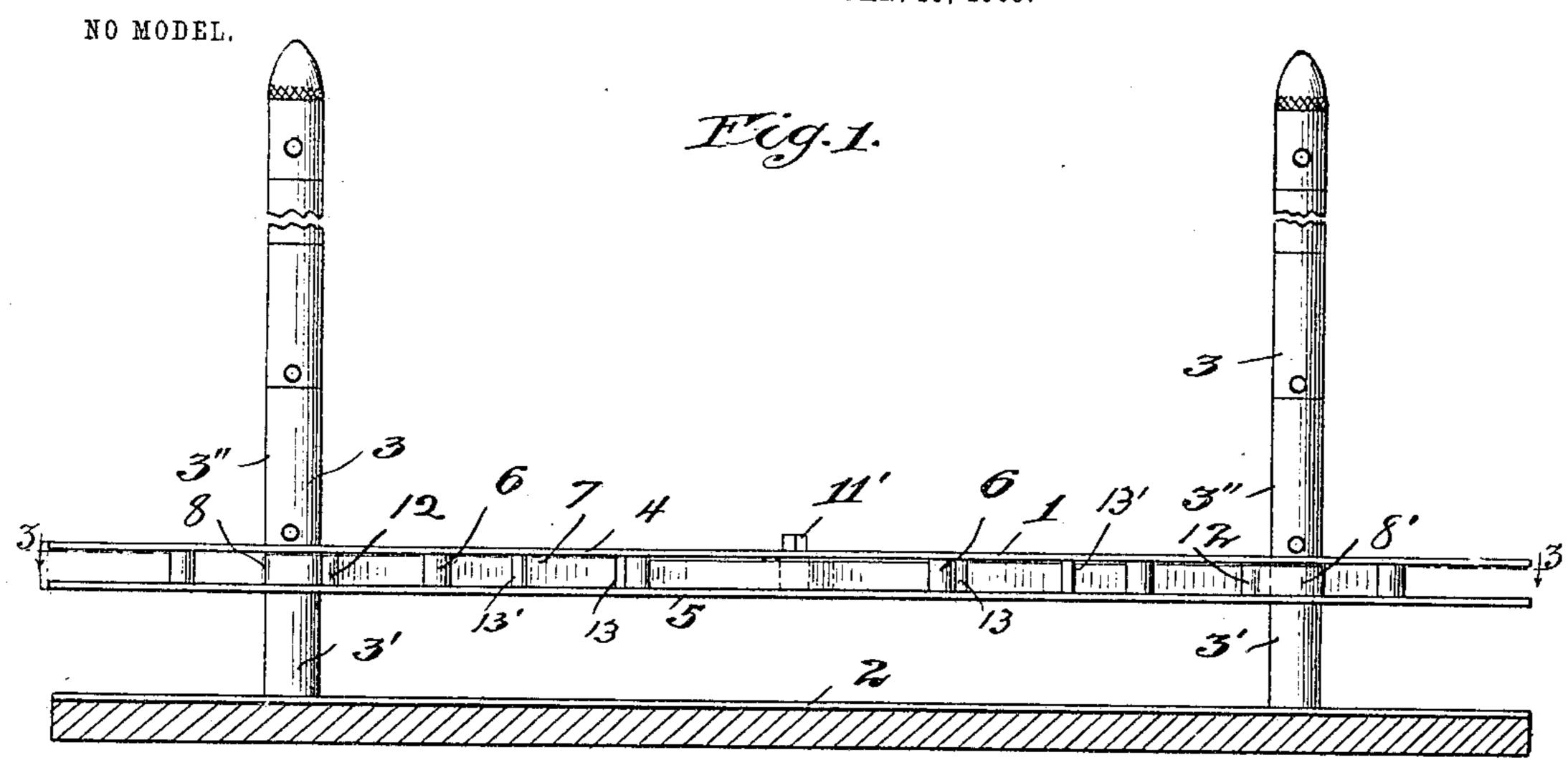
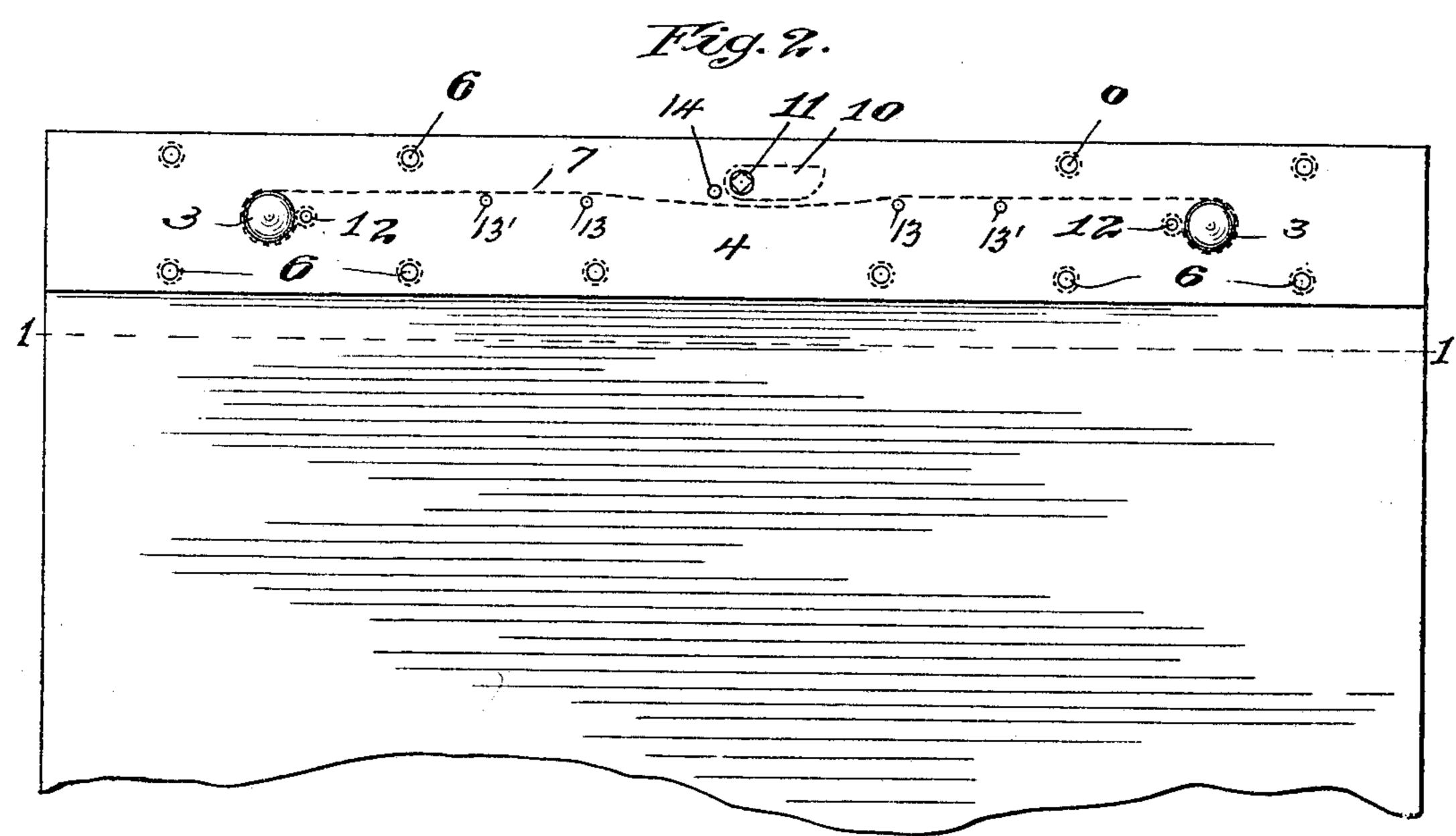
