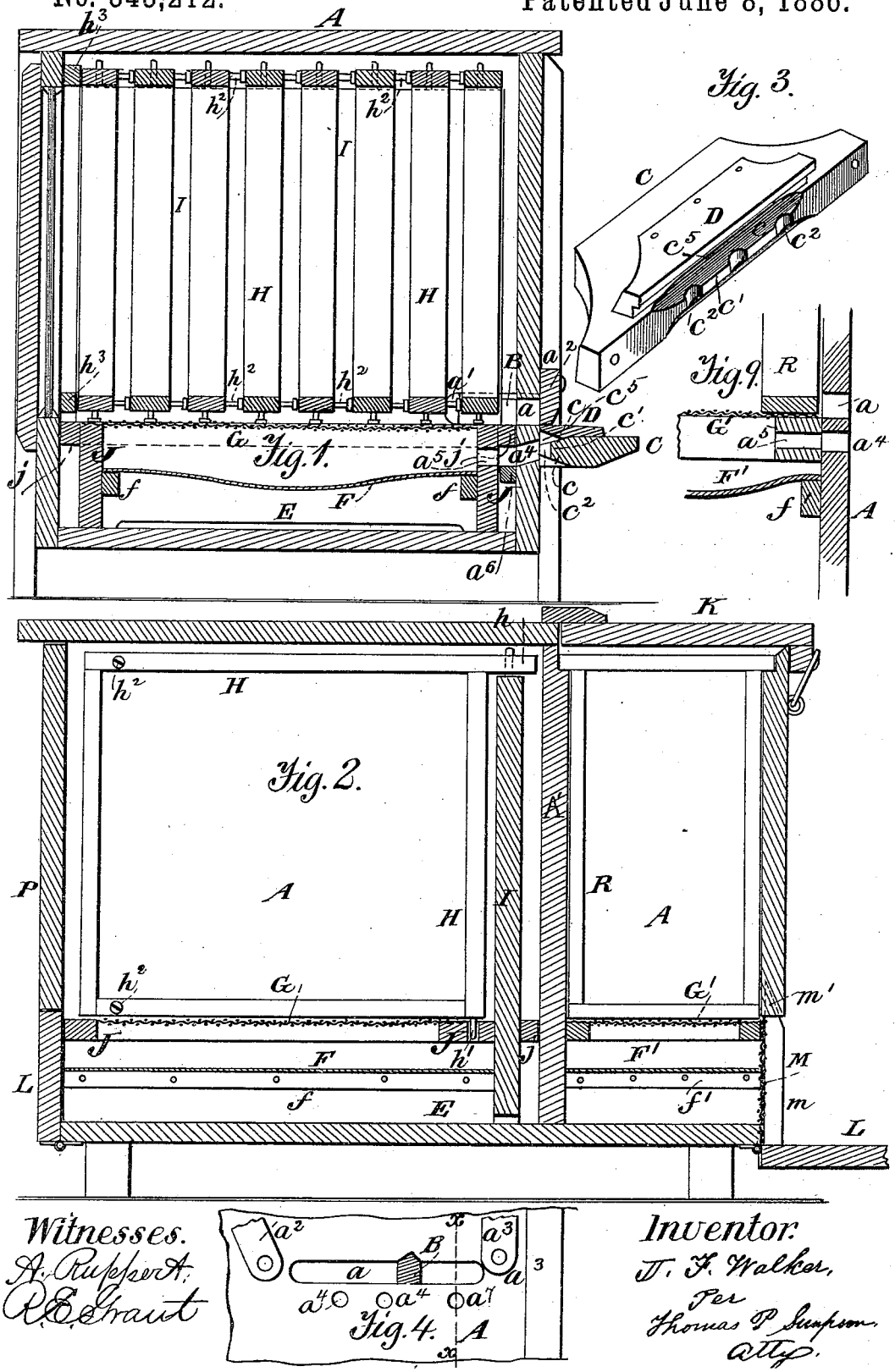
(No Model.) 2 Sheets—Sheet 1.

J. F. WALKER.

BEE HIVE.

No. 343,212. Patented June 8, 1886.



