

No. 891,043.

PATENTED JUNE 16, 1908.

F. H. CRUMP.  
LOOSE LEAF BINDER.  
APPLICATION FILED JUNE 17, 1907.

Fig. 1.

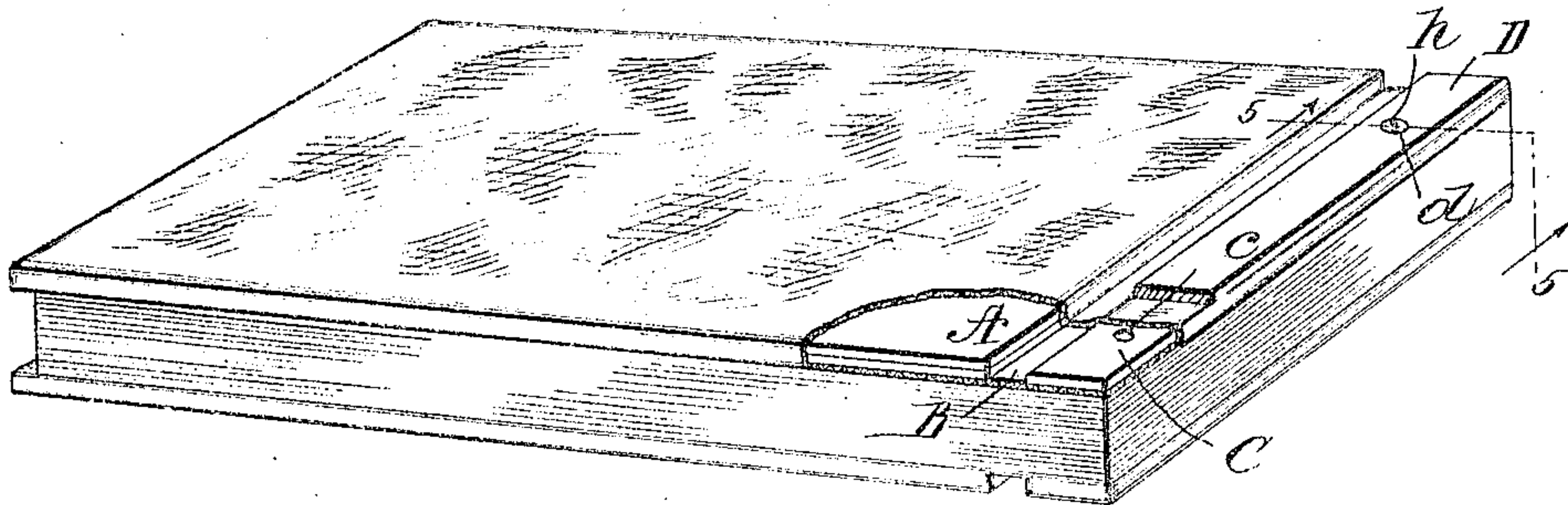


Fig. 3.

