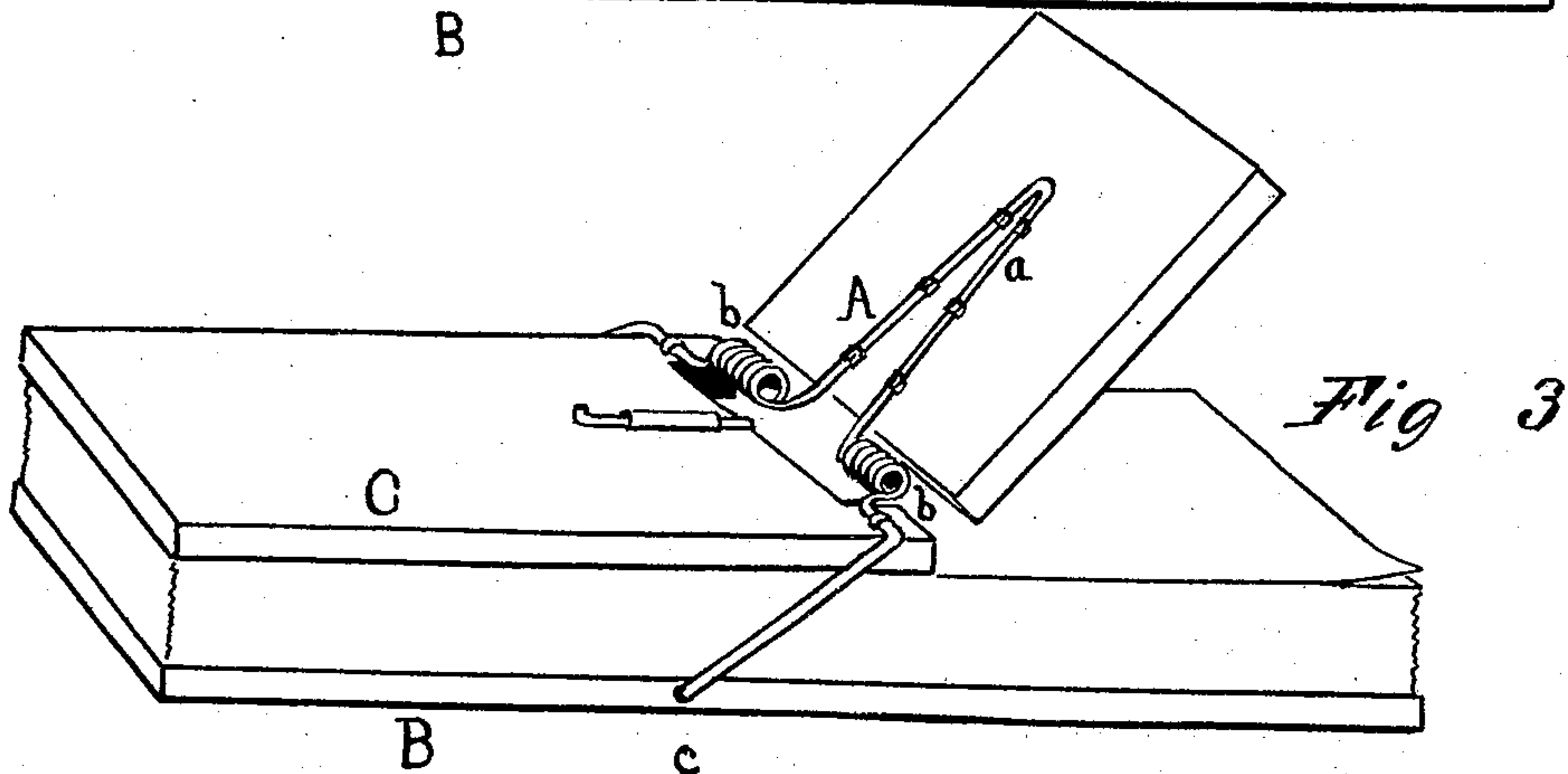
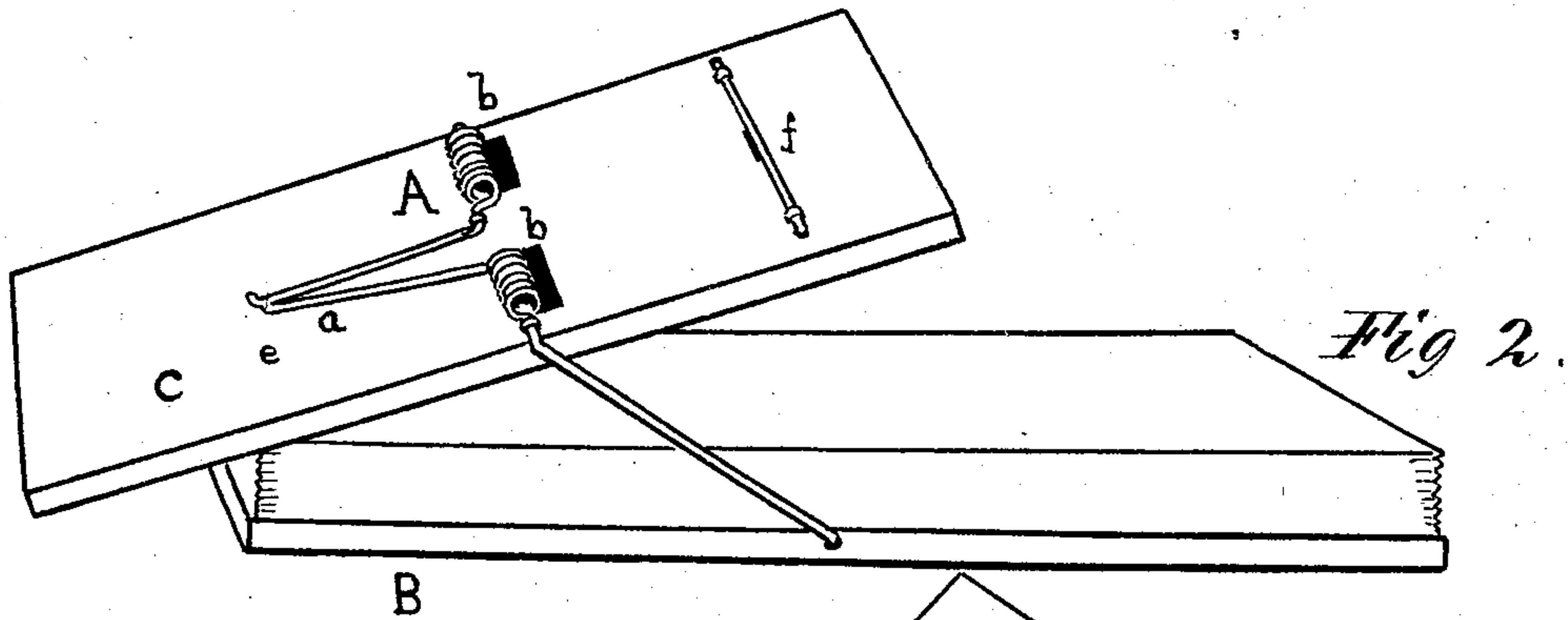
