

No. 793,735.

PATENTED JULY 4, 1905.

J. S. McDONALD.
LOCK FOR LOOSE LEAF BINDERS.
APPLICATION FILED NOV. 16, 1903.

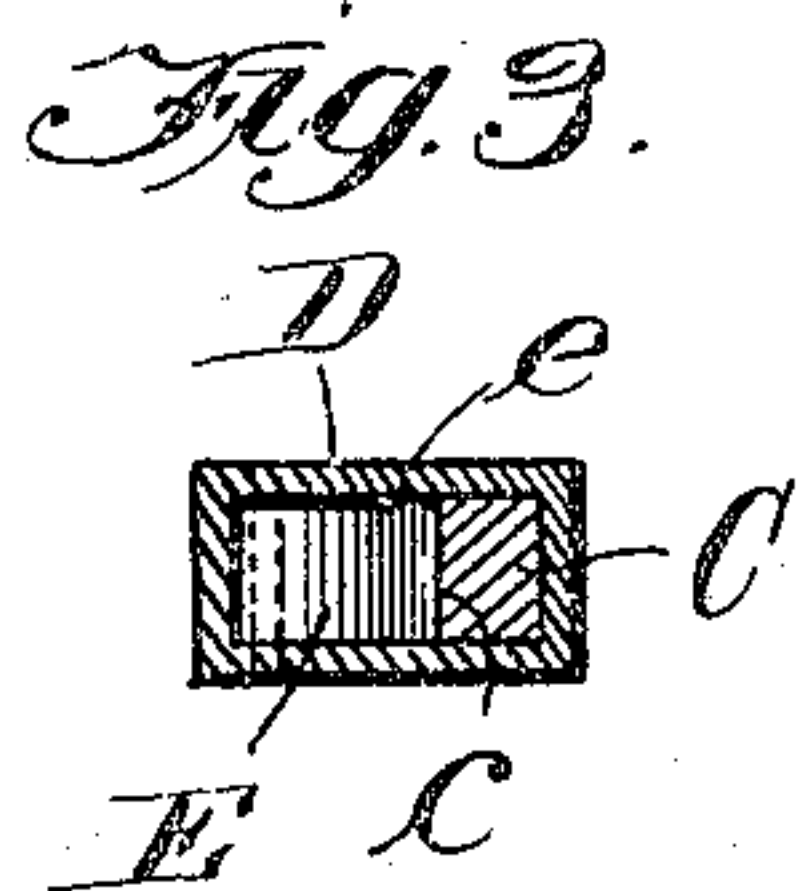
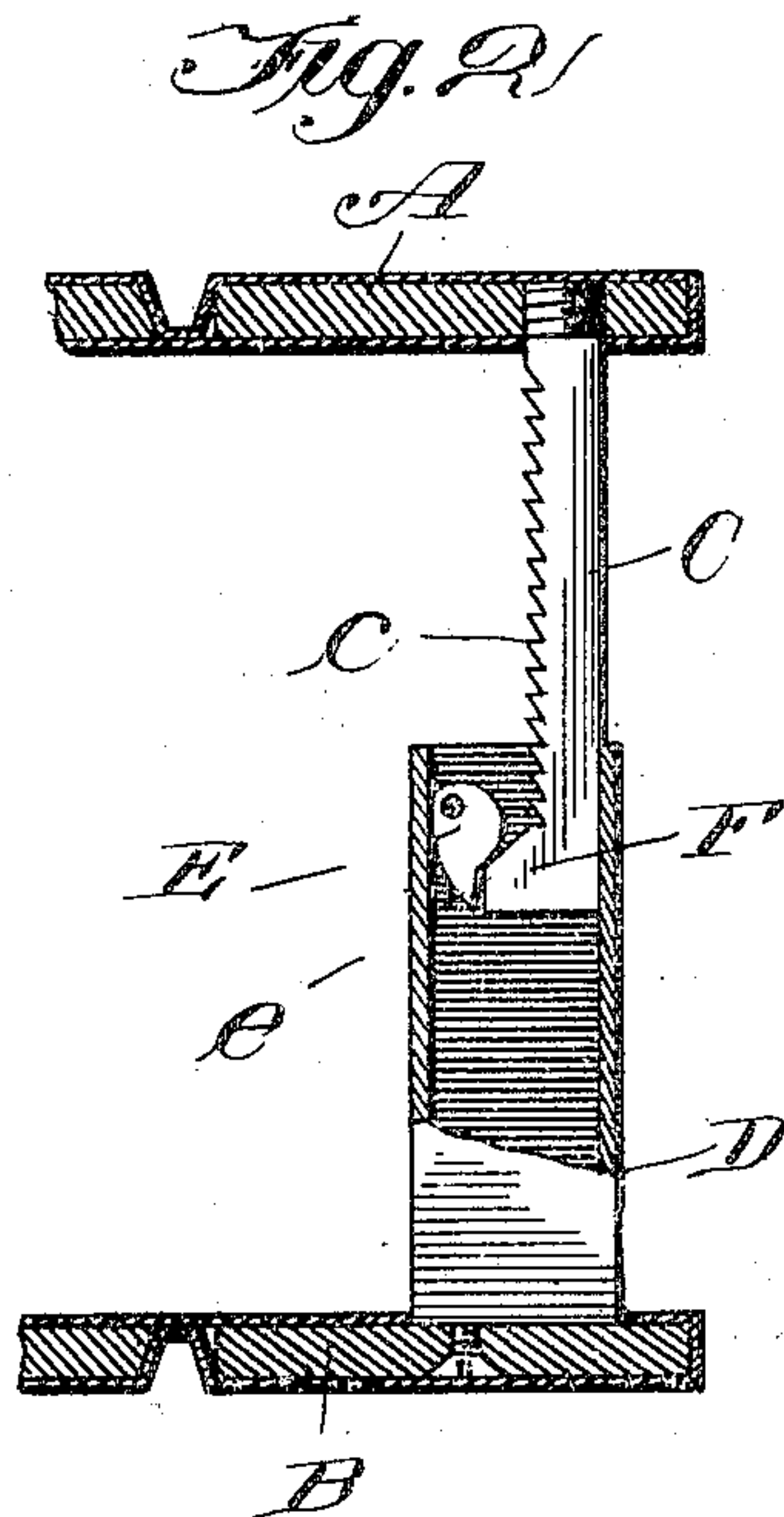
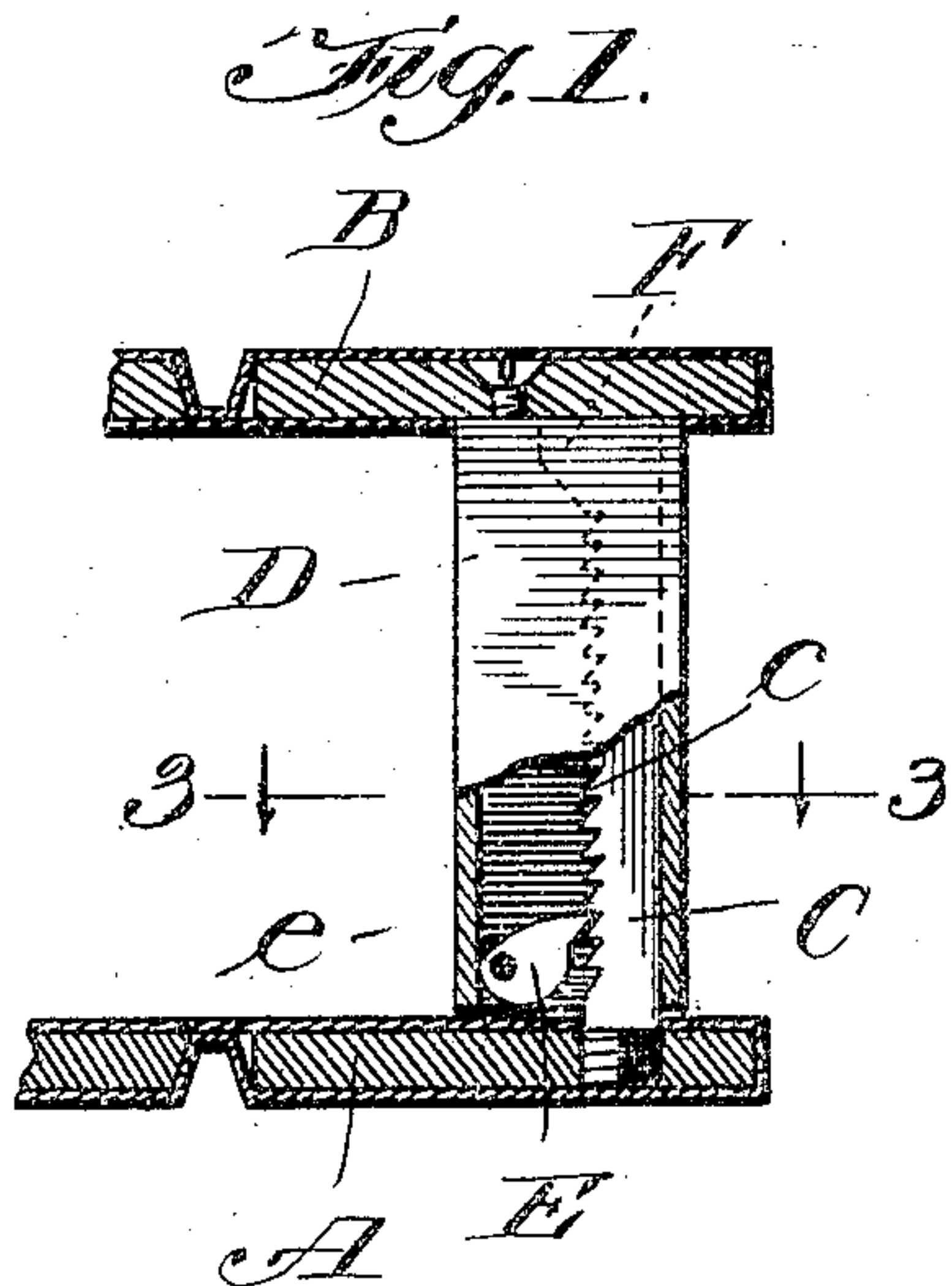


