

(No Model.)

2 Sheets—Sheet 1.

W. M. KINNARD.
BOOK BINDING AND BOOK.

No. 381,252.

Patented Apr. 17, 1888.

Fig. 1

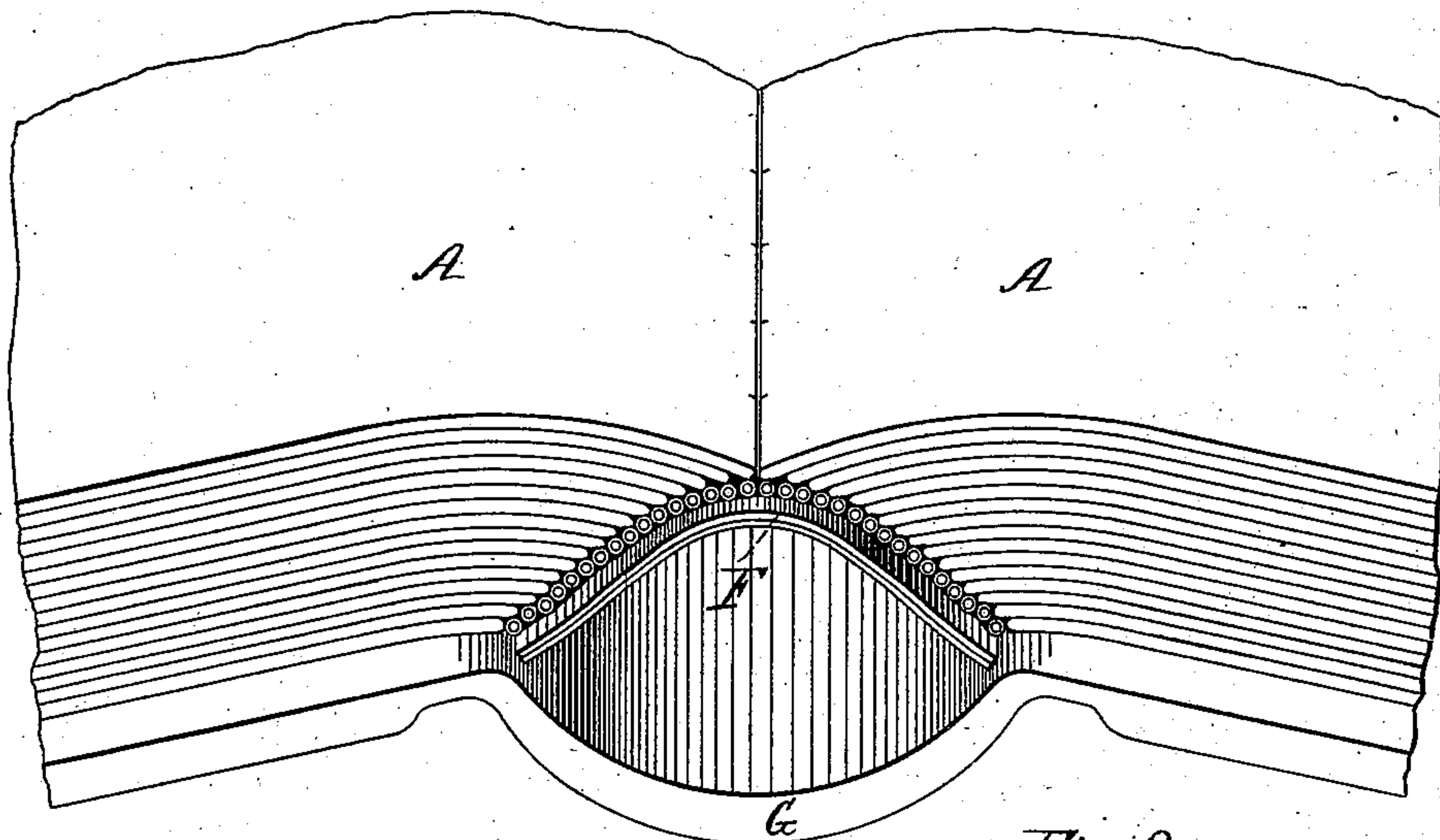


Fig. 2.

