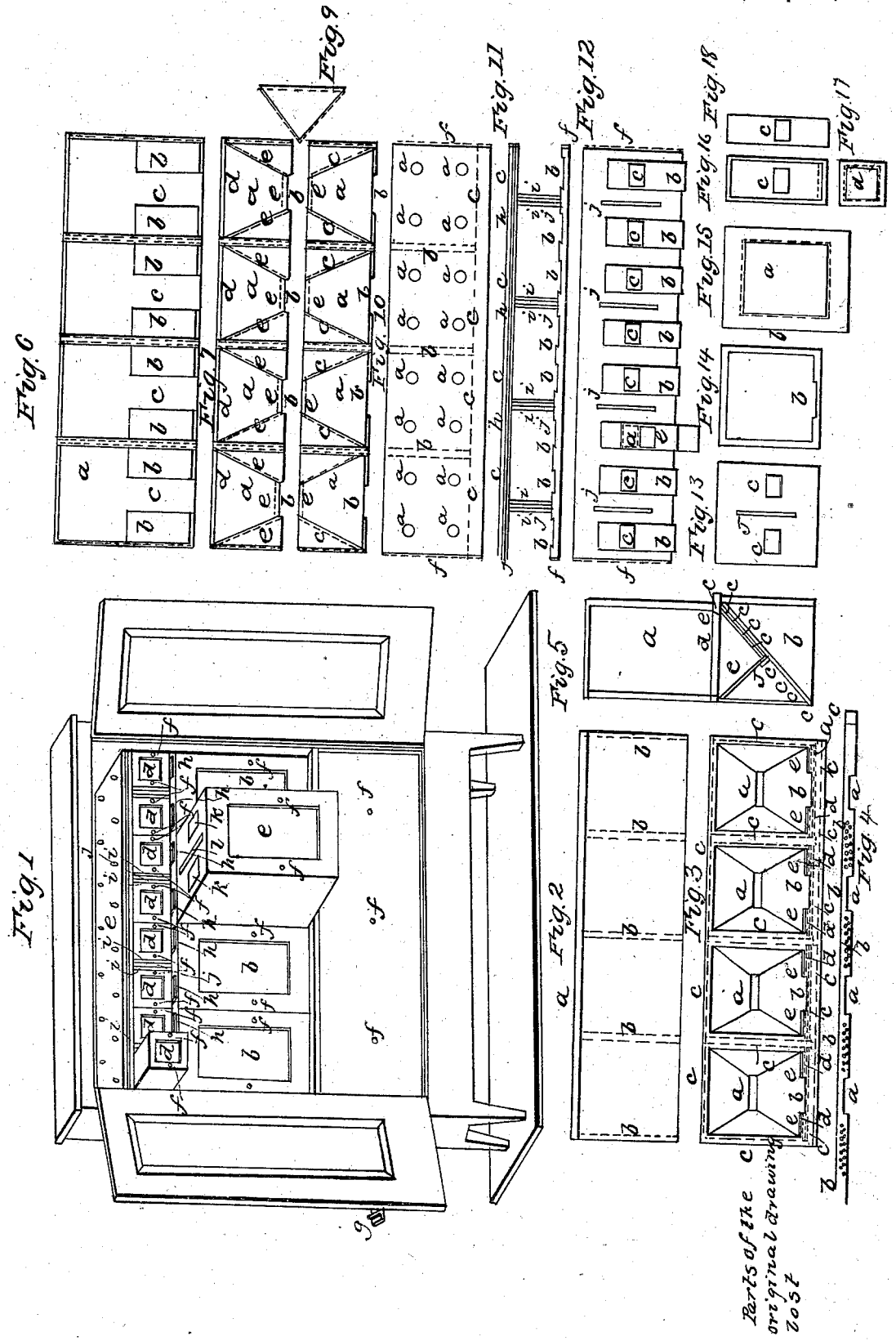
W. D. MILLER.

