

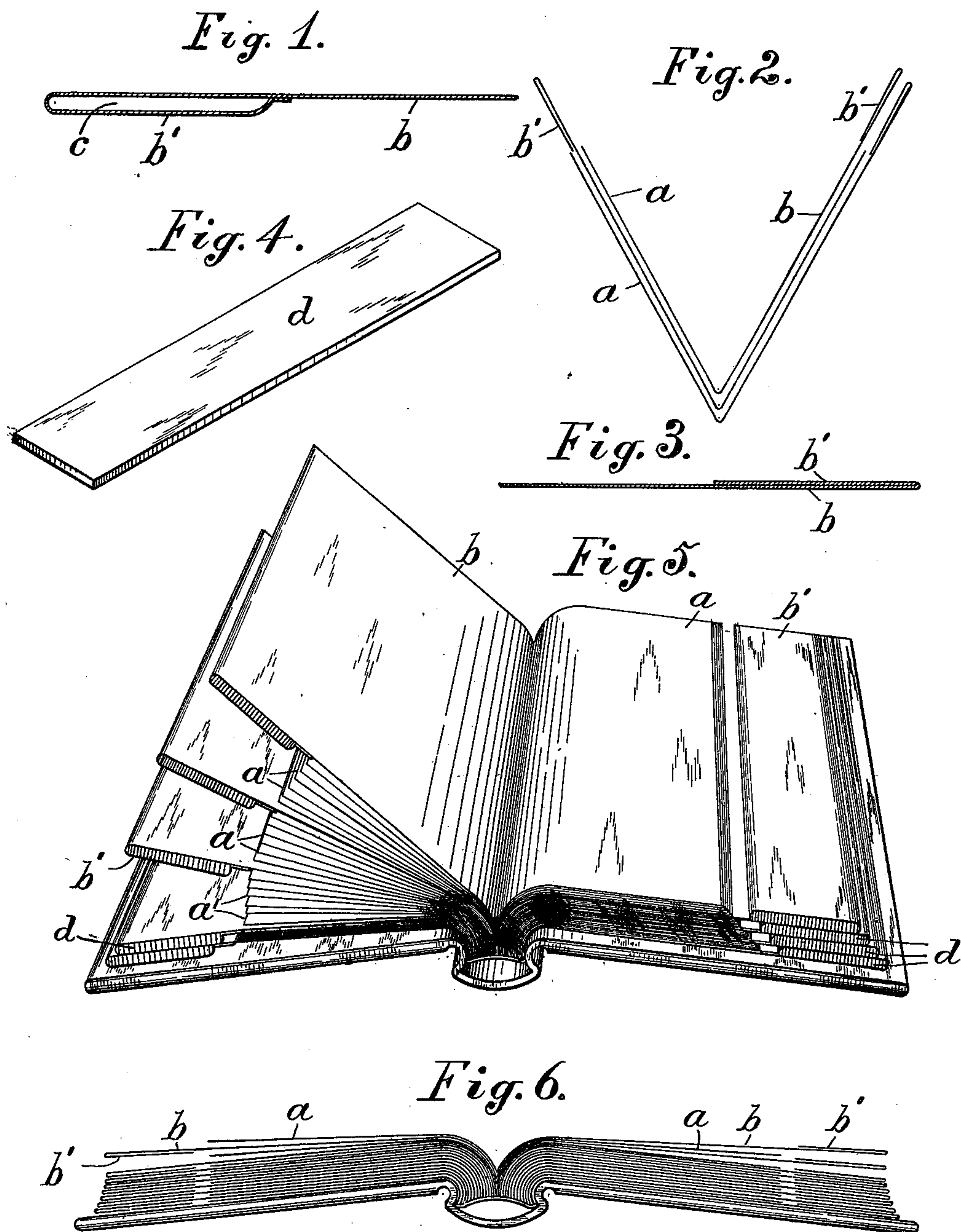
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Patented Apr. 16, 1901.

E. R. KITTREDGE.  
RECORD LEAF WITH THICKENED EDGE.

(Application filed Aug. 18, 1899.)

(No Model.)



Attest:  
L. Lee,  
Edw. P. Winney.

Inventor.  
Ernest R. Kittredge, per  
Thomas S. Crane, Atty.



# UNITED STATES PATENT OFFICE.

ERNEST R. KITTREDGE, OF TENAFLY, NEW JERSEY, ASSIGNOR TO THE  
ACCOUNT, AUDIT & ASSURANCE COMPANY, OF NEW YORK, N. Y.

