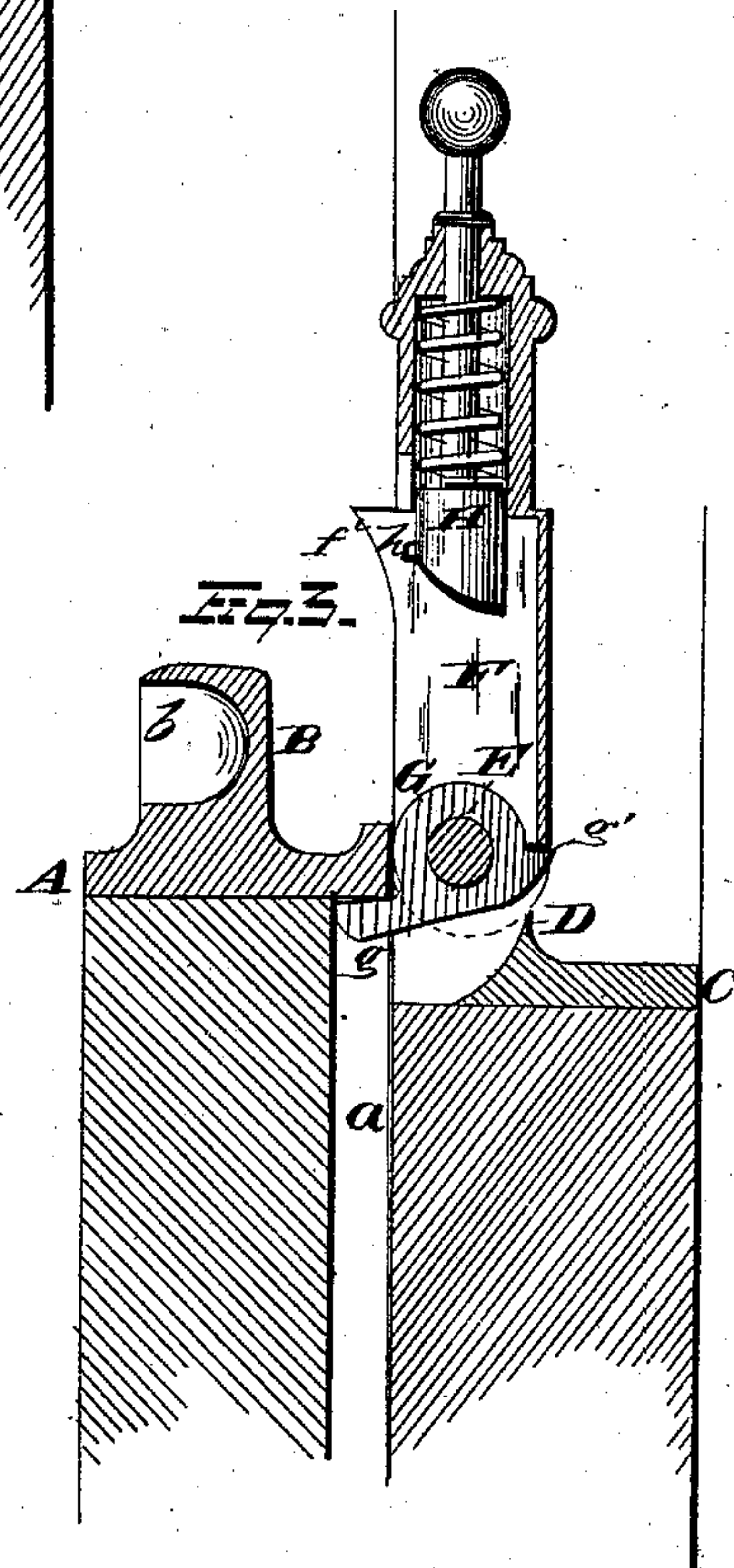