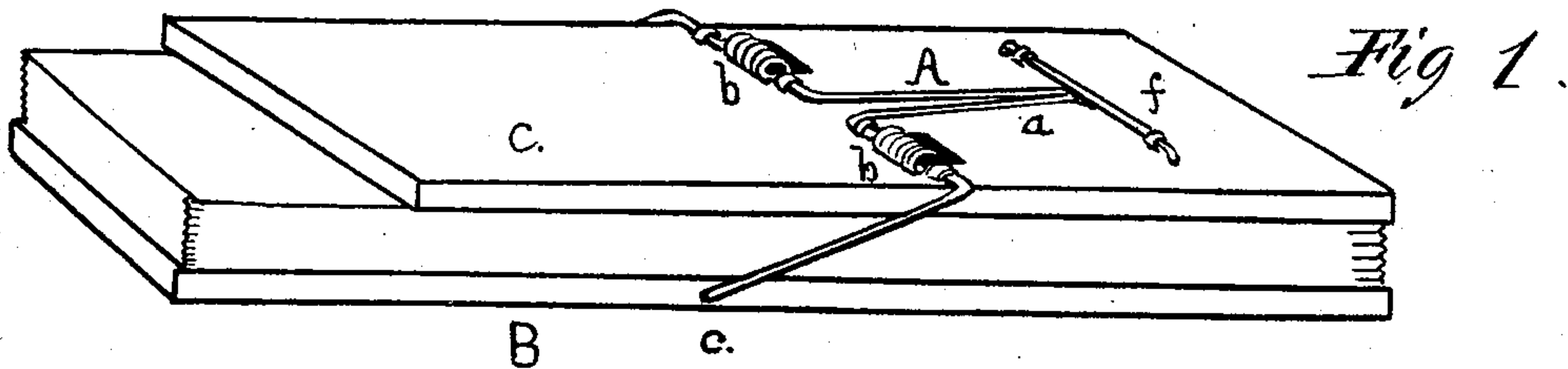


