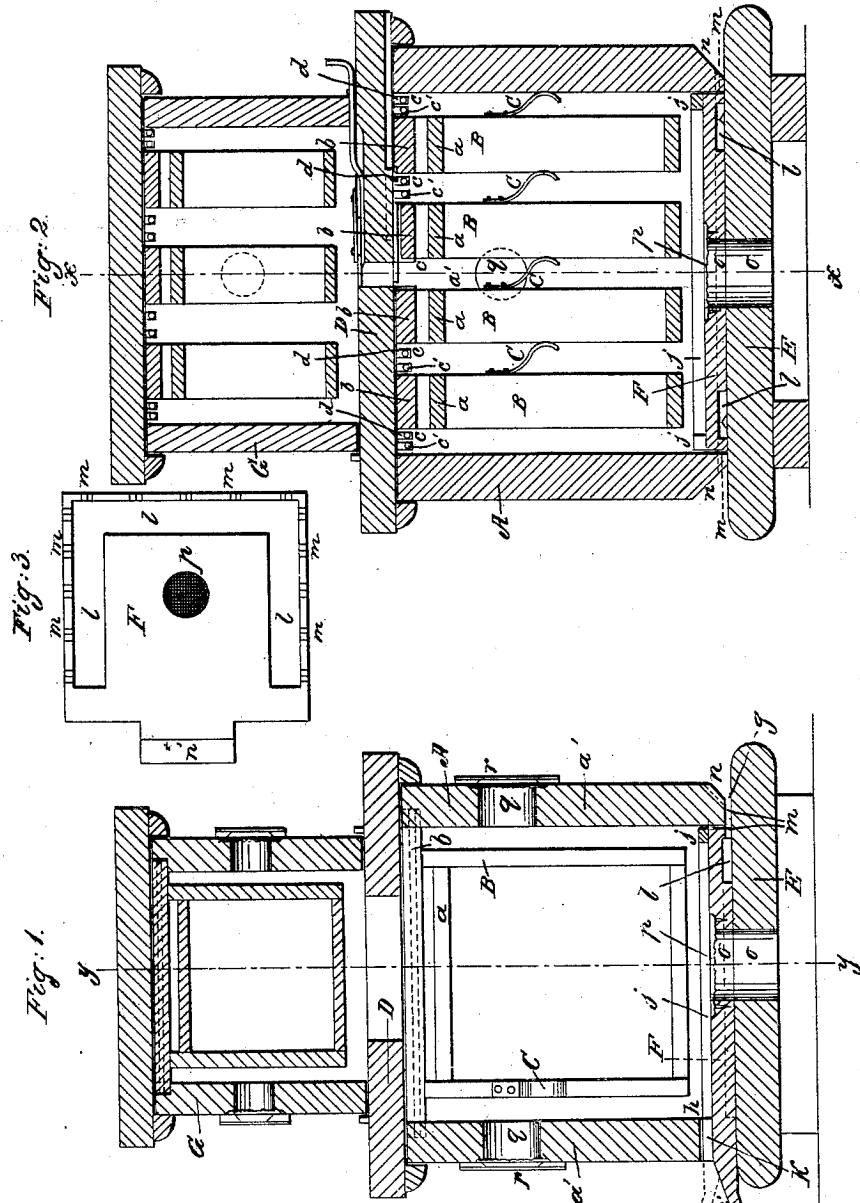


GUNN & CAIN.

Bee Hive.

No. 37,039.

Patented Dec. 2, 1862.



Witnesses:  
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# 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. 37,039, dated December 2, 1892.

*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 certain new and useful Improvements in Bee-Hives; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying 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; Fig. 2, a vertical section of the same, taken in the line *y y*, Fig. 1; Fig. 3, a detached inverted plan of the false or sliding bottom F.

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

The invention relates to an improved means for keeping the comb-frames at a proper distance apart, and also to a novel and improved arrangement of a false bottom applied to the hive in such a manner that the advantages of a proper ventilation are obtained, as well as facilities for cleaning the hive and the guarding of the same against the ravages of the bee-moth.

