

A. O. & E. R. KITTREDGE.
BOOK SECTION HAVING WIDE AND NARROW LEAVES.

(Application filed Nov. 12, 1901.)

(No Model.)

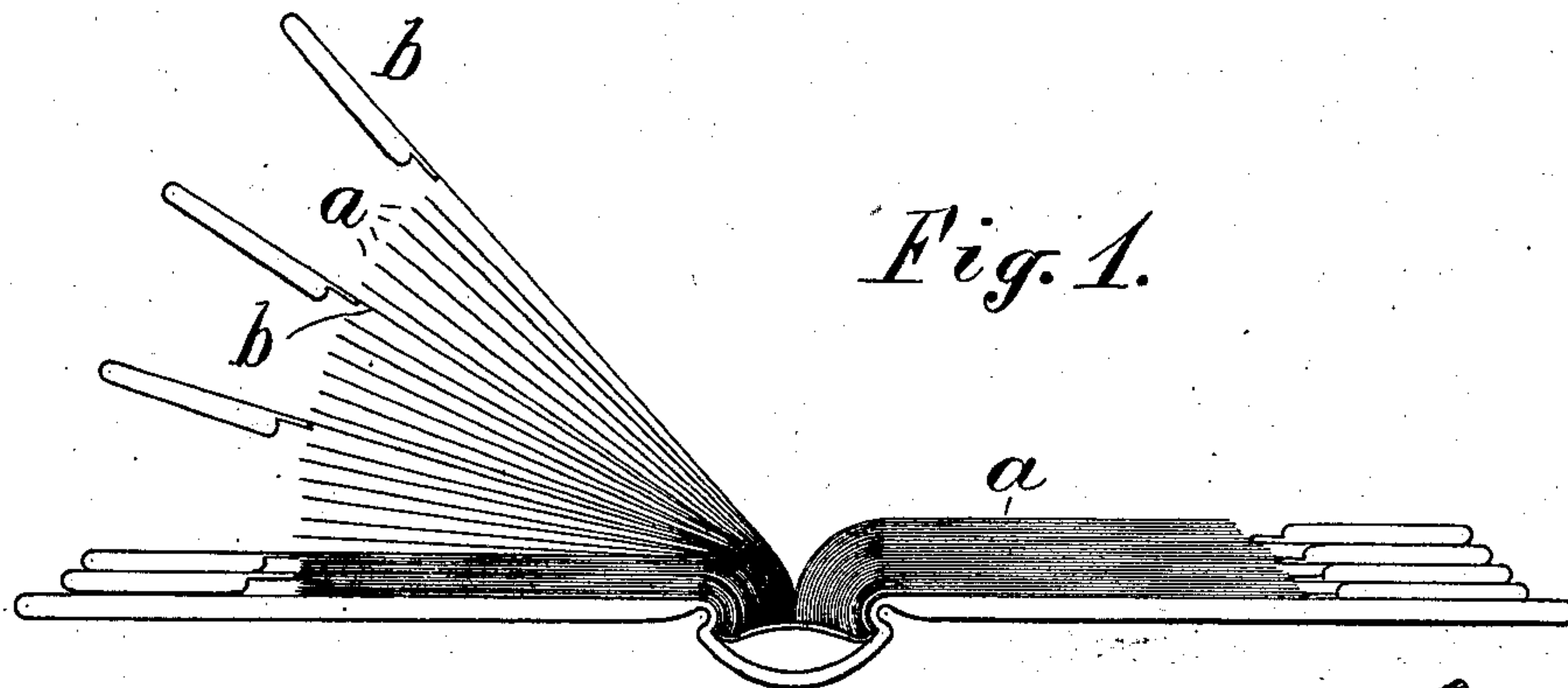


Fig. 2.

