

the bees make when under its influence. Then, when we find causes of swarming present in a hive, but no preparations yet made, we know that swarming may be forestalled by removing the causes. But if the causes have remained long enough to induce the swarming impulse, and preparations have begun, drastic measures are necessary to remove not only the causes, but the "impulse," and it is almost like trying to break up a "sitting hen."

In our next article we shall take up the cause of swarming, and how to prevent it.

#### HOW TO BEGIN WITH BEES.

According to the famous instructions for making "pemmican," "first catch your buffalo."

Get bees near home; have them inspected by a competent, disinterested person. If they are not Italian, buy some queens from a reliable breeder. The former owner of the bees will be able to give the beginner a deal of gratuitous advice on their management.

A better way is to spend a season or two in the apiaries of some successful specialist, or a term at the Agricultural College, at the same time getting all the information possible from one's tutor, and from reading standard books and journals.

Catalogues of supply dealers are good reading matter. A small supply of goods can be bought as a first investment, and after that it is best to make the bees pay their way. The following is a good beginner's outfit: Smoker, veil, bee-brush, text-book, subscription to bee journal, one colony of bees in 10-frame hive; two extra hives, with queen-excluder and extracting supers for all three; medium brood foundation, and wire embedder.

This is an outfit for the production of extracted honey. I recommend this in preference to a comb-honey outfit, because it is a much easier matter for a beginner to get honey in full-sized combs than in sections. If the honey is for home use only, or to sell to a few neighbors, it can be cut and used out of the large frames. After some experience has been gained in producing honey in extracting combs, the more difficult matter of producing it in pound sections can be taken up.

The second or third year, if the love for bee-keeping holds, a further investment will be necessary for an extractor and uncapping knife, and uncapping can, wax-press, etc.

## GARDEN & ORCHARD.

### Some Good Old Apples.—I.

"The old friends are the best friends," they say, and the old adage seems to me to apply to some good old apples which have now, for some time, been discarded, owing to their susceptibility to scab. But now that the use of the lime-sulphur spray has been proved so effective in destroying this evil, and in transforming our unproductive orchards into gold mines, we may wisely remove from the black-list some otherwise most excellent varieties. Among these, let me mention a few, somewhat in the order of ripening:

1. The Early Harvest.—There is no apple of its season to compare with this, either for dessert or cooking. It is earlier than the Astrachan, and far superior in quality to either it or the Transparent. How well I remember the pride and delight of my boyhood days over two rows of "harvest apple" trees in my grandfather's old orchard, when I could take my schoolboy friends in for a feast, how we hunted for the yellow beauties here and there showing upon the topmost boughs, and got them either by climbing or by peeling them with sticks or stones. And the crops those old trees gave about fifty years ago, and the great wagon loads which I took to Hamilton market, some seventeen miles away, and for which I found a ready sale. Nor will I ever forget the delicious sauce and pies made from these harvest apples in early August, and, indeed, from the green ones in the month of July.

That was before the days of the scab; but soon afterwards the pest appeared, we thought a temporary evil, but it remained with us, multiplied, and increased from year to year, until, in utter discouragement, we destroyed all those dear old trees, except one, and warned everyone against planting them, as being unprofitable.

Well, perhaps they would not be very profitable now, for they are not so attractive as the Astrachan, and are only medium in size, still, with spraying, the trees would each yield four or five barrels of clean fruit, and would find a ready sale just before that variety is ready. I would, therefore, recommend intending planters to include a few Early Harvest trees in the new orchards, providing they intend to treat them with up-to-date methods.

2. Then comes the good old Fall Pippin. One immense old tree still stands on the old homestead. It was there in 1798, when my grandfather, Dennis Woolverton, came to Canada from New Jersey, and bought 400 acres of land at Grimshy. It was only one of perhaps a dozen trees of this variety, fine old monarchs of the orchard, from which, away back in the "sixties," I harvested immense crops of beautiful, clean

apples, and, in one season, sold a carload of them to Haskett & Brown for \$2.50 a barrel. What apple of its season compares with it, coming in a little later than Gravenstein, and before the Ribston or the King?

But that terrible scourge, the Scab, invaded that orchard soon after. Instead of passing away, it spread and increased, until these fine old trees became unprofitable, and in despair, we rooted out all but one, which I retained for private uses.

Now, thanks to our experiment stations, we can, by faithful spraying, again grow this old variety, and I would recommend the planting of a certain proportion of Fall Pippins in any commercial orchard, where the owner wishes to cover the season with successive shipments.

The tree, however, is only a moderate cropper, and very large yields must not be expected. Yet, its great excellence for cooking will always commend it to those who want to buy the best; while only its large size stands in the way of its being commended as a leading dessert variety. In a cool cellar, the Fall Pippin may be kept till nearly Christmas.

LINUS WOOLVERTON.

### Pernicious Brown-tail Moth.

The brown-tail moth, the caterpillars of which feed not only upon orchard trees, but upon the forest hardwood trees as well, threatens to become a pest in Canada. In the Eastern States, where it was introduced about 1890, it has spread rapidly. It obtained a foothold in Nova Scotia in 1907, but has been kept in check and considerably reduced by the vigor of the measures taken to exterminate it. Stray specimens of the male moth have been found in New Brunswick since 1902. The pest is being brought into Canada on nursery stock imported from France, but as notice of this fact was communicated to the Ottawa authorities from New York State, where it had been observed on such stock early in 1909, very careful inspection has been made of all European nursery stock imported. Though over 300 winter webs have been found in this way, it is believed, the Dominion Entomologist, Dr. Hewitt, assures us that none have escaped destruction. Infestation from this source has probably been prevented.

