

No. 693,086.

Patented Feb. 11, 1902.

E. A. TRUSSELL.
TEMPORARY BINDER.
(Application filed Jan. 14, 1901.)

(No Model.)

Fig. I.

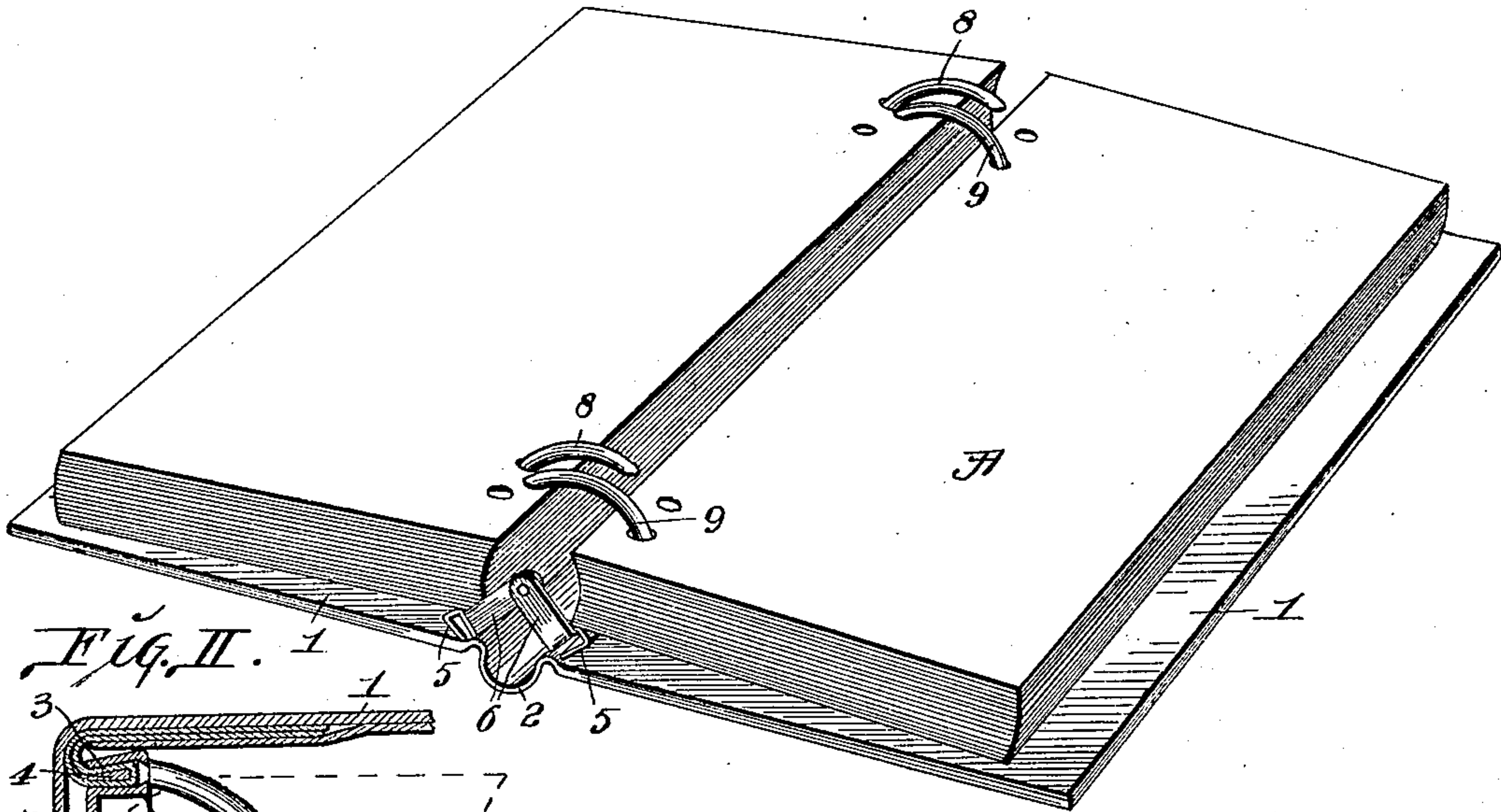


Fig. II.

