

The Apiary.

How to Make Artificial Swarms.

THERE are several methods practised in artificial swarming, and any bee-keeper who understands the nature and habits of the bee will readily perceive how to make artificial swarms. For the benefit of those who do not understand the process, we will give a method simple in its operations and certain in its results. Even a novice may practise it successfully with the use of movable comb hives. Artificial swarming should not be commenced until after drones appear, and stocks are strong, or near the time of natural swarming. Then proceed as follows: First remove from the stand the stock you wish to divide or make a swarm from, and blow in a little smoke; then look for the queen by removing each card of comb carefully. When you discover her, put the card she is on into an empty hive, with all the bees that adhere to it; now take another card from near the centre of the hive, and put that into the empty hive also, with all the bees that adhere to it. Now put two empty frames into the full hive, in place of those taken out. The combs, however, should be placed in the centre of the hive, allowing the two frames to be put on the outside next to the walls of the hive. When this is done, fill the empty hive in which you have just put the queen with frames, putting one frame between the two cards of comb; then set the hive on the stand where the old hive stood, and remove the old hive to a new stand. The result will be that the bees will leave the old hive for the field, and in returning will go to the old stand and enter the hive which has been placed there, and finding the queen, will remain, making a good swarm. The old stock from which the queen was taken will be in the same condition as if a swarm had issued naturally, except that it will not have a queen-cell as far advanced, or may not have queen-cells started; but the bees, finding that the old queen is gone, will at once commence queen-cells, and in twelve or fifteen days will have a queen. It is well, however, when dividing, if any queen-cells are observed, not to take them out on the two cards of comb that are taken away, but select such cards as have no queen-cells on them, leaving the cells in the old or parent hive. The old stock will for a few days appear quite deserted, until the young bees that are in the combs hatch out and commence to fly, when it will frequently appear stronger than the new swarm, and even cast a second and third swarm, as in natural swarming. To prevent this, it is necessary to examine, after the queen-cells are capped over, and cut out all but one, leaving the one farthest advanced; or if a swarm has been made early, some time before other stocks are ready, the queen-cells may be put into small hives with a quart of bees, and allowed to mature, and then they can be given to other stocks, when the old queen is removed.

With box hives, artificial swarming is more difficult. To practise it successfully requires considerable apiarian knowledge. The bees must be driven out, and having ascertained that the queen is with them, put them into an empty box and place them on the old stand, putting the old stock on a new stand. Care should be taken that all the bees are not driven out, as in that case the brood would perish for the want of heat. Then, too, the old stock may cast a second swarm, because it is impossible to remove the queen-cells. It is better for all who intend to practise artificial swarming to inform themselves of the nature and habits of the bee. If they do this all difficulties will disappear.

Several communications have reached us making enquiries regarding the best method of effecting artificial swarms, and also the method of proceeding in order to introduce Italian Queens. The above will be accepted as a reply to the communications on the first head; and with regard to the last, our readers are referred to the apiary department of the CANADA FARMER, of March 22nd of the present year.



The Divining Rod at Fault.

To the Editor of THE CANADA FARMER:

SIR,—Having observed in a January number of your very valuable journal an account of the use of the "divining rod," accompanied with an enquiry in reference to the same, I thought it might be interesting to some of your numerous readers to state some facts in regard to the use of this rod in Nova, and the ultimate result. Many years ago, when the writer was quite a lad, it became evident that the log hut, in which the old gentleman and his spouse had spent many happy years of bush life, had grown too small for longer occupation. The sturdy pioneer accordingly began judiciously to scan his large estate with a view to fix upon a suitable site upon which to erect his castle. There were a number of lovely raises of ground, which would answer very well, but one was especially beautiful—so much so, that the little ones thought it the best adapted for the future dwelling to stand upon. Consonant with his usual forethought, the hale sire began to enquire about water. And while the shrewdest neighbors were consulted, and their views attentively listened to, there happened to come along one of those mediums, under the name of a tin pedler, of whom there were not a few in those days, in whose hand the "divining rod" would act to perfection, never erring, but leading with the greatest possible precision and accuracy to the desired treasure (for certainly good water is an invaluable treasure). Accordingly the "prong" was secured, and in good faith the aged pioneer accompanied the pedler across his fields, tracing large veins in various directions, one of which ran exactly through the proper spot, provided one of the chief, but not the choice site, were fixed upon. Here a stake was carefully planted: then, the search was prosecuted, and the choice site carefully examined and re-examined. The pedler pronounced it a most lovely one, but destitute of the one thing needful. With great reluctance the spot was abandoned as unsuitable, and the choice fell upon the one where the stake had been previously planted. The castle was erected, and the writer put down the well, and sure enough there was plenty of good water. A few years later I put down another where the rod indicated a good supply, and there also found an abundance of the desired liquid. But in the process of time it became expedient to erect a second dwelling. I at once chose the site pronounced by the pedler, with his "rod" in his hand, "desert," and as in my opinion a good convenient farm kitchen requires the well inside, I made preparations last fall for sinking the well to suit the building, when lo! to my great surprise and discouragement, I was informed that, by the indications of the so-called "divining rod," there was no water there. Not content, however, to be so frustrated in my calculations, I began the well, and having perforated the crust so common in this neighborhood, and reached the proper depth, there were flattering indications of water. Thus encouraged, I proceeded, and notwithstanding the extreme dryness of the season, I obtained an abundance of excellent water, running over a bed of gravel, as large as goose eggs—the other two wells having yielded gravel only about the size of pigeon's eggs. By the unusual settling of the hard crust above the quicksand, I am soundly convinced that not far from the well there is a flowing subterranean rill, with which, had I struck it, I could (despite the drought) have done nothing in the shape of a well. I have now a well promising to be, perhaps, as good as any on the road between Windsor and Toronto, "the divining rod" to the contrary notwithstanding.

