I. REYNOLDS.

METALLIC BOOK-BACKS.

No. 186,216. Patented Jan. 16, 1877.

Fig. 2.

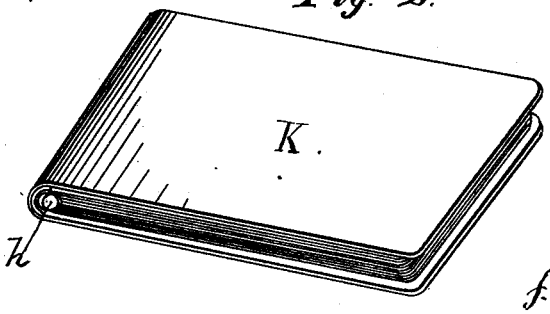


Fig. 1.

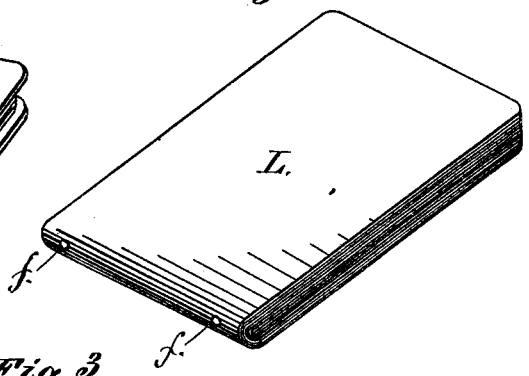


Fig. 3.

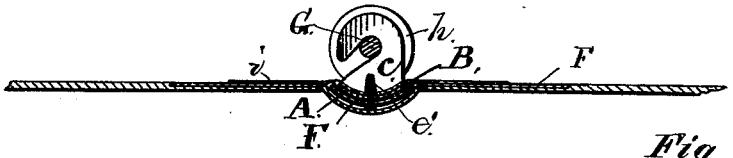


Fig 4

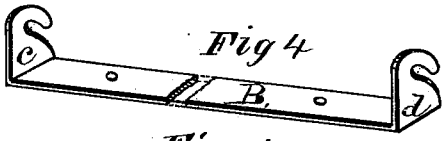


*Fig. 4**

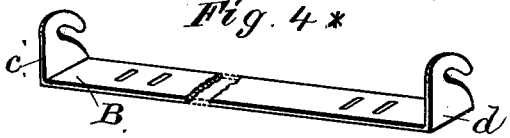


Fig 5

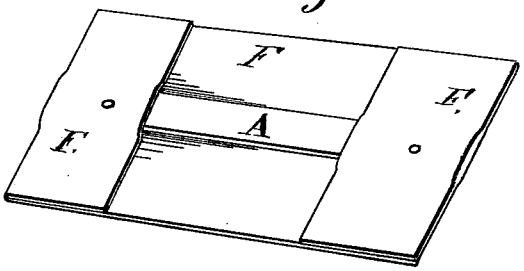


Fig. 6.

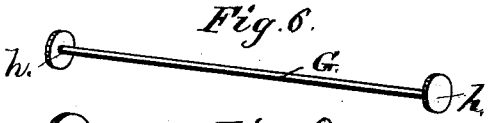


Fig 7

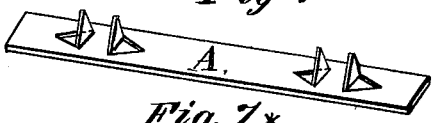


Fig. 8.

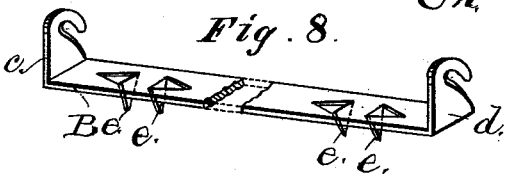


*Fig. 7**

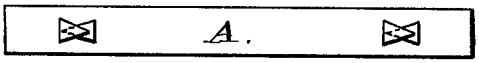
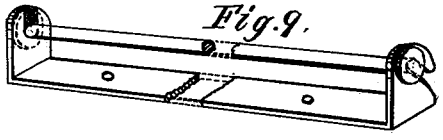


Fig. 9.



Witnesses
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by John J. Halsted
his atty

UNITED STATES PATENT OFFICE.

