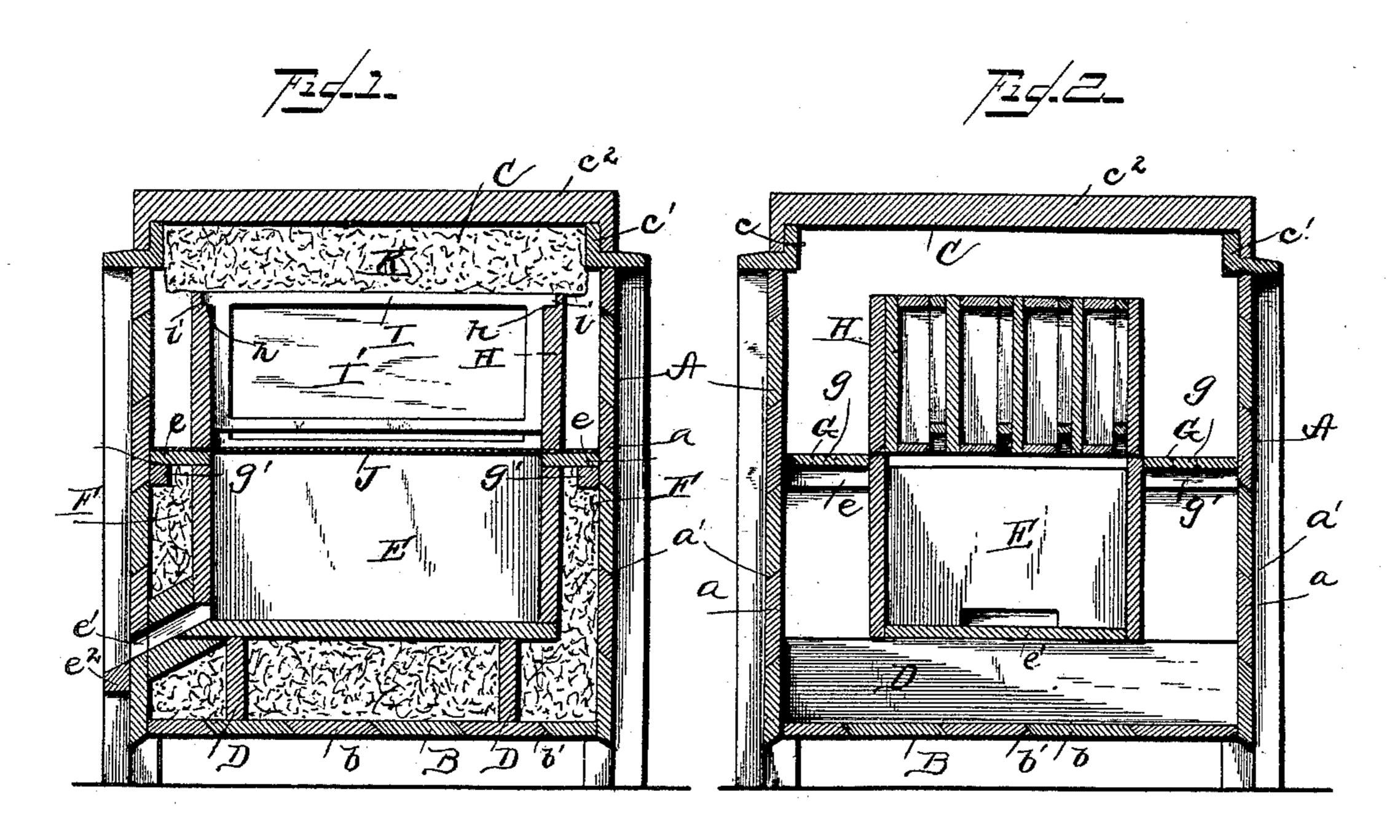
(No Model.)