Fig. 4.

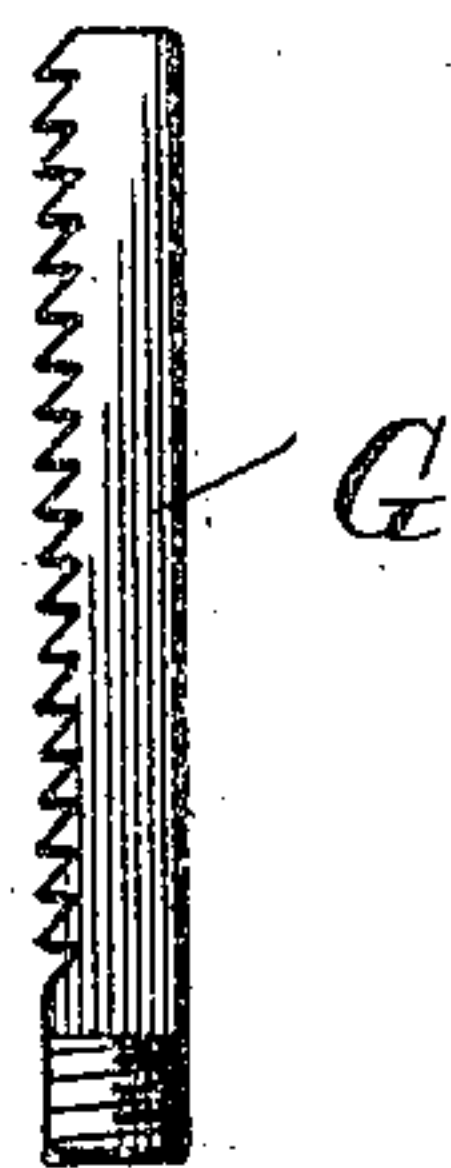
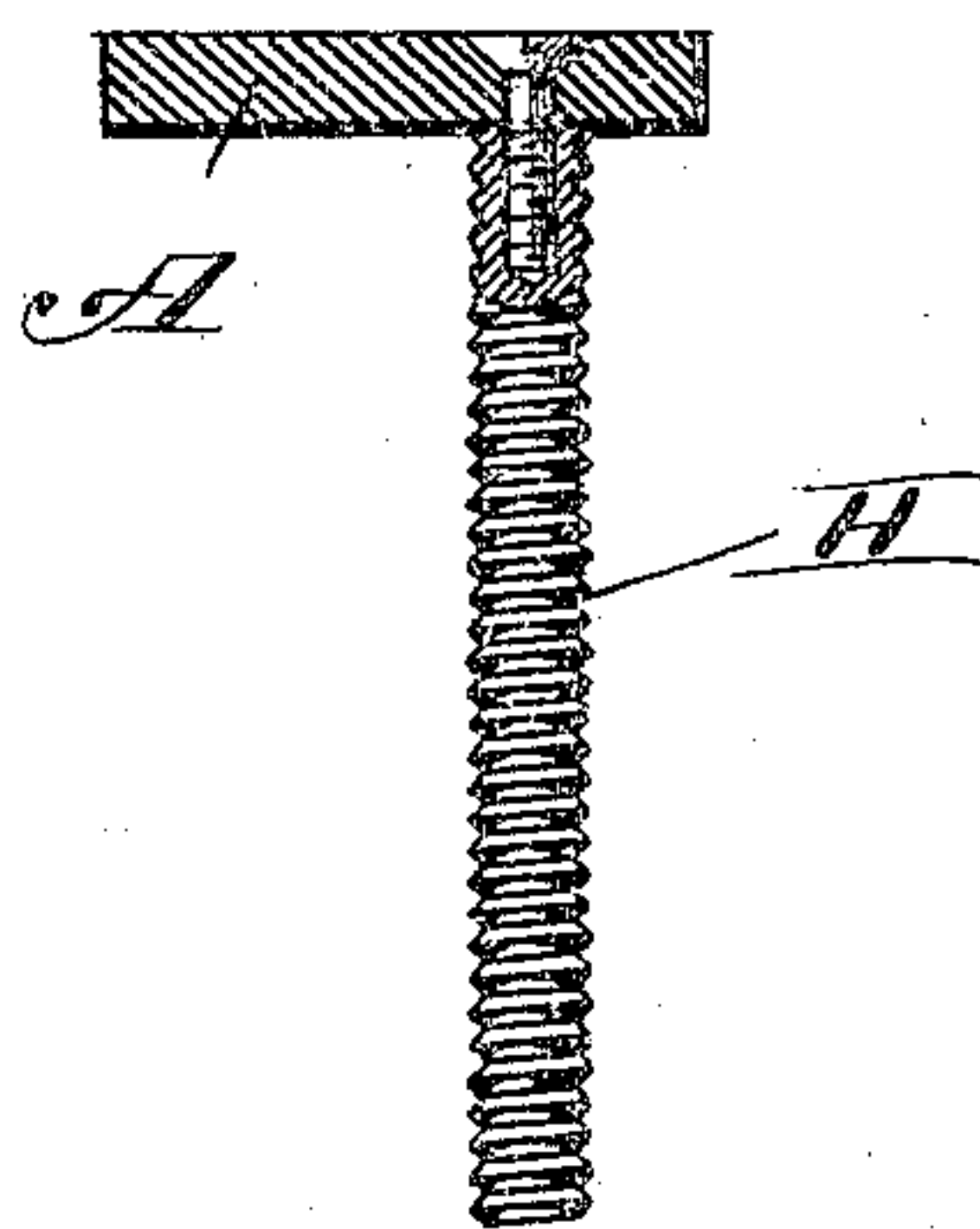


