

them in the extracting supers of the same hive (if they will fit); also the brood, unless it is needed for making increase or building up weak colonies.

The essentials for swarm-control are ample room for brood and honey, given in time; good ventilation and shade. An ounce of prevention is worth a ton of cure.

As the strength of the colony increases, enlarge the entrance gradually, until, about June 1st, when all except weaklings should be given an entrance the full width of the hive, and an inch and a quarter deep. At the opening of clover bloom, every colony should have a super, and before it is half filled with honey, another placed between it and the brood chamber. Adopt some system of upward ventilation. It will not hurt for weaker colonies to have more room than they will use. Years of experience with one's bees and locality will give an idea of what average yield per colony to expect. It is well to get super room to that capacity on each hive almost at the start. Then watch that the extra-strong ones do not get at all crowded.

This method is for use when running for extracted honey. With some variations it could be applied to comb-honey production. But the latter is more difficult, and should be left until this is mastered.

Middlesex Beekeepers.

The Middlesex County Beekeepers' Association held a spring meeting in London, Saturday, May 7th. There was a good attendance from all parts of the County.

The morning session was devoted to a discussion on how bees had wintered, and methods of spring management. Bees have wintered well, but have drawn very heavily on their stores. The result is that, where attention has not been given, there is considerable loss from starvation. Otherwise, bees are in good condition.

One member had trouble with his bees robbing, because the entrances had not been contracted immediately after removing them from the cellar. He was advised that prevention is better than cure. Entrances should be kept small all through the spring.

There was considerable discussion on sweet-clover honey. W. A. Chrysler, of Chatham, reported that bees did not winter well on it. The nectar is more watery than from other varieties, and as it comes when the cool nights of fall are on, it does not get well ripened. While it is a good variety of honey for sale, it may not be good for wintering.

Morley Pettit, Provincial Apiarist, of Ontario Agricultural College, Guelph, gave an address on "Co-operative Experiments in Apiculture." He sketched the history of the Agricultural and Experimental Union, which was started in 1879. Co-operative experiments in field crops and fertilizers were taken up in 1886, under the direction of Prof. C. A. Zavitz. There were at that time 24 experimenters; the number has increased to 5,000 in 1909. The first appropriation for this work was \$75; last year it was \$2,750. Eleven different branches of agricultural work are taken up. Apiculture was started in 1889, continued five years, and dropped. In the spring of 1910, circulars and application blanks were sent to about 1,500 beekeepers, and, as a result, more than 300 beekeepers have made application for an experiment in apiculture. Almost every county in Ontario is represented, as well as most of the other Provinces, and some parts of the United States.

A lively discussion followed Mr. Pettit's address, in which several good points were brought forward on the prevention of swarming.

D. Anguish, of Lambeth, addressing the meeting on production of comb honey, said it is necessary to manage for both comb and extracted honey in the same yard. Some colonies are not disposed to build comb honey so well as store in extracting supers. Beekeepers should endeavor to produce a first-class article, and hold for a good price.

The question of shovelling snow from entrances received some discussion. The decision was that dry snow will do no harm, so long as ice does not freeze over the entrance and prevent ventilation.

POULTRY.

Incubator Chicks.

An inquirer, desirous, like many others at the present time, of extending his poultry-rearing operations, with a view to profit, of course, requests the publication through "The Farmer's Advocate" of the experience of other readers with the use of incubators. With the work of the hatching season fresh in mind, naturally re-



A Typical Black Orpington Hen.

calling that of previous years, this would seem to be the most opportune time for readers to jot down a candid statement of their experience with the "wooden hen," compared with one of flesh and feathers. Most people are ready to relate experience that has been gratifying to themselves in its results, but the lessons from failure in some particular may be all the more valuable. Some have no hesitation about showing the dark side, and putting their name to the facts, for the benefit of others, while many prefer to request the non-publication of their names, though willing enough to furnish the details. Such requests will be respected, and the names of particular makes of incubators we shall be pleased



Herding the Geese.

to know, though not for publication, as that would be trenching upon the advertising domain.

