Express Rates on Cream.

On March 21st, 1911, the Board of Railway Commissioners of Canada issued an order fixing certain express rates on cream for buttermaking, and a tariff of higher rates on cream for other purposes. This did not prove satisfactory to either the express companies or to the shippers. Accordingly, a new tariff was asked for, and on June 1st, 1911, the express companies submitted for the consideration of the Board a special tariff "B," and on the 26th of June a special tariff "C," both giving rates on cream either sweet or sour, and to be used in any way the purchasers think proper—"B" excluding and "C" including collection and delivery service.

Tariff "B," as submitted, is almost identical with the Board's tariff on cream for buttermaking, practically the only difference being in the matter of collection and delivery service. The tariff on cream for buttermaking includes collection and delivery service, while that on cream, without restriction as to use, does not include such service.

Tariff "C," including collection and delivery service, differs from tariff "B," which excludes such service, by an increase of 5 cents per can in eight of the rates quoted, 10 cents per can in two of the rates, and 15 cents per can in one of the rates.

After considering the tariffs filed by the express companies, the Board of Railway Commissioners have ordered that the following tariff on cream in cans, with or without jackets, plainly and distinctly stencilled and tagged, go into effect on the 18th of September, 1911, between all points east of Port Arthur:

Miles.	5-gal. cans each.	8-gal. cans each.	10-gal. cans each.
25	15 cts.	20 cts.	25 cts.
50	18 "	26 "	31 "
75	22 "	31 "	36 "
100	26 "	36 "	41 "
150	34 "	46 "	51 "
200	42 "	56 "	61 "

The above charges do not include collection or delivery service. Returned empty cans will be charged at the rate of 5 cents each for return carriage.

Where shipments are called for and delivered, 5 cents per can extra is charged.

There are several other clauses relating to the procedure in shipping from regular stations, flag stations, etc.

Express companies are obliged to furnish a collection and delivery service for cream shipments in any locality for which a wagon or sleigh service is provided.

The cream is to be carefully handled, and delivered with the least possible delay, and not left exposed to sun or severe frost.

Every Patron Loses.

Editor "The Farmer's Advocate":

We have a good deal of very hot weather this summer, and it has required great care to send the milk in proper condition to the cheese factory, and there has been considerable bad milk returned to the farmer, and a good deal taken in that should have been returned. The majority of our patrons now cool the evening's milk, but the morning's milk is generally left to take care of itself. Some of the very hot mornings, the milk, when received at our factory was 84 degrees, and it was found that it took one pound more of such milk to make a pound of cheese than when the weather was very cool. I heard of one factory where, on a certain hot day, the inspector was visiting, and he and the cheesemaker took the trouble to drive around and interview all the patrons, and asked them to take particular pains to cool both the night's and morning's milk. The patrons did so, with the result that it took over one pound less milk to make a pound of cheese than it did the previous day, and the weather was just as hot; and then, a much better quality of cheese was made.

It is impossible for a carpenter to make a good wagon box out of lumber that has commenced to rot and decay. So it is just as impossible for a cheesemaker, no matter how well he may understand his business, to make a first-class cheese from overripe milk.

Now, this is a serious matter. The average yield at our factory for July was 12.17. Now, if the milk, morning's as well as night's, had been properly cooled, it could have been 11.17, which would have made a difference in the total receipts of about $425. Someone will ask where the difference went? Why, it went out in the whey. In very hot weather, the whey is much whiter. But we cannot make the $425 extra out of the pigs. I doubt if we could make $25. So there will be a dead loss of $400.

