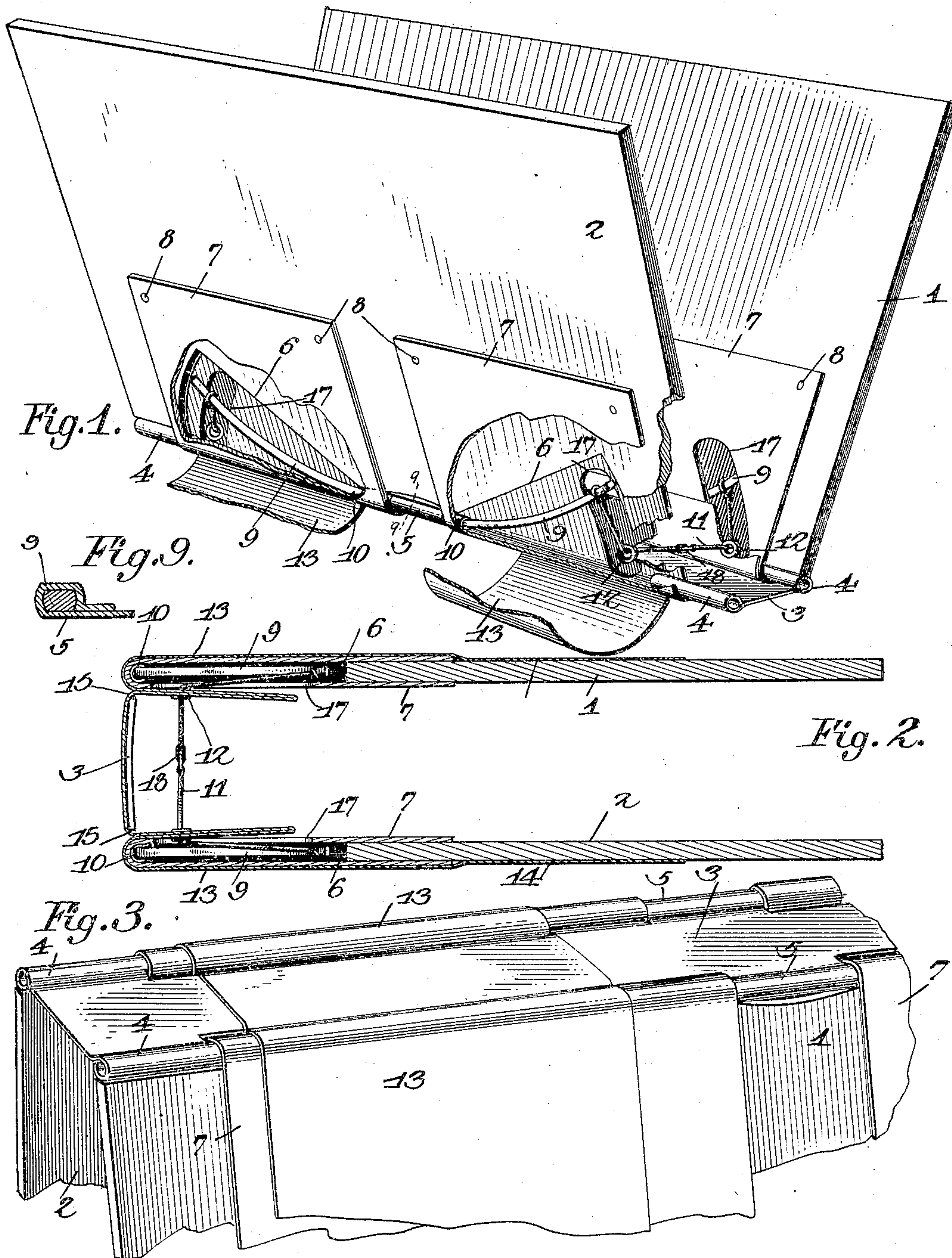


R. F. HIGHT.  
TEMPORARY BINDER.  
APPLICATION FILED DEC. 21, 1904.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 5.

