POULTRY.

Duck Farming.

BY JOHN J. LENTON.

Large establishments for keeping hens are not numerous, but there are a great many large "duck farms." Long Island takes the lead, but there is one duck farm at South Easton, Mass., owned by James Rankin, on which as many as 10,000 ducklings have been raised and marketed in a single season.

What interests the reader of this, however, is to know why duck farms are numerous and profitable, while large "hen farms" are rare. That the hen can be kept a year with less labor than a duck requires, and consumes less food, is well know; but the duck has an advantage over the hen which places her far in the lead, and that is the rapid growth of the ducklings.

While a chick is slowly reaching a marketable age and weight, the ducklings are up and in market long before. In three months from the time the eggs are put in an incubator (for incubators are used on all large poultry farms) the ducklings are ready for market, and that, too, in the face of the fact that four weeks of the thirteen are required for incubation. This leaves only nine weeks for growth, but in that period the ducklings may reach four or five pounds weight, while the chick, with the advantage of only three week for incubation and with ten weeks of the three months for growth, will do well if it reaches a pound and a half. Hence a duckling will make more than three times as much meat up to the age of ten weeks as a chick.

The cost is the same per pound of meat produced in each case. It requires, on an average, about five cents worth of food to produce one pound of poultry (and that rule seems to hold for all classes and all ages), but it pays to produce the meat in the shortest time. Now, if five pounds of duckling can be produced in the same time reqired for a pound and a half of chick, it is equivalent to more than three crops of chicks, and though the duckling eats more food, it grows more rapidly, and the cost per pound of meat is the same.

Another advantage is, that the duck lays her eggs in the winter, or at a time when eggs for incubation are mostly in demand, and she will lay an egg every day if she is a choice duck and from a good laying strain, while the hen does not begin until later and is more uncertain. The eggs of the duck are also more fertile, and better hatches are secured. The young duckling has a good appetite from the start, is not very fastidious, and is subject to but few drawbacks; cholera, roup, and lice have no terrors for it. Give the young duckling half the care and warmth allowed the chick and it will be happy and grow fast.

The duckling thrives on a coarse, bulky diet. A mess of turnips, cooked and thickened with bran and meal, will be a delicacy, and all kinds of nutritious weeds, such as purslain, plantain, rag-weed and pig-weed, will be accepted readily. Ducklings can be removed from the brooders much sooner than chicks, and as soon as partially feathered they will thrive under a shed or any dry shelter, while the old ducks will snugly tuck themselves away for a good night's rest outside, with a north-east storm pouring down on them. This is something, however, we advise should not be permitted, as they give the best results with care.

A duck will lay as many eggs in a year as a hen, but she performs that work quickly and then takes a long vacation, while the hen will be dropping an egg occasionaly throughout the year. For keeping the family in a supply long after the duck ceases, the hen becomes a favorite, though she really does not produce a greater number, if as many, in a year, nor does she produce as large eggs as the duck. But, as the duck has paid for herself in advance, she receives no thanks, and is considered a very unprofitable creature, while the hen receives all the credit and praise. If the duck would extend the laying period, she would give the hen a hard struggle for first place.

But all ducks do not weigh five pounds when ten weeks old. The ducks that are expected to give such returns are of the "blue blood" families. The favorite breed on the larger duck farms is the Pekin, which cannot fly over a fence two feet high, and thrives on dry land. On many of these farms there is no water except for drinking purposes, given in troughs, and the ducks seem to do as well as those that have access to a pond or other water privileges. The Pekins, though they thrive best when foraging for their food, are often kept in small yards. All the time and labor of raising the ducklings (spring ducks, but sometimes known as "green ducks") is from February to June. After that time there is but little demand, and only a few adults are kept for next year's laying.

Turkey "Incubators."

A novel feature in Australian poultry breeding is the use of turkey hens for incubators. These are said to be the best sitters, and can be made to sit at any time without being broody, by giving them a teaspoonful of port wine before placing them on the nest. They will each cover twenty eggs, and bring out three or four clutches before leaving the nest. The chickens are removed to foster mothers, which have ckickens of the same age, and a fresh sitting of eggs supplied to the turkey on the nest. So says the Journal of the Board of Agriculture.

