J. W. Davidson.

Bee Hive.

No. 2,777. Patented Sept. 17, 1842.

Fig. 7.

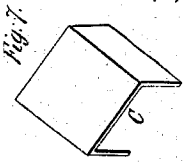


Fig. 2.

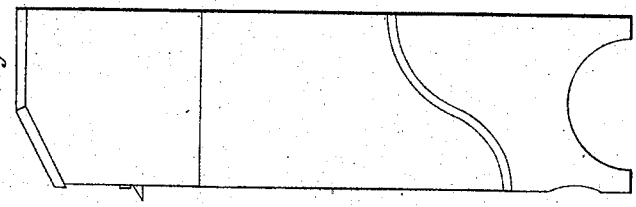


Fig. 6.

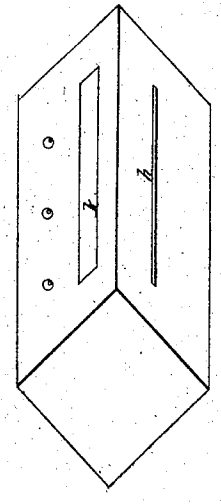


Fig. 5.

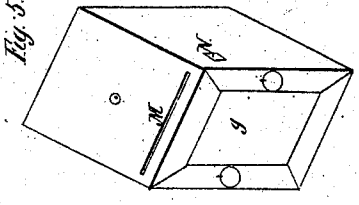


Fig. 4.

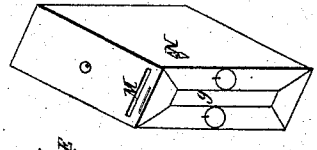


Fig. 1.

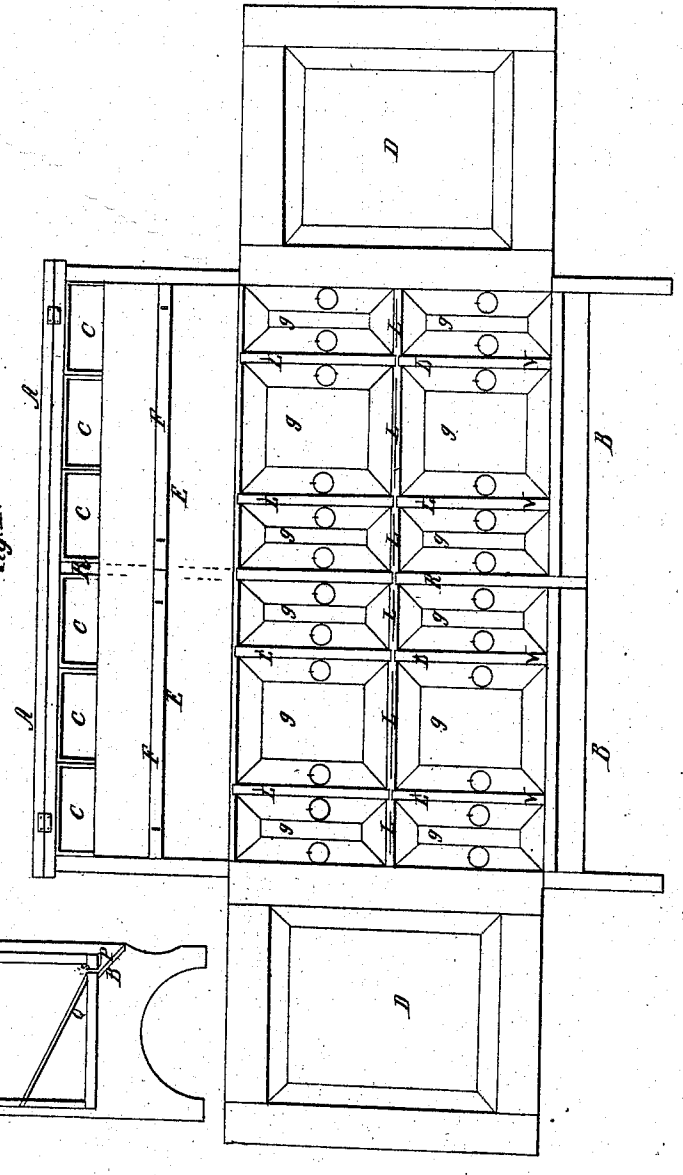
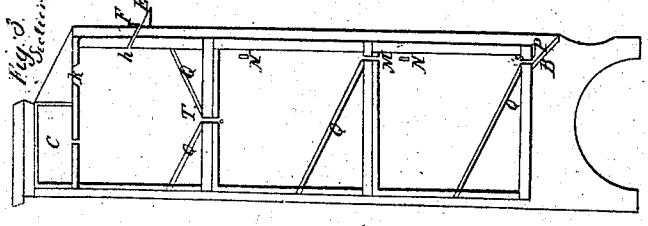


Fig. 3. Section



UNITED STATES PATENT OFFICE.

JESSE W. DAVIDSON, OF ROME, OHIO.

BEEHIVE.

Specification of Letters Patent No. 2,777, dated September 17, 1842.