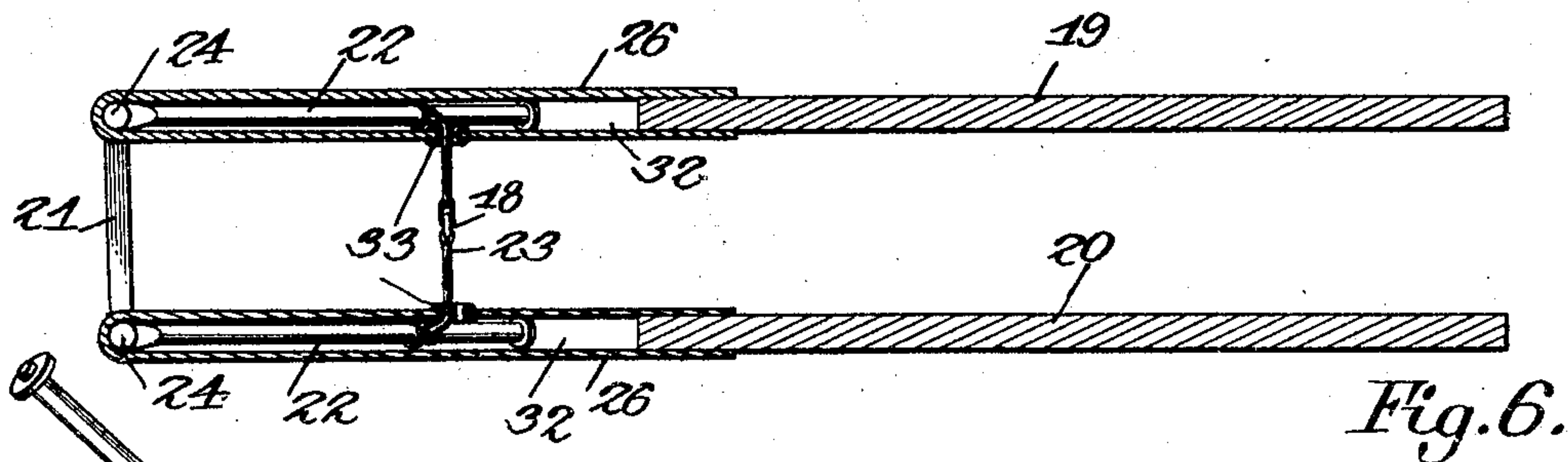
