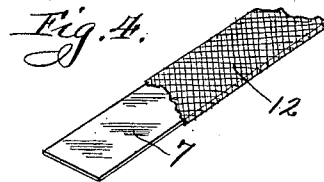
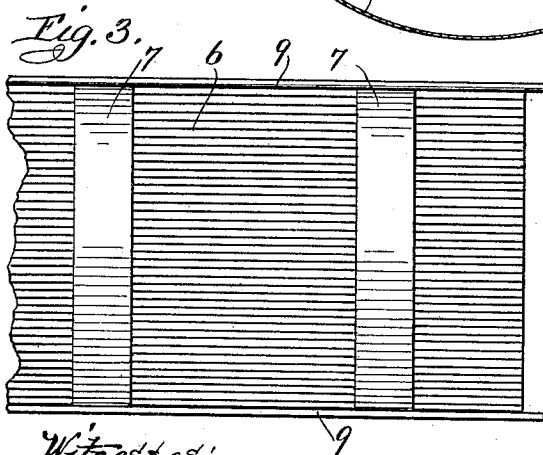
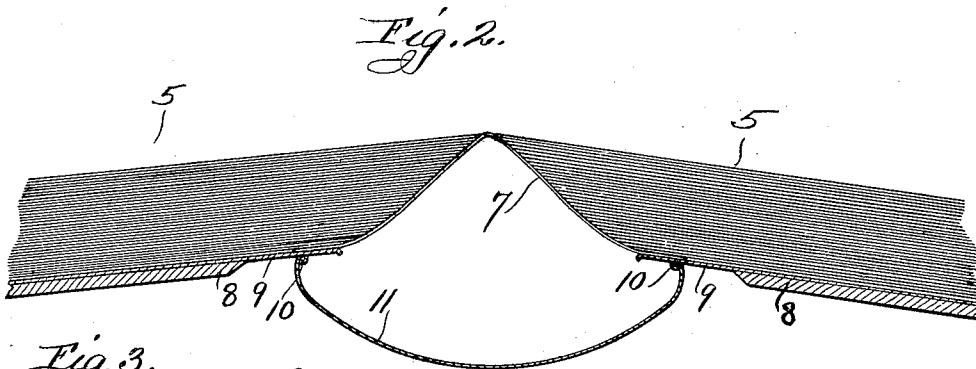
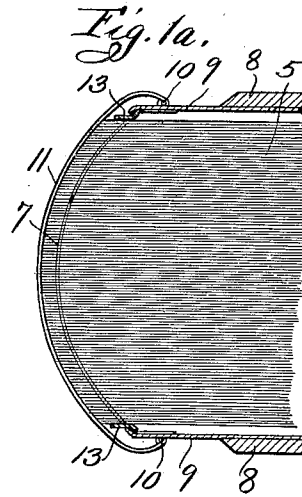
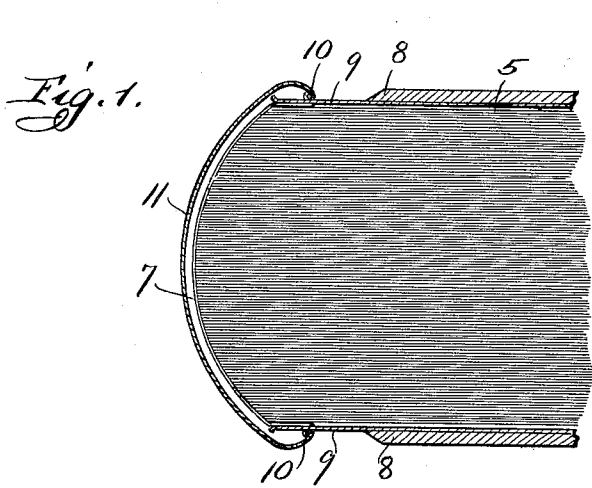


W. S. PROUDFIT, JR.
BOOKBINDING.
APPLICATION FILED JUNE 30, 1906.

996,360.

Patented June 27, 1911.



Witnesses:
B. J. Grier.
M. S. Brown

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UNITED STATES PATENT OFFICE.

WILLIAM S. PROUDFIT, JR., OF CHICAGO, ILLINOIS.

BOOKBINDING.

996,360.

Specification of Letters Patent. Patented June 27, 1911.

Original application filed March 13, 1905, Serial No. 249,936. Divided and this application filed June 30, 1906. Serial No. 324,288.

