removed, as otherwise much of the strength of the plant would be diverted for their sustenance, and the labors of cultivation would be largely increased, as from each of the eyes a vine would spring up, which, in order to secure a crop, would have to be destroyed. After removing the manure from the hill—which should be spread evenly over the ground—a light plow, called here a hop-plow, is run diagonally between the rows, two furrows together, the earth being thrown to the centre each way. This is done both ways of the yard, leaving the hills diamonding to a person standing square with the yard. The earth is then mostly removed from the hills with a hoe, or potato hook, after which an instrument called a hop-hook is used to remove the remainder and lift the roots into view. This implement can be made by any blacksmith, from three-eighths round iron, the hook being a half circle, about five inches across, with a shank about four inches long, to which any one can fit a wooden handle. The point should be flattened the opposite way from the line with the handle, filed smooth and roundish, and when held horizontally, with bow up, the point should be about an inch and a half lower than the junction of the bow and shank. The roots being all laid bare, the "runners" are cut close to the bed-roots with a sharp knife—a sickle-shaped knife, made for the purpose, is best. The crown or top of the tap-roots are then cut off, so as to leave but a few eyes from which to produce vines for the current year. The hill is now grubbed, and should be covered with earth to the depth of about two inches. As this work does not have to be done the first spring, we now naturally come to the work of

SETTING POLES.

In the spring, after the manure has been removed and the vines have grown three or four inches high, or as soon as the hills can be readily distinguished, and before anything has been done in the way of cultivation, the work of setting the poles commences. For this purpose a crowbar, with the lower end made large, and of about the same shape as the sharpened end of the poles, is prepared. It is plunged into the ground to the required depth and worked backward and forward until a hole is made sufficiently large to receive the pole. Two poles are set to each hill the first season, and three vines trained to each pole. It is customary here to set three poles the second year, and train but two vines to a pole. They are set one foot away from the centre of the hills, (diagonally with the yard), so as not to interfere with the bed-roots, placed from twelve to fourteen inches in the ground, and their tops inclined away from each other, so that their points will be about equi-distant from each other and from the tops of the poles in the adjoining hills.

TRAINING.

When the vines are about two feet high the work of training commences, and care should be taken not to let them get the start of
the trainers, as in that case the work is trebled; the vines twisting and roping around each other. When they do become entangled in this manner, before tying up it is necessary to disentangle them—a tedious and delicate job, as they must not be broken, and are exceedingly brittle while young.

Select the thriftiest vines (two or three to a pole, as before explained,) and wind them two or three times round the nearest pole. This prevents crossing the vines on the hill, which would endanger their chafing each other. Care should be taken not to let the vines cross each other on the pole, as the upper would strangle the lower one. They are now fastened with a piece of yarn raveled from an old woolen stocking, the ends of which should be twisted, not tied, together. In putting the yarn around, it must be put below the second joint.

When the vines on the poles are about four feet high, gather all the surplus vines, twist them into a bunch, and bury them at the foot of the pole. Cutting is practiced by some, and pulling off by others, but the first bleeds the vines, and the latter might seriously injure the root.

When the vines are once all tied up, the labor of training is mostly done, but the yard requires attention every day for three or four weeks, in order to observe and tie up any vine which might have escaped from its fastening, or which, for any reason, refused to cling to the pole. Should the heads of the vines get broken off by hail or otherwise, after the surplus vines have been destroyed, cut off one of the uppermost arms and train the other round the pole, and it will soon become the main vine.

CULTIVATION.

As soon as the surplus vines have been destroyed, the plow should be started, In new yards we advise throwing a light furrow towards the hill the first plowing. Use a very short whiffletree, made on purpose, to avoid injury to the vines. Plow four furrows to a row each way of the yard; then clean up around the hill with the hoe, taking pains to keep the ground loose and free from weeds.

The second and third plowing is done with the cultivator, or double shovel plow, the latter time diagonally. The fourth plowing, throw the earth toward the hill with the hop plow, going four times through each way as at first, and finish with the hoe. Hilling is practiced by some, but in our judgment it is better not to hill much. There ought to be absolutely no weeds in the yard when this course of cultivation is completed, which should be before the “burr” sets, which, in this latitude, takes place about the 20th of July. After the first year, the earth should be thrown from the hill at the first plowing. Subsequent cultivation as above.

PREPARATIONS FOR THE HARVEST.

During the spring and summer, the hop-grower, if just commencing the business, must make ample preparations for the harvest, as the