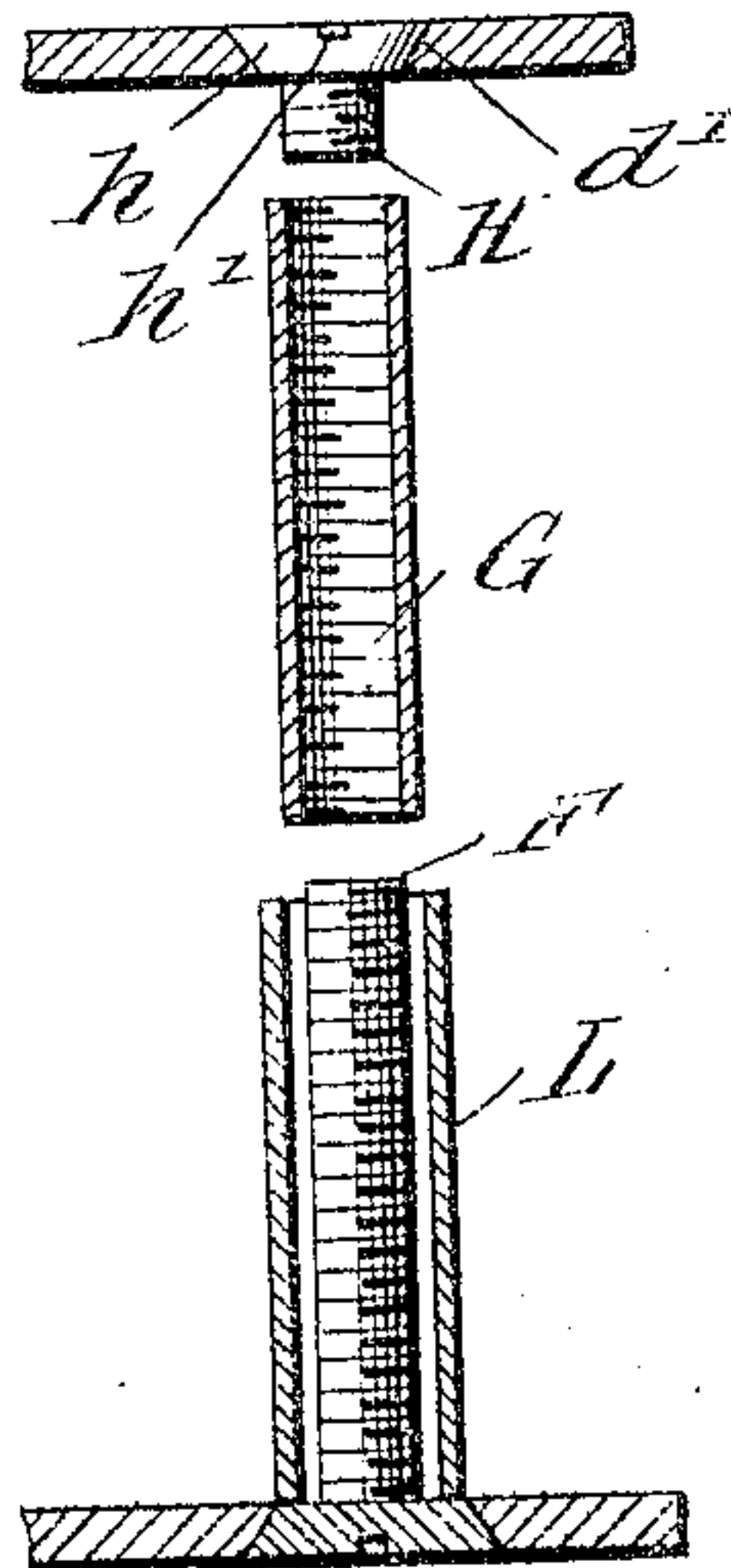


Fig. 6.

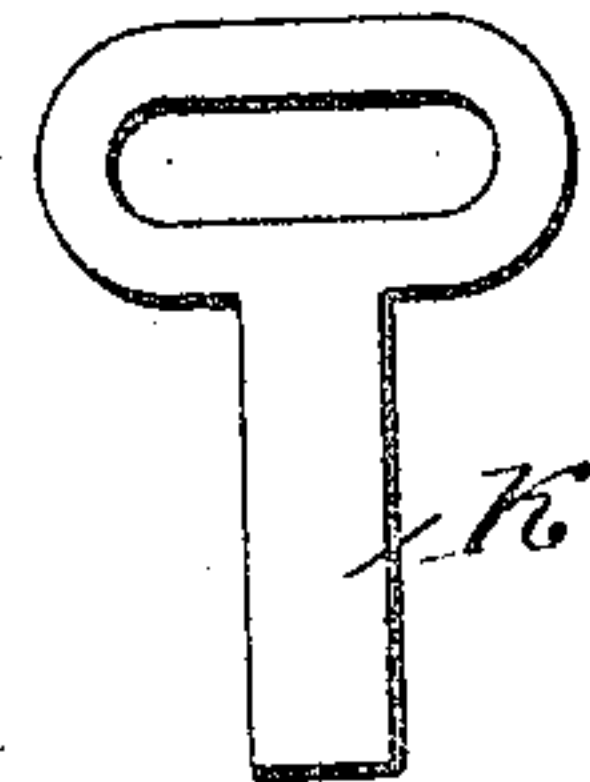


Fig. 4.

