

No. 617,758.

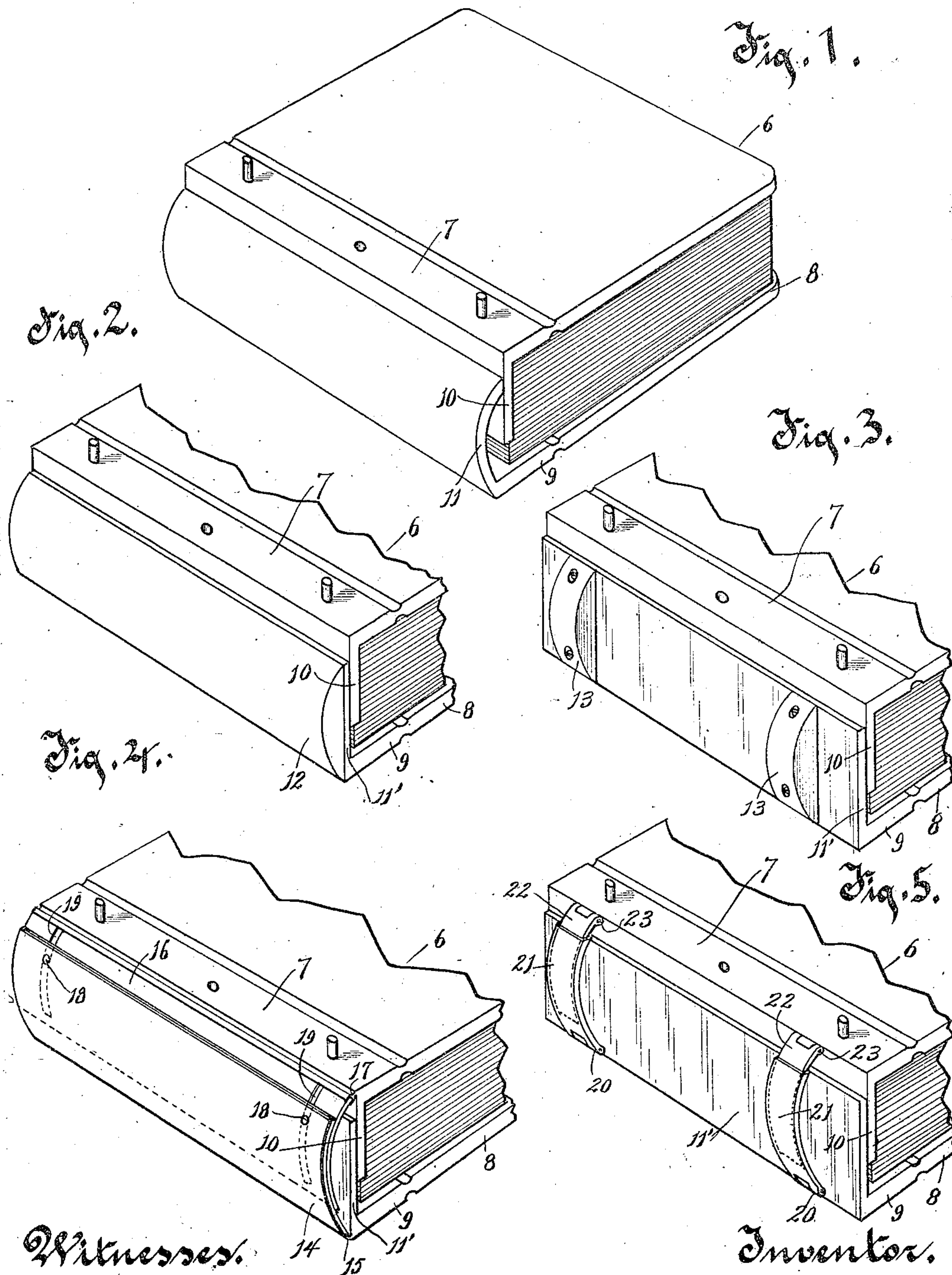
Patented Jan. 17, 1899.

H. C. MILLER.

BACK FOR TEMPORARY BINDERS.

(Application filed May 28, 1898.)

(No Model.)



Witnesses: 14
C. H. Keeney
Anna V. Faust.

Inventor.
Henry C. Miller.
By Benedict & Morsell.
Attorneys.

