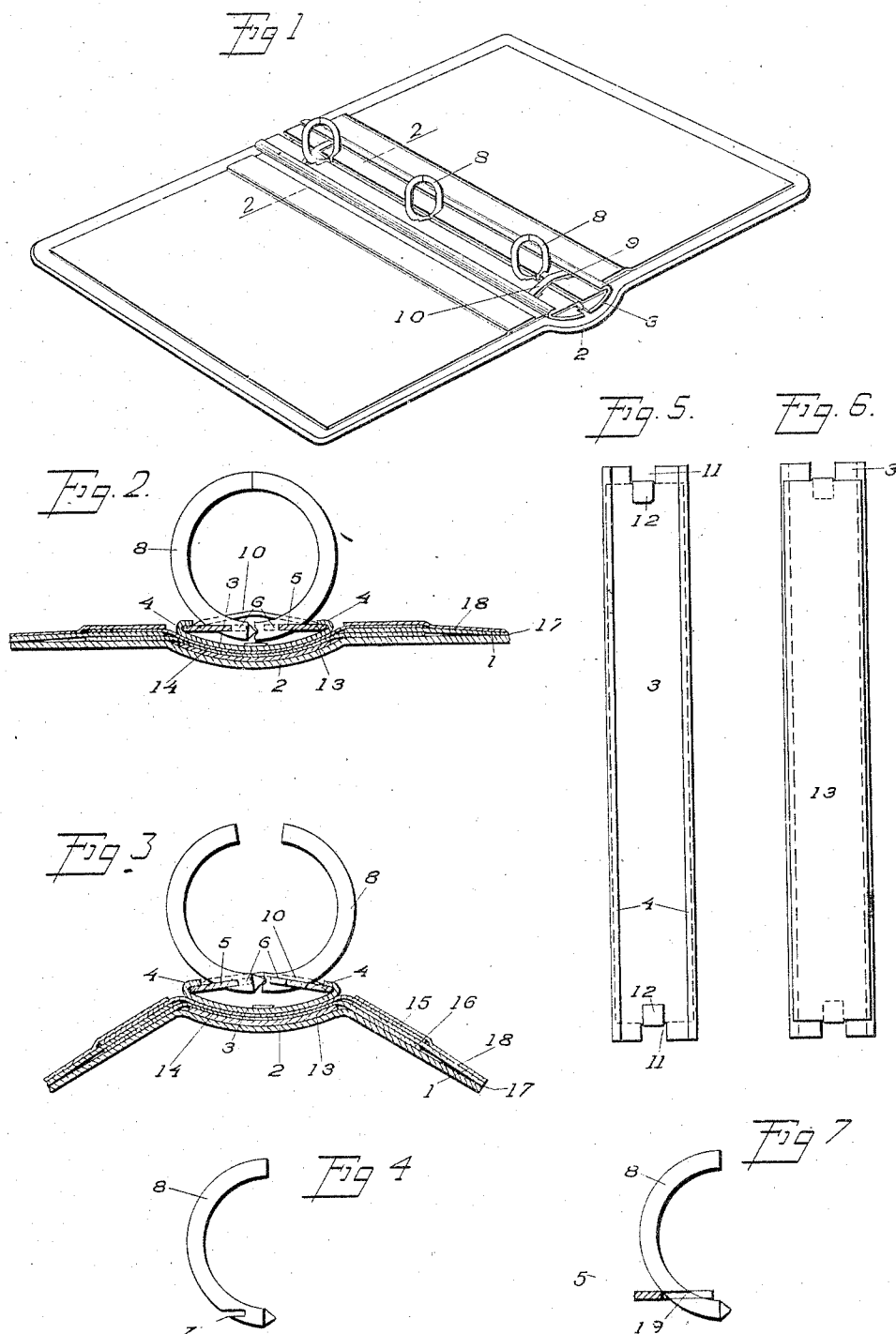


C. D. TRUSSELL.  
 TEMPORARY BINDER.  
 APPLICATION FILED JAN. 20, 1908.

959,182.

Patented May 24, 1910.



Witnesses.  
 Albert M. Galt  
 Hugh F. McQuade

Inventor  
 Clarence D. Trussell  
 By his Attorney  
 Joseph A. Stetson

# UNITED STATES PATENT OFFICE.

CLARENCE D. TRUSSELL, OF NEW YORK, N. Y., ASSIGNOR TO TRUSSELL MANUFACTURING COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## TEMPORARY BINDER.

959,182.

Specification of Letters Patent.

Patented May 24, 1910.

Application filed January 20, 1908. Serial No. 411,655.

To all whom it may concern:

Be it known that I, CLARENCE D. TRUSSELL, a citizen of the United States, residing in the borough of Manhattan, New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Temporary Binders, of which the following is a specification.

My invention relates to temporary binders for blank books, account and memorandum books, and the like, in which the leaves may be inserted or removed at will.

The object of my invention is to provide a temporary binder of inexpensive, simple and strong construction which may be readily opened for the withdrawal or insertion of leaves and readily closed for the retention of the leaves.

Figure 1 of the drawings is a perspective view of my temporary binder, the covers being open and the sheet-holding prongs being closed but no leaves being shown. Fig. 2 is a sectional view on the line 2-2 of Fig. 1. Fig. 3 is a view similar to Fig. 2, the sheet-holding prongs being shown in open position. Fig. 4 is a detail side view of a sheet-holding prong. Fig. 5 is a detail plan view of the spring plate and binding plate. Fig. 6 is a bottom view of the same. Fig. 7 is a detail side view illustrating a modified method of securing a sheet holding prong to its carrying plate.

