

W. K. Sawyer's  
 Improved Bee Hive

117690

PATENTED AUG 1 1871

Fig 1.

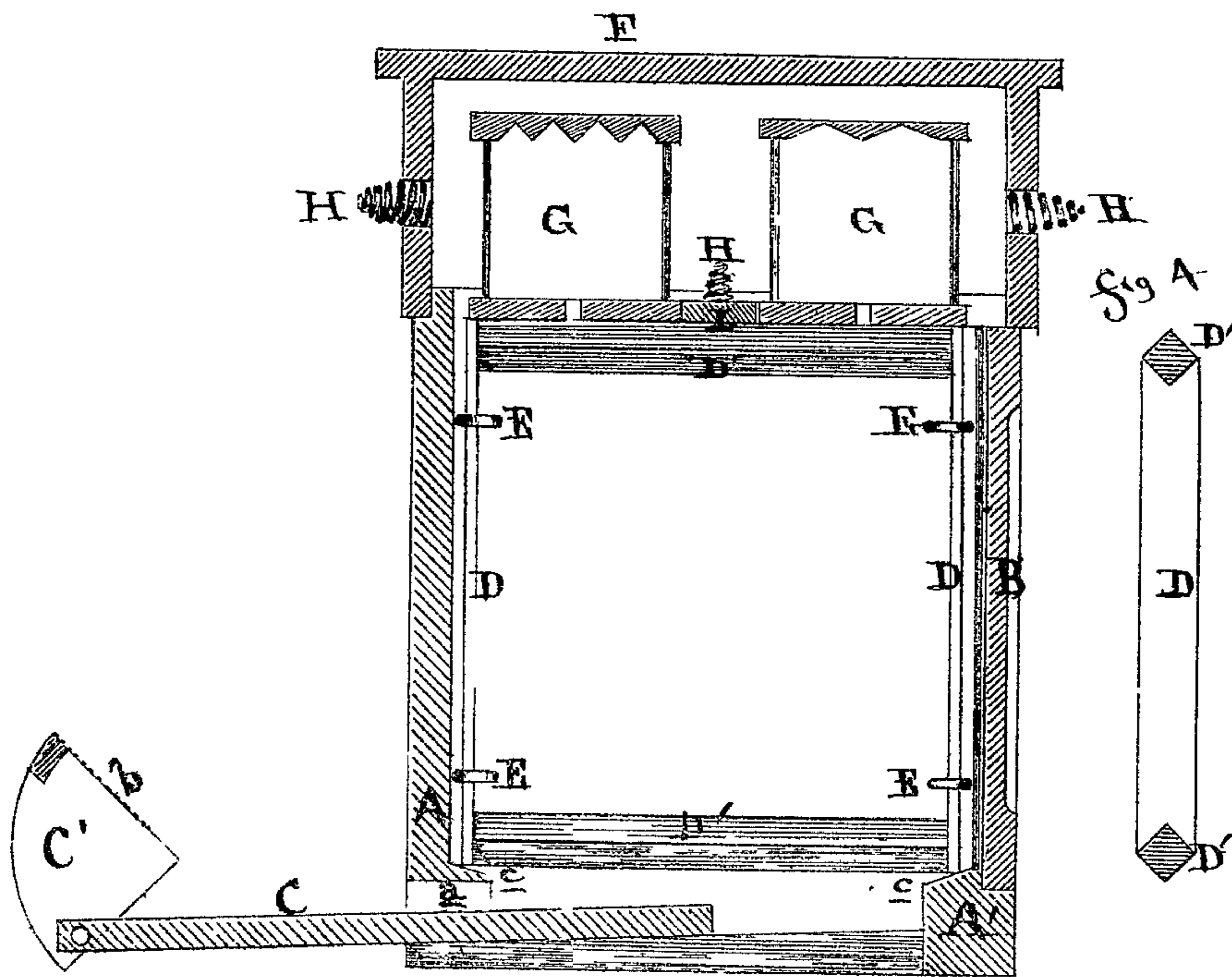


