D. LATCHAW.

Bee-Hive.

No. 168,261. Patented Sept. 28, 1875.

Fig. 5.

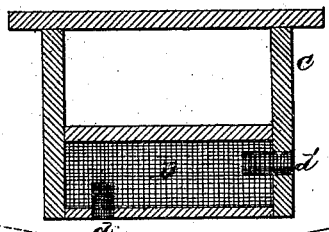


Fig. 1.

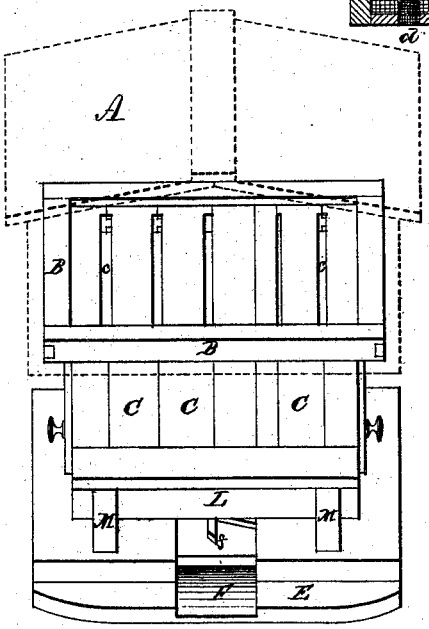


Fig. 2.

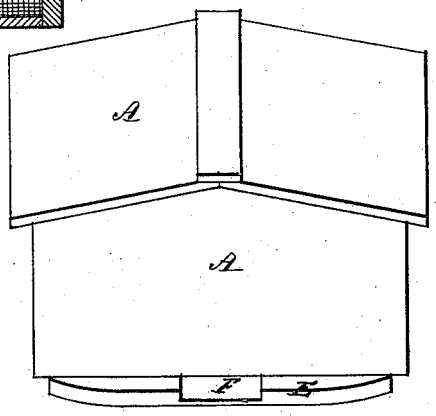


Fig. 4.

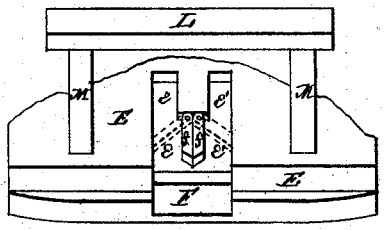


Fig. 3.

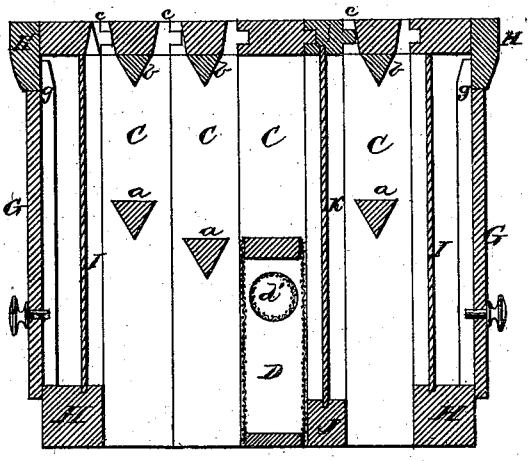
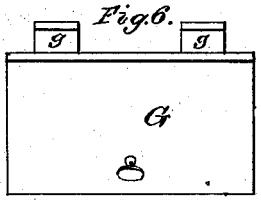


Fig. 6.



Witnesses
John A. Ellis.
Jno. K. Ellis

Inventor
David Latchaw
per
C. H. Watson & Co
Attys

UNITED STATES PATENT OFFICE.

DAVID LATCHAW, OF BARKEYVILLE, PENNSYLVANIA.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. **168,261**, dated September 28, 1875; application filed March 24, 1873.

To all whom it may concern:

Be it known that I, DAVID LATCHAW, of Barkeyville, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Bee-Hives; and I do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification:

This invention relates to bee-hives, and consists in the construction and arrangement of parts by which a well-ventilated hive is furnished in the summer or warm season of the year, and which may admit of a supplemental frame or box, being fitted over the same for the winter or cold weather, and in a trap for robber-bees, and in combining with the same an entrance to close or open, as desired, and in the construction of a frame to be enlarged, contracted, or divided, and in the construction and combination of parts, as hereinafter more fully described and pointed out by the claims.

