portugal*, *Wahre Reinette*, *Reinette Gros d'Angleterre*, *De Bretagne*, *Janurea*, *St. Helena Russet*).—Brown and yellowish green, flat conical, large, kitchen and table, first-rate; November to April. Good bearer. Is probably the best apple of its size, and surpassed by few of those that are smaller: it therefore deserves extensive cultivation.

*Reinette du Canada Grise*, see *Royal Russet*.

*Reinette du Canada Platte*, see *Royal Russet*.

*Reinette des Carmes*, see *Barcelona Pearmain*.

*Reinette Caractere*.—Yellow, russet, oval, small, table, first-rate; December to April. Peculiar subacid, and slight Fenouillet flavour.

*Red Streak* (of *Backhouse*), see *Flower of the Town*.

*Reinette, Carse.*

*Reinette du Caux.*

*Reinette, Chassens Glanz.*

*Reinette, Citronen.*

*Reinette d'Angleterre*, see *Golden Pippin*.

*Reinette Von Claveral.*

*Reinette, Contin*.—Yellowish red, roundish, middle-sized, table, second-rate; October. A good bearer. Raised by Sir G. I. Mackenzie, at *Coul, N.B.*

*Reinette, Course.*

*Reinette, Crudos Gutten.*

*Reinette Diel*.—Yellowish red, oblate, middle-sized, table, first-rate; December to March.

*Reinette, Dietzer Mandels.*

*Reinette Doree* (of the Germans), see *Dutch Mignonne*.

*Reinette Doree* (of the French), (*Reinette Jaune Tardive*, *Reinette Rousse*).—Different sorts have fruited under this name, but none of them are equal to the Golden Reinette or Dutch Mignonne.

*Reinette de Doue.*

*Reinette Drapier.*

*Reinette, Early French*, see Early Harvest.

*Reinette, Englische Granat.*

*Reinette, Episcopale.*

*Reinette, d'Erkenstein.*—Yellowish brown, roundish, middle-sized, second-rate; November to January.

*Reinette, d'Espagne*, see *Reinette Blanche d'Espagne*.

*Reinette Franche.*

*Reineete Franche a Cotes.*

*Reinette Franche Grauwe.*—Brown russet, roundish, middle-sized, kitchen and table, first-rate; December to April. Requires a good situation, with free admission of sun.

*Reinette, French*, see French Russet.

*Reinette, Gardonker Gold.*

*Reinette, Guamont.*

*Reinette, Gielen*, see Golden Reinette.

*Reinette de Geer.*

*Reinette Gielen, Grosse.*

*Reinette, Glanz.*

*Reinette, Golden* (Kirke's Golden Reinette, Yellow German Reinette, English Pippin, Aurore, Reinette d'Aix, Court-pendu Dore, Elizabet, Princesse Noble of the French, Reinette Gielen, Wyker Pippin, Wygers, Megginch Favourite, Dundee).—Reddish yellow, oblate, middle-sized, table, first-rate; October to January. A handsome, regularly formed, and excellent dessert fruit. Good bearer. Originally raised in Hertfordshire, where it is still a common apple.

*Reinette, Goldgelbe Sommer.*—Yellow, oval, middle-sized, second-rate; September.

*Reinette Grœm.*

*Reinette Grise* (Reinette Gris Extra, Belle Fille, Roger).—Yellow russet, oblate, middle-sized, table, first-rate ; November to March.

*Reinette Grise d'Angleterre Petit*.—Russet, oblate, small, table, first-rate ; November to January.

*Reinette Grise de Champagne*.—Russet, roundish, small, table, second-rate ; November to March. Flavour resembles that of Fenouillet Gris.

*Reinette Grise Doree.**Reinette Grise Double.*

*Reinette Grise de Grandville*. — Yellow russet, oblate, middle-sized, table, second-rate ; December to February.

*Reinette Grise d'Hiver Petit.*

*Reinette Grise de Holland* (Reinette de Havre, Reinette de Hongrie).— Russet, roundish, small, table, second-rate ; November to March. Very thickly coated with russet.

*Reinette Grisede Metz*.—Russet, roundish, small, table, second-rate ; November to March.

*Reinette Grise, New*.—Yellow russet, oblate, small, table, first-rate ; January to March. Good bearer.

*Reinette Grise de St. Onge.*

*Reinette Grise de Turbinee*.—Russet, oblate, small, table, first-rate ; December to January. Tree subject to canker.

*Reinette Grosse du Canada*, see Reinette du Canada.

*Reinette Gros d'Angleterre*, see Reinette du Canada.

*Reinette Grosse d'Angleterre* (Pomme Madame of some).—Streaked, roundish, large, kitchen and table, second-rate ; December to February. Nearly as large as the R. du Canada, but of less merit.

*Reinette, Grove End.*

*Reinette Grune*, see Old Nonpareil.

*Reinette de Hollande.*

*Reinette de Hongrie*, see *Reinette Grise de Hollande*.

*Reinette Jaune Hative* (Drap d'Or of some, *Reinette Grise de Automne* of some, *Reinette Marbree* of some, *Citron des Carmes*).—Yellow russet, roundish, middle-sized, table, second-rate; November.

*Reinette Jaune Sucree* (*Citron, Anglaise, Chance*).—Yellow, oblate, small, table, first-rate; November to February. Tree apt to canker.

*Reinette Kaul*.

*Reinette Konigs*.—Yellowish red, oblate, middle-sized, table, second-rate; December to February.

*Reinette, Kirke's Golden*, see *Golden Reinette*.

*Reinette, Kleiner Casseler*, see *Barcelona Pearmain*.

*Reinette, Knack*.

*Reinette de Laak*.—Yellowish red, roundish, middle-sized, table, second-rate; September. A good bearer.

*Reinette, Lancashire*.

*Reinette, Large Sweet*.

*Reinette a Longue Queue*.

*Reinette Marbree*, see *Reinette Jaune Hative*.

*Reinette Micheaux*.—Yellow, oblate, middle-sized, table, second-rate; December.

*Reinette Minster Golden*.

*Reinette Mononisten*.

*Reinette de Monthron*.—Yellow, roundish, middle-sized, table, second-rate; October to November.

*Reinette Mulchompts Carmine*.—Yellowish red, roundish, middle-sized, table, second-rate; October to November.

*Reinette, Muscaten*.

*Reinette de Meseau*.

*Reinette Musquee*.

*Reinette Nonpareil*, see *Old Nonpareil*.

*Reinette Naine*.—Yellowish green, conical, middle-

sized, table, second-rate; November to February. Tree dwarf.

*Reinette Neimans Rother.*—Yellowish red, conical, middle-sized, table, second-rate; December to February.

*Reinette du Nord.*—Yellow, oval, middle-sized, table, second-rate; will keep two years.

*Reinette, Northern.*

*Reinette Von Orleans.*

*Reinette Paille.*

*Reinette, Pepin de.*

*Reinette, Pictee.*—Pale russet, roundish, middle-sized, kitchen, indifferent; October.

*Reinette Nelquin,* see *Reinette d'Aizerna.*

*Reinette, Phillips's,* see *Court of Wick.*

*Reinette, Platte.*

*Reinette, Poire.*

*Reinette de Provence.*

*Reinette Quetten* (Quince *Reinette*). — Yellow, obovate, middle-sized, kitchen, second-rate; October to February. Shaped like a quince.

*Reinette Rouge,* see *Barcelona Pearmain.*

*Reinette de Rochelle.*

*Reinette Rouge Pictee.*

*Reinette Rouge de Pentecote.*

*Reinette Rouge de Sickler.*

*Reinette Rouse,* see *Barcelona Pearmain.*

*Reinette Royal.*—Streaked, conical, large, kitchen and table, second-rate; December to April; good bearer.

*Reinette Saffran.*—Yellow, russet, conical, middle-sized, cider, second-rate; August to September.

*Reinette, Selwood's.*—Greenish yellow, pear-shaped, small, table, second-rate; December to February.

*Reinette, Speckled Golden,* see *Barcelona Pearmain.*

*Reinette Striped Monstrous*.—Streaked, roundish, large, kitchen, second-rate; November to December.

*Reinette Truite*.—Yellow streaked, roundish, middle-sized, table, second-rate; November to December. Sugary but not very juicy.

*Reinette, Tyroler Glanz*.—Pale yellow, roundish, middle-sized, table, second-rate; December to January.

*Reinette, Wellners Gold*.—Russet, oval, small, table, first-rate; January to May; handsome and rich.

*Reinette Wahre*, see *Reinette du Canada*.

*Reinette, Weise Antillischere*.

*Reinette Van Mons*.

*Reinette Verte*.—Green, roundish, small, table, first-rate; December to May; partakes of the flavour of Golden Pippin and Nonpareil.

*Reinette, Yellow German*, see *Golden Reinette*.

*Reinette Zorgvliet*.

*Reinette, Zimt*.

*Reinette, Zoete Grauwe*.

*Reixivardt*.

*Renouvelet*.—Cider.

*Renshaw's Beauty*.

*Rhein Apfel, der Saure*.—Cider; November to April.

*Rhinebeck Pippin*.

*Rhode Island Greening*.—Green, roundish, large, kitchen and table, first-rate; December to April; good bearer.

*Ribston Pippin* (*Glory of York, Formosa Pippin, Travers's*).—Green and yellowish red, roundish, middle-sized, table and kitchen, first-rate; November to March; ought to be in every collection; trees very healthy in some soils; in others subject to canker. Raised at Ribston Hall, near Knaresborough, from French seed.

*Ribston Pippin, New.*

*Rick.*

*Ridge.*

*Riviere.*

*Roan's White Crab.*—Yellow, roundish, small, cider; January to March.

*Rigby's Pippin.*—Pale yellowish red, roundish, middle-sized; December to February.

*Robert's Seedling.*

*Robinson's Pippin.*—Russet, roundish, small, table, first-rate; December to February.

*Rob Roy.*—Yellow and greenish red, roundish, middle-sized, kitchen, second-rate.

*Rockrimmon.*

*Rodmersham Pippin.*—Yellowish red, roundish, middle-sized; kitchen, second-rate; October to December.

*Rogers's Magnum Bonum.*

*Roi, Du.*

*Roi Tres Noble,* see Edel Konig.

*Romaine.*—Yellow, roundish, middle-sized, table, first-rate; September.

