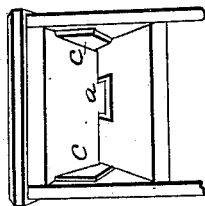
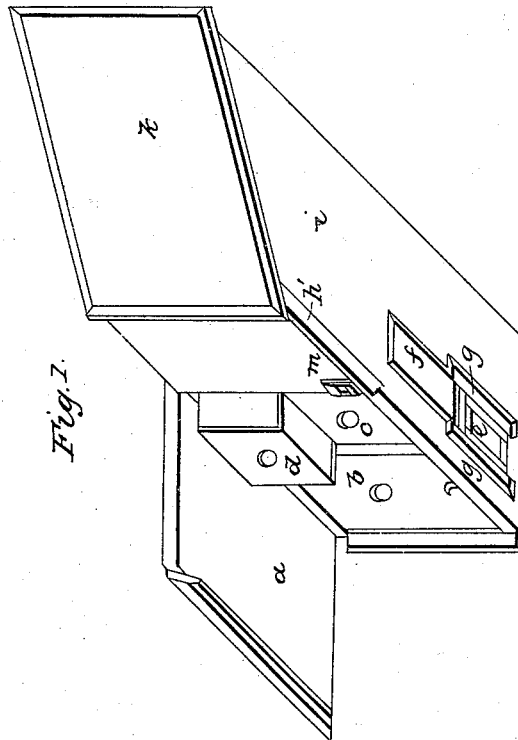
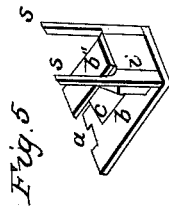
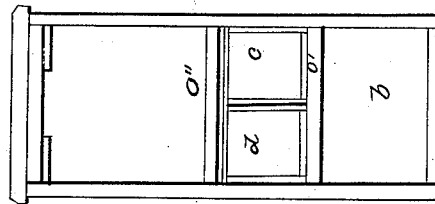
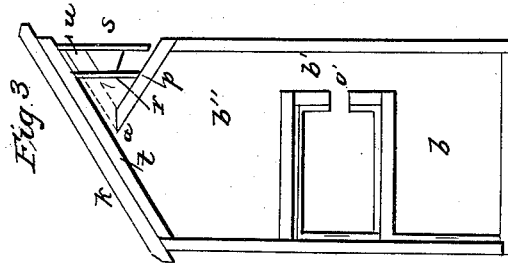


## Bee Hive.

No. 4,116.

Patented July 22, 1845.



# UNITED STATES PATENT OFFICE.

ELIAS PARKS, OF WHEATFIELD, NEW YORK.

## BEEHIVE.

Specification of Letters Patent No. 4,116, dated July 22, 1845.

*To all whom it may concern:*

Be it known that I, ELIAS PARKS, of the town of Wheatfield, in the county of Niagara and State of New York, have invented a new and improved mode of securing bees from various damages to which they are liable, especially in this northern climate, first, to discharge the damps from the hive, which is caused by the breath of the bees and frequently becomes frost or ice in the hive; second, to keep the robbing bees, the bee-moth, and all other destroying insects from gaining admittance to the inner contents of the hive; third, to secure a more regular and rapid increase of the bees; fourth, to keep their stores accessible to the owner; fifth, to keep their stores from the damps, which is so injurious to the flavor of the honey, by a new shape and construction of the hive.

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

I make my hives of boards one inch thick the height in front is thirty-four inches, the height in rear is twenty-six inches, from front to rear is sixteen inches, from side to side is fourteen inches the slant in the roof is eight inches in the sixteen as may be seen in the drawings. For the apartment for drawers I cut my boards above and below one foot long and one inch wide; the end board is twelve inches wide and six long leaving a passage three inches by twelve from the upper to the lower apartments; reference being had to the drawings which are one eighth the size of my hive.

Figure 1 is a perspective view of the rear and one side of the hive, *a* is the outside back door, thrown open and exhibiting the door to the lower chamber, and the drawers *c* and *d*; the drawer *d*, is drawn out (in the figure) about three inches; in the side *i* and near the lower corner adjoining the door *b*, is the air hole *e*, over which is placed a wire screen; the air can be admitted or kept out at pleasure by the slide *f*, which is large enough to cover the opening and is kept in place by the cleats *g, g*, which are constructed so as to form a groove with the side *i* or, may be hung at top by a leather hinge in the center of door *k* and of each of the drawers *c* and *c'*, is a circular glass window  $1\frac{1}{2}$  inches in diameter; *h* is the covering board or outside roof; *m* is the button which confines the door, *a*, when closed; *h* is a molding  $1\frac{1}{2}$

inches wide for the purpose of covering the joint above the door; a corresponding piece being on the door to cover the remainder of the joint; a strip of leather is used on the opposite joint; the door hinge being a continuous leather one.

