

(No Model.)

F. BOWMAN.
BLANK BOOK.

No. 468,780.

Patented Feb. 16, 1892.

Fig. 1.

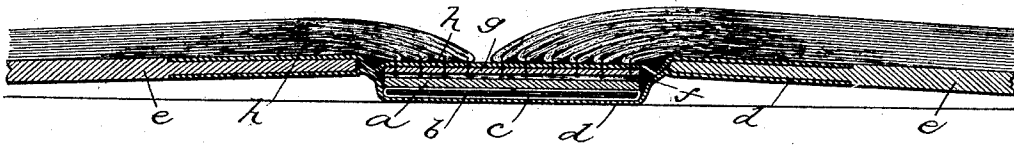


Fig. 2.

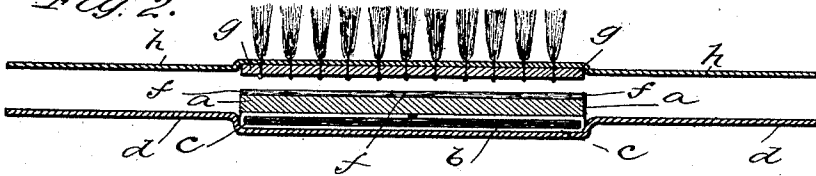


Fig. 3.

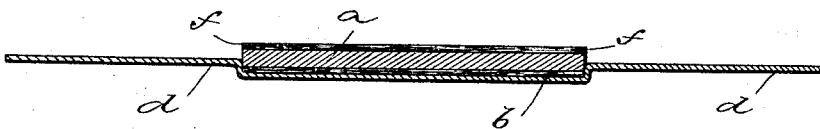


Fig. 4.

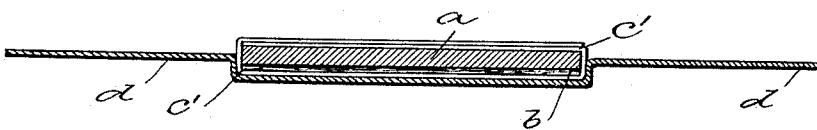
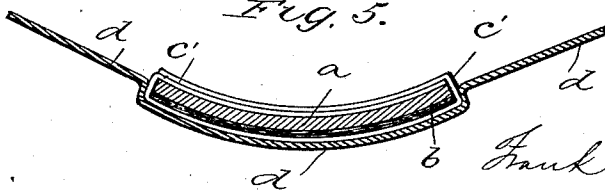


Fig. 5.



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FRANK BOWMAN, OF BROOKLYN, NEW YORK.

BLANK BOOK.

SPECIFICATION forming part of Letters Patent No. 468,780, dated February 16, 1892.

Application filed November 28, 1891. Serial No. 413,405. (No model.)

To all whom it may concern:

Be it known that I, FRANK BOWMAN, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Blank Books, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain useful improvements in the manufacture of blank-books; and it has for its object to provide a very strong and durable outer back and to provide improved means whereby the inner back may be securely fastened to the outer back and to the covers of the book.

Another of its objects is to cushion the outer back or the fabric enveloping it—that is, to provide a slightly-yielding surface which will secure a better impress of the tools with which the marking and printing on the outer back is done without danger of breaking the outer back or cutting the fabric inclosing it, as will presently appear.

In the drawings, Figure 1 is a vertical sectional view of my improved book opened. Fig. 2 is a vertical sectional view of the outer and inner backs separated, the covers being removed. Fig. 3 is a sectional view of a modification of my outer back, and Figs. 4 and 5 are transverse sectional views of a modified form of the cushioning device.

