

No. 760,042.

PATENTED MAY 17, 1904.

E. A. TRUSSELL.
TEMPORARY BINDER.
APPLICATION FILED JUNE 4, 1902.

NO MODEL.

Fig. I.

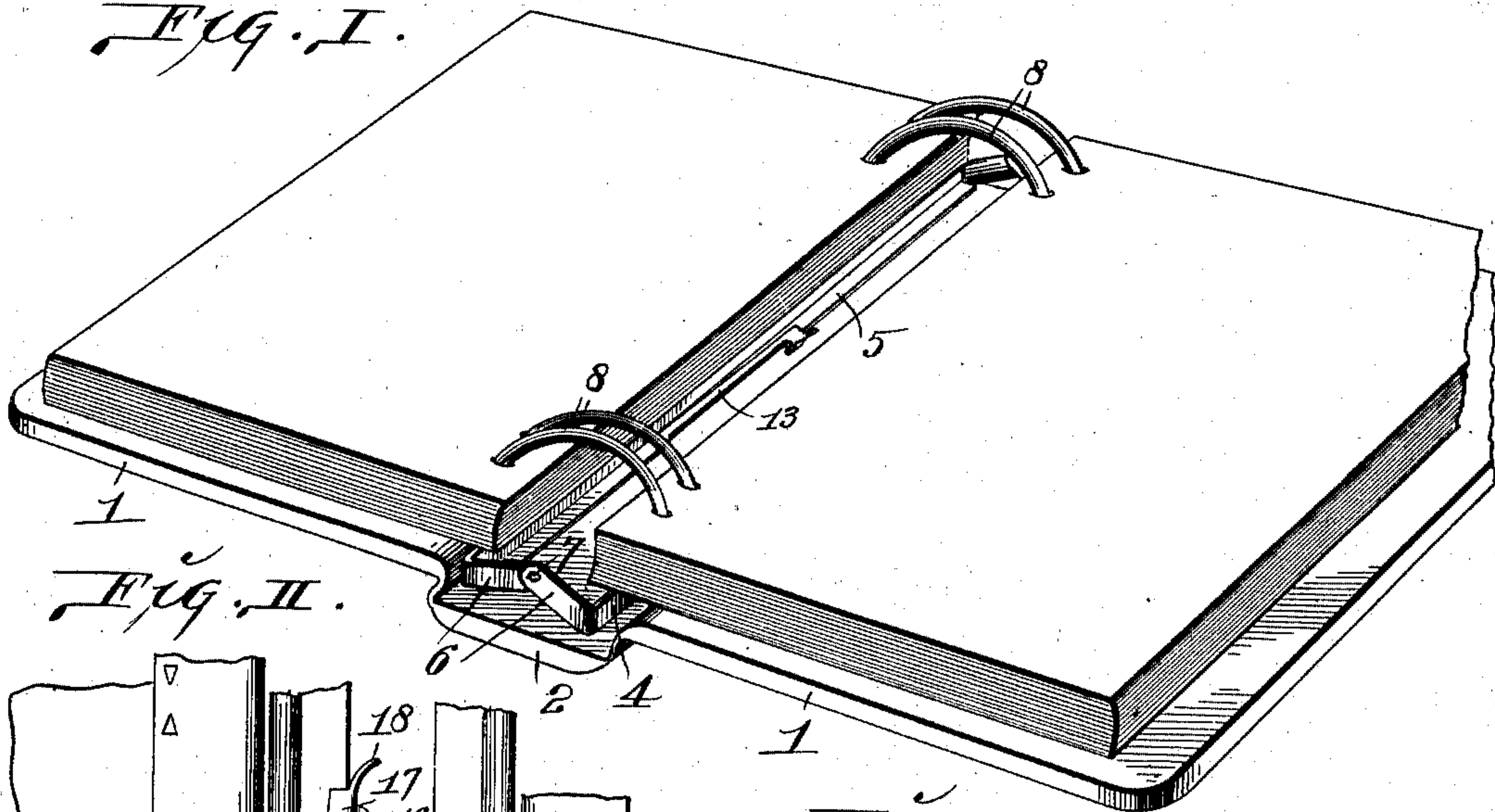


Fig. II.