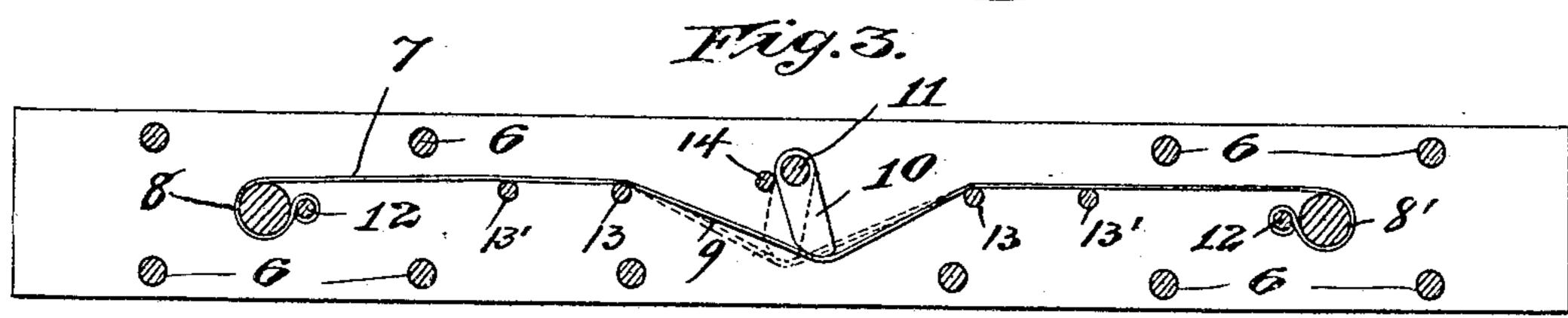
T. R. EDDY. TRANSFER BINDER.

