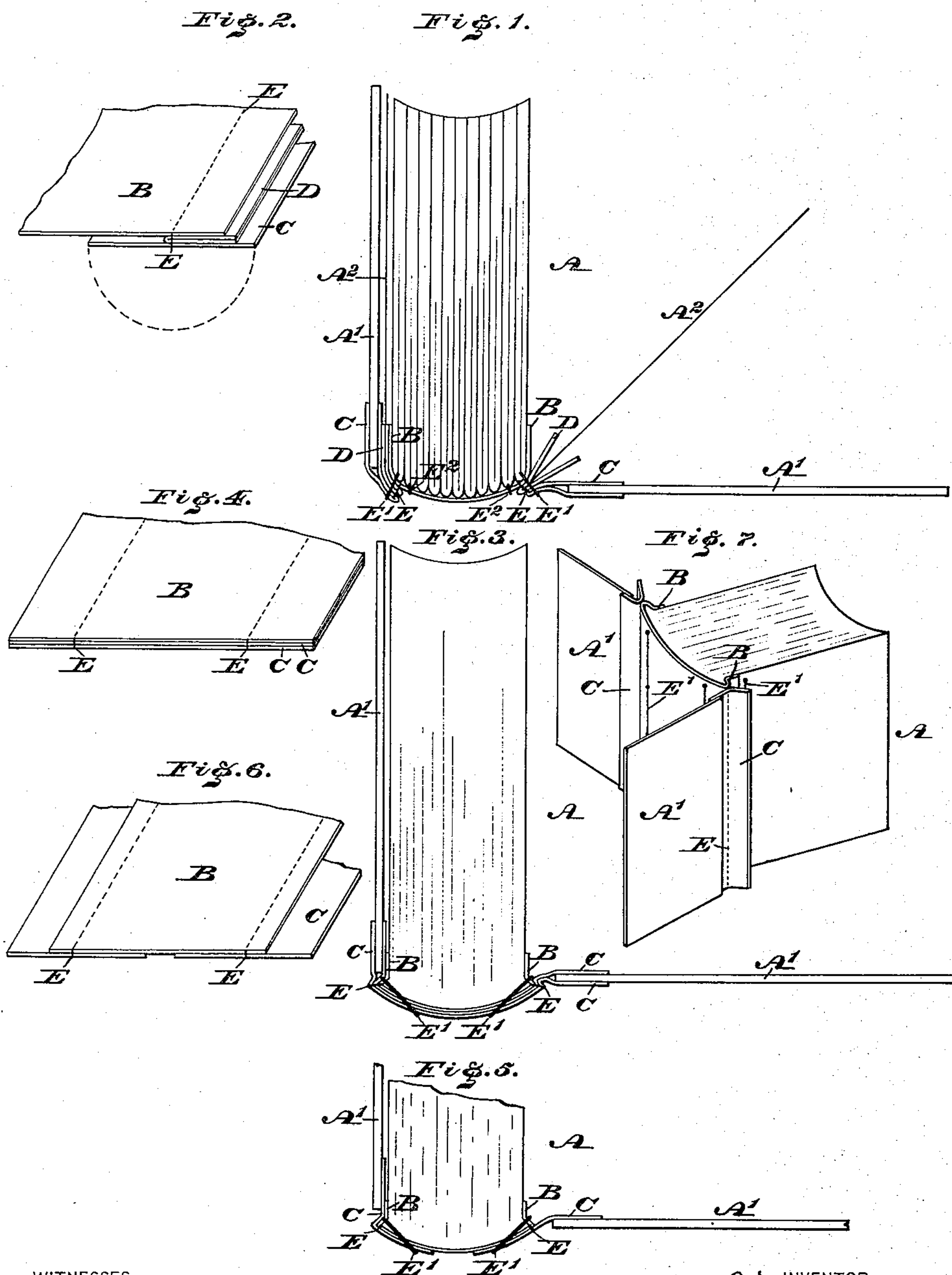


(No Model.)

T. C. LOVE, Jr.
BOOK BINDING.

No. 362,754.

Patented May 10, 1887.



WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS C. LOVE, JR., OF PHILADELPHIA, PENNSYLVANIA.

BOOK-BINDING.

SPECIFICATION forming part of Letters Patent No. 362,754, dated May 10, 1887.

Application filed November 12, 1885. Serial No. 182,557. (No model.) Patented in England January 12, 1886, No. 507; in Belgium January 30, 1886, No. 71,591, and in France April 20, 1886, No. 173,490.

