season of six months, have added to its fertility the equivalent for at least 200 pounds of sulphate ammonia, 100 pounds of high-grade acid phosphate, and 60 pounds of kainit.

## Crate-fattening of Chickens.

"The Farmer's Advocate," having learned that the subscriber to the following contribution makes a specialty of crate-fattening chickens, submitted the following questions to him, hoping to elicit information valuable to its readers:

1. How long have you been engaged in the business of crate-fattening chickens?

2. About how many chickens do you fatten in this way per year?

3. Where do you obtain the birds for fattening, what breeds are preferred, and what prices paid?

4. What length of time are they forced? Give details about rations, crating, etc. What are the average gains in weight?

5. What is the approximate selling price, cost of feed and other expenses?

6. Would you recommend farmers to undertake crate-fattening of their birds, or is this likely to prove profitable to them?

Editor "The Farmer's Advocate":

I will give you my experience with crate-fattening of chickens, and, if at any time I could meet with the Institute meeting, and demonstrate fattening and dressing and feeding, I would be glad to do so.

1. I have been fattening chickens for the past seven years. I started with 50 birds, and I expect to fatten 3,000 birds this year.

2. After the first year, I have fattened about 1,500 per year. This year I expect to fatten 3,000.

3. I buy all kinds of poultry from the farmers, and select the chickens that are suitable for fattening, and sell the rest to different firms in Toronto. I consider the Rocks very hard to beat, although I fatten all the heavy breeds, such as Orpingtons, Wyandottes, Rocks, and crosses with the above breeds. The prices run from 6 to 8 cents per pound, and crate-fattened chicks from 10 to 12 cents per pound. There is a number of farmers that are fattening the chicks, and I buy them from them. I believe I am the only one that pays an advance price for fattened birds.

4. I make crates the same as the Government experiment stations use—8 feet long, with 4 pens 2 feet long, 16 inches wide, and 20 inches high. I select the birds as to sizes, and put four birds in each pen. Before putting them in, I give them a good dusting with sulphur. I starve the bird for 24 hours before starting to feed, and I give them just what they will eat up clean in about five minutes, or a little longer. If any is left, I clean out the troughs and turn them over. I feed three times a day the first week, and twice a day after that. If the birds have been properly fed, and have had a balanced ration, they will be fattened in from three to four weeks. If birds are not fat in four weeks, if properly fed, it will usually pay best to ship them and take what you can get for them. The ration that has given good satisfaction with me is ¼ corn, ¼ barley, ¼ buckwheat, ¼ low-grade flour. I mix it with whey, skim milk or buttermilk. I make the mixture just so it will pour out of a pail. In very warm weather I give them a drink of water in the middle of the day, but when it gets cool they do not need it. I add a little salt as it makes the feed more palatable. They will gain from one and a half to three pounds per chick. I also give them all the grit they will eat twice a week. The average gain for the whole season (1,500 birds) is about two pounds each. I can get best results from birds weighing four to five pounds each, and the cost is about 13 cents each for the season. The grain costs about $1.45 per cwt. The feathers will nearly pay for dressing. We dress all our birds; they are oled at the mouth, and feathers taken off. I have shipped to one firm in Montreal my whole output each year.

5. I get them dressed for 2 cents each. My building is 22 feet by 82 feet, and will accommodate 800 birds. A very valuable asset is the manure. I had over 150 bushels of clear droppings in one year.

6. I consider it will pay anyone to fatten their chickens, as there is not much danger of overdoing the market. The time is here when the people are beginning to want the best. There is nothing that hurts the market more than to flood it with a poor article, and it is the same way with the poultry business. As to profits, take a bird at 4 pounds, at 8 cents per pound, makes 32 cents—the cost alive. The same bird, fattened to 6 pounds, at 12 cents per pound, gives 72 cents. You have a profit of 40 cents per bird, less feed. It is not difficult to fatten chicks; anyone can do it who will attend to the work and feed regularly. One of the most important points is not to overfeed the first week. Just give them what they will eat up quick and want a little more, but don't give it to them. It will pay the farmers better to fatten chickens than it pays to fatten hogs. It is difficult, in the small towns, to get the people started to pay an extra price for the No. 1 article, but when they do, nothing else will do but the best. I have a number of local customers that want no other chicks but crate-fattened ones.

D. BURCH.

Norfolk Co., Ont.

[Note.—We have omitted part of Mr. Burch's answer to question five. However, it may be said that the profits each year, as given in this letter, are very attractive, and justify his statements in reply to question six. We will welcome specific contributions from others, relating their experience with crate-fattening.—Editor.]

# THE DAIRY.

## "Aberdeen" Cheese Factory.

One of the best, if not the very best, cheese factories in the Brockville section is the Aberdeen, belonging to Jas. A. Ferguson, of Caintown, Leeds Co., Ontario. While this is an old factory, the building was rebuilt four years ago, so that a modern, up-to-date factory is here found. In its construction, the essentials of successful cheese-making were carefully considered. The factory is equipped with a cool-curing room, built at the same time as the factory, and constructed according to the blue-prints and specifications furnished by Commissioner Ruddick. This room is 20 x 30 feet; is supplied with double windows and shutters; the ice-room is about one-third the size of the cooling-room. The floor of the cooling-room is cement, and rack accommodation is supplied for about 250 regular-sized cheese. The make-room has a wooden floor, and the entire interior of this room is painted.

