

way; supposing a new occupant is at work:

Taking the last crop of the rotation to be a grain-crop, the land is scarified, grubbed, etc., by horse or steam-power, cleaned in fact, and when the time comes for the autumn furrow, the previously shallow-ploughed land is broken-up with the plough about 2 inches deeper than it had been the custom to treat the land, and this is always done in preparation for a "manured root-crop," to be followed by 1. grain of some kind; 2. seeds, clover or a mixture; 3. wheat. The average yield of which crop in the country where this is practised is all but 30 imperial bushels to the imperial acre, that is a much greater yield than is produced here. In Scotland, where deep work is the rule too, the average is only a fraction short of 35 bushels to the imperial acre.

This treatment will bring the depth of the surface soil from 4 inches to 6 inches; the next rotation will bring it, with the same addition, up to 8 inches, and with that depth most English and Scotch farmers are satisfied. The sooner our folk follow the same route, the better it will be for them, their families, and their country.

ROAD-MAKING.

Next month the statute labour work throughout the province will be performed, and path-masters should arrange beforehand for it to be done in the most economical and efficient manner. The statute labor plan is not the best that could be devised for insuring permanency and system in road-making, and where it is followed every effort should be made to get as much and as good work done as possible. In the report of the Provincial Instructor in Road-making, just published, a list of instructions to path-masters is given, which we give below for the benefit of those interested:

1. Every good road has two essential features:

(a) A thoroughly dry foundation.

(b) A smooth, hard, waterproof surface covering.

2. The foundation is the natural sub-soil, the "dirt road," which must be kept dry by good drainage.

3. The surface covering is generally a coating of gravel or broken stone, which should be put on the road in such a way that it will not, in wet weather, be churned up and mixed with the earth beneath. That is, it should form a distinct coating.

4. To accomplish this:

(a) The gravel or broken stone should contain very little sand or clay—it should be clean.

(b) The roads should be crowned or rounded in the centre so as to shed the water to the open drains.

(c) Ruts should not be allowed to form as they prevent water from passing to the open drains.

(d) The open drains should have a sufficient fall and free outlet so that the water will not stand in them but will be carried away immediately.

(e) Tile under-drains should be laid wherever the open drains are not sufficient and where the ground has a moist or wet appearance, with a tendency to absorb the gravel and rut readily. By this means the foundation is made dry.

5. Do not leave the gravel or stone just as it drops from the wagon, but spread it so that travel will at once pass over and consolidate it before the fall rains commence.

6. Keep the road metal raked or scraped into the wheel or horse tracks until consolidated.

7. Grade and crown the road before putting on gravel or stone.

8. If a grading machine is available, grade the roads which you intend to gravel before the time of statute labor, and use the statute labor as far as possible in drawing gravel.

9. A fair crown for gravel roads on level ground is one inch of rise to each foot of width from the side to the centre.

10. The road on hills should have a greater crown than on level ground, other-