E. J. YORK.

Wardville, March 22nd, 1868.

Another correspondent, Mr. George Doidge, writes on the same subject as follows:

Having in every article which has appeared in your columns concerning the Divining Rod, allowed me here to make a remark or two respecting the

communication from your Lakesfield correspondent. I think your correspondent goes a little too far when he says that Dr. Hutton published a recantation. From reading what the Doctor says about it, I am led to the conclusion that, if he had been a thorough believer in its power, he would have set to work and endeavoured to prove, to a mathematical demonstration, the truth of what its advocates say about it. Why does not your Lakesfield correspondent sit down and reduce his theory to an absolute certainty? He surely can invent some instrument by which he can measure the rotations of the rod, and then, by actual experiment, prove at what depth water can really be found. The whole thing seems ridiculous when parties attempt to explain it on the principles of electricity. So far as anything I ever heard or read, there is little or no attraction between any kind of wood and water, especially when separated by a thick mass of earth or rock. Let the believers in its power try it over the mouth of a well when there is a plentiful supply of water, or over the side of a vessel at sea, and see whether its motions are more violent then than when tried otherwise. As regards its use in Cornwall and other parts of the old country, allow me to say, there was a time when parties did believe in its virtues far more than at present, as is evidenced in the number of places where they have sought in vain. In my school-boy days I have wandered over scores of places where parties, trusting to its directions, have sought in vain for that which they most ardently wished for.

And here in Canada parties are no less disappointed very frequently who attempt to follow its dictates. I could take you, Sir, to places in this Township where parties have dug to the depth of seventy feet, who were directed to the particular spot, they say, by its motions, and then did not find water.

On the farm on which I now live, some thirty years ago, the then owner wished to dig a well, and fearing it would be a rather expensive affair if dug where it would be convenient to the house, consulted a celebrated Medium, who decided that in order to get water at all they would have to go to a considerable distance from the house; as a consequence, parties have had to fetch the water several rods from the house ever since. Repeated experiments made since that time leave no doubt whatever that water is found at a uniform depth, and plenty of it, all over the village, notwithstanding the prediction of certain parties to the contrary. Lord Bacon once said that the Englishman's nature prompted him to require a reason for everything; and until I am convinced that the motions of the Divining Rod can be turned to some practical account, I see no reason why I should not dig for water (as I have done three different times) where it will best suit my purposes, advising those who are contemplating the digging of a well to do likewise.

Wild Lands. Farmers' Clubs.

To the Editor of THE CANADA FARMER:

SIR,—I should be very glad if you could inform me how far north the public lands of Ontario and Quebec (fit for cultivation, especially for wheat growing) reach, and what is their extent, not including Red River Settlement; also if the land lying on the northern and western shores of Lake Superior is fit for wheat growing, as this is a subject on which I have been unable to get any information from any source whatever. I have just been reading an extract from Mr. George Laidlaw's pamphlet on narrow gauge railways, in which he speaks of "illimitable forests of magnificent timber, a vast mineral region of ascertained wealth, and a boundless extent of rich fertile soil, equal if not superior, two hundred miles north of Lake Nipissing, to that which fills the granaries of the Baltic with the choicest cereals." Now, he cannot surely mean two hundred miles direct north of Lake Nipissing: for in that case he would cross the water-shed lying between Hudson Bay and the Canadian lakes; and although that may be a country of "illimitable forests," and even of great mineral wealth, it would be a country in which I should suppose no one would like to live; and if he