

(No Model.)

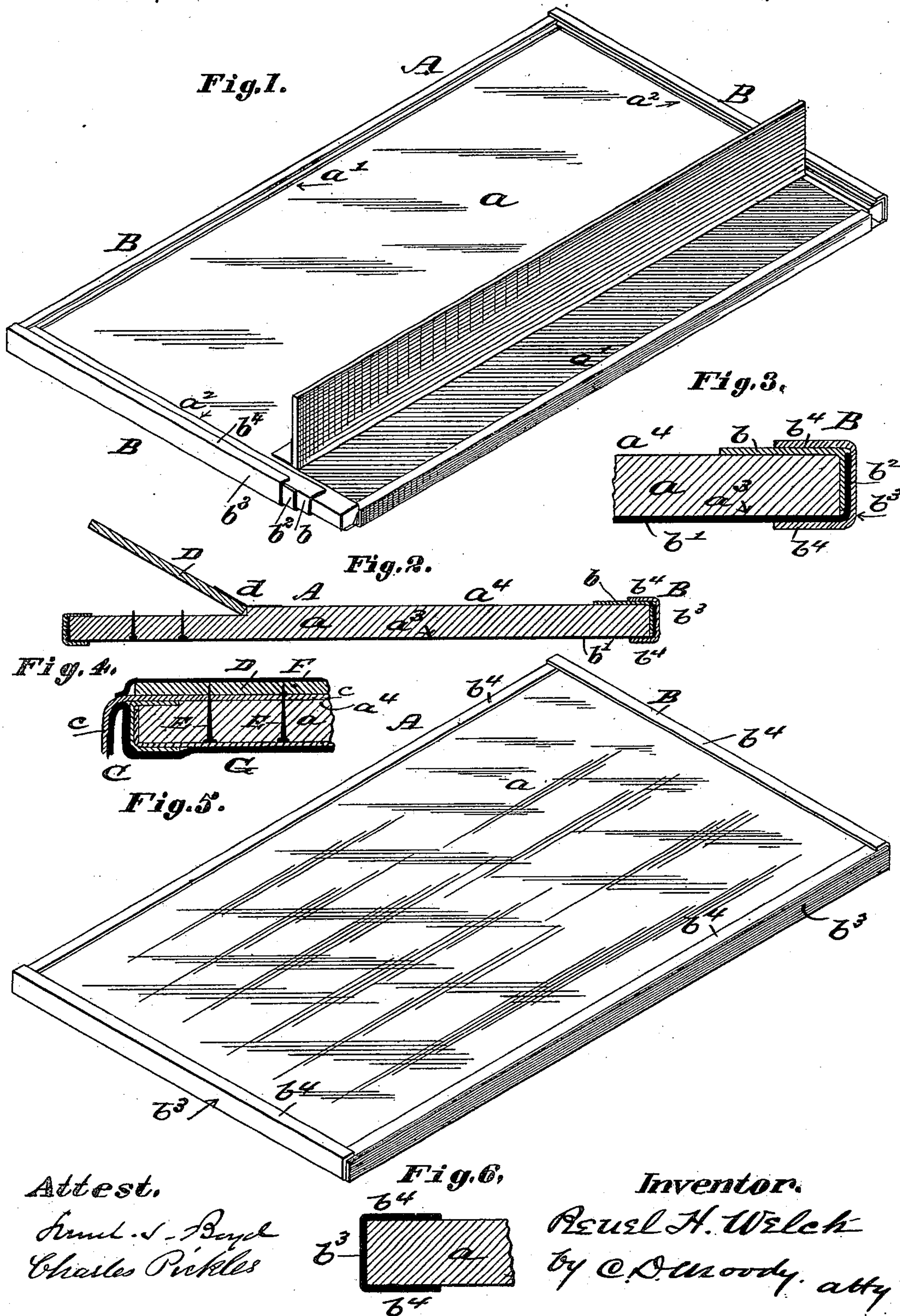
2 Sheets—Sheet 1.

R. H. WELCH.

BOOK COVER.

No. 270,560.

Patented Jan. 9, 1883.



(No Model.)

