(No Model.) 2 Sheets—Sheet 1.

J. T. DENNY.

BEE HIVE.

No. 282,284. Patented July 31, 1883.

Fig 1.

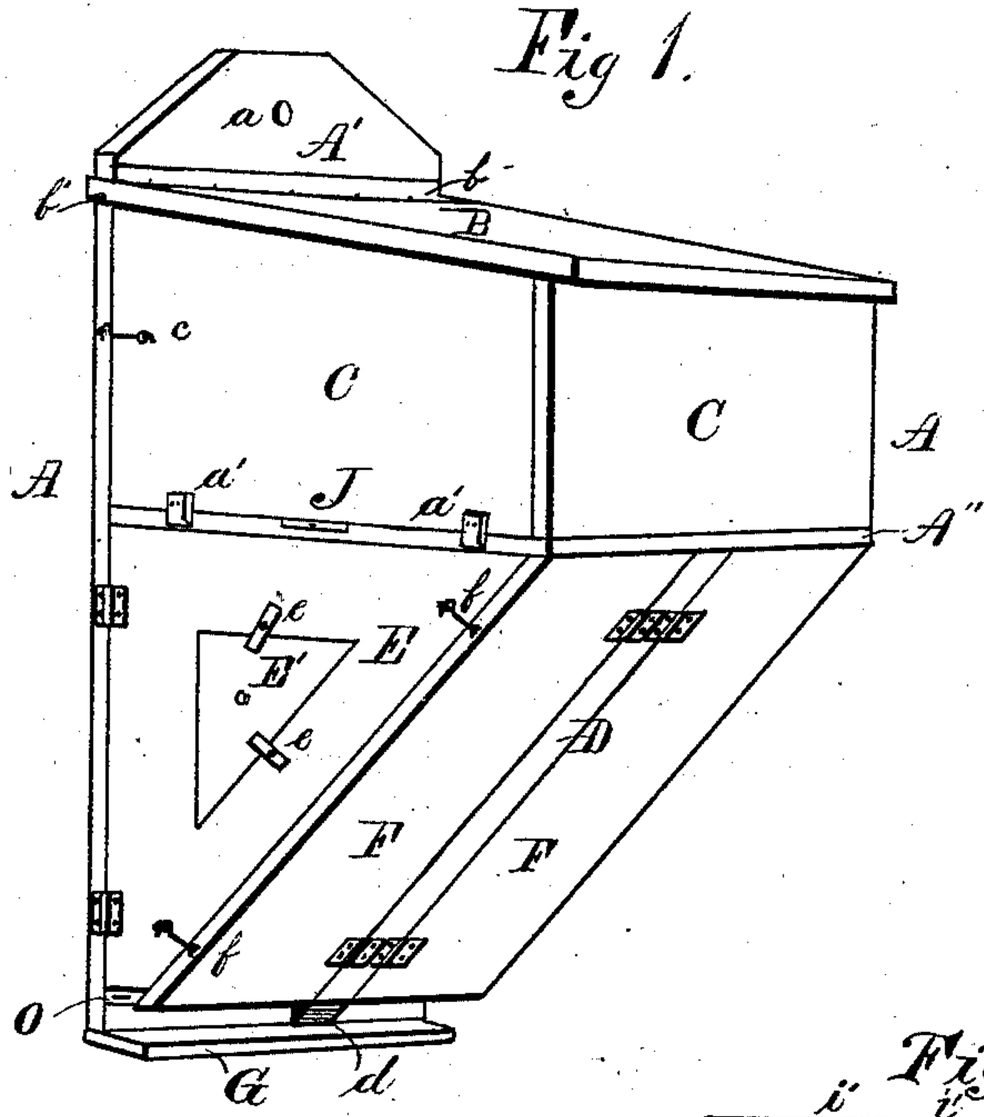
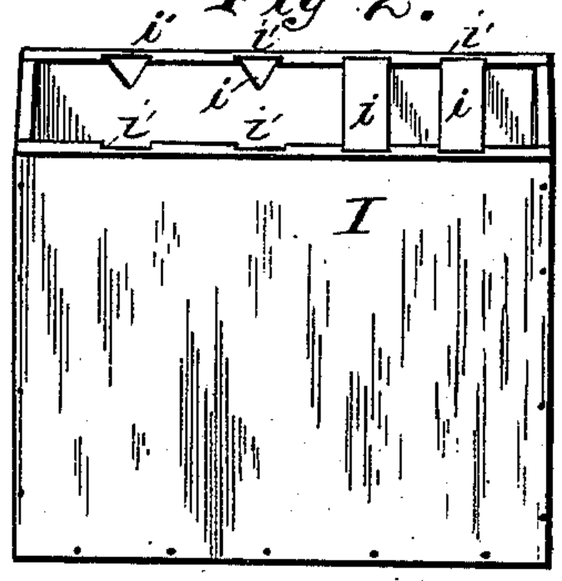


