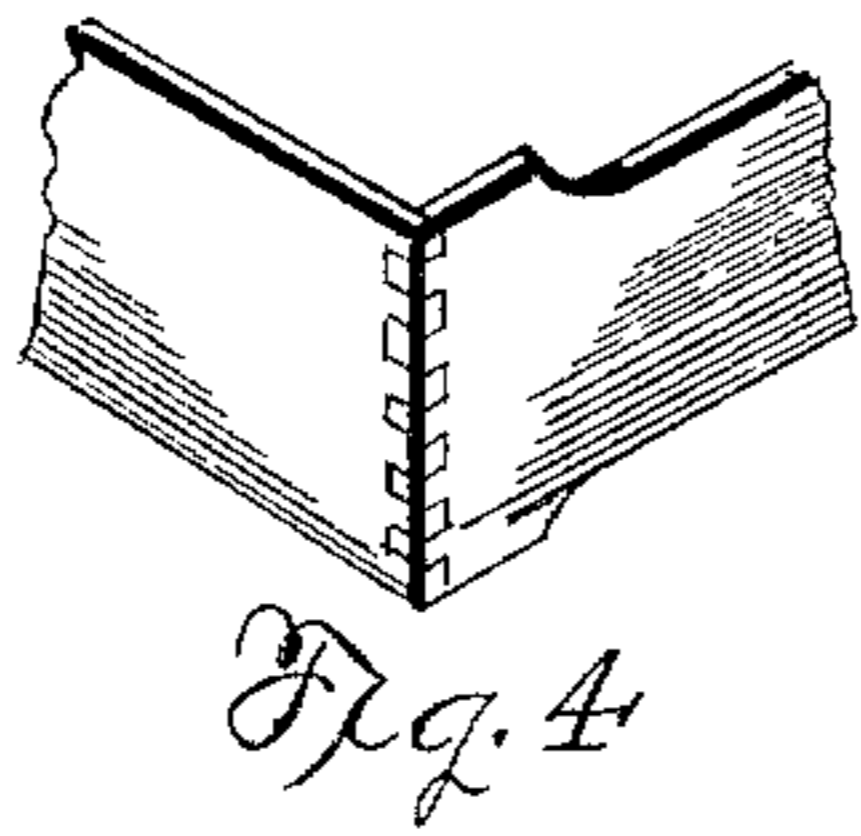
