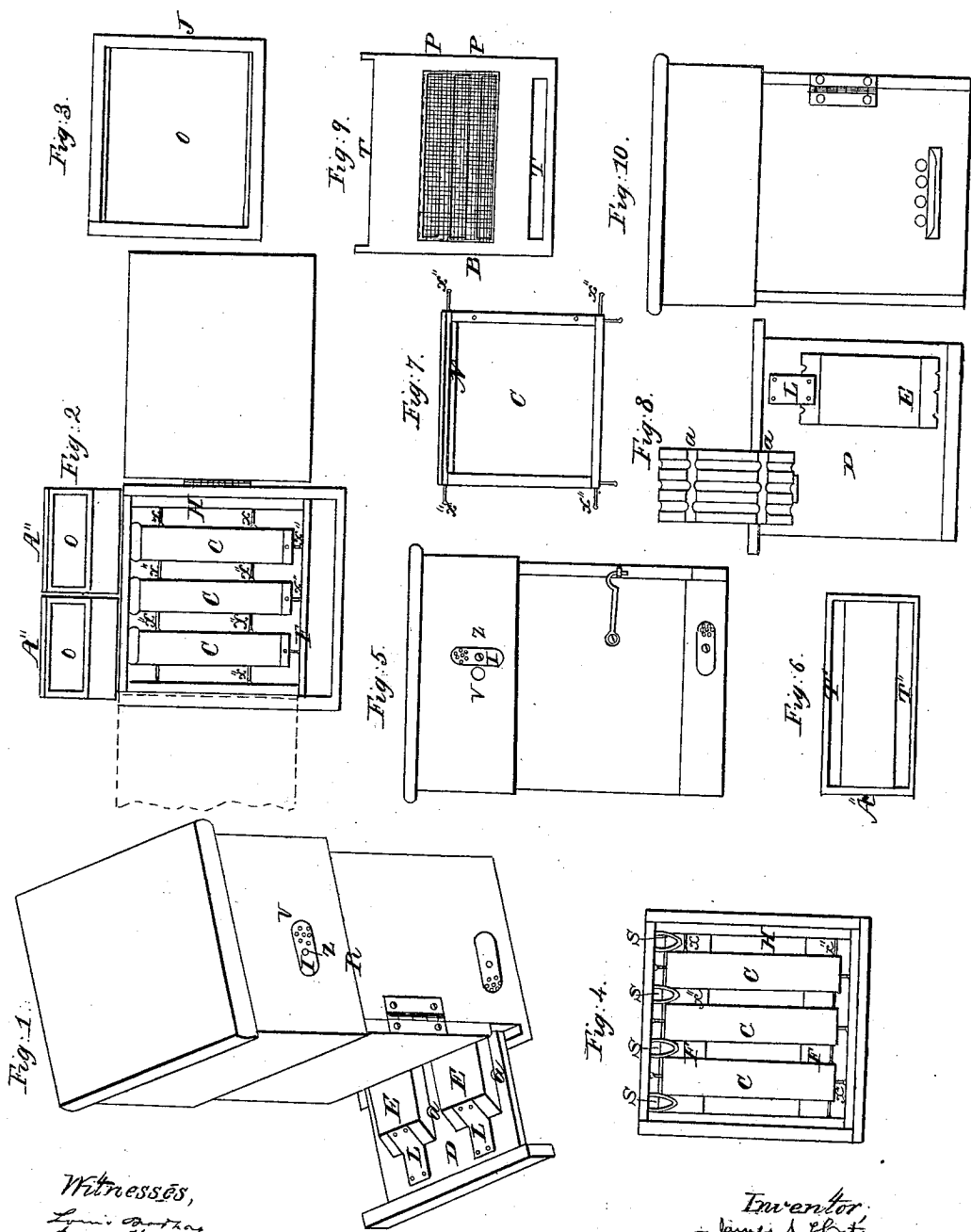


J. S. HOOTON.

Bee Hive.

No. 79,471.

Patented June 30, 1868.



