

(Model.)

2 Sheets—Sheet 1.

J. W. BITTENBENDER.

DEVICE FOR FASTENING HONEY COMB FOUNDATIONS.

No. 393,739.

Patented Dec. 4, 1888.

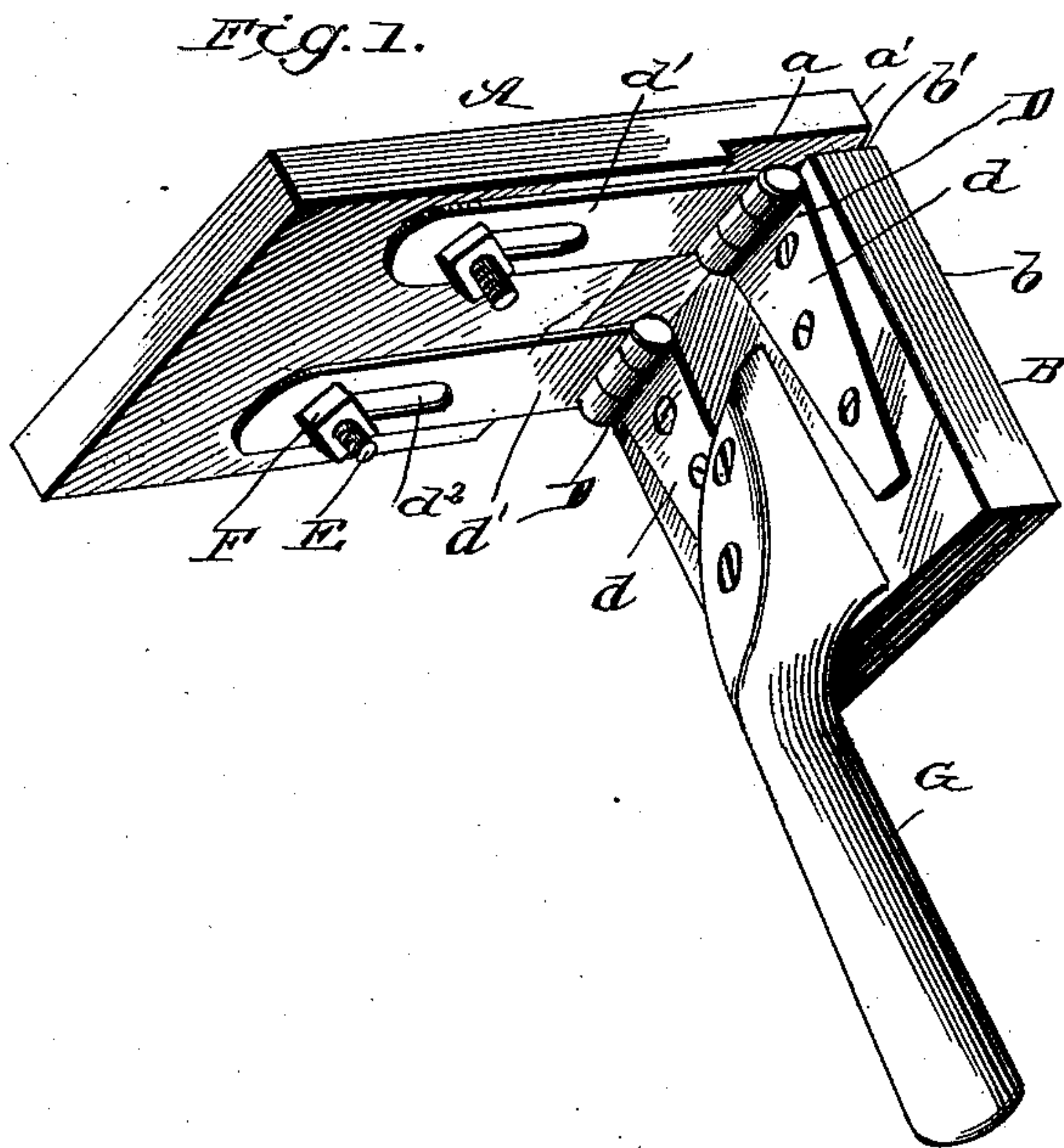


Fig. 2.

