E. JONES.

Bee Hive.

No. 3,911. Patented Feb. 12, 1845.

Fig: 1.

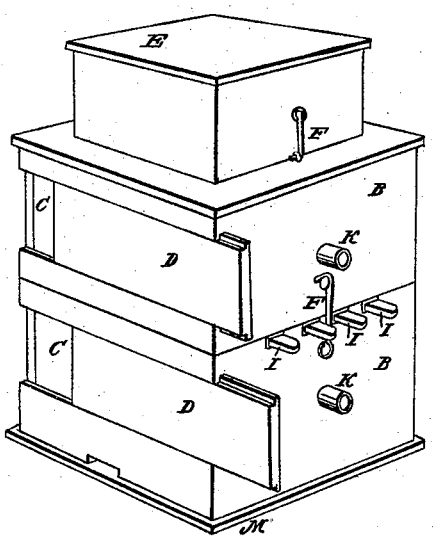


Fig: 3.

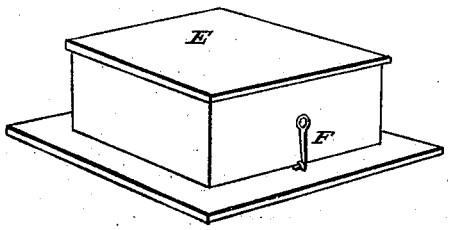


Fig: 2.

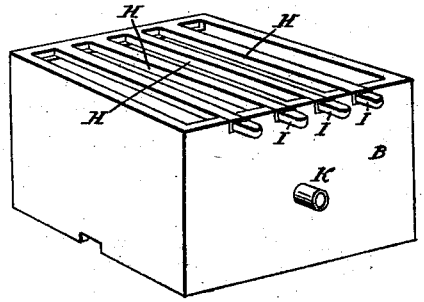


Fig: 4.

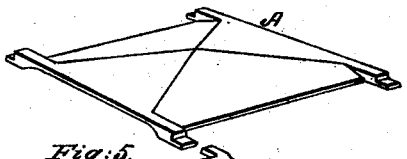


Fig: 5.

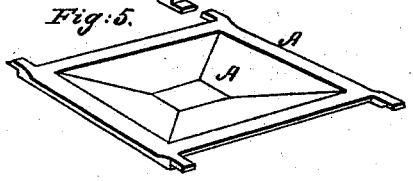
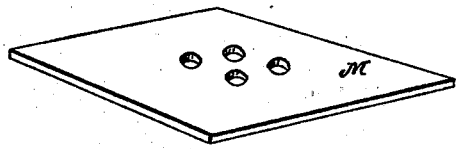


Fig: 6.



UNITED STATES PATENT OFFICE.

ELIAS JONES, OF AMSTERDAM, NEW YORK.

BEEHIVE.

Specification of Letters Patent No. 3,911, dated February 12, 1845.

To all whom it may concern:

Be it known that I, ELIAS JONES, of Amsterdam, in the county of Montgomery and State of New York, have invented a new and Improved Mode of Dividing and Increasing Swarms of Bees, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a perspective view of the hive. Fig. 2 is a perspective view of one of the boxes. Fig. 3 is a perspective view of the top. Fig. 4 is a perspective view of the pyramidal bottom detached from the hive. Fig. 5 is a perspective view of the under or concave side of the pyramidal bottom. Fig. 6 is a perspective view of the bottom board upon which the pyramidal bottom rests.

The hive, generally, is made like other bee hives in use, such as the pyramidal bottom A, boxes B B, glass windows C for examining the bees, sides D for closing the windows, top E for collecting the honey, fastenings F for securing the boxes together.

My improvement consists in a certain new and useful combination and arrangement of a horizontal series of parallel perforated tubes H for conducting the warm breath of the apiarian to the vicinity of the joint between the boxes where the separation and division is required to take place, for the purpose of driving the bees to any part of the boxes required whenever it becomes necessary to colonize them. Said tubes serving also to sustain the comb in the boxes and to admit air for ventilation. And slides I for closing them in winter—said slides also strengthening the tubes to secure the comb attached to them. Also in the arrangement of other tubes K in the sides of the boxes to admit the breath of the apiarian for directing the bees to the position required in the boxes for the purpose above set forth.

The horizontal range of perforated parallel tubes H aforesaid are made of paper and placed at the top of each box inside and just below the joint between the two boxes, extending through the sides of the boxes, the ends of the tubes outside the boxes being open for the admission of the air, or the slides. The single tubes K have no slides and are arranged near the bottoms of the boxes. They are perforated around their peripheries from the inside to the outside. The paper tubes are to be perforated after they are arranged in the hive and as required by withdrawing the slides and introducing a wire bent at right angles and made sharp at the bent end. They may be formed on the slides after being inserted into their corresponding grooves by wrapping the paper around them and then withdrawing the slides from the paper.

The bees will, as usual, commence their operations at the top of the upper box and work downward till all the boxes are filled. Feeling themselves crowded, and needing more space they will swarm and colonize elsewhere unless attended to before the boxes are filled. Therefore, before the lower box be filled, which may be seen through the glass window, preparation is made for a horizontal division of them by driving the bees from the joint where the comb is to be divided; this is effected by introducing warm air or breath through the perforated tubes, to which the bees have an avertion, and as soon as they feel the warm breath to touch their bodies, they retreat from the vicinity of the tubes and when they are in a proper position in the boxes for the operation of dividing the comb a flat plate of metal, or a wire, or silk thread or other suitable article is passed between the boxes by which the comb is divided horizontally. The boxes are then separated and placed upon empty boxes—that which was at top becoming the top of a range of boxes; and that which was at the bottom becoming the top of another range of boxes—a top being previously placed upon the lower box. Thus are formed two colonies of bees from one hive. The boxes are then placed upon the pyramidal base A which is made concave on the under side and placed upon a horizontal perforated board M of greater length and breadth—the lower edges of the pyramid being made concave except at the four corners, which rest upon the perforated board; thus when the worm falls from the comb he strikes the inclined surface of the pyramidal base and rolls down upon the horizontal perforated board and in attempting again to ascend will pass under the concave edges of the pyramid to the apertures in the horizontal board. The bottom board may rest on legs upon the ground or be suspended from the under side of a roof or otherwise. The honey may likewise be taken from the hive without driving the bees from the hive or destroying them by simply driv-

ing the bees from the upper to the lower box in the manner above described, then passing a thin slide or wire through between the boxes, removing the upper from the lower box, placing the top of the formed upon the top of the latter, discharging the upper box of its honey and then making it the lower box, in this manner the honey can be perpetually taken without destroying the bees. This, however, I do not mean to claim as my invention.

It should be observed that in dividing or colonizing the bees in the manner above described that a pyramidal base and rectangular top must be provided for each colony or pair of boxes.

What I claim as my invention and which I desire to secure by Letters Patent is—

The arrangement of the horizontal parallel tubes and slides and the manner of dividing the bees by means of the breath as set forth.

ELIAS JONES.

Witnesses:
G. D. PRICE,
JOHN OLMSTED.