

No. 633,491.

Patented Sept. 19, 1899.

J. ROBERTSON.
AUTOMATIC WINDOW LOCK.

(Application filed Dec. 21, 1898.)

(No Model.)

3 Sheets—Sheet 1.

Fig. 1

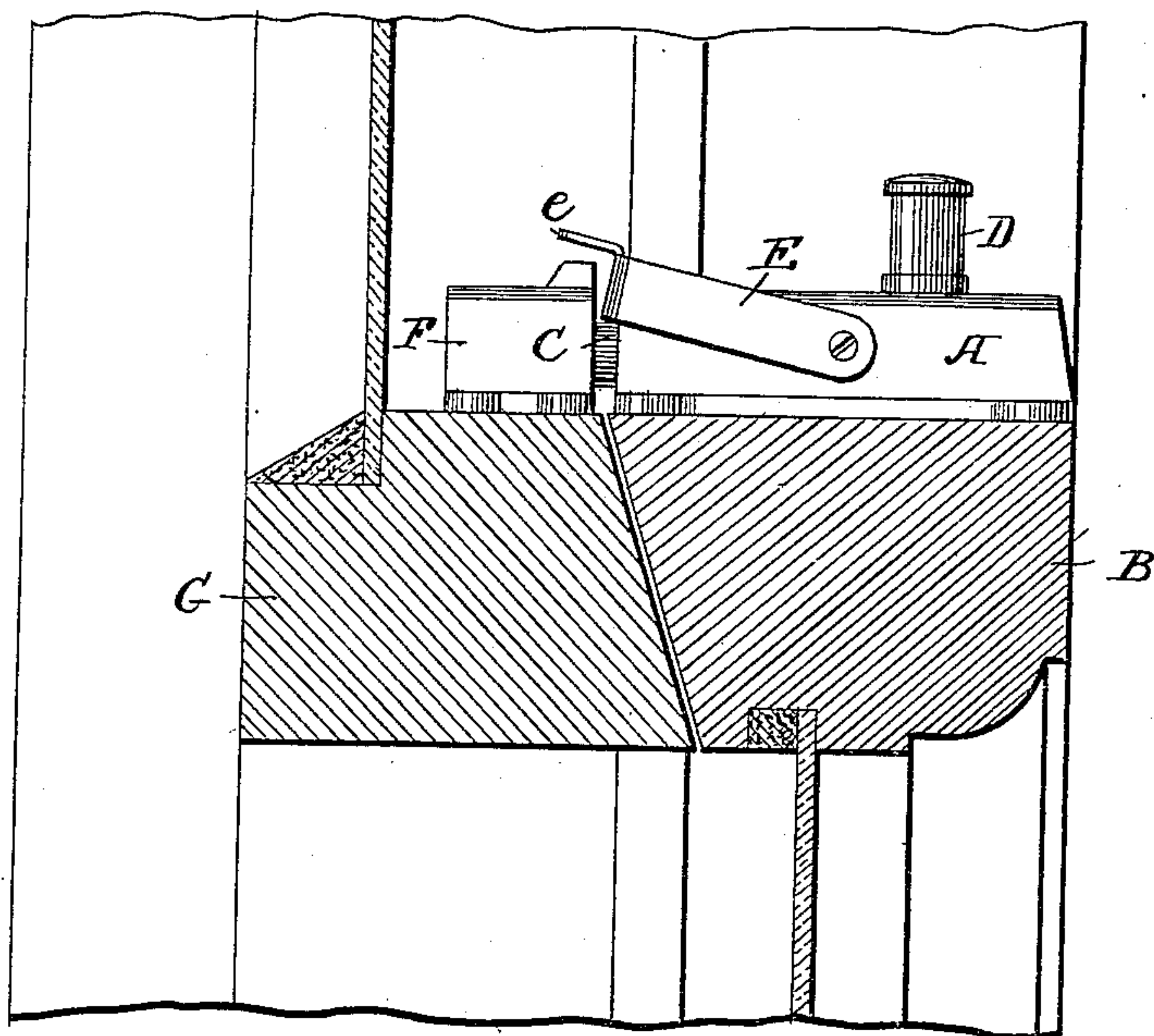
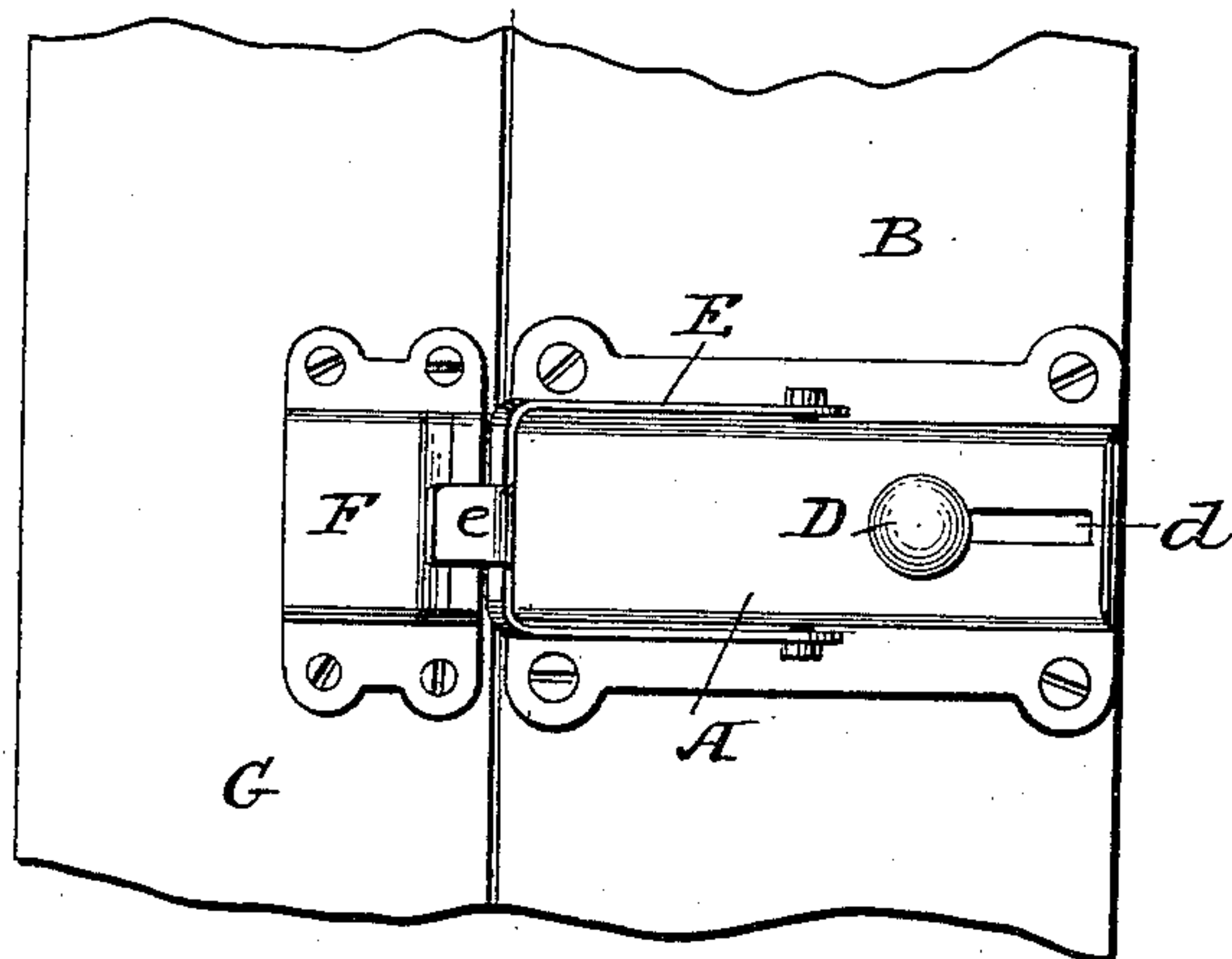


