

R. BLAIR.
Bee-Hives.

No. 148,281.

Patented March 10, 1874.

Fig. 1.

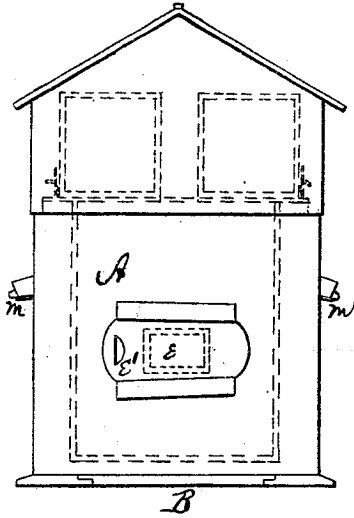


Fig. 2.

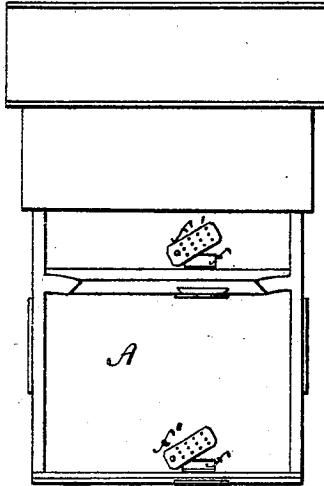


Fig. 3.

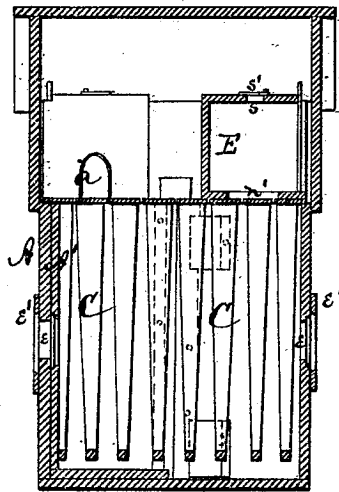
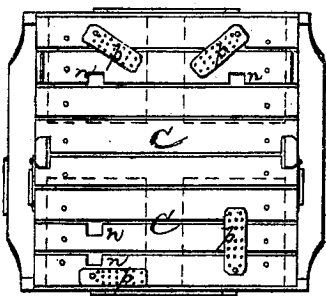


Fig. 4.



Witnesses;
L. P. Himes.
C. L. Ewert

Inventor;
Robert Blair,
By J. Mc. Perkins
Attorney.

R. BLAIR.
Bee-Hives.

No. 148,281.

Patented March 10, 1874.

Fig. 5.

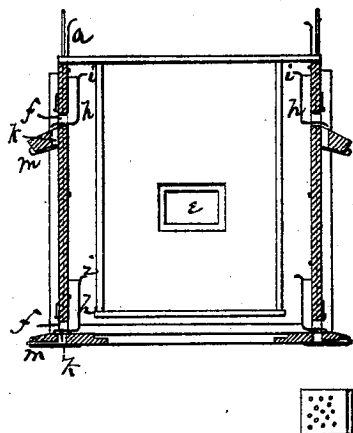


Fig. 6.

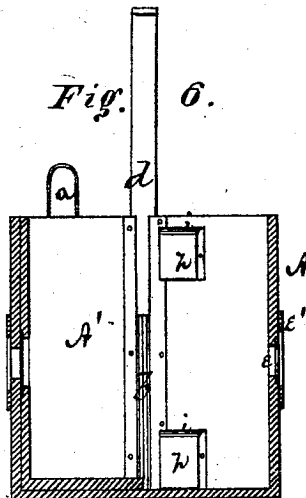
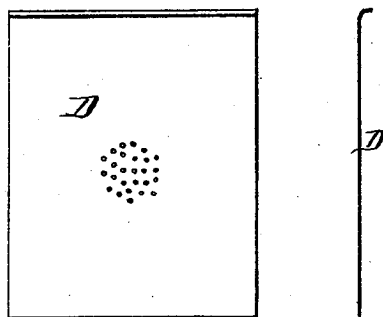


Fig. 7.