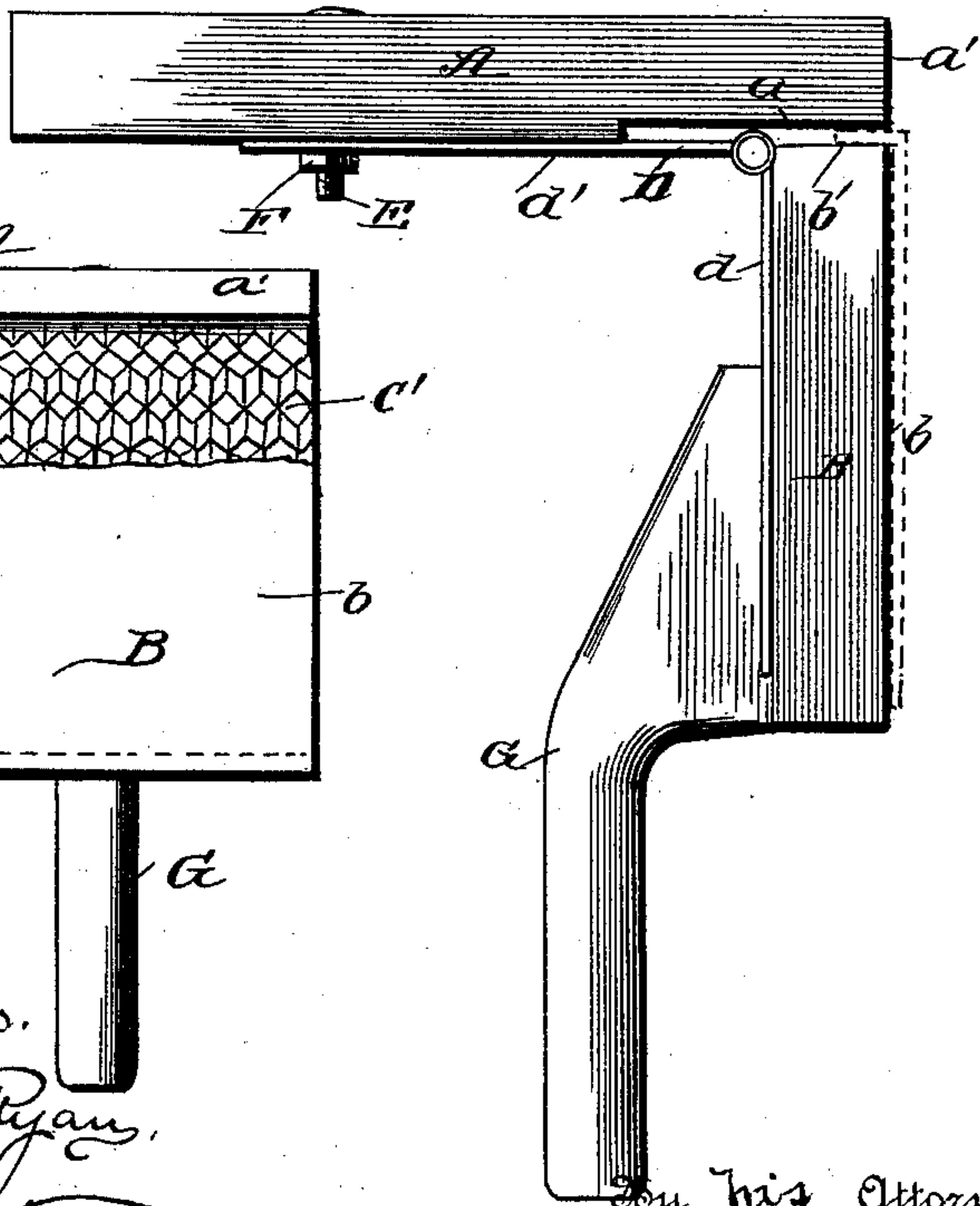
