

J. E., & J. HETHERINGTON & C. C. VAN DEUSEN.

BEE HIVE.

No. 180,027.

Patented July 18, 1876.

Fig. 1.

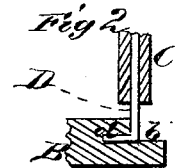
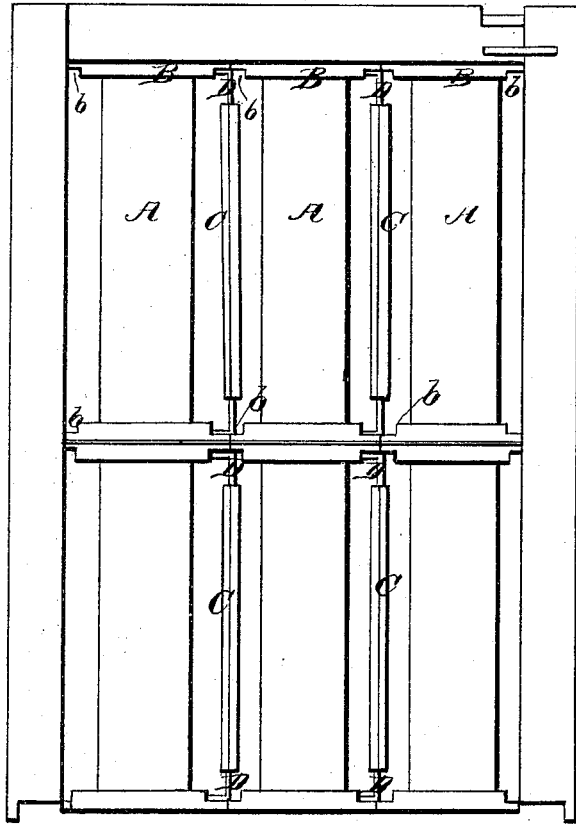


Fig. 3. D

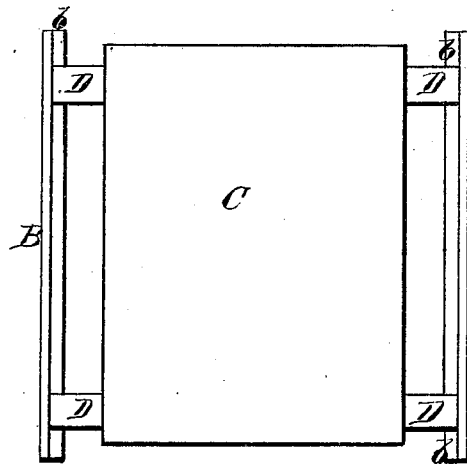


Fig. 4.

WITNESSES

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Fig. 5.

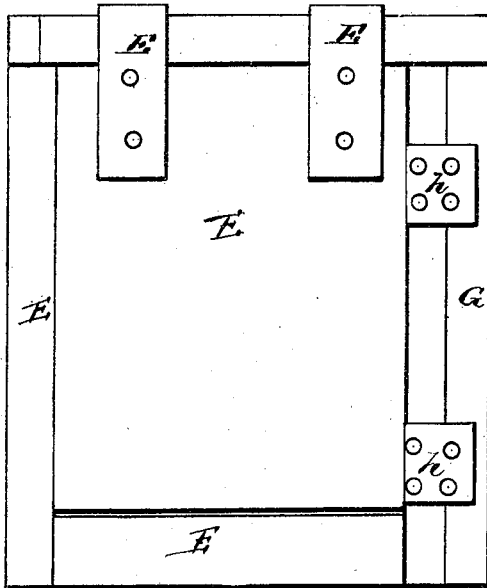


Fig. 6.

