

(Model.)

A. F. BONHAM.

Process of Making Honey Comb Foundation.

No. 234,226.

Patented Nov. 9, 1880.

Fig. 1.

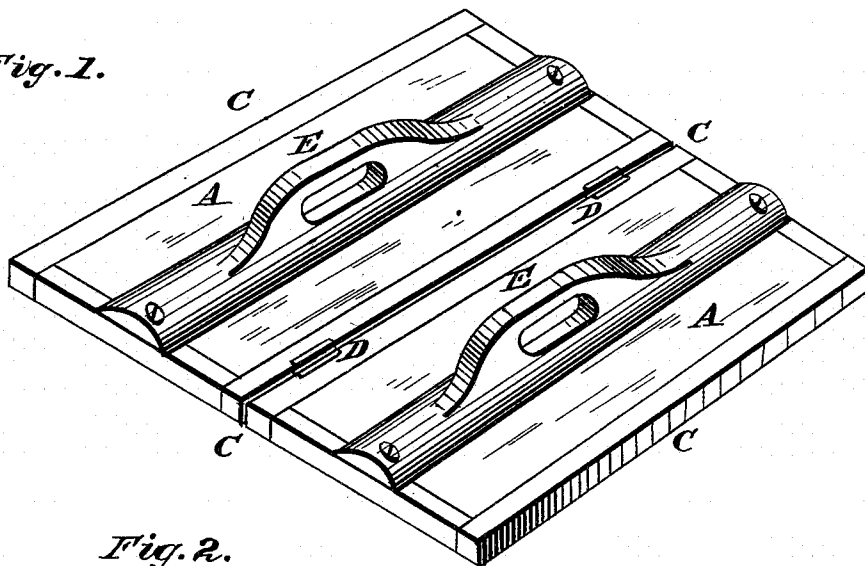


Fig. 2.

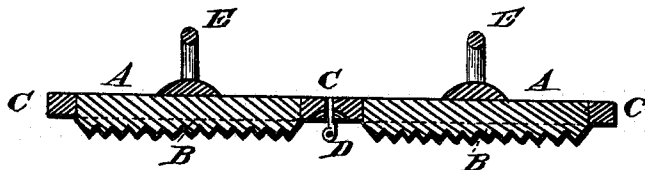


Fig. 3.

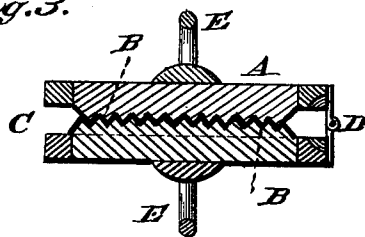
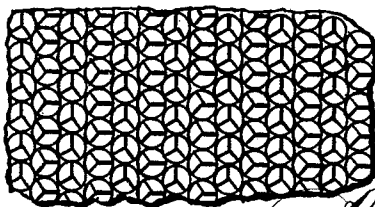


Fig. 4.



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UNITED STATES PATENT OFFICE.

ANDREW F. BONHAM, OF SEVEN MILE FORD, VIRGINIA.

PROCESS OF MAKING HONEY-COMB FOUNDATIONS.

SPECIFICATION forming part of Letters Patent No. 234,226, dated November 9, 1880.

Application filed August 16, 1880. (Model.)

To all whom it may concern:

Be it known that I, ANDREW F. BONHAM, of Seven Mile Ford, in the county of Smyth and State of Virginia, have invented certain new and useful Improvements in Processes of Making Foundations for Honey-Combs in Hives; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view of a mold for making comb-foundations, showing them open and ready for operation. Fig. 2 is a sectional view of the same after being dipped in the melted wax. Fig. 3 is a sectional view of the molds closed together for the purpose of forming the foundations. Fig. 4 is a representation of a sheet of comb-foundation made by my improved process.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to an improved process for making foundations for honey-combs in hives; and it consists in certain improvements in the same, which will be hereinafter fully described, and pointed out in the claim.

Comb-foundations have heretofore been made by pressing cakes of beeswax between suitably-engraved rollers or pressure-surfaces. In this manner, however, cracks, slits, or other defects are of frequent occurrence in the sheets of foundation thus manufactured, and, even if not visible, such defects are almost invariably present, thus rendering the manufactured article unstable, easily bent, and thus injured or destroyed.

To remedy such defects it has been attempted to insert in the foundation a net-work of fine wire. To this the objection is not only the expense, which is quite an important item, but also the injury caused to the young brood by the wire, which, owing to the thinness of the foundation-sheet, is necessarily at some places, and frequently throughout the surface of the sheet, exposed.

In carrying out my improved process I preferably employ two semi-molds, A, made preferably of plaster-of-paris, and provided upon their faces with triangular pyramidal projections B, fitting together nicely, so as to produce the impression required. The said molds are, for convenience, fitted in wooden frames C, hinged together at D, and having handles E, by which they may be readily and conveniently manipulated.

In operation the apparatus is first opened, as shown in Fig. 1, and then immersed in water, so as to thoroughly soak the molds. The faces of the latter are then dipped in melted wax, which will adhere without sticking, (owing to the faces having been soaked.) Next the molds are closed together and some pressure exerted, so as to form of the wax adhering to the molds a single sheet or cake. After permitting this to cool for a short time the apparatus is dipped in cold water and cautiously opened, when the foundation-sheet may be readily removed and the operation repeated. The edges of the sheet may then be trimmed, when it is ready for use.

The foundation-sheet produced in this manner is stronger, more easily handled, and freer of defects than those produced in any manner heretofore known to me.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The herein-described process of manufacturing comb-foundations for hives, which consists in first immersing the molds in water, then dipping the faces of said molds in melted wax, then closing them together and exerting pressure, and finally removing the sheet thus molded, as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ANDREW FULTON BONHAM.

Witnesses:

JNO. R. SEXTON,
C. F. BONHAM.