

No. 837,501.

PATENTED DEC. 4, 1906.

G. A. PLINOS.  
SASH FASTENER.  
APPLICATION FILED APR. 30, 1906.

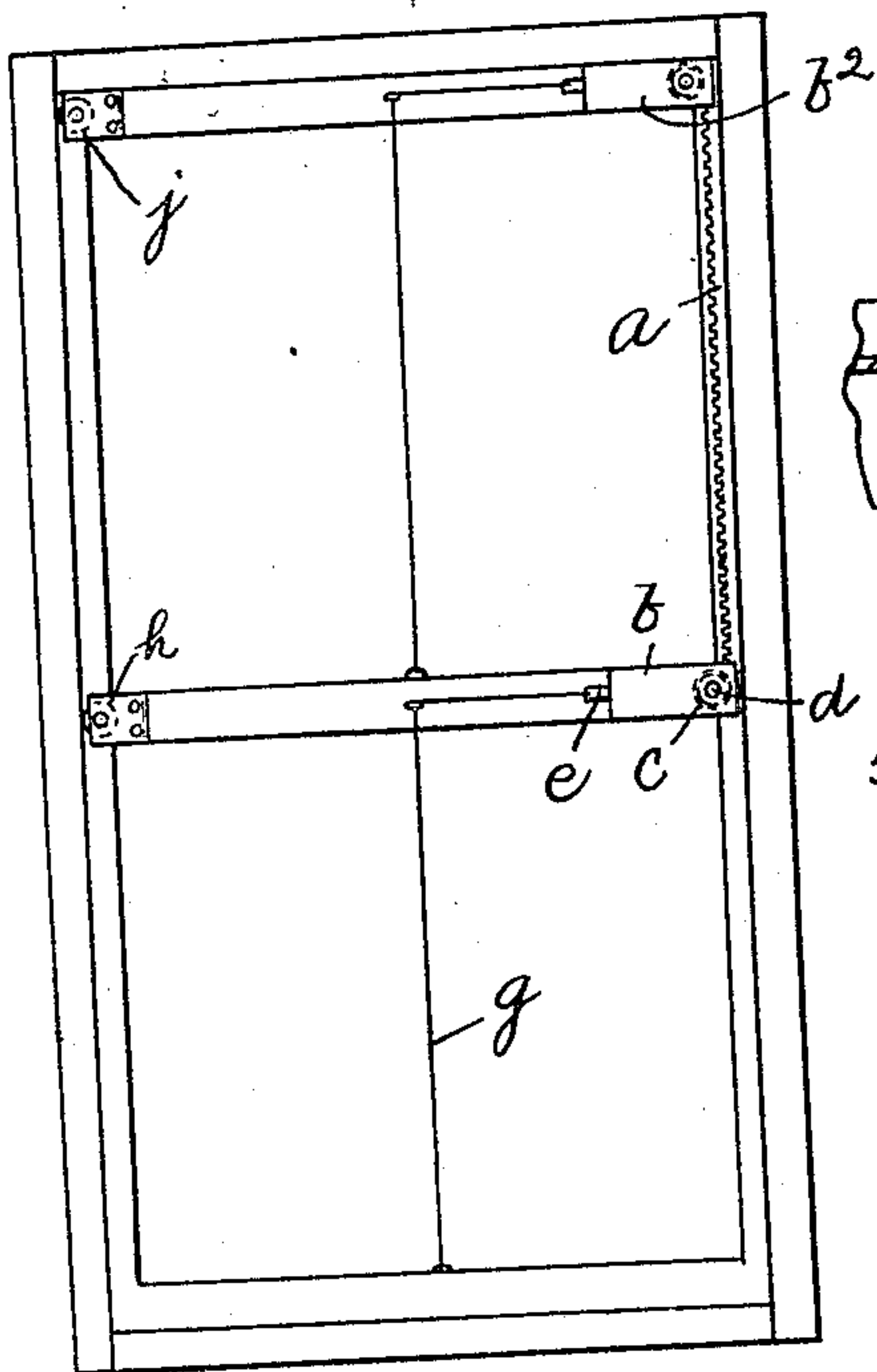


Fig. 1.

