

a very vicious practice. This should always be avoided, both for the comfort of the animal and the cleanliness of the milk. The milker should have short finger nails, for long nails will be sure to hurt the teats and cause irritation to the cow. There are two methods of milking—the one may be called stripping or catching the teats between the finger and thumb and stripping down the whole length of the teat. This plan is not recommended. The better way is to grasp the teats, one in each hand, diagonally across the bag, and press out the milk—the second, third and fourth fingers doing the work, while the upper portion of the hand and first finger prevents the milk from returning to the udder; the milk should be drawn rapidly and the udder completely emptied of its contents. In the flush of the season, or when the cows are yielding the most milk, from 11 to 12 cows per hour will be about the rate for a competent hand. A slow, dilatory milker makes a great loss in the yield of milk, and, if possible, ought never be allowed to milk, except, perhaps, when the cows are going dry at the end of the season. As the last drawn milk is the richest in butter, great care should be taken that all the milk in the udder be drawn, and this is important, not only on account of the value of such milk, but because the habit of leaving a part of the milk undrawn has a tendency to dry up the cow and weaken her capacity for yielding a full flow of milk another season.



## APIARY.

### OFFICERS OF THE ONTARIO BEE-KEEPERS' ASSOCIATION.

President, Hon. L. Wallbridge, Belleville.  
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### Prize Essay.

We will give a prize of TEN DOLLARS for "THE BEST ESSAY ON WINTERING BEES IN CANADA." This essay must be in our office by the 1st of September next. The prize to be awarded by a committee chosen from among the members of the Ontario Bee-Keepers' Association by Executive Committee of that association.

### DO BEES INJURE SOUND, HEALTHY PEACHES?

The Massachusetts Ploughman remarks as follows:

This question having been put to us some years ago, we have very naturally watched the operations of the bees on the peach trees ever since. The results of this examination have been to draw conclusions different from those entertained by many others. In consequence of this we have been

slow to express an opinion, thinking possibly further observation might lead to a different conclusion, but as year after year only gives additional evidence of its correctness, we give to our readers the result of our observation, hoping by so doing to encourage closer observation and to draw out opinions.

The first year or two of observation disclosed the fact that the wasp evidently commenced the work of puncturing the fruit, and that the honey bee followed. This at first led to the belief that the wasp was the first cause of the destruction; but, on further examination, it was observed that some of the trees in the orchard were entirely exempt from injury, and in fact, that some whole orchards were perfectly free from injury, not a peach being punctured; this led to a still more careful examination, when it was found that most, if not all, of the fruit punctured, had on one side a decayed spot before punctured. On some peaches the decayed spot was very small and on others quite large, but whatever the size, the wasp would puncture the fruit very nearly in the centre of the decayed spot, which has led many to believe that the decay is caused by the puncture, when observation seems to prove that the decay invites the wasp to make the puncture. Being satisfied of this the next investigation was in a direction to ascertain the cause of the decay, when it was in every instance found to be the yellows. We have yet to see the peach orchard, the fruit of which has been injured by the bees, that has not been struck by the yellows, and, so far as we have observed, the fruit of every tree that has the yellows will be attacked by the bees.

### HOW I INTRODUCE QUEENS.

To introduce queens there are but two methods employed that differ materially. One of these methods is to cage the Queen that is to be introduced, and to place the cage (wire cloth) down right on the frames over the cluster of bees and cover the bees, cage and all, with the bee quilt, and let them alone forty-eight hours, then turn up the quilt till the cage is exposed to view; now draw out the sliding door, and let the queen run out among the bees. Keep your eye on her, and if she is permitted to run down among the bees without being molested, close up the hive and wait fifteen or twenty minutes, then open the hive gently and look up the queen. If the bees are not ready to accept her, you will find her imprisoned in a ball of bees, generally on the bottom board. This we call "balling the queen." Don't be nervous or in too big a hurry; just take a large spoon and dip up the ball of bees and turn them out into a pan of water. This will cause them to release her, and set them to swimming for life. Pick out the queen by catching her wings between the thumb and finger. She positively will not sting. Never take hold of the queen by the abdomen, as you may injure her.

Now, return her to the cage and place it back just as before, and leave it twenty-four hours and try them again, and so on till she is accepted. She will generally be accepted without all this trouble, but not always. The queen will generally begin to lay in one or two days after she is accepted by the bees, and after she begins to lay she is as safe as if she had been raised in the hive. For this reason I keep a watch over her till she has deposited her first eggs.

The other method is to cage the queen on a comb taken from the brood nest. The comb is taken out

and all the bees brushed off of it. The queen is then placed on the surface of the comb, and an opened cage with thin, sharp edges placed over her and pressed slightly into the comb, thus imprisoning the queen. The comb is then hung back in its place. The bees will generally cut her out and accept her while all is undisturbed and quiet in the hive. If they fail, however, to liberate her in forty-eight hours, the comb should be lifted out and a partial opening made with the point of a knife under the edge of the cage. The inquisitive little subjects will see the point, and will proceed to liberate the queen.