Witnesses.
A. Ruppert A.
R. E. Grant

Inventor.
J. F. Walker.
Per
Thomas P. Simpson.
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(No Model.) 2 Sheets—Sheet 2.

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Fig. 5.

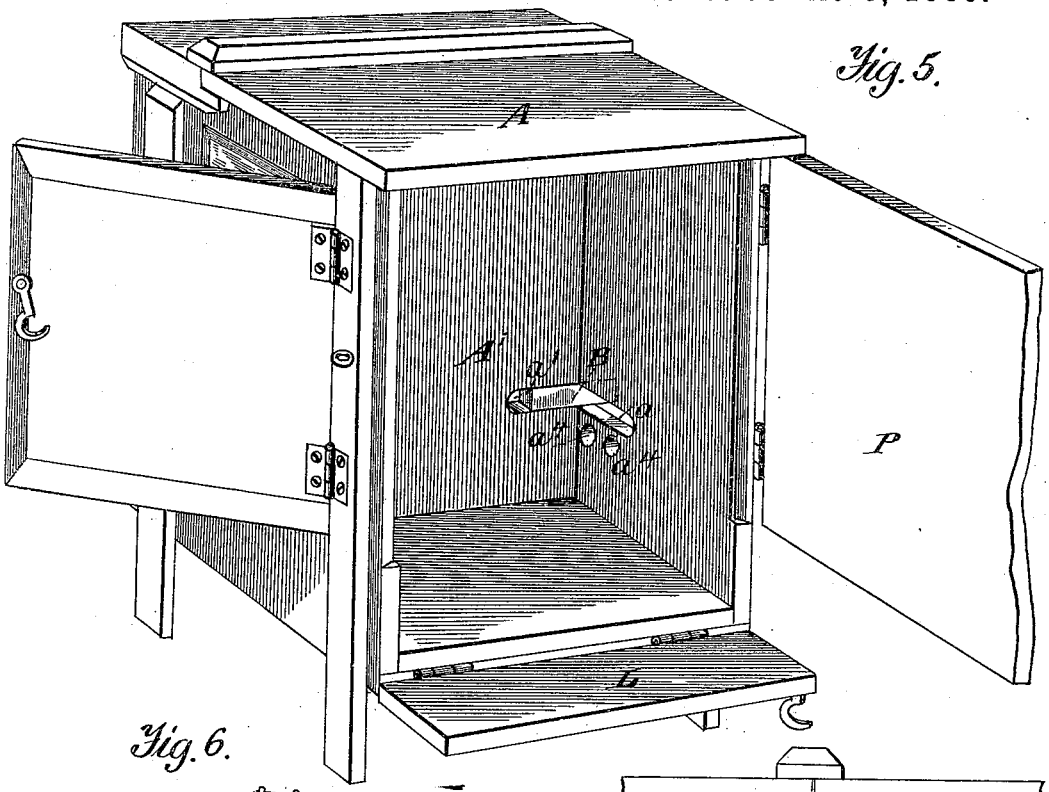


Fig. 6.

