APIARY.

Importance of Good Queens.

That the queen is by all odds the most important part of a colony of bees, all beekeepers of any enlightenment will agree. Yet, how many farmers or others who keep bees give this matter the attention it deserves? They seem to think, and often say so, that bees are bees, and that's all there is about it, failing to realize that there are different strains of bees, varying as to their qualities, good or bad, just as there are different strains of cattle, horses, etc., and that careful, judicious breeding and selection of stock will certainly pay them for their trouble in one case as well as another. How often in going through an apiary, the owner will point out some three or four colonies that have given him a large yield of honey, while, others that have had the same chance gave little if any surplus. Other conditions being equal, the queens are most surely the cause of such discrepancies in the amounts of honey produced. Someone will say, "The queens don't work." True, they do not gather honey, but what is more important, they produce the workers, imparting to their offspring qualities desirable or otherwise.

Again, in the month of June quantity is just as important as quality, as regards the bees in a hive, and while some queens will lay an enormous amount of eggs early in the season, thus insuring a large force of bees for the honey season, others will barely hold their own and consequently be of little use to the apiarist as far as profit is concerned. While I doubt if it will pay the small producer, or, for that matter, the large producer, to raise many queens other than those reared naturally during the swarming season, yet we all have the privilege of improving our stock of bees at a very small outlay. There are numbers of beekeepers who make queen-rearing a specialty, from whom we can procure new blood to tone up our yards from time to time as needed, and I would suggest that if you have a dozen or so colonies in the back yard, that have had no attention in regard to this matter, that you procure a few queens from some reliable breeder, and just note the difference in those colonies during the following season. This is a good time of the year to re-queen, especially if you are in a buckwheat district, so that you can remove the old queens without danger of robbing. As to introduction of queens, the most essential precaution is to be sure the colony is queenless, as more queens are lost by trying to introduce them to colonies that have something they recognize as a queen than from all other causes put together. For this reason, it is not desirable to destroy the old queen before the fresh one arrives by the mail, for fear that in the intervening time, queen cells may be started and perhaps a young queen hatch and cause you a lot of trouble, it may be the loss of a queen.

While queen breeders generally say that they will send queens by return of mail, they, like human nature in general, are not always able to do just what they say, so for reasons given don't be in haste to destroy a queen before receiving another. After having tried nearly all methods of introduction, I now practice what I believe to be the safest and quickest plan extant, namely, direct introduction. If the queen should arrive by the morning mail, I at once go to the colony to be re-queened (if not already queenless), hunt out the queen and destroy her. In the evening, light the smoker and put a small quantity of tabacco in it (the only use I have for the weed), give the smoker a few puffs so that the smell of tobacco is apparent, lift up one corner of the board or quilt over the bees and smoke them lightly, then give them two or three puffs at the entrance and let the queen run in. In five or six days you will be almost sure to find the queen laying nicely in her new home. Don't open the hives inside of time mentioned, as bees, if molested too soon, will often ball a queen that has been successfully introduced. I have yet to lose my first queen by this method, which has the advantage of being so simple that even the most inexperienced can succeed all right.

Beginners may ask what is the best race of bees? This is a matter of individual opinion, and as I have said previously, there are different strains of bees as well as different races, just as there are the different breeds of cattle, etc. Personally, I am a great friend of the Carniolan bees. They are very gentle and good workers; i. e., some strains of them are. However, like nearly every ideal, they have their failings, the most serious one, in my experience, being their inclination to swarm a little more than the Italians or blacks. This, of course, is not desirable, especially in out-yards, when one of our objects is to keep down swarming as much as possible. I might say that my reasons for doubting the advisability of honey producers, either small or extensive, to rear many queens, are that in both cases they will not have the time necessary to devote to queen rearing to make it a success. The small producer will have a farm or something else to claim his attention, while the large producer will have his hands full without attempting to rear queens. A plan of constantly improving the stock in the apiary as practiced by a successful honey producer is as follows: He produces both comb and extracted honey, his very best colonies are run for comb honey, the others for extracted; swarming is almost controlled with the latter, while of those run for comb honey nearly all swarm. As practically all the increase comes from his very best colonies, the result is sure to be just what he is aiming at—improvement in stock.

York Co., Ont. J. L. BYER.

POULTRY.

Good Prospects for Poultry.

Mr. F. C. Hare, Chief of the Poultry Division, Ottawa, who has just returned from a visit to the fattening stations, reports as follows:

Wherever I have been in Canada this spring, I have noticed a substantial improvement in the quality of the young chickens. The farmers are realizing that there is a growing demand for a White Wyandotte or Barred Plymouth Rock market chicken, and are introducing these breeds as fast as they can. I think the White Wyandotte will be the most suitable breed for the Canadian farmer. Up to the present time the Orpington chickens are not doing as well at the illustration hatching stations as the Wyandottes. The latter are growing faster than either the Rocks or the Orpingtons. They are well liked in France, and are sent over to Great Britain from that country. If the French can hold a foremost place in the British market with these birds, I see no reason why we in Canada cannot do the same.

