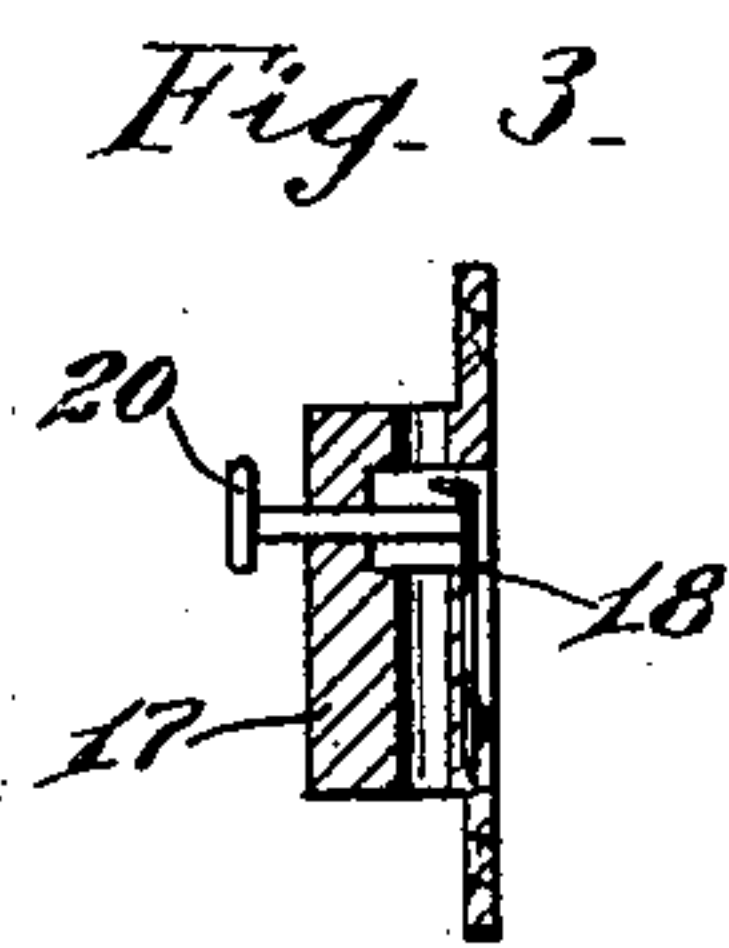
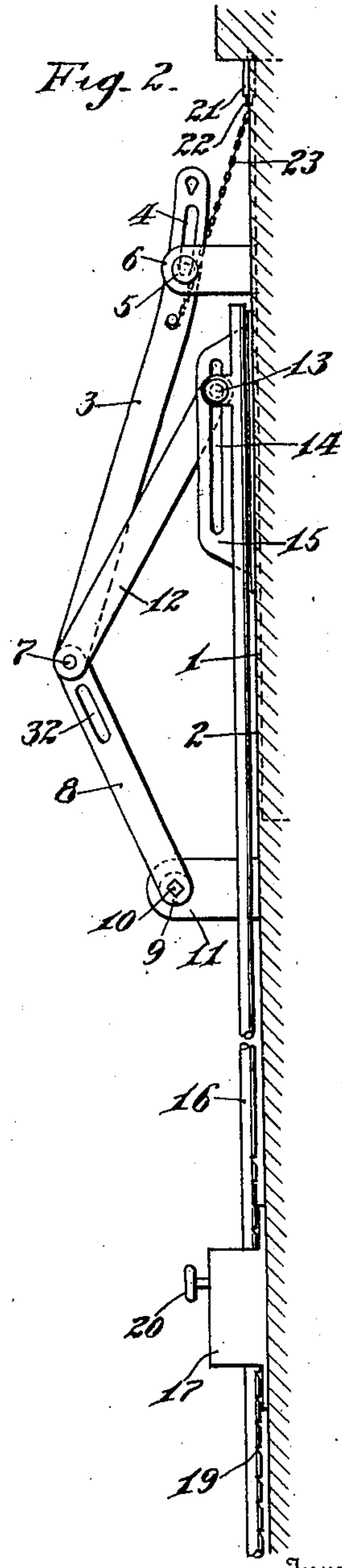
