

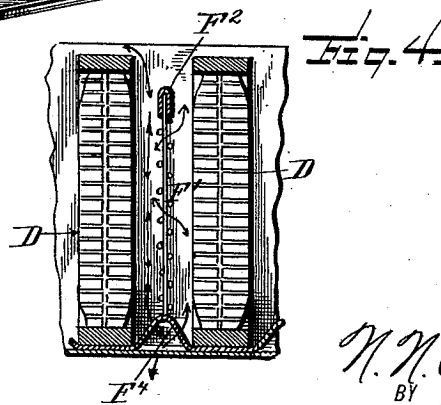
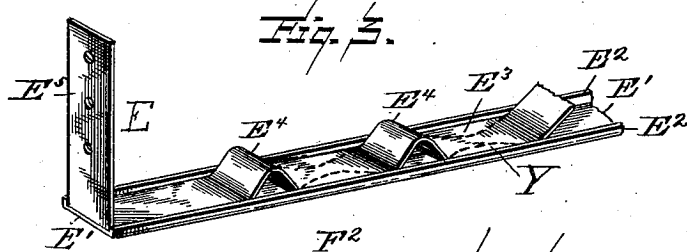
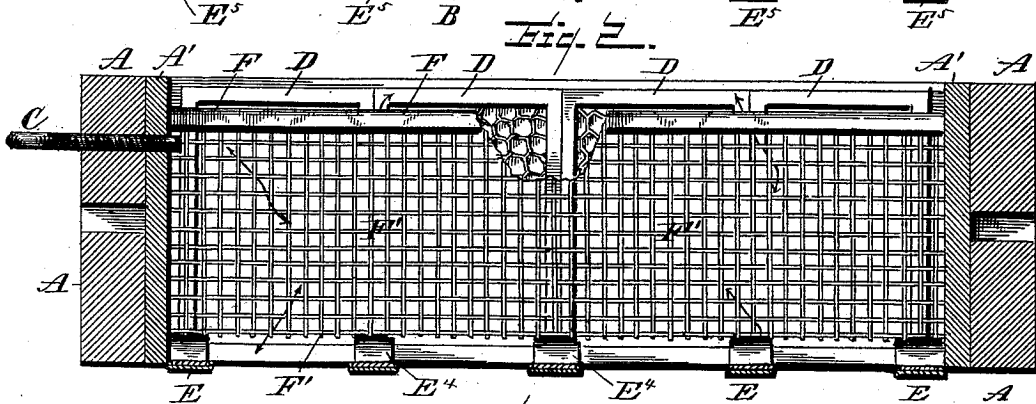
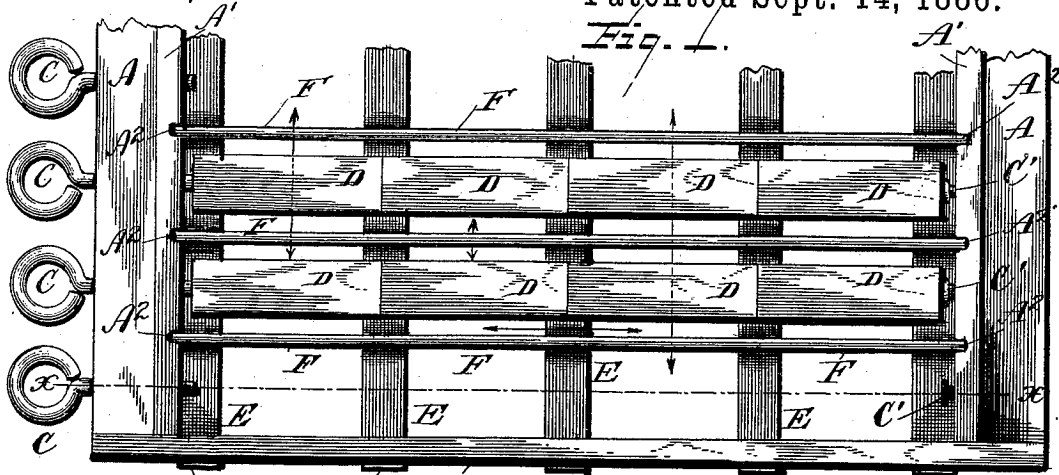
(No Model.)