Fig. 2 is a transverse section of the hive six inches from the front; exhibiting the transverse shape of the drawers; the lower chamber and the upper chamber at the section immediately under the bees entrance; the drawers are separated vertically from the upper and lower apartments by the floors *O' O''* one inch thick; between the upper sides of the drawers and the floor *O''* a small space not more than half an inch is left for the free movement of the drawers.

Fig. 3 is a longitudinal section of the hive through the center of one of the drawers and of the rest of the hive; *B, B''* exhibit the longitudinal shape of the hive and upper apartment; *B*, is an open passage connecting the apartments *B, B''* the entrance for the bees to the drawers is through holes as at *O*, in the center and corresponding in size with the windows *c, d*, in Fig. 1, between the ends of the drawers passage *B''* is a partition one inch thick perforated by two holes to correspond with those in the ends of the drawers; said drawers are six by six and eleven inches in length; at *a* immediately under inside roof board is the only admittance to the hive for the bees, this entrance  $5$  by  $\frac{3}{4}$  inches is through the board *P* into the upper apartment which is 12 by 15 inches and 8 inches deep on the back side in the clear. *S*, is a section of the slide or regulating blinds; the outer one extends the whole breadth of the hive and has a hole at the bottom  $4 \times \frac{1}{2}$  inches (midway of the board) the inner blind *R* is eight inches wide leaving off two inches at each end; and fits close to the board *P*, the front of the blinds is about one inch back of the front of the hive; and can be drawn out to any required distance by means of slides at each end represented by the dotted line immediately under and parallel with the roof *T* the slides run in a groove formed by cleats fastened to the sides of the hive and represented by the other dotted lines; the outer and inner blinds are stayed together by blocks placed between them, *u* is a screw to be used as a handle.

Fig. 4 is a view in perspective of the ante-room and plan for the blinds; *A* is the entrance to the hive corresponding to *a* in

Fig. 3. C, C are the cleats mentioned in the description of Fig. 3.

Fig. 5 is an inverted sketch of the slide blinds. B is the outer and B'' the inner blinds, A the entrance through the outer blind; S, S, the slides, C, and L the stay blocks.

Operation: The hole at the upper end of the hive is calculated for the double purpose of a passage for the bees; and ventilating the hive, the fact is if the only passage for the bees to the hive is at the upper end of the hive the bees will have their dry combs and combs of increase in the upper apartment; and the body of bees will always be found there; their inleads also through their combs will all tend to the same point (the passage) which will give their breath free passage out of the hive; the honey being deposited below is preserved from the damps which is caused by the breath of the bees which is very injurious to the flavor of the honey; 2d, it is the best mode of ventilating; the aperture being large and the bees living near as before stated their breath passes readily out through the regulating blinds before it is condensed to frost or ice; and if any part of it adheres to the blinds the construction of the roof is such as at P, Fig. 3, that when it melts it is immediately carried out of the hive.

The application of the apartment for drawers near the center of the hive as A and C, Fig. 2, is found far preferable to placing them in the upper part of the hive on the following considerations: 1st, if the drawers are placed in the upper part of the hive the bees will seldom deposit honey in them which difficulty is obviated by placing them in the center of the hive. 2d, the honey is much better flavored, as it is not injured by the breath of the bees; as in the hives now in common use.

The lower apartment, b Fig. 2, is intended as a storehouse or place of deposit

for honey that the bees may not fill their combs with honey which would otherwise be filled with increase.

The regulating blinds as seen at S Fig. 3 are intended to prevent the robbing bee from doing damage to the colony within; they should usually be raised on the slide so as to give free passage for the bees under the inner blind S, S, Fig. 3, but should the robbers commence their depredations they should be slid down close; the hole in the blinds being smaller than that of the passage into the hive those within will effectually defend themselves.

The application of a wire screen as seen at E Fig. 1 at the lower end of the hive to receive air has a very different operation than it would have if it were placed at the top of the hive; if placed above the bees an hour in cold weather is sufficient time for it to become coated with frost so as to be entirely useless; but if placed below the bees it will remain clear and there will always be a current of fresh air passing through the hive; another consideration is that my hives effectually prevent the bee moth and all other insects from doing damage to the contents of the hive being made tight at bottom the bee moth can not gain admission unless it be at the passage of the bees which they can never do.

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

The manner in which I construct my hive as before described, that is to say placing the small boxes, usually called the honey boxes, below the main hive and entrance; substantially in the manner described. The mode practiced by all others being to place the honey boxes above the entrance for the bees.

ELIAS PARKS.

Witnesses:

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T. C. DONN.