THE DAIRY.

HOW TO SELECT COWS.

There are various rules by which experienced farmers and dairymen judge of the milking qualities of cows when it becomes necessary to buy them. A wedge-like shape of body, rich colour of skin, silky touch of hair, size and prominence of udder and milk veins, and the like, are popular tests of a good milker. But there is too much guesswork about these, and good judges are sometimes deceived. It is not so generally known as it should be, that a system known by the name of its originator, Francis Guenon, a French husbandman, has come largely into use, which is based on scientific principles. and in conjunction with such signs of a good milker as are generally relied upon, is a wellnigh infallible index to the milking qualities of a cow. On the hinder parts of all bovine animals, between the tail and the udder, there is a space, of greater or less extent, where the hair, instead of growing downward, lies in the opposite direction. This is called the "escutcheon," and in proportion to its size and shape, the cow is found to be possessed of milking qualities. This, in brief, is the Guenon system. It is now nearly half a century since it was given to the world in the form of a brief treatise, which attracted considerable attention throughout the European continent, but has only of late received much notice in America. Guenon, in the course of years, greatly elaborated his system, dividing the escutcheons of cows into ten classes, of which the first, called the Flanders, is most indicative of high milking tendencies. It is difficult, in the absence of diagrams accompanied by full explanatory notes, to give an intelligible idea of this matter. Happily, however, the whole subject has been brought within the reach of farmers and dairymen by the issue of a little work, costing only fifty cents in pamphlet form, or seventy-five cents in cloth. Its author, W. P. Hazard, of West Chester, Pa, was one of three experts appointed in 1878. by the Governor of Pennsylvania, as a "Guenon Commission," to test the system in question. They examined two hundred cows, jotting down their opinions of the yield, quality, and time of each of them, and afterwards printing them alongside of the reports of their owners. The result of their examinations was convincing to themselves and others as to the merits of the system, and of its great value to the practical farmer; so much so, that they were led to express the opinion that if generally followed for twenty years, the value of the nest cattle of the State would be vastly increased. Mr. Hazard's book contains the report of this Commision in full. gives the pith of M. Guenon's latest exposition of his system, contains nearly 100 illustrations, and quotes numerous expressions of approbatory criticism from high authorities among farmers, dairymen, and agricultural journals. Mr. Hazard's book is admitted on all hands to be a valuable contribution to dairy literature. A careful study of its 90 well-filled pages is all that is necessary to qualify an intelligent and observing mind to make practical use of the system it so thoroughly expounds. Drirymen especially should possess themselves of this book. "There's money in

it." Poor cows are the heaviest burden that presses on this important industry, and if the principles laid down by Guenon, and so clearly elucidated by Mr. Hazard, were generally understood, not only the selection but the breeding of profitable dairy cows would be the result.

THE DAIRY INTERESTS IN THE UNITED STATES.

At the meeting of North-Western dairy. men recently held at Geneva Lake, Wis., a paper on the above subject was read by Col. R. M. Littler, of Davenport, Iowa, Secretary of the National Butter, Cheese, and Egg Association. It was replete with valuable information and statistics. He cited instance after instance where, since the introduction of organized dairying, the results were of the most satisfactory nature financially. They had asked the Agricultural College at Ames to make experiments in dairy processes, to elucidate certain questions which individuals could not accomplish.

In 1880 there were 35,877,791 horned cattle in the United States, estimated at \$25 a head: these would represent a value of \$796,943,775, an increase over the figures of 1870 of 50 per cent. The census showed that in 1880 there were 12,442,137 milch cows in the country, which will probably be increased in 1882 to 13,000,000. Calculating the value of the milk at \$40 per cow per year, it would be worth \$520,000,000. An increase of 10 per cent. during the next year means an addition of \$1,000,-000 per week to the wealth of the country.