Fig 2

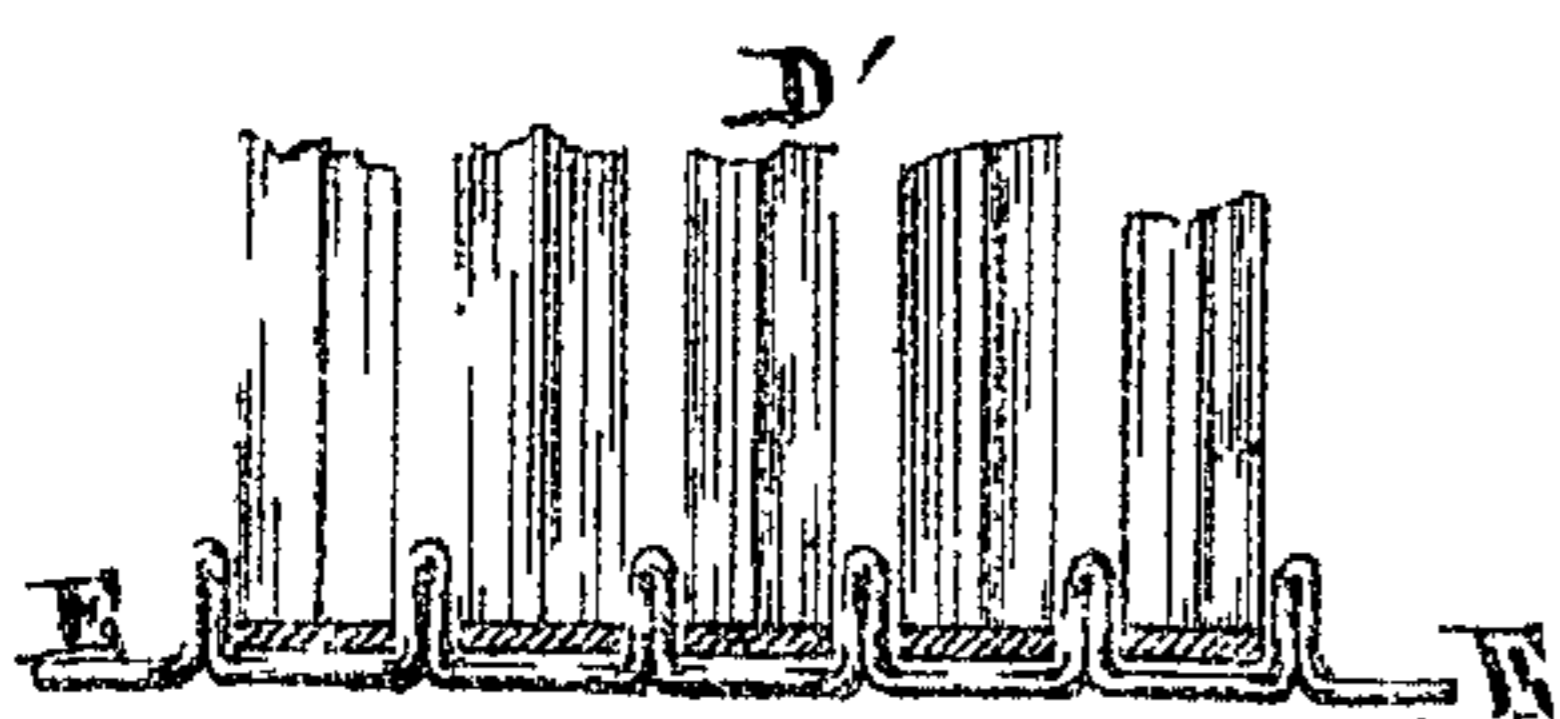
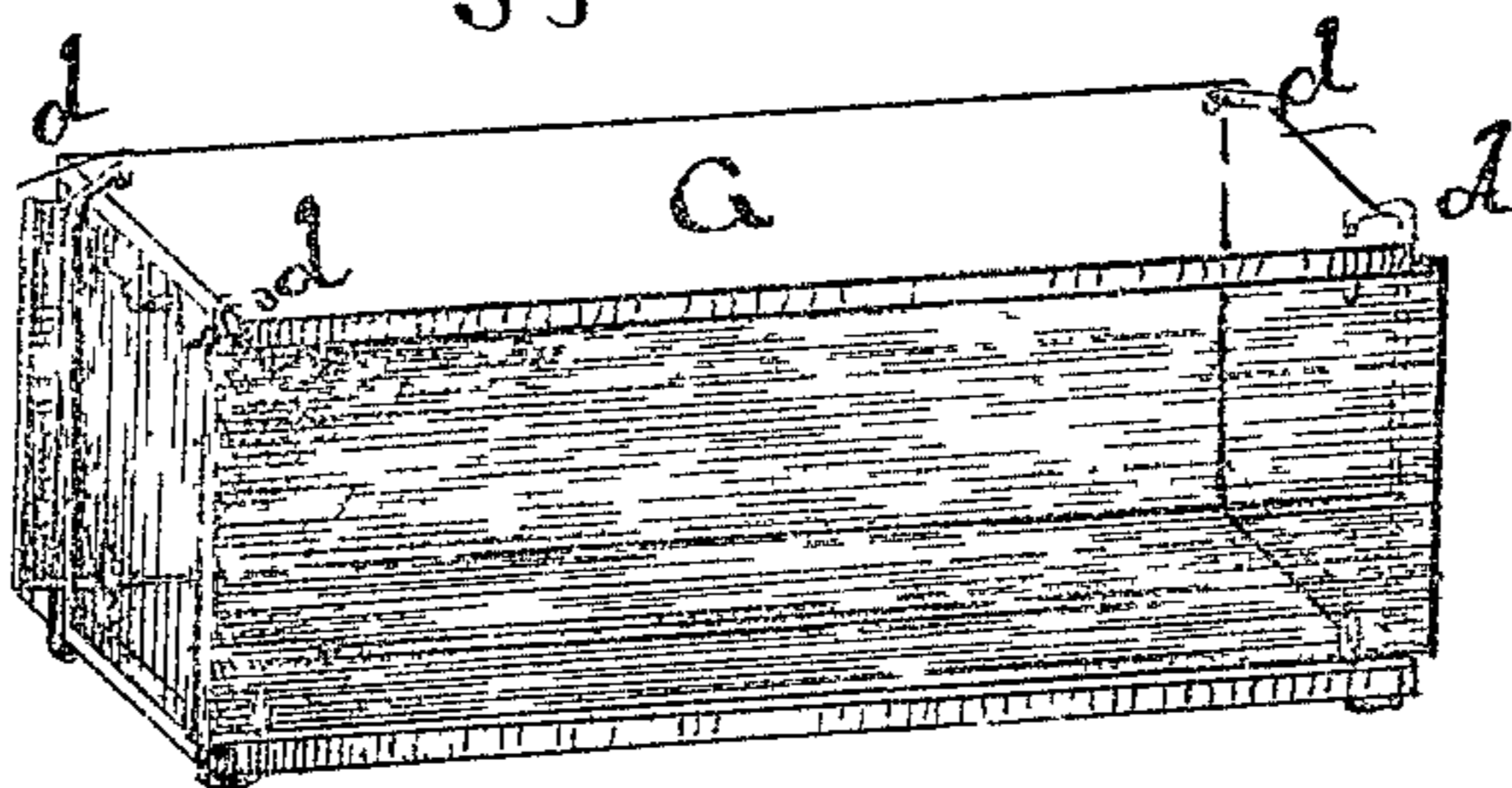