APPLICATION FILED JAN, 19, 1903.







Witnesses,
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Attifs.

United States Patent Office.

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TRANSFER-BINDER.

SPECIFICATION forming part of Letters Patent No. 775,104, dated November 15, 1904.

Application filed January 19, 1903. Serial No. 139,584. (No model.)

To all whom it may concern:

Be it known that I, Thomas R. Eddy, a resident of Chicago, Cook county, Illinois, have invented certain new and useful Improvements 5 in Transfer-Binders, of which the following is a specification.

This invention relates to improvements in transfer or temporary binders of that type in which a pair of binding-strips or cover mem-10 bers are united by means of posts which extend through the sheets contained between the cover members, the invention relating more particularly to mechanism for adjustably locking one cover member upon said posts and 15 relatively to the opposite cover member.

The salient objects of the invention are to provide a construction which is capable of locking the two members together at any exact position of adjustment required, to pro-20 vide a construction which operates to lock the movable member upon both posts of the coöperating member simultaneously and likewise to release the same simultaneously, to provide a construction in which the locking 25 is accomplished by bringing tension upon a flexible strap in such manner as to clamp the two ends of the straps to the respective posts, to provide a construction in which the locking mechanism is of the simplest form and re-30 duced to a minimum number of parts, and in general to provide an improved mechanism of the character referred to.

To the above ends the invention consists in the matters hereinafter described, and more 35 particularly pointed out in the appended claims, and the invention will be readily understood from the following description, reference being had to the accompanying drawings, forming a part thereof, and in which—

Figure 1 is an edge elevation of the two binding-posts connecting the same. Fig. 2 is a top plan view of the parts shown in Fig. 1, the locking mechanism being shown in un-45 locked position in dotted lines. Fig. 3 is a sectional view taken on line 3 3 of Fig. 1 and looking downwardly, showing the lock-

ing mechanism in the position assumed when locked.

In the drawings the skeleton frame only of 50 a temporary binder is shown, which frame comprises the two back strips or clamping members 1 and 2 and the posts 3 whereby the back strips are adjustably connected and upon which the sheets to be bound are impaled. 55 Usually the back strips 1 and 2 are inclosed in a leather binding and united with coverleaves by means of a flexible leather connection in a well-understood manner; but sometimes the binder is used without covering or 60 cover-leaves.

The back strip 2 may be of any suitable rigid construction adapted to rigidly support the pair of posts 3. In the present instance the base-sections 3' of said posts are shown as 65 permanently united with the back strip 2, while the remaining portions of each post are composed of a plurality of separable sections 3", such construction being also common. The posts 3 are of uniform diameter through- 7° out the principal parts of their length.

The back strip 1 comprises a pair of platelike strips 4 and 5, secured together in parallel relation and at a short distance apart by means of a plurality of space-stude 6. Plates 75 4 and 5 are provided with registering apertures suitably spaced to fit upon the posts 3.

7 designates a locking-strip, which in the preferred embodiment consists of a strip of watch-spring or analogous spring metal and 80 is arranged edgewise between the plates 4 and 5. The two end portions 8 and 8' of the strip 7 are arranged to partially encircle the binding-posts 3, while its intermediate portion 9 extends between the posts and adjacent to a 85 locking-cam 10, rigidly mounted upon a rotatable stub shaft or shank 11, which has bearback strips of a temporary binder and the lings at its upper and lower ends in the plates 4 and 5, respectively. The upper end of the shank 11 protrudes through and above the 9° upper plate 4 and is squared or otherwise suitably formed, as indicated at 11', to receive the end of a key whereby it may be positively rotated. The relative arrangement of said

parts is such that when the cam is rotated it operates to flex the locking-strip 9 at a point between its ends, so as to shorten said lockingstrip, and thus cause the ends 8 and 8' thereof, 5 which encircle the posts, to come into clamping engagement with said posts. In the preferred embodiment illustrated the extreme ends of the locking-strip are engaged with fixed studs 12, located adjacent to the proxi-10 mate sides of the binding-posts 3, and the strip extends thence around the respective posts and in a practically direct line between the latter when in its unlocked position. At that side of the locking-strip remote from the 15 cam 10 and at some distance on each side from the latter the locking-strip is supported by means of studs 13 and 13', so that when the strip is flexed the angle of flexure is confined to the relatively short space between the two 20 studs 13 nearest the locking-cam.

