

the wax and have it clear and in a suitable condition for market, is a problem that has taxed the minds of the best bee-keepers all over the land, and many have been the methods resorted to from time to time. It is not my purpose to explain all the methods that have been used, because many of them are only practicable in the hands of the specialist supply dealers or by those that have access to a good supply of steam, but to call attention to two entirely different ways of rendering combs, new or old, no matter how damp, or moldy, or dirty with dead bees, larvae, honey &c., or bits of wax, cappings, or any other scraps that contain bees wax.

I will try and make this matter so plain that every one can see that they are applicable to every bee-keeper, whether they own two colonies or two hundred.

The method which is at once the easiest, cleanest, in fact, an automatic method, and which produces the finest wax of any process known to date is the *Sun Wax Extractor*. It is very handy, and can be placed out in the yard in some central location where all kinds of scraps or even whole combs (frames and all) may be dropped into it, and when the sun shines it commences work, the wax produced being nearly white, and the refuse reasonably clear of wax. I will not attempt to describe the sun wax extractor here, because being in the supply business I would be accused of trying to advertise myself. The other method is old, but if carried out as here directed, will get every particle of wax out of everything that goes through the process.

Take any vessel you may have convenient in which water can be heated, the size to be such as will be best suited to your needs. I make a bag out of cheese cloth or 5c. factory cotton large enough to fill the vessel, leaving just enough room to turn it over with a stick when full. Pound the combs up fine (if you leave it until cold weather it will be easier done) fill the bag up, put it into the vessel of water placed on a fire and heat it up to the boiling point *but do not let it boil*. Now, with a stick or two, keep turning the bag over every few minutes for about an hour, then press the bag down to the bottom of the vessel, turning it over and over, pressing and working it all you can for ten or fifteen minutes. Place the sticks in such a position as will keep the bag down under the water. Lift the vessel off the fire, allow it to cool as slowly as possible, and you will find that the refuse does not contain wax enough to hold it together. When all is cold the wax will be in a cake at the top of the water, with a small

portion of sediments at the bottom of the wax. The longer it has been in cooling the more distinct will be the line of separation between the wax and the sediment.

One thing I would strongly impress upon the minds of those melting wax is that if they desire to preserve the finest color possible, never allow it to come in contact with iron, zinc, or brass while melting.

Mr. McKnight—What effect would there be in wax that was brought to a temperature of boiling or a degree or so less. Mr. Myers said when wax bubbled, particles that get exposed to the steam will not form properly and apparently caused a great deal of sediment. Mr. McEvoy said that in melting wax it should not be boiled. Mr. Alpaugh would not render comb in hot water or steam, but would render them in an oven or a Solar wax Extractor, as there should be no effect of dampness. Mr. Jones thought that wax could be over-heated in an oven.

Mr. Corneil said that Mr. D. A. Jones said that he had heated wax up to a degree of 230, and that the wax did not seem to be hurt. He (Mr. Corneil) had put a thermometer in his wax extractor which went considerably over a degree of 212, and this wax appeared to be a good quality.

Mr. Corneil described his Solar wax Extractor. He had it packed at the sides and bottom with saw-dust, and had two glass covers in which the heat could be raised to a high degree. Mr. Darling asked Mr. Corneil if the heat would ignite wood or saw-dust. Mr. Corneil answered that the heat went up to 228 degrees in his extractor, but he thought that about 500 degrees was necessary to ignite wood.

Mr. J. B. Hall said that formerly by melting combs in water he could not get wax without sediment, but now by using the Solar Extractor he got the wax clear.

Mr. Meyers was asked if he noticed in the wax made from light or dark combs, when boiled in a bag it is dark, but if put through sulphuric acid it will be fairly bright.

Mr. McKnight asked Mr. Myers if the action of the sulphuric acid had any other effect on the wax besides brightening. Would it make the wax brittle. He did not notice any difference.

The committee on affiliation with the North American Bee Keepers' Association reported as follows:—

#### REPORT OF COMMITTEE ON AFFILIATION.

To the President and members of the Ontario Beekeepers Association:

Your committee to whom was referred the