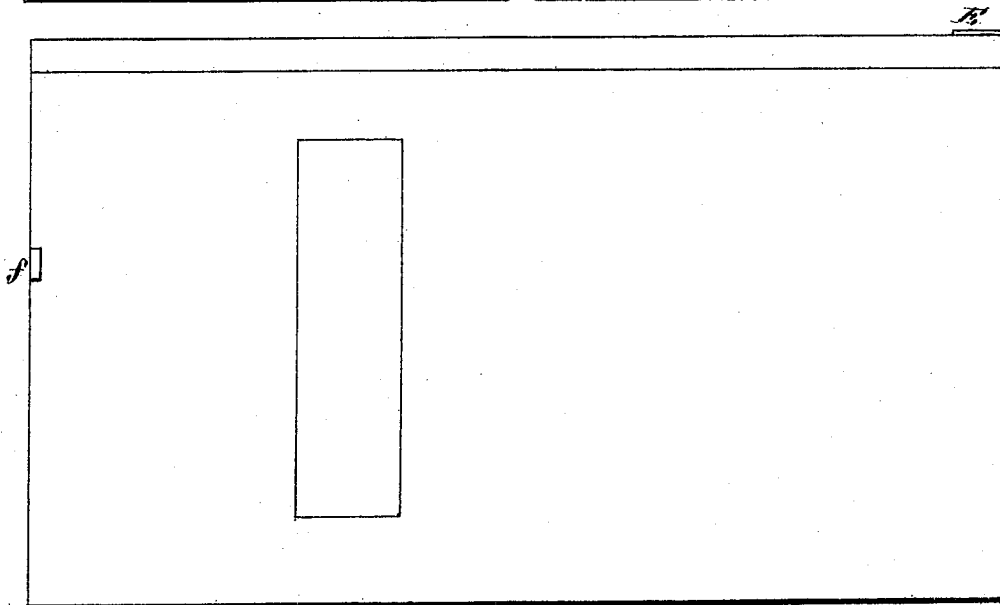
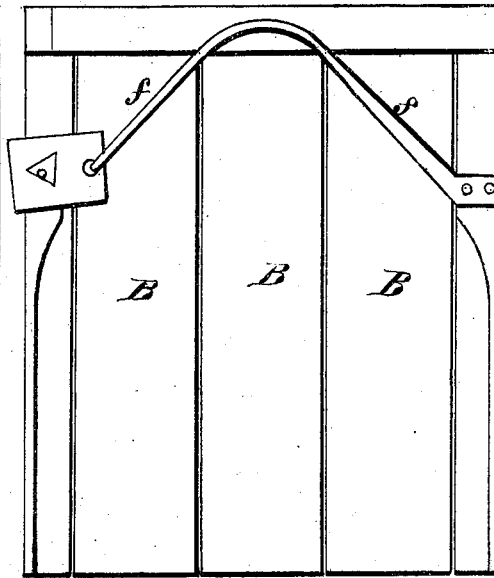


Fig. 7.

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Fig. 8.

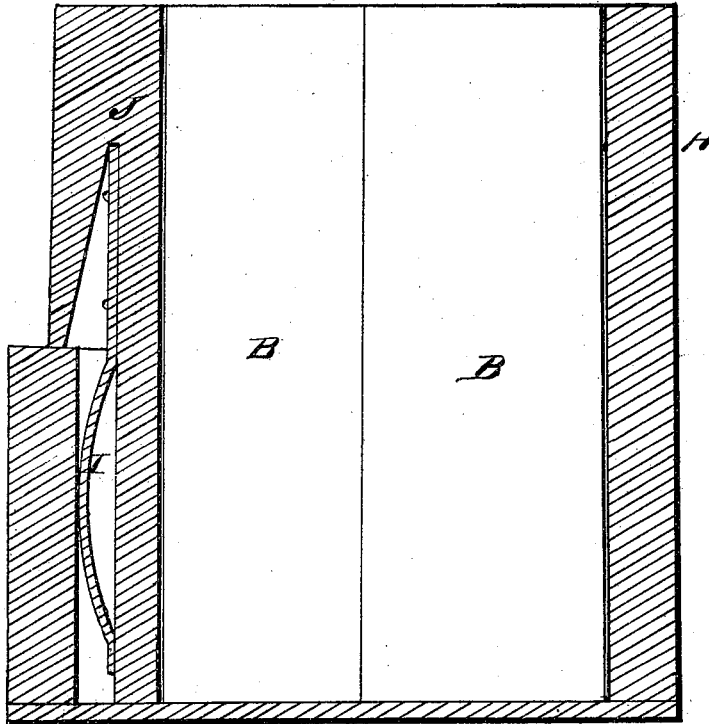
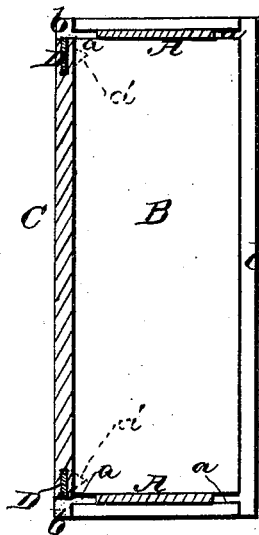


Fig. 9.