The dairy interest of Iowa, Illinois and Wisconsin has increased 66 per cent. during the last ten years, while the increase in New York State was but 6 per cent. The dairy interest of the States of Kansas, Nebraska, Dakota and Minnesota are also pushing forward with rapid strides. The present high price of butter-45 to 50 cents per poundhas a tendency to discourage exportation. Hence exports are constantly falling off, being in 1881 but 18,000,000 pounds. The foreign market for cheese was more favourable, the exports since May, 1881, amounting to 135,-000,000. He thought 200,000,000 pounds would soon be too small a figure to measure the annual dairy export from the United States. When in England a short time ago, he was told by farmers that it cost them twelve cents to produce a gallon of milk. Illinois or Wisconsin or Iowa dairymen could export it to England, and place it on the consumer's table for less money than it would cost English dairymen to produce the milk from which it was made.

IOWA DAIRYMEN IN COUNCIL.

The sixth annual Convention of the Northern Iowa Butter, Cheese and Egg Association, held at Cedar Rapids, February 22-24, was largely attended. The topics discussed were live ones, and the discussions showed that the farmers of Iowa engaged in the dairy industry are wide awake and enthusiastic in their efforts to get as much legitimately out of the business as there is in it. Hon. R.D. Stephens, in his address of welcome on behalf of the Cedar Rapids Board of Trade, said "the last census shows that there are 12,000,000 cows

good grass land to feed the whole lot, allowing three acres to each cow; that Iowa is preeminently the dairy State of the Union; its soil and climate cannot be surpassed."

The rapid growth of this industry in Iowa was referred to by C. H. Huston, Esq., of the Cedar Rapids Dairy Board of Trade; by Hon. H. D. Sherman, of Monticello, in responding for the Convention to the welcome accorded; and also by President Moran in his annual address. The latter contrasted the former system of farming, when wheat and corn were the principal crops of the State, and the present condition of things, where dairying has largely superseded these crops. He said: "More pasture land and less wheat, as many cows as the farm will feed, well selected, well housed, and well milked, and as many pigs as can be profitably kept-such seems to be the model farm of the future."

A call of the roll of counties represented showed that the aggregate number of creameries in such counties is over 150.

The cost per year of keeping cows, which was a prime factor in the cost of milk, was fully discussed, some claiming \$15 per year, others \$40. About \$30 was agreed upon as the average, and the cost of milk was graded on the value of land. On land worth \$25 to \$50 per acre, milk costs 40 cents per 100 lbs.; over \$50, 55 cents per 100; \$75, 65 cents; and \$100 per acre, 75 cents per 100 lbs.

The above is a brief synopsis of the first day's proceedings, and comprises all of the report which has yet come to hand in our Western exchanges. Any other matters of special interest to Canadian dairymen which may be embraced in the remaining reports will be duly chronicled in the RURAL CANADIAN.

HOW TO MILK.

Much harm has been done by the old injunction to "milk as rapidly as possible." Never attempt to hurry the operation; milk steadily, and keep the milk drawn as fast as it will flow naturally. Don't stop to talk or loiter about the milking, but do not grasp the teat as if you were going to crush it in your hand, or thrust your thumbs into the udder as if bearing your weight on them. I have seen those who claimed to be good milkers who would do this, and have seen thin skinned and soft flesh cows that would kick under the affliction until it was almost impossible to milk them, although ordinarily they were quiet when milked by those who had milked them previously. The operation of being milked should be a pleasant one to the cow, and it will be if it is done rightly. One other cause occasionally produces bloody milk, and that is allowing a cow to go too long before milking when she has a full flow of milk. The pressure and strain of the full milk yessels in the udder are too much for the delicate structure of that organ, but this cause is more apt to produce this trouble, or garget, in the spring, when the cows that are fresh in milk are first able to get a hearty feed of grass. For a cure, give one or two doses of saltpetre (about a tablespoonful as a dose), and not more than one dose a day; to relieve the garget, rub the udder with some soft grease, or with bacon rind (some people think the latter is best, they ascribe a penetrating power to the saltpetro in the bacon pickle, or to the smoke which has flavoured it), and take care to milk multy census shows that there are 12,000,000 cows and quietly. Remove the cause, if you know in the United States, and Iowa has enough it, and hope for better things in future.