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES S. McDONALD, OF CHICAGO, ILLINOIS.

LOCK FOR LOOSE-LEAF BINDERS.

SPECIFICATION forming part of Letters Patent No. 793,735, dated July 4, 1905.

Application filed November 16, 1903. Serial No. 181,385.

To all whom it may concern:

Be it known that I, JAMES S. McDONALD, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Locks for Loose-Leaf Binders, of which the following is a full, clear, and exact description.

The object of my invention is to provide a simple and effective lock for the backs of the covers of removable-leafed ledgers, account-books, records, &c., which comprises a pivoted device or dog that falls out of engagement with the bolt of the lock when in one position and into engagement therewith when in the opposite position, substantially as hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a longitudinal sectional view of the back of a removable-leafed book, showing a side view of my improved lock with a portion of the case thereof broken away to expose to view the interior construction of the same. Fig. 2 is a similar view showing the position of the parts thereof when the book is reversed. Fig. 3 is a transverse section taken on line 3-3, Fig. 1, looking in the direction of the arrows. Fig. 4 is a detail view of a modified form of the bolt of the lock. Fig. 5 is a similar view of yet another form of the bolt of the lock.

Referring to the drawings, A and B represent the transverse strips of metal or plates placed in the backs of the covers of books, to the forward edges of which the covers thereof are hinged and between which the confined edges of the removable leaves of books of this character are removably placed. In order to enable these strips A and B to be moved nearer together or separated farther apart, according as it is desired to clamp or release the removable leaves between them, I have connected them by my improved lock, which will secure said strips in their relative position when the book is placed on one side and will permit their being easily unlocked when placed on its opposite side. This lock comprises a bolt C, which is immovably secured at one end in one plate A and projects at right angles therefrom toward the opposite plate. This

