

Hints to Cattle Breeders.

Prof. Miles, of Michigan Agricultural College, delivered an interesting lecture on Breeds of Cattle, before the Farmers' Institute, at the Illinois Industrial University. We take the following practical suggestions from an abstract of the lecture published in the report of the Trustees of the University :

It is important to acknowledge in the start that our breeds are not the result of accident; and this leads me to enumerate some of the qualifications which a good breeder must possess to attain the highest success in the art.

1. Definite ideas as to the kind of animals he wishes to produce. With many there is a lack of analytical power in determining good points. A man judges as a whole instead of in detail.

2. Persistence and perseverance in adhering to the plan marked out. A change of standard will result in failure.

3. A correct and educated eye, capable of detecting slight variations in form and quality. One must keep the balance adjusted in breeding, and be able to correct slight variations. Anatomy and physiology should be understood, though not technically.

4. The breeder should be free from prejudice and bias. The ownership of an animal should not blind him to its defects.

5. He should have good judgment, and be apt in tracing causes and effects. Many have failed in this respect.

6. He should be cautious, and not prone to jump at conclusions from insufficient data.

7. He should be an Artist, capable of forming an ideal model of perfection, and then of approximating to the conception already formed by moulding the plastic organization of the animal, so as to give it expression. Bakewell, Collins, Booth, Bates, Webb and Quartley, were men of this class. Breeding in fact is a fine art, and one of the most interesting and fascinating of pursuits.

Our native cattle are of diverse origin and have serious defects, the result of their mixed origin, and of a hap-hazard mode of breeding. One of the most remarkable types is the Texas cattle, originated from the Spanish cattle, and still somewhat resembling the cattle found around the Mediterranean. Our native varieties have also little in common, and vary a great deal among themselves. Hence it is desirable to improve our breeds.

In agriculture generally we find an advantage in the division of labour, and so in breeding. It is desirable to breed for milk and for beef. It is hardly possible to combine the two with the best success. The native animals have no special qualities, or definite character.

The advantage of the improved breeds is, first, that they have a definite character from a long course of breeding. The quick-

est way to get this fixedness is to get established breeds. The attempts to make breeds in this country have generally failed. Col. Jacques, although a cattle man, failed in the attempt. There is too great a variety of elements to work with, and it is a saving of time to begin with the established breeds. In the second place, we can select according to our needs and the locality. Different places need different breeds. At one of our Michigan fairs, farmers from Northern Michigan were inquiring "which is the best breed of sheep?" I replied, "you might as well ask which is the best turnip or potato. I don't know your farm or mode of farming. Each breed is adapted to a particular purpose, and you must choose accordingly."

Mistakes will occur from the diverse modes of treating the same breed. Mistakes are made in condemning small breeds, as the Devon, Galloway, &c. These are adapted to peculiar places and purposes. The Short-horn is admirably adapted for certain ranges.

In selecting animals, look first to purity of blood. The pedigree is, the recorded evidence of breeding, but does not necessarily show purity of blood. The value of a pedigree depends on its completeness, and the character of the ancestors. Two animals of undoubted purity of blood would differ in value, if their ancestors were not of equal merit. "Like produces like," not precisely, but like the various ancestors as a whole. Ancestors of unequal merit result in unequal offspring.

Herd books are not always reliable. There are the dangers of accident and imperfect recollection. The breeder should also be familiar with the history of the breed he adopts, and with the origin and peculiarities of certain families. Certain strains will not sell among breeders.

These general observations apply to all the breeds.

COMPARATIVE VALUE OF CATTLE FOODS.—

From a paper prepared by H. S. Collins, of Collinsville, Conn., we extract a table showing the comparative values of different cattle foods, which is worthy of careful study:—

KINDS OF FOOD.	Per cent- age of fat for- mers in 100 lbs.	Per cent- age of flesh for- mers in 100 lbs.	Total nutri- ment p. cent. in 100 lbs.
Potatoes	18.9	1.4	20.3
Sugar Beet	13.6	.9	14.5
Mangel Wurtzel	12.6	1.0	13.6
Parsnips	7.0	1.2	8.2
Carrots	6.6	.6	7.2
Swedish Turnip	5.2	1.0	6.2
White Turnip	3.3	.9	4.2
Best-English Hay	36.3	13.5	49.8
Lucerno Hay	32.0	12.7	50.7
White Clover	40.0	18.7	58.7
Red Clover	18.7	22.5	41.2
Indian Corn	68.7	11.0	77.7
Rye Meal	55.8	14.3	70.1
Linseed Cake, English	61.0	22.1	73.1
Ditto American	48.6	22.2	70.8
Oatmeal	51.1	18.0	69.1
Barley	52.0	13.0	65.0
Peas	41.9	23.1	65.0
Beans	39.7	24.0	63.7
Buckwheat	52.1	9.0	61.1

Colts Injured by Heated Milk.

When the dam is used in hot weather upon the farm or road, so as to heat her blood, the colt should never be allowed to suck until she has fully cooled off. Let him fill himself before the mother is put into the harness, and if it is important that he should accompany the dam, tie him at her side so that he will be unable to draw milk until he is liberated; for it is much better that he should go hungry a few hours than to take his food while it is in a fevered state.

If the mare is to make a long distance in a hot day, and return at night, it is best to leave the colt at home, and draw the milk from the udder by the hand once or twice during the day, and then upon returning allow the colt to fill himself gradually as the milk is secreted.

Colts injured by heated milk seldom recover from it for a year or two, and many times never. They become reduced in flesh, get lousy in the fall, and during the first winter of their existence, when they need health and strength, as under any circumstances it is the most critical period of their growth, they have just life enough to enable them to move, and the second summer, the proper time for development, is spent in the recuperation of lost vitality.—*American Rural Home.*

The first volume of the *Herd Register* of the American Jersey Cattle Club has been issued. It contains the pedigrees of 537 bulls and 1,427 cows.

The *Rural New Yorker* gives 23,419,082 pounds as the amount of wool, on sheepskins, imported into New York in 1870, and 12,470,351 pounds as the amount of wool imported in the same time from Jan. 1st to December 31st. The total amount of wool in New York Jan. 1st, 1871, is estimated at 7,475,750 pounds.

NEW ZEALAND WOOL.—Mr. Geo. Cooper has sent us an excellent sample of fine merino wool, grown in Otago, in New Zealand, and from various accounts received respecting the climate, we should judge that this colony is well adapted for sheep husbandry, including the fine-wooled breeds.

At a recent sale of Mr. E. H. Cheney's shorthorns, at Gadsby Hall, Leicester, the total amount realised from forty-eight cows and eight bulls was £5,132 Ss. The average price of the cows was £96 10s.; that of the bulls £62 7s. The highest price given was £500 for the cow Cherry Princess, bought by Lord Dunmore.

SOWS EATING PIGS.—Young sows will sometimes eat their offspring, from costiveness, which may be prevented by feeding some laxative food, and rubbing the backs of the pigs with an infusion of aloes; or raw salt pork given to the mother will prevent her from eating her pigs. It has been given to them with success after they had eaten one or two of their pigs.—*Western Rural.*