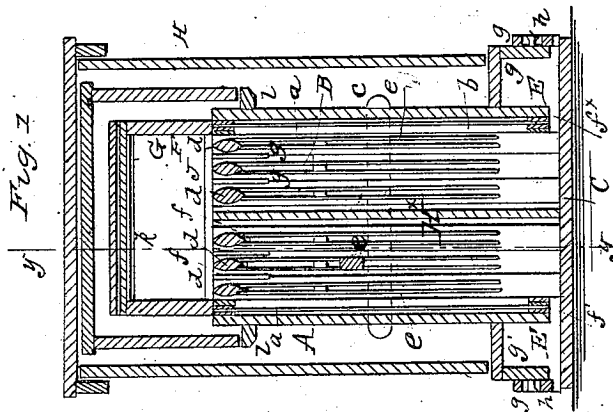
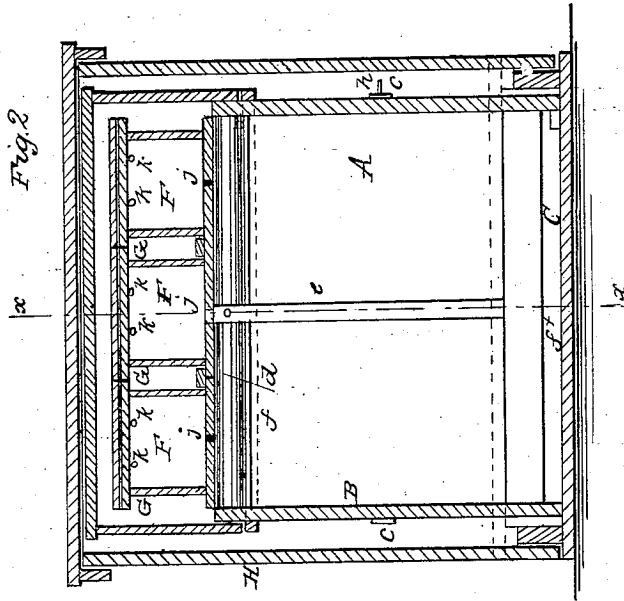


T. F. BINGHAM.

Bee Hive.

No. 59,169.

Patented Oct. 30, 1866.



Witnesses  
*J. W. Huntington*  
*Wm. Green*

Inventor  
*T. F. Bingham*  
*Per Munn & Co*  
*Attys*

# UNITED STATES PATENT OFFICE.

T. F. BINGHAM, OF GOWANDA, NEW YORK.

## IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 59,169, dated October 30, 1866.

*To all whom it may concern:*

Be it known that I, T. F. BINGHAM, of Gowanda, in the county of Cattaraugus and State of New York, have invented a new and Improved Bee-Hive; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a transverse vertical section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a longitudinal vertical section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention consists in a novel arrangement of the parts of a hive, as hereinafter shown and described, whereby superior advantages are obtained in bee-culture, such as the separating of them into different compartments, as may be required, so that each comb-frame may be inspected separately and manipulated as required, the hive divided to promote swarming, &c., the building of straight combs insured, and a uniform temperature within the hive promoted.

A A represent the two walls of the hive which inclose the comb-frames B, and these walls are lined with paper or pasteboard *a*, with an air-space, *b*, between, as shown clearly in Figure 1. The walls A A rest upon a suitable base, C, and the frames B are clamped between the walls A A by a bar, *c*, at each side.

The comb-frames B are composed of three sides of a quadrangle, and the upper horizontal strips *d* of the frames are provided with a central pendent bar, *e*, composed of two slats connected by a central piece, and the strip *d* is of diamond or oval form in its transverse section, and the lower edge of the strip of each comb-frame has a waxed cord, *f*, attached to it. To the upper part of each comb-frame, by the side of its strip *d*, a piece of paper or pasteboard, *g*, is attached, extending the whole length of the frames. These waxed cords and the paper strips insure the building of straight combs by the bees, the paper strips *g* extending a short distance below the strips *d*, as shown clearly in Fig. 1.

The pendants *e*, in consequence of being composed of two strips with a space between them, admit of the bees passing from one side of the comb-frame to the other, and also serve as a guide for a bar, D, by which combs cut from other hives may be fastened in the comb-frames, and the removal of drone-combs allowed, as well as the straightening of crooked combs.

The bars *c* are attached to one of the walls, A, the other wall being provided with a pin, *h*, at each side, to fit into any of a series of holes in the bars *c*. By this means a greater or less number of frames B may be inclosed between the walls A A, and the hive enlarged or contracted as desired.

To the outer side of the lower part of each wall A there is attached a lateral shed-like projection, E, which serves as a protection for the bee-entrances *f*<sup>x</sup> at the lower ends of the walls A A, and in the front parts of the projections E there are placed adjustable doors composed of two bars, *g g'*, which are connected by a screw, *h*, said screw passing through an oblong slot, *i*, in one of the bars, to admit of the adjustment of the same to enlarge or contract the opening at the front of the shed-like projections E. (See Fig. 1.)

These shed-like projections E, it will be seen, serve as supports or bases for the walls A A.

F represents the spare-honey boxes, which are placed on the tops of the comb-frames B. These boxes have glass sides and a slot, *j*, in their bottoms to admit of the bees passing into them. To the under sides of the tops of the boxes F there are also secured waxed cords *k*, which insure the building of straight combs by the bees. These spare-honey boxes are covered by a cap, G, the lower edges of which rest on cleats *l* attached to the outer sides of the walls A A, and the cap and walls are covered by a case, H, the lower edges of the sides of which rest on the shed-like projections E, and the lower edges of the ends resting on the base C. This cap and case afford spaces for packing, so that the hive may be perfectly protected in winter.

H<sup>x</sup> is a division-board, which may be inserted between any two of the comb-frames B, in order to divide the hive into two compartments when necessary. This is an important feature,

as the hive may be divided and two colonies of bees formed from one.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The application of waxed cords *f* to frames B and to the spare-honey boxes, to insure the building of straight combs, as set forth.

2. The combination of the cap G and case H, with the spare-honey boxes, walls A A, and comb-frames B, all arranged substantially as and for the purpose specified.

T. F. BINGHAM.

Witnesses:

HENRY S. STEBBINS,  
CHAS. HENRY.