Witnesses;
L. D. Gimes.
C. L. Ewert.

Inventor;
Robert Blair
By J. McC. Perkins
 Attornes.

UNITED STATES PATENT OFFICE.

ROBERT BLAIR, OF PERRYOPOLIS, PENNSYLVANIA.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. **148,281**, dated March 10, 1874; application filed January 26, 1874.

To all whom it may concern:

Be it known that I, ROBERT BLAIR, of Perryopolis, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Bee-Hives; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

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

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of the specification, and in which—

Figures 1 and 2 are side views of the hive. Fig. 3 is a longitudinal section of the same; Fig. 4, plan view of the main hive. Figs. 5 and 6 are sections of the main hive. Fig. 7 shows a partition used in the same.

The hive proper consists of a box, A, of suitable dimensions, to be placed upon any desired support, and is provided with a sliding bottom, B, for the purpose of giving ventilation, and for cleaning out the interior of the hive. One-half of the box A is made double, forming a three-sided box, A', which is provided with bails or handles *a a*, so as to be easily lifted out and put in. This is to be used in swarming, when the box A', with the swarm in it and closed on all sides by means of the frames C C and a sliding partition-board, D, may be lifted out and placed in an empty hive, after which another box with empty frames is inserted in its place. On the inner side of the front and back are formed vertical grooves *b b*, for the insertion of the partitions D D, one of said grooves being formed in the movable box A', and the other in the main hive A. When the partitions are not in use, the grooves *b b* are covered by slides *d d*, to prevent the bees from waxing up the grooves. In the sides of the box A are glass-covered openings *e*, with sliding doors *e'*, so that the bee-keeper, by opening said doors, can at any time see the bees at work. In both the front and the back are two bee-entrances, *f f*, one at the bottom and the other at any desired height above

the same, each being provided with a perforated door, *f'*, so that when said doors are closed there will still be proper ventilation of the hive. Each entrance *f* leads into a vertical tube, *h*, which is closed at its lower end, forming a passage, through which the bees must pass upward to get into the hive. At or around the top of the tube *h* is a projecting ledge, *i*, upon which the bees may lodge, for guarding the entrance when it is too cold for them to be at the entrance. Below each entrance *f*, on the outside, is an aperture, *k*, leading into a perforated moth-cup, *m*, into which the miller is attracted by the light through the perforations, and once in he cannot escape. These moth-cups may be drawn out to be cleaned.

The comb-frames C C are made of such size that their top bars will form a lid or cover for the brood-chamber formed by the box A. These frames are all tapering, as shown in the drawing, which will compel the bees to build their combs in that form, so that any frame or frames may be lifted out without injuring the combs.

In the top bars of the frames C C are made openings *n n*, to correspond with similar openings *n' n'* in the bottoms of the honey-boxes E E, which are placed on top of the comb-frames. The openings *n n* may be closed by means of perforated slides *p p*, and still allow of proper ventilation.

The honey-boxes E are made in any suitable form, with glass in one end, so that the keeper can easily see when they are full. In the top of each box E is a hole, *s*, for the purpose of blowing tobacco-smoke into the box to drive out the bees when it is desired to remove the box. This hole *s* is covered by a slide, *s'*. The whole hive thus constructed is covered by a cap, G, made angular, as shown, so as to allow the rain to pass off freely.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A bee-hive having sliding bottom B and the removable box A', provided with handles *a a*, slot *b*, and window, as shown and specified.
2. The vertical grooves *b b*, arranged in the sides of the hive A and box A', in combina-

tion with the partitions D D and slides *d d*, for covering the said grooves when not in use, substantially as and for the purposes herein set forth.

3. The tubes *h h* below and above, provided with ledges *i i* around their upper ends, arranged, in combination with the entrances *f f*, as shown and specified.

4. The tapering comb-frames C C, so constructed that the top bars thereof form the

cover for the brood-chamber, as and for the purposes herein set forth.

In witness that I claim the foregoing I have hereunto set my hand this 12th day of January, 1874.

ROBERT BLAIR.

In presence of—

B. C. SLOCUM,
C. C. MARTIN.