T. J. THORP.
Metallic-Binder for Books.

No. 219,419. Patented Sept. 9, 1879

Fig. 1

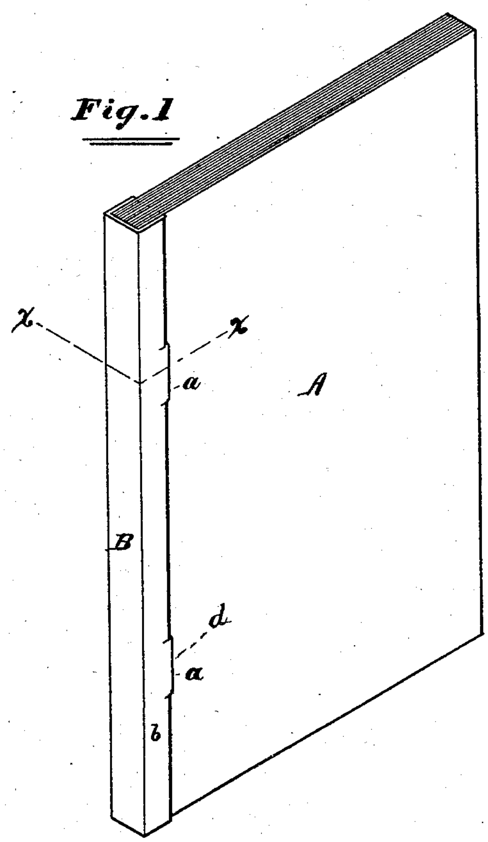
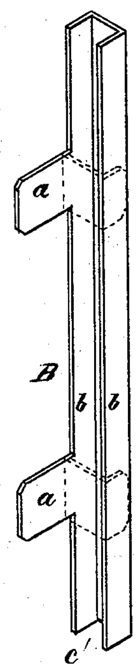


Fig. 2



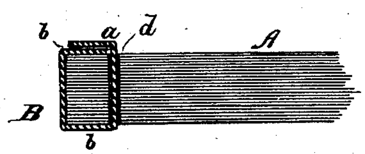


Fig. 3

Attest:

R. J. McKellar

S. S. Schoff

INVENTOR

Thomas J. Thorp

By W. H. Warner &c.

Attorney

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS J. THORP, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO CHARLES J. BARNES, OF SAME PLACE.

IMPROVEMENT IN METALLIC BINDERS FOR BOOKS.

Specification forming part of Letters Patent No. **219,419**, dated September 9, 1879; application filed February 1, 1879.

To all whom it may concern:

Be it known that I, THOMAS J. THORP, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Metallic Binders for Books, Tablets, and Pamphlets, of which improvements the following, in connection with the accompanying drawings, is a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the said improvements.

In the drawings, Figure 1 is a perspective of a book or pamphlet provided with a binder embodying my invention; Fig. 2, a like representation of the binder detached; and Fig. 3, a section in the plane of the line *x x*, Fig. 1.

Like letters of reference indicate like parts.

The object of my invention is to make a simple, cheap, durable, and effective binder for books, tablets, and pamphlets; and to this end my invention consists in making a binder in one piece of flexible metal, having prongs extending from one edge thereof, and sufficiently long to pass through slots in the leaves to be bound together, and long enough to admit of the prongs being also bent over the opposite side or edge of the binder, so as to preserve the pressure applied in applying the binder to the leaves, as well as to hold the latter together by reason of the passage of the prongs through the leaves, and in form and application substantially the same as hereinafter specified.

A A in the accompanying drawings, forming a part hereof, represent the leaves of a book, tablet, or pamphlet.

B is a binder, which I employ for the purpose of binding the leaves A A together. I make the binder B in one piece of flexible sheet metal. The form of the blank from which this binder is made may be inferred by referring to Fig. 2; but the blank may be described, briefly, as a thin flat piece of flexible sheet metal, rectangular in form, or in the form of a parallelogram, considerably greater in length than in breadth when intended for comparatively thin books, and having one or more tongues, *a a*, extending from one of its lateral edges.

The next step in constructing the binder is to bend it into the form represented by the full lines in Fig. 2. The distance between the parallel sides *b b* there shown should be such as to receive tightly the leaves to be bound, and the groove or channel, *c*, thus made should be deep enough to allow the sides *b b* to lap to a considerable extent the leaves to be inserted therein for being bound. The binder is then ready to be applied to the use for which it is intended.

To prepare the leaves for the binder, I arrange them evenly and compactly together, and punch or cut through them the holes *d d*, to receive the tongues *a a*, these holes or slots being made at such a distance from the rear edges of the leaves as not to be covered by the binder.

To apply the binder, I thrust the tongues wholly into the slots *d d*, or through the same as far as the sides of the binder from which they extend will allow them to be pushed. I then turn the binder over the rear edges of the leaves and bend the tongues *a a* back and down firmly upon the side of the binder opposite that from which they extend, as indicated by the broken lines in Fig. 2 and by the section shown in Fig. 3, it being understood that the tongues are long enough for this purpose.

By this means the leaves are not only securely held by the tongues, but the sides of the binder are firmly clamped upon the leaves. The whole binder may then be pressed more firmly upon the leaves, if necessary.

The binder may be of any suitable length; but I deem it preferable to extend it along the entire rear edges of the leaves, as shown, thus making the device serve as a metallic backpiece as well as a binder.

It will be perceived that a binder constructed as now described may be easily made, and that it will be cheap, strong, and durable, and that it may be applied with facility to the use for which it is intended, and that it will hold the leaves in place both by pressure and by means of the tongues *a a* passing entirely through them, and that these tongues by being bent down upon the binder after being passed through the leaves will preserve the pressure originally applied.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the leaves A A, having therein the slots *d d*, with the binder B, made in one continuous piece of sheet metal, having one or more tongues, *a a*, extending from one of the longitudinal edges of the body of the binder, the said tongues being continuous or in the same piece with the body, and adapted to enter the said slots when the said tongues are passed through the said slots, and are turned down over and upon the side of the binder, substantially as and for the purposes specified.

THOMAS J. THORP.

Witnesses:
F. F. WARNER,
H. C. BALLARD.