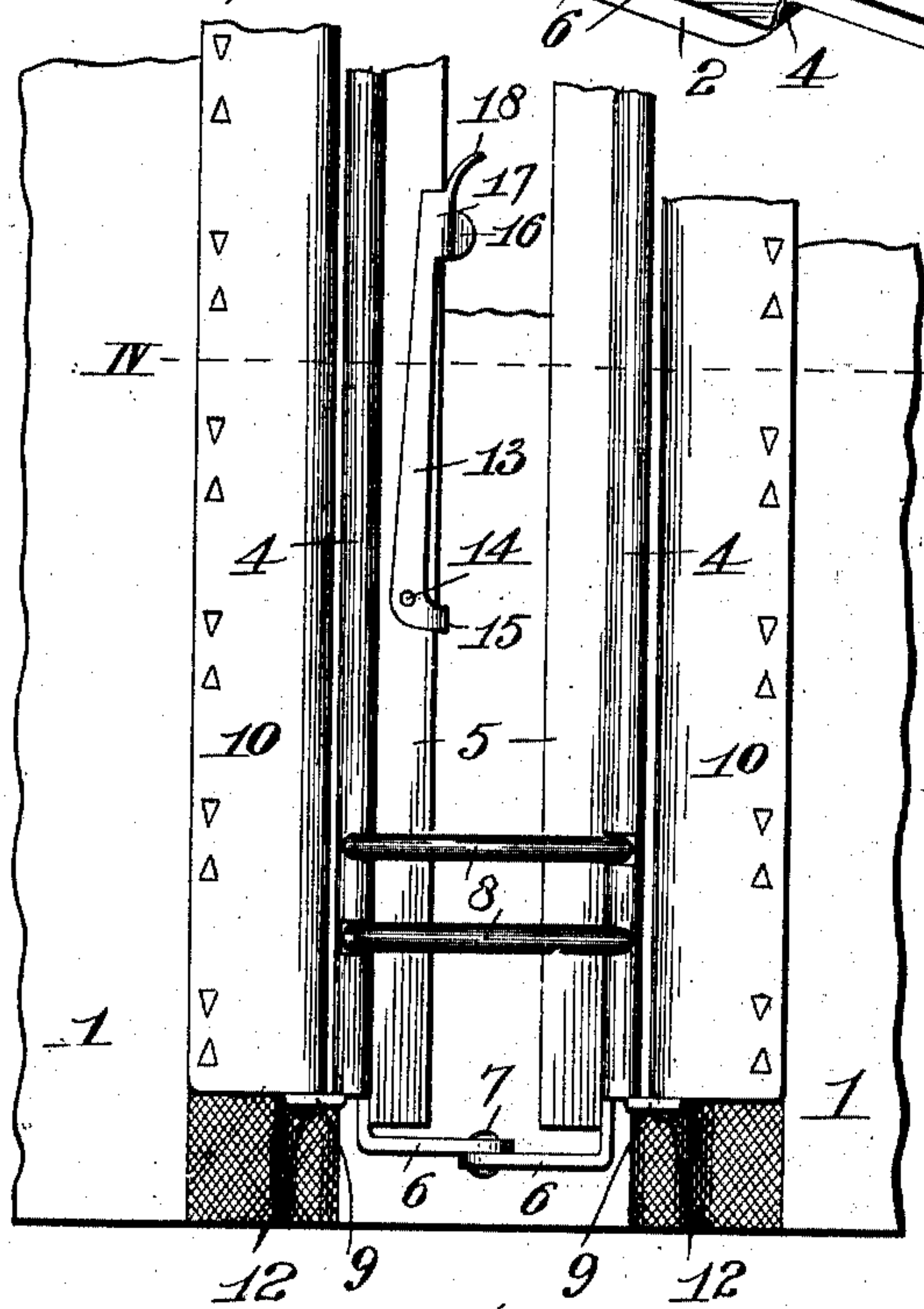


Fig. IV.