In regard to the number of young chickens that will be reared this year, I do not believe more chickens will be marketed than last year. Of course, there are more chickens being hatched, but there seems to be trouble all over the country with chickens dying off when they are from a week to three weeks old. I know that the primary cause of this has been the heavy rainfall this year, and the best means to adopt in order to rear chickens through this kind of weather is to place them in small, movable houses, where they can be fed inside the house and receive indoor exercise while the unfavorable weather lasts. Chickens that are under hens in small brood coops out in the fields have a rather poor time when they have to huddle around the hen for several days, but when they are inside a movable house, the weather does not make much difference.

Another cause of death in young chickens has been a general lack of animal food. There are not so many grubs, worms and insects as in former years, the wet weather having diminished the crop, and I am positive that this is one important reason why young chickens are dying off. It is seldom that the farmer's wife gives the chickens any meat or animal food, and, with the rather small supply of insects this year, the growth in chickens was retarded.

I would advise any farmer who finds his chickens in a weak condition or dying from no apparent cause, to feed them every day boiled refuse meat of some kind.

As to the price that fatted chickens will bring, present indications show that it will be higher than last year. Fatted chickens that the Department have just shipped to a Toronto provision merchant realized twelve cents per pound alive, and the merchant states that "the shipment was very satisfactory." The Canadian public is appreciating the greater quantity of flesh of the fatted chickens, and also its improved quality and juiciness; and wherever I have been a growing demand for fatted chickens is noticeable. I believe that within a few years the demand for fatted chickens will be so great, and there will be so little sale for the ordinary thin chickens, that practically the whole poultry trade will be carried on in crate-fed chickens.

Dressed Poultry Exhibits.

Regarding the prizes for dressed poultry that the Industrial Exhibition, of Toronto, offers this year, instead of showing these in pairs they have made a class for single birds, and as many of our readers do not have a pair of birds suitable for showing they can enter a single bird. We are informed that each bird should be thoroughly cooled before being packed, and each one wrapped in parchment paper so as to prevent any bruising and so as to retain the natural color of the flesh, and doubtless if they could be placed on the train at a time suitable to reach Toronto in the evening or early in the morning, they will arrive in much better condition, as the temperature is much cooler than in the day time. We trust that our readers will patronize this new department, which will be along the educative line, and assist in furthering the interests of the poultry industry.

Poultry-keeping Profitable.

Prof. A. G. Gilbert, of the Ottawa Experimental Farm, in answer to the question, "Why is poultry valuable to the farmer?" gives the following reasons:

1. Because he ought by their means to convert a great deal of the waste of his farm into money in the shape of eggs and chicks for market.

2. Because, with intelligent management, they ought to be all-year revenue producers, with the exception of perhaps two months during the moulting season.

3. Because poultry will yield him a quicker return for the capital invested than any of the other departments of agriculture.

4. Because the manure from the poultry-house will make a valuable compost for use in either vegetable garden or orchard. The birds themselves, if allowed to run in plum or apple orchard, will destroy all injurious insect life.

5. Because while cereals and fruits can only be successfully grown in certain sections, poultry can be raised for table use or layers of eggs in all parts of the country.

6. Because poultry-raising is an employment in which the farmer's wife and daughters can engage and leave him free to attend to other departments.

7. Because it will bring him the best results in the shape of new-laid eggs during the winter season, when the farmer has most time on his hands.

8. Because to start poultry-raising on the farm requires little or no capital. By good management, poultry can be made, with little cost, a valuable adjunct to the farm.

GARDEN AND ORCHARD.

Trap Lanterns Unsatisfactory.

The habit possessed by certain insects of gathering near a bright light after dark has been considered by many horticulturists as a peculiarity that might be made use of in the destruction of injurious species. In view of this, Prof. Slingerland, of Cornell Experiment Station, and other prominent entomologists, some time ago began a series of investigations to determine the practicability of such a proposal. Various styles of trap-lanterns and moth-catchers, such as are being forced upon the market, were used. In his general summary of bulletin No. 202, Prof. Slingerland concludes as follows:

"An orchardist or grower of small fruits has no use for a trap-lantern or a "moth-catcher," because they will not catch enough of the more injurious fruit pests to pay one-tenth of the trouble and expense of running them. Tent-caterpillar moths are the only common fruit insects that are caught in economic numbers, and nine-tenths of these will be males. Codling moths are not attracted by lights and only rarely may one accidentally fall a victim; the highest record, thus far, is eight codling moths in fifteen nights. The wingless female cankerworm moth will not crawl into 'moth-catchers,' and the lights do not attract the two kinds of apple-borer beetles, the peach-borer moth, plum curculio or sawflies of the currant worm or pear slug. And as trap-lanterns can have no effect upon fungous diseases, they can never take the place of the spray pump and Bordeaux mixture. We believe that several trap-lanterns set near every tree in the orchard will not noticeably reduce the crop of wormy apples or the numbers of hungry caterpillars feeding on the buds and leaves."

Two Notable Dairy Articles.

Mr. J. W. Hart, Superintendent of the Kingston Dairy School, and Mr. F. J. Sleightholm, formerly director of the Ontario travelling dairy and Superintendent of the Western Dairy School, contribute two articles on buttermaking competitions in this issue of the "Farmer's Advocate," which will be read with intense interest in view of the approaching contests at several of the big fairs. Mr. Hart, it may be mentioned, officiated as judge at previous Toronto Industrial buttermaking trials. The suggestions given, while specially applying to making butter publicly, are just as useful in ordinary practice.