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
crop must be secured within a very short time, and requires more than usual energy and care in the gathering and curing, or it will become wholly or partially worthless. The first thing he will require will be a

**DRYING AND STOREHOUSE,**

Of which several plans have been made. The one subjoined, which, for a small one, we consider a model of convenience, is twenty by forty, with twenty foot posts. It is divided into four rooms—two down and two up stairs—by a partition running from top to bottom across the building in the centre. One room on the ground floor is the stove-room. It has no floor other than the natural ground. It is plastered on the ends and sides in order to prevent the escape of heat, but has no ceiling. Four openings are made close down to the ground, one on each of the four sides, about ten by twenty inches, to allow of the entrance of cold air to supply the stove and keep up a draft through the hops above. These openings are supplied with sliding doors, by which the amount of air entering the stove-room can be regulated. The hop-stove stands in the middle of this room. It should be large enough to take in cord wood, unless, as some prefer, two stoves are used, in which case the arrangement would be different from that here described. The pipe should be twelve inches in diameter, passing around the entire room at a distance of four feet from the sides and six feet from the slats of the drying floor, before entering the chimney, which is in the partition already alluded to. This immense pipe serves as a drum to distribute the heat evenly to all parts of the room. Above the stove-room is the kiln, or drying-room, separated from the stove-room simply by an open floor. This floor is made of strips of one and a quarter inch lumber, two inches wide, placed one and a quarter inches apart, and covered with coarse (eleven ounce) burlaps, having a very open mesh; or, what is on some accounts preferable, thin factory cloth.

Upon this floor the green hops are spread to dry; and, the stove-room having no ceiling, the warm air rises up through the open floor and circulates through the bed of hops. The sides and ends are plastered to the roof, but here the bare shingles are left exposed. The kiln is provided with a large opening in the top of the roof, to create a draft and allow of the escape of the clouds of vapor which rise from the green hops when drying. This opening is surmounted by a square cupola, the sides of which are made of thin strips of wood, so arranged as to keep out the rain, but offering no impediment to the escape of vapor. Another form of ventilator, which is growing in favor here, is in the form of a large funnel, which is open upon one side to allow of the escape of vapor, and so constructed that it will revolve with the wind, and provided with a vane, which whirls it around when the wind changes, always keeping the escape upon the opposite side from the quarter from which the wind comes. Back (or in front, as convenience dictates,) of the drying-room is the