man could obtain by working separately. Thus the bacon industry would be raised to a higher standard throughout the country. M.R.

Preserving Skim Milk.

THE patrons of many of our creameries are not satisfied with the skim milk that is returned to them from the creamery. They claim that it sours too soon after being returned to the farm. The rapid development of lactic acid is caused by the heating of the milk during separation, and in some cases by being run from the separator into sour vats.

The chief objection voiced by the patrons is that the calves to which part, or all, of the skim milk is fed do not thrive well, even when the fat constituent is replaced in the form of meal. They further claim that if the milk cannot be returned sweet, it will pay them to feed their calves on whole milk. This is especially the case where veal or beef is being produced. It may be modified somewhat in the case of dairy calves, where the young are not required to lay on so much flesh; but, at the same time, it is essential that the milk should be sweet to give the best results.

The invention of the pasteurizer seems to have somewhat simplified the matter. The pasteurizer is an apparatus for heating the milk to 160° F., and thereby destroying about ninety-nine per cent. of the germ content. This destruction of the bacteria which cause the souring must undoubtedly improve the keeping qualities of the milk, and yet it does not change its properties. Therefore, why not pasteurize?

It is generally conceded that the cream which has been pasteurized will, as a rule, make a finer quality of butter than unpasteurized cream. It is also claimed that skim milk is preserved by pasteurization. Now, why not combine the two and pasteurize the milk before separating, thus insuring good butter and sweet skim milk. Aside from the pasteurizer, the cleanliness of storage tanks has much to do with the rapid souring of the skim milk. It has been found necessary to clean the tanks every day to keep them sweet. True, it will require labor, but, at the same time, it will be of profit to the patron and indirectly to the creamery. Anything to convince the patrons and at the same time give good results, should be the aim of every creamery —hence the necessity of preserving the skim milk. F.R.M.

Filter Beds.

IN many cheese factories sufficient provision is not made for the removal of washings and refuse. Often the slop is run into the gutter which conveys it to the outside of the building, where it spreads over the surface of the ground, or is run into some neighboring creek. Where no better method is practised, it cannot but be responsible for many infectious diseases, which are too common in country places. Much of the impure milk which is received at some of our factories may be attributed to the same cause, where the cows have access to a creek into which the factory slop has found its way. This may develop into no small amount of injury, as the water will go several miles before it becomes free from pollution.

There are various ways of overcoming this difficulty, but the simplest and most reliable way is by the construction of a filter bed. The cost is moderate and the construction simple. The materials will vary with the size, but a few loads of sand, with planks and tiles, are all that is necessary.

For a medium-sized factory an excavation 20x20 feet and 2 feet deep is all that is required. Then two rows of glazed (or unglazed if others cannot be procured) five inch tile should be laid in the bottom, each row five feet from the side in the bottom of the excavation. These tiles are to drain the bed, and it is necessary that they should have a uniform slope to a free outlet. After the tile are laid, plank sides four feet high must be erected and made secure, and then filled with coarse sand to within six inches of the top. To convey the washings to the bed, tiles, pipes, troughs, or logs may be conveniently used. Several outlets, to spread the washings over the bed, is necessary to procure the best results. The sand need not be changed for years, but if it is found necessary, the top four or five inches is sufficient to remove. When