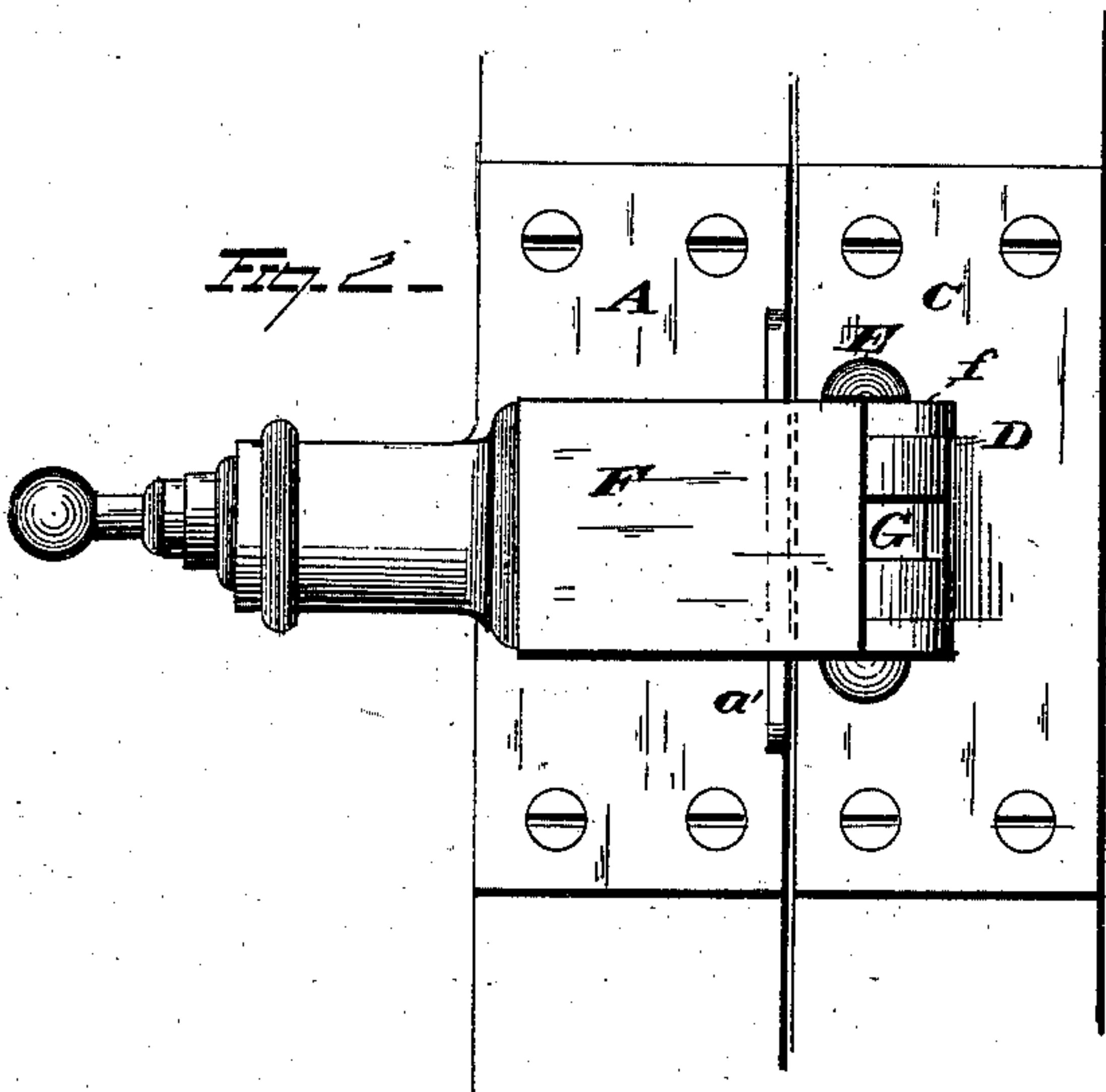
