

No. 759,410.

PATENTED MAY 10, 1904.

W. C. VANDEN BERG.
TEMPORARY BINDER.

APPLICATION FILED AUG. 10, 1903.

NO MODEL.

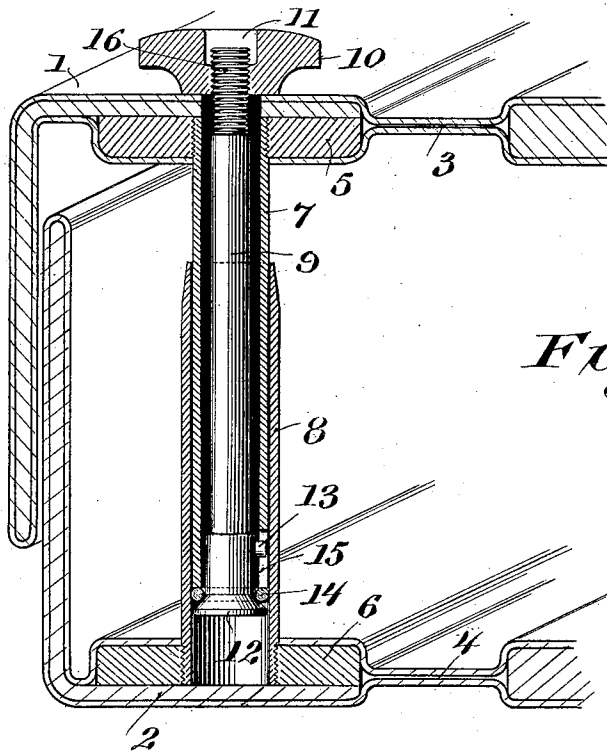


Fig. 1.

Fig. 2.

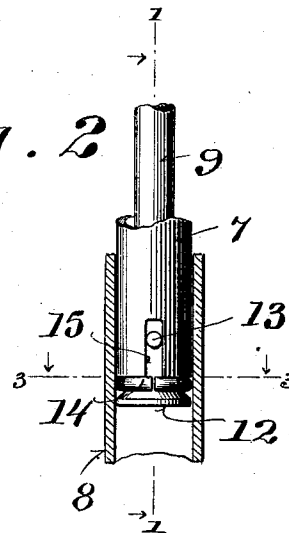


Fig. 4.

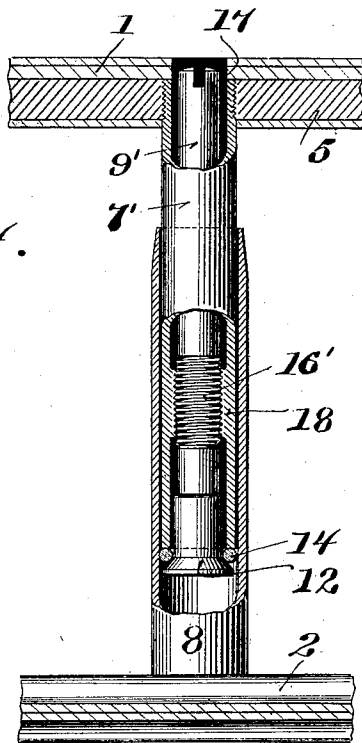
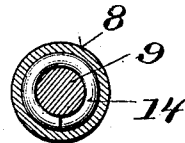


Fig. 3.



Witnesses:
Geo. W. Young.
E. W. Heller.

Inventor:
William C. Vanden Berg
By H. G. Underwood
Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM C. VANDEN BERG, OF MILWAUKEE, WISCONSIN.

TEMPORARY BINDER.

SPECIFICATION forming part of Letters Patent No. 759,410, dated May 10, 1904.

Application filed August 10, 1903. Serial No. 168,856. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. VANDEN BERG, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Temporary Binders; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to that class of temporary binders usually employed with that style of blank-books known as "loose-leaf" ledgers, although not confined thereto; and it consists in certain peculiarities of construction and combination of parts, as will be fully set forth hereinafter in connection with the accompanying drawings and subsequently claimed.

