Horticultural.

HORTICULTURAL ITEMS.

Early Pears.—The Doyenne d'Ete pear ripens at Norfolk, Va., in the latter part of June, or about the time or soon after our northern strawberries. A few thousand bushels would be acceptable to the people of the North about that time.

Greenhouses.—The Rural New-Yorker objects to connecting greenhouses with dwellings, on account of safety from fire, the unpleasant odors of fumigation with sulphur, tobacco, &c., and the dust and annoyance of workmen.

Strawberries.—At the discussions of the Illinois Horticultural Society, two cultivators of the strawberry pronounced the Wilson and Green Prolific as the two best and most productive sorts. Others objected to the Green Prolific as being too soft. It was stated that the Colfax is so rampant a grower that it kills all the weeds and takes care of itself.

Mulching Pear Trees.—A writer in the Tribune mulches his pear orchard over the whole surface with salt hay, in June, and rakes it up in November. This gives fine crops and protects the fallen fruit.

Canker Worm.—A correspondent of the Fruit Recorder gives additional evidence of the value of printer's ink to keep the canker worm from crawling up the tree. It is put on belts of sheathing paper. But the best remedy of all is the square box, described in the Illustrated Annual Register for 1872.

Dwarf Pears sometimes succeed finely at the west. A correspondent of the Agriculturist describes an orchard of 300 trees, 10 years old, which bears annually "splendid" crops, in Lincoln County, Ky.

Roses.—The Editor of the Fruit Recorder says he has grown the Washington Noisette and the Caroline Marniesse in exposed places without any injury from winters. Doubtless the exposed places favored the early ripening of the wood, and thus rendered them hardier.

Large Pears.—The Horticulturist says that one bushel of pears raised at Norfolk, Va., sold in New York for 12 dollars. They were so large that 48 specimens made the bushel—25 cents each.

THE SAMBUCUS EBULUS AND ITS USES.

Among the homely shrubs usually considered a weedy nuisance by farmers, is the "Sambucus ebulus," or elder, indigenous throughout the Eastern and Middle States; it grows mostly along fences and roadsides, but the elder, like many other despised and discarded things, can be made really useful to housekeepers.

The berries of the elder, which ripen the latter part of August and 1st of September, lasting till the heaviest frosts, are very nice when dried, answering the same purpose for cake and mince pies as Zante currants; they have the merits of costing nothing but the slight labor of drying, which can be done by hanging the stems of the berry clusters on lines in a dry warm room, or laying the berries on plates in the sun, or near a hot stove. Elderberries also make a nicer jelly, requiring only a quarter of a pound of sugar to a pound of juice, with a little lemon juice added, and the steeped lemon peel for flavoring.

A very good wine is also made from elderberries, useful in sickness, and palatable pies can be made from those berries, either in a dried or fresh state, with a couple of tablespoonfuls of boiled cider, and the same amount of molasses or sugar, according to taste, and a little flour to each pie; one tablespoonful of vinegar will do, if cider is not to be had.

The blossoms of the elder in infusion, are useful as a medicine for constipation of the bowels in young children, and the bark steeped in cider is said to be the only discovered remedy for that fatal malady known as Bright's disease of the kidneys.—Com. in *Country Gent.*

An English farmer, who has kept sheep for forty years, says he has found rock salt a valuable antidote for liver rot, and that these animals cannot be too liberally supplied with this saving substance. He further declares that in cases of congestion of the liver or rot he has found two tablespoonfuls of turpentine shaken up in half a pint of water and given to the sufferer a frequent cure, unless the disease has made very great progress.

Garden, Orchard & Forest.

INJUDICIOUS TREATMENT OF TREES.

"It is a matter of universal regret that the magnificent chestnut trees in the Tuilleries gardens are dying out, not, says a French paper, owing to injuries received during the siege, though a few small ones have had their bark torn off by the horses kept there at that time, but on account of the mistaken treatment they have received from the engineers in whose charge the trees of the French metropolis are placed. They are accused of two great errors in forest lore; one is the neglect of lightening the earth sufficiently above the superficial roots, by means of which a tree lives and breathes as much as by its branches. The other consists in the violent remedial efforts employed to restore the vigor of unhealthy trees. Trenches are made round them and filled with fresh soil, but the most important roots are cut in the process."

We are indebted for the above extract to an English paper, the *Pall Mall Gazette.* The writer very judiciously points out the mistakes in the treatment of the trees. Those roots that, coming near the surface, inhale from the atmosphere those elements which are necessary to the existence, the health, and even life of the tree, should not be too heavily covered.—And care should always be taken, not only in the removal of trees, but also in the culture of the soil, to preserve the roots from being injured.—As'st Ed.

PROPAGATING ROSES WITH CUTTINGS.

Roses are very easily grown from cuttings. The shoot should not be too young, nor yet so old as to be woody. Peter Henderson says:—"If a cutting will break readily it is in the best condition to grow; but if it bends it will not root as quickly, if at all." It should be cut off just below a joint, trimming off the leaves at the bottom, and leaving not more than two buds with leaves at the top, and if these are large it is better to cut off one or two of them, for if there are too many leaves they will surely wilt.

