

land not seeded down should be fall-ploughed five or six inches deep and packed or harrowed as it is turned. If fall ploughing is not possible, then the same depth of ploughing in the spring followed immediately by the packer or harrow will give good results.

Mixed Farming.—In all that territory included in the general term 'brush country,' climatic and soil conditions are such as to make it most desirable as a mixed farming country. For this district some such rotation as the following, modified or expanded to suit particular cases, is suggested:—

- 1st yr.—Hay.
- 2nd yr.—Pasture.—Manure in autumn 12 tons per acre.
- 3rd yr.—Pasture.—Break and disc July or August.
- 4th yr.—Wheat or oats.
- 5th yr.—Oats.
- 6th yr.—Barley—seeded down:—
 - Timothy, 4 lbs.
 - Alsike clover, 4 lbs.
 - Red clover, 4 lbs.'

MANITOBA.

Mr. W. C. McKillican, Superintendent of the Experimental Farm at Brandon, Man., calls attention to some differences in the conditions prevailing in Manitoba, as contrasted with Saskatchewan conditions and to the consequent variations in the procedure which should be followed with new land in the former province.

MODIFICATIONS FOR MANITOBA.

The methods advocated by Mr. Mackay for Saskatchewan are largely applicable to Manitoba, particularly to new land in the southwestern part of the province where conditions are similar to Saskatchewan. The method of handling prairie sod by breaking shallow early in the season and backsetting deeper at a later date is quite the best here as well as in Saskatchewan. The practice of putting crop on newly broken prairie sod cannot be too strongly condemned; the latter should always have a season in which to rot.

Summer-fallowing.—The method of summer fallowing called 'Fourth Method' by Mr. Mackay, gives the best results in Manitoba. Ploughing early is quite as important in Manitoba as it is in Saskatchewan.

There are, however, large districts in Manitoba where the need or advisability of summer-fallowing is not very great. Generally speaking, the portions of the province north of Range 16, that bordering on Lakes Winnipeg and Manitoba and that east of the Red River, are not suited to summer-fallowing. There may be drier localities within this territory where fallowing is permissible; but, in the greater part of it, the result of summer fallowing is too great a conservation of moisture, giving a heavy growth of straw that falls down and fails to mature the grain. For this territory, barley or green oats may be used as a cleaning crop. These should be sown late and cut before any weeds can ripen. Grass and clover crops can also be used to good advantage in the place of summer-fallow in a rotation.

Crop rotation.—In the older parts of Manitoba, the system of grain and summer fallow can no longer be considered as a complete or wholly satisfactory