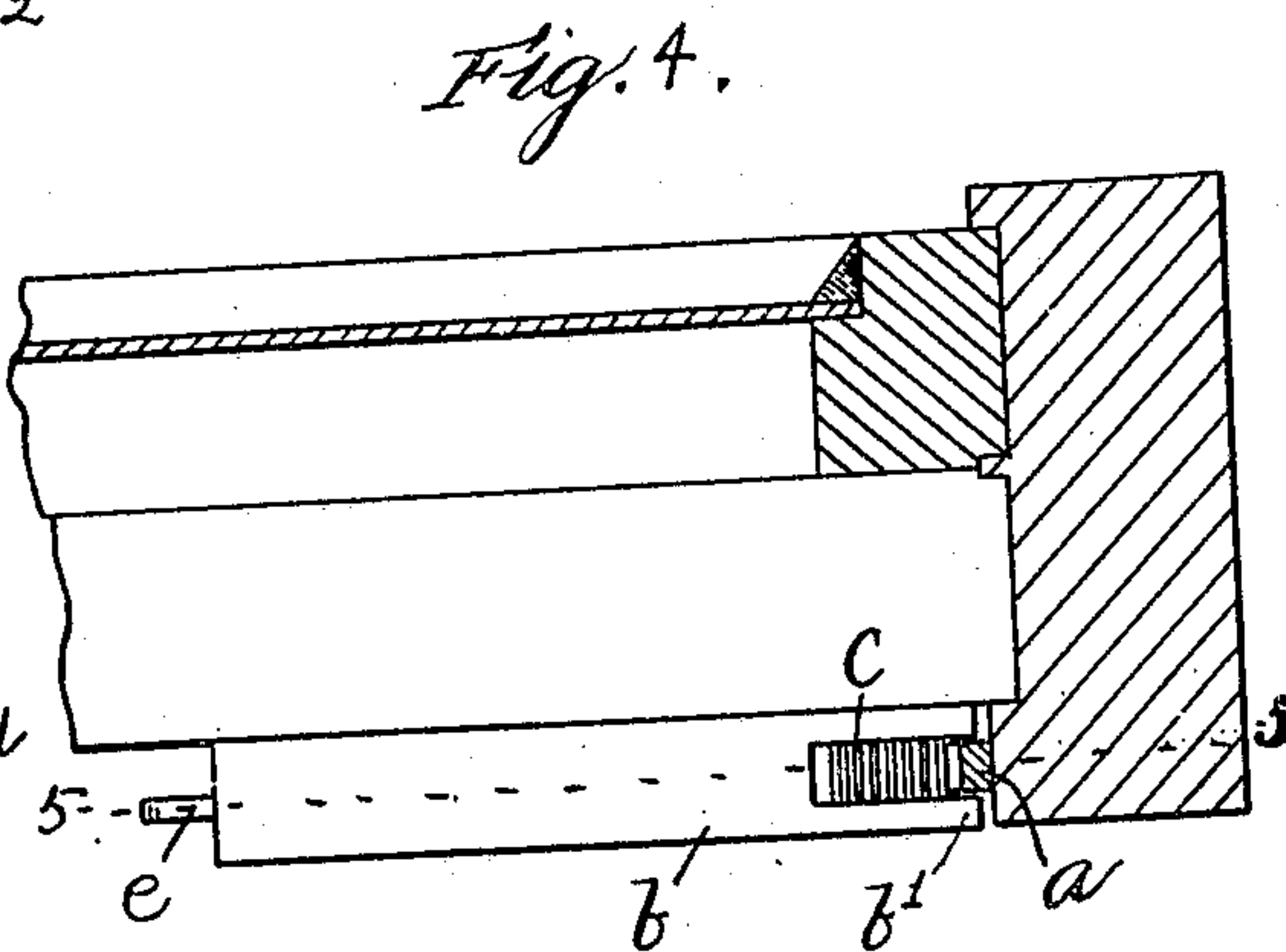


Fig. 4.

