

GUNN & CAIN.

Bee Hive.

No. 33,484.

Patented Oct. 15, 1861.

Fig. 2.

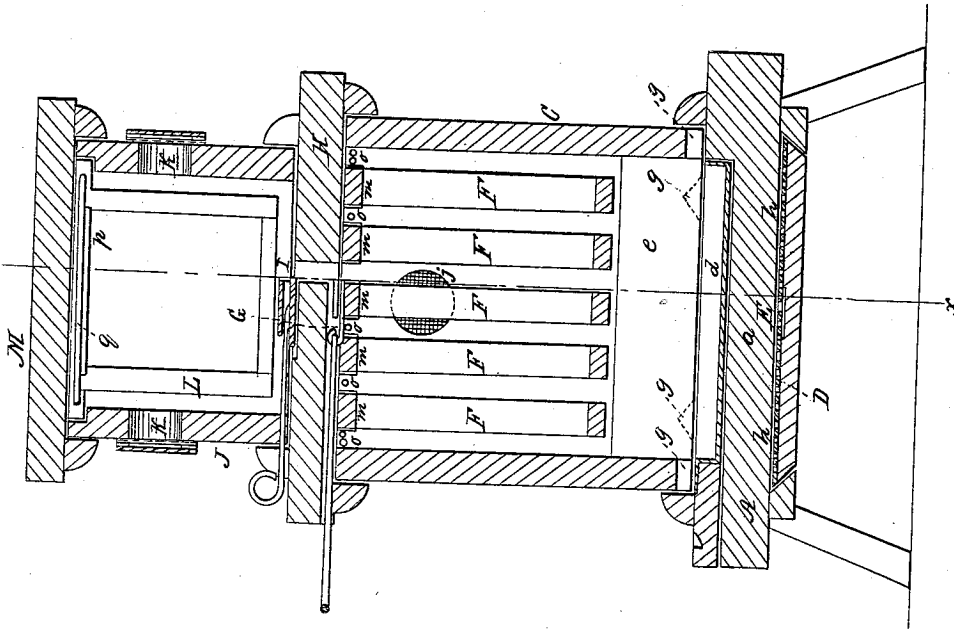
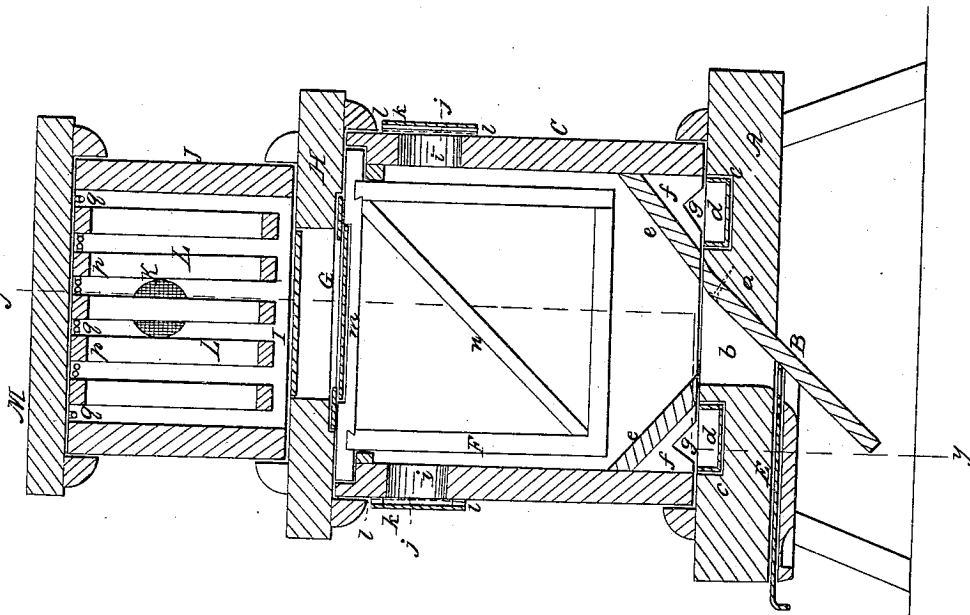


Fig. 1.



Witnesses:

*Steele*  
*W. Tusch*

Inventors:

*D. W. Gunn*  
*C. L. Cain*  
*Per Mumford & Co. Attorneys.*

# UNITED STATES PATENT OFFICE.

D. M. GUNN AND C. L. CAIN, OF OSKALOOSA, IOWA.

## IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 33,484, dated October 15, 1861.

*To all whom it may concern.*

Be it known that we, D. M. GUNN and C. L. CAIN, of Oskaloosa, in the county of Mahaska and State of Iowa, have invented a new and Improved Bee-Hive; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a vertical section of our invention, taken in the line *x x*, Fig. 2; and Fig. 2, a vertical section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to obtain a bee-hive which will admit of a perfect ventilation as well as a more convenient arrangement than hitherto for the confinement of the bees or their separation from the spare-honey boxes with a view of removing the honey therefrom.

