

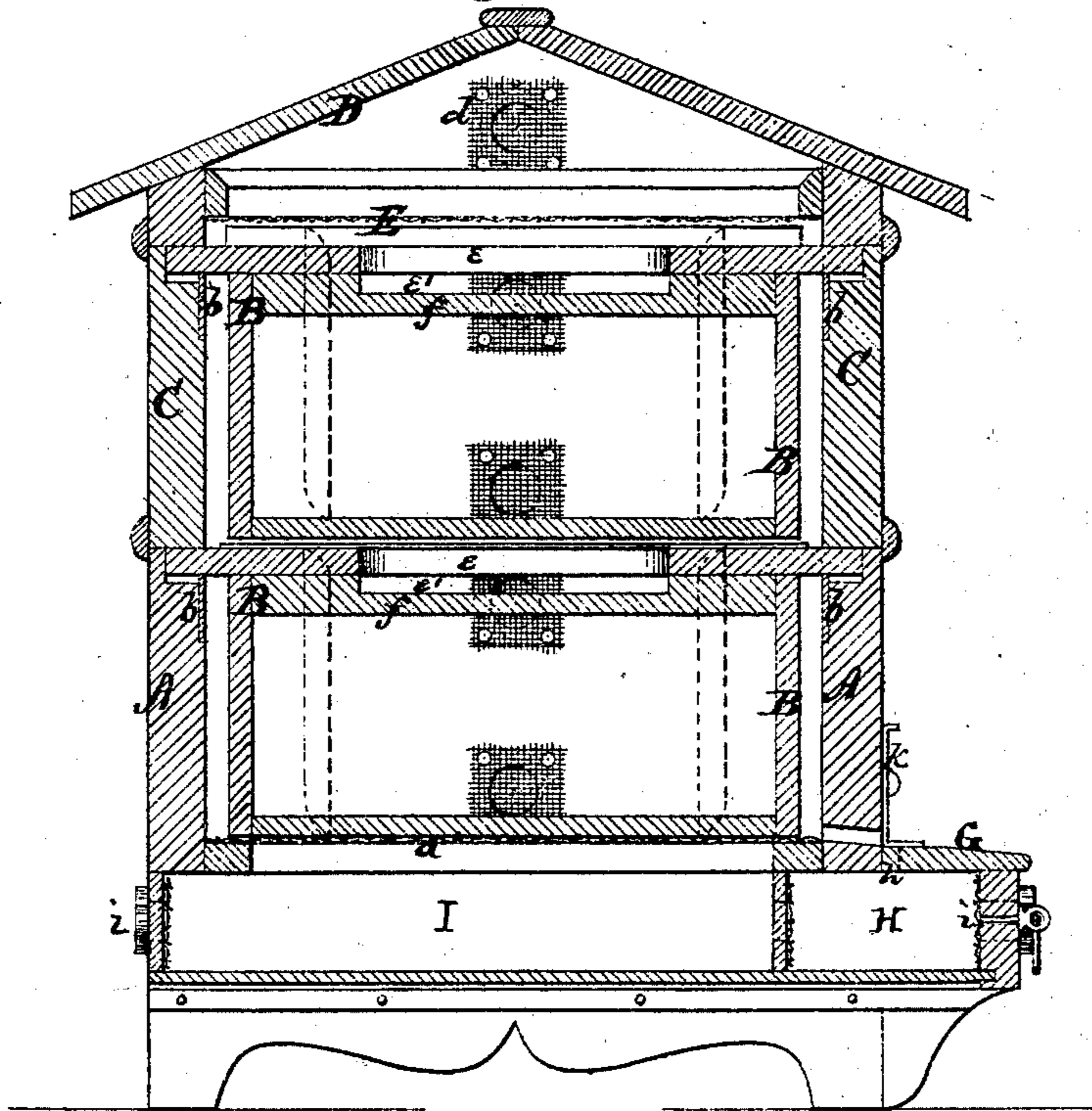
J. S. PROCTOR.

Improvement in Bee Hives.

No. 122,279.

Patented Dec. 26, 1871.

Fig. 1.



Witnesses

John A. Ellis.
J. V. White

Inventor.

J. S. Proctor.
Per.

J. H. Alexander
Atty.

J. S. PROCTOR.

Improvement in Bee Hives.

