H. H. EDWARDS.

TEMPORARY BINDERS.

No. 182,650. Patented Sept. 26, 1876.

fig. 1.

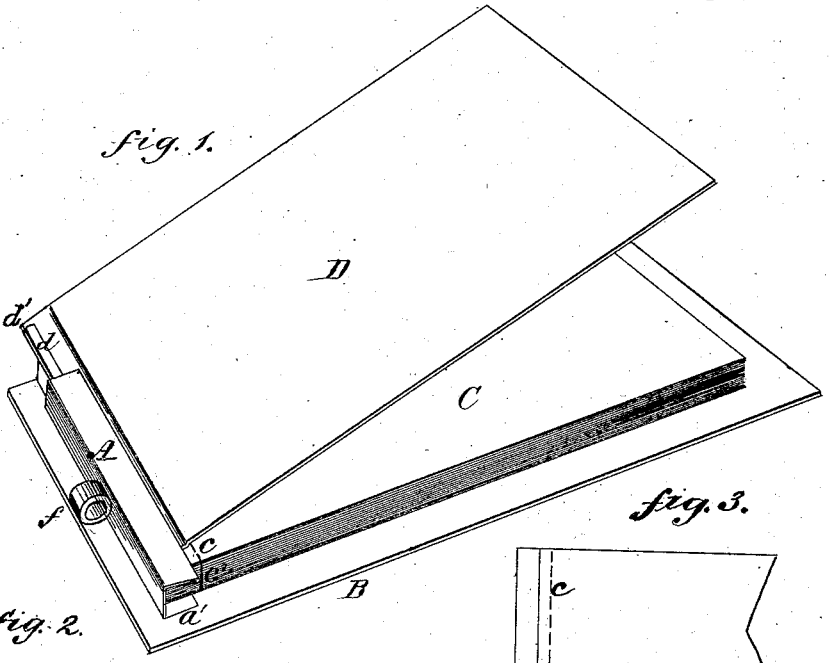


fig. 2.

fig. 3.

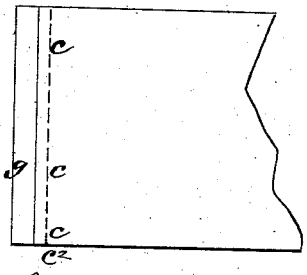


fig. 4.

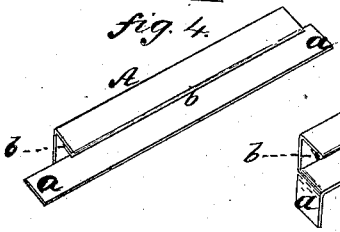


fig. 5.

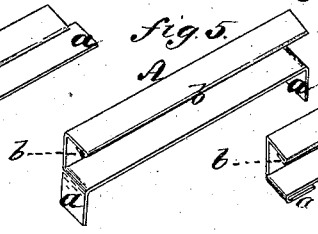


fig. 6.

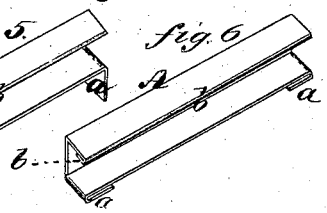
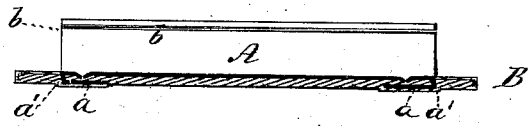


fig. 7.



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UNITED STATES PATENT OFFICE.

HENRY H. EDWARDS, OF MINNEAPOLIS, MINNESOTA.

IMPROVEMENT IN TEMPORARY BINDERS.

Specification forming part of Letters Patent No. **182,650**, dated September 26, 1876; application filed February 2, 1876.

To all whom it may concern:

Be it known that I, HENRY H. EDWARDS, now of Minneapolis, in the county of Hennepin and State of Minnesota, but formerly of Grand Rapids, Michigan, have invented certain new and useful Improvements in Metallic Binders for Books and Tablets; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention is an interchangeable self-binding book-cover and tablet-holder, in which the tablet is separate and distinct, with detachable leaves, and adapted for all kinds of business, and when used up the stub portion is removed from an open metallic binder, and a new book replaced by another in a moment, or the book when filled can be withdrawn sidewise from the open binder. The book of detachable leaves is complete in itself, being stitched together with paper pasted over the stitched end. It is pierced in a line at one side of the stitching, with oblong cuts or incisions, and this is done in the stitched book, to allow any one of the leaves to be detached without leaving a jagged or torn edge, and to prevent the swelling of the book at the line of the separation of the leaves, which takes place where there are no perforations, or with perforations in which the paper is removed with such perforations. One of these incisions or cuts in the leaves is at one or both edges of the book, which gives a starting-point in detaching the leaves. By this means the leaves are detached from any part of the book with a smooth and even edge at the stub. The binder is a metallic clamp, open at one side and both ends, and provided with an interior edge-holding shoulder, arranged to leave a sufficient space within the clamp to allow the tablet to be inserted in place, whereby a temporary-stitched tablet is inserted into either open end of the clamp, and made secure by the edge-holding rib or shoulder, which binds the tablet just along a line outside of the line of incisions. The binder is secured to a back by lap-lips, and a detachable front cover is used with the binder and tablet, having its flexible hinge provided with an edge-stiffener, by which such cover can be inserted into the open-ended clamp with the tablet, and easily withdrawn. This cover protects the tablet, and, being detachable, may form a temporary or permanent binding for pocket use.

