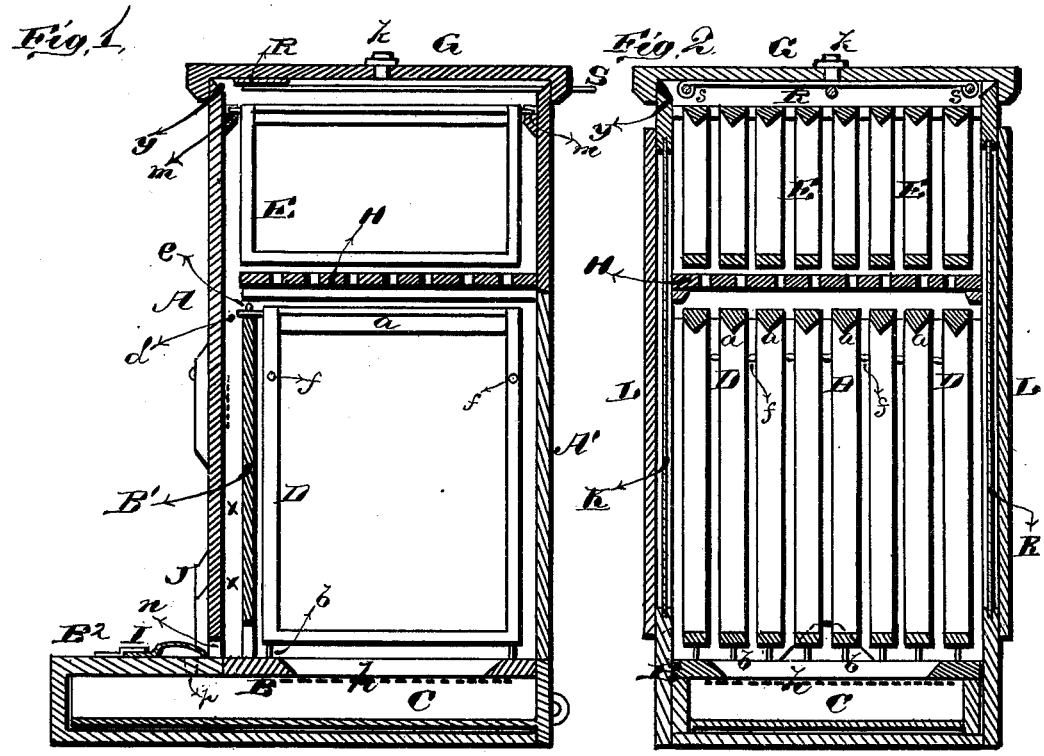
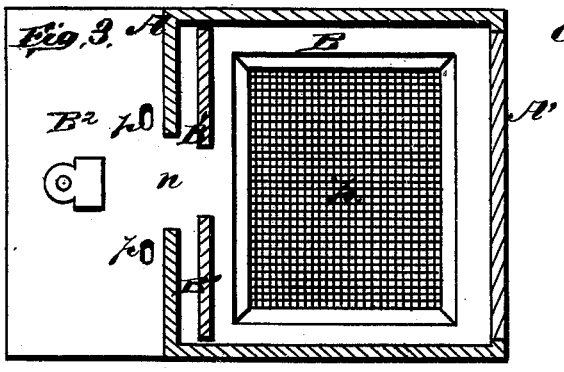
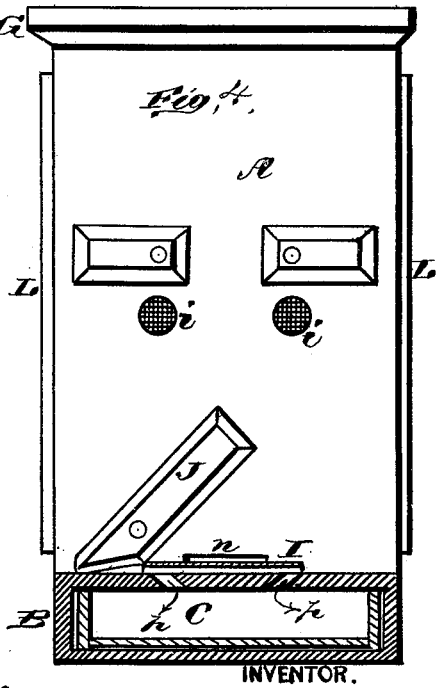
J. F. VAN HORN.

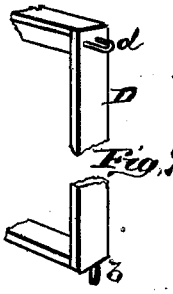
BEE-HIVES.