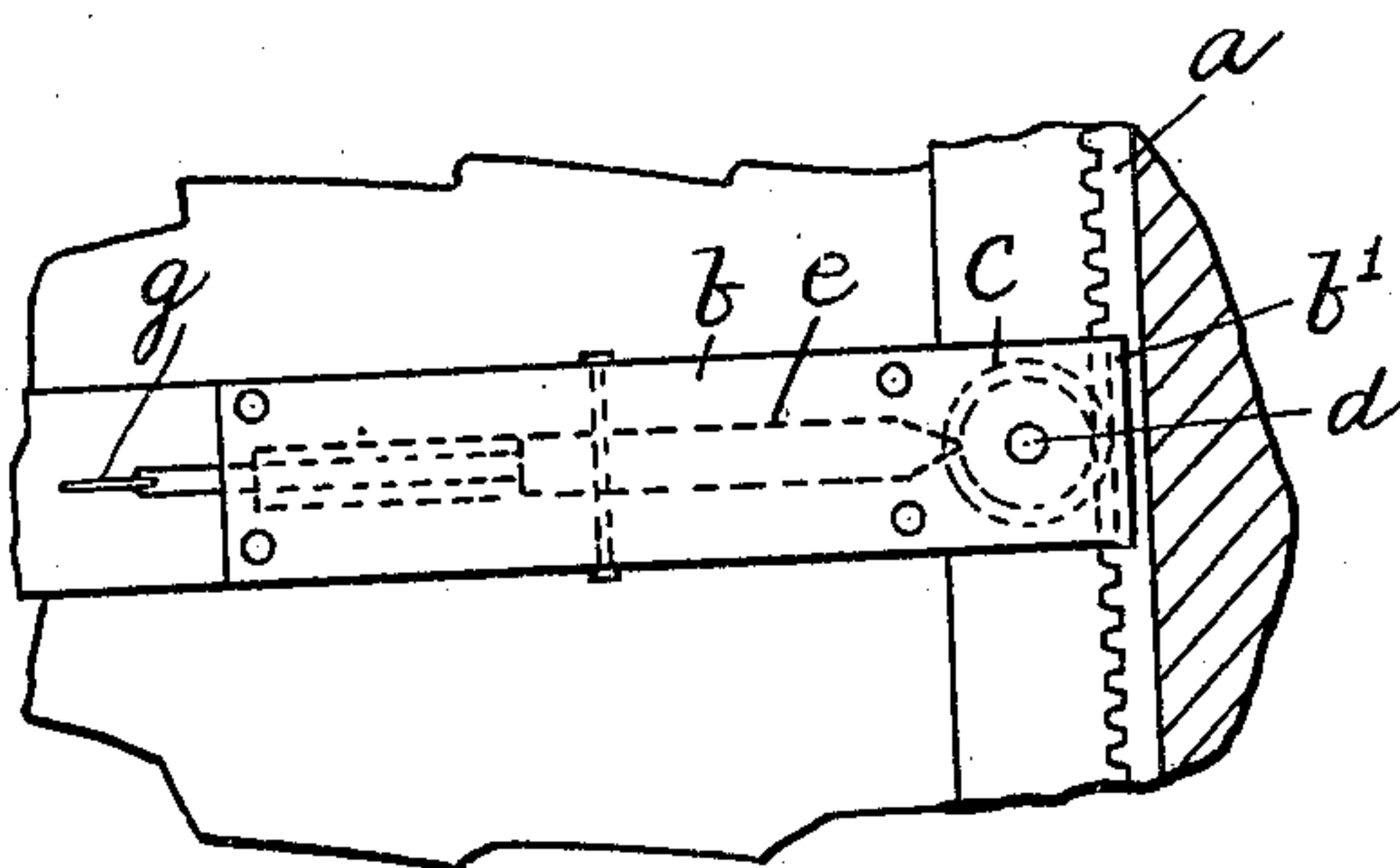


Fig. 3.