Fig. 2



Witnesses

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Fig. 3.

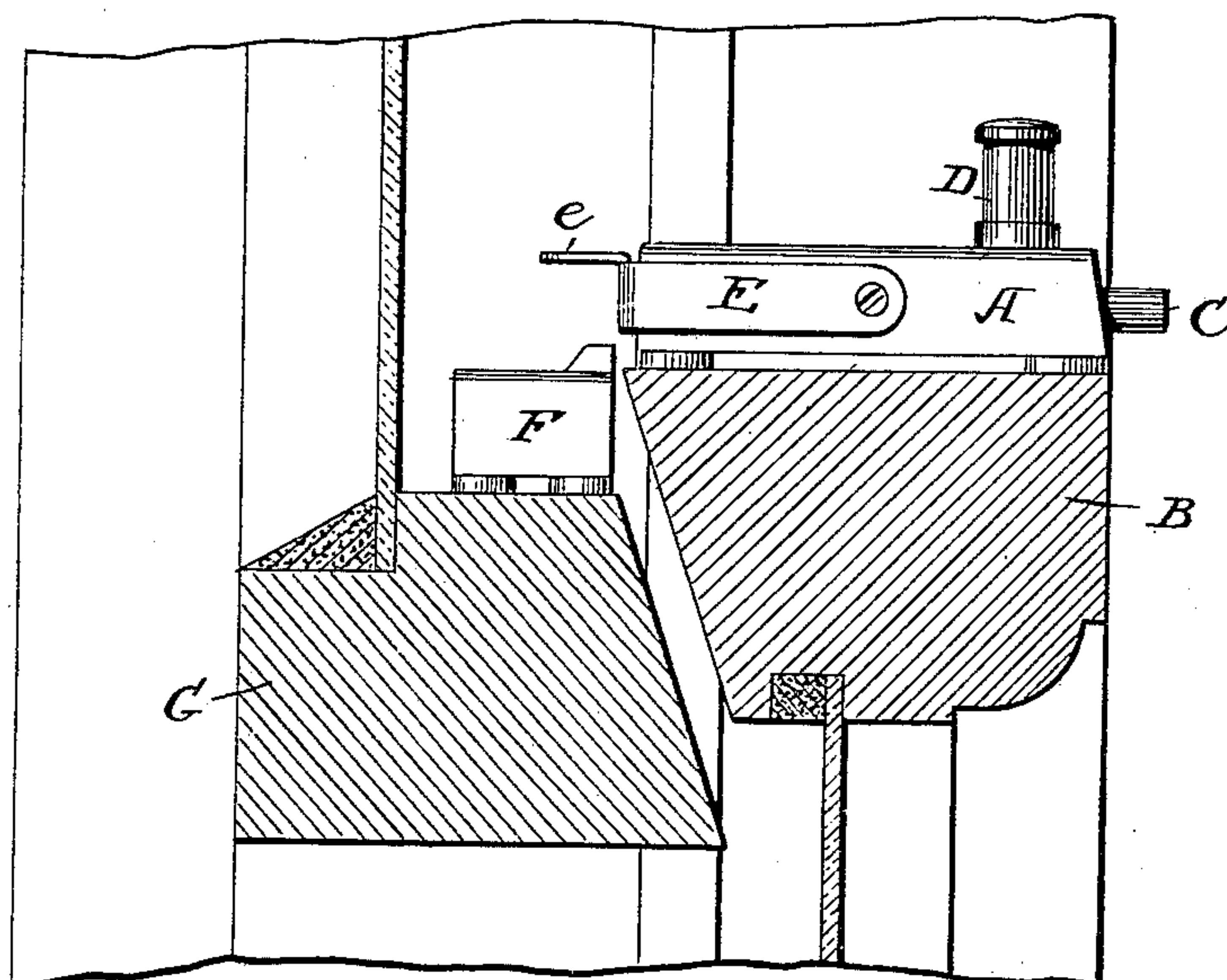
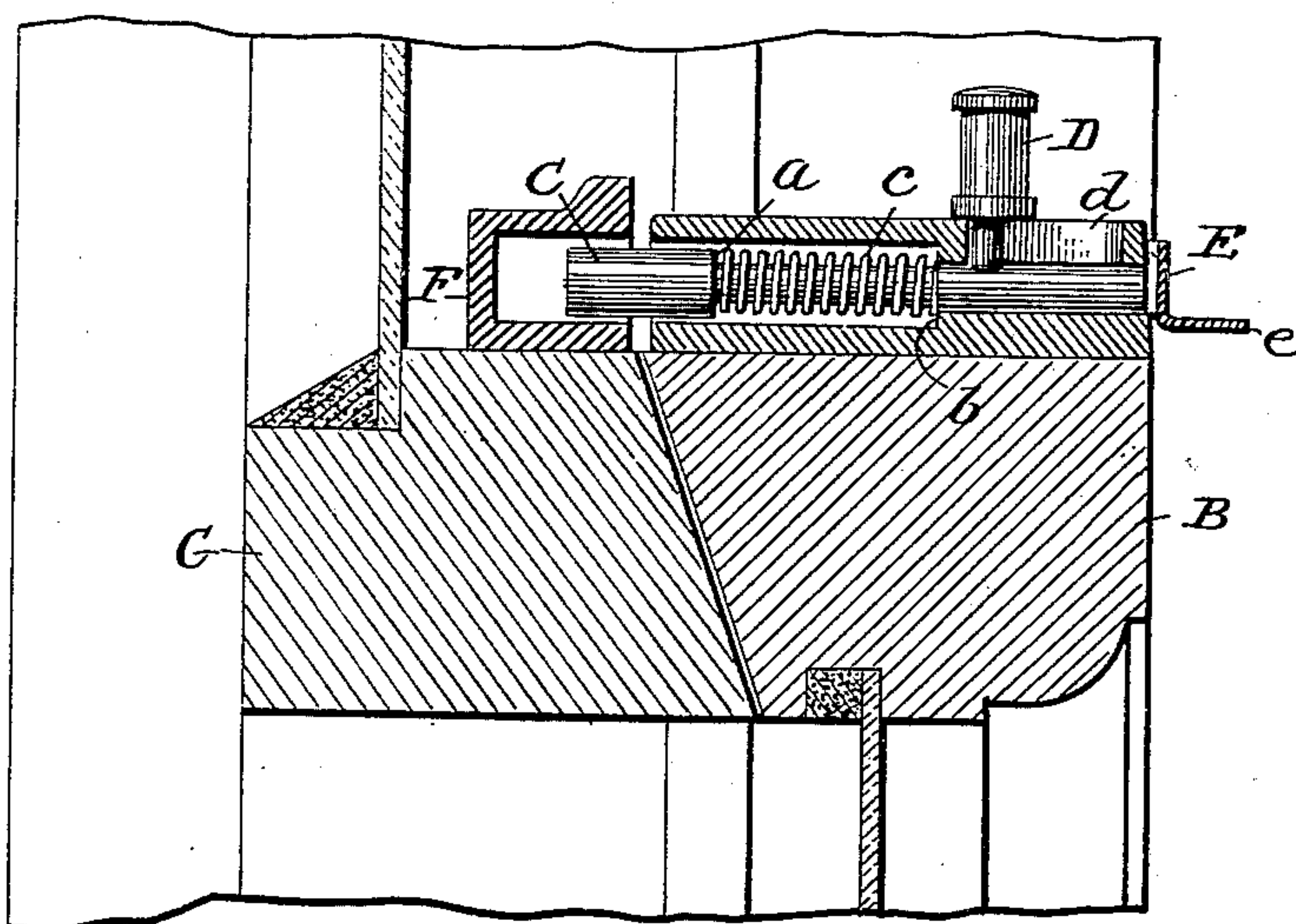


