

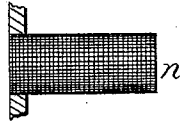
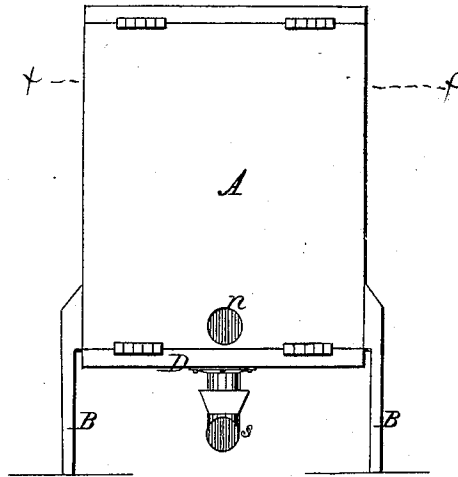
*J. C. Gaston.*

*Bee Hive.*

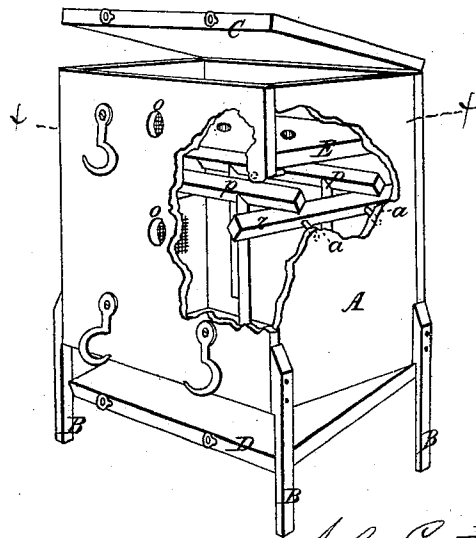
*Nº 86,915.*

*Patented Feb. 16, 1869.*

*Fig. 1.*



*Fig. 2.*



*Witnesses,*

*J. C. Munier  
A. F. Peck*

*Inventor,  
J. C. Gaston,*

*Per*

*H. P. K. Peck  
att'y.*

# United States Patent Office.

J. C. GASTON, OF CINCINNATI, OHIO.

Letters Patent No. 86,915, dated February 16, 1869.

## 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, J. C. GASTON, of Cincinnati, in Hamilton county, in the State of Ohio, have invented certain new and useful Improvements in Bee-Hives; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 represents a front elevation of my improved bee-hive.

Figure 2 is a perspective view of the same, with a portion of the case broken away, to exhibit the interior.

In the accompanying drawings—

A denotes a rectangular hive, supported upon legs B. The hive is provided with two hinged doors, C D.

The former, C, constitutes the top of the hive, and the latter, D, forms the bottom thereof.

The object of hinging the entire bottom is to provide a free opening for the admission of a swarm of bees; also, for the purpose of opening this hinged bottom to a sufficient extent for free ventilation in very warm weather.

The hive may be made in two parts, the parts fitting closely together at the line *x x* in figs. 1 and 2.

The openings *o o* are covered with wire gauze, and serve for ventilating the apartments.

At the ends, and in the interior of the hive, below the removable diaphragm E, there are two rectangular rails, *z*, supported by metal brackets *a a*.

These rails *z* are arranged with their corners in vertical and horizontal planes, which cut the rails centrally, thereby forming narrow rests, upon which the corners of the removable pendants *p p* are supported.

The pendants are made of three right-angular pieces of wood, and are removable, at pleasure, without difficulty.

When the sharp, angular corners only are in contact with supports, which present similar narrow or sharp points of contact with the frames or pendants, as represented in fig. 2, the pendants or frames may be very easily detached, because a slight vibrating movement may be easily given to the frames or pendants, which will break the fastening of wax which the bees have placed about these points of contact, and the pendant or frame may be readily and quickly removed; and, when constructed in this manner, the entire body of comb may be detached by sliding it out at the open end of the pendant, by first passing a knife along the surfaces of the pendant to which the comb adheres.

The comb so removed from the pendants is not broken or marred by the operation, and the pendants are left in a clean condition, to be again dropped into their places.

Instead of cleats to support the removable diaphragm E, I employ four metal studs, inserted in the sides of the hive, where they will not impede the free introduction of the pendants.

The passage-way *s*, for ingress and regress, represented in fig. 1, is substantially like that described in my patent numbered 83,952, and, like that, it is attached to an opening in the bottom of the bee-hive.

As an additional passage-way to the hive, I have inserted in an opening in the side of the hive, in close proximity to the bottom of the hive, a wire-gauze tube, *n*, which serves to effect some of the purposes specified in my former patent as being effected by the angular or elbow-formed passage-way; but the tube passage-way *n* is placed in position to form a direct entrance to the hive; and, in certain conditions of the swarm of bees, the direct entrance is desirable.

When a new swarm of bees is placed in the hive, it is important that the entrance or passage-way should be in such relation to the hive that the bees will readily find ingress and regress, and at such a time the direct passage-way or entrance *n* is to be employed; but, after the bees have become accustomed to their new habitation, the direct passage-way *n* may be removed, and the bees will readily adopt the passage-way *s*, which is described in my former patent.

The opening in the side of the bee-hive, into which tube *n* is inserted, should be carefully closed when the tube *n* is removed.

The tubular passage-way *n* would be equally effective; if formed of the same material, in a rectangular form.

I deem this device, as a protection of the hive from moths and other insects, a valuable and novel improvement.

My object in making the tube *n* of wire gauze is to imitate, as closely as possible, the spider's web, in order to prevent the entrance of millers, and, at the same time, afford an easy passage for the bees.

I am aware that entrance-tubes have heretofore been constructed of various materials—wood, perforated tin, &c.; but these I do not wish to claim, my invention being limited to where the tube is made wholly of gauze or wire, and arranged, in relation to the bottom, as set forth.

The rails *z*, which are sustained upon brackets projecting from the interior of the end-pieces of the hive, occupy positions which afford a clear passage-way between them and the inner surface of the hive; and, when the pendants are resting upon the rails *z*, free access may be had to all parts of the inner surface of the hive, between the pendants, and their supports, and the hive. The bees may, therefore, pass freely around their work at all times, and any moisture which may accumulate upon the inner surfaces will freely pass to the bottom of the hive, without being brought in contact with the honey.

Having fully described my improvements in bee-hives,

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

1. The rectangular rails *z*, supported, by brackets,

out of contact with the interior surface of the hive, and arranged to support the angular pendants *p*, the several parts being constructed, arranged, and operating conjointly, in the manner and for the purpose substantially as described.

2. The open wire-gauze passage-way *n*, arranged, in relation to the bottom of the hive, substantially as and for the purpose specified.

3. The combination, in a bee-hive, of the passage-

way *n* and passage-way *s*, in the manner and for the purposes substantially as described.

In testimony whereof, I have hereunto set my hand, this 11th day of December, 1868.

J. C. GASTON.

Witnesses:

H. P. K. PECK,  
A. L. KING.