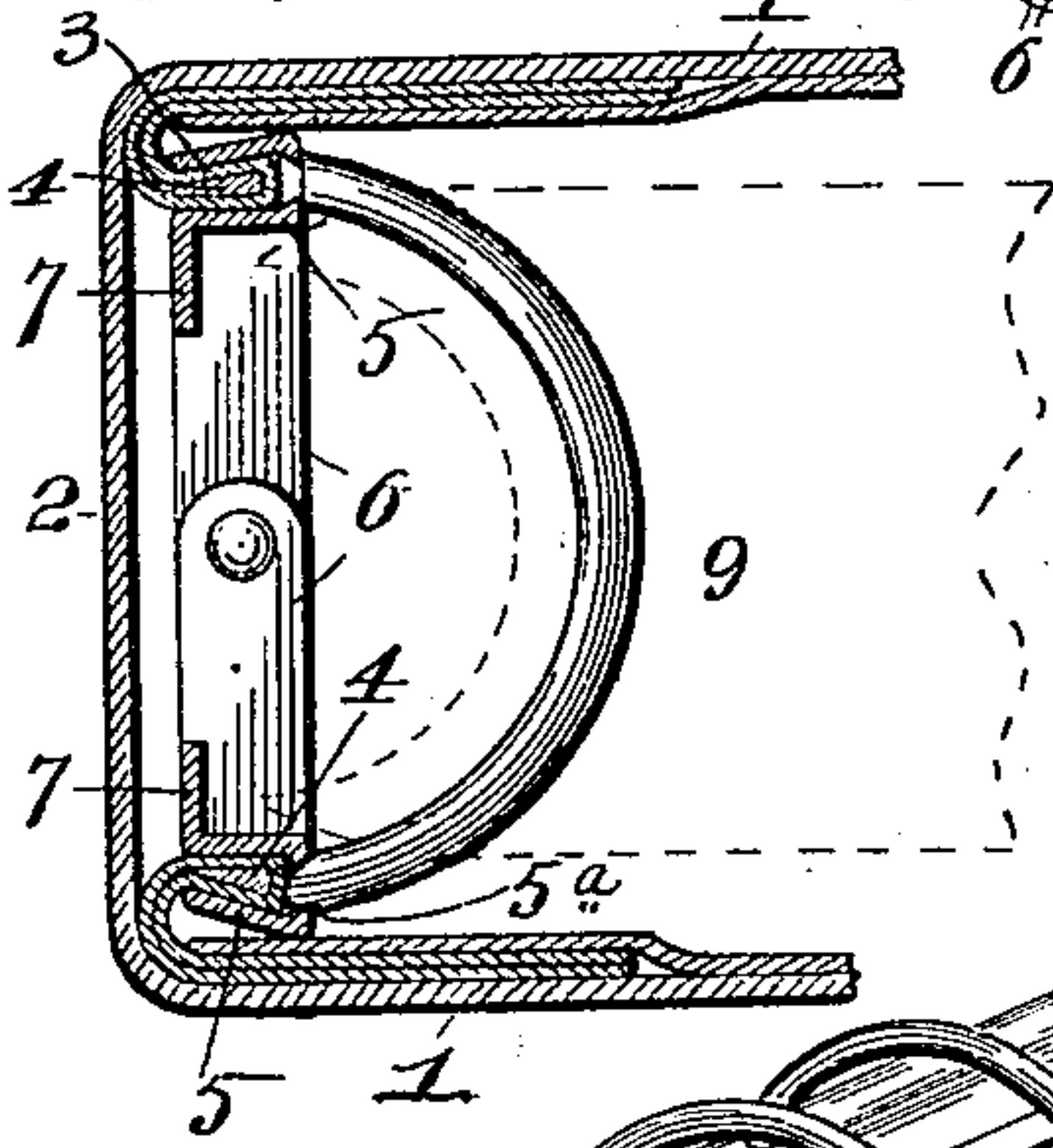


Fig. III.

