

(Model.)

G. L. TINKER.

BEE HIVE.

No. 311,273.

Patented Jan. 27, 1885.

Fig: 1.

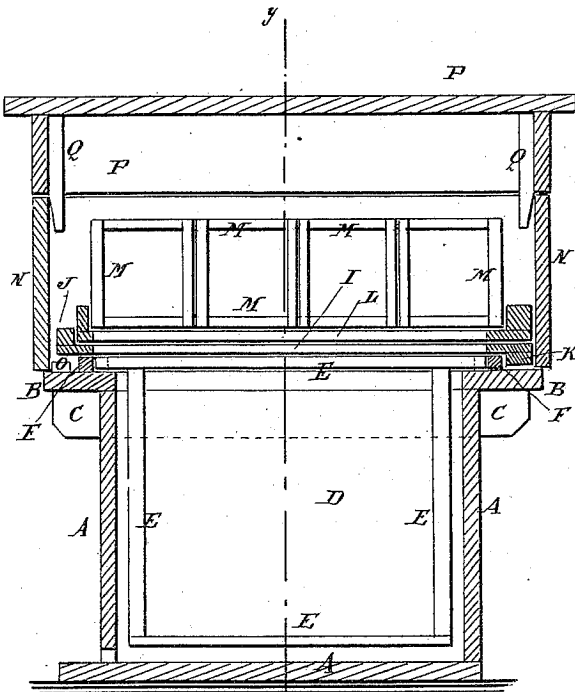


Fig: 2.

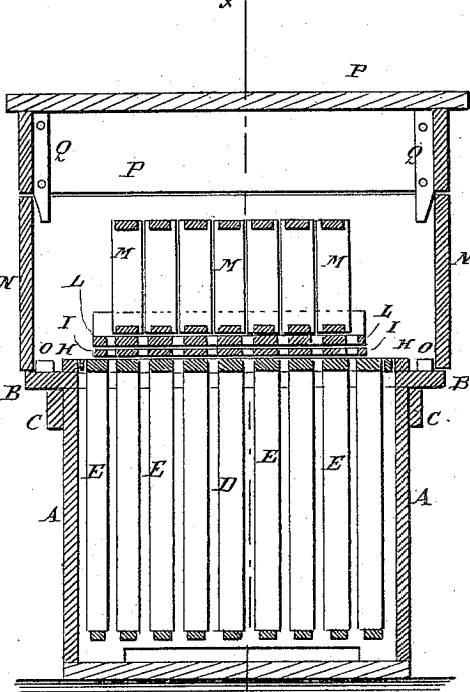
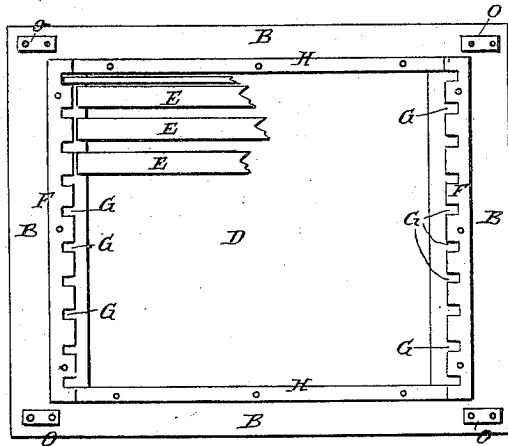


Fig: 3.



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BEE-HIVE.

SPECIFICATION forming part of Letters Patent No. 311,273, dated January 27, 1885.

Application filed October 17, 1883. (Model.)

To all whom it may concern:

Be it known that I, GEORGE LYMAN TINKER, a citizen of the United States, residing at New Philadelphia, in the county of Tuscarawas and State of Ohio, have invented certain new and useful Improvements in Bee-Hives, of which the following is a description.

Figure 1 is a sectional side elevation of my improved bee-hive, taken through the line *xx*, Fig. 2. Fig. 2 is a sectional rear elevation of the same, taken through the line *yy*, Fig. 1. Fig. 3 is a plan view of the body of the hive, showing a part of three comb-frames in place.

The object of this invention is to facilitate bee-culture, and also to increase the productive capacity of the swarms.

The invention consists in the construction and arrangement of parts, as will be hereinafter fully described and claimed.

A represents the body of the hive, to the upper edge of which is attached an outward projection or ledge, B, supported upon cleats C, attached to the sides of the said body A, as shown in Figs. 1 and 2. The body A forms the brood-chamber D of the hive, and within it are placed the brood comb-frames E, the projecting ends of the top bars of which rest upon the inner part of the projection or ledge B, or upon the top edge of the body A. The ends of the top bars of the comb-frames E fit against spacing-bars F, attached to the frame B at the front and rear of the hive, and which have recesses or slots G, or other suitable guides, formed in their inner edges, the distances between the said recesses or slots G being equal to the width of the top bars of the comb-frames E, and the said recesses or slots being equal in width to the distances between the top bars of the said comb-frames E, so that the said bars F will serve as guides in arranging the comb-frames, as illustrated in Fig. 3. These notched spacing-bars, arranged as shown, afford means of accurately and easily adjusting the comb-bars so that they will all be exactly the same distance apart. The rear spacing-bar serves, also, as a stop for the cleat K of the rack I to abut against. The spaces between the ends of the spacing-bars F are closed by bars H, attached to the projection or ledge B at the sides of the hive.

