(Model.)

## G. S. FISK & H. K. VERGASON. BEE HIVE.

No. 273,674.

Patented Mar. 6, 1883.

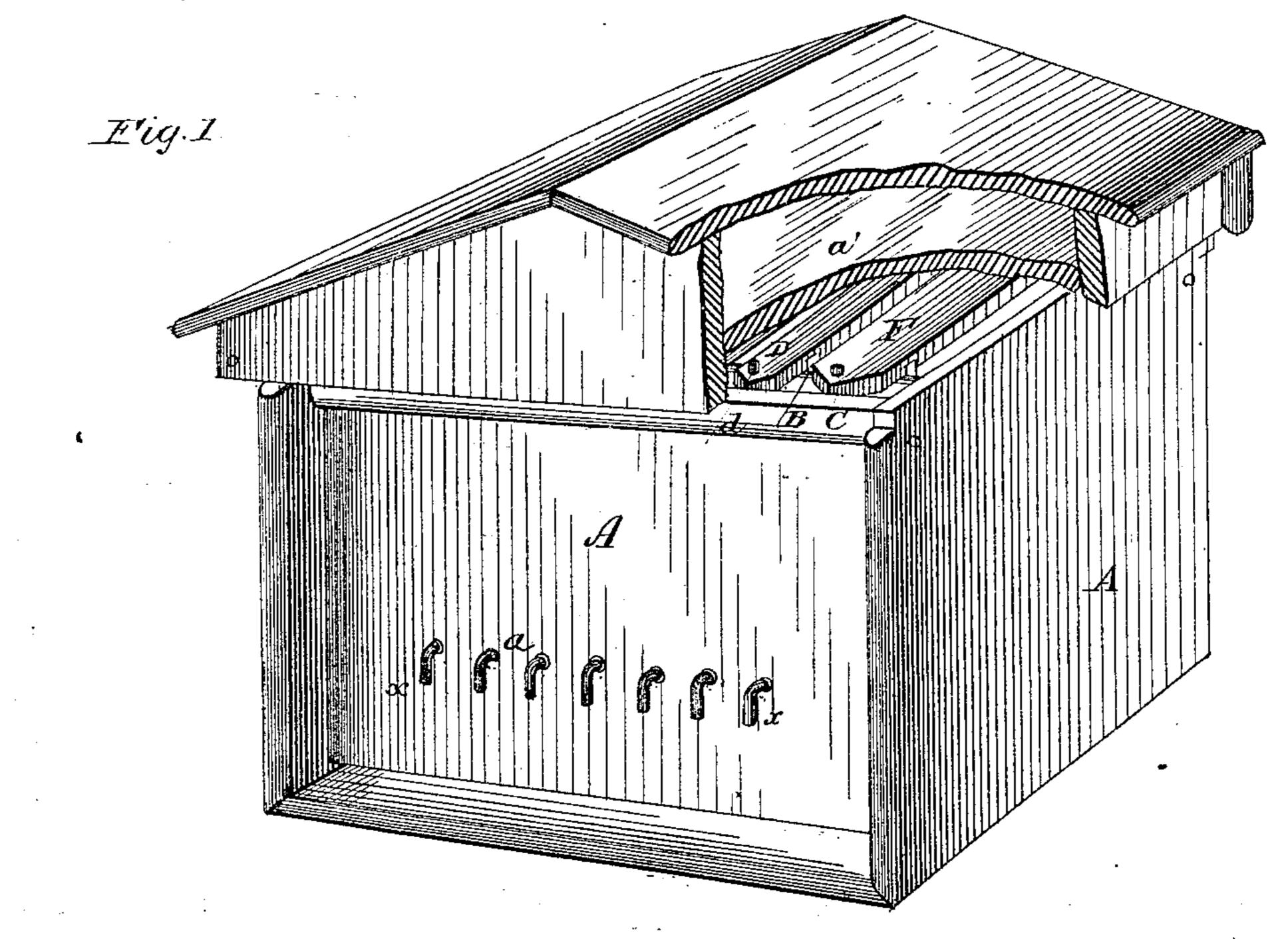
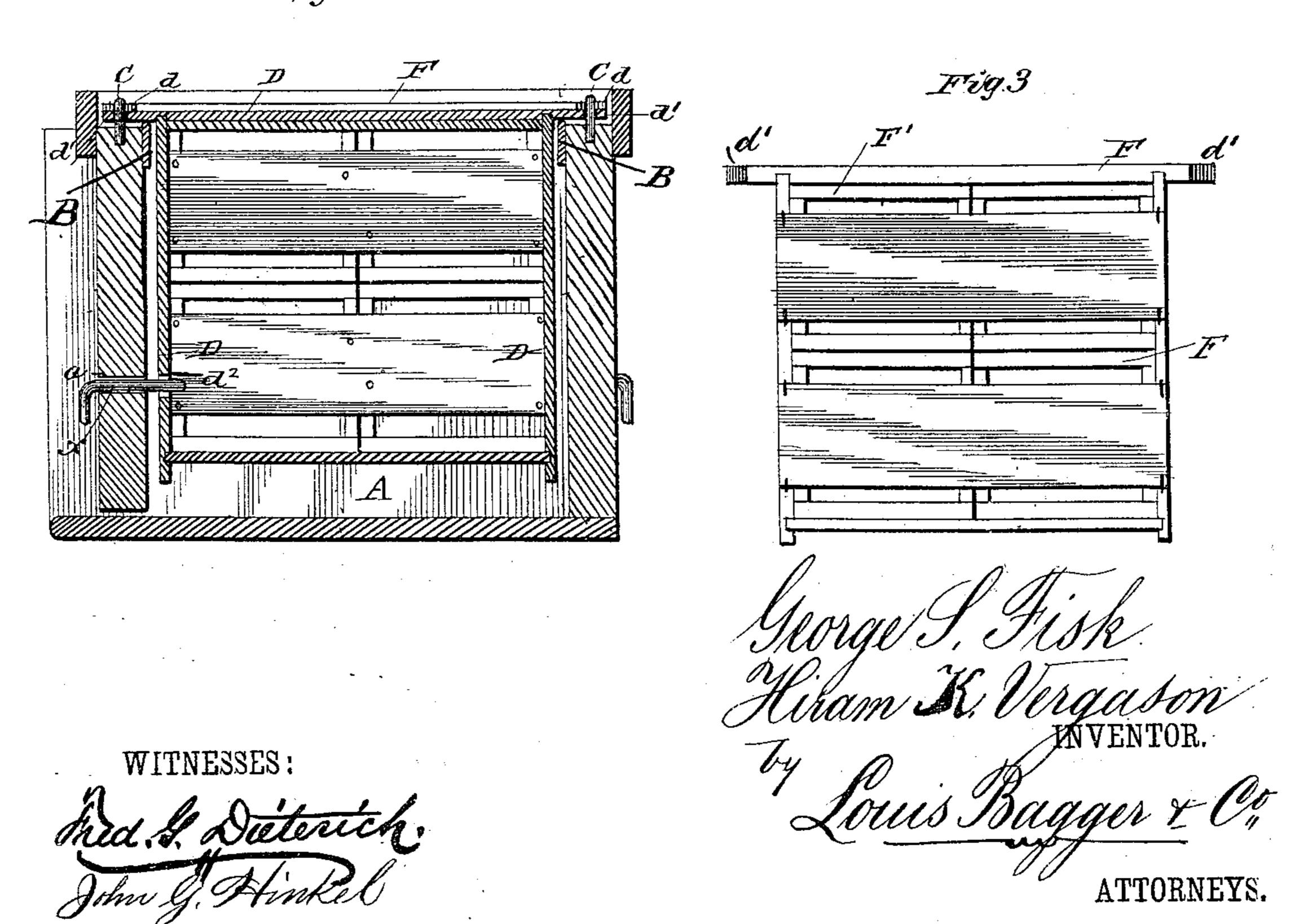


