

machines with a capacity of 80 gallons per hour are set up. The machines are made by Lane and Co., of Edinburgh. The process is a very simple one. The machines are nothing more than two large steel cylinders, 20 in. or 22 in. in diameter and about 6 ft. long. These cylinders are set close together; when heat is applied I should judge, with the expansion, they are only 1-16 in. apart. They are heated by means of applying dry steam to the inside of the drums. The milk is delivered directly on to the hot cylinders by means of a perforated pipe, which throws a fine spray on to each cylinder, the high temperature causes a thin coating of milk to adhere to the cylinder, and while the latter is revolving the dried milk is shaved off by means of thin knives, which latter must be perfectly true and set close to the cylinders. The dried milk when it is being delivered from the cylinders has the appearance of very thin white tissue paper. These large sheets of milk if touched with the hand will break readily. This substance is received from the cylinders into two large boxes, where wooden mallets are used for breaking up the dried milk, which is afterwards passed through a fine sieve, in order, as it were, to size it. After being passed through the sieves the milk has the appearance of fine meal made from a light-coloured American corn. It is then filled in barrels exactly like a 200 lb. flour-barrel, which are lined with parchment-paper. The dried milk is then ready for export. Any New Zealand dairyman or others interested can see a sample of this milk at the Dairy Commissioner's Office, Wellington.

If this system proves a success, a milk which is so easily handled and shipped is almost certain to meet with a good demand, particularly in a country like South Africa. I may explain that the sample of milk to which I gave a trial test did not prove a success, for the reason that the caseine did not seem to dissolve, thereby leaving considerable sediment.

THE MEAT INDUSTRY.

One of the great industries of the country is "saladeros," which signifies salted or jerked beef factories. These factories also make extract of beef, &c. About \$45,000,000 is invested in this business. The principal market for this "tasago" or salted or jerked beef is found in Brazil. Before these saladeros were established, the only exportable animal products were grease from boiled-down animals, tallow, and hides. Now they have fifteen or sixteen of these saladeros, and, from statistics given by Señor Ronaldo Tidblom, there were slaughtered at these institutions for making jerked beef 403,000 cattle in 1901 and 253,100 in 1902. It is also said that about 250,000 head of steers are sent into Uruguay and Rio Grande (Brazil) for the purpose of supplying the saladeros there. The total export of jerked beef for 1901 was 24,296 tons, and for 1902 22,304 tons. It is claimed that this jerked-meat industry cannot be done away with by the establishment of meat-freezing works, for the reason that Brazil and Cuba will always require and must have tasago. These countries also take leaner and lighter cattle for this purpose from the Argentine than those sought after by the freezers and exporters.

Although I am not an expert on meat-freezing works, I am going to give some practical facts with reference to what is being done in this, the greatest of industries in the Argentine. During my short stay in the republic I was successful in getting through some of the most important freezing-works in the Argentine. The first freezing-works which I visited was at the Town of Campana, and by the kindness of Mr. Graham, representative of John Cook and Sons, I was able to get a look over the whole premises. This was the first meat-freezing works started in the Argentine, and dates back only to 1883. It belongs to the River Plate Fresh Meat Company. They have a killing-capacity of upwards of six thousand sheep and four hundred steers per day. This company also started the first export chilled meat business to Great Britain in 1901.

The chilled-meat industry is becoming an important factor in the Argentine meat trade. The advantages in favour of chilled meat over either live cattle or frozen beef for export, as claimed by the Argentinos, is, that the price is higher on the British market than for frozen beef, and also that the expenses incurred in handling live-stock for export are much higher—that is, transport, &c. The River Plate Fresh Meat Company are now extending their premises. They have erected large buildings where the sheep will be housed over night. This is found necessary owing to the fact that when it rains the sheep get wet and muddy, which makes the killing much harder and more disagreeable next morning. This idea might be adopted to advantage in New Zealand. These buildings or large sheds need not necessarily be very expensive.

At Campana they have a good wharf where the large Home steamers come alongside. The mutton and beef is taken direct from the freezing-chambers, where the small trucks are run right into the chamber, and during the loading a set of outside insulated doors are shut and opened to allow the trucks, which run on a narrow railway, to pass in and out. This scheme seems to work well. The steamer "Langton Grange" was loading a large shipment of beef and mutton at Campana at the time of my visit. This was being shipped by John Cook and Sons, of Australia. The chilled meat for the British markets is loaded in a similar manner, only instead of having the trucks run to the wharf in the open, they have built a sort of insulated shed or tunnel, which protects the carcasses from exposure to the hot sun. This company owns large grazing paddocks or estancias, where the surplus stock are kept, also paddocks for resting the stock in close proximity to the works.

I may also mention that in connection with the chilled-meat business operated by the River Plate Fresh Meat Company in 1901 they exported 29,919 quarters of beef, and from the 1st to the 31st January, 1902, their exports were 38,148 quarters. Later figures I was not able to obtain. There seems, however, to be a rapid increase in the exports to Great Britain, and from what one can learn from recent reports from London, this factor in the meat-market at Home seems to be alarming the Beef Trust of the United States and the Australian shippers. It is claimed by shippers in the Argentine that their meat is competing fairly successfully with the meat from the United States, and that they are in a position to lay it down in London cheaper.

The next freezing-works I visited, those of the Campania Sansinena de Carnes Congeladas, are the largest in the Argentine. Through the kindness of Mr. M. Leishman Runciman, of Runciman