

In England it is customary to lay these drills off obliquely, in order that the ploughing for the following crop may incorporate the manure more thoroughly, as that crop, which is generally barley, oats, or wheat, gets only one preparatory ploughing. In some instances, wherein the manure has been very intimately mixed with the soil, the drills are drawn through the soil after it has been laid quite flat, and the seed is sown in them without any other preparation. Various manures have been used for turnip crops, as lime, dung, ashes, sea weed, but the bone dust has the preference.

**Sowing the seed.**—This should be done whilst the earth is fresh and moist, and as soon as possible after it has been turned up. The *drilling* has been effected in various ways; the seed is dropped either from some of the improved drill-machines, or, after it is dried, it is put into something like a pepper box, with holes in one end, the other is attached to a stick; it is then dropped by one person, who is followed by another with a rake to cover the seed; the crowns of the drills being in either case flattened down by a light roller, and the seed sown in regular rows, at the depth of about an inch and a half along the middle of the tops, directly over the manure. A common mode of sowing is also by the hand-drill, which follows the roller, to which it is attached by a rope, and the seed is sown upon *one-bout* ridges in the following manner. The roller, wide enough to cover two ridges at once, yet, on the first turn takes but one ridge with one of its ends; and in returning, while it rolls this a second time with the same end, rolls a second ridge the first time with the other; which again in returning it rolls a second time, along with a third ridge the first time. In this way it goes twice over the ground; the drill depositing the seed between the first and second rollings. The more general practice, however, is to sow two drills at a time from a drill

machine constructed for the purpose.

The plants generally make their appearance in ten days or a fortnight, getting the rough leaf when they are a couple of inches high. The process of horse-hoeing now commences, by running a small single horse plough, or one of the implements constructed for the purpose, up and down the rows, as near as it can be done without injuring the crop, or at about 3 inches distant from the plants, so as to cut up weeds, and turn off a shallow portion of earth from the turnips. In 2 or 3 days afterwards the sides of the drills are hand-hoed with a gardener's hoe, with an 8 inch blade. With this the labourer stands opposite the rows, and with one stroke across the ridge he cuts out the plants at regular distances, leaving them standing singly, with a vacant space of at least 9 or 10 inches between each, thus thinning them and allowing sufficient space for their roots. This at first sight seems as if it would destroy the crop, but the plant soon regains its vigour, and thrives more luxuriantly.

When the turnips are intended for immediate use, the space between may be 10 or 12 inches, as this favours the greater growth of the bulb; but when they are for winter consumption the spaces may be smaller, as it is thought that the bulb having its growth somewhat checked, ripens more firmly, and resists the frost better.

The second process must be repeated within a fortnight or three weeks from the first, but with more care; the hand-hoe must turn the earth around every single plant, removing all other sprouts excepting the one; for when two grow together, they mutually injure each other; this terminates the horse and hand hoeing, as the broad leaves of the plant generally overshadow the ground and check the growth of weeds, but if, owing to moist and favouring weather, more weeds should spring, they must be