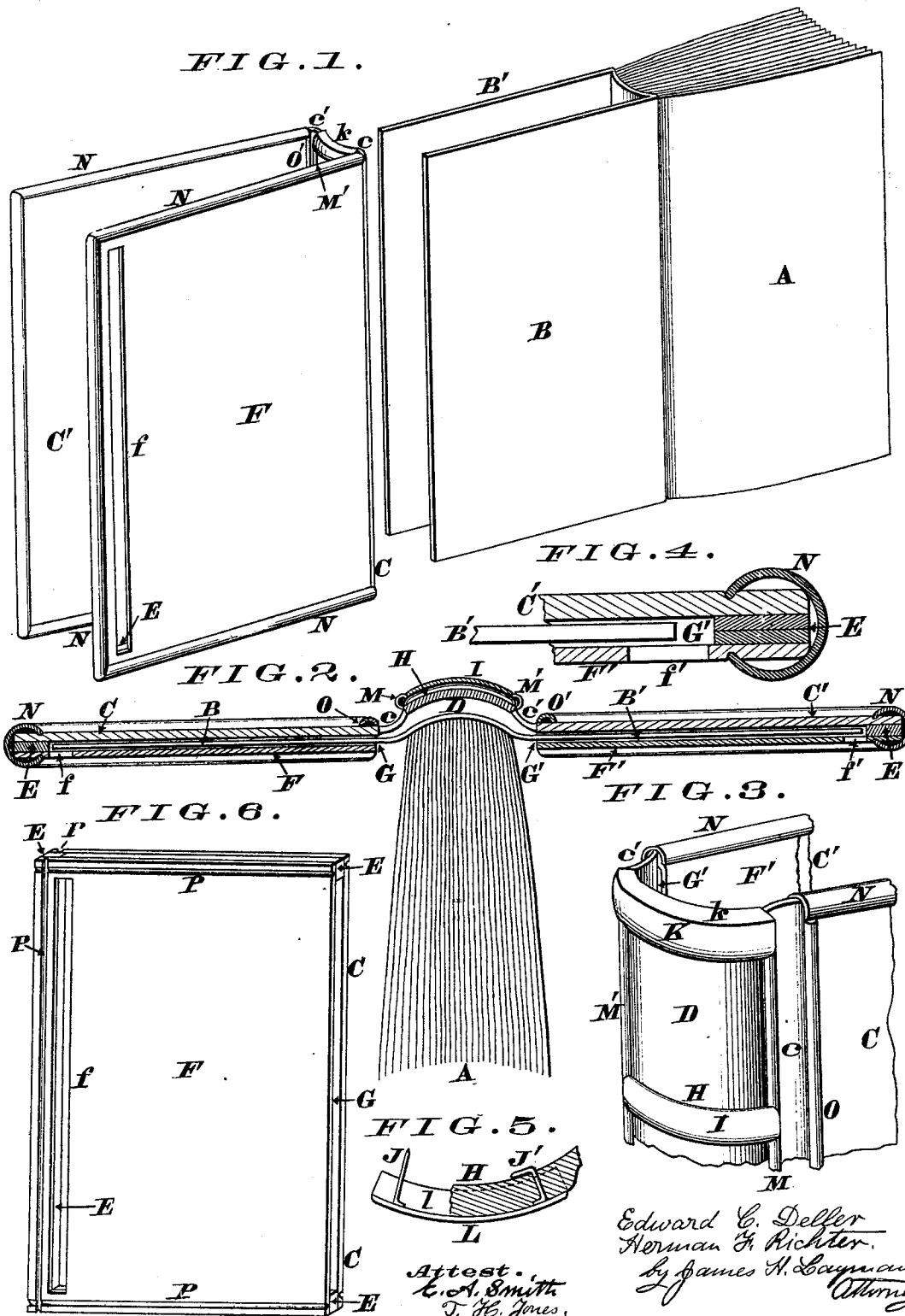


E. C. DELLER & H. F. RICHTER.

BOOK-BINDING.

No. 176,286.

Patented April 18, 1876.



UNITED STATES PATENT OFFICE

EDWARD C. DELLER AND HERMAN F. RICHTER, OF CINCINNATI, OHIO.

IMPROVEMENT IN BOOK-BINDINGS.

Specification forming part of Letters Patent No. **176,286**, dated April 13, 1876; application filed January 24, 1876.

To all whom it may concern:

Be it known that we, EDWARD C. DELLER and HERMAN F. RICHTER, both of Cincinnati, Hamilton county, Ohio, have invented certain new and useful Improvements in Book-Bindings, of which the following is a specification:

This invention relates to that class of books which are provided with a separable or false cover, from which the book proper can be readily detached whenever desired; and the first part of our improvements comprises a novel construction of sockets for said separable cover. These sockets are adapted to receive the flaps or backs of the book proper, as hereinafter more fully explained.

The second part of our improvements consists in incasing the edges of the covers, the "hubs" of the back, and other prominent parts of the book with metallic bindings, thereby adding to the durability and appearance of the covers.

The third part of our improvements consists in providing the top and bottom of the back-binding with metallic tips, that prevent the back being injured when the book is withdrawn from a shelf or other support.