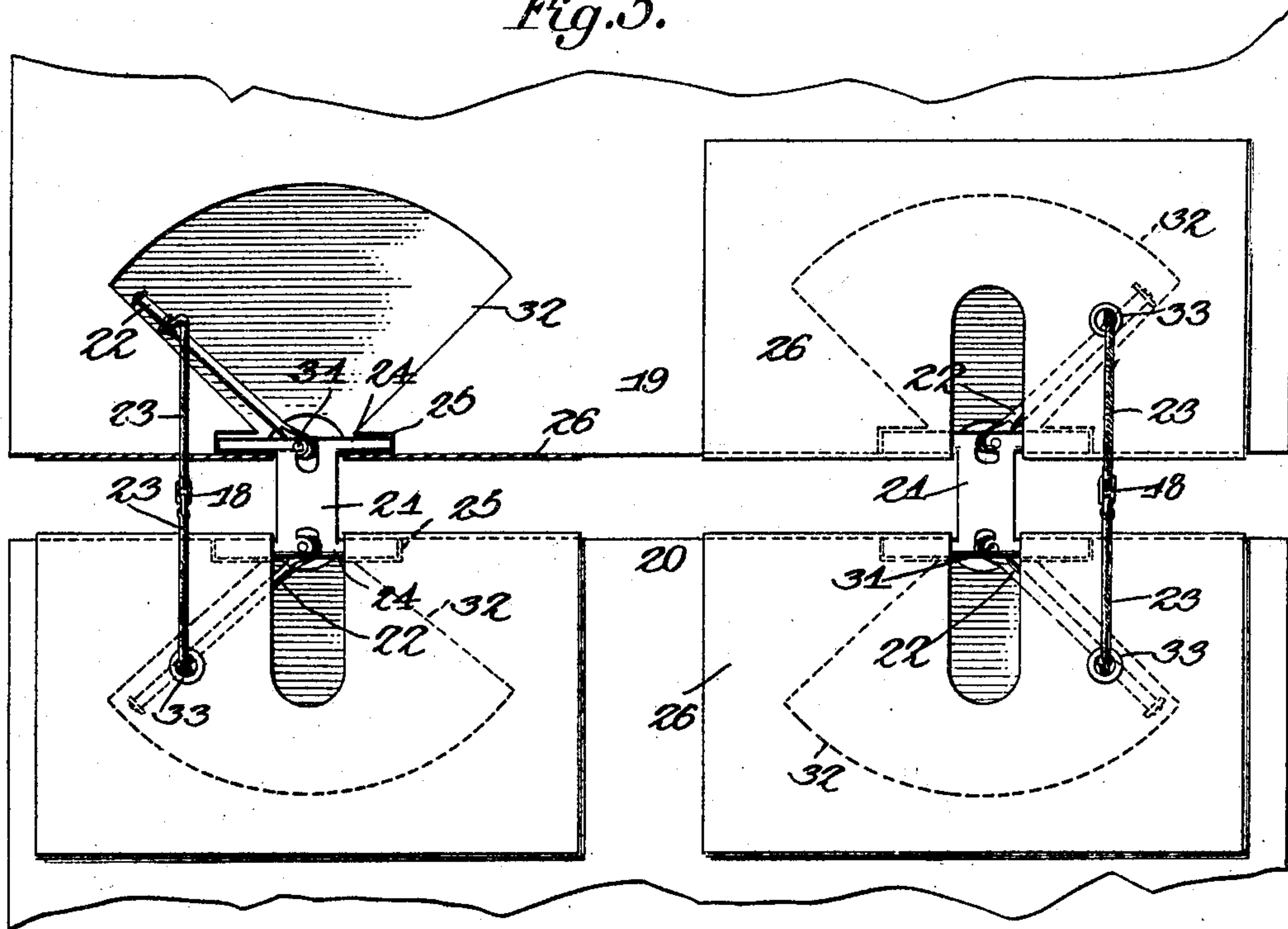


