HORTICULTURE AND AGRICULTURE.

ON IMPROVING VARIETIES OF FRUITS.

Mr. Poiteau, a writer in the Annals of the Paris Horticultural Society observes in substance, that it is but rarely that improved varieties of our native fruits originate with nurserymen; they are generally the productions of chance, found in the woods or hedges, from distant corners in the provinces, where the finer sorts are hardly known, and where the sorts they have are mismanaged or negleted. That "like begets or produces like" has long been considered as a law of nature among animals and some vegetables; but this law is not always uniform, especially among the domesticated animals or highly cultivated plants. Yet, on this principle, our nursery-men have acted in their endeavours to obtain better kinds of fruit, by sowing seed of the best, in the hope that they would raise something still better. It is well known that in this process they have failed. The celebrated Duhamel and his cotempories failed in the same way. From these and other instances, the author concludes that practitioners are wrong in their expectations of obtaining at once, what can be only the result of time. He seems to infer that seedlings, apples or pears, for example, require some years, and some cultivation, while they are passing from one stage of their infancy to another, before they can show their inherent qualities.

After noticing the fact proved by Mr. Knight, P. H. S. that a crab, fecundated by the pollen of a good fruit produces better kinds from seeds than can be had from seeds of improved fruit, he proceeds to prescribe the method pursued by the Flemish orchardists, to obtain new sorts, and which is given on the authority of M. Van Mons. The Belgians, he says, do not prefer the seeds of ameliorated fruit. When the seedlings appear, they do not, as others do, choose only such as are free from spines, having large leaves, and remarkable for their thickness and beauty of their wood; but on the contrary, such as are most spinous, provided the spines are long, and well furnished with buds or eyes, placed near together. This last circumstance they consider as an indication that they will soon shew fruit. Individuals having such properties are grafted, apples on paradise, and pears, on quince, stocks, to hasten fruitification. The first fruits of these are generally bad; but whatever they are, the se[illegible]d and sowed. The sec[illegible] begin[illegible] and

I should not take away the calf. But supposing no difficulty of that kind, the calf should be taken from the cow the first day, or twelve hours after it is calved, then fed from a bucket, or small tub with two quarts of milk from the cow in the morning and evening, the finger held in the milk will very soon induce the calf to suck, and in a very short time he will drink the milk freely and readily. I have had a piece of leather, (upper leather) sewed together of the size and in the form of a cow's teat, a small opening at the top, the bottom so cut as when nailed to the bottom of a bucket or tub with three pump nails, the milk will pass under easily and flow to the orifice of the teat, the calf will soon press for it with as much earnestness as for that of his dam, and shortly he will be so impatient for his breakfast and supper, that the process of sucking will be too tedious, and he will drink freely—it will not be necessary to increase the quantity of milk beyond too quarts night and morning but as he advances in size, add a little water, a pint at first and increase it, of the same warmth as the milk, to which a gill of Indian meal which may be increased to a pint, although I prefer of using double the quantity of wheat bran, and think it far better for milch cows than Indian meal—offer him second crop hay, (if before the season for grass) he will soon eat it, and may have skimmed milk soon substituted for new milk made warm with water, as milk direct from the cow.

When four or five weeks old he will eat grass and drink water, and be quite as large as if he had taken all the milk from the cow. The saving of milk will amply pay for the trouble, and the calf will not be stinted in size. I think we err in permitting calves to suck too much at first, even when intended for the butcher, they fat better by beginning moderately, and increasing gradually, as gorging is injurious, to the brute creation as well as to the human race.

Let a man purchase an animal as prepared and presented at our cattle shows for premium, stuffed and pampered for the occasion, then let him feed fairly as a good farmer ought to feed, and before the next cattle show, the animal would be like the lean kine of Pharaoh.

