

quality of butter manufactured; if it goes bad it is liable to be returned. The butter is made in an improved "Astra" combined churn and worker having a capacity of ninety gallons. The butter 'comes' within five or six minutes. After washing, 2% salt is added and then the butter-worker is pushed into the churn so that churning, salting and drying are all done in one operation. The texture of the butter remains firm and, soon after manufacture, the butter is removed to the cold storage where it may remain in perfect condition for two months. The whole dairy plant is run by one engine. All vessels are scalded by steam after use. Milk records are kept up to date and milk is frequently tested to see if the proper percentage of fat is maintained.

We were assured and we have no hesitation to believe, that this dairy farm is run on commercial lines and we earnestly look forward to the day when there would be many such dairy farms run with profit and on up-to-date methods.

D. ANANDA RAO.

Reclamation of Saline Land.

There is a large backwater near Coondapur town. With a view of getting this reclaimed and brought under cultivation, I gave out last year about sixty acres of this on cowle terms, of rupees two per acre for five years and rupees four per acre thereafter, to a number of private persons. The lands were sold by auction for the most part and fetched about Rs. 65 per acre. On inspecting these lands this morning I was interested to see the

first steps which the people were taking to bring them under cultivation. Normally the lands are submerged by salt water at high tide and the first thing they do is to exclude this by building a high mud bund, sometimes faced with stone, leaving an opening for flood-water to escape. Very large quantities of sea sand are then brought in dugouts and spread over the surface till the level is sufficiently raised. A thick layer of mud from the river is then spread on the top of the sand. When the monsoon comes the first rain water is impounded in the field, and kept on the land for about a month, when it is let out, and a coarse salt-resistant paddy* called 'Kaggu bhatta' is sown broad-cast. This year being the first, the crop grew very well till the rains stopped (about October) when the salt, no longer being diluted by the rain, became concentrated, with the result that the crop, then just maturing, was 'burnt up' and gave a very poor yield. The outlet to the backwater is open and a good deal of drainage water is still running off from the field. The same process will be repeated next monsoon, and it is hoped that the salt will be sufficiently washed out by the time the next crop is sown to allow the crop to mature.

It is interesting to see that some coconut trees planted on similar adjacent land reclaimed more than twenty years ago, are practically barren. The people say that, as soon as the roots reached the level of the salt tidal water, the trees ceased to grow properly. This confirms what I remember reading some years ago in an article on coconut cultivation, that it is the fresh seepage water from the land that keeps coconut trees growing on the sea-shore above; they will not grow well in pure salt water where there is no fresh-water moving in the sub-soil. On the other hand, land of this description, when reclaimed, grows paddy, followed by pulses in the second crop season.

21-219-15.

M. E. COUCHMAN.

* Samples of paddy and rice are kept in the College Museum.—Editor.