(No Model.)

C. F. JEWETT.

BOOK BINDING.

No. 454,003. Patented June 9, 1891.

Fig. 1.

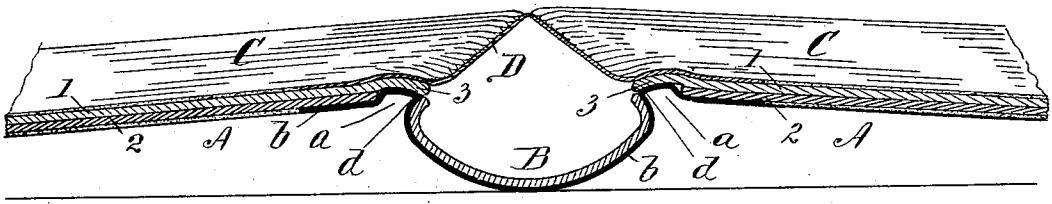
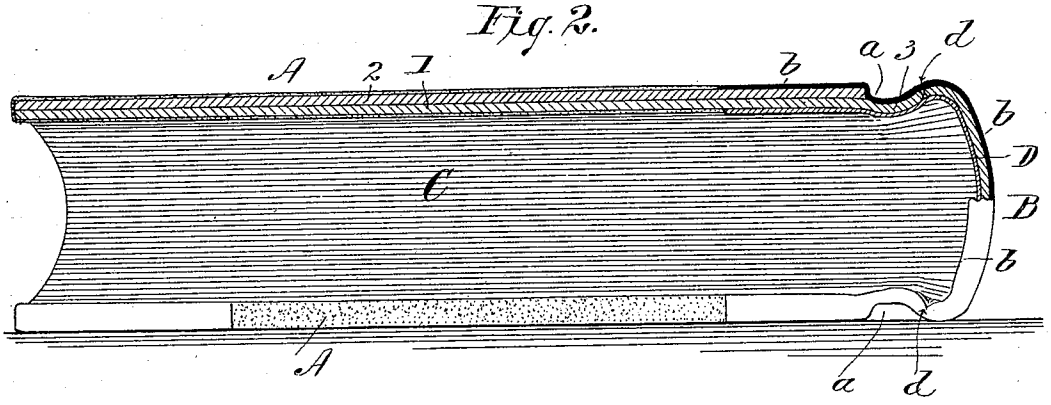


Fig. 2.



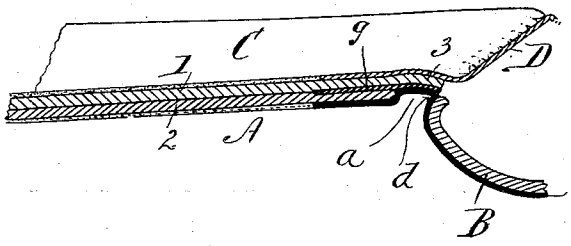


Fig. 3.

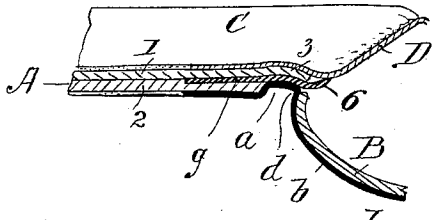


Fig. 4.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES F. JEWETT, OF SPRINGFIELD, ASSIGNOR TO ALBERT G. JEWETT, OF WESTHAMPTON, MASSACHUSETTS.

BOOK-BINDING.

SPECIFICATION forming part of Letters Patent No. 454,003, dated June 9, 1891.

Application filed December 19, 1890. Serial No. 375,271. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. JEWETT, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Books, of which the following is a specification.

This invention relates to bindings for blank or account books, the object of the invention being the provision of a book of the utmost simplicity and durability, which, on being opened, is capable of being spread flat, so as to present a clear and even surface on which to write entirely to the inner back of the book.

The invention consists in the peculiar formation and combination, arrangement, or connection of the parts constituting the book-binding, all as will hereinafter more fully appear, and be set forth in the claims.

Reference is to be had to the accompanying drawings, in which the present improvements are clearly and fully illustrated.

Figure 1 is a sectional view taken across the book when opened. Fig. 2 is in part an end view and in part a cross-section of the improved book shown as closed. Fig. 3 is a sectional view of a portion of the book similar to the view Fig. 1, but illustrating a modification or subordinate feature of construction. Fig. 4 is a sectional view similar to Fig. 3, but illustrating a further feature of improvement, to be hereinafter particularly referred to.

