

3. Clover. 4. Oats. "In most clays of the ordinary description, the last crop of oats should be sown with pasture grasses, and left for a few years or until they begin to engender moss."

*On a strong land of a dry and not of too tenacious a quality*, the most general routine is, 1. Fallow. 2. Wheat. 3. Beans. 4. Barley. 5. Clover. 6. Oats, or sometimes wheat. If there is any doubt about the ripening of the bean or the potatoe, oats may be substituted in its place.

A favourite rotation on some of the strong lands of England, is, 1. Summer fallow, limed. 2. Barley. 3. Clover, first fed, and afterwards kept for seed. 4. Wheat. 5. Beans, dunged. 6. Wheat. 7. Oats.

The wheat and oats are taken in this rotation in alternate successions, without any material damage to such soils, although "two successive crops of white corn are justly objected to, upon the best principles of cultivation."

"All other circumstances being favourable, good clay soils are particularly adapted for the production of wheat and beans, and may be continued under these crops alternately as long as the land can be kept free from the weeds by drilling the bean crops. This is the most profitable course of cropping that can be followed, provided a sufficiency of manure be procured, and the drilled beans be alternately horse and hand hoed. The nature of the soil, or other circumstances, may render a crop of clover or rye-grass necessary occasionally for one year, and this can be succeeded by oats." The rotation then would be, 1. Fallow. 2. Wheat. 3. Clover and rye grass. 4. Oats. 5. Drilled beans. 6. Wheat. In this rotation the manure should be applied every 3d or 4th year, first to the fallow and then to the bean crops. When the soil becomes weedy, another naked summer fallow should be given, which commences a fresh rotation. The following rotation is sometimes pursued, as being less ex-

pensive and more easily effected. 1. Fallow. 2. Wheat. 3. Drilled beans. 4. Barley. 5. Clover and rye grass. 6. Oats. 7. Drilled beans. 8. Wheat; after which a new fallow begins a new rotation.

In some cold clays the following rotation is recommended. 1. Fallow, with dung. 2. Barley, beans, or oats. 3. Clover cut the first year, and pastured for two or three years. 4. Oats; and then a new succession.

Alternate crops of potatoe, wheat, and clover have been successfully grown in the neighbourhood of large towns, where manure could be easily obtained, and the crop of wheat was of less consequence as an article of sale in the market, than the potatoe. A better course, however, is that which is adopted in the neighbourhood of Edinburgh and Glasgow, viz. 1. Potatoes. 2. Wheat. 3. Clover. 4. Oats.

*Rotation on Loams.*—Every soil intermediate between absolute clay and sand, or gravel, is termed loam. Loamy clays constitute the best description of clay soils, and may be cropped under nearly the same principles as those applied to light ground from which they differ only in their degrees of quality; rich free loam is the most profitable description of land; it is easily cultivated, and produces almost uniformly excellent crops. The management of this loam depends greatly upon the subsoil. If the subsoil is retentive, the surface will require to be cleared from root-weeds once in a rotation of six or eight years, by means of a summer fallow; whereas, if the subsoil is porous, an effectual cleansing may be given by a drilled crop of turnips, or potatoes. The rotation may then be 1. Turnip fallow. 2. Wheat. 3. Clover and rye grass. 4. Oats after grass. 5. Drilled beans. 6. Barley. 7. Clover and rye grass. 8. Oats, and this to be succeeded by turnips. Manure should be applied with the beans. On some fertile loams, the rotation is, 1. Turnips. 2. Oats. 3. Clover. 4. Wheat. 5. Oats. 6.