

(No Model.)

U. G. MATTHEW.
BEEHIVE.

No. 470,789.

Patented Mar. 15, 1892.

Fig. 1.

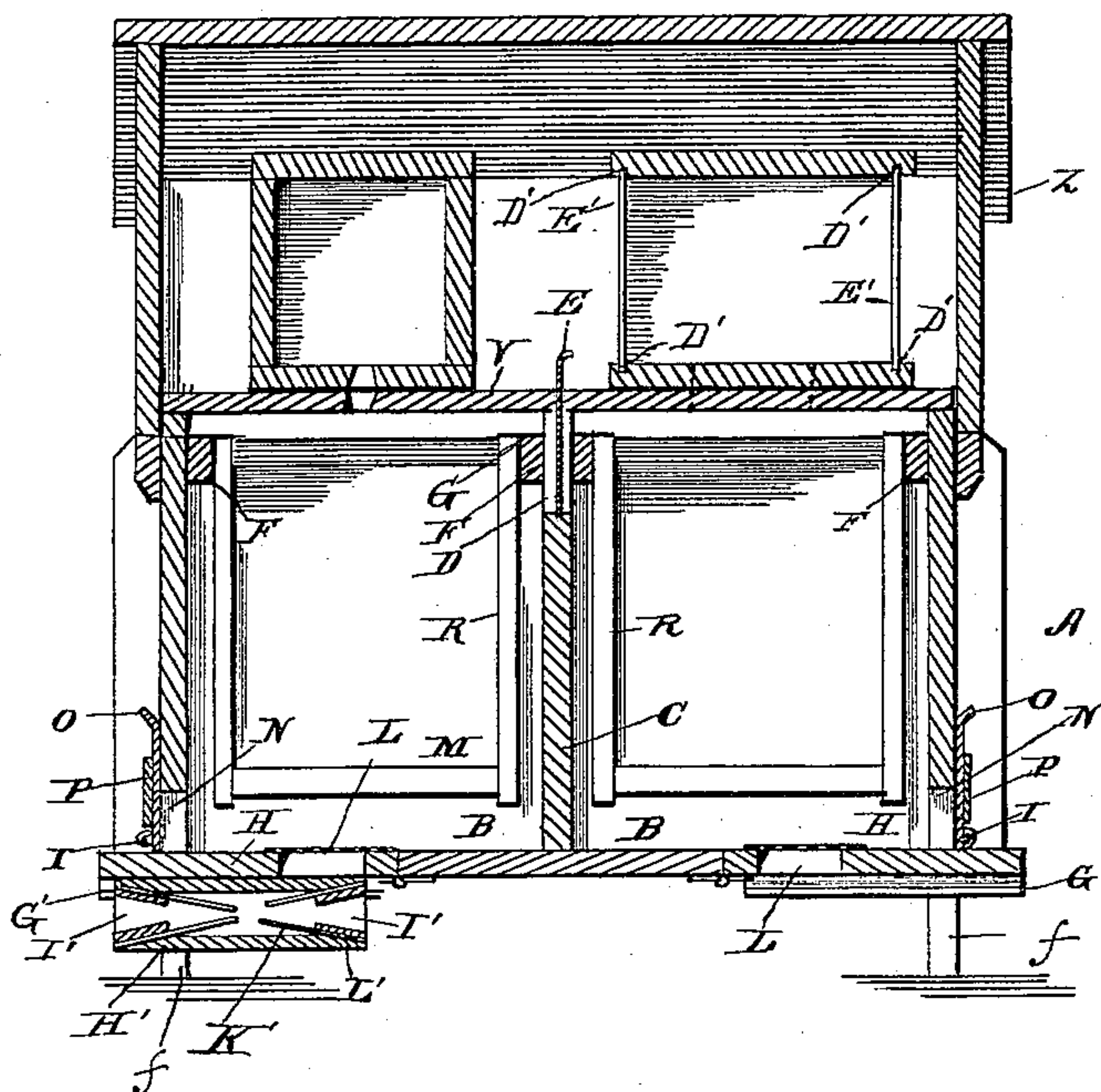
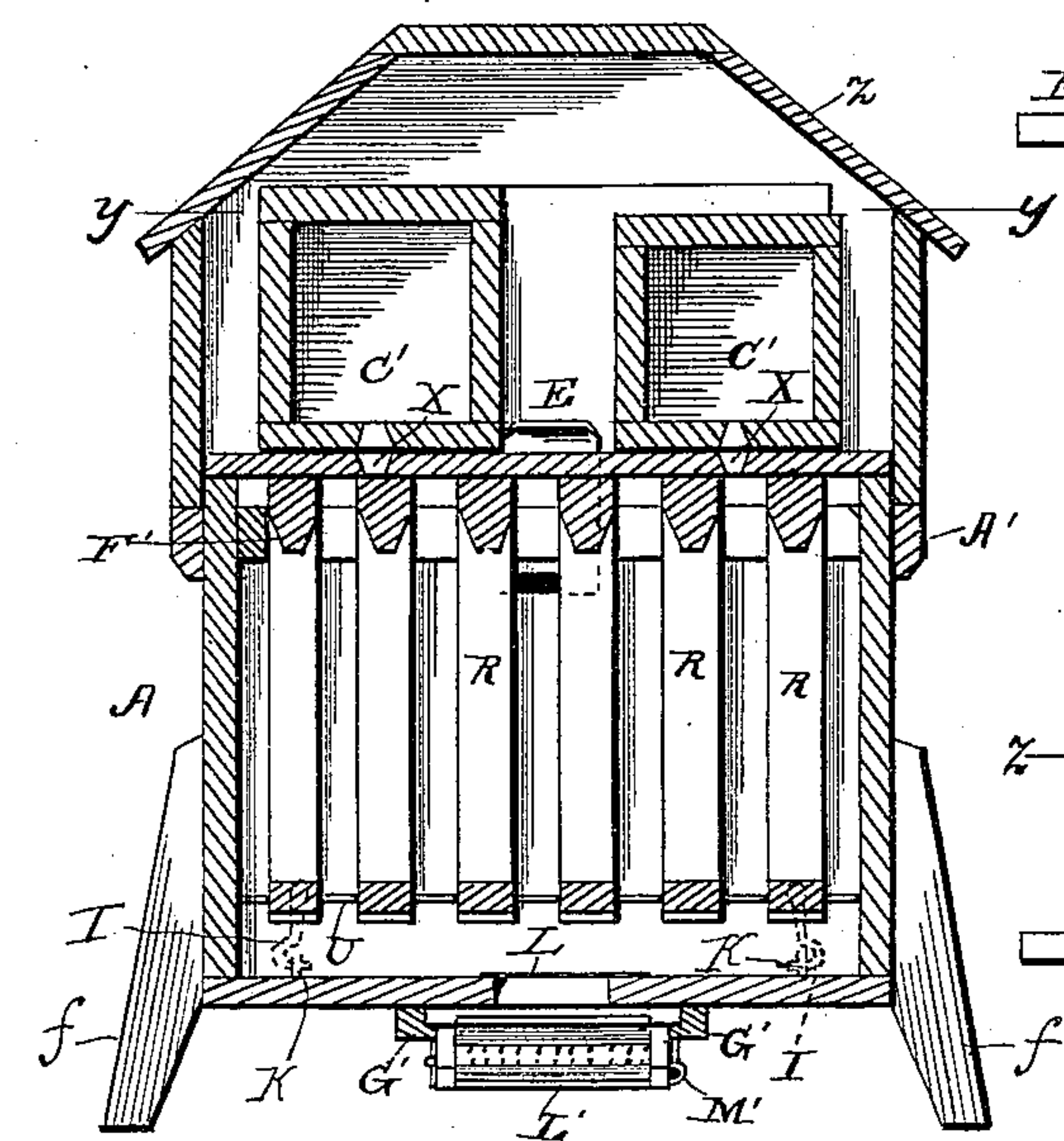


