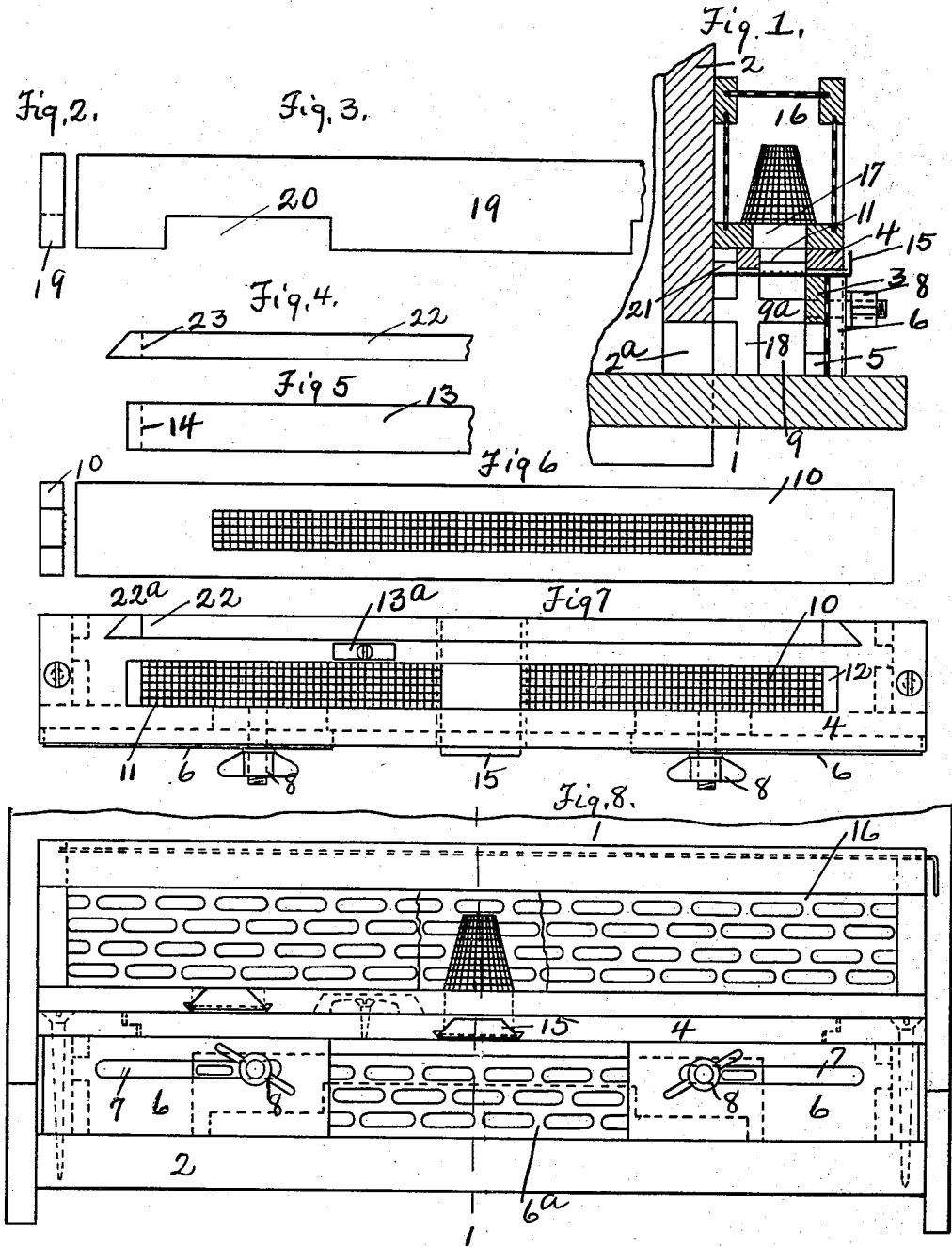


G. C. RAHN.
 BEEHIVE ENTRANCE GUARD.
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1,017,233.

Patented Feb. 13, 1912.



Witnesses
 B. M. Hartman
 Umuir C. Hies

Inventor
 George C. Rahn
 by N. Z. Rind
 Attorney

UNITED STATES PATENT OFFICE.

GEORGE C. RAHN, OF HAILEYBURY, ONTARIO, CANADA.

BEEHIVE-ENTRANCE GUARD.

1,017,233.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE C. RAHN, a citizen of Pennsylvania, United States of America, residing at Haileybury, Province of Ontario, Dominion of Canada, have invented new and useful Improvements in Beehive-Entrance Guards, of which the following is a specification.

This invention relates to beehive entrance guards and consists in certain improvements in the construction thereof as will be hereinafter fully described and pointed out in the claims.

It is desirable at certain seasons to confine the entrance to beehives both as a protection from the weather and also to prevent a robbing of the hive by outside swarms where the swarms are weak. It is desirable in connection with this at times to have the entrance circuitous so as to protect the hive from the weather. It is also desirable to provide the entrance guard with means so that it may have the full width for the summer months and also to provide an entrance guard in which the drone catcher may be used.

