

*F. Brewer,
Bee Hive.*

No. 112,317.

Patented Mar. 7, 1871.

Fig. 1.

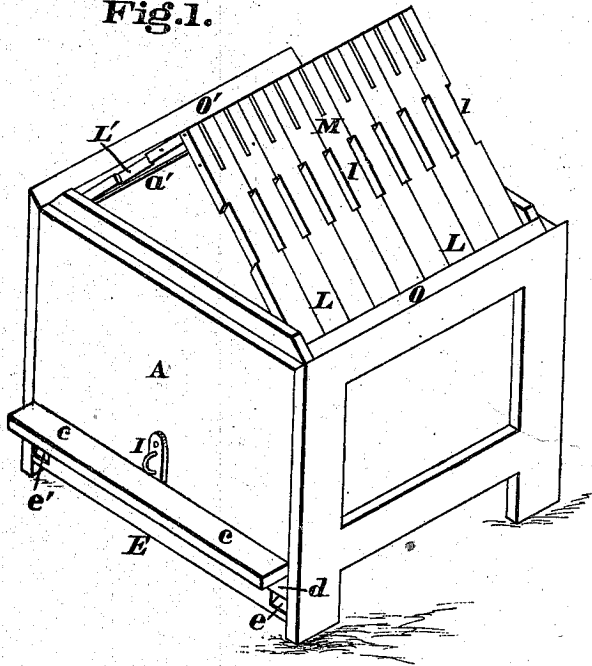


Fig. 2.

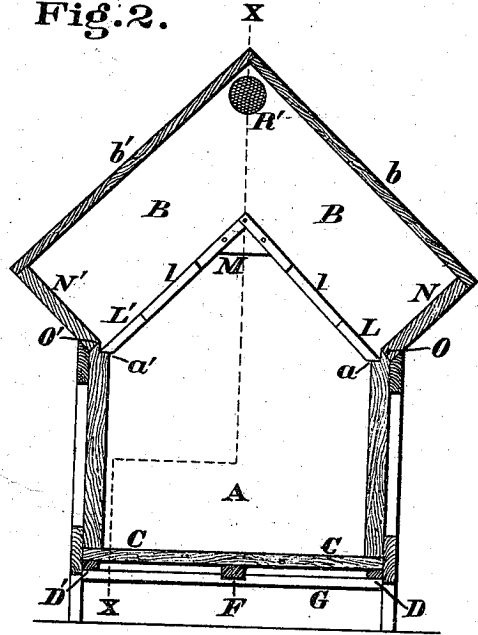


Fig. 3.

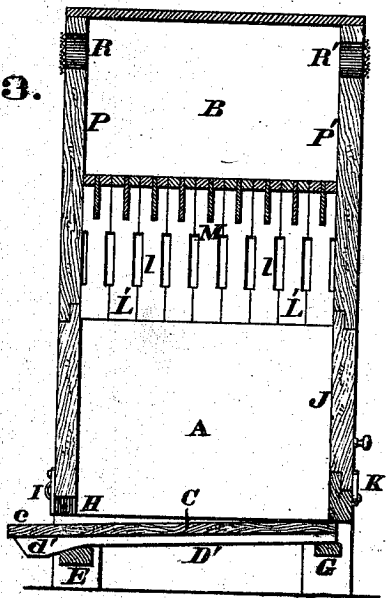
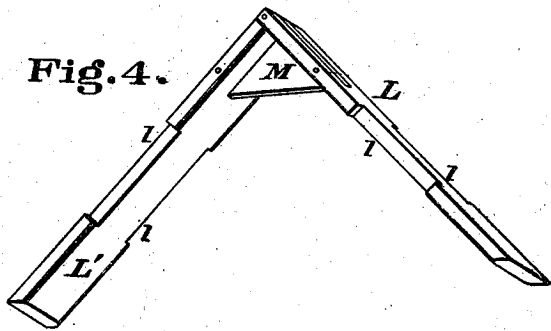


Fig. 4.



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*atys.**

Attest.

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United States Patent Office.

FELIX BREWER, OF WAYNESVILLE, MISSOURI.

Letters Patent No. 112,317, dated March 7, 1871.

IMPROVEMENT IN BEE-HIVES.

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

I, FELIX BREWER, of Waynesville, Pulaski county, Missouri, have invented an "Improved Bee-Hive," of which the following is a specification.

Nature and Objects of the Invention.

The first part of my invention relates to the comb-frames, which are made of a roof shape, with their apexes directly in line with the center of the hive, and with their bases resting upon the tops of the side walls of the breeding-chamber, by which arrangement said frames are rendered capable of being lifted from the hive whenever desired.