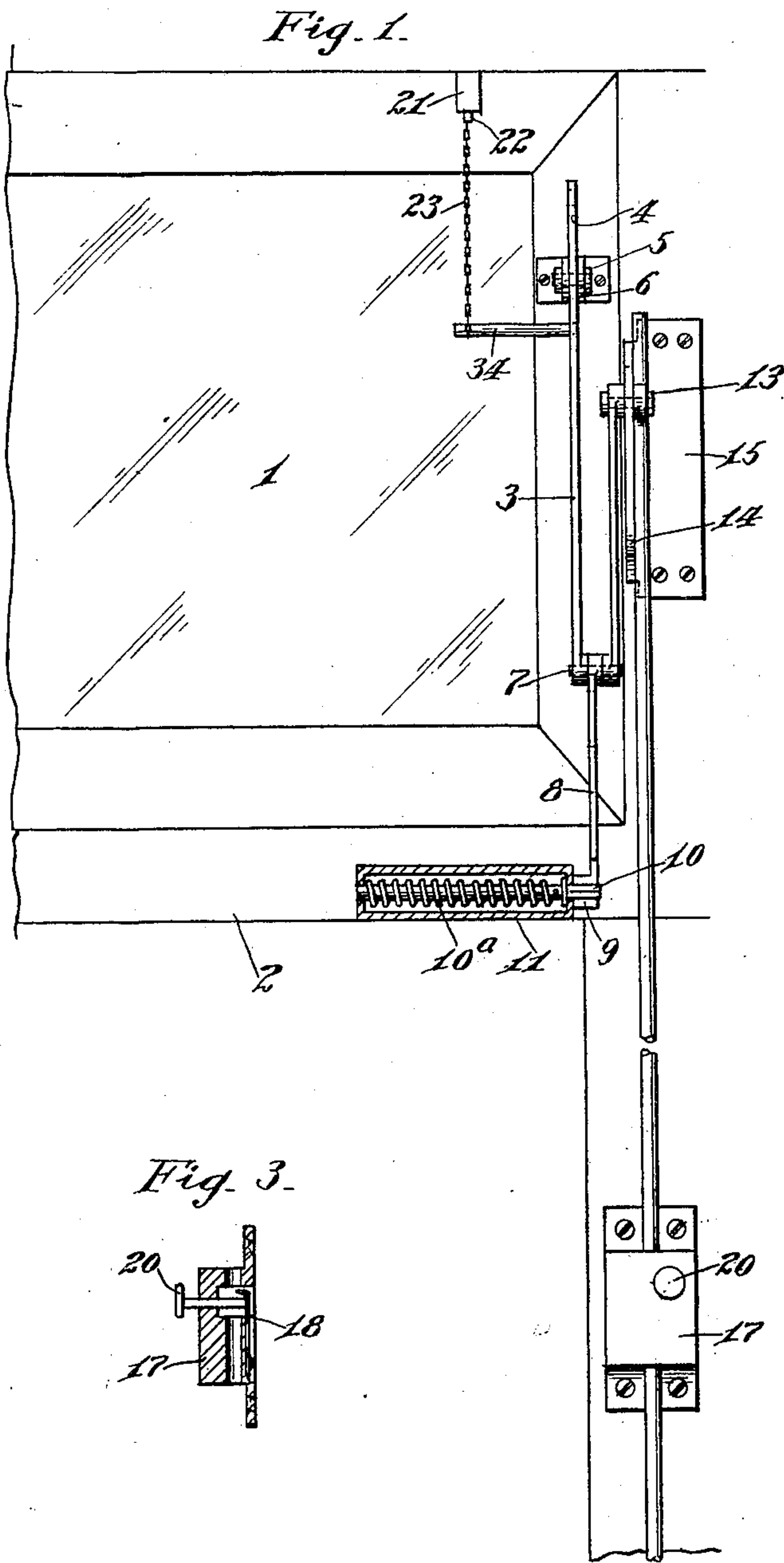