As a modification of the above methods, I make the sliding door of my cages so that they will project above the bottom, or, rather, the top, when the cage sets wire cloth down, and let this projecting sliding door pass up through a slit made with the point of a knife in the quilt, so that I can draw it out and thus liberate the queen without the bees knowing it.

Dr. Nugent, of Stratroy, offers for sale two hundred colonies of bees. As the price varies according to quality of bees, and furnishing, parties desiring to make purchases, should call early and select the best.

### BEE-KEEPERS OF NORFOLK COUNTY.

We are pleased to note that the Bee-Keepers of Norfolk Co. have organized and are to be known as the "Norfolk Bee-Keepers' Association." The first meeting was held at Bloomsburg on the 13th of January last; four meetings have been since held; the membership at present numbers forty. The next meeting of the Association will be held at Simcoe on Friday, August 4th, at 2 p.m., to which all are cordially invited. Communications should be addressed to Elias Clouse, Sec.-Treasurer, Bloomsburg, Ont.

### PRACTICAL AND SCIENTIFIC APICULTURE.

Every pursuit, every profession, every business enterprise must, in order to be made a success, rest upon certain known, fixed rules of action based upon the accumulated knowledge of which practice has been shown the best fitted to obtain the best results. Scientific apiculture is comparatively of to-day's creation, yet its possibilities are encouraging enough to warrant all the careful thought, business acumen and energy that the best of us can offer. Fortunately many of the problems, obscure so few years ago as to be within the memory of almost all present, are solved, and instead of the doubt, uncertainty and mystery of the past, the greater part of the conditions requisite to success are well known and are easily complied with. One element of success, however, at times, baffles the best of us, yet would seem to be of easy solution, notwithstanding the apparent uncertainty which now obscures this part of our occupation. Of course, I refer to the wintering problem, for let us so improve our bees that we get hundreds of pounds from every colony, and increase almost at will, yet, if, in the recurring, we find that few of our colonies have survived the winter, or having survived, are indisposed or incapable of giving the best results, we have most certainly failed in this, which to-day is practically the greatest obstacle in scientific bee culture. I cannot believe, however, that the day is far distant when we shall surmount this as we have other difficulties apparently as great. Bees are warm-blooded creatures and I can see no reason why they should be an ex-

ception to other animals in regard to their care, and believe the question to be simply how to so care for them as to comply with known laws in such cases.

But practical apiculture rests upon more than the mere knowledge of what can be and should be done. It rests upon the unwritten part of our trade, which is quite as much to learn as the trade secrets of any other occupation, the knowledge of just when and how to perform the little operations that go to make up the day's labor; or, as it is commonly expressed, the "knack" of knowing just how and when to do it. You must know just what the condition of every colony is, and when occasion arises must aid them promptly promoting this, checking that, leaving nothing to uncertainty, in fact, you must live with your bees if you would close the season's labor with success.

How to obtain this knowledge is a matter for your careful consideration. Undoubtedly, if you were so situated as to make it possible, the advice and precept of some skillful apiarist would be preferable, but I imagine that but few are so situated, and therefore it may not be amiss to refer you to such resources as will furnish reliable information. I confess it is with pride I can say to you that the works of our own countrymen, are pre-eminently the most practical and scientific. No one can read "Cook's Manual" without being impressed with the labor and research necessary to enable the author to place before the reader and carefully explain anatomy and physiology of the bee, and its bearing upon practical agriculture, or the years of toil which has made the "A B C of Bee Culture" what it today is, or the common sense of "Quincy's New Bee-Keeping." We should be proud of our countrymen. But with all your knowledge never neglect the little things that impress you at the time as new. Follow up your practice with careful study and investigation. Lay the foundation for success broad and strong, and when the superstructure is built it will long endure.—T. L. VON DORN, in *Nebraska Farmer*.

### More than 500 Invalids

With diseases fast tending towards death, could be cured in from one to four weeks, by consulting Dr. Englehardt at his Medical and Surgical Institute, for the treatment of all forms of disease, corner of Erie and Pearl streets, Buffalo, N. Y. 40 years practice. Consultation free.

Counter-claims—Your wife's shopping bills.

### DONALD DINNIE'S FIRST DEFEAT.

The famous Scottish champion athlete, Donald Dinnie, has been beaten for the first time at two of his favorite games—putting the stone and throwing the hammer—and that by Duncan Ross, a countryman of his own, who is now located near Louisville, Ky. Both champions met at the Scottish games recently given by the Yonkers Caledonian Club. Ross, a mere stripling in comparison to Dinnie, has been in the country six years, and hails from Clyde. At present he is engaged as preceptor in a training school at Louisville.

In taking the field yesterday against the champion of the world, he did so with the ambition of beating him. Both men were in fine condition. In putting the stone, Dinnie sent the granite 43 feet 7½ inches, while Ross pitched it 44 feet 9½ inches, beating Dinnie 1 foot 2 inches.