Now for the remedy. The condensing factories will not take in any milk if the temperature is over 60 degrees. Now, if our cheesemakers were authorized and empowered to send all milk back to the patrons which went over 70 degrees, I believe we would not only have a very much lower average, but we would have a better quality of cheese. There is scarcely any farmer that has not plenty of cold well water. Now, if he would set two coolers full of cold water in the can the moment he has done milking, and then, whenever the water gets warm, empty it out and put in two more coolers full of cold water, this would not be much trouble; and then, in the morning, have the milk can sitting in cold water, and set a cooler of cold water in the can when he commences to empty the milk, it would not take long to reduce the temperature away down below 70. Someone may ask, "What is there in this for me?" This is a very reasonable question, and we will try to answer it. If the milk had been properly cooled and taken care of at our factory during July, and the average pounds of milk to a pound of cheese been 11.17, instead of 12.17, as I have already stated, we would have had $425 more money to divide, of which our largest patron would have got over $24, and the average patron, sending about 7,500 pounds, would have got about $7. When there was over $425 of a loss at our factory in July from overripe milk, how many thousands of dollars of a loss would there be in all the cheese factories in Canada?

When we find out such a leak as this, we should certainly stop it at once. Then, let every patron of every cheese factory get to work and cool his milk properly both nights and mornings, and so prevent the great loss, get more money for the milk, and enable the cheesemaker to make a better quality of cheese.—[A Cheese-factory Secretary of 27 Years' Experience.

[Note.—The above letter, by a highly valued contributor, well known personally to the editors of "The Farmer's Advocate," is worth thinking over. A better way of accomplishing the cooling, however, is to set the can of milk in a tank or half-barrel, through which cold water runs. The narrow "coolers" are pretty good if handled in a thoroughly cleanly manner, but too often they are set on more or less dirty stands or well curbs, and then reinserted into the milk, with dust and germs adhering.—Editor]

POULTRY

Poultry and Eggs in Muskoka.

Editor "The Farmer's Advocate":

I am an interested reader of this Poultry Department, and would like to give my experience in this branch of the business.

I began in a very small way, with only ten pullets and one cockerel. Some of the pullets were part Light Brahma, the others part White Leghorn; the cockerel three-parts Buff Orpington. They began to lay the 8th of January, 1909, and laid steadily until the following September. In the meantime, three had died from an unknown disease. They laid no more until January 1st, 1910, when they began (they and their pullets), and kept it up, with the exception of a few odd days, the whole year. Counting losses and feed, which I had to buy, the first year they only paid their way. Last year, the average number being about a dozen hens, they average 134 eggs each, and made $25 profit, including chickens sold at 20 cents per pound. This year I have all grade Buffs and a pure-bred male. Began the year with 19 yearlings and pullets. During the first three months they laid $20 worth of eggs, the feed, which was raised on the farm, costing about $8. In January the eggs were sold for 35 cents a dozen; in February, 30 cents, and in March, 25 cents; in the spring they got down to 18 cents, but are 25 cents now. Being in Muskoka, we find the tourist traffic keeps up the price. In winter I feed the hens three times a day, generally buckwheat in the morning; boiled vegetables, mixed with bran, and a little pepper sometimes; evening, peas or wheat, warmed in extra-cold weather. I also warm the water or milk. They roost in the cow stable, and have a scratching shed, besides. In summer they have the run of the fields, and get feed twice a day.

L. C.

Animal Food for Fowls.

These are the most expensive foods. They form a substitute for the worms and insects that are the natural summer food of fowls upon free range. Fowls confined to small runs require to be fed more or less animal foods during long, dry spells in the summer and during the winter. Even where the range is unlimited it frequently pays to feed animal food.

It is generally believed, and I think rightly so, that good egg yields cannot be secured annually without the use of such foods as green-cut bone, beef scraps, or cooked refuse, meat, etc. Many believe that the larger the amount of animal food the fowls consume, the greater will be their egg production. There is good ground for doubting this statement, in that those foods are expensive, and the extra eggs may cost more than they are worth. Moreover, herein is where serious injury may be done to the hen's digestive and reproductive organs.—[Prof. W. R. Graham, in the Standard and Poultry World.

Stock Ducks.