This factory was visited between five and six o'clock on Tuesday, July 19th, a hot, bright day, yet the temperature of the cooling room was 58 degrees F. There were fourteen cheese in the hoops, and one hundred and thirty cheese in the cool-curing room, indicating one of the advantages of having such a plant, viz., that cheese do not have to be rushed to market as soon as made. The cheese were pronounced by Inspector Publow to be of excellent quality, firm, well finished, smooth and close.

Aberdeen Cheese Factory.

Owner and maker, James A. Ferguson, Caintown, Leeds Co., Ont. A pattern of factory to follow after.

A windmill is used at this factory for pumping purposes. A tile drain carries all sewage well away from the vicinity of the factory. A steel whey tank is used, and the whey is pasteurized, being a temperature of 110 degrees at the time of visiting the factory. The surroundings are desirable, the vicinity being quite high, well drained, and everything is quite as clean and inoffensive as at most homes.

Patrons of this factory take better care of their milk than the average. Water-cooling is general; covered stands are frequent.

Mr. Ferguson is maker, as well as owner, and, as is to be expected where such a type of factory is found, and such patrons are, he takes a care of his culture and of his making that is producing an excellent product.

## Contrasts in Milk Records.

Some records are always stimulating. Some of the records from members of the cow-testing associations for May are indicative of good cows well kept and well fed, in a word, decidedly profitable cows. For instance, one dairyman in Western Ontario, owning a herd of 62 cows, had the inspiring record of 1,127 pounds of fat per cow during the month. Again, in six associations in Peterboro and Oxford Counties, the average yield of 380 cows was 1,057 pounds of milk and 31.6 pounds fat.

The reverse of the picture is not so rosy, indicating the need of more and better cows. Several associations have an average of under 700 pounds of milk and 26 pounds fat. A group of 75 cows at one creamery gave only 604 pounds of milk and 21.8 pounds fat in May. Think of the difference! The average yield noted above is seventy per cent. better.

As an instance of what is being done by the selected animal, the record of one of the most famous cows to-day forms a wonderful contrast. She is credited with 120 pounds fat in 30 days. This cow, it is said, was picked up from a neighbor who did not keep records, and, therefore, was unaware of her phenomenal value. Who will be the next man to discover another such diamond in the rough? Individual cow records alone can show where such jewels exist.

C. F. W.

## Testing the Cows.

Is it worth while to test my cows? It does not cost anything, but will it pay for the bother and time? Many men are finding it is worth while, that it pays to find out whether the cows are eating more than they are worth, and wasting one's time taking care of them. In truth, they are wondering how they ever made it pay, when they did not test their milkers. One progressive farmer, who thought he had a paying herd of cows last year, found out that the heaviest milker in full flow in June only gave 1,057 pounds of milk, the rest running much below that. He found only two cows out of the fifteen testing as high as three per cent., and one as low as two per cent. Was it worth his while to test that herd? Undoubtedly. That winter he sold every one of them, and, in replacing them, he got the kind that paid as they went along.

Mr. Whitley, who has charge of the cow-testing work of the Dominion Department of Agriculture, is finding many such cases. Last year, in July, 7,700 cows were tested for 730 men. This year there will be 1,500 cows more than last year. There is an astonishing number of cows giving milk that tests less than two per cent. An excellent plan is now adopted, which should cause a great increase in cow-testing. This plan allows the cheese or butter maker to buy the complete testing outfit, and gives him charge of the testing in his locality, the Department paying him a fair remuneration each month. Factory owners should encourage their makers to co-operate with this plan.

The Department will supply to any man, for the asking, a very neat record book for his herd, so arranged that the record for the year for each cow is contained on a single page. The number of pounds of milk, the value of the milk, the per cent. of fat, and the cost of feed, are so arranged that the profit or loss is seen at a glance. Every man who milks cows should have one of these record books, and make use of it.

There is small argument to defend the position of the man who does not believe in testing and keeping record of what his cows are doing.

## Double Cream Cheese.

Take any quantity of cream testing 22° fat, the cream may be either sweet or slightly sour (.3 to .4 of acid). Add rennet at the rate of 5 ozs. to every 100 lbs. of cream; do not use a larger proportion of rennet, as the cheese when finished are liable to have a strong rennet flavor, which is not desirable. Add the rennet when the cream is at a temperature of 60° to 65° F.

In about four hours the coagulation will be firm enough, depending on whether the cream has been previously pasteurized or not. If pasteurized a longer time will be necessary for the coagulation, the addition of culture will also be advisable.

When coagulated pour into dry cloths placed over bowls, and hang up to drain in a cool, draffy place. Cloths should be of close duck and dry. It is advisable not to put too much cream cloth as it will be liable to develop too much acidity before draining is completed.

A few hours later open out and scrape down sides to help draining; hang up again, repeating at intervals till the cheese is