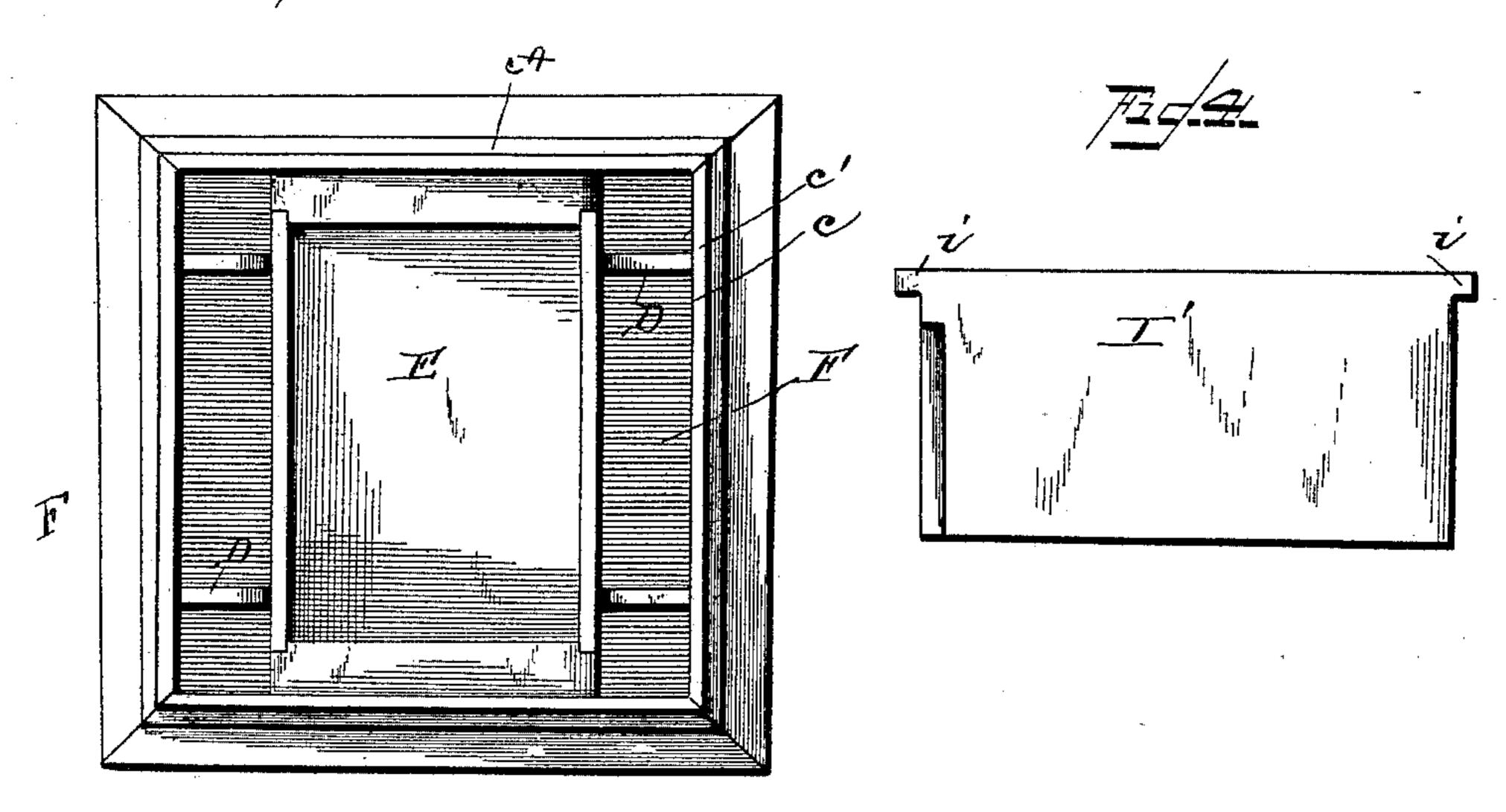
U. BAIRD.
BEE HIVE.

No. 424,844.

Patented Apr. 1, 1890.



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## United States Patent Office.

URIES BAIRD, OF ELLSWORTH, OHIO.

## BEE-HIVE.

SPECIFICATION forming part of Letters Patent No. 424,844, dated April 1, 1890.

Application filed July 24, 1889. Serial No. 318.573. (No model.)

To all whom it may concern:

Be it known that I, URIES BAIRD, a citizen of the United States, and a resident of Ellsworth, in the county of Mahoning and State 5 of Ohio, 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 of the invention, which will enable others skilled in the art to which it ap-

10 pertains to make and use the same.

The invention relates to improvements in bee-hives, the object being to keep the bees dry and warm in winter by packing around the brood-chamber some absorbent non-con-15 ducting material—such as chaff—which will absorb the moisture deposited by the bees and will prevent the escape of the heat they give out; and it consists in the construction and novel combination of parts hereinafter de-20 scribed, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

Figure 1 of the drawings represents a central vertical section of a hive embodying the 25 invention, which section passes through the doorway of the hive. Fig. 2 represents a similar section thereof at right angles to that shown in Fig. 1. Fig. 3 is a plan view of the hive unpacked and with the upper or honey 30 chamber removed. Fig. 4 is a side view of the division-board l' of the honey-chamber.