Fig 3



Witnesses:  
 G. S. Sprague  
 Jas. I. Day

Inventor:  
 W. K. Sawyer  
 Per Atty  
 G. S. Sprague

# UNITED STATES PATENT OFFICE.

WILLIAM K. SAWYER, OF THREE OAKS, MICHIGAN.

## IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 117,690, dated August 1, 1871.

*To all whom it may concern:*

Be it known that I, WILLIAM K. SAWYER, of Three Oaks, in the county of Berrien and State of Michigan, have invented a new and useful Improvement in Bee Hives; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a vertical longitudinal section through my improved bee hive. Fig. 2 is a plan of one of the guide wires, showing the method of sustaining the comb frame in position. Fig. 3 is a perspective of one of my honey boxes.

The nature of this invention relates to an improvement in bee hives; and consists in a peculiar arrangement within the hive of a movable bottom board provided within an adjustable moth trap; in a novel construction of the comb frames and the arrangement of guide wires for supporting the same; in a new and peculiarly constructed ventilator.

In the drawing, A represents the front, and A' the rear walls in my hive, the latter being provided with a door, B, to observe the progress. Within the door, however, a glass should be inserted in proper grooves in the side walls. The bottom of the hive is inclined toward the front, in an opening in which the bottom board C is inserted, which, when partially drawn out, forms a landing place for the bees, entering the hive through an appropriate opening, *a*, in the bottom of the front wall. C' is a sector, pivoted to the outer corners of the bottom board, and having on its face a screen of wire cloth, *b*, which covers or uncovers the entrance to the hive, as may be desired, while not interfering with its ventilation, which may be regulated by raising or lowering the bottom board and securing the same, which will give the desired area of opening, by inserting a pin through each side wall into the edges of said board, or by any other suitable means. D are the comb frames, which are like vertical strips, connected by horizontal bars D' in the form of a quadrangular prism. The lower ends of the frames rest on inclined ledges *c* at the bottom of the front and rear walls, and being maintained in a vertical position by the guide wires E, se-

cured at their ends to the side walls. The frames are inserted between the projections of the guide-wires from the top, the cap F being removed for that purpose. G are the honey boxes, whose sides and ends are of glass and top and bottom of thin lumber, the whole being held together by the wire clamps *d*, as shown. The bottoms are provided with the usual openings for the admission of the bees entering them between the comb frames, the boxes being laid transversely thereon. The tops of the boxes are grooved, as shown, for more securely holding the pendent comb, and when the honey is to be marketed they may readily be divided into strips by a knife drawn through the thinnest part, leaving a narrow strip of wood adhering to the comb, facilitating the handling thereof and saving the clamps and glass for future use. H are ventilators, which are of wire loosely coiled into a comb, and a sufficient number of which is inserted in proper holes bored through the cap, and a dividing strip, I, laid across the comb frames between the honey boxes.

The advantages of this form of hive will readily be perceived in the facility with which the comb frames are inserted and removed; in the saving of the glass used in the honey boxes; in the perfect and easily regulated ventilation, and in the ease with which the hive may be cleaned by drawing out the bottom board.

When the bees of a hive are about to swarm, the bottom of a similar hive may be removed and the hive placed over the one occupied by the bees, which will then enter it; or the hive may be placed over a swarm and secure the bees. By removing the glass and wires in the rear wall A' the frames can be removed to and fro or be taken out without injuring the bees or honey.

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

The construction and arrangement of a hive provided with door B, inclined ledges *c*, bottom board C provided with sector C', and screen *b*, guide wires E, and comb frames D, in the manner and for the purpose set forth.

WILLIAM K. SAWYER.

Witnesses:

R. S. BRUCE,  
C. N. VALENTINE.