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UNITED STATES PATENT OFFICE.

JOHN E. HETHERINGTON, JAMES HETHERINGTON, AND CHARLES C. VAN DEUSEN, OF SPROUT BROOK, NEW YORK.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 180,027, dated July 18, 1876; application filed May 27, 1876.

To all whom it may concern:

Be it known that we, JOHN E. HETHERINGTON, JAMES HETHERINGTON, and CHARLES C. VAN DEUSEN, of Sprout Brook, in the county of Montgomery and State of New York, have invented a new and valuable Improvement in Surplus-Honey Boxes; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view, and Figs. 2 and 3 are detail views thereof. Fig. 4 is a view of the partition. Figs. 5 and 6 are end views of our honey-box, and Fig. 7 is a side view thereof. Fig. 8 is a transverse vertical sectional view, and Fig. 9 is a detail view of the same.

Our invention relates to bee-hives; and it consists in the construction of the honey-boxes and division-boards, and the clamps used in connection therewith when applied to the hive, as will be hereinafter more fully set forth.

In the annexed drawings, A A represent the end pieces, and B B the top and bottom pieces, of which the honey-boxes are made. On the inner sides of the top and bottom pieces B B, near each end, is made a groove or saw-kerf, *a*, across the same, and along each edge is made a rabbet, *b*, on the inner side, as shown. The end pieces A A are made of very thin material, and inserted in the saw-kerfs *a a* and there glued fast, which completes the honey-box.

The size of these boxes may be varied according to the size of the hive in which they are to be used, or to vary the weight of the package for the market.

C represents the division-board, in each end of which is made a saw-kerf of suitable depth. In each of these kerfs is then inserted and fastened a strip, D, of tin or other suitable sheet metal. The ends of these strips are bent as shown, and formed with points *d d* to be pressed into the rabbets of the box, and thus be held there.

At the sides or ends of the honey-boxes in the hive we use a clamp, E, composed of the bottom and two sides of a box for holding

the boxes-together. This clamp is provided with a movable side, G, to be let down for convenience in handling and changing the boxes, said movable side having elastic joints *h h* at the bottom, and an elastic cord, *f*, at the top to press the boxes firmly together when the clamp is closed.

The honey-boxes are held in position in the clamp H by means of the movable side piece J sliding in the clamp, and provided with a spring, I, of suitable construction, which presses the side piece J against the honey-boxes, and holds them securely in place.

The top and bottom pieces B B may be constructed without rabbets *b*, so as to present perfectly even surfaces, into which the points *d d* of metal strips D D will catch, thereby fastening the division-board C to the top and bottom pieces, without departing from the spirit of my invention.

The clamp H, with its sliding side piece J, is employed as a honey-box for holding the comb-frames in place, and can be employed also as a box for transporting the honey-boxes.

What we claim as new, and desire to secure by Letters Patent, is—

1. The division-board C, having saw-kerfs cut in its ends, and the metallic strips D inserted and fastened therein, and formed with the points *d* at the ends, as set forth.

2. The clamp E, provided with the movable side piece G, elastic joints *h h*, and elastic cord *f*, as and for the purposes herein set forth.

3. The clamp H, provided with the movable side piece J and spring I, as and for the purpose set forth.

4. The division-board C, provided with plates D having points *d*, in combination with top and bottom pieces B B, having plane surfaces, substantially as set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

JOHN E. HETHERINGTON.
JAMES HETHERINGTON.
CHARLES C. VAN DEUSEN.

In presence of—
CHAS. MCLEAN,
EDWIN JUDD.