Fig. 3.

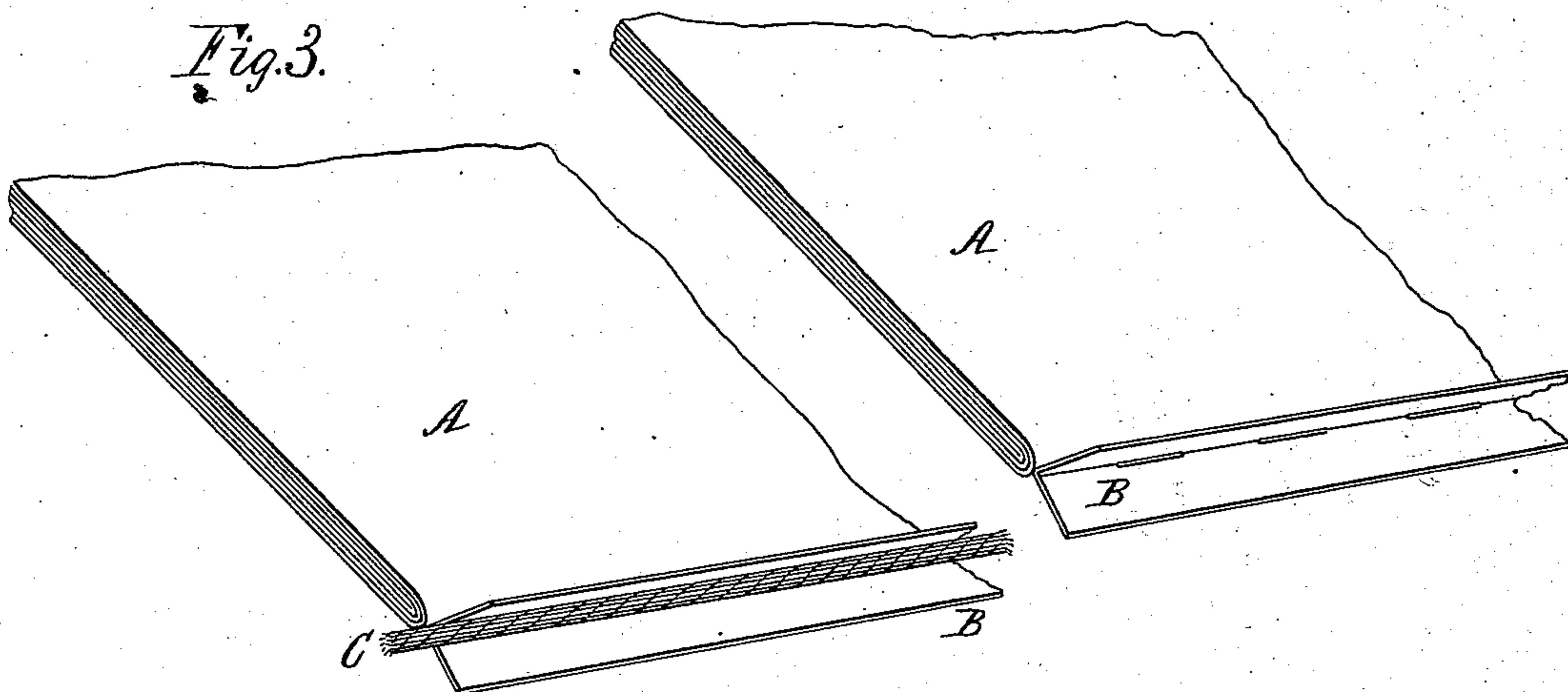
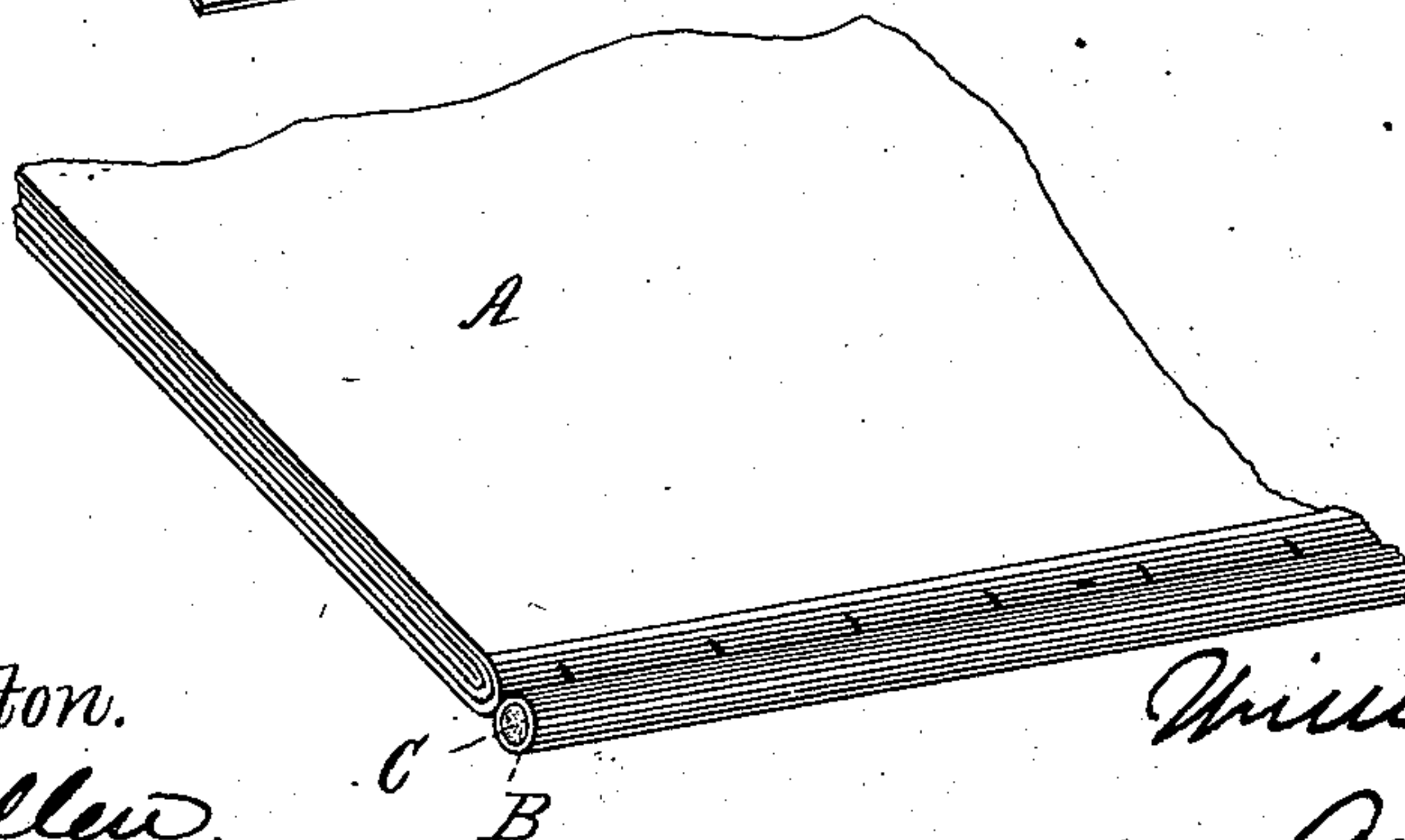


Fig. 4.



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Fig. 5.

