

56° F. After the buttermilk had drained thoroughly, the butter was rinsed with water and allowed to drain. After this water was added, at a temperature of 50° F.; as much water being added as there was cream originally. The churn was then revolved eight times, and the wash water allowed to drain. After the butter had drained thoroughly, it was salted at the rate of .75 of an ounce per pound of butter, the salt being evenly distributed by means of a sifter, etc. The churn was then revolved twice without worker, then twice with worker in position every half hour until the butter was sufficiently worked. During process of salting and working the churn was run at as low speed as possible, in order to preserve the grain and the body of the butter.

The manufacturing being done, we must next turn our attention to the packing, etc. None but the best boxes and parchment paper procurable were used. The parchment paper, 24 hours previous to use, was soaked in a solution of formalin and brine. The boxes were lined with a double thickness of parchment paper, after which they were packed ready for exhibiting. After exhibits were prepared they were immediately cooled to a temperature of 18° F., and maintained at that temperature until shipped to the exhibition. It may be of interest to know that the butter was made six days previous to judging at the exhibition.

With regard to the saltless butter which we exhibited, the process of manufacture was entirely the same as with the salted butter, except that instead of salt being added $\frac{1}{4}$ of 1% of preservaline was added.

In conclusion, I may say that the score on this butter was as follows: Flavor, 48½; grain, 24; color, 14½; salt, 9½; finish, 5; total, 96½ points out of a possible 100.

G. S. DOBBIE,

Buttermaker, Brownsville Creamery.

The Four Great Dairy Breeds in America.

(Continued.)

By Valancey E. Fuller.

IV.

JERSEYS.

Jerseys and Guernseys, which are often called the sister breeds, unquestionably have the same origin. Some say that the Brittany cow, and others say the Normandy, was the source of their origin, but the preponderance of evidence is that they are descended from the latter breed. As far back as 1734 the Jerseys were, according to the authority of Rev. Philip Falle, recognized as a distinct breed, and were esteemed as superior to French cattle. The system of management of the Normandy, Brittany and Guernsey stock was almost identical.

IMPORTATIONS INTO LOWER CANADA.

Early in the fifteenth century emigrants to Lower Canada went from Dieppe, St. Malo and Rochelle, and brought their own cows with them from Normandy and Brittany. Being very tenacious of their own customs, and assimilating very little with the English-speaking population, they handed down the breed comparatively pure. There was constant trading between Brittany, Normandy and Lower Canada, and, like the Ayrshires, the Brittany and Normandy cattle were introduced into Lower Canada by captains of sailing vessels. These cattle of Lower Canada are now recognized as a distinct breed—"French Canadian"—and have their own Herd Register. There is little doubt that the Jerseys, Guernseys and French-Canadian cattle had one common ancestry. The milk of the latter is as rich as that of the Jersey, but they do not give so much of it, nor are they as large in stature as the Jersey or Guernsey. This may be easily accounted for from the fact that the French-Canadian cattle have not had the same care or as good handling as the Jerseys or Guernseys.

IMPORTATION TO JERSEY PROHIBITED IN 1763.

As far back as July 16th, 1763, an act was passed by the States of Jersey prohibiting importation of any live cattle from France, except for slaughtering. Ever since the year 1763 the breeders of the Island have been alert to maintain the purity of the breed.

ROYAL JERSEY AGRICULTURAL SOCIETY FORMED.

The Royal Jersey Agricultural Society played a very important part in the early development in Jerseys, and still continues to do so. This society was organized on January 18th, 1834, and immediately drew up a scale of points. I know of no organization which has shown as great foresight as has this society, especially in the rules they have passed to keep the prize bull on the Island for one year, or forfeit the prize-money; to make the services of the prize bulls available to members for a nominal fee; to permit final registration, or qualification, as it is called, of females only after they come in milk and their superior individuality has been approved by a committee especially appointed for that purpose, thereby preventing "qualification" and the entry in the herdbook of undesirable animals, even where the sire and dam were qualified; to compel the showing of the dam in the ring, in awarding prizes to bulls, and increasing or decreasing the number of points accorded to the

bull according to the good or poor qualities of the dam.