Fig. 4.



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Fig. 5.

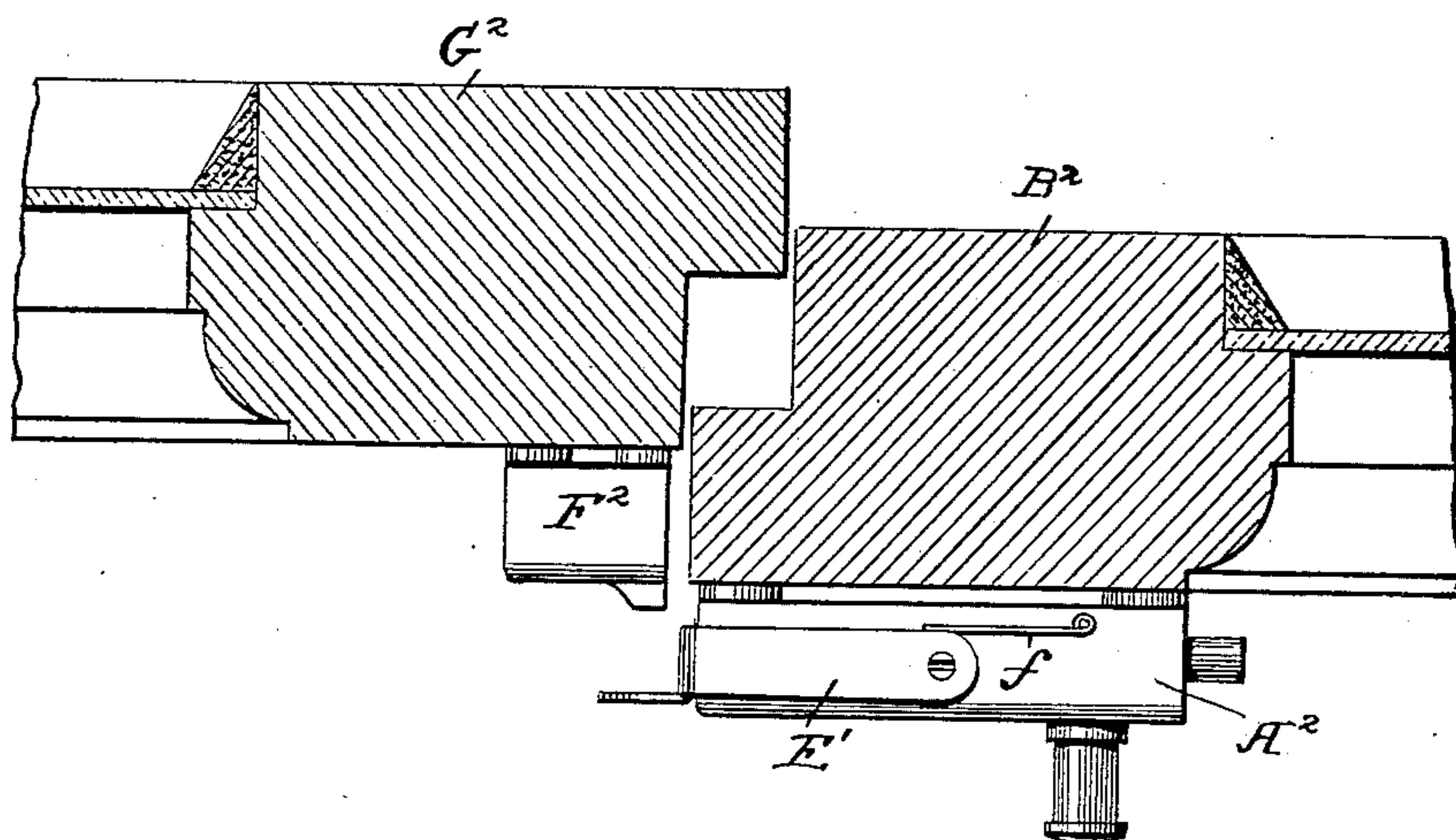
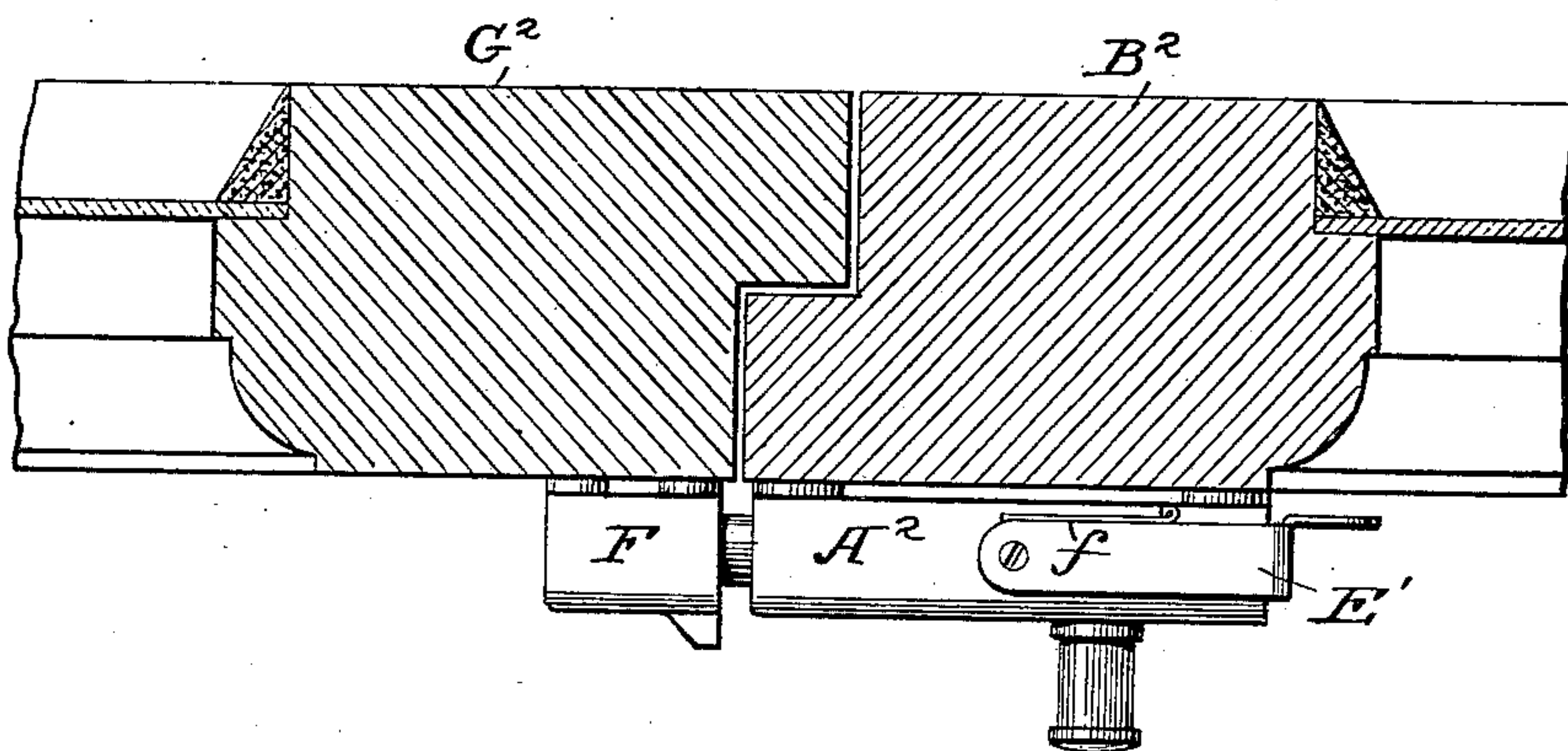