Bee Hive.

No. 3,246. Patented Sept. 1, 1843.



UNITED STATES PATENT OFFICE.

WM. D. MILLER, OF MAD RIVER TOWNSHIP, OHIO.

BEEHIVE.

Specification of Letters Patent No. 3,246, dated September 1, 1843.

To all whom it may concern:

Be it known that I, WM. D. MILLER, of Mad River township, in the county of Clark and State of Ohio, have invented a new and Improved Bee-Palace for Protecting the Bees from the Ravages of the Bee-Moth; 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, in which—

Figure 1 is a perspective view. Fig. 2, is the front of the protector (*a*) Fig. 1. Fig. 3, is a frame on the top of the protector (*a*) Fig. 2. Fig. 4 is a slide or stop that runs parallel through the protector back of a hopper (J) Fig. 5. Fig. 5 is the end of the protector (*b*) and the side of a hive (*a*). Fig. 6 is the incline plane (*f*) Fig. 5. Fig. 7 is the back part of the hopper (*e*) Fig. 5. Fig. 8 is the front part of the hopper (*h*) Fig. 5. Fig. 9 is the end piece of the hopper to be placed in a groove (*c*) Figs. 7 and 8. Fig. 10 is the upper chamber floor (*e*) Fig. 1. Fig. 11 is the frame or partitions for the upper drawers (*d*) Fig. 1. Fig. 12 is the upper part of the partitions between the hive and drawer (*k*) Fig. 1. Fig. 13 is the top of the hive (*c*) Fig. 1. Fig. 14 is the bottom of the hive. Fig. 15 is the front of the hive (*b*) Fig. 1. Figs. 16 and 17 are the bottom and front of the drawer (*d*) Fig. 1. Fig. 18 is a tin cutter (*h*) Fig. 1. Fig. 19 is an end piece of the palace representing the inside and space for each apartment. Fig. 20 is the thickness of the end piece. Fig. 21 is the back of the palace representing the slide (*a*) the braces (*i*) the outside plane (*x*) the entrance to the inside (*b*).

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

I construct my palace and bee protector with a frame similar to a common bureau with panel doors in front Fig. 1. The inside is divided into four apartments, the protector (*a*), the hive (*b*), the drawer (*c*), and the upper chamber (*e*). The protector is fifty-six inches long, fifteen inches high, and fifteen inches wide, which serves as a base for four hives; under each hive is a hopper with an opening at the bottom (*a*) Fig. 3. The hopper is made by putting in the partitions one inch thick, ends half inch (*b*) Fig. 2. On each side of the partitions and on the inside of the end piece I cut a groove at an angle of about 45 degrees (*f*) Fig. 5 for the admission of the incline plane Fig. 6. Then a groove at the same angle at (*e*) and (*h*) for the side pieces of the hopper. Also a mortise (*j*) Fig. 5 through each partition and through the frame of the palace for the slide Fig. 4. The end piece of the hopper Fig. 9 is put in the side pieces with a groove (*c*) Figs. 7 and 8. The back part of the hopper Fig. 7 has a space cut at (*b*) to admit the bees between the front part of the hopper and the incline plane (*c*) Fig. 6, and the line of (*c'*) Fig. 5. The space except that described at (*c*) is to be closed with a lining (*b*) Fig. 6. The front part of the hopper Fig. 8 has the bevel cut off at (*k*) to give more room for the bees to enter the hive. The bottom of the hopper is beveled off the thickness of the stuff (*e*) Figs. 7 and 8 to make an open space seen at (*a*) Fig. 3 for the purpose of letting the moth out (when got loose by the bees) on the incline plane thence out of the palace. The frame on top of the hopper (see at (*a*) Fig. 2, the end (*d*) Fig. 5, the top Fig. 3) is put on when the above described is completed. The dotted lines at (*c*) represent the sides ends, and partitions under the frame. The frame projects over the hopper a half inch all around. The dotted lines at (*d*) show the end of the lining and hopper as described above. The front piece of the top frame is cut out at (*b*) half inch on the top and beveled back to the edge of the incline plane as represented by a line of dots from the incline plane (*f*) Fig. 5 through the bottom of the hive (*a*) Fig. 5. The slide Fig. 4 is to extend through the protector and frame of the palace, as described before so as to rub on the incline plane and the back of the hopper. This slide has a space cut at (*a*) for a passage for the bees to the hive. When the slide is put through at its proper place the plug (*e*) is to be placed in a mortise (*d*) then by blocks at (*c*) the slide can be moved the correct distance for closing and opening the communication to the hive and no farther. The thickness of the outside frame of the palace is included in the length of the slide. By drawing the slide to the right it will bring the part (*b*) over the entrance to the hive, thereby closing it, (except air holes to be made with a small spring awl). This must be done in the evening a little after