Other objects of the invention will appear from the specification and claims.

The invention is illustrated in the accompanying drawings as follows:—

Figure 1 is a section on the line 1—1 in Fig. 8 showing a cross section of a fragment of a hive with an entrance guard and drone trap in place thereon. Fig. 2 is an end view of a closure strip forming part of the entrance guard under certain conditions of use. Fig. 3 a side elevation of the same strip. Fig. 4 shows the side of the closure strip normally closing the summer entrance. Fig. 5 a top view of the same strip. Fig. 6 a plan view of the traveling board. Fig. 7 a top view of the entrance guard and drone trap in use. Fig. 8 a front elevation of the entrance guard with drone trap in place.

1 marks the hive bottom, 2 the hive front, 2^a the ordinary opening or entrance to the hive. The entrance guard is of boxlike form having the front 3 and top 4. The front 3 has the entrance opening 5. This does not extend the full length of the guard. Slides 6 are arranged on the front 3. These are provided with the slots 7 in which the screws 8 operate. By this means, the slides may be moved toward and from each other thus varying the width of the entrance opening 5

and at the same time, maintaining it in a central position.

It is desirable to provide a traveling board along the entrance. For this means, the ends 9 are provided with the horizontal grooves 9^a. The traveling board 10 is placed in the slots 9^a. This can be readily put in place before the entrance guard is placed on the bottom 1. This is the position of the entrance guard where it is desirable for any purpose to reduce the size of the main entrance.

In some kinds of weather, it is desirable to obviate the direct opening into the hive and for this purpose I provide the closure strip 19 which is slid into the vertical grooves 18 in the ends 9 of the entrance guard. This closure strip 19 has an opening 20 near the end and out of register with the central opening 5. This obviates the direct opening referred to and there is still space for an entrance between the closure strip 19 and front 3.

It will be observed that the hive may be closed entirely by sliding the strips 6 together. In order to provide for ventilation, the traveling board 10 is provided with a screen and the top 4 has an opening 11. A closure strip 13 is provided for closing the opening 11. The opening 11 has the shoulders 12 at its end in which the tongues 14 on the ends of the strip 13 rest. The strip may be locked in place by the button 13^a.

It is sometimes desirable to put a perforated strip at the entrance front to prevent the passage of drones, or the perforation may be small enough to prevent the passage of bees where it is desirable to have an opening too small for such passage. The slides 6 form a convenient means for securing such a strip 6^a. I have shown a strip so arranged in the drawings.

It is sometimes desirable to arrange a drone trap on the entrance guard. I have shown a drone trap 16 which may be placed directly on the top of the entrance guard, the cover strip 11 being removed. The drone catcher has an opening 17 at its center, the opening of which can be controlled by the slide 15.

In the summer months, it is desirable to have a more extended opening than the opening 5. To provide for this I have the opening 21 in the back edge of the top 4. This is normally covered by a strip 22, the

strip having the tongues 23 at its ends for resting on the shoulders 22^a at the ends of the opening. By closing the slides 6, and for making the front 3 act as a top and the top 4 as the front, the opening 21 can be brought in position directly over the bottom 2. In this instance, the traveling board 10 would be put into the groove 18. In this way, the full opening would be given the full length of the front.

What I claim as new is:

1. In a beehive entrance guard, the combination of a box shaped guard frame with a front opening and with horizontal grooves in the ends of said frame; a removable traveling board arranged in said grooves; and an adjustable cover for the opening in the front.

2. In a beehive entrance guard, the combination of a box shaped guard frame with a front opening and with horizontal grooves in the ends of said frame; a removable screen traveling board arranged in said grooves; and an adjustable cover for the opening in the front.

3. In a beehive entrance guard, the combination of a box shaped guard frame with a front opening, said frame having vertical grooves in its ends; an adjustable cover for the front opening arranged to vary the size of the opening and to maintain it in a central position; and a guard strip arranged in the grooves and having openings out of register with the front opening.

4. In a beehive entrance guard, the com-

bination of a box shaped guard frame with a front opening; adjustable slides arranged over said openings; means for securing said slides; and a perforated strip arranged between said slides and the front and held in place by said slides.

5. In a beehive entrance guard, the combination of a box shaped frame with a front opening; a removable cover for said opening in the top; and a screen traveling board removably secured in the guard above the front opening.

6. In a beehive entrance guard, the combination of a box shaped guard frame with a front opening; adjustable covers adapted to control the size of said opening and to close said opening, said top having an opening at the edge toward the beehive front; and a removable cover for said opening in the top.

7. In a beehive entrance guard, the combination of a box shaped guard frame having a front opening; an opening at the inner edge of its top; horizontal and vertical grooves arranged in the ends of the frame; an adjustable cover for the opening in the front adapted to control the size of the opening; and a removable traveling board arranged in one of the grooves.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

G. C. RAHN.

Witnesses:

A. H. McPHAIL,
S. B. MORAN.