

Some
ate the
ay too
other
nd find
n fact
ces in
like the
March
ats a
ownd
l the
up so
ilable
egg-
The
resent
e de
ch, as
ilable
years
n the
allow
a two
orage

nt
make
and
asen-
d in
hard
I be
and
hou-
for
here
gan
racy

ro-
ould
step
hall
at
ply
of
as
re
the
om
the
ff
is
st
to
re
in
n?
of
as

nd
h
nt
nt
s
h
n
t



FARM AND DAIRY

& RURAL HOME

We Welcome Practical Progressive Ideas

The Recognized Exponent of Dairying in Canada

Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.—Lord Chatham

VOL. XXXVI

TORONTO, ONT., FEBRUARY 1, 1917

No. 5

An Experience of One Year With Artificial Incubation

Our Hatches Were Good and the Chicks Healthy and Vigorous—Incubating Methods in Detail

WHEN we first came back to the farm it was our intention to run a dairy and poultry farm. Now, with our first year on the soil almost completed, and a year's experience under our own peculiar conditions to judge by, we are thinking of developing a poultry and dairy farm. Our cows have done well; they are good ones, if we do say it ourselves. But our poultry have done the cows one better. Labor and investment considered, they are by far the more profitable of the two. The work is easier, and more pleasant. The hours are shorter. The same strict adherence to clock-like routine is not necessary. "Elliscroft Farm," as we have chosen to call our little standing, will hereafter number poultry as the main source of income with dairy cattle a good second.

Our enthusiasm for the poultry end of our business is largely due to the wonderful efficiency of modern artificial incubating and brooding methods. With a good incubator of large capacity and good brooders it is now possible to make poultry a fairly extensive side line without becoming so lost in detail that the rest of the farm work must suffer. The incubator has come to stay. Its success is assured. Artificial brooders have not been perfected to the same degree, but, even then, we would not care to divide our attention over 20 hens with 300 chickens when our coal burning brooding stove would care for all of them with only a fraction of the work. It is with our experience in incubating and brooding that this article principally deals.

The first essential to success in chicken rearing, whether the natural or artificial method be followed, is fertile eggs with good, strong germ. I have seen the statement made, and on good authority, that 330,000,000 eggs were set in Canada in 1915, and from these only 14,000,000 chickens were hatched. What a pile of useless eggs! What a waste of time and energy! And the most of this energy wasted by farm women who look to poultry for their pocket money. Only a part of this loss can be attributed to inefficient incubating. More of it was due to weak germs or infertile eggs. We were guided in our selection of hatching eggs by the advice of a couple of friends

who had already become well known in poultry circles, and so we avoided many of the mistakes of beginners. We were careful to select eggs from pens of year-old hens that had made good records in their pullet year, mated with cockerels. This is generally regarded as the most satisfactory mating. Particularly is it important that the females be hens and not pullets. Pullets, if of a good

F. E. ELLIS, B.S.A., Malton Co. Ont.
laying strain, will lay so heavily during their first winter as to exhaust their vitality. The eggs from hens, on the other hand, are larger, more vital and capable of giving birth to larger and stronger chickens. Particularly is this true of the egg breeds—Leghorns, Minorcas, and so forth. With Rocks, Wyandottes and similar breeds the difference in favor of year-old hens is not so great. As a rule, farm-reared breeding stock is preferable, as farm hens usually have free range, but we have secured eggs for hatching from both farmer poultrymen and specialized poultrymen, and had good results from both. The latter, however, has the bigger problem in the produc-

tion of eggs that will range from 80 to 90 per cent. hatchable.

Choice of an Incubator.

Our choice of an incubator fell on a 400 egg machine. This may seem like a large machine to purchase when one is not contemplating poultry keeping on an extensive scale. But why not, we argued, hatch all of our chickens in a couple of runs, instead of keeping a small machine going continuously for three or four months. Likewise, the system of brooding that we were contemplating, necessitated chickens in large flocks. Another factor to be considered in deciding the capacity of incubator is the short duration of the hatching season if winter layers are the chief desideratum. Chicks hatched earlier than March will begin laying in the late summer, but there is a danger that they will moult their first fall and not lay again until spring. Chicks hatched later than May 15th, on the other hand, will not begin laying until a couple of the months of highest prices are past, and profits will be reduced accordingly. With a large incubator all the chicks can be gotten out in the proper season.

Our preference is for the hot air, lamp-heated incubator. And we purchased one of the highest priced machine on the market. Machines that are cheap in price are liable to be cheaply constructed, the heating pipes are liable to leak lamp fumes into the egg chamber, the thermostat will not be as accurate as is desirable, and the heat distribution will not ensure an even temperature in all parts of the egg chamber. Cheap machines have done more than any other single factor to discourage artificial incubating. Buy a good machine or stay with the hens.

The incubator should be located in a room with good ventilation and an even temperature, not too hot or too cold. A well ventilated cellar is probably the best place on the farm, and it was in our cellar that our machine was installed. Be careful to have the machine sitting perfectly level. Try it with a spirit level. If one side is slightly higher than the other, that side will be the higher temperature. It is desirable, though not absolutely necessary, to pipe the lamp fumes out of the cellar.

Getting Ready for a Start.

White diarrhoea is the great curse of the artificial system of chicken rearing, and white diarrhoea is due in large measure to failure to properly cleanse and disinfect the incubator. We have had no experience with the disease. Although our machine was

(Continued on page 8.)



The Farmer's Friend

If one of your family was lying at death's door would you go for a lawyer, dentist or blacksmith? or would you get the best doctor you knew of to handle the case? And why would you get him? Because you would feel he had experience and knew what he was doing. You would have confidence in such a man to handle the case right. Now, in the poultry and egg business it is the same way. You must know what you are doing all the time and how it will come out to make a success of it, and that requires long experience. The man that makes the most money on his hens is the man on a farm who can keep a large flock and raise his own feed. And when he gets to understanding how to guard against some of the many mishaps that come his way he will be able to make some money on his hens, for there is money in them when you know how to get it.

Fowls of all kinds are the farmer's friends. The domestic fowls are beneficial in devouring insects and vermin, furnishing eggs and choice table food, have a market value. The wild birds and game birds also, for the reason that they eat many insects that are injurious to crops and farm products. Inwards of 1,500 wire-worms have been taken from the corn of one peasant. This number being consumed at a single meal, the total destroyed must be almost incredible.