The connecting end of the cam 10 is suitably rounded so as to readily slip upon the locking-strip after it has passed into engagement with the latter, and in order to limit 25 the extent of rotation of the cam in one direction a stop-stud 14 is provided, which is so disposed as to arrest the cam in a position in which the tension of the spring will tend to hold the cam in bearing with the stud, as in-3° dicated clearly in dotted lines in Fig. 3. This arrangement overcomes all tendency of the mechanism to become unlocked accidentally, because the resilience of the locking-strip will at all times tend to retain the cam in locking

35 position.

I preferably employ a locking-strip of such character and thickness that it possesses considerable stiffness, so that the turns 8 and 8', which encircle the posts, tend to expand. The 4° result is that the back strip 1 as a whole is very firmly locked to the binding-posts, although it is probable that even in a fulllocked position the encircling portions 8 and 8' of the locking-strip do not absolutely con-45 form to the exteriors of the posts. In any event it is found in practice that after the locking-strip has been flexed sufficiently to clamp the posts very firmly there is still ample resiliency or elasticity in the mechanism as a 5° whole to permit the locking-cam 10 to be carried slightly beyond the dead-center position and into the position shown in dotted lines in Fig. 3. This characteristic is also of importance, since it insures a reliable locking action 55 notwithstanding the posts may be slightly irregular either as to size or shape. It will be obvious that the back strip 1 may be locked upon the posts in any exact position of adjustment so as to hold firmly any number of 60 interposed leaves.

While I have herein shown and described what I deem to be a preferred embodiment of the invention, yet it will be obvious that the details thereof may be modified without de-65 parting from the invention. I do not, there-

fore, limit myself to the exact details shown, except to the extent that they are made the subject of specific claims.

I claim as my invention—

1. In a temporary binder, the combination 70 of a back strip provided with a post, and a second back strip apertured to fit upon said post, and means for adjustably locking said parts together, comprising a strip of resilient metal mounted upon said apertured member and 75 having a part arranged to extend around the post-aperture therethrough, means holding said strip, means to draw it into forcible contact with the post, and means for holding said drawing mechanism in a position to exert ten- 80 sion upon said post.

2. In a temporary binder, the combination of a back strip provided with a post, a second back strip apertured to fit upon said post and comprising a pair of plate-like members 85 spaced apart and rigidly united, and means for adjustably locking said apertured member to said post comprising a resilient metal strip mounted between the two plates of the apertured member, and having a part arranged 90 to encircle the post-aperture therethrough; means holding the ends of the strip, and means for flexing the strip at a point between the held ends, for the purpose set forth.

3. In a temporary binder, the combination 95 of a back strip provided with a pair of parallel posts, a second back strip apertured to fit upon said posts, and consisting of a pair of parallel plate members spaced apart and rigidly united, a ribbon-like strip of metal in- 100 terposed edgewise between said plate members and having its ends arranged to extend around the post-apertures and secured to fixed supports and its intermediate portion arranged to extend between said post-apertures, 105 a tensioning-cam movably mounted adjacent to said intermediate portion of the lockingstrip and adapted to be shifted to flex said strip, and means for operating said cam.

4. In a temporary binder, the combination 110 of a post supporting member provided with a pair of parallel posts, a second member apertured to fit upon said posts and comprising a pair of parallel plates spaced apart and rigidly united, and means for adjustably locking 115 said apertured member to the posts comprising a resilient metal strip interposed edgewise between the plates of said apertured member, having its end portions arranged to extend around the post-apertures therein and secured 120 to fixed supports, and its intermediate portion arranged to extend between the posts and longitudinally of the member, a locking-cam journaled to rotate between said plates and in position to engage and flex said intermediate 125 portion of the locking-strip, and strip-supports located at each side of, and at a distance from the locking-cam, substantially as described.

5. In a temporary binder, the combination 13°

of a post supporting member provided with a pair of parallel posts, a second member apertured to fit upon said posts and comprising a pair of parallel plates spaced apart and rigidly united, and means for adjustably locking said apertured member to the posts comprising a resilient metal strip interposed edgewise between the plates of said apertured member, having its end portions arranged to extend around the post-apertures therein and secured to fixed supports, and its intermediate portion arranged to extend between the posts and longitudinally of the member, a locking-cam journaled to rotate between said plates and in

position to engage and flex said intermediate 15 portion of the locking-strip, and strip-supports located at each side of, and at a distance from the locking-cam, and a cam-stop arranged in the path of said locking-cam and in position to arrest the latter at a point 20. slightly beyond the dead - center position relatively to the thrust of the locking-strip thereon.

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Witnesses:

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