



VOL. IV. No. 5.

TORONTO, CANADA, MAY 5, 1872.

NEW SERIES.

The Field.

Potatoes and their Cultivation.

II. CULTIVATION.

When the land was newly cleared from the original forest, the potato was always planted in hills, all the mould that could be got from among the fresh roots heaped upon them when planted, and nothing further done to them until digging time. Even after the land was cleared up, this was, and continues still to be the favourite method with many; some planting whole seed, but the most part use cut potatoes for seed. Noah Webster, the author of the well known dictionary, gives the four following rules for raising potatoes:—1st, the seed should be of full growth. 2nd, cuttings produce more than whole potatoes. 3rd, potatoes will not come to perfection without sun; therefore nothing is so prejudicial as to plant them too thick especially on rich soil. 4th, cuttings in drills where the land is light will answer well at nine inches apart.

The preparation of land for potatoes ought to begin the previous fall. If the ground is very foul and weedy, it ought to be ploughed immediately after harvest; then, after being well harrowed allowed to lie and rot a few weeks. It ought then to be well manured, and again ploughed, leaving it lying unharrowed all winter, taking care to let the water off if any is likely to lie on it. In most cases, however, one ploughing in the fall will be sufficient. In the spring, after the grain crops are sown, and the ground has become dry enough to work well, the ground for potatoes has to be cross ploughed and harrowed, but as ground for potatoes does not require to be made so fine as it does for turnips, carrots, &c, if it is at all clean, it does not require much harrowing to fit it for planting. Up to this stage, whether it is intended to plant in drills or hills, the cultivation is the same.

DRILLS.

As I have generally planted potatoes in drills, I will treat of that method first. Having the land prepared, drills are opened from 30 to 34 inches wide, and not too deep, should the ground be loose, they will sometimes be made deeper than is wanted; in that case give the drills a single stroke of the harrow lengthwise of the drill, the loose mellow earth falling into the bottom of the drill makes a fine bed for the potato sets. Then plant the sets about a foot apart in the drill,—a little less or more as the variety may grow rank or otherwise. Then cover up with the plough, covering the sets not more than six inches deep. If the ground is cloddy or very loose, benefit may be gained by rolling the land after covering up; but in most cases that is not necessary. They are then left until the young shoots are a nut ready to push through, when we set up the drills anew with the plough, thus cutting all the young weeds that have sprung up in the bottom and sides of the drills. Then harrow the drills well down lengthwise of the drill, thus killing most of the weeds on the top of the drill and making the whole fresh and mellow for the young plants to come through. If this operation is well done it will leave very little work for the hoe. After this, the young plants will generally grow very rapidly. When they have grown a few inches high, take a drill cuttva or (this implement should be of the best kind, one that will not slip over the hard spots—many are not sufficiently careful on this latter point, hence the loose soil that needs the least cultivation gets most,) pass up one one drill and down another, running the cultivator as deep as possible, thus making the bottom of the drill loose and mellow, and killing the young weeds that are just springing up, taking care not to go too near the young potato plants the first time. Then, after a week or so, cultivate them again, going up the drills we come down before, and setting the cultivator a few inches wider so as to get as close to the young plants as possible without injuring them. It is of im-

portance that drills be made at first as straight and equal as possible; for when made all alike wide it greatly facilitates the culture throughout the entire season—the cultivator getting near the young plants all along the drill, without tearing out plants in some places, and leaving other parts uncultivated. It is of great importance that the potatoes (and other root crops) be thoroughly and frequently cultivated during their growing season, as frequent stirring of the soil hastens the decomposition of organic matter, and otherwise renders latent plant food available, and also effectually kills weeds, or rather prevents them from growing at all. This prevention of weeds from springing up is of vast importance if it were only for the sake of moisture. A writer in a late number of the *American Agriculturist* says:—"Every weed robs the ground of moisture—the weeds are constantly absorbing from the soil water through their roots, and evaporating it through their leaves into the atmosphere; the weeds in many a field of potatoes evaporate during our hot July weather 500 gallons of water per day per acre. If this be so it is of great importance to prevent weeds from springing up.

When the young plants reach the proper size, before the roots begin to run much in the drills, we set them up with the plough, if with a single moulded plough, going up and down in each furrow, leaving the drills not too high, and another flat on the top. They may now be considered finished until digging time. Land cannot be cleaned so well with potatoes as it can with turnips, because potatoes are planted earlier, so that there is not such a good opportunity to clean the ground before they are planted, and then they have to be sooner laid by, so that the weeds get a chance to grow between the drills when they cannot be killed (by the plough or cultivator) without injuring the crop.

HILLS.

As already stated, my own practice has mostly been to plant in drills; many, however, prefer planting in hills. They think they