*Romaine Blanche.*—Pale yellow, oblong, middle-sized, indifferent; November to February; requires a warmer climate than that of Britain.

<sup>2</sup> *Romaine d' Italie.*

*Roman Stem.*—Yellow and brownish red, ovate, small, table, second-rate; November to December.

*Romanite,* see Rambo.

*Romril.*—Pale yellow, oblate, middle-sized, kitchen, cider, first-rate; November to February; great bearer.

*Rosackerle* (Pomme de Hanau).—Yellowish red, roundish, middle-sized, cider; January to March; a bitter-sweet.

*Rose de China.*—Green and yellowish red, roundish, middle-sized, table, first-rate; November to February.

*Rose Harding.*

*Rook's Nest Apple*, see Spice Apple.

*Rosmarinapfel*, *Weisser Italienische.*

*Rostocker* (Stetting Rouge.)—Red, oblate, large, kitchen, first-rate; November to May; resembles Norfolk Beaufin.

*Rother Bietigheimer.*—Streaked, roundish, large, kitchen; November to February.

*Rother Wiener Sommer Apfel.*—Yellowish red, pear-shaped, middle-sized, table, second-rate; October.

*Rouge Bruyere.*—Cider.

*Rouge de Pentecote.*—Red, calville-shaped, middle-sized, kitchen; January to April.

*Rougham Seedling.*—Greenish red, oblate, small, table, second-rate; December.

*Round.*

*Round Head.*—Green, roundish, middle-sized, kitchen; November to January.

*Rowlinson's.*

*Royal Beacham.*—Cider.

*Royal Devon.*—Pale yellow, streaked, roundish, small, cider; November to December; bitter.

*Royal George.*

*Royal Jersey*—Streaked, roundish, small, cider.

*Royal Mundi.*

*Royal Pippin.*

*Royal Red*, *Hunt's.*

*Royal Somerset*, see London Pippin.

*Royal Wilding.*—Yellow, conical, small, cider, first-rate; December. A shy bearer, from Herefordshire, but one of this name in Devonshire has been much celebrated.

*Royale d'Angleterre*, see Herefordshire Pearmain.

*Royal Rouge d'Hiver.*

*Rumsche Kruger*, see Nonnette.

*Ruby*, *Winter.*—Red, roundish, middle-sized, indifferent; December to February; bright colour.

*Russet's.*

*Russet, Acklam's.*—Below middle size, round and flat; yellowish green and russet, good, table; November to February. A Yorkshire apple.

*Russet, Aromatic,* see Spice Apple.

*Russet, Bath.*

*Russet, Bishop's.*

*Russet, Bowyer's* (Bowyer's Golden Pippin.)—Yellow russet, roundish, oval, small, table, first-rate; September; shoots canker.

*Russet, Boston* (Roxbury Russet, Shippen's Russet of some).—Russet, roundish, middle-sized, table, first-rate; January to April. Of excellent quality, with a Ribston Pippin flavour.

*Russet, Bowne's Imperial.*

*Russet, Burgundy.*

*Russet, Byson Wood,* see Byson Wood.

*Russet, Caraway.*

*Russet, French* (French Reinette, French Pippin).—Russet, roundish, middle-sized, kitchen; November to December.

*Russet, Golden* (Golden Mundi of some).—Russet, ovate, middle-sized, table and kitchen; first-rate; December to March. Requires a good situation.

*Russet, Harvey.*

*Russet, Irish,* see Sam Young.

*Russet, Knobby* (Winter, Old Maids).—Russet, oval, small, table, first-rate; December to March. Surface thickly coated with russet and remarkably uneven.

*Russet, Mignonne.*

*Russet, Morris's Nonpareil.*—Russet, oblate, small, table, first-rate; November to February.

*Russet, More's.*

*Russet, Pitmaston Nonpareil* (Russet-coated Nonpareil).—Russet, oblate, small, table, first-rate; December to February. Not handsome, but exceedingly rich and brisk flavoured.

*Russet, Nine Partners Little*.—Green russet, oval, small, table, first-rate; January to May.

*Russet, Orange*.

*Russet, Patch's*.—Russet, oval, small, table, second-rate; November to December.

*Russet, Pile's*.

*Russet, Plough Keepsie*.

*Russet, Powell's*.—Russet, roundish, small, table, first-rate; November to February.

*Russet, Rawlin's Fine Red Streak*.

*Russet, Roxberry*, see Boston Russet.

*Russet, Royal* (Passe Pomme du Canada, Reinette du Canada Grise, Reinette du Canada Platte, Leather-coat).—Russet, conical, large, kitchen, first-rate; November to May. Becomes soft unless kept in pure sand; tree bears well.

*Russet, St. Helena*, see Reinette du Canada.

*Russet, Sandy's*.—Russet, oblate, small, table, second-rate; November to February.

*Russet, Scarlet*.

*Russet, Scotch*.

*Russet, Skippen's*.

*Russet, ditto*, see Boston Russet.

*Russet, Sison's*.

*Russet, Sweet*.—Red russet, roundish, small, table, second-rate; November to December.

*Russet, Sweeting*.—Russet, roundish, middle-sized, kitchen; January to March.

*Russet, Swinden's Table*.

*Russet, Syke House* (Syke House).—Russet, oblate, small, table, first-rate; November to February. Particularly deserving of cultivation. Raised at Syke House, in Yorkshire.

*Russet, Wareham's*.

*Russet, Wheeler's*.—Green russet, oblate, middle-sized, kitchen and table, first-rate; November to April.

*Russet, White*.—An Irish apple. Large, angular, yellow, white and russet, table, good; November and December.

*Russeting, Cooper's*.

*Russeting, Long Island*.

*Russeting, Mr. Keen's Small*.

*Russeting, White*.

*Russeting Winter*.

*Russian*.

*Russian*, see Court-pendu Plat and Summer Gilliflower.

*Russian Emperor*, see Alexander.

*Russian Transparent*.

*Rymer* (Caldwell, Green Cossings, Newbold's Duke of York, Newbold's Admiral Duncan).—Pale greenish red, roundish, large, kitchen, first-rate; December to April. Keeps very firm, and contains a brisk sharp juice. Raised by Mr. Rymer, of Thirsk, Yorkshire.

*Sabine* (of the French).

*Sabine* (of the Fleming's), see Gravenstein.

*Sack*.

*Sack, Herefordshire*.

*Sack Apple*, see Devonshire Quarrenden.

*Sack-and-Sugar*.—Yellow, roundish, small, kitchen and table, second-rate; August; good bearer.

*Sacomb, Flemish*.

*Saint Andrew*.

*Saint Germain*.

*De Saint Julien* (Seigneur d'Orsay).—Greenish-yellow, roundish, large, table, first-rate; December to March. Bears well.

*Saint Laurance*.—Yellow, oblate, small, table, second-rate; August to September; cankers.

*Saint Mary's Pippin*, see Downton.

*De Saint Louis*.

*Saint Martinzæable*.

*Saint Michael's Pippin*.

*De Saint Nover.*—Cider.

*Saint Patrick's Sweeting.*—Yellow, oblate, small, table, indifferent ; August to September.

*Salopian.*—Pale green, oblate, middle-sized, kitchen, first-rate ; October to December. Good bearer.

*Sam's Crab*, see Longville's Kernel.

*Sam Rawling's*, see Hoary Morning.

*Sam Young* (Irish Russet).—Russet, oblate, small, table, first-rate ; November to February. Rich and high flavoured. An Irish apple.

*Sanguineum*, see de Neige.

*Sang Tardif.*

*Sapling Bark.*—Yellow, oval, small, indifferent ; August.

*Saru Sinap.*

*De Sauge.*—Yellow, brownish red, oblate, middle-sized, cider ; November to February. A bitter-sweet.

*Scarlet Admirable, Kirke's*, see Hollandbury.

*Scarlet Perfume*, see Cole.

*Savelow's.*

*Scarlet Weeper.*—Streaked, conical, middle-sized, table, indifferent ; November to December.

*Schafer.*—Greenish red, roundish, small, table, second-rate ; December to January. Resembles the Scarlet Nonpareil.

*Schweitzer Schlotter Apfel.*

*Scudamore's Crab*, see Herefordshire Red Streak.

*Sea Cliff.*—Green, oblong, large, kitchen, second-rate ; October to January.

*Schiebich.*

*Schyers, Pippin.*

*Sedan.*

*Sedgefield.*—Streaked, round, middle-sized, second-rate ; December to February.

*Seek-no-further*, see Yorkshire Greening.

*Seek-no-further, American*, see Rumbo.

*Seaside Lemon.*

*Seigneur d'Orsay*, see Saint Julien.

*De Seigneur Rouge*, see d'Adam.

*Du Serail*.

*Shaw Green*.

*Shepherd's Fame*.—Like Blenheim Pippin.

*Shepherd's Newington*.—Streaked, roundish, large, kitchen; October to November. Does not keep well.

*Sheep's Nose* (Bullock's Pippin, Long Tom.)

*Shireling*, see Lancashire Gap.

*Shorrock's Table Fruit*.

*Shustoke Pippin*.—Yellowish red, oblate, middle-sized, kitchen, indifferent; December.

*Siberian Harvey*.

*Siberian Sugar*.—Yellow, roundish, small, cider, first-rate; December to January. Flesh orange, juice highly saccharine.

*Siben Schlafer*.—Pale yellow, oblong, middle-sized, indifferent; November to January.

*Silverling*.—Pale green, conical, large, kitchen; November to March.

*Simpkin*.

*Simpson's Seedling*.—Green, ovate, middle-sized, table, second-rate; January to April.

*Sine-qua-non*.

*Sir Thomas Gower's*.

*Sir Walter Blacket's Favourite*, see Edinburgh Cluster.

*Sir William Giblon's*.

*Sir William Parker's*.—Like a Golden Pippin.

*Sklenkory*.

*Slade's Pippin*.—Pale brownish red, ovate, small, table, second-rate.

*Solebury Cider*, see Buk's County.

*Somerset Lasting*.—Pale yellowish red, oblate, large, kitchen; October to February.

*Sommer Kleiner*.

*Sommer Koning*.

*Sonnette*.—Greenish yellow, ovate, middle-sized, cider. A bitter-sweet.

*South Carolina Pippin*.—Yellow, roundish, large, kitchen ; December.

*Sour Rawlings*.

*Sovereign*.—Yellow, pear-shaped, middle-sized, indifferent ; October.

*Sparrow Pippin*.

