

proportioning and preparing it as to render an average ration of it equally rich in the elements of nutrition, and especially in nitrogenous elements, as an average ration of the green and succulent food of summer. We keep too much stock for the quantity of good and nutritious food which we have for it, and the consequence is, cows are, in nine cases out of ten, poorly wintered, and come out in the spring weakened, if not indeed positively diseased; and a long time is required to bring them into a condition to yield a generous quantity of milk. It is a hard struggle for a cow reduced in flesh and in blood to fill up the wasted system with the food which would otherwise have gone to the secretion of milk; but if she is well fed, well housed, well littered, and well supplied with pure fresh water and with roots, or other moist food, and properly treated to the luxury of a frequent carding and constant kindness, she comes out ready to commence the manufacture of milk and butter under favourable circumstances."

I will now bring my letter to a close by advising my brother farmers to keep the cows constantly in good condition; this is the great secret of profit.

I will say a word in my next letter as to the result of the butter factory started in this municipality last year, namely the municipality of L'Avenir, county of Drummond.

THOS. BRADY.

Durham, 30 June 1881.

## Poultry Department,

### Fattening Poultry.

France does not yield the palm to any country in the world so far as fattening poultry is concerned. Those who have visited Sarthe, Orne, Aisne, Saône and Loire, Haute Garonne, etc., assure us of this fact. But this business (says *La Basse-Cour*) is neglected elsewhere as much as it is encouraged in the localities mentioned. In a large number of French villages there is no poultry fit to be seen. With their feathers on the birds look well enough, but plucked they are nothing. They are not either fat or fleshy; they are only fit to have their bones hidden in the sauce of a ragoût, and they are quite unfit for the spit. It is well to make the best of things, however; and, perhaps, if one knew what was best, this would be done. It will be well therefore to talk over the matter, and be careful not to ask housewives for what they cannot give us. We know quite well that if we were at the outset to take it into our heads to advise them to buy an incubator, or even to feed the poultry by hand, as is customary in Brasse or Maine, they would not listen to us. We will therefore be more moderate in our demands. We only want them to begin in a small way with half a dozen, or a dozen fowls, and to go to the expense of a coop for each bird that is to be fattened.

But they will say, What is a coop? It is a sort of box or cage made of boards or wicker-work, large enough for the bird to be in it without feeling uncomfortable, but still straight enough to prevent its turning round. There should be bars in front, between which the hen can easily push its head, and peck its food from a trough placed close to the coop, and within reach of its beak. Behind, there should be an opening, through which the droppings—which will fall into the ashes or pit prepared for them—can be removed. At one end of the coop there should be a door, which can be opened when it is necessary to carry the bird away, or to replace it. Surely the inhabitants of our villages could construct these little cages in their leisure hours. The coops might be made separate, or if preferred, a number could be made together, and they could be divided by boards. That is a detail which might be left to individual convenience.

The coops should be put somewhere out of the cold, and also where the birds would not be disturbed excepting at meal times. The fowls should be allowed three meals per day—that is, first thing in the morning, at noon, and in the

evening before the sun sets. It is especially important that birds which are being fattened should be kept perfectly quiet.

The best food that can be given them will be unbolted buckwheat, barley, oats, and maize. Rye will not do the poultry any good. If preferred, various kinds of meal can be mixed together, and a sort of paste can be made moistened with as much milk as is necessary. The paste ought to be tolerably stiff, and yet soft enough to be made into balls about the size of a walnut. One hundred grammes of paste would be enough for each bird at one meal. It is also very important that the diet should be varied, and therefore cooked and mashed potatoes may be given for the second meal. The meal balls or cooked potatoes should be put into the seed-trough hung before each coop, and the birds may be left to take what they want. When they have finished, a little fresh water should be given them, and then the trough containing the food that is left should be carefully carried away, for if left it would become sour, and would hinder the fattening.

Cleanliness and regularity are of the utmost importance in this business. There should be a fixed time for each meal, and the birds should never be kept waiting for their food. At the same time, the coop should be kept scrupulously clean. The sweepings should be carried away, the perches washed, and the wooden pit or soiled ashes should have bran spread about or have fresh ashes sprinkled over. It is for the purposes of ensuring this perfect cleanliness that it is convenient to have a change of coops.

It will be acknowledged that there is no difficulty in all this. The method of fattening poultry which has just been described is very simple, and may be carried on by everybody. All that is wanted for it is great regularity and daily attention. Birds which are subjected to this treatment will be in good condition of fat at the end of twenty-five or thirty days. It is generally supposed that it is absolutely necessary to perform an operation in order to obtain what are called fat pullets. This is a mistake. The operation in question is only suited to cocks which are to be caponised, but the ovaries of hens can be destroyed without it. The larger proportion of the birds known as fat pullets have not been thus operated upon. The hens have merely been put apart when young, and kept entirely from the cocks. In this way, they can be fattened early and under very favourable conditions.—*Ex.*

#### (1) The Ovoscope.

(Translated from the French.)

At this season of the year, every good housekeeper is preparing her provision of eggs for the winter. In spite of all the care my readers may take in the selection of the eggs they wish to preserve, it often happens that they buy eggs that have been set upon for a longer or shorter period, and have thus become unfit for the purpose, and in a short time utterly useless.

To do away with this annoyance, a little instrument, called an *ovoscope*, has been invented, by means of which the state of every egg, as to its freshness, can be infallibly determined. M. Voitellier, a French manufacturer, has had the politeness to send me a pamphlet, entitled "Artificial Incubation," a subject which, from his great experience in artificial hatching, he should thoroughly understand. From this little work I submit the following extracts for my readers' information.

"The *ovoscope*," it is M. Voitellier who is speaking, "is composed of a wooden egg-cup, with a handle for its support, and a metal plate, black on one side and white on the other, which surrounds both the egg and its receptacle.

(1) *Ovoscope* means "Egg-Inspector."