Fig. 2



## United States Patent Office.

GEORGE S. FISK AND HIRAM K. VERGASON, OF BINGHAMTON, NEW YORK; SAID VERGASON ASSIGNOR TO SAID FISK.

## BEE-HIVE.

SPECIFICATION forming part of Letters Patent No. 273,674, dated March 6, 1883.

Application filed July 7, 1882. (Model.)

To all whom it may concern:

Be it known that we, GEORGE S. FISK and HIRAM K. VERGASON, of Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Bee-Hives; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to an improvement in bee-hives; and it consists in the construction and arrangement of parts, as will be more fully hereinafter set forth, and specifically pointed out in the claim.

As heretofore constructed much trouble has been experienced in keeping the comb frames at proper relative distances from each other; and the object of this invention is to provide efficient means for holding said frames properly separated both above and below, said securing means being susceptible of ready disengagement to allow the ready removal of such frames whenever desired.

Among other elements of importance, the invention consists essentially in a ledge formed upon the inner side surfaces of the case or box, 30 said ledge being provided with upwardly-projecting metal pius, which are arranged at proper distances apart, and which operate through boles in the upper rail of the frames which rest upon the ledges. The end rails of 35 the frame are provided with apertures, which, when the frames are in position, as indicated, coincide with similar apertures in the front of the hive, and a series of metal pins thrust in said coincident apertures serve to lock the 40 lower portion of the frames firmly in their places. The two end frames contain removable honey-boxes, and are similarly locked in position. We have discovered that bees will gum and wax the wooden blocks which have 45 been used for this purpose, and thus prevent the ready removal of the frames.

The invention is illustrated in the accom-

panying drawings, in which Figure 1 is a perspective view, partly broken away. Fig. 2 is a vertical sectional view through the body of the 50 hive, showing the means for fastening or fixing the comb frames in position; and Fig. 3 is a side view of one of the frames removed from the hive, showing the arrangement of the honeyboxes in the frame.

Similar letters of reference indicate corre-

sponding parts in all the figures.

Referring to said drawings, A represents the case or box, having secured upon its inside the ledges B, and provided with upwardly-pro-60 jecting pins C, which operate in the apertures d in the projecting ends of the upper rail, d', of the comb-frames D, the end rails,  $d^2$ , of which are provided with apertures which are coincident with apertures a when the pins C 65 are positioned properly in the apertures d throughout the series, a metal pin, x, serving through the apertures  $d^2 a$  to lock the lower portion of each frame in place.

F represents the end frames, having remova- 70 ble honey-boxes F', but otherwise of similar construction and adaptation—that is to say, they are constructed with upper rail, d', having projecting perforated ends, and perforated end rails,  $d^2$ .

The case or box and the other portions shown are of any well-known approved construction.

What we claim as new is-

In a bee-hive, the combination of the ledges 80 B, having upwardly-projecting pins C, and the frames D, having projecting ends perforated at d, and perforated end rails,  $d^2$ , with the case A, having apertures a, and with the metal pins x, as and for the purposes set forth.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

> GEORGE SMITH FISK. HIRAM KNAP VERGASON.

Witnesses:

L. M. BLANDING, P. M. BLANDING.