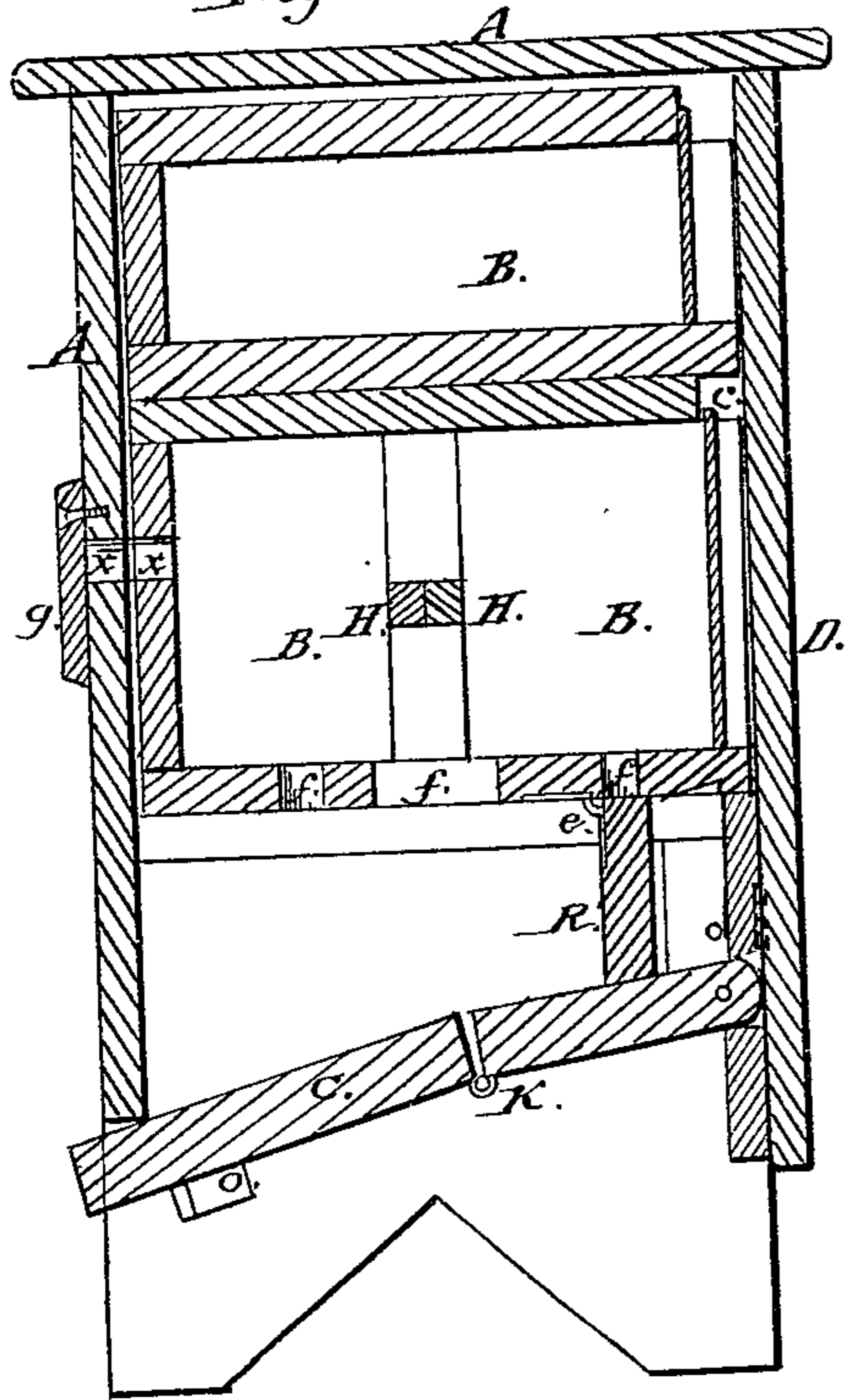


Cassell & Quinn,

Bee Hive.