UNITED STATES PATENT OFFICE.

HENRY C. MILLER, OF MILWAUKEE, WISCONSIN.

BACK FOR TEMPORARY BINDERS.

SPECIFICATION forming part of Letters Patent No. 617,758, dated January 17, 1899.

Application filed May 23, 1898. Serial No. 682,000. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. MILLER, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and
5 useful Improvement in Backs for Temporary Binders, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

10 My invention has relation to improvements in backs for temporary binders or other books having movable cover-sections.

The object of the invention is to provide, in a temporary binder or other book having
15 movable cover-sections, an improved construction of rounded back, whereby the book when opened is adapted to be readily turned on said rounded back to thereby permit the leaves to be turned so as to lie flat or in a substantially horizontal plane in order to facilitate writing thereon.

20 With the above primary object in view the invention consists of the devices and parts or their equivalents, as hereinafter more fully set forth.

25 In the accompanying drawings, Figure 1 is a perspective view of a binder, showing one form of my invention; and Figs. 2, 3, 4, and 5 are similar views of fragments of temporary binders, showing, respectively, different modifications of the invention.

30 Throughout all the figures of the drawings the numeral 6 indicates one of the cover-sections, provided with a rear binding-piece 7, forming a part thereof, and the numeral 8 the other cover-section, provided with a rear binding-piece 9, forming a part thereof.

In each figure of the drawings also the rear binding-piece 7 is shown as provided at its
40 rear edge with a projecting flange 10 at right angles thereto and the binding-piece 9 with a similar flange, the said flanges overlapping and capable of sliding one within the other. The flange of the binding-piece 9 (shown in
45 Fig. 1) is indicated by the numeral 11, and the corresponding flange in all the other figures of the drawings by the numeral 11'.

50 While I have shown and specifically described the flanges 10, 11, or 11', yet I do not wish to be understood as limiting myself

thereto, inasmuch as it is possible in one of the forms shown to omit one of said flanges, while in the other forms one flange may be omitted, or both flanges, as desired.

It will be understood that in the manufacture of the most common form of temporary
55 binders the binding-pieces 7 and 9 are formed of strips of metal covered by suitable material, such as leather, and the flanges 10, 11, or 11' may be formed of the same strips of metal,
60 the flanges being produced by bending said metal at right angles, the flanges so produced being ordinarily also covered with suitable material, such as leather. These metallic
65 strips, however, I have not deemed necessary to show herein, as they are well known in this art. Besides it is not my intention to limit myself to the use of such metallic strips. I therefore merely make mention of the same
70 herein in order to render clear the fact that I prefer to use such strips in the manufacture of the binders.

In the form of construction shown in Fig. 1 the outer flange 11 is of rounded contour and is shown as a continuation of the binding-
75 strip 9. The flange 11 itself therefore in this instance makes the rounded contour of the back. In all the other figures of the drawings the corresponding flange 11' is devoid of this rounded contour, and said rounded contour
80 is formed on other parts.

Referring to Fig. 2, 12 indicates a strip or block having an inner flat side and a rounded outer side. The inner flat side is secured
85 to the face of the flange 11' in any desirable manner—as, for instance, it may be glued thereto or attached by screws or equivalents. By thus providing a separate strip or block
12 an advantage is secured, inasmuch as
90 when said part becomes worn it may be readily removed and another similar block substituted therefor.

In the form illustrated in Fig. 3 instead of employing a single continuous block similar
95 to 12, applied to the outer flange 11', I show as secured to said flange separate small blocks 13 13, having rounded outer sides and inner flat faces, which faces fit against the flange 11'. These blocks may also be removable, so that
100 in case of wear others may be substituted

therefor. I show them secured in place by means of screws.

In the form shown in Figs. 1, 2, and 3 it will be evident that after a certain quantity of leaves is inserted between the cover-sections the upper cover-section 6 will have been raised such a distance that the entire space at the back between the cover-sections is not intersected by the round back piece or pieces.

In Figs. 4 and 5 I show forms of construction wherein the rounded contour is preserved, no matter to what extent the cover-sections may be spread apart by the insertion of the additional leaves. The rounded contour is thereby not only preserved, but the appearance also enhanced.