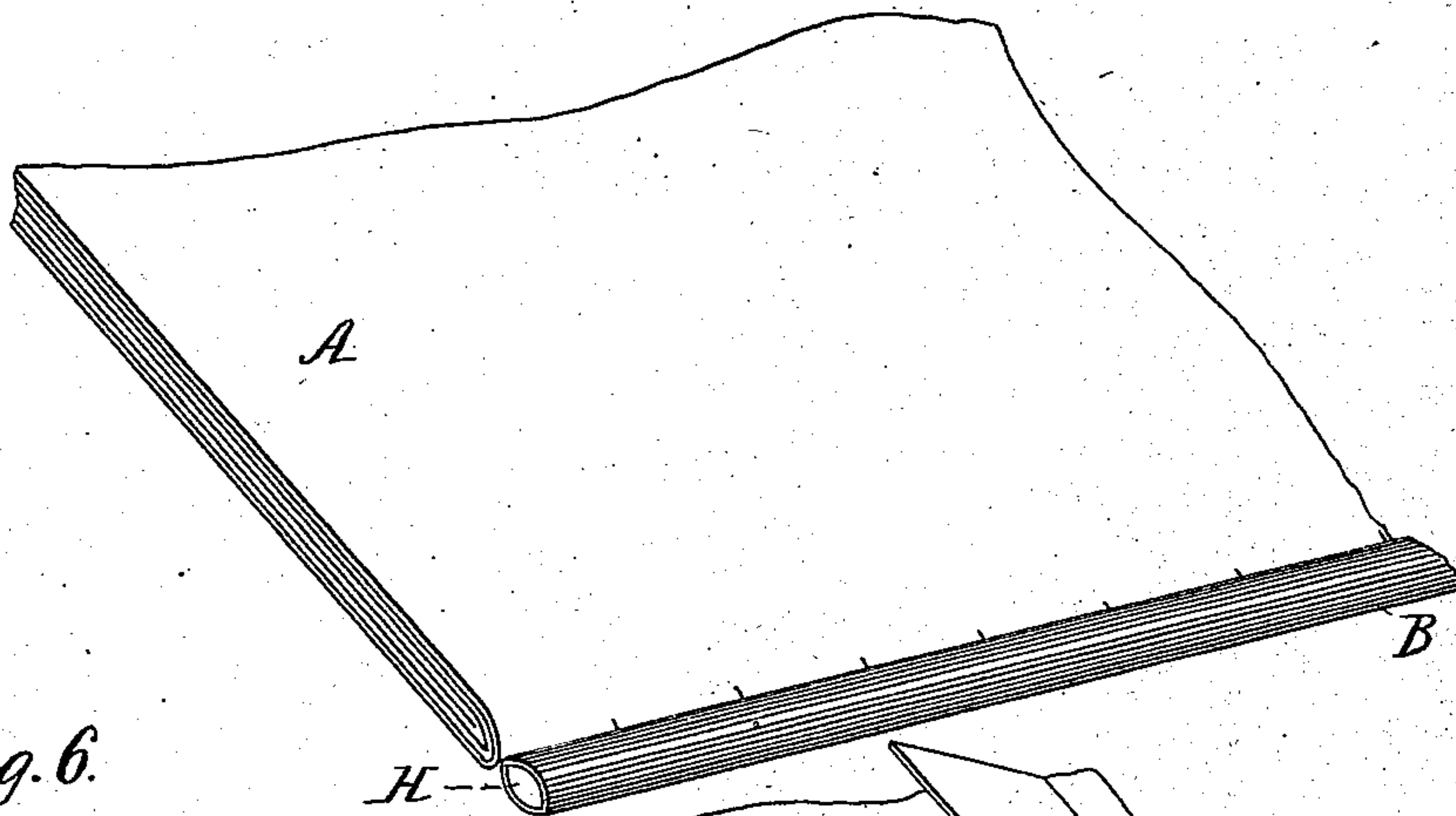


Fig. 6.

