

No. 860,852.

PATENTED JULY 23, 1907.

E. T. CARY.
COMBINED BOTTOM BOARD AND FEEDER FOR BEEHIVES.
APPLICATION FILED SEPT 4, 1906.

Fig. 1.

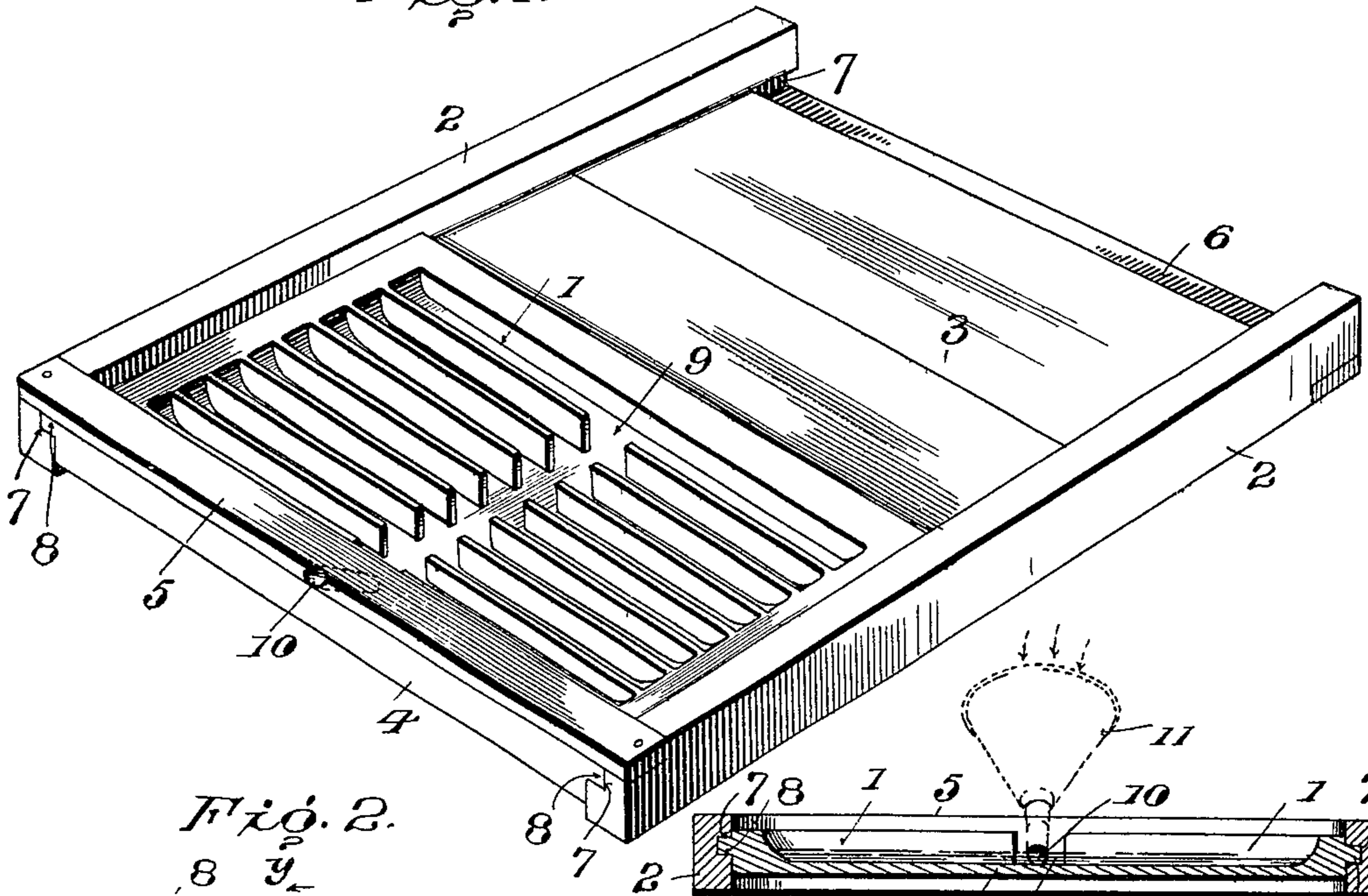


Fig. 2.