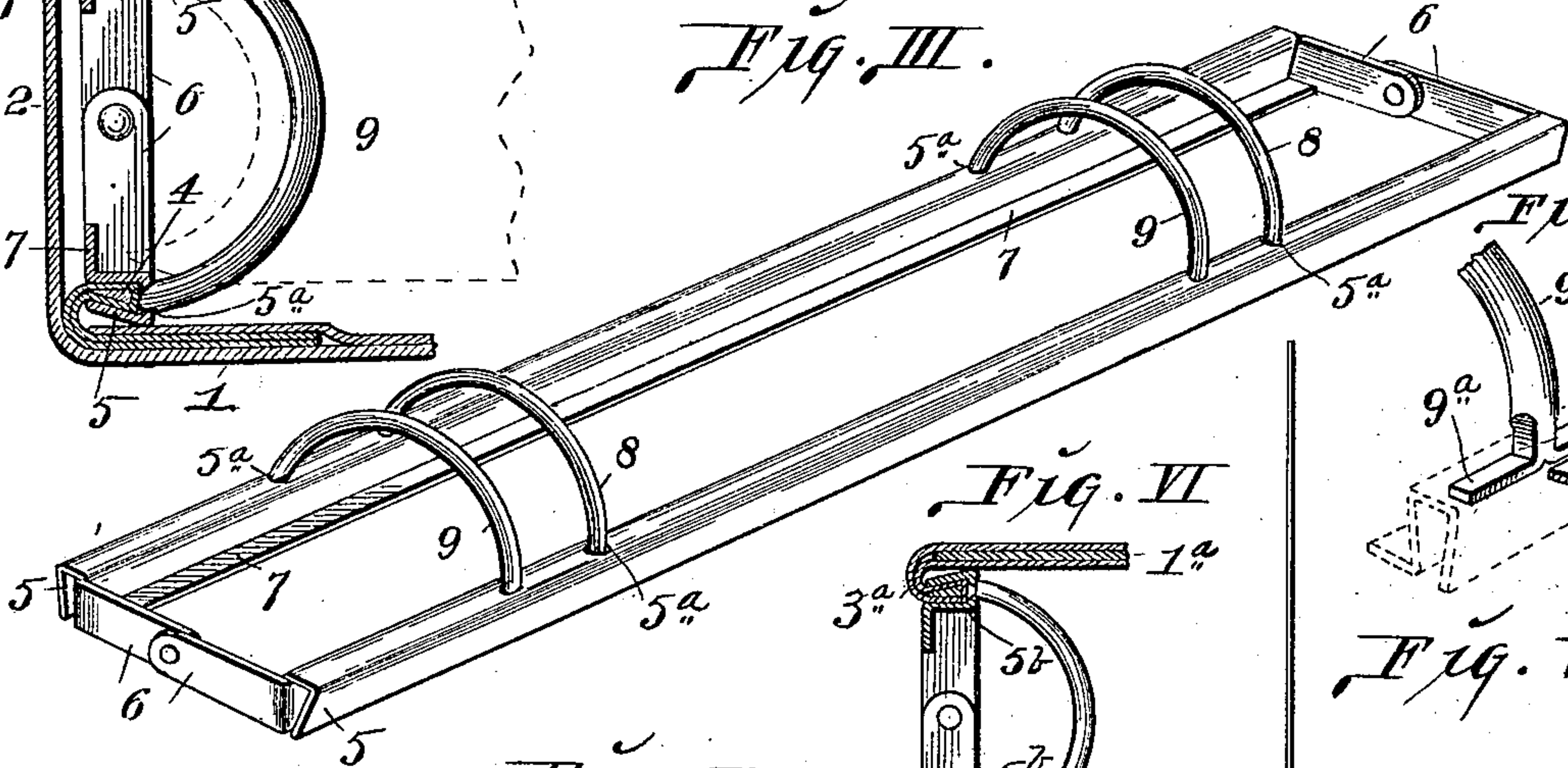


Fig. VII.