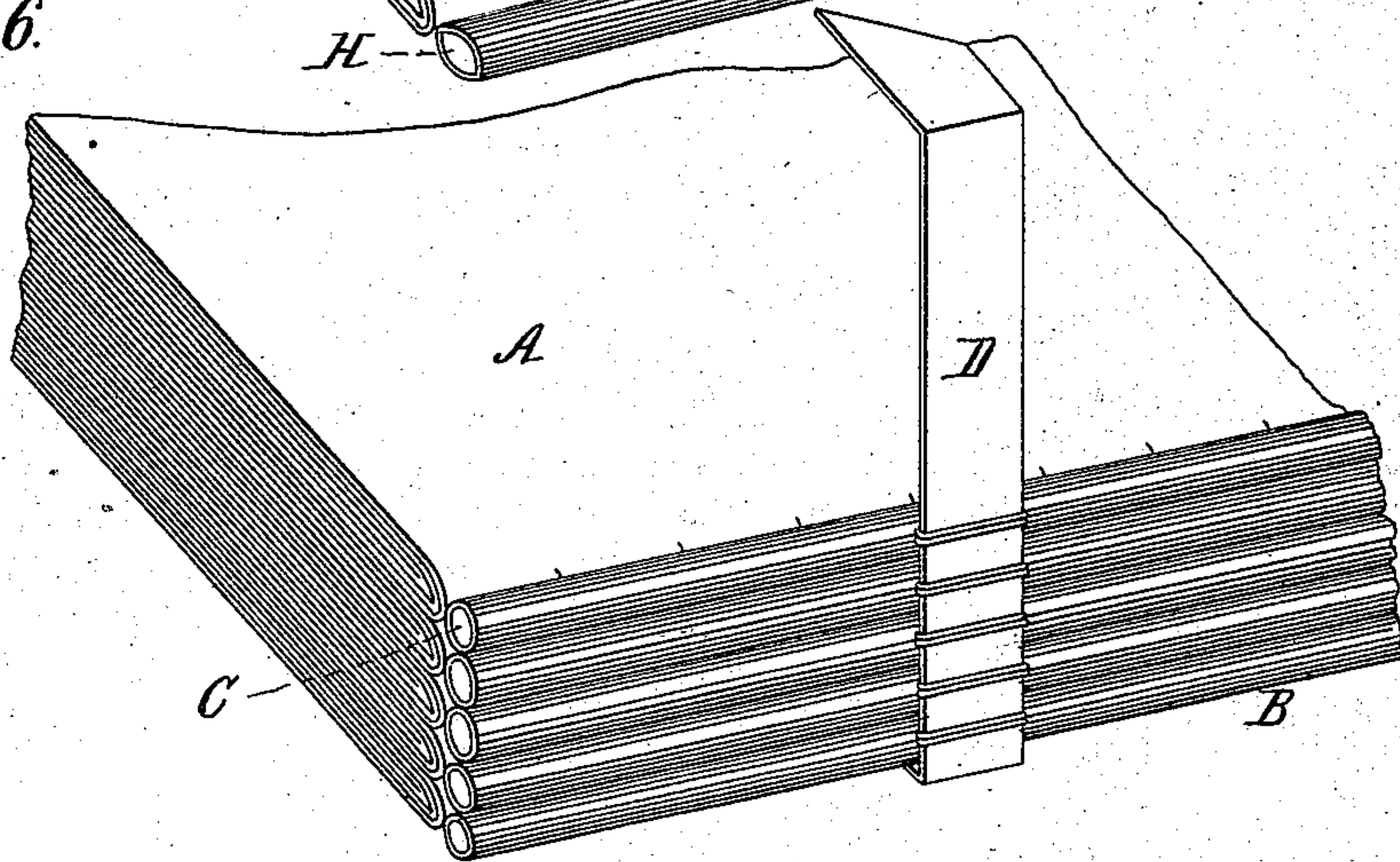
