

ble return may be harvested each year, without detracting from its productiveness and value. There are comparatively few farmers whose capital and other circumstances would admit of such a system of management; and indeed there are few who sufficiently understand the principles which govern vegetation, and who are prepared to practice such an improved system as would be productive of full average crops of grain, grasses, and roots, without giving the land periodically what is generally termed a naked summer fallowing. In all cases where such a system can be practised with nearly a certainty of success, it would certainly be wise to do so; and if capital to be employed in agriculture, could be had, and a regular and full supply of good, and in every respect skilful farm laborers could be procured at reasonable wages, we should certainly advocate nearly a total abolition of the old, and in many respects useless, and certainly very expensive system of making naked summer fallows. The best, and probably the most easily managed preparative crops for winter wheat, are peas, and a clean clover sward. Where winter wheat is sown after peas, the land, by right, should have been liberally manured with barn-yard manure for the pea-crop; and where this has not been done, in most cases a light dressing of well fermented barn-yard manure might be ploughed in with the first furrow. If the subsoil be of a good strong clay, and the surface soil light and porous, the first furrow should be ploughed from seven to nine inches deep, or a sufficient amount of the subsoil should be brought to the surface, as to give a consistency or stiffness to the upper soil. The winter wheat plant delights in a stiff soil; and it would be well for those who have a light soil, to make an experiment in deep ploughing, with a view of ascertaining the actual benefit that would accrue to the wheat crop, by mixing the under with the upper soil. In nine cases out of ten, such a system would add from 30 to 40 per cent. to the average product. The deeper a good soil is ploughed the greater quantity of ma-

nure will the land bear, and the larger will be the yield. These are facts that should be understood by every practical cultivator; and the best and most efficient means of appreciating those truths, is to put the system to a practical test, either on a small or large scale, as may suit the convenience of the experimenter. When the experiment of deep ploughing has been fairly made by the farmers whose soils are adapted to such a system, the results, in our opinion, will prove so flattering, that the practice will become general among all to whose soil it would be applicable.

In ploughing the first furrow of a pea fallow, on most soils a deep furrow is not only requisite to secure a full average crop, but it is also necessary to lay up the land in narrow ridges. The width of the ridges will greatly depend upon the character of the subsoil. If it be porous, and not calculated to hold water, and retain it near the surface during the seasons when heavy falls of rain prevail, then the ridges may with much propriety be made from eight to ten yards wide; but if the subsoil be retentive, and not suited for natural drainage, then it is obvious, that from four to five yard ridges, with deep furrows, are requisite. As soon as the land is ploughed in the manner described, it should be carefully harrowed lengthwise, without defacing the shape of the ridges; and if the land be clean, the only after-preparation that will be required is, the ploughing of the seed furrow. Of the various methods of depositing winter wheat in the soil practised by our best cultivators, none have proved equal to the system of ribbing, which we believe has now been put to the trial in almost every township in Western Canada. The ribbing plough is simply a one-horse plough, with a narrow mould-board, constructed in such a manner, that a three by six inch furrow could, if required, be ploughed with it, with as much neatness as a six by nine inch furrow could be turned with an ordinary Scotch plough. The operation of ribbing, consists of ploughing the furrows from eight to ten inches wide, in