To enable those skilled in the art to fully understand and construct our invention, we will proceed to describe it.

A represents a bench on which the hive is placed. The top *a* of the bench forms the bottom of the hive, and said bottom has a slot *b* made in it, one side of which is inclined to receive an apron B, which is inclined and projects some distance below the slot *b*. The slot *b* extends the whole width of the hive, and the apron B is simply a board of suitable thickness and width, the upper part of which is secured by nails to the inclined side of the slot, as shown clearly in Fig. 1. In the upper surface of the bottom *a* there are made two recesses or grooves *c c*, one at each side of the slot *b*. These recesses or grooves receive sheet-metal drawers *d d*, the upper edges of which are flush with the upper surface of the bottom *a*, the drawers being allowed to slide freely in and out of the bottom *a*. The drawers *d d*, like the slot *b*, extend the whole width of the hive.

C represents the lower and main part of the hive. This part C is a hollow cube, and two inclined partitions *e e* are placed in its lower part, said partitions being directly over the drawers *d d*, as shown clearly in Fig. 1, and separating them from the main compartment of the lower part C of the hive. The compartments *f f*, formed by the partitions *e*

*e*, have entrances *g*, which are formed by making notches in the lower edge of part C. The drawers *d d* are supplied with a suitable bait, (molasses or sugar diluted with water,) and the moths are thereby attracted into the compartments *f f*, and perish in the drawers *d d*, the latter being removed from time to time for the purpose of cleansing and replenishing them with fresh bait.

In the under side of the bottom *a* of the part C of the hive, there is placed a slide D, the inner end of which has a piece of perforated sheet metal *h* attached, and when the slide D is closed the perforated metal *h* extends entirely across the slot *b*, which forms the entrance to the hive. At the center of the slide D there is a small sectional slide E, which may be adjusted independently of slide D. This sectional slide E is perforated at its inner end precisely the same as the metal *h* of slide D, and when open and slide D closed admits of a small entrance to the hive. In the upper part of C, at two opposite sides, there are openings *i i*, which are covered by wire-cloth *j j* and have each an outer covering *k* with openings *l* at its edge. These outer coverings *k* obstruct the light and still admit of ventilation through the openings *l*. The coverings *k* may be formed of sheet-metal of rectangular form and bent at their corners to form the openings *l*, the coverings being tacked to the sides of the hive C at their corners. By the use of the perforated slides D E and openings *i i*, covered by the wire-cloth *j* and the light obstructed by the coverings *k*, perfect ventilation is obtained when the bees are confined in the hive and the bees are not annoyed by the admission of light.

F represents comb-frames, which are placed vertically in the lower part C of the hive, their upper cross-rails *m* resting on the top edges of the part C. The comb-frames may be of the usual rectangular form, each being provided with a diagonal bar *n*, as shown in Fig. 1, said bars serving as supports to the comb and also as braces to the frames. The frames F are placed at the usual distance apart, and between their upper rails *m* rods *o* are placed to prevent the bees passing up between them.

G represents a slide which is placed over a space between the two central cross-rails *m*

*m*, and *H* is a cover which is fitted loosely on the part *C* of the hive, said cover having a slide *I* at its center, which is directly over slide *G* at the top of the comb-frames *F*.

On the cover *H* the spare honey-box *J* is placed. This box *J* is provided with ventilating-apertures *K* at its sides, which are arranged precisely like those of the lower part *C* of the hive. The box *H* is provided with comb-frames *L*, the upper cross-pieces *p* of which rest on the top of the box *J*, and wires *q* are attached to the sides of the cross-pieces *p* to prevent the bees escaping up between the cross-pieces *p*. The cover or top *M* of the box *J* is fitted loosely upon it.

By preventing the bees escaping up between the top cross pieces or rails of the comb-frames in both boxes the bees are prevented from waxing or gluing fast the tops or covers of the boxes, and the tops or covers *H M* may therefore be readily removed at any time for inspecting the contents of the boxes or for the removal of honey therefrom. By means of the slides *D E G I* the bees may be

confined in either part *C J* of the hive, so that the unoccupied part may be examined and parts pertaining thereto manipulated with safety.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent, is—

1. The combination and arrangement of the slides *D E G I* with the guard-wires *o q* and the removable covers *H M*, substantially as shown, for the purpose of confining the bees in either part *C J* of the hive and rendering the contents of either part accessible, as set forth.

2. The combination of the perforated slides *D E* with the dark-ventilators *K* and *i* in the hive, constructed and arranged substantially as and for the purpose herein specified.

D. M. GUNN.  
C. L. CAIN.

Witnesses:

R. DUMONT,  
I. RHINEHART.