

in the case of Pear trees, may say, that if out of this multitude of intermediate forms, we are incapable of recognising distinct specific types, that is because these first species have been crossed and recrossed thousands of times with one another, that their fertile hybrids have enormously increased the number of crosses, and to that may be attributed these innumerable forms which drive classifiers wild. Far be it from me to deny such crosses or their influence; for nothing strikes me as more probable. Indeed it is scarcely possible to doubt it, when we see what takes place in an orchard of Pear trees in full blossom, where the bees, attracted from a league all round, are feeding from morning till night, and brushing about the pollen of all sorts and varieties, and shedding it on stigmas which were never intended to receive it. And these fertilisations, unnatural as they are thought to be, invariably take; all the flowers which receive pollen of any Pear tree whatever, setting their fruit, which always contains fertile seeds. I ask, then, if this constant fertility, after every conceivable cross, proves the diversity of species from their primitive types? To my mind it is precisely the contrary.

Does the graft, as some people maintain, alter the character of the variety? For my part I think not; at least I have never observed anything to make me think so. Duhamel, for example, remarked a century ago, that the Pear Imperiale with Oak leaves (another curious variation of foliage similar to what I mentioned before) never had but three cells in its ovary instead of five. Now it can be proved at the present day that all the fruit of this race or this variety have but three cells; although ever since the time of Duhamel it has never been propagated in any other way than by grafting. Many other facts of the same kind might be brought forward in support of the want of power in the graft to alter the nature of the variety, as for example the property, whatever it may be, which gives flavour to fruit, varying as it does so remarkably in different kinds.

The notion that fruit trees degenerate because they are propagated by grafting is an error which must be exposed. There is no single fact to prove it. Those which have been cited depend upon totally different causes, first and foremost among which are climate, unsuitable soil, and very often bad cultivation, or a neglect of pruning, so common now-a-days. Our ancient Pears, which a century or two ago were so justly esteemed, are now exactly the same as they ever were; they ripen at the same time and keep good just as long. If they are neglected it is no proof that they degenerate. It is only that nurserymen are interested in bringing forward new varieties. The pretended degeneracy of ancient races is in reality nothing more than one of these clever devices of the present day. On the other hand, can it be true, as Van Mons and many pomologists believe, that the pips of a good fruit produce wild austere fruit, and thence return to what they suppose to be the specific type? I do not hesitate to declare the contrary, and I defy any one to bring forward an example of a good fruit, whose flowers were fertilised by its own pollen, or by that of any of its own race, whose seed has produced wild fruit. If a good variety is fertilised by a wild or austere sort, it is only natural that the trees raised from such seed should produce new varieties, some if not all of which will prove inferior in quality; it may even happen that in the number there will be some with fruit as bad as that of the wilding which furnished the pollen; but this degeneracy, if you like to call it so, is nothing but the consequence of an unskilful cross. It may be considered certain, that all superior varieties of the Pear tree, and I may say of all fruit trees, if they are fertilised by themselves, produce good fruit; they may vary, and will probably do so, sometimes in one peculiarity and sometimes another, according to the variety, but none will become wild, any more than our seedling Cantaloupe Melons return to the form and flavour of the little wild Melons of India, or our Cabbages and Cauliflowers return to some one of the wild races or varieties that grow on the sea-shore. Whatever the advocates of immutability may say, the species of plants are really subject to great variation, and there is much truth in the theory which refers to the same specific type races and varieties, which, though very different in appearance, have the same morphological organisation, and which, like the members of the same family, are capable of crossing one with the other. Taking the whole series of possible generations, I am quite aware that there always will be doubtful cases, notwithstanding the proof of fertile crossing; but that is no reason for separating, as so many distinct primordial entities, what observation and analogy show us can proceed from a single original specific type. Take any one of our races of Pear trees, and transport it to all the regions of the globe; wherever it can exist, it will struggle to adapt itself to the situation, and you will find after a few generations it will have given birth to new and numberless varieties. This fact, which takes place under our own eyes, in the case of every cultivated plant that is much distributed over the world, gives the key to those polymorphous species which perplex botanical classifiers, and which have only become what they are, by Nature herself having spread them over an immense expanse of country."

It appears to us, says the Editor of *Les Mondes*, from which these remarks are derived, that the views of M. Decaisne are self evident; that the

immutability of species is not at all at variance with the multiplicity of varieties, or of what in other cases are called races. Two Pear trees and two Pears do not differ more from one another, than two dogs or two men.

