

No. 702,700.

Patented June 17, 1902.

J. A. BROOKS & E. E. WHITTAKER.

SASH LOCKING MECHANISM.

(Application filed Mar. 17, 1902.)

(No Model.)

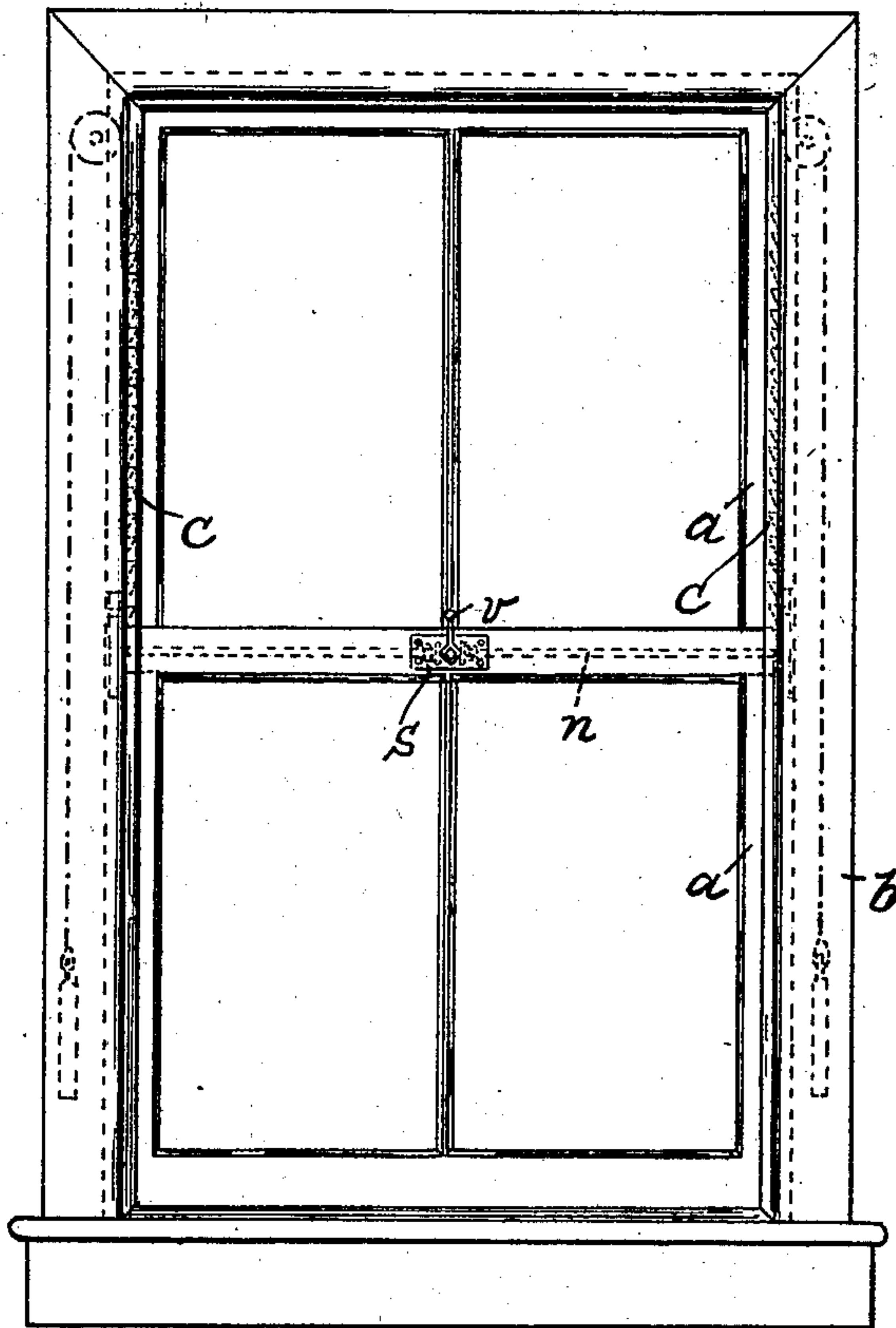


Fig. 1

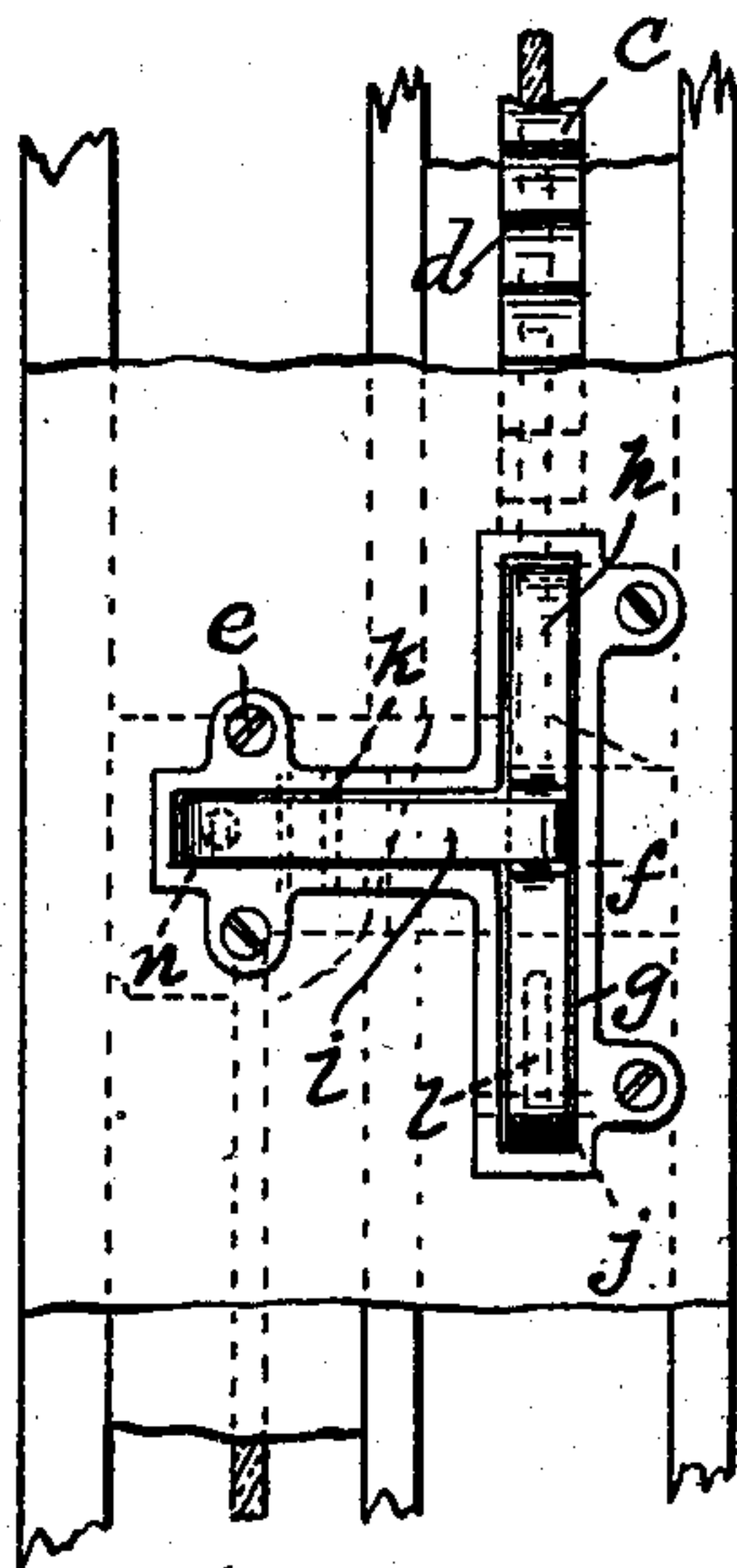


Fig. 3

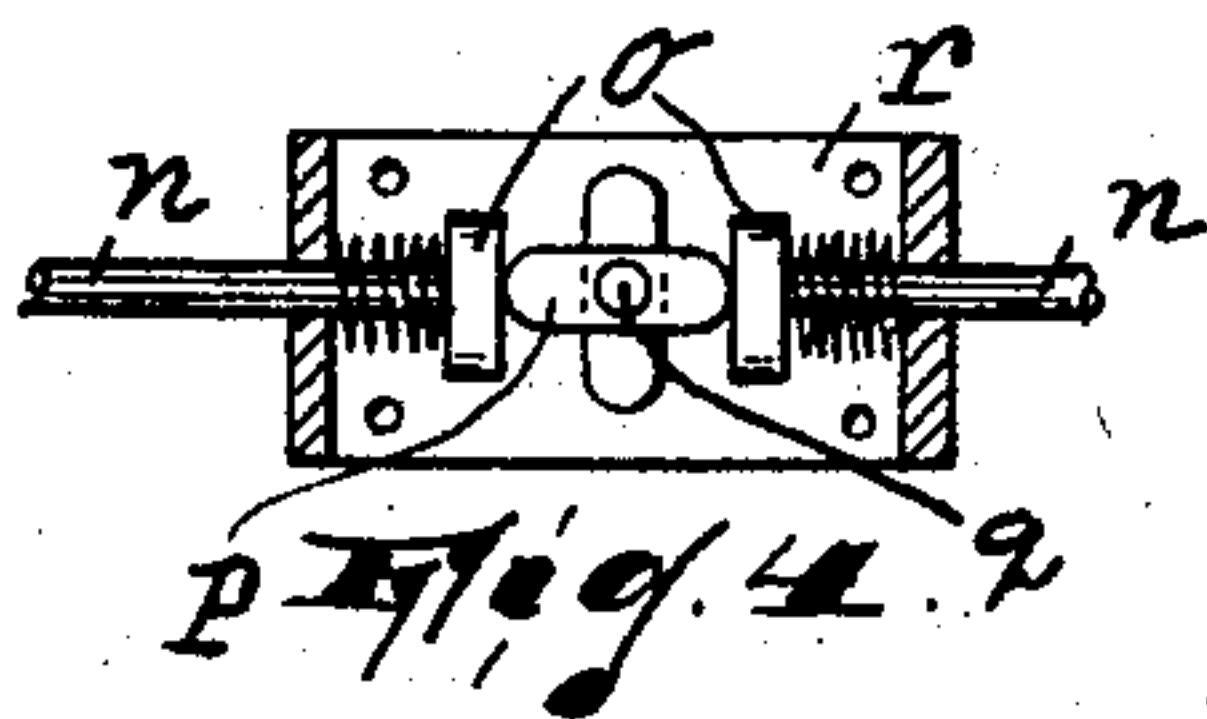


Fig. 4

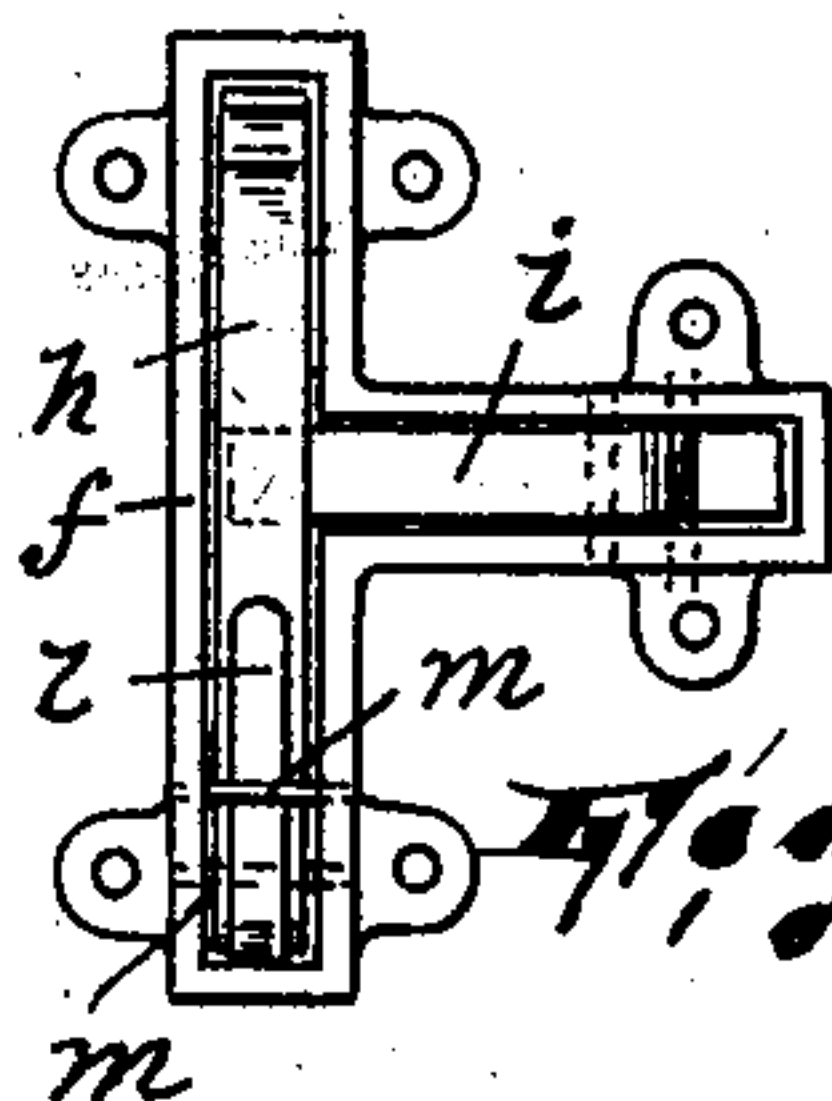


Fig. 5

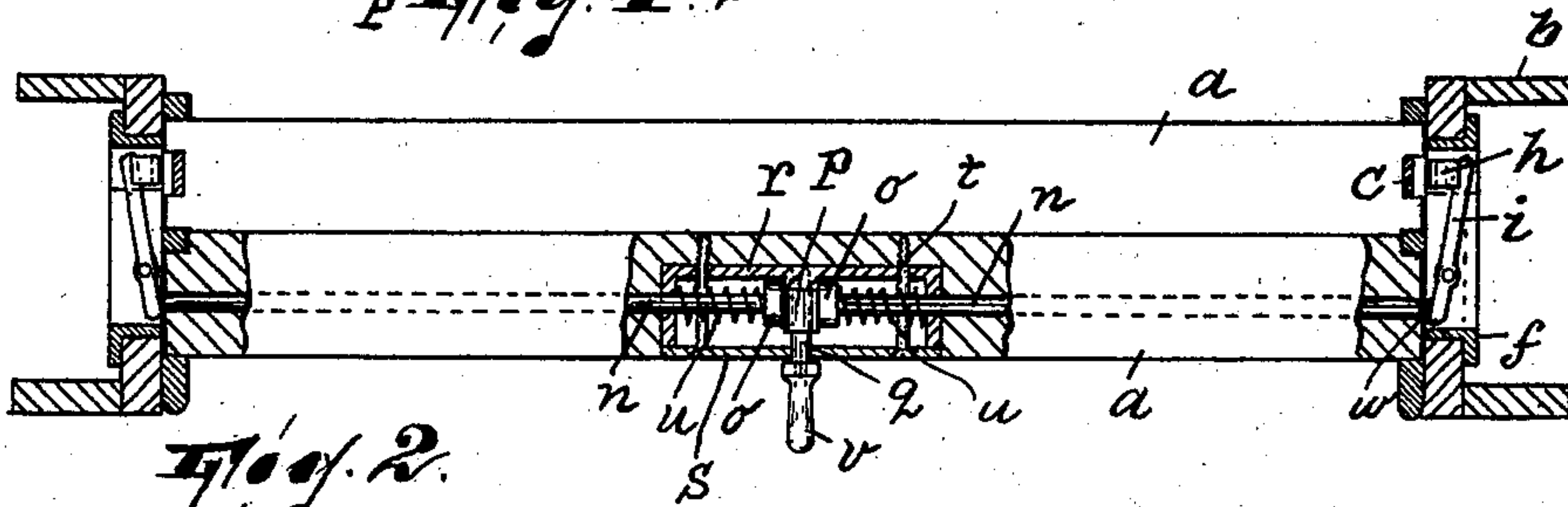


Fig. 2

WITNESSES:

Wm. S. Bell.
Robert J. Pollitt.

INVENTORS,

Joseph A. Brooks,
Edward E. Whittaker,

BY

Garner & Leonard,
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOSEPH A. BROOKS AND EDWARD E. WHITTAKER, OF PATERSON, NEW JERSEY.

SASH-LOCKING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 702,700, dated June 17, 1902.

Application filed March 17, 1902. Serial No. 98,514. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH A. BROOKS and EDWARD E. WHITTAKER, citizens of the United States, residing in Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Sash-Locking Mechanisms; and we do hereby declare the following to be a full, clear, and exact description of the same.

This invention relates to locking devices for window-sashes; and it has reference particularly to mechanism of this nature in which a toothed rack is employed, so that the sash may be secured at any desired position in the window-frame.

The principal object of the invention is to provide a mechanism of this nature whereby the upper sash may be left slightly down from the top at night, so as to permit ventilation of the apartment, and yet be locked against further opening from the outside.