*Spätblukende* (Mœtapfel a Fleurs Tardives).—Streaked, oblong, middle-sized, kitchen ; November to December.

*Spice Apple* (Aromatic Russet, Brown Apple of Burnt Island, Rook's Nest Apple, Brown Spice, Burnt Island Pippin).—Russet, conical, middle-sized, table, second-rate ; October. Good bearer.

*Spice, Early*.

*Spice, Scarlet*.

*Spice, Sweeting*.

*Spicewood*.

*Spiesslinger*.

*Spitzemberg Æsopus* (Spitzemberg Flushing).—Red, oblong, middle-sized, kitchen and table, first-rate ; requires a south wall ; November to January. An American apple.

*Spitzemberg, Kaigns*.—Pale red, conical, middle-sized, indifferent ; November to January.

*Spitzemberg, Newtown* (Matchless).—Yellowish red, roundish, middle-sized, kitchen and table, second-rate ; November to February. Very handsome. An American apple, introduced by Mr. Cobbett.

*Spitzemberg, Pownal's*.

*Spitzemberg, White*.

*Spotted Pippin*.

*Standard*.

*Staunton Pippin*.

*Stead's Kernel*.—Cider.

*Stern Apfel*.

*Stettin Pippin*, see Dutch Mignonne.

*Stettin Jaune*.—Yellow, roundish, large, kitchen ; January to June. Bears abundantly.

*Stettin Rouge*, see Rostocker.

*Stelsted Pippin*.

*Stetchworth Seedling, Bayley's*.

*Stetchworth Seedling, Eaton's*.

*Stire*.

*Stire, Red*.—Streaked, roundish, small, cider, first-rate ; November to January. Austere.

*Stire, White*.—Pale green, roundish, small, cider, first-rate.

*Stirling Castle*.

*Stoke Park Pippin*.—Very like the Pine-apple.

*Stone Pippin*.—Pale yellow, oblate, middle-sized, table, first-rate ; January to April. Handsome.

*Stone Pippin, Norfolk* (White Stone Pippin, White Pippin, Winter Stone Pippin).—Pale greenish yellow, oblong, middle-sized, kitchen, table, second-rate ; November to July. Valuable for its long keeping. A Norfolk apple.

*Stone Pippin*, see Gogar Pippin.

*Stony Royd Pippin*.—Yellow, roundish, middle-sized, kitchen and table, first-rate ; January to April.

*Straat*.—Greenish yellow, roundish, middle-sized, table, first-rate ; December to April. Resembling Newtown Pippin. Tree disposed to canker.

*Strawberry, Early*.

*Strawberry, Summer*.

*Strawberry, Winter*.

*Strode House Pippin*.—Yellow, roundish, middle-sized, table, second-rate : November.

*Strifling d' Hiver*, see D' Astem.

*Striped Holland Pippin*, see Lincolnshire Holland Pippin.

*Striped June*.

*Stubton Pippin*.

*Sturmer Pippin*.—Greenish yellow and brown, conical, middle-sized, kitchen and table, first-rate; February to June. Brisk flavour.

*Stuttgarter Gaishirtel*, see *Wugsdorffer*.

*Sudbury Beauty*.—Yellow, roundish, small, table, first-rate; October to January.

*Sugar, Siberian*.

*Sugarloaf Pippin* (Hutching's Seedling, Dolgoi Squozni—Long transparent).—Green, oblong, middle-sized, kitchen; August. A Russian apple, from the Taurida Gardens.

*Summer Hedging*.—Red, roundish, small, cider.

*Summer Pippin*, see *Margaret* and *Summer Golden Pippin*.

*Summer Queen*.—Pale yellowish red, roundish, middle-sized, kitchen, second-rate; August to September.

*Summer Rose*.—Yellowish red, oblate, small, kitchen and table, second-rate; August.

*Summer Stibbert* (Summer Queening of some, *Avant Tout*, *Hative*).—Yellow, conical, large, kitchen, second-rate; August. Good bearer.

*Summer Traveller*, see *Early Red Margaret*.

*Superieure*.

*Superintendenten*.

*Superintendent Prachtvoll Reinette*.

*Surprise*.

*Sussex*.—Pale greenish red, oblate, middle-sized, table, second-rate; November.

*Svinels*. *Swaar*.

*Swedish Early Sauce*.—Streaked, conical, middle-sized, kitchen, second-rate; August.

*Swedish Golden*.

*Sweet Lading*.—Streaked, oblate, middle-sized, cider, second-rate; November.

*Sweet Little Wilding* (*Zoete Wildjes*).—Small, cider.

*Sweet Pippin* (of the Americans), see Red Sweet Pippin.

*Sweeting, Large Green.*

*Sweeting, Large Red Winter*, see Red Sweet Pippin.

*Sweet Pippin.*—Yellow, ovate, small, cider; October to November.

*Sweet Topaz.*

*Sweeting, Large Striped.*

*Syke House*, see Syke House Russet.

*Taffitai*, see Transparent d'Astrachan.

*Tankard, Old.*

*Tankerton.*

*Tankerville.*—Streaked, roundish, small, indifferent; September.

*Tanner's.*

*Tardfleur.*—Cider.

*Taunton*, se Pomeroy.

*Tay Side Pippin.*

*Ten Shillings.*—Russet, red, oblate, middle-sized, table, second-rate; November.

*Tenterden Park.*—Yellowish red, roundish, small, table, first-rate; October to February.

*Terwin's Goliath.*

*Tete du Chat.*

*Tete du Chat* (of Jersey), see Round Catshead.

*Tetofsky.*—Streaked, oblong, middle-sized, table, second-rate; August to September. Handsome.

*Tewksbury, Winter Blush.*

*Thickset*, see Cluster Golden Pippin.

*Thompson's.*

*Thorle, Summer* (Whorle Pippin, Watson's New Nonesuch, Paradise of some).—Pale yellowish red, oblate, middle-sized, table, first-rate; August to September. A very handsome apple.

*Thorle, Winter.*

*Toilet*, see De Longbois.

*Thoresby Seedling*. — Red, pear-shaped, middle-sized, table ; January to April.

*Tockington Ruby*.—Cider.

*Tom Potter*.

*Tom Put*. *Top*.

*Tonnelle*.

*Tontigne*.

*Torbron's*.

*Tower of Glammis* (Glammis Castle, Late Carse of Gowrie).—Greenish yellow, conical, large, kitchen, first-rate ; November to January.

*Transparent*, see *De Glace*.

*Transparent d' Astrachan* (Taffitai).

*Transparent d' Christ*.

*Transparent Green*.

*Transparent, Wood's New*, see *Court of Wick*.

*Transparent de Moscovie*, see *White Astrachan*.

*Transparent de Zurich*.—Pale yellow, conical, middle-sized, cider ; September to October. Good bearer.

*Traveller*.—Streaked, oblate, middle-sized, table, indifferent.

*Travers's*, see *Ribston Pippin*.

*Travelling Queen*.—Streaked, roundish, middle-sized, indifferent ; November to January.

*Trianon Superbe*.

*Troughton's*.

*Trinnpington* (Eve Apple, Delaware).—Red, oblate, small, table, second-rate ; September to December.

*Tschelebi*.

*Turk's Cap*.—Cider.

*Turc Vert*.

*Tulip* (Tulp, Tulpen).—Red, ovate, middle-sized, table, second-rate ; November to April. A Dutch apple of a very bright red colour, and a good bearer.

*Turpin*.—Yellow, ovate, middle-sized, kitchen ; November to May.

*Turin Cluster Pippin*, see *Cluster Golden Pippin*.

*Turckenham*.—Streaked, broad, conical, large, kitchen ; September to October.

*Two Yearling*.—Yellow, roundish, small, table, second-rate ; May to July.

*Uffington Pippin*.

*Underleaf*.—Yellowish red, oblate, middle-sized, second-rate ; December.

*Underleaf, Herefordshire*.

*Valentine*.

*Valleyfield Pippin*.—Greenish red, oblate, middle-sized, table, second-rate ; September. Good bearer.

*Vandervere*.—Yellowish red, oblate, middle-sized, kitchen and cider, second-rate ; December to March.

*Van Dyne*, see Woolman's Long.

*Vater Apfel ohne Kerne*.

*Veiny Pippin*.—Brownish green, roundish, middle-sized, indifferent ; October to January. Great bearer.

*Venus Pippin*.

*Verte Mure*.

*Vertue*.

*Violette, Pomme* (*Violette de Quartre Gouts, Gros Pomme Noire d'Amerique, Red Calville* of some).—Dark red, conical, large, kitchen, second-rate ; October to March. Moderate bearer, fruit covered with bloom like a plum.

*Virginia Favourite*.

*Wach's Apfel*.—Pale yellow, oblong, middle-sized, cider ; October to December.

*Wadhurst Pippin* (*Walmer Court*, see Northern Greening).—Yellow and brownish red, roundish, large, kitchen, first-rate ; October to February.

*Waltham Pippin*.

*Waltham Abbey Seedling* (*Docter Harvey* of some).—Yellow, roundish, large, kitchen, first-rate ; September to January. Fruit handsome. Requires but little sugar ; tree a good bearer. Raised in 1810 from a seed of the Golden Noble, by Mr. Barnard, of Waltham Abbey.

*Wanderer.*

*Warren.*

*Warwickshire Greening.*

*Warwickshire Pippin*, see Wyken Pippin.

*Wasserlinger.*—Greenish yellow, streaked, roundish, large, cider; September to April.

*Watch Apple*, see Cambusnethan Pippin.

*Watson's Dumpling.*—Streaked, roundish, large, kitchen, first-rate; October to February.

*Wax.*

*Weisbrod.*

*Weisser Bietigheimer.*

*Weeks Pippin*, see Court of Wick.

*Wellbank's Constant Bearer.*—Yellowish red, roundish, ovate, middle-sized, kitchen, second-rate; November to January.

*Wellington*, see Dumelow's Seedling.

*Welsh Pippin.*—Yellow, calville-shaped, middle-sized, kitchen; November to January.

*West Grinstead Pippin.*—Green streaked, roundish, middle-sized, table, second-rate; November to April; does not shrivel.

*Wetherell's White Sweeting.*—Yellow, roundish, middle-sized, cider; September; a sweet cider apple.

*Whernel's Pippin.*—Yellow, pear-shaped, middle-sized, kitchen, second-rate; December to March.