To all whom it may concern:

Be it known that I, WILLIAM S. PROUDFIT, Jr., a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Bookbinding, of which the following is a specification.

My invention relates to binding known as solid book binding, *i. e.*, such in which the leaves are not removable and the objects of my improvements are, first, to provide a cheap and durable binding; second, to cause the book to lie flat when opened, and other objects to become apparent from the description to follow.

This application is a division from my application for Letters Patent on book binding filed March 13, 1905, Serial No. 249,936. The said original application pertains entirely to loose leaf binding while this application is confined to solid binding.

Heretofore books have been bound in which the binding strip consisted of a stout cord, and the back was made of flexible or nearly flexible material. My invention provides the use of thin metal spring strips, or something similar thereto, for the binding strips. And to assist in causing the book to lie flat when opened a spring back is provided which is hinged to the covers a short distance from the binding edge of said covers.

To describe my invention so that others versed in the art to which it pertains may understand it sufficiently to make and use the same, I have illustrated it on the accompanying sheet of drawing in which:—

Figure 1, is a section, through the binding of a book embodying my invention; Fig. 1^a, is a similar view in which the binding strip extends through notches in the edge of the leaves; Fig. 2, is a similar view with the book in an open position; Fig. 3, is a fragmental view of the back of the book with the back removed, and Fig. 4, is a perspective view of one of the metallic spring strips.

Similar reference characters refer to similar parts throughout the several views.

The leaves 5 of the book are made up into the usual signatures 6 and are secured in proper order to the binding strips 7. The binding strips 7 which are preferably made of spring metal have their extremities rigidly secured to the edges of the covers 8 by

rivets or otherwise, which serve as the connection between the leaves 5 and the covers 8. The binding edges of the covers 8 are preferably provided with the metal plates 9 to which are hinged at 10 the edges of the back 11 which is preferably made of metal, although the ordinary bookbinder's case may be used in combination with the spring strips. The hinges 10 are preferably placed some distance back from the binding edges of the covers 8 so as to insure the throwing up of the leaves when the book is opened as seen in Fig. 2. It will be seen that such location of the hinges 10 necessitates that the edges of the back 11 spring apart some during the time that the book is being opened, but as soon as the spring strips 7 are in front of a line drawn from one hinge to the other, the back 11 will assume its normal position and force the spring strips 7 with the leaves 5 up and away from the back 11.

The leaves 5 or the signatures 6 may be secured to the metal binding strips 7 in any desired manner, but I prefer to place a cloth covering 12 over the strips 7 as shown in Fig. 4, and secure the leaves to this cloth covering. To prevent the abrasion of the leaves by contact with the plates 9, protecting plates 13 may be placed between the binding edges of plates 9 and the leaves as shown in Fig. 1^a.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:—

1. In a solid bound book, covers, a flat spring strip having its ends secured to swing with said covers and leaves secured to said strip.

2. In a solid bound book, a flat spring strip, two covers, the ends of said strip rigidly secured to said covers to swing with the same, leaves nonremovably attached to said strip and a spring back to constantly press the binding edges of said covers toward each other.

3. In a solid bound book two covers, a flat spring strip having its ends secured to swing with said covers, leaves attached to said strip, a curved spring back connected between the binding edges of the covers to constantly press said binding edges toward each other and protecting pieces between the binding edges of the covers and the leaves to prevent abrasion of the leaves.

4. In a solid bound book, two covers, a flat spring strip having its ends rigidly secured to swing with said covers leaves non-removably attached to said strip and a back
5 connected to said covers a distance from their binding edges.

5. In a solid bound book, covers, a flat spring strip having its ends rigidly secured to swing with said covers, leaves non-removably attached to said strip and protecting
10 plates between the binding edges of the covers and the leaves.

6. In a solid bound book, covers having plates attached to their binding edges and
15 integral therewith, a flat spring strip having its ends secured to said plates to swing with

said covers and leaves non-removably attached to said spring strip.

7. In a solid bound book, covers, a flat spring strip having its ends secured to swing
20 with said covers, leaves non-removably attached to said spring-strip, and a back hinged to said covers.

In testimony whereof I have signed my name to this specification in presence of two
25 subscribing witnesses, this 28th day of June, 1906, at Chicago, Illinois.

WILLIAM S. PROUDFIT, JR.

Witnesses:

JAMES M. PROUDFIT,
R. J. JACKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents"
Washington, D. C."