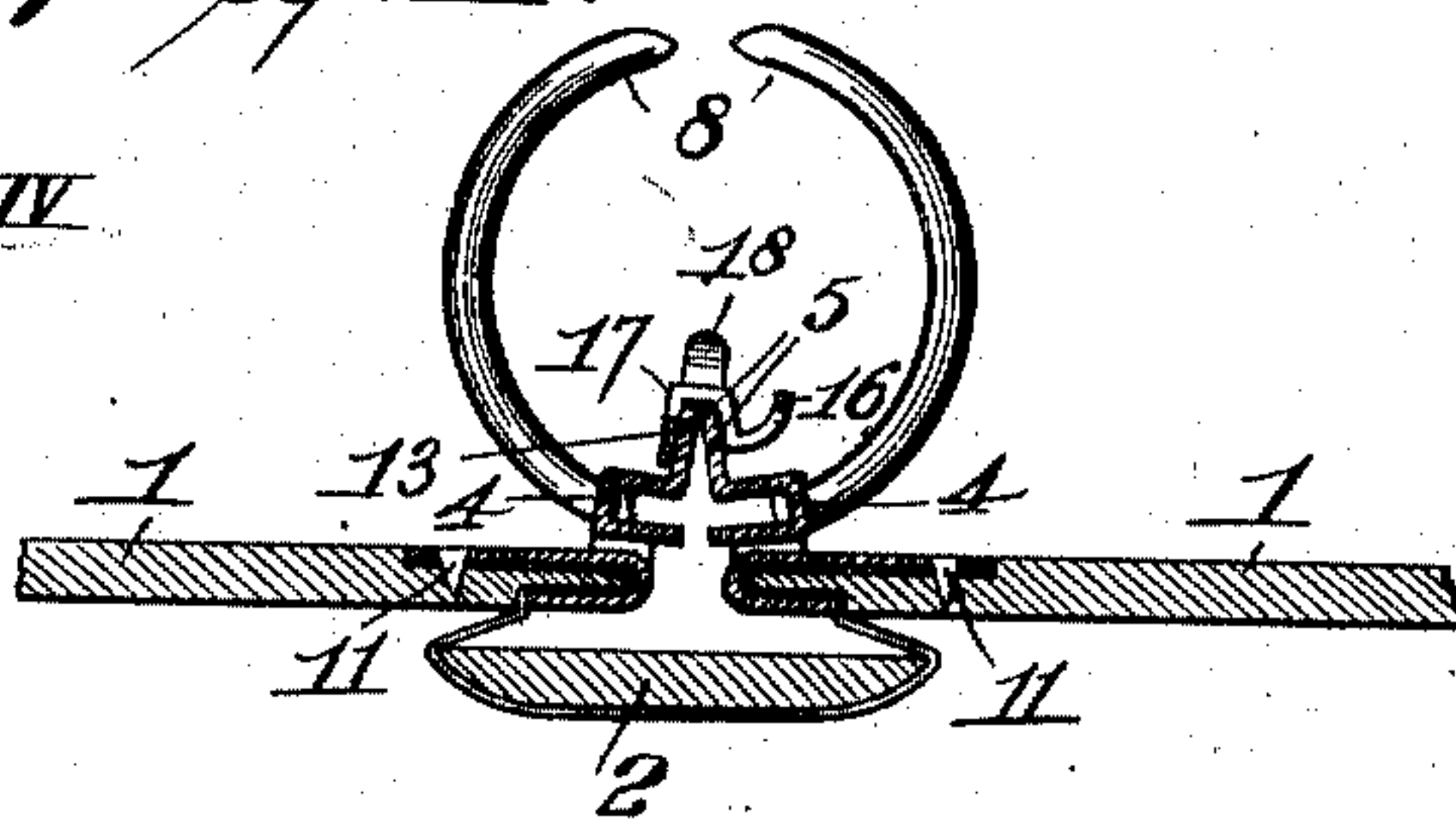


Fig. V.

