

elaborate; any sort of a rough hut of slabs or sods, covered with a tin or thatched roof, answers the purpose. In such a comparatively mild climate as the Argentine they do not need nearly as much protection as we do in the cattle districts of our country, particularly in the South Island of New Zealand. It can, therefore, easily be imagined what an advantage a country like the Argentine, as a dairying country, has even over Canada, United States, and Russia: abundance of grass and water and sunshine almost the year round.

In the Argentine, silos for the curing of green fodder are a thing almost unknown; there are a few, but they can hardly be called "silos." Where the cattle are fed on any fodder, it is principally alfalfa or full-grown maize. The maize is rarely ever cut green and fed to the cattle, as is done in other countries. In some cases the maize is fed to the cows in the ear. In most dairying districts of the Argentine it is, however, not necessary to provide much, if any, winter food for the cattle, grass being in abundance the winter through. I think the Argentine is the finest grass country in the world. This, together with the beautiful water, which can be obtained nearly all over the country at a reasonable depth, makes stock-growing cheap and easy. In many districts farmers do not require to sink more than 15 ft. to 20 ft. in order to strike a good supply of water.

Of course, in some places it is necessary to sink artesian wells. Where this is done the water-supply is never-failing. It is also claimed by experts that the water-supply, generally speaking, throughout the Argentine is a very pure one. This may be accounted for in some of the districts which I visited by the fact that the water in many wells filters through sand-beds—that is, after you go down a certain depth. Take it all round, I think the Argentine has the clearest and probably the best water for butter-making purposes that it is possible to find in any country.

The following is a list of the names of the butter-factories in the Argentine and their respective daily outputs at the time of my visit at the end of March, 1904:—

Name of Factory and Situation.	Daily Output in Pounds.
La Union Argentina, Buenos Aires City	30,837
La Tanilera, Tandil, on the Great Southern Railway	5,506
Progreso, Buenos Aires City	5,506
Co-operacion de Cremerias Buenos Aires City	8,149
La Martona, Vicenete Casares, on the Great Southern Railway	4,405
La Union Gaudarense, Gaudara, on the Great Southern Railway	4,184
La Delicia, Florencio Varela, on the Great Southern Railway	1,762
La Vritel, Chascomus, on the Great Southern Railway	1,541
La Celia, Navarro, on the Great Southern Railway	1,321
Molino del Oeste, Buenos Aires	4,405
Lagranga Blanca, Marina, and other small factories in Buenos Aires Province and the other provinces	7,709

I give the above information so that our dairymen may know the size or outputs of the Argentine factories. For these statistics I am indebted to Señor J. B. Rospide, representative of the newspaper *Haritza*.

As I mentioned at the outset, dairying in the Argentine is practically a new industry. The first separators were introduced in the years 1890 and 1891. The butter exported from the Argentine in 1891 was 1,320 kilos. Previous to 1901, salted butter in tins was an article of import into the Argentine. In 1895, 400 tons was exported; in 1901, 1,500 tons; and in 1902, over 4,000 tons. According to the latest statistics issued by the Ministry for Agriculture, the export of butter for 1903 was 5,696 tons, an increase over last year of 1,696 tons. The Argentine Year-book draws attention to the fact that if this rate of increase is maintained, an annual export of 50,000 tons may be looked for shortly. It further states that to obtain this it would only be necessary to milk half the available number of cows in the Argentine, which are estimated at nearly twelve millions.

"So important is this industry becoming," says the Argentine Year-book, "it would be a mistake to consider it other than subsidiary and complementary to what must always remain the principal business of the country, the breeding of cattle and sheep for exportation, either as live-stock or through the freezing establishment; its development, in fact, should be regulated in such a manner that the abstraction of butter from the milk may not be permitted to interfere with the life and growth of the young animals on whose weight and quality so much depends." If it were not true that calves of good quality and weight could be raised less than a third cheaper on skim-milk with the addition of pea-meal, ground maize, or linseed-oil cake than they can be produced on butter-fat, I would then say the extract quoted was good advice to the farmers.

BUTTER-MAKING.

So far as the actual work of butter-making in the Argentine is concerned, the system adopted in most factories is somewhat different from ours in New Zealand. The bulk of the cream at most factories comes in in what I would call an overripe condition—that is, for the butter-maker to have control over it, or, in other words, for him to be able to ripen it uniformly with a good starter.

The fact of the cream arriving at the factories in this condition may be accounted for by the following reasons: First, dirty milking-yards; second, dirty milkers; third, dirty, rusty cans. And the most dangerous source of infection, in my opinion, is the carrying of milk and cream long distances by rail in these rusty cans. A great deal of the milk is brought to the creameries in small cans on horseback. Large quantities of cream are also brought to the railway-stations from the small estancias or farms in this same manner. It is an astonishing thing to see a native coming to a small siding or station with six or eight cans of cream slung from each side of the horse's back. They also very often take double that number of empty cans back with them.