

Small in size, hardy, a good milker. she possesses all the qualities adapted to our severe climate. Well taken care of, she gives an abundance of very rich milk, and is equal to the best Ayrshire, while being much more easily and economically kept."

Mr. C. C. MacDonald, another of Prof. Robertson's assistants, in the same report speaks of the little fawns, as follows: "At St-Norbert I had the pleasure of seeing one of the finest specimens of the Canadian cow that I ever saw. So much did this little beauty take my fancy that I went twice on one day to visit her. I took a sample of her milk and under very unfavorable circumstances it tested 5% butter fat. The fat came to the surface so quickly, before I could get at the test, that quite a stiff cream had gathered, and became quite tough, so I did not get a fair sample."

At St Jerome, in the Lake St John region, another sample of milk was brought in for a test; it contained 8% butter fat. I expressed a desire to see the cow that gave that milk, and was directed to where she was feeding. I saw her milked in the evening at 6 o'clock, the milk was weighed and tipped the beam at 15 pounds; this was on the 27th of July. I was informed that the little cow had milked as high as twenty five pounds at one milking. She is red in color, very dark colored hair around the eyes, very strongly built, weighed about 650 pounds, and five years old. The cow was for sale at \$25. I also found a very valuable herd owned by— of St-Denis. The average per cent of fat for this herd was four."

At my request Mr. Colburn had four of the cows tested with the Babcock machine. Mr. E. D. Gifford, of Oneonta, who has had the benefit of a short term at Cornell, made the test, doing the work very carefully, and reported as follows: "Trixie No. 923, 28 lbs. of milk, Aug. 6th; 9.6% butter fat. Loo No. 728, 29½ lbs. of milk; 8.6% butter fat. Countess No. 551, 31 lbs. 4 oz.; 8.2% butter fat. Jose, No. 193, 34 lbs. milk, 8.2% butter fat—an average of 8.625%."

Mr. Colburn writes: "I had the test made August 6th. The milk tested was taken from each milking, night and morning, after being thoroughly stirred. I was feeding at the time nine pounds of grain per day, equal parts by weight of cotton seed meal, corn meal, middlings and wheat bran, with oats cut green and cured like hay. I do not consider my yield of milk nearly as large as I can get from these cows, as this is their first season here, and it was in fly time. They are and have been constantly improving since I got them. Their weight is about 1,000 lbs. for cows, and 1,400 for the aged bull, and is, I think about their maximum."

I have been thus lengthy in describing these animals, because they are the only representatives of the breed in this country, and because they give great promise as butter producers. (1)

C. W. JENNINGS.
Belleville, New-York.

THE SIMMENTHALER CROSS.

A chief of Jersey Breeders, with a herd three hundred strong, after nearly twenty years' experience makes the following statement:

"I have had constantly brought to my attention the fact that owing to persistent inbreeding the stamina and

(1) So, if fat, the cows should give 600 lbs. of carcass and the bull 840 lbs.—E.

health of the Jerseys was on a yearly decline, and from the losses in our herd I found that if I wished to retain my dairy and furnish absolutely pure milk and butter on the lines that we have always used, to make each animal pay for the food consumed and the care given, we must do something to put new life in the Jersey cow." (Breeder's Gazette, Oct. 9, Interview with Havemeyer.)

This, no doubt, is an uncolored statement of facts. Mr. Havemeyer evidently has been bound to succeed with his Jerseys. He has imported from their native land, he has bought from the best herds, he has bred from the best strains, he has availed himself of the best appliances and the best markets—now, without turning from his purpose, he frankly confesses that if he wishes to retain his dairy and furnish absolutely pure milk and butter (by pure he evidently means healthful—free from disease germs) he must do something, to put new life in the Jersey cow.

Had this statement come from some unintelligent breeder, without means or opportunities for success, it would have little weight. Men without ability or without sufficient means are liable to fail, whatever breed they may handle. Mr. Havemeyer's failure is

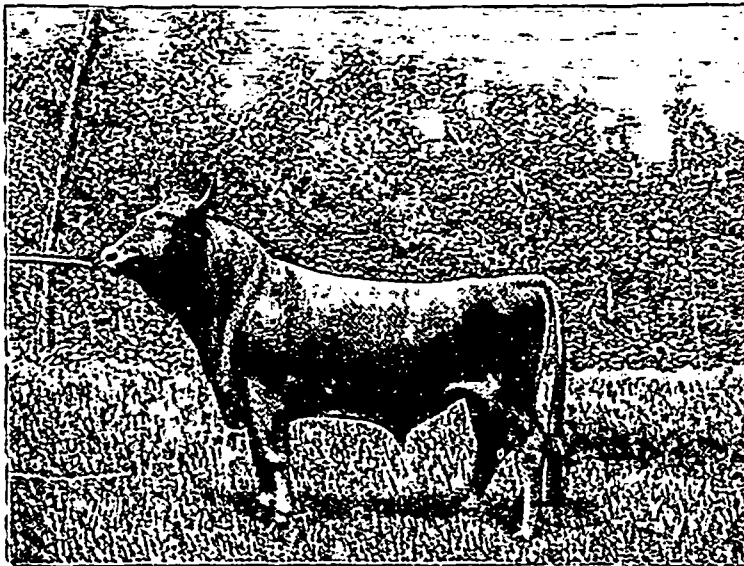
each during the year. This is a maximum record for an entire herd... In the Alps where the grass is savory and richest 25 pounds of their milk yield a pound of butter; in the valleys the quantity required for the same purpose varies from 28 to 30 pounds...

They grow rapidly and are mature in their fourth year. They are of enormous size, compactly and cleanly built, and their flesh is fine grained, tender and savory."

