

## POULTRY.

## Fattening of Poultry by Different Methods.

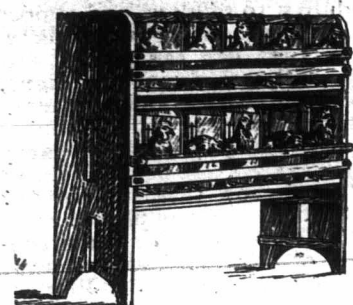
THE CRAMMING PROCESS AND THE FOOD USED IN SO DOING—CARE OF THE NEWLY-HATCHED CHICKEN REQUISITE—FLESH OR FAT—BETTER-BRED POULTRY REQUISITE.

BY A. G. GILBERT, POULTRY MANAGER, CENTRAL EXPERIMENTAL FARM, OTTAWA.

Poultry development is taking place more rapidly than is apparent to the casual observer. It has assumed the following "acute" phase, if we may so write. The Government has arranged for the transport of various agricultural products more or less perishable, in their nature by cold-storage chambers in car and steamboat. Among them are poultry and eggs. More arrangements have been made for the establishment, under the operations of the Commissioner of Agriculture and Dairying, of three experimental stations for the fattening of poultry by the forced or cramming process so much in vogue in England and France. The farmers are asked to send none but the superior quality. Of eggs we do not speak at present. But as to the superior quality of poultry, the cold fact is that it cannot be shipped in quantity until it is produced by the farmers of the country. And it is equally plain that our farmers cannot produce the superior quality until they keep the breeds which make the large, fleshy chickens so susceptible to easy fattening by ordinary careful feeding or forced methods. It is only waste of energy and time attempting to get the weight of the Plymouth Rock or Wyandotte chicken on the nondescript. Now, what are we going to do about it? Surely not going to let the opportunity of reaching a thirty-million-dollar egg and poultry market slip from us! We have seen too clearly what the cow has done with intelligent care and feeding not to give the hen a chance.

## CARE OF CHICKENS NECESSARY PREVIOUS TO FATTENING.

We have shown in a previous issue the breeds best adapted for egg laying and flesh development. We propose now to show the different methods of fattening chickens or fowls. To get the desired weight in flesh rather than fat it is imperative that the chicken be cared for from time of coming out of its shell. It must be borne in mind that a chick which has become "stunted" from being "stinted" during the first five weeks of its existence will never make a satisfactory market fowl. Why? Because during the period of the chicken's life mentioned there is a great drain on the system for feathers, bone, muscle, etc. If the chicken is dragged about by its mother in her active efforts to find food for it, instead of being well cooped and fed, during its early life, the result will be development of bone, sinew, muscle, feathers, etc.—everything but the flesh that is so desirable. Such a chicken is not a promising subject to put in the fattening pen. It will be well, then, to bear in mind the fact that to secure the greatest quantity of the finest quality of flesh in the shortest time it is necessary that the chick be well cared for from time of hatching.



STRAIGHT FATTENING PEN.  
(As used in England.)

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## DIFFERENT METHODS OF FATTENING.

The fattening of chickens has long been practiced in England and France. There are three well-known methods of doing so, viz:

1. Allowing the birds their liberty and giving them all they can eat of a rapid flesh-forming food. The food is given in a trough. It is said in this case they are more likely to put on flesh than fat—a very important point.
2. Penning up the birds in small cages arranged in straight or circular form, the latter frequently in tiers. They are fed to repletion three times a day for ten or fifteen days, when they are said to be "half-fatted."
3. Birds penned up as in No. 2. After ten days or so the appetite of the birds begins to fail. The food is then forced down their throats by a machine worked by hand, foot or from under the arm. This is called the cramming process. Sometimes the operation is done by hand as described later on.

The cut shows one description of cramming machine. In others the tube is inserted into the gullet of the bird as it is confined in the pens. In the above the bird has been taken out of the fattening pen and is held by the operator to the tube, while by a quick motion of the foot the proper quota of food is forced down the throat. Some machines are operated by the arm.



