

H. VOGELER.
 PROCESS FOR THE MANUFACTURE OF BEESWAX SCALES.
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1,174,207.

Patented Mar. 7, 1916.

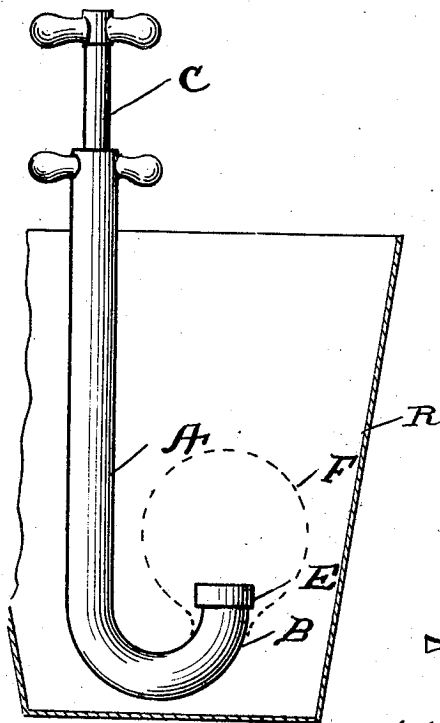


Fig. 1



Fig. 5

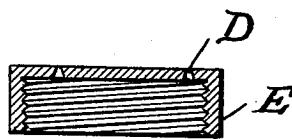


Fig. 2

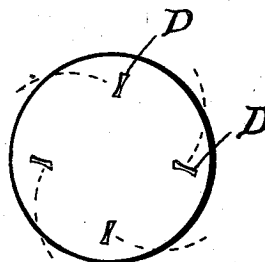


Fig. 3

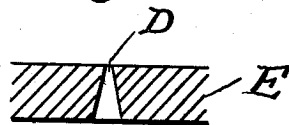


Fig. 4

Fig. 6.



WITNESSES:

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PROCESS FOR THE MANUFACTURE OF BEESWAX SCALES.

1,174,207.

Specification of Letters Patent.

Patented Mar. 7, 1916.

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To all whom it may concern:

Be it known that I, HENRY VOGELER, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented a new and useful Process for the Manufacture of Beeswax Scales, of which the following is a specification.

Wax scales as relating to this invention consist of numerous semifused laminae of wax secreted by the bees and in some instances involuntarily.

Now the purpose of this invention is to produce this scale artificially and thereby accomplish the following objects: Less work is required to put in the comb foundation. Less fish bone in the comb honey. Less expensive to manufacture than comb foundation. In addition to these objects I have practically demonstrated that by the employment of my artificially produced scale the bees build up their comb faster; they swarm less frequently; and store more honey.

In carrying out my invention I have employed peculiar apparatus, and in order to facilitate the clear and intelligent understanding of the invention, I have shown said apparatus in the accompanying drawings and incorporate them in and as a part of this application.

In these drawings, Figure 1 is a side elevation of the wax pump and head. Fig. 2 is an enlarged central vertical section of the head. Fig. 3 is an enlarged top or end view of the head. Fig. 4 is an enlarged sectional view of one of the perforations in the head. Fig. 5 is an enlarged top view of one of the perforations. Fig. 6 is a view of the finished product.

In the employment of this apparatus, melted beeswax at a temperature of 145° is placed in the long neck A of the pump. The shorter neck B of the pump is then immersed in water held in the tank R, the latter being at a temperature of two or three degrees below that of the wax, or about 143°. The plunger C is then forced home and the melted beeswax is forced through the perforations

D in the head E, the latter being screwed to the short neck B. These perforations D I have so inclined relative to the head that they will direct the issuing wax somewhat in the manner shown by dotted lines in Fig. 3. The purpose of directing this wax in this spiral form is to create a circulation of the water thereby causing the wax to cool more rapidly. Another advantage is that as the wax from the several perforations is directed away from each other the danger of massing together is obviated. The several perforations are about one fifth of an inch in length by about one one hundred and eightieth of an inch in cross section, and if made in the general form shown in Fig. 5 the wax will form a crimped ribbon as it issues therefrom. In order to catch these wax ribbons as they issue from the head E, I have provided a removable sack F which placed over the head as shown by the dotted lines in Fig. 1. The scales that I produce are to be placed in the cells and the bees take them out to build their combs.

Having thus fully described my invention, what I claim is:

1. The process for the manufacture of beeswax scales consisting of forcing melted beeswax through suitable forms to produce very thin ribbons, substantially as herein described and for the purpose set forth.

2. The process for the manufacture of beeswax scales consisting of forcing melted beeswax through suitable forms to produce very thin ribbons, said forms being immersed in water, substantially as herein described and for the purpose set forth.

3. The process for the manufacture of beeswax scales consisting of forcing melted beeswax through suitable forms to produce very thin ribbons, said forms being immersed in water at a temperature slightly below the temperature of the melted beeswax, substantially as described and for the purpose set forth.

HENRY VOGELER.

Witnesses

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."