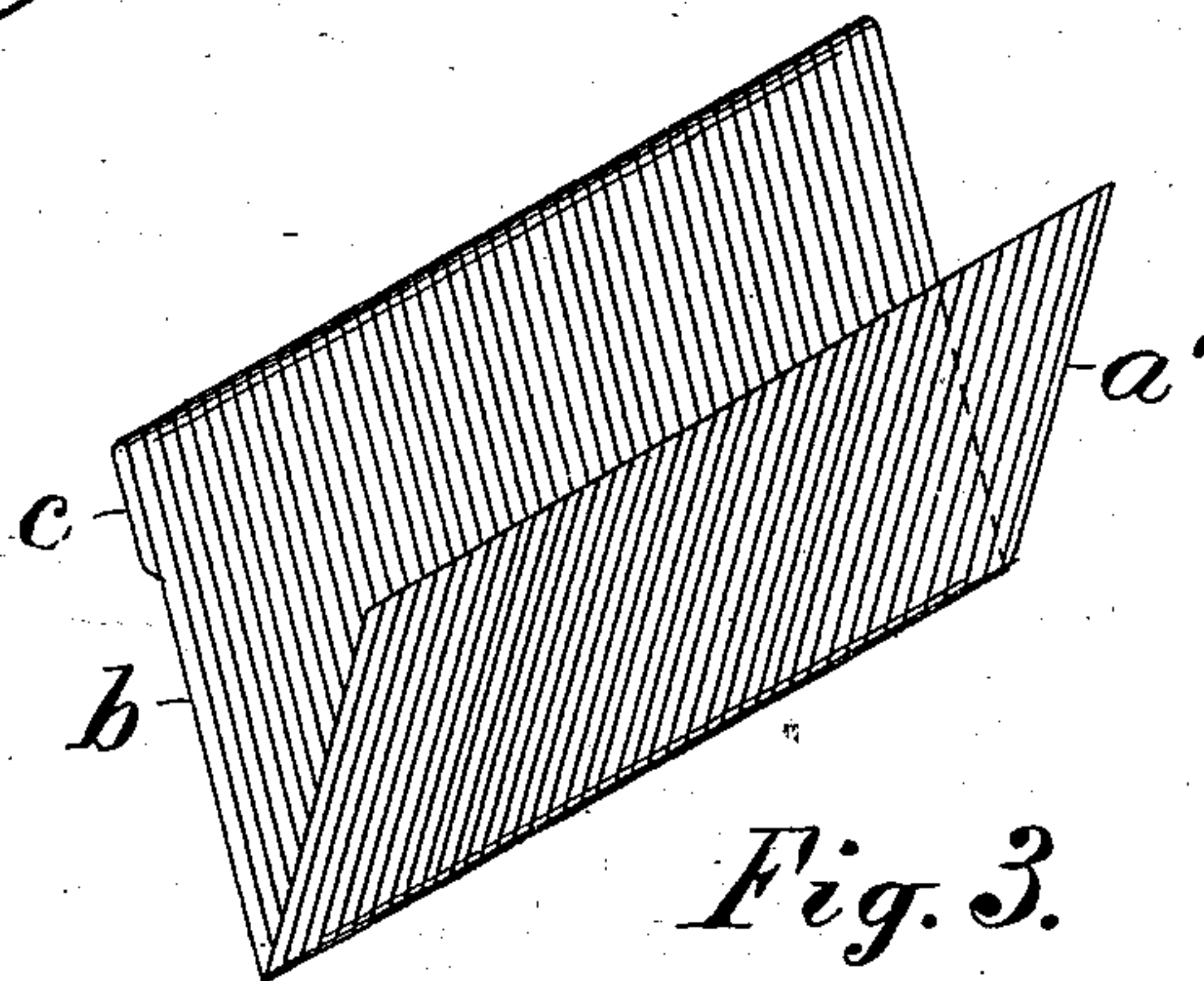