F. A. BLICKLEY.
 TRANSOM AND WINDOW OPERATING MECHANISM.
 APPLICATION FILED FEB. 11, 1909.

925,555.

Patented June 22, 1909.
 2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 4.

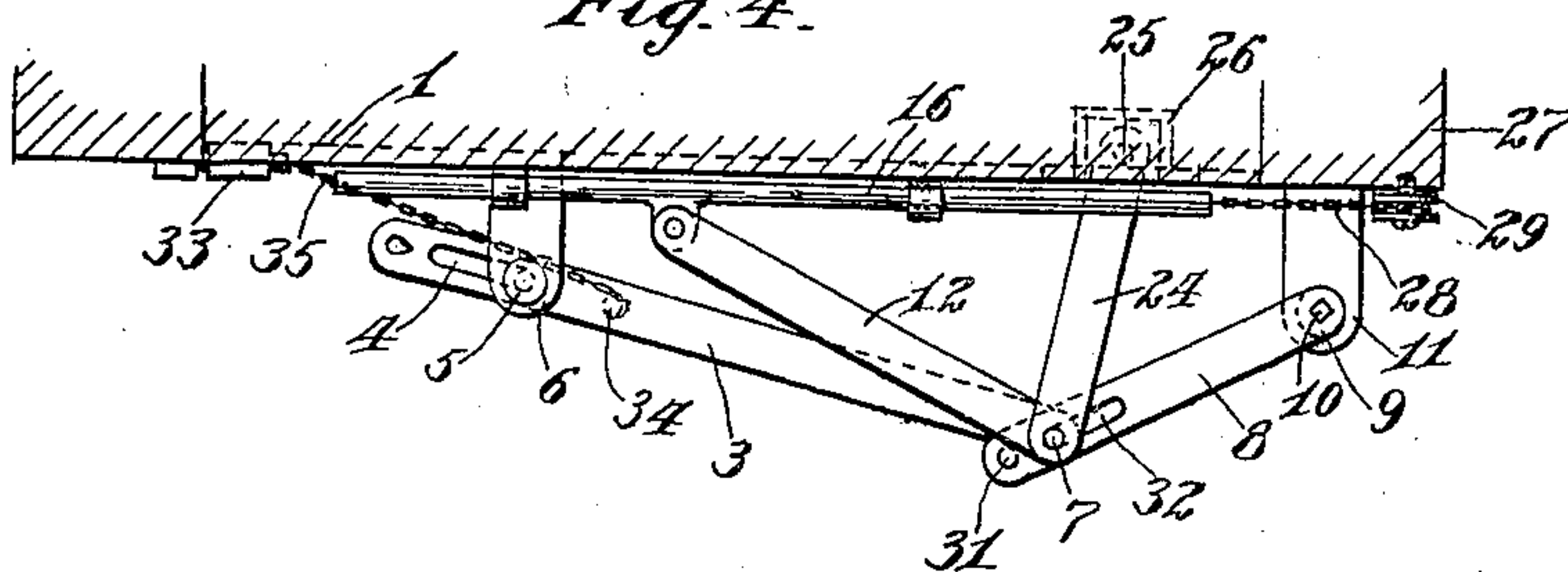
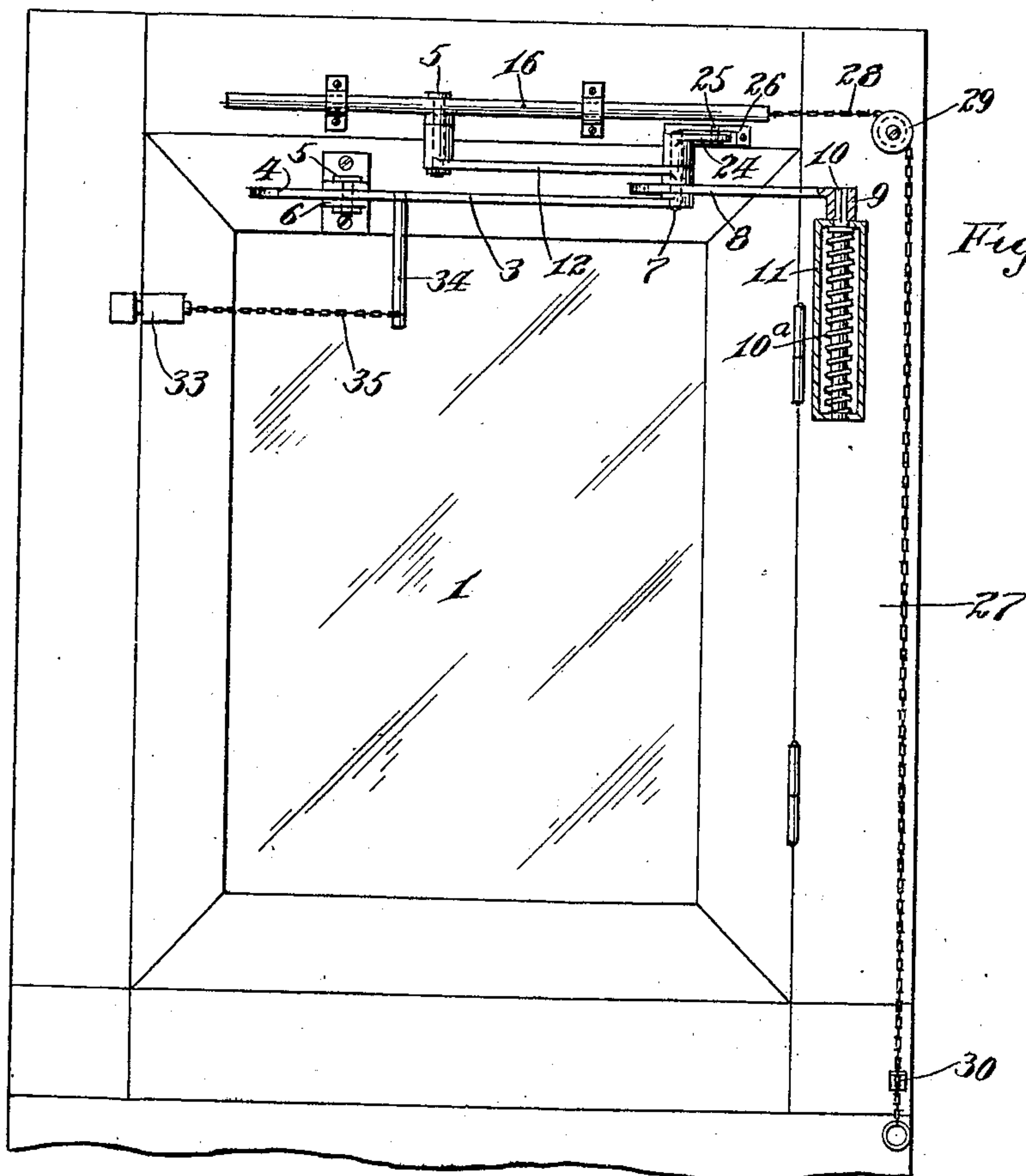