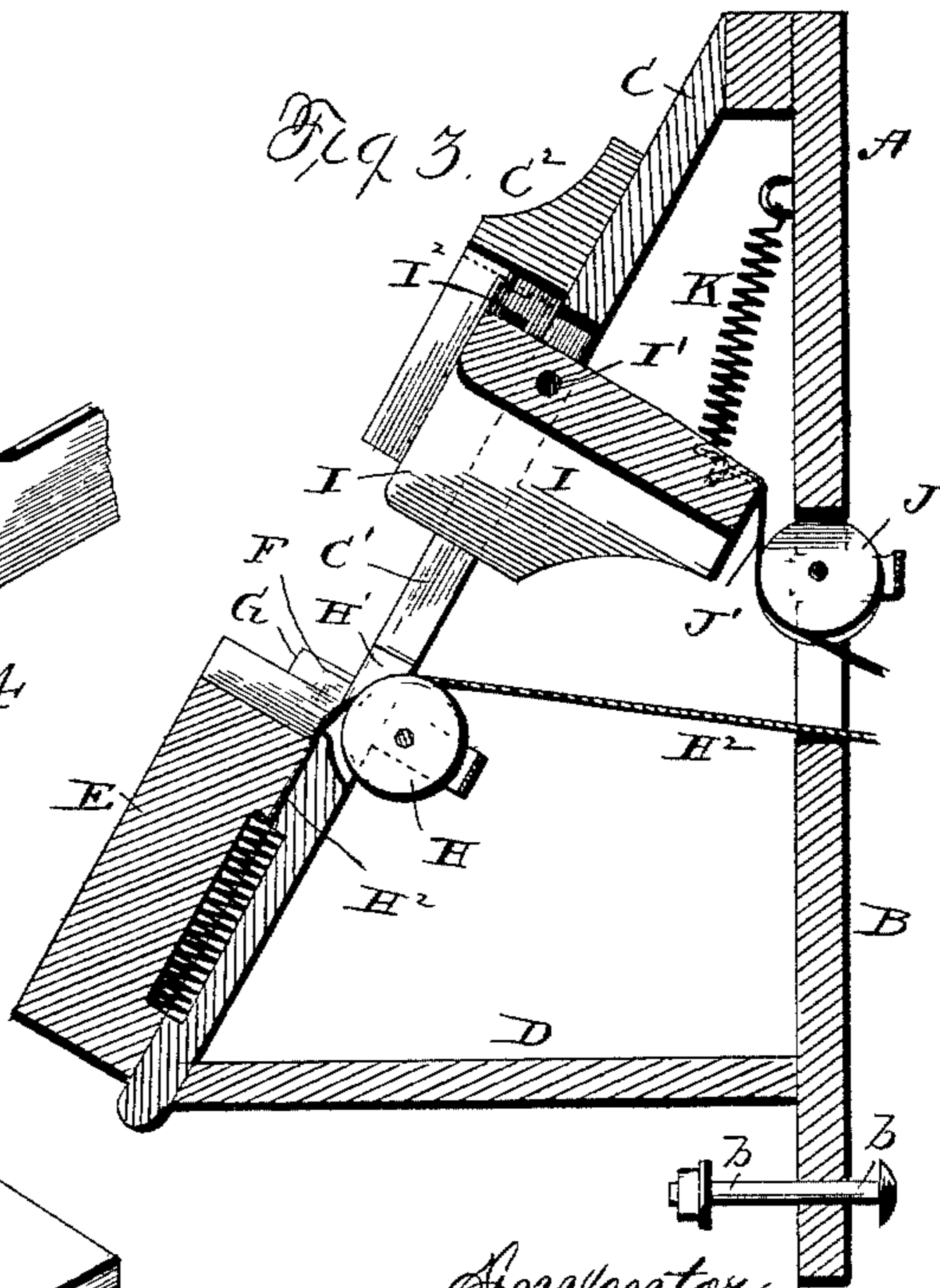
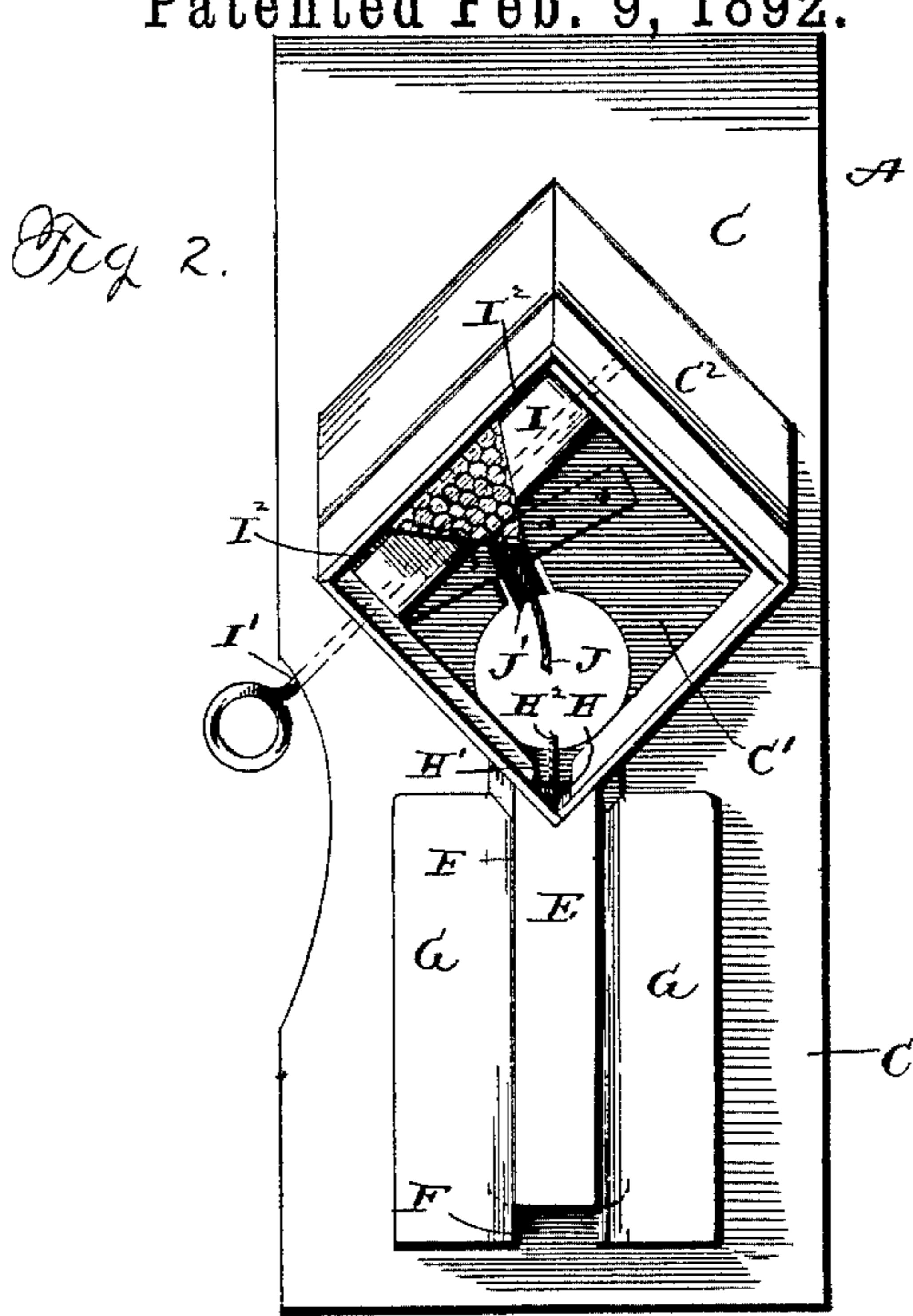
