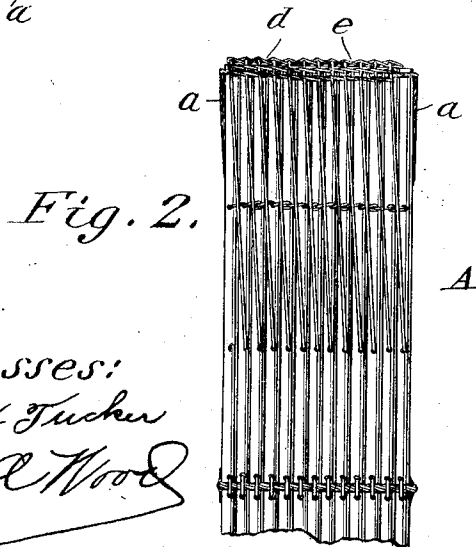
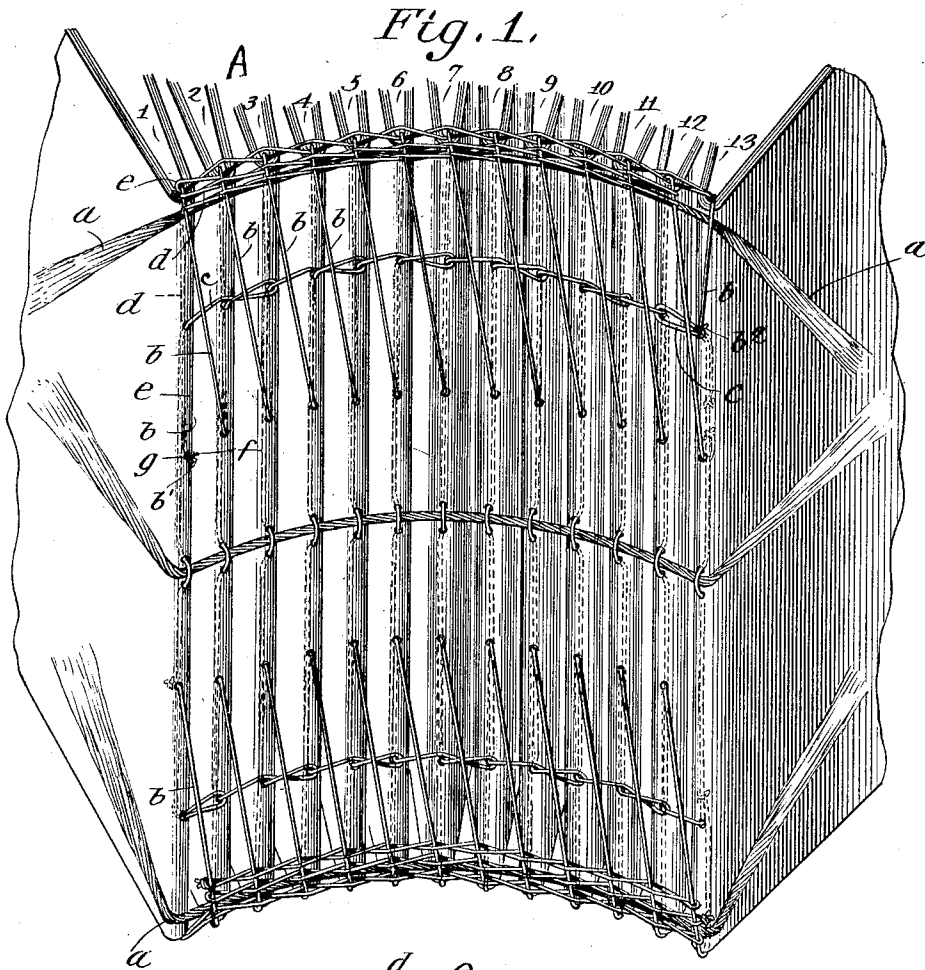


C. S. ALTOONIAN.
STITCHING FOR SIGNATURES OF BOOKS.
APPLICATION FILED OCT. 8, 1910.

1,006,451.

