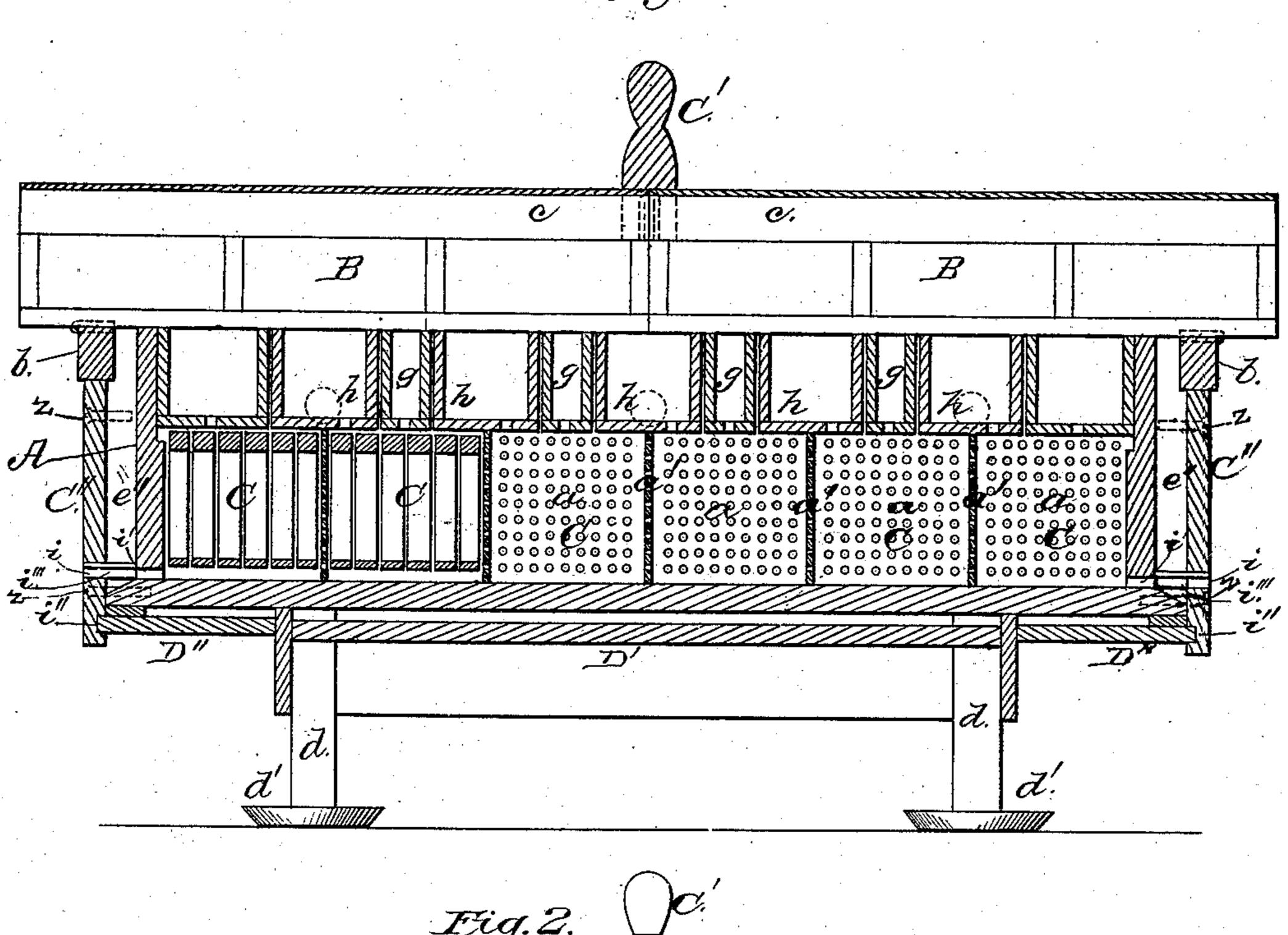
