

UNITED STATES PATENT OFFICE.

S. R. BRYANT, OF WATERFORD, PENNSYLVANIA.

BEEHIVE.

Specification of Letters Patent No. 31,369, dated February 12, 1861.

To all whom it may concern:

Be it known that I, S. R. BRYANT, of Waterford, in the county of Erie and State of Pennsylvania, have invented a new and

5 Improved Beehive; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

10 Figure 1 is a vertical section of my invention taken in the line *x, x*, Fig. 2; Fig. 2, a horizontal section of the same taken in the line *y, y*, Fig. 1; Fig. 3, a detached vertical section of one of the comb-frames,

15 taken in the line *z, z*, Fig. 1. Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to obtain a hive of simple construction that may be kept

20 clean without any trouble, the combs readily inspected and manipulated or operated upon when necessary, and one in which the bees will be induced to build the combs even or in the same planes with the respective

25 planes thereof. The invention consists in constructing the hive with an inclined bottom and having the hive provided with swinging frames which correspond in form with a transverse

30 section of the hive and are provided with top rails of novel construction and also provided with vertical guides; all being arranged substantially as hereinafter fully shown and described, whereby the ends

35 aforesaid are obtained. To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it. A, represents a quadrilateral box of suitable dimensions and which is provided with a vertical central partition B, which extends down through the bottom of the box and is secured to a proper base C. The bottom of the box is of double inclined form

40 *a, a'*, each part extending up from the partition B, at an angle say of about 45° and meeting the sides *b, b'*, as shown clearly in Fig. 1. The hive as represented in the drawings

50 Figs. 1 and 2 is a double one, the partition B, dividing it into two equal parts D, E. The part D, of the hive has its bottom *a*, attached to the partition B, and the side *b*, is divided into two equal parts and connected to the ends *e, e*, so as to form doors which are connected to the partition B, by hinges *d, d*, as

shown in Fig. 2. The doors are secured in a closed state when desired by a button F, attached to an upright *e*. The part E, of the hive has its bottom *a'*, side *b'*, and one

60 end piece *f*, connected together and secured to the partition B, by hinges *g*. The other end piece *h*, of part E, is permanently secured to the partition B. The end piece *h*, has a button *i*, attached by which the side *b'*,

65 and parts connected to it may be kept closed when necessary. The bottoms *a, a'*, have openings or slots *j*, made in them adjoining the partition B, for the ingress and egress of the bees, and the

70 opening of the permanent bottom *a*, may if desired extend the whole width of the bottom to allow the filth and dirt to escape from the hive. It would not be essential to have the slot of bottom *a'*, thus long as said bottom

75 opens with the side *b'*, and the dirt or offal may be allowed to escape at any time. The box A, is provided with a top plate G, which is perforated with a proper number of holes *k*, to admit the bees to the spare-

80 honey box H, which is placed on G. Within each part D, E, of the hive there is placed a number of comb frames I. These frames have parallel front and back bars *l, l'*,

85 which are connected at their upper ends by cross rails *m*, the lower ends of said bars being connected by inclined cross rails *n*, which are parallel with the bottoms *a, a'*, as shown in Fig. 1. The frames I, are hinged to the partition B, as shown at *o*, and the front bars

90 *l, l'*, of the frames have projections *p*, attached which keep them, when the frames are closed, at a proper distance apart. The upper cross rails *m*, of the frames I, are narrower than the upright bars *l, l'*, and the rails *m*, are

95 made of V form in their transverse section or of a form approximating thereto as shown clearly in Fig. 3. To each rail *m*, there is attached one or more vertical strips *q*, which may extend down to the lower inclined rails

100 *n*, or part way down as desired. By having the top cross rails *m*, made narrower than the upright bars *l, l'*, of the comb frames I, and of V form the bees will not be liable in building their combs, to

105 bring the comb of one frame in contact with that of the adjoining one as considerable space is allowed between the lower edges of the rails *m*. The vertical guides *q*, also induce the bees to work within the planes of

110 the frames. This is an important feature of the invention, for if the combs in the

frames are not kept separate one from another the frames of course can not be swung on their hinges for the purpose of inspecting and rendering accessible the combs. By
 5 throwing open the doors and ends of the box A, all the comb frames are exposed and the latter may be turned on their hinges so as to render each comb perfectly accessible.

The hive may be readily cleaned of all
 10 dirt and filth as the latter falls down the inclined bottoms *a, a'*, and passes out through the openings *j*. If the bottoms are attached to the doors however the latter with the doors may be opened in order to cleanse the
 15 hive.

The hive may be made double as shown or made of single form. In the former case a hole *a**, may be made in the partition B, so that one part may be colonized from the
 20 other, and a non-swarmling hive consequently obtained.

I do not claim broadly inclined bottoms

for hives; nor do I claim the V shaped top rails *m*, for comb frames, for such devices have been used, but

I do claim as new and desire to secure by
 Letters Patent:

1. The inclined bottoms *a, a'*, in connection with the hinged comb frames I, and a quadrilateral box A, formed of side and end
 30 pieces *b, b', c, c, f*, arranged to open substantially as and for the purpose set forth.

2. The vertical guide strips *g*, placed in the comb frames I, substantially as and for
 the purpose set forth.

3. The V shaped cross-rails *m*, of comb frames I, when constructed narrower than the upright bars *l, l'*, and used in connection with the guide strips *g*, for the purpose
 35 specified.

S. R. BRYANT.

Witnesses:

A. M. JUDSON,
 H. R. WHITTELEY.