3 Sheets, Sheet 1.

J. A. McAnulty,

Bee Hive.

No. 111,466. Patented Jan. 31. 1871.

Fig. 1.

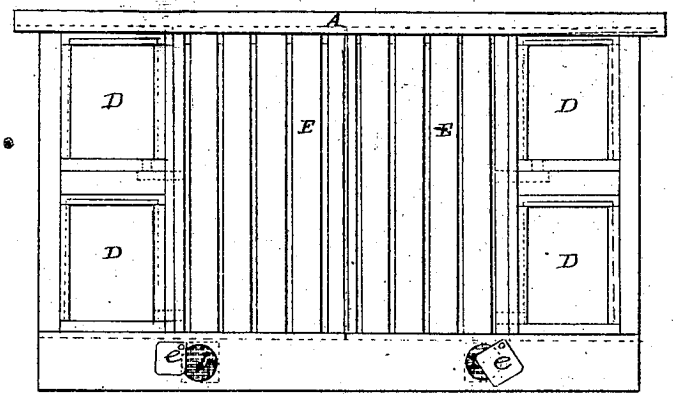


Fig. 2.

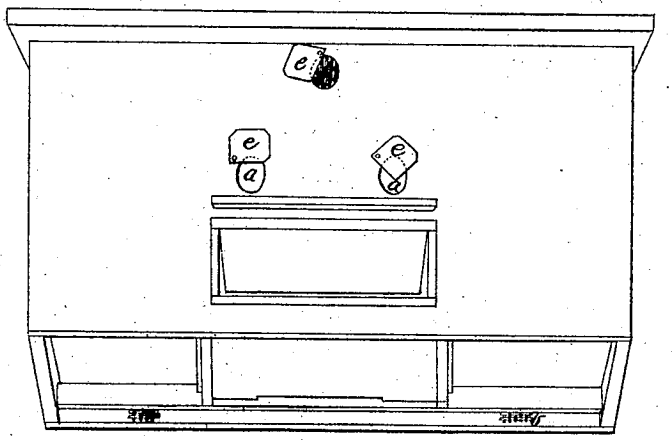
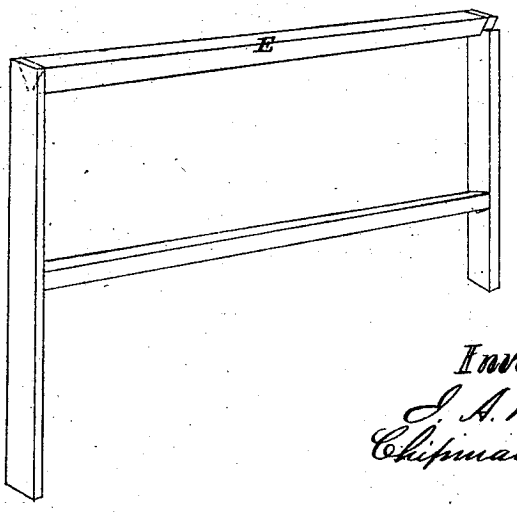


Fig. 3.



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3 Sheets, Sheet 2

J. A. McAnulty,

Bee Hive.

No. 111,466. Patented Jan. 31, 1871.

Fig. 4.

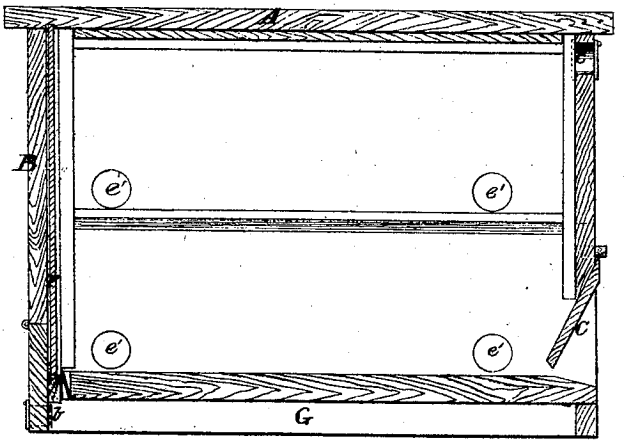
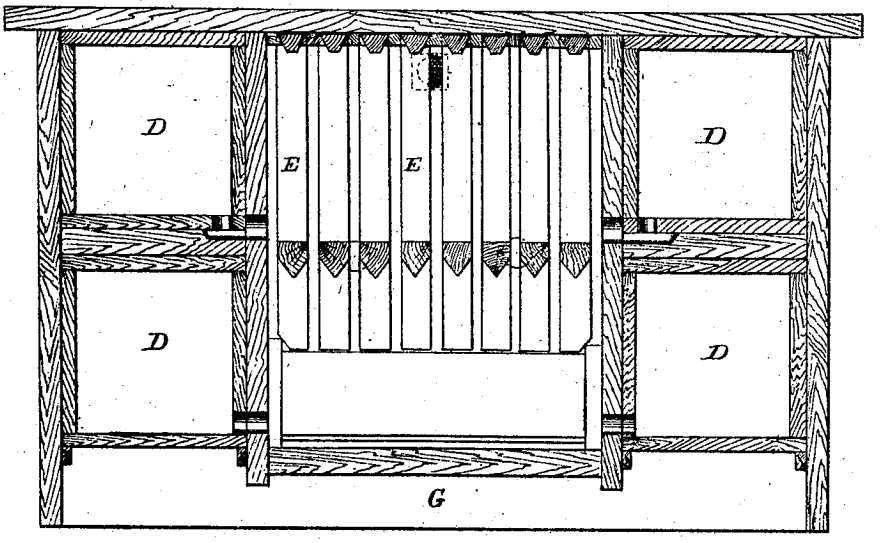


Fig. 5.



