J. WHEELDON.

BEEHIVE.

No. 110,809. Patented Jan. 3, 1871.

Fig 1

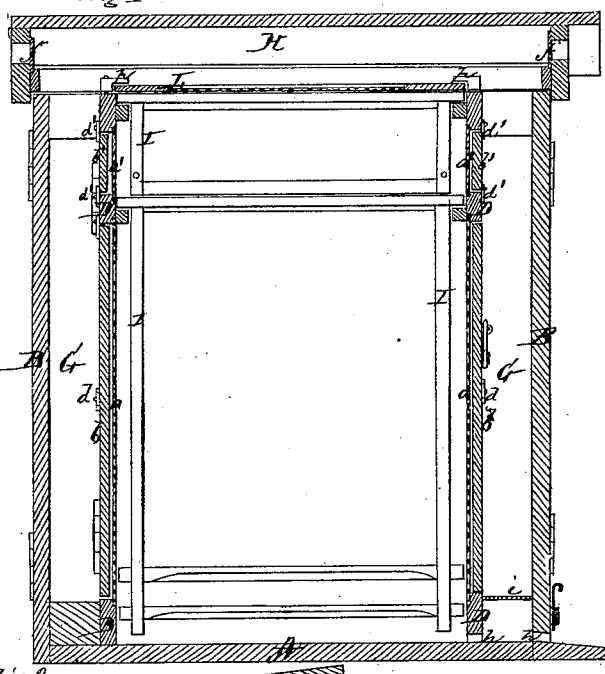


Fig 3

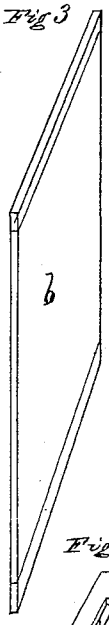


Fig 4

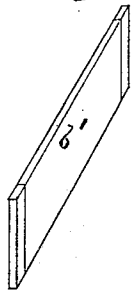


Fig 2

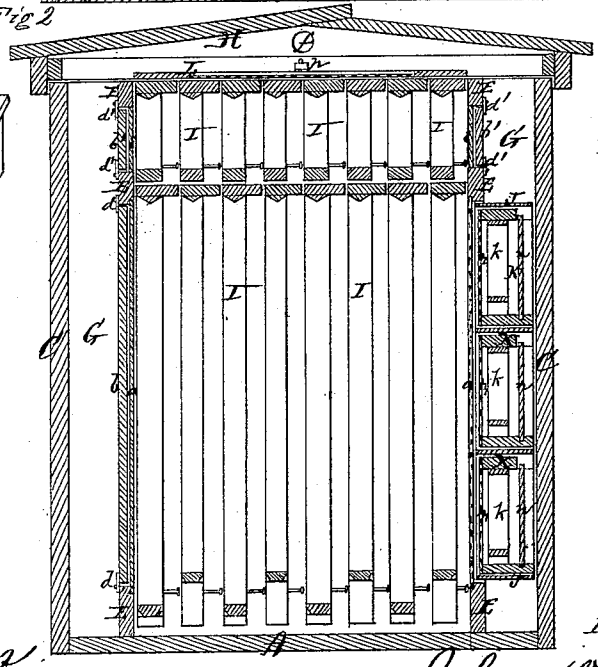


Fig 5

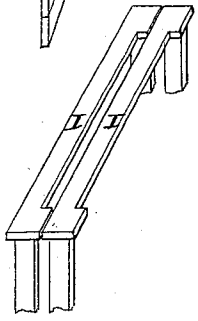
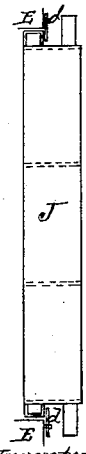


Fig 6



Witnesses.

Harry King

C. L. Ewert.

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United States Patent Office.

JOHN WHEELDON, OF GREENSBURG, INDIANA.

Letters Patent No. 110,809, dated January 3, 1871.

IMPROVEMENT IN BEE-HIVES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN WHEELDON, of Greensburg, in the county of Decatur and in the State of Indiana, have invented certain new and useful Improvements in Bee-Hives; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "bee-hive," as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section, and

Figure 2 is a transverse vertical section of my hive.

Figures 3 and 4 are perspective views of panels used in the inner hive.

Figure 5 is a perspective view of the upper ends of two combs or honey-frames.

Figure 6 is a plan view of the queen nursery and fertilizer.

A represents the bottom board of the external hive;

B B are the front and rear; and

C C, the right and left swinging doors, forming the sides of the same.

