

hens, the mites will attack them whenever they become hungry. To discover the pest, if present, carefully examine the cracks and corners of the roosts and nests. On moving a roost or nest, they may be seen under it, clustered in patches, having a reddish or grayish powdery appearance. These patches are composed of mites of all ages, eggs, cast-off skins, and filth. Sometimes patches of minute, steel-gray eggs, 1-75 to 1-100 of an inch in diameter are found in crevices where no mites can be seen. Unfortunately, the pest is often so great that the mites can be found in piles  $\frac{1}{2}$  inch deep along all the lower surfaces of the roosts.

#### LIFE-HISTORY.

The numerous eggs which the adult mite lays in crevices, etc., hatch in two or three days in warm weather. The young mites are nearly white, and have but six legs. For the first few days they live on filth, but they soon attack the fowl. The young mites shed their skins several times during growth—a process which requires about 10 days to complete. Then they lay eggs, and the cycle continues as before.

#### REMEDIES.

The number of possible remedies is practically unlimited. The mites are not hard to kill when they are accessible, but it is their great numbers and prolificacy, combined with their ability to find every hiding place that makes the task of freeing a poultry house of mites a tedious one.

The first step necessary is the removal of all dirt, filth and unnecessary fixtures. Then whitewash the walls, nests, roosts, etc., with hot whitewash containing crude carbolic acid. The addition of a small amount of glue will cause it to adhere better. Although the whitewash will not penetrate into every crack, it will close up many, besides killing every mite with which it comes in contact.

Coal oil, poured carefully over the roosts and in the nests kills large numbers, and also keeps others away until the smell of the oil has disappeared.

Another remedy which the writer has found very effective is the liberal use of boiling water. It is also very cheap.

A very good insecticide is a strong solution of corrosive sublimate. It also destroys the eggs. It has the disadvantage, however, of being a deadly poison, and must be used cautiously.

An easy method of clearing movable nests of mites is to remove them and their contents to a safe distance, and then burn the nesting material in the nest. If the nest takes fire, turn over, and let the hot smoke from the smouldering fire ooze through the cracks.

Where the poultry house can be closed up tightly, burning sulphur in it is sometimes recommended. Wood ashes dusted in the nests, and a good insect powder applied frequently to sitting hens, is beneficial, as it gets into the breathing pores of the mites and smothers them.

The whole secret in ridding a house of this pest is thoroughness. Without several thorough applications, repeated at intervals of a few days, one cannot hope to be successful. A combination of whitewash, coal oil and hot water has been very successful in my case.

Middlesex Co., Ont.

C. W. S.

#### Be Careful of Your Eggs.

Hot weather means that a great many eggs are going to be stale before they reach the consumer. There is no reason why the eggs should be stale when leaving the producer, and there is just as little reason why they should be allowed to remain around shops until they have become unfit for use, or at least have a very noticeable stale flavor.

The egg must be delivered to the consumer as soon as possible after it is produced, because delay is dangerous, and likely to lead to bad results.

The first person who has it in his power to hasten delivery and to insure fresh eggs to those who use them is the producer. The gathering of the eggs is a very important point, and should be attended to daily. The nest is better not exposed to the direct rays of the hot summer sun, because a very few hours in this condition may start incubation, and in any case will detract from the fresh, wholesome flavor of the egg. Too much emphasis cannot be laid on regular and frequent gathering, twice a day being preferable to one gathering made in the evening.

This is the natural incubating season of the hen, and those poultrymen and farmers who keep hens of the sitting breeds must be on the alert, or some of their motherly-inclined feathered creatures will steal away their nests and prepare to raise a brood. It is said that many of the stale eggs now being sold are those which have been located in such a nest after being there perhaps anywhere from a few days to two or three weeks. These eggs are often partially incubated by the heat of the sun, and are always stale and not very palatable, and should never be sent to market along with the good eggs. By always being sure to gather the eggs regularly, and to market them at least twice per week, and oftener, if possible, and to keep them in a cool place, and not behind the kitchen range or in the pantry window in the sun, the producer does his part toward giving the consumer a good product.