Fig. 6.



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UNITED STATES PATENT OFFICE.

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AUTOMATIC WINDOW-LOCK.

SPECIFICATION forming part of Letters Patent No. 633,491, dated September 19, 1899.

Application filed December 21, 1898. Serial No. 699,923. (No model.)

To all whom it may concern:

Be it known that I, JAMES ROBERTSON, a subject of the Queen of Great Britain and Ireland, residing at New Brighton, near Christchurch, Canterbury, in the Colony of New Zealand, have invented a new and useful Self-Acting Window-Lock, (for which I have made application for Letters Patent in New Zealand, bearing date October 26, 1898, No. 11,105,) of which the following is a specification.

The object of this invention is to provide a simple and effective window-lock capable of being manufactured at small cost and so constructed and arranged as to be self-locking.

This window-lock is intended more particularly for windows having sliding sashes; but it can be adapted for window-casements or for sashes pivotally hung, as hereinafter explained.

My invention consists of a metal barrel or casing containing a bolt provided with a spiral spring and suitable knob, a loop or strap being pivotally attached to said barrel or casing, which latter is attached (in the case of windows having vertically-sliding sashes) to the meeting-rail of lower sash, a suitable socket to receive end of bolt being attached to the meeting-rail of upper sash. In the case of sashes sliding horizontally the said barrel or casing with bolt would be attached to the meeting-rail of inner sash and the socket to the meeting-rail of outer sash. To open the sashes fitted with the window-lock, the knob is drawn back and the lower sash raised to allow the bolt to clear the socket, when the loop or strap falls over the end of bolt and holds it back until the window is closed again, when the end of said loop or strap is lifted by coming in contact with the edge of the socket on upper sash, allowing the bolt to shoot into said socket, and thus securely lock the window. If the lock is required for casements, a small spring is fitted on the barrel or casing to retain the loop or strap in position, as hereinafter explained.