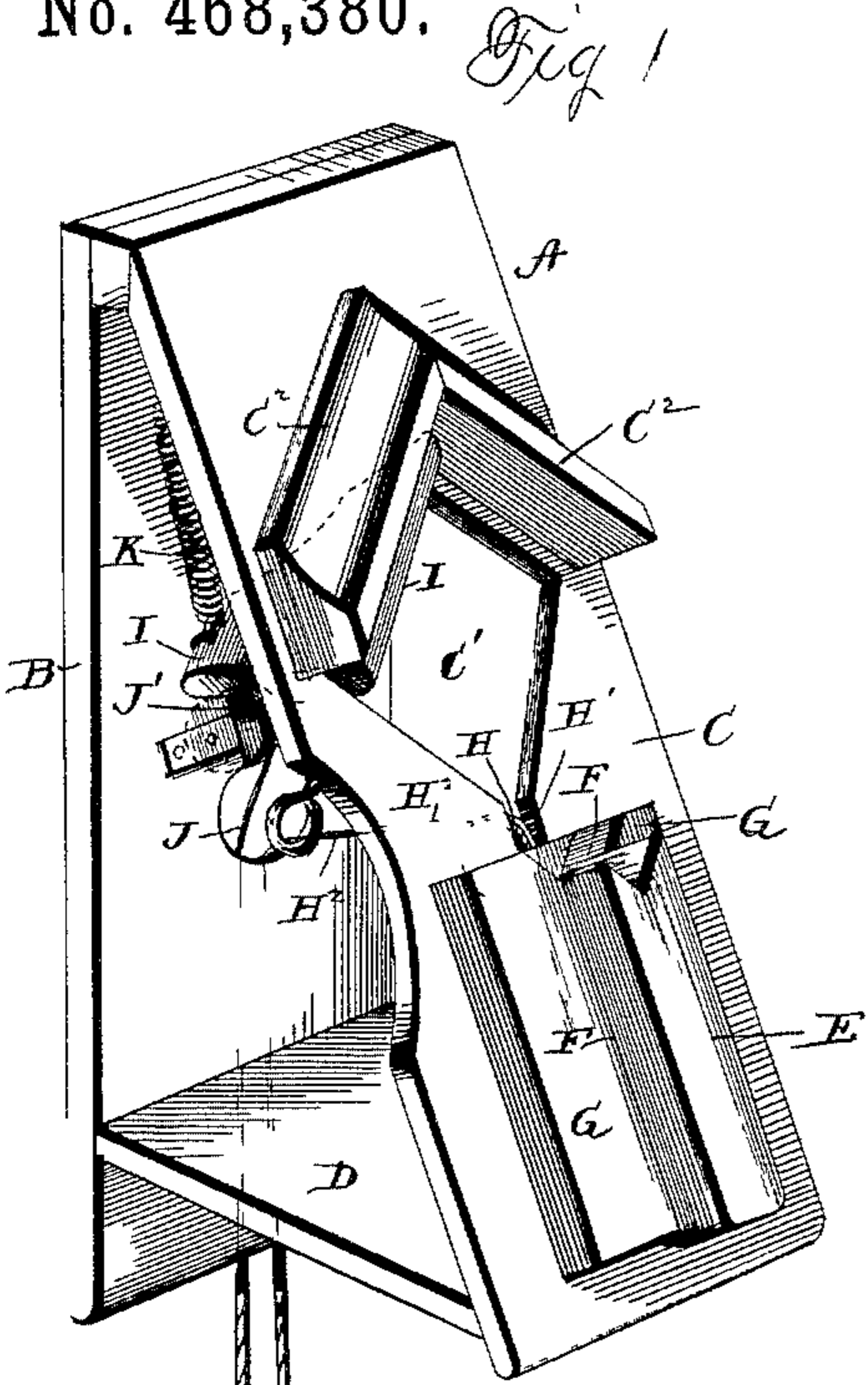