sundown which will protect the bee from the miller the parent of the moth. If there should be any bees out when it is closed the part between the hopper and the outside entrance is a protector from the weather over night. In the morning about sunrise the slide must be drawn back. If the slide should not be attended to, the aforesaid hopper will be a protector from the moth by conveying out of the palace all the moths that may be got loose by the bees or otherwise.

The second apartment in this specification is the hive with a glass front (*a*) Fig. 15 the glass to be put in the inside as represented by dots (*b*.) The top Fig. 13 has two open spaces (*c*) for admission to the drawers and a space (J) for the admission to the upper chamber. Also a space in the partition (J) between the hive and drawer Fig. 12 up through the partition (J) Fig. 11 to the inside of the partition between the drawer and upper chamber (*h*) Fig. 11. The upper part of the partition between the drawer and upper chamber (*c*) Fig. 11 is shown at Fig. 10 with holes (*a*) to be closed with a plug as represented at (*e*) Fig. 1 until the bees are hived, then the plugs may be drawn and glass tumblers or bowls put on for the bees to work in. There are partitions at (*b*) to keep each company of bees to their own apartment and a lining (*c*) Fig. 10 and (J) Fig. 11 to keep the bees from getting out in front.

The third apartment the drawer (*d*) Fig. 1 has a glass front (*a*) Fig. 14. The bottom Fig. 16 has an open space (*c*) as described at (*c*) Fig. 13, for admission to the inside of the drawer. When the drawer is filled it can be taken out and emptied by drawing a tin cutter Fig. 18, and (*h*) Fig. 1, (*b*) Fig. 12. When the cutter is drawn a certain distance it cuts the honey and closes the entrance to the drawer as shown at (*a*) and *e* Fig. 12. When the drawer is returned the cutter is pushed back as shown at (*b*) Fig. 12. The tin cutter is put in with a dovetail groove (*b*) Fig. 11.

The fourth apartment represented at (*e*) Fig. 1, is an open space extending back the depth of the palace to be used for glass tumblers or bowls as described before. The inside of an end of the palace is shown at Fig. 19, and the space for each apartment, the braces for the outside plane (*i*,), the outside plane (*x*), the bottom board (*f*), the space for the protector (*m*), the mortise for the slide (*a*). The line of (*c*°) is the direction for the bees to the hive (*b*), the grooves (*d*) for the partition between the hive and drawer (*l*), the groove (*e*) for the partition between the drawer and upper chamber (*n*), the rabbet for the door (*k*,) the back (*h*). Fig. 20, is the thickness of the end piece. Fig. 21 is the back of the palace representing the slide (*a*.), the braces (*i*.), the outside plane (*x*.), the entrance to the inside (*b*.)

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

The combination of the protector and slide constructed as described with the above described arrangement of hives furnished with pyramidal bottoms for the purpose specified.

WM. D. MILLER.

Witnesses:
P. A. SPINING,
I. A. CRAIN.