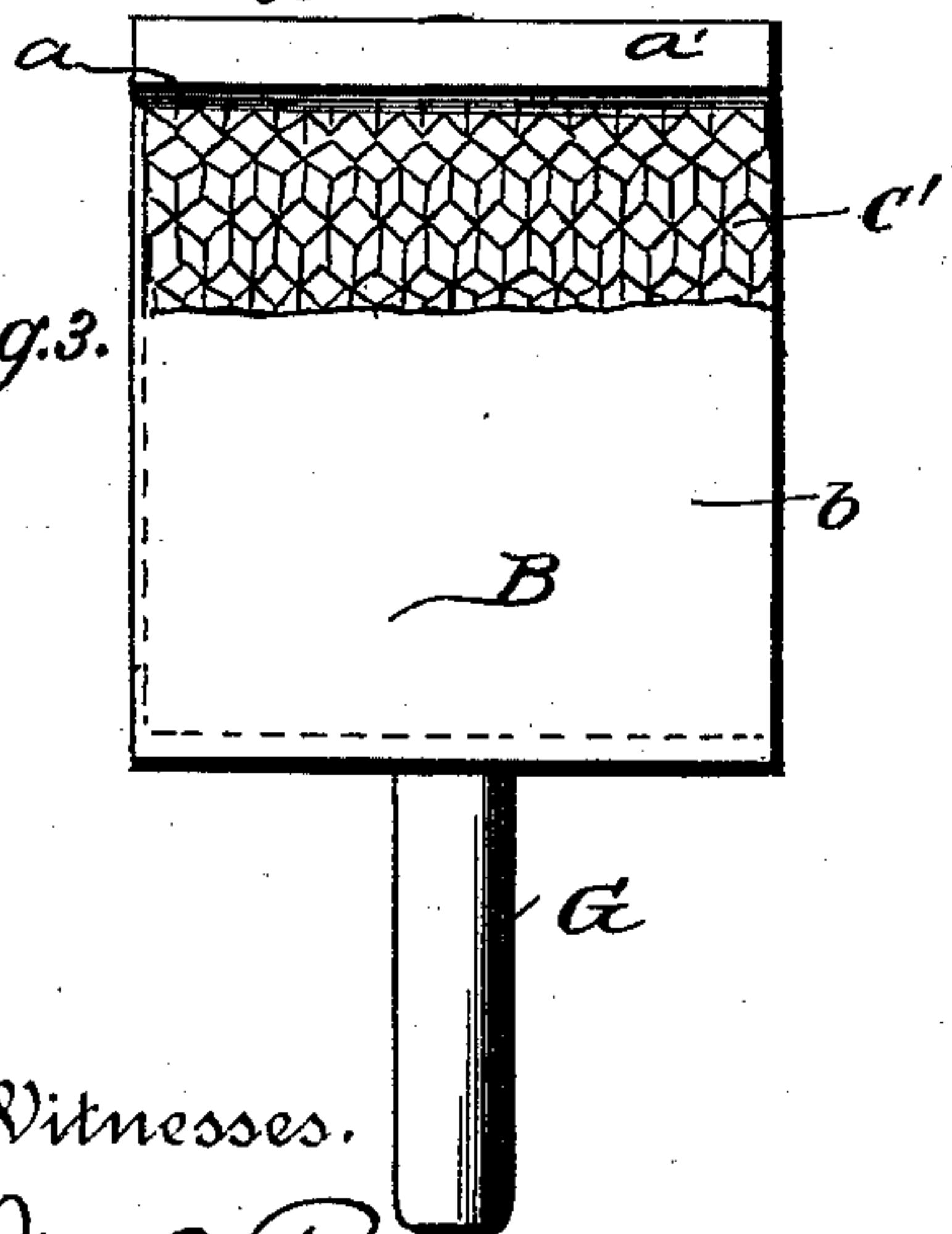