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J. A. McAnulty, 3 Sheets, Sheet. 3.

Bee Hive.

No. 111,466. Patented Jan. 31. 1871.

Fig. 6.

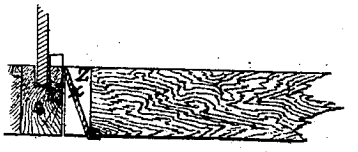
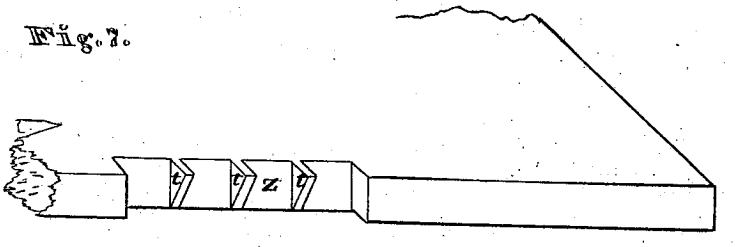


Fig. 7.



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United States Patent Office.

JOHN ARMSTRONG McANULTY, OF GILPIN, PENNSYLVANIA.

Letters Patent No. 111,466, 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, JOHN ARMSTRONG McANULTY, of Gilpin, in the county of Indiana and State of Pennsylvania, 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 front view of my invention, with hinged door removed.

Figure 2 is a perspective view, showing rear and bottom of same.

Figure 3 is a perspective view of one of the comb-guides.

Figure 4 is a vertical section from front to rear.

Figure 5 is a vertical transverse section.

My invention relates to bee-hives, and consists in certain improvements in the construction and arrangement of the parts thereof designed to afford a sufficient protection to the bees in severe climates, besides securing proper ventilation and providing more storage for the surplus honey.

The letter A of the drawing designates the outer case of my hive, provided with the hinged front B, entrance C, openings *a a*, and ventilators *b b* and *c*.

D represents the surplus-honey boxes arranged at the sides of the hive instead of at the top.

E, the comb-guides, having their upper bars dovetailed, and arranged to slide in dovetail grooves formed in the top of the case A. Each comb-guide, being entirely detached from its fellows, may be pulled out separately, should there be occasion.

F, the front glass, arranged to slide horizontally, thus enabling the homestead to be opened to a greater or lesser extent at will.

When the glasses are fully opened they occupy spaces in front of the side boxes D on each side of the homestead.

G, the lower chamber in the under part of the hive. The ventilating apertures *b b* are made in the front wall of this chamber and are covered with wire-gauze. The ventilating aperture *c* in the upper part of the rear wall is also covered with gauze.

Suitable pivoted plates *e e* are provided to close all of these apertures.

By placing the surplus-honey boxes at the side of the hive the number of boxes is increased; at the same time the distance to be traversed by the loaded bees is decreased.

As the ventilating apertures *b b*, for the entrance of the air, are placed underneath the front of the comb-guides, and in the front wall of the lower chamber G, the bees are prevented from having access to them. When they can gain such access their habit is to smear the ventilators with wax, destroying the ventilation.

The front edge of the floor of the homestead is recessed at *z* to permit the passage of the air from the chamber G. This recess is covered by a piece of wire-cloth, *x*, slanting upward and outward, the same being nailed to the tongues *t t*, whose edges are inclined in like manner.

In front of the forward edge of the floor is placed a notched strip, *s*, which is grooved longitudinally to keep the glass slides in place. This notched strip forms the front wall of the air-opening, and the wire-gauze is designed to extend from the upper part of this front wall downward in a diagonal direction to the lower edge of the rear wall of the opening. Thus arranged, the bees cannot get at the wire-cloth to close it up.

My hive can be made without a removable top, as the comb-guides are constructed to be drawn out at the front. Any one of them may be removed at will, and the arrangement of the glass front is such as to prevent the necessity of opening the whole front for this purpose.

The entrances within the hive to the surplus-honey boxes are lettered *e' e'*. They are arranged at each end of each box and at the bottom thereof.

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

1. The hive herein described, having the side boxes D D and the horizontally-sliding glass plates F F, when constructed and operating substantially as shown and described.

2. The pendent comb-cards E E, having their upper bars dovetailed to slide in corresponding dovetail grooves in the top of the hive.

3. In combination with the upper ventilating passage C and the ventilators *b b* in the lower chamber G, the air-passage *z*, guarded by the notched strip *s* and the diagonal piece of wire-cloth *x*, substantially as specified.

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

JOHN ARMSTRONG McANULTY.

Witnesses:

WILLIAM J. DRUM,

JAMES C. GREENE.