(No Model.)

A. WORTMAN.
COMBINED SECTION CLOSER AND FOUNDATION FASTENER FOR
HONEY SECTIONS.

No. 468,380.

Patented Feb. 9, 1892.



Witnesses
C. Williamson
P. J. Rogers.

Inventor
A. Wortman
by Franklin A. Hough
Atty.

UNITED STATES PATENT OFFICE.

ALVE WORTMAN, OF SEAFIELD, INDIANA.

COMBINED SECTION-CLOSER AND FOUNDATION-FASTENER FOR HONEY-SECTIONS.

SPECIFICATION forming part of Letters Patent No. 468,380, dated February 9, 1892.

Application filed July 23, 1891. Serial No 400,434. (No model)

To all whom it may concern:

Be it known that I, ALVE WORTMAN, a citizen of the United States, residing at Seafield, in the county of White and State of Indiana, have invented certain new and useful Improvements in a Combined Section Closer and Foundation Fastener for Honey-Sections; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in that class of machines which are adapted for use in the manufacture of frames which are commonly known as "honey-sections," said frames or honey-sections consisting of a single strip of wood cut partly through at intervals of its length upon one face of the strip and the ends of the strip being provided with notches. This strip of wood, when folded, forms a rectangular frame. The notched ends of the strip intermeshing form a perfect and secure joint.

It is customary to attach to one of the inner side walls of the frame a small triangular piece of artificial comb commonly denominated a "foundation."

The present invention has for its object to provide a simple and inexpensive machine adapted to form in a single movement from the prepared strip of wood a complete honey-section, closing the joint securely and attaching the foundation.

