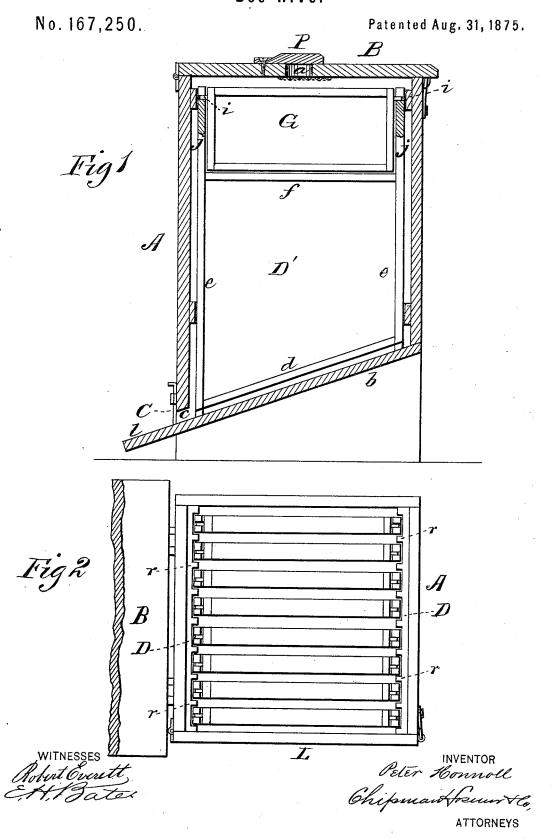
P. HONNOLL. Bee-Hive.



## United States Patent Office.

PETER HONNOLL, OF MARIETTA, ASSIGNOR OF TWO THIRDS HIS RIGHT TO JAMES W. HONNOLL, OF BYHALIA, AND MOSES H. HONNOLL, OF MARI-ETTA, MISSISSIPPI.

## IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 167,250, dated August 31, 1875; application filed July 10, 1875.

To all whom it may concern:

Be it known that I, Peter Honnoll, of Marietta, in the county of Prentiss and State of Mississippi, 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 longitudinal vertical section of my beehive; and Fig. 2 is a plan view, part sec-

tional, thereof.

This invention has relation to improvements in box bee-hives; and its nature consists in detached honey-frames arranged in the upper part of the hive, and journaled in the extended upper ends of the side rails of the comb or bee-bread frames below, whereby the latter are relieved of the superincumbent weight of the former, and may be readily detached when filled without disturbing the bees or bee-bread, as will be hereinafter more fully explained.

In the annexed drawings, A designates an upright box, constituting the casing of my improved hive, which box is closed by a hinged lid, B, provided with a gauze-covered aperture, a, and has an inclined bottom, b. It has also a hinged door, L, at its sides, which affords a means of access to the upper part of the box, for a purpose hereinafter explained.

The bees have access to the interior of the hive through an opening, c, between the floor b and the front of the hive, which opening extends entirely across the width of the same, and may be partly closed by means of sliding doors C. Floor b, as shown in Fig. 1, extends outward from the front of the hive, thus forming a landing, l, upon which the bees will alight, being thence directed up the landing through the said opening into the hive. The front and rear ends of the hive-box are provided with strips D at top, and near the bottom of the same, which strips are ribbed at intervals, as shown at r, the ribs serving as guides for vertically movable and detached

frames D', the lower rails d of which conform to the inclination of the floor, and the side rails e of which extend considerably above the horizontal top rail f, as shown in Fig. 1. The frames D' are of the shape of a trapezoid, and fill up rather more than two-thirds of the whole space within the box, the remaining third being occupied by the surplus - honey frames G. The latter are of the form of a rectangle, and are provided with spurs or product the surplus of which they are supported by the surplus of the sur jections i, by means of which they are supported in the cleft upper ends of extensions j of the side rails of frame. The clefts in the upper ends of the said side rails are of exactly sufficient depth to hold the honey-frames G clear of the top rail of the bee-bread frames below; consequently the latter will be relieved of the superincumbent weight of the former. An advantage to be readily appreciated, also, is that when the bee-keeper finds that any one of the surplus-honey frames G is filled, he may lift it bodily out of the hive without disturbing its occupants, and replace it with a fresh one.

During the unproductive season, the upper frames G may be stuffed with cotton through side doors L, thus protecting the bees from the ingress of cold air, and the accumulations of moisture therein, consequent upon the condensation of the warm vapors, will be carried out of the hive by the inclined bottom b. The ventilating-aperture a may be also closed, when requisite, by means of a pivoted gate or slid-ing door, P, as shown in Fig. 1.

What I claim as new, and desire to secure

by Letters Patent, is-

In a bee-hive, the bee-bread frames D, having the extensions j, cleft at their upper ends, in combination with the swinging honeyframes, with journals i, substantially as de-

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

PETER HONNOLL.

## Witnesses:

- H. PICHARDSON.
- J. F. WARREN.