

tion from each tank ten, twelve and fifteen feet square to the pound.

These were placed side by side and drawn out in the upper stories by the bees. It was manifested in various ways that the bees objected to the Alkanet, so this kind

able to expect that the bees keep adding scales of newly secreted wax and then pulling the side wall, thus decreasing gradually the percentage of colored wax. We also conclude that the quality of wax used in the foundation has an influence, not only on the

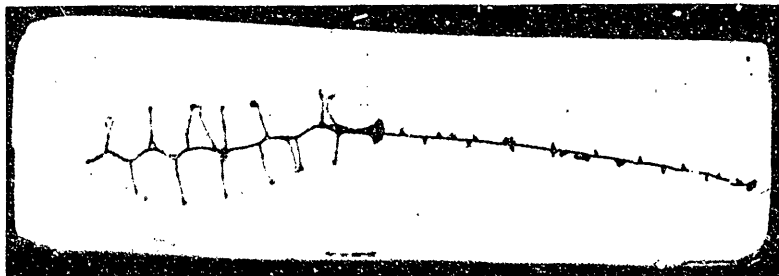


Fig. 3 (b). Giving a side view of comb foundation, flat-bottomed, 12 sq. ft. to the pound. This shows a continuous piece of foundation. One half of the foundation was covered over, the other half exposed and worked out by the bees.

was discarded. To the foundation, colored black with the preparation of carbon, the bees did not object. The object in placing foundation made of ordinary wax alongside of the colored, was to make measurements of each kind when drawn out by the bees. The measurements of the colored and uncolored being identical, gave us a basis for the statement that the bees did not object to this preparation; and the methods of drawing this comb were identical with that of ordinary foundation. The base and lower part of the comb were not as we might expect, of a black color, and the

base, but to a certain extent in almost the entire wall of the cell. The heavier the foundation, the greater the influence on the side wall. Again, notes were taken daily when the bees were beginning to draw out the foundation; and although the heavier foundation was scattered about in various parts of the upper stories, they gave the preference to the heavier foundation, working on it first. Great caution must, of course, be observed in coming to conclusions. The bees, if the heavier foundation had been taken away, might have been almost as willing to go to work at once

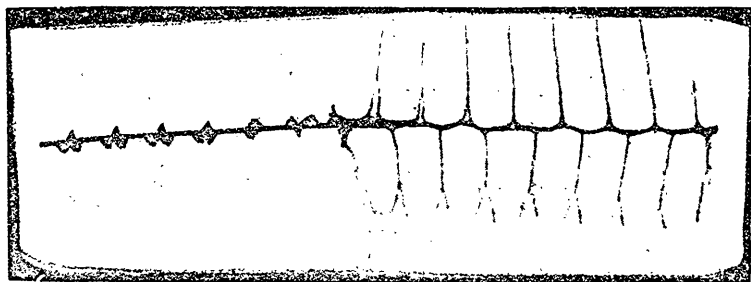


Fig. 4 (c). Giving a side view of comb foundation, flat-bottomed, 4 sq. ft. to the pound. This shows a continuous piece of foundation. One half of the foundation was covered over, the other half exposed and worked out by the bees.

fresh and added wax, white. Instead there was a regular gradation from black at the base to white at the top of the cell. The heavier the foundation the darker the base and adjoining side wall.

From the above it would appear reason-

upon the lighter grade. At present, no way appears open for conducting a satisfactory experiment to prove anything in this direction. The measurements taken at the base of the wall, and half an inch from the base, all tend to show that the wall is