

vation, in order to experiment, compare and choose the best system of management that can be adopted at the present time. Whether I can suggest any improvement, may be a matter of opinion till after it be tried; but as my experience has been materially different to such as I have seen related in other Agricultural Journals, I will offer it to the readers of the Co. Gent. for their consideration.

Kind of Soil and its Preparation.—The hop grows in its wild state on the banks of rivers, frequently in company with the salix or common willow, generally on rich alluvial soil, which indicates its preference for rich soil, and shows that good deep soil is the best for its growth. I prefer a retentive or moist soil, rather than a dry one, as is generally recommended, because the hop, like the grape-vine, absorbs and gives off an immense amount of water. A dry soil may produce hops that have a smaller proportion of vine to hops, than those grown in more moist ground; but the point with me is, which kind of soil will produce the greatest weight of hops to an acre. I say rather low moist ground, in proof of which I raised, 1,235 pounds the first year of pulling, on an acre of ground in 1854, which netted me nearly \$410.

New ground is best if procurable; rich ground is in any event indispensable. It should be clean, free from roots, stumps, and stones and sods, and well pulverised. There is a difference of opinion as to the best width for the rows. They may vary from six to eight feet, *according to the richness of the soil*, being widest on the best, because here they will attain the tallest growth and shade the most ground. Ridge up or gather the ground to the lines of the row, dragging well before plowing, and lightly afterwards, and the ground is ready for marking.

I prefer square planting to the break-joint or quincunx form, because it saves much expense in cultivation, especially in the early stages of growth. And however it may be as to the roots—there is no advantage from the row and space plan, in the matter of spading. The rows must be precisely straight, and a small stick placed where each root is to be set and subsequently become a “hill” as we call them. The cuttings vary from two to 4 dollars per 1,000 according to the ruling price of hops; and cuttings with *three eyes at least*, generally from four to six inches long, are taken from the roots. We will revert to cuttings hereafter. Supposing the cuttings fresh, with good eyes, ready to set there is a very wide difference in the mode of setting out.

Usually cuttings are put two or three in a slight excavation made with a hoe, being laid horizontally across one another, and then covered with a few inches of the finest mold at hand. I object to any such hasty slovenly planting, for several reasons. 1st. Roots so planted sucker very much. This causes much extra trouble in working and keeping the ground clean. 2nd. The suckers weaken the bearing vines and lessen their growth, and the yield of hops also. 3rd. A plantation so set out will be worn out in ten or twelve years; but if properly propagated it may endure half a century or more. In England they are set out thus, I believe: an excavation being made on the ridge, four cuttings are held with one hand, their tops of equal height, mold being drawn about them with the other—and more over and about them afterwards with a hoe.

The plantation that I owned were set out on a *theoretical* plan of my own. I wished to prevent suckering, and throw the strength of the root into the bearing vines. Had I consulted practical men, as I did, or rather imitated them, I should *not* have succeeded in this. I therefore theorized, and then made a hole a foot deep where each hill of roots was to grow, with the pole bar. I then commenced setting, being careful to prevent the roots getting too dry. The cuttings being of unequal length, I took the tops of four in the left hand, putting the other ends into the hole, and then filled in fine mold with the other hand and then pressed it down; then covering with two inches of fine mold and pressing