In the said drawings, Figure 1 is a partly sectional view illustrating one form of my said invention, the section being taken on the plane indicated by the line 1 1 in Fig. 2 and enough of the covers of a temporary binder being shown to indicate the use of my device. Fig. 2 is a detail partly sectional view of parts of my said invention. Fig. 3 is a detail sectional view taken on the plane indicated by the line 3 3 of Fig. 2. Fig. 4 is a partly sectional view illustrating another form of my said invention.

Referring by numerals to the form of my said device illustrated in the first three figures of the drawings, 1 and 2 indicate, respectively, the upper and lower covers of the binder or ledger, which covers are shown as having flexible reduced portions (marked 3 and 4, respectively) to facilitate opening of the same, between which and the back of the binder or ledger are transversely-arranged metal strips 5 6, formed with screw-threaded bores therethrough for the reception, respectively, of the upper exteriorly-screw-threaded end of the upper hollow post 7 and the lower and similarly-screw-threaded end of the lower hollow post 8, herein shown as of greater diameter than the upper post, so as to receive the same. The described metal strips 5 6 are covered by the flexible covering of the covers 1 and 2, the opposed inner surfaces of said covering being of course provided with holes in lines with those in the said strips 5 6.

Within the upper or inner post 7 is located the rod 9, and in the form shown in Fig. 1 the upper end of this rod is screw-threaded, as shown at 16, for engagement with the exterior nut 10, said nut being shown with a screw-threaded central bore for this purpose, above which the bore is enlarged with smooth walls and extends entirely through the upper part of said nut, as shown at 11. The lower end of the rod 9 is of increased diameter and conical or tapered, as shown at 12, and is provided with a laterally-projecting pin 13 to keep the rod 9 from rotating, below which pin and resting on the said tapered portion is a loose split ring 14. The lower end of the post 7 is formed with an opening or slot 15 therethrough for the reception of the said pin 13.

The form of my device shown in Fig. 4 is generally the same as that just described, except that in this form the described upper nut 10 is dispensed with and the inner rod (herein marked 9' to distinguish the same from the rod 9 just named) is shown with its threaded portion (herein marked 16') as located lower down on said rod instead of at the top thereof, as in the form shown in Fig. 1, and in the form shown in Fig. 4 the said rod 9' does not project up through the upper cover 1; but the upper end of said rod is below the same and provided with a transverse slot 17 to afford a means for turning said rod, as with a screw-driver or other device inserted in said slot, and the upper or inner hollow post (herein marked 7' to distinguish the same from the post 7 shown in Fig. 1) is formed with interior screw-threads, as shown at 18, for engagement with the exterior screw-threads 16' on the rod 9', besides which, as in this form the rotation of the rod 9' is necessary, the pin 13 and slot 15 are omitted. The mechanical details of the two forms of my invention shown are otherwise, as stated, the same, and the like parts of each are similarly numbered; but I do not limit myself to these various details beyond what is claimed by me, as same may be varied in many minor ways and be still within the scope of my invention.

The operation of my invention will be readily understood from the foregoing description, taken in connection with the accompanying

drawings. The separate leaves or other sheets to be bound being slipped on the posts (of which as many are used as are desired) and the telescoping hollow posts pushed together 5 to the required degree, all in the manner well known in the use of loose-leaf ledgers and other temporary binders, the rod 9 (or 9') is screwed upward, so that the conical or tapered end 12 of the inner post 7 (or 7') is 10 drawn up within the split ring 14, and this action serves to open and spread the split ring until it is tightly held between the inner wall of the outer hollow post 8 and the conical end 12 of the rod 9, (or 9'), the free end of the 15 inner hollow post 7 (or 7') serving as a stop to prevent upward movement of the ring 14, thus securely binding the two telescoping posts together and preventing their separation until the rod 9 (or 9') is forced down- 20 ward and the ring 14 released from its described binding contact.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

In a temporary binder or analogous securing device, the combination with a pair of hollow posts, one telescoping within the other, of a rod projecting through and beyond the free end of the inner hollow post and terminating in an enlarged conical or tapered end, and a 30 split ring loose on said end beyond the end of said inner post, and adapted to be spread by the inward movement of said rod end, and held between said conical or tapered end and the inner wall of the outer hollow post, thereby 35 binding the said hollow posts together.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

WILLIAM C. VANDEN BERG.

Witnesses:

H. G. UNDERWOOD,
E. W. HELLER.