Patented Oct. 24, 1911.



Witnesses:
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STITCHING FOR SIGNATURES OF BOOKS.

1,006,451.

Specification of Letters Patent.

Patented Oct. 24, 1911.

Application filed October 8, 1910. Serial No. 586,122.

To all whom it may concern:

Be it known that I, CHARLES S. ALTOONIAN, a citizen of the United States, residing at the city of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Stitching for Signatures of Books, of which the following is a specification.

My invention relates to improvements in stitching signatures of a book, prior to the latter receiving its cover or final binding operation; and the object in view is to provide a strong and durable stitching for the signatures, in order to add greater strength to the corners of the book.

In the accompanying sheet of drawings, Figure 1 shows in perspective the body of a book made up of any desired number of signatures, and illustrates the manner in which the corners of the signatures are sewed together in accordance with my improved binding, and, Fig. 2 is a rear edge view of the book of signatures secured together by the novel stitching embodying the principles of the present invention.

Like reference characters indicate like parts.

My improved stitching is adapted for the corners of signatures of a book, designated by reference letter A as a whole, and the stitchings for each corner are constructed alike and made up as follows: First, a piece of hemp cord *a* is pasted across the corner of the signatures and the free ends secured in like manner to the outer leaves of the same. Next, by means of a needle a thread *b* is carried through the first signature, 1, at a point below the end of said signature, until a knot formed on the end of said thread abuts the vertical folded edge of said signature, as at *b*¹. This thread is then carried over the cord *a* and passed through the second signature, 2, adjacent to the point *b*¹, from whence said thread is sewed around in the same manner with each and every other signature, 3, 4, 5, etc. Another knot is then formed to unite with the loop stitching or common binding *c*, at a point *b*² upon the vertical folded edge of the last signature, 13. The final operation consists of employing two threads, as *d* and *e*, of different colors, to afford a neat effect and at the same

time add strength to the stitching, as described. A needle is mounted on each thread *d* and *e*, and the ends of the latter are tied together to form a knot, as at *f*. The thread *d*, which may be a red color, is carried through the first signature, 1, at the point *g*, and brought around the thread *e*, which may be a blue color, thence over the cord *a* and beneath the first signature-thread *b*. The thread *e* is now carried beneath the second signature-thread *b*, then the thread *d* is carried beneath the third signature-thread *b*, then the thread *e* is carried beneath the fourth signature-thread *b*, and so on consecutively until the thread *b* of the last signature, 13, has been stitched in this manner, after which a second similar stitching of the threads *d* and *e* is repeated from the signature, 13, then a final third and similar stitching is repeated from the signature, 1, to, 13, where said threads *d* and *e* are tied together to form a knot at the vertical outer edge of said last signature, 13.

While in the drawings I have shown only two stitchings by the threads *d* and *e*, it is obvious that one, two, three or more such stitchings may be made, and more than two such threads may be used to impart an ornamental stitching for each end of the book.

By my improved manner of stitching, as above-described, it is evident I provide a simple, strong and desirable binding for the ends of signatures, so that the same will withstand a great amount of rough handling without loosening the leaves or injuring the binding.

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

A stitching for signatures of a book, composed of a cord secured upon the outer leaves of the signatures and passing over the ends thereof; a thread *b* passing through the folded edge of one signature at a point *b*¹ below the end thereof, thence over said cord and through the folded edge of the next signature, adjacent to the entering point of said first signature, and so on in the same manner throughout the following signatures, and an ornamental stitching composed of two or more different color threads, *d*, *e*, the thread *d* passing through the entering

point of said first signature and around the
thread *e*, thence over the cord and beneath
the thread *b* of said first signature, then the
thread *e* carried over the cord and passed be-
5 neath the thread *b* of the next signature, and
so on in like manner throughout the fol-
lowing signatures.

Witness my hand this third day of Au-
gust, A. D. 1910.

CHARLES S. ALTOONIAN.

Witnesses:

OHAN. MANOOGIAN,
JOHN F. COLLINS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