D D are stationary sash, forming the front and rear; and

E E are right and left-hand swinging sash-doors, forming the sides of the internal hive, which is placed within the external body, leaving a space or chamber, G, between the same, around all four sides.

The inner hive D E forms the brood-chamber and honey-chamber above the former.

The openings in the sashes D and E, opposite the brood-chamber, are filled with wire-cloth or perforated tin, *a a*, and on the outside of the same in the said sashes are inserted panels, *b b*, which are held in place by buttons, *d d*.

The openings in the stationary sashes D D, opposite the honey-chamber, are also filled with wire-cloth or perforated tin, *a'*, while those in the sash-doors E E are filled with glass, *e*.

Panels *b' b'* are also inserted outside of the same, and held by buttons *d' d'*.

In the brood and honey-chambers of the inner hive D E are placed the movable frames I I, which can be taken out and put in from either the right or left side.

These frames, or rather the upper bars of the frames, are constructed as shown in fig. 5, having the ends wider than the center, so as to form convenient bee-passages.

The entire hive is covered by the movable roof H, provided with external upward ventilators, *f f*. This roof H must be removed or raised to allow the doors to open.

Over the bee-entrance *h*, through the chamber G, is placed wire-cloth, *i*, forming the lower ventilator.

On either one or both of the sash-doors E may be attached the queen nursery and fertilizer, which is constructed as follows:

A case or frame, J, of tin or other suitable material, provided with from six to twelve pockets or holes, is held in the space for the panel *b* by means of the buttons *d d*.

Each pocket in said frame contains a movable nucleus-box, K, the inner surface of which is covered with wire-cloth, *m*, and the external surface with a movable glass, *n*, and inside of the box is a small frame, *k*, for queen-cell and honey.

On top of the inner hive D E is laid a frame, L, covered with wire-cloth or perforated tin, forming the upper ventilator for the same, said frame being held down in place by buttons, *p p*.

The right and left swinging doors of my hive, thus constructed, give full control of either side of the hive, and access to the external frames without interfering with the center frames, the frames moving right and left corresponding with the doors.

The sash-body D E, with openings covered with wire-cloth or perforated tin, gives control over the atmosphere of the brood and honey-chambers at all seasons of the year.

In the fall, by removing the panels *b b* and *b' b'*, nursery J K, and surplus honey-frames, and placing the upper ventilator L upon the top bars of the brood-frames; then fill the chamber G about eight inches with straw, leaves, or shavings, or any other good non-conductor of heat and a good absorbent of moisture, then about one inch of crushed charcoal, then fill the balance of the entire chamber with the first-named articles.

By this means the animal heat is confined and the moisture escaping from the bees taken up; in cold weather preventing ice and frost from forming on the combs, and in open, damp weather preventing mold and mildew from collecting on the combs and souring the honey, thus preventing dysentery, or what is commonly called bee-cholera.

The charcoal will neutralize the carbon and other poisonous gases generated by the bees, thus keeping the atmosphere of the brood-chamber healthy.

In spring and summer all absorbing material is removed and honey-frames and panels replaced.

The chamber G then acts as an air-chamber around the brood-chamber, keeping the bees and brood comfortable during hot weather, preventing large quantities of bees clustering idly about the entrance, and working more regularly and industriously.

The queen nursery and fertilizer J K being attached to the wire-cloth of the sash-doors E, gets the benefit of the internal heat necessary to hatch the young queen.

I put queen-cells in the nucleus-boxes K K, with a dozen or two bees; let stand till the young queen is five or six days old, then remove the queen from the bees, placing her in fertilizing box with six or eight drones. Let her remain with them from four to six days, when she will show signs of fertility and is ready for the swarm.

Having thus fully described my invention,

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

1. The combination of the stationary sashes D D, right and left swinging doors E E, wire-cloth or perforated tin *a a a' a'*, glass *e e*, and panels *b b* and *b' b'*, all substantially as shown and described, to form the inner hive.

2. In combination with the inner hive, composed of the various parts described, the outer hive, formed of the bottom board A, front and rear sides B B, and right and left swinging doors C C, constructed and arranged substantially as and for the purposes herein set forth.

3. The combination of the case J, nucleus-boxes K K, wire-cloth *m*, movable glass *n*, and frames *k*, all constructed and arranged as described, and attached to the door E of the inner hive, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of August, 1870.

JOHN WHEELDON.

Witnesses:

WILLIAM CUMBACK,

JOHN W. LOVETT.