

(No Model.)

G. W. LEWIN.

SASH HOLDER.

No. 270,229.

Patented Jan. 9, 1883.

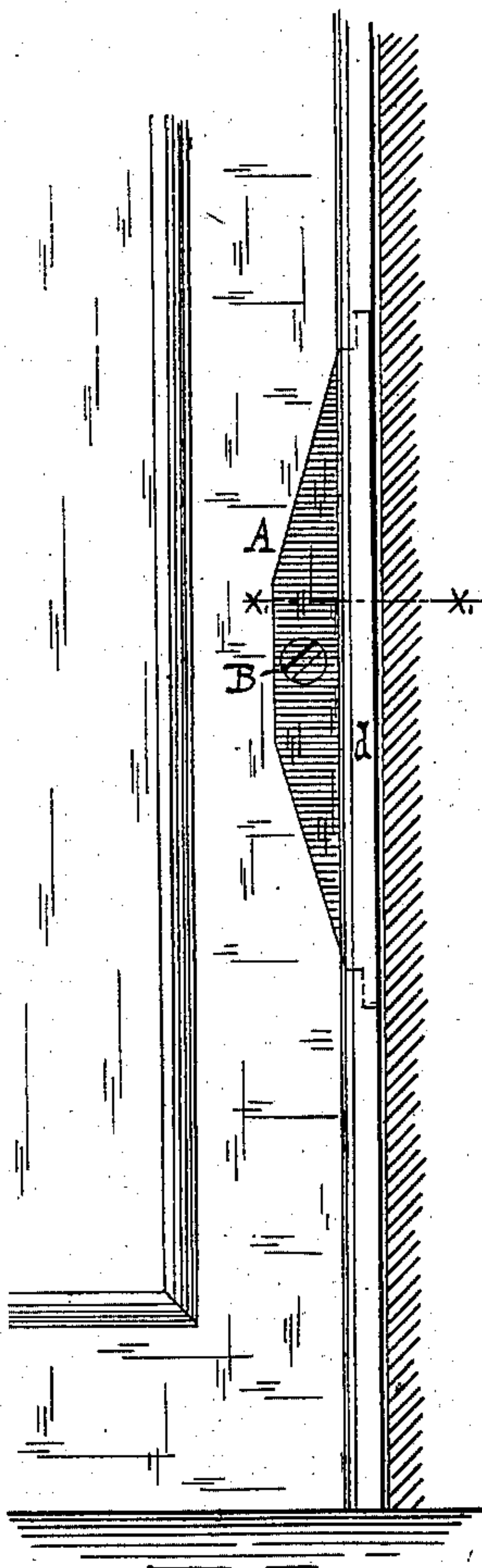


FIG. 1.

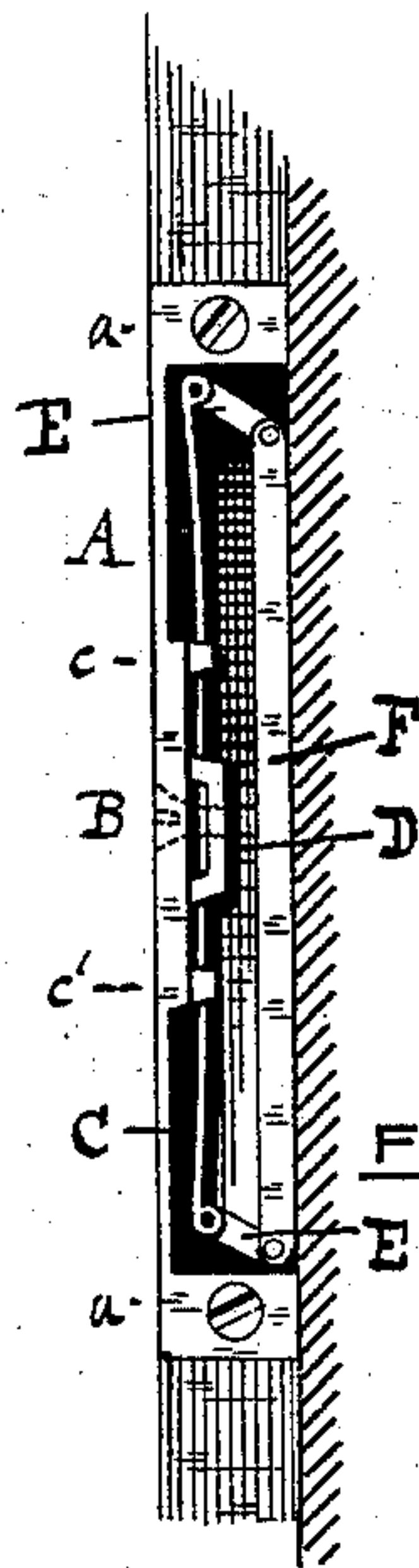


FIG. 2.

