

received information which has been of great practical use to her. This work will go on next summer. Two travelling dairies will go out. More applications have been sent in for a visit by the traveling dairy than one man could fill in three years.

In the creameries' association meeting President Derbyshire said that the province sustained a loss of \$1,500,000 from improper facilities in dairying, and that only 3 per cent. of their butter was made in the best way, entailing a loss of \$2,700,000. Mr. Macfarlane, Dominion analyst, gave some statistics of Danish dairying. England requires 100,000 tons of butter annually, of which Denmark supplies 41 per cent., the United States 4 per cent., Canada 0.75 per cent. But Denmark imports from Sweden 8 million and from Russia 44 million pounds, reshipping the best to England. The increase of her own productions has been from 12 million to 14 million pounds annually in the last few years, chiefly through winter dairy. Instead of exporting grain they consume it in butter production, besides importing great quantities of feeding stuffs. Roots are largely used. Centrifugal separators and the partnership system of dairying put the small cottar on a level with the extensive farmer. In addition, close sympathy and cordial alliance exist between scientific men and the practical farmers.

The imported Guernsey cow Select 2205, whose portrait appears herewith, has a record of 22 lbs., 8 oz. of butter in seven days. For several years she has been in the Muster Hill Farm Guernsey herd at New Braintree, Mass. In this herd are six daughters of Select, and of Select 2d, (14 lbs. with first calf and half sister of Select) there are four daughters, all with at exception show by actual test unusual richness. This herd of Guernsey cattle will shortly be removed from New Braintree to Wayland, Mass., when we presume it will be brought to the notice of readers in our advertising columns.

The accompanying cut, from a drawing by J. W. Hills, represents a group of Cheviot ewes belonging to Mr. D. F. Wilber, Crumhorn Stock Farms, Oneonta, N. Y. They were selected with special care for individual excellence, and Mr. W. hopes, we believe, to exhibit them at Chicago. As our readers know, the native home of the Cheviots is a bleak and mountainous district, and they are noted for ability to withstand exposure. They have a high reputation as a mutton breed as well as for their wool. An association of American breeders of Cheviot sheep was organized in January last, of which the officers are -- President, Henry Van Dreser, Cobleskill, N. Y.; vice-president, Wm. Curry, Hartwick; secretary, E. J. Bruce, Ketchum; treasurer, T. N. Curry, Hartwick. (1)

Joseph Elkington, of Princethorpe.

By PROFESSOR WRIGHTSON.

We reprint the following excellent paper from the *Showyard Chronicle* :--

Visitors to the Royal Agricultural Society's Showyard in these days seldom are blessed with the abundant leisure of our forefathers. They concentrate their attention upon the

1. Cheviots, &c., but no one who has ever tasted "black faced" 4 year old mutton would care for Cheviot mutton.

vast acreage of canvas which contains so much that is worthy of attention, and cannot spare time for topographical observation. We, however, cannot pass by in silence the fact that a pioneer in the important work of land drainage lived and worked within some ten miles of this busy scene. A hamlet in the parish of Stretton-upon-Dunsmoor, called Princethorpe, 6½ miles from the town of Southam, and about the same distance from Coventry, situated upon or near the Roman Fosse Way, which runs across the county from Stretton-on-Fosse to Stretton-upon-Dunsmoor, marks the home of Joseph Elkington. It is an obscure little place, situated in a lovely district, where the pilgrim in quest of agricultural knowledge might well pause for a moment to inquire for the farm and house of a man of great reputation during the last century. A man who was voted \$1,000 by Parliament for his services to agriculture must have been a marked person in his time. He is accorded a position in every treatise upon land drainage, and was accounted a wise man in his neighbourhood. Elkington is said to have used the divining rod, and to have possessed occult powers in discerning the underground course of water. His skill, no doubt, aroused some feeling of superstition among the simple villagers and farmers of his time, but was rather to be accounted for by his deep knowledge of springs and the water economy of soils. This is not the place to describe Elkington's methods, although, if space permitted, it would be easy to quote from the numerous works in which his modes of proceeding are described. He appears, like many men of practice, to have been averse to committing his system to writing. He, however, willingly communicated all his practice to Mr. John Johnston, of Edinburg, himself an eminent drainer, who embodied them in a book which remains as a monument to Elkington's genius.

The late Mr. John Wilson, of Edington Mains, accorded Elkington a high position, as having been the most worthy successor of Captain Walter Blyth, who had drawn attention to the importance of drainage a century earlier. Blyth's teaching had been forgotten until Elkington, in 1764, goaded into action by the loss of several hundreds of his sheep by liver-rot, discovered an ingenious plan for drying his lands and ridding them of the "superfluous and venomous water" of which Blyth had complained. We may in these days picture the old-fashioned Warwickshire farmer, clad in homespun, puzzling over the sources of wetness in his fields. He had, according to Sinclair ("Code of Agriculture"), dug a trench 5 feet deep, which did not, however, reach the principal body of sub-jacent water. Here was a drain cut through the wet land which would not sink. It is said that while he was deliberating what was to be done, a servant passed by chance with an iron bar for pitching hurdles. Here was his opportunity, so, seizing the bar Elkington proceeded to make a hole through the bottom of the trench, and on pulling out the bar, which is said to have penetrated 4 feet, up rushed a gushing stream of water, which ran along the bottom of the trench. This was Elkington's triumph, and from this fortunate commencement he gradually built up a system in which the tapping of springs was the chief object.

Elkington's system was that of irregular drainage. He cut drains where they appeared to him to be wanted, and employed the auger for the drainage of his own, and many other farms. Mr. Everhed relates, in his "Farming of Warwickshire," that Elkington's auger holes filled in time with the ochrey matter common in peat bogs. The occupier (1856) drained the land after Elkington's principles applied in a more thorough manner. He made shafts 14 or 15 feet in depth, and filled them with stones to a level of one foot above the drain bottoms, and through these stones the water rises and pours off into the main outfall, leaving the land perfectly dry. Elkington's system is only applicable to land wet from