

plentiful supply of temporary pasture, also green feed for feeding out to stock or for ensiling, and roots for feeding during winter with hay and ensilage.

A longer rotation, suited for dairy farms and holdings suitable for sheep- and cattle-fattening purposes, especially for land that calls for breaking up fairly frequently and not removed far from factory or market, is to be found in the following:—

No. 5.—(i) Forage crops (rape or mixtures suitable for ensiling or feeding off); (ii) roots (mangolds, swedes, turnips); (iii) oats; (iv) grass and clovers; (v) grass and clovers; (vi) grass and clovers.

No. 6.—(i) Oats; (ii) grass and clovers; (iii) grass and clovers; (iv) grass and clovers; (v) roots; (vi) forage crops.

No. 7.—(i) Forage crops; (ii) grass and clovers; (iii) grass and clovers; (iv) grass and clovers; (v) roots; (vi) oats.

In No. 5 the grass-mixture is sown with the oat crop. The legumes grown in the pasture mixture, also in the forage-crop mixtures (if grown), add nitrogen to the soil and so benefit the non-leguminous crops grown in these mixtures, also the succeeding root and oat crops. In No. 6 the root crop cleans and ameliorates the soil for subsequent satisfactory growth of the forage and oat crops. Should it be preferred, owing to the nature of the soil or other cause, to sow the grass-mixture alone this can be done after the forage crop is off, provided the weather and seasonal conditions are favourable. No. 7 provides for such a contingency, as also for sowing the grass-mixture on rape land (unploughed) when fed off, if conditions suit such an economy. Under average conditions of soil-fertility the only manure required for these six-year rotations is that applied—liberally—with the root crops, and with rape if grown as the forage crop. When the land does not carry a long grass lea, owing to lightness of soil or other deficiency, these six-year rotations are also adaptable. If desired, the length of grass lea could be slightly reduced.

For conditions such as remoteness from market, and difficulty or disinclination towards breaking up the lands owing to labour and other causes, the long rotations embodied in the following should be considered:—

No. 8.—(i) Oats; (ii) grass and clovers; (iii) grass and clovers; (iv) grass and clovers; (v) grass and clovers; (vi) roots (turnips) or rape.

No. 9.—(i) Roots or rape; (ii) grass and clovers; (iii) grass and clovers; (iv) grass and clovers; (v) grass and clovers; (vi) oats.

No. 10.—(i) Wheat; (ii) roots or rape; (iii) grass and clovers; (iv) grass and clovers; (v) grass and clovers; (vi) grass and clovers; (vii) grass and clovers.

No. 11.—(i) Roots or rape; (ii) wheat; (iii) grass and clovers; (iv) grass and clovers; (v) grass and clovers; (vi) grass and clovers; (vii) grass and clovers.

In each case the grass lea can be varied (lengthened or shortened) according to the conditions associated with the farmer. In No. 8 provision is made for sowing the grass-mixture with the oats if soil