Referring to the drawings, 1 represents the covers of my temporary binder having the back 2. Lying inside the back 2 is the curved spring plate 3 provided with the inturned, longitudinal edges or flanges 4 adapted to engage the outer edges of the right and left metallic prong-carrying plates 5, provided with notches 6 adapted to be engaged by and fitted within notches 7 in the sheet-holding prongs 8. In the outer edges of the prong-carrying plates 5 adjacent to the two outer pairs of sheet-holding prongs, are notches 9 (Fig. 1) adapted to receive the outer ends of metallic stop-pieces 10. At each end of spring-plate 3 are notches 11 adapted to be engaged by ears 12 at the ends of the binding plate 13. The double binding strip 14 is held firmly between the binding plate 13 and spring-plate 3, as best illustrated in Figs. 2 and 3. Where the double binding strip 14 extends into the covers, its two layers 15 and 16

part to receive the stiffening board 17 of the covers, upon each of which is secured, preferably by paste, the inner finishing layer 18.

Fig. 7 illustrates a modified method of securing the sheet-holding prongs 8 to the prong-carrying plates 5. The prongs 8 in the modification have two opposite side notches or slits 19 and into these fit the sides of the notches 6 in the prong-carrying plates 5.

The sheet-holding prongs 8 are adapted to engage holes punched in the removable leaves (not shown) of the binder and retain them bound when the sheet-holding prongs are in the position illustrated in Fig. 1 and Fig. 2. The lower joint between the sheet-holding prongs is then below the line of engagement between the spring-plate 3 and the prong-carrying plates 5 so that the resiliency of spring-plate 3 retains the prongs in closed position. When, however, one set of prongs is pulled into open position illustrated in Fig. 3, the joint between the prongs rises, as illustrated, to a point above the line of meeting between the prong-carrying plates 5 and spring-plate 3 so that in this position the resiliency of spring-plate 3 holds the prongs open. The stop-pieces 10 are slightly curved, as indicated, so as to allow the upward movement of prong-carrying plates 5 but to stop effectively said upward movement, as illustrated in Fig. 3. The notch engagement between the prongs 8 and the prong-carrying plates 5 hold the same together with great rigidity in substantially integral engagement so that the opening or closing of one pair of prongs is communicated transversely across the binder to all the other pairs of prongs. The notch engagement of the prongs with their carrying plates dispenses with solder, which is objectionable for several reasons. The notches may be formed accurately and cheaply and the parts readily assembled so as to lessen the cost of manufacture. The notches 9 in prong-carrying plates 5, which receive the outer ends of the metallic stops 10, retain said stops from sidewise movement. The binding-strip 14 is held firmly upon spring-plate 3 by the engagement of ears 12, as best illustrated in Figs. 1, 5 and 6. The employment of the double binding strip 14, which on each side extends into the covers, gives additional strength and pliability to the binding, inasmuch as the two

layers 15 and 16 of said binding strip separate to receive between them the stiffening board 17. The modified form of engagement between the prongs and prong-carrying plates, illustrated in Fig. 7, also secures the same together substantially as effectively as if they were integral. In either structure the prongs and their carrying plates can be moved in relation to each other or separated only by pulling the prongs inward or the plates outward. When the binder is assembled this is impossible. The fit between the notches of the prongs and the notches of the carrying-plates should be very close and tight.

What I claim as new and desire to secure by Letters Patent is:

1. In a temporary binder, a spring plate, oppositely arranged prong-carrying plates engaging said spring-plate but not engaging each other, mating prongs rigidly mounted by notched engagement on the prong-carrying plates having, when closed, their joints below the lines of contact between the prong-carrying plates and the spring-plate and, when open, having their joints above said lines, and a stop device to limit the opening movement of the prongs by contact with the prong-carrying plates.
2. In a temporary binder, a main plate extending lengthwise of the binder, a pair of covers each comprised of a plurality of layers, a double binding strip adjacent to the main plate having extensions which are secured on each side of one of the layers in each cover, and means to secure said binding strip in position upon the main plate.
3. In a temporary binder, a spring plate, oppositely arranged prong-carrying plates engaged by said spring-plate, mating prongs, and a stop device seated above the prong-carrying plates and held from sidewise movement by notches in said prong-carrying plates.
4. In a temporary binder, a spring plate,

prong-carrying plates engaged by said spring-plate, but not engaging each other, mating prongs upon the prong-carrying plates having their joints below the level of said plates, and a narrow stop device seated above the prong-carrying plates and held by engagement therewith from sidewise movement.

5. In a temporary binder, a spring plate, prong-carrying plates, mating prongs, and a narrow metallic strip engaging notches in the prong-carrying plates so as to have no sidewise movement and so as to limit the opening of the prongs.

6. In a temporary binder, a spring-plate, a binding plate engaging said spring-plate, a stiffening board in each cover, and a double binding strip held between the spring-plate and the binding-plate, having extensions which are secured on each side of said stiffening boards.

7. In a temporary binder, mating prongs having oppositely arranged notches near their joints, and prong-carrying plates having notches adapted to be tightly engaged with the notches in the mating prongs so that said prongs and said plates will move as if made in one piece.

8. In a temporary binder, mating prongs, each prong having near the prong joint an outwardly extending notch to fit tightly the thickness of its carrying-plate, and prong-carrying plates having inwardly extending notches to fit tightly the size of the prongs and effect a tight engagement between said prongs and said carrying-plates so that they will move together as if integral.

Signed at New York city in the county of New York and State of New York this 6th day of January A. D. 1908.

CLARENCE D. TRUSSELL.

Witnesses:

GEORGE X. HILKERSON,  
MINNIE KAUFFMAN.