will prove successful, but the following may be used as a guide. When the chicks are removed to their brooding quarters there should be some coarse sand or fine chick grit scattered where they can have free access to it. They should then be left until they show positive signs of hunger, which would be between two and three days after hatching. They may then be given some bread crumbs that have been very slightly moistened with milk; this may be scattered on clean sand or chick grit. If being brooded by a hen she will see that no feed is allowed to lie around, but if in a brooder, what the chicks do not pick up in a few minutes should be removed, as nothing in feeding causes so much trouble as leaving feed of that nature around until it is sour.

"The chicks should be fed five times a day. The following system may be adopted or altered to suit conditions: first feed, bread crumbs, moistened with milk; second, finely cracked mixed grains; third, rolled oats; fourth, moistened bread crumbs; fifth, finely-cracked mixed grains. If too early to get the chicks out on to the grass at once, green feed should be supplied in the form of young lettuce, sprouted grains, or any other tender succulent feed that is acceptable. After the chicks are ten days or two weeks old, coarser feeds may be allowed. All changes should be made gradually. The infertile eggs may be boiled and mixed with mash feed and the bread and milk discontinued. Hoppers in which is placed cracked grains and dry mash or rolled oats should be put where the chicks can have free access to them. As soon as they become accustomed to the hoppers, the hand feeding may be reduced to the mash feeds and if the chicks are on range it will be found that after a time they will get careless about coming when called; it may then be dropped and dependence placed entirely on the hopper feeding. Place grit, water, also, if possible, a dish of sour milk where the chicks will have free access to it. Nothing provides animal food in better form than does milk; the chicks like it and thrive on it.

Suggestion for Record of Performance.

Readers will remember that at the Dominion Poultry Conference held in Ottawa in February, a resolution was passed favoring the introduction of Record of Performance work with poultry in a manner more or less similar to that followed with respect to dairy cattle. A committee was appointed to develop a plan of carrying on this work, and we give herewith one suggestion that has been made and will be passed upon by the committee as a whole. Readers who are interested in this work are invited to offer any suggestions they may care to make.

"FLOCK INSPECTION.—The inspection and culling of flocks with a view to eliminate the non-producers and birds unsuited for breeding, to establish a better type of bred-to-lay birds which will be known as "Approved Flocks" among the general producers and from which eggs and breeders may be produced. This work to be under the direction of the Provincial Department of Agriculture.

"BREEDING STATIONS.—The establishment of breeding flocks among representative farmers or poultry keepers for the purpose of demonstrating the advantage of pure breeds and bred-to-lay strains, and for the producing of suitable eggs and breeding stock for sale to the surrounding section. These breeding stations to be conducted by the Provincial Department of Agriculture.

"RECORD OF PERFORMANCE A.—The conducting of tests under government supervision and on government or neutral ground, for the purpose of obtaining an official record by actual trap-nest results. This official test may be conducted by either Federal or Provincial Governments or colleges and may be secured by

"(1) Laying contests as generally understood or,

"(2) Laying 'tests' as distinguished from 'contests.'

"The 'test' being a means to obtain an official record and is not a competition. One bird or more may be entered. This will be under the supervision and inspection of the Dominion Department of Agriculture.

"RECORD OF PERFORMANCE B.—This is the inspection of trap-nested flocks somewhat similar to that conducted in the Dairy Branch. It will be open to any breeder who wishes to enter his flock and will be under the supervision and inspection of the Dominion Department of Agriculture."

A Working Flock.

EDITOR "THE FARMER'S ADVOCATE":

We have fifty-five Plymouth Rock hens which were hatched in May 1918. They commenced laying in December and have certainly paid their way. We have not kept strict account of the feed which they consumed, but we know that if the feed and labor were charged against the hens the net returns from eggs would be gratifying. We did not keep account of the eggs used in the family of five, but the following is the number of eggs sold up to the end of April from the fifty-five pullets: December, 18 dozen; January 55 dozen; February, 84 dozen; March, 97 dozen; April, 93 dozen, or a total of 347 dozen for the five months. The first week in May they are still laying an average of forty eggs a day.

DAVID GENTLEMAN,

Lambton Co., Ontario.

HORTICULTURE.

Insects Attack Cane Fruits.