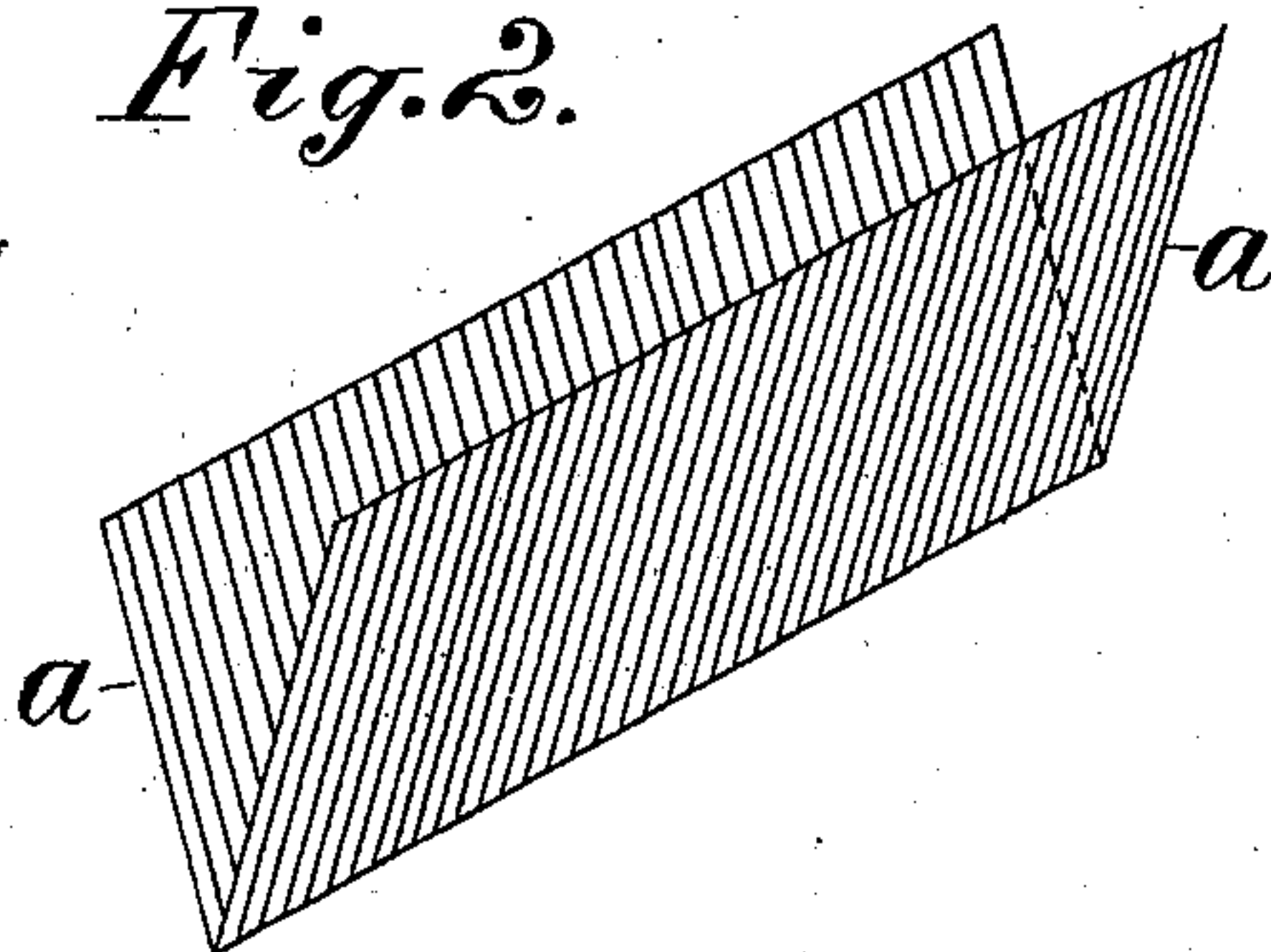