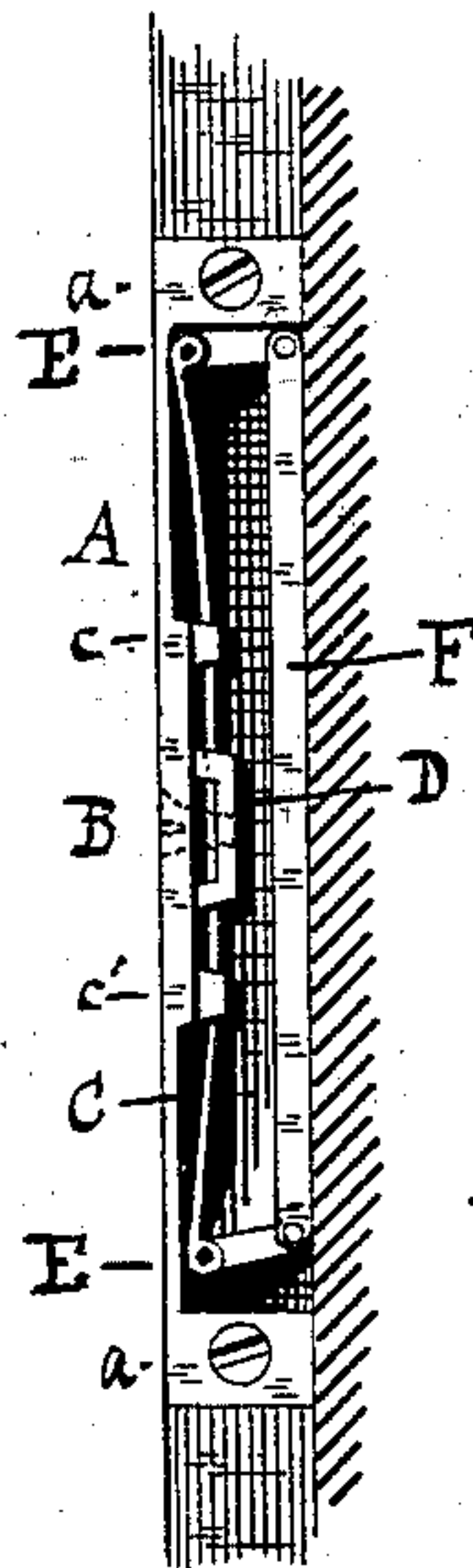


FIG. 3.