Fig. 6.

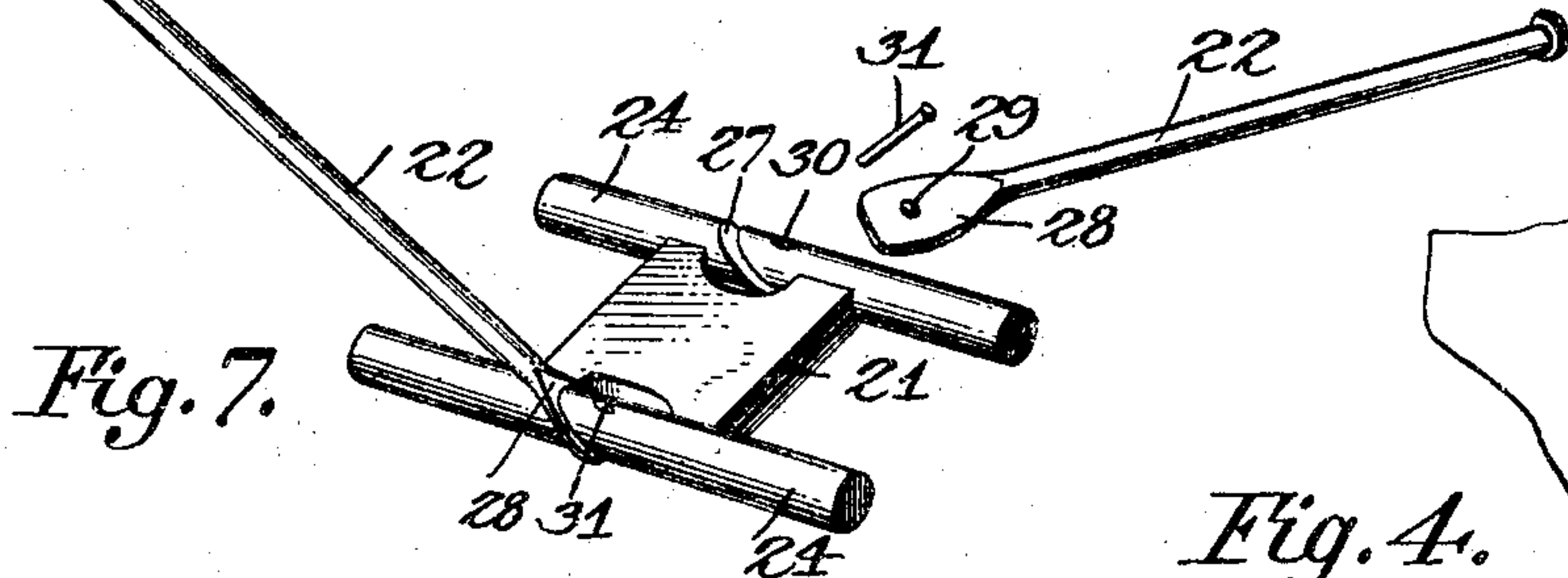
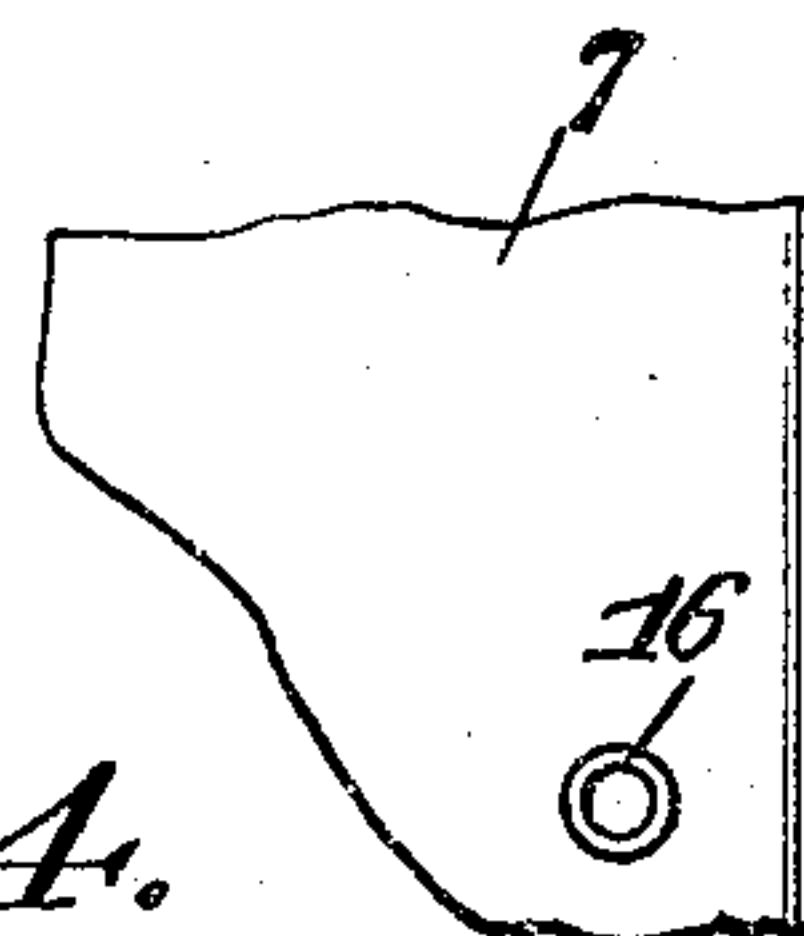


Fig. 7.

Fig. 4.



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# UNITED STATES PATENT OFFICE.

ROBERT FOSTER HIGHT, OF LAFAYETTE, INDIANA.

## TEMPORARY BINDER.

SPECIFICATION forming part of Letters Patent No. 794,223, dated July 11, 1905.

Application filed December 21, 1904. Serial No. 237,817.