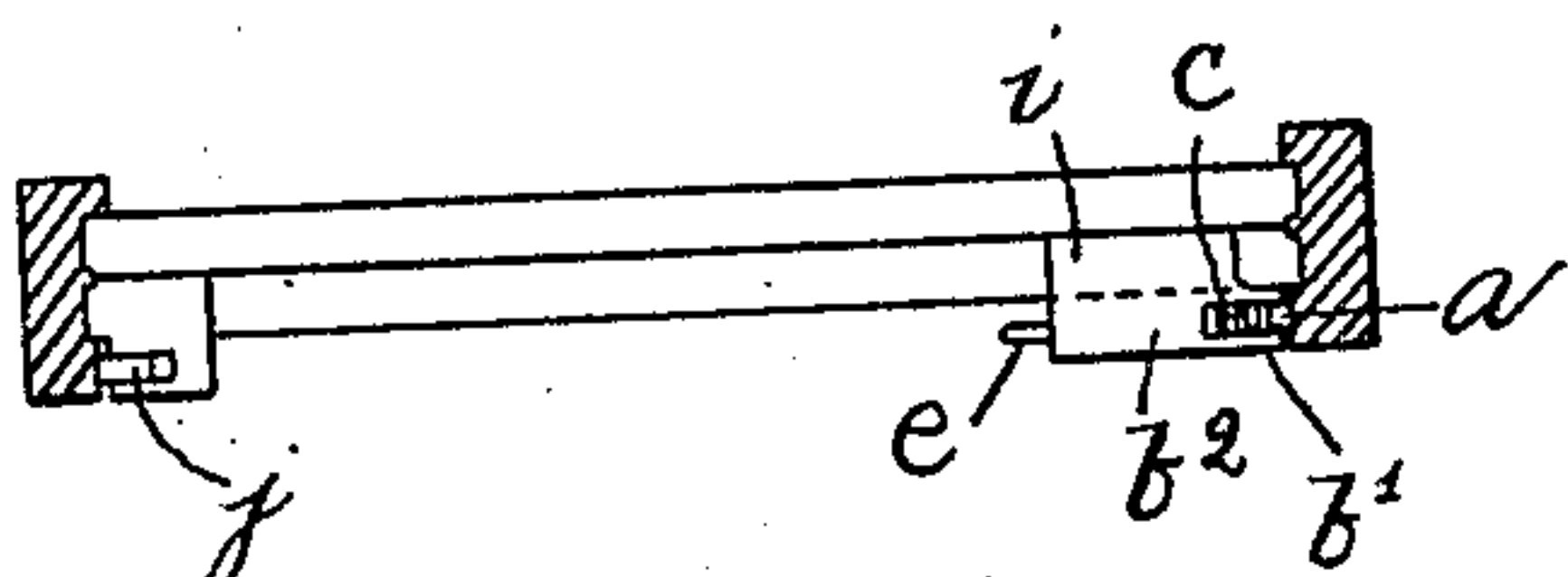


Fig. 2.

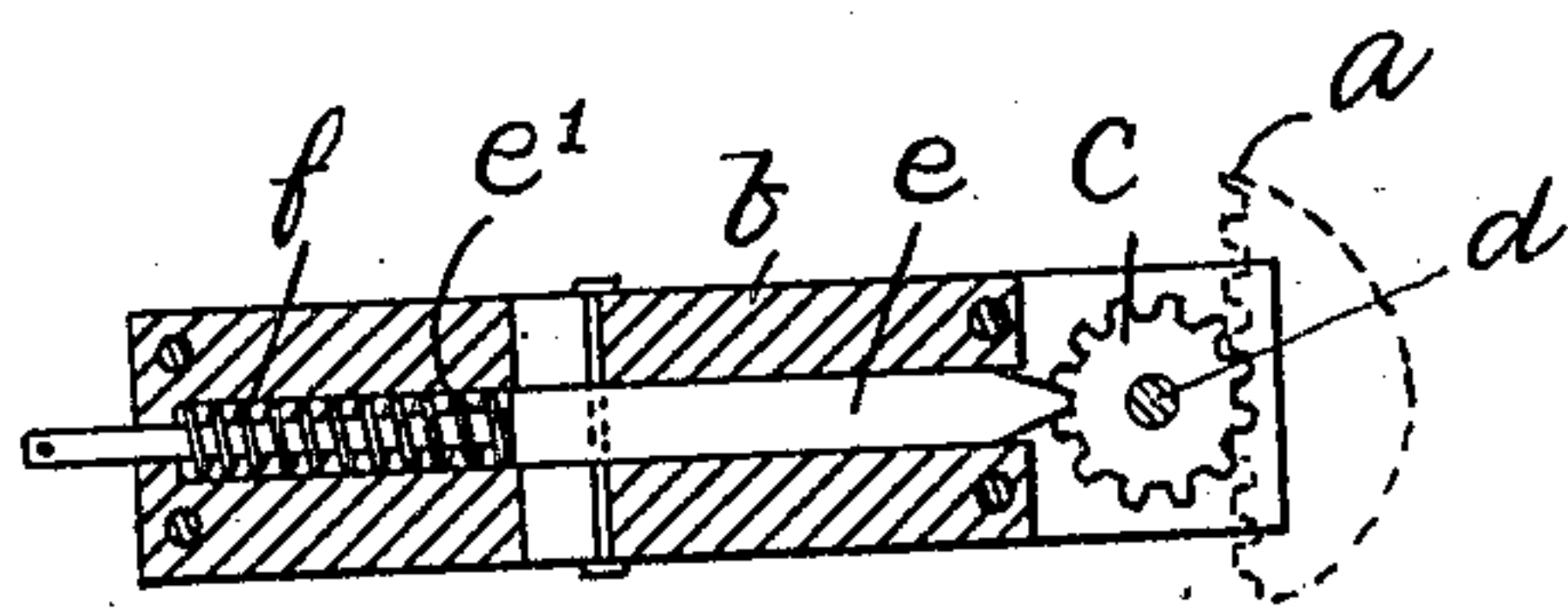


Fig. 5.