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

A represents the body or main portion of the hive, which is of rectangular form, and has a series of comb-frames, B, suspended within it. The comb-frames B are of rectangular form, as shown clearly in Fig. 1. These frames B are provided at their upper parts, each with a cross-bar, *a*. These cross-bars *a* are a short distance below the upper cross-bars, *b*, of the comb-frames, sufficient space being allowed between them to admit of the bees passing freely along over the bars *a* and above the combs which are attached to them. This will be fully understood by referring to Fig. 2. The frames B are suspended within the body A of the hive by having the ends of the upper bars, *b*, of the comb-frames fitted in recesses *c*, made in the upper edges of two opposite sides, *a' a'*, of the body A of the hive, and each frame has a spring or elastic projection, C, attached to it, and these springs keep the comb-frames in proper position or at a suitable distance apart within the hive A, as will be fully understood by referring to Fig. 2.

Between the upper parts of the comb-frames B there are placed guard-wires *c'*. These wires have their ends fitted in recesses *d* in the upper edges of the sides *a' a'* of the body A. These recesses extend down nearly to the level of the lower surfaces of the upper cross-bars, *b*, as shown in Fig. 2. The guard-wires *c'* prevent the passage of the bees between the upper ends or top of the comb-frames, and in consequence of having the comb-frames provided with the supplemental cross-bars *a*, a passage is not only formed for the bees above the bars *a* and between them and the bars *b*, so that a communication will be obtained between the comb-frames, but the bars *a* also admit of the guard-wires *c'* being placed lower down than usual, and sufficiently far from the cover D of the body A to prevent the bees from gluing or waxing the wires to the under surface D.

E represents the bottom of the hive, which is connected to the lower edge of one side, *e*, of the body A by hinges *g*, and F is a false or sliding bottom, which is placed on the bottom E, and is allowed to slide freely in and out through a recess, *h*, at the bottom of the front side of the body A of the hive. The false or sliding bottom F is provided all around its edge with a vertical cleat, *j*, and a recess, *k*, is made at the center of the cleat at the front side of the bottom F, said recess *k* affording a passage for the bees to enter and leave the hive. In the under surface of the false or sliding bottom F there are made recesses *l*, which extend around three sides of said bottom near its edges, and the spaces between said recesses *l* and the edges of the bottom are notched, as also are the bottom edges of the sides of the body A of the hive, as shown at *m* in Fig. 1. These notches *m* form a communication between the recesses *l* and the external air, and the lower edges of the sides of the body A are beveled, as shown at *n*, in order to allow the moths to freely pass into and through the passages *m* into the recesses *l*, which serve as moth-traps.

The front edge of the false or sliding bottom F is provided with an inclined projection, *n'*, which is directly in front of the entrance *k*. This projection *n'* serves as an alighting-board, as shown clearly in Fig. 1.

At the center of the false or sliding bottom

F and the bottom E there are made openings *o*, which serve as ventilators, and over the opening of the false or sliding bottom F there is placed a wire-cloth, *p*. Ventilating-openings *q* are also made in the sides of the hive, covered with wire-cloth and protected by a cover, *r*.

At any time when it is desired to confine the bees within the body A of the hive, as in winter, for instance, the false or sliding bottom F is withdrawn and inverted and then replaced. By this the hive is deprived of an entrance, and the recesses *l*, being uppermost, are made to serve as a feeding-trough. The upright cleat *j* around the false or sliding bottom F affords great facilities in cleaning the hive, as it retains all filth and trash upon said bottom and enables the latter to be withdrawn from the hive without having the filth escape from it.

The spare-honey box G at the top of the

body A may be provided with comb-frames arranged precisely like those in the body A.

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

1. The springs or elastic projections C, attached to the comb-frames B, as and for the purpose herein shown and described.

2. The false or sliding bottom F, provided with a cleat, *j*, all around its edge, and an alighting-board, *n*, and also provided with recesses *l* in its under surface, in connection with the notches *m* in the under side of the bottom and in the lower edges of the sides of the bottom of the hive, substantially as and for the purpose herein set forth.

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Witnesses:

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