bolt is rectangular in cross-section, and one edge *c* thereof is serrated or toothed and extends longitudinally into the adjacent open end of a rectangular case D, which is securely fastened to and projects from the plate B in alinement with said bolt. Pivoted between the sides of said case, preferably near the entrance thereof, next the toothed edge of bolt C, is a loosely-pivoted dog E, the preferred shape of which corresponds to the punctuation-mark known as a "comma." The pivot of this dog is through the center of the head, and when the book is placed on its side so that the tail of the dog is pendent the point *e* thereof engages the serrated edge *c* of bolt C and prevents the withdrawal of the latter, and consequently the further separation of plates A and B, but when the book is reversed and held other side down the center of gravity of the dog is such as to cause it to fall away from the bolt and release it. In order to prevent the accidental withdrawal of the bolt from the case, I have provided the extremity thereof operating within the case with an offset or head F, that prevents its passing out between the dog and case, substantially as shown in the drawings. If desired, however, a bolt G similar to that shown in Fig. 4 could be employed, which dispenses with this offset.

In Fig. 5 of the drawings I show a modified construction of the bolt. This bolt H is corrugated or screw-threaded and is revolvably secured to strip A, so that after the clamping-strips are moved toward each other to compress the removable leaves between them as far as possible by revolving the bolt H in the proper direction said strips can be brought still nearer and compress the removable leaves to a greater extent.

I do not wish to be understood as confining myself to any particular form of bolt or to any particular construction of the pivoted dog, as it is obvious they may be made in a variety of ways without departing from the spirit of my invention.

What I claim as new is—

1. In book-covers, the combination with clamping-plates, of a serrated bolt secured to and projecting from one of said plates toward the other, and a suitable case secured to and

projecting from the opposite plate into which said bolt extends, and a loosely-pivoted dog having an engaging point and adapted to engage the serrated edge of said bolt.

5 2. In book-covers, the combination with clamping-plates, of a bolt having one edge serrated and secured to and projecting from one of said plates toward the other, and a suitable case secured to and projecting from the opposite plate, into which the said bolt extends, and a loosely-pivoted dog having an engaging point and adapted to engage the serrated edge of said bolt.

15 3. In book-covers, the combination with clamping-plates, of a serrated bolt secured to and projecting from one of said plates toward the other and provided with an offset enlargement or head at its unattached end, and a suitable case secured to and projecting from the opposite plate into which said bolt extends, and a loosely-pivoted dog having an engaging point and adapted to engage the serrated edge of said bolt.

25 4. In book-covers, the combination with clamping-plates, of a bolt having one edge serrated and secured to and projecting from one of said plates toward the other and provided with an offset enlargement or head at its unattached end, and a suitable case secured to and projecting from the opposite plate into which said bolt extends, and a loosely-pivoted dog having an engaging point and adapted to engage the serrated edge of said bolt.

35 5. In book-covers, the combination with clamping-plates, of a rectangular bolt having one edge serrated and rigidly secured at one end to one of said plates, and having a lateral offset or head at its unattached end, a suitable case secured to and projecting from the opposite plate into which said bolt extends, and a loosely-pivoted dog near the mouth of said case having a pendent end or tail, the end of which opposing said serrated edge of the bolt having an engaging point and engaging there-
45 with.

6. In book-covers, the combination with clamping-plates, of a serrated bolt rigidly secured to and projecting from one of said plates toward the other, and a suitable case secured to and projecting from the opposite plate into which said bolt extends, and a loosely-pivoted dog having an engaging point and adapted to engage the serrated edge of said bolt. 50

7. In book-covers, the combination with clamping-plates, of a bolt having one edge serrated and secured rigidly to and projecting from one of said plates toward the other, and a suitable case secured to and projecting from the opposite plate into which said bolt extends, and a loosely-pivoted dog having an engaging point and adapted to engage the serrated edge of said bolt. 55 60

8. In book-covers, the combination with clamping-plates, of a serrated bolt rigidly secured to and projecting from one of said plates toward the other and provided with an offset enlargement or head at its unattached end, and a suitable case secured to and projecting from the opposite plate into which said bolt extends, and a loosely-pivoted dog having an engaging point and adapted to engage the serrated edge of said bolt. 65 70

9. In book-covers, the combination with clamping-plates, of a bolt having one edge serrated and rigidly secured to and projecting from one of said plates toward the other and provided with an offset enlargement or head at its unattached end, and a suitable case secured to and projecting from the opposite plate into which said bolt extends, and a loosely-pivoted dog having an engaging point and adapted to engage the serrated edge of said bolt. 75 80

In testimony whereof I have hereunto set my hand this 10th day of November, 1903.

JAMES S. McDONALD.

Witnesses:

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FRANK D. THOMASON.