

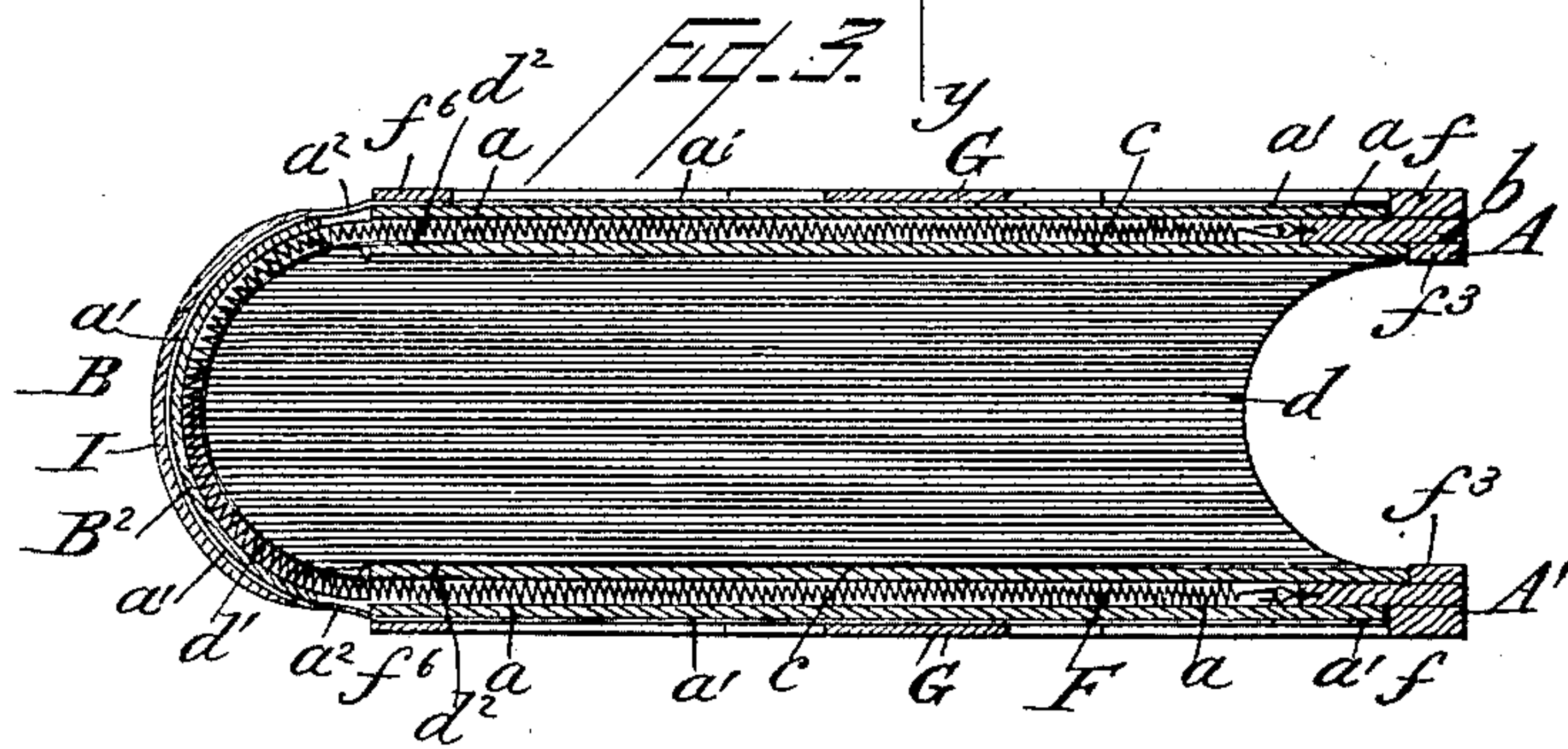