There are many gardens throughout the country wherein cane fruits are found in more or less considerable quantities, but too often the foliage is riddled by insects or the plants are in other ways so injured as to be almost non-productive. A little attention at the right time will protect the canes and make a crop of fruit possible. The following information regarding the most destructive insects and their control is gleaned from Ontario bulletins and we are passing it on at this time in order that thousands of patches may be saved from the depredations of numerous destructive pests.

THE IMPORTED CURRANT WORM OR CURRANT SAWFLY.—The most common and destructive insect attacking both currants and gooseberries in Ontario is the imported currant worm, or, as it is commonly called, the currant sawfly. The larvæ are greenish caterpillars almost three-quarters of an inch long when full grown and with black heads and many black spots over the body. The adults are four-winged insects known as sawflies. The female is about the size of a house fly and has a black head and conspicious honey-colored body; the male is smaller and blackish. Adults appear soon after the leaves come out and lay eggs in chains along the veins of the underside of the leaves. These soon hatch and the young larvae feed on the foliage, often being most numerous in the central parts of the plants, and doing much damage there before attacking the outer leaves. The foliage in many a plantation is almost entirely destroyed, only the main veins and the fruits being left. There are two broods in a year, the larvæ of the second appearing about the time the currants are ripening. When the larvæ are full grown they enter the ground and make earthen cocoons. The winter is spent in there.

MEANS OF CONTROL.—Fortunately this pest is easily controlled by spraying with arsenicals. The first application should be with two pounds of arsenate of lead to forty gallons of diluted lime-sulphur, or of Bordeaux mixture applied just before the blossoms appear and repeated soon after the fruit is set. See to it that all the inner and lower leaves are covered. The lime-sulphur or Bordeaux is added to control diseases. If the second brood is seen to be present, hellebore, one ounce to one gallon of water, should at once be used. The hellebore should be fresh, as it loses strength if exposed to the air. It is unsafe to use arsenicals on the fruit at this stage.

THE CURRANT APHIS.—The leaves of currants and, to a lesser extent, of gooseberries are often severely attacked by green plant lice, aphids, which feed upon the under surface and cause the leaves to curl downwards. The parts of the upper surface between the veins are usually elevated in large irregular blisters that are often reddish in color. Affected leaves in many cases are so much weakened that they die. The aphids pass the winter in the egg stage. Eggs are very small, black and glossy and are placed in the axils of the buds and the wood. They hatch a few days before the buds burst and the young aphids at once proceed to feed upon the developing buds and leaves. Reproduction in early summer is very rapid, and enormous numbers of the insects may be found. Natural enemies, however, both parasitic and predaceous, usually bring them under control in midsummer.

MEANS OF CONTROL.—Arsenical mixtures are useless as aphids are sucking insects; hence contact poisons must be applied. Of these probably the best is black leaf 40, a tobacco extract. The only objection to this is that it is somewhat expensive. It should be used with lime-sulphur as soon as the eggs have hatched, that is, a day or two before the buds burst. This will destroy most of the insects and, if another application combined with the lime-sulphur or Bordeaux mixture is given just before the blossoms come out, almost every aphid can be destroyed. Of course, in the latter case the spray must be shot up from beneath so that the under surfaces may be covered. The lime-sulphur or Bordeaux is added with the object of controlling diseases. Kerosene emulsion or whaleoil soap, 1 pound in 6 gallons of water, may be used instead of black leaf 40, but should not be combined with lime-sulphur. It is almost useless to spray after the leaves have become curled because it is then impossible to hit all or nearly all the aphids.

