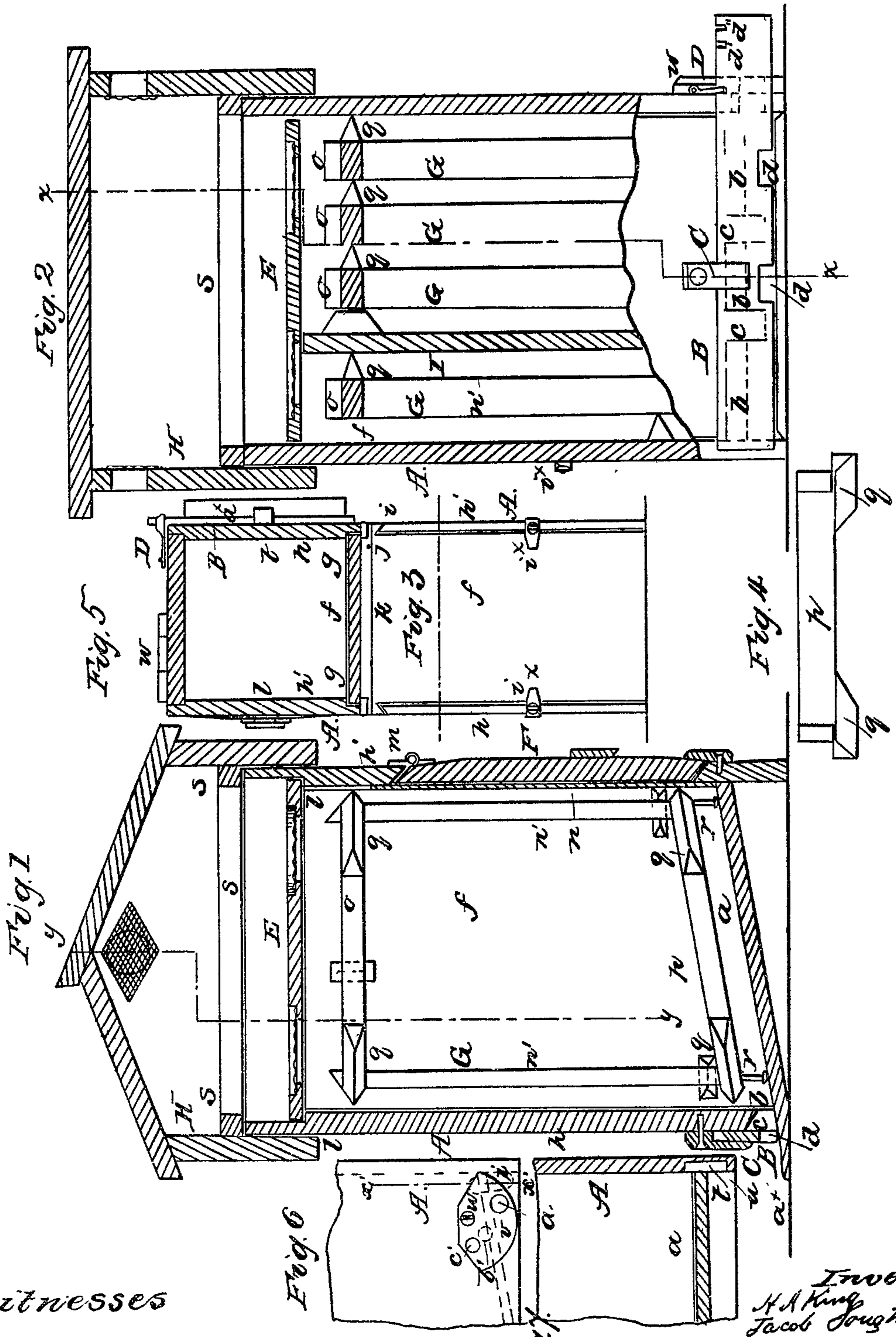


KING & LOUGHMASTER.

Bee Hive.

No. 40,725.

Patented Nov. 24, 1863.



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UNITED STATES PATENT OFFICE.

H. A. KING AND JACOB LOUGHMASTER, OF SEAL, OHIO, ASSIGNORS TO H. A. KING, N. H. KING, AND A. A. KING, OF SAME PLACE.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 40,725, dated November 24, 1863.

To all whom it may concern:

Be it known that we, H. A. KING and JACOB LOUGHMASTER, of Seal, in the county of Wyandot and State of Ohio, have invented a new and Improved Bee Hive; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical section of our invention, taken in the line $x x$, Fig. 2; Fig. 2, a vertical section of the same, taken in the line $y y$, Fig. 1; Fig. 3, a diminished side view of the body or main portion of the hive, the cap being removed; Fig. 4, a detached plan or top view of one of the comb frames; Fig. 5, a horizontal section of the hive, taken in the line $z z$, Fig. 1; Fig. 6, a side view of the lower part of the hive; Fig. 7, a section of Fig. 6, taken in the line $x' x'$.

