

for example. Few places in the West have so varied a surface, sweeter herbage, and such plentiful abundance of cool springs, and these give it rare advantages as a dairy section.

The process here employed yields a product greatly superior to any other yet discovered. It requires, however, a costly apparatus, and the use of great skill. Various attempts had been made at different times to bring milk into a form in which it could be enjoyed by those who could not possibly reach a cow, but never gave general satisfaction, or were attended with any marked success, until Mr. Borden, after years of research and experiment, arrived at the perfection of his present method.

Few of our readers are probably aware of the extent to which this article has been made and sold. Of Mr. Borden's various factories, there are two within thirty miles of each other on the Harlem railroad, New York, with capacity to work daily 15,000 and 20,000 quarts of milk; and to supply the war demand have sometimes been run day and night. How great a luxury has thus been furnished to our brave defenders, both in hospital and camp, every returned soldier well knows. Its use in private families has also rapidly increased from the time it was introduced, and at the present time thousands of families use it in preference to any other.

The Way it is Made.

In the first place the utmost care is used to obtain the best material and to have it drawn in the cleanest manner. As soon as drawn it is strained and placed in cans, set into cool running spring water, until the temperature is sufficiently reduced. To be properly cooled at once and to be thoroughly rid of all traces of animal heat and odor is a prime necessity. It is then taken to the works where it is first tested, by one as skilled in his art as a custom-house liquor taster is in his, and if there appears the slightest defect or dilution, it is rejected. If all is right it is strained into a vat, from which it flows into brass cans which are set into what is called the bath tank, which is nearly full of water, heated by steam. From the cans it is next poured into the "Well," which is furnished with a steam coil, which heats it to a higher degree. The object of these processes is the precipitation of the albumen which it contains, the presence of which, although it amounts to only one quarter or three-eighths

of one per cent. in quantity, would seriously interfere with successful condensation.

Evaporation in Vacuo.

From the steam well it next passes into what is called the vacuum pan, an oblong copper vessel—in form somewhat like an egg—standing on one end, of four or five feet diameter in its smaller portion, and containing from one to two thousand quarts. This is furnished with a steam jacket over its bottom and a coil of copper tube inside, through which either steam or cold water can be introduced at pleasure, and thus a perfect control obtained over the temperature of its contents. The air is removed from it by a pair of double acting air pumps, which are worked by a steam engine, and are set in motion as soon as the milk is ready in the well. As soon as the barometrical guage shows a sufficient vacuum, which is indicated by a rise of the mercury to twenty-five or twenty-six inches, the milk is allowed to enter by a pipe leading from the well; evaporation of the water commences at once and proceeds with rapidity. The pressure of the atmosphere being removed the milk boils at a temperature so low that the hand might be held in it, and yet the water passes off from it at the rate of more than a hogshead per hour. The proportion of water in milk is usually 87 per cent—the balance being dry matter. Evaporation is not continued to dryness, but until it is reduced to one-fourth of its original bulk, when it assumes the appearance of thick cream, in which form it gives much greater satisfaction than if fully dried.

Just before the completion of the process it is subjected to what is termed superheating, by which is evolved and carried off in the condenser all remaining odor, and leaves the product in the highest possible state of purity. The article thus prepared, as soon as drawn off and cooled, is ready for market and may be employed for all the uses of fresh milk, and is in no respect inferior to it.

New York Academy of Medicine

caused an investigation to be made by a committee especially appointed to visit the works from whose report we make a few extracts:—After describing the process of evaporation, they say:

"It affords the section no small degree of satisfaction to be able to state to the academy, that after a thorough examination of this subject, they are fully convinced that in 'Borden's Condensed Milk' the