The second part of my improvements relates to the peculiar shape of the hive, which is constructed in such a manner as to form a brood-chamber below and a honey-chamber above, the two apartments being separated by a series of the aforesaid roof-shaped comb-frames.

General Description with Reference to the Drawing.

Figure 1 is a perspective view of my improved bee-hive, with the upper or honey-chamber removed;

Figure 2 is a vertical section through the entire hive in the plane of the comb-frames;

Figure 3 is a vertical section at right angles to the previous one, the section being taken at the line X X;

Figure 4 is an enlarged perspective view of one of the comb-frames.

My bee-hive is composed of two distinct chambers or apartments, A and B, of which the lower and stationary one A is the brood-chamber, and the upper or detachable one B is the honey-chamber.

The chamber A is provided with a movable bottom board, C, which can be slid out for the purpose of cleaning the hive, and this board is capable of being adjusted, so as to allow a greater or lesser opening at the front of the hive for ventilation, &c., by the following arrangement:

Secured to the lower side of this board, near its edges, are battens, D D', whose forward extremities terminate in inclined planes or wedges, *d d'*, which are capable of playing upon the chamfered or beveled edges, *e e'* of the rail E.

When the bottom board is drawn forward these inclined planes descend the chamfered edges of the aforesaid rail and allow the board to drop a slight distance, as shown in fig. 3; but when the board is shoved back the inclined planes ride up on said chamfered edges, thereby elevating the board C and closing the opening, as shown in fig. 1.

The front edge of the bottom-board projects some distance beyond the hive, as shown at *c*, so as to serve as a support for the bees to alight upon before entering the hive.

The customary entrance to the hive is through an aperture, H, which may be more or less closed by a shutter or scutcheon, I.

Extending along the mid-length of board C is a cleat, F, which serves to stiffen said board and prevent in-warping; and it also limits the distance to which the bottom board is shoved in, by the rear end of said cleat impinging against the rail G.

The rear of the brood-chamber is furnished with a removable back, J, which is capable of being detached by simply turning down the button K.

The upper edges of the walls of the breeding-chamber are formed into ledges, *a a'*, for supporting the comb-frames, which are composed of two strips or slats, L L', that are united at their apexes and separated at their bases so as to have the represented roof-shape, as shown in figs. 1, 2, and 4.

Inserted in the apexes of these frames are thin strips of wood or pasteboard, M, which serve as a base for the bees to build straight comb upon.

Recesses *l* are made in the edges of the frames, so as to form channels through which the bees can pass from one chamber to another, and these channels also allow air to circulate freely through all parts of the hive.

The top of the removable honey-chamber B slopes in two opposite directions, as shown at *b b'*, and the lower edges of the same project some distance beyond the sides of chamber A, so as to shed water as far as possible from the hive.

Secured to the extreme projecting edges of the sloping sides *b b'* of the roof are inwardly-inclined boards N N', which rest against shoulders O O' of chamber A.

The front end P of the honey-chamber and the rear one P' are vertical, as shown in fig. 3, and are provided with ventilators, R R'.

The roof-shaped comb-bars are designed to take the place of the frames in common use, and they overcome various objections in securing movable combs.

Bees seldom, if ever, attach their combs to the bottom bars of the frames in the brood-chamber of the hive, and usually but a portion of the distance down the end bars, and all the area of the comb attachment being represented by the roof-shaped comb-bars, it is evident that the loss of space occupied by the surplus frames and the harbor formed thereby for moths and other intruders between the frames and the walls of the hive are obviated, and the combs are more readily removed, on account of there being no bottom bars to interfere with other combs or cause the bees to attach one comb to two frames or two combs to one frame.

My peculiar-shaped comb-bars are not liable to warp, are much cheaper, more readily manufactured, afford all the surface required for the attachment of the combs, and the combs swing, or rather are suspended,

in a natural manner, allowing the bees all the space within the hive below the honey-boards formed by the comb-bars, and all the space that is possible to give them in any form of hive.

These comb-bars form, the only honey-boards required in my hive, and afford surplus room both above and also at each side of the brood-chamber, and in as close proximity thereto as possible; and, by making passages on each side of said bars to the honey-boxes, the queen will never enter such boxes to deposit her eggs.

Claim.

I claim as my invention—

The roof-shaped bars L I' I, in combination with the brood-chamber A a' O O' and the detachable honey-chamber B b' N N' P P', as and for the purposes described.

In testimony of which invention I hereunto set my hand.

Witnesses:

JOHN B. ELLIS,
D. B. COLLEY.

FELIX BREWER.