A further object of the invention is to so construct the locking mechanism that it will lock the lower sash also when the said sash is in its closed position.

The invention consists in the improved sash-locking means constructed substantially as will be hereinafter described, and finally embodied in the clauses of the claim.

In the accompanying drawings, Figure 1 shows our invention applied to the ordinary window. Fig. 2 is a slightly-enlarged horizontal section, taken just above the upper sash, of what is shown in Fig. 1, portions of the lower sash being shown in section to fully disclose details of the invention. Fig. 3 is a side view of the window-frame removed from the walls of the building and showing our invention in position therein, and Figs. 4 and 5 illustrate details of the invention.

In the side rails of the upper one of two sashes *a*, arranged to move vertically, as usual, in the frame *b*, are set racks *c*, preferably having ratchet-teeth *d*. Against the outer faces of the uprights of the window-frame *b*, in the plane of the parting-rails of the two sashes when closed, are secured by screws *e* metallic plates *f* of substantially T-shaped form. Each plate has an opening *g* conforming in shape to its own shape. In the opening *g* are pivoted a dog *h* and a lever *i*. The dog

is pivoted at its lower end, as at *j*, extending vertically in the frame *f*, while the lever *i* is pivoted between its ends, as at *k*, one end overlapping the dog *h*, being against the outer face of the same. A plate-spring *l*, disposed opposite the inside face of the dog *h* and tending to push the same outwardly (by bearing with its upper end against said dog) is held in place by being passed between two pins *m*, which traverse the vertical portion of the opening *g* of the frame *f*, the lower end of the spring being bent outwardly, extending between the lower end of the dog and the adjoining wall of the frame. The spring therefore acts to keep the dog disengaged from the rack, opposite to which, it should be remarked, said dog is disposed.

In the parting-rail of the lower sash *a* are arranged slide-rods *n*, each of which is adapted at its outer end, when the sash is lowered, to bear against the free end of the lever *i* to push it outwardly. The inner ends of these rods have opposed heads *o*, between which is a cam *p*, carried by a spindle *q*. It should be remarked that the spindle has bearings in a casing *r*, which is set in the parting-rail of the lower sash and which has a cover *s*, secured in place by screws *t*. The rods *n* project through the side walls of this casing. Between the said side walls of the casing and the heads of the rods are interposed spiral springs *u*, which are coiled about the rods and tend to press their heads against the cam *p*.

v is simply a crank carried by the spindle for turning the cam *p*.

When it is desired to lock the upper sash open at any desired position, the lower sash is first arranged at its closed position, so that the slide-rods will be aligned with the levers *i*. By means of the crank *v* the cam *p* is then turned, causing the slide-rods to move outwardly and turn the levers *i* on their pivots. The ends of these levers which are opposed to the dogs are thus caused to move inwardly, pressing the dogs against the racks *c*. In this position it will be impossible to lower the upper sash from the outside. If the levers *i* are so constructed that, as shown in the drawings, their free ends will set back considerably into the frame *f* when moved

by the slide-rods *n* they will form, with the frame, recesses, as at *w*, Fig. 2, in which the ends of the slide-rods may take. Thus will be formed between the frame *f* and the slide-rods locking means for the lower sash.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a sash-locking mechanism, the combination of the window-frame, sashes arranged to slide therein, a rack carried by one of said sashes, a dog adapted to engage the rack and pivotally arranged in said frame, and means for actuating said dog, a portion of said means being carried by the other sash, substantially as described.

2. In a sash-locking mechanism, the combination of the window-frame, sashes arranged to slide therein, a dog pivoted in the frame and adapted to engage one of said sashes, a lever also pivoted in said frame and engaging said dog, a slide-rod arranged in one of

said sashes and engaging said lever, and means for actuating said slide-rod, substantially as described.

3. In a sash-locking mechanism, the combination, with the window-frame, of sashes arranged to slide therein, a dog pivoted in said frame and adapted to engage one of said sashes, a lever engaging said dog, a slide-rod arranged in the other sash and adapted to register with and actuate said lever, and means for actuating said slide-rod, said window-frame having a recess adapted to receive the end of said slide-rod to lock the sash carrying said slide-rod, substantially as described.

In witness whereof we have hereunto set our hands in presence of two witnesses.

JOSEPH A. BROOKS.

EDWARD E. WHITTAKER.

Witnesses:

JOHN W. STEWARD,
ROBERT J. POLLITT.