SIGNIFICANCE OF H. C. OR C., P. S. AND F. S.

When an animal is "qualified" by a committee, the designation of H. C. (Highly Commended), or C. (Commended), is attached to its register, according to the individuality of the animal entered. If the sire and dam of such animals are "qualified" in the herdbook, the designation of P. S. (Pedigree Stock) is attached; if sire or dam are not qualified, F. S. (Foundation Stock) is attached.

In the first scale of points (1834) much stress was laid on the straight back. Out of the total of twenty-seven points four were given for this feature, and eight for head, eyes, ears and horns. This scale was revised in 1845, 1849, 1851, and 1858.

MOVEMENT TO IMPROVE THE BREED.

The first concerted movement to improve the breed was made in 1834. Col. Le Couteur, Secretary of the Royal Agricultural Society of England (but a Jersey man by birth), describes the Jerseys in 1834 as "Too slightly formed behind, and cat-hampered. The udder was ill-formed, the tail coarse and thick, the head coarse and ill-shaped; many were without that golden or yellow tinge within the ears which denotes a property to produce yellow and rich butter; some had short, bull necks; some had too much flesh, or dewlap, under the throat, and some were too heavy in the shoulders."

I fear that some of these defects apply to too many Jerseys exhibited at the fairs on this continent.

The first test was made by Mr. Hume, president of the R. J. A. S., in 1845, of three two-year-old heifers, and was for a year. They showed an average profit of £15 5s. 2d. each, but this included a credit of £4 10s. to each heifer for the



Blue Bell, Imp.

Typical Jersey cow. Aged 14 years. Photographed six months after calving.

value of her manure. The test of the same heifers was continued the following year, with an increased profit of 33 per cent.

IMPORTATIONS TO THE U. S.

An Alderney cow was known to have been imported to Penn., U. S., in 1817, by Mr. Wm. Works. She yielded 9½ pounds of extremely rich, highly-colored butter per week. She was small, and was supported with less food than ordinary stock. She averaged fourteen quarts of milk a day. Less than 17 pounds of her milk were required to one pound of butter. In 1840 Mr. Nicholas Biddle, of Pa., imported three Alderneys. The importations into the U. S. really began in 1850. Mr. John A. Taintor, of Hartford, Connecticut, made the greater number of them in that year, including the bull Splendens 18, and the cows Sisson's Dam 22, Violet 28, and Jessie 28. He and a Mr. David Buck, also of Hartford, Connecticut, imported Dot 7. The great Daniel Webster, imported for "Franklin," Jenny Lind 552. Buttercup was imported by Mr. Sam Henshaw, of Boston, but was sold to D. Buck. The bull, Sailor 169, was also imported by Henshaw. While Mr. John A. Taintor seems to have imported Jerseys for others, he is entitled to the credit of having first introduced them into America. Mr. E. Colt and David Buck, both of Hartford, Connecticut, became the owners of the majority of Jerseys imported in 1850. In 1851 seven males were imported, including Premium 7, Colonel 76, Typhoon 77, John Bull 167, Norfolk 224, Willoughby 231, and George W. Lyman's bull. Taintor imported 1; Thos. Motley, of Mass., 4; and Peter Lawson, of Lowell, Mass., 1. Thirteen females were brought to the U. S. that year. Up to 1860 John A. Taintor continued to be the chief importer, having brought over 50 females, and Thos. Motley 7; but the latter imported more bulls than the former. Hartford, Connecticut, was the great center of Jerseys in the early days of its history in this country. Massachusetts,

around Boston, came next, with Pennsylvania and Maryland following.

IMPORTATIONS INTO CANADA.

The first importation into Canada was made Aug. 17th, 1868, by Mr. S. Sheldon Stephens, of Montreal. It consisted of the bulls Defiance 196, bred at the late Queen's Shaw Farm, Windsor, Eng.; and Victor Hugo 197, bred on the Island. The cows were Victoria 411, Pride of Windsor 483, Amelia 484, and Juliette 485, all bred by her late Majesty the Queen; and Alice 488, Hebe 489, Berthe 490, Bonnie 491, Lisette 492, Ophelia 493, Pauline 494, Lydie 495, Portia 496, Fancy 1318, and Beauty 1319, all bred on the Island of Jersey.