Similar letters of reference indicate corresponding parts in the several figures.

To enable those skilled in the art to fully understand and construct our invention, we will proceed to describe it.

A represents the body or main portion of the hive, which is of quadrilateral form, and is provided with an inclined bottom, a , the lower or depressed end of which projects beyond the front side of the hive to serve as an alighting-board, a^x . In the lower part of the front side of the hive there are made three openings, $b b b$, the spaces c between which are of equal width, and which we term "pillars." These openings constitute the bee-entrances, and directly in front of them there is a slide, B, which has two openings or notches, $d d$, made in it, corresponding in width with the pillars c , but of less height. This slide B rests upon the alighting-board a^x , and is retained in contact with the front side of the hive by means of a button, C. In the upper edge of the slide B there are made at one end three notches, $d' d' d''$, into any of which a plate, D, attached to one side of the hive by a pivot, may be fitted. By this adjustment of the slide B the capacity of the bee entrances b may be varied as desired. The greatest capacity of the entrances b is of course equal to the capacity of the notches $d d$, in the slide, and these are more or less contracted

by shoving them more or less over or in front of the pillars c , and they may be closed entirely by making said notches register with the pillars c . This will be fully understood by referring to Fig. 2, in which the pillars c and openings b are shown in red. One side, f , of the hive A is a slide, which is allowed to move freely up and down, and bears against the backs of vertical rabbets $g g$, made in the front and back $h h'$ of the hive, and the upper edges of the front and back are beveled, as shown at i , to fit in beveled notches j , made in a cross bar, k , at the top of the slide f , as shown in Fig. 3. This cross-bar k , when the slide f is fully down, is flush with the tops of the front and back of the hive, and said cross-bar, in consequence of being provided with the notches j , and fitting over the beveled surfaces i , firmly holds the back and front of the hive in proper position, preventing them from warping or springing apart. The slide f is held in place by buttons i^x . In the upper parts of the front and back of the hive, at their inner sides, there are made rabbets $l l$, to serve as supports for the honey-board E, as shown clearly in Fig. 1. These rabbets extend down sufficiently far within the hive to admit of quite a space being above it—that is to say, between it and the top of the body A, as shown in Figs. 1 and 2. At the back h' of the hive there is door, F, which is hung by hinges m at its upper end, and a glass, n , is inserted in the back h' , said glass being covered by the door when the latter is down. (See Fig. 1.)

G represents the comb-frames, which are made with vertical sides n' , horizontal top bars, o , and inclined bottom bars, p , the inclination of the latter corresponding to the inclination of the bottom a of the hive. The top and bottom bars, $o p$, are constructed with projections q , which extend out laterally from the frames, and also extend out from the front and back of the same, as shown in Fig. 4. These projections keep the comb frames at a proper distance from the walls of the hive and from each other. Each bottom bar, p , also has two pins or rods, r , driven into it—one near each end—to keep the bottoms of the comb-frames at a suitable distance above the bottom a of the hive, as shown clearly in Fig. 1.

H represents the cap of the hive, which is

provided with a double pitch roof, and is of sufficient capacity to fit over the top of the body A. Within this cap H there are nailed or otherwise secured horizontal strips *s*, which serve as bearings to support the cap, said strips resting on the top of the body A. In one side of the hive, at its lower part and inner surface, there is made a groove, *t*, which extends above and below the bottom *a*, and is covered at its lower part with wire cloth *u*. (See Fig. 7.) By this means air is admitted into the hive without admitting light, and in the same side of the hive there is made a hole, *v*, which is covered by a flap or slide, *w*, also having a hole, *a'*, made in it, which may be brought in line with the hole *v* to admit air underneath the bottom *a*, so that said air may pass up into the hive. Another hole, *b'*, is also made in the same side of the hive, above the bottom *a*, and a similar hole, *c'*, made in the flap or slide *w*, so that air may be admitted directly into the hive when required.

I is a partition-board fitted in the hive A and in line with either of the pillars *c c*, the latter admitting of the partition forming a complete cut off between the two parts of the hive, and at the same time allowing bee-entrances for both.

The hive thus constructed will be strong and

durable, the honey-board and slide *f* will not be liable to be affected by shrinking or swelling, and may be made at a reasonable cost.

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

1. The fitting of the honey-board E on rabbets *l l* within the hive, in the manner and for the purpose specified.

2. The cross-bar *k* at the upper end of the slide *f*, provided with beveled notches *j j* to fit over the beveled surfaces *i* at the upper ends of the front and back of the hive, for the purpose specified.

3. Securing the cap H on the hive by having the former of sufficient dimensions to fit over the top of the body A, and securing strips *s* within the cap H, to rest on the top of the body A and support the cap, as set forth.

4. The flap or slide *w*, attached to the hive and provided with holes *a' c'*, in combination with the holes *v b'* in the side of the hive, and the groove *t* in the inner surface of the side of the hive, as and for the purpose specified.

H. A. KING.

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Witnesses:

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