

### Artificial Incubation Preferred

Geo. Pazman, Peterboro Co., Ont.

Artificial incubation and artificial brooding of chickens are two points on which men have improved on nature's methods. Any farmer who intends to raise 100 or more chickens ought to invest in an incubator. There should be no question about inability to run a machine. Any child can run an incubator. A 120 egg machine is about the ideal for the general farmer.

Objection is sometimes taken to the incubator on the ground that it will not hatch a normal chicken and that incubator chickens are very subject to white diarrhoea. I have never had white diarrhoea with incubator chickens, and I have used incubators for many years.

I start up the incubator and allow it to run half a day to a day to make sure that it is in good running order and that it keeps a steady temperature. A temperature of 103 degrees is kept right through the hatch until the last few days, when it will go higher. The controlling of the temperature depends almost altogether on the machine. With a reliable incubator one need not look at the thermometer more than twice a day. The lamp should be filled and re-trimmed once each day.

The cooling and turning of the eggs is a most important point in getting a good hatch. Most people are afraid to cool enough. It is my experience that after the 10th day, you cannot kill a chicken by cooling. Watch a hen for advice in that particular. For the first few days she will stay on the nest steadily. But after the 10th day, she will go off and stay until the eggs are quite cool.

Long cooling gives stronger, healthier chickens. At one time, I took the eggs out of the incubator early in the morning and forgot them until after nine o'clock. I went back and put them in and had a good hatch. Of course, the time which the eggs are to be left exposed will vary with the temperature of the room. In a fairly cool room they might be left out for 15 minutes. Turn and cool the eggs twice a day until the first one is pipped, which will be on the 19th or 20th day. Then close up the machine and leave it.

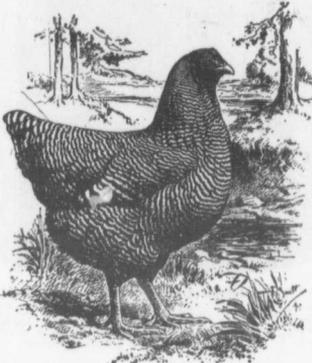
Do not be afraid of the temperature getting too high towards the last. Many poultry men turn the light down until it is almost out for fear of getting too high a temperature. Let the temperature go up until the regular lowers it again.

Testing out all infertile eggs or dead germs is an important point. I test all the eggs on the fourth day and keep testing regularly, a few every day, taking out all infertile ones.

### How to Manage Geese

John Young, Huron Co., Ont.

An orchard is the ideal place in which to keep geese, and for the breeding flock a good creek is necessary for best results. I keep Toulouse



A Madison Square Garden Winner

The ideal in type and feathers for a top notcher Barred Plymouth Rock pullet in here shown.

geese, have four geese and a gander, and raise 50 to 60 goslings each year.

During the winter, we feed our geese on grain once a day, with apples or mangels for green food. As the laying season approaches, geese should be fed twice a day. The eggs are gathered before they get chilled, set on their ends, and turned every other day.

When the goose is setting, she should be taken off the nest every second morning to feed. At least once a week, the eggs should be sprinkled with water.

For the first six weeks the goslings should be well fed. From that time on, they will hunt their own living. Goslings which are very weak should be fed a little cream and bread for the first week.

### Some Pointers on Artificial Brooding

N. C. Campbell, Brant Co., Ont.

To hatch eggs is comparatively easy. "Any hen can hatch a chicken, but it takes a good one to raise it." The difficulty is to get the chickens over the first two weeks. I leave them 24 to 36 hours in the incubator. They are then removed to the brooder, on the floor of which is sand and hay loft chaff. The grit they pick from the sand is their first food. It is most unwise to take the chickens out of the incubator immediately they are hatched and feed them a lot of soft food.

Shortly after the chicks are placed in the brooder, I give them their first feed; it is dry bread crumbs, or a corn-meal cake made with milk and baked so that it will crumble. When a couple of days old, I give them pin-head oatmeal. Some people claim that hard, dry grain is the natural food for the chicken. This is not true. What they would get naturally is vegetable food, worms, bugs, and flies, but not hard grain.

I feed pin-head oatmeal with charcoal for a week. Grit and water are left before the chicks at all times. There is no danger of bowel complaint where charcoal is used. After the first week, the feed should include a larger amount of the coarser grains, but I believe in giving them soft feeds once a day at least.

A common mistake often made in artificial brooding is in not supplying sufficient ventilation in the brooder. If you were to take off the lid of some brooders at any time the smell would knock you down. We must use commonsense in brooding chickens as in all other work. I do not use a thermometer in the brooder. After a little experience, one is able to tell by the hand whether the temperature is right or not.

### Pure Bred vs. Grade Poultry

C. W. Hurst, Carleton Co., N.B.

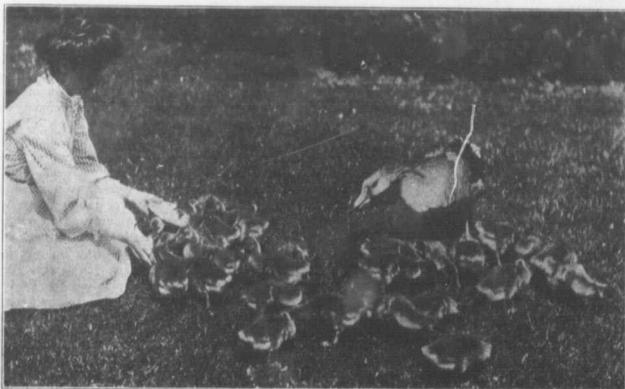
In all branches of the live stock industry, good blood is the foundation of success. In fact, in all business the best material must be used to attain the highest success. In nothing does good blood (the best material) count for more than in poultry husbandry. Common hens, like cheap labor, are not to be depended upon.

Here are four strong points in favor of pure bred stock in the poultry yard: 1. Those who keep scrub stock cannot sell eggs for hatching at pure bred prices. 2. Those who keep scrubs cannot sell their surplus cockerels for breeding. 3. They cannot exhibit their stock at poultry shows, and there results a loss of all the benefits ensuing. 4. As a market bird, scrubs cannot compete with the pure bred in appearance and quality.

The choice of a breed hinges on what the fowls are intended to produce. If we want eggs alone, we have a long line of breeds to select from—Leghorns, Minorcas, Spanish, Andalusian, Hamburgs, Houdans, and so forth. If we aim to produce roasters, we find superior qualities in the Plymouth Rocks, Brahmas, Cochins, Langshans, Dorkings, and Wyandottes. If we properly raise, house, and feed fowls of these breeds, no crossbred fowl will equal them.

Note.—Laying strains of Rocks, Orpingtons, and Wyandottes are now known to produce as many eggs as any of the so-called egg breeds, and they lay more readily in winter time when eggs are most difficult to produce and high in price. Before you decide to change to a lighter breed you should ponder well on this point.—Editor.

The breeding of turkeys has decreased in Ontario owing to the ravages of Black Head, a disease of the liver. The feeding of salt in the soft feed will help to ward off the disease.—Jas Baptie, Peterboro Co., Ont.



The Goose Asks but Few Favors and Little Help to Rear Her Stock

Geese, after being fairly started for the first two weeks as goslings, will live and thrive on pasture grass. It costs next to nothing directly to rear them to a marketable age, and since they sell readily for remunerative prices it is amazing strange that there are not more geese raised. The illustration shows a flock on Mr. John Young's farm in Huron Co., Ont.