In the drawings, *a* designates the rigid outer back or strip, formed in this instance of a flat piece of binder's-board or other suitable stiff material. To the outer side of this back I secure a cushion *b*, formed of leather or flannel or any suitable cushioning material, preferably in the manner shown in Figs. 1 and 2 of the drawings. In this construction the cushion *b* is first inclosed in the thin glue-excluding fabric *c* and then secured to the back by gluing or in any suitable manner, the edges of the inclosing fabric being secured next to the rigid back, in order that the glue will be effectually excluded from the cushion and to secure a smooth surface on the outer side to which to glue the outer or finishing fabric *d*. The longitudinal edges of this fabric *d* extend beyond the longitudinal edges of the outer back, and said extensions are secured to the outer side of the covers *ee* at their inner edges, thus forming a strong

flexible connection between the outer back and the covers. To the inner side of the outer back is glued a strip *f* of flannel or leather or any suitable material, which entirely covers the back *a* and forms a yielding surface, to which the rigid inner back *g* is glued. The object of providing this yielding embedding surface *f* is to permit the projections or roughness formed on the under side of the inner back by stitching or stapling the sections to the upper side thereof to be embedded in this yielding surface, thereby more securely fastening said inner back to the outer back. The roughness or projections formed by the stitching is an advantage instead of a disadvantage, as when they are embedded and glued in the strip *f* they aid materially in securing the inner back to the outer back, as is evident. The inner back is reinforced by the fabric *h*, which is glued to its upper or inner surface and extends beyond the longitudinal edges of the inner back, said extensions being glued to the inner sides of the covers at their inner edges. The sections or signatures are secured to the inner back by stitching or stapling, said fastening passing through the fabric *h* and the rigid inner back, as clearly shown in Fig. 2 of the drawings.

In the modified construction shown in Fig. 3 I secure the cushion *b* directly to the outer back and secure the fabric *d* directly to the cushion, entirely dispensing with the enveloping fabric *c*.

In Fig. 4 I have placed the outer cushion *b* between the outer back *a* and an enveloping fabric *c'*. This enveloping fabric passes entirely around the outer back and the cushion, its ends being carried over the inner side of the back *a* and glued thereto, forming a double thickness of the fabric on the upper or inner side of said back, to which the inner back is secured. In Fig. 5 I have shown this latter construction applied to a concaved outer back.

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

1. The combination, in a blank book, of an outer rigid back-strip *a*, covers flexibly secured thereto, a stiff inner back-strip secured to the covers by a strip of flexible material *h*,

this material having its longitudinal edges extending over and glued on the adjacent edges of the covers, an interposed pad-strip *f*, glued between the two backs, and signatures secured to the inner back, the signature-fastenings passing through the inner back and embedded in the pad-strip, substantially as described.

2. A book consisting of a rigid outer back, a rigid inner back, a strip of yielding material glued between said backs, thereby securing them together, signatures secured to said inner back, the signature-fastenings passing through the inner back and embedded in the interposed strip, and covers secured to the backs, substantially as described.

3. In a book, the combination of a rigid back, a cushion secured to said back between it and the outer or finishing material, a rigid inner back, a strip of yielding material placed between the two backs and securing them together, signatures secured to the inner back, and covers secured to the backs, substantially as described.

4. In a book, the combination of a rigid back, a cushion secured to said back between it and the outer or finishing material, said cushion consisting of a strip of soft or yield-

ing material inclosed by a thin glue-excluding fabric, the covers and signatures, and means for securing them to the back, substantially as described.

5. In a book, the combination of the rigid outer back, the cushion secured to the outer side of said back, the finishing material *d*, covering said cushion and extending beyond the longitudinal edges of said back, said extensions being secured to the outer sides of the covers at the inner ends thereof, an inner back, a strip of yielding material placed between the two backs and securing them together, a reinforcing-strip *h*, secured to the inner surface of the inner back and extending beyond its longitudinal edges, said extensions being secured to the inner side of the covers at their inner ends, signatures fastened to the inner back, said fastening passing directly through the fabric *h* and the inner back and the covers, substantially as described, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK BOWMAN.

Witnesses:

ALBERT E. CUTHBERT,
HENRY M. HAWKES.