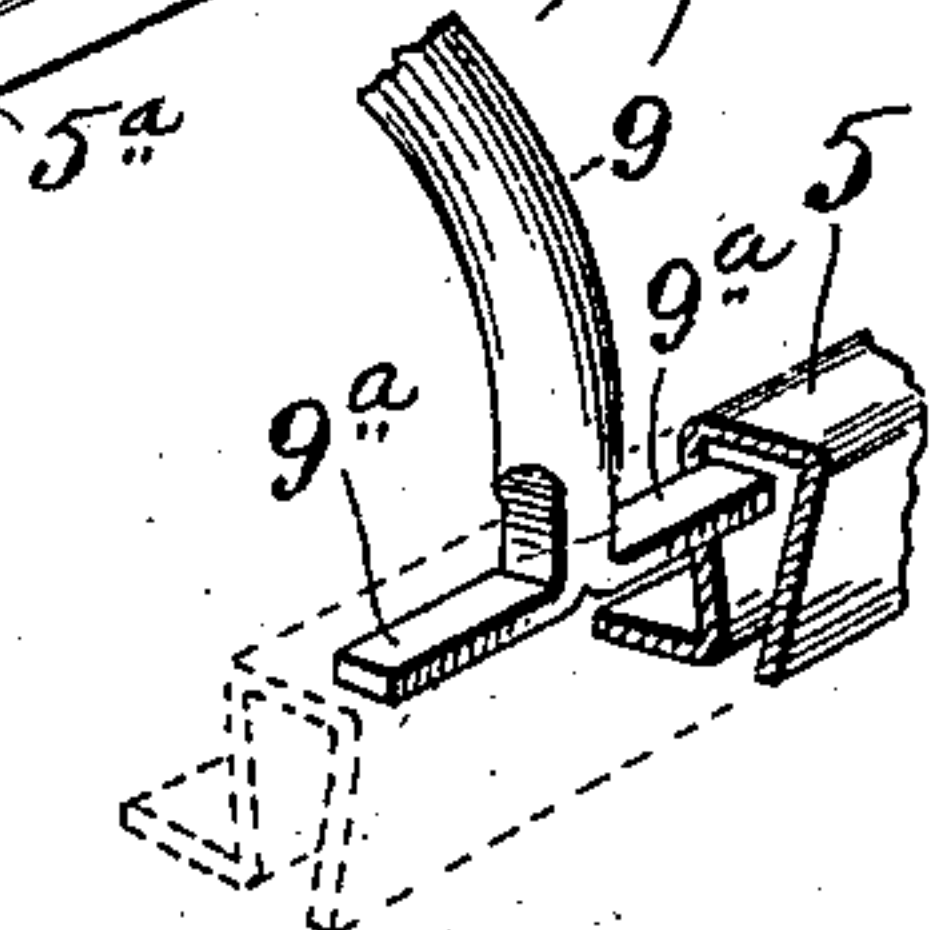


Fig. VI.