*White Costin.*

*White Easter.*—Pale yellow, pear-shaped, middle-sized, kitchen; January to April.

*White Hyde Pippin.*

*White Loaf.*—Yellowish red, oblate, large, kitchen.

*White Letham Pippin.*

*White Lily*, see Devonshire Buckland.

*White Pippin*, see Norfolk Stone Pippin.

*White Seal.*—Pale yellow, oblong, large, kitchen; September; of little value.

*White Sour*, see Devonshire White Sour.

*Whitmore Pippin*.—Yellow, conical, large, kitchen, second-rate ; December to January.

*Whorle Pippin*, see Summer Thorle.

*William*.—Yellow, oblate, middle-sized, table, cider, second-rate ; November to January.

*Winchester*.

*Williams's Favourite*.

*Williams's Pippin*.

*William, Prince*.

*Windham's Pippin*.

*Windham's Seedling*.—Yellow, oblate, middle-sized, kitchen, indifferent ; November to March.

*Wine*.—Yellow, oblate, middle-sized, cider ; December.

*Wine, Green*.

*Wine, Red*.

*Wine, Vandervoust's White*.

*Wine, White*.

*Wine, Sops of*.—Red, roundish, middle-sized, cider ; October to February.

*Wine Sop, Winter*.

*Wine Sop, American*.—Red, roundish, middle-sized, kitchen, second-rate ; December to April.

*Wine, Spitzemberg*.

*Winter*, see Knobby Russet.

*Winter Bogge, Zoete*.

*Winter Colman* (Norfolk Colman, Norfolk Storing).—Yellowish red, roundish, middle-sized, kitchen, first-rate ; November to April. A Norfolk apple.

*Winter Greening*.

*Winter Majetin*.—Green and brownish red, roundish, large, kitchen, first-rate ; January to May ; tree hardy, not subject to the attacks of insects. A Norfolk apple.

*Winter Pippin*.

*Winter Scarlet*.—Red, calville-shaped, middle-sized, kitchen ; November to January.

*Winter Stone Pippin*, see Norfolk Stone Pippin.

*Winter Warden*.—Streaked russet, roundish, middle-sized, kitchen, second-rate; December to February.

*Wire Wood*.

*Wise Apple*.

*Witham's Pippin*.

*Witte Wyn*.—Pale green, roundish, middle-sized, cider; October to November.

*Woodcock*, see Northern Greening.

*Woodcock, New*.—Streaked, roundish, middle-sized, cider; December to January.

*Wood's Hundington*, see Court of Wick.

*Woodstock Pippin*, see Blenheim Pippin.

*Wood's Greening*.—Green, conical, middle-sized, kitchen and table, second-rate; January to May.

*Woolman's Long* (Ortley, Van Dyne).—Yellow, oblong, middle-sized, kitchen and table, first-rate; December to April; excellent in a good situation. From New Jersey, in N. America.

*Wollaton Pippin*, see Court-pendu Plat.

*Wormsley Pippin* (Knight's Codlin).—Pale green, roundish, middle-sized, kitchen and table, first-rate; September to October. Raised by Mr. Knight, at Wormsley Grange.

*Wugsdorffer* (Stuttgarter Gaishirtel).

*Wydoe*.—Yellowish red, conical, middle-sized; second-rate.

*Wyken Pippin* (Warwickshire Pippin, Girkin Pippin, Arley).—Yellow, oblate, small, table, second-rate; December to April; has been confused with Wyker Pippin, but is very different. Raised at Wyken, near Coventry, by a Lord Craven. A great favourite in Warwickshire.

*Wyker Pippin*, see Golden Reinette.

*Wyggers*, see Golden Reinette.

*Yellow*, see Court of Wick.

*Yellow Bough, Large Early*.—Yellow, roundish, large, kitchen, first-rate; August to September.

*Yellow Harvest*, see Early Harvest.

*Yellow Harvest, Large*.

*Yellow Pippin*.

*Yellow Seggiden*,

*Young Pippin*.

*Young's Seedling*.—Greenish red, roundish, middle-sized, kitchen and table, second-rate; January to June.

*Yorkshire Greening* (Coates's, Seek-no-further of some, Yorkshire Goose Sauce).—Green, oblate, large, kitchen, first-rate; October to January; apt to speck, yet much esteemed for kitchen use.

*Yorkshire Greening, Woolaton*.

*Zoete Blanke*.—Yellow, calville-shaped, small, cider, second-rate; October to March.

*Zoete Champagne*.—Russet, roundish, small, cider, second-rate; November to January; a sweet russet.

*Zoete Kandy*.—Yellowish red, roundish, middle-sized, second-rate; December to January.

*Zoete Kantjis*.

*Zoete Jopen Roode*.

*Zoete Peter Lely*.—Russet, oblate, small, table, first-rate; November to February.

*Zoete Wildjes*, see Sweet Little Wilding.

*Zoete Raboise*.

*Zoete Vene*.

*Zuribel*.

#### APPLES USED AS STOCKS.

*English Paradise*.

*French Paradise*.

*Doucin* (of the French).

*Wild Crab*.

SELECTION OF APPLES FOR THE CLIMATE OF  
LONDON.

*Dessert Sorts.*

Early Red Margaret	..	ripens in August.
Devonshire Quarrenden	.. ..	Aug. and Sept.
Oslin	.. ..	Aug. and Sept.
Summer Golden Pippin	.. ..	Aug. and Sept.
Kerry Pippin	.. ..	Sept. and Oct.
Wormsley Pippin	.. ..	Sept. and Oct.
King of the Pippins	.. ..	Oct. and Jan.
Hughes's Golden Pippin	.. ..	Dec. and Feb.
Pearson's Plate	.. ..	Dec. and Mar.
Ribston Pippin	.. ..	Nov. and Mar.
Downton Nonpareil	.. ..	Dec. April, or May.

EDINBURGH AND DUBLIN.

In situations where the Ribston Pippin is known to canker, the Herefordshire Pearmain may be substituted; and, with this alteration, the above selection is presumed to be suitable for the climates of Edinburgh and Dublin. For additional choice and trial, the following are highly deserving of notice as dessert apples of approved excellence:—

Large Golden Bough, or Early Harvest,	ripens in the beginning of August.
Golden Reinette	.. .. Oct. and Jan.
Golden Harvey	.. .. Dec. and May
Scarlet Nonpareil	.. .. Jan. and March
Braddick's Nonpareil	.. .. Jan. and April.
Old Nonpareil	.. .. Jan. and May.

KITCHEN APPLES SUITED FOR THE GENERAL  
CLIMATE OF BRITAIN.

From the following sorts of kitchen apples, suit-

able for the general climate of Britain, a supply may be obtained throughout the year:—

Hawthornden	Alfreton.
Blenheim Pippin	Brabant.
Bedfordshire Foundling	Northern Greening

#### FOR THE NORTH OF SCOTLAND.

*Dessert.*—Oslin, Early Red Margaret, Pitmaston Nonpareil, Wormsley Pippin, Ribston Pippin, Baxter's Pearmain, Court of Wick, Claygate Pearmain, Pearson's Plate, Braddick's Nonpareil, Scarlet Nonpareil, Sturmer Pippin.

*For Kitchen use.*—Dumelow's Seedling, Tower of Glammis, Keswick Codlin, Hawthornden, Bedfordshire Foundling, Round Winter Nonesuch, Mere de Menage, Northern Greening, Royal Russet, Waltham Abbey Seedling, Yorkshire Greening, Rymer.

**FOR WALLS.**—Golden Pippin, Golden Harvey, Ribston Pippin, and Nonpareil.

**FOR ESPALIERS AND DWARF STANDARDS,** the same as for Walls, together with King of the Pippins, Newtown Pippin, Court of Wick, Scarlet Nonpareil, Downton Pippin.

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#### PROPAGATION.

*By Seed.*—The apple pip never gives birth to a seedling tree yielding fruit like that of its parent; and, which is still more strange, every pip from the same apple will produce a seedling differing from the others. The vast majority of seedlings are mere crabs; but care and judgment in selecting the parents

of which the good qualities are required to be united in the offspring, will partially obviate this tendency of returning to the original wilding.

The sorts of apples proper for crossing or reciprocal impregnation, appear to be those which have a great many qualities in common, but some different qualities. Thus the Golden Pippin has been crossed so as to produce a good offspring, by other Pippins or Rennets, and not by Calvils or Codlings. A small sized apple, crossed by a large sort, will be more certain of producing a new variety than the above mode, but will be almost equally certain of producing a variety destitute of valuable qualities. Mr. Knight's mode of cutting out the stamens of the blossoms to be impregnated, and, afterwards, when the stigmas are mature, introducing the pollen of that intended for the male parent, is unquestionably the most scientific mode of performing the operation. In this way he produced those excellent apples, the Downton, Red and Yellow Ingestrie, and Grange Pippins, from the same parents, viz., the seed of the Orange Pippin impregnated by the pollen of the Golden Pippin. The Bringwood Pippin he produced from the Golden Pippin, impregnated with the pollen of the Golden Harvey apple.

In crossing to produce new varieties, some fixed purpose should be adhered to, and prosecuted accordingly. Thus, if a dessert apple is desired, flavour

must of course form the most prominent object ; and that flavour must be accompanied by abundance of juice, or the produce will be worthless. Nothing can redeem the want of the latter quality, for we are acquainted with apples equal in flavour to the celebrated Ribston Pippin, and yet we cannot place them on the table through the absence of the latter property. Keeping properties should, moreover, be ever kept in view, unless the object be to produce a good early apple. With regard to the juicy qualities, we would, above all, recommend frequent trials with the Old Nonpareil as one parent, for, up to the present period, we believe it to be unrivalled as to the abundance and various characters of its juice, and that up to a very late period in the spring. Mellowness or tenderness of texture is also another great consideration, for few like a hard-fleshed apple. The Kerry Pippin is perhaps the highest flavoured autumn apple in the country, and had it the mellow texture of the Nonpareil it would stand unrivalled in every respect ; it is, however, hard, and this is indeed its only fault. Bearing properties should also be kept in view, for bad bearers are by no means to be tolerated in these days, when so much choice exists. When the object is to produce a good kitchen apple, good baking or boiling properties must of course stand first on the list ; and next to this, we should say, long keeping and prolific habits. The John apple, or, as it is

called by the Horticultural Society of London, the Northern Greening, is the best baking and longest keeping apple we have. This might well be selected as the parent, on one side, of a superior kitchen apple: it is, moreover, of very sound constitution.

