

No. 767,172.

PATENTED AUG. 9, 1904.

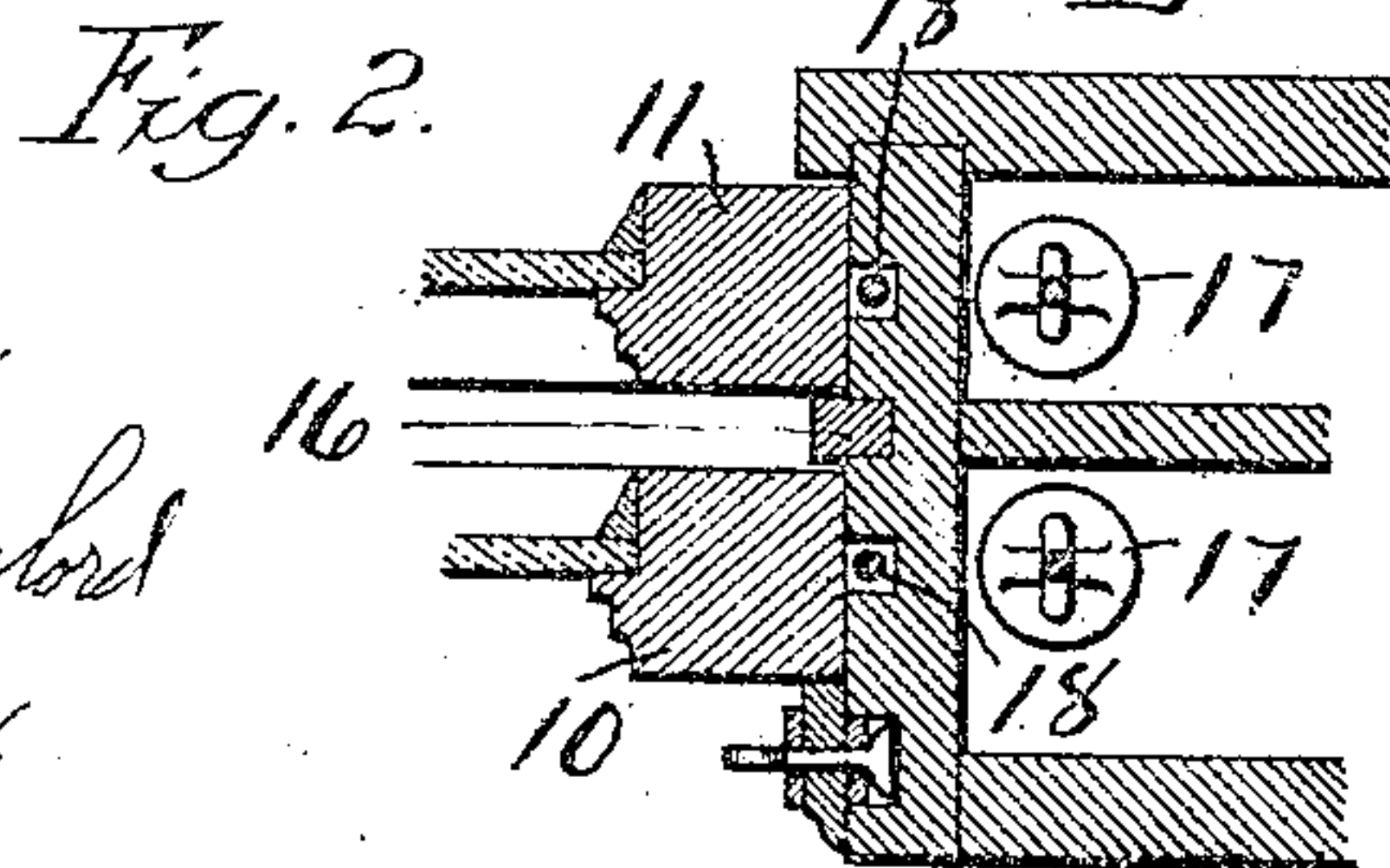