Like letters of reference denote correspond-

ing parts in all the figures.

Referring to the drawings by letter, A desig-35 nates the outer frame or casing of the hive, rectangular and nearly square in form and supported at the desired height by suitable legs secured to its corners. Each side of said casing is composed of a proper number of 40 horizontal boards or strips a, placed one above the other, with their ends secured to the upward extensions of the adjoining legs and with their lower edges a' beveled downward and outward, for a reason hereinafter explained. 45 The bottom B of the casing is composed of similar boards or strips b, which are similarly beveled at one or both edges, as at b'. The top C of the casing is provided with a large opening c, surrounded by an upward-stand-50 ing flange c', upon which fits the depending flange of the cap-cover  $c^2$ . The opening in the top C may be fitted with any desired style | desirable.

of top; but the one described is the one preferred. Extending across the floor of the casing from side to side on its inner surface are 55 the two similar boards D, which have their edges upright and stand at equal distances, respectively, from the front and rear wall of the casing.

Eisthe brood-chamber, rectangular in shape 60 and standing upon the boards D. The said chamber extends nearly from front to rear within the casing, and is connected to the front and rear walls by the short strips e, the inner edges for which are secured to the up- 65

per edges of its ends.

e' is the bee-entrance, inclining downward from the brood-chamber to the front wall of the casing in the usual manner, and  $e^2$  is the alighting-strip below the outer end of the 7° bee-entrance for the bees to rest upon when about to enter or leave the hive.

The brood-chamber makes two equal-sized side spaces or chambers F within the casing, near the ends of which, below said chamber, 75 are the boards D. There are also spaces below the brood-chamber between said boards, and to the upper part of the walls of the brood-chamber are secured the strips e, which serve to hold the same in place.

G G are boards which cover in the spaces F, and are provided at suitable points with the openings g, affording access to the bees into said spaces or chambers from above. The ends of these boards G rest upon supporting- 85 strips g', secured to the front and rear walls of the casing and extending from the side walls thereof to the broad-box near the top of the latter.

His the rectangular honey-chamber, resting 90 upon the brood-chamber and having the usual inner rabbets h at the upper edges of its ends to receive and support the projections i of the comb-frames I, which are of ordinary construction and may be of any desired number. 95

I' is a hanging division-board, having projections i at its upper edge similar to those of the frames, which board is of the same depth as the honey-chamber. The said board can be moved closer up to the frames when the 100 swarm is weak and there are but few frames and prevent the heat given out by the bees from being extended over a larger space than

J is a cloth that can be extended between the open meeting ends of the brood-chamber and honey-chamber, cutting off communication between them.

K is a cushion made of closed bags of some suitable cloth and a stuffing of chaff, which is an absorbent and non-conducting substance.

The brood-chamber may be either fixed or removable. To pack the casing the cover and ro board G are removed and chaff is packed in the chambers or spaces around the broodchamber. The cushion K is then placed above the honey-chamber.

In putting the frame or casing of the hive 15 together the beveled edges a' of the boards should be slightly separated from each other, so as to form escape-spaces for the moisture in the hive.

The chaff aids in retaining the heat given 20 out by the bees and absorbs the moisture deposited by them and gives it to the walls and bottom of the casing, upon which it is condensed and conducted out of the casing by the beveled edges of the walls and floor thereof, issuing between the boards that form the walls and floor and dropping thence to the ground.

The packing, obviously, may be performed without removing the brood-chamber and after the swarm has occupied the hive and the 30 latter is on its summer stand. The hive has been found very useful in practice, and the simplicity of its construction is apparent.

Having described my invention, I claim— The combination of the casing having the 35 beveled side and bottom boards a and b, slightly separated from each other for the escape of moisture, the cover C, the transverse boards D within the casing, the brood-chamber forming the chambers F and resting on 40 said boards, the boards G, covering the chambers F, the honey-chamber above the broodchamber, provided with suitable comb-frames, and the cloth J, to stop communication between the brood and honey chamber, substan- 45 tially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of witnesses.

URIES BAIRD.

Witnesses:

BENJ. McGowen, J. A. MANCHESTER, HUGH A. MANCHESTER.