To these ends and to such others as the invention may pertain the same consists in the peculiar construction and in the novel combination, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claim.

Reference is now had to the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, like letters of reference indicating like parts throughout the several views.

Figure 1 is a perspective view of a machine embodying my improvements. Fig. 2 is a

front view with a honey section in place. Fig. 3 is central vertical section of the machine. Fig. 4 is a view of the joint of a honey-section.

The main frame A of the machine is triangular in form, being composed of the vertical side B, the inclined face C, and the base portion D, which unites the lower end of the inclined face C with the vertical side B. The vertical side B of the frame, it will be observed, extends for a short distance below the base D, and through this depending portion are passed bolts *bb*, which serve to secure the machine to a bench, table, or other suitable support. The inclined face C of the frame is provided with a rectangular opening *C'* of a diameter slightly less than the diameter of a honey-section. Two of the angles of said opening *C'* are in a vertical line extending through the longitudinal center of the face C, and secured to the face of the frame directly above the said opening is a frame or molding *C''*, the distance between the edges of the opening and the molding corresponding with the thickness of the strip of wood of which the honey-section is formed.

E is a block of metal notched at its upper end. This metallic block is vertically movable within the groove F between the blocks G G, which blocks are secured to the face of the inclined surface C directly beneath the opening *C'*, and the position of the movable block E is such that when the said block is carried to its extreme upward throw the notch E' in the upper end of the block will register with the lower angle on the opening *C'*. The pulley II is journaled within suitable bearings upon the rear wall of the inclined portion C of the frame, the front edge of the pulley occupying a vertical groove II' beneath the lower angle of the opening *C'*. Over this pulley passes a cable or chain II², one end of which is attached to the rear face of the block E and its opposite end attached to the foot-lever or treadle II³.

I is a metallic block pivoted within the opening *C'* upon the rod I', the upper face of the said block being parallel with and adjacent to one of the upper side edges of the opening *C'*. The rear end of the block I is connected with the treadle II³ by means of the cable or chain J, which is passed over a suitable pulley J', journaled in bearings

provided in an opening in the vertical rear wall B of the frame. When the front edge of the pivoted block I is thrown upward by the movement of the treadle, the upper face of the block will contact with the edge of the opening C', and along the upper face of the block, at the point at which this contact is secured, a strip of felt I² is secured. The rear end of the block I is attached to the rear or vertical wall of the frame at a point near its upper end by means of a spiral spring K, the tension of which spring serves to normally hold the front end of the block out of contact with the edge of the opening C'.

The operation of the device is simple and readily understood. The strip of wood of which the honey frame or section is to be formed is first notched at its ends and mitered across one of its faces at the points at which it is to be bent and is then folded so as to bring the ends of the strip together and is placed in position, as shown in the drawings, the notched ends being at the lower angle of the opening C', and one of the upper side edges of the strip being placed between the molding C² and the block I. The triangular piece of artificial comb which is to be used as a foundation within the honey-section is placed with the frame, one of the side edges of the foundation being passed between section and square (or crotch) down to felt. A firm pressure upon the treadle will serve to force the

block E upward against the lower angle of the frame, while simultaneously the block I will be forced into contact with the foundation-strip of comb, pressing the same securely against the inner face of the frame and causing the same to adhere thereto.

It is at once evident that the device will be equally operative by placing the main frame upon a table with the portion B in a horizontal position instead of having it inclined, as shown in the drawings, and I contemplate the use of the frame in this position.

Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

The combination, with the former, the movable block, the treadle, and connections between the treadle and block, of the pivoted block I and connections between the treadle and said pivoted block, whereby a pressure upon the treadle will serve to simultaneously move the sliding and the pivoted blocks and effect a closing of the joint of a honey-section and the attachment of the foundation-comb thereto, substantially as and for the purpose described.

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

ALVE WORTMAN.

Witnesses:

ROBERT M. DEZELL,
C. L. WESTBROOK.