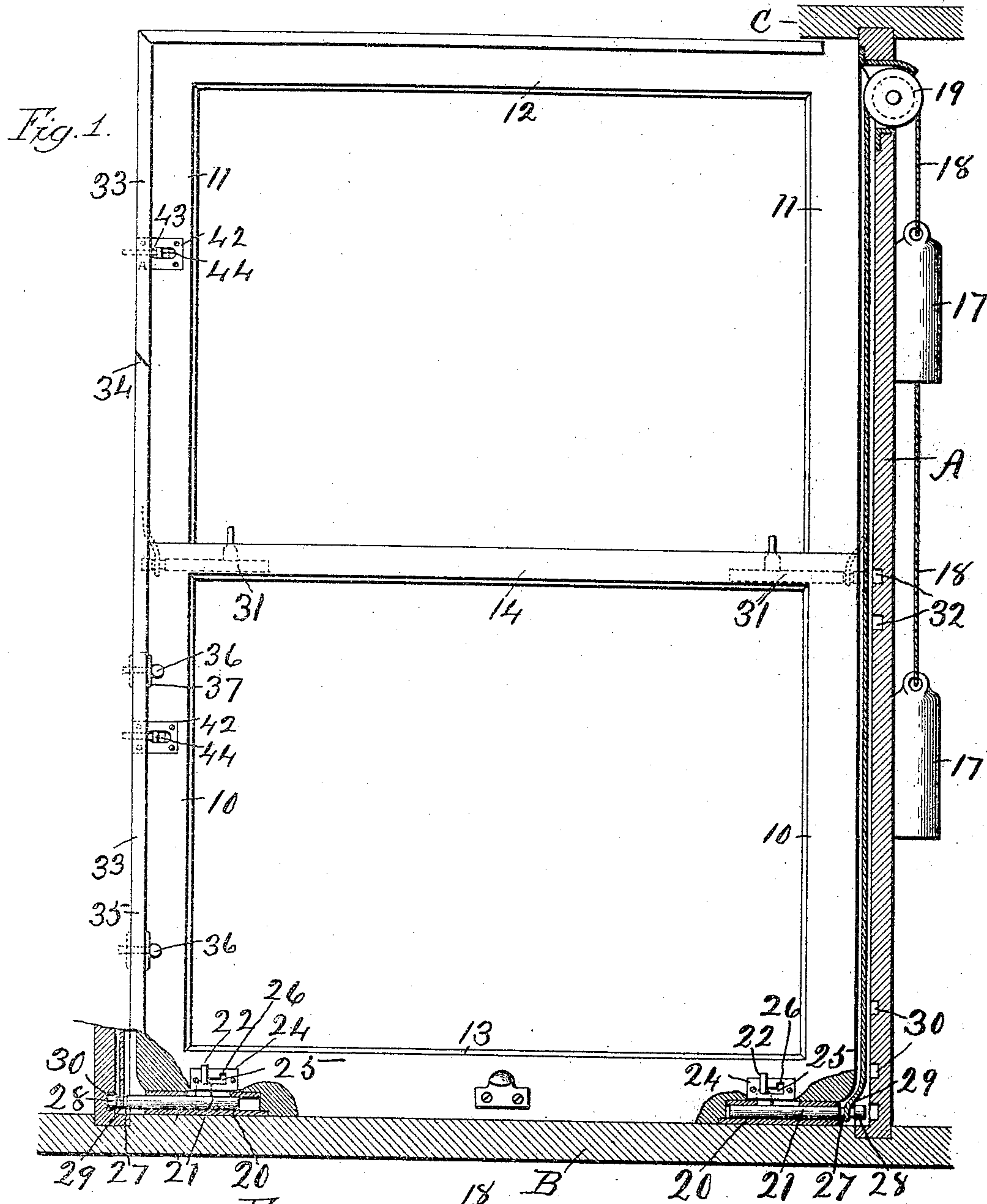
J. N. SCHERNER.