The first point upon which light is asked is:

1. How many seasons' experience have you had with an incubator?
2. What are the advantages or otherwise of the incubator, compared with the hen?
3. Cost per hatch, counting oil, attendance, etc.
4. If you have discarded the use of an incubator, would you state the reasons why, and, also, if there was any departure from the rules accompanying the apparatus?
5. What have you found to be the essential conditions for securing successful hatches, and what is considered a fair percentage of living chicks?

6. What trouble, if any, have you found in the brooding process? And do you find artificially-hatched chicks as healthy and vigorous as those from hens?

Home Preservation of Eggs.

Dealers in eggs, when they wish to hold them for a time, make no use of preservatives, but simply place them in cold storage. This method is not practicable in the home, however. "Many methods of packing and preserving eggs for home use have been tried," to quote from an Ames, Iowa, bulletin on the subject, "such as packing in salt, oats or bran; covering them with paraffine, vaseline, butter, or lard; storing on shelves and in racks in cool places; and immersion in salt brine, salicylic acid, water-glass, or lime-water." Of all those mentioned, only two, the use of water-glass and of lime-water, have been effective in keeping eggs for several months. Water-glass is the better preservative of the two, eggs having been kept in a solution of this chemical for three years.

"Water-glass (soluble silicate of sodium) is a pale-yellow, odorless, syrupy liquid, costing usually from 60 to 90 cents per gallon. For use, stir one part of water-glass, by measure, in 11 parts of boiled water, either hot or cold, but must be cool before using."

LIME-WATER MIXTURE.

"Slake three pounds of good quicklime in a small amount of water, then add the milk lime thus formed to three gallons of water. Keep the mixture well stirred for a day, then allow the lime to settle, and use only the clear liquid."

KIND OF EGGS TO PRESERVE.

No eggs that float, or that are dirty, stale, cracked, or thin-shelled, should be used. Only those that are fresh, clean, unwashed and sound are suitable, infertile eggs being preferred.

Vessels for liquid must not be of metal, or corrosion will take place, but those of either earthenware, glass or wood are suitable. Six-gallon earthenware jars, with covers, holding from 20 to 24 dozen eggs each, are very convenient. Whatever vessels are used should be first carefully scalded and made sweet.

PACKING THE EGGS.

The preferable method is to fill the vessel used half-full of the liquid, and, as eggs are laid, they are carefully placed therein. There should be at least two inches of preservative above the eggs always. Keep in a cool cellar.

COST.

The cost is less than one cent per dozen for the water-glass method, and, if lime is used, very much less than that, even. There should be no attempt to keep eggs over year, but until that time, preserved as described above, they can be used for nearly all purposes in place of strictly-fresh eggs.

Prof. Shutt, of Ottawa, differs somewhat from the American experts quoted above. He prefers the lime-water mixture, and uses but 2 pounds of quicklime to 5 gallons of water. On the other hand, Prof. Graham, O. A. C., Guelph, favors the water-glass method. In co-operative experiments, he says, more people succeed with water-glass than with lime-water. He would dilute American water-glass with only seven times its bulk of water, but the English water-glass, which is much thicker, requires about twelve times its bulk of water added.

GARDEN & ORCHARD.

Some Good Old Apples.—II.

Prominent among the excellent varieties which we were on the point of consigning to the grave, on account of its susceptibility to apple-scab, is that prince of dessert apples, the Snow Apple. In Ontario it is known under this name by reason of its very white flesh, but in Quebec as La Fameuse, meaning The Famous, because of its supreme excellence of quality for dessert. It is also called De Neige, or Pomme de Neige, which is simply the French for Snow Apple.

About one hundred years ago, nearly every apple orchard planted in the Niagara Peninsula contained a good many trees of this kind, and there still remain a few of these on the so-called "mountain" side at Grimsby, which were planted by my great-grandfather, Jonathan Woolverton, soon after he purchased the old homestead, in 1798. Fifty years ago, these apples grew clean, and free from scab, and we boys counted it the treat of the year to meet, in the December evenings, for drafts of backgammon, with a plentiful supply of Snow apples as a constant refreshment while we played our games. But now, for many years, the fruit has been ruined by scab, both in size and quality, and, in consequence, left unharvested to waste upon the ground. It was from the seed of one of these that originated the