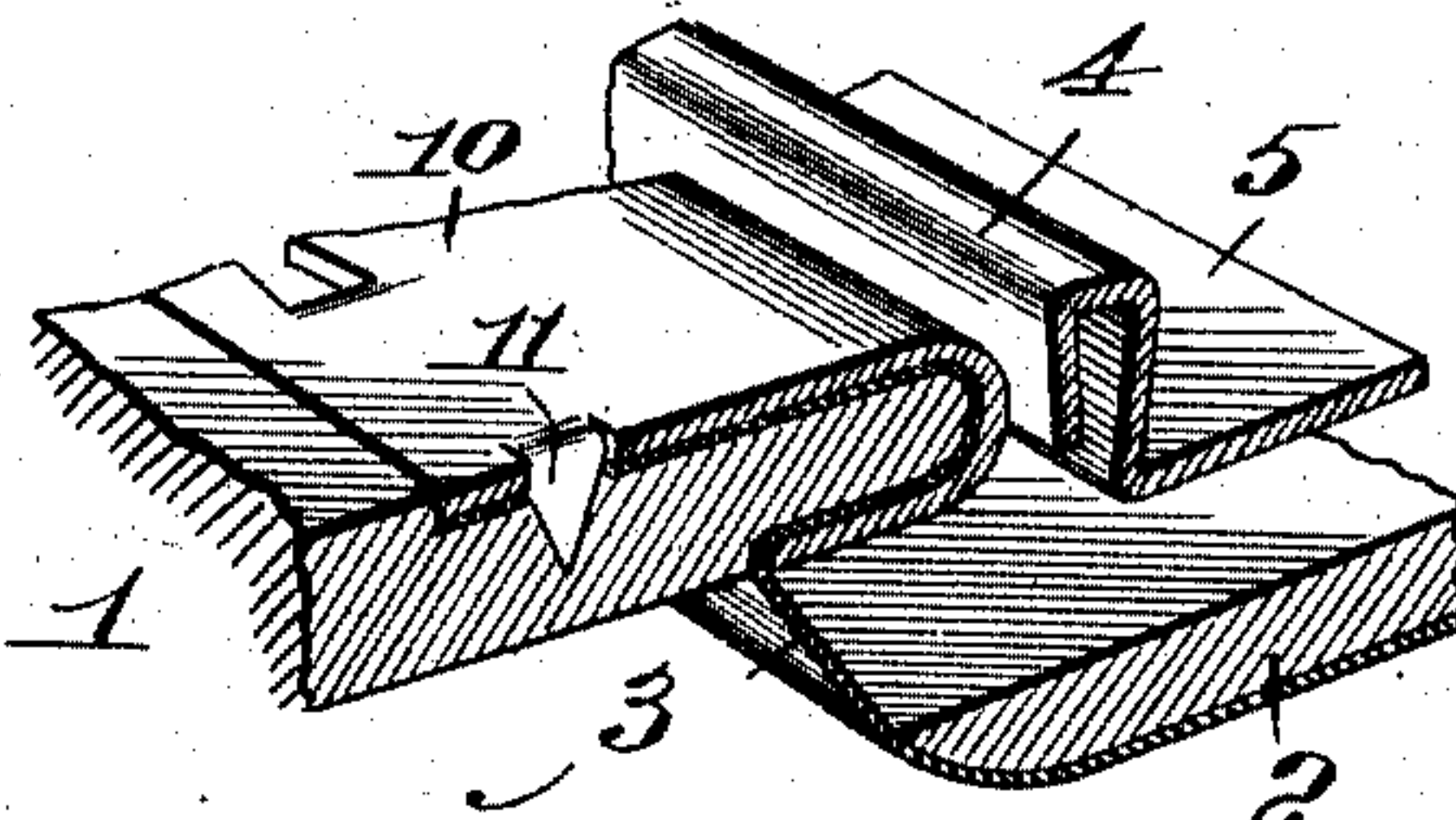
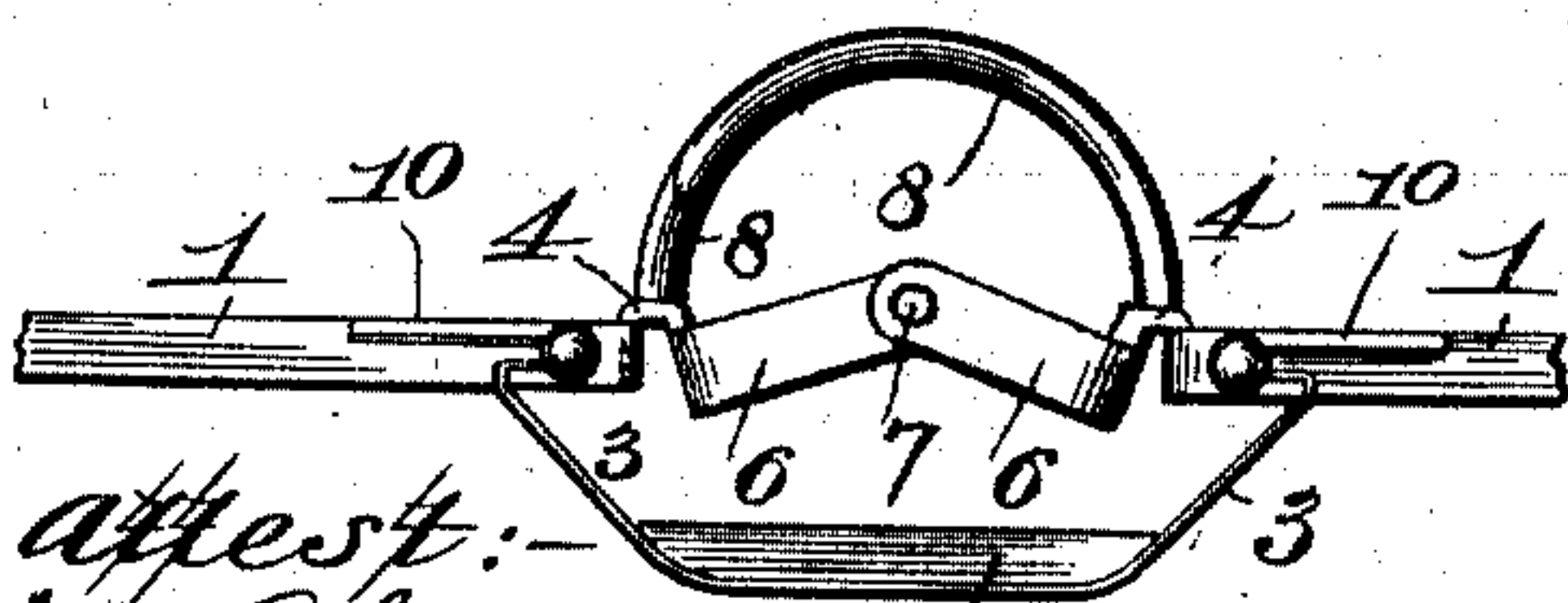