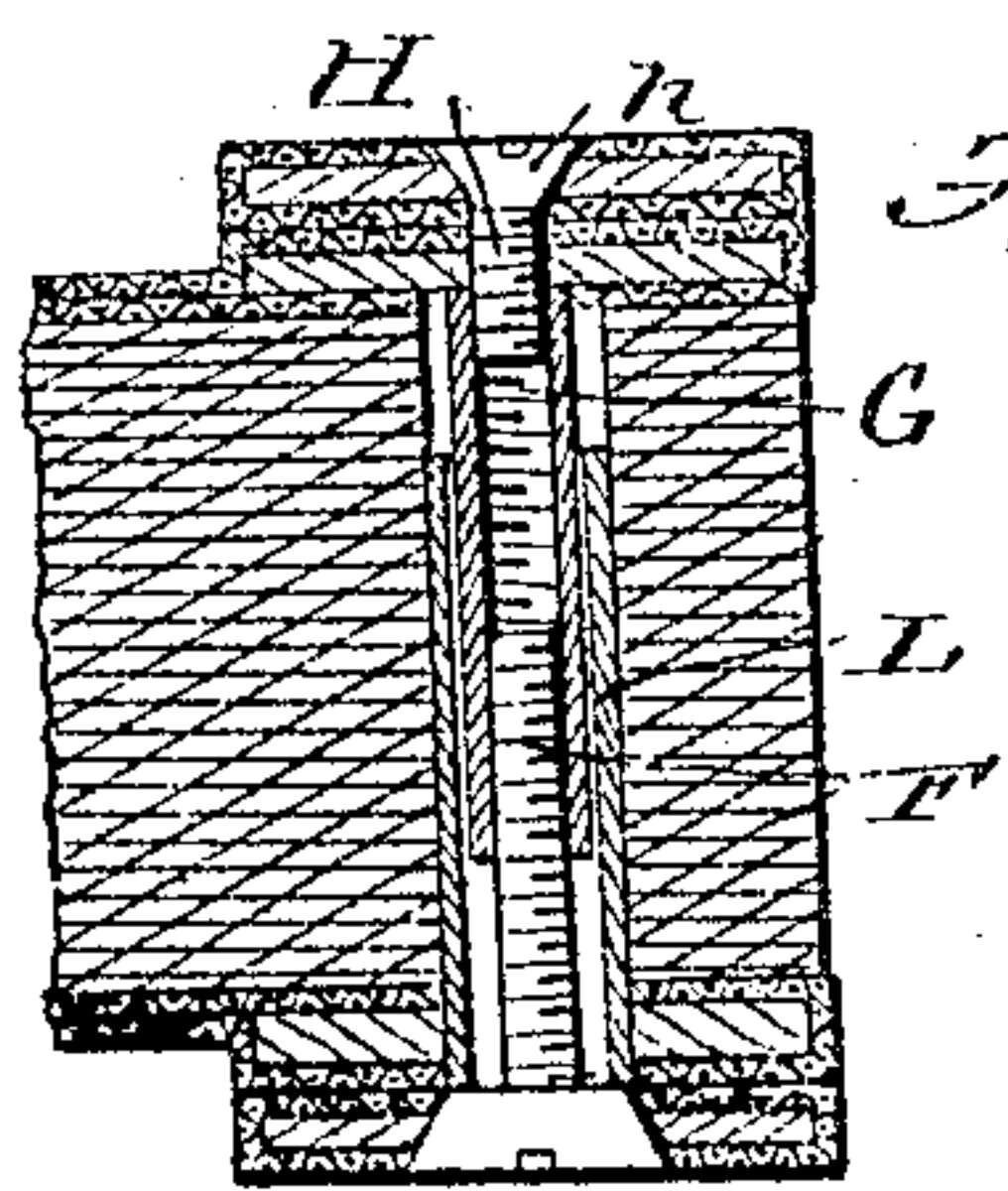
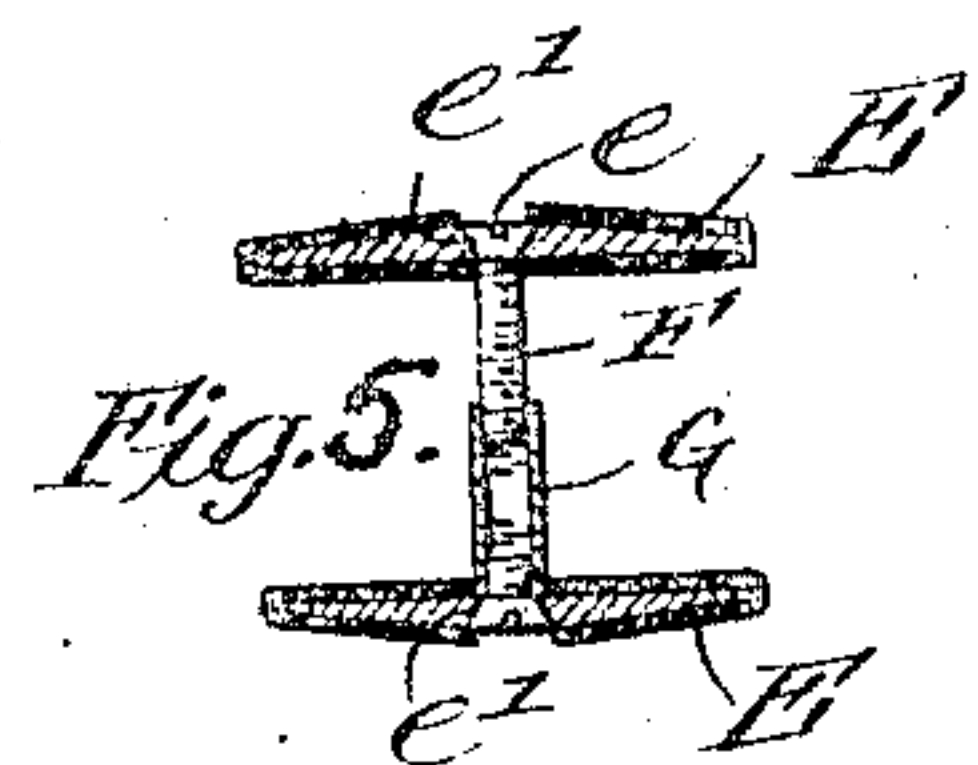
