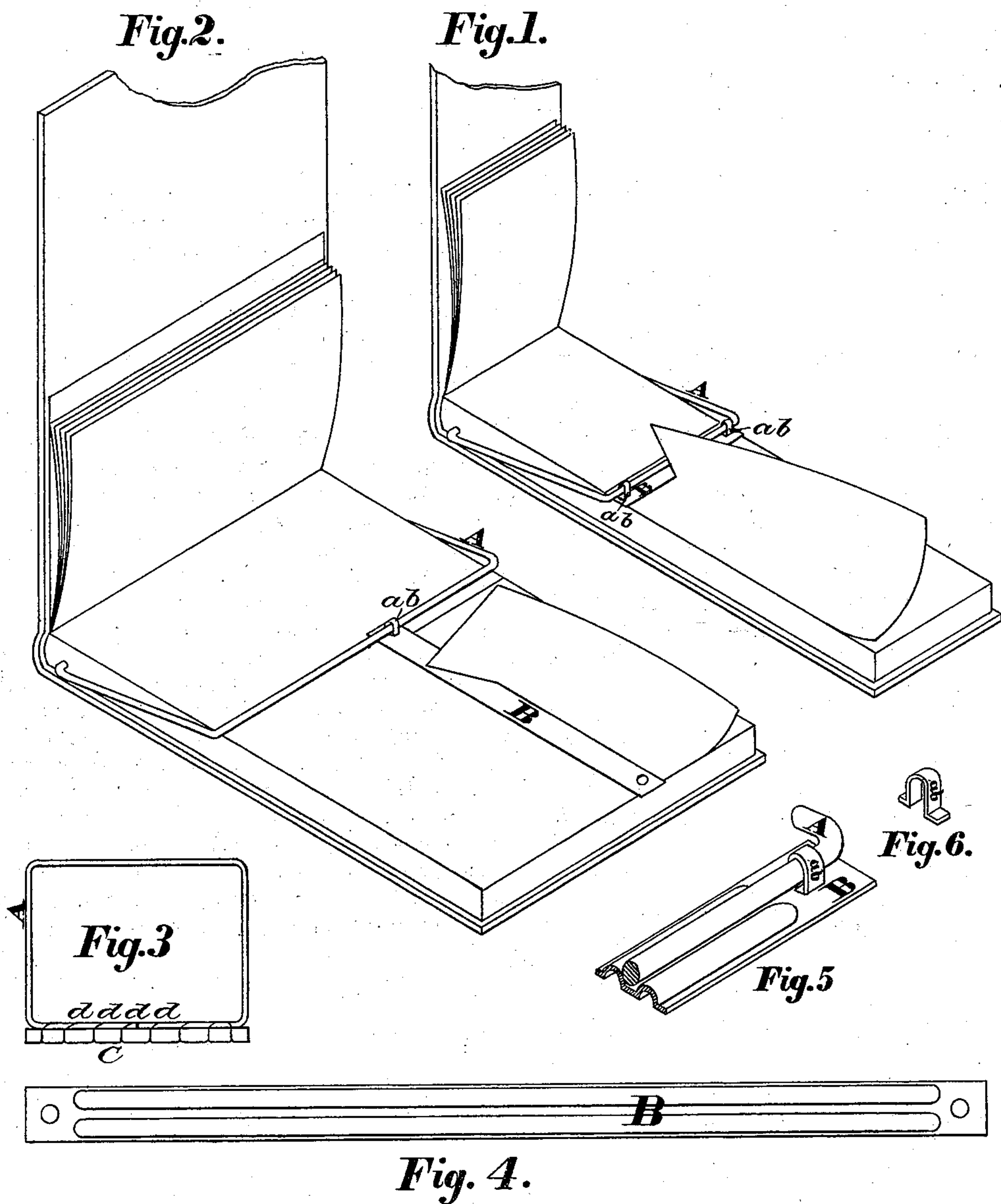


(No Model.)

L. W. ARNOLD.  
Leaf Cutter for Check Books.

No. 230,602.

Patented Aug. 3, 1880.



**Witnesses**  
William H. Hall  
Thomas Morrison

**Inventor**  
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# UNITED STATES PATENT OFFICE.

LLEWELLYN W. ARNOLD, OF CHICAGO, ILLINOIS.

## LEAF-CUTTER FOR CHECK-BOOKS.

SPECIFICATION forming part of Letters Patent No. 230,602, dated August 3, 1880.

Application filed May 13, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, LLEWELLYN W. ARNOLD, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Leaf-Cutters for Check-Books; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

My invention relates to a device for inseparably attaching a safe-edge ruler or paper-tearer to the book in which it is to be used.

The objections to devices for the purpose heretofore proposed which I seek to obviate are as follows: In those that provide for horizontal cutting by means of an additional ruler the two blades interfere with each other in practical operation, making it impossible to secure smooth square work, as with a single blade. The same, and also others with springs and elastic cords, are liable to displacement and to breakage with ordinary care in using, requiring frequent readjustments and repairs. In others the doubled strips of metal constituting the spring-clasps, retaining their own bulk with the diminishing thickness of the book, upheave the leaves from the back cover, and cannot be pressed effectively to the diminished leaves at the top and bottom of the page. All having the spring attachment or movement require the use of force with both hands, either in applying the cutting-edge or in withdrawing the stub from under the ruler, and none of them, when attached to the book, admit of its being freely opened at any page, as is often desirable for inspection, (as by a purchaser,) for filling out blanks ready for signing, for signing unfilled blanks, &c.