Many apple-buyers have lost money during the season now closing. The crop proved larger than was expected, and prices were high in the fall. Much inferior fruit was marketed, and, prices being high in early winter, consumption was materially reduced, so the inevitable happened—prices declined. And they continued to decline, especially for the lower grades, until lately, when there has come a revival of demand. Notwithstanding the low wholesale prices, retailers in the cities kept their prices well up, and the unusual spectacle of oranges, which were unusually plentiful, selling for less than apples, was not uncommon.

## THE FARM BULLETIN.

### A City on Wheels.

In Detroit, Mich., one million dollars a week is paid in wages by the automobile and accessory industries. This weekly payroll keeps 58,000 people employed in the automobile factories. It is estimated that more than 200,000 persons in the city are dependent upon the automobile industry for a livelihood. The total annual capacity of the plants is 85,000 cars, with a total capitalization of \$30,000,000. All told there are twenty-three factories devoted exclusively to the production of gasoline-propelled vehicles. The total value of Detroit-made cars this year will be \$200,000,000. More than \$10,000,000 is invested in automobile plants in the city. Sixty per cent. of the national output of automobiles is built in Detroit, and the city is enjoying the greatest prosperity in its existence. How long the boom will last, is another question. He is a wise man who will know when to get out.

### The Safety Valve.

Editor "The Farmer's Advocate":

When the steam engine was invented, they had to provide a means for the surplus steam to escape. This was accomplished by the safety valve. It has been ascertained that many human beings generate surplus energy, too, and in this case the safety valve appears to be the mouth. Or, in other words, when a person "flies off the handle," he has to vent his wrath on something. Now, Mrs. Hopkins appears to have selected the farmer as a means of easing her feelings. To quote one of her own sentences, "But the say will out," means that she must let it out, or something more dreadful will happen within. She complains of how she is disgusted with the shabby way farmers dress. Now, Mrs. Hopkins, should you some day expect to pass through "The pearly gates and golden," you must be very careful in handling St. Peter your passport, because while he

was on this earth he was a fisherman. How disgusting it would be for you should some of that "fishy odor" adhere to your robes.  
Bruce Co., Ont. H. McN.

### The Tuberculosis Commission's Progress.

By M. H. Reynolds, Secretary.

It seems desirable that the public should be given opportunity to know what the International Tuberculosis Commission is doing, inasmuch as the Commission represents indirectly the Canadian and United States Governments, and involves livestock sanitary control work of all of the individual States. The last session, held at Detroit, was devoted largely to reports. The committee on Dissemination of Bovine Tuberculosis presented its study under such headings as "Introduction of Disease Into the Herd"; "Dissemination by Feeding to Calves"; "Dissemination by Contact at Shows"; "Dissemination by Placing Healthy Animals in Contaminated Stables"; "Dissemination by Transportation of Healthy Animals in Infected Cars"; "Dissemination by Pasture Exposure." The discussion on this report gave considerable attention to the problem of tracing back from the killing-floor to the infected farm, with a view to detecting the diseased herds, and concentrating control work as much as possible on diseased herds.

The Committee on Disposition of Tubercular Cattle reported concerning the necessity of accepting tuberculin for diagnosis as a fundamental; the necessity of voluntary co-operation, and the superiority of voluntary co-operation to measures of compulsion. This committee considered the feasibility of the Bang and Ostertag methods of dealing with tubercular herds under American conditions. It also made recommendations concerning the relation of indemnity to final disposition of carcass; the principle of carcass salvage; the obligatory disposal of all clinical cases; and a study of the conditions which should determine the disposition of reacting cattle.

A very considerable amount of discussion on this report was given to the question of remuneration for owners, and particularly as to whether this should be regarded as a temporary or as a permanent provision in tuberculosis control work. A number of members held that it must necessarily be considered as a useful preliminary and temporary measure.

Careful consideration was given to the possibility of making either the Ostertag or Bang method of dealing with tuberculosis in the herd, or a combination of the two, feasible in America and Canada for grade herds. This is along the line of finding some method more economical than slaughter for as many herds as possible. The next meeting of this International Commission will be held in Ottawa.

### Prospects in Essex.

Heavy rains for past two weeks preceding date of writing (May 2nd) have checked farming operations. Should rains continue, serious damage may result to spring grain, as it is just at a stage when flooding will work destruction. Prospects hitherto were the brightest possible. Grain owing to the mellow condition of the soil, germinated rapidly, and is now a month in advance of last year. A few weeks ago, a statement was made in "The Farmer's Advocate" regarding early seeding in several localities, and a request sent out asking for information from any section where seeding had occurred at an earlier date. Was expecting to see a note from Essex, but so far it has not appeared. The peninsula takes the premium for early seeding this year. In the northern and central portion of Tilbury West some fields were sown on March 15th, while seeding was quite general in same locality by the 20th. Much of the grain is covering the ground nicely, despite the cold, raw weather of April.

Fruit prospects are, so far as can be ascertained, good. Pears and plums promise an abundant harvest; the orchards are white with blossom. Peaches are not making as good a showing as last year, but the bloom is sufficient to warrant the expectation of a fairly large crop. Some of our enterprising vegetable gardeners have early potatoes showing above ground, while extensive preparations are being made for setting out early tomatoes and planting cucumbers. This season promises to be a record-breaker, so far as building operations and general improvement is concerned.

Later, May 7th.—Heavy rains have ceased. Farmers are resuming their work. Oats and barley in low-lying, poorly-drained districts, have suffered considerably. Frost sufficient to form ice occurred on 5th and 6th inst. While impossible to determine the damage sustained to fruit crop at present stage of development, yet probabilities are that the peach crop will be much lighter than anticipated. Owing to cold rains and subsequent frost, peach blossoms have not matured properly, and, therefore, do not present as fine an appearance as they ought. A. E.