

APIARY.

Successful Wintering.

There are a great many important things about the beekeeping business, and a great deal to be learned about all of them, even by those who "know it all" already, but perhaps the most important is the problem of successful wintering; and successful wintering means more than having the hives come out in the spring "with bees in them." It means having the colonies come through the winter strong, and ready to build up in booming colonies for the honey harvest. Of course, successful wintering is not a guarantee that the bees will put up a big surplus the following summer, but it is a guarantee that they will get everything there is going, and the seasons are few and far between in this favored part of the world when a colony that is ready for business on the fifteenth of May cannot scrape together enough in the next three months to pay its grocery bill and have a trifle left for its savings account; and while it is pretty discouraging to see big colonies put in the summer—as occasionally happens—without being able to get ahead of the demands of their household, it is a great deal worse to see a bang-up good honey crop practically going to waste because the bees, or a great many of them, are not in shape to take advantage of it until it is nearly over, and the direct loss in the second case is infinitely greater than in the first. The average honey yield of an apiary is generally governed by the percentage of big colonies in the spring, and it is, therefore, of paramount importance to have just as large a percentage of big ones as possible. The way to accomplish this end is to put the bees up in nothing short of the best way you know how, or the best way anybody else knows how, which can be done by visiting progressive beekeepers, buying a "bee book," subscribing for one or more of the publications devoted to the beekeeping industry, and reading everything that is printed in them. Then study your own particular locality, and modify conditions to suit it, for while the fundamental principles of successful wintering are the same everywhere, weather conditions vary so much in different localities, and, for that matter, in any one locality, that there can be no cast-iron rules that will apply everywhere, or in every case. The main things to be guarded against are starvation and dampness, whether outside or cellar wintering is practiced, for, with plenty of good grub, good dry quarters, and, for outdoor wintering, abundance of "clothes," the bees, if there are enough of them together, can stand almost anything in the way of weather.

Large Shipments of Honey to England, and Prices.

To the Editor "Farmer's Advocate":

Every honey-producing country ships honey to England, and the big shipments received from California have brought down the prices. Californian honey rules the prices in the English markets. In 1903 Jamaica and Chillian honey sold from 16 to 26 shillings per 112 pounds, Canadian 28 to 31, Californian 35. One very choice lot from California brought 40. I received 44 shillings for mine, and an order for 36,000 pounds more at the same price for the same quality of honey. All the honey I ever shipped to England was pure, clean honey, and as I had no more left I dare not buy any to ship to the Old Country for fear of getting some basswood mixed into the clover, and if I did it would only bring from 28 to 31 shillings, instead of 44. I sent to the English dealers for samples of the foreign honeys and the prices they paid, so that I might be better able to judge of how honey sold there, and also to find out if these dealers were the best of judges of honey. I received nine samples, very carefully numbered and the names of the countries it was from, and in a letter with these samples the prices were quoted which were paid for each class of honey. Some of these samples were so very nearly alike in color, body and flavor that it was close work to find any difference in the quality; and yet there was a difference, and the English dealers made a big difference in the prices they paid for each lot. The English dealers are the best judges of honey in the world, but some may say that I may not be able to judge in matters of this kind, and that it is a big statement to say that they are the best judges of honey in the world. Well, I should know, because I have been 41 years a beekeeper, and 18 years I was a successful exhibitor of honey at our largest exhibitions. I was three years the sole judge on the honey exhibits at Walkerton, and one year the sole judge at Woodstock. I was also one of the three judges at Toronto on honey in 1887-88-89. But since I have been inspector of apiaries I refused to have anything to do with judging honey.

Pure clover honey of the very finest quality is the only class of Canadian honey that will sell for a fair price in the English markets, and this, if very choice, will always bring a little better

price than Californian honey, but when large shipments of honey are sent, as they have been this year to England, the prices of all honey goes down. I sent a sample to England lately, and am offered 5 shillings more than any other per 112 pounds, but the prices are so low that I could not accept it, as I could and did do better here.

Mail samples of the very best quality of clover honey to the English dealers and get their prices before you ship any, and never ship any to the Old Country but pure clover honey. No Government inspection of honey here will cause the dealers in England to pay one cent more for it than its market value there, which will always be regulated by the supply and demand.

Wentworth Co., Ont.

WM. McEVOY.

The Ontario Beekeepers' Association will hold their annual convention at Toronto, on Wednesday, Thursday and Friday, November 15th, 16th and 17th. The meetings will be held in the vicinity of Massey Hall, where the Fruit, Flower and Honey Show will be held on the same dates.

GARDEN AND ORCHARD.

American Pomological Society.

The thirty-ninth biennial meeting of the American Pomological Society was held in Kansas City, Mo., Sept. 19th to 21st, when the following officers were elected for the ensuing two years: President, L. A. Goodman, Kansas City; Vice-Pres., T. V. Munson, Denison, Texas; Sec., John Craig, Ithaca, N. Y.; Treasurer, L. R. Taft, Agricultural College, Mich. A resume of this convention appears in the Western Fruit-grower, from which we quote a few excerpts that will be of interest to Canadian horticulturists in view of our own approaching horticultural gatherings:



Missie of Neldpath Thirteenth 26285

One of the offerings at the dispersion sale of Mr. W. D. Platt, Hamilton, Ont., on November 1st. There are nine individuals of this Missie family in the sale.

