

Very few saddles are used by the natives in the Argentine. They have a sort of home-made arrangement which is composed of heavy bands around the body of the horse, and the top of which is made of strong leather, two rolls of some material covered with leather are faced on each side of the centre of the horse's back, and a large hook on one side, which permits of hitching the horse to a load of any kind by means of a chain or rope—a very handy arrangement indeed.

New Zealand dairymen will understand that this is not a good system of conveying milk or cream to a butter-factory or skimming-station after reading my remarks on the methods adopted for churning butter for city and suburb supply.

Now, getting back to the butter-making process again: I found that the grading of cream would hardly be possible, for the reason that you get so many hundred different qualities of cream at all degrees of ripeness, particularly at a large factory like La Union, where they turn out in the flush of the season about 20 tons of butter per day, and where they get the cream in from over fifty separating stations, mostly by rail, besides the many small estancias that forward cream direct. The grading and ripening of cream with a starter in the Argentine is therefore not practised very much. In most of the factories, with the exception of two or three, the cream is allowed to ripen on what might be called the self- or chance-ripening system. Most of the factories are substantially built and fairly well equipped. The large factories have any amount of freezing-capacity. The chilling of the cream is done by means of movable coils, through which cold water or brine is circulated. The vats are in nearly every case shallow, and the coils are worked up and down in the vat perpendicularly, not, like most of ours, on the horizontal principle. Generally speaking, the cream is not churned at nearly as low a temperature as we work on in New Zealand, the result being loss of fat in the buttermilk and injury to the texture of the butter in the working process. Most of the Argentine butter which I examined, both in the country and on the African markets, had the appearance of being overworked, and I was thoroughly convinced of that point after watching the process in some of the large factories. The Argentine butter is much paler in colour than the New Zealand article. This may be accounted for partly by the food eaten by the cattle, and perhaps the breed of cow may have something to do with it. Then, also, the large amount of friction given the butter in the working process tends to grease it, and make it, as it were, have the appearance of hog's lard. A good deal of the butter exported is not salted. This latter is even paler than the salted butter. I have, of course, always found from experience that salt adds a little colour to the butter. While in Cape Town and Durban I learned from a number of dealers that the Argentine pale butter was very well thought of. It, however, only required a glance to see that New Zealand butter was the finest-made butter sent into Africa, but the mistake was that they did not get it there while it was newer.

I am in hopes that we may by experimental work get some method of reducing the high colour in our butter without ruining the body and texture, as the British expert buyer thinks so much of the latter. My advice to New Zealand producers in the past has been rather against the manufacture of unsalted butter in large quantities for export, on the grounds of the greater liability of deterioration in transit during the long voyage, as compared with fifteen days from the Argentine or a few days from Denmark. The Argentine is differently situated and can afford to take the risk, for the reason that they can land their butter in London in such a short time compared with the time it takes our butter to reach the British consumer. This month, April, there is an arrangement being entered into which will enable the producers in the Argentine to land their butter in London in fifteen days, so when they get such a quick fortnightly service as this they can lay their butter down in the Old Country in a fairly fresh condition as compared with ours. The butter-boxes are not so good in the Argentine, the timber not being so suitable. Like the Canadian boxes, the sides, bottoms, and covers are often in three pieces, tongued and grooved. The Argentine people, however, have paid more attention to the question of making the boxes for the African market of much heavier timber, and also to nailing them better. I commented strongly on this matter when dealing with New Zealand butter shipments in my African report.

During my hurried visit to the Argentine I had the pleasure of visiting two butter-factories controlled by Lovell and Christmas and Mr. Henry Reynolds. The latter manages the business, besides buying from other factories for export. Mr. Reynolds was one of the pioneer dairymen in the Waikato, Auckland Province; he has also the honour to be among the first to start butter-factories on what could be called a good sound factory system in the Argentine. The first factory visited was at Progreso, in the City of Buenos Aires. This factory is quite close to the railway-station, which makes it very convenient for receiving cream. It is equipped with a good plant and plenty of freezing-power. At the time of my visit there they were turning out about 5,500 lb. of butter per day.

The other factory controlled by Mr. Reynolds is situated at Tandil, on the Southern Railway. I had the pleasure of spending a few days at this factory along with the manager, Mr. Gerlach, who at one time resided in New Zealand. At the time of my visit this factory was turning out about the same quantity of butter as the Central Factory at Progreso, in Buenos Aires, where the whole of the business is transacted. The factory at Tandil is a fine building, equipped with a good plant. The boiler is of Italian make, 80-horse power, fitted with a fuel-saving condenser, which permits of the water entering the boiler almost at boiling-point. Mr. Reynolds informed me that this boiler was installed at a much lower cost than either an English or American boiler. They have also a very powerful engine and two Linde freezing-machines. Four large churns are placed in a row in the butter-making room. They are of an American make, well known to me, called the "Squeezer." The butter is churned, worked, and salted in the churn. The cream is elevated into shallow vats, where it is cooled down by means of movable coils on the same principle as that in use at the Central Co-operative Factory at Christchurch. Although this factory was turning out less than 3 tons per day at the time of my visit, it has a capacity of 10 or 12 tons per day. In connection with the capacity question, I find the very reverse in the Argentine from what I have experienced in New Zealand—viz., that instead of building the factories too small