

Garden, Orchard and Forest.

Successful Plum Culture.

It appears to be a settled fact that plum culture is at length to be a success in this country, in spite of the continued opposition of the curculio. This enemy does not seem likely to be vanquished, but we are learning how to circumvent his operations cheaply and effectually, as applied to commercial orchards, so that fine plums are no doubt shortly to become abundant in the markets; and the wholesale growers are quite willing that the little Turk should continue for all time to deter common people from growing this fruit, as the prices will thereby rule enough higher in the markets to more than compensate for the labor of fighting off the insects from large orchards.

Five or six years ago one or two enterprising fruit-growers near Chillicothe, O., commenced planting Damson plum trees on the clayey hill lands of Ross county, setting two or three thousand the first year, and more the second and third, till now it is reported there are not less than fifteen thousand of the trees in orchards in that vicinity. Part of these have borne fruit the past two years, and the owners are highly pleased with the growth of the trees and their product thus far. They are mostly of the variety known as the Shropshire Damson; but there are some of the large kind of plums also grown in the vicinity. There are some smaller orchards of Damsons and Prunes, and also pretty large ones of the Wild Goose plum in other places of Southern Ohio, promising to be quite successful. All of these are depending on the jarring method of protection against the curculio; but more about this further on.

At the late meeting of our State Horticultural Society we had an account of the successful experience of Messrs. C. & J. Brown, of Huron county, near Norwalk, O. They commenced four years ago last spring, planting at that time two thousand plum trees, on good, loamy soil, one-third of them Lombard, and the rest Orleans, Imperial Gage and other leading varieties. They have since planted three thousand more, making five thousand in all. The trees first planted grew finely, and the Lombards especially commenced to bear the third year, and last year they bore an immense crop, some of the trees as much as two bushels each of fine fruit—quite too much for their good—the whole 700 trees averaging fully a bushel each. The other varieties also bore some, so that the sales were very little short of a thousand bushels, and the prices from \$6 to \$7 per bushel at wholesale.

HOW THEY CATCH THE CURCULIOS.

These gentlemen have invented a curculio catcher which is considered superior to that of Dr. Hull or any other that has been described, though operating on the same plan as that of Dr. H. and others. It consists of a frame of muslin, about eight feet in diameter, in the form of a wide cone or hopper, the lowest point near the middle; and under this is a tin can or slide, into which the beetles roll after falling from the trees, and are kept till the orchard has been gone over, or it is convenient to empty them out for cremation. This apparatus is mounted on a pair of light wheels, with a cross-bar handle for pushing it along; and in the front part of the canvas is a slit, which opens by means of a lever connected with the handle, so as to let the body of the tree pass in, then it closes around the same while the tree is jarred.

The jarring is done with an implement in the form of a crutch, about eight feet long, the head covered with rubber to prevent bruising the bark, and care is taken not to strike, so as to do mischief in that way. It is carried on top of the "catcher," and operated by the same man that runs the machine; or, if preferred, another man or boy goes along and does the jarring.

The Messrs. Brown inform me that in going over their orchard of 2,000 trees the past season, they used three of the machines, one man to each, and they jarred the whole of the trees twice each day. One active man with the machine can jar 600 trees in four hours, or nearly at the rate of three a minute. Of course when the trees become large it will take a longer time, as several branches will have to be jarred separately. The jarring was commenced as soon as the young fruit was out of the calyx (in May), and was performed once a day at first; then twice a day as soon as the curculios appeared numerous, and continued for a couple of weeks, by which time they almost entirely ceased to be found—the whole number of jar-

rings being only thirty. It may be, however, that as the orchards grow older the jarring will need to be continued somewhat longer; and in localities where there are old peach or plum orchards in the vicinity, the insects may be more troublesome.

M. B. BATEHAM.

Hot-Beds.

Select a site having a good aspect, south or south and west, secured from the chilling blasts of the north and north-east. Dig a pit as you would for storing roots, of such dimensions as will give you what plants you need—say five and a-half feet in width and from eight to twelve in length. Such a size is most convenient, as it is easily covered and uncovered. Let the pit be one to one and a-half feet in depth. The hot-bed is often made on the surface without digging a pit, and, if the ground be not sufficiently dry, it is better to do so; but, if dry, there is, in the bed being sunk, the advantage of the surrounding soil assisting to preserve within the bed a more equal temperature and desirable moisture.

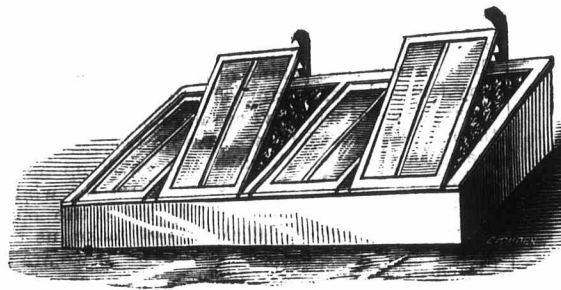
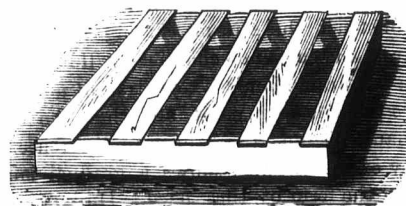


Figure 1.