Upon the top of the comb-frames E is placed a rack, I, called by me an "intermediate rack,"

and which is formed of slats connected at their forward ends by a cleat, J, attached to the upper sides of the said ends, and connected at their rear ends by a cleat, K, attached to the lower sides of the said ends, the said cleat K being of the same thickness as the spacing-bars F and the top bars of the comb-frames E, so that the intermediate rack, I, will rest upon the said spacing-bars and comb-frames, and so that the said intermediate rack can be slipped into place from the rear side of the hive without killing any of the bees. The slats of the intermediate rack, I, are to correspond in width with the top bars of the brood-frames E, and the distance from center to center of said slats and of the brood-frames E is to be exactly the same. The end parts of the spaces between the slats of said rack I are closed by blocks interposed between the ends of the said slats, to prevent the bees from passing out between the ends of the said slats. The cleat K serves as a stop to limit the forward movement of the intermediate rack, and the cleat J serves as a stop to limit the forward movement of the section-rack L of the surplus-honey frames M. The section-rack L is formed of slats of the same width as the slats of the rack I, and placed at the same distance apart, and which are secured in place by cleats attached to the upper sides of their ends, the said cleats serving as guards to keep the surplus-honey frames M in place. The surplus-honey frames M are formed with their top and bottom bars of the same width as the bars of the section-rack and the top bars of the brood-comb frames, and their side bars of a width equal to the width of a bar of the section-rack plus the width of the space between adjacent bars of the said section-rack, so that when the said frames M are placed side by side, with the edges of their side bars in contact, spaces will be left between the adjacent top and bottom bars, as shown in Fig. 2. With this construction the intermediate rack, I, and its cleats J K prevent the section-rack L from being waxed to the top bars of the comb-frames E, so that the said section rack L and its comb-frames M, when the said frames M are nearly filled, can be removed and replaced with another section-rack L, provided with empty comb-frames M, and the first section-rack L and its partly-filled frames can be

placed above the said empty frames, continuous passage-ways for the bees being formed from the brood-chamber upward so far as the tiering may be extended. The upper part, N, 5 of the hive rests upon the outer part of the projection or ledge B, and is kept in place by small guide-blocks O, secured to the said frame near its corners. The upper part, N, of the 10 hive is provided with a cover, P, which is secured in place by guide-bars Q, secured to it at its corners, and which enter the corners of the said upper part, N, as shown in Figs. 1 and 2.

I am aware that my arrangement of the 15 spacing-bars has heretofore been used in substance; also, that a honey-board has been constructed of a rectangular frame with spaced slats, the said slats being of less thickness than the sides and ends of the frame. This 20 honey-board is intended for use in that class of hives that have a bee-space between the main honey-frames and the surplus-honey frames, and I claim no such construction.

I am also aware that a former patent shows 25 a board slotted to register with spaces between the main honey-frames, a slotted slide being placed over this board, with its slots registering with those of said slotted board. The lower cross-bars of the surplus-honey frames are not 30 in alignment with and do not rest on the bars of the slotted board and slide, but a bee-space is left between said parts. The slide, moreover, cannot move in the direction of the length of the bars of the honey-frames and slotted board 35 and rack, but moves transversely thereto, so that any bees passing between said slide and board and surplus-honey frames would be mashed by the shearing action of the edges of these parts. My racks slide in the direction 40 of the length of the bars and slats, and hence no bees can be injured. I do not desire to claim such patented construction as of my in-

vention, but hereby restrict myself to the construction set forth in my claims.

I am also aware that surplus-honey boxes 45 have been set directly upon the brood-frames, so as to form continuous bee-passages between both sets of frames.

Having thus described my invention, what I claim as new is— 50

1. The combination, in a bee-hive, of the main frames E with the intermediate rack, I, resting thereon, and provided with upper and lower cleats, J K, at its ends, section-rack L, resting on the rack I, and surplus-frame M, 55 resting on the section-rack L, the cross-bars of said frames and racks being of the same width, and being in vertical alignment and resting one upon the other, whereby the said racks may be moved singly or together by means of the 60 cleats and in the direction of the length of the bars or slats, substantially as set forth.

2. The combination, in a bee-hive, of the main frames E with the intermediate rack, I, resting thereon, and provided at its ends with 65 the upper and lower cleats, J K, section-rack L, resting on the rack I, and provided on its upper surface at its ends with cleats, surplus-honey frames M, held between said cleats, with their lower cross-bars resting on the bars of 70 rack L, the cross-bars of all of said frames and racks resting one upon the other in vertical alignment, whereby the racks may be moved singly or together in the direction of the length 75 of the bars or slats of the frames and racks, and the surplus-honey frames be removed with rack L, for the purpose of tiering, without disturbing their relative position to the rack, substantially as set forth.

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Witnesses:

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