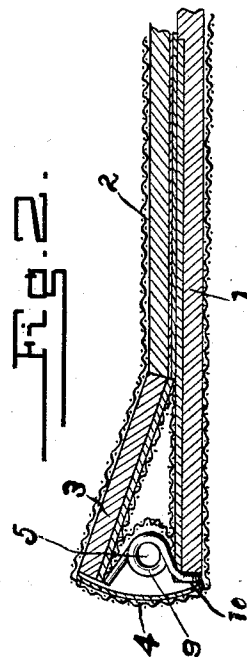
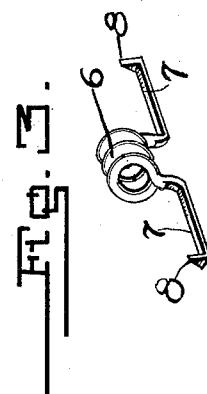
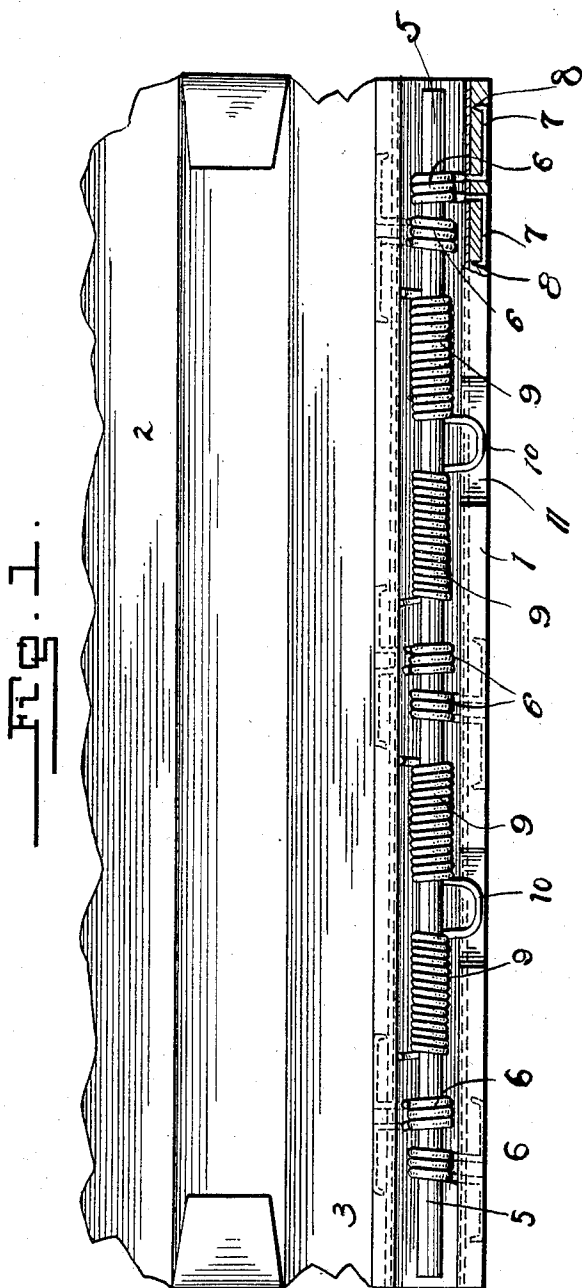


F. WOLFF.  
 TEMPORARY BINDER.  
 APPLICATION FILED JULY 18, 1910.

976,421.

Patented Nov. 22, 1910.



Friedrich Wolff, <sup>Inventor</sup>

Witnesses

Everett Lancaster  
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 his Attorney,

# UNITED STATES PATENT OFFICE.

FRIEDRICH WOLFF, OF PITTSBURG, PENNSYLVANIA.

## TEMPORARY BINDER.

976,421.

Specification of Letters Patent. Patented Nov. 22, 1910.

Application filed July 18, 1910. Serial No. 572,608.

*To all whom it may concern:*

Be it known that I, FRIEDRICH WOLFF, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Temporary Binders, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to temporary binders for use in retaining loose sheets in book form, and the principal object of the same is to provide the binder in the form of book covers which have a novel spring connection the tension of which is constantly exerted to clamp the loose sheets between the covers.

In carrying out the objects of the invention generally stated above it will be understood, of course, that the essential features thereof are necessarily susceptible of changes in details and structural arrangements, one preferred and practical embodiment of which is shown in the accompanying drawings, wherein:—

Figure 1 is a fragmentary end view of the binder, the binding cloth being removed and one of the covers being broken away, to show the spring connection. Fig. 2 is a fragmentary longitudinal sectional view. Fig. 3 is a detail perspective view of one of the springs employed.

Referring to the accompanying drawings by numerals, it will be seen that the improved binder comprises a base cover 1, an upper cover 2 that has a flexibly connected rear section 3 that is connected to the rear edge of the cover 1 by the usual flexible back 4. A supporting rod 5 is located between the rear ends of cover 1 and section 3, said rod being supported by the convolutions of a plurality of spiral springs 6, the ends 7 of which are flattened and project in opposite directions and terminate in angular penetrating points 8. Six of said springs have been shown in the accompanying drawings, two adjacent each end of rod 5 and two at the center thereof, but it is to be understood that more or less may be used as desired. The springs are arranged in pairs, one member of one pair have the flattened end por-

tions embedded in cover 1 and the other member has the flattened end portions embedded in cover 2. This arrangement of springs and bars provides simple means for hinging the cover 1 to the section 3.

The cover 1 and section 3 are normally held in clamping relation by spiral springs each of which is provided with two convolute body sections 9. Said springs are formed of a single length of material shaped to provide the said body sections and the central tongue 10 that separates said sections and which tongues enter the recesses 11 of the body sections in the rear edge of the cover 1. The ends of said springs bear against the rear portion of the under-surface of section 3, so that said springs are constantly exerting a pressure that rocks the forward edge of section 3 into clamping engagement with cover 1, by means of which it will be clear that leaves can be rigidly, but removably clamped between said sections and cover. Preferably two of the clamping springs are employed, one being arranged on each side of the center of the hinge connection between the cover and the section.

What I claim as my invention is:—

1. A temporary binder comprising an upper and a lower cover, hinge members carried thereby, said members having a spiral body and penetrating ends, a bar supported by the spiral bodies of said members, and means carried by said bar for normally retaining said covers in clamping relation.

2. A temporary binder comprising an upper cover and a lower cover, one of said covers provided with recesses, spiral hinge members carried by said covers and having cover penetrating ends, a bar carried by said members, and spiral springs carried by said bar and provided with central tongues that engage said recesses and free ends that engage the other cover.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

FRIEDRICH WOLFF.

Witnesses:

WOLD WEFING,  
GEORGE BRUNING.