Fig 2.



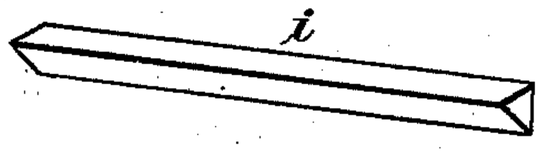


Fig 3.

Witnesses:

C. C. Swett.

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his Attorneys.

(No Model.) 2 Sheets—Sheet 2.

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Fig 4.

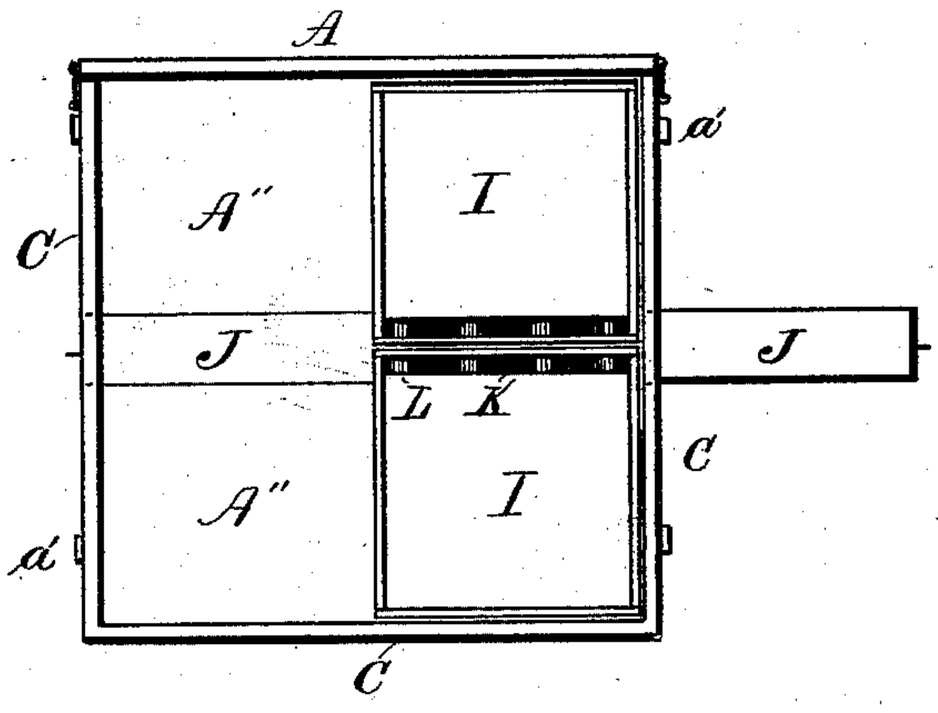
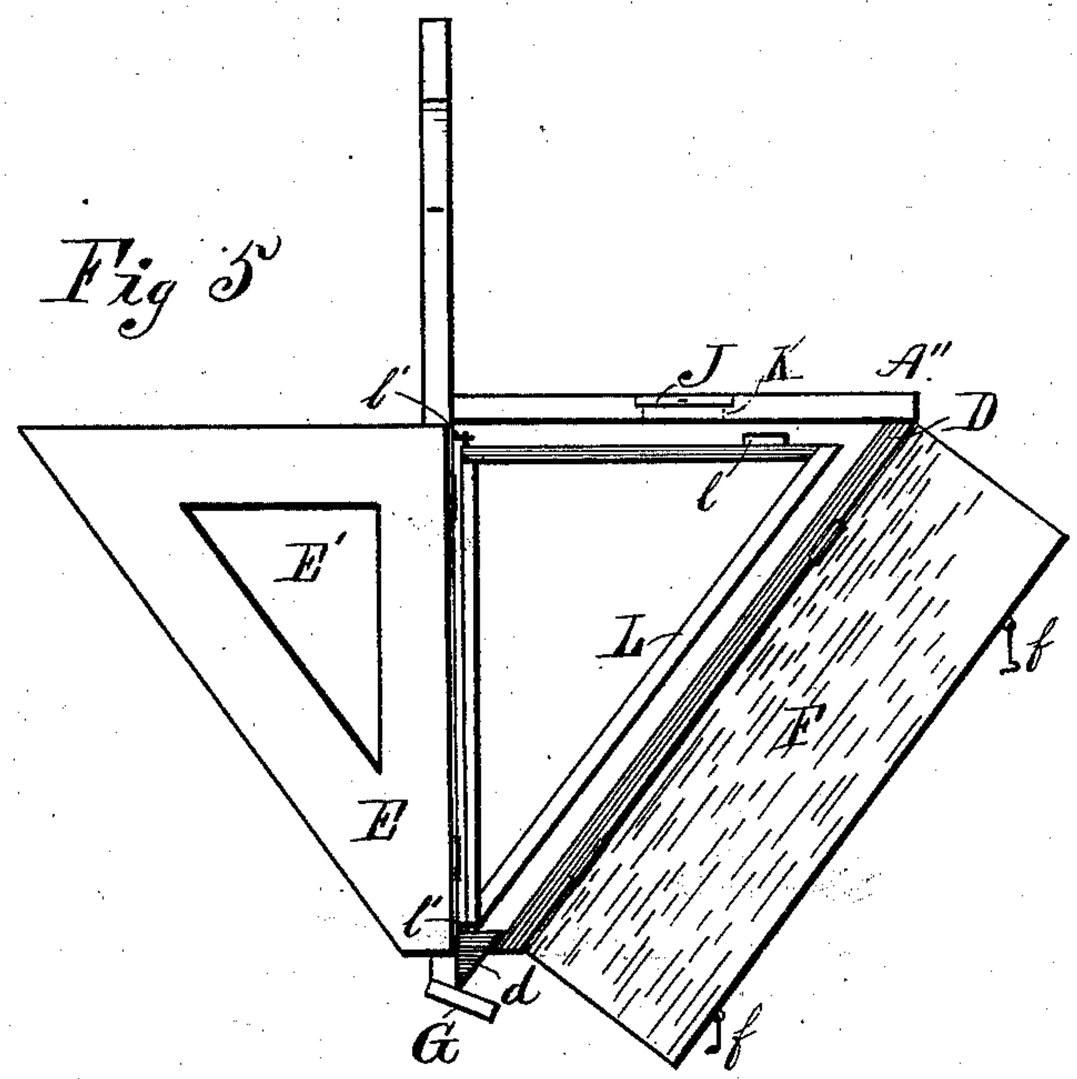


Fig 5



Witnesses:

C. L. Smith.

Sherwood Welch

Inventor:

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By Smith and Wright

his Attorneys.

UNITED STATES PATENT OFFICE.

JOHN THOMAS DENNY, OF REIDSVILLE, NORTH CAROLINA.

BEE-HIVE.

SPECIFICATION forming part of Letters Patent No. 282,284, dated July 31, 1883.

Application filed March 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. DENNY, a citizen of the United States, residing at Reidsville, in the county of Rockingham and State of North Carolina, have invented certain new and useful Improvements in Bee-Hives; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 and figures of reference marked thereon, which form a part of this specification.

My invention consists in the novel construction and arrangement of the different parts of a bee-hive, by means of which complete control over the bees is secured. They may be made to occupy, or may be excluded from, any part of the hive, and the work of the bees may at all times be fully inspected.

The improvements I have made are of a character to meet better than has heretofore been done the requirements of the bees in the manufacture and storage of honey and in breeding.

My invention is fully illustrated in the accompanying drawings, to which reference is made in the following description.

