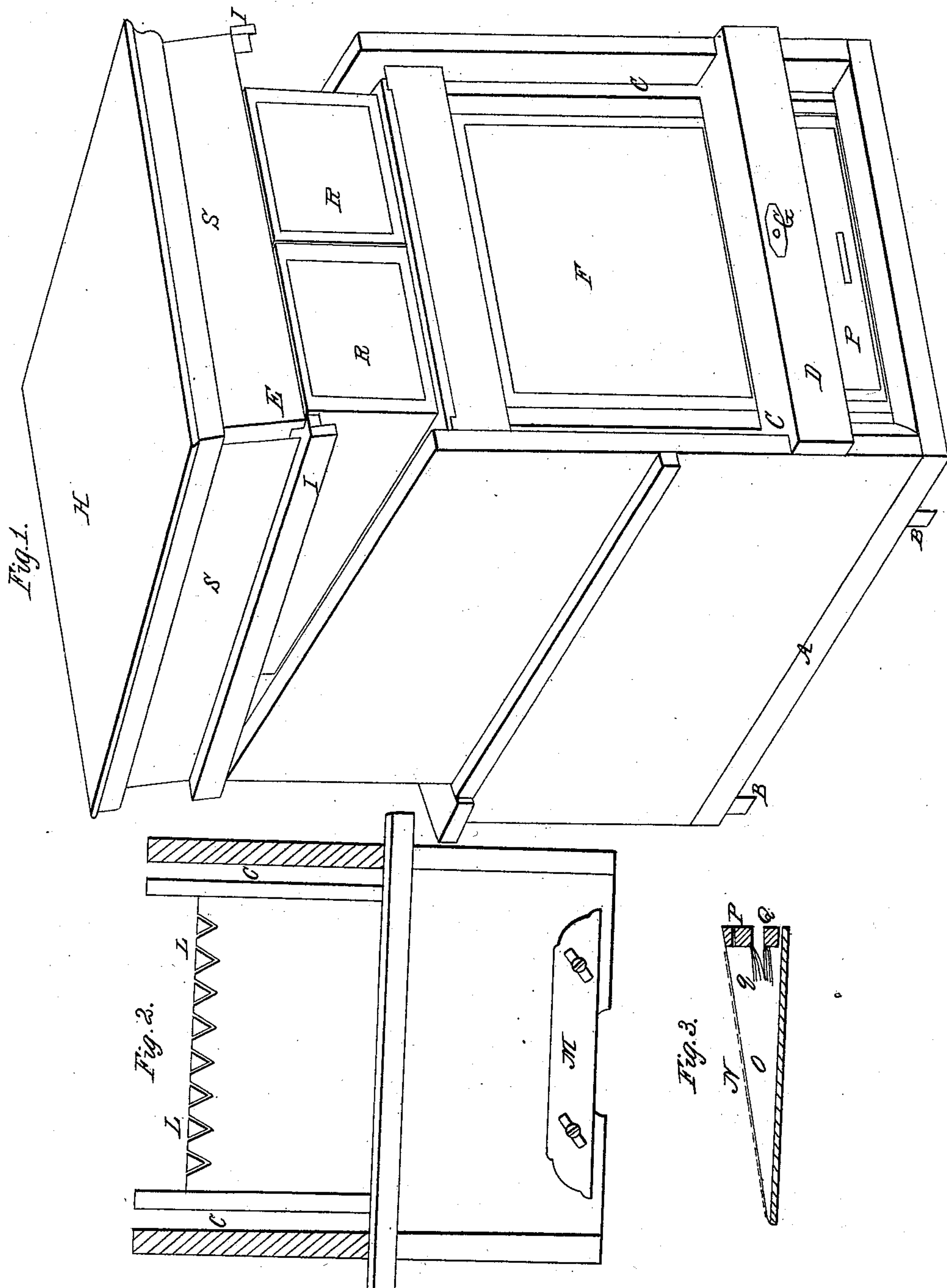


J. L. REID.

Bee Hive.

No. 36,169.

Patented Aug. 12, 1862.



Witnesses:
Edw. T. Brown.
J. Gibbons

Inventor:
J. L. Reid
Daniel Breed & Co.

UNITED STATES PATENT OFFICE.

JAMES L. REID, OF VAN WERT, OHIO.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 36,149, dated August 12, 1862.

To all whom it may concern:

Be it known that I, JAMES L. REID, of Van Wert, in the county of Van Wert and State of Ohio, have invented a new and useful Improvement in Bee-Hives; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists of a peculiar construction and arrangement of bee-hives.

