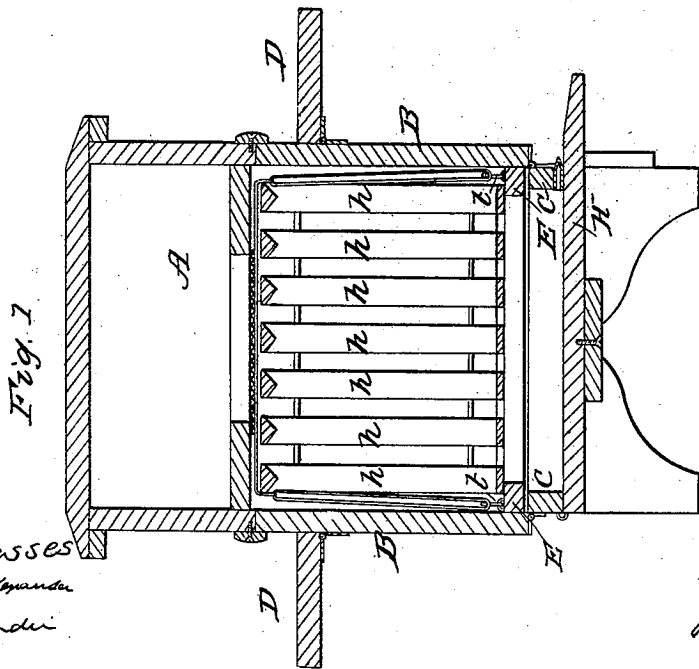
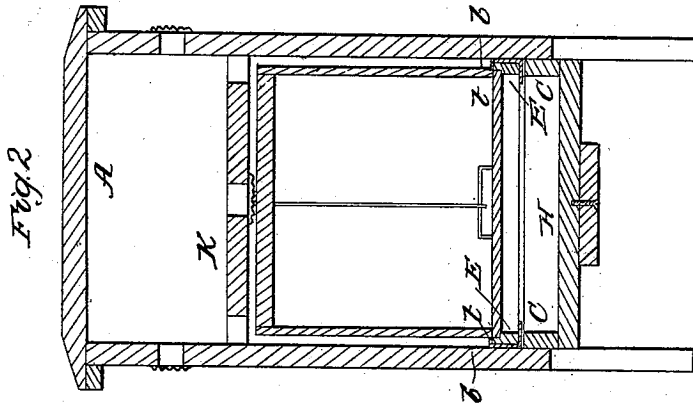
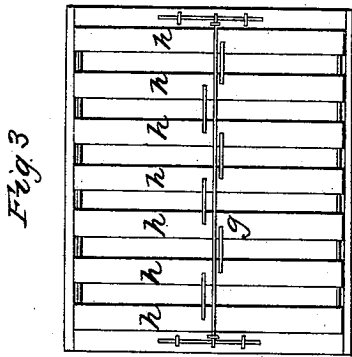


SMITH, VOSBURGH, KRAMER & WINTER.

Bee Hive.

No. 39,451.

Patented Aug. 4, 1863.



Witnesses
 Charles Alexander
 C. H. Alexander

Inventors
 G. W. Smith
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UNITED STATES PATENT OFFICE.

G. W. SMITH, N. B. VOSBURGH, A. J. KRAMER, AND W. L. WINTER,
OF LINN COUNTY, IOWA.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 39,451, dated August 4, 1863.

To all whom it may concern:

Be it known that we, G. W. SMITH, N. B. VOSBURGH, A. J. KRAMER, and W. L. WINTER, of Linn county, and State of Iowa, have invented certain new and useful Improvements in Bee-Hives; and we hereby declare that the following is a true and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 represents a vertical section of our hive, cutting the comb-frames at right angles. Fig. 2 represents a front elevation. Fig. 3 is a plan view of the comb-frames.

The letter A represents the body of the hive, made of boards and of the ordinary shape and size. The hive A is provided with two doors, B, placed on opposite sides. The doors B are hinged at bottom to the ties C, which bind the sides of hive A together, and extend upward near two thirds of the height of A, and fit under the boards that bind the upper part of hive A together, their surfaces, when closed, being flush with surface of said boards. Doors B, when shut, are confined by a button.

D represents the handles by which the doors B are opened. These handles are hinged near the center of the doors, and are made to fold back and rest on the surface of B.

E represents the slide, which rests on the ties C, and is designed as a support to the comb-frames *h*. The slide E is formed of four pieces of small scantling framed together, two sides resting against the interior of hive A, and the ends extending as far out as the doors of A. The sides of slide E that rest against the interior of A are constructed with a rim, *t*, the bottom of comb-frames *h* resting in the angle formed by the rim and the surface of slide E. By this arrangement the comb-frames *h* can be easily withdrawn from or returned to the hive A.

To facilitate the removal of the comb-frames entire, and to prevent the bees from waxing the slide E to the hive, the slide E is made to rest at opposite sides on metal plates *b*, these plates being made to cover a half an inch in width of the bottom of sides of E, and then pass up between the outside of E and the interior of A, and are there bent down on the surface of E, forming a sheath or bed, on which E may slide with facility, (see *b*, Fig. 2.) The plates *b* extend the whole length of slide E. The comb-frames *h* are secured at top by wire clamps, as seen in Fig. 3, and are

further held in position by a binder, *g*, which is laid across their top in the direction of the two doors, and *g* is fastened at its ends by a string which passes down and under staple in the slide E. The comb-frames *h* are kept at their proper distance apart by small nails driven into their edges. Directly under the ties C is the hinged bottom H, which is hinged to C, and extends some two inches or more beyond the opposite side of A, and serves as a rest to the bees before they enter the hives. The bottom H can be adjusted by the means of two buttons placed beneath it. At the bottom of tie C, where it rests on H, an opening is made for the admission of the bees into the hive. Into this opening is inserted a tin case, I, wide enough to admit of the free passage of the bees. There are two metal slides by which the case I can be closed, when it becomes necessary to protect the inmates of the hive from annoyance.

K represents a movable platform situated just above the top of the comb-frames *h*, and supported at its four sides by screws or nails entering the interior surface of A. Openings are made at the outer edge of this platform for the bees to ascend above it and engage in their labor. A hole is cut through its center, over which a piece of wire-cloth is fastened for purposes of ventilation. For the same purpose holes are made in three sides of A, and covered in like manner with wire-cloth. Several perforations are also made in the bottom H to secure a current of air upward.

It will be seen that our hive is marked by great simplicity of construction and facility of access to the interior, the comb-frames being easily removed through either door.

Having thus described our hive, what we claim, and desire to secure by Letters Patent, is—

The slide E, in combination with the metal sheaths *b*, the comb-frames *h*, and the doors B, the whole constructed and arranged in the manner and for the purpose herein set forth.

In testimony that we acknowledge and claim the foregoing we hereby affix our signatures in the presence of two witnesses.

G. W. SMITH.
N. B. VOSBURGH.
A. J. KRAMER.
W. L. WINTER.

Witnesses:
JOHNSTON ELLIOTT,
SIMON BIXBY.