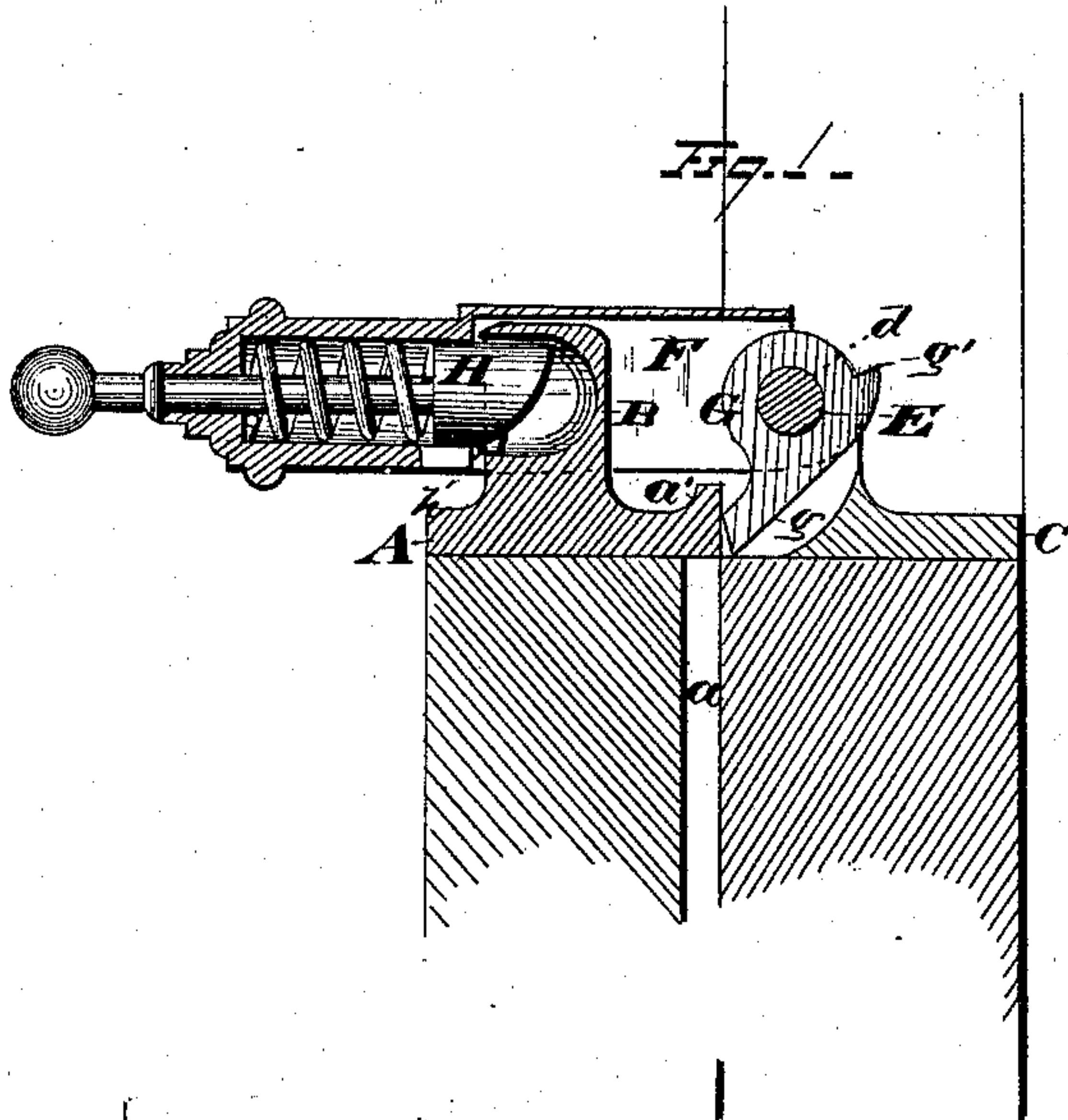