## RECORD-LEAF WITH THICKENED EDGE.

SPECIFICATION forming part of Letters Patent No. 672,171, dated April 16, 1901.

Application filed August 18, 1899. Serial No. 727,711. (No model.)

*To all whom it may concern:*

Be it known that I, ERNEST R. KITTREDGE, a citizen of the United States, residing at Tenafly, county of Bergen, State of New Jersey, have invented certain new and useful Improvements in Record-Leaves with Thickened Edges, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

10 The object of the present invention is to furnish an improved construction for the class of books referred to in Letters Patent No. 598,590, granted the 8th day of February, 1896, to Brown and Kittredge. Such invention comprised a book or assemblage of leaves  
15 composed of wide or long leaves with one or more narrow or short leaves interposed between each adjacent pair of the wide or long leaves and with the margins of the wide  
20 leaves, which project beyond the edges of the narrow leaves, reinforced or thickened to compensate for the aggregate thickness of the interposed narrow leaves, so that the book when closed will be of even thickness throughout its entire width.

In the present invention the edges of the wide leaves are thickened by forming each wide leaf with a marginal flap folded over and its longitudinal edge attached to the face  
30 of the sheet. The attachment of the flap by its edge forms a hollow pocket under the flap. Where the leaves are of uniform thickness and a single narrow leaf is interposed between each pair of the wide leaves, the fold  
35 or flap upon the margin of the wide leaf compensates for each intervening leaf. Where a number of the narrow leaves are interposed between the adjacent wide leaves, I introduce a filler within the turned-over portion  
40 of the wide leaf, so as to thicken the margin of the wide leaf in the required degree, and in such case I secure the edge of the marginal flap to the face of the wide leaf to form a pocket or inner space within which a filler  
45 of the required thickness may be inserted.

To meet different demands, books may be required with a greater or less number of the narrow leaves between the wide leaves, and by the provision of a pocket between the marginal flap and the body of the wide leaf to receive a filler such wide leaves are adapted

for use in manufacturing books having a greater or less number of narrow leaves.

The invention further consists in the leaf-sheet folded to form two leaves and having a  
55 flap upon one margin folded over and secured to the first leaf to thicken the edge and the opposite margin folded over in proximity to the inner edge of such thickening-flap to form a narrow second leaf.

In the annexed drawings, Figure 1 is a section of a leaf edge with a hollow pocket formed thereon. Fig. 2 is an end view of three sheets folded to form wide and narrow  
65 leaves with the edges of the wide leaves thickened. This figure illustrates the mode of making a pair of wide and narrow leaves from a single sheet of paper and their mode of assemblage to constitute a book or section of a book, such as is shown in Fig. 6. Fig. 3 is a  
70 section of a leaf edge with the margin doubled by a close fold. Fig. 4 is a perspective view of a filler for the pocket upon the leaf edge shown in Fig. 1, but upon a smaller scale than the former figure. Fig. 5 is a perspective view of an open book embodying  
75 this invention and having wide leaves with a number of interposed narrow leaves. Fig. 6 is an end view of a book having each alternate leaf thickened.

*a a* designate the narrow leaves of a book, and *b b* the wide leaves with reinforced margin.

*b' b'* designate the integral flaps, turned over upon the margin of the wide leaves to thicken  
85 the same.

Fig. 6 shows a book having alternate wide and narrow leaves, and in such case the margin of the wide leaf requires merely to be doubled in thickness, as shown in Fig. 3, in  
90 which case the entire marginal flap *b'* may be secured to the surface of the leaf-sheet.

Fig. 5 shows a book having groups of narrow leaves inserted between the wide leaves, and in such case the wide leaf requires thickening in an additional degree by means of the  
95 pocket.

Fig. 1 shows the edge of the flap only secured to the face of the leaf-sheet and the body of the flap separated from the leaf sufficiently to form the hollow pocket *c*. A flat  
100 rectangular filler *d*, such as is shown in Fig.



4, may be made of paper, pasteboard, or other suitable material of the required thickness and inserted in the pocket to thicken the edge of the leaf in the required degree. The thickness of such a filler may obviously be varied within considerable limits to compensate for the thickness of the intervening narrow leaves in the book, and the margin of the book may thus be made of exactly the same thickness as the portion occupied by the narrow leaves. By forming the pocket of the integral flap  $b'$  it may be readily expanded or contracted to the thickness of the interposed filler, and the flat walls of the pocket may, if desired, be secured to the filler by cement.