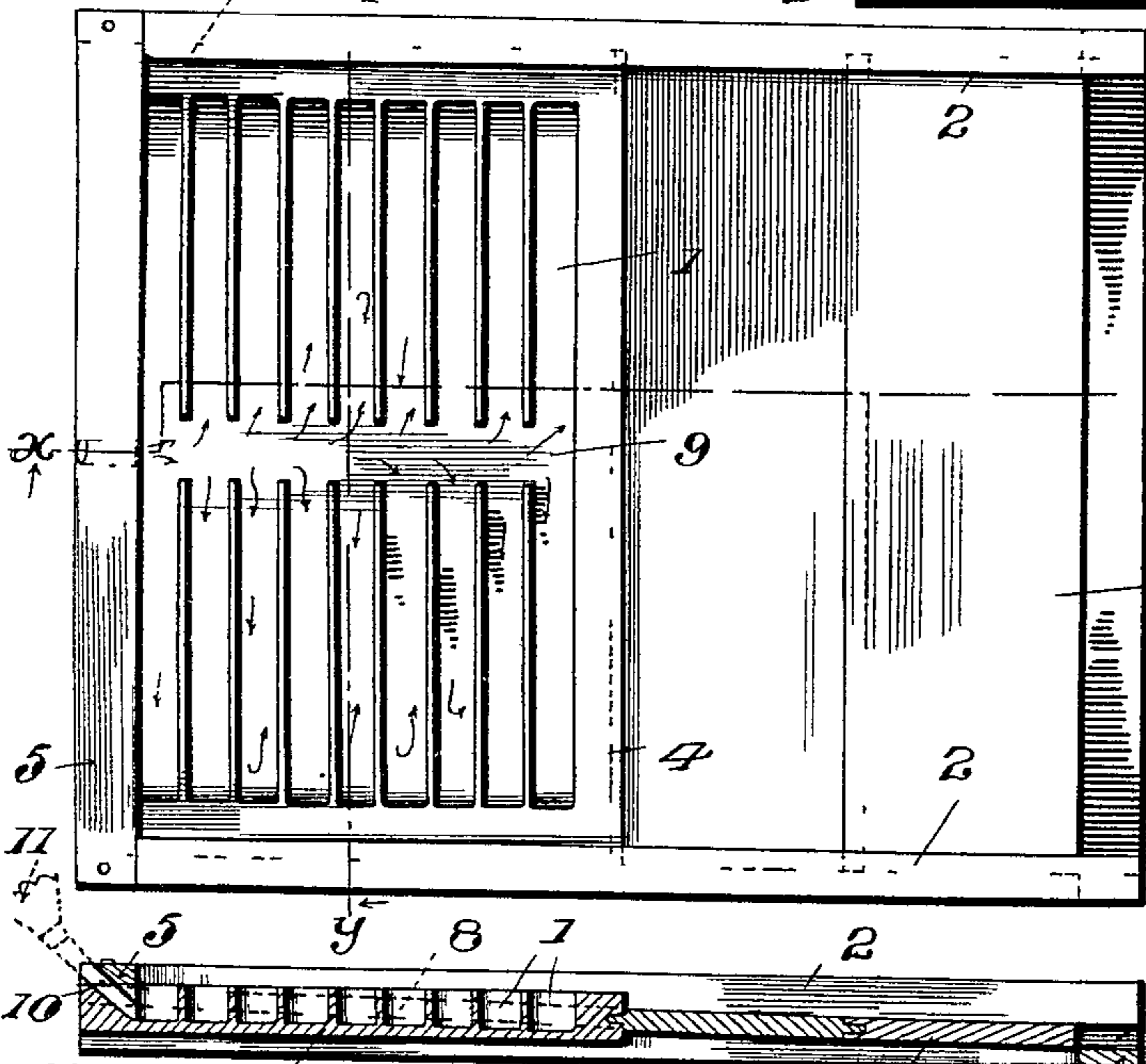
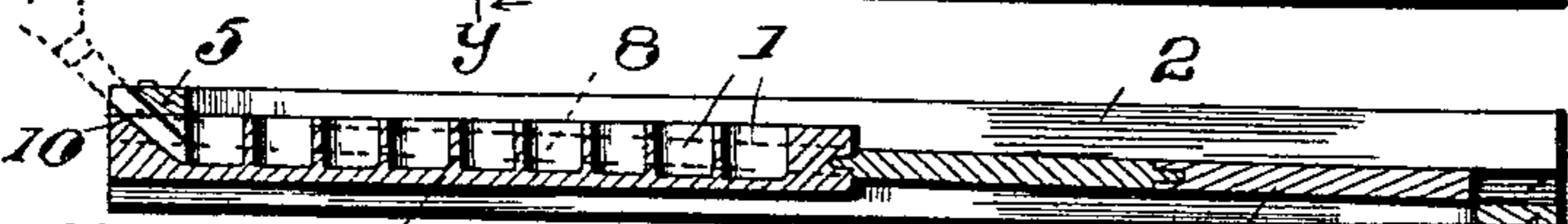


Fig. 4.



Witnesses

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Fig. 3.

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EDWARD T. CARY, OF ALEXANDRIA, VIRGINIA.

COMBINED BOTTOM BOARD AND FEEDER FOR BEEHIVES.

No. 860,852.

Specification of Letters Patent.

Patented July 23, 1907.

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To all whom it may concern:

Be it known that I, EDWARD T. CARY, a citizen of the United States, residing at Alexandria, in the county of Alexandria and State of Virginia, have invented certain new and useful Improvements in Combined Bottom Board and Feeder for Beehives, of which the following is a specification.

As commonly practiced in the provision of bee hive structures, the bottom is separate and movable with reference to the superstructure or habitat, either part being detachable to admit of access being readily had to the interior of the structure. It is also necessary at times to the promotion of the colonies that they be supplied with artificial food, such as syrup, this being usually accomplished by means of a feeder generally arranged in the lower portion of the hive and consisting of a channeled tray separate from and placed upon the bottom of the structure.

