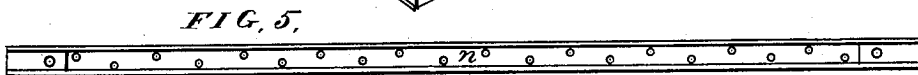
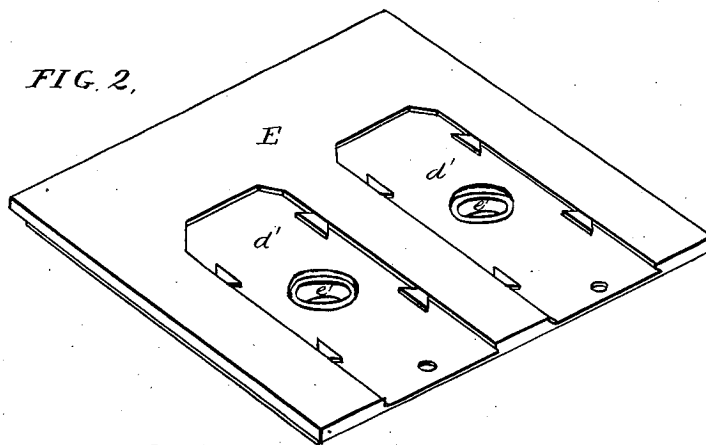
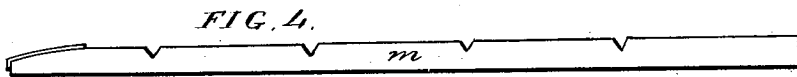
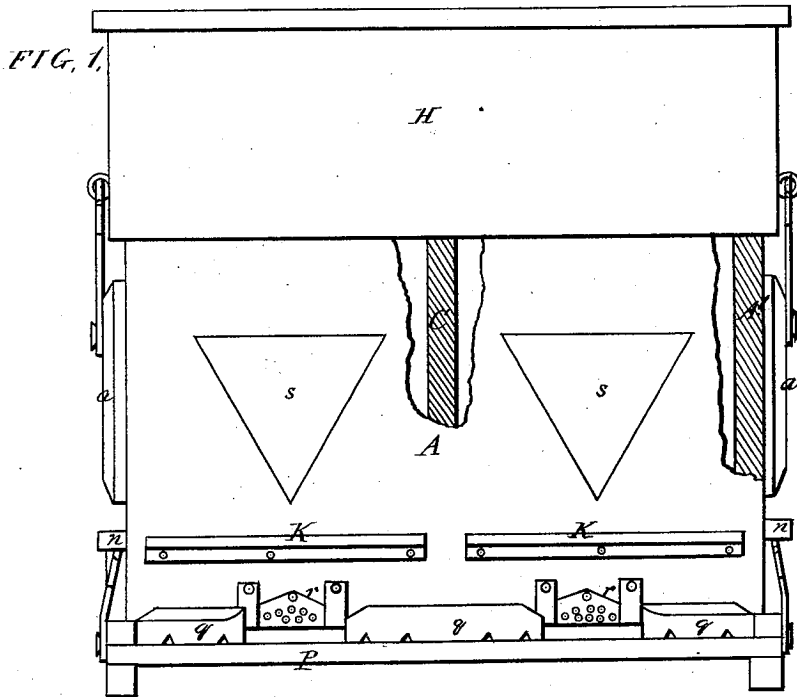


J. NEAL.
Moth-Trap.

No. 164,199.

Patented June 8, 1875.



WITNESSES
Robert Bennett
E. H. Bates

INVENTOR
Jacob Neal,
Clifman & Co.