In practice it is found that a mere touch of gum or glue at any point upon the filler is sufficient to hold it within the pocket and that the walls of the pocket then accommodate themselves to the thickness of the filler.

The pocket formed in my construction is open only at the ends, and is thus adapted to wholly inclose the filler and retain it securely upon the leaf without any gum or other fastening, and it is therefore possible where the construction (as in a loose-leaf ledger) requires the occasional addition or removal of narrow leaves to insert the filler loosely or removably, so as to be exchanged for a thicker or thinner filler at pleasure. Where one or two narrow leaves are added to the book, it is evident that the filler may be removed from the pocket and thickened in precisely the same degree by adding corresponding thicknesses of such paper as is used in the narrow leaves. The wide and narrow leaves are readily made in pairs from a single sheet of paper, as illustrated in Fig. 2, and the margin of the wide leaf in such case may be reinforced by a close fold, as shown in Fig. 3, or by the open pocket shown in Fig. 1. Groups of such sheets to form a book or section of a book having alternate wide and narrow leaves are readily formed by placing pairs of such leaves successively one within the other, as shown in Fig. 2, with the narrow leaf of each pair in contact with the wide leaf of the preceding pair. Such groups of leaves when stitched together correspond to signatures in a printed book and may be used independently without covers or may be bound with other similar sections in a book with covers, as shown in Fig. 6.

Where the wide and narrow leaves in a book are formed from different sheets of paper, it is obvious that sheets of very different sizes must be used; but the manufacture of such books is greatly simplified by forming the wide and narrow leaves in pairs, as shown herein, and thickening the margin of the wide leaf by an integral flap, as such construction enables the manufacturer when making certain classes of account-books to use only one size of paper in making the leaves. In such case one leaf upon the sheet is folded over at the margin to form the integral flap and the edge of the other leaf (in folding the sheet)

is brought into proximity to the inner edge of such thickening-flap.

It is obvious that the invention is embodied in such a combination of narrow and wide leaves with folded margins, when such wide and narrow leaves are assembled for use, whether they are permanently bound together or not.

Were it desired to provide a smooth writing-surface upon the projecting margins of the wide leaves at one side of the book, as at the left-hand side, all of the marginal flaps may be folded to the left, as shown in Fig. 2, and the edge of each flap is thus brought upon the under side of the leaf when turned to the left. Such folding of the marginal flaps all in one direction is not claimed herein, as it is the joint invention of A. O. Kittredge and E. R. Kittredge, and is claimed by them in a copending application, Serial No. 727,717, filed August 18, 1899.

I hereby disclaim a book having wide and narrow leaves with an integral flap upon the margin of each of the wide leaves folded longitudinally backward to thicken the edge and to provide a level and unobstructed writing-surface upon all of said leaves upon the same side thereof.

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

1. A leaf or sheet for written records, having a marginal flap folded over and its longitudinal edge attached to the face of the sheet, as and for the purpose set forth.

2. A leaf or sheet for written records having a marginal flap folded over upon one edge of the leaf and the edge of such flap secured to the face of the sheet to form a pocket, the inner space between the leaf and flap being open at the ends only, to insert a filler of the required thickness, as and for the purpose set forth.

3. A leaf or sheet having a marginal flap folded upon the leaf, with a filler inserted between the flap and the leaf to thicken the edge of the leaf, substantially as herein set forth.

4. An account-book leaf, having a marginal flap folded over upon the leaf and secured thereto by its edge to form a pocket, with a filler inserted removably within such pocket to form a pad of the desired thickness, as and for the purpose set forth.

5. A leaf-sheet folded to form two leaves and having a flap upon one margin of the sheet folded over and secured to the face of the same, and the opposite margin of the sheet folded over in proximity to the inner edge of such thickening-flap, whereby a narrow leaf is formed integral with a broad leaf having an integral thickened edge.

6. A book having wide and narrow leaves formed in pairs from single leaf-sheets, the wide leaves having the margin folded over and secured upon the face of the leaf to compensate for the thickness of the adjacent narrow leaf.



7. A book having wide and narrow leaves, with an integral flap upon the margin of each of the wide leaves folded over and secured to such wide leaf by its edge to form a pocket.

5 8. A book having wide and narrow leaves, with an integral flap upon the margin of each of the wide leaves folded over and secured to such wide leaf and inclosing a filler to compensate for the combined thickness of a num-

ber of the narrow leaves, substantially as here- ro  
in set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ERNEST R. KITTREDGE.

Witnesses:

JOHN J. McBRIDE,  
THOMAS S. CRANE.