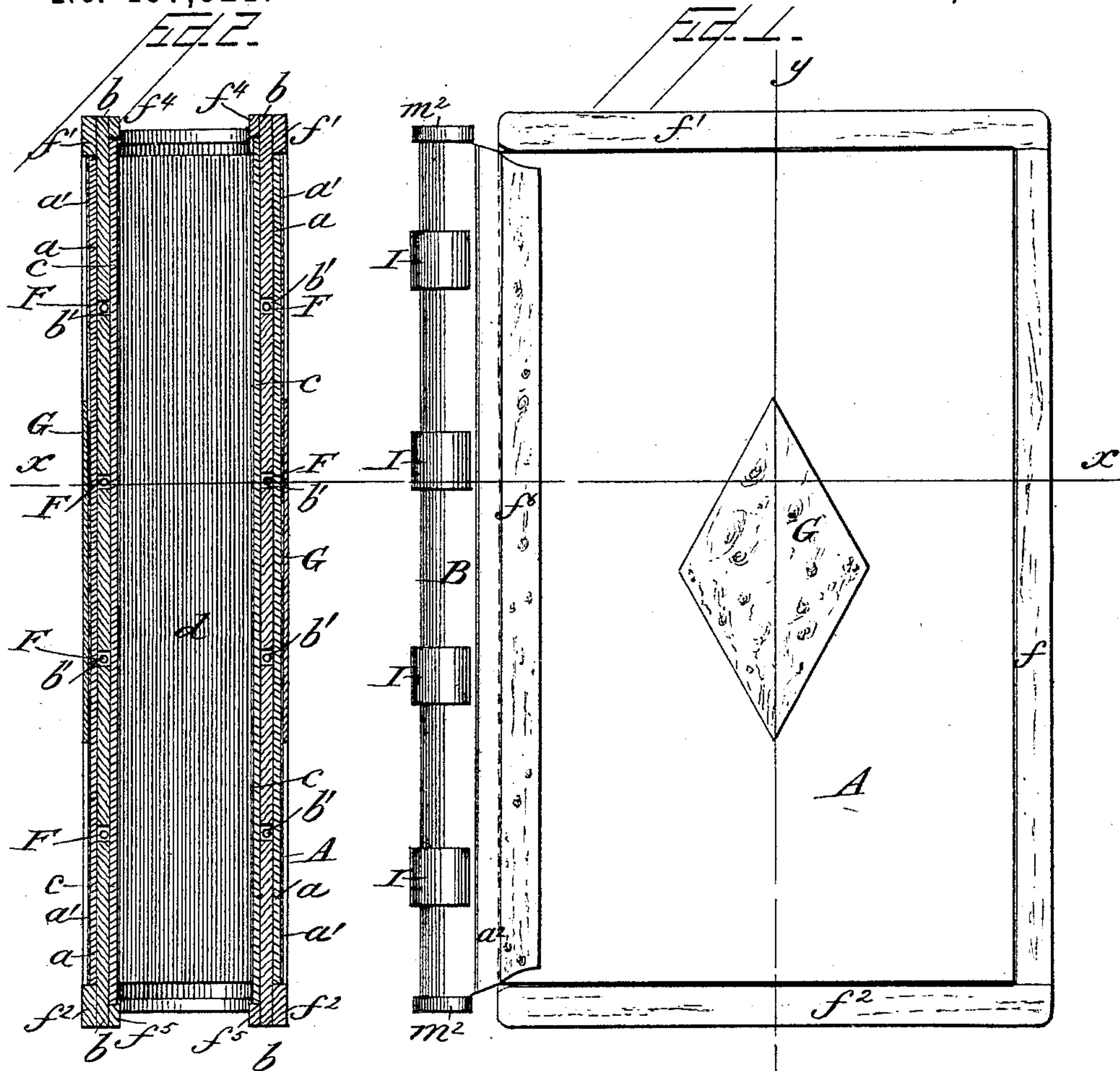
(No Model.)