In the accompanying drawings, Figure 1 is a perspective view of my improved bee-hive, the top being raised on one side to show the honey-boxes, and the outer wall of one side being removed to show the position of the observing-glass through which the working of the bees may be inspected. Fig. 2 is a front view of the lower part of the hive, with a section of the main portion of the side walls. Fig. 3 is a section of the moth-trap detached.

In Fig. 1 of the accompanying drawings, A represents the bottom board of the hive, with foot-pieces B. The walls of the hive are made double, there being a small space, C, between the outer and the inner wall. In the rear the glass forms the inner wall, and there is a small space between this glass and the board or outer wall, which is removed as above mentioned. The double walls render the hive warmer in winter and cooler in summer, and also prevent dampness of the bee-apartment from rain or snow when these are blown against the hive. These walls also prevent congelation of the vapor from the breath of the bees.

The roof H is made removable, it being provided with a ledge, which gives it a secure joint and also holds it in place. The upper portion, S, of the walls forms a sort of hoop, I, inclosing the honey-boxes. This hoop also has ledges dropping over the edges of the lower walls, and it is removable like the roof. When this hoop I is in place, it is fastened by the rear end board which covers the observing-glass. The board enters a notch, E, and then it is sprung tightly into place and the lower edge secured by a button, G, thus fastening the different parts together by a single button. With this construction of joints the roof and walls may shrink or swell by the weather without affecting the joints.

At the upper part of the bee-apartment are

arranged triangular comb-bars L, Fig. 2, fitting into corresponding notches, which prevent the bars from working. Each of these bars may be removed independently of the others. From experience I find these comb-bars better than the common frames, as the bees are liable with such frames to build their comb so as to connect two or more of the frames, and thus prevent them from being removed separately. Also, with the frames, if the combs are warped, (as is often the case,) one of the combs cannot be removed alone; but with the single bars the bees are not likely to build two combs together and there is no obstruction in removing the combs singly.

The bee-entrance is provided with an adjustable metallic slide, M, secured in place by small screws. This slide serves as a drone-trap. When the season arrives in which it is desirable to get rid of the drones, this slide M may be lowered while the drones are on the wing, and thus shut out the drones, while the working-bees are permitted to enter the hive. Then in the evening the drones will be found clustered at the entrance of the hive, and they may be swept into water, and thus destroyed.

My combined moth and robber trap and ventilator is placed at the bottom of the bee-apartment. It is arranged as follows: An oblique screen, N, is set so as to cover a small box, O, extending over the entire bottom of the bee-apartment. The meshes of this screen are too small to let a bee pass. The door P, Fig. 3, of this trap is very wide, and when open the moths will collect in the trap, as they delight to lay their eggs among the comb-cuttings which fall through the screen all over the bottom of the trap, furnishing food for the moth larvæ. When collected in the trap, the moths, with their eggs, may be easily destroyed.

By removing the honey-boxes K and leaving the door P open the hive will be completely ventilated without producing too strong a draft of air through the hive. As ventilation is most important in winter, when the bees are confined to the hive, the removal of the honey-boxes (as above mentioned) does not interfere with their proper use, and the ventilation at this season does not prevent the use of the moth and robber trap at the season when they are required. The ventilation carries the moisture (produced by the breath of the bees)

from the bee-apartment into the chamber above, so as to completely prevent condensation and congelation in the bee-apartment.

By inserting the door P the moth-trap is converted into a robber-trap. In this door is a small opening, Q, surrounded by bristles q, so that a robber may enter the opening but cannot return. When the hive is attacked by robbers, (the door P being closed and the sentinels being stationed at the bee-entrance to the hive,) they usually seek some by-way to the hive, and they soon find the opening Q, and, entering, they are entrapped. It is best to close the slide or door M when robbers attack the hive. Then the robbers are compelled to seek an unusual entrance (as they usually do) in order to avoid the sentinel at the common entrance.

With my arrangement of honey-boxes there is no sliding the boxes, which would be liable to crush the bees. The roof and the hoop I may be removed and the bees gently driven

from the top, when the honey-boxes are adjusted and the hoop I and roof replaced.

My hive is very convenient, cheap, and durable. It is well adapted to hiving new swarms of bees or to making artificial swarms by division. It is easily cleaned, not only of the filth that falls to the bottom of the moth-trap, but also of any undesirable combs.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combined moth and robber trap and ventilator, Fig. 3, constructed and applied in the manner and for the purposes specified.

2. The combination of the moth and robber trap and ventilator with a hive constructed substantially as set forth.

JAMES L. REID.

Witnesses:

A. W. BAKER,
DAVID NEWCOMER.