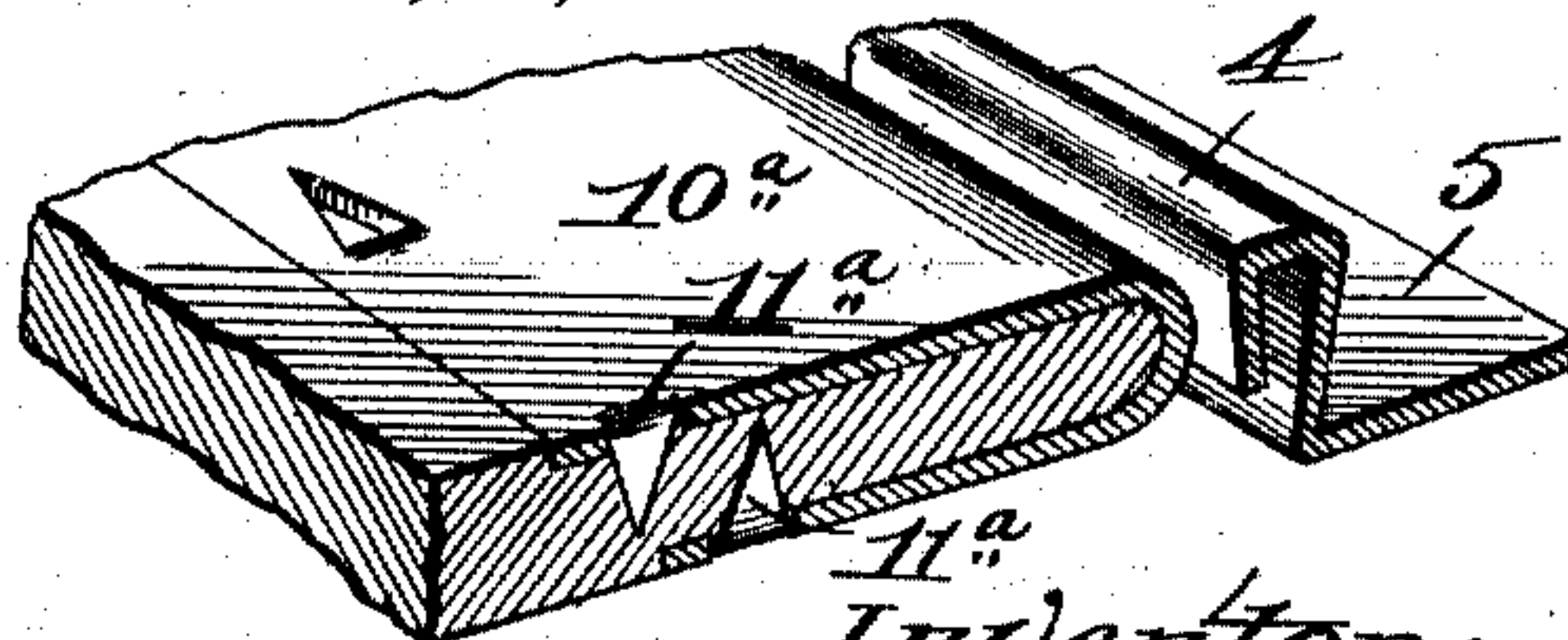


