

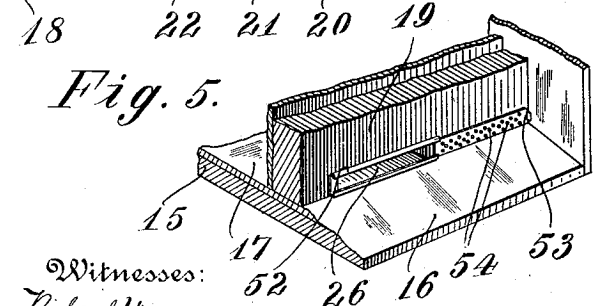
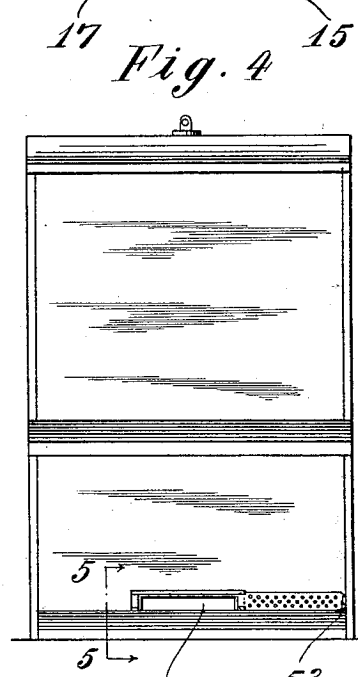
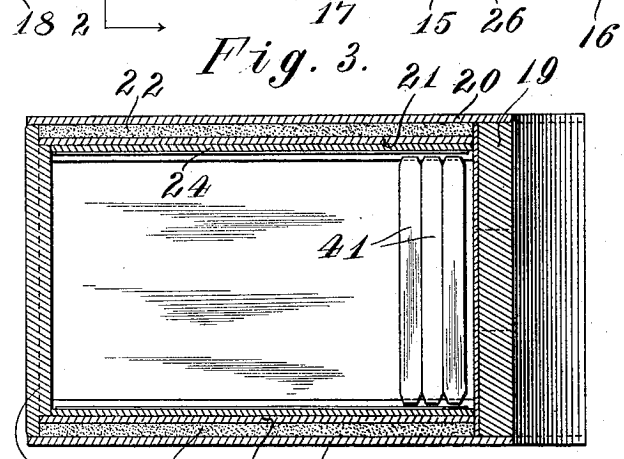
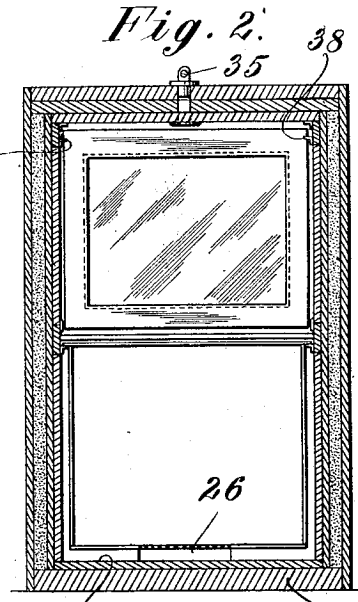
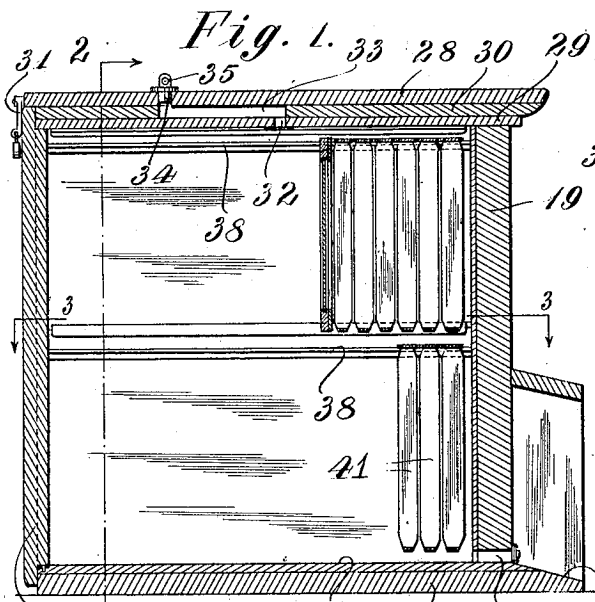
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APPLICATION FILED APR. 27, 1916.

