

M. J. STEARNS,

2, Sheets, Sheet 1.

Bee Hive.

No. 111,626.

Patented Feb. 7, 1871.

Fig. 1.

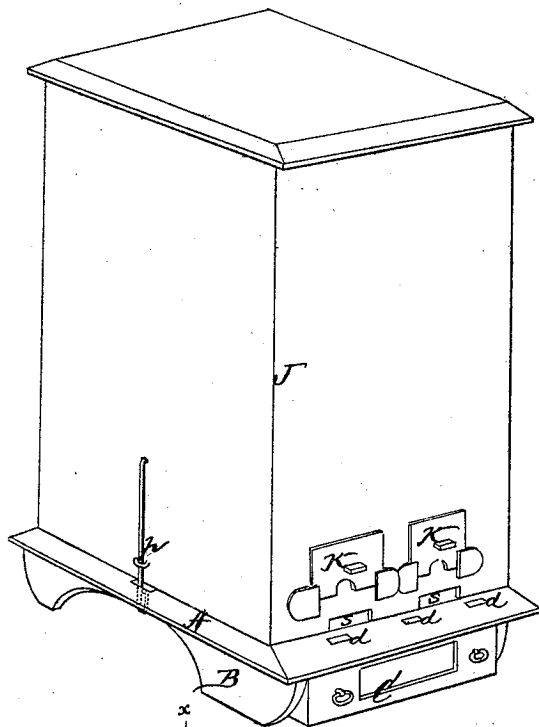
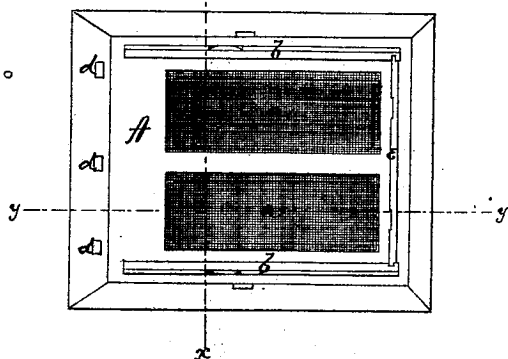


Fig. 2.



Witnesses:
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Inventor:
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M. J. Stearns,

Bee Hive.

No. 111,696.

Patented Feb. 7. 1871.

Fig. 3.

Fig. 4.

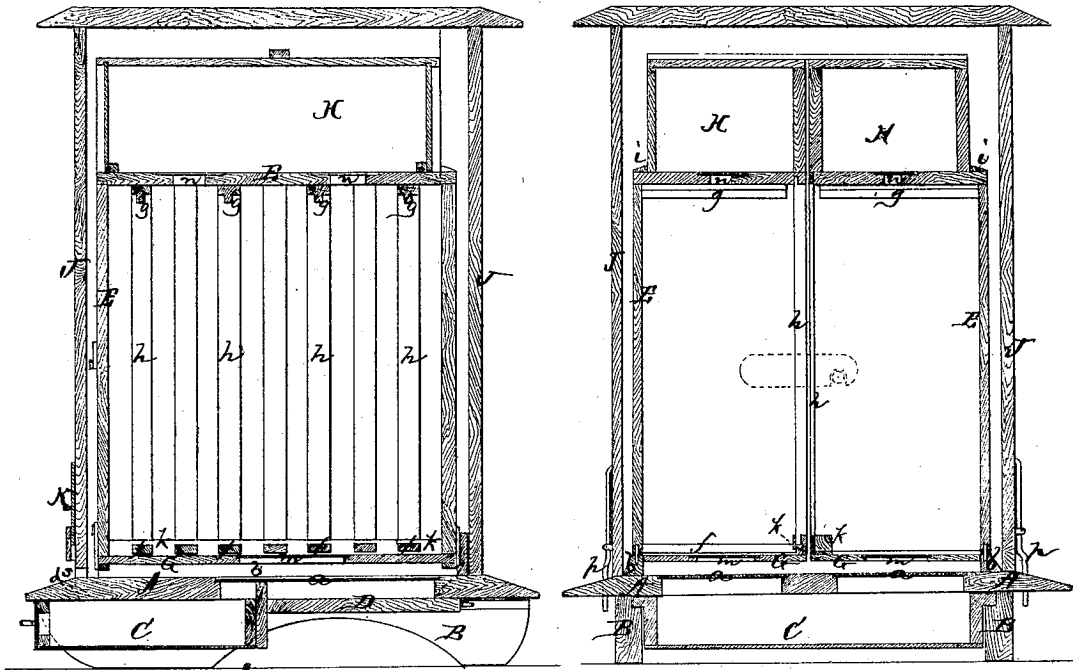
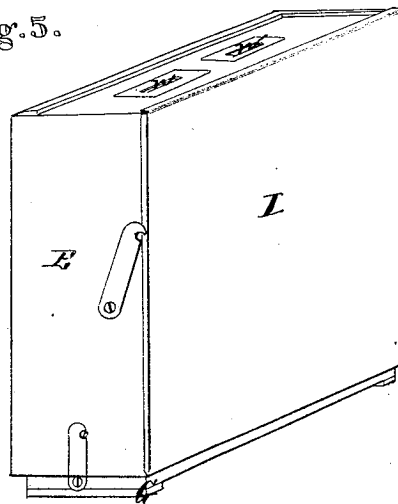


Fig. 5.