Fig. VI.



attest:-
W. Smith
E. Knight

Inventor:-
E. A. Trussell:-
By Wright, Bro
attys.

UNITED STATES PATENT OFFICE.

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

TEMPORARY BINDER.

SPECIFICATION forming part of Letters Patent No. 760,042, dated May 17, 1904.

Application filed June 4, 1902. Serial No. 110,138. (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 means whereby the sheet-holding frames of temporary binders are attached to the cover-boards of the binder.

It also relates to means whereby the cloth of the binder-back is held to the binder-covers.

It also relates to a lock whereby the members of the sheet-holding frame are held in contracted condition while the loose sheets are being applied to or removed from the prongs of the sheet-holding frame.

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

Figure I is a perspective view of a binder constructed according to my present improvement. Fig. II is an inside view showing one end of the central portion of the binder. Fig. III is an end view of the central portion of the binder. Fig. IV is a cross-section taken on line IV IV, Fig. II. Fig. V is an enlarged section showing in detail the connection between one of the members of the sheet-holding frame and the attachment of the cloth of the binder-back to a cover-board. Fig. VI is a cross-section illustrating a modification of the strip by which the sheet-holding frame is attached to the cover-boards.

11 designate the cover-boards of the binder, and 2 the binder-back. The binder-back 2 is united to the cover-boards 1 by a cloth strip 3, the connection of which to the cover-boards will be hereinafter more particularly alluded to.

4 designates the longitudinal bars that form the main body of the sheet-holding frame and which are provided with flanges 5, extending at angles from the main portions of the bars. The sheet-holding frame-bars are united at their ends by transverse arms 6, that are united centrally of the binder-back by pivot-

pins 7, so that the two frame-bars may be moved toward each other in the use of the binder.

8 designates the arch-prongs, that are carried by the frame-bars 4 and adapted to move with said bars. Each bar 4 is provided at its ends with ears 9, to be hereinafter more particularly referred to.

10 designates clip-strips of channel shape in cross-section that are applied to the inner edges of the cover-boards 1, the construction of these strips being most clearly illustrated in Fig. V. Each clip-strip is provided with a series of prongs 11, that are struck from the strip and are adapted to enter the cover-boards, as seen in Figs. IV and V. This method of applying the strips to the cover-boards affords a very secure attachment for them and one that is readily and inexpensively produced. The clip-strips 10 are adapted to receive the connection of the bars 4 of the sheet-holding frame by hinge-pins 12, that are introduced through the ears 9 of the bars 4 and seated in the cover-boards within the clip-strips.

The cloth strip 3 of the binder-back hereinbefore referred to is applied to the cover-boards 1 by placing it about the inner edges of the cover-boards both above and below said boards and within the clip-strips 10, as seen in Fig. V, thereby firmly clamping said cloth strip and holding it securely in place by reason of the manner in which it is gripped and held by the clip-strips.

