

aired before a special committee of the council, and, it is needless to say, whether justly or not, the official is going on in the same old way. We draw attention to this instance with the view of interesting others in this work, and of finding out if the case cited has any counterpart elsewhere. If not, it may be taken for granted that the system of inspection generally adopted is giving good satisfaction. If, on the other hand, such grievances are numerous, the system must be partly at fault, and admits of being remedied. An independent officer, who could be called in to act as arbitrator, or to settle such grievances, might help to make the present system more perfect.

Buckwheat Middlings.

The value of buckwheat middlings as a food for milch cows has been lately tested at the Pennsylvania Experiment Station, and found to be very satisfactory. It proved to be the cheapest by-product that could be obtained. When fed to cattle it has a slight costive tendency, which is easily overcome by feeding it in connection with corn-and-cob meal and new process oil-meal, the following proportions, by weight, being suitable:

- 3 parts buckwheat middlings.
- 2 $\frac{1}{4}$ parts corn-and-cob meal.
- 1 $\frac{1}{2}$ parts new process oil-meal.

This mixture was used for the station herd for three months with entirely satisfactory results. Eight pounds per day per cow was the average grain ration, corn fodder being used for coarse fodder, and on this ration the herd averaged about twenty pounds of milk and 1.2 pounds of butter per cow per day. If ensilage is fed once a day, the oil-meal may be omitted with good results. Buckwheat middlings are palatable, and, when fed in the above ration, no ill-effect was observed on the health of the cows, or of the calves born while the ration was being fed. Not only the amount of milk and butter produced upon this ration, but also its quality, was very satisfactory. The cost of buckwheat middlings ranged from \$14 to \$15 per ton, and, taking into consideration the large amount of protein which it contains, and its high percentage of digestibility, it proved one of the cheapest concentrated foods obtainable.

Perhaps the by-product which is used most universally among dairymen is wheat bran, many thinking it necessary for the best results. On account of its low percentage of digestible matter and relatively high price, it cannot claim much attention from the economical feeder of to-day

The station herd, as above noted, was fed a ration containing no bran for over three months, with satisfactory results, its place being taken very largely by buckwheat middlings.

When and How to Use a Starter in Cheesemaking.

By R. W. STRATTON, Dairy School, Guelph.

Just when and how much to use cannot be definitely stated. It must be determined by the exercise of good judgment. Suffice it to say, that it is better to err on the safe side, by using too little rather than too much. First apply the rennet test, to be sure of the acidity of the milk, before adding the starter. A starter may be used with advantage at all times with gassy milk, and in cold weather when milk is being delivered at the factory very sweet. If it is known for a certainty that all the milk being delivered in the vat is perfectly sweet, a little may be added at the start; but the bulk should always be kept until the condition of the milk has been ascertained by the rennet test. Do not ripen the milk so low, by two or three seconds, when using a starter.

Let it always be remembered that while a good, clean-flavored starter can be used to advantage, a poor flavored one should never be used under any circumstances, as it would spoil the flavor of the whole vat.

Making Fall Cheese and Handling Gassy Milk.

We give below some pointers on making fall cheese and handling gassy milk, by Mr. T. B. Millar, instructor in cheesemaking at the Provincial Dairy School, Guelph:

In making fall cheese, the system is similar to that used in making summer cheese, the following being the only points of difference:

If the milk is working slowly, use some clean-flavored starter.

Use enough rennet to have coagulation take place in from forty to forty-five minutes.

Set the milk so that it will be ready to dip, with one-quarter inch acid, in from two and three-quarters to three hours time after setting.

Keep the curd warm, about ninety degrees, until ready for milling. Mill when the curd becomes flaky, showing one and one-quarter to one and one-half inch acid.

Salt at the rate of two and three-quarters to three pounds of salt per 1,000 pounds of milk,