ANCIENT FRUIT LORE.—No. V.

(Continued from p. 749.)

How to order Quinces.

QUINCES are a fruit, which, if there be any store of them, be not to be layed in that room, where any other fruit is, by reason of their strong sent. For, being layed in any close room, neer other fruit, it will cause the fruit to smell of them. The riper also that they be, the stronger their sent is: especially if they be in a close room: and they will not onely be hurtful to the fruit neere them, but noysome also to them that come into the room where they be. Therefore they are to be layed, in such a room seuerall (vpon fine straw) where they shall haue ayre enough. Also, being to be carryed any far way, they must be packt in straw: and so likewise Medlers. Their time of gathering also is all one with Medlers.

As the order of packing, & vsage of Peares, Medlers, & Quinces is shewed: so likewise shall be declared the manner of packing pippins, and al other sorts of apples, beginning with the summer fruit.

How to packe or maunde apples.

All kinde of summer or winter apples must be packt, layed, and carryed in wheate or rather rye straw. And although, for the most part, they are layed in some room, neere where they growe, vntill they be all gathered & ready to be carryed away: yet the better way for those that are to conueigh their fruit, from whence they are gathered, is to haue maunds, straw, & all ready, lynng them with straw, that whē your baskets or prickels be ful, you may presētly poure them into the maunds. For, being first layed in one place, and then taken vp again, to be put into maunds or other casks, doth hurt the fruit with too much tossing: but being presently put into the maunds, well packt, and gently handled, will cause summer fruit to keep plumpe, and keep their colour the better.

If you haue not so many of one kind of fruit, or that there be a remnant (as of some sorts, there be but a few, in an orchard) so that the maund cannot be filled: first poure in one sort, and when they be all in, lay some fine sweet straw vpon them, then poure in the other kinde of fruit, and so fill your maunde: and being filled and well packt, the two sorts will not come together in the stirring or carriage of them.

How to empty maunds, and how to lay the fruit.

At the emptying of them, see that the fruit be not rashly poured out, least that the seuerall sorts com together. And although packt and carryed in straw, yet at the emptying let the straw be pickt out cleane: and, as neere as you can, let every sort be layed seuerall. Now, if there be so many sorts, that, for want of room, some of them must be mixed, be sure that you mingle none, but those that will last alike: But if they be neere in taste and colour, there needes no separation. But although some sortes doe last alike, and be neere of one taste, yet if they be not of a colour, they are not to be layed together. For, it is an vnseemly sight to see one heape of apples of seuerall colours. But if already they be mingled, let them be taken vp with a Trey: and looke how many sorts there be in the heape, you must haue by you so many baskets, and so part every sort, seuerall: when they be parted, the ripest to be first spent, & the rest by degrees in their time.

And although they that be summer fruit, be called rathe fruit, yet are they not ripe all at one time. Wherefore, no sorts must be layed together, but those that ripen alike: otherwise, being laid together in a heape, the one will be rotten before the other be ripe, and cause the hardest amongst them to rot, before they be kindly ripe.

Also Pippins and other winter fruit, are to be carryed and packt in maunds, lyned with wheate or rye straw: and at the emptying of them, the straw to be cleane pickt out. And when your pippins, or other winter fruit, come to be layed in the house or place appointed, whether they should be conueighed or carryed, vnlace your maunds, take off the straw, at the top: when you haue done, whelme downe the maunds, emptying them gently, into small baskets, picking out the straw as cleane as you can. Haue a great care also in hooting or pouring the out. For, in pouring of them hard, the one will hurt the other: especially the stalks of the one, will run into the other. And being once stalk-prickt, they will not last long, although not presently seene.

Also, being battered or bruised, they cannot keep. Onely the Pippin hath a qualitie by itselfe. For, if it be battered, the skinne being not broken, it will dry vp againe: so that it be when it is greene, and being layed amongst the rest: for then they will soake away the bruise, and make it plumpe againe, it it be not too much bruised.

STRAWBERRIES AND SPORTS.