Fig. 5.



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FRANK A. BLICKLEY, OF PHILADELPHIA, PENNSYLVANIA.

TRANSOM AND WINDOW OPERATING MECHANISM.

No. 925,555.

Specification of Letters Patent.

Patented June 22, 1909.

Application filed February 11, 1909. Serial No. 477,326.

To all whom it may concern:

Be it known that I, FRANK A. BLICKLEY, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Transom and Window Operating Mechanism, of which the following is a specification.

My invention relates to improvements in transom and window operating mechanism, the object of the invention being to provide improved means whereby the transom or window can be opened and held in open position, but which when released will be automatically closed.

A further object is to provide improvements of this character, which can with but slight alteration be used on transoms hinged at the middle, or at the bottom, or on casement windows or other similar devices.

With these and other objects in view, the invention consists in certain novel features of construction, and combinations, and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1, is a view in elevation illustrating the application of my improvements to a transom, such as ordinarily used having horizontal pivot pins at its center. Fig. 2, is a side view of Fig. 1. Fig. 3, is a view in section illustrating the rod clamping device, and Figs. 4 and 5, are views illustrating the application of my improvements to a window hinged at the side.

As shown in Figs. 1, 2 and 3, 1 represents an ordinary transom, and 2 a frame. 3 represents a link which is provided near its upper end with a slot 4, into which a cross pin 5 in a bifurcated bracket 6 is disposed. The link 3 is located in the bifurcated bracket 6, and the latter is secured to the transom above the pivotal point of the latter. The lower end of this link is connected by a pivot pin 7 with a link 8, and the latter has an angular sleeve 9 at its lower end, mounted upon the angular end of a shaft 10, which latter is mounted to turn in a casing 11 secured to the frame 2, and has a coiled spring 10^a thereon to exert rotary pressure on the shaft and link 8 for a purpose which will more fully hereinafter appear. The pivot pin 7 also pivotally connects a link 12, which latter at its upper end is provided with a cross pin 13, mounted to move in a slot 14 on the guide bracket 15,

the latter secured to the frame 2. This pivot pin 13 also pivotally connects the vertical rod 16 with the link 12, and the rod 16 extends downwardly in convenient reach of the person on the floor, and passes through a casing 17 secured to the frame. The casing 17 is provided with a vertical bore to accommodate rod 16, and has a spring dog 18 adapted to enter any of a series of notches 19 in the rod 16, and hold the rod against vertical movement. A button 20 is provided on the casing, and is adapted when forced inward to release the dog from locked engagement with the rod, and hence permit the latter to move upwardly. 21 indicates a spring latch on the transom to lock the same, and the locking bolt 22 of this spring latch is connected by a cord or other flexible connecting device 23 with a pin 34 on the link 3, so that when the latter moves downwardly, its first movement will serve to unlock the latch.