Fig. 3.

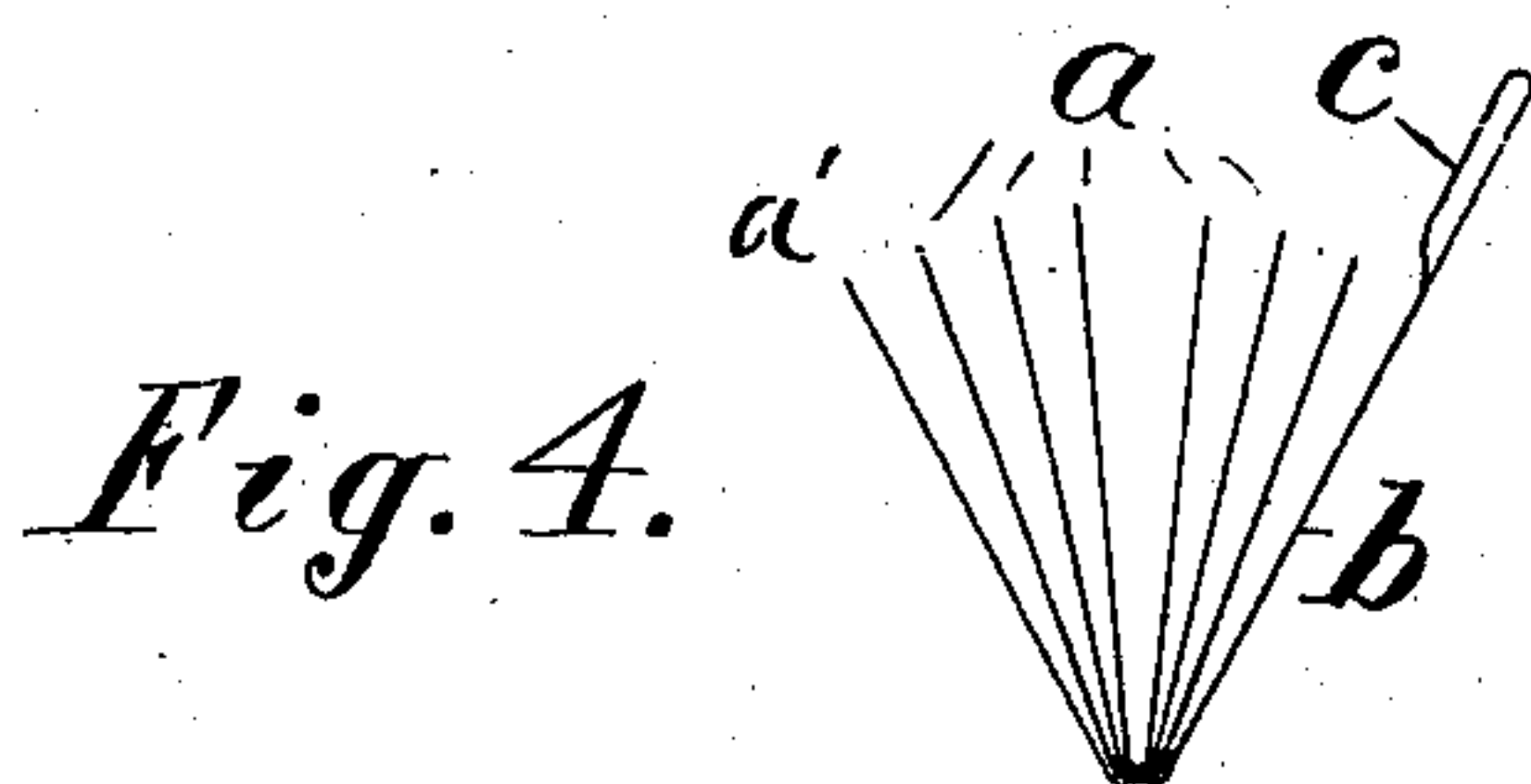


Fig. 4.