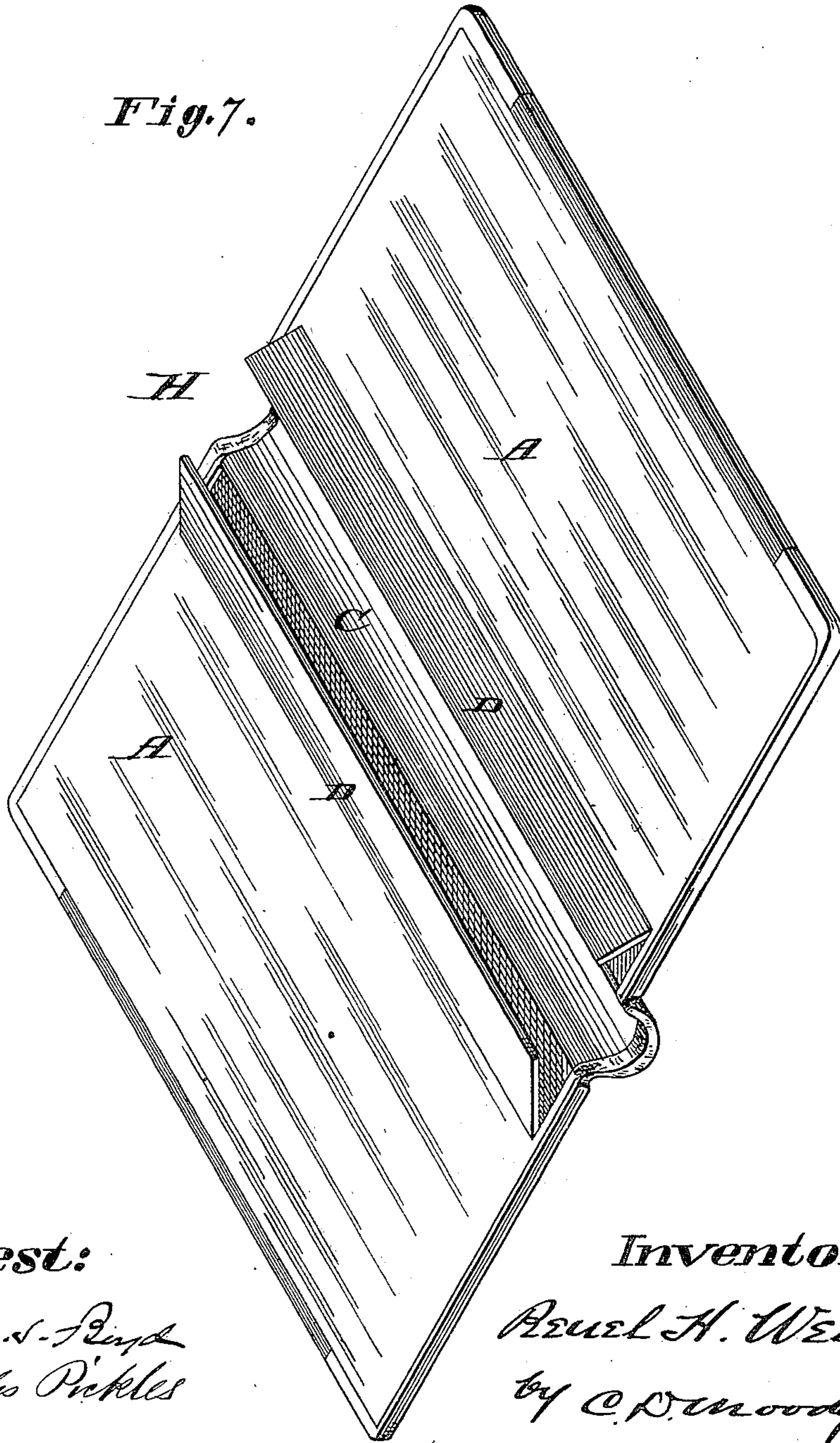
2 Sheets—Sheet 2.

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Fig. 7.



Attest:

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UNITED STATES PATENT OFFICE.

REUEL H. WELCH, OF ST. LOUIS, MISSOURI, ASSIGNOR OF TWO-THIRDS TO
GEORGE D. BARNARD, OF SAME PLACE.

BOOK-COVER.

SPECIFICATION forming part of Letters Patent No. 270,560, dated January 9, 1883.

Application filed April 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, REUEL H. WELCH, of St. Louis, Missouri, have made a new and useful Improvement in Book-Covers, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a view in perspective, looking toward its inner side, of one of the boards of the improved cover, a portion of the metallic edging being broken away, and the board-flap being upturned; Fig. 2, a transverse section taken through the board; Fig. 3, a transverse section, upon an enlarged scale, of the outer part of the board; Fig. 4, a transverse section upon an enlarged scale, showing the mode of connecting the cover-board and cover-back; Fig. 5, a view in perspective of the cover-board, showing the metal applied to the edges only of the board; Fig. 6, a detail, being a section, upon an enlarged scale, of the outer edge of the construction shown in Fig. 5; and Fig. 7, a view in perspective of the cover.

The same letters denote the same parts.

