THE FARMER'S ADVOCATE

and fear you, and the chances are they never will forget those.

"When teaching the calf to drink, don't push its head into the pail, but wet your fingers in the milk and let it suck, and coax its head into the pail, and usually the second or third time it will drink of its own accord.

"There are three essentials at this time, i. e the quantity of milk, its temperature and its quality. Calves are injured more by not observing carefully these rules for the first few weeks of their lives, than in any other way. At this age their little stomachs are not strong, and a little care at this time often means the difference be tween an unprofitable and a profitable animal.

The amount to be fed should not be determined by guesswork, but by actual weighing or measuring, for I find it so easy to overestimate. No artificial heating of milk is so good as the natural animal heat, which is about 100 degrees, so try to retain this temperature as nearly as possible. The mother also furnished the milk in a sanitary condition, and we should try to follow her example in this respect, and see that the pails are kept in a cleanly condition.

The care of the pen makes quite a difference about keeping their digestion right. The calves at our place require more and take more bedding than all the rest of the stock put together. If they are permitted to lie on a cold, damp bed, they take cold, and that they are out of condition is shown by their rough, staring coat, running nose and general unhealthy appearance.

DON'T FORGET THE EXERCISE.

" I visit so many barns where calves are kept in a little $4 \ge 6$ pen, with conditions just the reverse of what they should be-dark, gloomy damp, ammonia-filled air to breathe; no chance for exercise. Is it any wonder that the average production is so low when they have been brought up under these conditions ?

"The fall calf usually makes the best growth. Possibly one reason is because we are around the barn more, and notice their conditions, and can give them proper attention at the right time while, in the summer, our work calls us more to the field, and the stock is apt to get neglected. One quite common trouble with the spring calf is that we want to get it out on pasture altogether too soon, and skim milk, grass, flies and hot. weather make a mighty poor combination. For my part, I would rather keep them up through the summer, feeding them on good oats and clover and milk. By paving attention to the stable conditions and exercise, the calves will make a better growth than if turned out.

Cool-curing at the Quinte Cheese Factory.

An ideal site for a cheese factory is occupied by the plant of the Quinte Cheese and Butter Company, Ameliasburg, Prince Edward Co., Ont This is a four-vat factory, about 30 x 70 feet in size, built of solid cement, with a twelve-inch wall. 13 feet high, a cement floor and S-inch partition walls, and was first completed in 1905, at a cost of \$1,400. It stands on the south shore of the beautiful, clongated sheet of water known as the Bay of Quinte, which divides the peninsula of Prince Edward Co. from Hastings Co. on the mainland. A very good curing-room was provided, but being set down into the ground, it was

Men Who Know.

" I find the keeping of individual cow records very useful indeed, and would not go Lack again to the guessing method," writes a farmer who has tried both ways.

The men who just guess, and who do not know what each cow in the herd gives during the year, often guess too much on the weight of milk and fat, and too little on the cost of feed. They guess that " Polly " is the best cow in the herd, but they do not know, because they have not weighed or tested the milk on any system. Probably "Buttercup" is far ahead of "Polly" as a pro-

The Dairy Division, Ottawa, supplies record forms for milk and feed, so that men can soon know what profit each cow pays. The question is not "What does the herd average this month or next?" but "What does each cow give during the year?" Each cow should be a "long-dis-tance" milker. tance ' milker.



Harvest-field Refreshments.

POULTRY.

Economical Production of Eggs. (From an address delivered by Prof. W. R. Graham, at

Chatham, Ont., on July 16th, 1910. Reported for "The Farmer's Advocate.")

The money in poultry depends upon two things cost of production and selling price. As I see it, the life and death of the poultry industry in Canada depends to a considerable extent upon co-operation.

There are great quantities of eggs going into cold storage to make cales, and some of them I don't want in any shape or form. They aren't exactly rotten, but some of them are " pretty thin.