You see I differ from many good men as to the condition in which animals should be exibited at our cattle shows—I do not mean the cattle as fatted for Beef, although in that case I should lean to the farmer who presented well fatted beef at the least expense. I have thought it better to have rather small enclosures for calves, and change them every two or three weeks. If the feed should be short or the flies so troublesome as to prevent their eating in the day time, feed with a quart of wheat bran or ree pints per day—if no bran, a pint of Indian eal—some crust of bread occasionally of which y soon become fond. I am fully of opinion ves should be so fed as to keep them in a wing state, but never gorged or pampered, requently occurs that they require a very all piece of their tail cut off; the necesy is ascertained by pulling the tail, and if bones are loose and the skin spongy, cutting ecessary, they are what farmers term *tail-*. They should be provided with salt to lick n they please. I use the crude lump salt Liverpool; my cattle of every descripick it freely.

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NIPS.—Sow strong wood ashes over the ground the time they are springing up. This will cause ung plants to grow sooner out of the way of in-. produce a larger crop, and cause the crop to be t and palatable.

ADVANTAGES TO BE DERIVED FROM THE DESTRUCTION OF WEEDS.

Plants that grow naturally, among a crop that has been sown, may be regarded as *weeds*, or, in other words, as enemies to a crop that is cultivated. The destruction of weeds, therefore, must be considered as one of the most important branches of the agricultural art; for if it be neglected, or even if slovenly performed, one third, or one half of a fair crop, may only be obtained, even from the very best soils. Besides, it merits consideration that if weeds are suffered to exist, the full advantage of manuring land, and many other improvements. can only be but partially reaped. Nor is this all, the mixture of weeds in the soil, prevents the crop from receiving the beneficial influence of the air;—augments the risks at harvest, (for a crop that is clean, may be ready for the stack-yard in much less time than is required to harvest it, when encumbered with weeds) and the seeds of these intruders, deteriorate the quality of the grain. Notwithstanding all the injuries thence sustained, how many are there, who hardly ever attempt to remove weeds in an effectual manner? This negligence is the more to be blamed, because, were farmers at the trouble of collecting all sorts of weeds, before they have formed their seeds and of mixing them with rich earth, they would soon be reduced into a soft pulpy mass, and in this way a pernicious nuisance may be converted into a valuable manure.

Various experiments have been tried, to ascertain *the positive advantage* to be derived from carefully weeding one part of a field, and leaving another undone, among these, the following, made with peculiar accuracy, may be safely relied on.

1. *Wheat.* Seven acres of light gravelly land were fallowed, and sown broad-cast; one acre was measured off, and not a weed was pulled out of it; the other six were carefully weeded. The unweeded acre produced eighteen bushels: the six weeded acres, one hundred and thirty-five bushels, or twenty-two and half per acre, which is four and half bushels, or one quarter more produce in favour of weeding.

2. *Barley.* A six acre field was sown with barley, in fine tilth, and well manured. The weeding owing to a great abundance of charlock, cost 12s. per acre The produce of an unweeded acre was only 13 bushels; of the weeded, 28. Difference in favour of weeding 15 bushels per acre, besides the land being so much cleaner for succeeding crops.

3. *Oats.* Six acres sown with oats; one acre ploughed but once, and manured, produced only 17 bushals. Another six acres ploughed three times, manured *and weeded*, produced 37 bushels per acre. This experiment proves, that oats require good management, and will pay for it as well as other crops. Ten bushels of the increased produce may be fairly attributed to the weeding; and the other ten to the manure.

The importance of weeding, both to the individual and the public is such, that it ought to be enforced by law. At any rate, a regulation of police, for fining those who harbour weeds, the seeds of which may be blown into their neighbour's ground, can have no injustice in principle. In England, the petty constable might be required, by precept from the high constable, to bring in presentments to the Quarter Sessions, containing a list of all persons who suffered weeds to run to seed in their hedges or lands, such presentments to be particularly specified in court. Those referring to the coltsfoot, to be given in at the lady-day sessions and those referring to thistles, ragweed, &c. to be given in at the midsummer sessions. An order of court might then be made, for the immediate removal of such nuisances. and if not complied with, the offender should be fined a sum not exceeding five pounds, one half to the informer and the other half to the relief of the poor.