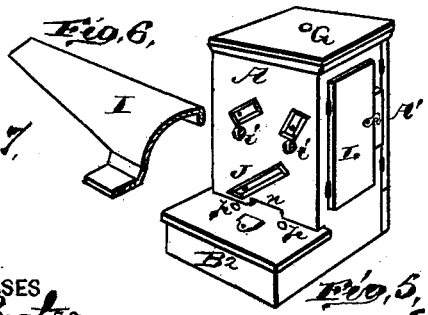
No. 195,422. Patented Sept. 18, 1877.











WITNESSES

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JAMES F. VAN HORN, OF CORSICANA, TEXAS.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. **195,422**, dated September 18, 1877; application filed July 28, 1877.

To all whom it may concern:

Be it known that I, JAMES F. VAN HORN, of Corsicana, in the county of Navarro and State of Texas, 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 longitudinal vertical sectional view of my bee-hive. Fig. 2 is a rear sectional view. Fig. 3 is a horizontal sectional view. Fig. 4 is a part-sectional front view; and Figs. 5, 6, and 7 are perspective details of the same.

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

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents the body of the hive, with movable bottom B, and below this a waste or moth drawer, C, as shown. The hive A is provided in the back with a door, A′, so that the bee-keeper will always operate from the back, or behind the hive, and consequently never gets stung by the bees at work.

D D are the lower frames, which have the comb-guides or bevel tops *a*, which frames can be all pulled out at once with the bottom B; or by lifting the frames a little they can be taken out one at a time; or by removing the top frames and the honey-board they can be taken out from the top. Thus there are three separate and distinct ways of removing the lower frames. These frames D are supported by metal points *b* on the bottom, and wire loops *d*, connecting with pins *e* of the frame-board B^1, allowing them to swing separately, and the said frames are kept apart by metal points *f*, as shown. There is a suitable space—say three-eighths of an inch—above and below on each side, and between the frames. Underneath the frames in the bottom B is a wire-cloth, *h*, to allow the waste to go to the drawer C.

The frame-board B^1 is permanently secured to the movable bottom B, and acts for three purposes, viz: First, as a support for the frames D. Second, the air blowing through the air-holes *i* in the front of the hive comes against said frame-board, and is thereby dispelled sufficiently to not chill the brood, and consequently the bees will not stop them up, and they can be closed in the winter. The third and most important purpose is that this frame-board leaves a passage, *x*, between it and the front of the hive, for the bees to work in the top frames without passing through the lower frame.

By opening the door A′ behind, the operator can work upon the brood-frames and not disturb the top ones; or, by taking off the top of the hive after pulling out the wax-cutter, the top frames E may be removed without disturbing the lower.

The top part of the hive is beveled to an edge, as shown at *y*, so as not to mash the bees in replacing the top G. In this top is a hole closed by a stopper, *k*. This hole, when the stopper is removed, is to blow smoke through.

H is the honey-board, perforated, as shown, with holes of such size that the bees can pass through. This board is so arranged as to leave a space between it and the frames above and below it, thereby deterring the queen from passing up through to the top frames. The top frames G are supported by metal points *m* at each end.

The bottom B is extended forward, and forms the alighting-board B^2, and is, in front of the bee-entrance *n*, provided with a shield, I, of tin or other suitable material. Beneath this shield are two passages, *p p*, leading directly, at the front of the hive, into the drawer C beneath, so that the aroma or odor from the drawer will attract the moth, and cause it to go into said drawer. The shield I slides in suitable guides, so that it can be easily removed for cleaning, when desired.

Over the bee-entrance is a beveled slide, J, for entirely or partially closing said entrance.

In the sides of the hive are glass plates K, covered by hinged doors L, for observing the progress of the work without opening the hive.

Under the top G, to the same, are fastened two rods, *s s*, upon which slides a wax-cutter,

R, operated by a handle, S. This is to be used in case the bees should run little fibers of wax or propolis from the top of the frames to the top of the hive. By pulling out the cutter R all these are cut, thereby preventing the killing of any bees in removing the top.

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

1. In a bee-hive, the frame-board B^1, attached to the sliding bottom B, and provided with pins *e* on its upper edge, in combination with the frames D, having the eyes *d*, pins *f*, and metal points *b*, and with the rear door A' opposite the bee-entrance *n*, substantially as described, and for the purpose set forth.

2. A cutter, R, arranged to slide or be moved close to the under side of the top of a bee-hive, 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 FAUST VAN HORN.

Witnesses:
HAL W. GREER,
JAS. L. AUTRY.