

H, H, Fig. 3, surrounded by the spaces I, I, for receiving the drawers; its elevation, in width, is also shown at H, H, in the section, Fig. 6. J, J, is a cap, or cover, to the top of this opening, which cap may be taken off when the slides inclosed by it are to be moved. K, is a horizontal partition inclosing the vertical opening H; and L, is a block which fills the capacity of said opening at its lower end, and is made sloping at top toward its four sides.

The bees enter the compartments of the upper story through openings *r, r*, and the bottom of each of the drawers in the upper story slope back as shown at M, Fig. 6, toward the opening H, H, in the center of the structure, so that the filth from the bees will pass in that direction as it is to fall into said opening; at the back edge of the bottom M, these drawers are open along their whole length, as shown at *e; f*, is an aperture through partition *g*, into the vertical opening H; *i*, in Figs. 5, and 6, is a slide by which the opening *f*, may be closed; when not closed, the filth from the upper drawers will fall through the opening *f*, to the bottom of the space H, whence it will pass through openings *j*, and *k*, on to the inclined floor F, of the lower story, and escape thence, with the filth from the lower compartments, in the ordinary way. In Fig. 5, *l, l*, are openings through the floor of the upper end compartment, which may be closed by slides *m, m*; the openings *l, l*, correspond with openings in the tops of the end drawers of the lower story, and through the floor of the upper story; and when the slides *m, m*, are drawn back, the bees can pass from the lower to the upper end compartment through said openings. Under each of the blocks E, on the sides of the structure, there are three slides similar to those marked *m, i*, in Fig. 5, but of greater width, the compartments being wider, and with this difference also; the middle slide covers an opening leading into the upper, from the lower, compartment, in the manner of the openings *l, l*, in Fig. 5; and the two side slides close openings through which the filth may fall into the space H; these openings are shown at *n, n*, Fig. 6, and the matters which pass through them on to the top of the block L, escape through the openings *j*, and *k*, or through similar openings *o*, on to the inclined floors of the compartments of the lower tier, the inclination of the block L, serving to conduct them thereto. The openings *o*, may be closed by slides *p, p*, and the openings *j*, by slides *q, q*, when the cover J, is removed; said slides moving in suitable

grooves, and extending down from the top of the opening H, H, above the partition K, to the apertures which they are to close.

The center opening H, H, constitutes an important feature of my improvement, as by means of the various openings made into it, as above described, the bees may be allowed to pass through it from one story, and from one compartment, to another; and with the aid of the openings and slides which govern the communications through the sides, and through the tops and bottoms of the respective drawers, with their slides, as above described, a complete command of the palace is obtained, so that the bees may be allowed to pass from one compartment to another in any manner that may be required; any part, or portion, of the palace being made to communicate with, or the communication being cut off from, any other part, at pleasure.

Having thus, fully described the manner in which I construct my bee palace, it is to be understood that I do not claim the forming of separate drawers, or hives, which may be removed at pleasure, nor do I claim the use of glazed partitions, or of slides for governing the communications from one compartment to another, these devices having been repeatedly used, and variously modified, but—

What I do claim as constituting my invention, and which I desire to secure by Letters Patent, is —

1. The combining with the respective compartments, a central, vertical opening, formed in the manner of that marked H, H, in the accompanying drawings, and around which opening the respective compartments are situated; there being apertures from said compartments leading into, and from, said vertical opening, which apertures are governed by slides, in the manner and for the purpose set forth.

2. I also claim, in combination with said central vertical opening, the manner in which I have arranged and combined the several apertures and slides, by which a communication is established or cut off between any part or parts of the structure; the whole being constructed substantially in the manner set forth, while such variations may be made therein as may be dictated by fancy or convenience, while the distinguishing features above claimed remain unchanged.

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Witnesses:

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