We would strongly advise that little crossing should take place between kitchen and table apples; the produce of such can only in the main tend to confuse: the country is full of such apples, which, in general, possess no decided character.

The pips of apples that will not keep until the spring are best sown in the autumn, but if the apples will continue undecayed, the pips should be kept in them until March, and then be sown. The largest and most convex pips usually produce the most valuable varieties. Sow them in pots or border of light rich loam; bury the seed an inch deep, if in a border, six inches apart each way. Mr. Loudon says that at the end of the year the seedlings should be transplanted into nursery rows, from six inches to a foot apart every way. Afterwards they should be removed to where they are to produce fruit; and for this purpose the greater the distance between the plants the better. It should not be less than six or eight feet every way. The quickest way to bring them into a bearing state, Williams of Pitmaston considers, is to let the plants be furnished with lateral shoots, from the ground upwards, so disposed as that the leaves

of the upper shoots may not shade those situated underneath, pruning away only trifling shoots. By this mode, fruit may be had from seedling apples at four, five, and six years of age, instead of waiting eight, ten, and even fifteen years, by the usual mode of planting close, and pruning to naked stems.

Mr. Macdonald, a distinguished gardener in Scotland, has also succeeded in obtaining fruit from seedlings at an early period by grafting, already stated as one of the uses of that mode of propagation. In 1808, he selected some blossoms of the Nonpareil, which he impregnated with the pollen of the Golden Pippin and of the Newtown Pippin. When the apples were fully ripe, he selected some of the best, from which he took the seeds, and sowed them in pots, which he placed in a frame. He had eight or nine seedlings, which he transplanted into the open ground in the spring of 1809. In 1811 he picked out a few of the strongest plants, and put them singly into pots. In spring, 1812, he observed one of the plants shewing fruit-buds. He took a few of the twigs and grafted them on a healthy stock on a wall, and in 1813 he had a few apples. The third year (1816) his seedlings yielded several dozens, and also his grafts; and he mentions that the apples from the grafts were the largest.

If the length of time which has hitherto been required to cause seedling fruits to blossom, could be

limited to two or three years, we have no doubt that many more persons would be tempted to raise seedlings, and the sure consequence would be a vast accession of new and useful fruits; for who shall place a limit either as to size or quality? We do think that the thing may be accomplished in much less time by a due consideration of the conditions necessary in order to produce fructification. A sudden check after excessive luxuriance is a well-known promoter of fructiferous habits. We would, therefore, grow the young seedlings for two years in the richest loam imaginable, specially prepared. We would, in the third year, transplant them into a poorer soil, giving them plenty of room, and, of course, a perfect exposure to light; and we would, at the same time, graft some scions from them on the healthiest old trees in the garden; selecting those known to be great bearers, and placing the scions at the extremity of the principal shoots.

Mr. Knight states that the width and thickness of the leaf generally indicates the size of the future apple, but will by no means convey any correct idea of the merits of the future fruit. When these have the character of high cultivation, the qualities of the fruit will be far removed from those of the native species; but the apple may be insipid or highly flavoured, green or deeply coloured, and of course well or ill-calculated to answer the purposes of the planter.

An early blossom in the spring, and an early change of colour in the autumnal leaf, would naturally be supposed to indicate a fruit of early maturity, but Mr. Knight was never able to discover any criterion of this kind on which the smallest dependence may be placed. The leaves of some varieties will become yellow and fall off, leaving the fruit green and immature; and the leaves in other kinds will retain their verdure long after the fruit has perished. The plants whose buds in the annual wood are full and prominent are usually more productive than those whose buds are small and shrunk in the bark; but their future produce will depend much on the power the blossoms possess of bearing the cold, and this power varies in the varieties, and can only be known from experience. Those which produce their leaves and blossoms rather early in the spring are generally to be preferred, for, though they are more exposed to injury from frost, they less frequently suffer from the attacks of insects—the more common cause of failure. The disposition to vegetate early or late in the spring, is, like almost every other quality in the apple tree, transferred in different degrees to its offspring; and the planter must therefore seek those qualities in the parent tree which he wishes to find in the future seedling plants. The best method Mr. Knight was able to vegetate very early in the spring, has been by introducing the farina of the Siberian Crab into the blossom of a rich and early

apple, and by transferring, in the same manner, the farina of the apple to the blossom of the Siberian Crab. The leaf and the habit of many of the plants thus obtained, possess much of the character of the apple, whilst they vegetate as early in the spring as the crab of Siberia, and possess at least an equal power of bearing cold; and Mr. Knight obtained two plants of the family which were quite as hardy as the most austere crab of our woods.

*Grafting* is the most usual and successful mode of propagating established varieties, and whip or tongue grafting are those usually adopted.

*Scions*.—At whatever season grafts are intended to be inserted, the branches which are to form them should be taken from the parent stock during the winter, and not later than the end of the preceding year; for if the buds have begun to vegetate, in the smallest degree, (and they begin with the increasing influence of the sun,) the vigour of the shoots, during the first season, will be diminished; and the grafts will not succeed with equal certainty; though a graft of the apple-tree very rarely fails, unless by accidental injury, or great want of skill in the operator. The amputated branches must be kept alive, till wanted, by having the end of each planted in the ground, a few inches deep, in a shady situation. (*Knight on Apple*, 55.)

The scions should be of one-year-old wood, one-

fourth of an inch in diameter ; four to six inches long, and with not less than three buds. One bud should be low down at the tongue end of the scion, that is of the end inserted into the stock, for we have observed that scions having such a bud have generally taken the most successfully.

The part of the tree from whence the scion is taken is far from immaterial. The lower branches on the south side of the tree, provided they are well exposed to the light, and shoots from the main trunk of a branch rather than from its spray, are to be greatly preferred. Mr. Knight most approved of the shoots emitted from the main stem, being of opinion that "the decay of many varieties (such as the Gilliflower Apple, which in my estimation is and always was without a rival in the climate of England) might be greatly retarded by propagating it from scions which have recently sprung from the trunks of old trees, in obedience to the instructions of Virgil (whose authority is however generally of little value), and probably of Hyginus, 'summa ne pete flagella.'" (*Trans. Hort. Soc.* i. 149, N.S.)

With regard to the opinions here expressed, we would say that the selection of scions from new and vigorous kinds of strong constitutions and from old and partially worn out sorts, are two very different affairs. We would always take the scion from a situation fully exposed to sunlight, and from the subordi-

nate parts of trees of too gross a character, or where a dwarfing system was intended, and from the strongest shoots that could be found in those sorts suspected of wearing out.

*Stocks.*—Quite equal in importance to the care of selecting the scions, are the desirable means of obtaining proper stocks. A preference has generally, and justly, been given to those raised from the seeds of the native kind, or crab, as being more hardy and durable than those produced from the apple.

The offspring of some varieties of the crab, particularly of those introduced from Siberia, vegetate much earlier in the spring than other trees of the same species; and thus the inexperienced planter will probably be led to suppose, that such stocks would accelerate the vegetation of other varieties in the spring, and tend to produce an early maturity of the fruit in autumn. In this, however, he will be disappointed. The office of the stock is, in every sense of the word, subservient; and it acts only in obedience to the impulse it receives from the branches: the only qualities, therefore, which are wanting to form a perfect stock, are vigour and hardiness. In collecting the seeds to sow, it must be remembered that the habits as well as the diseases of plants are often hereditary, and attention should be paid to the state of the tree from which the seeds are taken; it should be large and of free growth, and rather in a growing

state than one of maturity or decay. The crab-trees, which stand in cultivated grounds, generally grow more freely and attain a larger stature than those in the woods, and therefore appear to claim a preference. The seeds should be taken from the fruit in the autumn, and sown in beds of good mould an inch deep. From these the plants should be removed in the following autumn to the nursery, and planted in rows of three feet distance from each other, and eighteen inches between each plant. Being here properly protected from cattle and hares, they may remain till they become large enough to be planted out; the ground being regularly worked and kept free from weeds. (*Knight on the Apple*, 50.)

They will have attained a diameter of from half an inch to an inch, the size fit for grafting, after having from one to two or three years' growth, particularly for dwarfs, or even for full and half-standards, if intended to form the stem from the graft, which is an eligible method for these trees; but if the stock is to form the stem, they will require three or four years' growth to rise to a proper height; seven feet for full, and four or five for half-standards.

The stocks thus raised from the seeds of the Crab or Wilding apple are called *free stocks*, and for full standards are much to be preferred; but for dwarfs, half-standards, and wall-trees, the *Paradise*, or, as the French term them, the *Doucin stocks* are preferable.

They are preferable because they produce trees much less vigorous and free in their growth than are those worked on free stocks. Paradise stocks are those raised from layers, cuttings, or suckers of cultivated apples. Those raised from suckers are frequently called *Dutch Paradise stocks*. For moist soils we think Paradise stocks are most suitable, and for very dry localities, the free stocks.

Do not disturb the roots of apples intended to be grafted the same season; the check in the first instance would render the success of the operation of grafting precarious. The branches or stems of trees intended to be grafted should be cut back before spring. We are quite aware that it has been recommended to remove the young trees once or twice during the time they remain in the nursery, under the idea of increasing the number of their roots: but this practice is only eligible with trees which do not readily grow when transplanted. Mr. Knight always found the growth of young apple-trees to be much retarded, and a premature disposition to blossom to be brought on by it, and could not afterwards observe that those trees, which had been twice removed, grew better than others. It has also been supposed that many small roots, proceeding immediately from the trunk, are in future growth of the tree to be preferred to a few large ones; but as the large roots of necessity branch into smaller ones, and probably extend to a

greater distance, the advantages of more transplantations than from the seed-bed to the nursery, and thence to the orchard, may reasonably be questioned. (*Knight on the Apple*, 66.)

In selecting stocks, however, for the apple, it should always be borne in mind, that the Paradise stock will not answer for the ordinary orchard standard. Apples grafted on this stock will never make such large trees as those grafted on the free or crab-stock. The Paradise stocks are therefore peculiarly fitted for a dwarfing system, and in this respect well adapted to the modern improved kitchen garden. The Paradise stock, however, is of rather tender habits, and requires a very generous kind of soil. It will not thrive either in so clayey, or so sandy, or gravelly a soil as the common crab, therefore some caution is necessary in adopting it. If any jealousy exists on this head, the same end may be obtained by using the free stock, and by transplanting it about a couple of years after grafting, first encouraging it to grow rather luxuriant. In this transplantation all tap roots should be cut away if intended for the kitchen garden, and a slight top dressing should be applied: this will soon compensate for the loss of the tap roots by an increased amount of surface fibres, which, holding more sympathy with the atmospheric action, will be found eminently conducive of bearing habits.