WINDOW.

APPLICATION FILED APR. 9, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:

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Inventor:

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2 SHEETS—SHEET 2.

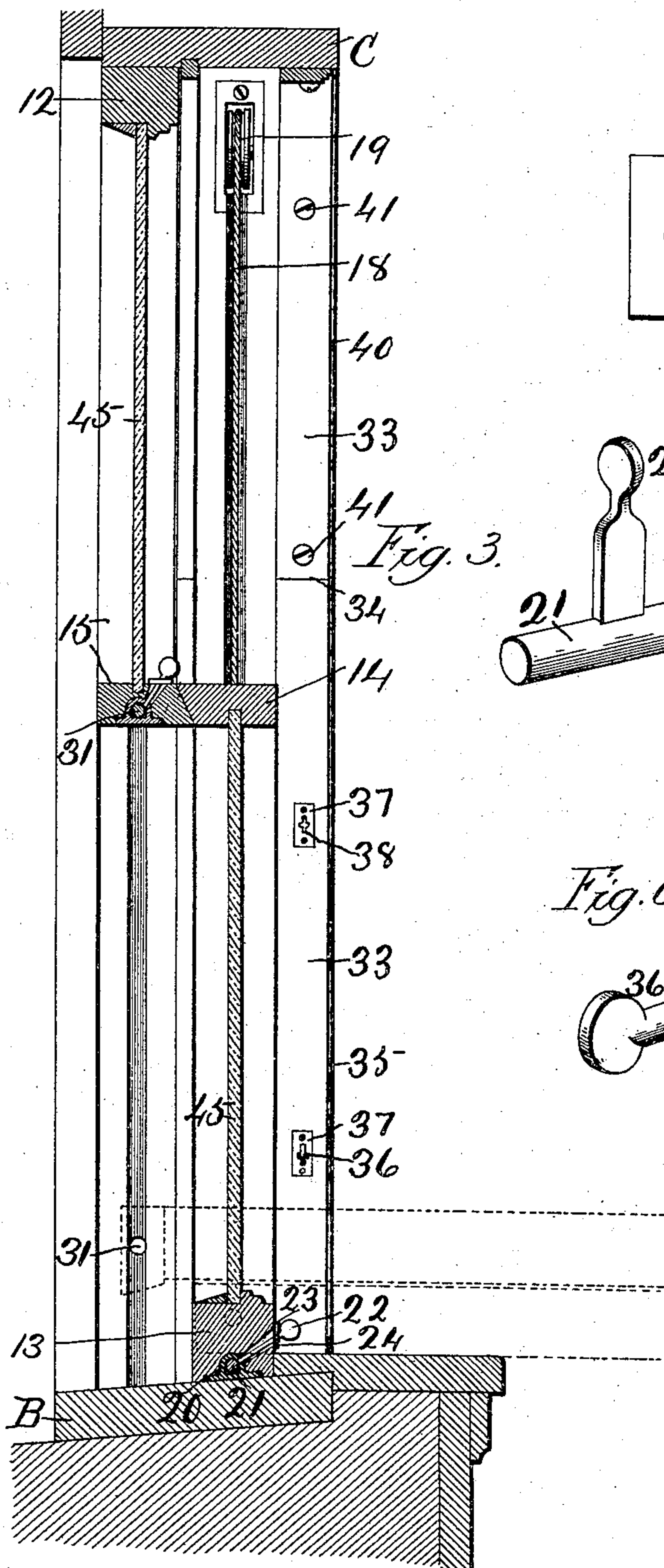


Fig. 4.

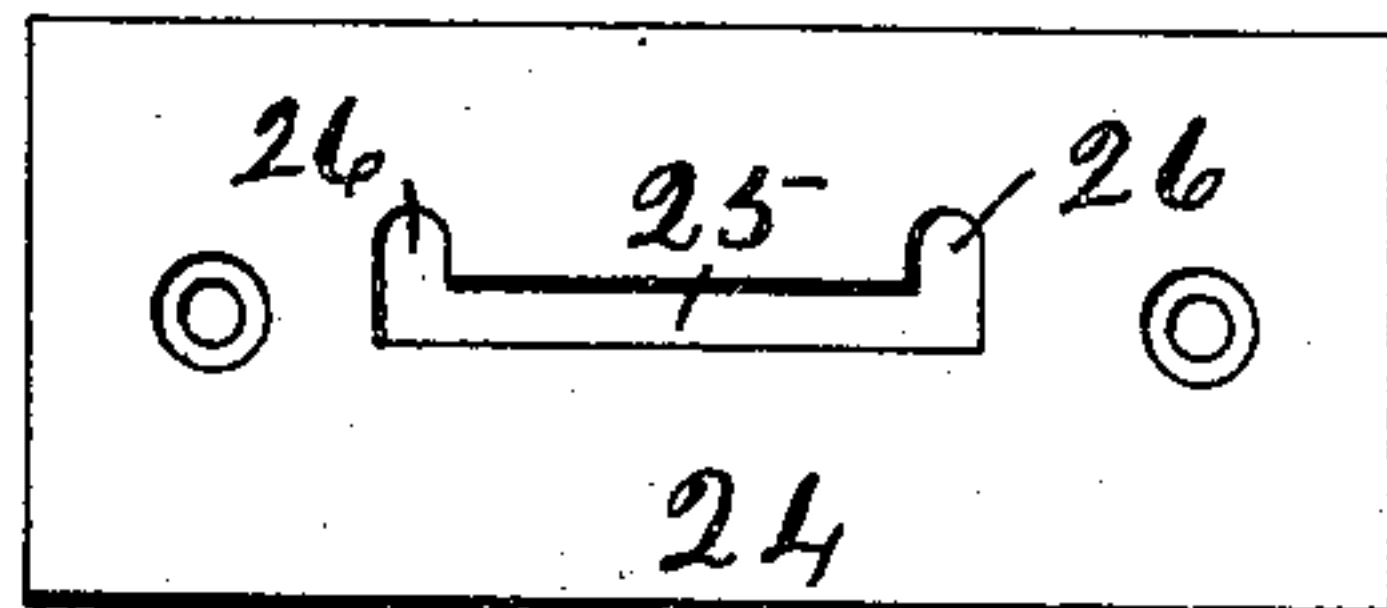


Fig. 5.

