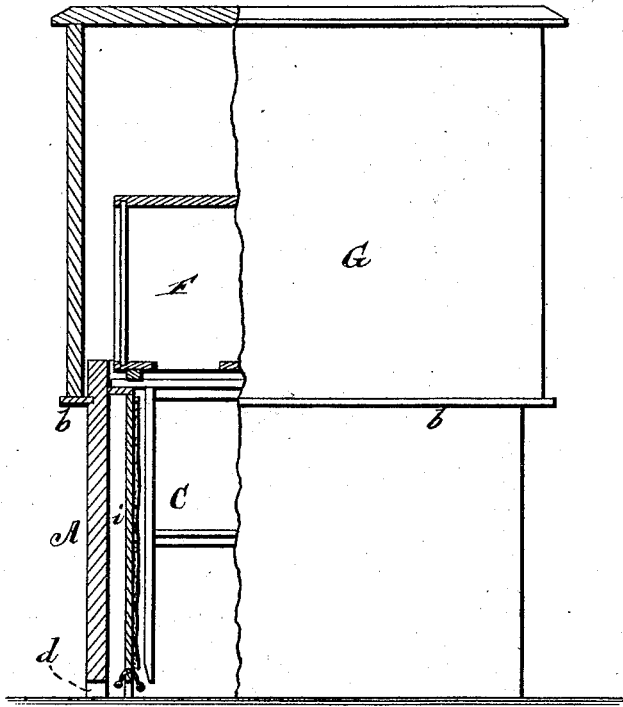


J. YOUNG.  
Bee-Hive.

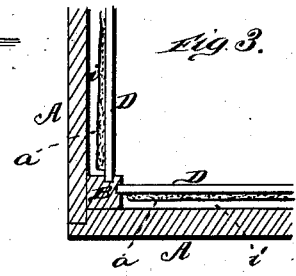
No. 203,521.

Patented May 7, 1878.

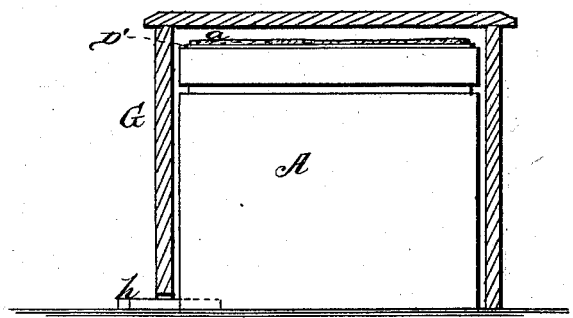
*Fig. 2.*



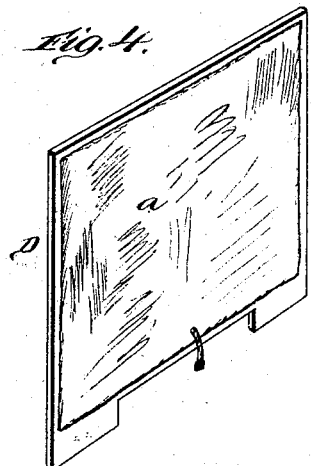
*Fig. 3.*



*Fig. 5.*



*Fig. 4.*



WITNESSES

*Robert E. Bennett*  
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INVENTOR.

*James Young*  
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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JAMES YOUNG, OF WARSAW, INDIANA.

## IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 203,521, dated May 7, 1878; application filed February 23, 1878.

### *To all whom it may concern:*

Be it known that I, JAMES YOUNG, of Warsaw, in the county of Kosciusko and State of Indiana, have invented a new and valuable Improvement in Bee-Hives; and I 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 vertical section of my bee-hive. Fig. 2 is a part sectional side view. Fig. 3 is a sectional detail. Fig. 4 is a perspective view of the board, and Fig. 5 is a vertical section of the same with cap removed.

My invention relates to bee-hives; and it consists in providing the brood-chamber with interior reversible walls lined with cotton on one side, and forming a dead-air chamber between them and the main walls, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

The body of the hive is constructed of the sides A A, secured to the inside corner posts B B, as shown fully in Fig. 3. Within this chamber are the comb-frames C C, of any desired construction.

The corner posts B B are provided with vertical grooves on both their inner sides, near the inner corner, to receive the boards D D, which are lined upon one side with cotton flannel, batting, or similar material, *a*.

A board, D', provided on one side with similar lining, *a*, is laid on top of the comb-frames.

