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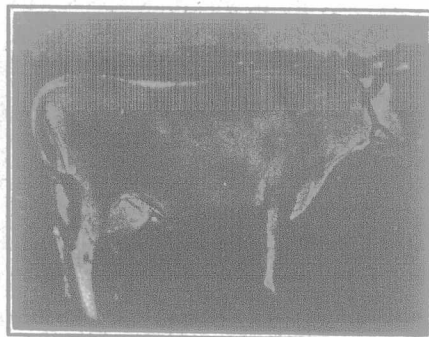
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Our School Department.

Beef Breeds of Cattle.

In a study of live stock, type rather than breed is the important factor. Beef cattle and dairy cattle embrace practically all cattle beasts in this country, and in a study of them the first step should be to print a picture on the mind of the beef type and one of the dairy type. Considerable has been written in these columns about the dairy cow, and in this article we are going to discuss beef cattle. Just by way of a preliminary description we shall quote from "Types and Breeds of Farm Animals," by Plumb, a description of the beef type:

"The general appearance of the beef animal when of correct type shows a distinctly meat-producing form. The animal is broad of back from shoulder points to hips; has a wide, deep body; short and somewhat thick neck; wide, deep, full bosom; rather broad, thick, fleshy hind quarters, and a generally deep, wide body. Viewed from one side, the top and bottom lines of body run rather parallel, with the back quite level. From front or rear, the outline should be rather full and broad. Cattle of this type are commonly referred to as 'blocky', indicating compactness and squareness of form. If the body is inclined to be long it may be termed 'rangy', while animals long in leg, showing too little depth and fulness of body, may be termed 'leggy'."



A Champion Dairy Cow.

With the above description in mind, compare the two animals illustrated on this page. It will be noticed that every part of the dairy cow's body is so constructed, and the parts of her anatomy so correlated, that she may produce milk in large quantities. Originally, the chief aim of the cow was to rear her young, but man took cows as he found them and developed some for milk, and others for beef production. The dairy cow shown here was at one time champion butter cow for Canada.

Notice the straight lines of the beef animal—a Hereford. She is rectangular in form, straight in her lines, broad on the back, thick and heavily fleshed all over. An animal which is, when finished, not broad on the back and thickly fleshed, is not a good type of beef animal. The expensive cuts of meat are found on the back, and it is that part of the cattle beast that live-stock men have developed for the purpose of meat production.

The three outstanding beef breeds are Herefords, Aberdeen-Angus and Shorthorns. Galloways are also first-class producers of meat, but they are not common in this country, so we shall only discuss the three first-mentioned breeds.

Shorthorns, in color, may be either red, white, or a combination of red and white, commonly known as "roan." They were originally developed in England, and at one stage in their career Thomas Booth and Thomas Bates were two outstanding Shorthorn breeders. They were not the originators of the breed, but their importance rests on the fact that Thomas Booth strove to develop strictly beef animals, while Bates desired type cattle that would also milk well. Angus Craikshank, in Scotland, desired a thicker, more heavily fleshed kind of cattle than either Booth or Bates had produced, so he developed an even heavier kind than before existed, and named the breed of Scotch Shorthorns, which is popular to day.

We have only mentioned two or three of the many kinds in connection with the

development of the Shorthorn breed. Every school should have the book from which we quoted in the beginning of this article, for all breeds of live stock are quite fully discussed in it.

Herefords were also first found in England, where men took the common cattle of their time and by judicious breeding developed a beast such as we find represented by the Hereford of to-day. No one can mistake a Hereford for some other breed. Their broad, white face and breast, long-spreading horn, and beautiful red color, brands them of the one breed. In some details they differ from the Angus and Shorthorn but they conform very closely to the beef type and are splendid feeders.

The home of the Aberdeen-Angus is in the Counties of Aberdeen, Kincardine, and Forfar, of Scotland. They are sometimes called "Doddies," which is a Scotch term for polled or hornless cattle. Aberdeen-Angus cattle, as you probably already know, are jet black in color and have no horns. There are other minor distinguishing features, but, generally speaking, they are thick, low-set, smoothly and deeply fleshed. The Aberdeen-Angus has a remarkable record in the show-ring as a butcher's animal.

We have really only mentioned these three breeds. Their history is remarkably interesting and there has been a great deal written about them. We would recommend you to study the illustrations in our last Christmas Number very carefully, for the Shorthorns, Aberdeen-Angus and Herefords pictured there are models of type. Later we shall tell you how to obtain information about all breeds, and how to get good pictures of them from the secretaries of the associations.

Bad Weed Seeds.

During the winter time you will probably be studying grain and grass seeds, picking out the noxious weeds and calculating the percentage of good and bad seeds in a sample. Later you will probably be germinating samples of seed and again calculating the percentage



A Good Beef Type.

of germination, or viability. There is a Seed Control Act in Canada which may be obtained from the Seed Commissioner, Ottawa, describing the standards set for all marketable grain and seeds. Every school ought to have a copy of this Act. However, just to let you know at present what are termed noxious weeds, we shall name those mentioned as such in the Act. They are: Wild oats, twitch or quack grass, docks, Russian thistle, purple cockle, campions (including white cockle, night-flowering catch fly, and bladder campion), cow cockle, stinkweed, false flax, ball mustard, wild radish, wild mustard, and other wild Brassica species, hare's ear mustard, tumbling mustard, wild carrot, field bindweed, dodder, blue-burr or stickseed, blue weed, rib grass, ragweed, ox-eye daisy, Canada thistle, and perennial sow thistle. Seeds of the weeds mentioned should be considered bad, and your opinion of a any sample of seed or grain will depend upon the numbers found in a sample.

"I must compliment you on the very fine Christmas Number you have gotten out, containing so many fine photographs and articles, even though we don't agree with the Honorable T. A. Cramer and his free-trade theory."

York Co., Ont. J. D. SIBBALD, JR.