Profitable Egg Production.

For all farmers a most profitable branch of the poultry business is the production of eggs during the winter, says Mr. F. C. Hare, Chief of the Poultry Division, Ottawa. Every winter there is a great demand for new-laid eggs; the supply is always limited, and high prices are paid. In the large cities strictly fresh eggs sold readily during the past winter at from forty to sixty cents per dozen. Some farmers are so situated that they can maintain a city trade in fresh eggs throughout the year. A premium of several cents a dozen can usually be obtained for new-laid eggs shipped weekly to the city merchant. There is a growing preference on the home markets for brown-shelled eggs. The shells of the eggs should be wiped clean if necessary, and the eggs graded in size. For shipment to the merchant, they should be packed in cases holding 12 dozens or 30 dozens each. Eggs to be palatable, should be eaten in a strictly fresh condition; therefore, they should reach the consumer without unnecessary delay. This requires (1) that the eggs be collected regularly every day, and stored in a cool room (temperature, 40 to 50 degrees F.), until a sufficient number are on hand to deliver to a dealer; (2) that the dealer forward the eggs to the merchant at least once a week; and (3) that the merchant protect the eggs from deterioration while in his possession.

Experiments at the Utah Experiment Station showed that the profit from young hens or pullets was about five times greater than that from hens three to four years old. Not only did the old hens lay considerably fewer eggs, but the eggs were worth less per dozen. This is accounted for by the fact that the pullets laid a larger proportion of their eggs in winter, when the price was good. When the pullets are forced for winter egg production, there should be kept in addition another breeding pen of selected fowls, from which to rear the chicks. A hen or pullet that commences to lay in the spring will at that time produce stronger-germed eggs for hatching than will another that has had her vitality impaired by winter laying.

The farmer should select from the flock of pullets ten or twelve of the best winter layers, placing a regular leg band or a piece of wire around the leg of each. The next winter these pullets (then yearling hens) should be separated from the laying hens and kept in good health and medium flesh, but not fed for winter laying. In February or March they should be mated with a suitable cockerel, and their rations increased so as to bring them into laying at the time when their eggs are required for hatching. Such a process of selection would soon produce a particularly fine strain of winter layers.

Preserving Eggs in Waterglass.

Writing in the Farmer and Stock-breeder, a farmer's wife says: Whenever I hear of eggs having failed to keep absolutely fresh in waterglass, I suspect some deviation must have been made in their mode of treatment from the one which invariably succeeds. I cannot always get to the bottom of it, but occasionally indications are found pointing to two probable causes of failure, and I met with a very prominent instance of this the other day. I met a friend who had just been to a local chemist's for a tin of waterglass. Knowing my interest in the matter, she asked for an opinion on the liquid. The tin had rather an excessive amount of printing, from which it appeared the chemist had set up a process of his own. This is to collect the eggs and fill the bucket or cask with them before putting any liquid on them. Now, goodness knows how old some of the eggs would be before the preserving influence reached them. With some, egg selling is now discontinued, and all are being preserved. Others who have egg contracts running have to keep them going, but all the surplus ones are preserved. These may be at the rate of a dozen or a score a day, and before a dish holding two or three hundred is full the first put in may be a fortnight or three weeks old. The last put in will be fresh, but the first stale when the liquid is added. When the time comes to use them next winter some will be perfect and others inferior and probably a little tainted in flavor. Then there will be an outcry that the waterglass has not done its work, which is a discredit it in no way merits, and if consideration were exercised it would be found that the fault was at the beginning, as I above indicate. Now, I have always advised that all eggs must be quite fresh when put into the waterglass, and this rule can have no exceptions, and if the liquid is put into the dishes at the start, and the eggs submerged every evening as collected, every good point will be retained, and there need be no fear of their failing. At best an egg is a very perishable article. Preserving must be done to a nicety, and I have no sympathy with those who are careless in statements as to how to proceed, as this is sure to result in failure more or less.

A Short Course in Poultry Diseases.

When the excrement secreted by the kidneys, which is normally pure white, appears yellow, though the droppings are solid and the bird appears perfectly healthy, look out for bowel trouble.

When the crop is hard and unyielding, there is danger of the bird becoming crop-bound.

When the discharges are streaked with blood, it is time to give preventives for diarrhœa.

When the joints are hot and swollen, and the fowl is disinclined to stand, rheumatism has taken hold.

When the nostrils are clogged with dirt, and the eyes water, ward off a possible case of roup by timely treatment. If the case is bad, apply the hatchet, and bury the carcass.

When the bird seems lame and has a small swelling on its foot, remove to a house with no perches, and oblige it to roose on a bed of straw. Bumble-foot is easily cured in the early stages if the cause is at once removed.

When a hen seems to drop down behind, and goes repeatedly to the nest without laying, she is usually suffering from a disorder of the oviduct, and would as well be killed and eaten.

When a bird is "going light," has good appetite, but passes food from the bowels undigested, it is in the early stage of consumption, and treatment is useless.

When the hen seems giddy, and turns round and round, she is probably suffering from apoplexy.

When the bird has leg weakness, with no disorder of the liver, feed lighter, and give plenty of bone-forming material.