*To all whom it may concern:*

Be it known that I, ROBERT FOSTER HIGHT, a citizen of the United States, residing at Lafayette, in the county of Tippecanoe and State of Indiana, have invented a new and useful Temporary Binder, of which the following is a specification.

This invention relates to temporary binders.

The object of the invention is to provide a binder in which leaves may be readily combined therewith and be held against accidental separation therefrom, in which the removal of a leaf or of leaves may be readily and quickly accomplished, or the insertion of a new leaf or new leaves be effected with facility, in which the means for holding the leaves assembled shall be capable of yielding or lengthening when the covers are opened, thereby to prevent any binding of the leaves and to facilitate their examination, in which the means for holding the leaves assembled shall be placed under tension when the covers are closed, thereby to maintain the leaves properly positioned therebetween, and generally to improve devices of this character.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a temporary binder, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in perspective, partly in section, of a form of temporary binder constructed in accordance with the present invention. Fig. 2 is a view in transverse section. Fig. 3 is a view in perspective of a portion of the binder, showing more particularly the construction of the book. Fig. 4 is a fragmentary detail view of a modified part of the invention. Fig. 5 is a plan view of another form of the invention, showing the same spread out flat or opened. Fig. 6 is a transverse sectional view through the binders shown in Fig. 5. Fig. 7 is a perspective detail view of a portion of the operating mechanism combined with the form of invention shown in Fig. 5. Fig. 8 is a detached detail view of a form of

fastener that may be employed for holding the ends of the tapes or cords combined. Fig. 9 is a sectional detail view, on an enlarged scale, taken on the line 9 9, Fig. 1.

In each of the forms of the invention the leaves or signatures to be bound are omitted, as their inclusion would only tend to confusion and would conceal certain features of the invention necessary to be shown in order to secure a full and clear understanding of the case.

Referring to the drawings and to Figs. 1 to 4 and 8 and 9 thereof, 1 and 2 designate the two cover-sections of the book or binder, and 3 the back. The cover-sections may be made of any suitable material, such as heavy pasteboard, and the back of sheet metal, preferably sheet-iron, and are provided at each end with hinge-butt members 4 and intermediate of their ends with similar members 5, these members being disposed in transverse alinement with each other.

One edge of each cover adjacent to the back is provided with two angular recesses 6, covering each of which is a U-shaped metallic plate 7, which embraces both sides of the cover and is held combined therewith by rivets 8 or other equivalent form of fastening device. Each plate 7, which constitutes, in effect, a hinge-joint, partially encircles the portions 4 and 5 of the back, as clearly shown in Fig. 1, and thus completes the hinge, which will be of a nature to permit the covers freely to be opened or closed without any binding action.

Secured against turning in each butt member 5 is a bowed or curved spring 9, which is polygonal in cross-section, preferably rectangular, and has its terminals disposed within the recesses 6, a short metallic tubular section 10, secured upon the spring on each side of the butt member 5, serving to hold the former from longitudinal movement therein, the springs being normally flexed to project away from the back—that is to say, when the covers are closed they will occupy the position shown in Fig. 1. Each spring is held from turning within the butt member 5 by clenching or clamping the tongue forming the member around the spring, as clearly shown in Fig. 9. Connecting the terminals of the



springs on the opposite sides of the book are binder cords or tapes 11, which extend through eyes 12, carried by flexible flaps 13, of leather, parchment, or any other strong and yielding material, these flaps being secured at their outer ends to the covers, as shown at 14, and projecting into the joints formed between the bends of the plates and the back, as shown at 15 in Fig. 2. These flaps will operate in a measure to relieve the tapes or cords of undue strain, as the eyes will yield with the flaps for this purpose; but under some conditions it may be preferred to combine the eyes directly with the plates 7, and thus do away with the flaps, and this is shown at 16 in Fig. 4. As shown in Fig. 1, the plates are provided on their opposite sides with curved slots 17, back of which work the terminals of the springs 9; but these slots may be omitted, if preferred, as shown in Fig. 4.

The ends of each cord or tape are connected by a clip or fastener, (shown in detail in Fig. 8,) and which consists of two links 18, that constitute, in effect, split rings and are adapted to interlock to hold the tape ends together. These clips are small and will present no obstruction to the movement of the leaves or signatures upon the tapes.

