

the water out of the field are made deep, and kept open.

The above system, however, cannot be practiced with advantage only under certain circumstances; and therefore it would be better for those farmers who have never put it to the test to do so on a small scale, by which means they will in a very short time be able to judge correctly of the advantages it possesses over other systems of Autumn ploughing.

In those sections of the country where Winter wheat is very subject to rust, and when the subsoil consists of a rich chocolate or straw-coloured clay, an excellent means of evading the rust, and of ensuring a large yield of wheat, of a superior sample, is to bring up to the surface, in the autumn, from three to four inches of the subsoil. This may be done either by ploughing from ten to twelve inches deep, with a strong team, with one furrow, or one plough may be made to follow the other, the first ploughing a furrow as deep as can be done with one span of horses, and the second should be made to bring as much as possible of the subsoil to the surface. In the Spring, as soon as the ground becomes sufficiently dry, it should be harrowed, and ploughed lightly, and sown with peas. Ribbing or drilling are preferable to sowing broadcast, for a single horse hoeing of the peas will pulverise the subsoil, and tend to ameliorate its condition, by mixing it with the surface mould, which of course is buried a few inches from the surface. When the peas are harrowed, the ploughings for wheat may be made about six inches deep, thus mixing the buried surface mould with the subsoil in nearly equal proportions. This system may be new to some, and many may question its efficacy in preventing rust, and in securing to the farmer an average of from forty to fifty bushels of wheat per acre, upon land that would not yield more than half that quantity, and that, too, of an inferior quality. If there be any skeptics on this point, it would be well

for such to satisfy themselves, by making an experiment of the system here laid down, which, if done even upon a small scale, will as correctly set the matter to rest, in their own minds, as if it had been done upon a large one. In some instances, autumn ploughing may be executed late in the season, with a well-turned, seven by ten-inch furrow, and in the spring will require no other ploughing, for oats, than simply a stirring with one of the improved two-horse cultivators, which, if not in general use, should be as speedily as possible, as it greatly facilitates spring work.

Subsoil ploughing may be done with greater advantage late in the Fall, when the ground is soft, than at any other season of the year. As subsoil ploughs are very scarce, it is not to be supposed that this mode of deepening the soil can be practiced to any extent. Subsoiling simply consists in ploughing two furrows deep, and the last furrow is not brought to the top, but is allowed to remain in the bottom of the furrow, which is effected by the subsoil plough having no mould board. An iron plough, with the mould board off, makes a good substitute for, and is a pretty correct likeness of a regular subsoil plough. Those who have iron ploughs would do well to make a trial of subsoil ploughing, although it be on a small scale.

AUTUMN WHEAT.

By this time autumn wheat should be sown, and therefore we shall not be able to give much advice on this important crop, that can be put into practice this autumn. In consequence of the heavy falls of rain that prevailed last fall, and the openness of the winter, the *larva* of the Hessian and Wheat Flies were destroyed; and doubtless the severity of the spring frosts also contributed to the same end. Hence it is fair to infer that the Canadian wheat grower need not apprehend as much damage from those