In the drawings, A A represent the book-covers; B, the outer back, to which the covers are hinge-connected. C indicates the leaves or sections or series thereof, and D represents the inner back, to which the leaf-sections are secured in the usual manner. The outer back B is of the form common in blank-books, being concaved and inwardly turned more or less sharply at its opposite edges, substantially as shown. The covers A are of a step form at their outer sides near their inner edges—that is, the outer sides of the covers at and for a short distance forward from the inner edges are of rabbeted form, as shown at *a*. This form of the cover is most advantageously insured by employing inner and outer layers 1 and 2, the inner layer being somewhat wider than the outer, so that when said layers are pasted or otherwise secured the one upon the other with their forward edges coincident the inner edge portion 3 of the inner layer will project inwardly beyond the inner edge of the outer layer. The edges of the cover portion 3 are arranged next to the edges of the curved back B and hinged thereto by the sheet *b* of flexible material, usually leather, which covers and is pasted or cemented on the outside of the curved back B and extended forwardly on the portion 3 of the cover-layer 1, and also on the inner edge portion of the outer layer 2. It is to be here particularly observed that the said sheet *b* of flexible material, in addition to being made to adhere to the outer side of the back, is also pasted or made to adhere to the entire outer surface of the said portion 3, and being extended over and stuck upon a part of the surface of the outer layer next to said portion 3, said flexible sheet material covers the raw inner edge of the cover-layer 2, and, as is vital under the present invention, constitutes the hinge at *d* between the edge of the back and the edge of said portion 3. The inner back D, to which the leaf-sections are secured, and whether the same is in the form of one continuous sheet extending for the whole length of the book or formed in sections applied at intervals, is connected to the inside of the cover at the inner edge portion thereof, as usual; and the portion of the inner back which lies, when the book is closed, next to and within the outer back B, is unsecured to the latter, so that when the book is opened and the leaves spread to either side, as in Fig. 1, said inner back may be upwardly deflected. Now it will be seen that, due to the hinging of the cover to the back at *d*, and the outer sides of the covers being rabbeted, as at *a*, as the book is opened there is no portion of the cover which acts as an impediment to the complete opening thereof by abutting against the curving edge portion 6 of the back *d*, as has heretofore been the case with books of ordinary construction.

I am aware that it has been proposed to form the book-cover with the step or rabbet at its inner edge, and provide a hinge-piece that is free to open and separate from the entire surface of the portion of the book-cover which corre-

sponds with portion 3 of the present illustrated book, there being substantially in the said mentioned book a double hinge, and in such book the said portion, which in a manner corresponds to the portion 3 of my improved book, necessarily becomes in use more or less deflected or sprung out of or angular to the general plane of the cover; but so far as I am able to ascertain a book has never heretofore been constructed with the rabbet *a* at the inner edge portion of the cover, leaving a portion, as 3, which is absolutely rigid, providing the sheet *b*, which is secured to the back and to the surface of the said portion 3, especially at the inner edge of said portion, and which forms the hinge directly at and between the edges of said back and said portion 3, and securing the said inner back in the manner shown; and while this formation and arrangement of the parts is most simple and is one which does not affect the cost of the binding, the book at once becomes at least as efficient for the stated purpose as one in which expensive and numerous elements or sections of material are employed.

To the end of insuring the utmost rigidity of the portion 3 of each cover it will often be found desirable, particularly in large books, to provide the plate *g* of metal between the layers of the cover at the inner portions thereof, the said plate by a section thereof overlying and re-enforcing the portion 3, and such section of the plate *g* which overlies the portion 3 may be of curved or concave form, as shown, to which portion 3 also conforms, thereby giving a more advantageous and attractive form to the covers next to the back.

In Fig. 4 it will be noticed that the plate *g*, there also shown as provided, has its inner edge 6 extended and in the opening of the book acts as a lever upon the inner back, assisting in the elevation of the inner back and the complete opening of the book. This latter feature is deemed of advantage in books essentially constructed under this invention, which are of unusually large size.

It will be noted that the part of the cover constituting the inner edge thereof, which as the book is opened exerts more or less of a prying action on the leaf-sections near their points of connection with the inner cover, has a forcing or prying action on the leaf-sections through the medium of the interposed portion of the flexible inner back, which back has capabilities for withstanding the abrading or chafing effects of such contact.

What I claim as my invention is—

1. In a book, the covers, each constructed with the rabbet at its inner edge, having the portion 3, which is formed rigid, the rounded outer back, a sheet of flexible material, which is secured to the outer surfaces of said portions 3 3 next to the edges thereof, thereby forming the hinge directly at and between the edges of said outer back and of said portions 3, the inner back secured by the portions thereof which are adjacent its edges to the inner sides of each cover, and the leaf-sections, which are attached to said inner back and by portions of said inner back separated from the said portions 3, all substantially as described and shown.

2. In a book, the covers, each constructed of two layers of unequal width, whereby the rabbet is produced at the inner edge formed by the portion 3 of the inner cover-layer the re-enforcing plate *g* between the layers and by a portion thereof overlying the said portion 3, the rounded outer back, a sheet of flexible material, which is secured to the outer surface of said portion 3 at and next to the edge thereof, thereby forming the hinge directly at and between the edges of said back and said portion 3, and the inner back and leaf sections, all in combination and arrrangement substantially as and for the purposes set forth.

3. In a book, the covers, each constructed of two layers of unequal width, whereby the rabbet is produced at the inner edge formed by the portion 3 of the inner layer and the re-enforcing plate *g* between the layers and by a portion thereof overlying the said portion 3 and by its inner edge portion 6, extended inwardly beyond the edge of the said portion 3, the rounded outer back, a sheet of flexible material, which is secured to the outer surface of said portion 3 at and next to the edge thereof, thereby forming the hinge directly at and between the edges of said back and said portion 3, and the inner back and leaf sections, all in combination and arrangement substantially as and for the purposes set forth.

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