In the annexed drawings, Figure 1 is a perspective view of a book provided with our improved bindings, the book being shown detached from its separable cover. Fig. 2 is a horizontal section, showing the flaps of the book proper engaged with the appropriate sockets of the separable cover. Fig. 3 is a perspective view of a portion of the back and covers of the separable member of the book. Fig. 4 is a horizontal section through a portion of one of the sockets. Fig. 5 is a horizontal section through one of the metallic tips; and Fig. 6 is a perspective view of one of the separable covers and its sockets, previous to being united to the back.

Of the above illustrations, Figs. 3, 4, and 5 are drawn on an enlarged scale.

A represents a ledger or journal, or other blank-book, and B B' are the covers or flaps of the same. As these flaps are not exposed when the book is in use, they may be made quite plain, and need not be very thick or heavy. C C' represent two stout covers of any suitable material, said covers being united to the back D by the customary flexible joints

c c'. Firmly attached to the top, bottom, and outer margins of these covers are fillings E, composed of one or more narrow strips of pasteboard, leather, wood, or other light material. Secured to the fillings E of cover C is a sheet of pasteboard, F, of the same size as said cover, but of somewhat thinner material. F' represents a precisely similar sheet secured to the other cover, C'. By this arrangement of covers, fillings, and sheets, two sockets or receptacles, G G', are formed of such capacity as to readily receive the appropriate flaps B B' of the blank-book A. These sheets F F' are provided, respectively, with slots *f f'*, which slots allow said sheets to spring or bend away from the covers C C' when the flaps B B' are inserted in the sockets G G'. The back D is stiffened with any suitable number of hubs, H; that are incased in sheet-metal mountings I, which latter may be secured in position with prongs or rivets J J', as seen in Fig. 5. Attached to the upper part of back D is a metallic tip, K, having a flange, *k*, that projects over the extreme end of said back. The lower end of the back is shod with a precisely similar flanged tip, L l. These tips may be secured in position with rivets or tongues J J', as shown in Fig. 5. Furthermore, the ends of these tips, together with the ends of hub-mountings I, may be soldered to sheet-metal ribs M M', disposed longitudinally of back D. These ribs are preferably located at or near the junctions of the joints c c' with said back. In order to stiffen, and at the same time protect, the covers C C', the edges of the latter are incased within sheet-metal mountings N, of any appropriate material. These mountings are forced upon the covers, so as to cause the edges of the sheet metal to embed themselves in the substance of the covers, as more clearly shown in Fig. 4; or, if preferred, suitable grooves or creases P may be made in the backs C C' and inner sheets F F', so as to afford a more secure hold of the mountings. These grooves are seen in Fig. 6. The bindings N are mitered at their junctions and then soldered together, the joints being rounded off, so as to avoid sharp angles. The inner ends of said bindings or mountings, which are fastened to the tops and bottoms of the covers C C', are united together with ribs O O', that

are located at the junction of said covers with the joints *c c'*.

The book A, which may be a ledger or any other account or blank book, is applied to the separable or false cover in the following manner: Said book and cover are first opened, as shown in Fig. 1, and the flaps B B' are inserted in the mouths of the sockets G G', after which the book A is drawn toward the separable member C C' D. This act causes the flaps B B' to completely traverse the sockets or receptacles, and as soon as the back of book A comes in contact with the back D, the book A B B' is at once secured in its proper position. While the flaps B B' are being inserted in their appropriate sockets G G', the slots *f f'* allow the inner sheets F F' to spring far enough to permit said flaps sliding in with the utmost ease, and without subjecting either the book A or the separable cover to any injurious strains. These slots allow the sheets F F' of the sockets to give far enough to compensate for any warping or springing of the flaps B B'. The blank-book, having been thus applied to the separable cover, may be opened and closed with even greater facility than a book of the same size can be when bound in the usual manner. When the ledger has been filled, the covers C C' are bent back to the position shown in Fig. 1, the flaps B B' are withdrawn from the sockets G G', and a new account-book is at once substituted for the old one. By this means the heavy and comparatively expensive separable cover may be rendered useful for protecting an indefinite number of books of any kind.

The tip K *k* is another important feature of our improvements, as it prevents the back D

being sprung and torn when the book is withdrawn from a shelf, the upper end of said back being the part that is always grasped for such a purpose. The lower tip L *l* coacts with the mountings N on the bottom edge of covers C C', to prevent injury to the covers when the book is shoved in upon a shelf, or withdrawn therefrom. For small blank-books the slots *f f'* may be omitted. The tips on the ends of the back D may be composed of bone, hard rubber, or other material.

We are aware that it is not new to provide books with separable backs or covers, such covers being seen in Letters Patent No. 84,564, issued December 1, 1868, to L. G. Matthews, and, therefore, we do not propose to claim, broadly, the separable backs, but only our special devices for increasing the capacity of these pockets, so as to contain large and heavy books.

We claim as our invention—

1. The sockets G G', formed by the covers C C', fillings E, and inner sheets F F' of a false or separable book-cover, for the purpose specified.
2. The combination of the separable cover C C' D, fillings E, and inner slotted sheets F F' *f f'*, as and for the object stated.
3. The metallic binding N, having its edges seated in the grooves or creases P of the cover C, as and for the purpose explained.

In testimony of which invention we hereunto set our hands.

EDWARD O. DELIER.
HERMAN F. RICHTER.

Witnesses:

JAMES H. LAYMAN,
JOHN C. HEALY.

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