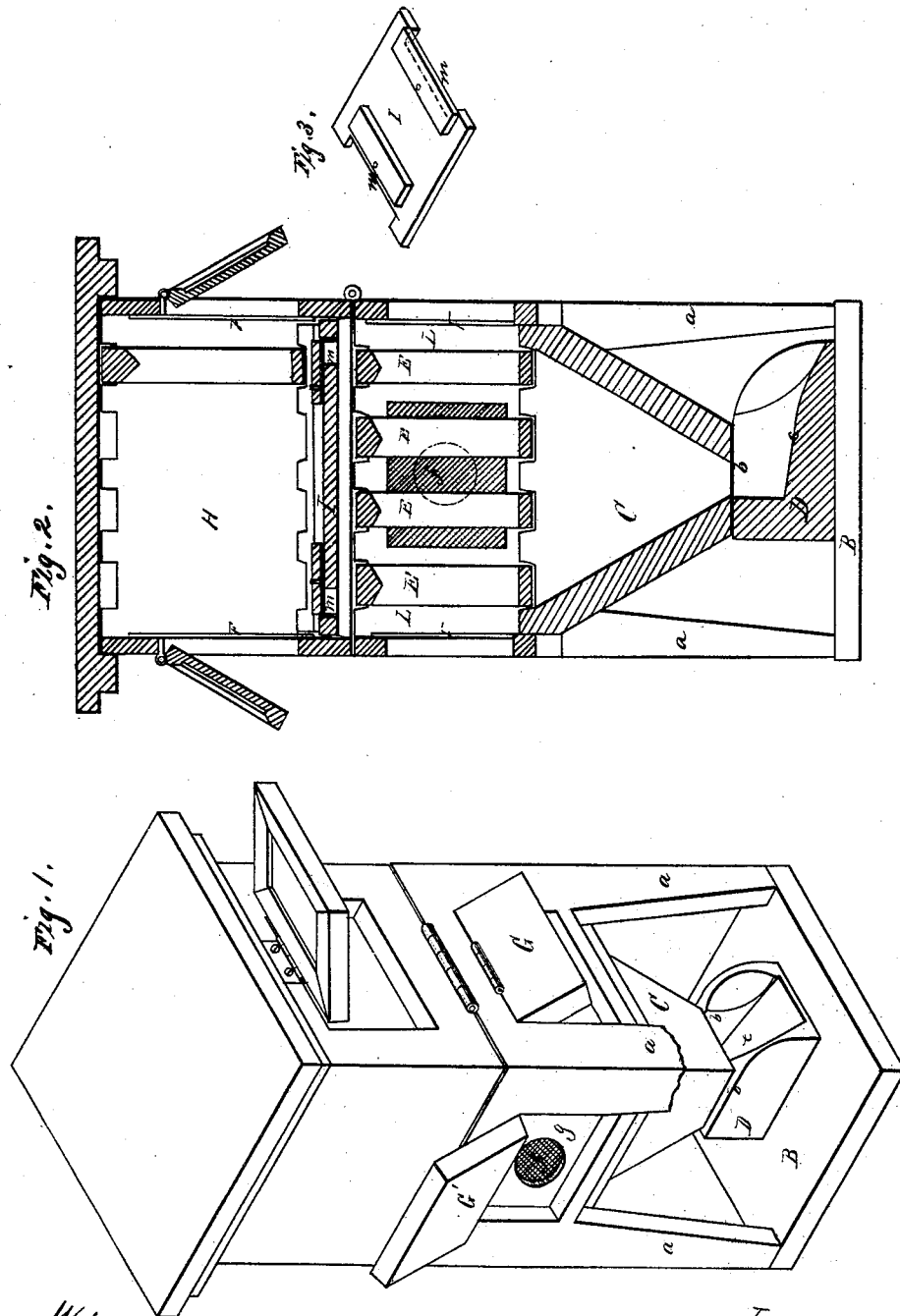


R. A. Williams,

Exe. Nive.

No. 109,986.

Patented Dec. 6. 1870.



Witnesses.
G. Fitzgerald
Geo. H. Strong

Inventor.
R. A. Williams
By his Attys
Dewey & Co

United States Patent Office.

ROBERT A. WILLIAMS, OF COLUSA, CALIFORNIA.

Letters Patent No. 109,986, dated December 6, 1870.

IMPROVEMENT IN BEE-HIVES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ROBERT A. WILLIAMS, of Colusa, county of Colusa and State of California, have invented an Improved Bee-Hive; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

The object of my improvements in bee-hives is to so construct the entrance to the interior of the hive as to provide against the inroads of the bee-moth or miller.

The lower portion A of the stand is supported upon the four corner posts *a a*, which rest upon a bottom board, B.

Extending downward from the bottom of the portion A is a hopper, C, the lower end or apex of which rests upon the sides *b* and end of a trough or channel formed in a wooden or other shoe, D.

This shoe can be made of one solid block of wood or of two or more pieces as desired, and is removable, being slid under the hopper.

Through this shoe is made a groove or track, *e*, one end of which is closed, and the hopper rests both upon the sides and this closed end, so as to leave a communication from one side only.

The bottom or floor of the channel gradually slopes from the closed end to the bottom board B at the opposite end, thus forming an inclined track.

The opening into the bottom of the hopper which leads to the interior of the hive is circular, and should be just large enough to allow one bee to enter at a time.

By this arrangement of the entrance the bee-moth will be unable to find its way to the interior of the hive, but generally be stopped in the channel, and if any eggs should be deposited in the shoe they can be cleaned away by removing the shoe from beneath the hopper.

The frames E are made in the usual form and suspended inside the chamber L upon suitable racks, so as to be readily handled when necessary.

Having thus described my invention,

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

The hopper C, in combination with the removable shoe D, channeled or grooved as described, for the purpose of protecting the entrance from the inroads of moth, substantially as above described.

In witness that the above described invention is claimed by me, I have hereunto set my hand and seal.

ROBERT A. WILLIAMS. [L. S.]

Witnesses:

W. S. SPEAR,
JNO. B. DE JARNATT.