Fig. 3.



Witnesses.

Joe A. Ryan,

J. F. Riley,

Inventor.

John W. Bittenbender,

By his Attorneys

C. A. Snow & Co.

(Model.)

2 Sheets—Sheet 2.

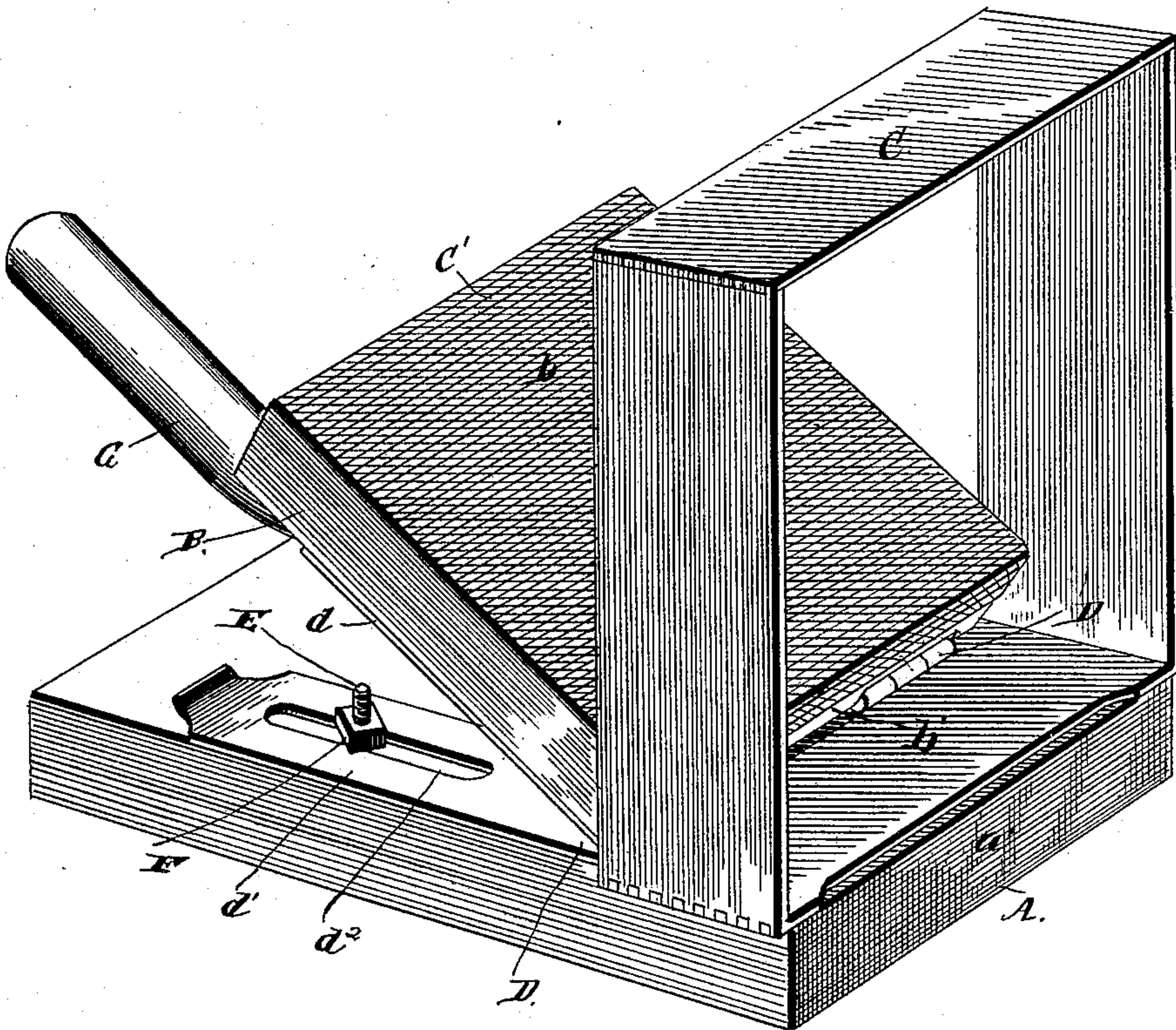
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Fig. 4.



Witnesses.

Geo. J. Brooke.
St. J. Riley.

Inventor.

John W. Bittenbender.

By *his* Attorneys

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UNITED STATES PATENT OFFICE.

JOHN W. BITTENBENDER, OF KNOXVILLE, IOWA.

DEVICE FOR FASTENING HONEY-COMB FOUNDATIONS.

SPECIFICATION forming part of Letters Patent No. 393,739, dated December 4, 1888.

Application filed April 7, 1888. Serial No. 269,965. (Model.)