One thing I would say if you go into this cooperative scheme, and that is, feed your hens. You mired, cannot produce the requisite quality of eggs or

feed the hens." They feed their chickens on garbage, on the scratchings from the manure heap, and on what light stuff blows out of the tail-end of the fanning mill, and then expect the hens to produce eggs.

As nearly as I can find out, it takes between three and four pounds of grain to produce a pound of live pig. We can produce a pound of chicken for that amount of grain, and we can sell our chickens for 20c. to 25c. per pound, and our old hens for 14 cents.

It used to be thought that chickens needed a grass run. We have found that they grow as well or better on cultivated land, so now we hitch a horse to our colony houses, and draw them out into the lane along the corn field. They won't bother the corn, but they will follow the cultivator, and every time it stirs up the soil they'll pick up a fresh crop of insects which make ideal meat food. Then, the cultivation germinates a great many weed seeds, and these seedlings

make ideal green food, so the chickens grow lite weeds. We can grow in eight weeks out there a chicken that would take 12 weeks to attain the same weight inside. We also have colony houses scattered around the orchard.

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Will chickens eat tomatees? 1 guess most people will say 'yes.'' But they won't eat tomatoes if you feed them well. At least, in these orchards where we have our colony houses there have been experimental patches of tomatoes, and I don't believe there have been two tomatoes picked by the chickens in four years. We hop-

per-feed those chickens, giving them all the grain they want. I admit we have ied sparrows as well as our neighbor's guinea fowl and turkeys, but withal, it has not in any year taken more than four pounds of grain to produce a pound of chicken.

If you want to make a chicken fat, feed him just a little less than he wants to eat-enough less to keep an edge on his appetite. It is like feeding a boy on pie. You can't sicken him of it as long as you are giving him less than he wants. Overfeed chickens, keeping them close to the feed, and they will likely die. Overfeed and give them a range, and they won't take more grain than is good for them. The more you study hens, the more you think about yourself.

If you use the ordinary stationary henhouses, I have been in henplease clean them annually. houses 18 inches deep with manure, and all alive. I have come to the conclusion that the only reason some farmers clean their cow stables is the fear that otherwise they would themselves get

If you won't clean your henhouses, get the

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found to be damp, causing some considerable trouble with mold. Four years ago the curingroom was lined up, according to Government specifications, at a cost of \$200, and an insulated ice-chamber, $20 \ge 20 \ge 13$ feet, cost another \$400.

The curing-room which is about 30 x 20 or 21 feet wide inside, with a ceiling somewhere about 13 feet high, gives a large cubic content of air The walls and framework are painted, and the ceiling oiled, presenting a very pleasing appear About 25 cords of ice are required to fill ance.

the ice-chamber, and are put in at a cost of \$15 A year ago, one of the editors of "The Farm-er's Advocate" was privileged to visit this fac tory, and the particulars then gleaned will still be of service in keeping the advantage of cool cur ing before the public. Since the provision for cool-curing, the mold trouble had been practically overcome. The cheese bored particularly well showing a very close body, fine texture, and very clean flavor. One of the July cheese on the shelves was at the time pronounced by Mr. Publow as probably equal to anything that would be seen at Toronto Exhibition.

A feature worth remarking is a small ice box built into the partition between the curing room and ice room, to hold victuals and anything that it may be wished to been cool. In a number of factories, eitchers of milk and other articles of food are often seen standing in the flues. This rold pir, and in ice hox for the number is not and spaces transle, but very convergent in 1 bit of man of cool entine, the maker. A Ver Dusen is blad that apart from the saving

throughout the section so that the cheese might be made the same right through, was such that he

poultry on grasshoppers, grass and water. May becope thin's poultry are destructive. They say to poultry destructive. They has been come don't grain out of the fields where it bas been come don't to the fields where the field where the field where the field where the field where th has been sown don't touch the shocked grain in of fanciers, the field." And to their wives and children they. We trap nest our hens, and any that doesn't say, "Don't take anything out of the granary to lay loses her head.



Quinte Cheese and Butter Company's Former Filward Co., Ont. Ideally sit and on south show of the Bay of Quintemay on to the boats. Has