

Agriculture and Colonization.

the section, and is put in the centre ; the bees then draw it out from either side and fill it with honey. We have found by supplying this foundation that it saves the bees a lot of time and energy. They are working all the time and we are getting all the meat without any bone. They draw out the wax we give them and add to it very little and the whole of their effort is then given to producing the honey. It takes about 10 pounds of honey to make one pound of wax, so that by every pound of foundation we give the bees we save 10 pounds of honey, and therefore it is a paying operation to give them the foundation, and we have also found that it pays very decidedly to supply bees with the best foundation which is procurable.

By Mr. Featherston :

Q. That is a natural comb is it not ?—A. Yes, it is drawn out from the foundation.

Q. It is natural comb, not an artificial one ?—A. No, it is a natural comb, but it was drawn out from the artificial foundation given to the bees to work on.

Q. It is done by the bees ?—A. Yes, certainly. Another advantage is that it is always much straighter and more even. It is stronger and easier to handle. If you give them a good foundation they build their comb and section, as it is called, straight, so that is more easily marketed, but in the old basket hives the comb was irregular and you had to cut it out in pieces and sell it by weight and there was a great waste, so that in every way there is a great advantage in supplying a good foundation, and in following the newer methods adopted by bee-keepers.

By Mr. Carpenter :

Q. Is it a new idea ?—A. No.

Q. It has been done for some time ?—A. It has been done for years, but the question we are trying to solve is as to the character of the foundation that should be used. Mr. Holtermann pointed out that the nature of the foundation had a very appreciable effect on the sales of the honey, because if the foundation was dark coloured and gave a dark "fish bone," as they call it, that is the central portion, it would sell for a cent or two a pound less than if that were not showing. Now, the Central Farm honeycombs which I have with me this morning, some are made from good foundations and some from bad ones. But perhaps you will see the difference better from this photograph I hold in my hand.

Really, the experiment was to find out which was the best foundation, and whether it paid the farmer to buy a cheap foundation or a superior one at a slightly higher price. We found that, as in many other things, the best foundation gave the most satisfactory results and paid the best in the end. You will see here from the samples I exhibit, two combs made from bad foundations and one made from the best, and you would readily notice the difference at a glance. It shows how much better it is to get the best foundation you can, because you get better results from it, and that idea is illustrated right through the investigation. In the experiments for the past year there was one very interesting point came out. Mr. Shutt, our chemist, has helped us very much by making the critical examinations and measuring the combs made by the bees during the summer, and he found that the bees deposited a very much heavier comb to hold buckwheat honey than to hold clover honey, so that there was a great deal more waste labour with the buckwheat honey than the clover, and moreover it sold for a very much lower price.

By Mr. Featherston :

Q. Is it because the buckwheat honey is thinner ?—A. Well, no, I would rather say it was thicker to look at it. It certainly appears thicker, but as to the reason why the bees should make a thicker comb for buckwheat than for clover, we have not found that out. Here is a specimen of the buckwheat honey and of the clover.

By Mr. Cochran :

Q. Do they make a heavier comb when you furnish the foundation ?—A. The foundation is now supplied by all bee-keepers.