Clear sand is the best to make all kinds of cuttings grow, but it must be thoroughly soaked with water all the time, for if allowed to dry, the cuttings will surely die. Bottom heat is also essential to the successful growth of all kinds of cuttings, and if a hot-bed or hot water tank is not to be had, we must improvise one with a pan of hot water, placing the pots into it and changing it two or three times each day. The great secret in growing cuttings is in the evenness of the temperature, which should not vary more than from 65 to 70 degrees; if allowed to vary from 50 to 80 degrees they will rarely live. So, if possible, cover the cuttings with a glass, and remove it when it is very warm. If a large pot is only half full of sand and kept in warm water, and covered with a piece of window glass, a very good tiny hot bed is procured.

In summer it is well to plant cuttings out of doors in sand, with a partial shade from the sun, and enclose them in glass-shades night and day. As soon as a few tiny leaves show that the rootlets are formed, the cuttings must be transplanted into the richest soil, for although sand is the best medium to force the roots, it will not nourish them sufficiently to form many leaves.—*Springfield Republican.*

MANURING ORCHARDS.

In efforts to keep orchards in bearing, mistakes are often made in the place for applying the manure. It should not be in contact with the trunk, unless for the purpose of a mulch, and to be removed early in spring. The terminal roots of an apple tree fifteen years old, in a good soil, are twelve to sixteen feet from the trunk, and still farther in older trees. These fine, hair-like roots take from the soil all, or nearly all, the nutriment for the fruit. Consequently, the manure should be applied where they are—for a tree fifteen years old, twelve to sixteen feet from the trunk; for one of twenty to twenty-five years' growth, eighteen to twenty-three feet; and for a very large, full grown tree, still farther. But in all cases we would commence the dressing as much as three to six feet from the trunk, thickening it outward, and then tapering outward so as to make the dressing very heavy about where we suppose the finest roots end, but much reduced both inside and outside of that ring.

If the object were to smother the tree in grass and weeds we would pile the manure against the trunk, for the rains would wash it outwards and would surely produce growths of some kind, but not of apples. Why do we see everywhere so many orchards with trees looking somewhat thrifty, bearing abundant leaves but no fruit? It is not because the soil is exhausted; the soil, in many cases, if plowed up and cultivated, would give forty bushels of corn, and then, if seeded down, two tons of hay to the acre. Extreme poverty of soil is not always the cause of failure. They fail to bear because the growth and former fruiting of the orchard have exhausted the peculiar substances required for the apple tree and its fruit. The tree gets enough of its peculiar food to keep it alive and thriving moderately, but nothing to spare for making fruit; and so the tree lives as long as it can, by appropriating all the food it can get to sustain its own life, but yields no more fruit till the lost ingredients are restored.

As to how these can best be returned to the soil, lack of space forbids now to enlarge; but we will say here that for large old trees, bearing less and less every year, the following compost could hardly fail to bear well:—

Two cart loads of fresh virgin soil, on which no fruit trees had ever grown; two bushels of lime, two of wood-ashes, and one of common salt for each tree; less of the same for smaller trees.

If apple tree wood is ever burned as fuel or otherwise, its ash may well be preserved and applied to the orchard, as it of course abounds in the minerals required. Instead of the fresh virgin soil above mentioned, peat, black vegetable mold of any kind, and decayed leaves, grass or weeds may be used. A mixture of all or any part of these, is good.

We think barn manure is not the right thing. If green it may prove injurious; if well rotted it is worth more for other purposes. Soap suds, refuse lime after plastering or white-washing, and the lime from old buildings torn down, are all good, especially the suds. Throw it up among the lower limbs and let it trickle down the trunk. The youngest trees may be treated in this way with advantage, whenever any roughness of the bark appears, provided the suds be not over strong. As it usually comes from the laundry it is safe.—*Observer.*

INSECTS ON PLANTS.

A lady of Illinois writes to the Germantown *Telegraph* that she is opposed to smoking plants to destroy insects, but tells how she does it by watering:—

"My plan is simple and costs nothing but time and water, yet it has saved us plants which might otherwise have perished. When you first notice insects on a plant, prepare a vessel of lukewarm water and give it a thorough sprinkling. If this does not remove them you may use your fingers or a straw and push them off into the water, which is sure destruction. In vain they try to reach the vessel's brim. The hapless insects never learned to swim. It is but seldom that more than one such bath is needed.

Plants want to be kept clean and free from dust to thrive, and as nearly all insects are opposed to cleanliness, they will not be very troublesome where proper attention is paid to the comfort of the plant. Of course where there are a great many plants in a small room, they are more liable to be troubled.