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FASTENERS FOR MEETING-RAILS OF SASHES.
No. 192,896. Patented July 10, 1877.



WITNESSES

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INVENTOR

W. H. Brown.
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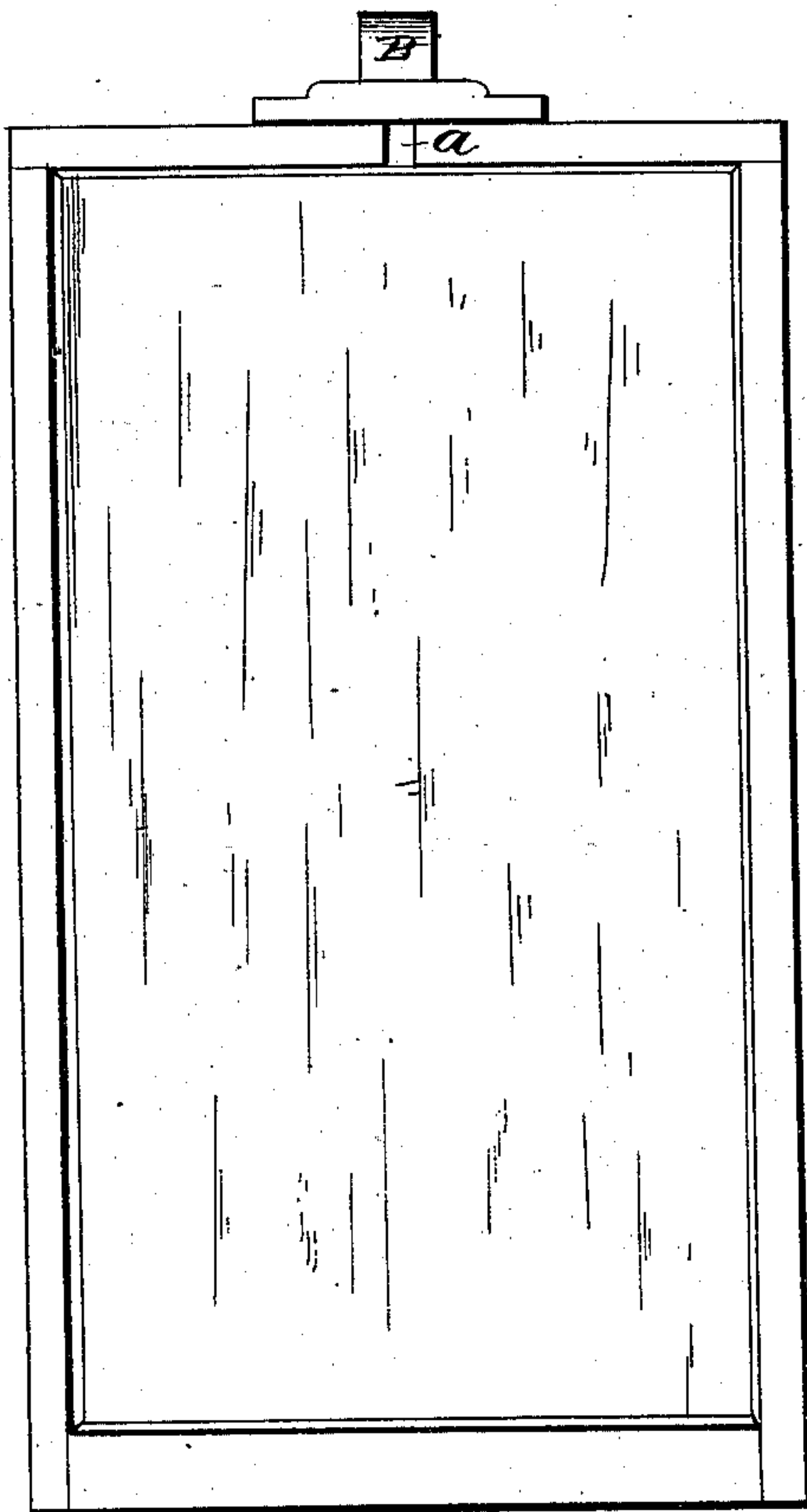
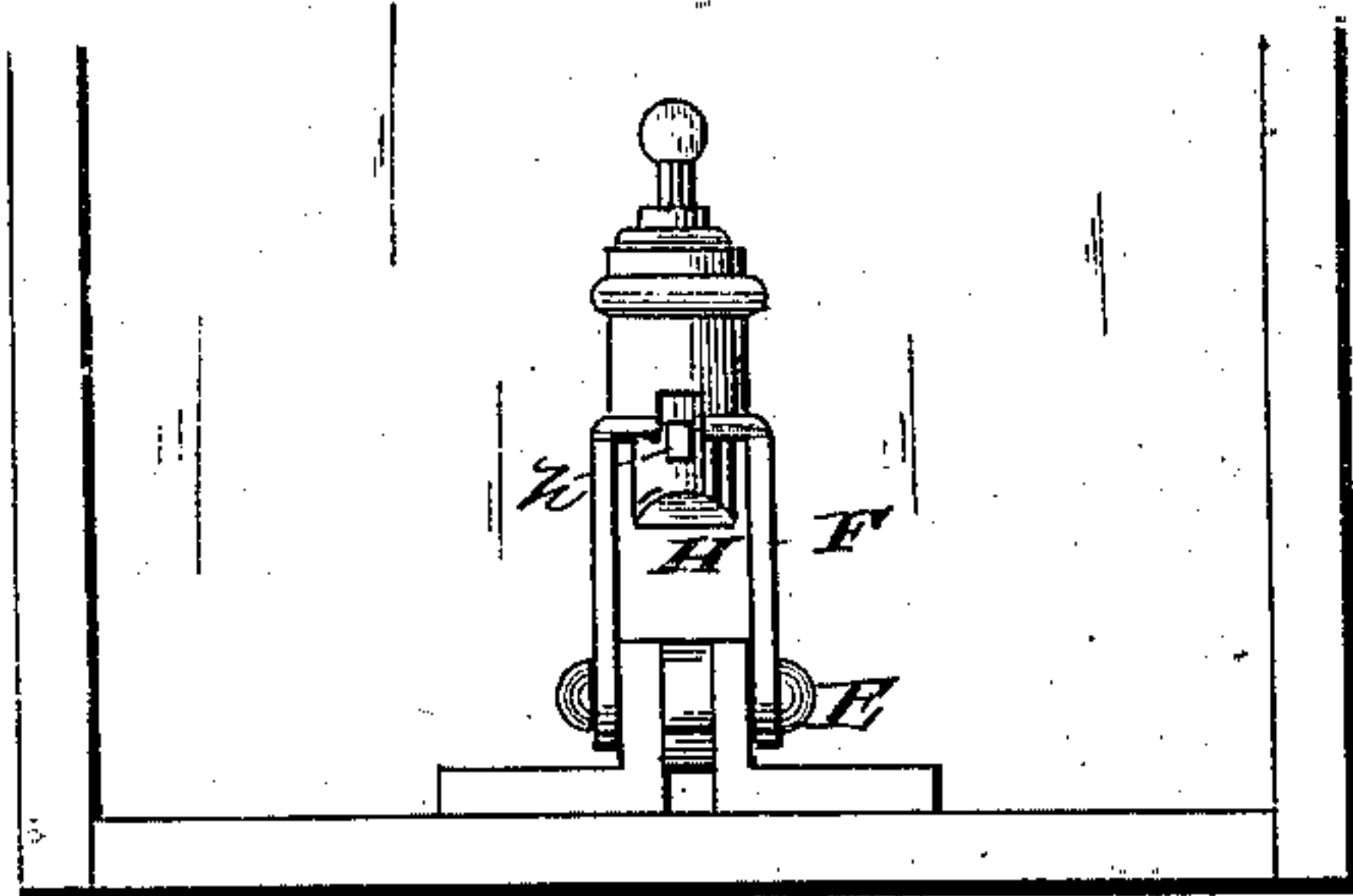