In the drawings, Figure 1 is an elevation, exhibiting in perspective the exterior, front, and side of a bee-hive. Fig. 2 is a plan view of a honey-storage box. Fig. 3 is a comb strip or bar. Fig. 4 is a plan view of a hive, the cover having been removed. Fig. 5 is a side elevation of the hive, the upper section having been removed and the doors being opened.

Like letters indicate like parts in the several views.

The letter A indicates a bee-hive having an opening, *a*, in its vertical extension A′, for hanging the hive when desired.

B is an inclined removable cover, with a weather-strip, *b*, attached. It is hung by notches on the nails *b′*, and projects on three sides of the box part of the hive to shed rain.

C is the upper section of the hive, composed of the front and two side pieces fixed together, and is secured to the vertical back A of the hive, which forms the fourth side, by hooks *c c*. Tangs *a′ a′*, projecting downward upon its sides, steady it upon the floor or partition A″.

The parts of the hive marked with the letters A, A′, A″, G, D, and *d* are all fixed. The other parts are either hinged or removable.

I in Fig. 2 is a honey-storage box, having the comb-strips *i*, resting in V-shaped notches *i′*, at proper distances apart. Each box has a glass cover and an opening, K, Fig. 4, along one side of its bottom. The strips or bars *i* are made three-sided, (see Fig. 3,) having an edge at the bottom. Bees prefer to attach their comb to such a projection rather than to a flat surface, as provided for them in some hives. I have shown the construction of the box in Fig. 2. The opening at the bottom should run transversely to the comb-bars. In Fig. 4 the bars are omitted to afford a better view of the bottom of the boxes, and in this view two boxes only are introduced, leaving one-half the floor-surfaces exposed and showing the slide J closed. I prefer to use four storage-boxes in each hive. K represents the openings in the storage-boxes and the coincident openings in the floor A″, through which openings the bees pass to and fro. J J are slides for closing the openings in the floor A″. Each slide J admits the bees to one pair of boxes. By this provision the bees are admitted to one pair of boxes until such boxes are filled with honey. They are kept out and admitted through the opposite openings into the other pair of boxes, the first being closed to prevent their soiling and discoloring the honey. Perfect control over the bees is secured to the apiarist by this system of doorways. The apiarian is able to exclude the bees from either apartment of the hive or to retain them either in the breeding-apartment below or in either pair of the storage-boxes.

I make the lower section of my hive triangular in shape, the front inclining sharply back toward the bottom. This is for the purpose hereinafter to be explained. For this lower section or breeding-apartment I have provided side doors, E E, and front doors, F F. Each pair of doors E and F are closed together and fastened to each other by hooks *f f*. In E E are glass-covered openings or windows pro-

vided with shutters E′ E′, which are held in position by buttons *e e*. Within this lower apartment or brood-chamber are hung the triangular comb-frames L, conforming in shape to the exterior of the hive. The frames L swing upon pivots *l′ l′*, and their free ends are kept at proper distances from each other by the transverse pieces or blocks *l*, placed on each. The horizontal part of the frame L is made three-sided, like the bars *i* in the storage-boxes. By making these frames L L triangular they become self-bracing, and will not sag with the weight of the honey and comb. Neither will the bees fasten or glue these frames to the hive, as they hang and swing clear of the hive on all sides. The frames L swing freely on their pivots and sockets *l′*, and are easily removed by lifting them vertically until the lower pivot passes clear of the socket in which it works.

G is the alighting-board, inclined slightly downward at its front edge, and *d* is a block to which is secured the strip D, and against which the sliding doors O abut when closed. There are two doors O—one on each side of the hive—which slide in and out in the same manner as the doors J J, and guard the entrance for the bees to the hive.

The usual devices for securing ventilation are employed, and the doors E and F are preferably provided with hinges.

Having described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

In a bee-hive, the combination of the back A and perforated extension A′, the sides C, top B, storage-boxes I, having openings K, slides J in floor A″, formed as described, with the hinged side doors, E E, having central triangular-shaped shutters, E′, the inclined front doors, F F, the triangular comb-frames L, pivoted at their ends, strip *d*, sliding doors O, and the alighting-board G, all constructed substantially as shown and specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN THOMAS DENNY.

Witnesses:
G. D. WILLIAMS,
JNO. E. LAMBERTH.