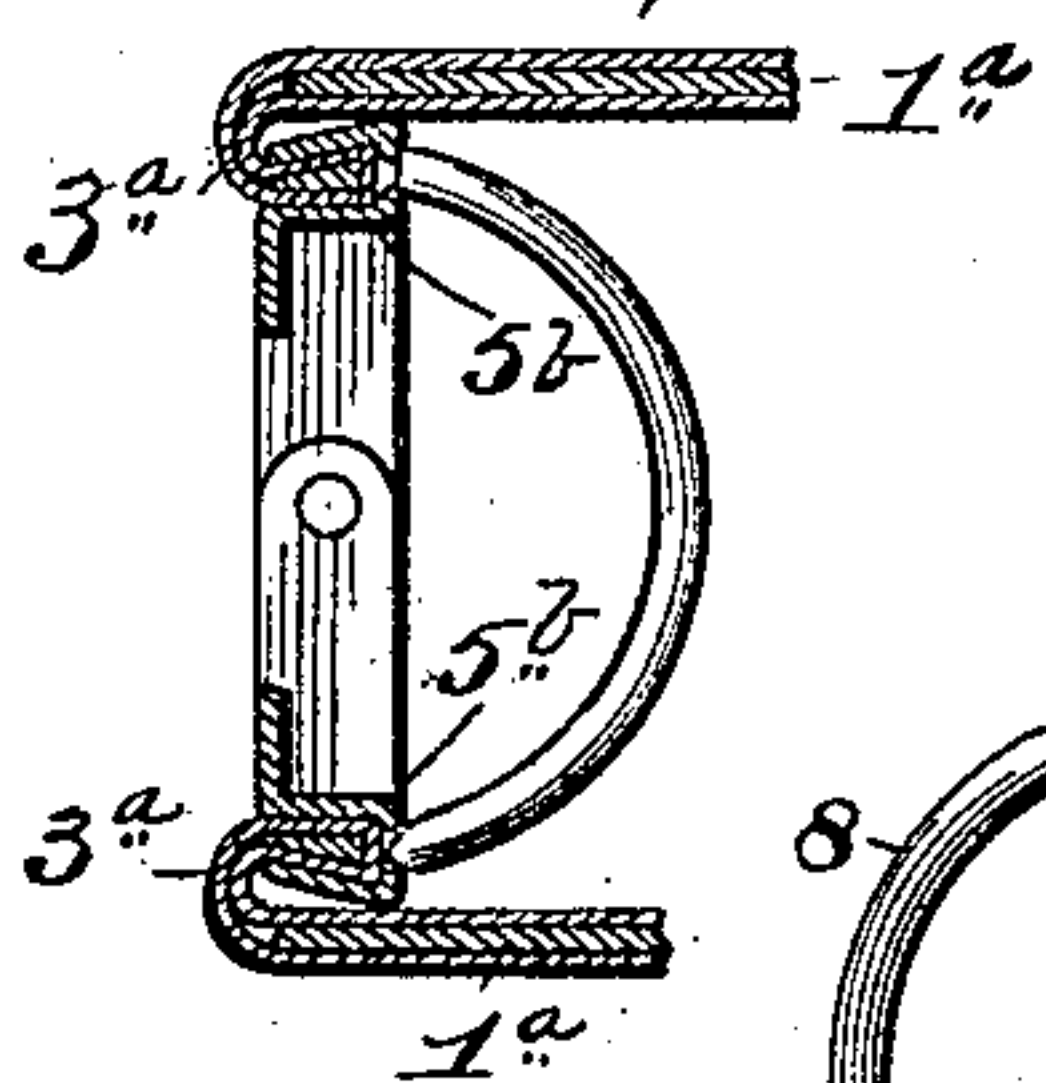


Fig. V.