*Grafting old Trees.*—There are few plantations

now existing, in which many middle-aged trees, of diseased and unproductive varieties, are not to be found. These should be immediately regrafted; but unless this operation be performed with more judgment than usually belongs to the common grafter, it will often be fatal to the tree. The grafts will, however, almost always succeed during the first three or four years, together with the stock. It not unfrequently happens that the scions inserted belong to as old, and as diseased, a variety as that which has been taken off; and, in this case, the graft and the stock appear to die by mutual consent. When old trees are to be grafted, the scions of a very young and hardy variety, of extremely vigorous growth, should be selected; and the grafts should be inserted in the large branches at some distance from the trunk; and never, where it can be avoided, in the principal stem itself. Large scions should be used, for these take a deeper and firmer hold of the stock than small ones. The thick covering of lifeless external bark should, at the same time, or in the succeeding winter, be totally pared off, care being taken that the internal bark be not anywhere cut through. The effects of this operation will be found extremely beneficial to the tree in its future growth, and it will not be difficult to trace these effects in their cause. From very numerous experiments on the ascent and progress of the sap in trees, made by means of coloured infusions, and by

taking up the vessels in different parts, Mr. Knight was perfectly satisfied that the ascending and descending fluids are carried to every part of the tree. (*Knight on the Apple*, 85).

*Root-grafting* is easily practised, and it has the very strong recommendation of having as its advocate Mr. Beaton, the very excellent gardener of Sir W. Middleton, at Shrubland Park, near Ipswich. He observes, that Mr. Knight was the first who ascertained the possibility of grafting scions on pieces of the roots of the same or some allied species with success. When he made his experiments on this subject known to the Horticultural Society some thirty years since, it was looked on merely as an interesting fact in vegetable physiology. Subsequently, however, the practice began to be extensively employed in the nurseries to multiply rare plants, or such as are difficult to propagate by the more ordinary means, such as *Combretum purpureum* and so forth. Mere propagation of rare species is, however, by no means the only object to which this mode of grafting can be advantageously applied; another and a still more important one is, that by its means we gain one grand step in preventing canker in fruit-trees—perhaps the surest step of any that has yet been thought of. We all know that certain plants prefer particular soils and dislike others, but no one can tell the reason. When a young fruit-tree shews symptoms of premature decay or canker,

the fault, or rather the misfortune, is ascribed in nine cases out of ten to the subsoil ; but this is a hasty conclusion. The worst garden or orchard soil in the kingdom produces some healthy tree ; if only one, why not more of the same species or variety ? Simply because there is only one of the stocks used in this instance which prefers that particular soil. Now, if we take pieces of the roots of this particular stock, and graft on them, we may reasonably expect that, other circumstances being favourable, they will produce trees as vigorous and healthy as their parent stock on that particular soil, though they might refuse to do so on soil which we would think more propitious for them. This disposition in trees cannot be scientifically explained ; practically we can easily account for its effects. Apples and pears are grafted on seedling stocks from the seeds of the wild crab, or, what is oftener the case, from seeds of the common apples and pears, which can be more readily procured. Now, seedlings of the apple and pear—indeed, seedlings of all sorts—however truly they may perpetuate species in the eyes of the botanist, are well known to differ from their parents and among themselves in constitutional peculiarities, and it is not too much to say that there are as many different kinds of stocks—that is, different constitutionally—for apples and pears in one nursery, as there are different soils in the kingdom to plant them in : this at once explains why a few

trees in an orchard are growing vigorously, while all the others are cankered or shewing signs of premature debility. We may plant, hoe, and drain our soils as we may, but nature only provides the suitable stock ; and when we meet with even but one tree which flourishes in a particular soil, we need not be afterwards at a loss for stocks to suit that soil. (*Gard. Chron.* 1841, 179.)

*Suckers* are only obtainable for propagation of the same variety, or for forming Paradise stocks, from maiden trees, that is trees growing on their own roots ; from Paradise stocks previously rooted. Maiden or other trees apt to throw up suckers are usually called *Creeping Apples*.

*Layering* may be resorted to as an unfailing mode of propagation with all apples, but as the branches are usually too far from the surface for them to be bent down to it, *circumposition* is the plan that may be resorted to. This differs from layering only in having the soil placed in a vessel and raised to the shoot. There are pots called *layering pots* made for this practice, and differing from the common garden pot only by having a section about an inch broad cut through one side, and to the centre of the bottom, for the admission of the shoot or branch.

M. Foulup employs small tin cases of a conical form, like the upper part of a funnel, two and three-quarter inches in length, and two and a sixth inches

in width at top, narrowing towards the lower part till only sufficient room is left for the introduction of the shoot or branch intended to be propagated. These cones are supported on rods, to which they are secured by wire. Commencing with the central branches, the leaves are taken from the parts which the tin is intended to inclose; the branch is cut two-thirds through as in layering, and being inclosed by the funnel, the latter is well packed with moss. Moisture necessary for favouring the emission of roots is supplied by means of a bottle, from which the bottom is struck off, and the neck furnished with a cork, perforated so as to admit a small pigeon's feather or bit of wool to form a syphon, by means of which the moss is kept in a proper state of moisture. Hard-wooded plants are propagated in this way from the middle of May till the end of June; and the branches are sufficiently rooted to be taken off by the end of September. It is, however, necessary in all cases, to ascertain whether the branches are sufficiently rooted previously to their being separated. This is easily done by opening up the edges of the tin; when the branches are found to be sufficiently rooted they are potted off without removing the moss by which the roots are surrounded. Being moderately watered, they are immediately placed under glass on a slight hotbed, and kept shut up for a fortnight. They are then gradually exposed, and afterwards placed in the shade of large trees, so that

only half the rays of the sun shall reach them. (*Gard. Chron.*)

*Budding* is a mode of propagation rarely adopted for the apple, for, although the operation may be performed upon stocks much smaller than those required for grafting, yet a greater time elapses afterwards before they come into bearing than in the case of grafted specimens. One advantage of budding is, that as three or four buds may be inserted round the same branch, a good head to the tree is sooner secured. July is the best month for budding this fruit.

*Cuttings.*—We believe that almost all, if not all, varieties of the apple may be propagated thus. There is no difficulty in making cuttings of the Burr-knot, Codlin, and Jenetting varieties, strike root; and we have made those of many other varieties similarly strike by merely taking care that at the bottom of the annual shoot employed there should be a portion of the old wood allowed to remain. Let the cuttings be six or eight inches long; cut off the extreme point, and allow no more than two buds at the part above the soil to remain, cutting away all the buds covered by it. Let the soil be very light, press the soil about the cutting, four inches of which should be buried by the earth; water moderately, and cover with a hand-glass. If planted in a pot, and plunged in a very gentle hotbed, the rooting takes place faster

and more certainly. Plant the cuttings in February, and do not move the hand-glass, except to give water, until the rooting is effected. Air may be admitted in July, and the glass finally removed in August, and the whole transplanted into the nursery rows during October. Trees raised from cuttings always are more dwarf than those propagated in any other mode, and excellent specimens may be thus grown for forcing in pots.

It will now be seen that very similar results will be produced by the use of the Paradise stock by layering and by cuttings: they all have a tendency to a dwarfing system by exchanging tap or deep roots for fibrous surface roots. The latter are closely connected with habits of fruitfulness, as is well known, more especially in young trees.

When the crab stock is employed our ordinary loamy soils will suffice; when, however, the Paradise stock, the layer, or the cutting is employed, the soil should receive some manuring in addition. This may frequently be applied as top-dressing, as will be shewn hereafter.

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### SOIL, SITUATION, AND MANURES.

THE character of the soil is of much importance with the apple, more especially in laying the foundation for a permanent orchard; for, with regard to espaliers or dwarf standards in kitchen gardens, the

small amount required by them, through severe limitation of the shoots, is easily supplied, by placing the trees on prepared platforms, which need not be more than about five feet square, and from one to two feet in depth of soil, on a bottom of broken stones or bricks rammed hard.

To prepare the soil for a regular orchard, thorough drainage is of the utmost importance, providing the soil is too retentive of moisture ; indeed, without this, disappointment will occur even on the very best of soils. The character of the subsoil, therefore, has much to do with success in this case. If such be retentive of moisture, which will in consequence accumulate, and keep the surface soil in a sour state, the trees will inevitably become covered with moss, and liable to canker and decay at the points. In cold clayey soils, if the amount of underdraining does not prove sufficient, much rain-water may be carried away by open gutters. A deep and sound loam, of a rather tenacious character, is the best for the ordinary orchard : such, if on a gravelly or stony subsoil, will produce fine healthy trees of immense size, if of considerable depth. Where, however, the subsoil is of very damp character, too great a depth is more injurious than otherwise ; and we have known orchards of this character a total failure through deep trenching and manuring. The deep trenching in this case only serves to decoy the roots into a most pernicious me-

dium, choked up with stagnant waters at certain periods : thus, at a great depth, the soil becomes what is technically termed "soured," for the solar heat can in this case exercise no ameliorating influence.

In all cases where ground is suspected of being too damp, the trees should be planted high ; indeed we always plant in such cases at or nearly on the ground level, securing a foot at least of soil beneath them, and acquiring the desired depth of soil above the ground level by throwing the trees on hillocks, or by forming continuous ridges with deep furrows between to carry off the surface waters.

Where the soil is too light, sandy, and of a loose character, a very different process becomes necessary. Here a greater depth may by all means be permitted ; indeed, if the soil is of a wholesome character, it scarcely matters how deep, providing it is not made artificially deeper than the top of the substratum : this is in all planting a wrong course of proceeding, for, when the roots reach the sides of such holes, they are forced into subsoil of a very doubtful character. Of course draining is out of the question here ; on the contrary, means must be taken to secure a permanency of moisture during extreme droughts. This may be accomplished by mixing marl or clay with the loose soil, and by placing such in masses beneath the soil, as an artificial substratum.

