

J. GRIESINGER.  
 BINDING DEVICE FOR LOOSE LEAF BOOKS.  
 APPLICATION FILED APR. 8, 1912.

1,070,450.

Patented Aug. 19, 1913.

Fig. 1.

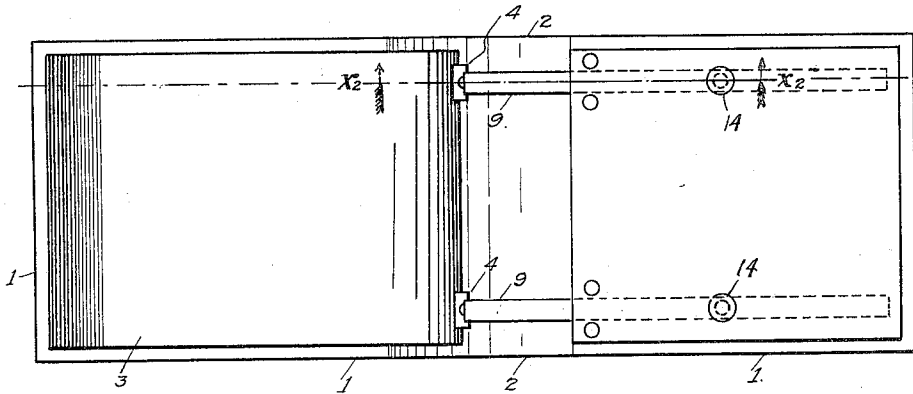


Fig. 2.

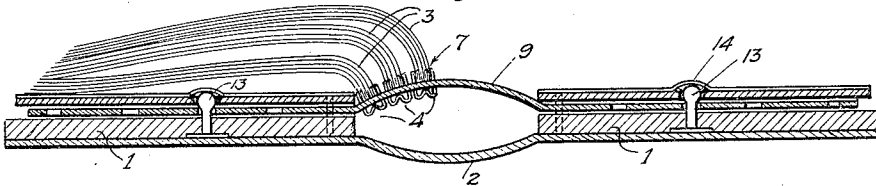


Fig. 3.

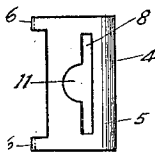


Fig. 4.

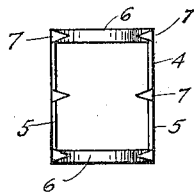


Fig. 5.

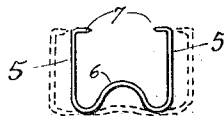
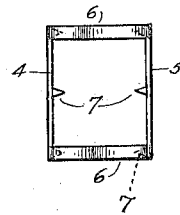


Fig. 6.

Witnesses:

Robert L. Roy Finlay  
 Chas. Seton Harvard

Inventor:

John Griesinger  
 by Albert H. Merrill  
 Attorney.

## UNITED STATES PATENT OFFICE.

JOHN GRIESINGER, OF LOS ANGELES, CALIFORNIA.

BINDING DEVICE FOR LOOSE-LEAF BOOKS.

1,070,450.

Specification of Letters Patent.

Patented Aug. 19, 1913.

Application filed April 8, 1912. Serial No. 689,122.

*To all whom it may concern:*

Be it known that I, JOHN GRIESINGER, a subject of the Emperor of Germany, residing in the city of Los Angeles, State of California, have invented a new and useful Binding Device for Loose-Leaf Books, (Case No. 3,) of which the following is a specification.

This invention relates to an improved leaf-retaining clip, an object of the invention being to provide such a clip adapted to hold a small leaf-section or bunch of leaves and also adapted for extension or expansion to retain a relatively large leaf-section.

This binding device is particularly adapted for holding a series of magazines together in bound volumes. The clips and other parts of the binder will be sold to the user who can then bind his own periodicals in convenient form for reference. When the individual leaf sections consist of separately bound magazines, all the leaves thereof will be securely held by the teeth of the retaining clips, even though said teeth penetrate only the outer leaves of each section.