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MONROE J. STEARNS, OF GALESVILLE, WISCONSIN.

Letters Patent No. 111,696, dated February 7, 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, MONROE J. STEARNS of Galesville, in the county of Trempealeau and State of Wisconsin, have invented a new and valuable Improvement in Bee-Hives; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of my bee-hive in perspective;

Figure 2 is a plan view of the base or bottom of the hive;

Figure 3 is a longitudinal vertical section of the hive through line *y y*, fig. 2;

Figure 4 is a transverse vertical section of the same through line *x x*, fig. 2; and

Figure 5 is a perspective view of one half the inner hive.

The nature of my invention consists in the construction and arrangement of a bee-hive; and

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.

A represents the bottom board or base, which contains two screens *a a*.

The legs B B form the cleats for the bottom board, and form also the slides for the drawer C, as well as for the damper D back of the drawer.

On top of the board A are also two pieces, *b b*, on which the inside hive rests, and which pieces form another set of cleats, preventing said bottom board from warping.

At the front of the bottom board A are three holes, *d d*, which are designed to take the millers down into the lighted drawer C, from which there is no chance of escape when they are once in.

The damper D back of the drawer is so constructed that the bees may be given more or less air, as may be desired.

At the rear ends of the cleats *d d* are grooves, in which is placed a slide, *e*, for the purpose of keeping the bees from going in between the hive and the case, and it can be raised up when necessary to clear the bottom board of dead bees, giving the rake a perfect chance to work.

The inside hive is composed of two separate boxes, E E, the inner adjoining sides and bottom being formed of slats.

The short slats *f f* form the rest for the comb at the bottom of the hive. There are also tongue-guides, *g g*, at the top of the hive, to fasten the comb.

The top board of each box E is grooved on the

under side to receive the upper ends of the slats *h h*, and across the lower end is a bar, *k*, grooved on both the top and the inside to receive the ends of both the upper and lower slats. By removing a screw in each end of the bar *k*, the slats can be all taken out with the comb.

A false bottom, G is also connected with each of the boxes E, which bottoms are only used when it is desired to transfer the bees to another hive. These bottoms are provided with screens *m* to give the bees air when they are operated with. They are slipped under and hasped on, as shown in fig. 5, when desired to move the hive.

At the top of each box are two holes, *n n*, to let the bees up to the drawers H H, on top. These drawers are open at the bottom, with glass ends, and are kept in place by cleats *i i*, on the outside.

The slats *h h* and *f f* may be made of wood or metal. They serve the purpose of preventing the bees from connecting the comb in the two parts, and leave the hive so it can be separated, one part taken out and an empty one put in its place.

There is also a cut-off, I, connected with this hive. This is made of tin, with flanges on three sides, and is used in transferring bees.

The outside case J is first removed; then slip the two false bottoms G G under and hasp them on; then turn back the hasps that hold the two boxes together; then separate them just enough to get one of the cut-offs I down between them, and fasten it with a nail on each side; then slip the other in and fasten.

The bees in either one of the boxes may now readily be transferred to an empty box without letting a single bee get out of the hive or be injured.

The outside case J is so constructed that it leaves a half an inch between it and the inside hive. This space is for dead air, making it cooler in summer and warmer in winter. This case is fastened on with wire hasps and keys *p* on the bottom.

On the front of the casing J are guards K, so constructed that if one swarm attempts to rob another, they can be shut down so that one bee can guard the entrances *s*. Then at night the guard can be taken out and turned over to close up the entrance. This sends the miller down in the drawer C.

When the hive is closed in this manner for the night the damper D on the bottom is opened, and the bees will have plenty of air.

Having thus fully described my invention,

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

1. The arrangement of the bottom A, legs B B, drawer C, damper D, screens *a a*, cleats *b b*, slide *e*, and entrances *d d*, all substantially as shown and described, and for the purposes set forth.

2. The box E, constructed as described, with slats *f f* and *h h*, guides *g g*, bar *k*, and openings *n n*, all substantially as and for the purposes herein set forth.

3. In combination with a hive formed of the two boxes E E, constructed as described, the false bottoms G G and cut-offs I I, substantially as and for the purposes herein set forth.

4. The combination of the bottom A with drawer C and damper D, the boxes E E, false bottoms G G, honey-boxes H H, cut-offs I I, and outer case J, with

its guards K K, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

MONROE J. STEARNS.

Witnesses:

EDW. F. WADE,
B. F. HEUSTON.