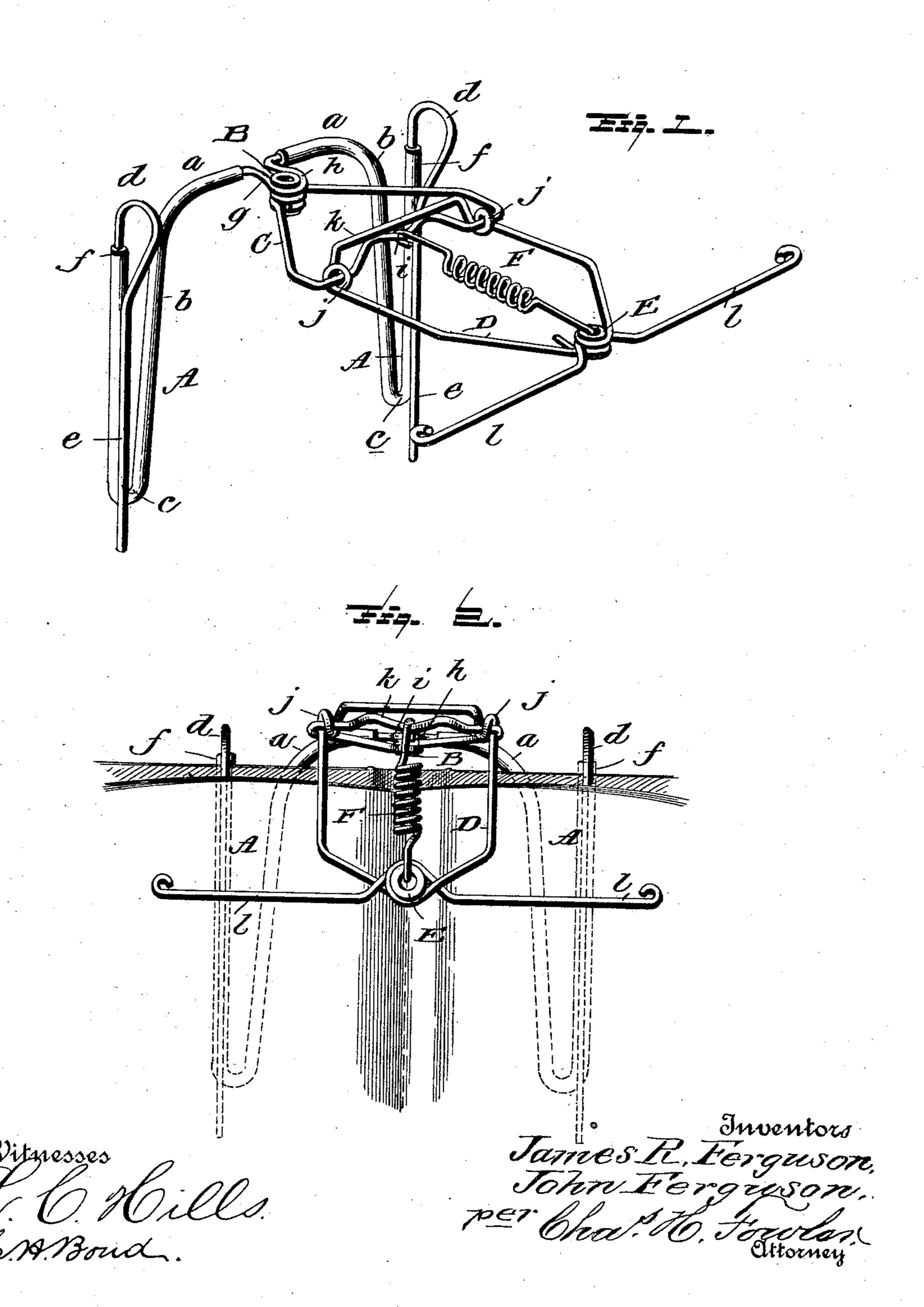
(No Model.)

J. R. & J. FERGUSON. BOOK LEAF HOLDER.

No. 472,571.

Patented Apr. 12, 1892.



United States Patent Office.

JAMES R. FERGUSON AND JOHN FERGUSON, OF CHESTER, CONNECTICUT.

BOOK-LEAF HOLDER.

SPECIFICATION forming part of Letters Patent No. 472,571, dated April 12, 1892.

Application filed August 17, 1891. Serial No. 402,855. (No model.)