Patented Jan. 16, 1917.

2 SHEETS—SHEET I.

1,212,223.



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2 SHEETS—SHEET 2.

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Fig. 6.

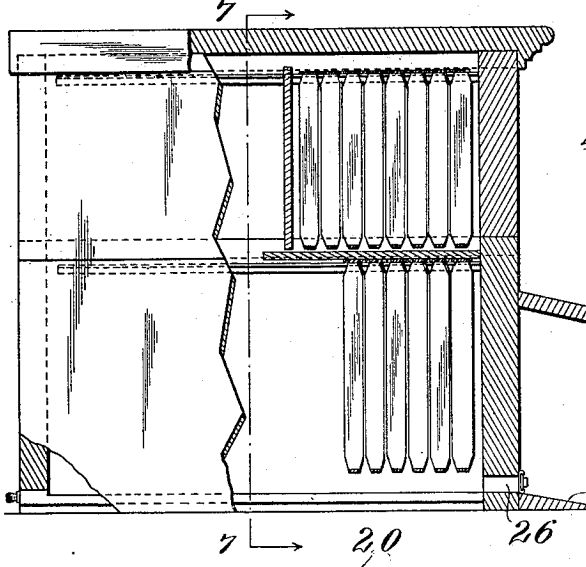


Fig. 7.

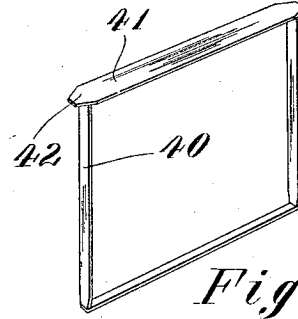
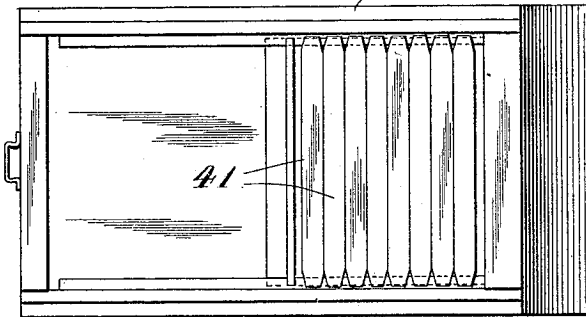
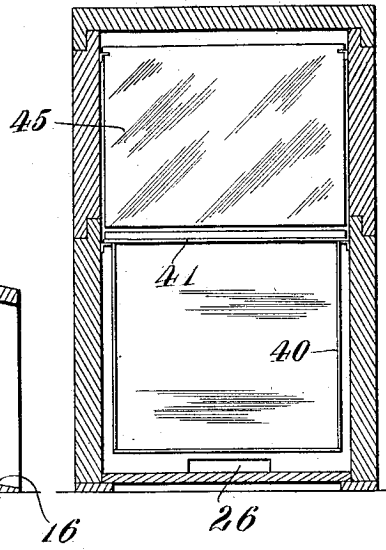


Fig. 8.

Fig. 9.

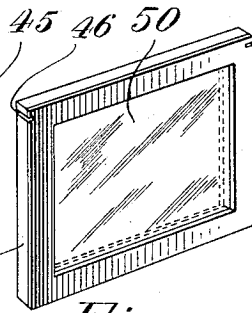
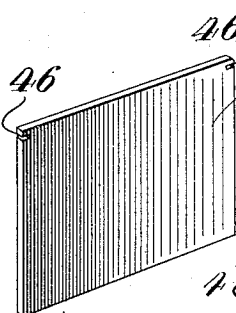
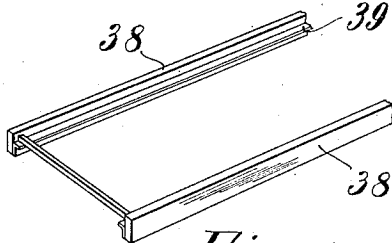


Fig. 10.

Fig. 11.

Fig. 12.

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UNITED STATES PATENT OFFICE.

MICHAEL HOFFMANN, OF SOUTH BETHLEHEM, PENNSYLVANIA.

APIARY.

1,212,223.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MICHAEL HOFFMANN, a subject of the Emperor of Austria-Hungary, and resident of South Bethlehem, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Apiaries, of which the following is a specification.

