

coarser kinds have much declined of late years. Berkshires are commonly liked, but improved varieties of this and the Suffolk, Essex, &c., constituting smaller breeds, are of finer texture, and more suitable for domestic use.

Of the characteristics of animals, it may be observed that horses should have bright and prominent eyes, denoting spirit and eagerness in draught, to which deeply and broadly developed necks and sloping shoulders are essential. The external form of cattle should approach as near as possible a parallelogram. A delicacy of head, legs and tail, if not carried to an extreme, denotes high and useful breeding. Some have a tendency to lay on fat in lumps—particularly the Herefords—while others produce what is termed mottled meat, having the fat and lean nicely mixed in alternate layers. Some breeds, as the short horns, have a strong tendency to early maturity and fattening; others, as the Ayrshire, Alderney, &c., are usually poor and lean, but produce large quantities of rich milk. Pasture, elevation and climate are powerful modifying conditions in matters of this kind. In Canada, sheep having a large carcase and a heavy fleece pay better than the finer short-woolled, as the Merino or even Down. In the management of Live-Stock generally, liberal and systematic feeding, cleanliness and protection, are of as much consequence as good and pure breeding, and really good animals will always pay for liberal treatment.

*Question 15.*—What is meant by rotation of crops? Can a system of rotation be carried out in Canada? If so, what should that system be? State the rationale of the Fallow and Drill Culture.

*Answer.*—Rotation of crops, as the name implies, consists of bringing crops of different kinds to succeed each other in a certain order. The reason is that one kind of crop draws from the soil a greater amount of a particular substance or substances, than another crop. Wheat requires large quantities of potash, soda and phosphate of lime, while frequent and repeated cropping exhausts the soil. Hence other crops, such as roots, &c., should intervene, which draws more largely on other substances for support. On old, cleared farms the following course may be suited to many situations and soils:—First year, wheat; second, turnips, or roots well manured; third, barley, or spring grain sown with grass seeds; fourth, hay; fifth pasture. A strict system of rotation cannot be carried out generally, in so new a country as Canada. We should study to prevent exhaustion by keeping land for two or more years in pasture and growing wheat at longer intervals. Fallows and drill crops keep the land clean, and expose the soil to the action of air, heat and moisture.

*Question 16.*—Explain the theory of Rent, and the circumstances which affect the value of land. What should be the principal conditions of a farm lease?

*Answer.*—Rent is the price paid for the use of land, and like the interest paid for the use of money, the amount depends on the value of the article loaned. Rent is the amount remaining after the labor and expense of cultivation, with the farmer's remuneration for skill and labor, are paid. The value of land is