To all whom it may concern:

Be it known that we, JAMES R. FERGUSON and John Ferguson, citizens of the United States, residing at Chester, in the county of 5 Middlesex and State of Connecticut, have invented certain new and useful Improvements in Book-Leaf Holders; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being 10 had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in book-leaf holders; 15 and it has for its objects, among others, to provide an improved device of this character which, in addition to having the usual means for holding the same to the back of a book, shall have provisions for automatically ad-20 justing itself to the varying differences in thickness of the two portions of the book and for aiding in the closing of the clamp portion against the leaves of the book. While designed primarily for use as a book-leaf holder, 25 it is at once evident that the device, as hereinafter described and shown, is applicable to other uses—such, for instance, as for bill-files and other uses which will readily suggest themselves to the user. The clamp portion 30 or holder is hinged on a portion of the bar or portion that extends at right angles or substantially so from the arms that hold the device to the back of the book. The spring that connects the clamp portion with the said bar 35 is hooked on the bar below the center where the hinge works, so that a tension is provided on the spring to give it power. We hang the spring just as low as we wish to get power and the length of the spring will allow.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined

by the appended claims.

The invention is clearly illustrated in the 45 accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which-

Figure 1 is a perspective view of our improved device with the clamp portion shown. 50 extended or at right angles with the arms that

hold the device to a book. Fig. 2 is a plan of a portion of a book opened and the open leaves held by the clamp portion.

Like letters of reference indicate like parts

in both of the views.

Referring now to the details of the drawings by letter, A designates the arms, which are designed to hold the device to the back of the book. They are formed, preferably, of a single piece of wire which is bent upon itself 60 to form the cross portion a, from opposite ends of which extend downward or at right angles thereto the portions b, which in turn are bent upward, as at c, and thence over upon curved lines, as seen at d, and thence 65 downward to form the spring portions e, adapted to be sprung over the back of the book, as indicated by dotted lines in Fig. 2. Those portions which engage the outer surface of the covers of the book are preferably covered 70 with rubber, felt, or some other analogous material f, to prevent marring the cover. The wire is at its center, which is the center of the cross portion a, formed into a loop q, which encircles a short tube of thimble or 75 rod B, which has preferably a flanged end, as shown at h, to prevent displacement of the loop and yet allow the wire to turn thereon, as on a pivot. This part of the device, however, may be differently constructed with-85 out affecting the operation of the other parts, which are the essence of the invention.

C is a substantially triangular-shaped wire having its ends at the apex of the triangle bent in opposite directions to form opposite- 85 ly-extending coils or loops, which loosely embrace the rod or thimble B, as seen clearly in Fig. 1, so as to form a swivel and allow the triangular-shaped piece to turn thereon to accommodate the clamp to the varying thick- 90 nesses of the two portions of the book, one portion nearly always containing more leaves than the other. The cross portion of this triangular piece is provided at its center with a bend i for the engagement of one end of the 95 spring, soon to be described. The clamp portion D is formed, preferably, of a single piece of wire, which is coiled around the cross-bar of the triangular-shaped piece, as seen at i, to form the hinge on which the said clamp is roo turned, the cross portion k being raised, as seen in Fig. 1, so that when the clamp portion is in its horizontal position, as seen in Fig. 1, the bend of the cross-bar of the triangular portion will be a short distance below the cross-bar of the clamp portion for a purpose hereinafter specified. The wire forming the clamp portion is then extended forward and coiled around a short rod or thimble E and the ends extended in opposite directions horizontally, as seen in both views, to form the arms l, which are adapted to lie upon the leaves of the book and keep them open, as seen in Fig. 2.

F is a spring hooked or otherwise connected 15 at one end in the thimble or rod E and at the other end connected to the cross portion of the triangular piece, engaging the bend therein, as seen clearly in both views. It will be observed that the spring is hung on the same 20 wire or bar on which the hinge of the clamp portion works and that the wire is out of the center where the spring is hung. This is deemed essential in order to give power to close the clamp. The connection is such that 25 very little force is required to start the clamp portion, and as soon as it is started the spring does the rest. The connection of the spring is also such that it works endwise, and there is very little danger of stretching the same.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What we claim as new is—

1. The combination, with the clamp portion, of a portion to which it is hinged and a spring

connecting the clamp portion with the hinge portion, as set forth.

2. The combination, with the clamp portion and a portion to which it is hinged, of a spring connecting the clamp portion with the cross-40 bar of the hinge, said spring being arranged lengthwise of the clamp portion, as set forth.

3. The combination, with the book-holding arms, of a portion swiveled thereto and a clamp hinged to said portion, as set forth.

4. The combination, with the book-holding arms, of a portion swiveled thereto and forming a part of the hinge, the clamp hinged to said portion, and a spring connecting said portion and clamp, as set forth.

5. The combination, with the swiveled portion, of the clamp portion formed with coils embracing the cross-bar of the swiveled portion, and a cross-bar raised above the cross-bar of the swiveled portion, as and for the 55 purposes specified.

6. A device for the purpose specified, consisting of holding-arms, a horizontal portion swiveled thereto, a hinged clamp, and a spring connecting the clamp with the swiveled portion and out of the center on which the part turns, as set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

JAMES R. FERGUSON. JOHN FERGUSON.

Witnesses:

I. W. BAILEY, F. H. PERRY.