APIARY.

Work for May.

BY JOHN MYERS.

May is one of the most important months of the year for the bee-keeper. During this month especial care should be given to the bees, in order that the queen shall be kept laying to her fullest capacity, if we are to have plenty of workers to gather the honey when the season for it arrives White clover is about the first flower that the bees lay up any surplus from in Ontario. It takes twenty-one days from the time the egg is laid until the mature bee has emerged from the cell, therefore not more than two generations can be brought to life between the first of May and the commencement of the honey harvest, which is about the twelfth of June, usually. Now, what we want to do is to make the queen lay all she possibly can during this month. The question might be asked, But can we make the queen lay more than she wants to? I think we can, or at least I think we can help her to lay all she does want to. In the first place let me say that at this time of the year the queen is capable of laying an average of about three thousand eggs per day. We will suppose our hive contains eight combs, and four of them are filled with sealed honey, or at least there may be sealed honey enough in the hive to fill three or four combs, as the case may be. The bees are very loth to touch sealed stores; in fact, they will hardly touch it at all, unless compelled to do so by hunger. They have been known to let the brood starve, with plenty of sealed stores in the hive; also, if there is a patch of sealed honey in part of a comb, the queen will rarely ever lay in the comb directly opposite. Thus it will be seen that with too much honey in a hive, the queen may be restricted to half, or even less, of her laying capacity. In order to overcome the above difficulty, I would uncap some of the sealed honey every three or four days, as when it is once uncapped, or the cappings broken, the bees will remove all the honey from the parts so disturbed, and the queen wanting some place to lay will fill the combs with eggs almost as fast as the bees remove the honey: and while the bees are doing this, it will stimulate them to feed the queen more, and cause her to still increase the number of eggs laid. Too much sealed stores at this season will decrease rather than increase the quantity of brood and eggs. On the other hand, if there is only a limited supply of stores in the hive, the bees are aware of the fact; and being creatures of great ecomomy, they cease feeding the queen, which also causes her to lessen greatly the quantity of eggs laid. The plan I have adopted, and which I practice each season, is about as follows: Where a hive has too much sealed stores, I take out two or three of the heaviest combs, trying to leave enough honey in the hive to last them at least two weeks; this I uncap, and allow the bees to do whatever they like with it, filling the space made by removing the full combs with empty ones. If, on further examination, I find some colonies that haven't a sufficient supply, I uncap a comb or two taken from hive No. 1 and put it in the one needing stores. I try to distribute the stores so that each colony has enough to last them about two weeks, as bees will do better if they know they have about this quantity ahead. If I have now no combs of honey left, I place a stimulator feeder on each hive and feed about one pound of thin syrup per day. Always feed in the evening, as there are no robber bees to disturb them.

There is nothing that will make a colony breed up so fast in the spring as a little feed given daily. If the bees have been wintered outside, I would leave the packing on all this month, unless the bees show signs of discomfort by hanging out at the entrance, I would then remove it. If the bees have been wintered in the cellar, I would pack them on top, if not at the sides, and treat them about the same as for those wintered outside. The feeder mentioned above can be placed on the hive and the packing filled in around it, thus making it so the bees can take down the feed no matter how cold the weather is outside. After getting the bees about in the shape mentioned, give them a good letting alone (except to feed them) until they commence to hang out in front, when they will either want more room or the packing removed.

Bees in Manitoba.

SIR,—This is the earliest I have ever taken my bees out of their winter quarters. The 7th of April was the earliest until this year, when I took them out on the 1st of April. They are in better condition this year than I ever had them before—plenty of bees, and plenty of stores, and all healthy. About 80 per cent. of the number I put in last fall came through all right. They are gathering a little pollen already [letter dated April 11th]. I had very good success with them last season. I got about one hundred pounds of extracted honey from each hive. I use the Jones hive and find it the best for general use, for gathering honey and for putting them away in the winter. I have used the Langstrath and found it all right as far as the storing of honey went, but as there is no space to pack with chaff, the bees did not winter as well in it as in the Jones hive. I have discarded the combination hives, as I found it did not pay to have too many kinds in operation.

I am, yours,

G. G. GUNN, Gonor, Man.

VETERINARY.

