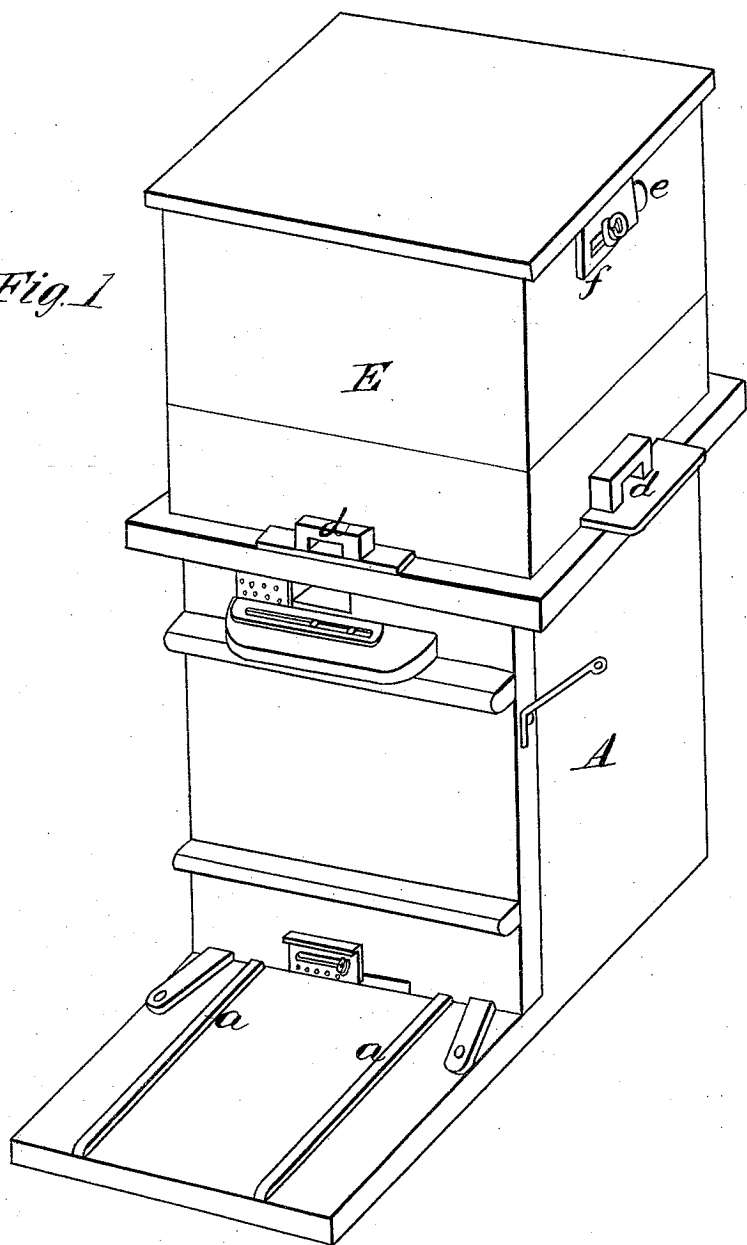


J. MESSENGER.
Bee-Hives.

No. 157,341.

Patented Dec. 1, 1874.