Witnesses:  
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# UNITED STATES PATENT OFFICE.

GEORGE A. PLINOS, OF HAVERHILL, MASSACHUSETTS.

## SASH-FASTENER.

No. 837,501.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed April 30, 1906. Serial No. 314,357.

*To all whom it may concern:*

Be it known that I, GEORGE A. PLINOS, of Haverhill, county of Essex, State of Massachusetts, have invented an Improvement in Sash-Fasteners, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to that class of fasteners which are adapted to lock window sashes, shutters, and sliding doors in the various positions to which they may be adjusted, and has for its object to provide a fastener of the above character which is simple in construction and is adapted to guide a sash, shutter, or door in its sliding movements.

For an understanding of my invention reference is made to the accompanying drawings, in which—

Figure 1 is a front elevation of the window sash and frame provided with my invention. Fig. 2 is a plan view thereof. Fig. 3 is a detail view in elevation of the fastener. Fig. 4 is a plan view thereof, and Fig. 5 is a section on the line 5 5 of Fig. 4.

According to my invention I secure a rack *a* to the window-frame closely adjacent the runway of the sash, said rack extending from a point adjacent the upper end of the lower sash to the top of the casing. The fastener which coöperates therewith is contained in a metal casing *b*, which is secured to the upper end of the lower window-sash, said casing having an outer plate *b'* extending toward the window-frame, so that it overlaps the rack *a*, as shown in Figs. 3 and 4. A pinion *c* is journaled on a shaft *d* in the casing *b* in such a position that it meshes with the teeth of the rack *a*, as indicated in Figs. 4 and 5. A bolt *e* is slidably mounted in said casing, and a spring *f* is provided on said bolt between a shoulder *e'* thereon and the rear end of the casing *b*, the outer end of the bolt being so shaped that it will enter the space between any two of the teeth in the pinion *c* and hold the same from rotation, and said spring *f*, acting normally to hold said bolt in engagement with said pinion, as shown in Fig. 5. A cord *g* is connected to the inner end of the bolt *e*, said cord extending to any convenient point, as shown.

The opposite side of the sash is provided with a roller *h*, which is adapted to roll in contact with the inner side of the window-

frame or an especially-provided track thereon, said roll *h* thereby coöperating with the gear *c* in guiding the sash in its sliding movement, so that it will run smoothly. The upper sash is provided with a second casing *b<sup>2</sup>*, which contains exactly similar mechanism to that already described, said casing, however, being mounted on a base *i*, which extends inwardly from the upper end of the upper sash to an extent equal the thickness of the lower sash, so that said casing *b<sup>2</sup>* is held in such a position that the pinion thereof will engage the rack *a*. The opposite side of the frame is also provided with a guiding-roller *j*, which performs a similar function to the guiding-roller *h*.

It will be apparent from the foregoing that if the window is to be raised or lowered the cord *g* will be pulled sufficiently to draw back the sliding bolt *e* out of engagement with the pinion *c*, so that the latter is free to rotate and the sash to be raised or lowered, and if it is desired to lock the window at any particular point it is simply necessary to release the cord, so that the sliding bolt may again lock the pinion.

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

1. In combination with a window-casing and an upper and a lower sash slidably mounted therein, a rack secured to said casing and extending from a point adjacent the upper end of said lower sash to a point adjacent the top of the casing, and locking devices mounted on each sash in engagement with said rack, substantially as described.

2. In combination with a window-casing and an upper and a lower sash slidably mounted therein, a rack secured to said casing and extending from a point adjacent the upper end of said lower sash to a point adjacent the top of the casing, a pair of pinions respectively mounted on said sashes adjacent the upper ends thereof in mesh with said rack, and independent locking devices for each of said pinions, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE A. PLINOS.

Witnesses:

LOUIS H. HARRIMAN,  
LOUIS J. KEILWEISS.