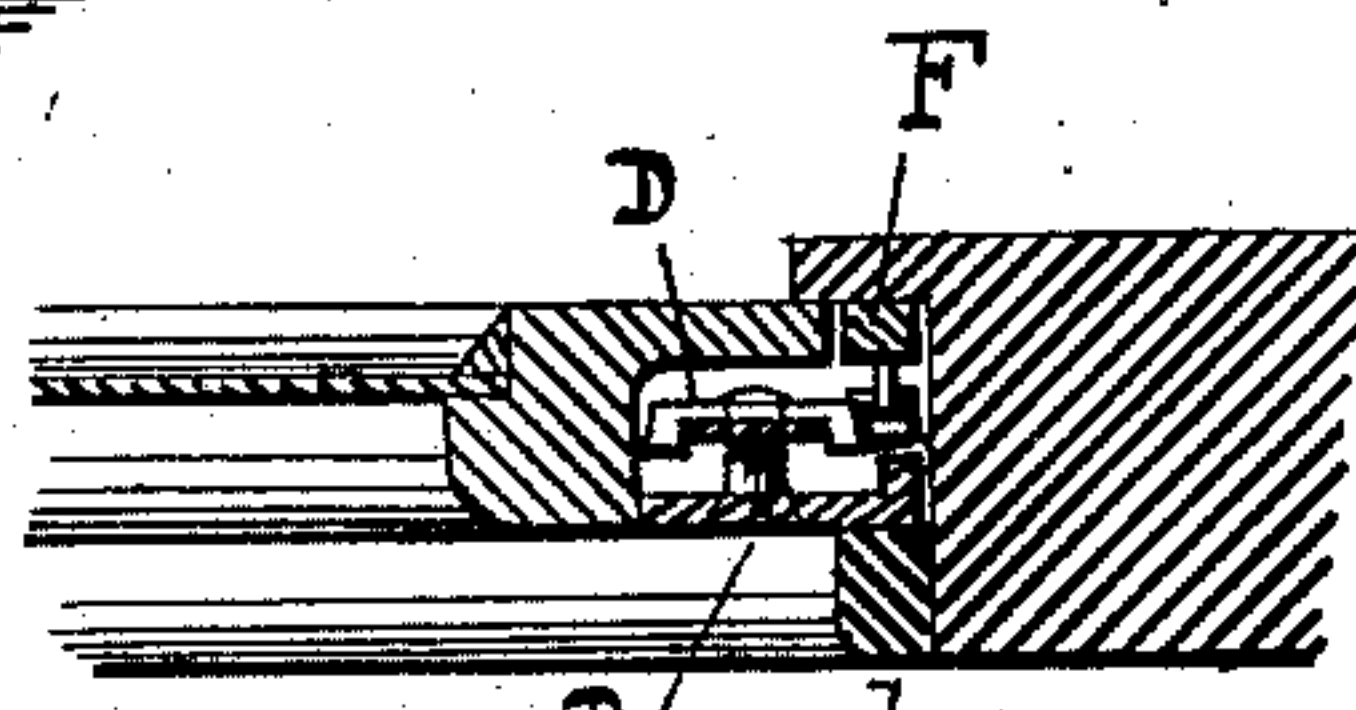


FIG. 4.