2 Sheets—Sheet 1.

J. D. METS.
BLANK BOOK COVER.

No. 467,821.

Patented Jan. 26, 1892.



Attest:

H. H. Schott
Edward J. Lemrick

Inventor:

J. D. Mets
by his atty
Marion F. Saurance

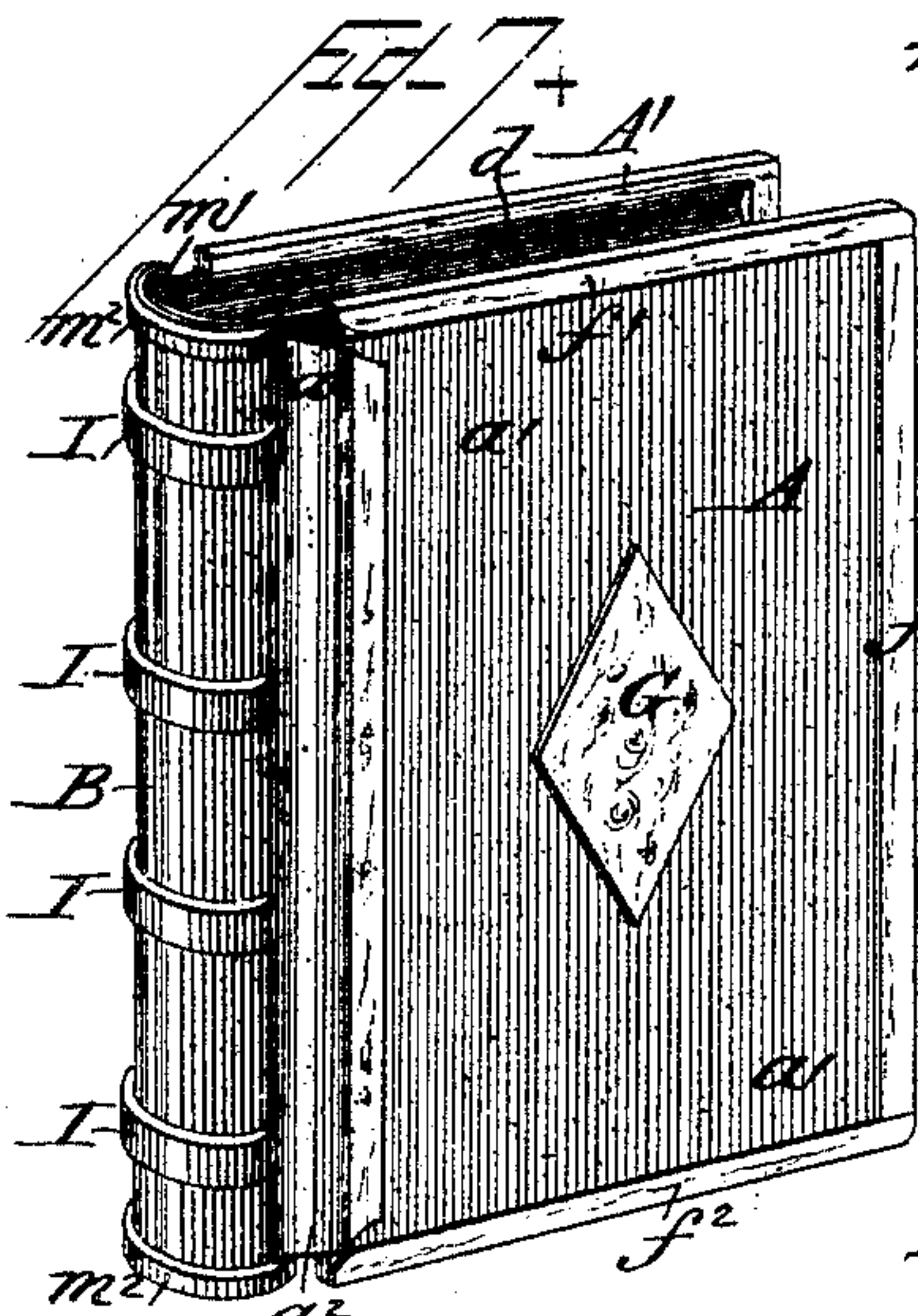
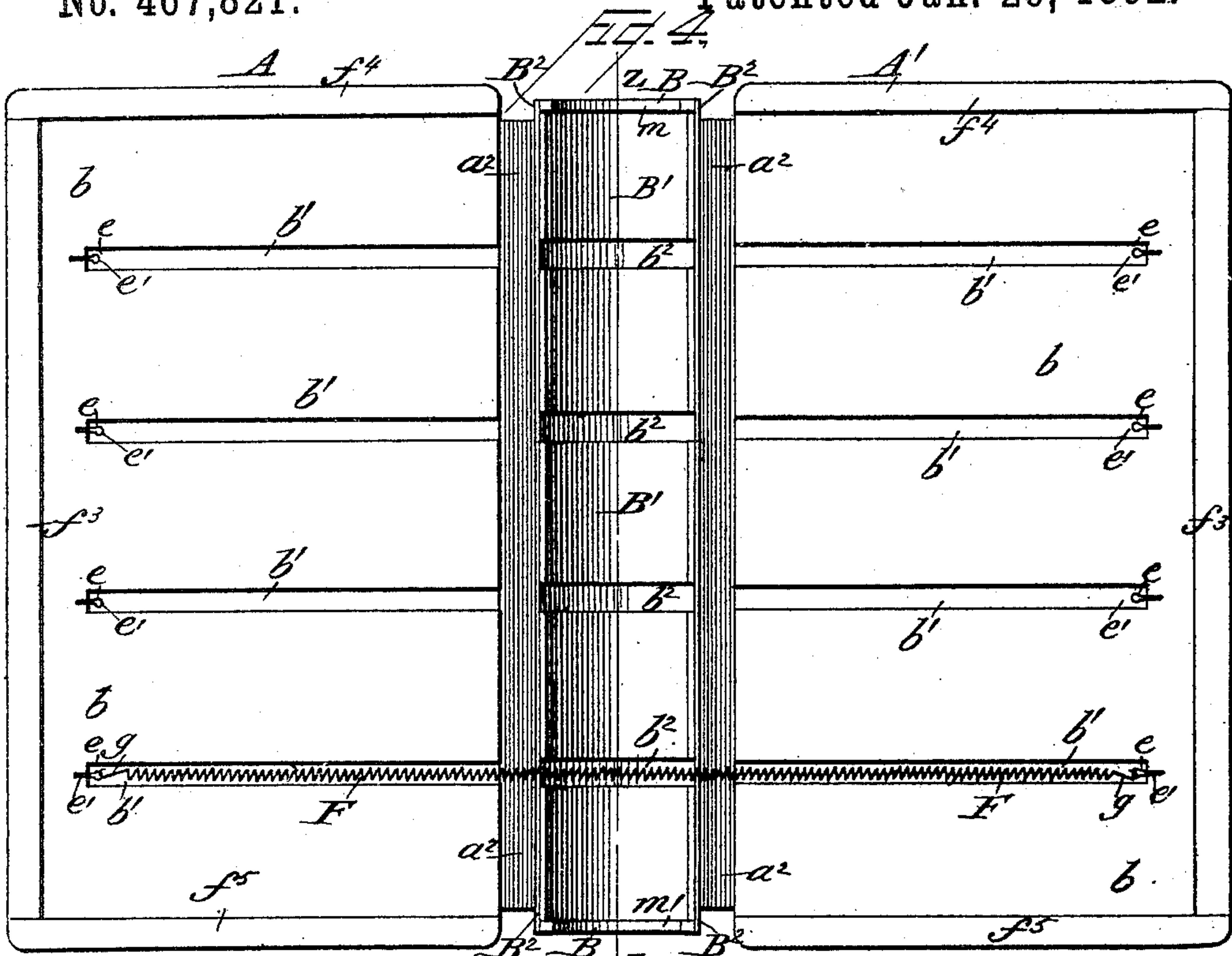
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2 Sheets—Sheet 2.