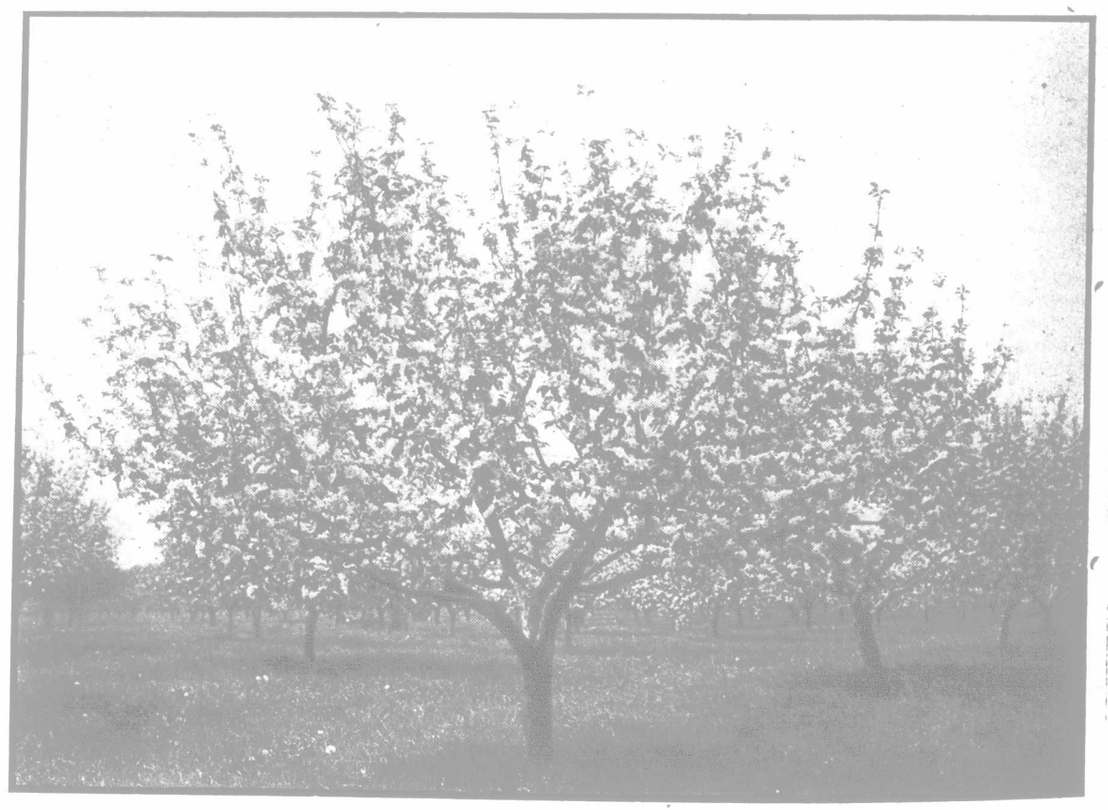
RASPBERRY SAWFLY.—The damage is done by the larvæ of the fly, green in color, eating the tender green portions of the leaves, leaving only the veins. The fly deposits the eggs on the leaves and the larvæ begin feeding as soon as hatched.

CONTROL. If early in the season spray the plants with two pounds of lead arsenate in forty gallons of water. If the fruit is ripe or ripening the larvæ may be jarred off by hand on to the hot dust between the rows. It is not well to use the poison on the ripe or ripening fruit, because of discoloration. White hellebore, either dusted over the plants or steeped, one ounce in two gallons of water and sprayed over the foliage, is a very good remedy.

FARM BULLETIN.

Soldiers Going on the Land.

The Soldier Settlement Board have made the announcement that up to the third of May, 6,598 applications for the benefits of the Soldier Land Settlement provisions had been approved by the Qualification Committees in the whole of the Dominion. The greatest number was in Alberta, where 1,134 applications were approved by the Edmonton office and 767 by the Calgary office. Saskatchewan shows 1,264, Manitoba, 1,535, British Columbia, 946. In the East the numbers approved in the various provinces are: Ontario 426; Quebec 115; New Brunswick 189; Nova Scotia 114; Prince Edward, 104. The total number of applications received in all the provinces was 9,849. Reports also show that 508 applicants have been recommended for agricultural training and 143 have applied for and are actually taking training either at the training centres or on farms of selected farmers.



The Promise of a Good Crop

In the Railway Committee.

At a recent meeting of the special committee on the Consolidated Railway Act, called to hear the representations of the Governments of the three prairie provinces, the question as to whether railways should be compelled to pay for telephones installed in stations where a railway company may determine that a telephone is not essential to the success of their business, was discussed. It was asked that, in the public service, railways be compelled to give telephone service to the surrounding territory and pay for the installation of telephone. The Minister of Railways did not favor forcing the railways to pay for telephone service if they did not want it, evidently looking forward to a considerable future expense to Canadian National Railways if this were done. The trouble lies mostly in small stations where farmers