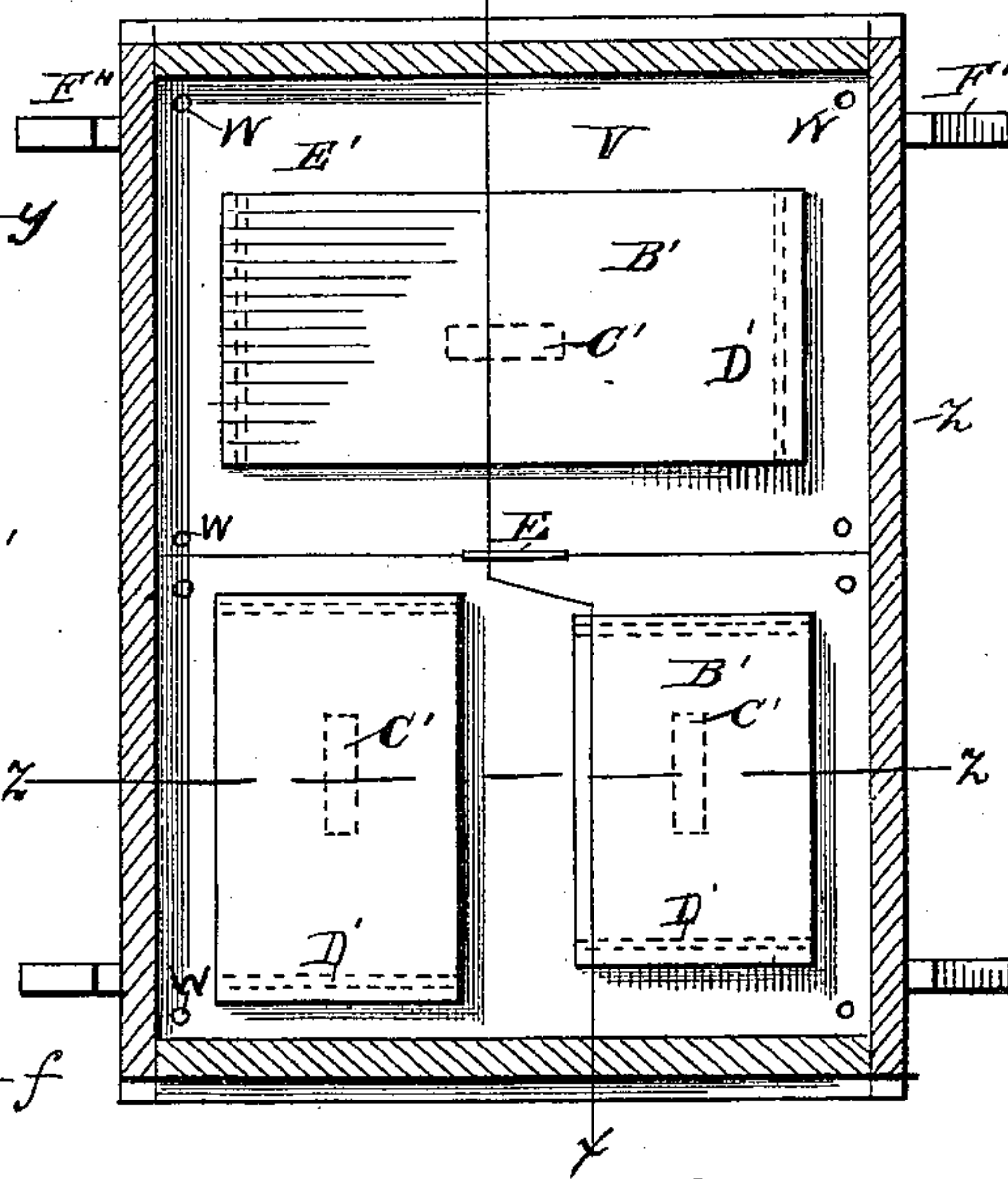
Fig. 2.