IRA REYNOLDS, OF DAYTON, OHIO, ASSIGNOR TO REYNOLDS & REYNOLDS, OF SAME PLACE.

IMPROVEMENT IN METALLIC BOOK-BACKS.

Specification forming part of Letters Patent No. **186,216**, dated January 16, 1877; application filed November 18, 1876.

To all whom it may concern:

Be it known that I, IRA REYNOLDS, of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Metallic Book-Backs; 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to an improved metallic back for book-covers, which are adapted for removal at will from the books which they protect; and it consists, primarily, in combining two pieces of metal with a piece of linen or other flexible material riveted to and between them, the cloth serving to strengthen the back of the cover, and one of the pieces of metal serving for securing the book to its cover; and it further consists in certain details of construction.

In the drawings, Figure 1 shows the uncovered book formed simply of folded sheets, preferably stitched together; Fig. 2, the covered book, the book and cover being connected agreeably to my present invention; Fig. 3, a section of the cover and my novel metallic book-back; Figs. 4 and 4* and 8, modifications of the hook-piece of the back; Fig. 5, an under-side view of the metallic back and the textile strip to which it is secured; Fig. 6, the loose rod, and Figs. 7 and 7* a modification of the under metallic piece.

A is a plate of metal, preferably arched or curved. B is another plate, which is preferably and economically made complete at one act, being stamped or cut from sheet metal, and with its ends *c d* cut into hook form, as shown, and turned up at right angles to the body of the plate, and the prongs *e e*, or holes for the rivets *e' e'*, may also be made by the same act of cutting and bending. F is the strip of linen or other strong flexible or textile material, which I rivet to between these two plates A and B, this strip being preferably long enough to admit of being doubled under at its ends to give greater strength to the completed cover, and broad enough to leave an ample edge at each side of the plates, which edges or margins are firmly secured to the book-cover, and underneath the edges of the leather or other material which forms the exterior finish of the cover. The hooks at *c d* are each adapted to receive and retain one end of the wire rod G, which, being loose and unattached, is readily placed, as shown, in the central fold of the book, and, this rod being then inserted in such hooks, the binding is completed. The heads *h h* of this rod G not only prevent it from slipping out endwise or otherwise, but also give an ornamental and attractive finish to the completed book. A finishing-strip of thin cloth or of paper, *i*, may be laid over piece B.

From the above description it will be seen that under the most violent strain to which the book may be subjected in use there is no liability or risk of detaching or loosening the under plate from the cover, or of tearing away the strip F, as it is riveted securely between metals, as well as almost immovably fastened to the cover; that the united plates cannot slip endwise; that the rod G, being a separate piece, and not connected positively to the plate, is not liable to any strain either upon itself or upon the plate, which might render the whole device useless, as would be the case if the rod were soldered to a wire hook at one end of the plate, and were arranged to hook to it only at its other end.

It will also be observed that I avoid any soldering of wire to the plate B, or to either plate, and any soldering of the rod G to either plate; nor do I need to bend any wires to form hooks.

This improved book-back, while simply and cheaply made, has the merit of great strength and durability, and one of the covers, K, made with this improvement, will answer for scores or hundreds of memorandum-books, L, to which it may be applied.

The rivets *e e*, when used, may, if preferred, project above the plate B, and enter holes or perforations in the fold of the paper, as shown at *f* in Fig. 1.

It is evident that the hooks *c d* may be made

separately, and afterward brazed or otherwise secured to the plate B; but I prefer to make them integral therewith.

I claim—

1. The combination of the linen or other fabric F with the two metallic pieces between which it is fastened, and whereby such metal back is adapted to be permanently secured to the two leaves of the cover, substantially as shown and set forth.

2. The wire rod G, in combination with the upturned metal plate B, the plate A, and the fabric secured between such plates, substantially as shown and set forth.

3. In combination, the loose rod, the inside metal plate provided with two hooks to receive such rod, the plate A, and the linen or fabric secured between these two plates of the metal back.

4. In combination, the plate A, the plate B, having two hooks to receive the removable wire rod or fastener, and the fabric between such plates, when these plates and fabric are secured together by means of rivets, which project above the inner plate, and are adapted to enter holes in the back of the book.

IRA REYNOLDS.

Witnesses:
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J. J. HALSTED.