This course we have often recommended within the last twenty years; for one portion of the soil in our immediate neighbourhood is of this kind; indeed, being on the margins of a large moor, the soil is of a very poor and loose character. The small holders around this moor were in the habit of digging the ground close to the stems of their apple trees, in order to grow potatoes; what they considered making the most of their land. We have persuaded many to renounce this pernicious practice, and to keep their trees in rows, with three feet at least on each side totally uncropped, and of course undug. The benefits under such a change soon become manifest. The neighbourhood abounding in marl too, we have persuaded many, in making new plantations, to place lumps of marl beneath the trees, and also to blend the same material in a loose state all through the mass of soil. In addition to this, they collect all the lumps of turfy matter they can, weeds, &c., and mix them through the mass; and this course has always proved successful even in such a poor locality.

With regard to manures, we are rather averse to their introduction into the body of the soil, unless where the object is to obtain large trees in a short period, irrespective of their produce for the first few years. When such is the object, manuring becomes a justifiable course, and it may be introduced liberally. For ordinary gardens, however, or small orchard en-

closures, where either quick returns or a dwarfing system are desired, we would abstain from the use of manures as much as possible, unless the soil is a poor character. Some rotten manures should, however, be introduced at planting, in order to give the tree a bold start. We would always collect all the old weedy turf at hand, ditchings, &c. &c., and blend them with the soil: such will conduce more to fruitfulness and a permanency of character than exciting manures. We are not aware that any particular kind of manure is preferred by the apple: we would use them with regard to their effect on the temperature and moisture of the soil; thus, for cold and damp soils, we would use horse manure, and for dry and parching ones, that of the cow, which latter is always understood to retain moisture longer than that of the horse.

When old orchard trees are becoming exhausted, manures should by all means be liberally applied as top-dressings. In this case it is a good plan to lay bare the upper portion of the surface-roots by removing a few inches of the surface soil, and then to apply a circle of compost of good rotten manure, six inches in depth; or, what would be better, a compost composed of equal parts manure and sound fresh loam; this, with a liberal thinning of some of the most exhausted boughs, will throw fresh vigour into half-worn trees for many years.

The apple-tree succeeds best in situations which are neither high, nor remarkably low. In the former its blossoms are frequently injured by cold winds, and in the latter by spring frosts, particularly when the trees are planted in the lowest part of a confined valley. A south, or south-east, aspect is generally preferred, on account of the disturbance of the west, and the coldness of north winds: but orchards succeed well in all aspects; and where the violence of the west-wind is broken by an intervening rise of ground, a south-west aspect will be found equal to any. The trees attain their largest stature in a deep strong loam; but will grow well in all rich soils, which are neither excessively sandy, nor wet. An orchard generally is most productive of fruit when it is situated near the fold-yard, and is in consequence much trodden and manured by the cattle in the winter; and hence it will not unfrequently be found advantageous to plant on the site of any old orchard. The ground, however, in which old apple-trees have grown, is esteemed very unfavourable to young ones. When, from contiguity to the house, an orchard is planted in this kind of ground, the pear and apple should be made to succeed each other. The roots of the pear-tree descend to a greater depth in the ground than those of the apple-tree; and as the stocks of neither of these fruits will afford proper nutriment to the other, it may be questioned whether their action on the soil be perfectly similar. (*Knight on the Apple*, 67.)

The soil best suited to the apple, as already stated, is a strong loam, and it should be two feet deep, resting on a dry subsoil, and thoroughly drained, for no other cause is more productive of canker and mossiness than stagnant root-moisture. Before planting, the ground should be trenched all over full two feet deep, and drained throughout, the bottom of the main drains being not less than four feet below the surface.

When the soil on which the orchard is to be established is shallower than the depth here named as most desirable, no attempt should be made to deepen it below the level of the true surface soil. This is a fallacious mode of procedure, yet one that we have often seen practised, not only with the apple but other trees. In such cases, when holes are sunk into the subsoil, the tree is circumscribed as though in a flower-pot; and when the roots reach the level of the subsoil at the extremity of the holes, ill effects generally follow. Where the soil is too shallow, we would rather gain the requisite depth above the ordinary ground level; and if the soil is of a very adhesive character and damp, this will be found beneficial rather than otherwise: if too light and sandy, we would strongly advise putting soil of a very stiff character in the bottom of the hole, such as lumps of very adhesive loam, marl, or even pure clay. These substantial materials will contribute to the stability

and permanency of the trees during periods of draught, by furnishing moisture when the light surface soil is exhausted. In all cases, it is of much service to place stones, brickbats, chalk, or any imperishable materials on the subsoil, ramming it hard about six inches in thickness; this will prevent the descent of tap-roots, and conduce much to a prolific habit.

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### STANDARD OR ORCHARD CULTURE.

*Distance.*—The young trees having been trained in the nursery with tolerable good heads, they should be planted with all their heads entire; if any are intended for the kitchen garden, plant them at least forty feet distance; and, for a full plantation, to form an orchard, allow never less than thirty feet distance every way.

It is impossible, however, to dictate any distance as universally applicable, for soil and situation ought to have a very controlling influence. Mr. Knight's rule is very judicious, where he observes that the distance between each row, as well as the space between each tree, must depend on the situation and soil. When the former is high and exposed, the trees should be closely planted to afford each other protection; and when the latter is poor and shallow, their growth will of course be diminished, and they will consequently require less room. But in low and shel-

tered situations, and deep rich soils, where the trees are little exposed to winds, and attain a large size, wider intervals must be allowed them. In the former instances, a distance of twelve yards between each row, and half as much between each tree, will be sufficient; in the latter, twenty-four yards between each row, and eight between each tree, will not be found too much, particularly if the ground be intended for tillage after the trees have grown to a considerable size. An opinion rather generally prevails at present in favour of planting single trees at twenty or twenty-five yards distance from each other on arable grounds, and specious reasons may be offered in defence of this practice. The roots, as well as the branches, are at perfect liberty to extend themselves in every direction; but the latter are every way exposed to the storms of autumn, and to the cold winds of the spring; and trees of more hardy kinds than the apple are well known to grow much better when planted near enough to afford each other protection, than when totally insulated. It might be supposed that trees growing in distant rows will not regularly occupy the whole surface of the ground with their roots, but these always extend far beyond the branches, and will meet across very wide intervals. Closely planted orchards, where the trees afford each other protection, will ever be found most productive in a climate which is as subject as ours to great and sudden changes of

temperature ; but, nevertheless, there are situations in which single trees, particularly such whose growth is tall and aspiring, will best pay the planter and the community. When the branches of a single tree are raised moderately high from the ground by the length of the stem, the whole of the herbage beneath it receives, during some part of the day, the full influence of the sun ; and it is in consequence as readily eaten by stock of every kind, as the produce of any other part of the field. There are instances in which five or six trees, regularly dispersed over an acre of pasture, have been highly beneficial ; and Mr. Knight never saw any instance in which such a number has been any way injurious. Six of such trees, where the ground is good, and the variety properly chosen, will annually afford a produce of more than a hundred gallons of cider, which will generally be found to exceed in value the rent of the ground which produced it. Where the mode of cultivation will admit, the rows should always extend from north to south, as in this direction each part of the tree will receive the most equal portions of light and heat. (*Knight on the Apple*, 74.)

At the time of planting, trim any broken roots, but leave all the others entire. And, as soon as planted, let every one be well staked, to support them firmly upright, and prevent their being disturbed in rooting by winds. Let them also, in future, advance with all

their branches at full length, and, for the general part, take their own natural growth, and they will soon form numerous natural spurs in every part for bearing.

In pruning the apple-tree, and all other standard trees, the points of the external branches should be everywhere rendered thin, and pervious to the light, so that the internal parts of the tree may not be wholly shaded by the external parts ; the light should penetrate deeply into the tree on every side, but not anywhere through it. When the pruner has judiciously executed his work, every part of the tree, internal as well as external, will be productive of fruit ; and the internal part, in unfavourable seasons, will rather receive protection than injury from the external ones. A tree, thus pruned, will not only produce much more fruit, but will also be able to support a much heavier load of it, without danger of being broken : for any given weight will depress the branch, not simply in proportion to its quantity, but in the compound proportion of its quantity, and of its horizontal distance from the point of suspension, by a mode of action similar to that of the weight on the beam of the steelyard : and hence 150 lbs. suspended at one foot distance from the trunk will distress the branch which supports it no more than 10 lbs. at 15 feet distance will do. Every tree, therefore, will support a larger weight of fruit, without danger of being broken, in proportion as the parts of such weight are made to approach nearer to its centre.

Each variety of the apple has its own peculiar form of growth ; and this it will ultimately assume, in a considerable degree, in defiance of the art of the pruner. Something may nevertheless be done to correct whatever is defective. When the growth of any variety is weak and reclining, the principal stem should be trained to a considerable height before it be allowed to produce branches ; and if any of these take horizontal or pendent direction, they should be regularly taken off. One principal leading stem should be encouraged almost to the summit of the tree, to prevent a sudden division into two large boughs, of nearly equal strength ; for the fork which these form is apt to divide and break when the branches are loaded with fruit. All efforts to give the heads of young trees a round and regularly spreading form, whilst in the nursery, will be found injurious to the future stages of their growth. Large branches should rarely or never be amputated. In the garden culture of the apple, where the trees are retained as dwarfs or espaliers, the more vigorously growing kinds are often rendered unproductive by the excessive, though necessary, use of the pruning-knife. Mr. Knight always succeeded in making trees of this kind fruitful by digging them up, and replacing them, with some fresh mould, in the same situation. The too great luxuriance of growth is checked, and a disposition to bear is in consequence brought on. (*Knight on the Apple*, 91.)

If the branches are judiciously reduced in number as the tree progresses, no severe pruning will be required. Care, of course, must be taken to remove any cross-growing, chafing branches ; and if this be done whilst they are growing, and the cut is made smoothly and close to the trunk, the wound will speedily heal over. All dead and broken branches should be removed as soon as noticed.