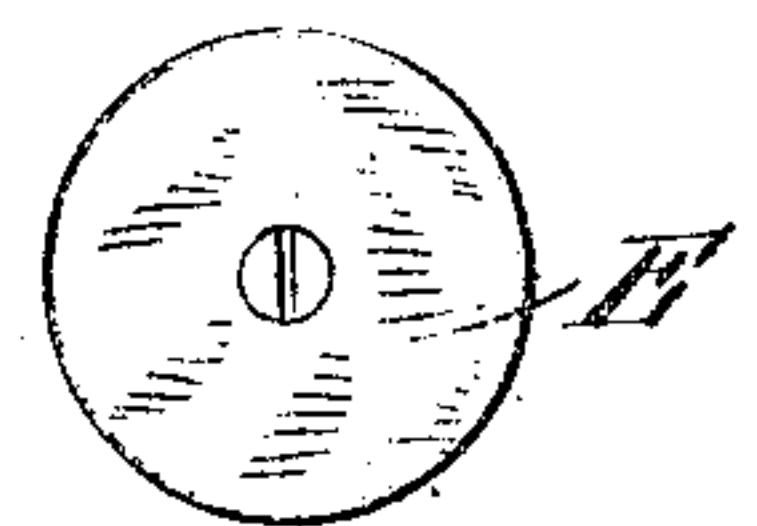