J. D. METS.
BLANK BOOK COVER.

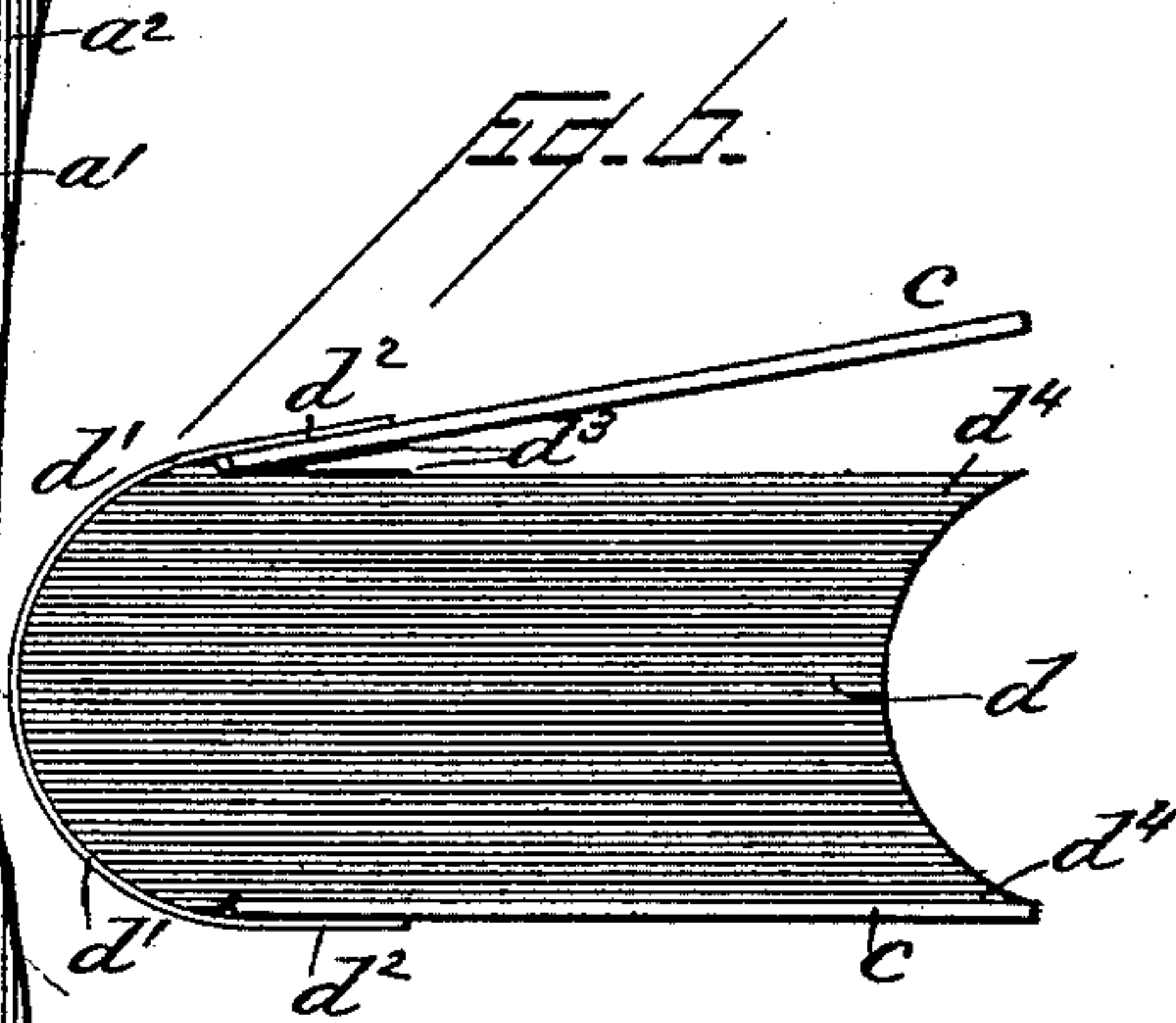
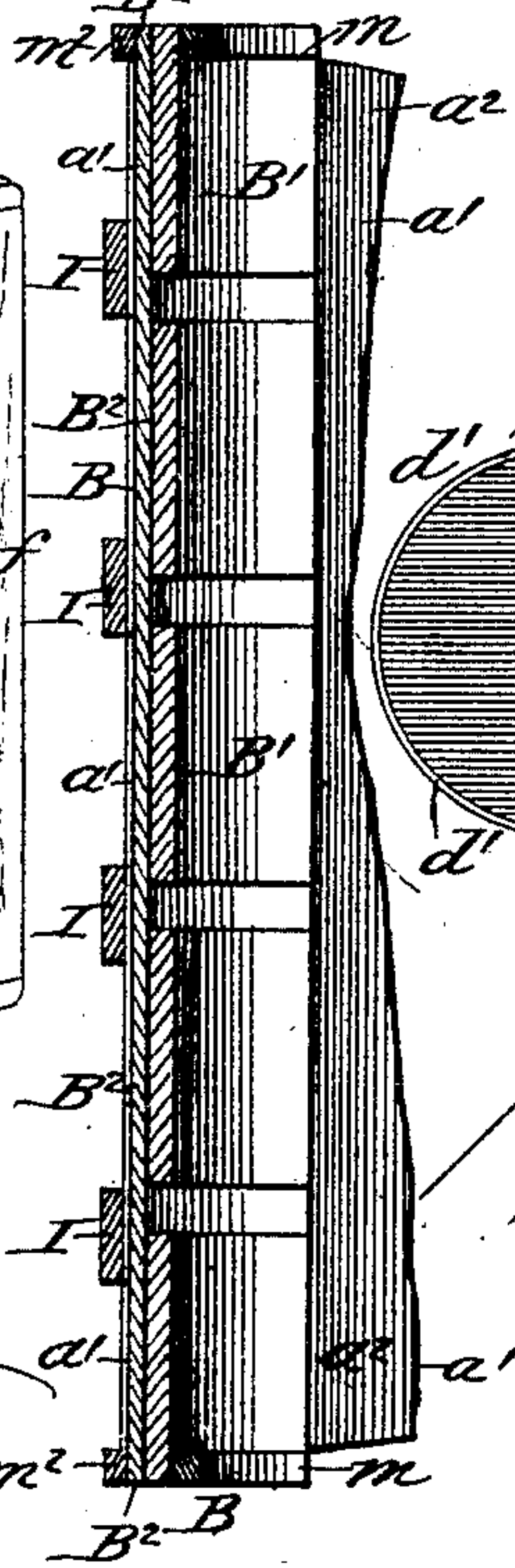
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UNITED STATES PATENT OFFICE.