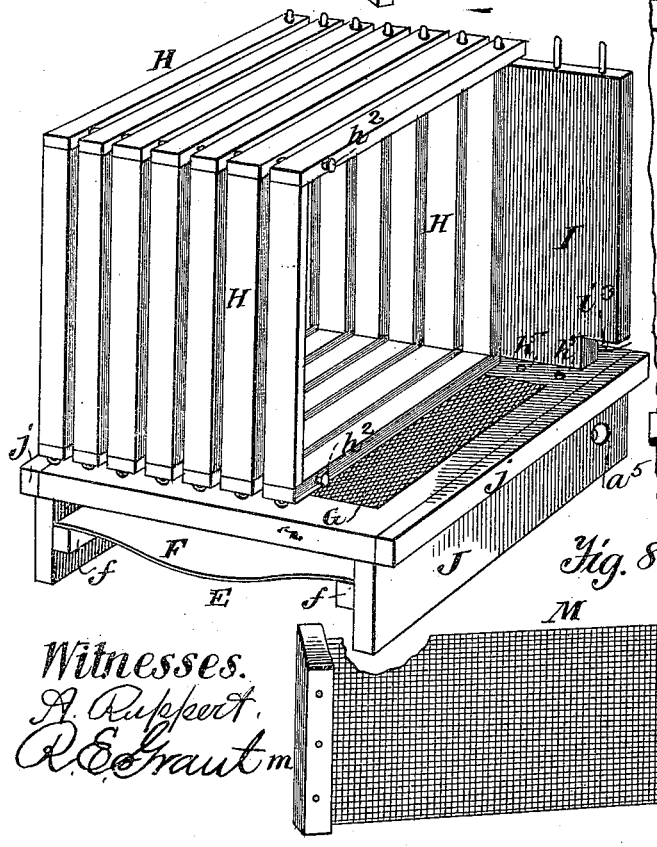


Fig. 7.

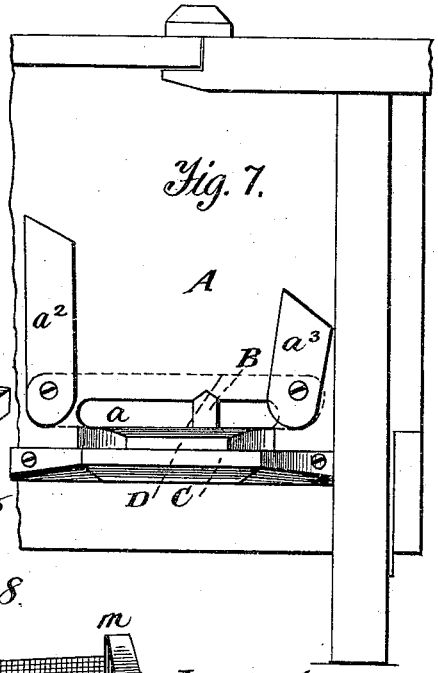
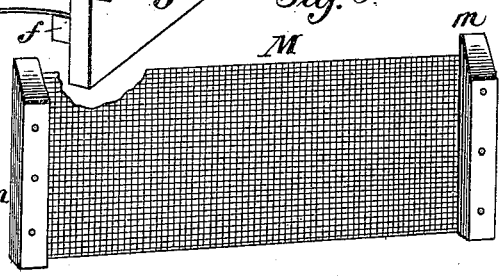


Fig. 8.



Witnesses.
A. Ruppert.
R. E. Grantm

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UNITED STATES PATENT OFFICE.

JAMES F. WALKER, OF BRANDENBURG, KENTUCKY.

BEE-HIVE.

SPECIFICATION forming part of Letters Patent No. 343,212, dated June 8, 1886.

Application filed February 1, 1886. Serial No. 190,497. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. WALKER, a citizen of the United States, residing at Brandenburg, in the county of Meade and State of Kentucky, have invented certain new and useful Improvements in Bee-Hives; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The special object of the invention is to improve the general construction by introducing new features thereof, as hereinafter described, and pointed out in the claims.

Figure 1 of the drawings is a vertical cross-section of my bee-hive. Fig. 2 is a longitudinal view, the same showing the comb-frames and their sliding support; Fig. 3, a perspective view of the alighting strip or platform and its cap. Fig. 4 is a detail view showing the block; Fig. 5, a perspective view of the hive with the doors opened; Fig. 6, a perspective view of the brood comb-frames resting on the part which slides and carries them; Fig. 7, a front view showing the bee platform and entrance; Fig. 8, a detail view of the wire-gauze attachable in and detachable from the side of the honey-comb compartment. Fig. 9 is a vertical section on line x x of Fig. 4.

In the drawings, A represents a hive divided by a partition, A′, into two compartments—one for breeding and the other for surplus honey.

a is a horizontal slot in the front side of the hive for the entrance and exit of the bees, the same communicating with both compartments.

In the partition A′ is the slot a', through which and through slot a works the slide-block B, by which the slot a' may be increased or diminished in size or closed. Under the slot a, and in front of the hive, is the alighting-platform C, upon which is placed a cap, D. Between this platform and cap is formed a cavity, c^5, by beveling the part C at c on the upper side of the longitudinal median rib c' and notching the rib at c^2; also, by rabbeting and cutting away the under side of cap D. This allows the moths to pass up through the notches c^2 into said cavity, from which they find their way through hive-holes a^4 into the spaces below wire-gauzes in each compartment, whence they cannot get to the brood or surplus-honey frames H R.

