





# United States Patent Office.

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## IMPROVEMENT IN BEE-HIVES.

The Schedule referred to in these Letters Patent and making part of the same

*To all whom it may concern :*

Be it known that I, L. H. CRITCHFIELD, of Shreeve, in the county of Holmes, and State of Ohio, have invented new and useful Improvements 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 accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical section as indicated by the line *x-x* of fig. 2.

Figure 2 is a top view, with cap removed.

Figure 3 is a section in detail of removable sash.

Like letters in the figures of the drawings indicate like parts.

My invention consists of two or more hives, united by means of hinges, and provided with removable partitions and sashes, and also with inclined bottoms, for the purpose, first, of dividing large colonies, the hives being separated and joined with empty ones, making the necessary provision for queens, thus increasing the colony; second, in combining weak ones, or a weak with a strong one, thus preventing the loss of small swarms; third, in affording ready access to the middle of the hives, for removing old musty comb and worms, or for remedying any derangement that may be found to exist therein; fourth, in enabling the bees to remove more readily, worms, filth, or other matter that may fall loosely on the bottom.

My invention is constructed as follows:

A A are two hives, united by means of what are termed "slip-hinges," *a*, two or more of which are attached to the backs thereof by screws, so that the two may be separated by slipping the hinges of the one off from the hinges of the other, or that they may be readily swung open for access to the middle for removing old musty comb, worms, and other matter.

Each hive, where it joins with the other, next to the edge on the inside thereof, is provided with grooves to receive the tongues *b b* of the removable partitions B' B', which are slipped into the grooves, and having a knob, or other suitable device, *c c*, to take hold of to pull them out.

B B are the surplus boxes.

C, removable cap, which fits over the boxes, and down on to the shoulders *d d* of the hives.

D D are the inclined bottoms, an aperture, *e e*, being left on each side of the hive for the passage in or out of the bees, and, when desirable, one of them may be closed by a hinged door, *f*.

The two hives A A, when united, are secured by hooks *g g*, attached to a bar, E, along the outer side of the surplus boxes, and also by hooks *h*, on the front side of the hive.

The bar E is fastened to the plate F, on which the boxes rest, the hooks being placed across where the bars join in the middle of the hive.

G are the stationary sashes, having the ends of the top bars projecting from the sides thereof, by which they are suspended from a shoulder formed on the inner sides of the hive, and made of different lengths to correspond with the inclination of the bottom of the hive, and arranged at proper distances apart, as ordinarily, and having in the top bar of each, a concave receptacle, *h h*, for molasses.

Opposite to the concave receptacles in the plate F, are holes, *i i*, by means of which and a funnel-shaped tube, H, inserted therein, the molasses is poured into the receptacles, the tube being moved from hole to hole as each receptacle is supplied with the molasses. Thus, it will be seen, I propose to feed the bees in winter from molasses put into these receptacles, so that they may not have so far to travel for food when their supply is exhausted.

K is the removable sash, which, when the partitions are withdrawn, is inserted, and rests upon the apex where the inclined bottoms join in the middle of the hive.

It is provided with a ring or knob, *n*, for withdrawing it.

### Operation.

The hives A A being united and fastened by the hinges and hooks, the removable sash is inserted in the middle, and a flat bar, L, slipped over the top, between the top of the hives and the bar E, closing the opening entirely. The cap is then placed on.

When it is found the colony is large, and it is desired to divide and thus increase it, the cap is removed, and the flat bar L and sash drawn out, and the partitions inserted, (see fig. 1,) when the hooks are unfastened, and the hives separated, (in the manner herein described,) and joined with empty ones of a like construction, provided with hinges and hooks.

When it is desired to combine weak colonies, or unite a weak with a strong one, and thus prevent the loss of small swarms, the hives are united and the partitions drawn out, but very slowly and gently, and the sash inserted, and the hives fastened, and the cap placed on as before.

Having thus fully described my invention,

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

1. Two or more hives, A A, united by means of hinges and hooks, and provided with removable partitions B' B', and sash K, substantially as and for the purpose set forth.

2. The combination of the inclined bottoms D D, with two or more hinged hives, A A, provided with removable partitions and sashes, substantially as and for the purpose set forth.

L. H. CRITCHFIELD.

Witnesses:

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