

In the Argentine, where the farmers or *estancieros* do not possess plants of their own, they deliver their milk to the nearest skimming-station. Then, again, where the cream is skimmed or raised by deep setting for account of the senders, or is purchased outright, in either case it is carted or railed to the factories at large cost for carriage. I have no idea when the proper system of payment for milk will be adopted in the Argentine—that is, by paying on the butter-fat basis. It is estimated that there are about two hundred and twenty skimming-stations in the Argentine Republic, where skimming by centrifugal machines is done.

This business covers four provinces—Entre Rios, Buenos Aires, Santa Fé, and Cordoba.

In dealing with the dairy industry of the Argentine I have endeavoured to refrain from making comparisons between it and New Zealand and Australian methods. I reckon that it is my duty only to give the true practical facts as near as possible as I found them, and then to let our farmers and dairymen make the comparisons and judge for themselves as to what this enormous country is capable of doing in dairying and what we have to compete against. It only requires a run over the various lines of railways to convince a person of the enormous extent of the country and its vast richness. On each side of the different lines you will see thousands of fat cattle and sheep, and it must be remembered that at the time of my visit it was their autumn, when one would expect to find the grass partly dying out, but so far as I could see the pastures were in excellent condition, and late crops on the grand fields of alfalfa and maize were indeed a sight.

One can imagine the carrying-capacity of the Argentine when it is realised that the province of Buenos Aires alone is two and a half times as large as the wonderful New York State in North America. It is estimated that this province alone has about 10,500,000 head of cattle, over 82,000,000 sheep, and about 2,230,000 head of horses. In 1901 the total value of agricultural and pastoral products from this province alone was \$740,000,000. We must, of course, figure on the fact that this province has a population of about 1,300,000 people. I am strongly of the opinion that if the people of the Argentine would adopt a better system of milking, yarding, and feeding the cattle, they would in a very few years turn out 50,000 tons of butter instead of 6,000 tons. While in the Tandil district I met a Mr. A. Leanes, who has had a lot of experience in dairy-farming in the Argentine. He is now on an estancia of 20,000 acres, and has a thousand cows. At the time of my visit he was milking between five and six hundred cows. He sends the cream to a butter-factory, and utilises the skim-milk for pigs, &c., on the farm. Señor Leanes informed me, upon inquiry, that the value of his land was about £2 10s. per acre, and he further stated that two acres of the grazing-land would carry one cow—that is, the year round. This land is situated about two hundred miles south of the City of Buenos Aires. I found it almost impossible to get from a farmer or *estanciero* the exact profit made per cow on the estancias.

CASEINE.

I was not surprised to find that caseine was manufactured in fairly large quantities for export in the Argentine when I saw that little or none of the skim-milk was fed to the calves. As pointed out at the beginning of this article, the Argentinos prefer beef to butter-fat, or rather prefer raising the calf on butter-fat instead of skim-milk and meal.

I visited the large estancia owned by Dr. Santamarino, at Tandil. Tandil is 210 miles from Buenos Aires, on the Southern Railway. Near the town of Tandil is one of the great sights or curiosities of the Argentine Republic—viz., the "Rocking-stone." This stone weighs thousands of tons, and sits on a small pivot. To prove that this great rock moves, all you require to do is to place a bottle under it, when it will be smashed by the slight rocking of the stone. It is said that one of the old Presidents at one time undertook to pull this marvellous rock off its perch by hitching 400 bullocks to it, but the trial was not a success.

Coming back to Dr. Santamarino's business, which is situated near the Rocking-stone, I must say that this is a very interesting estancia. We should call this a "large ranch" in the northern United States of America, or a "run" in Australia. The estancia is over four square leagues in extent. In 1901 they installed separators in a factory at the homestead. At the time of my visit they were working five separators, and over 15,000 litres of milk per day was separated. In the flush of the season between four and five thousand cows are milked. They are also adding about five thousand more to the herd, all of which are already tamed for milking. On this large estancia there are thirty "tambos" or stations. Each one of these "tambos" is well fenced and watered. They also have paddocks of maize and lucerne. Besides, on each "tambo" will be found fairly good buildings. This sort of a farm will sound large to our New Zealand people. It, however, requires enterprise and capital to carry on a business of that kind. Dr. Santamarino has also lately erected a large building and equipped same with an up-to-date plant for manufacturing caseine. He not only manufactures the skim-milk from his own herd into caseine, but many of the *estancieros* who have separators sell their skim-milk to him. Mr. Reynolds's butter-factory at Tandil also supplies a large quantity of skim-milk to the doctor's business. I was informed that the caseine fetches about £30 per ton in London. Coke is burnt for drying the milk, and the expense is not a very light one. The great trouble is to get details from such an experimental business. I would not recommend this system of dairy-farming in New Zealand, particularly the milking process. I am quite sure our New Zealand farmers can make a great deal more money by feeding the skim-milk judiciously to calves and pigs than by manufacturing it into a rough caseine for export. During the first quarter of 1903 80,000 kilos. of caseine was exported from the Argentine.

DRIED MILK.

The manufacture of dried milk is practically a new business in the Argentine. While in the country I visited Mr. L. Gahnan's estancia at Navarro, in the Province of Buenos Aires. A new plant has just been installed in Mr. Gahnan's butter-factory. A company has also been formed for the manufacture of dried milk in large quantities for export. At Mr. Gahnan's factory three