Witnesses

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Fig. 3.



Inventor

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UNITED STATES PATENT OFFICE.

ULYSSES G. MATTHEW, OF NEW CITY, ILLINOIS.

BEE-HIVE.

SPECIFICATION forming part of Letters Patent No. 470,789, dated March 15, 1892.

Application filed July 13, 1891. Serial No. 399,322. (No model.)

To all whom it may concern:

Be it known that I, ULYSSES G. MATTHEW, of New City, Sangamon county, Illinois, have invented a new and useful Improvement in Bee-Hives; and I do hereby declare that the following is a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to an improvement in bee-hives; and it consists in the peculiar construction and combination of devices that will be more fully described hereinafter, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical longitudinal sectional view through my improved bee-hive on the plane indicated by the dotted line *xx* of Fig. 3. Fig. 2 is a vertical transverse sectional view on the plane indicated by the dotted line *zz* of Fig. 3, and Fig. 3 is a horizontal sectional view on the plane of the dotted line *yy* of Fig. 2.

The body A of the hive, which is of twice the usual size, is divided into two brood-chambers B by means of a vertical central partition C. The said partition has an opening D at its upper edge, which admits of communication between the two brood-chambers, and this opening is kept normally closed by means of a slide E, which operates in grooves in the sides of the opening. On the opposite ends of each brood-chamber, at a slight distance from the upper sides thereof, are secured transverse cleats F, and rabbets G are made in the ends of the brood-chambers and in the upper side of the partition, the said rabbets being at a suitable distance apart.

The bottoms of the brood-chambers are partly formed at their outer ends by hinged platforms H, which are adapted to be lowered, and are normally kept secured by hooks I and catches K. (Shown by dotted lines in Fig. 2.) The said platforms project beyond the ends of the brood-chambers and have openings L near their centers covered with pieces of wire-gauze M. The said openings constitute ventilators in the bottoms of the brood-chambers.