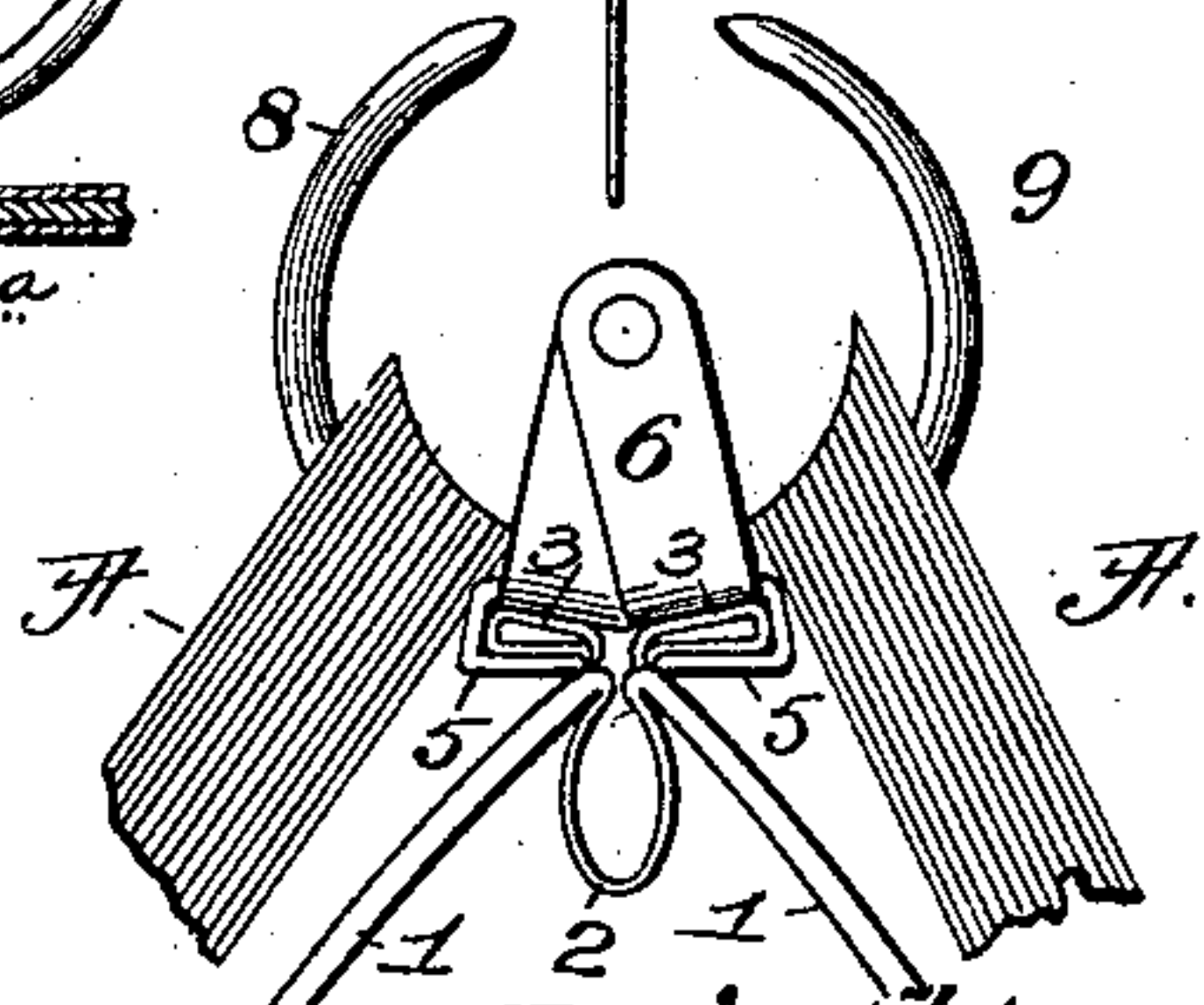
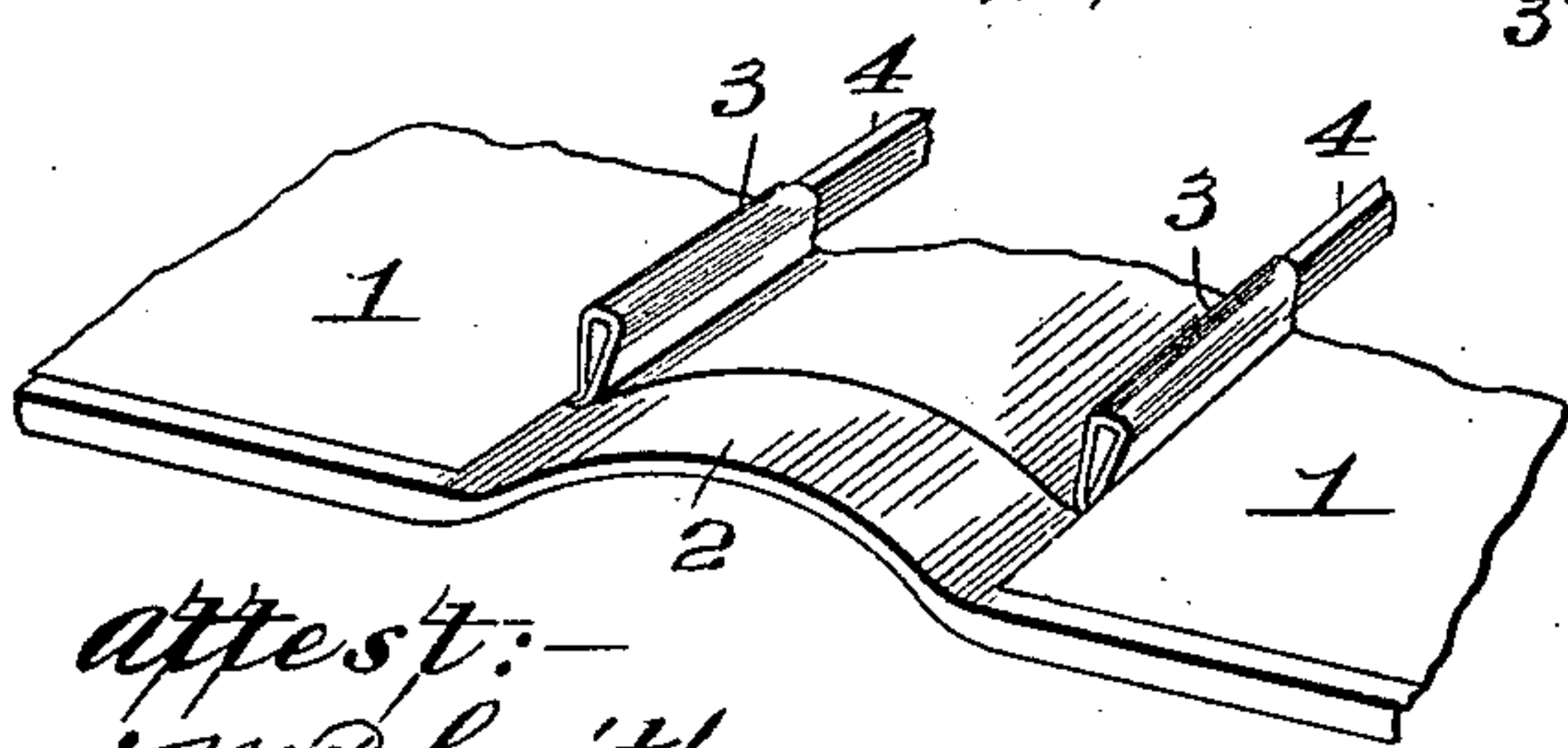