1. *Nimrod*.—I sent the true sort to Mr. Nicholson at the same time that I sent it to Mr. Rivers. It came to me from a friend at Blandford, who also grew noble Eleanor. My ground was not strong enough for it; I therefore discarded it. Its colour here was orange scarlet. It is not capable of being grown to the size of Eleanor. It is sweet, and of the Queen's flavour. Eleanor is more or less acid. No doubt Mr. Doubleday's six runners sprang from the ones that I sent to Mr. Nicholson; still I was surprised to see Mr. Nicholson's description of Nimrod, viz., "very like Eleanor, if not the same." Messrs. May, Ingram, and Baker of Blandford grew both these sorts. The last gentleman especially recommended Nimrod to me.

2. *The False Sir Harry*.—This was, I believe (and others think so too) Hooper's Seedling. I have had a letter full of groans on the subject, cheered by thanks for my last and other articles. The complainant says the true Sir Harry is slow to grow and slower to run. This I found to be the case. Ninety-five out of 100, I believe, have never had the true Nimrod or true Sir Harry, or they have had them mixed.

3. *La Constante*.—The complaints against the growth and slow running of this good Strawberry are such as I supposed would be the case. Mr. Turner wrote this week for runners, complaining of its slow growth and slow and sparse running. I have not the sign of a runner yet, though I manured and watered close after cropping. If such is the case in the fine ground of Slough and Salt Hill, what can we expect in our inferior lands? I shall make all the plantations of Frogmore Pine that I can (one is already made), and discard this sort. Still, where it will succeed it should be grown. The Frogmore Pines are worthy of the Royal gardens in which they were raised.

4. *Model and Bijou*.—These are two seedlings of M. de Jonghe's, which he rightly describes as slow growers and slow runners. I planted four this spring in front of my south wall. The sharp hoar frosts soon killed them. Bijou is alive and very small, with two diminutive runners. Had not M. de Jonghe asked in a late communication, "what will Mr. Radclyffe say?" I should not have adverted to them. I will, however, take every care of mother and daughters, which might do in the Blandford land, where they can grow good crops of Myatt's Quinquifolia, a curious, handsome, and good-flavoured Strawberry, suitable chiefly for pot culture.

SPORTS.—Roses, such as M. Campbell and White Bath, will sport. I have seen on M. Campbell a perfectly striped Rose and La Reine (its parent) at the same time. I have seen on the White Bath, white Roses, white and roseated, and also a bloom one half white and the other half rose; but I never saw a Strawberry sport. Still, the freaks of Nature are manifold, or we should not have the term *lusus naturæ*. I bought 12 Sir Harry's (not of Mr. Underhill) for 10s., and Sir Harry sported, or returned to the ancient type of Hooper's Seedling. Let us hope that the raisers of seedlings will, like the calico printers, find out a recipe for fixing. These mishaps put me in mind of the vicarage of Gussage, All Saints, Dorset, to which I was presented by Archdeacon Buckle. The first Sunday that I served the church, the clerk gave out the words of the Psalm—

"One neighbour now can scarce believe
What t'other neighbour says!"

W. F. Radclyffe, Rushton.

Home Correspondence.

Appearance of a Plant in a Singular Place.—In a hard gravel walk close to my house, my gardener and myself distinctly remember, about five or six years ago, two little rosettes of purplish leaves pushing their way up. We neither of us could imagine what they were; they were soon trampled down and apparently killed. But this spring they have re-appeared in exactly the same spot, and were protected. They have now flowered and prove to be *Epipactis latifolia*. This Orchid, though by no means a rare plant, I have never seen in this neighbourhood, and have heard only once of its having been found in a wood about a mile and a half distant. The gravel walk was made 20 years ago; and before that time the spot existed as a little-used carriage drive; and about 25 or 26 years ago it was a pasture field. How could this *Epipactis*, which is so rare a plant here, have come to this spot? The root stock seems to have lain dormant under the gravel for the last five or six years. Could a seed have been blown here from a distance and have germinated during some season when the walk was neglected? The tall stems growing up in the midst of the bare gravel surface present an odd appearance, and the case seems to me a singular one. *Charles Darwin, Down, Bromley, Kent.*

Spurious Strawberries.—I can fully confirm Mr. Doubleday's statement in reference to this subject in last week's Number; as regards Nimrod, I am of opinion that no other kind has ever been distributed by Messrs. Lucombe, Pince, & Co. under that name, except Myatt's Eleanor, which I got twice from that firm through Messrs. Henderson. What Mr. Doubleday had from the late Mr. Nicholson as the true Nimrod, is, I believe, the same sort which Mr. Radclyffe gave me,