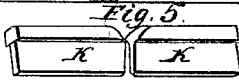
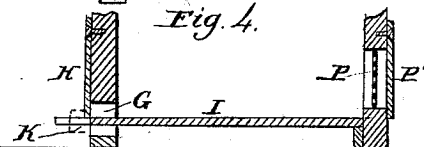
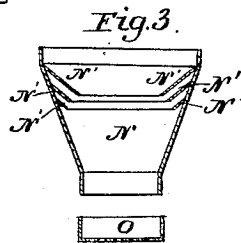
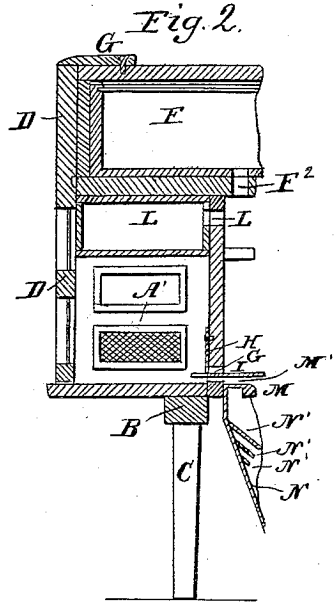
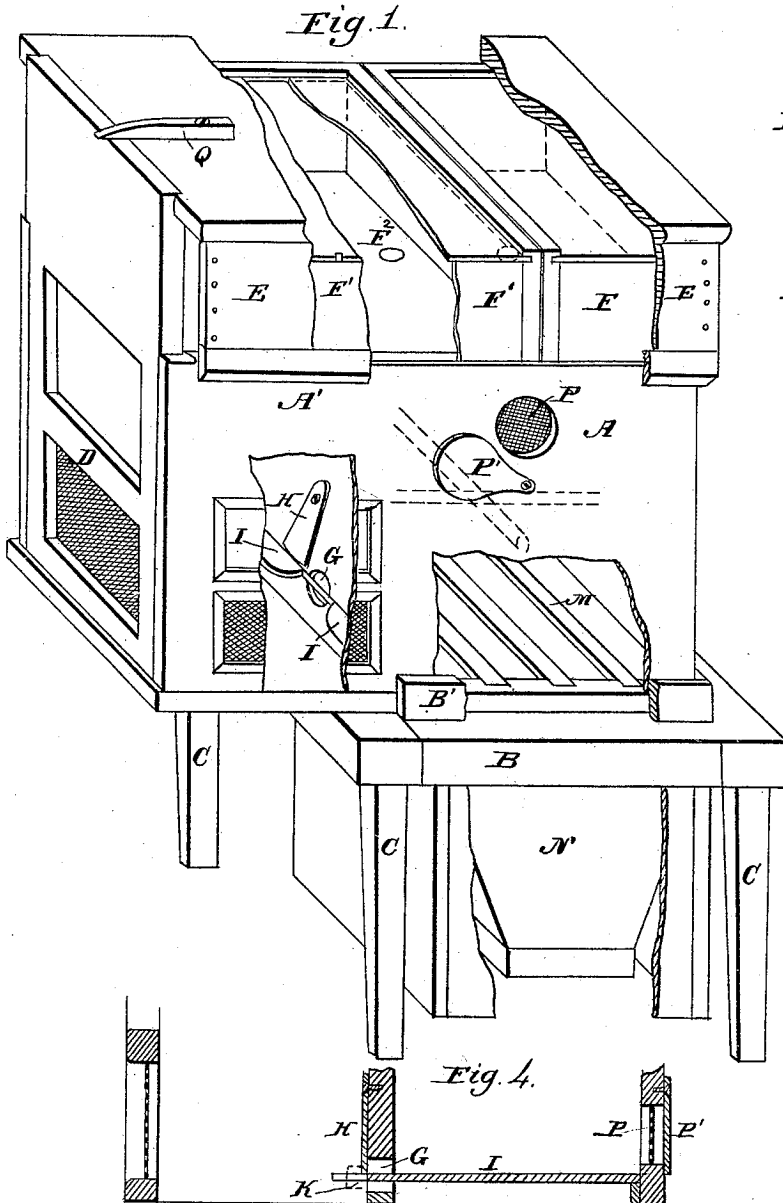


G. GRAFFMAN.

Bee Hive.