In 1871 the imported cow Taffy 5523, and Topsey of St. Lambert, were added to the herd. Later on Stoke Pogis 3rd 2238 was bought by Mr. Romeo H. Stephens from Mr. Peter Leclair, Winoskie, Vermont. Mr. Leclair had bought Stoke Pogis 1259 (imp.) and Marjoram 2329 (imp.) at public sale in England, and by crossing them at his farm in Vermont, Stoke Pogis 3rd was produced.

Mr. Harrison Stephens, father of S. Sheldon Stephens and Romeo Stephens, really bought the herd above described for Mr. S. Sheldon Stephens through Mr. L. P. Fowler, a celebrated dealer in Jerseys, of Bushey Farm, Herts, England, and Mr. James Duncan Gibbs, a friend of Mr. Harrison Stephens, who accompanied Mr. Fowler when he bought the stock. The herd was first kept on the farm of Mr. S. Sheldon Stephens, on the lower Lachine Road, near Montreal, but was afterward removed to the farm of Mr. Romeo Stephens at Montreal, Que. It was the location of the farm which gave the name of "St. Lambert" to the herd. The St. Lambert herd was retained there for many years, and was destined to become famous the world over. I have been very particular to give the names of the animals imported by Mr. S. S. Stephens, for to-day there are probably more than three times the number of animals recorded in the A. J. C. Herd Register tracing to some members of this herd than to any other herd.

Readers of the "Farmer's Advocate" need not be told that Mary Ann of St. Lambert was the most celebrated animal ever bred at St. Lambert, Que. In the development of the St. Lambert strain the writer played no insignificant part.

FORMATION OF THE A. J. C. C.

The A. J. C. C. was founded in 1868. Its office was first at Newport, R. I. The late Col. Geo. E. Waring was secretary, and Mr. T. J. Hand treasurer. On its removal to New York City, Mr. Hand became secretary. The A. J. C. C. is the most wealthy of all the live-stock dairy associations. There are more Jerseys registered in this country than any of the other pure-bred dairy breeds. Till within the last few years its annual receipts have been far in excess of the other dairy breed associations, but the Holstein-Friesian Association is rapidly catching up. The members of the A. J. C. C. are extremely conservative. Considering its wealth and the great number of Jerseys recorded in its Herdbook, there are those who feel that the Club does not do as much as it might to encourage the breed in this country and Canada, nor as is done by other dairy breed associations. In this view I concur.

CHARACTERISTICS.

There are Jerseys of many colors, though the solid color, black tongue and switch predominate. The head of the Jersey cow is very beautiful, the most beautiful of all dairy breeds. She has a good long neck, a thin wither, usually a straight back, though I regret to say there are far too many with sloping rumps. She usually has very thin thighs, high hip bones, and a wonderfully deep paunch. Her udder is large, but not so large as that of the Holsteins. The imported Jerseys have usually a very long full-front udder, extending well up on the belly. Too many Canadian and American Jerseys are deficient in fore udders. Imported Jerseys are prone to have rather small teats, though beautifully placed. Jerseys have been intensely inbred, and in some strains small teats have resulted from this course. The Jersey cow is the smallest of the four breeds I have described. She is very fine in limb, shows her breeding, and is considered delicate by some. This, however, is not my experience. She possesses a high nervous temperament, which seems to stand her in good stead in case of sickness and in her work as a dairy cow. She is game to the last notch.

MILKING QUALITIES.

The Jersey cow has been noted for 100 years for extreme richness in her milk. A good herd of Jerseys, including those in milk a long time, will average from 4.75 to 6 per cent. fat. They averaged in the Pan-American dairy test 4.58 per cent., and in the St. Louis cow demonstration 4.7 per cent., but none of these cows were in calf. Twenty years ago a Jersey cow that gave 40 pounds of milk a day was considered a phenomenon, but such records are very common to-day and the Canadian-bred Jersey cow, Adelaide