

be kept at somewhat wider distances than otherwise, but as a general rule, if mangels and turnips are in drills two and a half feet apart, they should be thinned to a foot apart in the drills. Carrots will sometimes make room for themselves and fill the ground in a surprising manner, if sown in the right sort of soil, without any great attention having been paid to the thinning process, but to grow an even crop of large, well shaped roots, the rows should be a foot and a half or more apart, and the carrots six inches apart in the rows.

The preparation of manure, and the application of it to the summer fallows for fall wheat, will form one of the chief operations on many farms till harvest time commences. As a general rule, the manure not used in putting in the potatoes, turnips and other spring crops, is applied to the fallow. No doubt it is useful in this way, both as supplying certain fertilizing ingredients to the soil, and aiding to give it that mechanical texture required by the wheat crop. At the same time, if farmers would not so generally look upon the wheat fallow as the proper and only destination for the dung heap, if they would lend the manure for a year or two to the growth of mangels or turnips, and sow five or ten times the breadth of these that they have had heretofore, we are sure that they would soon find themselves great gainers by the process. The abundance of roots fed to the cattle in winter and spring would quadruple the quantity of manure, and make it also of a much better quality, while the superior condition of the cattle would be no small advantage. The wheat would then come in, in the proper place in the rotation, and receive the benefit of the dressing given the previous crop of turnips, and after a year or two there would probably be as much good manure left each season to apply direct to the naked wheat fallow, after supplying the root crops, as there would have been altogether if the roots had not been produced and fed. All the manure about the yards with all the

waste litter, weeds, refuse, &c., should be gathered carefully in heaps in the beginning of summer, and when a certain degree of fermentation has taken place, the heaps should be turned over, to promote the decomposition, and ensure the destruction of weed seeds. If a light covering of earth can be given, and the leakage pumped over the heap, it will improve the quality of the mass. The manure may be drawn out to the fallow as opportunity occurs, and turned under with the second or third ploughing.

We alluded to the subject of fallows in our last. Experience shows that the longer ground is under grain crops, with a frequent recurrence of the naked fallow, the more liable fall wheat is to be heaved out with the spring frosts. It loses that open, fibrous texture, similar to the composition of new land, which enables the root of the wheat plant to spread and take a firm grasp of the soil, and in this way, as well as offering a sort of medium for the filtration and escape of the superfluous water, prevents the heaving out operations of the spring frosts. Thorough drainage with tiles would doubtless be the best mechanical improvement of the soil to prevent frost killing of wheat, but till that improvement is effected, the condition of new land may be imitated to a certain extent, and the requisite favorable state of the soil obtained by a judicious course of cultivation. In the first place, it should not be considered necessary to sow fall wheat upon the same field every second or third year. It is a pure mistake to suppose that this is profitable. Once in five or six years is quite often enough. But after land has been two or three years in grass, having previously been well cultivated, cleared and manured before seeding down, it will be in good condition to obtain a wheat crop from. We should recommend ploughing once, say about the 1st June, or a month earlier or later according to circumstances, and then to use the harrow