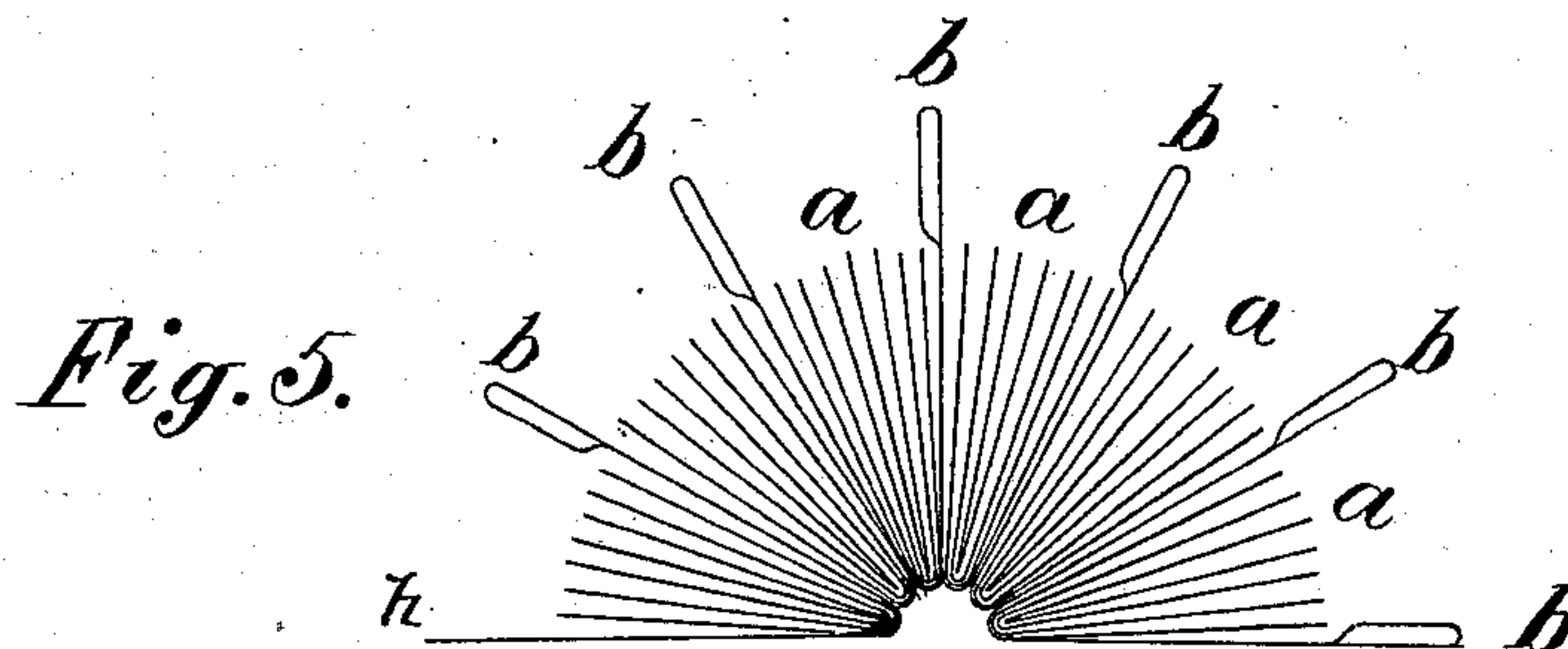


Fig. 5.

Attest:
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UNITED STATES PATENT OFFICE.

ANSON O. KITTRIDGE, OF SPRINGFIELD, MASSACHUSETTS, AND ERNEST R. KITTRIDGE, OF NEW YORK, N. Y., ASSIGNORS TO ACCOUNT, AUDIT & ASSURANCE COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

BOOK-SECTION HAVING WIDE AND NARROW LEAVES.

SPECIFICATION forming part of Letters Patent No. 702,012, dated June 10, 1902.

Original application filed August 18, 1899, Serial No. 727,717. Divided and this application filed November 12, 1901. Serial No. 81,970. (No model.)

To all whom it may concern:

Be it known that we, ANSON O. KITTRIDGE, residing at 42 Leyfred Place, Springfield, county of Hampden, State of Massachusetts, and ERNEST R. KITTRIDGE, residing at 128 East Twelfth street, in the city, county, and State of New York, citizens of the United States, have invented certain new and useful Improvements in Book-Sections Having Wide and Narrow Leaves, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

The present application is a division of application No. 727,717, filed August 18, 1899, with title "Book-sections having wide and narrow leaves," and claims a modification of the invention therein set forth.

In the present invention the book-sections contain each an odd number of narrow leaves, while the construction allowed in the said application produced book-sections having an even number of narrow leaves between each of the wide leaves.

The object of the present invention is to furnish a convenient means of producing at short notice blank-books, account-books, and other books having wide and narrow leaves. Such books when used for accounts and records of various kinds frequently require to be ruled in columns with headings printed upon the various columns or pages. In most books having wide and narrow leaves a certain number of narrow leaves is bound intermediate to two of the wide leaves, and the narrow leaves are used in connection with a record or inscription upon the projecting margins of the wide leaves. It is found in practice that the demands of various businesses require wide variations in the number of narrow leaves for use in connection with each of the wide leaves, and as such requirements cannot be anticipated so as to keep the books in stock we have devised means for preparing unit sections with a group of the narrow leaves and a single wide leaf, so that such sections may be quickly bound into books of various dimensions.