To all whom it may concern:

Be it known that I, JOHN W. BITTENBENDER, a citizen of the United States, residing at Knoxville, in the county of Marion and State of Iowa, have invented a new and useful Improvement in Devices for Fastening Honey-Comb Foundations, of which the following is a specification.

The invention relates to improvements in honey-comb-foundation fasteners.

The object of the present invention is to produce a device of cheap and uncomplicated construction capable of fastening in a positive and reliable manner artificial comb or beeswax to sections or the like to form foundations or starters for honey-comb.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of the improved device. Fig. 2 is a front elevation, Fig. 3 is a rear elevation, and Fig. 4 is a perspective view, of the foundation-fastener with a section fitted upon the base of the device ready to receive a sheet of artificial comb or beeswax.

Referring to the drawings, A designates the base of the fastener, made of suitable material, preferably of wood or some other light substance that may easily be handled, and it has a portion of its upper surface, near the front edge, cut away, reducing it in thickness, and forming a recess or space between it and the edge of a table, B, which is hinged to the upper face of the base A, thereby providing for the reception of a section, C. The table B is also preferably constructed of wood or other light material, and it may be of any desired shape to conform to the configuration of the section C or other surface to which a sheet, C', of artificial comb or beeswax is to be fastened, and from the top of which said sheet C' is to be suspended. By means of hinges D the table B is secured to the upper face of the base A, and it is adapted to receive upon the front face, b, a sheet of beeswax, which is intended to form the foundation or starter for the honey-comb, and also to serve as a guide for the bees and enable them to build the honey-comb straight. The sheet, C', of arti-

ficial comb or beeswax, after it is placed upon the face b of the table B, has a portion of it, about a quarter of an inch, turned in upon the end b', which portion is designed to be pressed into the pores of the wood forming the section C, whereby the sheet, C', of artificial comb or beeswax is securely fastened in position without necessitating pasting or similar means now employed to effect the same result.

The two hinges D, which secure the table B to the base A, are placed, preferably, near the sides of the two parts, and one leaf, d, of each hinge D is fastened to the rear face of the table B by screws or the like, and the other leaf, d', may be secured to the base A in a similar manner; but I have illustrated in the accompanying drawings hinges constructed with longitudinal slots d², through which pass bolts E, provided with nuts F, that bear against the leaves d' of the hinges D and hold them in position. By this construction the table B may be adjusted with reference to the edge a' of the base A, whereby the sheet, C', of artificial comb or beeswax placed upon the table may be brought over the section C, which is fitted in the recess of the base A, and made to hang in the central vertical plane of said section when the latter is reversed. When it is desired to adjust or change the position of the base A to the table B, the nuts F are unscrewed and raised from the hinges D, which are free to move a distance equal to the length of the slots d².

A handle, G, is provided upon the rear face of the table B between the hinges to facilitate the manipulation of the device.

To apply a foundation or starter to a section, the sheet, C', of beeswax, which has previously been prepared by passing a roller over a sheet of wax and making in the same hexagonal depressions identical in shape and size with those in the bottom of honey-cells, is placed upon the face b of the table B. About one-quarter of an inch of the sheet of wax is then turned in upon the end b' of the table B, to be afterward pressed into the pores of the wood forming the section. The section is then fitted in the recessed portion of the base A, and the table B is adjusted to bring its lower front edge in the central vertical plane of the section, after which the table is

brought forward in a vertical position by means of the handle G, and the portion of the sheet of artificial comb or beeswax previously turned in upon the edge of the table is pressed into the pores of the section, whereby the said sheet will be fastened, and when the section is inverted left securely suspended in the section without the necessity of pasting, and also without injury to the cells in the sheet upon the withdrawal of the table B.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will readily be seen, and I desire it to be understood that I do not limit myself to the precise details of construction herein shown and described, as I may, without departing from the

spirit of the invention, make any minor changes therein.

Having described my invention, I claim—

The herein-described honey-comb-foundation fastener, consisting of a base adapted to receive a section, a table, and hinges securing the table to the base and provided with longitudinal slots, whereby said table is rendered adjustable, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN W. BITTENBENDER.

Witnesses:

A. T. LOONEY,

A. A. DICKINSON.