

E. N. KINGSLEY.

Bee Hive.

No. 57,924.

Patented Sept. 11, 1866.

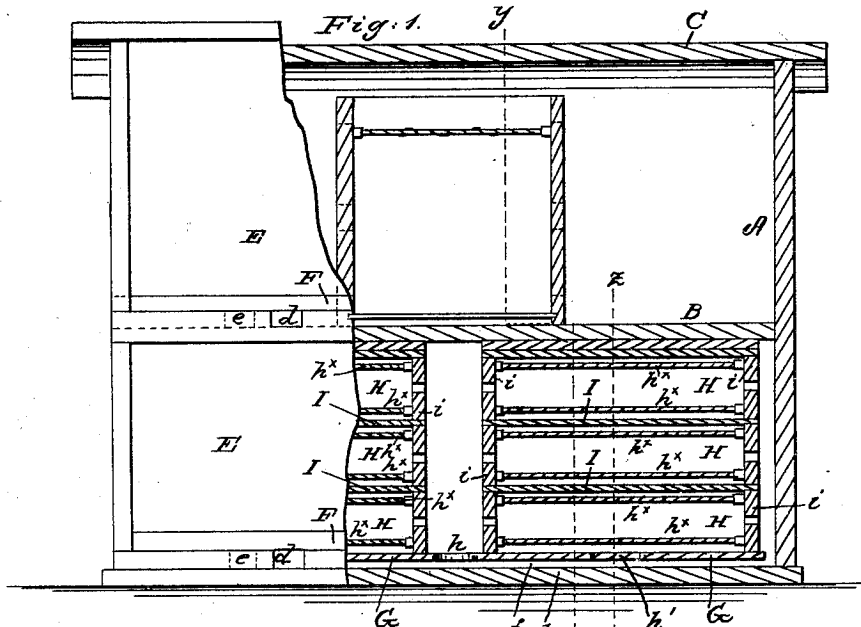


Fig. 2.

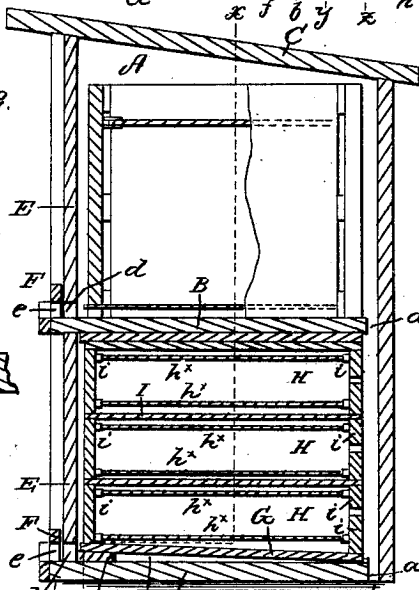
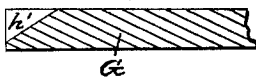


Fig. 3.



Witnesses:

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# UNITED STATES PATENT OFFICE.

E. N. KINGSLEY, OF MINNEAPOLIS, MINNESOTA.

## IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 57,924, dated September 11, 1866.

*To all whom it may concern:*

Be it known that I, E. N. KINGSLEY, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and Improved Bee-Hive; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a transverse vertical section of the same, taken in the line *y y*, Fig. 1; Fig. 3, an enlarged section of a portion pertaining to the same, taken in the line *z z*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention consists in a novel construction and arrangement of a case placed over a ditch, excavation, or cellar, and provided with doors, bee-entrances, moth-trap, and ventilating openings or spaces, as hereinafter set forth, whereby a plurality of bee colonies may be securely kept, properly ventilated, and due provision made for all the different manipulations required or practiced in bee culture.

A represents a case, which may be of any suitable dimensions, constructed of wood, and provided with a central horizontal partition, B, and a roof, C, to shed or let off the rain. This case is placed over a suitable ditch or excavation, D, from which the case is supplied with warm air in winter, and passes into the case through openings *a* at the rear ends of the bottom *b* and partition B. (See Fig. 2.)

The front of case A is provided with the sliding doors E E, one above and the other below the partition B, and these doors are each provided with notches *d* in their lower ends, to serve as bee-entrances. These bee-entrances may be closed at any time by means of slides F, having notches *e* in them. By moving these slides F the bee-entrances may be wholly opened, or wholly or partially closed, as desired.

Within the case A, on its bottom *b*, there are placed two strips or boards, G G, which form a false or supplemental bottom for the

case, the front ends of said boards resting upon cleats *f*, to admit of a space, *g*, underneath the boards G and above the bottom *b*, an opening, *h*, being made in the boards G where they are in contact or abut against each other, to admit moth passing into the space *g*, and also to admit of hot water being poured into said space in order to destroy the moth from time to time, as they accumulate therein. These boards also have inclined planes *h'*, formed by notching their front ends, (see Fig. 3,) whereby the bees (workers) are allowed to pass into the lower boxes and the queens confined therein.

The hives are formed of boxes H, placed one over the other within the case A. These boxes are of rectangular form, and each provided with a top and bottom, *h<sup>x</sup>*, secured in position by screws *i* or other means. These tops and bottoms are a trifle smaller than the boxes H, in order to allow a space all around for ventilation, and admit of the escape of moisture by evaporation. By this means the boxes may be kept dry, the vapor arising from the exhalation of the bees being allowed to escape freely. These tops and bottoms may be constructed of wood, glass, or other material, and the boxes may be separated by slides I of wood or glass. These boxes may be used as brood-chambers, spare-honey boxes, and feeders, as they may be cut off from each other, or made to communicate with each other at pleasure—that is to say, those of each tier. Hence it will be seen that these boxes are in fact sections, which may be used to form artificial or natural or non-swarming hives, and they admit of the changing and renewing the comb annually. In fact all the manipulations and different modes of bee-culture may be carried on by this arrangement of boxes or sections.

The moisture from the several boxes collects on the inner side of the case A, and during mild weather or in summer runs down the sides thereof through the openings *a* into the ditch or excavation D; and in order to insure this result perfectly the partition and bottom, on which the boxes or sections rest, may be slightly inclined backward. During the winter season this moisture will congeal on the inner sides of the case and serve as a protection.

Having thus described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

1. The case A, constructed with doors or slides E E, notched at their lower edges, and having notched slides F in front of them, for the purpose of closing the bee-entrances, or wholly or partially opening them, as may be desired.

2. The passage *a* in the rear of the case, between its walls and the frames, opening into the excavation D, for running off the moisture from the boxes and supplying warm air to the

case, substantially as described, for the purpose specified.

3. The securing and arranging of the top and bottoms *h*<sup>x</sup> in the boxes or sections H, so that a space will be allowed all around them for ventilation and the evaporation of moisture, substantially as described.

E. N. KINGSLEY.

Witnesses:

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