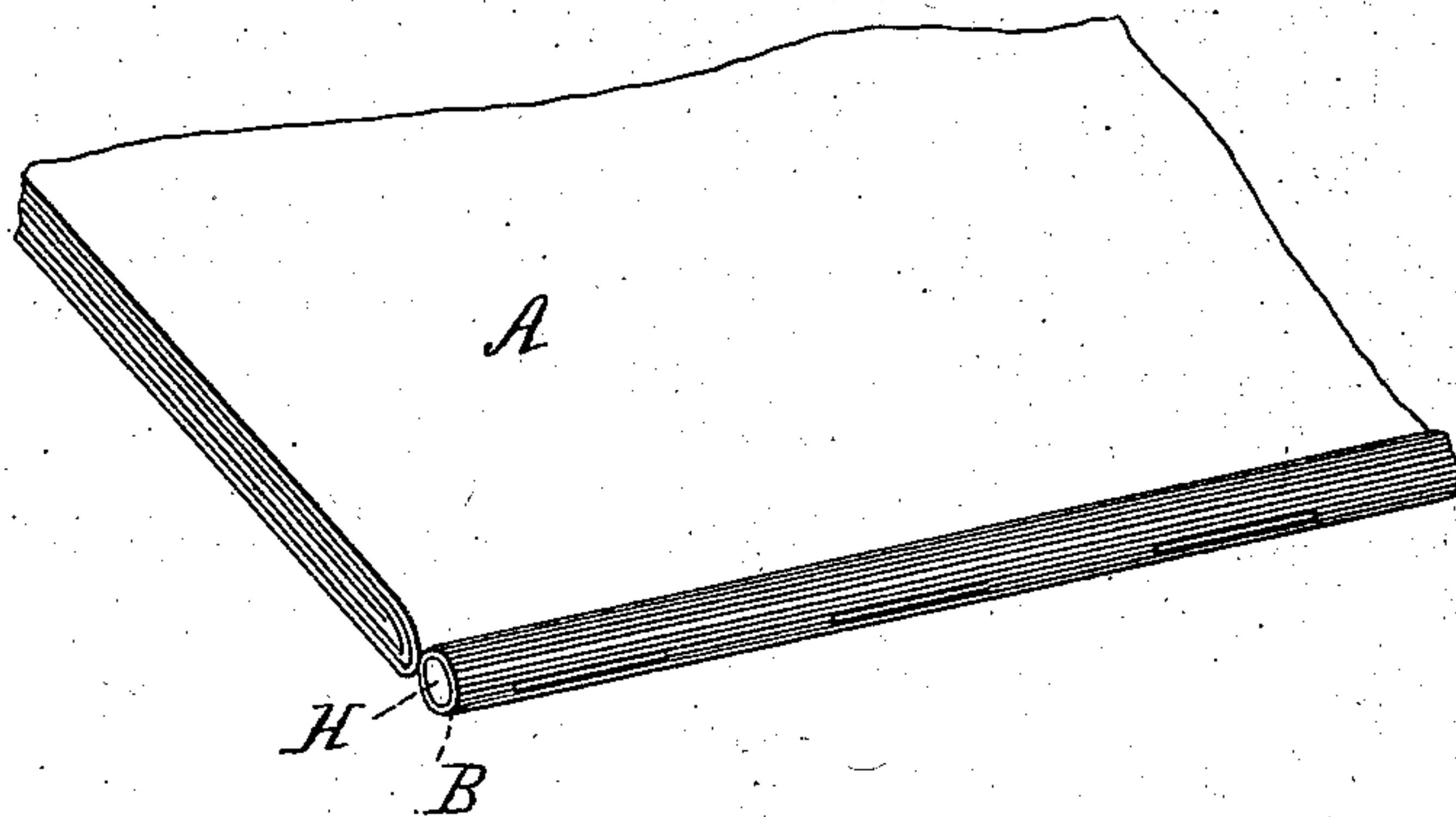


