

On the cold, wet lands of the British Islands, France, &c., in consequence of protracted rains, the soil was not in a state to admit of a favorable seed bed, and we have seen many complaints of the late and disadvantageous manner in which the wheat has been sown; the exact opposite to our experience in this western hemisphere.

We consider then that our farmers' prospects are now much brighter than they have been for several years past, and that prices are likely to continue remunerative. We require to pay better attention to the cleaning and cropping of the soil, the selection of seed, and the application of manures; matters of the utmost importance in order to reap abundant crops of good quality. And with a view of expediting the accomplishment of these objects, we would strongly recommend our readers to improve the leisure which winter affords for storing their minds with useful and appropriate information by judicious reading, and careful directions. Farmers cannot now complain of a want of suitable books, either as periodicals or standard works. The chief thing is to get farmers, young men especially, to form the habit of reading, thinking, and correct observation. Such acquisitions both dignify and improve their pursuit. The comparative leisure of winter affords opportunity also for considering and planning next year's operations; repairing implements, hauling posts and rails, so as to get fences into an efficient state for protection, before the hurried duties of the spring commence. Something can always be done by anticipation, towards rendering the operations of that extremely busy season less complicated, and more easily practicable.

### Portable Manures and their applications.

The most signal improvement, perhaps, in modern British agriculture is the manufacture and employment of less bulky manures, which readily admit of being transported to the most distant parts of the farm, and the sides and tops even of hills and elevated ridges, places to which farm-yard dung and other heavy substances used for fertilizing the soil, would not reach. Hence we now see splendid fields of turnips, folded by sheep, followed by excellent crops of barley or oats, with clover and grass, where from time immemorial only heath, broom, and a few coarse alpine plants, cropped by the mountain or black-faced sheep, were only to be seen. Portable

manures, or Land tillages as they are sometimes termed, such as guano, rape and bone dust, super-phosphate of lime, poudrette, &c., are also extensively employed in the ordinary cropping of the lower portions of farms; and their introduction into Canada of late years, although a yet but to a small extent, is constituting a new and improved epoch in our colonial agriculture.

Portable manures are applied either in a dry or liquid form, broadcast or in the drill, prior to sowing, or during the time the side is being deposited. In some cases a portion is applied after the plants have advanced to a certain stage, a portion being deposited at the time of sowing the seed.

The application of portable manures, guano, or super-phosphates, in a liquid state, renders the germination of the seed, and the subsequent braiding, a matter of certainty, and is consequently of peculiar advantage in sowing turnip and other small seeds in such a climate as Canada, when drought is so frequently a cause of failure during the spring and early summer months. In a dry climate the applying of manure in a liquid form has been known, in some instances, to double the weight of root crop. Machines for the equable distribution of liquid manure have been invented, and found much beneficial under certain circumstances in practice. The quantity of water to the amount of manure per acre is regulated according to the condition of the land, the dryness of the atmosphere, and the supply of water within a convenient distance. The water-drill is used for manure as well as for turnip—the depositing of the seed following immediately the distribution of the liquid-manure, which is conveyed from the body of the machine by spouts. Super-phosphates are usually preferred for liquid-manure, but a mixture of guano with super-phosphate is occasionally employed.

In applying portable manures, the common practice is to deposit in the drills, either by hand or by machine. By this method the roots of the germinating seed rapidly come into contact with the manure. This condition, when manure is present, ensures a rapid growth during the first stages; but in practice it has been observed that the plants, when they reached the period of bulbing, do not grow so vigorously either in developing the leaves or bulbs. It