To all whom it may concern:

Be it known that I, THOMAS C. LOVE, Jr., a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Book-Binding, (which has been patented in Great Britain, No. 507, January 12, 1886; in France, No. 173,490, April 20, 1886, and in Belgium, No. 71,591, January 30, 1886, and application made for patent in Germany of date January 12, 1886,) which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents an end view of a book bound in accordance with my invention. Figs. 3 and 5 are end views of modifications thereof. Fig. 2 is a perspective view of a detached portion of parts shown in Fig. 1. Figs. 4 and 6 are detached views of detached portions of parts shown in Figs. 3 and 5, respectively. Fig. 7 represents a perspective view of a modification.

Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to improvements in book-binding; and it consists in a book having the cover connected to the body thereof in the manner and by the means hereinafter set forth and claimed, whereby a strong and durable hinge is formed.

Referring to the drawings, A represents a book, which, excepting the features of my invention, is of the usual form.

B represents a strip of linen, integument, or other suitable material, which is passed around the back of the book, and gummed or otherwise firmly secured to the sides of the body thereof.

C represents a strip of material which is secured to the strip B and gummed or otherwise secured to the cover A' of the book.

D represents a strip of material which is secured to the strip B and gummed or otherwise firmly secured to the fly-leaf A².

In Figs. 1 and 2 the strip D is doubled and interposed between the strips B and C, and said parts are stitched through, forming flexible hinges E for the covers. The inner end of the strip C is then folded on the outer

end thereof and the cover A' fitted between the two parts of the folded strip C. The fly-leaf is fitted between the folds of the strip D, said cover and leaf then being secured to the respective folds, as above stated. I stitch through the strips C D B and the outer signature or signatures, as at E', and stitch all or part of the other signatures to the strip B at the back of the book, as at E².

In Fig. 3 three strips are shown, all passing around the back of the book, the strip B being secured to the body and the strip C being duplicated, so as to embrace opposite sides of the cover A'. The three strips are stitched through, forming flexible hinges E for the covers. In said Fig. 3 I stitch through the ends of the strip, the adjacent signatures, and then through the three strips, as at E', at the back of the book.

In Fig. 5 I employ strips B C, which are stitched through, forming flexible hinges E for the covers. The ends of the strip B are secured to the body of the book and the ends of the strip C to the cover A'. I stitch through the ends of the strip B, and then through the strips B and C, as at E', at the back of the book, the portions of the strips C on the back of the signatures being adapted to be secured to the back of the covers.

It will be seen that the covers and body of the book are firmly connected, owing to the strips B C. The hinges E permit the covers to open to full extent and relieve the back of strain when opened, as the strips sustain each other, the strain on one strip being transmitted to the other strip, thus removing direct strain from the back and preventing what is known as "breaking" of the back of the book.

The stitches E' are shown in Fig. 5 as passing through the strip B and the side of one of the outer signatures obliquely to the back of the body of the book and through the strip C, and in Fig. 7 the stitch is shown as passing through the side of the signature to the back of the book, then along the back parallel with the edge of the side, and thence through to the side of the outer signature, then on the side parallel to the edge thereof, and then through to the back, as before, and so being alternately on the back of the body and on the side of the

outer signature, and passing obliquely through from side to back, as shown.

The strips D prevent tearing out of the fly-leaves, and as they are interposed between the strips B C and stitched thereto, they increase the strength of the flexible hinges.

In Fig. 7 the strip C (shown in Fig. 6) is doubled, so as to embrace opposite sides of the cover.

10 The stitches E' employed have no connections with the covers; consequently there is no strain on the signatures when the covers are opened.

15 The features of the oblique stitches and passage of the same through the signatures alternately at the sides of the same and back of the body form the subject-matter of another application for Letters Patent, Serial No. 235,050.

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

1. A book having its body and covers connected by strips which are secured to the body and covers and stitched through, forming flexi-

25 ble hinges for the covers, substantially as described.

2. A book having its body and covers connected by strips which are secured to the body and covers and stitched through, forming flexible hinges, and additional stitches passed 30 through said strips and the signatures, substantially as described.

3. Strips secured to the body and covers and strips connected with the fly-leaves, the strips being stitched through, forming flexible hinges 35 for the covers, substantially as described.

4. A book having its body and covers connected by strips, the said strips being secured to the body by oblique stitches E' passing through said strips and alternately from the 40 side of the outer signature and from the back of the body, and alternately along the back of the body and the side of the said outer signature, all substantially as described.

THOMAS C. LOVE, JR.

Witnesses:

JOHN A. WIEDERSHEIM,
A. P. GRANT.