

studied them and fitted in ideas from various systems, until they are now saving me the expense of a man's help during the busy working season. First, the Heddon hive gives me many short cuts in work all through the season, commencing with queen clipping, the queens are smoked to the queen excluder, and there caught without the trouble of removing frames. As swarming time approaches, a hive-lifting device enables me to diagnose and suppress swarming perfectly, and thus through each stage of the work short cuts follow. During the time of extracting there is no brushing of combs tolerated, the supers are set on end beside the hive and after setting off a certain number they are placed on a large special wheel-barrow with a 30 inch wheel and taken to the house; from here they are loaded and drawn home from the out yards where the extracting is done with a two-horse power, verticle, gasoline engine, and the honey allowed to run to barrels in the cellar. In packing the bees for the winter another specially constructed barrow, together with two three-bushel baskets, and a very large short-handled fork, enables me to pack as many colonies as two men formerly did.

Now a word for my ready helper who smokes, this is a sturdy little fellow, with a copper fire box, $4\frac{1}{2}$ by $8\frac{1}{2}$ in., and a lung capacity of $8\frac{1}{2}$ by $11\frac{1}{4}$ inches. The cap is hinged on the left side and to prevent it from flying open under any and all circumstances while in use, it is held securely by a short piece of chain composed of very short links, one end being riveted to the cap while the other end is drawn down and into a groove, filed in a piece of galvanized iron, which is bent at right angles and riveted to the barrel, this gives an expansive fastening, thus allowing for coking, which takes place at the edges, and yet gives a secure fastening. An-

other very useful feature which prevents the grass from falling out of the cap and upon the fire, is a piece of metal bent at right angles and riveted just above the lower edge on the inside of cap projecting in one half-inch this effectually holds the grass where it is placed and prevents the necessity of frequently refilling. (Applause.)

Mr. Smith—You have heard Mr. Miller's paper. There are several new things in it with which we are not very much acquainted. Probably some of you would like to ask some questions.

Mr. Hershiser—I would like to ask how he prevents swarming.

Mr. Miller—That is the Heddon hive. The back of the hive can be lifted and a diagnosis made of the condition of the hive and if there are cells and they are preparing to swarm it shows. I take the super off, and take the top section of the brood chamber and set it upon bottom board beside the old stand, the super is then replaced on the section of the brood chamber on the old stand. In four days you can tell where the queen is. Nine out of ten times she is in the hive by the side and if she is there, swarming is controlled.

Mr. Chrysler.—Mr Miller has explained that he does not totally control the swarming. I think Mr. Miller is on the right track in the way of large crops of honey with the least amount of work. I practiced two years ago what is practically his method of securing a crop of honey and I think it is just the thing, but I want to know a little more about it than I do at present.

Mr. Miller—New introductions must be studied. Certainly I have not given all the details—it would take some time and it would be impossible to give them all. But this study of conditions will all come if you give it the attention and follow them out, and success lies with the Heddon hive as I have been practising for the last eight years.

About two years ago I had a number of compliances for a number of years. There is no work in the condition of a hive to controlling the bees to the yard in the nose the entrance. The bees will look to see if we must not we must not on the old stand but if the queen side all is right no harm done.

Mr. Cogshall—I have with an 8-frame that these hives

Mr. Miller—I have ten frames and more than that. Each of the hives have the ten frames.

Mr. Byer—In the left on the old stand there be any danger place. I do not point.

Mr. Miller—The bees are clipped. The bees will come back.

Mr. Holterman—I have Miller a question many who are not sure about the thing about the divided brood place for queen bees always find cells where?

Mr. Miller—I have a colony to swarm cells. You may see they are there but it is just a matter of time.

Mr. Holterman—I have a convenient place for the cage is, you have a place to find the

Mr. Hershiser—I have a divisible brood chamber. The best place for the queen is the frame bottom case, but I have a number of cells will be built