Referring to the accompanying drawings, forming part of this specification, in which the same letters of reference indicate corresponding parts where they occur in the several figures, Figure 1 represents a section through

the meeting-rails of a pair of vertically-sliding sashes, showing my window-lock attached, the sashes being closed and locked. Fig. 2 is a plan of same. Fig. 3 represents a section through the meeting-rails of a pair of similar sashes with lock attached, but the sashes being slightly open. Fig. 4 is a section through the meeting-rails of a pair of similar sashes, showing the window-lock in section locked. Figs. 5 and 6 are sectional plans showing the window-lock attached to a window-casement and provided with a spring for retaining loop or strap in position.

Referring to Figs. 1, 2, 3, and 4, A is the barrel or casing, attached to meeting-rail B of lower sash and containing a bolt C, the inside portion of which is reduced in diameter in order to form a shoulder at *a*, another shoulder *b* being formed within said barrel or casing. A spiral spring *c* is placed around the bolt and between the shoulders *a* and *b*, a suitable knob D being screwed or otherwise fastened to the bolt, the shank passing through a slot *d*, formed in barrel or casing. E is a locking-piece in the form of a loop or strap pivotally attached to sides of said barrel or casing and provided with a lip or flange *e* at outer end. F is a socket secured to the meeting-rail G of upper sash to receive the end of bolt C when the sashes are closed. When the sashes are closed and locked, the loop or strap E should be in the position shown in Fig. 1. When it is desired to open the window, the knob D is drawn back to free the bolt from the socket F and the lower sash raised at the same time, (or the upper sash lowered, as may be desired,) when the loop or strap E instantly falls over the end of the barrel or casing and holds the bolt back until the sashes are closed again, when the moment the lip or flange *e* comes in contact with the socket F (see Fig. 3) the loop or strap E is caused to rise, and thus allows the bolt by the action of the spring *c* to shoot into the socket F, and thereby securely lock the window. If desired, after the window is closed and locked the loop or strap E may be drawn over into the position shown in Figs. 2 and 4, thus further securing the window.

Referring to Figs. 5 and 6, A² is the barrel or casing, attached to the stile of a casement B² and containing the bolt with spring and

knob, as before described, and provided with loop or strap E', but also having a spring f, secured on the inner side of said loop or strap, so as to press against the heel or back end of same, so as to retain said loop or strap over end of bolt as soon as it is drawn clear of the socket to open the casement. When the loop or strap is turned over to the opposite side of barrel or casing, as shown in Fig. 6, the spring similarly retains it over the other end of bolt. F² is the socket, attached to jamb or frame of casement G², (or to the other casement, if there is a pair,) into which socket the bolt shoots when the casement is closed. This last form of lock could be applied to sashes pivotally hung, the barrel or casing containing bolt being attached to the sash and the socket attached to the frame.

My self-acting window-lock cannot be unfastened from the outside without breaking the glass.

It is evident that the shape of the barrel or casing and socket may be altered or varied without departing from the spirit and scope of my invention. Hence I do not wish to limit myself strictly to the construction set forth, but,

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

1. A sash-lock comprising a casing, a sliding bolt within the casing, a spring acting upon the bolt to project the same, a knob for retracting the bolt, a movable locking-piece

capable of being moved to a position to engage either end of the bolt to hold it against projection or retraction, and a socket adapted to be engaged by the bolt in its projected position, substantially as described.

2. A sash-lock comprising a casing, a sliding bolt within the casing, a spring acting upon the bolt to project the same, a knob for retracting the bolt, a movable locking-piece capable of being moved to a position to engage either end of the bolt to hold it against projection or retraction, the said locking-piece being provided with a projecting lip and a socket adapted to be engaged by the lip of the locking-piece and by the bolt when in its projected position, substantially as described.

3. A sash-lock comprising a casing, a sliding bolt within the casing, a spring acting upon the bolt to project the same, a knob for retracting the bolt, a movable locking-piece capable of being moved to a position to engage either end of the bolt to hold it against projection or retraction, a spring for maintaining the locking-piece in its normal position, and a socket adapted to be engaged by the bolt when in its projected position.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JAMES ROBERTSON.

Witnesses:

A. H. HART,
G. HART.