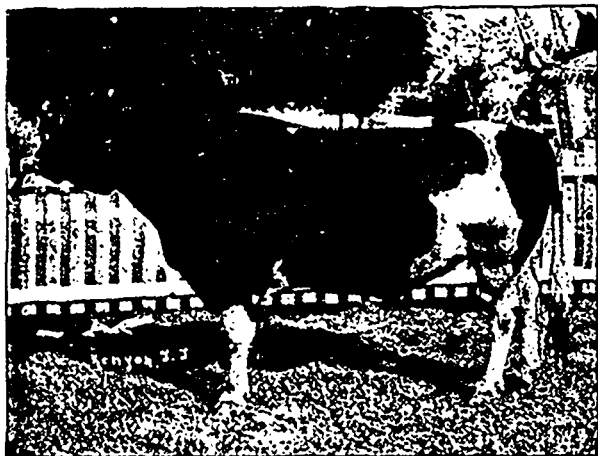


herd began to show the outward conformation or build of the native black kine on the surrounding hills." When this was noticed the breeder went regularly to Mr. Bates and some other eminent breeders for a cross of fresh Shorthorn blood to restore the diminished character in his own herd.

The other instance given relates to Jerseys, and points out that when these are bred several generations deep in England, and especially if the parents on both sides be so bred, they vary from the island type. Besides, it is claimed that these variations differ according to quality. On the richer grazing lands they lose the light-flesh character, and, while continuing to yield, under suitable management, milk rich in butter, they have, even when milking, a fair covering of beef upon their frames, and, when not milking, an evident tendency to fatten beyond that of the breed when brought over from the island. A case in point is given of a dairy farmer in the north of England, where, doubtless, conditions are not favorable to the prosperity of Jerseys, whose herd of Jerseys had developed coats of thick, wavy hair. These had been bred on the farm for considerable time, and gradually accustomed themselves to a climate in which warm winter coats were needed.

A writer in the above journal, who is very strong on the question of environment, states that the true-built Shorthorn prospers best where it was first brought out, in the vicinity of Durham. But such a statement is not borne out by facts, as fine Shorthorn herds of the true type have prospered as well in Scotland and in other parts of England as in the northern counties. In this connection *The Live Stock Journal* points out that, while environment may have something to do with variations in the outward characteristics of animals, to a large extent such variations depend upon the treatment accorded them by the breeder, or in other words the breeder in a large measure has it within his power to overcome the effects of environment. While this is true, and while improper stabling and improper feeding will work great changes in the outward characteristics of animals, there are good grounds for believing that a change of environment dissimilar to that of the original home of the breed will, if no fresh blood is brought in, materially change the type.



Filligrees Clothilde Lincoln -617- A. H. F. A. Weight, 2,100. Won 6 firsts as a yearling, and 7 firsts as a two-year-old in Ohio; 2nd at Toronto, London and Ottawa, 1898. Owned by A. & G. Rice, Curries, Ont.

If this be true what lesson is there in it for the Canadian breeder? Simply this, if he wishes to maintain the characteristics of his herd he must make frequent importations of animals from the original stock. If the change of environment in going from one locality in Great Britain to another or from the Island of Jersey to England brings about such changes as have been instanced above, surely there is ground for believing that the change of environment in bringing animals from Great Britain to Canada would have still greater effect. It may be that in Canada we have conditions quite similar to those prevalent in the northern counties of England where Shorthorns were first brought

out, but it is very doubtful, as we have a more rigorous climate and are very far separated from them. It then becomes incumbent upon our breeders, if they wish to keep their herds up to the original type of the Shorthorns, to import regularly new blood. This also applies to other breeds.

Are our Horse-Breeding Methods Improving?

In another column we publish an article by Alex. Galbraith, secretary of the American Clydesdale Association, reviewing the horse-breeding season of 1898 in the Western States. We wonder if what he says applies to Canada? His statement that, not during the last fifteen years has breeding been conducted in a more haphazard, indiscriminate manner than this season, is really a startling one, and we sincerely hope that it does not apply to the horse-breeding season of 1898 in Canada. The increased interest in the horse trade and the experience that our farmers have had with scrub horses during the past ten or fifteen years would lead us to expect that more system and intelligence have been applied to horse breeding in this country during the past season than for several years back. Whether there has been a definite improvement in methods or not it is hard to say. We are quite safe, however, in saying that perfection has not been reached yet. After the slipshod methods that have been practised in this country during the past decade it is very unlikely that anything in the way of perfection has been attained to. Therefore our farmers and breeders should read very carefully the article referred to and endeavor to profit by it in their methods of horse-breeding.

One of the remedies which Mr. Galbraith suggests, that of co operation on the part of farmers in securing the services of good horses, could be very well adopted by farmers in this country. The value of such a plan cannot be over-estimated. We have several organizations in this country existing for the benefit of the farmer, and why could they not be utilized for this purpose? This would seem to be a very useful line of work for our farmers' institutes to take up. The institutes now cover nearly every portion of the Province, and, if each one would select good stallions of the various types of horses likely to be in demand by the members, a great improvement in the horse-breeding methods of this country could be obtained. For example, the directors of each institute, on the recommendation of some recognized authority, might select a stallion from among the Clydesdales, Shires, Hackneys, standard-breds, and other types of horses, for use by its members, and make arrangements with the owners for a fee to be charged according to the number of mares supplied. Such a plan would serve to place the horse-breeding methods of this country on a proper basis, and to show our farmers what a really good type of horse was like. We would like to have the opinion of some of our institute workers and others with regard to this plan.

A Rational View of the Tuberculosis Question

At the meeting of the American Health Association, held recently in Ottawa, Dr. Irving A. Watson, President of the New Hampshire State Board of Cattle Commissioners and Secretary of the State Board of Health, made the following statement in regard to bovine tuberculosis:

"That it is impossible to eradicate bovine tuberculosis, but it may, without inflicting too great a burden on the State, be reduced to a degree that will subserve the interests of the stock-raisers and likewise protect the public health; that but a very small percentage of the animals infected with tuberculosis in any way endanger the public health, and that an indiscriminate slaughter of the cattle reacting to the tuberculin test is wholly unnecessary, inasmuch as many of them either recover, or the disease is perman-