

Fig. 1.

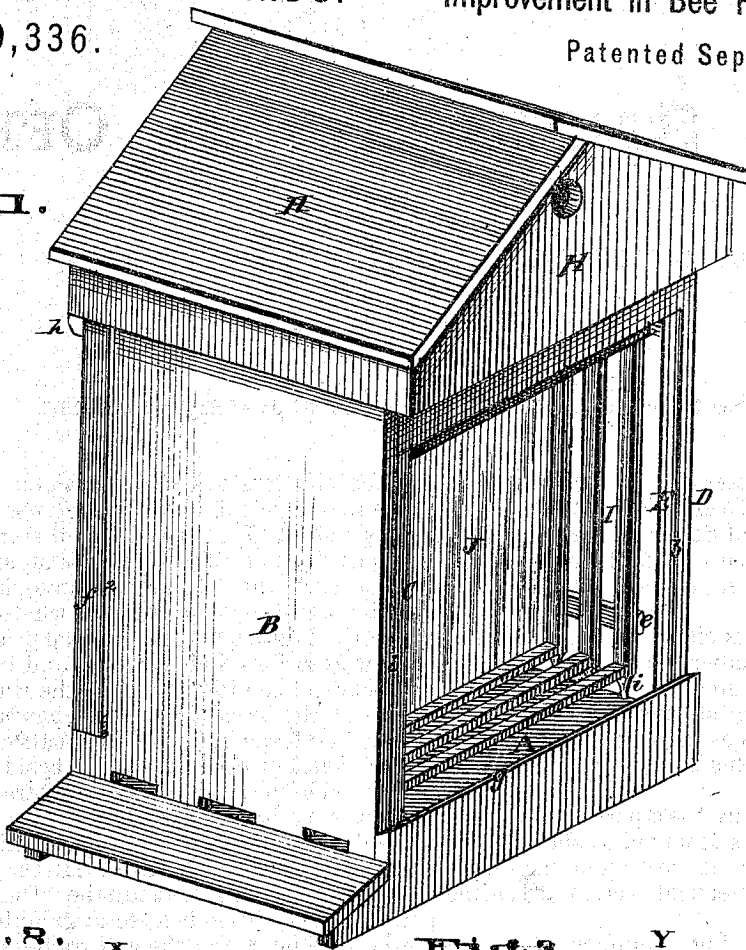


Fig. 2.

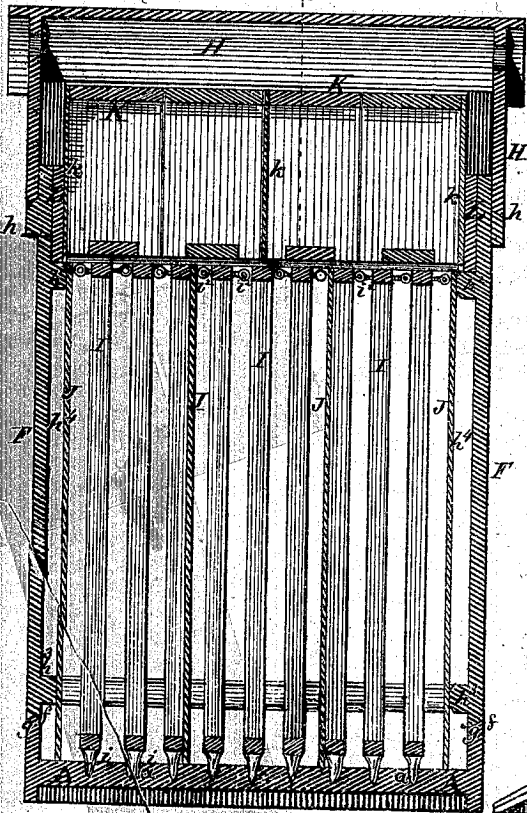
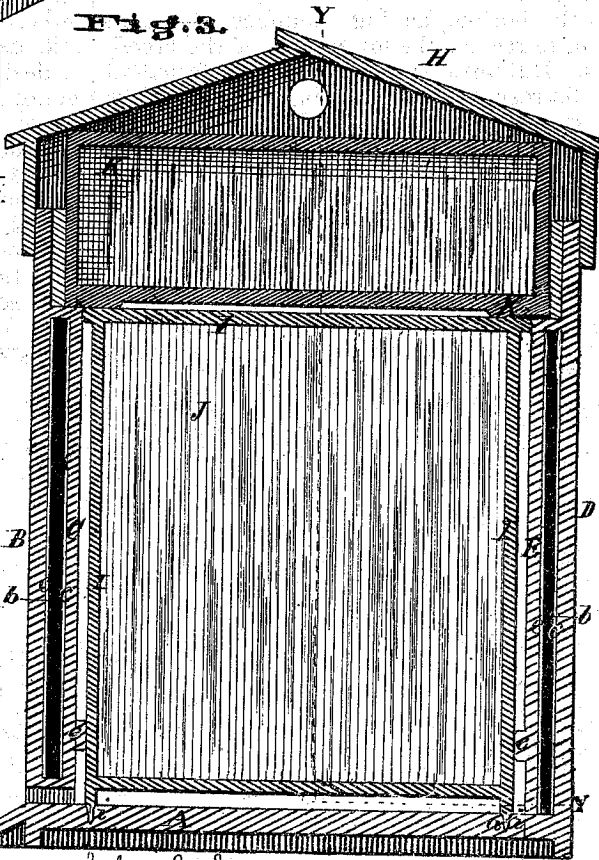