N. N. BETSINGER.

BEE HIVE.

No. 349,078.

Patented Sept. 14, 1886.



WITNESSES:

*S. C. Hills,*  
*W. S. Small*

INVENTOR

*N. N. Betsinger*  
BY  
*E. P. Stocking*  
ATTORNEY

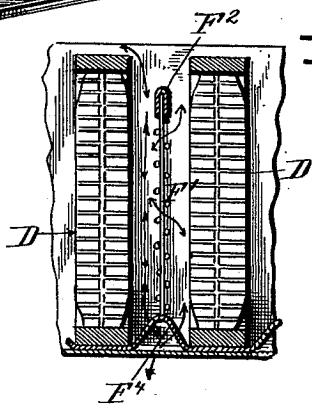
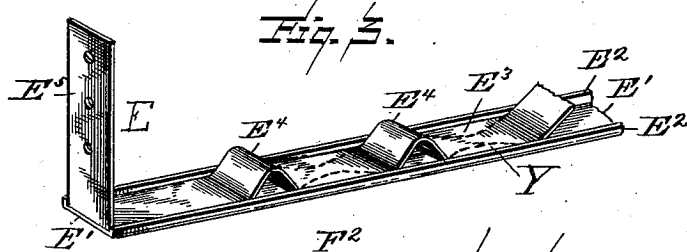
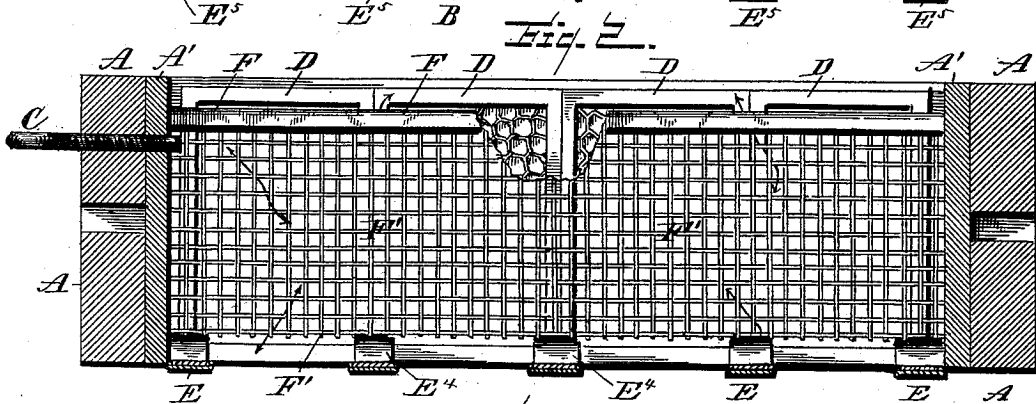
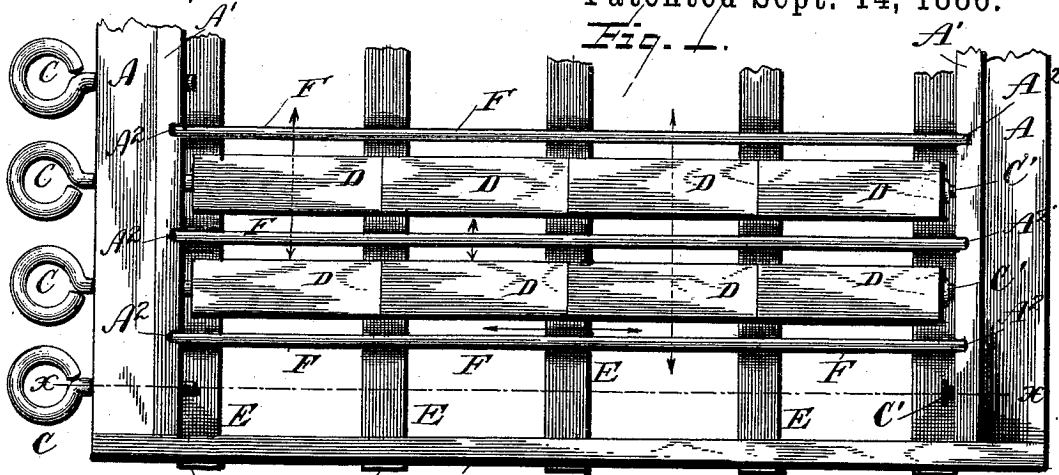
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strips together, a small portion of the flanges E<sup>2</sup> of the strip E' may be bent inwardly over and down upon the bent strip E<sup>2</sup>, between the spacing projections, as indicated by dotted lines Y, Fig. 3.