Fig. IV.



attest:-
M. Smith
E. A. Trussell

Inventor:-
E. A. Trussell:-
By Wright & Co. atty's.

UNITED STATES PATENT OFFICE.

EMORY A. TRUSSELL, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE SIEBER & TRUSSELL MANUFACTURING COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION.

TEMPORARY BINDER.

SPECIFICATION forming part of Letters Patent No. 693,086, dated February 11, 1902.

Application filed January 14, 1901. Serial No. 43,148. (No model.)

To all whom it may concern:

Be it known that I, EMORY A. TRUSSELL, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Temporary Binders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to that class of temporary binders utilized for holding loose sheets of paper, the invention particularly relating to means whereby the frame that holds the loose sheets is removably applied to the binder-covers.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a perspective view showing my improved binder in open condition. Fig. II is an enlarged cross-sectional view taken through the rear part of the binder. Fig. III is an enlarged detail perspective view of the sheet-holding frame. Fig. IV is an enlarged detail perspective view of a fragment of the binder-cover. Fig. V is a detail end view of the rear part of the binder, showing it open for the insertion or removal of loose sheets. Fig. VI is a similar view to Fig. II, showing a modification wherein the back of the cover is omitted. Fig. VII is a perspective view of the prong-fastening.

1 designates the covers of the binder, connected by a pliable back 2.

3 designates tabs secured to the rear parts of the covers 1, preferably by pasting them thereto. These tabs are preferably of fabric and they are folded so that their free ends provide pockets within which are swelling and stiffening strips 4. The free ends of the tabs project forwardly approximately parallel with the covers 1, and they receive the removable attachment of the sheet-holding frame to be described.

5 designates frame members of the sheet-holding frame, which are hinged to each other by arms 6, that extend at right angles from said members. Each frame member 5 is so formed as to produce the walls of a three-sided pocket having a contracted mouth, as clearly seen

in Figs. II and III. The pockets in the members 5 are designed to receive the swelled free ends of the tabs 3 for the attachment of the sheet-holding frame to the covers 1. In attaching the frame to the covers the ends of the side members 5 are presented to the free swelled ends of the tabs 3, and the tabs are entered into the pockets of the frame members and slipped lengthwise therein, so as to be positioned in the pockets, where they are retained by reason of the mouth of each pocket being more contracted than the interior of the pocket. 7 are stiffening-flanges projecting inwardly from the inner wall of each frame member 5.

