adjacent to the farm buildings or supposedly possessing some peculiar soil characteristics are usually favoured to the disadvantage of the rest of the farm. Many farms include small areas upon which practically all the manure is lavished each year, greatly to the detriment of the rest of the farm, and much to the disadvantage of the owner. The influence of a rotation in improving conditions in this respect can hardly be overestimated.

5. Considerably less labour is required to keep fields in good condition where a rotation is followed. While it might be claimed that ploughing a field every third or fourth year would involve a large amount of labour, it can be stated on the other hand that performing these cultural operations more frequently permits of their being performed much more easily year by year. At the same time, if careful record be kept of the amount of labour upon a field where no rotation is followed, it will probably be found that practically just as many hours of horse labour or man labour have been spent as where under a short rotation.

6. Fields under long rotations or no rotations are almost certain to become infested to a greater or less extent with weeds. Fields under a short rotation are practically always clean, provided of course that the cultural operations are properly performed. The value of the rotation in helping eradicate all injurious plant life is a point the importance of which cannot be too much impressed upon our farmers in eastern Canada to-day, where weeds are so exceedingly prevalent, as is well known to be the case.

Many other minor points might be cited in favour of the introduction of a rotation. The above should, however, suffice to indicate its value on the farm. The rotation, as I have attempted to demonstrate, is important, but no rotation can make up for poor cultivation or faulty soil treatment. So I propose to devote the rest of this paper to a consideration of some of the more important conditions of plant growth and the different cultural operations as affecting the same.

SOIL CULTIVATION.

The requirements of rapid plant growth are: 1. Moisture. 2. Warmth. 3. Plant food.

MOISTURE.

The moisture supply depends primarily on precipitation. Precipitation, or rainfall, is, however, not controllable. It is necessary, therefore, to so handle soils as to enable them to conserve or retain the moisture received until required for crop production.

Drainage a Factor in Moisture Conservation

Several factors influence moisture conservation in soils. Of these various factors, good drainage is probably the most important. Well drained soils are free from the danger of baking or puddling, that is, they are friable and loose on the surface, so preventing evaporation. Well drained soils being free from hydrostatic or free water to a considerable depth are in shape to absorb rain as it falls and preserve it in the form of capillary or hygroscopic water. It is only as capillary or hygroscopic water