Referring particularly to Fig. 4, the numeral 14 indicates a supplemental rounded strip, which is shown as hinged at 15 to the lower edge of the flange 11', said hinge being constructed in any desirable manner, but preferably formed by means of the leather or other covering used in the binder. A similar curved strip 16 is hinged at 17 to the upper edge of the flange 10. This hinge is also shown as formed by the leather or other covering of the binder. The curved strip 16 fits against the inner side of the strip 14. By this construction it will be obvious that as the cover-sections are adjusted farther apart or closer together by the insertion or removal of leaves, as the case may be, the curved hinged strips or back-sections will automatically conform to the adjustment, owing to the free turning thereof on their hinges, and thereby preserve the rounded contour. I provide one of the sections—say section 14—with inwardly-extending pins 18 18, which fit in elongated slots 19 19 in the other back-section, the inner ends of the pins being provided with heads (not shown) which bear against the inner side of the curved back-section 16, thereby preventing the two back-sections from separating.

In the form shown in Fig. 5 the flange 11' has hinged to its lower edge by ordinary hinge-joint connections 20 20 the rounded or curved tubular arms 21 21. Into these tubular arms pass other arms 22 22, which are connected to the flange 10 by means of ordinary hinge-joint connections 23 23. It is obvious that the parts can be reversed without departing from my invention—that is to say, the tubular arms 21 may be connected to the flange 10 and the arms 22 to the flange 11'. It is evident that this construction will effect the same function as the construction shown in Fig. 4, the telescoping arms 21 and 22 turning upon their hinges, so as to conform to the increased or decreased thickness of the book, and the telescoping feature preventing the arms from separating.

As above stated, in one of the forms of construction shown only one of the flanges 10 or 11 is absolutely necessary, while in all the

other forms only one of said flanges may be employed, or both may be omitted. For instance, in the Fig. 1 form the flange 10 could be entirely omitted, and also, if desired, the flange 11 instead of extending from the binding-strip 9 could extend from the binding-strip 7. In Fig. 2 also either one of the flanges 10 or 11' could be omitted and the block 12 secured to the single remaining flange, or, again, in said Fig. 2 form both flanges could be omitted and the block 12 secured directly to the rear edge of either of the binding-strips 7 or 9. The same is true in regard to the Fig. 3 form—that is to say, the blocks 13 13 could be secured to one of the flanges 10 or 11' and the other flange omitted, or both flanges could be omitted and the blocks secured to the rear edge of either of the binding-strips 7 or 9.

In the constructions shown in Figs. 4 and 5 it is obvious that one or both flanges could also be omitted. In case both flanges are omitted the hinged arms, respectively, would then be secured to the rear edges of the binding-strips 7 and 9.

From the foregoing description it is thought that the advantages of my invention will be readily understood. It will be apparent that in a temporary binder or other book having movable cover-sections it is desirable when entries are made therein that the leaves may be turned so as to lie flat, in order to enable entries to be readily made. The several constructions illustrated in the accompanying drawings render it possible to accomplish this object in a simple manner, and at the same time a much neater construction is provided than where a perfectly flat back is employed.

What I claim as my invention is—

1. In a back for a binder, or other book, the combination, with movable cover-sections, of curved overlapping back-sections, the convexity of the curves being outermost, and said back-sections hinged, respectively, to the cover-sections and slidably fitted together, whereby as the cover-sections are moved closer together or farther apart, a continuous rounded contour of the back is preserved.

2. In a back for a binder, or other book, the combination, of movable cover-sections, curved overlapping back-sections, the convexity of the curves being outermost, and said back-sections hinged, respectively, to the cover-sections and slidably fitted together, whereby, as the cover-sections are moved closer together or farther apart, a continuous rounded contour to the back is preserved, and means for preventing the separation of the back-sections.

3. In a back for a binder, or other book, the combination, with movable cover-sections, of curved overlapping back-sections, the convexity of the curves being outermost, and said back-sections hinged, respectively, to the cover-sections, and slidably fitted to-

gether, whereby as the cover-sections are moved closer together or farther apart a continuous rounded contour to the back is preserved, one of said back-sections provided
5 with a projecting pin or pins, and the other back-section with a slot or slots to receive the pin or pins.

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

HENRY C. MILLER.

Witnesses:

A. L. MORSELL,
ANNA V. FAUST.