JOHN DANIEL METS, OF DUBUQUE, IOWA.

BLANK-BOOK COVER.

SPECIFICATION forming part of Letters Patent No. 467,821, dated January 26, 1892.

Application filed April 12, 1889. Serial No. 306,964. (No model.)

To all whom it may concern:

Be it known that I, JOHN DANIEL METS, a citizen of the United States, residing at Dubuque, in the county of Dubuque, and State of Iowa, have invented certain new and useful Improvements in Blank-Book Covers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates particularly to the cover-binding of large, heavy, blank books, which will endure daily use for a long series of years without serious injury, and which books for this reason become the proper place of entry of important records, whether original or transcribed.

In the accompanying drawings, Figure 1 is a view in elevation of one of my improved blank books, having its cover-binding complete. Fig. 2 is a vertical longitudinal section in the line *yy* of Fig. 1. Fig. 3 is a transverse section in the line *xx* of Fig. 1. Fig. 4 is a plan view of the cover-binding thrown open and with the blank book proper removed. Fig. 5 is a longitudinal section in the line *zz* of Fig. 4, showing one-half of the back of the cover-binding and with a portion of the hinge connecting said back with the right-hand cover shown in Fig. 4. Fig. 6 is a transverse section showing the cover-binding of the blank book incomplete, the view showing the application of the inner paste-board portions of the cover-binding to the blank book proper, while Fig. 7 is a perspective view of one of my improved blank books with the cover-binding complete, and Fig. 8 is a diagram of my improved blank book complete thrown open for use.

My improved book-cover or cover-binding for blank books is made in part of pasteboard, leather, and wood, pasteboard covered with leather forming the outside, wood the center, and pasteboard the inside of the sides of the cover, while the back is made either of pasteboard or wood, at option.

In the drawings, A and A' indicate the side covers or lids, and B the back of my improved blank-book cover.