To all whom it may concern:

Be it known that I, JESSE W. DAVIDSON, of the town of Rome, in the county of Richland and State of Ohio, have invented a new and useful Improvement in the Construction of Bee-Houses; and I hereby declare that the following is a full, clear, and exact description of the construction of the same, reference being had to the annexed drawings, making a part of the specification, in which—

Figure 1 exhibits a view of the front elevation of the bee-house: with the doors standing open showing the whole front part of the house. Fig. 2 exhibits an end view of the house. Fig. 3 exhibits a transverse section through A B, A B, showing all the chambers. Fig. 4 exhibits a plan of one of the small drawers. Fig. 5 exhibits a view of the plan of one of the large drawers. Fig. 6 exhibits a view of the plan of one of the large boxes over the drawers. Fig. 7 is a view of the plan of one of the small boxes at the top of the house. The front part of the lids is designated by the letter A. The two boards or inclined planes at the bottom by the letter B. The small boxes at the top by the letter C. The doors by the letter D. The boards at the top for the bees to light on, and the opening or holes into the large boxes by the letter E. The slides at the top by the letter F. The drawers by the letter I. The opening or holes through the large boxes opposite the slides by the letter *h*. The top of the large boxes and the glass to exhibit the working of the bees by the letter *k*. The small mortises or holes through the front of the partitions and floors by the letter L. The opening at the top of the drawers corresponding with the opening through the floors, by the letter M. The holes in the sides of the drawers by the letter V. The round holes in the upper tier of drawers and large boxes by the letter O. The slides to shut the bees out at pleasure by the letter P. The bottoms of the drawers forming the inclined planes by the letter Q.

To enable others skilled in the art to make and use my invention I will proceed to direct its construction and operation.

The bee-house consists in a house or box made in the shape of a bureau; with the exceptions of its top; and four feet ten inches in height, four feet eight inches in length, one foot four inches in width. The size however may vary to suit the notion of the purchaser.

The house is divided into two separate apartments by means of a center partition R this partition is made the length and width of the house, to be inch stuff and dovetailed into the upper and lower floors. The house is also divided by three tiers, or stories, by means of a plank division or floors that are fitted into the ends and center partition of the house, by dovetailing into both. The lower floors to be the breadth and thickness of the center partition, and holes mortised through in an oblong square, within two inches of the front edge, to correspond with like holes in the lower tier of drawers, that the bees may have ingress and egress, the two boards at the bottom of the house, to be let in by a groove, running back with an angle of fifty degrees till they strike the under side of the lower floor corresponding with the holes through the floors these boards may be four inches wide for the bees to light on, the middle and upper floors of the same thickness, but one inch less in width so as to receive the doors, dovetailed into the ends and center partition. The second or middle floors, to have holes mortised through within one inch of the front part, to correspond with like holes at the bottom of the drawers in the second tier, the third or upper floors to have holes T bored through them in a center line, and cut so as to form an inclined plane of twenty-eight degrees; at the top of the floors from one hole to the other, in combination with the holes in the large boxes and also with the holes O in the upper tier of drawers, the second and third floors to be one inch less in width, than the center partition and under floors so as to receive the doors; dovetailed into the ends and center partition.

The stories or space between the floors are fourteen inches in the clear, and are subdivided by two vertical partitions V in each apartment, making six chambers in each, to receive the drawers; making twelve drawers in all. The size of the drawers is as follows, two large drawers in each apartment 12 by 14 in., and four small drawers in each apartment 6 by 14 in. and 13 in. back, with glass in the front to exhibit the working of the bees, the drawers to be made of half inch stuff, and the bottoms to be put in by

a groove cut in each side leaving an opening at the front part of the under side of half an inch for the bees to pass up and down; forming an inclined plane of twenty-eight degrees, till the bottom strikes the back; the front of the drawers to have two rings to pull them out by, put in by wires, so they will hang downward. The drawers to be sunk back the thickness of the rings to receive the doors; the upper stories to be divided into two chambers by the partition R, so as to receive a box in each chamber two feet two inches long, one foot high and one foot two inches broad, leaving room at the top of the large boxes, to put on three small boxes C in each apartment, see Fig. 3, of 8 inches long 8 in. wide and four inches high with glass in front to see when they are full of honey, or there may be more small boxes on top of the large boxes; the large boxes to have a strip of glass *k* in the top near the front edge; to exhibit the working of the bees, and a ring at each end so they can be lifted out at pleasure the roof resembles the roof of a desk hung with two pairs of butts, so the front part may be turned back at pleasure, the doors may be paneled and locked the front of the top to be locked, the ends of the house to be made of one and a half inch plank.

The bottoms of the two large boxes, are put in by a groove on each end, starting within half an inch of the center of the end running back with an angle of twenty eight degrees till they strike the sides of the boxes, the bottoms of the boxes and drawers are put in with a groove so they may be taken out at pleasure. The object of the two large boxes at the top, is to put the first swarms of bees in, as it is natural for bees to commence working at the top of any open cavity and work downward; those boxes are calculated to hold the main body of bees, the holes in the front part of the large boxes in combination with the holes in the upper part of the house, is for the convenience of the bees, that they may fill the boxes and upper tier of drawers much sooner, owing to the short distance they have to travel to and from their honey boxes, avoiding the inconvenience of traveling up through the drawers, the small boxes will be filled much sooner when they stand immediately over the main body of bees; the object of the center partition is to divide the house into two separate apartments, so the bees may retain two queens, in the same house, and in doing so they will multiply and increase much faster. The object of the boards at the bottom is for the bees to light on in communication with the holes through the floors up into the drawers, the distance being so short for the bees to travel till they reach their honey drawers, the boards to be of different color so that the bees may know their own place, the boards at the bottom are put in by a groove cut in at each end and run back with an angle of fifty degrees till they strike the back part of the holes in the lower floors and about three inches wide the two slides at the bottom of the floors are for the purpose of shutting the bees in at pleasure.

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

The combination of the upper or swarming box and its small honey boxes with the collateral hive boxes below constructed and arranged substantially as above described.

JESSE W. DAVIDSON.

Witnesses:
GEORGE K. WEST,
J. J. GREENOUGH.