8 and 9 designate curved sheet-receiving prongs arranged in two pairs. The prongs 8 are each permanently attached at one end to one of the frame members 5, and the prongs 9 are permanently attached to the other member 5, the free ends of each of said prongs being adapted to extend to the frame member to which it is not connected. Each of the frame members 5 is provided with apertures 5^a, that receive the free ends of the curved prongs 8 and 9 when the binder is in closed condition, as seen in Figs. II and III. When the prongs are entered into the apertures 5^a, the said prongs serve as braces to stiffen the frame by which they are carried and prevent strain upon the arms 6, that connect the frame members 5.

In the use of the binder the sheets of paper A, previously perforated, as seen in Fig. I, are inserted or removed when the binder is open, and the covers are moved into the positions seen in Fig. V to thereby separate the prongs 8 and 9, that when the binder is closed or opened flat overlap each other. Then on moving the binder into flat open position, as seen in Fig. I, the loose sheets of paper may be readily transferred from side to side, each sheet in turn riding on the prongs 8 and 9 passing therethrough.

By removably connecting the sheet-holding frame to the covers, as described, I provide for the ready and easy renewal of covers upon their destruction from wear or other cause.

In Fig. VI, I have shown covers 1^a connected to the frame members 5^b by the tabs

3^a, the binder in this instance being substantially the same as that shown in the other views of the drawings, except that the pliable back 2 is omitted, thereby reducing the expense of manufacture.

In the use of the binder and upon closing it with the loose sheets therein the covers 1 bear against the outer sides of the frame members 5 at the widest parts thereof, as seen in Figs. II and VI, so that the covers fulcrum against the frames at said point, and thereby press the frames inwardly, so that the prongs are caused to enter the apertures 5^a, thereby causing the binder to be compactly closed.

In Fig. VII, I have shown the construction whereby the prongs 8 and 9 are applied to the frame members. The inner end of each prong is first milled to produce flattened sides and the prong is split to provide two diverging arms, (indicated by 9^a,) the same construction being adopted in the attachment of the prongs 8. In assembling the parts the inner end of each prong after being split is passed through a square aperture in the frame member 5 and the arms 9^a are spread outwardly into flat positions within the frame members. The non-circular shape of the prongs and the shape of the aperture in which they are fitted prevents the prongs from turning, while the arms 9^a effectually hold the prongs to the frame members. An advantageous feature of this construction is that the form of attachment of the prongs to the sides, aside from being very secure, takes up little space in the frame members, thereby leaving ample room for the tabs 3.

I claim as my invention—

1. In a temporary binder, the combination of covers, tabs carried by said covers and having swelled edges, and a hinged sheet-holding frame having pocket members adapted to receive said tabs, substantially as described.

2. In a temporary binder, the combination

of a pair of covers, tabs attached to said covers, said tabs being provided with swelled edges; and a sheet-holding frame comprising members containing pockets having contracted mouths and adapted to receive the swelled edges of said tabs, and curved prongs adapted to receive the sheets to be held, substantially as described.

3. In a temporary binder, the combination of a two-part sheet-holding frame, covers, flexible tabs carried by said covers and adapted for connection to said sheet-holding frame and having their free ends adapted for movement to the opposing member of said frame; said covers being arranged to fulcrum on the members of the sheet-holding frame at the forward edges thereof to effect movement of said frame and carry the free ends of the arched prongs inwardly, substantially as described.

4. In a temporary binder, covers, and sheet-holding frame composed of two parts arranged together, flexible tabs by which said covers are attached to the rear of said frame, arched prongs carried by said frame, said covers being arranged to fulcrum on the prongs forward of the tabs for controlling the closing of the said sheet-holding frame substantially as described.

5. In a temporary binder, the combination of a pair of covers, tabs attached to said covers, a sheet-holding frame having pocket-containing members hinged together, and adapted to receive said tabs, and prongs carried by said frames, the inner ends of said prongs having flattened sides and being split and bent outwardly to form diverging arms located within the pockets of said members, substantially as described.

EMORY A. TRUSSELL.

In presence of—

E. S. KNIGHT,
M. P. SMITH.