POULTRY FEEDING MACHINE.

## DIFFERENT FOODS.

Various meals are used in England for making up the rations for hand or machine use. The favorite meals for making flesh are oatmeal, barley and buckwheat. All grains made into the meals are ground very fine—so fine that they are called flours. In France corn meal is sometimes used in making up a ration. In England it is said to give a yellow color to the skin, which is not desirable, and is not popular on that account. Mutton or meat fat and tallow are mixed in the rations in greater or less quantity, according to the exigencies of the occasion. In some cases Australian mutton fat is used. The fat is melted and mixed with the ground grains and milk. The food is made into paste with skim milk slightly sour or buttermilk. Both are considered valuable. When fed by hand the food is made into bullet shape, or half-finger length pieces of paste, and forced down the gullet. When fed by machine the food is given in semi-fluid condition, or almost so.

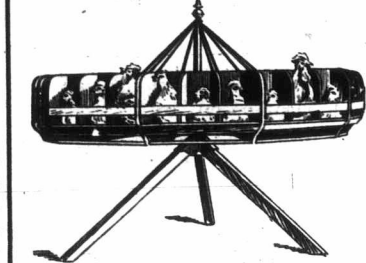
## RULES TO BE OBSERVED.

There are certain rules to be observed, as follows: 1. Feed with greatest punctuality three times a day. 2. Give no stale or soured food. 3. Observe the greatest cleanliness. 4. Keep the birds quiet and in from semi-darkness to total darkness towards the end of the fattening period. 5. The apartment for fattening should be kept moderately warm.

To secure cleanliness the bottoms of the small pens or cages can be so arranged as to allow the droppings to fall on a board underneath, on which is dry earth or sand. To ensure quiet the cages are made large enough to hold the bird and no more. It is thus prevented from moving about. White-wash and carbolic preparations make good disinfectants. In many cases in England semi-darkness is secured by having heavy cloth blinds in front of the coops or cages.

## FLESH OR FAT.

By the cramming process it has been noticed that the birds frequently come out of their cages round balls of fat rather than flesh. That is where the birds have been confined, fed till "half fatted," and then crammed for the balance of the term, no exercise being meanwhile allowed. On the other hand, it has not been infrequently noted that the birds which have been fed as much as they could eat three or four times per diem for ten or fifteen days, but had their liberty, put on flesh rather than fat and that the flesh was of superior quality and flavor. Too much importance cannot be placed upon this statement. It may not matter to the seller whether he has the weight of his chicken in fat or flesh, but it is certainly a matter of some consequence to the purchaser, for fat in such a case is waste. There is room here for interesting experiment, in which the aid of the chemist will have to be sought in the preparation of rations flesh-making rather than fat-forming, and with such material as our farmers have within their easy reach. Old fowls take on fat most readily.



CIRCULAR FATTENING PEN.  
(In France several tiers are used and the attendant drawn up to feed by pulleys.)

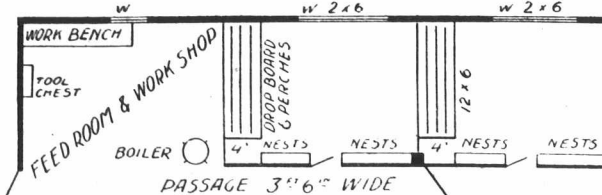
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## DO SOMETHING MEANWHILE.

In the foregoing the subject of fattening, or, rather, putting on flesh by different methods, has been pretty well threshed out. As I remarked in your last issue, our farmers can do much meanwhile. If they do not choose to try the forced feeding, they can pick out their early cockerels, pen them separately, if possible—at any rate keep them in a quiet place—and feed them for ten, twelve or fifteen days, carefully and regularly, all they can eat. And note the difference. It may require, mayhap, systematic effort, but without it we can never hope to reach the high-price market, at home or abroad, with poultry, beef, mutton or bacon.