This invention relates to improvements in apiaries or beehives and has as its principal object the provision of means whereby honey combs may be readily extracted from the hive at any desired time and without the usual difficulty.

Another object is in the provision of an effective ventilating means by which air currents or light is excluded from the interior of the hive.

A further object is to provide means whereby the interior of the hive is better protected from extremes of heat and cold than usual and also in which the honeycomb cells may be segregated in some particular section or sections of the hive, and finally to provide means whereby a portion of the opening left for the egress and ingress of the bees may be closed to any desired extent.

These and other objects are attained by the novel construction and combination of parts hereinafter described and shown in the accompanying drawings, forming a material part of this specification, and in which:—

Figure 1 is a vertical sectional view showing the cell forming frames in operative position. Fig. 2 is a transverse sectional view taken on line 2—2 of Fig. 1. Fig. 3 is a horizontal sectional view taken on line 3—3 of Fig. 1. Fig. 4 is a front view of the hive. Fig. 5 is an enlarged perspective, sectional view taken substantially on line 5—5 of Fig. 4. Fig. 6 is a partial sectional and partial elevational view showing a modified form of construction. Fig. 7 is a vertical sectional view taken on line 7—7 of Fig. 6. Fig. 8 is a plan view of the same, the cover plate being removed. Fig. 9 is a perspective view showing in detail one of the comb forming frames. Fig. 10 is a perspective view showing a part of the frame holding rails. Fig. 11 is a perspective view showing a movable partition plate, and Fig. 12 is a similar view showing a transparent partition plate.

In the drawings, the beehive is shown to

consist of a substantially rectangular structure, having a base 15, and threshold 16, which is extended outwardly and slanted down in the usual manner. The interior plate 17, preferably of non-conducting material, is disposed on the base and rising therefrom are the front and back walls, respectively 18 and 19, to which are connected exterior elements 20 and the side walls, an inner spaced lining 21 forming a part of the wall, the spaces therebetween being filled with any preferred heat insulating medium 22, and an interior lining 24, of similar material to the upper plate 17, completes the side wall of the structure. At the front a cover entrance is provided having a narrow opening 26 at the bottom accessible from the threshold 16 for the bees as they enter the hive. The upper portion of the hive or cover is preferably comprised of an outer plate 28 and a bottom plate 29 having between them a third or insulating plate 30 all of which may be locked in position by means indicated at 31 or otherwise as preferred.

Through the lower plate 29 extends an opening 32 communicating at its upper end with a slotted passageway 33 formed in the plate 30, one end of which registers with an opening 34, in the top plate 28, normally covered by the removable plug 35. Thus when the plug is raised an air passage is provided for ventilating the hive.

One or more pairs of rails 38 are secured along the inner side walls, one pair being at the extreme upper portion and the other spaced at intervals therebelow so as to allow sufficient room for the comb holding frame 40, each of which is substantially rectangular and having an enlarged head 41, the ends 42 of which are adapted to be positioned on top of the rails and slidable therealong as may be desired. These frames 40 are of such nature that the bees will build their comb structure in the manner of a web extending from side to side of the inner walls each being separated so that they can be removed bodily, one at a time without interfering with the others. If it be desired to use but a portion of the interior of the hive a plate 45 having slotted edges 46 adapted to engage with the projection 39, formed with the rails 38, so that it can be adjusted along the rails at any desired point or, in place in the plate 45, a frame element 48 may be used having a central transparent section 50 and

containing grooves 46 at the edges similar to those of the plate 45.

In Figs. 6 and 7 a slightly different form of construction is observable, the structure 5 being built in sections so that one or more may be removed vertically without interfering with those below.

In Fig. 5 the threshold 16 has immediately above it the bee passage 26, in this case provided with a horizontal slide-way 52 in which may be operated a cover plate 53, provided with fine perforations 54, so as to admit the desired quantity of air but at the same time to prevent the intrusion of invaders or any considerable draft of air.

Having thus described my invention what

I claim as new and desire to secure by Letters Patent, is:—

In a beehive the combination with a structure having transverse rails disposed parallel within its interior, independent comb making frames slidably engaged on said rails, said frames having a symmetrical widened upper portion acting as separators between adjacent members said frames having beveled upper ends, and plates also slidably on said rails whereby said frames may be held in close proximity.

Signed at South Bethlehem, Pa., in the county of Northampton, and State of Pennsylvania, this third day of April, 1916.

MICHAEL HOFFMANN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."