Fig. 1



WITNESSES
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Robert Everett

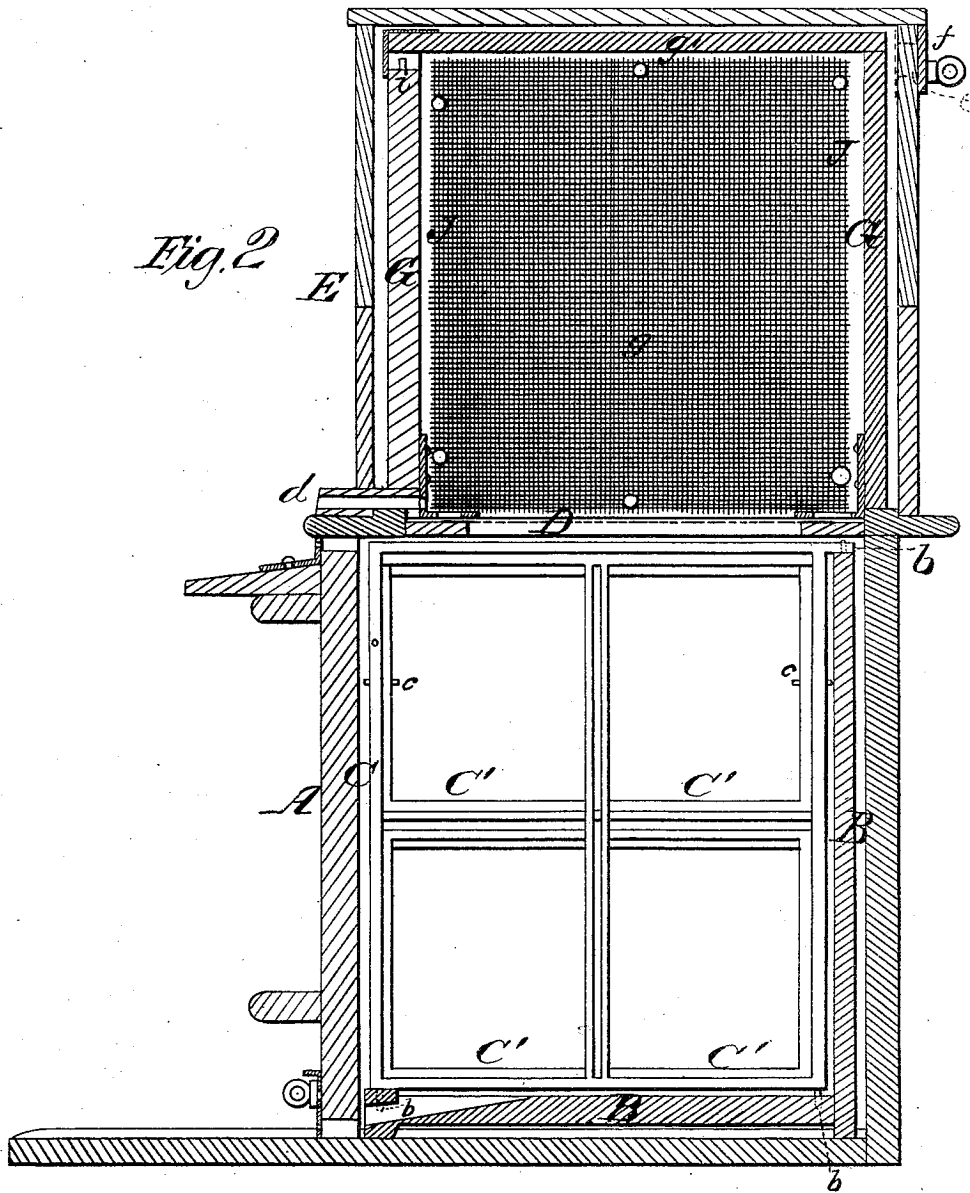
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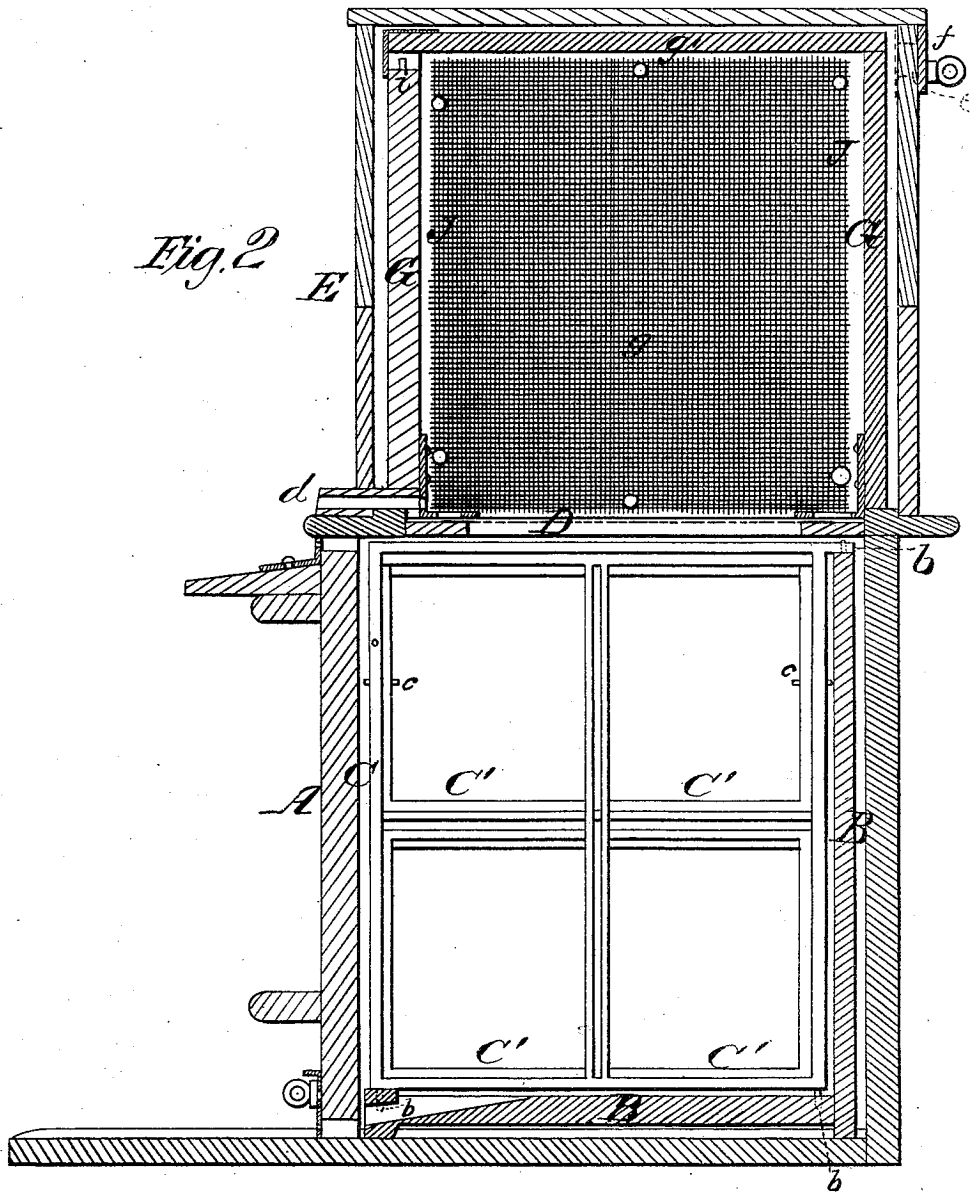
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UNITED STATES PATENT OFFICE.