In a paper on cover crops, J. W. Lloyd, of Illinois, said that on hillsides he believed that the orchard should be cultivated in strips, a strip two rows wide being cultivated and the alternate strip in clover, the cultivation and clovering to be alternated on each piece. Some growers believe in keeping such an orchard in clover. If this is done the clover should be mowed and allowed to lie on the ground, and the soil stirred with a disk harrow. Vetch could be handled in the same way. On the black prairie soils, which are rich in nitrogen and humus, leguminous cover crops are not needed, and here better results follow the use of oats or rye, instead of clover. Leguminous crops are not needed in peach and pear so much as in apple orchards.

In a paper on cultivation of orchards in Southern Indiana, J. A. Burton, of Orleans, held that the best method of handling an orchard was a mean between the extremes of absolutely clean cultivation and no cultivation at all. In regard to spraying, Mr. Burton stated that he puts two men on the pump-handle and keeps them working hard, thereby getting the fine mist so necessary for effective work.

Mr. Dunlap, of Illinois, believes growers are about ready to change their formula for making spray mixtures by using less copper sulphate and more Paris green. A mixture that has given good results is 3 pounds copper sulphate, 6 pounds good stone lime, and 6 ounces Paris green to 50 (American) gallons of water. Thorough application is necessary, and the time of applying is also important. Mr. Dunlap cited an experience in spraying nine rows of apple trees within six days after blossoming time. Nine other rows were left unsprayed on account of unfavorable con-

ditions until a week after the first nine rows were sprayed. The nine rows sprayed at the right time picked 175 barrels of No. 1 apples; the nine rows sprayed a week late yielded 17 barrels of No. 2 apples.

H. H. Whetzel, of Cornell University, said that those who had trouble in getting their spray mixtures to stick might use the following plan: Put two pounds resin and one pound sal soda in two quarts water; boil until it is a dark brown in color, which may require, perhaps, fifteen minutes' hard boiling. Add this to a barrel of spray mixture, and the latter will stick to the trees in spite of heavy rains.

Prof. Craig believed the most effective spraying for apple scab and other fungi was before the buds open, when the bare twigs can be covered. It was protested that this early spraying was not productive of results in Nebraska and Illinois, though at least one Illinois grower agreed with Prof. Craig.

C. H. Williamson, Quincy, Ill., who was chairman of the committee on grading and inspecting fruits, enjoys the distinction of having offered the resolution before the National Apple-shippers' Association defining what constitutes a No. 1 apple, according to which definition it must be normal in shape and color, free from injury by worms, and must not have skin broken by bruise or injured by fungous disease. Size differs with varieties. Ben Davis, Baldwin, and such apples, should be not less than 2½ inches in diameter. Winesap, Fameuse, and others of the class, should be not less than 2¼ inches in diameter. As it is almost impossible to guarantee that a barrel of apples shall be absolutely free from insects, Mr. Williamson would now change the definition to read: "No. 1 apples shall be practically free from insects, etc."

A COLORADO METHOD OF TOP-GRAFTING.

W. S. Coburn, of Colorado, read a paper on top-grafting trees. The old system of cleft-

grafting they found slow, he said, and they did not like the idea of joining the smooth cut of the scion to the rough surface of the crevice made by splitting with a chisel. "We have top-grafted 2,000 apple trees," said he, "and this is the plan we use: Limbs to be top-grafted are sawed off; some limbs have been sawed off which were six inches in diameter. Then with a small saw we saw in one side of the stub where the scion is to be inserted. This opening is made lengthwise of the stub, of course, and the opening is wider at the end of the stub than farther down, for it runs out down on the stub, as would have to be the case in sawing up and down the stub. This opening is smoothed out with a harnessmaker's knife in the shape of a crescent, and we are ready to insert the scion. The scion is cut down to three buds, and shaped to fit the opening which has been made. The kerf made by the saw grows

shallower lower down on the stub, and one side of the wedge of the scion will have to be cut off to allow the bark of the scion to meet the bark of the stub. If one has properly shaped the scion, the rest is very simple. Cut the top end of the scion square, and with a mallet or something of that kind drive it into the opening in the stub. After one has made one or two grafts the scions can be cut so that they will exactly fit the opening, and when they are driven in they cannot be pulled out by the operator. The whole is waxed over just as would be the case by any other method. Not one graft in a thousand need be lost by this process."

HORIZONTAL SYSTEM GRAPE TRELLISING.

What was described as one of the best things of the convention was an address by T. V. Munson, Denison, Texas, outlining his plan of making a trellis for grapevines, together with his system of pruning them. He uses a three-wire trellis, one wire being strung from the top of posts four feet high. To this the canes are tied. At the top of the posts a cross arm is fastened, this arm being two feet long. From each end of these arms another wire is strung, these wires being four inches higher than the center wire, and of course they are a foot to the right and to the left of the center wire. The vine is trained straight up until it reaches the middle wire; no shoots are allowed to form between the ground and this wire. The vine is tied to this wire, and two arms, or canes, are formed, one being trained along this center wire in each direction. These canes form the foundation of the first crop. The next year these canes are cut back to about three buds each, as the new shoots put out they