

## TO ITS GOOD CONDITION,

it is then for the most part filtered through gravel, and in this way is freed from the presence of a large number of micro-organisms, and is then rapidly cooled and brought to the consumers in this form. The second portion is centrifuged, thoroughly cleansed and divided into cream and skimmed milk. In this way cream is reduced to two different qualities, or is used for the manufacture of butter, the yearly production of which is 250,000 kilograms. The skim milk produced is very much favoured and is a cheap form of nutrition. About ten thousand litres of this are sent out daily. A third portion serves for the manufacture of cheese in which the soft cheese of the French variety occupies the most prominent place Roquefort, Camembert, etc. Two million litres of milk are employed in this way every year. This cheese is sent throughout Germany to all the larger cities of the Empire where it is in great demand.

"What is called children's milk is obtained from farms whose cattle have the whole year been fed on dry food. The strictness with which Berlin has thus provided for unadulterated milk has had most favourable results in the quality of the milk, and the improvement of the milk in general has been most marked and has resulted in the diminution of the adulteration with water of from 14.1 per thousand in 1879 down to 3.6 per thousand in 1886, as testified to by

## THE OFFICIAL INSPECTION.

"There is undoubtedly, too, another evidence of this benefit in the diminution of mortality in children, whereas during the years of 1871 to 1880 thirty per cent. of children died in the first year. In 1881 it was lowered to twenty-seven per cent., and in the present year down to 28.8 per cent. While of course, undoubtedly, other factors have played an important part in the improvement of mortality; such as improved dwelling places, sewers, etc., nevertheless the improvement of the milk, which is almost the only nourishment for children under one year, must be recognized as having the greatest influence in this respect.

"From the small developments mentioned above up to the great increase in milk supply and analogous products there has been a further development as a result of the same enterprise. The by-products in the manufacture of cheese, butter, and such like products must be mentioned, such ar-

ticles as lactic acid, lactose and various preparations of casein, all of which find a market in various parts of the country, as well as being exported for use in pharmacy, dye factories, paper, textile industries and like industries. So much has this become

## AN ESSENTIAL FEATURE.

of the dairy that special technical laboratories have been constructed.

The bacteriological study of milk and its products has become so important in Berlin that it has been found necessary to establish an experimental station in which all the essential scientific questions concerning milk infection can be worked out thoroughly. Such, for example, is the effort to obtain in pure culture the various bacteria which renders milk infectious. In the same place inoculation experiments upon the smaller domestic animals are carried on. Feeding experiments on both the larger and smaller domestic animals are also thoroughly carried out.

"A special laboratory for the chemical analysis of milk has likewise been created. In the year 1896 no less than 21,480 analyses were made. In consideration of these various features, the existing conditions of the milk supply are the most favourable that can possibly be obtained. Formerly the various suppliers of milk carried on a wholesale milk adulteration, and at the present time, as will be seen from the analyses, this adulteration has been.

*Note.* — A litre contains 1.760 of an imperial pint, therefore a hundred litres are equal to 88 imperial quarts or 22 gallons, about 220 lbs. *Ed.*

## A HEIFER'S FIRST MILKING PERIOD

I question—in some degree, at least—says a writer in *Home and Farm (Eng.)*, the wisdom of the policy of prolonging the milking period of a first calver by delaying her second calf with a view of inducing the habit of prolonged milking. That training has very much to do with the making of a cow, is, I think, not to be disputed, and in all probability the loss of milking capabilities in the modern Short-horn, of which we hear so much, is due very much to the pernicious habit of letting the heifers suckle their calves or, worse still, of removing the calves to be reared by nurses and at the same time possibly fattening up the heifer for show purposes. No beast with any