Witnesses,
 Louis Carter
 Jacob Henry

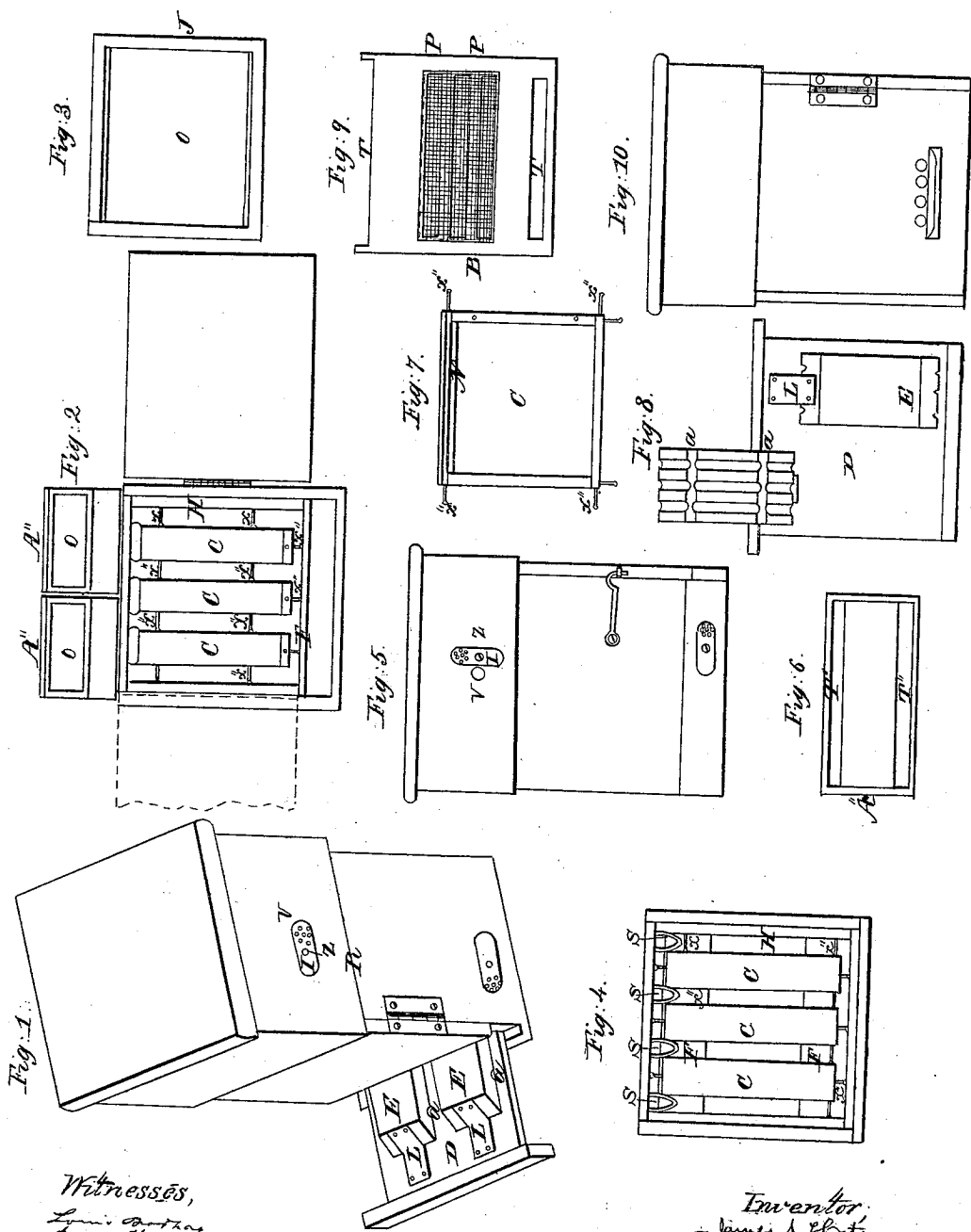
Inventor,
 James S. Hooton
 by *[Signature]*

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L. H. ...
Jacob Henry

Inventor,
James S. Hooton
by ...

left-hand edge of the front end of each rack, as seen in Fig. 4, I place the metal pins marked X" in Figs. 2 and 4, not more than three-eighths of an inch in length. The object of these pins is to fully support the racks, and yet have them touch no wood, as everywhere the pieces of wood are brought together the bees will wax them fast, and compel the severing of the wax before the racks can be removed. By the use of these pins I prevent the racks from being waxed fast to each other or to any other part of the hive.