F F are the honey-boxes, and G is the cap of the hive, which latter rests upon cleats *b b* attached to the sides of the body A, near the top, as shown.

In the summer time the boards D D, which form the inner walls of the hive, are turned with the lining outward, and the board D', when laid upon the comb-frames, should have its lining upward. This will prevent the bees having access to the lining, which they would otherwise cut out or wax over, so as to render it useless as an absorber.

When the brood-chamber is filled the top board D' is raised, and the boxes F F are placed underneath the same.

As soon as the weather becomes cold enough to prevent the bees working, the inner walls D D are reversed, which will make a complete cotton wall on all sides of the hive, and by reversing the top board D' there will be cotton next to them from the top. This cotton absorbs all the moisture, thereby avoiding the danger of smothering the bees by the dampness running down the sides of the hive and freezing over the mouth or entrance *d*. The inner walls also form a dead-air chamber, *i*, between them and the body of the hive, which largely protects from the frost coming through.

By removing the cleats or rim *b*, the parts of which are mitered for that purpose, the cap G can be dropped down over the main body of the hive, making another wall of wood.

In the lower edge of one of the sides of the cap is formed a button, *h*, which, by being turned crosswise, secures the two parts together, one end of the button being turned into the entrance *d*, and yet leaves sufficient space to supply the bees with air.

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

1. A bee-hive provided with interior reversible walls lined on one side and forming a dead-air chamber between them and the body of the hive, substantially as and for the purposes set forth.

2. The combination, with the hive A B and comb-frames C, of the interior reversible walls D D and top board D', said walls and board being provided on one side with an absorbent lining, substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JAMES YOUNG,

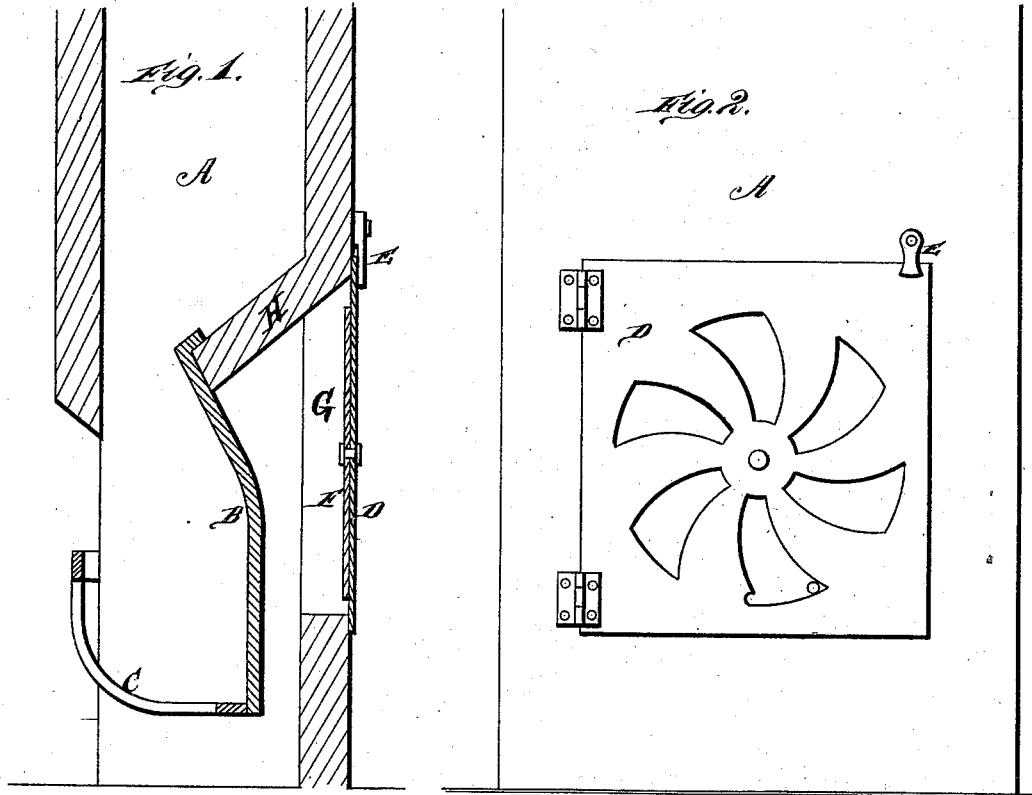
Witnesses:

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Fire-Place.

No. 203,522.

Patented May 7, 1878.



WITNESSES

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