

D. L. GROVER.
Bee-Hives.

No. 140,497.

Patented July 1, 1873.

Fig. 1.

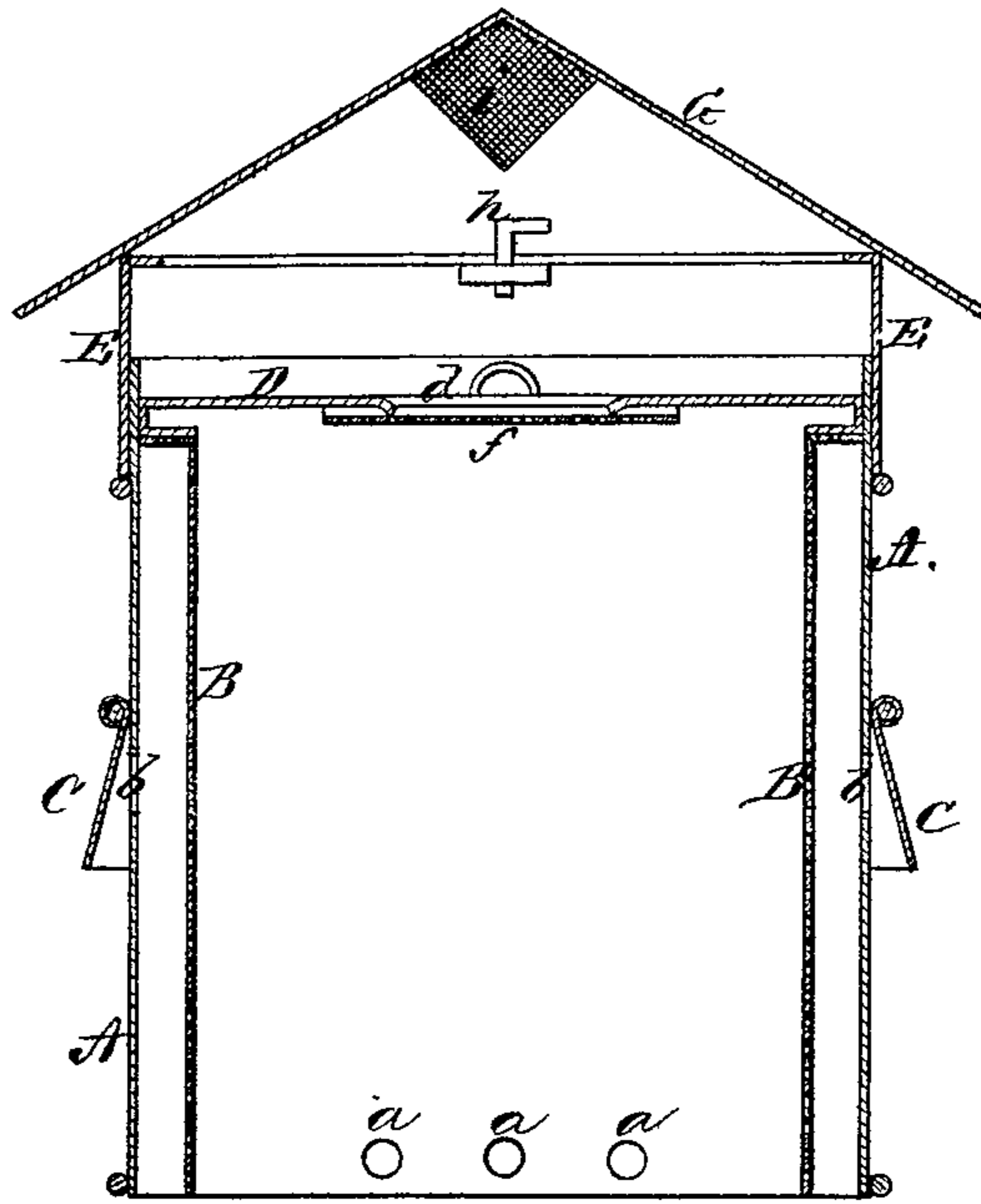
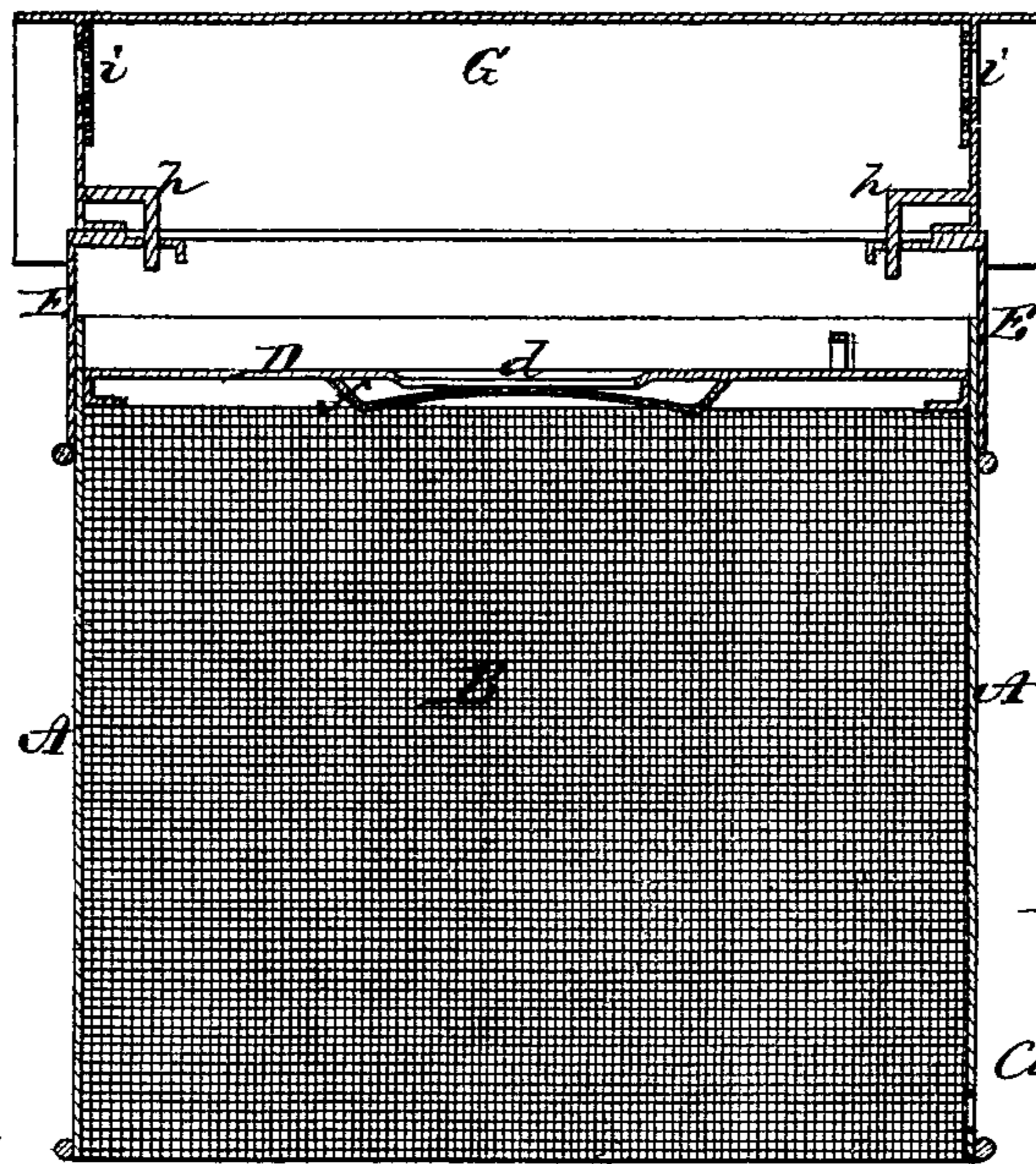