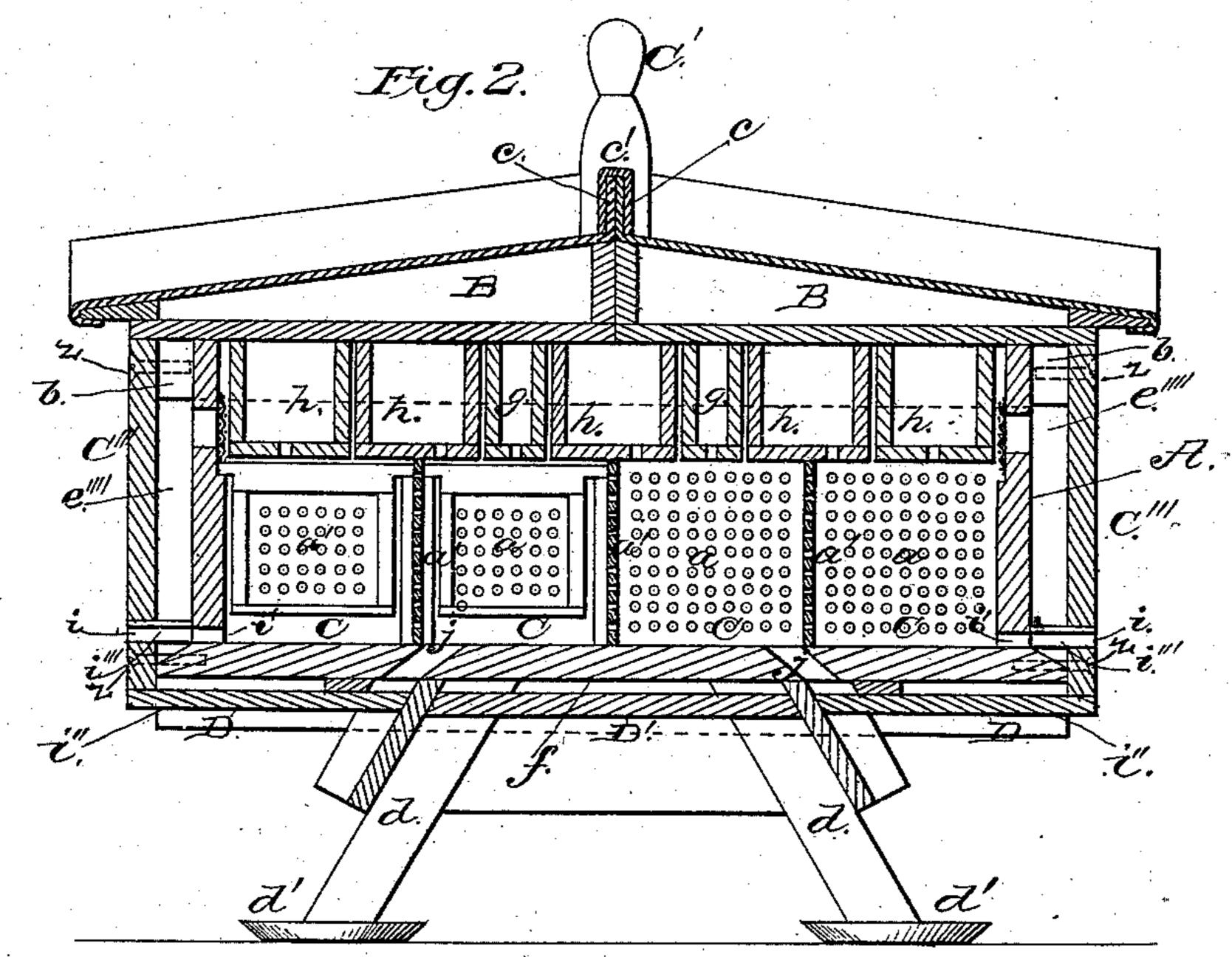
J. W. READ.
Bee Hive.