Fig. 2.

WITNESSES

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# UNITED STATES PATENT OFFICE.

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## LOOSE-LEAF BINDER.

No. 891,043.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed June 17, 1907. Serial No. 379,382.

*To all whom it may concern:*

Be it known that I, FRANK H. CRUMP, a citizen of the United States, and a resident of Los Angeles, in the county of Los Angeles and the State of California, have invented a new and useful Improvement in Loose-Leaf and Temporary Binders, of which the following is a specification.

My invention relates to improvements in devices for readily binding together loose leaves, so that one or more can be readily removed without disturbing the rest, and also in devices for temporarily binding books, periodicals, magazines, &c.

The object of the invention is to provide simple, cheap, and efficient means for securely binding loose leaves, and papers, periodicals, and magazines &c.

My invention consists in certain novel features of construction, arrangement, and combination of parts as will be hereinafter fully described and pointed out in the claims reference being had to the accompanying drawings, in which

Figure 1 is a perspective view of a loose leaf binder embodying my improvements. Fig. 2 is a vertical section showing the clamp bolts in use. Fig. 3 is a vertical section of the clamping means before assembling. Fig. 4 is a top plan view showing the use of a circular plate in place of the strips D; Fig. 5 is a sectional view showing the use of such circular plates, and Fig. 6 is a view showing a screw driver for use in assembling the parts.

In carrying out my invention I use the double card board covers A A, inclosed in canvas or other suitable material, the canvas B, extending beyond the ends of the backs A A, and having secured to them the single canvas covered card board strips C C, the canvas B forming a hinge at the space between the ends of A A, and C C; the strips C C have punched through them the holes c c which are in alinement.

D D represent removable canvas covered metal strips provided with holes d d having beveled countersunk edges d'. The plates D are of the same size as the strips C and are to be placed against the same, the holes d registering with the holes c.

If desired, instead of using plates D, I may use removable canvas covered disks or buttons E having holes e through their centers, said holes having the beveled countersunk edges e'.

To hold the covers and parts of the binder together I use extension screw bolt clamp devices consisting of a screw shank F, having the beveled head f, fitting in the bottom cover member A; on the screw shank F is screwed the hollow internally threaded post G and into the upper end of said hollow post is screwed the screw threaded plug H having a beveled head h, fitting in the upper cover member. The heads f and h are provided with cross grooves, or sockets f' and h' into which a key K may be placed to tighten and loosen the screw bolt clamping device.

In Fig. 3 I have shown a clamping device in which the screw shank F is covered by a smooth hollow tube L designed to present a smooth surface to the loose leaves which the bolt or clamp device holds.

In practice the extension clamp bolts operate as follows—Having placed the metal strips (or buttons) having the beveled holes upon the end strips C, the screw tops or plugs H are removed, and then the bolts are inserted through the holes in the lower cover; loose leaves may then be quickly placed over the bolts, the top cover is then placed over the bolts and slipped down as far as it will go; the screw plugs are then inserted and screwed down continuing to screw until the hollow tube or post will go no farther.

To remove the cover for insertion of other leaves or removal of those already bound, unscrew the top plug and remove the top cover when any or all of the leaves may then be quickly removed and others inserted and the cover replaced.

By leaving the gap between the covers A and the strips C a hinge B will be formed which will be found very convenient.

By covering the plates and strips with canvas they will not scratch any smooth surface upon which the binders are placed.

Where the buttons are used the extension bolts may be screwed tight without damage to the covers, which would otherwise occur if screws were used without such protection.

I claim:

A loose leaf binder comprising two independent covers each having a rigid strip hinged thereto at one edge, said rigid strips having openings therethrough, removable wear plates adapted to be superposed upon said rigid strips and having openings registering with the openings in the rigid strips, said

openings in the wear plates being counter-sunk, clamping means for connecting the rigid strips and wear plates, said means consisting of a screw plug inserted through the  
5 upper rigid strip and wear plate, a screw plug inserted through the lower rigid strip and wear plate, an internally threaded tube adapted to connect the upper and lower screw plugs, and a tubular sleeve having smooth outer and inner surfaces, said sleeve 10 adapted to slide over the outer surface of the connecting tube.

FRANK H. CRUMP.

Witnesses:

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JOHN T. HAYES.