

UNITED STATES PATENT OFFICE.

JOSEPH TRITT, OF NEW RICHMOND, OHIO.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 122,080, dated December 19, 1871.

To all whom it may concern:

Be it known that I, JOSEPH TRITT, of the town of New Richmond, in the county of Clermont, in the State of Ohio, have invented certain Improvements in Bee-Hives and Feeder attached, of which the following is a specification:

The first part of my invention relates to the two sliding doors, the inner and outer, in the rear part of the hive, which sliding doors are so arranged as to both slide out at once on either side, or one slide one way and the other the contrary way, and are so constructed as to run in grooves, so that either or both can be shoved through any quantity of bees adhering to said doors or rear part of the hive without mashing, bruising, or injuring a single bee. When a simple view into the hive is desired remove the outer door alone, and when you desire to get into the colony remove both doors. If it is wished to remove a single frame at a time from one side or the other of said hive, shove both doors together to that side which will expose the frame or frames you desire to move or pull out. If it is desired to remove a middle frame, shove the outer door to one side and the inner door to the other, so as to have both doors pass the central comb frame to be removed, thereby exposing said frame, while all the other frames are shut in; the object being not to expose the colony of bees to the air or light, except as to that part where the frames are to be removed, and thereby only disturbing the bees in that part of the colony where the frames are being removed, the grooves and slides of said doors being so arranged as not to permit water to penetrate into the hive. The second part of my invention relates to the manner of attaching, inserting, and removing the movable comb frames into and from the hive, which is done by placing the groove on the under side of said frames upon the wire slides, and then pushing them gently along on said wire slides until they enter the back staple and front niche at the top of the said frames, and when fully put in place are firmly fastened above and below, so that they are kept equidistant from each other and can be transported over ordinary roads in ordinary vehicles without said frames being displaced or swinging around or about, and, therefore, preserves the combs and adds security to the colony. The said frames are simply pushed in and pulled out, keeping the frames in the same position in and out of

the hives, which insures safety to the honey and combs by preventing the breaking or sloughing off of the same in warm weather, which will take place when frames are thrown in different positions in taking out of hive from that which they occupy within the hive. These frames are so arranged that in the sliding in and pulling out no bees are injured, nor can be, with proper care. If needs be the false sides can be removed, thereby giving room to incline the frames so as to not interfere with honey-comb or bees by sliding said frames in or out. Said wire slides and staples, as applied to the hanging or fixing in of said movable comb-frames, are of my invention.

Figure 1 is a front view of said hive. Fig. 2 is a section of hive, showing the interior. Fig. 3 is a rear view, exposing a number of the movable comb-frames, and showing that the doors can be slided and adjusted so as to expose any one or more frames while the balance are shut in—the central as well as the outer frames. Fig. 4 is an inverted view, showing the bottom board, exposing the lower valve and ventilators. Fig. 5 is a representation of one of the large movable comb frames removed from the hive, which is thirteen inches in height, twelve inches across, and one inch in width. Fig. 6 shows one of the small or cap frames removed from the hive, which is five and seven eighths inches deep, five and one-eighth across, and one inch in width. Fig. 7 represents a plan view of the bee hive reversed; Fig. 8, a perspective view of the bee-feeder and its funnel, and Fig. 9 a sectional elevation of the same.

A represents the bottom board of the hive, supported upon any suitable standards, and provided with an alighting-board, *a*, ventilating-orifices *a*¹, and opening *a*². *a*³ *a*⁴ represent pivoted covers adapted to close the openings *a*¹ *a*² when desired. B represents a feeding box of any proper construction, which is located below the hive, being removably attached to the bottom board by buttons of proper construction. It is preferably provided with a pipe and funnel, by means of which food may be supplied to it without removing it. C represents the comb-frame chamber, in which are contained the frames C' C', as shown. These frames are formed with grooves upon the lower edges and with recesses upon the upper edges at the front, and with a pin at the rear, as shown in Fig. 2. The front side

of the chamber is provided at the proper point with a line of staples, which are adapted to rest in the recesses of the comb frame when the latter are in place; and the rear side has a series of recesses to receive the pins of the same. D represents the chamber containing the comb frame, which is provided with a distinct entrance, as shown in Fig. 2, which may be used if desired. E E represent the doors of the hive, which are made to slide in grooves, as shown.

Certain marked advantages are obtained by this construction. The bees are easily fed when desired. Any desired frame is easily reached without disturbing the others, and all, or nearly all, the movable parts may be operated without danger of crushing the bees.

The full hive is twenty-one inches in height exclusive of the legs and cap, fourteen and one-half inches across one way and fifteen and one-

half the other way, and in shape is an oblong square, and is named "the bee keeper's companion."

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The comb frames, constructed specifically as described, with the grooved recess and pin, in combination with the bent wire slide, the series of staples, and the recesses for the pin, as set forth.

2. The combination of the sliding doors E E with each other and the hive, one being adapted to cover the other, as set forth.

J. TRITT.

Witnesses:

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