As shown in Fig. 1, when the covers are closed the spring-terminals are disposed toward the upper walls of the recesses 6, and thus hold the cords or tapes under tension, and when the covers are flattened out the springs are given a quarter-turn, due to their rigid connection with the butt members 5, and thereby cause the springs to occupy a plane approximately parallel with the back, whereby tension is removed from the cords or tapes, thereby permitting the leaves or signatures to be readily turned and examined. In this form of invention, as well as in that to be described, it is to be understood that the covers and back are to be incased in suitable sheathing of leather, cloth, or the like, thus to hide all the operative parts from view and to impart a neat and finished appearance to the article.

In the form of embodiment of the invention shown in Figs. 5, 6, and 7 the back is dispensed with and the cover-sections 19 and 20 are combined by hinge members 21, which also constitute cams to actuate actuating-levers 22, to which are attached the terminals of the cords or tapes 23. The hinge members each comprise a body portion having secured to each terminal two bars 24, forming hinge-pintles, which are fitted in recesses 25 in the opposed edges of the cover-sections and are held therein by plates 26 of the same or substantially the same character as the plates 7. (Shown in Fig. 1.) Each of the pintles is divided intermediate of its length by an oblique slit 27, in which are mounted the flattened ends of the levers 22, the levers and overlapping ends of the pintle members being pro-

vided each with orifices 29 and 30, respectively, through which passes a pin 31 to hold the members combined. The levers work through an arc of a circle and are confined within appropriately shaped recesses 32, cut in the opposed edges of the cover-sections, and the cords or tapes pass through eyes 33, secured to the inner members of the plates and are thereby held properly combined with the levers. In this form of the invention, as in that first described, the cords or tapes when the cover-sections are opened will be relieved from tension and when the covers are closed will be placed under tension.

The forms of the invention herein shown are selected from various combinations that can be employed, and as many different ways of carrying the same improvements into effect will be obvious it is to be understood that the invention is not to be limited to the structures herein shown.

Having thus described the invention, what is claimed is—

1. A temporary binder comprising covers, binder-cords combined therewith, and movable elements for causing the cords to be tightened when the covers are closed and loosened when the covers are opened.

2. A temporary binder comprising connected covers, binder-cords, and means with which the cords are connected and movable under the opening and closing movements of the binder, to maintain the cords under tension when the covers are closed and to relieve them from tension when the covers are opened.

3. A temporary binder comprising covers, a back combined therewith, binder-cords, and means carried by the back and coacting with the cords to cause them to be lengthened when the covers are opened and to be shortened when the covers are closed.

4. A temporary binder comprising a back provided with hinge-joints, a pair of covers, plates secured to the covers and having hinge-joints combined with those of the back, elements movable by the opening and closing of the covers, and binder-cords secured to the said elements.

5. A temporary binder comprising a pair of covers the lower edges of which are recessed, a back, plates secured to the cover and movably connected with the back, spring elements carried by the back and having their free terminals movable in the recesses, and binder-cords secured to the terminals of the springs and passing through eyes in the plates.

6. A temporary binder comprising suitable covers, binder-cords combined therewith, movable elements for lengthening and shortening the cords as the covers are opened and closed, and coupling devices for uniting the terminals of the cords.

7. A temporary binder comprising suitable



covers, the edges adjacent to the back of which are recessed, plates disposed over the recesses, springs arranged between the plates and having their terminals disposed within the recesses, and binder-cords connecting the ends of the springs.

8. A temporary binder comprising suitable covers, one edge of each of which is provided with recesses, a back plate provided with hinge-joints, plates disposed over the recesses and having hinge-joints combined with those of the back plate, springs mounted between the

plates and in the cut-away portions and having their intermediate portions secured to the back, and binder-cords secured to the free ends of the springs and passing through openings in the inner members of the plates.

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

ROBERT FOSTER HIGHT.

Witnesses:

VIRGINIA STEIN,  
FLORENCE G. RUGER.