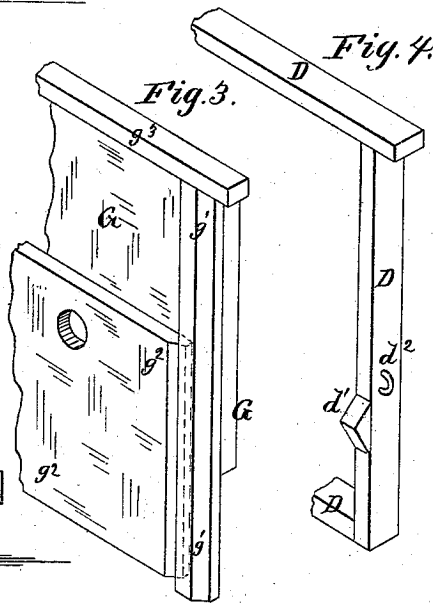
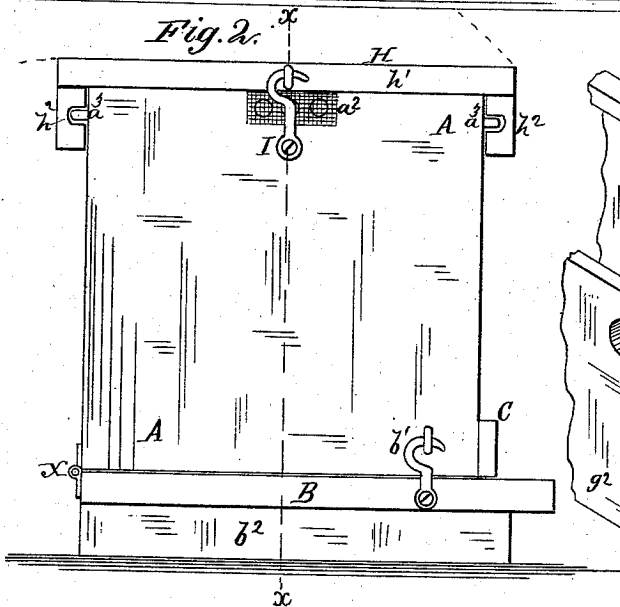
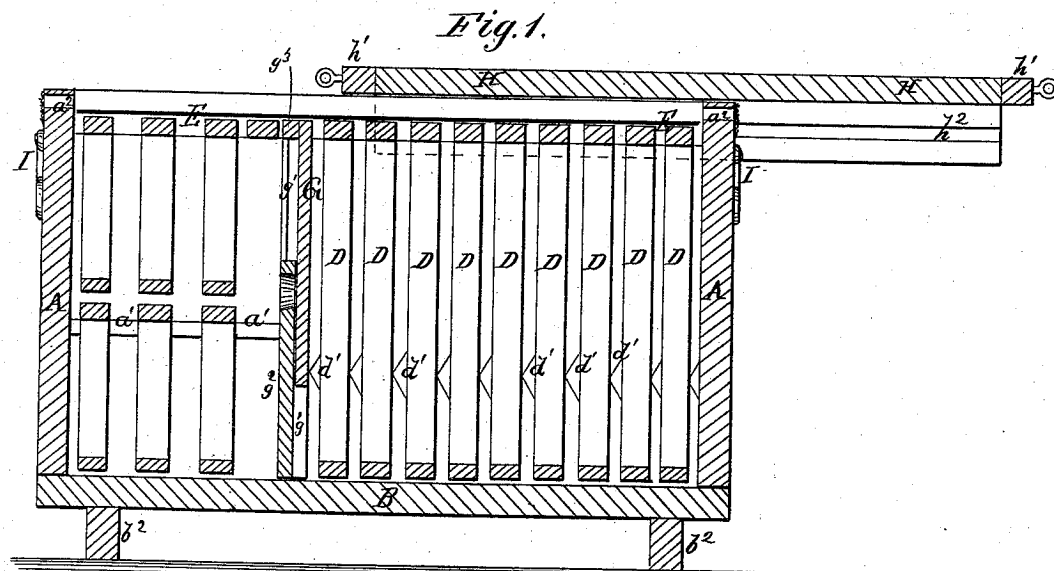


J. BARNES.  
Bee-Hive.

No. 221,999.

Patented Nov. 25, 1879.



WITNESSES:

Henry N. Miller  
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# UNITED STATES PATENT OFFICE.

JOSIAH BARNES, OF TOPEKA, KANSAS.

## IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. **221,999**, dated November 25, 1879; application filed February 8, 1879.

### *To all whom it may concern:*

Be it known that I, JOSIAH BARNES, of Topeka, in the county of Shawnee and State of Kansas, have invented a new and useful Improvement in Bee-Hives, of which the following is a specification.

My invention is a bee-hive constructed, as fully described hereinafter, so as, while simplifying the construction, to reduce the liability of the top to warp, permit access to the different parts of the hive, and obviate the objections incident to the waxing of the division-board at the edges.

In the drawings forming part of this specification, Figure 1 is a central elevation, in section, of my improved hive; Fig. 2, an end view; Fig. 3, a perspective view, showing part of the division-board; Fig. 4, a perspective view, showing part of one of the frames.

The body A of the hive is of any suitable construction, and is hinged at *a* to the base-board, B, hooks and staples *b'* serving to hold the body down upon the board. The body is divided into two chambers by a division-board consisting of two sections, G *g*<sup>2</sup>, the former being suspended in the same manner as the ordinary frames D, which occupy the brood-chamber, and being provided with cleats or guides *g'*, between which the section *g*<sup>2</sup> slides.

By raising the section *g*<sup>2</sup> the bees may pass beneath the section G into the surplus-honey chamber, in which are suspended two series of frames, as shown.

By the above-described construction of the division-board, the opening and closing of the communication between the two chambers is not prevented by the waxing of the edges of the board to the sides of the body, which is apt to occur, and which, when the division-board is in a single piece, renders it immovable.

The top H projects beyond the front and back of the body, and is provided with cleats *h*<sup>2</sup>, having grooves to receive retaining-pins *a*<sup>2</sup>, which permit the top to slide longitudinally, but retain it in contact with the body.

The sliding top, in connection with the division-board constructed to open or close communication between the two chambers, permits access at will through either chamber, while the bees may be confined in the other.

In order to prevent the warping of the top, which results when the said top is dampened at the under side by moisture condensing thereon, which warping prevents it from sliding, I so suspend the frames as to leave a shallow space above the top of the frame, with ordinary ventilated openings *a*<sup>2</sup> at the ends, and place directly above the frames, and free from contact with the top, a strip, E, of cloth.

The moisture will collect upon and be slightly absorbed by the cloth, which, as it extends to the edges of the hive, prevents any moist air from rising directly from the hive and striking the top, while any moisture in the cloth will be evaporated and carried away by the air passing over it through the ventilating-openings, thus preventing it from being absorbed by the top, and also cooling the hive.

When it is desired to obtain access to the whole interior of the hive, to remove the bees or for any other purpose, the body may be turned back upon its hinges, carrying with it the frames, thus exposing the interior.

I claim—

1. The combination of the hive-body A and a division-board consisting of two sections, G *g*<sup>2</sup>, the former having narrow side cleats, *g'*, and the latter extending nearly across the hive and sliding between said cleats, as set forth.

2. The combination, in a hive, of a flat top, frames or comb-holders arranged to leave a shallow space between the same and the top, ventilating-openings communicating with said space, and cloth E, extending parallel to the top over the frames completely across the hive, as specified.

JOSIAH BARNES.

Witnesses:

SAML. HALL,  
W. G. SHAW.