The first part of my invention consists in the application of a retaining link or loop, oscillating upon one of its sides, attached to the book, while carrying the ruler upon its opposite side; and the second part consists in the application of a loose pivotal yoke revolving and sliding upon the loop, and upon which, as a pivotal center, a single ruler pierced with a hole to receive the yoke freely oscillates to the

vertical and to the horizontal lines of severance.

In the accompanying drawings, Figures 1 and 2 represent books to which the device is applied in complete working order. Fig. 3 is a small profile of the loop with its lower side (in which are the ends of the wire) firmly stitched with very fine wire to the back cover or binding of the book, of which a section is shown. Fig. 4 is an enlarged top view of the safe-edge ruler. Fig. 5 is a greatly enlarged view of a small portion of the loop and of the ruler with the yoke inserted in place. Fig. 6 is a greatly enlarged view of the yoke detached from the other parts.

Corresponding parts are indicated by the same letter in the different figures.

The rigid rectangular link or loop A, which may consist of bent wire, must be large enough to embrace loosely and very obliquely all the leaves of the book, as shown at Figs. 1 and 2. Its imperfect side is attached to the back cover of the book upon a line parallel with the binding. The attachment may be effected by means of a couple of bows like that of the yoke *a b*, Fig. 6, embracing the wire passing through holes in the cover, and having the ends turned down upon the back of the cover in the form shown at Fig. 6, or, as in case of a soft cover, by means of stitches of thread or fine wire passing over the wire and through the cover, as shown at Fig. 3, (where A is a profile of the loop, C a cross-section of the back cover, and *d d d d* the stitches,) or by other equivalent means.

The ruler B is a metal blade presenting quite sharp lower edges, and having its ends pierced with round smooth holes to receive loosely the bow of the yoke *a b*. Though not essential, yet to secure the requisite stiffness with less material, it may be ribbed, as shown in Figs. 4 and 5. The ribbing may be rolled continuously in long strips, afterward to be cut into bars of the requisite lengths, flattened, and pierced at the ends; or the ribbing and piercing may be produced upon bars of proper or exact lengths.

The yoke *a b* is a slight bar of metal bent at the middle into a bow to embrace the wire



of the loop, and having the ends bent outward to form lugs, as shown at Fig. 6. It is inserted in the eyelet at one end of the ruler, and its bow, protruding above, receives the wire of the loop.

In applying the device, first mark upon the back cover of the book the point where the opposite side of the loop will fall when the cutting-edge of the ruler is applied to the vertical line of severance; throw open the back cover and to the inside of it attach the loop, as before described; spring over the whole body of leaves, pass it into the loop, and let all fall to place, as shown in Figs. 1 and 2.

The single ruler B, freely oscillating upon the loose yoke *a b* to the vertical and to the horizontal lines of severance, is used as an ordinary paper-tearer, securing smooth edges and square corners to the severed leaf. The loop A, oscillating upon its fixed side, accommodates itself to the varying thickness of the book, to the opening and shutting of the book, at any page, and the easy turning of the stubs, and the device is not liable to displacement nor breakage with reasonable use. One cutter may be used on several books successively; but it is my belief that the device can be made so cheaply in quantities that the book-maker will be able to supply books with it already attached at a merely inconsiderable advance in cost.

I represent the ruler as pierced at both ends alike, for the reason that when the device is applied to books of that class having but one blank severable by a vertical cut from each leaf, and which books are often carried in the pocket, it is my intention and recommendation that both ends of the ruler be yoked to the loop A, as shown at *a b a b*, Fig. 1, which form involves only the first part of my invention.

It is evident from Fig. 5 that the loop A, falling by its own weight and elasticity into the groove of the ruler B, will hold the ruler in a position vertical to the top and bottom of the page, so as to require some force to remove it.

The peculiar construction making the loop A and ruler B consist of separate pieces articulating with each other by means of the yoke *a b* is nowise essential to the first part of my invention, but is essential to the second part.

When the device is applied to a book requiring only the vertical cut or tear, as shown in Fig. 1, though the construction may be the same, with both ends of the ruler yoked to the loop, yet it involves only the first part of my invention, as it likewise would if the loop and ruler were soldered together, constituting, in a mechanical sense, but one piece of metal; but when the device is applied to a book having two, three, or more blanks on each leaf, as in Fig. 2, and hence requiring horizontal as well as vertical cuts or tears, the ruler B must be made separate from the loop A, with but one end yoked to it, and thus be left free to leave the vertical position and to slide up and down the page in a horizontal position, as shown in Fig. 2.

It is manifest from Figs. 1 and 2 that the device can be attached to the book in a position the reverse of that shown—that is to say, the loop may be secured to the back cover far enough from the binding to hold the ruler with its edge close to the binding of the book, thus making the device equally available for a book having no memorandum-stubs to be left in the book.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the rectangular loop A, hinged to the back or cover of the book, with the safe-edge ruler B, attached to said loop by yoke *a b*, substantially as and for the purpose set forth.

In testimony that I have claimed the above I have hereunto subscribed my name in the presence of two witnesses.

LLEWELLYN W. ARNOLD.

Witnesses:

WILLIAM W. HALL,  
THOMAS MORRISON.