When new fowls are bought, quarantine them until sure they have no disease.

When a fowl has difficulty in breathing, look out for pneumonia.

When a fowl is dangerously sick with an organic disease, it is worse than useless as a breeder. It is usually safer to kill a bad case of illness than to try to cure it.—[Farmers' Gazette.

A Young Farmer's Start—Begin Right and Then Go Ahead.

For Lice

I found last summer it was an excellent plan to hang a small canvas bag, about the size of a blue-bag, containing sulphur, inside the turkey coop, just low enough so that the mother turkey would knock against it as she stepped about the coop. I suppose the same thing would answer just as well with hens. I always use insect powder on my young turkeys. I powder them once a week for about three weeks, and ha e very good success with young turkeys. MRS. J. L. H.

Kind Words.

Herman Buck, Addington, Ont.—"I could not do without your magazine in my home."

C. F. Slipp, Houlton, Me., U. S. A.—"I love to read the 'Advocate,' which is the best farmers' paper printed in America."

Chas. Moody, Algoma, Ont.—"Your paper is excellent. Could not get along without it."

George Kirkwood, Grey, Ont.—"The first of May issue of the "Farmer's Advocate" was delayed in coming, and every night was like a week without it."

Geo. L. Pugh, York Co., N. B.—"I have taken the "Advocate" a long time, and prize it very much. Was pleased when you changed it to a weekly."

APIARY.

Lessons in Wintering.

At the spring meeting of the East Middlesex Beekeepers' Association, one of the most important points brought out in discussing the wintering of bees in a bee cellar or outdoor storehouse, was to have the room full of colonies, so that there would not be a large area of cold air circulating about the hives. When a person has a given number of colonies to winter, the room in which they are stored should just hold that many and no more. If the room is too large for the number of hives on hand, then partition off part of it, by boarding up tightly. A house for the purpose of storing bees should be quite closely built of boards and paper, or the walls packed with sawdust. A wall similar to the ordinary stable wall should prove satisfactory. The ceiling should be well covered, and drafts prevented from circulating under the floor. Ventilation can then be provided, by making an opening in the floor and another in the ceiling. Such a room should be packed full of colonies, or filled around the sides with chaff. In March, when warm weather approaches, the house can be gradually emptied, until in the warm days of seedtime all the hives have been set out.

When bees are kept in a cellar, a temperature between 42 and 50 is safer than anything below 40. Last winter many bees died with stores in the hives, simply because the cluster was too cold to move over to the stores.

Clipping and Scraping.

By Morley Pettit.

I wish to mention two matters of importance to be attended to now. These are clipping queens for the swarming season, and scraping hives and frames clear of propolis and beeswax.

When the swarming time comes, it is a great advantage to be able to go to a hive that is swarming, find the queen at the entrance, cage her, move back the hive, set the new hive in its place, with caged queen at entrance, then watch the swarm return for its queen, and enter the new hive. What a contrast to the nerve-wracking, tree-climbing methods of hiving swarms with unclipped queens. The value of having hive parts well fitting, and kept as free from propolis and burrcombs as possible, should be almost self-evident. An annual overhauling will accomplish this fairly well.

During fruit bloom, or before, when the bees are getting enough honey to keep them from trying to rob, every brood-chamber should be looked over and set to rights. The day must be bright, comparatively still, and thermometer at or above 70° F. in the shade. The beekeeper should have at least one extra hive and bottomboard. Have it scraped, bottom stop edges and frame rabbets, clean of propolis and beeswax. Transfer the combs of the first colony into the clean hive, being careful to keep them in the same order. Use just enough smoke to keep the bees quiet on the combs while they are being handled. Glance over each comb until you find the queen, catch her carefully, and clip off her wings with a pair of embroidery scissors.

When all the combs and bees are transferred to the clean hive, scrape off the top bars with a short-handled hoe, and set the hive on the stand where the old one stood. Thoroughly scrape out the old hive, and use it for the next colony, and so on.

Outdoor and Spring Management of Bees.

A great many beekeepers think (or did think before this last winter) that this subject was worn threadbare. Beekeepers that knew all about wintering bees, have come to the conclusion that there is a lot to learn yet. For my part, I do not think I know it all, nor do I ever expect to, but I am always willing to learn, or willing to do all I can to help a brother beekeeper. As I have had success this last winter, only losing eight colonies out of 160, I will give you a few outlines of my method.

In the first place, as soon as the honey harvest is over, I go through each colony to see if they have a queen. If I find any without, I give them a frame of brood from some other colony so they can raise a queen. Then along in September, I weigh up all the hives, and if I find any short of stores, I feed them up. All colonies should have not less than thirty pounds of honey, not counting bees, hives or combs. When all are fed up, I start and pack away for a hard winter, and if it comes a mild one I lose nothing. I follow Mr. Alpaugh's system considerably, for I think it is as cheap and as simple as any I have seen or read about. In the first place, I make a case to hold four colonies, two facing north and two facing south, or at any angle I choose, as it makes no difference how they stand as long as they have plenty of stores and are well packed. I make the outside cases large enough so that there will be