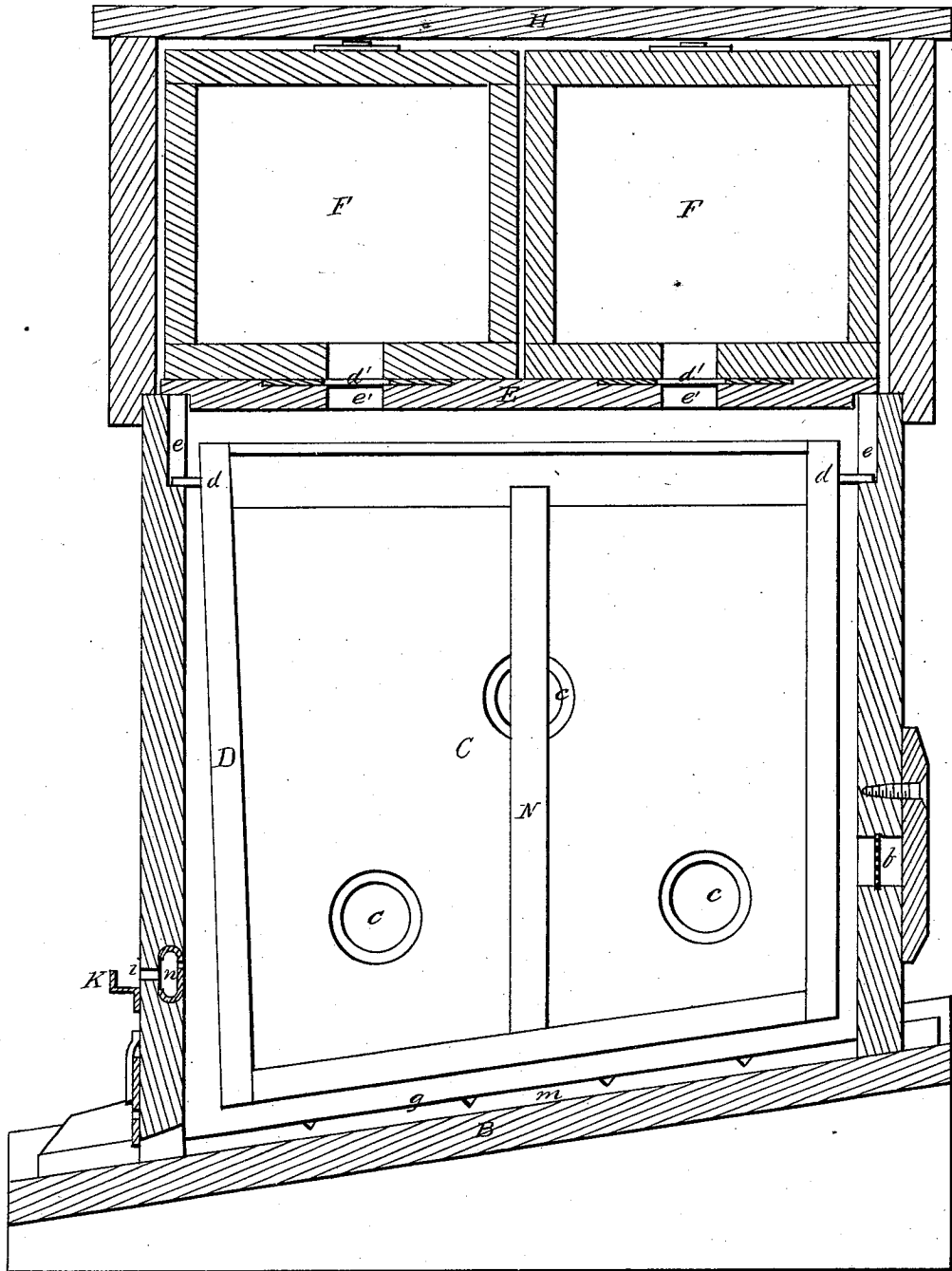
ATTORNEYS

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FIG. 3.



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UNITED STATES PATENT OFFICE.

JACOB NEAL, OF MOULTON, IOWA.

IMPROVEMENT IN MOTH-TRAPS.

Specification forming part of Letters Patent No. **164,199**, dated June 8, 1875; application filed April 24, 1875.

To all whom it may concern:

Be it known that I, JACOB NEAL, of Moulton, in the county of Appanoose and State of Iowa, 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 front view of my bee-hive, and Fig. 2 is a detail view of the same. Fig. 3 is a vertical sectional view, and Figs. 4 and 5 are detail views of the moth-slides.

This invention has relation to bee-hives; and it consists in the construction and novel arrangement of a bee-hive, as hereinafter more fully set forth.

In the accompanying drawings, the letter A designates the wall of the bee-chamber of the hive, provided with observation-windows *a* and ventilating-openings *b*. B indicates the inclined base of the bee-chamber, and C a partition-wall dividing said bee-chamber into two portions, communicating by the passage-holes *c* through the partition. D represents the comb-frames, provided with pivots *d*, which are seated in the vertical notches *e* in the upper and inside edge of the chamber-walls. N are central comb standards or braces. Covering the divisions of the bee-chamber are the boards E, which have passage-openings *e'* and covering-slides *d'*. Upon these rest the honey-boxes F, which are inclosed by the hive-cap H, the lower inside edge of whose wall is rabbeted to fit the edge of the wall of the bee-chamber snugly. Under the transverse walls A' of the hive, and under the partition-wall C in grooves *g*, are located concave moth-slides *m*, the sides of which are notched, to form entrances for the moth from the bee-chamber—the wall of the groove-seat of the slide being sufficiently above the floor of the hive to expose the notch-entrances. At the front of the hive, above the entrances somewhat, a groove-seat is provided on the inside of the wall A, and two moth-slides are introduced therein from opposite sides, as shown at *n*. These slides may be made of wood or metal. The slides *n* are perforated in rear to allow the bee breath-passage into the slide, and out through perforations *i* in the wall of the bee-chamber.

Below these perforations are located ledges or platforms, having their front edges turned upward, as indicated at K, for the reception of the moth, and above these are large spots, *s*, of white paint or paper on the dark wall of the hive, forming a strong contrast, and serving as an addition to the odor of the bees in decoying the moth away from the entrance to the perforations leading into the trap. Below the moth-ledges the inclined base-board projects to form the entrance-platform *p* for the bees. On this are arranged three moth-traps, *q*, and the two spaces between them, when the slot under the hive-wall is open, serve as the entrances for the bees. Drop-slides *r*, which are perforated, serve to close these entrances when it is desired. It will be observed that the aprons or ledges K serve as a check to the miller in its descent toward the bee-entrances. The top of each comb-frame is triangular in cross-section, and from its middle a honey-post extends downward to the bottom of the frame. These sashes or frames are so hung that they do not touch each other, nor are they in contact with the wall of the hive. Therefore the bees are not liable to wax the sash together, or to the hive-wall.

The object of dividing the hive in two parts is to avoid interfering with the bee-bread and brood-comb in taking the honey. The bees always deposit their bee-bread and brood-comb in that division of the hive when they first commence their work—pure honey only being placed in the second division. The base, hive-wall, and honey-cap are secured together at each side by strong hooks and staples, and are adapted to be readily detached from each other when necessary for cleaning or other purposes.

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

The combination, with the perforated hive-wall, of the concave miller-slides in rear of said perforations, and the check-ledges below the moth perforations and above the bee-entrances, substantially as specified.

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

JACOB NEAL.

Witnesses:

JAMES G. WEST,
ISAIAH IRVIN.