Some gardeners, however, prefer a more regular and systematic course of pruning, and they usually adopt the following as detailed by Mr. J. Clarke, gardener to the Earl of Lonsdale, at Whitehaven Castle, Cumberland. The season for pruning, with such, commences as soon as the fruit is taken off the trees, and may be continued to the middle of March ; during that time cut out all the ill-placed shoots, such as incline to grow towards the centre, or into each other, and leave untouched all those that stand in such a way that the tree will form a cup, or something like a well-blown tulip, all the branches standing perfectly clear of each other, so that they will bear as much fruit on the inside as on the outside, the sun and air getting to all parts of the tree alike. Keep them as low as possible ; this may be done by removing a limb when it is likely to get over tall, leaving a young shoot at a proper place to succeed it, and by taking out a fourth or a fifth of the old wood every year ; in this way your trees will always have the ap-

pearance of being under twenty year of age. Having finished winter pruning, the next thing to be done is the shortening of the last year's wood. This is an operation of great importance, so much depending upon the nature of the season, as to whether the eyes will form wood or fruit spurs; and even the most experienced will sometimes err. To give weakly growing tree, shorten to eight or nine inches, that is, leaving a little more than one half, or just as the eyes may be of strength. The middle growth, shorten to 12 or 14 inches, that is, leaving about two-thirds, or as the wood may have a healthy, strong, and well filled eye. The luxuriant is a kind of tree very difficult to manage in warm droppy seasons, but at all risks shorten to about 16 or 17 inches, that is, leaving about three-fourths.

The season to shorten last year's wood is in April, and sometimes as late as May. Never shorten until the tree begins to grow, that is when the sap has begun to fill up the buds at the top of the tree; this is known by the buds becoming crimson, or of a rose colour, and a little swelled, always choosing to cut above a bud on the outside, placing the back of the knife towards the centre of the tree, and cutting upwards in a slanting direction about half an inch above the eye. The difference of trees with respect to time of breaking their buds is a full fortnight, which gives plenty of time for one person to go through

a large orchard. It will frequently happen that instead of only the extreme bud breaking into wood, three, or sometimes four will break; in this case, at next winter's pruning shorten all such down to two eyes, unless there be a branch wanted to fill up a vacancy. Then choose one well placed, and shorten it at the same time as the extreme shoot, only a little shorter; my reason for this is, if this and the extreme shoot were stopped both of a length, the sap would flow more freely to the top of the tree, the buds would break there more regularly, and the second shoot would only break about two-thirds or three-fourths of its length, and leave a portion at the lower end naked and unfruitful.

Mr. Clarke's practice, as here detailed, seems more adapted to the kitchen garden than the common orchard, and even there some portions of the practice must be received with caution. We think that there is no necessity for hollowing the tree out in the centre, like, as he observes, "a well-formed tulip:" such must be productive of a loss of fruit. Some of the very late ripening dessert kinds might possibly be benefitted by it in point of flavour, such, for instance, as the Nonpareil class. In our experience, however, we have always found it best to have two chances of fruit; one from the interior short branches or spurs, and the other from the extremes of the principal shoots; which, if not too severely pruned, will gene-

rally bear on the two-years-old wood. Sometimes the frost will destroy all the exposed blossom, and in such cases a tolerable crop will not unfrequently be preserved in the interior of the tree ; which, although not quite equal to the fruit from the extremities of the branches, is yet of great service, especially in bad apple years.

We would also urge that by far the best mode of checking over-luxuriant trees, is to cut away a portion of the extremities of the roots ; if the tree is young, it may be taken up and replanted as directed by Mr. Knight.

As to hand-pruning in the young wood, it should ever be borne in mind, that such is of no benefit to the tree, but must rather be regarded in the light of necessity, and for the most part only applicable to the dwarf standards or espaliers of the kitchen garden. Thinning, therefore, is judicious, and timely thinning is the only operation of prime importance as to orchard trees.

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#### DWARF STANDARDS.

DWARF standards are the best suited for cultivation in the kitchen-garden, as they do not overshadow such large surfaces of ground as is done by the full standards. The following rules for pruning them

have been furnished by Mr. Bliss and Mr. Green-shields. The following are Mr. Bliss's directions:—

Suppose your maiden tree has only one or two shoots, it is then necessary to cut them down to four or five buds, to get a sufficiency of wood to form the bottom of the tree. The following season leave about five of the most regular shoots, which will be quite sufficient, or even four, for they are none the better for being crowded with limbs from the stem. Do not leave more than six shoots at the outside, but what you take out, take out clean. The tree having stood two years without being headed down, it will throw out some young side shoots towards the top of the original shoots; these should be cut off within two buds of the bottom, allowing the original shoots to grow straight up, till they get to the height you wish them, say five or six feet or higher; then cut their tops off and keep all the young shoots spurred in every year to about two buds, nearly the same as you would a red currant tree; by this means it will throw all those spurs into bloom buds. And by pruning away all that superfluous wood, the fruit receives the whole strength and nourishment of the tree; and besides, by this method you not only throw your trees into bearing and produce more fruit, but they have the advantage of the sun. When the trees begin to get old, you may occasionally leave a clean young shoot, and the following year remove an old one, and

by so doing you will keep your trees in a young, healthy, bearing state. Dwarf apples on the small paradise stock may, if required, be kept in a much less space than those described above; and by this way of pruning, the trees may be, with proper management, kept perfectly free from the canker.

Mr. Bliss's directions for the formation of the tree are very proper, but we do think that in order to produce the neat, compact, and symmetrical espalier of the kitchen garden, shortening of the young growth must be had recourse to annually, from the period of planting. We are perfectly aware that the trees will bear earlier and better without such shortening; but the tree will speedily grow lean and naked in the lower extremities. If, in consequence of close pruning, the roots becomes too powerful for the top, which is generally the case, root pruning judiciously managed is a certain cure. Mr. B. is rather too sanguine, we doubt, as to his mode of pruning being a preventive of canker. This disease is found on all soils, and under all systems of pruning. When a given kind, however valuable, shews a constant disposition to canker, that kind should be given up, and one better adapted to the soil substituted.

Mr. Greenshields, F.H.S., judiciously observes, and the direction is applicable to all pruning, that in thinning, cut the old wood off close to the stem or branch it was attached to: this prevents young wood

springing afterwards. When the trees are thinned of the old shoots, as above stated, the young side shoots are to be spurred in, that is, so shortened, that only two or three buds are left on them, and the leading top shoots shortened to half their length.

The following and every succeeding year, the trees to be treated in the same manner as respects the young wood, till they acquire the desired height, when the leading shoots are to be shortened, as the side shoots or spurs had been previously. When the leading shoots show an inclination to grow very luxuriantly, which is apt to be the case under this treatment, they should be prevented doing so, by cutting off part of the old wood, along with the young shoot immediately above a flower bud. This will prevent the shoot so cut from increasing in length. The spurs must be treated in a similar manner, by cutting off a small portion of the old wood along with the young, where they are getting too long.

Young trees are to be treated in the following manner. If there are more than three shoots on the plant, reduce them to that number, and shorten each to three, four, or six eyes, according to their strength. The following season reduce the number of leading shoots to six, and shorten them to three-fourths of their length, and spur in the remaining shoots. The tree should be managed in every respect in this manner until it has attained the required size, which of

course depends on the convenience and fancy of the owner, or conductor, of the garden.

Let the trees take their natural form of growth as far as the system described will permit, for Mr. Greenshields considers it of little consequence what shape is given to the tree, provided every branch is made, as it were, a long spur, with bearing-buds from the base to the extremity.

Two or three years' trial of this method only, might possibly deter many from a continuance of it, in consequence of the quantity of young wood which will be produced yearly at first, and from the apparent difficulty of getting rid of the superfluity. But the inconvenience will be ultimately surmounted, if the foregoing instructions are attended to; and the consequence will be, the possession of both healthy and fruitful trees. To attempt to bring very old trees into this method of management, would be attended with difficulty, unless they were cut down short, and allowed to make new heads. (*Trans. Hort. Soc.* vii. 291.)

The advice here given by Mr. Greenshields is excellent, as we have proved for many years; although we had never read Mr. G.'s paper. Under a very similar system, we have the best stock of rough espaliers at the present time that we have ever seen in a kitchen garden.

The first and main point with dwarf espaliers, is to

secure the proper staple of soil—a good and tenacious loam. The second point, and one but little inferior to the first in point of importance, is to secure the bottom against the descent of the roots into the subsoil. When the subsoil is a clean gravel, surmounted by a sound loam, it perhaps would not be prejudicial to allow them to do so ; but in cold clays, or wet subsoils of a heterogeneous character, bad effects will assuredly follow, and the trees will, moreover, have a constant tendency to form late, and, of course, immature growths, such being well-known precursors of disease in most fruit-trees.

The dwarf espalier requires a very moderate quantity of good soil, providing the staple is a sound and rather tenacious loam ; and as such loams are not readily obtainable by all parties, we would here point rather to the minimum amount under which a fair share of success may be obtained ; merely premising that the more liberal the supply of such loam, the more permanent will be the success of the tree. When the natural soil is pretty sound, or has been long under cultivation, and produces good vegetables, little indeed of pasture loam will be requisite for the dwarf standard. The best criterion of a favourable apple soil, is the production of very superior brocoli or celery : soil which grows these two crops in high perfection will generally answer well for the apple. One thing should have particular attention, and that is,

that a young tree should never be planted in soil from which an old one has been removed, however good it may be. The best plan is to exchange it for some of the ordinary soil in the adjacent quarter, which has been occupied in vegetable culture : such will be fresh to the apple in comparison with the rejected soil. From four to six barrowsful of an adhesive loam will be sufficient in a case of the kind, blending it well with the common soil. Stagnant water must, of course, be removed : without this, all other preparations will be worthless.

We invariably place stones, bricks, or cinders beneath the soil, rammed down firmly at about twenty inches below the ordinary ground level : this we hold indispensable to a dwarfing system. Whenever, as before observed, we find any of them growing too luxuriant, we throw out a circular trench, and cut a few of the extreme points of the roots away, filling in the excavation with fresh soil from the vegetable ground.

Root-cutting, however, requires some caution, and should be done with moderation. If any doubts exist as to the amount to be cut away, it is well to cut one-half the circle only ; cutting the other half in the next year, if necessary. The best time to perform this operation is, we think, the end of October : the trees will begin to make new fibres before the period of germination, which will save them from pernicious extremes.

In pruning, we make a point of shortening all the

young wood a little, if it be only a few inches. This induces the development of spurs or side shoots, which in their turn, from their base, give rise to spurs. All side shoots not wanted are shortened back, or entirely removed, in the winter's pruning; and when the principal leaders reach beyond the desired height, which with us is 12 feet, they are cut back into the two-years' wood, in the way described by Mr. Greenshields.

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