## A Good Farm Poultry House.

Stephen Benson, a Beautiful Plains (Man.) wheat farmer, cultivating a section of land, does not consider poultry beneath his attention, and has a fine flock of Barred Plymouth Rocks, also Bronze turkeys, and geese. He has a very serviceable, yet inexpensive, poultry house, a brief description of which follows:



GROUND PLAN OF POULTRY SHED.

The building is 16x48 feet, the walls are flatted poplar logs 6 in. thick, on end, and well plastered, shed roof shingled, sloping south. (For ground plan see cut.) The feed room and workshop is

floored, pens filled in with clay. Each pen is well lighted with three 2x2 feet sash, the center one sliding open. The drop boards and nest boxes are two feet from the ground, thus not interfering with ground space; partitions are of woven wire, and under the nest boxes stiff wires are fastened upright two inches apart, with small V-shaped trough on outside in passage for water and soft feed (see cut). The nest boxes and perches are movable for cleaning, whitewashing, etc. Dry chaff is used on the pen floors in winter, and dust baths, gravel, etc., supplied. Under the feed room the natural slope of the ground leaves a space of two feet clear, and makes good winter quarters for the geese. An ordinary farm boiler is kept in feed room; a board cover is used on the boiler, with two inch-and-a-half holes near the center to permit escape of steam; over the boiler a tin funnel-shaped steam-catcher is hung with a pipe leading directly into a steam pipe which runs along near the roof and enters chimney near center of building. This arrangement, Mr. Benson says, does away with all dampness, and the boiler full of hot feed keeps the whole building comfortably warm, even in coldest weather. So dry is the atmosphere that saws and other tools hung in the work room do not rust.

## NEST BOX AND FEED TROUGH.

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## QUESTIONS AND ANSWERS.

[In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquiries must in all cases attach their name and address in full, though not necessarily for publication.]

## Veterinary.

## Discharge from Heifer's Nose.

FRANK H. SILCOX, Elgin Co., Ont.:—"I have a heifer, one year old this fall, running a thick white matter from nose, noticed principally in the mornings; also a yellowish substance in the corner of the eye. Have noticed her losing in flesh for the last month. Could you give the cause and remedy in the next ADVOCATE, and oblige?"

[The information given is not full enough, to diagnose the trouble, which might be catarrh in some form. Have you noticed any swelling about front bones of nose? Are the teeth sound? For catarrhal trouble give 1-lb. dose salts as a physic and follow with 1-dram doses sulphate of iron in bran mash night and morning for a week or so. Report results.]

## Anthrax in Calves.

SUBSCRIBER, Westport, Ont.:—"Some four weeks ago one of my calves was taken sick and within twelve hours died; since then I have lost four calves and two yearlings. The symptoms were lameness of either front or hind leg, with a great deal of swelling; after death I skinned one and found the swollen limb a mass of black clotted blood. Is the disease black leg; if so, is there a remedy or preventive?"

[Black leg, or, to use its more correct and scientific designation, anthrax, is a very prevalent disease amongst young stock in England, and it is there known under a variety of names—black quarter, quarter ill, blood striking, charbon. All of these designations denote the peculiar character of the disease, which is usually characterized by lameness of one leg or quarter, followed by swelling and gangrene. Anthrax is almost entirely confined to young animals from six months to two years old. When seen in older animals is due to actual contact, hence its contagious character. The cause of anthrax is a microscopic organism known as the anthrax bacillus, and thrives best under conditions of soil subject to floods, or in peaty, swampy soils, hence fields containing stagnant pools may be a source of infection and danger. We remember a number of cases appearing in a certain field, where no cattle could be pastured, and after a good deal of searching found that a carcass had been buried, unknown to the proprietor, suffering from this disease; hence, too much caution cannot be exercised in the destruction of the carcass by cremation. Symptoms are well described and cannot be added to. This disease is also very fatal to the human subject, and may be transmitted by handling the carcass and hides of the animals which have died of the disease. The only preventive is inoculation by a modified bacilli, so that they have lost, to a certain degree, their original virulence. It must be carefully borne in mind that cattle or sheep must not be fed in or near the field again, or the disease will again appear with even more severity.]

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