This breed will undoubtedly be a valuable acquisition to our country, but the wisdom of the proposed cross is questionable. It will be a violent one, especially if such enormous bulls are used.

The impression is strong that Mr. Havemeyer might have found breeds nearer home more suitable for his purpose. The Ayrshire is a beautiful animal of unquestioned health and stamina, the cow gives nearly or quite as much milk as the Simmenthaler, and it is as rich. The Red Polled, with equal stamina, is not behind in any dairy quality. And last, though not least, the Holstein-Friesian gives as rich milk and more of it.

A private letter lies before me from one of the largest breeders in California. He writes that he has largely crossed the Holstein-Friesian on other cattle.



"FRENCH CANADIAN" BULL, BELVIN 2nd No 99.

not from such causes. He is, no doubt, right in ascribing it to the lack of health and stamina in the Jersey cow—a lack of constitutional vigor to resist climatic influences and to ward off contagious diseases lurking in every section of our country.

This is not a matter for rejoicing by those who handle other breeds. Breeders worthy of their calling wish each other mutual success, and now they will wish Mr. Havemeyer success in his new undertaking.

He proposes to put new life in the Jerseys by crossing them with Simmenthalers, a breed from Switzerland.

What are its characteristics? From a report on this breed to our State Department, by Consul Mason of Basle, Switzerland, I quote and condense: "A cow exhibited at Lucerne in 1831 attained a weight of 2,494 pounds... the average weight of thoroughbred cows being about 1,400 pounds, though many choice herds average 1,700 pounds, and cows of 1,900 and 2,000 pounds weight are not uncommon... At Roseck, the insane asylum of Canton Soleuse, I have seen a herd of twenty choice cows, kept by the Cantonal government to supply the asylum with milk... From careful records kept by Superintendent Marti it appears that these cows average 21 pounds of milk daily or 7,665 pounds

He says, "I have a half-bred Jersey and Holstein, thoroughbred on both sides, which produced 662 2-4 lbs. butter last year by Babcock test."

I have advocated the crossing of breeds for several years, and have made inquiries on the subject. From what information I have been able to gain, and from my own very limited experience, I am led to the tentative conclusion that a cross of medium-weight Holstein-Friesian bulls with Jersey cows is a success. A cross thus made by me resulted in no difficulty of birth, and the produce was a large and very rich milker. I sold her to a large dairyman who has often said to me, "She was the best cow I ever owned." I cannot recommend the opposite cross—that of Jersey bulls on Holstein-Friesian cows. (1) As breeders say, "It does not seem to be a nick. (2)" I think our agricultural societies might confer a boon upon our dairy interests by a liberal offer of premiums for cross-bred cattle.

Yorkville, N. Y.

S. HOXIE.

(1) The true principle of breeding is that the purer bred of the two animals should be a-top. For instance: in crossing a Leicester with a Southdown, the ram should be a Southdown.—E.

(2) Metaphor from the game of Hazard. E.

REPORT OF MM. G. A. GIGAULT AND J. D. LECLAIR

(Continued)

The practice of examining the older packages of butter before shipping them and remedying the defects in them, if any exist, is highly laudable. The apprentice should attend this examination that he may learn to judge of the defects of butter. The maker should try, when possible, to meet the purchaser, to examine different kinds of butter, compare them with his own make, and endeavor to discover where the defects lie, and what remedies to apply to them.

Men able to judge have declared that the cow's food is the chief cause of the defects in butter, and now they assert that they all lie in the process of ripening the cream. We shall not enter into explanations on this matter.

It is past doubt that the idiosyncrasy of even a cow, the length of time since she calved, her food, water, the means employed in skimming the cream, all have great influence on the quality of the butter, as have the ripening and working, and we believe it may be said with truth that the same defect may be attributed to many causes.

BELGIUM.

HENRI POISKET, Glons, Belgium:

The farm contains 100 hectares (about 247 acres, nearly 300 arpents); stock: 20 cows, 18 horses, 12 heifers, 200 sheep, 12 pigs, 150 head of poultry.

The dung is not sheltered, but the stance is away from the runes or rain-shoots and the bottom is water-tight, as are the floors of the stable and cow-house. The dung stance communicates with the liquid manure tank by a trench, and in the same way the urine from stable and cow house reach it. The winter's dung is carted to the fields in the spring.

There are runes to lead the water from the roofs away from the manure. A cask about 6 feet long is used to cart the liquid manure over the meadows and pastures. It is right to say that in all European farm buildings in Denmark as well as elsewhere, great attention is paid to the ventilation and lighting.

Mr. Poisket's farm is at present let, and the rent paid is 9,500 francs a year (about £1 10s. an acre).

Rotation.—1, mangels; 2, wheat; 3, rye; 4, oats, partly sown with clover; 5, potatoes and clover. Twelve hectares (30 acres) in permanent pasture, and 4 hectares (9.88 acres) in permanent meadow, which are fed after the hay is carried.

This season there are 7 to 8 hectares (17½ acres) in clover, 6 to 7 (15 to 17 acres) of mangels, 1½ acres of carrots, and 2½ acres of turnips. The permanent meadows and pastures are treated either with liquid manure or with compost, many heaps of which have been made near the buildings and in the fields. Ditch cleanings and lime form part of these composts. The food of the hogs consists of milk, potatoes boiled, and mangel leaves.

In summer the cows pass the night in their stalls, where they have green clover; in winter, they have hay, mangels, grain, cake, and straw previously moistened. The stubbles are cleared after harvest, in August, and ploughed up in the fall. Liming is done periodically, clover is generally cut twice, the first crop about from the 1st to the 15th June. The value of sugar beets depends upon the richness in ascharine; last year they fetched