Fig. 2.



Witnesses:
E. N. Bates.
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UNITED STATES PATENT OFFICE.

DEMUS L. GROVER, OF GROTON, NEW YORK.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. **140,497**, dated July 1, 1873; application filed May 10, 1873.

To all whom it may concern:

Be it known that I, DEMUS L. GROVER, of Groton, in the county of Tompkins and State of New York, have invented a new and valuable Improvement in Bee-Hives; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of my bee-hive in transverse vertical section, and Fig. 2 is a longitudinal vertical section of the same.

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.

Like letters of reference in the several figures indicate corresponding parts.

A represents an ordinary square or rectangular hive with bee-entrances *a a*, as shown in Fig. 1. In the corners of the hive are fastened upright bars, to which are attached perforated linings B B, which run parallel to and a short distance from two opposite sides of the hive. These perforated linings may be made of tin, zinc, wire cloth, or any other suitable material, and may be removable or stationary, as desired. In the sides of the hive A, which are provided with the linings B B, are made ventilating-openings *b b*, which are covered on the outside with shutters of hoods C C. On the top of the hive A is the ordinary honey board D, in which is an aperture, *d*, covered with a perforated piece, *f*, or tin, or other suitable material. When honey-boxes are to be used with the hive on top of the honey-board D, a frame E, in the shape of a box, is slipped over the upper end of the

hive A, and the roof G attached on top of the same by pins *h h*, or other suitable fastenings. When no honey-boxes are intended to be used the roof G is attached directly on top of the hive A, and the box-frame E is dispensed with. In the corners of the roof G are wire-cloth covered openings *i i*, forming the upper ventilators.

Frames and honey-boxes of any suitable construction may be used with this hive.

Old hives may be fitted up with my interior perforated linings and ventilating openings, made as described, thus saving the expense of purchasing a new hive throughout.

The advantages gained by my improvements are pure and thorough ventilation; preventive against robbers; cooling the hive in hot weather without admitting worms or mice.

If the entrance becomes stopped up with snow or ice, or dead bees, they obtain pure air through the sides of the hive at the holes *b b*, the perforated linings B B distributing the air to all parts of the hive.

The object of the shutters C C is to prevent storms from driving into the hive, and to regulate the amount of air to be supplied; thus, in season of robbing, the entrances may be entirely shut up.

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

The perforated linings B B, arranged along opposite sides of the interior of the hive, with sheltered ventilating openings in said sides, and the honey board with perforated shield, all substantially as and for the purposes specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

DEMUS L. GROVER.

Witnesses:

FRANK CONGER,
EGBERT S. SEARS.