Inflammatory Vesicular Disease of the Foot of the Ox.

BY WM. MOLE, M. R. C., V. S.

Inflammation may be termed the succession of changes that take place in a tissue or organ as the result of an injury. The disease known as Foul in the Foot generally proceeds from external injury, the cause being attributed to the combined operation of moisture, causing friction by means of the mud and dirt between the claws. It is analogous to foot rot in sheep, and thrush in the frog of the horse's foot. From the peculiar form of the foot of the ox, he is especially liable to the lodgment of dirt and foreign substance within the cleft. This, if allowed to remain, forms a source of irritation and subsequent lameness. Sometimes the inflammation will extend entirely around the bulb of the heels, causing softening or ulceration of the skin of the coronet between hair and hoof. This disease is most frequently seen in the hind feet, they being farther removed from the source of blood supply and therefore more easily chilled; it is not contagious, although many cases may be in existence at the same time in a herd; they are all due to the same local conditions.

The symptoms vary, but lameness is the first to be noticed, and on examination we discover fever, attended with considerable swelling of the fetlock joint, and pain on pressure. This may exist for several days. At the end of seven or eight days an abscess appears and bursts, either at the side of the foot or between the claws. The effects of the first attack have not disappeared when it is followed by another, until the foot, in severe cases, becomes completely disorganized. By this time the toes are forced wide apart, the pus burrows in all directions, there is extensive sloughing, with the formation of sinuses or channels, and the discharge, of a foetid, evil-smelling character, results. This state, under bad management, often continues for months, and the cow will suffer constitutionally and get off her feed; indeed, the loss of milk and condition in dairy cattle is often considerable. When the pus burrows under the horny wall or the joint within the foot becomes inflamed, the fungoid granulations will occasionally spread to the back part of the hoof and sole, giving the leg an appearance resembling grease in the horse. The treatment is often difficult and tedious, recovery taking place slowly. The treatment will depend on the stage of the disease; in the first place the foot is to be well cleansed, removing any dirt or cause of irritation, then enveloping it in a flaxseed-and-bran poultice for two days. The next step will be to restore a healthy, sound condition to the soft parts between the claws, and the application of some good disinfectant. Carbolic acid lotion—one ounce to the pint of water—will be of service. A pledget of tow soaked with the lotion should be kept between the claws. The animal should be kept up from the fields and placed on clean, dry straw litter. Give a dose of the following saline laxative: Sulphate of magnesia, twelve ounces; nitrate of potash, one ounce; ginger, powdered, one-half ounce; dissolve in a quart of warm gruel. When the bowels are opened mild diuretics may be used: Spirits of nitrous ether, one ounce; tincture of gentian, one ounce; tincture of ginger, one ounce; give in a pint of water every day.

In cases where the granulations have assumed a fungoid character, the raw surface may be touched with pure carbolic acid; if the pus burrows under the horn, its channel must be followed and the sinus syringed out with a solution of chloride of zinc. There is no evidence that this disease is contagious, but the farmer will best consult his own interest by removing any animal suffering from this disease, from the rest of his stock, and by disinfecting the feet of his animals, and the floor of the stable. Freshly-slacked lime is preferable for this purpose; it not only cleanses the floor by drying up the moisture, it has also good effect on the feet by removing one of the exciting causes.

In discussing the treatment of this disease, it must be observed that success does not so much depend upon the adoption of this or that remedy, as in adapting it to the peculiar stage of the complaint in which its employment seems to be especially indicated, and in this the treatment of the properly-qualified veterinarian will be found to bear a marked difference to the unqualified cow doctor who has only one remedy for all and every complaint. In every symptom of disease his pint of linseed oil and turpentine has killed more animals than it has ever saved.

Goslings and ducklings should be kept away from the pond or creek until the water becomes warm, and the little fowls have passed from the downy to the feathered stage. If this is not done, ducks especially become weak and frequently die from the effects of the cold water.

An enormous pig, believed to be the largest ever seen, was slaughtered at Horseheath Lodge Paddocks, Linton, Cambridge, Eng., a farm owned by Mr. William Harris, of West Smithfield. The pig, which was fifteen months old, weighed nearly 90 stone, and measured 10 feet in length and 7 feet in girth.