

P. S. Ward.

Bee Hive.

No. 36,740.

Patented Oct. 21, 1862.

Fig. 1.

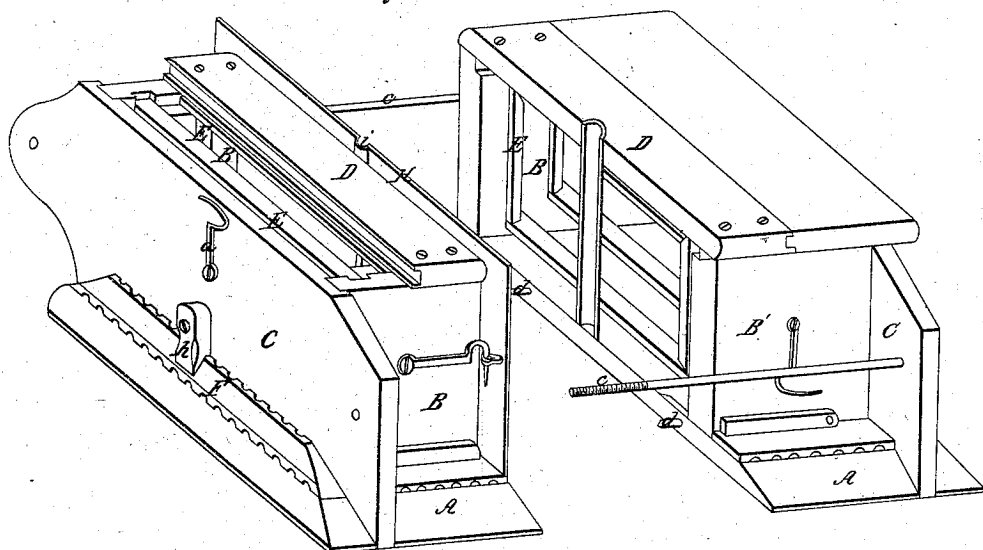
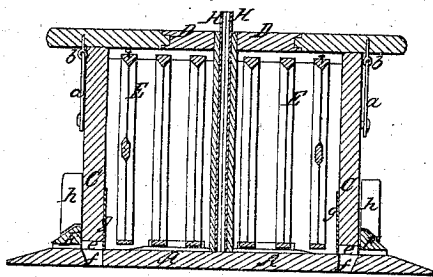


Fig. 2.



Witnesses;
James H. Bradley
J. A. Schuchman

Inventor;
P. S. Ward
By [Signature]
Attorney

UNITED STATES PATENT OFFICE.

P. S. WARD, OF MILLVILLE, IOWA.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 36,740, dated October 21, 1862.

To all whom it may concern:

Be it known that I, P. S. WARD, of Millville, in the county of Clayton and State of Iowa, have invented a new and Improved Bee-Hive; and I 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 represents by a perspective view a divided hive embodying my invention, some portion of each division or part being removed, to show the interior. Fig. 2 represents a transverse section of the same all together.

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

The objects of this invention are, first, to enable the apiarist at any time to inspect the working of the bees and to observe their condition, and also to enable him at any time proper to divide the colony, and safely form two families out of one; second, to obtain a more effectual means of protecting the bees from the ravages of the moth.

The invention consists in forming a hive in two equal uniform parts, and adapting said parts to be used separately or combined; also, in a peculiar construction of moth-trap, all as will be hereinafter fully explained.

To enable others skilled in the art to fully understand and use my invention, I will proceed to describe its construction and operation.

In Fig. 1 of the drawings the hive is represented as separated into two parts. Each of these parts is composed of a bottom board, A, end pieces, B B', side pieces, C, and top board, D. The top board, D, is formed in two parts, one of which is permanently attached to the top edges of the end pieces, B B', by common wood-screws. The other, being provided on its inner edge with a tenon adapted to fit a mortise in the other, is thereby secured at its back edge, while it is fastened in front by a hook, *a*, and eye *b*. (Shown clearly in Fig. 2.) By having only a portion of the top removable the comb-frames may be introduced or removed at pleasure without danger of disturbing the bees. The side boards, C C, at each end project some distance beyond the end pieces, forming ears, through which, when the two parts of the hive are put together to form a perfect hive, metallic rods *c c* are fitted, said

rods having a head on one end and a thumb-screw on the other, whereby the two parts of the hive are brought firmly together, being prevented from vertical or lateral movement independently by dowel-pins *d d'* on the inner edge of one bottom board entering corresponding holes in the inner edge of the other.

The sash or comb-frames E are made in the usual manner, and suspended at their upper ends on rabbets formed in the inner top edges of the end pieces, B B'.

In the angle formed on the outside of each part of the hive by the union of the bottom and side boards, A and C, respectively, is fitted a triangular block, F, having notches cut in the two inner sides. These, when the block is adjusted in position, open into a space, *e f*, formed by cutting away the bottom edge of the side board, C, and by cutting a mortise, *f*, down through the bottom board, A, directly under the side board, C. (Shown clearly in Fig. 2.) The object of these blocks F with openings is to invite the moth to deposit its eggs in the small spaces.

To prevent the moths from entering the hive, a metal plate, *g*, perforated with small holes, is fastened against the side board, C, on the inside, directly opposite the openings in the triangular block F. The small holes or perforations in the plate *g* allow fresh air to pass into the hive for the purpose of ventilation, but are too small to allow the moth or its larva or caterpillar to enter. The blocks F are secured in place by a button, *h*, (which is fastened by a screw to the side board, C,) and may be taken off and put back at pleasure. From the inner bottom edge of the block F, when in position on the hive, the mortise *f* in the bottom board, A, is beveled sharply, (shown in Fig. 2,) so that if the caterpillar comes outward it is very liable to fall off. If it goes in, it falls through the mortise in the bottom board, A, onto the ground. Similar blocks are fitted in front, directly under the passage or entrance to the hive, with corresponding openings in the bottom board.

The two parts of the hive being together, to separate them either for inspection or for permanent division, two metallic plates, H H, which may of sheet-iron or zinc, are placed between them, a sufficient-sized space being made to admit them by loosening the rods. One of these plates H is then fastened to each

part of the hive by a hook at each end catching into a staple soldered to the plates.

In order to have the plates properly adjust themselves when introduced between the two parts of the hive, a depression is formed across the center of each of them, forming a rib, *i*, on its back side. These ribs *i* enter corresponding grooves formed in posts, of which there is one in each part of the hive. The plates being adjusted and fastened and the rods removed, either part of the hive may be taken from the other and an empty half-hive put in its place. The two parts being then fastened together and metallic plates removed, as before explained, the bees in the old part will enter and fill the empty new part, and hence the colony will be doubled.

In case it is simply desirable to examine into the condition of the colony after separation, as above, and the bees have become quiet, the metallic plate may be unhooked and dropped over, so as to allow a full view into the hive.

If preferred, long hooks and eyes may be used instead of the rods and thumb-nuts for fastening together the two parts, to form a perfect hive.

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

1. The combination of the metallic plates *H H*, hooks and eyes *a b*, respectively, and rods *c c*, with the two parts of a divided hive, when the whole is constructed and arranged in the manner and for the purpose set forth.

2. The combination of the blocks *F* and buttons *h*, or their equivalents, with the mortises *e f* and perforated plate *g*, when constructed and arranged in the manner and for the purposes set forth.

P. S. WARD.

Witnesses:

JOHN V. BALL,
W. W. FLENNIKEN.