In practicing the invention we form the narrow leaves in pairs, which may be inserted within one another, and we form the wide leaf in connection with a narrow leaf from a single sheet of suitable width, the pairs of narrow leaves being inserted within the fold of such sheet and the whole secured together to form a book-section. Any number of the pairs of narrow leaves can be inserted within the fold of the sheet which constitutes the wide and narrow leaf, and books in great variety can thus be made at short notice from the same materials previously prepared. By this method narrow leaves can be combined with wider leaves of any desired width, and wide leaves of a given width can be combined with narrow leaves of any desired width. The edge of the wide leaf can be reinforced by any of the ordinary means to correspond with the thickness of the annexed group of narrow leaves in the same section and the book be thus made of uniform thickness in the edge and in the body. By this method of forming book-sections the sheets of paper can be ruled and printed before folding and can then be combined at short notice to produce the books desired.

The invention will be understood by reference to the annexed drawings, in which—

Figure 1 is an end view of an open book with the leaves separated at the left side to show the disposition of the wide and narrow leaves. Fig. 2 represents in perspective a pair of the narrow leaves for such book formed from a single sheet. Fig. 3 represents a wide and narrow leaf formed from a single sheet. Fig. 4 is an end view of one of the wide and narrow leaves with a group of three pairs of the narrow leaves inserted within the fold of the same. Fig. 5 is an end view of six sections constructed as shown in Fig. 4.

a designates the narrow leaves, *b* the wide leaves, and *c* a flap folded upon the edge of the wide leaf to form a pocket for the insertion of a thickener. Two narrow leaves are shown in Fig. 2, formed by once folding a sheet of paper of suitable width. A wide leaf *b* and narrow leaf *a'* are shown in Fig.

3, formed by folding a wider sheet of paper, the paper having also sufficient width to turn the flap *c* over upon the edge of the wide leaf if an integral flap is desired.

5 It is immaterial to the present invention how the edges of the wide leaves be thickened. The visible surfaces of the wide and narrow leaves are shown ruled, and such ruling is readily effected, and columns ruled
10 upon the sheets and headings printed in the columns, if desired, before the sheets are folded.

Fig. 4 shows in the outer leaves *a' b* a pair of wide and narrow leaves, like the pair shown
15 in Fig. 3, excepting that the thickener is shown upon the right-hand leaf instead of the left, and three pairs of the narrow leaves *a* are shown inserted in the fold of the outer leaves. Pairs of the narrow leaves to any
20 required number may be thus inserted, and the folds of all the leaves of such group are readily stitched or secured together to form a unit or section, and any of such unit-sections may be bound with other similar sec-
25 tions to form a book which necessarily has, as shown in Figs. 1 and 5, an odd number of the narrow leaves between the adjacent wide leaves.

An independent line *h* is shown at the left
30 side of the group of sections in Fig. 5 to indicate a fly-leaf or printed leaf to complete the book, if necessary.

From the above description it will be obvious that sections or units of different character may with the same facility be just as
35 readily made and combined in the same book as sections of uniform character.

Where books require uniform printing or ruling, but vary in the number of leaves in
40 the different units, the leaves may be made by printing and ruling sheets of suitable size and then folding such sheets to form integral pairs of the narrow leaves and of the conjoint wide and narrow leaves and carrying the
45 same in stock until a given book is ordered

and the required capacity of the book is known.

It will be understood from the above description that each section necessarily contains an even number of leaves and that one
50 of the leaves being a wide leaf the number of narrow leaves in each section is necessarily an odd number. The construction is thus distinguished from all of those in which each signature or section has narrow leaves formed
55 from a single sheet folded repeatedly, as the repeated folding of such a sheet would necessarily produce an even number of the narrow leaves.

This invention furnishes great facility in
60 making account-books from stock previously prepared, and thus enables orders to be filled with much greater despatch than where the ruling, printing, and folding of sheets must be done before a book can be made, as the
65 sheets can be ruled and printed in advance for many such classes of books and the proper number of narrow leaves readily combined with each of the wide leaves by the arrangement above described. 70

Having thus set forth the nature of the invention, what is claimed herein is—

A book having wide and narrow leaves and formed of unit-sections with an odd number of narrow leaves in each section, and each
75 section comprising a wide and narrow leaf in one piece with a group of narrow leaves in pairs inserted in the fold of such wide and narrow leaves, and the projecting margin of the wide leaf being reinforced to agree in
80 thickness with the other leaves of the section, substantially as herein set forth.

In testimony whereof we have hereunto set our hands in the presence of two subscribing witnesses.

ANSON O. KITTREDGE.
ERNEST R. KITTREDGE.

Witnesses:

C. MACINNES,
THOS. J. PATTERSON.