In the accompanying drawings, Figure 1 is a perspective view of a tablet or book embodying my improvements. Fig. 2 is a partial view of the inner or back edge of the tablet or set of leaves contained within the binder, a portion being broken away to show the means by which I make them separately detachable, and the manner in which they separate from the stub, and the starting-edge slit or incision. Fig 3 is a partial plan view, showing the line of incisions or slits across the tablet or leaves, which determines the line of their separation from the stub. Figs. 4, 5, and 6 represent the metallic binder in various stages of formation. Fig. 7 is a section taken longitudinally of the binder and the stub, showing the manner in which the binder is secured to the principal back.

The binder A I form out of a blank of sheet metal, in the form of a parallelogram, of less length, preferably, than the width of the principal back of the tablet, and having opposite lips at each end, projecting beyond the line of the ends, as shown at *a a*. This blank A is bent thrice in the line of its length, first to form the narrow shoulder *b*, formed by folding the edge completely over, and then twice at right angles, so that the whole forms a double L in cross-section, as shown. The projecting lips *a a* are then bent downward at right angles to the line of the strip, and are passed through two slits, *a' a'*, made in the principal back B near its end. They are then bent inward, as shown in Fig. 6, securing the binder firmly upon the back B, in the position shown in Figs 1 and 7. Tablet C and front cover D are then introduced simultaneously by passing one corner under the edge of the clamp or binder A at one end, and sliding them along until they are in proper position. The back D is made in two parts. The narrow strip *d*, being a flexible connection, and provided with a metal strip, *d'*, is clamped upon the outer edge to form a stiffener for the edge, and a

shoulder which operates in connection with the shoulder *b* on the binder, to prevent the back D from working or being pulled out, and to allow it to be inserted with the tablet.

When the tablet C is used up or filled, and it is desired to replace it by the introduction of a fresh one, the back D and the stub of the tablet are removed by slipping them out laterally in the line of the clamp or binder A. *f* is the ring for holding a pencil, when my invention is used as a pocket memorandum.

I form the tablet C in the following manner: A suitable quantity of sheets may be connected together at one side or end by stitching, and a strip of paper, *g g*, pasted over the edges. I then form, by means of a machine consisting principally of a series of very narrow sharp blades, a series of slits or incisions, *c c*, indicated by a broken line in Fig. 3, and shown by the broken view in Fig. 2. The intervals between these slits are less than the length of the slits, so that the leaves are really more than half severed from the stub or stitched portion of the book, while securely retained in place.

The leaves of the book are stitched together and a strip of paper pasted over the stitched end, and in this condition the incisions or cuts are made, and the edge or edges of the book will be slit, as shown at c^2 in Figs. 1, 2, and 3, to give a starting-point for more easily making the separation of the leaves without leaving broken and ragged corners. In this condition the complete book is inserted sidewise into either open end of the clamp-binder, with the line of slits just in front of the holding-shoulder, and at which point the leaves may be detached with a smooth edge.

In making the slits, the paper at the points of the incisions is not interlocked by being bellied, but the individual sheets are left free for easy detachment, and render the book a very desirable article in this respect.

I claim—

1. The open metallic binder or clamp A, provided with the interior holding-shoulder *b*, whereby the tablet is inserted sidewise, secured and held in place upon the back.

2. The combination, with the open metallic binder A, provided with the interior holding-shoulder *b*, of the end lips *a a*, and back B, and the tablet C, as described.

3. The combination of the back B, binder or clamp A, formed with shoulder *b*, on its inner side, flexible back D, formed with shoulder and stiffening-strip *d'*, and stitched or pasted tablet or book C, substantially as hereinbefore set forth.

4. As an article of manufacture, the within-described memorandum book or tablet, composed of back B, clamp or binder A, rigidly secured thereon near one end or side, and tablet C, and hinged back D, said tablet and back being removable only by sliding it laterally, substantially as herein set forth.

In testimony that I claim the foregoing I have affixed my signature in presence of two witnesses.

HENRY H. EDWARDS.

Witnesses:
JOHN TRAVIS,
JACOB H. COOK.