G. W. AKINS.

BEE-HIVE.

No. 186,223. Patented Jan. 16, 1877.

Fig. 2.

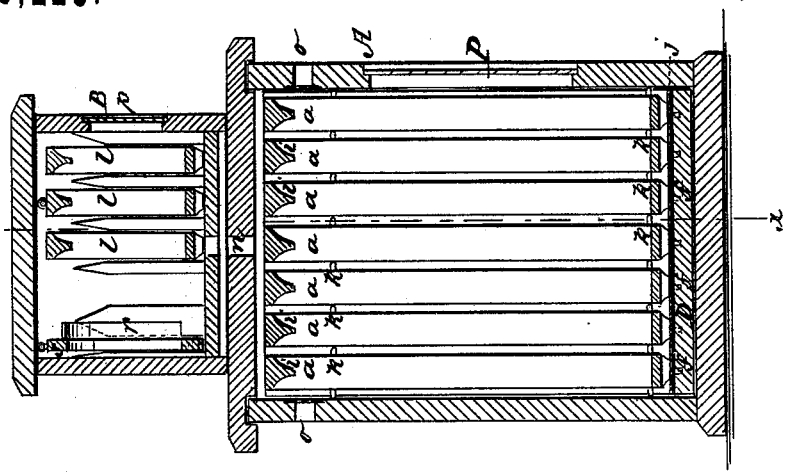


Fig. 3.

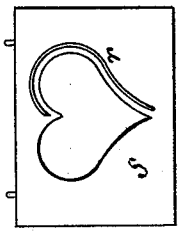
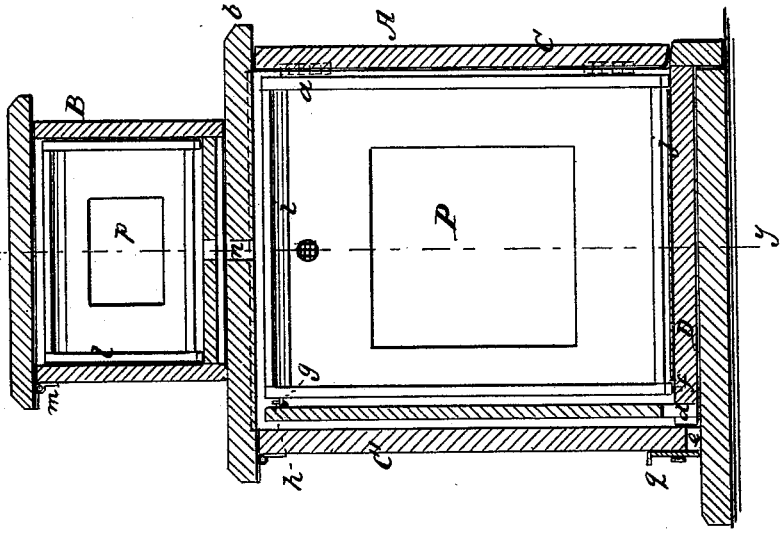


Fig. 4.

Fig. 1.



WITNESSES:

E. Wolff.

John Goethals.

INVENTOR:

G. W. Akins.

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE W. AKINS, OF BRIDGETON, PENNSYLVANIA.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. **186,223**, dated January 16, 1877; application filed July 15, 1876.

To all whom it may concern:

Be it known that I, GEORGE W. AKINS, of Bridgeton, in the county of York and State of Pennsylvania, have invented a new and Improved Bee-Hive, of which the following is a specification:

Figure 1 is a side elevation in section on line *x x* in Fig. 2. Fig. 2 is a front elevation in section on line *y y* in Fig. 1. Fig. 3 is a detail view of one of the frames. Fig. 4 represents different styles of bars on guard.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

A is the lower and larger compartment, which has its top *b* hinged to the front C′, and the back C hinged to one of the sides. D is an L-shaped support for the frames *a*, which slides into the compartment A, and is provided with an aperture, *d*, that corresponds with an aperture, *e*, in the front of a hive. The frames *a* are provided with pins *f*, that fit into holes in the bottom of the part D, and also with screw-eyes *g*, that engage with hooks *h* at the back of the part D. The cross-bar or guard *i* at the top of the frames *a* is made in one of the three forms shown in Fig. 4, the one shown at *i* having concave sides, terminating in a narrow square edge. The one shown at *i′* is concave at the sides, and terminates in a narrow rounded edge, and the one represented at *i″* is triangular in section, with the point of the angle cut away. The sides of the frames *a a* project below the lower cross-bar, leaving a space between the cross-bars and the part D. A sheet of tin, *j*, is placed in this space, to retain the refuse matter that collects at the bottom of the hive. Screw-eyes *k* are placed in the sides of the frames to keep them a uniform distance apart.

The compartment B is provided with grooves, in which frames *l* are placed. The cover to the compartment B is hinged at *m*. At *n* is an aperture in the bottom of the compartment B, and in the cover of the compartment A.

Holes *o* are bored in the sides of the compartment A for ventilation, and windows *p* are flared in opposite sides of the parts A and B, for the purpose of inspecting the inside of the hive. A slide, *g*, covers the aperture *e*. In Fig. 3 a frame is represented that is used in the compartment B whenever it is desired to have the honey-comb of any particular shape. It consists of a form of tin or other suitable material, *r*, placed on a frame or slide, S, and having the shape required in the comb. Bees will build inside of the form, leaving about one-fourth inch space between the form and the comb.

The support D can be withdrawn from the hive at any time for the purpose of cleaning. The tin sheet *j* receives a portion of the refuse matter, and can be readily taken out and cleaned.

On the 1st of May the bees are driven out into another hive and the frames examined. Three frames are taken out and set in a new box, and three empty frames are put in their place. The old queen must be put with the new colony, and half of the bees must be put in each box and shut up, and put on a stand. The hives are to be opened the next morning.

At the next natural swarming-times the swarms can be again divided The hive cannot freeze, and it is proof against mice.

This hive is one that any person can handle. It is readily cleaned, it being an easy matter to remove any of the parts.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The form *r*, arranged on a slide, S, in compartment B, as and for the purpose specified.

GEORGE W. AKINS.

Witnesses:

LORENZO D. TAYLOR,

T. E. GAMMILL.