Many dozens of eggs are injured in transit or by standing in the country stores. It is a common practice for produce buyers to go around through the country and collect eggs semi-weekly, weekly, and often fortnightly. These buyers not only collect from farmers, but also from the country stores. Many country people take their eggs to the country store, where they are left, goods and groceries being received in exchange. These eggs are allowed to sit around the hot, close store for various lengths of time. Very often no particular care is taken to keep them in a good condition. Good, bad and indifferent eggs all go into the same huckster comes along and takes them to the city, where they are again often handled several times before being placed on the table to be eaten. This mixing of good and bad causes what eggs were good at first to have an off flavor, and much harm is done by this. As far as giving the city consumers good eggs is concerned, the country stores and many hucksters are not the best possible means of handling.

The consumers are willing to pay well for the extra trouble taken to give them good fresh eggs, and the farmer can do nothing better than make an effort to get his eggs delivered to the consumer as expeditiously as possible. It is the producer

that is losing by the present methods, because large egg dealers will not buy and sell eggs at a loss if they know it, and they always buy expecting to discard a large percentage of the stock bought, because of it being unfit for use. Their price is set accordingly, and the farmer who produced the good eggs is the loser.

Remembering, then, these points, it is evident that some means is necessary to get the eggs on the market in the best possible condition, and to do this it is also necessary to be able to trace each egg to the producer, because very few people will sell bad eggs if they know they are going to be traced back to them.

In some districts egg circles have been organized, and are run co-operatively, producing a high-class product, for which the members receive increased prices. Why not more of these circles? Male birds are removed from the flocks of laying hens; all eggs are marked with the producer's stamp; fines are imposed if bad eggs are delivered; eggs are gathered regularly and often; and people who eat these eggs are sure of a wholesome, tasty product. A very great annual loss can be overcome by the organization and proper management of these circles, which make it a point to furnish their customers with a very high class of strictly fresh eggs.

## APIARY.

### Ontario Bee-keeping Outlook.

For the purpose of reporting on the condition of bees in Ontario, and the honey-crop prospects for 1911, blank inquiries were sent to five thousand beekeepers last month by the Fruit Branch of the Department of Agriculture. Six hundred replies were received, from which a report has been summarized by Morley Pettit, Provincial Apiarist. The total number of colonies reported for the fall of 1910 was 23,730. For May, 1911, it is 20,414. This represents a winter loss of fourteen per cent., which is five per cent. more than that reported a year ago. This also means that the remaining colonies are weaker in proportion, and are less fit for the work of gathering honey which the clover fields, weather permitting, will provide. On the other hand, the condition of clover is reported almost uniformly good. A few counties report "poor" and "below the average," and some "extra good." While a spring report is of value in determining the present prospect of the honey crop, there is no other farm crop so entirely dependent on weather conditions from day to day during harvest time. Any sudden change from hot to cold will often check the secretion of nectar in the flowers and reduce the expected honey crop by hundreds of thousands of pounds.