The leaf clip hereinafter described and claimed is capable of a very wide range of adjustment and may be detachably secured to a very few leaves or to a leaf-section including a large number of leaves.

This invention, therefore, relates further to a new article of manufacture consisting of a fastening clip for loose leaf books, said clip having teeth adapted to grip the leaf-sections to which it is attached, and said clip being adapted for engagement with fastening means to hold the same in the operative position.

Referring to the accompanying drawings, which illustrate the invention, Figure 1 is a plan view of an open book provided with this improved clip; Fig. 2 is a section on line  $x^2-x^2$  of Fig. 1; Fig. 3 is a side view of the clip; Fig. 4 is a face view of said clip; Fig. 5 is a back view thereof; Fig. 6 is an end view thereof, the extensible feature of the clip being indicated by dotted lines.

Referring in detail to the drawings, the book illustrated comprises the usual sides 1 united by the flexible back 2 and having the independent leaf sections 3. Said leaf sections may consist of a large or small number of leaves and the leaves may be independent of each other if few in number and may be larger in number if bound into magazines or

the like. To each of said leaf-sections is attached an apertured clip 4, the preferred construction of which is illustrated in detail in Figs. 3 to 6. Each of said clips consists of a plate approximately U-shaped in general outline. Said clip comprises the arms or side plates 5 united by a plurality of bendable curved strips 6 which may be extended to widen the clip as indicated by dotted lines in Fig. 6. Each side plate 5 is provided with a plurality of inwardly directed teeth 7 to grip the edge portions of the leaf-sections 3 as shown in Fig. 2. Each side plate 5 is also provided with a slot 8 to receive the retaining straps 9. Said slot 8 is preferably furnished with an extension 11 to receive a binding-post (not shown) if the book is provided with posts instead of the straps 9.

The strap-retaining flaps 12 are releasably held down by the heads of studs 13, eyelets 4 carried by said flaps, coöperating with said studs.

In operation, two of the fastening clips 4 are secured to the back edge of each leaf-section or magazine number to be bound into the volume, the side plates 5 being hammered down to drive the gripping teeth 7 into the outer leaves of each leaf-section. Then the various leaf sections are placed in order and the binding straps 9 are led through the apertures 8 of the clips in a well known manner.

I claim:

1. In a loose-leaf book, a plurality of independent leaf sections, a retaining clip for each of said leaf sections, said clips each having a gripping portion, said clips having apertures to receive means for holding them in the operative position, each of said apertures having an extension adapting the clip to receive a rod of greater diameter than the other portion of said aperture, and means to hold said clips in the operative position.

2. In a loose-leaf book, in combination, loose-leaf sections, and a plurality of retaining clips for said sections, each of said clips having a slot extending therethrough to receive fastening means, each of said slots having a lateral extension to adapt the aperture to receive a rod of greater diameter than the slot portion of the aperture, and fastening means for the clips.

3. As a new article of manufacture, a fastening clip for loose-leaf books approximately U-shaped in general outline, the base

portion of the U consisting of a pair of relatively narrow bendable strips of metal normally curved toward the mouth of the U and which are adapted to be straightened  
5 out to widen the clip, and grip-teeth projecting from the end portion of the clip.

4. As a new article of manufacture, a fastening clip for loose-leaf books consisting of a body U-shaped in cross section, each  
10 arm of said U having teeth which are directed toward the teeth of the other arm, there being an aperture through said clip to receive a fastening strap, said aperture having an extension adapting the same to  
15 receive a rod.

5. As a new article of manufacture, a fastening clip for loose-leaf books consist-

ing of a U-shaped clip having a normally inbent extensible portion uniting the arms of the U.

6. As a new article of manufacture, a fastening clip for loose-leaf books consisting of a U-shaped clip having a plurality of extensible normally inbent strips uniting the arms of the U.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses at Los Angeles, in the county of Los Angeles and State of California, this 30th day of March, 1912.

JOHN GRIESINGER.

Witnesses:

ALBERT H. MERRILL,  
CHAS. J. HODGE.

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