This invention contemplates a bottom for hive structures, of novel formation and embodies means for receiving food, thereby simplifying and cheapening the construction and reducing the labor of the apiarist in attending to the usual welfare of the colonies with the resultant advantage of quantity and quality of the product.

The invention consists of a bottom board having a plurality of separated distributing channels to receive the feed and an intersecting supply channel in connection with the distributing channels to convey the syrup thereto, said supply channel having a duct leading therefrom into which the liquid feed is run at required intervals.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of a combined bottom board and feeder constructed in accordance with and embodying the essential features of the invention; Fig. 2 is a top plan view of the device; Fig. 3 is a longitudinal section on the line $x-x$ of Fig. 2; and, Fig. 4 is a transverse section on the line $y-y$ of Fig. 2.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In its specific construction, the bottom board is of such formation as to adapt it to the special formation of hive for which it is designed, the essential feature being that it embodies a series of channels 1 adapted to receive the syrup or other liquid food upon which the colony is to thrive. While the channels 1 may be provided in any manner, either as an integral part of the bottom or separate therefrom, it is preferred to have the same occupy a portion of the bottom only and that

near the inner end so as not to interfere with the free ingress and egress of the worker bees.

As shown, the bottom board consists of longitudinal strips 2, plates 3 and 4 and transverse connecting strips 5 and 6. The longitudinal strips 2 are formed upon their inner sides with grooves 7 to receive matching tongues 8 at the ends or outer edges of the plates 3 and 4, said grooves inclining to give to the bottom a slight inclination to the horizontal, whereby water is prevented from entering the hive when the same is properly set up. Each of the plates 3 or 4 may consist of one or more parts and are joined by a tongue and groove so as to insure the formation of a tight closure between the meeting edges. The inner or rear portion 4 of the bottom is provided upon its top side with the channels designed to contain the liquid food, and in order that the food may be equally distributed in the channels to a like depth, the plate 4 occupies a horizontal position. The entrance portion 3 of the bottom is inclined so as to shed water.

Inasmuch as the plate 4 is provided with the channels 1, it is considerably thicker than the entrance portion 3, its top side being provided with a plurality of parallel grooves forming the feed channels 1, said grooves being provided by means of a gang of saws, or in any manner well understood in the art of wood working. A channel 9 intersects the channels 1 and is designed to receive the syrup which flows therefrom into the channels 1, said channel 9 having a duct 10 in communication therewith at one end through which the syrup is supplied in any convenient way as by means of the funnel 11 indicated by dotted lines in Figs. 3 and 4. The channels 1 serve to distribute the syrup whereas the channel 9 serves to supply the syrup to the distributing channels. The duct 10 is formed in the rear portion of the board 4 and inclines upwardly and rearwardly, its upper end being adapted to receive the nozzle of the funnel when supplying syrup to the hive.

In order that the part 4 may occupy a horizontal position, the tongues 8 at the ends or opposite edges thereof incline in a similar manner to the grooves 7 so that when the feeder plate 4 is in position its top and bottom sides are in planes parallel with the respective top and bottom edges of the strips 2.

The provision of a series of feed channels enables the bees to feed without requiring their alighting in the syrup, the series of walls and partitions separating the channels forming supports upon which the bees may obtain a footing when feeding. Moreover the great extent of support thus provided by the partitions enables a great number of bees to feed at one time which would not be possible if the partitions were dispensed with and the feed receptacles were in the nature of a shallow tray. By grooving the board,

as suggested herein, to form the series of distributing channels, the feeder is enabled to be cheaply constructed and is substantial, durable and prevented from warping, and the expense of joints wholly obviated. It is noted that the bottom board comprises essentially an entrance portion 3 which is inclined and a feeder portion 4 which is horizontal, the entrance portion being outwardly and downwardly inclined to shed water, whereas the feeder portion consists of a plate or board having a plurality of distributing channels which are adapted to be supplied from a main channel through a single opening or duct in the manner set forth.

The longitudinal strips 2 and the transverse strips 5 and 6 form a frame to receive the plates 3 and 4 constituting the bottom proper, said frame preventing warping of the bottom plates and strengthening the same.

Having thus described the invention, what is claimed as new is:

1. A bottom board for beehives comprising a frame, and plates fitted to the frame to form the bottom proper, an

end portion of the bottom being plain to constitute an alighting section and the other end portion of the bottom being provided with any communicating grooves forming feeder channels. 25

2. A bottom board for beehives comprising a frame, and plates fitted to the frame and constituting the bottom proper, and end portion of the bottom being plain and slightly inclined to form an alighting section and the other end portion of the bottom being parallel with the plain of said frame and having communicating grooves upon its upper side to form the feeder channels. 30

3. A bottom board for bee hives comprising longitudinal strips having inclined grooves upon their inner sides, an entrance section fitted into the grooves and correspondingly inclined, and a feeder section having inclined tongues at its edges fitting in said inclined grooves whereby the feeder section is adapted to occupy a horizontal position, said feeder section having a supply and distributing channels in its upper side and having a duct leading from the supply channel. 35 40

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD T. CARY. [L. S.]

Witnesses:

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