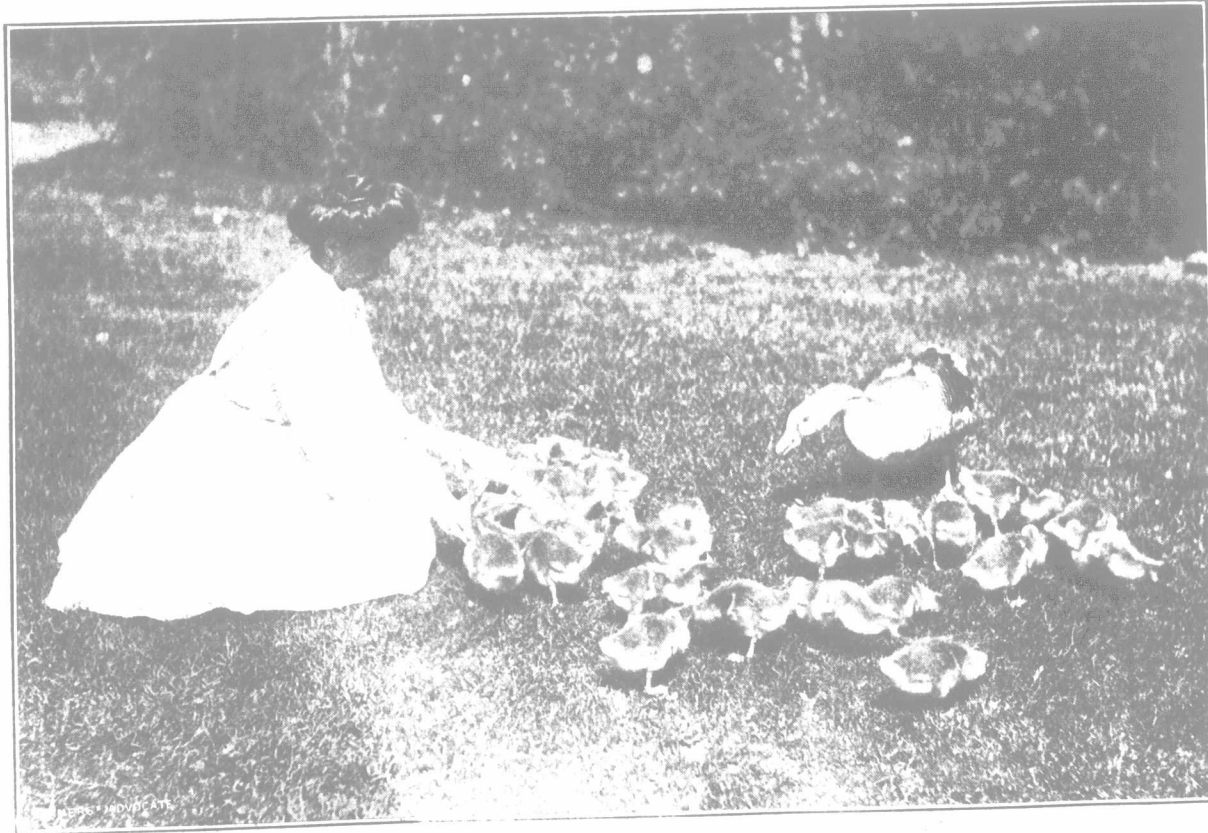
## GARDEN & ORCHARD.

### Fire Blight.

During the summer season the fruit-grower should keep a sharp lookout for fire-blight, twig-blight, or blight canker, as it is often called. This is a bacterial disease, the spores of which gain access to the trees through the holes made by the shot hole borer. The spread of the disease is also caused by other insects, amongst which the small green and black aphids are the greatest distributors. It is, therefore, necessary that the trees be freed from the attacks of these insects. The young shoots and watersprouts are very likely to become affected with the disease, and should be carefully watched and, wherever it is noticed, the affected part should be cut and burned. The instrument used in cutting should always be disinfected with a strong solution of copper sulphate or corrosive sublimate, as should also the end of the branch from which a portion has been removed. The canker on the trees can easily be distinguished from the black rot canker, as the former is in the shape of a smooth, depressed area, while the latter is raised and roughened. In cutting, it is always better to cut back at least one foot below the apparently affected area, in order to be certain that all the diseased portion is removed. The cure is done by the disease preventing the free upward flow of sap to the ends of the branches, thus cutting off the food supply to a certain extent. The ends of the branches without the diseased portion brownish and have a long, narrow crack.

The disease makes most rapid progress in warm, dry weather, and when the weather is warm and moist, the disease is slow in its progress and distribution of spores is so rapid in a dry season.

The fruit-grower is endeavoring to protect his trees from the disease, to exterminate the insects that are the carriers of the disease, and even to cut out the diseased portions, but the disease is bad, and the fruit-grower is left with limited means to combat it. The growing season is over, and the trees are not in the



A Liberal Breed.