The operation is as follows: With the parts as shown in Figs. 1, 2 and 3, when rod 16 is drawn downwardly, the pin 13 will be moved downwardly, thus forcing downwardly and outwardly the pivotal pin 7, drawing the link 3 downwardly, until the upper end of the slot 4 reaches pin 5, the latch 22 being unlocked, the link 3 will engage the bracket 6 and draw the transom to open position. As the transom is drawn to open position, the downwardly and outwardly pivotal movement of the pin 7 will swing the link 8 and turn shaft 10 against the action of the spring 10^a, and the rod 16 can be locked by means of the dog 18 in casing 17 to hold the transom in open position. When this dog is released however, by means of its button 20, the spring 10^a will force the parts to move in directions opposite to those above described to close the transom.

As shown in Figs. 4 and 5, to adapt my improvements for a window hinged at the side, but slight modification is necessary. In this construction, I dispense all together with the guide 15, and connect the link 12 directly with the rod 16, the latter being preferably shorter than shown in the preferred form. I also employ an additional link 24, which connects the pivot pin 7 with a pivot pin 25 in a countersunk socket 26 in the window casing 27, and operate the rod 16 by a chain or other flexible connecting device 28 passed over a pulley 29 on the frame 27, and secured at various adjust-

ments by means of a hook 30 on the casing. The link 8 is provided with an opening 31 near its end, and a longitudinal slot 32. The opening 31 is employed, when the parts are used as shown in Figs. 1, 2 and 3, to receive the pin 7, but when used as shown in Figs. 4 and 5, the pin is passed through the slot 32. This allows a certain longitudinal movement of the pin 7 within the slot to compensate for the swinging movement of link 24.

In windows of the kind shown in Figs. 4 and 5, the window latch 33 is some distance from the upper edge of the window, and to operate this latch, I have provided the link 3 with a depending rod or pin 34, which is connected by a chain 35 with the latch. In this modification I employ the same construction of casing 11, spring 10^a and shaft 10, as shown in the preferred form, in fact, the parts are perfectly interchangeable, and for this reason I have used the same reference characters in the preferred form and in the modification of such parts as are interchangeable. In other words, the link 3 which is in both forms connected to bracket 6 on the window or transom, is pivotally connected in both instances to links 12 and 8, and the latter to the spring pressed shaft.

A great many slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not restrict myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. In a device of the character described, the combination with a hinged window and casing, of a spring pressed shaft on the casing, a lug on the window, a link fixed to turn the said shaft, a link pivotally connected to said lug and said first mentioned link, a third

link pivotally connected at one end to the pivotal connection of said first mentioned links, and means for moving said last mentioned link so as to move the pivotal connection between said links and turn said shaft.

2. In a device of the character described, the combination with a hinged window and a frame, of a casing secured to the window frame, a spring pressed shaft in said casing, a link fixed to turn the said shaft, a second link pivotally connected to the first mentioned link and having a limited sliding engagement with the window, a spring latch for the window, a flexible connecting device between said spring latch and the last mentioned link, and a third link pivotally connected at the pivotal connection of the first mentioned links, and means for moving said last mentioned link so as to swing the first mentioned link and turn the shaft.

3. In combination with a hinged window and a casing, of a spring pressed shaft on the casing, a lug on the window, a link fixed to turn the said shaft, a second link having limited sliding engagement with said lug and pivotally connected to said first mentioned link, a latch on the window, a flexible connecting device between said latch and the end of said last mentioned link, a guide bracket on the casing having a longitudinal slot, a link pivotally connected at one end to the pivotal connection of said first mentioned links, a pin at the other end of said last mentioned link movable in said slot in the guide, a rod pivotally connected to said last mentioned link, and means for locking said rod against movement.

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

FRANK A. BLICKLEY.

Witnesses:

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J. A. L. MULHALL.