When the binder is put in condition for the introduction or removal of loose sheets from the prongs 8, the sheet-holding frame is moved into the position seen in Fig. IV by forcing the cover-boards toward each other and causing the sheet-holding frame-bars 4 to approach each other, so that their flanges 5 will be carried to an approximately vertical position. In order to hold the sheet-holding frame in the condition described while the loose sheets are being inserted or removed, I make use of a latch 13. This latch 13 is pivoted at 14 to one of the flanges 5 and is provided with a heel 15, that projects over said flange to limit the movement of the latch. The free end of the

latch is provided with a curved arm 16, that is adapted to ride onto the flanges 5 when said flanges are brought together and to fall on the farther side of said flanges when the latch engages the two flanges by reason of their entering into the socket 17, contained by the free end of the latch. The latch 13 is preferably of spring metal in order that it will accommodate itself to the back of the binder in the movement of said back in closing the binder, and it is provided with a tongue 18, that may be grasped by the fingers of the user of the binder to lift the latch out of engagement with the flanges of the sheet-holding frame-bars.

In Fig. VI, I have shown a modification, in which a clip-strip 10^a is used in lieu of the form of strip hereinbefore described and in the construction of which prongs 11^a are provided in connection with both arms of the channel-strip and adapted to enter the cover-boards of the binder from opposite directions to the more securely hold the clip-strip to the cover-board.

My construction admits of the use of a stiff back 2 sufficiently wide to build up a strong and neat-looking back to resemble somewhat closely an ordinary well-bound book, giving also a broad face upon which to rest when the binder is flat open and allows width of flexible strip to permit the sheet-carrying frame to swing together easily for inserting sheets on the arch-prongs. It will also be observed that the elevated loose back causes a wobbling motion of the sheet-carrying frame when the binder is in use—that is, when the covers are open and the greater weight of the sheets is thrown on one side that side of the sheet-carrying frame becomes depressed and the other side becomes elevated, compelling the pair of arch-prongs carrying the most sheets to stand in a more upright position to accommodate the sheets in their flat position. The flexible back members being secured on a line forward of the cover-hinge effects a greater movement of the back on closing the covers and causes the back to draw closely against the sheet-carrying frame when the binder is closed.

I claim as my invention—

1. In a temporary binder, the combination of a pair of cover-boards, clip-strips applied to said cover-boards, prongs carried by said clip-strips and embedded in said cover-boards, and a sheet-holding frame pivoted to said clip-strips, substantially as described.

2. In a temporary binder, the combination of a pair of cover-boards, channel clip-strips

applied to said cover-boards, prongs carried by said clip-strips and embedded in said cover-boards, and a sheet-holding frame pivoted to said clip-strips, substantially as described.

3. In a temporary binder, the combination of a pair of cover-boards, clip-strips applied to said cover-boards, a cloth strip for the back of the binder having its edges seated and held between said cover-boards and said clip-strips, and a sheet-holding frame connected to said clip-strips, substantially as described.

4. In a temporary binder, the combination of cover-boards, a sheet-holding frame connected to said cover-boards and having a pair of hinged members provided with flanges, and a latch pivotally carried by one of said flanges and adapted to embrace the flanges of the two frame members to hold them in a fixed position, substantially as described.

5. In a temporary binder, the combination of a pair of cover-boards, a sheet-holding frame connected to said cover-boards and having a pair of hinged members provided with flanges, and a latch pivoted to one of said flanges and having a free end provided with a socket and having a curved arm adapted to ride onto and cover the flange that is to be engaged and held to the flange by which said latch is carried, substantially as described.

6. The combination in a temporary binder, of a sheet-holding frame, prongs carried by said frame, a pair of cover-boards hinged to said frame, a back having a stiff middle section, and flexibly connected to said cover-boards; said back extending from points forward of the inner edges of the cover-boards and the hinge connection between the boards and sheet-carrying frame, substantially as set forth.

7. The combination in a temporary binder, of a sheet-holding frame, prongs carried by said frame, a pair of cover-boards, channel clip-strips applied to the inner edges of the cover-boards and extending thereover, and a back comprising a stiff middle section and a flexible strip; said strip being secured under the outer portions of said clips and extending to the stiff middle section of the back from points forward of the inner edges of the cover-boards and the hinge connection between said cover-boards and the sheet-carrying frame, substantially as set forth.

EMORY A. TRUSSELL.

In presence of—

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