W. R. CLOUGH.

Bill-Files.

No. 152,078.

Patented June 16, 1874.



Witnesses

Al Mulchman
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UNITED STATES PATENT OFFICE.

WILLIAM R. CLOUGH, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN BILL-FILES.

Specification forming part of Letters Patent No. **152,078**, dated June 16, 1874; application filed June 2, 1874.

To all whom it may concern:

Be it known that I, WILLIAM R. CLOUGH, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Bill-Files, of which the following is a specification:

This invention relates to that class of paper-files constructed with two plates or leaves, united and operating together by means of wire arms. My device consists in providing one of the plates or leaves with a spring, so connected with the arms that unite the upper and lower leaves or plates, and a projecting lever-arm, as to be brought to an equilibrium or state of rest by means of said lever-arm, thereby leaving said plates to move freely on the pivots of the arms that unite them; and also, by means of said lever-arm, the spring may be again brought to a state of action, causing the two plates to move each toward the other, securing between them thereby papers or documents inserted therein. The lever-arm is operated by means of a suitable catch to receive and hold its free end to the plate to which its opposite end is attached, as will hereinafter be described in detail.

In the accompanying drawings, Figure 1 is a plan view representing my invention. Fig. 2 is a side view, showing the lever-arm locked down in full line, and raised up in dotted line; and Fig. 3 is a perspective view of a modification of the invention.

The letter A represents the clamp uniting and operating the two plates or leaves B C. This clamp is preferably constructed from a single piece of wire, by doubling the wire at or about its center, and bending the ends in opposite directions at right angles to this doubled portion, which doubled portion constitutes the lever-arm *a*. The ends of the wire are provided with the coils *b b*, said coils containing the actuating or spring power, and being an integral part of said clamp A, which coils rest in recesses formed in the plate C. Again the ends of the wire are bent at right angles to the portion possessing the coils, then, passing around the edges or sides of the plate C, form the uniting-arms, which arms, being bent at their extreme ends at right angles, form pivots, which are inserted in the recesses *c* in

the edge of the base-plate or leaf B of the file, thus combining in a single piece of wire the spring, projecting lever-arm, and uniting-arms, the whole forming the clamp A, as shown in the drawing.

The clamp A may, however, be constructed by forming the various parts of separate pieces, and so connected as to operate substantially the same as if made of one piece. And again, although I prefer to attach the clamp A to the top plate C, as shown, it may be so attached to the base or companion plate B. It is obvious that two or more of the clamps A may be used. The free end of the lever-arm *a* is bent downwardly, and notched at the bend, as shown at *e*, which is for the purpose of passing under the bar *f*, arranged transversely on the plate C, and secured by staples thereto, in order to confine the lever-arm *a* down, and thus bring the coils *b b* into a state of action, constituting thereby a spring-pressure, which actuates, by means of the hinge or uniting arms, the two plates B C, so that they press toward each other and hold firmly between them papers and documents filed therein. The bar *f*, being of flexible material, when pressed in a lateral direction away from the lever-arm *a*, releases it, when it returns to its normal position, thus bringing the spring to a state of rest, and leaving the plates B C free to move on the pivots of their uniting-arms, which relieves the contents from pressure for the purpose of ease in adjusting them. It is also obvious that the lever-arm *a* may be operated by means of any suitable catch attached to the plate C, as shown in Fig. 3.

I claim as my invention—

1. In combination with the leaves or plates B C, the clamp A, constructed with the lever-arm *a* and coils *b b*, substantially as and for the purpose described.

2. The transverse bar *f*, attached to the plate C, for locking the lever-arm *a* of the clamp in position, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand.

WM. R. CLOUGH.

Witnesses:

GEO. W. CUSHING, Jr.,
ALBERT H. NORRIS.