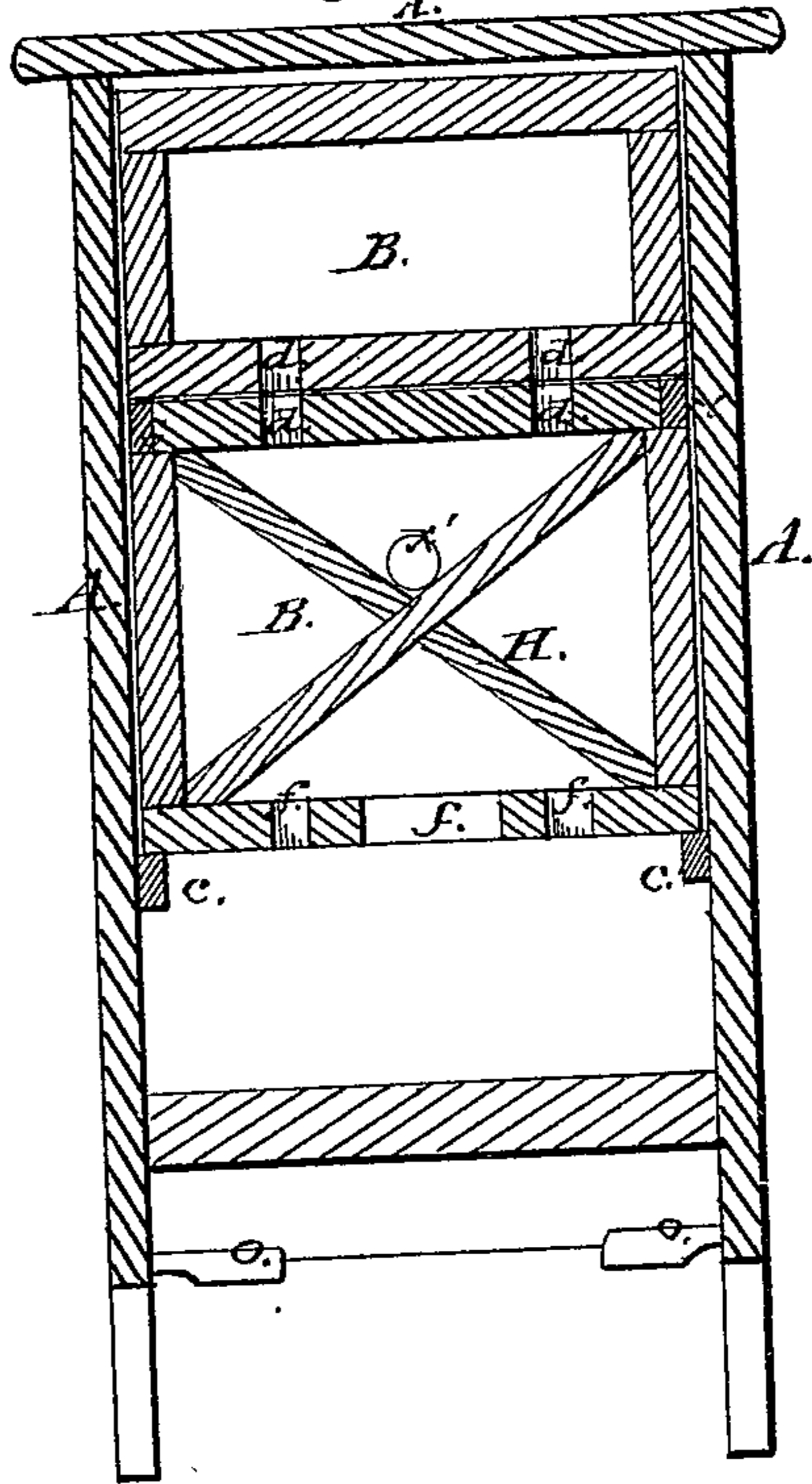
No. 76602.

Fig. 1.



Patented Apr. 14. 1868

Fig. 2.



WITNESSES:

E. L. Blue
Amman

INVENTOR:

John G. Cassell
Wm. Quinn
per
Alexander Watson
Attorneys

United States Patent Office.

JOHN I. CASSEL AND WILLIAM QUIN, OF EATON, OHIO.

Letters Patent No. 76,602, dated April 14, 1868.

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 we, JOHN I. CASSEL and WILLIAM QUIN, of Eaton, in the county of Preble, and in the State of Ohio, have invented certain new and useful Improvements in Bee-Hives; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon. In the annexed drawings, making a part of this specification—

Figure 1 represents a longitudinal vertical section, and

Figure 2 represents a cross-section of a bee-hive, and the honey-boxes contained therein.

A represents the outside box or bee-hive, of any desired dimensions, provided with suitable legs, and having a hole, *x*, through the front, and cleats, *c c*, on the inside, for the boxes, B, to rest on, and also having a door, D, hinged to one of the sides, making the back side of the hive.

C represents the bottom of the hive, and is composed of two pieces hinged together, as seen at K, and pivoted to the sides of the hive, near the back of the same. The front edge of the bottom, C, may be adjusted so as to give any desired angle to the bottom, by means of the buttons *o o*, which are attached to its under side, and notches in the sides of the hive near the bottom.

B B represent honey-boxes, of any required dimensions, to fit the inside of the hive A, and slide in or out of place, and rest on the cleats *c c*. The bottom or lower box, B, is provided with a number of holes, *ff*, in its bottom, to admit the bees, and with holes, *d d*, through the top, to correspond with the holes *d d* through the bottom of the box above, for the bees, that they may pass from one box to the other. The lower box is also supplied with cross-sticks, H H, and with a hole, *x'*, to correspond with the hole, *x*, in the front of the hive A. There is hinged to the bottom of the lower honey-box B, a movable door or shutter, R, which may be closed or brought up against the bottom of said box, or down at right angles therewith and against the bottom, C, as may be desired.

The button *g* is adjusted to the front of the outside of the hive, for the purpose of making convenient door or cover for the hole *x*, which is designed as a convenient opening from the outside direct to the honey in the inside of the box B, and through which a stick, rod, or wire may be inserted to break the comb of the honey inside, whenever the bees belonging to the hive may be on a raid to rob a neighboring hive, thereby compelling them to repair damages at home, and thus prevent the robbery of other bees and hives.

It will readily be seen that between the bottom-board C and the under side of the box B there is a chamber, through which the bees, moths; or other insects must pass before getting into the honey-boxes B B. It is a fact, determined by experiment, that moths cannot crawl along the under side of a smooth surface, and as the holes *ff* are through the bottom of the honey-box B, away from either side of the hive, it is obvious that moths cannot get into the honey-box B, and should they crawl up the inclined plane or bottom, C, and into the chamber between it and the bottom of the honey-box B, they can readily be swept out by means of the hinged door, R, being lifted up from behind, and letting the bottom, C, down at the front side, by means of the buttons *o o*, or by detaching the bottom, C, entirely from the hive, by means of the adjustable pins with which it is pivoted thereto.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The hinged bottom C, in combination with the perforated bottom of the honey-box B, all constructed substantially as and for the purpose set forth.

In testimony that we claim the foregoing, we have hereunto set our hands, this 26th day of November, 1867.

WM. QUIN,
JOHN I. CASSEL.

Witnesses:

JOHN V. CAMPBELL,
J. M. MASON.