No. 235,896.

Patented Dec. 28, 1880.

Fig.I.





Aghnot Cecis, Trank of Masi. Fig.3.

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## United States Patent Office.

JOHN W. READ, OF WEST SALEM, OHIO.

## BEE-HIVE.

SPECIFICATION forming part of Letters Patent No. 235,896, dated December 28, 1880.

Application filed April 28, 1880. (No model.)

To all whom it may concern:

Be it known that I, John W. Read, of West Salem, in the county of Wayne and State of Ohio, 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 a longitudinal section of my improved bechive, and Fig. 2 is a transverse section of the

15 same. Fig. 3 is a detail.

This invention has relation to improvements in that class of hives wherein a number of independent chambers are assembled in a single construction, each chamber being designed to

20 contain an independent brood.

The object of the invention is mainly as follows: to produce throughout the subdivisions of the hive a uniform heat, so that the weak colonies may be kept warm and in a thriving condition during cold weather; to produce throughout the subdivisions of the multiple hive the same scent, so that should a worker stray into a homestead not his own it may feel at home; to construct a multiple-chamber hive whereof the chambers may be readily visited to remove honey or feed the colonies, and wherein the broods may be readily protected from cold; and, finally, to protect such hives generally.

The nature of the invention will be herein-

after more fully set forth.

In the accompanying drawings, the letter A designates a rectangular box of from eighteen to twenty-four inches deep, sufficiently wide to contain two or more rows of chambers, and of a length proportionate to the number of the chambers to be employed. Usually the box is sufficiently wide to contain four chambers. The chambers are made in box A by means of perforated sheet-metal partitions a a', crossing each other atright angles, or I may use wire-gauze, the object being to establish ventilation throughout the chambers of the hive, and by the dissemination of the animal beat of the broods in all the said chambers to produce a uniform temperature therein and

prevent the destruction by cold of the weaker broods. A uniform scent is also established in all the said chambers, which, in the event of a worker getting into a chamber not his 55 own, causes him to feel at home, and does not draw upon him the hostility of its proper oc-

cupants.

The box A is supported upon legs d, that rest in pans d', filled with clean water or a lit- 60 tle oil, by which means the access of ants or other robbers to the hive is prevented. The sides of the box extend somewhat beyond its ends, and to these projecting ends are attached the cleats b, to which the hinged sections B of 65the roof are hinged. The roof is doublewalled, and in cross-section is triangular, so as to shed water after the manner of a gable roof. At their meeting edges the sections are provided with upright flanges c, extending 70 along the ridge of the roof and in a line at right angles thereto, over which are passed the guard-clamps c'. These are **U**-shaped in section, and not only exclude rain, snow, or sleet, but also prevent the sections from being 75 thrown up and the chambers C exposed.

To prevent robbery the roof-sections may

be locked together, if desired.

At the intersection of the ridge-flange and side flanges is a finial, C', having in its lower 80 edge the grooves e e', crossing each other at right angles, and receiving respectively the said ridge and side flanges. This finial is readily removable, as well as the guard-clamps, and serves to prevent water from leaking into 85 the hive at the middle of the roof, where the flanges meet and are unprotected by the guard-clamps, as shown in Fig. 1. The bottom of the box also extends beyond the end walls thereof, and to the bearings thus made 90 are attached removably, by means of screws z, the end pieces, C", that form with the real ends of the structure an air-chamber, e'', and whereof the ends project beyond the sides and below the bottom of the box, as shown.

The side pieces, C''', are removably secured to the ends of the pieces C'', and form with the sides of the box A the dead-air spaces e''''. These spaces may be filled with dry sawdust or other non-conductor of heat.

The lower projecting end of the pieces C'' are grooved, as shown at i'', and in them are

235,896

slid the removable bottom pieces, D, of the casing. These, with the removable board D', that fills the space inclosed by the legs, and the board D" at the outside of said legs, constitute the bottom of the casing, between which and the bottom of the hive-box A is a dead-airspace, f. Thus the entire hive is surrounded by an outer casing, which in summer may be taken off by removing the fastening-screws z aforesaid.

The bees enter the hive-chambers at the sides and ends of the box through registering perforations i i' in the side and end walls of the box and casing, the interval between which is spanned by a bridge, i''', attached to the casing-walls and coming off therewith. They enter and leave the inner chambers through inclined apertures j in the bottom of the box A. The comb-frames are suspended within the hive-chambers upon suitable ledges.

For raising queens the upper part of the hive above the chambers may be made as deep as the chambers, and over every alternate chamber below is placed a box, g, containing the brood from which the queens are to be reared, the said box not covering the whole of the chamber below, but allowing a part of the surplus-honey box to extend over it, as shown at h. This arrangement affords plenty of room for storing surplus honey, and also for raising a large number of bees, the heat

necessary for this purpose being the aggregated warmth of the broods in the hive-chambers.

I am well aware that a multiple hive containing a number of homes for bees is not new; also, that a double-walled hive has been used before. Hence I do not claim such devices, broadly.

What I claim as new, and desire to secure 40

by Letters Patent, is—

1. A multiple hive having a double-wall roof provided with flanges c, the clamp-guards c', passed oversaid flanges, the finial C', securing the same, and the removable side, end, 45 and bottom pieces, C'' C' D D' D'', forming with the hive dead-air spaces, as shown and described.

2. The combination, with a double-wall multiple hive, of the hinged roof-sections B, hav- 50 ing the erect flanges c at their meeting edges, the U-shaped clamp - guards c', passed over said flanges, and the finial C' at the point of intersection of the same and grooved to fit over the same, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence

of two witnesses.

JOHN WESLEY READ.

Witnesses:

!

JAMES JEFFERY, DANIEL GABLE.