Fig. 7.



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UNITED STATES PATENT OFFICE.

WILL M. KINNARD, OF DAYTON, OHIO.

BOOK-BINDING AND BOOK.

SPECIFICATION forming part of Letters Patent No. 381,252, dated April 17, 1888.

Application filed September 10, 1887. Serial No. 249,300. (No model.)

To all whom it may concern:

Be it known that I, WILL M. KINNARD, a citizen of the United States, residing at Dayton, county of Montgomery, and State of Ohio, have
5 invented certain new and useful Improvements in Book-Binding and Books, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 My invention relates to an improvement in book-binding and the improved book produced thereby, and is more especially adapted for use in binding large blank-books, and is designed to produce a more compact and stronger
15 book, so bound that when spread out for use the leaves will lie flat, or substantially flat, without any gap at the back. It is also more economical in construction, both in material and labor.

20 It consists in stitching or fastening the signatures or sections of the book to round or oval cords. These cords are then fastened to the back of the book in the usual manner.

In the accompanying drawings, Figure 1 is
25 a perspective view of a book showing my improved binding. Fig. 2 is a perspective view of a section of a book prepared to receive the cord. Fig. 3 is a similar view of a section with the cord laid in place to be fastened.
30 Fig. 4 shows a section with the cord attached. Fig. 5 shows a section having an oval or flattened cord instead of a round one. Fig. 6 shows a number of sections laid together to be bound into a book. Fig. 7 is a perspective
35 view of a section showing the cord stitched direct to the section.

The sections of the book are formed in the usual way by folding a number of sheets of paper across the middle, as shown at A, to
40 the back of the section, or along the folded edge is stitched along the middle a strip of leather or book-muslin, B, the edges of the strip being left free. Between these edges or wings is inserted a cord, C, of any desired size.
45 The edges of the strip are then wrapped around the cord tightly and glued or fastened in any convenient way, any surplus muslin or leather being cut away, as shown in Fig. 4. A number of sections or signatures being pre-

pared in this way, they are laid up, as shown
50 in Fig. 6, each one being securely fastened to the binding-strips of parchment D, in the usual manner, after which they are attached to the back F, Fig. 1, and the cover G, in the usual manner.

55 If preferred, instead of the round cord C, an oval or flattened cord, H, Figs. 5 and 7, may be used, and instead of first stitching the strips of leather or book-muslin to these sections and then inserting and wrapping the cord, the
60 cord may be wrapped first and stitched direct to the sections, the stitching-threads passing through the cord, though this is not calculated to make the joint between the cord and
65 section so flexible as the other method. By this construction each section is firmly attached to a solid compact body intervening between the section and the back of the book
70 by a joint that remains perfectly flexible and strong. The space between the edges of the sections and the backing is reduced to a minimum, giving the book a compactness that prevents the sagging of the leaves or sections or
75 their breaking off, and also avoids any wide gap between the right and left sides of the book when it is spread open. Much less material is needed and the labor of binding is reduced. The book can be made much shorter
80 between the back and the outer edges of the leaves, thus occupying considerably less room in a safe.

I am aware that blank-books have been bound with a flexible joint between the leaves or sections and the back of the book, and do not broadly claim such a construction; but,
85 Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The above-described improvement in book-binding, which consists in attaching the
90 sections of the book to the back by means of an intervening compact round or oval body, to which the sections are attached by a flexible joint, substantially as and for the purpose described.

2. The above-described improvement in book-binding, which consists in stitching the sections to a strip of leather or book-muslin in
95

which is wrapped a round or oval cord and binding said cord directly to the back, substantially as and in the manner described.

3. A book in which the sections are attached
5 to a round or oval cord by a flexible joint and the cord attached securely to the back, substantially as and for the purpose specified.

4. In a book-binding, a round or oval cord

intervening between the sections of the book and the back and attached to the sections by 10 a flexible joint, substantially as and for the purpose described.

WILL M. KINNARD.

Witnesses:

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