Fig. 4.

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UNITED STATES PATENT OFFICE.

WILLIAM H. BROWN, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN FASTENERS FOR MEETING-RAILS OF SASHES.

Specification forming part of Letters Patent No. 192,896, dated July 10, 1877; application filed June 1, 1877.

To all whom it may concern:

Be it known that I, WILLIAM H. BROWN, of Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Automatic Window-Sash Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to certain improvements in fasteners for securing window-sashes, and is designed to afford a simple and durable device which will automatically lock the window upon the descent of the lower sash.

It consists in securing to the upper side of the respective meeting-rails of both sashes a metallic supporting-plate, the one on the lower sash having a central socket-stud which engages a spring-pressed bolt working in a casing, which latter is pivoted to the plate of the upper sash. This swinging casing is adapted to be thrown up in vertical lines by the raising of the lower sash, and is thus held till the said sash is again closed, when, by the engagement of the metallic plate, secured to the meeting-rail of this sash, with a double latch-catch vibrating in suitable bearings upon the supporting-plate secured to the upper sash, the said casing is forced down over the lower sash, and the locking mechanism automatically fastens the window.

Referring to the drawings, Figure 1 is a vertical sectional view in a central line through the fastener of a part of the upper and lower sashes of a window locked by my improvement. Fig. 2 is a plan view of the same, while Fig. 3 is a central vertical sectional view with the fastener unlocked. Fig. 4 shows a rear view of the lower sash and a front view of a portion of the upper sash.

The meeting-rails of the two sashes are provided with supporting-plates respectively secured to their upper surfaces, and which are formed preferably of brass, though other suitable metal might be substituted. The plate A, connected with the lower sash, is made with a central stud, B, in the same piece therewith, having its outer face side provided with

the socket *b*, in which latter the locking-bolt has annular bearing.

The plate C secured to the meeting-rail of the upper sash is also preferably of the same material with that of the lower sash-plate, and has formed in single piece with it the bearing D. This latter is in line with the locking-stud B, and has a slot, *d*, passing centrally through it at right angles to the said line, in which the pivotal bolt E has loose engagement. To either transverse side of this bearing D are respectively secured the swinging arms *f* of the metallic casing F, which latter incloses the locking-bolt. Suitable slots in these arms serve as journal-bearings for the pivotal bolt to connect the said casing to its supporting-plate, and this pivot is formed with a head at either extremity so as to prevent it from longitudinal displacement.

A double engaging-catch, G, oscillates freely upon this pivot, which passes in cross-line through it, and it has movement in a vertical recess made in the upper body portion of this main bearing-piece D. Its forward extremity is provided with a latch, *g*, projecting forward and having vertical travel in the guideway *a*, formed on the rear side of the meeting-rail of the lower sash.

The latch *g*, on the opposite or rear portion of the main body of the catch, engages the lower rear extremity of the casing F as the latch *g* is brought down under the engaging action of the plate A, secured to the lower sash. When this sash is raised the latch *g* stands out in full horizontal line, while upon the descent of the sash the grooved way *a* permits its meeting-rail to pass without disturbing the latch. But that portion of the rear side of the plate A which overhangs this groove *a* engages the latch and draws it down simultaneously with its own movement. The catch G is correspondingly moved on its supporting-pivot E, and causes its rear latch *g'* to bear up against the casing F. The latter is hence obliged to swing upon this same pivotal connection E, and is brought forward and downward with a quick stroke. This actuating engagement, together with the weight and natural gravity of the casing, causes it to fall with a degree of force sufficient to urge the retraction of the spring-pressed bolt, and

bring it into engagement with its locking-socket *b*. This bolt *H* is formed with an annular shoulder-bearing for its spiral spring, which latter is pressed between the same and the inner side of the free or swinging extremity of the casing *F*. It is provided with a right-angular projecting finger, *h*, which serves to limit the withdrawal of the bolt, and prevents its torsional spring from being too strongly or severely acted upon as the bolt is drawn out from its casing.

The rear edge of the plate *A* is formed with a vertical rib or projection, *a'*, which bears against the incline *f'* on the forward side of the casing *F*, as the lower sash is raised. This engagement forces the casing upward and backward, so that its longer dimension may be in a vertical line, thus clearing the way for the free movement of the lower sash as it slides up or down.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An automatic sash-fastener, consisting of a metallic plate, formed with the engaging

socket, and adapted to be secured to a lower sash, in combination with the vertically swinging double catch and the locking mechanism, the two latter loosely secured by a single pivot to the upper sash-plate, substantially as described.

2. In an automatic sash-fastener, the vertically-swinging catch, formed with an engaging projection at both extremities and pivoted to the upper sash-plate, substantially as described.

3. In an automatic sash-fastener, the locking-bolt casing, adapted to swing freely on the upper sash-plate, and formed with the front projecting incline, in combination with the lower sash-plate, formed with the rear projection, adapted to engage the said incline on the bolt-casing, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of May, 1877.

WILLIAM H. BROWN.

Witnesses:

LESTER L. NORTON,
JNO. R. PARMELEE.