The pins must be of sufficient length to allow the bees to go between the racks, and between them and the sides of the hive, but not long enough to allow the bees to deposit any comb, and still leave room to pass in the spaces. Besides these pins, I have, for the support of the rack, and to enable them to be easily removed, small metal staples, (shown in Fig. 4,) marked S. These staples are in two rows across the inside of the front part of the hive, and in perpendicular rows or lines, and serve to keep the racks a proper distance apart when the racks are in place, and to support them. Being of metal, the bees will not wax the racks fast to them. They are made tapering, so that by drawing the racks forward a little enough space is given to carry the front end of the rack outward and to the left hand, that side of the hive being hinged and open.

The racks can all, or any number of them, be so carried to the left at the front end, and thus open to inspection both sides of any one or all of the racks, if desirable; also permit the removal of any one of them and replacing it without difficulty. These points are all fully shown in Figs. 2 and 4.

Outside of these racks, and next to the outside of the box, supported by the metal pins mentioned, I place on the two sides that are open sash, marked J in Fig. 3, with a glass, marked O, in each, which enables me to see at any time when the racks are full. Above and on top of these I place a thin board, marked B, (shown in Fig. 9,) covering the whole top, but with openings cut in it, and shown in Fig. 9, marked T and P. The openings T communicate with the lower part of the hive, and are made to correspond with the openings in the honey-cap A", Fig. 6, marked T". These honey-caps A" are placed on the top of the board B, and the openings T T' allow the bees to pass up from the lower hive into the cap. Near the center of this thin board B will be seen the openings P, which are covered on the lower side of the board B with wire-cloth, (shown in Fig. 9,) so as to prevent the bees from passing into them, but so as to allow the air to pass for ventilating purposes. There are three of these. The two outer ones of the three are intended to communicate with the openings T" in the honey-cap A", Fig. 6, and the middle one is intended to allow the air to pass from one part of the hive to the other for ventilating purposes

when the honey-caps are placed a little way apart, as they can be. In one end of these caps A", I place a glass, o, in Fig. 2, to enable any one to know when they are filled. Over the whole is placed the top part of the hive, which is made a square box, with a top, open at the bottom, and with a rabbet in the inside of the lower edge, making it sufficiently large to sit down over the lower box the depth of the rabbet, and make the hive close and tight.

On the two sides of the upper part of the hive, also on the same sides of the lower part of the hive, down below the part that swings on hinges, and opening into the drawer in the bottom, I bore holes, (marked V,) one through each side of both parts of the hive, to be used for ventilating purposes.

On the outside of the box, and near each of these holes, I fasten a metal strip about five inches long and one and a half inch wide, (shown in Figs. 1 and 5,) marked I, by means of a common wood-screw, marked Z, passing through the center of the strip, and screwed tight enough to prevent its turning by the weight of the metal strip, but so that the strip can be turned either way. One end of this metal plate I perforate, taking care to make the holes so small that insects cannot go through them. The other end of the strip I leave solid, and by means of this I temper the hive. During warm weather I turn the perforated end of the metal strip over the holes, and this allows fresh air to pass in at the lower holes and drive the warm air out at the upper ones. In cool weather I reverse the metal strip, thus closing the circulation.

To make the circulation complete, care should be taken to place the honey-caps apart, and, when it is desired to prevent circulation, place them close together.

Fig. 1 shows the hive R open for ventilation, and with the miller-drawer partly out. Fig. 2 shows the hive with the top part removed, showing the honey-caps A". Fig. 6 shows a sectional view of the honey-cap A", with the openings T", being the bottom of the honey-cap. Fig. 7 represents the comb-rack C, with the metal staples X".

In Fig. 7, N represents the comb-guide, which is nailed to the under side of the top piece of the comb-rack C, and running the whole length of the inside of the rack from front to back.

Fig. 9 represents the board B, with the opening in it, marked T and P, also the wire-cloth over the openings P. Fig. 8 represents the drawer for the bottom of the hive, marked D, with the pieces of wood E, and shows the grooves a and the leather hinges L, all in the manner and for the purposes specified.

What I claim as my invention is as follows:

1. The device for entrapping the worms, as specified.
2. Supporting the racks by the metal staples S, as shown and specified.
3. Supporting and holding to their places

the racks by means of the metal pins X'', as specified.

4. Supporting the racks solely upon metal bearings by means of the pins X and staples S, as set forth.

5. The hive R, when its several parts are constructed, combined, and arranged as set forth.

6. Board B, when constructed as specified.

7. The combination of the metal strip I'',

the screw Z, the aperture V, the openings P and T through the board B, with the wire-cloth, as set forth, and for the purposes specified.

JAMES S. HOOTON. [L. S.]

Witnesses:

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H. McMUNDAY.