Bee-entrances N are made in the ends of the brood-chambers at their sides to admit the

entrance and exit of the bees, and said entrances may be closed at will by slides O, which operate in guides P.

In each of the brood-chambers is arranged a suitable number of honey-frames R. The honey-frames are made of strips of wood, which are rectangular in shape, and their upper sides have projecting ends S, which bear on the cleats F and fit in the rabbets G and support the frames in the brood-chambers. The lower sides of the top bars of the honey-frames are beveled on opposite sides, as at F', to prevent the combs from dropping either way when the frames are removed. Pins U project laterally from the lower sides of each honey-frame, and said pins serve to space the honey-frames at their lower sides and to maintain them at the required distance apart, as will be readily understood.

The cleats F maintain the ends of the honey-frames at some distance from the ends of the brood-chambers, and hence prevent the bees from gluing the frames to the ends of the brood-chambers.

Honey-boards V form the tops of the brood-chambers, and said boards rest squarely on the upper sides of the honey-frames and are secured in place by pegs or pins W, which enter the upper edges of the body and may be readily withdrawn to admit of the removal of the boards V. These honey-boards V have openings X, which establish communication between the brood-chambers and the chamber Y, formed by the removable cover Z of the hive. This cover has its lower edges fitted around the upper portion of the body A and bearing on flange-strips A' on the sides of the body and may be readily removed at will.

A series of long caps or boxes B' are arranged transversely on the boards V at right angles to the honey-frames and have openings C' in their lower sides, which register with the openings X and admit the bees readily from the brood-chambers to the honey-boxes. When it is not desirable to admit the bees to the honey-boxes, the latter are reversed in position, thus closing the openings X. The honey-boxes are made of thin boards of suitable size with open ends, and the upper and lower sides of the honey-boxes project at the ends and have grooves D' in their opposing

sides, as shown in Fig. 1 and indicated by dotted lines in Fig. 3, in which grooves are fitted rectangular glass pieces E', which close the ends of the honey-boxes. These glass pieces admit light to the boxes when they are removed from the hive to disclose their contents, and the said glass pieces may be readily removed to permit access to the honey in the boxes.

The hive is supported on legs *f* at its corners, which raise it a suitable distance from the bench, table, or other surface on which it may be placed.

I will now describe my improved moth-traps, which I have devised to prevent the moth-miller from entering the hive. Under each of the hinged platforms H on opposite sides of the openings therein are a pair of guides or ways G', in which the moth-traps H' are fitted. The said traps are boxes having openings I' at their ends. On the upper and lower sides of the said openings are secured a series of converging wires K', which extend inward in the boxes and admit the ready entrance of the millers thereto; but the points of the wires effectually prevent their escape therefrom. The said traps have hinged bottoms L', as shown in Fig. 2, provided with hooks M', whereby they may be fastened when closed, which is their normal position. When a number of the millers are found in the traps, the latter are removed, the millers killed by pouring boiling water on them, and they are then removed by opening the hinged bottoms. During warm weather the traps are moved in the guides a sufficient distance to uncover the ventilator-openings; but in cold weather they are caused to close the said openings.

I will now describe the operation of my improved hive. Ordinarily the slide E is moved to close the opening D, and thus cut off communication between the two brood-chambers,

and the entrance to one of the latter is also closed, thus confining the bees to one of the brood-chambers and to the honey-boxes over it. In hiving bees, remove the moth-trap from the platform of the brood-chamber that is to be used and lower the said platform, which will enable the bees to quickly enter the hive. When the bees have given indications of a desire to swarm, at night, when they are all in the hive, the entrance to the brood-chamber in which they have been at work is closed and the slide E raised a sufficient distance to uncover the opening D. The entrance to the empty brood-chamber should be also opened, and the new colony of bees will then pass into the empty brood-chambers, after which the partition which should be closed and the entrance to the original brood-chamber opened, when the two colonies of bees will operate independently of each other in the separated chambers of the hive.

Having thus described my invention, I claim—

1. A bee-hive having the bottom provided with a ventilating-opening, and a moth-trap, and guides on the said hinged bottom, whereby the moth-trap may be moved to either close or uncover the ventilating-opening, substantially as described.

2. A bee hive having the supporting-legs, the hinged bottom, with the ventilating-opening and the guides, and the moth-trap having flanges fitting in the guides and adapted to be moved to close or uncover the ventilating-opening, substantially as described.

In testimony that I claim the foregoing I append my signature.

ULYSSES G. MATTHEW.

Witnesses.

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