No. 122,279.

Fig. 2.

Patented Dec. 26, 1871.

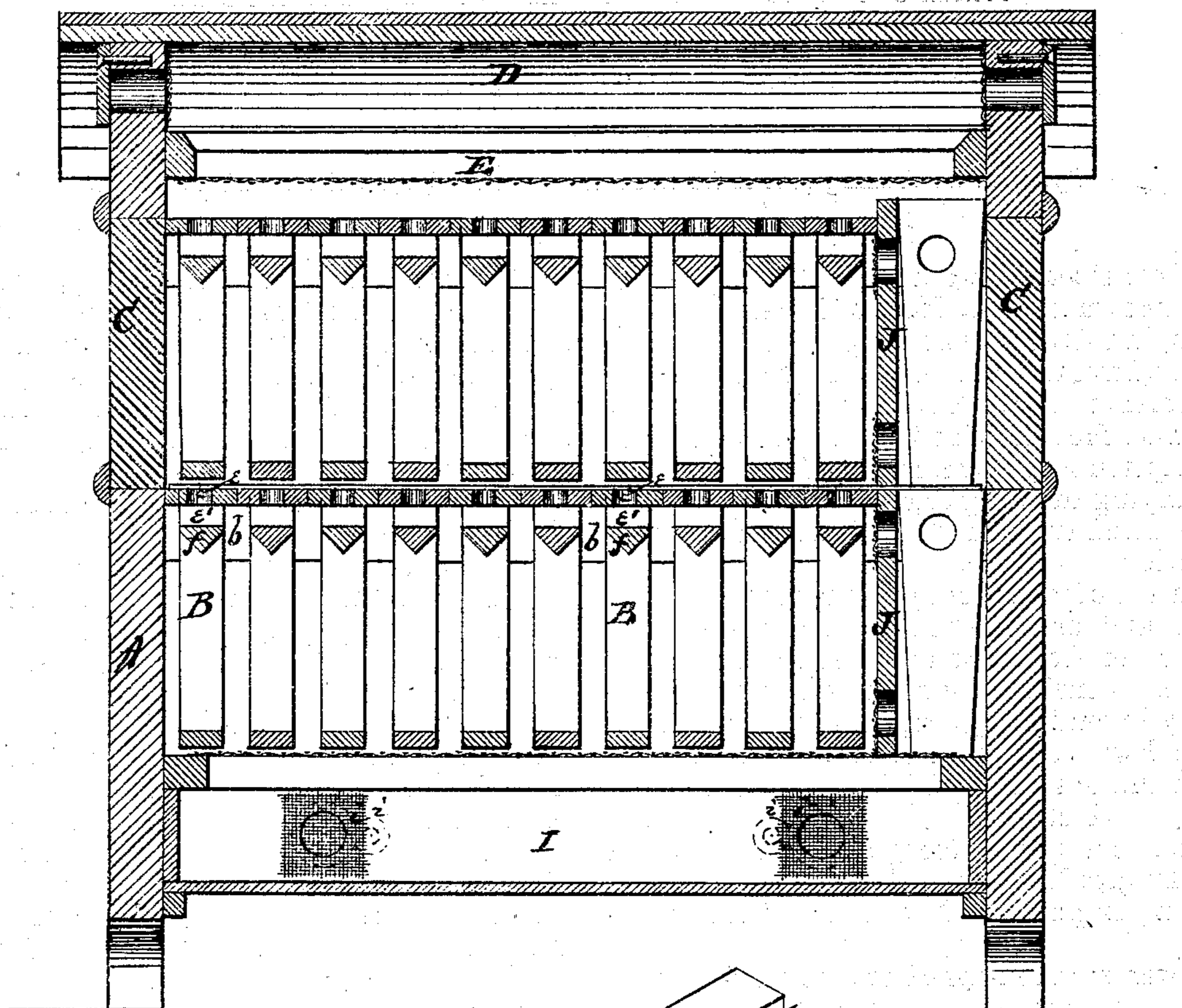
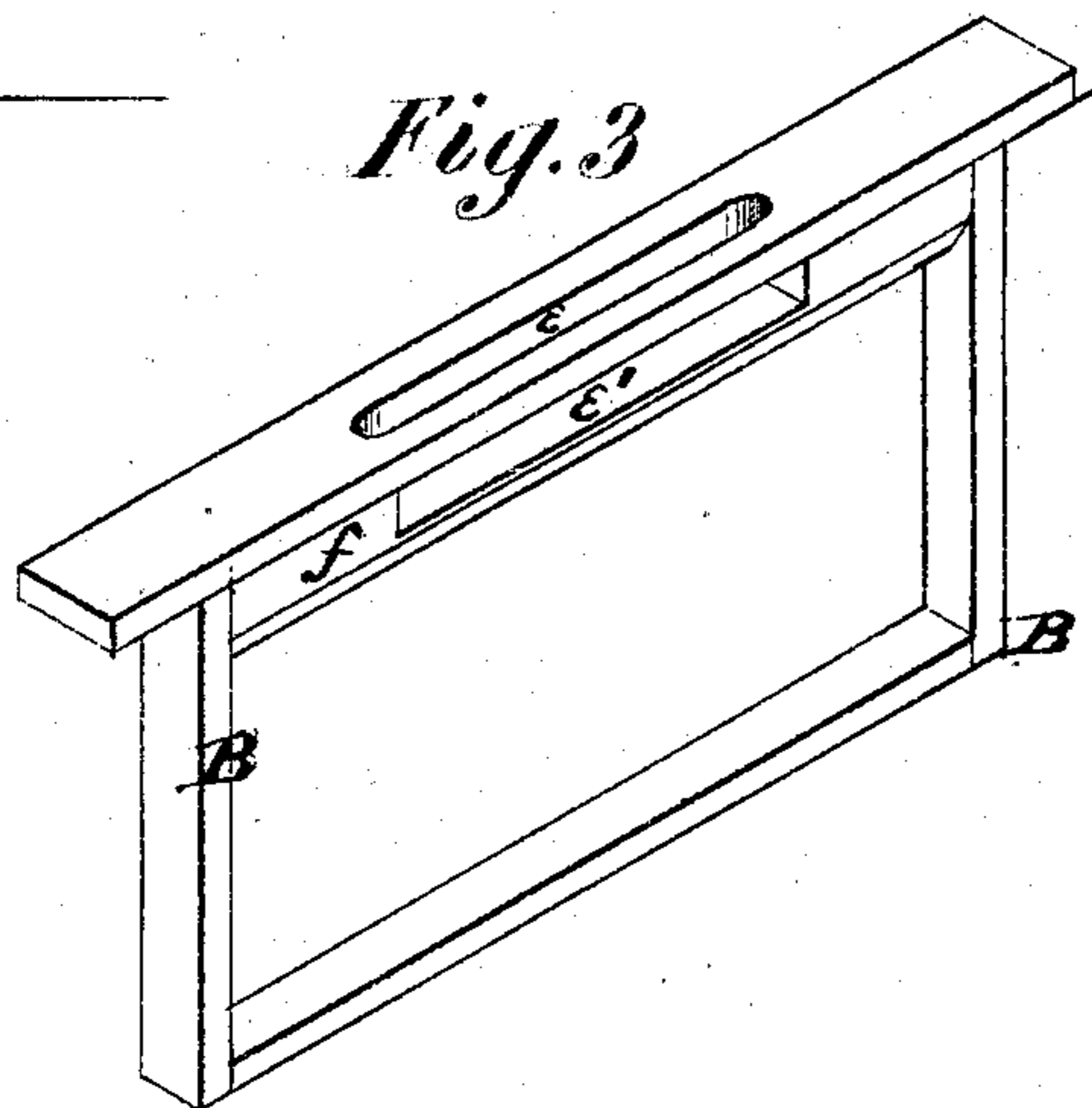