"I will mention two instances with their results. In one smoke was the agent, in the other pure water. A lady had a fine tree of carnation pink which became infested with insects. Believing as she did in the smoke theory, she subjected it to a thorough fumigation; expecting to find her efforts successful when the smoking process was over, she examined the pink. The insects were apparently killed—only apparently, as she afterwards found—and—her pink also. We had a large plant of the same variety, gave it frequent showerings, and never but once have seen these insects upon it when we treated it as I have described. The pests died, the pink lived, and I think that smoke, as a general thing, is death to the plant. Though many uphold the theory I have never seen the plant that had suffered a thorough fumigation, that looked well or was freed from insects. To be sure, my plan takes time and patience, but there is nothing that we can do which does not require both."

Nevertheless, smoking *is* a good thing. Good florists smoke their green-houses twice or three times a week, filling them with tobacco smoke and shutting them up all night, not only as a cure, but also as a preventive. Smoking stupefies the plant lice, and then they are easily washed off by sprinkling, and drowned in a pan of water if you wish.

The red spider is the worst enemy to contend with, for it is so small as to be scarcely seen with the naked eye, and its ravages can only be known by the brown, discolored and withering leaves. Frequent syringing over and under the foliage, and maintaining a moist atmosphere, will drive off, not destroy, this pest: it can't endure wet.

Perhaps the lady referred to above smoked her plants too much. The writer has done so with plants. I once had a pot of pinks badly infested with green flies: the pot, plant and all were soaked in a vessel of water until every insect was destroyed. With large plants this is not convenient. Have had small rose bushes and carnations infested the present season, which were smoked by turning a box over them and putting under it a pot containing tobacco and a few live coals. A few minutes done the work, and the plants were not destroyed.

BARBERRIES.

We are not specially called on to give "our opinion" of the Barberry, but we can furnish information that will be new to many. The Barberry is a native of the mountains of New Hampshire and other New England States, and is a shrubby plant. It is perfectly hardy and well adapted to our soil and climate; a good grower, is emphatically a hedge plant, and is furnished with an abundance of thorns. Unlike the Osage, it needs no trimming, sending up shoots from the main root, and close to it; on one we have just counted forty-seven sprouts where six years ago there were but three.

In a hedge it need not be planted nearer than three or four feet, as these shoots will soon make it impassable to all small animals, while the dense top will prove an effectual barrier to cattle and horses. The roots do not extend so far as many other hedge plants, and it can be propagated with ease and certainty by the seed and cuttings. We can attest with "Little Woman" the virtues of Barberry jelly or jam, and no New England housekeeper of the old school ever thought her stock of preserves complete without it. The bark is often used in coloring a fine shade of yellow. The shrub is ornamental—the first plants on our grounds that put on their dress of green is the Barberry, and it is the last to lay it off in compliance with stern winter's demands.—*Iowa Homestead.*

The Horse.

CORN INJURIOUS TO HORSES.

I am much interested in the welfare o dumb creatures, and especially of that noble animal, the horse, which suffers, in my opinion, more than all the rest.

I most earnestly believe, for years, we have been feeding our horses on unnatural food, which has developed pain, disease and suffering beyond all calculations. Furthermore, I have no doubt but this is the cause of the prevailing disease.

I may be too positive, but I have carefully watched the effects of corn upon the system of horses, until I am convinced that it is not only bad policy for owners in view of strength, health, and life of their horses, but that it is downright cruelty. I think the race is degenerating rapidly, and that we shall lose it entirely if we keep on many generations more.

Compare the number of foundered horses to-day with those of fifty years ago, when in the country no one but the doctor "kept his horse up." Take into consideration the countless cases of colds, fevers, and like diseases among horses, and the incalculable number of foundered, broken-down beasts, just when they ought to be the strongest, and most serviceable, and must we not conclude there is some wide-spread and prominent cause? It is not all from over-driving; for we have many cases where family horses, receiving, as their owners suppose, the kindest care, shortly turn out to be broken-down beasts, from some unknown and mysterious cause.

In regard to this disease: I believe corn, which has been fed for years past, has engendered heat and disease in the blood of horses, until they are keenly susceptible to the sudden changes of our climate, and that, and no other, is the cause of all this suffering and trouble. We have had a season of frequent and remarkable changes. The disease was in the blood, and ripe for developement; and we have reaped the reward for past ignorance.

That horses should eat no corn at all I do not believe. A change of feed is desirable. As the cold winter comes on, I begin to prepare my horses for that event by mixing enough corn to keep them warm. Doubtless our winters are colder than the natural climate for our race of horses; and a little corn is beneficial in assisting their natures to resist the cold.

If any one wishes to learn the most natural food for a horse, let him try the experiment by turning the horse out to grass until all grain is out of his system, and then give him free access to all kinds, and see which he will choose. Ever after, let him have that as a staple. It will prove to be oats.—M. C. in "*Our Dumb Animals.*"

MORTALITY AMONG JACKS.

There appears to be great mortality among the jack stock in Iowa, Illinois, Michigan, Tennessee and Kentucky, by the ravages of the epizootic influenza. In Kentucky the disease was terribly fatal, fully three-fourths of the jack stock in that State having died from its effects. Although the jennies suffered less than the jacks, the mortality among them was greater than among the horses.