The moths can be taken out on the trays under the wire-gauzes. These trays F F′ slide in and out, serving also to catch the bee-waste, being supported on guide-blocks $fff'f'$.

Each one of the brood comb-frames H has a rearward projection, h, apertured to receive a pivotal pin on the upper edge of the board I, which is fast on the slide-frame J, which carries the wire-gauze G.

In frame J are holes h^5, to receive pivot-pieces h' on the bottom of the comb-frames H. Thus each frame is held and can be turned on two pivots, concentrically arranged, and all have side studs, h^2, to regulate their distance apart. By this construction they may be taken out together on the slide-frame J by withdrawing it wholly or partially from the hive through the open side thereof, (which can be closed by the door P,) and then each one examined separately.

In the honey-chamber I use comb-frames R, suspended by end projections on rabbets of the chamber sides in the usual way, and these may be lifted out by removing the sliding cover K, which is held in place by a cleat and hook. Under these frames R there is a wire-gauze, G′, and under this a tray, F′, to catch the waste and the moths. The tray is supported by strips f', and may be removed through a small doorway opened or closed by the door L. There is also a large doorway, through which the comb-frames H and their supporting-frames are taken out or put in.

The hive may be nicely and readily ventilated by means of the spaces under the comb-frames, the doors, and the slots.

M is a wire-gauze screen having two end bars, m m, sharpened to enter grooves m' in the framing just above the doorway, that is opened or closed by door L. When this door is swung down, the frame M can be put in place, as shown in Fig. 2 of the drawings. Thus moths on the tray F′ cannot possibly escape when the door L is opened to permit the hive to be ventilated and the air to pass through freely. Around the slide-frame J, I

fasten a strip, *j*, to keep it at a suitable distance from the walls of hive.

If it is intended that the bees shall work only in the brood-chamber, the pivoted latch a^2 is thrown up while the latch a^3 is thrown down, and the slide-block B pushed through slot *a* into slot *a'*, so as to close the latter. The bees can thus be forced to work in either compartment or allowed access to both, or either of the compartments can be separately examined by confining the bees to the other.

The moths cannot enter the hive easily through slot *a*, as the bees more or less protect the entrance; but they can enter without hinderance from beneath the platform C and into the cavity c^5, as is intended, they being induced so to do by the smell of the honey and the light which enters from the ends of the rabbeted part of cap D. The holes a^4 lead to a hole or holes, a^5, in frame J, and in that of the honey-compartment over a ledge or bridge, a^6, so that the moths may get under the wire-gauze G.

i^3 is a notch in the partition I, for the purpose of forming a passway between the two compartments, so that, when desired, the bees may pass from one to the other.

When the bees are permitted to work in both compartments, both of the doors a^2 a^3 are raised or opened and slide B removed. Both of the doors can be closed, and the slot *a* thus closed entirely, when it is so desired. The entrance to the hive and the connection between the compartments are thus under complete control. The moths pass through holes a^7 and a^5, thus reaching the space between the screen G' and the tray F'.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. A bee-hive having an entrance-slot, *a*, a partition, A', with slot *a'*, a slide, B, crossing the slot *a* and fitting into the partition-slot *a'*, and the hinged doors a^2 a^3 in front of slot *a*, as and for the purpose described.

2. In a bee-hive, the combination, with honey-frame R, arranged over a wire-gauze, G', and a doorway opening into the space under said wire-gauze, of a removable wire-gauze, M, having the sharpened end pieces, *m* *m*, fitting across said doorway and into slots *m'*, as and for the purpose set forth.

3. In a bee-hive, the combination, with a platform, C, and cap D, the latter having the intermediate cavity, c^5, of the hive provided with the opening a^4 and ledge or bridge a^6, and the frame J, having the holes a^5, as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES F. WALKER.

Witnesses:
W. H. GOUGH,
C. C. FAIRLEIGH.