Fig. 3



Witnesses
J. A. Ellis.
J. V. White

Inventor
J. S. Proctor.
Per,
M. Alexander
Atty.

UNITED STATES PATENT OFFICE.

JAMES S. PROCTER, OF FRANKLIN, KENTUCKY.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 122,279, dated December 26, 1871.

To all whom it may concern:

Be it known that I, JAMES S. PROCTER, of Franklin, in the county of Simpson and State of Kentucky, have invented certain new and useful Improvements in Bee-Hives; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a "bee-hive," as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a transverse vertical section, and Fig. 2 a longitudinal vertical section of my hive. Fig. 3 is a perspective view of one of the comb-frames.

The lower or brood-chamber A is made twelve and three-quarters inches wide, eighteen and three-quarters long, and nine and three-eighths deep, inside measurement, and has a bottom, *a*, of wire-cloth. The sides are planed or rabbeted out on the inside to receive the ends of the top bars of the frames B, which rest upon a thin metal side or rest, *b*, attached to the side in such a manner that when the frames are suspended on them the top of the bars are raised to a level with the top of the chamber. The upper chamber C is movable, and is made exactly the same width, length, and depth; the tops and side constructed the same as the sides of the lower chamber. The chamber C has no bottom, but, when adjusted, rests in part on the outer walls of the lower chamber A, and the inner side resting on the ends of the top bars of the frames, thus securing said frames in their places, and preventing the bees from approaching their ends to glue or wax them to the sides of the chamber. The top D is movable, fitting equally well either chamber, and, when adjusted, also rests on the outer wall of the chamber and the ends of the top bars, in the same manner and for the same purpose as the upper chamber. It has a false or inner bottom, *E*, of wire-cloth, by which the bees are confined to the chamber without obstructing free ventilation in connection with the

ventilators *d* in the ends of the top, but permits the escape of heat or moisture; and, when the ventilators are closed, it gives ample dead-air space above the chamber, just where it is most needed. The frames B B are so constructed and arranged that, when suspended in the chambers, they leave a suitable distance between their sides and bottom and the sides and bottom of the hive, while their distance from each other is determined by the width of the top bars, which connect throughout their length, and which have a vertical opening or openings, *e*, (slots or holes,) through their centers connecting with a horizontal opening or space, *e'*, in the top of the comb-guide *f*, and in combination with which a space is formed which admits the free passage through them of bees or currents of air in either a horizontal or vertical direction. The moth-trap consists of vertical slots or holes *h* through the alighting-board G, communicating with the drawer or receiver H below. Above the slots are adjustable or fixed shields *k*, which, when adjusted, prevent the bees from approaching the slots, but furnish a safe retreat or approach for the miller to the slots, through which he passes to the drawer beneath, which, being separated by a partition or separate drawer, I, from the bottom of the hive, prevents the deposit of the eggs where they can have sufficient heat and nourishment for their progeny to be reared, while the volume of light admitted by the ventilators attracts the miller to the front of the drawer and prevents his escape. By means of the ventilators *i i* in both ends and partitions of moth and trash-drawer, and in each end of the movable top, the ventilation may be regulated and controlled at will, rendering the hive amply warm for a northern or cool enough for a southern latitude. In the brood-chamber A for a strong colony I use ten frames, and confine the colony to the space occupied by the frames by introducing a false end or partition, J, in one or both ends, leaving air-spaces in the end or ends of the chamber. Then adjust the top and regulate the ventilation at will.

When for any purpose it is desired to open or examine, remove the top, slip the false ends back to the ends of the chamber, when the frames may be spread or taken out; or each one may be examined as it is moved back on the rest *b* without raising from its bearing. If surplus honey stored

in boxes is desired, close the vertical openings *e* in the top bars of the frame, leaving only as many open as correspond with the openings in the boxes; place the boxes; then adjust the chamber and top. If in frames, suspend the same or a less number as in the lower chamber; adjust the false ends and top. When a less number is used above than is in the lower chamber, close slots in top bars of lower frames, that would otherwise permit the bees to pass into the air-chambers. To form nucleuses for queen rearing, cover the vertical openings in the top bars of the lower chamber with wire-cloth or perforated tin; form nucleuses in the upper chamber by introducing the necessary number of movable partitions; close openings in the top bars of the frames used for nucleuses with strips of wire-cloth or perforated tin; make a small opening in rear of the

chamber (over a temporary alighting-board) for the egress and ingress of the bees in each nucleus.

The operation of the moth-trap and cleaner is readily understood without further description.

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

The comb-frames B, constructed, as described, with guides *f* and slots *e e'*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in the presence of two witnesses.

JAMES S. PROCTER.

Witnesses:

JOHN H. SMITH,
M. MITCHELL.

(9)