Having prepared the site, the first requisite is a good supply of strong manure. The best is that from the horse stables. It readily acquires the required degree of heat for forcing vegetation. Lay down this manure in a heap, loosely, near the place marked out for the hot-bed, and after a few days it will be in a fit condition, having begun to ferment. Make a frame for the bed of inch or inch and a-half plank, a rough, strong box, open at top and bottom. Then commence making the hot-bed by first shaking up the manure with a fork thoroughly, and then putting it in successive layers on the whole surface of the bed. Lay layer upon layer to the height of two and a-half or three feet. Every layer is to be beaten down with the fork, and the outside trodden down compact. Having thus made the bed, cover with the glass frame and close it till the heat begins to rise. Then lay on about six inches of rich, clean garden mould. To have it fine, we put it through a wire sieve. The seed may be sown when the earth becomes warm. The condensing on the glass of the steam arising from the bed, will be a good indication that the proper time has arrived, and this is generally in twenty hours or so. Care must be taken to give the young plants plenty of air when they are up, but not to such a degree as to chill them.

Figure 2.
HOT-BED OR COLD FRAME.
See Fig. 1.

A cold frame differs from the hot-bed in not having the heat of a bed of manure for forcing the seeds into early vegetation. It is a frame with a sash placed on a bed of light, rich earth, in a part of the garden having a southern aspect, screened from the cutting air of the north and north-west. The cold air being excluded by the frame, and the

heat from the sun retained, the earth becomes warm, and an earlier vegetation is promoted. Not having the artificial heat of the hot-bed, it is not so early, nor should the seed be sown so early—not earlier than late in April. It will be necessary to water occasionally, and to admit air when the day is warm and bright.

Figure 2 represents a frame with laths nailed across it. By means of this simple device, beds may be easily covered with boughs of evergreen or other shade, to retain in the earth the moisture so necessary for vegetation. They may be kept covered till the young plants make their first appearance. After that light is unnecessary, but not before. Seeds are frequently sown in pots in the house, and do well with care. It is better to have a rim of moss in the box, or anything that will retain the moisture, and by this means keep the pots

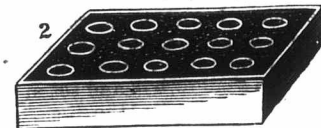
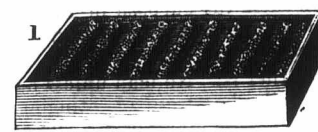


Figure 3.

and earth moist. Figure 3 represents such a box with pots. Figure 4 represents the seeds in a box. They are sown, as seen, in even rows. We have generally transplanted young seedlings from the hot-bed, as soon as they would bear removal, into a nursery bed, rich, mellow, and shaded from too much exposure; the plants thereby become hardier, and make more and better roots. The additional trouble and time are well paid by the better growth of the plants.



Before sowing seeds in the hot-bed, see that it is of the proper temperature. For this, we put a dibble to the bed, and when it is taken up, the heat in the bed is known from the heat of the dibble.

—S.

Peach Culture in Delaware.

Dr. Stewart's System of Peach Culture.

PLANTING.

He prefers fall planting, in rows twenty feet each way. Advises that the plow shall run twice in each furrow, and throws up subsoil from the crossing. Fills the hole with top soil slightly above the level of the field. Places the tree upon this mound, and piles the top soil a foot over the roots; during the winter it will settle to a level with the surface.

CUTTING BACK.

Cut off the tree to the height of a walking-cane, after it has put forth in the spring, but do not wound or depress its vitality while struggling for existence; allow it to get a start, and new roots to form, before subjecting it to the shock of decapitation. He applies a shovelful of strong ashes close around each tree every spring, until the third or fourth year; also, as much more to the hills of corn between the trees, which crop by this treatment improves annually, whereas, by the usual practice, the corn crop deteriorates, and the trees are robbed, but do not manifest it until the fruiting season demands a special effort.

He has observed that the ashes produce no sensible effect upon the trees until the second year; but its effect upon the corn is distinct in a few days.

Soda refuse is worthless as a substitute for this purpose, and unless the ashes yield 12 per cent. of salts of potash, more should be used. Some that he has tested only yielded 4-11ths of 1 per cent.

MULCH.

He mulches his trees with coarse manure close around the trunk in the spring; applying it in April after the buds swell and blossoms appear, but before the peach moth deposits its eggs. Immediately thereafter it should be "tied" to the tree by throwing a furrow towards the tree on two opposite sides, or by shovelling the surface soil so that the mulch embraces the stem a foot

above the level of the finding its way to the of the earth barred by in the manure, where birds, or the grubs hard bark, and suffer confidence in barkin peach tree is subject not "have worms."

During the first trained to assume the open head. He then of the trees, removing enabled to plow close of the cutting. The two years, turning the After two years the trimmed as before, a ing the furrows towa with the two previou ting back and plow years.

The trees ordinari being planted on a level with surface s of mulching with n around the trees, th beyond a few feet plowing also brings roots which extend always been observ circle around the tr of manuring in the whole ground, whic this State.

KEEPING

In the fall, remov around the trees, b cut a drain from t each tree into the basin is filled up in plied, which tends t as the season advan

The bud on the put forth to anti necessary, and doe of its native count is projected beyon wrappings of vege speedily to respon

The less the pro envelopes, the less climate irregulariti when the temperat safe; but, even th ing a higher tempe protection of the thickness, and this its efforts to matur In proportion as animal, has a high winter; but when it has less ability t germ in the bud, l quently destroyed.

A small defici will turn the sc dozen old persons few degrees reduc while fifty in the vigorous.

It has been der ing of an orchar without a single f offers every indu those who choose

This system is physiology of th any specific to ins success upon the elements and the and plow.—Rural

We regard th Sun, as both se say, however, th the importance o important, also, well-defined plan caricature natur

gent observer:—

"Farmers ho