The side covers or lids A A' are made of three sections—to wit, an outer pasteboard

section *a*, a central wood section *b*, and an inner pasteboard section *c*. The outer pasteboard sections *a* (see Fig. 3) are provided with a leather covering *a'*, which, extending entirely around the back B, constitutes an outer-finish surface for the blank-book cover, while at the point *a*² between the rear edge of the lids A A' and the back B this leather covering *a'* serves as a flexible hinge between said lids and back. In Fig. 6 the inner pasteboard sections *c* are clearly shown, one being closed and the other raised, as represented in the figures, and both united to the blank book proper by a leather backing *d'*, which is cemented to and passes around and upon the entire rounded rear portion of the blank book proper *d*, as represented, and with lapping portions, as at *d*² *d*², cemented to the inner pasteboard sections *c c*, thereby forming a hinge connection or joint of articulation for said sections, as shown; and to still further hold in place the sections *c c* they are at their inward rear edge portions provided their entire length with a longitudinally-doubled strip of leather, as at *d*³. This doubled strip affords throughout its length two laps, one of which is cemented to a fly-leaf *d*⁴ of the blank book proper *d*, while the other lap, as indicated in Fig. 6, is cemented to an inner finished surface of the sections *c c*, as shown.

Thus far I have described two of the sections composing the lids A and A' of my improved blank-book cover—to wit, the outer pasteboard section *a* and the inner pasteboard section *c*—and between which is a wood section *b*, to which my invention more particularly relates.

In plan view, Fig. 4, my blank-book cover is represented with the lids A A' thrown open on either side of its back B, and in this figure the wooden or central section *b* of each of the lids is shown, with the inner pasteboard section *c* of said lids removed. In this view, Fig. 4, *b* is the central wood section of the respective lids A A', having grooves *b'* sawed in and through the wood to their terminating points at *e*, where small metal loops *e'* are fastened to the wood, as shown, and into which loops hooks *g g* of spiral springs F in each of said grooves are inserted, one spring only for illustration being shown in this figure.

B is the back of the cover, made either of

pasteboard or wood, and may be constructed with five, more or less, concave sections, as at B', which are cemented to one continuous concave piece B² of full length of the back at such distances from each other as to leave recesses b² in line with corresponding recesses b' in the sections b for the spiral springs F, and all of which recesses b' and b² are occupied by a spring F when the book-cover is complete, as shown in Fig. 3.

The book-cover, as shown in plan view, Fig. 4, is supposed to be already supplied with the pasteboard sections a for each lid and its leather covering a', as shown in Fig. 3, though not shown in said view, and when thus far completed said cover may now be applied in position upon the blank book proper d (shown in Fig. 6) by cementing the wood sections b of the lids A A' upon the inner sections c c of Fig. 6, thus bringing the several parts into their relative juxtaposition, as shown in Figs. 1, 2, 3, and 7. Before this is done, however, the lids A A' on their outer edges may be supplied with wooden reinforce-bands, as shown in Figs. 1, 2, 3, and 4 at f, f', f², f³, f⁴, and f⁵, the same being united together and cemented on both the upper and under surface of the central wood section b, as shown, the outside pasteboard sections a and the inside pasteboard sections c of the lids being enough smaller than the wood centersections b to fit within the said reinforces, as shown, while further wood reinforces, as f⁶, are applied to the outer surface of the rear edge of the lids, and thus finished, my improved book-cover shows an outer leather binding surrounded by a wooden edge or band. At a central point on said lids, as shown in Figs. 1, 2, 3, and 7 in diamond form in this instance, I apply an outside wearing-panel G, of wood, the same being properly secured in position, and which, in connection with the reinforces f, f', f², f³, f⁴, f⁵, and f⁶, serve to receive the wear and friction which but for such reinforces would, in the use of the book, fall upon its leather-finish binding a' and soon greatly damage or destroy it. As clearly shown in Figs. 1, 5, and 7, I apply solid raised "bands" or "hubs" of a non-metallic substance, preferably of sole-leather, because it is important to have the hubs stout and solid yet pliant or resilient and not liable to scratch objects nor be subject to corrosion when placed upon the highly-finished leather covering of the back, and said hubs are of full thickness at their center and tapered at their ends, as shown, and cemented or otherwise suitably fastened in place on the outside of the leather covering a'. On all books it has been a customary construction to secure these hubs on the backs before the outer or finish leather was put on, so that when the book was covered the raised bands were also covered, the consequence being that when the leather wore through the bands were liable to come off; but in my case these bands are made of solid suitable durable material, preferably, as stated,

of sole-leather, and put on after the book is covered, this being not only much more durable but affording a friction wearing-surface as a protection to the finishing-leather a' of the book.