This being the construction, the operation of the invention is as follows: When comb-sections are stored within a hive, as shown and described herein, whether in the brooding or storage chamber, it will be seen that the bees have access to all of the comb-sections from all directions—that is to say, they can pass from one comb-section to another in all directions, as indicated by the arrows in Fig. 1, and, furthermore, from the bottom of the series of comb-sections upward and over the same and backward and forward through the separator to either of the comb-sections at each side thereof, as well as along the entire series of comb-sections from end to end of the case, and by passing over and under the same from one section to another in the series from side to side of the case, or even in any diagonal direction within the case. This freedom of passage is secured in part by arranging a series of comb sections edge to edge in longitudinal lines and spacing the same and inserting in the spaces separators, as clearly shown in Fig. 1. Perfect freedom of movement of the bees is also apparent under, over, and in and out through the separator, as shown by arrows thereon.

In the use of perforated partitions or shields, as heretofore employed, I have observed that the character of the perforation, it being more or less acute at its edges, is not as advantageous as those of reticulated wire. Furthermore, I have observed that bees, when working in the same, very often, if not invariably, build the comb out and attach the same to that surface of the separator which is toward the comb-section and immediately connecting with the aperture or perforation in the separator, and finally closing the honey-cell across the perforation itself, while bees working at the part of such a separator which is not perforated discontinue their work when their backs touch the separator and close their cells at that time, so that the result is irregularity in the depth of cells, and more or less of the cells are firmly connected with the separator, which prevents the extraction of the honey-sections without injury to the comb. Another disadvantage is that more or less of the cells of the comb are unfilled. All of these disadvantages,

as proven by actual demonstration, are obviated by the use of my invention, in that a colony of bees in approaching my comb-sections are in a measure controlled and regulated in their approach to the same, and that without material obstruction, by reason of the interposition of my separator, which admits of the free passage of a sufficient number of bees to work in each comb-section, while the surplus of workers pass onward to the next section or series of sections, and thus the work of the entire colony is systematized. The comb-sections are uniformly filled, both as to depth, area, and time required, so that I am enabled to predetermine without examination of the hive about when to remove the comb-sections therefrom and substitute others therefor. This freedom of systematic and controlled movement upon the part of the bees is secured in a measure when the comb-sections are arranged in other forms than that herein shown and described, so that I do not limit my invention to the use of a reticulated separator in connection with a series of comb-sections arranged edge to edge, nor to the use of both in any particular part of the hive.

In the other mechanical respects described herein my invention involves a minimum of expense in the construction of section-cases, and the novel features thereof are as a matter of course applicable to cases other than that shown, and I therefore do not limit my invention to the use of all the novel features herein shown in a single case, but may employ each separately, if desired.

Having described my invention and its operation, what I claim is—

1. A section-case having combined section-supporting slats provided with spacing projections, and with separators mounted upon said spacing projections and within the case, each of which separators is formed of wire-cloth of a mesh permitting the passage of worker-bees therethrough, substantially as specified.

2. A comb-section-supporting slat consisting of a flanged strip, E', and a bent strip, E<sup>2</sup>, secured within the flanges of the strip E', substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

NICHOLAS N. BETSINGER.

Witnesses:

E. B. STOCKING,  
Wm. S. DUYALL.