JEROME MESSENGER, OF COLDWATER, ASSIGNOR OF ONE-HALF HIS RIGHT
TO LEVI P. GIFFORD, OF BETHEL, MICHIGAN.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 157,341, dated December 1, 1874; application filed
October 3, 1874.

To all whom it may concern:

Be it known that I, JEROME MESSENGER, of Coldwater, in the county of Branch and State of Michigan, have invented a new and valuable Improvement in Bee-Hives; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a perspective view of my bee-hive. Fig. 2 is a longitudinal sectional view of the same; and Fig. 3 is a transverse sectional view.

This invention has relation to bee-hives; and it consists in a novel frame-holder and guides, which are so constructed that in drawing out the frames there is no liability of killing the bees or breaking the combs and wasting honey. It further consists in the employment of nucleus-boxes containing comb-frames, and located above the main comb-frame box, for the purpose of raising queen-bees, as will be hereinafter explained.

In the annexed drawings, A designates the main portion of the hive, the bottom of which is extended out some distance, and has secured upon it two parallel ways, *a*, on which the frame-holder B is supported and guided in moving this holder out of and in the box A. The bottom of the holder is grooved on the guideways, so that it will not move to the right or left thereon.

The frame-holder consists of a bottom board and a back board, and the frames C are held in place by means of pins *b* at their corners, and separating or steadying pins between them.

Figs. 2 and 3 show one of the frames C with four small frames, *C'*, applied inside of it, and held in place by means of pins *c*. By removing a pin, *c*, any one of the small frames *C'*

can be taken out, the honey removed from it, and it returned again for another supply. D designates a removable frame, which is covered with wire-cloth, and supported in the box A over the comb-frames C, as shown in Figs. 2 and 3. E designates a removable cap, made of two horizontal separable sections, and applied on top of the box A, and provided with entrances *d* and perforations *e*, which latter are provided with slides *f*. Inside of the cap E are three separate nucleus-boxes, G, having wire-gauze sides *g* and hinged covers *g'*. Each box G has a bee-entrance leading into its bottom, and inside of these boxes are comb-frames, J, held in place by pins. In these boxes the queen-bees are raised. The heat rising from the brood below will keep them warm and comfortable.

By these means I am able to obtain queen-bees very early in the spring of the year, which is very important to the bee-raiser. I use the same frames in the nucleus-boxes which are used below; and when I get through raising queens I remove the nucleus-boxes and the lower section of the cap E, and, if desired, put on a honey-box and the upper section of said cap.

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

1. The frame-holder B, mounted on guideways *a a* on the bottom of the hive-box A, substantially as described.

2. Nucleus-boxes G, having wire-cloth sides *g* and movable covers *g'*, in combination with the wire-cloth frame D inside of the cap E, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JEROME MESSENGER.

Witnesses:

DAVID B. PURINTON,
GEO. T. CULVER.