No. 56,551.

Patented July 24, 1866.



Witnesses:  
C. F. Clason  
J. A. Connolly

Inventor:  
Gabriel Graffman  
By  
D. J. Holloway, Esq.  
His Atty.

# UNITED STATES PATENT OFFICE.

GABRIEL GRAFFHAM, OF LAWRENCEVILLE, ILLINOIS.

## IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 56,551, dated July 24, 1866.

*To all whom it may concern:*

Be it known that I, GABRIEL GRAFFHAM, of Lawrenceville, in the county of Lawrence and State of Illinois, have invented a new and useful Improvement in Bee-Hives; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, made part of this specification, in which—

Figure 1 is a perspective view of a hive, portions of the casing being represented as broken away to show the interior structure. Fig. 2 is a vertical longitudinal section of the front portion of a hive. Fig. 3 is a vertical longitudinal section of the pit. Fig. 4 is a vertical longitudinal section of the lower portion of the hive, and Fig. 5 is a detached view of the wedges used, as hereinafter described.

In the different figures the same letters refer to identical parts.

A is the case inclosing the body of the hive, resting upon the frame B, supported upon legs C, or in other convenient manner. The case A slides upon the frame between guides B'.

The case A is formed in two parts, one being the body of the hive, and the other, A', constituting a sort of porch in front of the hive. A slide, D, working in grooves in the sides of the case, closes the front of this porch whenever it may be desired. Wire screens and glass windows in the front and sides of the porch give light and ventilation.

A notch in the back of the slide receives the point of the latch Q on the top of the hive, so as to hold the slide when raised. The same latch, when turned over the top of the slide, when let down, secures it in that position.

On the case A, I place caps F and F', covered, if desired, with glass slides, and having openings F<sup>2</sup> fitting to corresponding holes in the top of the case for the passage of the bees. Over these caps I fit the cover E, attached by hooks, so as to protect the caps and at the same time permit their ready removal.

A drawer, L, slides into the upper part of the porch, communicating with the interior of the case by the opening L'.

The bees, entering through the porch, gain admittance to the hive through the hole G.

When it is desired to remove the hive a slide,

I, is passed through slots cut for the purpose in the front of the case on both sides of the opening G, and forming a close bottom for the case A. Ordinarily, when the slide is not used and the bees are at work, these slots are closed by the wedge-formed stoppers K, Fig. 5.

H is a swinging door for closing the opening G when the slide is inserted.

The frame B under the case A is open, being covered only by a grating or bars, M, connected with the hole G by a bridge, M'. (Shown in Fig. 2.)

The pit N fills the space below the grating. It is made in the form of the frustum of a prism. The bottom of this is covered by a perforated floor and closed by the cap O. Around the upper sides of the pit are placed a series of inclined shelves, N', the whole being made of tin or other smooth metal.

Larvæ intruding into the hive and falling through the grated bottom M are unable to climb back upon the walls and around the shelves.

Suitable ventilators P, with swinging doors P', and covered with wire-gauze, are placed in the hive, as required.

Having fully explained the construction of my improved hive for bees, what I claim as my invention, and seek to secure by Letters Patent, is—

1. A bee-hive which combines in its construction the following elements, viz: a pit, N, with sloping shelves N', a case, A, separated from the pit by a grated bottom, M, and having a porch, A', closed by a sliding door, D, and a cover, E, with caps F and F', and a drawer, L, located above the porch, the said several parts being constructed and the whole arranged for use substantially as set forth.

2. The wedge-formed stoppers K, when used for closing the slots in the front of the case after removal of the slide I, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GABRIEL GRAFFHAM.

Witnesses:

I. CONNOLLY,  
C. F. CLAUSSEN.