Fig. 3.



ATTEST *Wm. C. Swin.*  
*Walter Allen*

*John C. Edwards*  
*By Wright & Brothers Attys.*

# UNITED STATES PATENT OFFICE.

JOHN C. EDWARDS, OF CATTLEVILLE, MISSOURI.

## IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 119,336, dated September 26, 1871.

*To all whom it may concern:*

Be it known that I, JOHN C. EDWARDS, of Cattleville, in the county of St. Charles and State of Missouri, have invented a certain new and useful Improved Bee-Hive, of which the following is a specification:

My invention consists chiefly in the manner of forming dead-air chambers in the walls of the brood-chamber, the manner of constructing and supporting the doors or shutters, the manner of holding the brood-frames in position, and the arrangement of the surplus honey-frames within a rectangular hoop.

In the drawing, Figure 1 is a perspective view, having one of the doors removed to show the interior. Fig. 2 is a vertical section at the line Y Y, Fig. 3. Fig. 3 is a vertical section at the line X X, Fig. 2.

A is the bottom, having a number of conical holes, *a*, to receive the lower ends of the brood-frames. B D are the outer shells of the front and rear walls, respectively, C E being the inner shells of the same. Between the shells B C and those D E there are dead-air chambers *b*, having a paper lining, *c*, to check the passage of heat and moisture. F F are the doors or shutters, whose lower edges *f* are either beveled, as shown, or rabbeted, so as to have a hold upon the complementary face *g* of the sill-piece G. *f*<sup>2</sup> are metallic batens attached to the edges of the shutters F and lapping over the joint between such shutters and the walls B D. The upper ends of the shutters are held in by a cap, H, which is supported by cleats *h* upon the shutters. Upon the inner sides

of the shutters are cleats *h*<sup>2</sup> *h*<sup>3</sup>, extending from side to side of the hive, and against these cleats rests a sheet, J, of metal or other material, between which and the shutter is an air-chamber, *h*<sup>4</sup>. I, I, &c., are the brood-frames, held in place at the lower ends by points *i*, which enter holes A in the bottom, and kept asunder at the top by screw-eyes *i*<sup>2</sup> in their top bars and by contact of the ends of the top bars with the walls C E, the sides of the brood-frames also having a bearing near their lower ends against cleats *e*. The sheets J, of metal or other material, besides being interposed between the outer brood-frames and the walls, may be interposed between any of the brood-frames, as shown, so as to divide the brood-chamber as it may be desired. In the space above the brood-chamber are a number of surplus honey-frames, K, inclosed in a rectangular hoop, L. Between the hoop and the end frames of the series, and also between any two of the separate frames, if desired, are placed sheets *k*, of glass or other material, to close in and to divide the surplus honey-space.

I claim as my invention—

The arrangement in a bee-hive of the dividing-sheets J, the brood-frames I supported and adjusted as described, and the inclosing-hoop L of the honey-frames, as described and represented.

In testimony of which invention I have hereunto set my hand.

JOHN C. EDWARDS.

Witnesses:

ALOIS ZERR,  
FREDK. VALENTIN.

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