In the drawing, Figure 1 represents the hive, arranged for summer. Fig. 2 represents the same, with the case over the hive, as used in cold weather. Fig. 3 represents a section of the hive. Fig. 4 is a section of the lighting-board and entrance. Fig. 5 is a section of the robber-trap, and Fig. 6 is a view of one of the end boards.

A represents the case, which, in the summer or warm weather is used in the position as shown in dotted lines, Fig. 1, and may be, when used in this position, filled with surplus honey-boxes of the usual or of any desired construction. The said case rests upon and is supported by the detachable bars B B, which have grooves to fit upon the top of the hive, and also have mortises and tenons near each end to fit together, so as to be held firmly in position, and also support the case A. In cold weather the bars B B are removed, and the case fits down over the whole hive, as shown in Fig. 2, thus affording a double protection to the bees. C represents the comb-frames, being tongued and grooved, as shown, by which means the comb-frames of themselves form a tight hive or brood-chamber, and the tongues and grooves prevent the comb-frames from slipping out of place. At the top the comb-frames are provided with guides *b b* of the usual form, and the tops of the frames are beveled off, forming an incline nearly on a line with the bevel of the comb-guides, so as to form the openings *c c* through the tops of the comb-frames. The comb-frames are also provided with supplemental guides *a a*, which also serve to brace the comb-frames. These guides *a a* may be placed at any point desired between the top and bottom bar of the comb-frames, but it will be found most desirable to place them near the bottom of the frames. In the lower part of one of the comb-frames is placed a robber or moth trap, D, the sides of which are formed of wire cloth. The wire-cloth in this position is used for two purposes: first, to admit the light; and, secondly, to admit the odor of the honey from the comb-frames to entice the robber-bees. This trap D has an opening, *d*, formed from a wire tube which extends some distance into the trap, the outside of said opening coming directly over the opening *e'* when in position. The trap has an outlet, *d'*, which is also formed of wire-cloth, and extending some distance into the trap. E represents the bottom board, having the beveled entrance F, in which are placed the pivoted buttons or stops *f f*, which may be turned to close the entrances *e* and *e'*, as shown by dotted lines, Fig. 4. The entrance *e* leads to the honey-chamber, and the entrance *e'* to the trap. It is a well-known fact that the moth work most at night, and therefore the entrance *e* should be closed at night, leaving the entrance *e'* to the trap D open, so that the trap will serve the double purpose of a robber-bee trap by day and moth-trap by night. G represents the end boards, being provided with lips *g g*, which fit closely inside of the top part of the frame or sash H, by which means the same is held in position without the use of buttons or hooks. H represents a sash, being provided with the grooves, the same as the comb-frames, so as to fit the frames closely. Said sash are provided with the glass I, so that by removing the end board G a full view of the interior of the hive may be had. J represents a frame,

having a glass partition, K. This frame J may be placed between any two of the comb-frames, thus dividing the hive into as small sections as desired, and any number of like frames may be used as well as any number of comb-frames, so that the hive may be expanded or contracted as large or small, as desired. The upper part of the frame C, having the trap D, may be provided with a feed-box of any known or desired construction, or may be provided with a comb-guide, the same as the other frames. L represents a shield, supported from the bottom board by the standards M M, said shield serving to protect the entrance F from rain, and also serves to retain the hive in position. In use, any one or more of the frames C may be removed without disturbing the rest, and other comb-frames inserted, or the hive moved together, to fill the vacancy, leaving the hive as tight as before, and, by the use of the sash H H, but one comb-frame may be placed between them, by which means the same is entirely inclosed, which will prove advantageous in raising queens.

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

1. The wire trap D, the frame C, provided with the wire tubes *d d'*, constructed and arranged as and for the purpose specified.

2. The comb-frames, tongued and grooved, as shown and described, so that the frames of themselves form a perfectly close hive, as and for the purpose herein set forth.

3. The sash H provided with the grooves, as shown, and the glass I, in connection with the end board G and frames C, substantially as and for the purpose described.

4. The case A, combined with the detachable bars B B and frames C, so arranged as to provide a summer and winter hive, substantially as and for the purpose herein described.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of November, 1872.

DAVID LATCHAW.

Witnesses:

WM. K. ELLIS,

C. ALEXANDER.