The birds intended for stock purposes should be hatched in March or April, as later-hatched birds will seldom lay sufficiently early in spring, and from the first allowed free range and given no forcing or fattening foods. It is important to provide the breeding stock with a practically unlimited run, and free access to plenty of swimming water. The housing may be of simple nature, but must be dry, capacious, and airy. The practice of closing up the stock at night in small, badly-ventilated houses cannot be too strongly condemned. An open shed, which may be part of some farm building will provide good housing accommodation. Each bird will require at least three square feet of floor space, and double this amount may be allowed with advantage. The floor must be dry and kept well bedded with clean material, such as straw, turf-mould, etc.

In order to obtain a satisfactory number of fertile eggs, the stock ducks must be given greenstuffs and animal food regularly, except during summer months, when the birds, if given constant access to suitable run, will procure these essential foods for themselves. Turnips, cabbage and early-cut clover are excellent green stuffs for ducks. The clover hay requires to be cut into short chaff, and steeped for about twelve hours in hot water before use; the turnips should be cooked and mashed, whilst the cabbage can either be cooked or chopped up finely and fed raw. A form of animal food which, as a rule, is easily obtainable is the refuse—especially blood—from butcher-shops and slaughter-houses. It happens, sometimes, too, that an animal is slaughtered on the farm, and, provided, of course, there is no infectious disease in the carcass, the blood and offal should be saved for the ducks. All material must be thoroughly cooked and minced before use, and fed as fresh as possible. The ducks' rations should consist almost entirely of soft, mixed foods, though an occasional feed of grain may be given. Any changes in diet should be made gradually, and the effect on the birds noted. This specially applies to animal food, which, if given suddenly in large quantities, is liable to cause severe diarrhea. The ducks may be fed twice each day, morning and evening, but it is important to give only as much food at each meal as the birds readily clean up. The morning meal should be scanty, so as to induce the ducks to take exercise in seeking food for themselves, since fat ducks are lazy, lay badly, and their eggs are usually infertile. It is advisable to feed in long troughs covered with movable wooden cages, in order to prevent trampling on the food, and it is most important to keep such feeding vessels sweet and clean. The ducks require access at all times to grit and lime. A load of screenings from a stone-crushing machine, or gravel from a river-bed or gravel pit will provide sufficient grit for a long period. The bulk of this material should be about the size of split peas or small Indian corn, but the presence of some finer material, like sand, is advantageous. Crushed oyster-shells provide lime in a good form, and can be purchased in most country towns. Some suitable rations are: 5 parts oat mash, 5 parts fine sharps or pollard, 2 parts bran, 3 parts Indian meal, 1 part cooked animal food; or, 5 parts oat mash, 5 parts sharps or pollard, 5 parts Indian meal, 2 parts cooked animal food; or, 5 parts oat mash, 5 parts fine sharps or pollard, 3 parts bran, 2 parts Indian meal, 1 part cooked animal food; or, 5 parts oat mash, 5 parts fine sharps or pollard, 5 parts bran. These four rations are to run concurrently, the first to start November 1st and run for two months, the second to run three months, the third two months, and the last five months. The parts given (oat mash is coarsely-ground oats) are by weight, and not by volume. If, however, the quantities are carefully weighed a few times, sufficient accuracy in judging the proper amounts will probably be gained, and constant weighing prove unnecessary. The dry portions of the ration should be mixed first, and, if desired, a fairly large quantity can be stored in one receptacle, ready for use. The green stuff and animal food should be added to the dry mixture, together with sufficient liquid to form, after thorough stirrings, a crumbly but not sloppy mass. It is better to prepare at one time only sufficient for one day's use. The green stuffs may be varied as frequently as possible, and, if desired, cooked potatoes may occasionally be added. Only good sound meals should ever be used, and the oat mash should be ground as finely as possible.—[A selection from "The Irish Table Duck Industry," by Percy A. Francis, in the Journal of the Department of Agriculture and Technical Instruction for Ireland.