J. W. ELDER. Bee-Hive.

No. 204,549.

Patented June 4, 1878.

Fig. 1. Jig. 2. C Fig.4. 000 đ 0000 ¥ig. 3. a

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## UNITED STATES PATENT OFFICE.

JAMES W. ELDER, OF HARDINSBURG, KENTUCKY.

## IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 204,549, dated June 4, 1878; application filed April 24, 1878.

To all whom it may concern:

Be it known that I, James W. Elder, of Hardinsburg, in the county of Breckinridge and State of Kentucky, have invented certain new and useful Improvements in Bee-Hives; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a longitudinal vertical section of my improved bee-hive. Fig. 2 is a transverse vertical section thereof. Fig. 3 is a side view of the same, with the hinged section of the house or inclosing-case supported in an elevated position; and Fig. 4 is a horizontal section through the base of the hive.

Corresponding parts in the several figures

are denoted by like letters.

This invention appertains to certain improvements in bee-hives; and it consists in constructing the casing of the brooding-chamber and honey box or boxes of tongued-and-grooved sections, held together by spring-rods, substantially as hereinafter more particularly set forth.

In the annexed drawing, A marks an outer casing or house, formed into two sections or parts, with the house portion hinged and hooked to the base a. To hold the house A up from in front of the bee-entrance, and to prevent the breaking of the hinges, it is held from falling down, or rather in an elevated position when opened, by means of jointed or disjointed rods a', attached to the base a, and provided with hooks, which enter staples or hook over projections secured to said house. In the bottom of the base a and ends of the house A are ventilating-openings b b', to produce a circulation or current of air through the hive. These openings, as is usually the case, may be covered with perforated plates or with wire.

B refers to the brooding-chamber, and C to the honey box or boxes, each of which is constructed of a series of tongued-and-grooved sections, held together by means of spring-rods, B' b' C' c', hooking over projections attached to the end sections, and coiled, as at b' c', to brooding-chamber, and thus permit of the cut-

permit of their automatic distention and contraction. The object of this is to permit of the swelling of the sections, and to bring the same tightly together upon shrinkage, and thus keep the said chambers tight and prevent the breaking of the wax formed therein by the bees.

By thus constructing and holding the said parts together, they can be readily taken apart for the removal of the honey, and be packed for shipment, and the putting together of the

same be expedited.

The brooding-chamber casing is adjusted upon flanged supports or ways d d, fastened to the bottom of the section or base a, to hold the same in position as against lateral pressure or movement, it being buttoned in position upon said supports by means of a button or cam, e, bearing against one end thereof, holding it firmly up to the bee-entrance f. The bee-entrance f, which is made in the base a, communicates with the brooding-chambers through an aperture therein, and by an inclined trough or platform, f', secured in the bottom of said entrance, and extending a short distance beyond said entrance, and exteriorly to the said base, as shown. To the exterior end of this trough or platform f' is suspended or attached the moth trap or receptacle D, which may be supplied with an oil of any kind to kill the moth falling therein. The upper front end of the receptacle or trap D stands in an isolated position with the bee-entrance trough or platform f', to prevent the passage of the moth therefrom to said platform or entrance, and to cause it to pass down or fall into the said receptacle and be drowned in the oil therein.

The honey box or boxes C, the bottom of which is provided with a number of bee passages or apertures, g g, corresponding with a number of similar passages, g' g', in the top of the brooding-chamber casing B, is adjusted in position between cleats or blocks h h, fastened upon said casing. Buttons or cams i i, attached to the said casing and arranged one at each end of the honey box or boxes, may be operated or turned by the hand, so as to shift said box or boxes to bring the bee passages or apertures g g in a line with, or move them past, the passages h h in the casing of the brooding-chamber, and thus permit of the cut-

ting off of the passage of the bees to and from the honey box or boxes, or between it and the brooding-chamber. In the ends of the brooding-chamber casing and the honey box or boxes is glass, to permit of the inspection of the bees and honey. When the honey box or boxes are removed, a zinc or other plate or board, j, is used to cover or close the bee-passage in the top of the brooding-chamber casing.

Having thus described my invention, what I claim, and desire to secure by Letters Patent,

In a bee-hive, the brooding-chamber and honey box or boxes, constructed of tongued-and-grooved sections, united together by spring or coiled rods B' C', substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I hereunto affix my signature in the presence of two witnesses.

JAMES W. ELDER.

Witnesses:

John P. Haswell, J. P. Board.