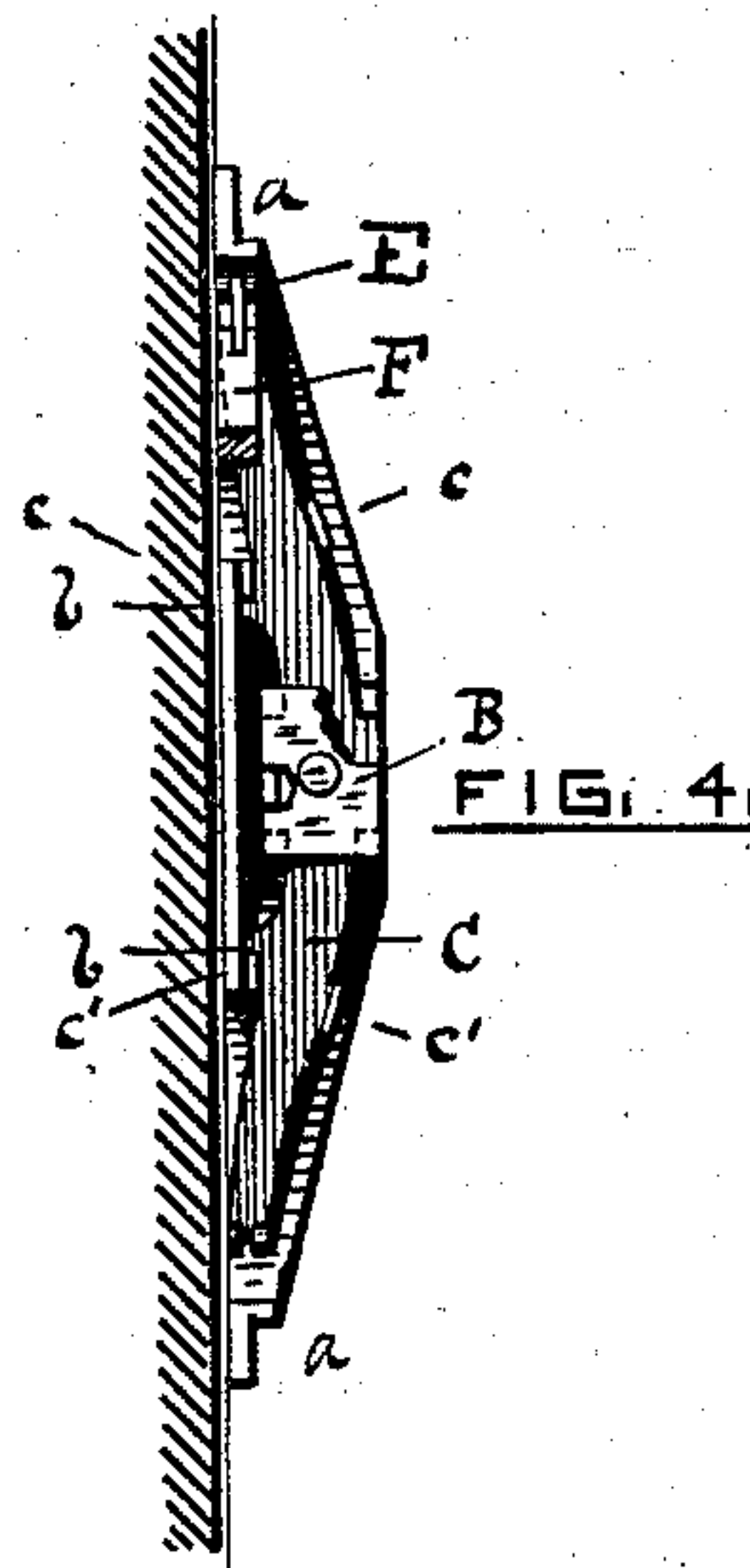


FIG. 5.

WITNESSES:

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*Andrew J. Jennings*

INVENTOR

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# UNITED STATES PATENT OFFICE.

GEORGE W. LEWIN, OF FALL RIVER, MASSACHUSETTS.

## SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 270,229, dated January 9, 1883.

Application filed May 1, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. LEWIN, of the city of Fall River and county of Bristol, in the State of Massachusetts, have invented a new and useful Improvement in Window-Springs; and I declare the following to be a specification thereof, reference being had to the accompanying drawings.

Like letters indicate like parts.

Figure 1 shows the application of my improved window-spring to a sash. Figs. 2 and 3 are vertical side plans of my invention, showing the spring in position at its least and greatest pressure, respectively. Fig. 4 is a vertical front plan, showing the form and location of the spring, with the pressure-bar removed in part to allow a more distinct view. Fig. 5 is a transverse horizontal section on line *x x* of Fig. 1.

My invention relates to that class of window-springs in which the sash is sustained in position by lateral pressure of a spring made adjustable by a screw and nut and exerting its pressure at both its free ends by means of oscillating links upon a pressure-bar, which is forced automatically into contact with the window-frame by the movement of said links.

In the drawings, A represents a plate of metal or other suitable material, which lies flush with the inner surface of the sash, as shown in Fig. 1, and is attached to the side of the sash, as shown in Figs. 2, 3, and 4, by screws passing through ear-pieces *a a*. The plate A is thickened at its center, as shown in Figs. 2 and 3, at which point it is perforated to receive the adjusting-screw B. The screw B passes through the spring C into and through the nut D. The spring C is flat and preferably made of a bow-shape, and is furnished with slight projections *b b*, and lies between posts *c c c' c'*. The nut D is square, and has at its four corners teats *d d*, by means of which in engagement with the edges of the spring C, as shown in Figs. 4 and 5, it is prevented from rotation when operated upon by the screw B, but has a direct backward and forward motion in the direction of longitudinal axis of the screw B. The spring C has bearings on either side of the nut D upon a fulcrum formed

by an interior ridge, of which the posts *c c* and *c' c'* are the projecting ends. By means of the screw B and non-rotating nut D the spring C may be brought nearer to or farther from the inner surface of the plate A, and thus varies to any desired degree the pressure of the spring C when bent upon its fulcrum. At each end of the spring C is a link, E, shown in Figs. 2 and 3, and pivoted or hinged to the ends of the spring C, and also to the ends, respectively, of the pressure-bar F. The bar F is made of any suitable material; but I prefer to make it of steel, with an external layer of lead, the latter to come in contact with the window-frame, as I consider lead to be a better wearing or friction surface for the purpose.

The operation of my improved window-spring is as follows: In raising the sash the parts are in the position shown in Fig. 2. While the sash is being lifted the pressure-bar F falls to its lowest position, relieving the strain upon the spring C, and consequently diminishing its own friction on the window-frame. As soon as the window has been lifted the desired height and is left unsupported by the hand it falls for a short distance by its own weight, which causes the pressure-bar F to rise, by means of the link movement, to the position shown in Fig. 3, thus causing the spring C to be bent, thereby sufficiently increasing the friction to prevent the further descent of the sash.

The reason of making the spring C in a bow-shape is to bring the adjusting-screw B into a position to be easily accessible without removing the bead *d*, as will be apparent by inspecting Figs. 1 and 5.

I claim as a novel and useful invention and desire to secure by Letters Patent—

The improved window-spring herein described, consisting of the plate A, screw B, spring C, nut D, links E E, and pressure-bar F, combined and operating substantially as and for the purpose specified.

GEORGE W. LEWIN.

Witnesses:

JAMES M. MORTON,  
ANDREW J. JENNINGS.