The present invention relates to the construction of the cover-boards, and to the cover itself as a finished product and a new article of trade.

Referring to the drawings, A represents the improved board, the improvement consisting in the employment of sheet metal for the purpose of bracing, staying, stiffening, strengthening, and protecting the foundation or body of the board, and thereby preventing it from warping or breaking and shielding it from dampness. The body *a* is of suitable size and shape to form the foundation of the board, and it is preferably a piece of wood. The metal B is applied thereto in such a manner as to keep the body from warping—a difficulty frequently experienced in the use of the ordinary cover-board. To this end the body *a* may be enveloped in the sheet metal, or the metal may be applied to a portion only of the board—for instance, to the edges and outer side of the board, or to the edges only—the benefit of the metal being largely obtained when a strip or strips of the metal are secured flatwise to the edges of the board, for the strains incident to the tendency of the body *a* to warp or crack then come edgewise upon the strips, or

in the direction most favorable to be withstood by the metal. Covering the side or sides of the body somewhat strengthens it, but serves more especially as a protection against the moisture incident to the binding of the board into the book, or encountered subsequently in using the book. For this last-named purpose other material than sheet metal can be used.

The metal, whatever parts of the board it may be applied to, can be fastened to the body *a* in a variety of ways. In Figs. 1, 2, 3, 4 the metal is shown applied to the edges *a'* *a'* *a''* *a''* of the board, and also to the entire outer side, *a''*, of the board and partially to the inner side, *a'*. These views also illustrate a desirable mode of securing the metal to the body. As there shown, an angled piece, *b*, of the metal B is applied to the edges *a'* *a''*, and extended a short distance upon the side *a'* of the body. A sheet, *b'*, of the metal is then applied to the outer side, *a''*, and turned up in the form of flanges *b''* *b''* against the piece *b*. These pieces *b* *b'* *b''* are then secured in place by means of the piece *b''*, the last-named piece having the flanges *b''* *b''*, and being slipped, and as tightly as is practicable, onto the parts *b* *b'* *b''*, and as shown in the drawings. The metal thus applied, the side *a''* is protected, and the body *a* strengthened and stiffened in a direction at right angles to the plane of the body. The body is necessarily strengthened according to the number of strips at its edges *a'* *a''*, (in this case three;) but, if desired, a single strip can be used; and, further, that portion of the metal that comes against the side *a''* of the body *a* can be omitted, in which case a construction such as shown in Figs. 5, 6 is used, the metal then applied to the board being the piece *b''* *b''* *b''*. Of the last-named piece the portion *b''*, or that which comes against the edges *a'* *a''*, is that which constitutes the main stay of the board, the flanges *b''* *b''* being a desirable means for holding the part *b''* against the edges *a'* *a''*. In this case the part *b''* *b''* *b''* is made to slip as tightly as is practicable onto the body. Any other suitable means can be used for attaching the part *b''* to the body. The part *b''* may also be a continuous strip extending around the four edges of the body *a*; but for convenience I may make it, as shown, in four parts—one for each edge

of the body. In this case the various parts may lap or interlock at the corners of the body, or besoldered together. Both of these methods may be employed in connecting the various pieces of metal shown in Figs. 1, 2, 3, 4.

The improvement further relates to the mode of uniting the boards and the back of the cover. This is shown in Fig. 4, where C represents the cover-back, made in the usual manner, and having the usual straps, *c c*. The board A is provided with a flap, D, hinged to the board at *d*. The straps *c c* are inserted beneath the flap D, and then the latter is turned down upon the straps, and the straps, flap, and board secured together, and either by cementing the parts together or by the use of the prongs E E, the latter being held in the body *a* and extending upward above the side *a'*, and sufficiently to perforate the straps and flap, as shown; or both the cementing and the prongs may be used in conjunction. The usual lining, F, and outer covering, G, may be used, and in the ordinary way.

The improvement further relates to the cover

as an entirety, the cover being finished substantially as shown in Fig. 7, and sold, as an article of merchandise, to the book-binding trade—that is, a book-cover, H, consisting of the boards A A, suitably made, and the back C, suitably made, the boards having the flaps D D, and the board and back being properly united, is finished ready for inserting the leaves of the book, and in that shape is supplied to the trade.

I claim—

1. The combination of the body *a* and the pieces *b b' b² b³ b⁴ b⁴*, substantially as described.

2. The herein-described manufacture, the same consisting in a finished book-cover having the cover boards and back united, and the boards having the flaps D D, but not having any leaves attached thereto, substantially as described.

REUEL H. WELCH.

Witnesses:

C. D. MOODY,
CHARLES PICKLES.