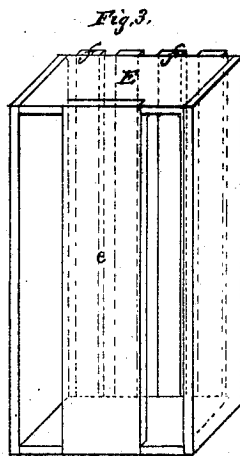
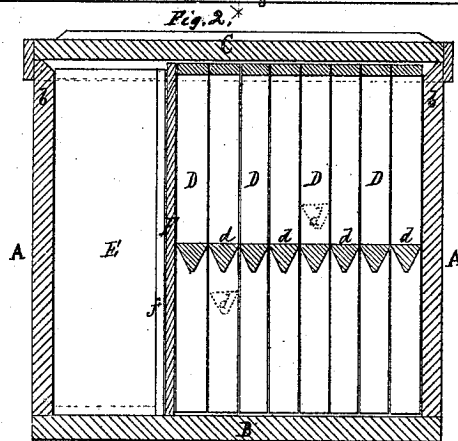
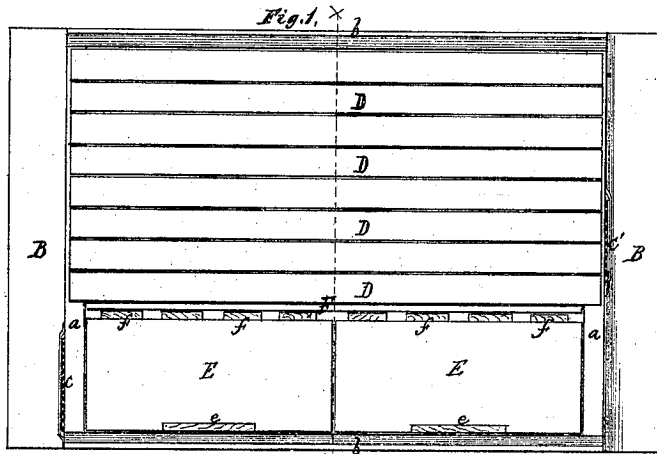


A. Bradshaw,

Bee Hive.

No. 111,310.

Patented Jan. 31, 1891.



Witnesses:

John W. Pyle
J. H. Foster

Inventor.

Arthur Bradshaw
by Geo. W. Colwell
Att'y.

United States Patent Office.

ARTHUR BRADSHAW, OF RANTOUL, ILLINOIS.

Letters Patent No. 111,310, dated January 31, 1871.

IMPROVEMENT IN BEE-HIVES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ARTHUR BRADSHAW, of Rantoul, in the county of Champaign and State of Illinois, have invented a new and useful Improvement in Bee-Hives; and I do hereby declare the following to be a full, clear, and exact description thereof, sufficient to enable those skilled in the art to which my invention appertains to fully understand and to make and use the same, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 is a top view of the hive with the cover removed;

Figure 2, a transverse central section thereof through the line *x x*, fig. 1; and

Figure 3, a perspective view of one of the honey-boxes detached.

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

My invention comprises improvements in the arrangement of the entrances and ventilators, in the construction of the comb-frames and honey-boxes, and in the partition between the boxes and frames.

The invention consists in the construction, arrangement, and combination of parts, as hereinafter described and claimed.

In the drawing—

A represents the outer box or hive, made, by preference, in rectangular form, as shown, and provided with a base or bottom, *B*, extending beyond the ends *a a*.

C is the cover, adapted to fit over the upper edge of the box.

The sides *b b* of the hive may be beveled at the top, on the inside, as represented.

D D are the comb-frames or sash suspended within the box by their projecting ends, which rest upon the upper edge of the parts *a a*.

E E are the honey-boxes, placed on end at the side of the hive, and separated from the comb-frames by a partition-board, *F*, which is made removable for a purpose to be hereinafter described.

In each end of the box *A* is an opening, which serves the double purpose of an entrance and ventilator. These openings are each provided with a removable covering of wire-gauze, *c c'*.

The openings are not in line with each other, but one, *c*, is opposite the honey-boxes, while the other communicates with the space occupied with the comb-frames.

The object of this arrangement is to prevent the bees from entering the honey-boxes before they have filled the frames, the entrance *c* being closed and the partition-board placed as shown for this purpose.

The gauze coverings may be placed over the entrances at any time to exclude "robbers." They are intended to be always used after working-time, to prevent "millers" from entering. Even when the entrances are closed sufficient air will pass through to freely ventilate the hives.

The comb-frames are constructed with cross-bars *d*, so secured as to be readily detached and adjusted up and down.

This is an important feature, for the reason that in transferring comb, young brood, and honey-comb from another hive, the bars *d* can be adjusted to support either a large or small piece of comb.

Before putting in a new swarm of bees the bars *d* are to be secured at the upper part of the sash, so as to secure straight comb.

The partition *F* is simply a thin piece of wood, of the same length and depth as the interior of the hive. Its use, as above referred to, is this: In the position in which it is represented in the drawing it prevents the bees from building in the honey-boxes before they have filled the comb-frames. Another use, when placed in the center of the hive, is to form two separate compartments in the fall, so as to winter over two "queens" in each hive.

The honey-boxes, as shown in fig. 3, are constructed with solid ends and sides, while the front and back are provided with slats *e f f*. This construction is not only cheap and durable, but I have found that bees will work in them more readily than in those of other makes.

The sashes can all be removed, with their contents, to a small frame, the hive cleansed, and the bees restored in a few minutes, thus preventing the "moths" and other intruding insects from doing any damage.

I do not claim, broadly, a partition in the lower part of the hive; neither do I claim, specially, the placing of the entrances out of line with each other; but

Having thus described my invention,

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

The arrangement of the slatted honey-boxes in one end of the hive, and resting endwise on the bottom thereof, with relation to the comb-frames, movable partition, and entrances, all as herein set forth, for the purposes specified.

To the above specification I have signed my name this 11th day of August, 1870, in the presence of the two subscribing witnesses.

ARTHUR BRADSHAW.

Witnesses:

E. W. SMITH,
DAVID CARTNER.