

tario are pretty well aware of that fact, and do not think they are attempting anything of the thick fat type. Occasionally a thick hog is found, but it is Nature's blunder or perhaps the breeder's.

Ontario is an intelligent old chap and if the packers play sharp and rogue the Old Man it may last for a time but I do not think he will lose his head and go clean out of the business and lose all the revenue, although some of the fickle ones may but that is not the class who are forging Ontario to the front. I may be blind, but I cannot see any signs of danger to the hog industry at the present time. But I think I do see signs of the packers in danger. Much of the hair-splitting, narrow policy on the part of the packers will only hasten the day of co-operation as they have it in Denmark. We have had much of the joint stock company get-rich-quick scheme foisted in the name of co-operation but they were only libels on the name, and those packing concerns naturally went out of business and became, as it were, fuel for the big concerns which, in turn, unless they do the square thing, will become fuel for co-operative effort.

L. E. ANNIS.

Scarboro, Ont.

Pure Milk During Milking

The Nelraske Experiment Station has recently conducted a series of experiments with the methods of controlling contamination of milk during milking. The conclusions reached are as follows:

It is safe to conclude from the foregoing experiment that some means of preventing milk contamination during milking should be employed.

The work required is sponge an animal's flank and udder is but a trifle, and great improvement can be made on the milk and its products.

The carbolic acid solution costs two cents per gallon, which is enough to treat ten cows. The only objections to this method are the disagreeable odor and the bother of mixing.

The vaseline costs about the same as the carbolic acid and serves as a good preventive for chapped or sore teats. It is also to be recommended for cows with short teats which have to be milked by the stripping method. This treatment will not answer when the cows have dirty udders.

The water treatment is to be recommended for general use above the other three, as it is cheaper and does the work practically as well. This method can be used on any farm with little or no inconvenience and the results obtained would more than compensate for the extra time required.

Cement floors are not only easier to keep clean, but are also less favorable to the growth and development of bacteria.

While it is necessary to use bedding in winter, in summer when cows are kept in the barn only during milking and feeding time it may be dispensed with to the betterment of the milk.

Milking out of doors in clean yards or pasture gives better results than in clean barns, even under the best of conditions.

Creamery Inspection in Ireland

In order that an Irish creamery shall receive registration under the present system of inspection, the following conditions must be complied with:

1. The manager must be capable.
2. Strict cleanliness and order must be manifest everywhere around the creamery, in the creamery, and in the

Make More Milk Money.

If you knew a way by which you could double your profits from your milk cows and at the same time save yourself a lot of hard work, you'd want to adopt it at once. Well the

Empire Cream Separator



will do that thing for you. We want to show you how and why. It's the simplest separator made; has few parts; nothing to get out of order; turns easily; skims perfectly; is easily cleaned; is absolutely safe; lasts longer; gives better satisfaction and makes more money for you than any other—all because it is so well and so simply built. No separator has ever made such a record in popularity and sales—because every man who buys it is satisfied. May our agent call and show you how it works? Don't buy a separator until you have investigated the Empire.

SEND FOR CATALOGUE. Let us send you our new Catalogue. Ask for book No. 12.

Empire Cream Separator Co. of Canada, Ltd., Toronto, Ont.

persons of manager, employees and pupils.

3. Apprentices and pupils must receive efficient training and instruction.

4. There must be a proper system of bookkeeping and business methods.

5. Premises and methods must be at all times open to inspection by the department.

6. Defects indicated by the Department Inspector must be remedied.

A list of the factories that are registered is published annually by the Department.

Uniformity in Marked Weights of Butter

EDITOR THE FARMING WORLD:

A number of communications have recently been received from representative bodies and leading butter merchants in Great Britain concerning the matter of a uniform weight of butter in what is intended to be the 56-lb. box. It is stated that boxes are frequently marked 57, 58 and even 60 lbs. It is not claimed that these boxes contain less than the marked weights any more than those which are marked 56 lbs.; the objection is against having either more or less than 56 lbs. in each package. The buttermakers of New Zealand, Australia and Argentina are very careful on this point, and the uniformity in their weights is much appreciated by the trade. The 56-lb. package was adopted because it represents half an English cwt. If any other weight is marked, and invoiced, the advantages of having such a standard are lost. The butter merchants in Great Britain are as much influenced by a matter of this kind as they are by the quality of the butter itself. New Zealand butter is receiving a premium over Canadian today more on account of its uniformity in all respects, the excellent packages and heavy parchment paper which is used, and the careful attention which is given to weighing and branding than because the quality is superior. It is a penal offence in New Zealand to place any other than the true net weight on a package of butter or cheese.

Every butter box should be weighed after the parchment lining is placed therein, the tare marked on it, and then filled with the proper amount of butter to ensure its turning out 56 lbs.

J. A. R. DUNICK,
Ottawa, Ont. Dairy Commissioner.

The Cream Gatherer

Now that the system of gathering cream has become necessary, it is of very great importance that there be a suitable class of men educated for the

position of cream gatherer. The responsibilities of the position are many, and the need of a good, intelligent, conscientious man is urgent. A lot of tact is necessary to smooth out little misunderstandings with the patrons, and a lot of real dairy knowledge is required to be able to explain the reasons for variation in the cream tests and many other vexatious questions which arise.

PERFECT SATISFACTION cannot be expected from the engagement of a cream gatherer who has not worked in the creamery and acquired a knowledge of testing, separating, butter making and creamery bookkeeping. Good men can often be hired from among the farmers themselves, but there are very few amongst these who are not woefully lacking in some very important qualification. One may have a hasty temper and be too prone to take offence, another may be too independent, one may be lacking in that essential attention to details, another may be too slovenly. Then again the question of popularity and the general esteem in which a man is held by a community has a great deal to do with the success or failure of a cream route.

Honesty, of course, is essential, not only that honesty which does not actually steal, but that honesty which considers one's employer's interests as one's own.

To a very large extent a cream gatherer stands between the patrons and the maker or manager, he is in an intermediate position, and must have the confidence of both. It is not desirable to criticize the one or the other to outsiders, and it is necessary to let the patrons see that the maker has both his respect and confidence.

DIFFICULTIES

There are numerous little difficulties which arise in gathering cream. Perhaps the most common is the variation in the test, and the gatherer must be well posted in all the different causes of variation connected with the manipulation of the separator. These things must be studied out patiently and intelligently. It is not satisfactory to jump at conclusions, as there is a reason for everything. A few pointed questions may readily reveal whether a variable cream test is due to an uneven turning of the separator crank, to an excess of rinsing water, to extra new milk cows, to uneven temperature of milk, to the visit of the parson or the hired girl's fellow at the same time. It must not be forgotten that it may be due to a carelessly taken sample, or a loose sample bottle cover, or to carelessness in testing, or to weak sulphuric