As shown in the figures, the back B at its upper and lower extremity is provided with an inner finish-band m m', between which the back of the blank book proper d is seated and against which a portion of the rounded rear end surfaces of the book proper d abut when the cover, as in Fig. 4, is applied thereto, and thus when the book is shut, as in Figs. 3 and 7, these bands m m' overlap an upper and lower portion of the blank book proper d and so act to preserve the proper relation of the body of the book with its cover. Opposite these bands on the outside of the back B of the cover I apply other bands m² as a surface-finish for the back, and also as wearing-bands.

In diagram Fig. 8 my improved book-cover is supposed to be shown complete and applied to the blank book proper d, which is thrown open with the several coil-springs F, (but only one shown in the figure,) extending from the side edge of the lid A to the like edge of the lid A', the spring F, which is shown, being partly in solid and partly in dotted lines. Thus the action of the springs, which is by contraction of the coils, tends to draw the lids at their outer edges firmly down upon the plane-line z, and so steadily hold the lids in proper fixed position while the pages of the book proper d are being written upon. When thus thrown open, the springs rise out of their channel-ways b², as in Fig. 8, but re-enter them when the book is closed, as in Figs. 1, 3, and 7. The springs are thus completely embraced within the channel-ways b' b² when the book is closed, while the greater portion of their length is always protected within the channel-ways b', whether the book is open or closed.

What I claim, and desire to secure by Letters Patent, is—

1. A book whose lids comprise an inner and outer section of pasteboard and a central section of wood with spring-reception grooves b' between, substantially as described.

2. A book whose lids comprise an inner and outer section of pasteboard and a central section of wood with spring-reception grooves b' between and with the rim of the lids reinforced with bands of wood, substantially as described.

3. A book whose cover is composed of lids hinged to a back by a finishing-leather which extends over the outer surface of the lids and back and with contraction coil-springs whose ends are fastened at a point adjacent to the outer side edges of the lids and which when the lids are opened only are seated in channel-ways provided in the lids, and which springs are seated both in the back of the cover and the lids when the lids are closed, substantially as described.

4. A book-cover comprising a back constructed without integral hubs or bands, a leather covering on the outside of the back, and solid sole-leather hubs or bands shaped
5 to conform to the contour of the back and applied outside the leather covering, substantially as described.

5. As a new article of manufacture, a solid exterior protecting hub or band of non-metallic material for the back of a book, said
10 hub or band having a contour which conforms on its concave surface to the back of a book, substantially as and for the purpose described.

15 6. A book whose lids comprise an inner and outer section of pasteboard and a central section of wood and are on their edges reinforced with a wooden rim and within the rim are supplied with wearing-panels G, of
20 wood, substantially as and for the purpose described.

7. A book having its lids composed of an outer section *a*, of pasteboard, an inner section *c*, of pasteboard, and a central section *b*,
25 of wood, and a back B, to which the lids are hinged, composed either of wood or pasteboard, and with a backing B², of paste-

board, substantially as and for the purpose described.

8. A blank book having its body portion 30 or blank book proper *d* seated between lapping bands *m m'* on the inside surface of its back B, substantially as and for the purpose described.

9. In combination with a blank-book cover, 35 spiral springs made to bridge the back thereof, and which are extended along the lids to a point near their front edges and there fastened, and which for a greater portion of their length are always protected within reception 40 grooves *b'* of the lids whether the lids are open or closed, substantially as and for the purpose described.

10. A book-cover back B, having grooves or channels for receiving, seating, and laterally 45 confining the curvature of the springs, substantially as described.

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

JOHN DANIEL METS.

Witnesses:

A. B. CUTLER,
J. D. METS, Jr.