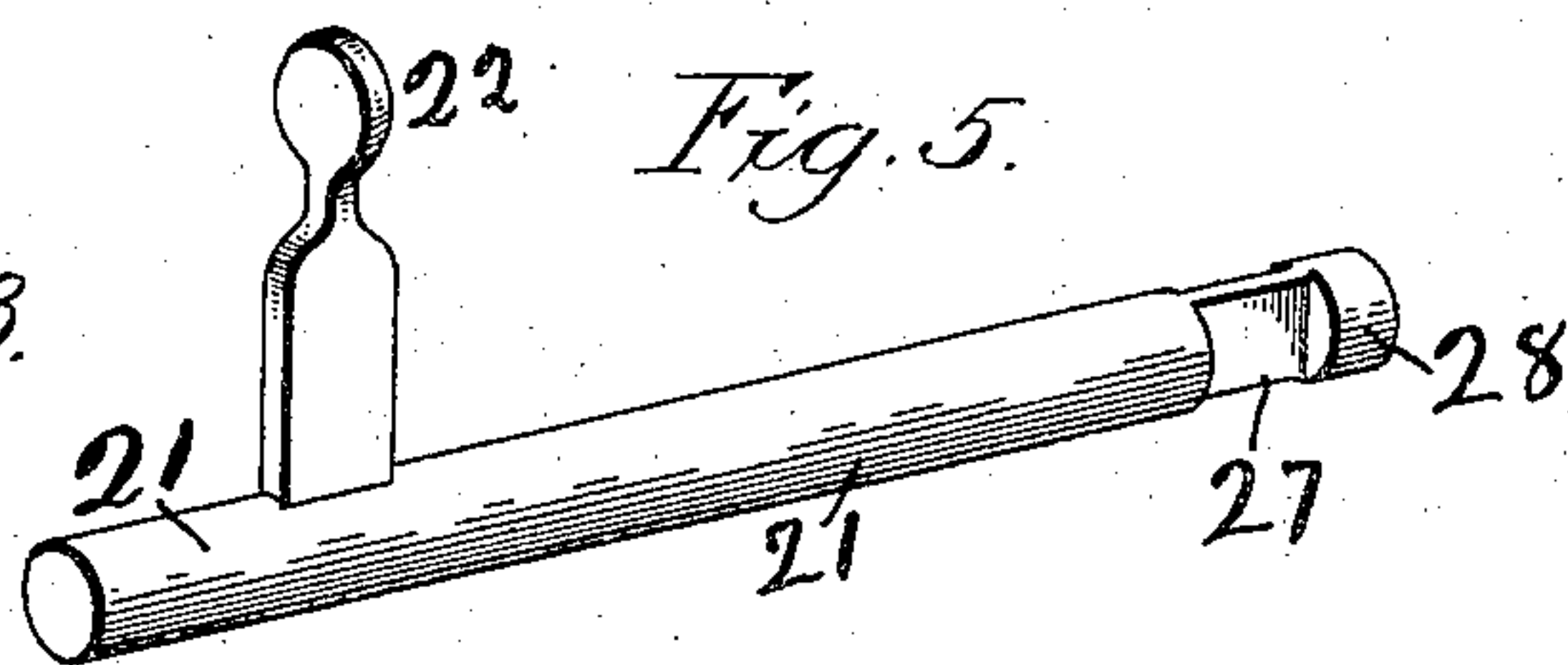


Fig. 6.

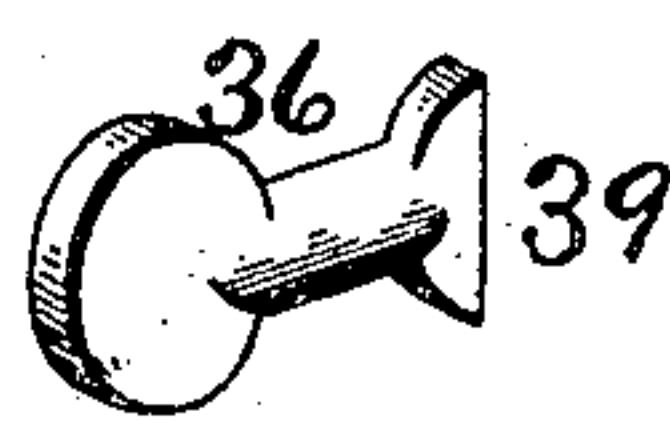


Fig. 7.

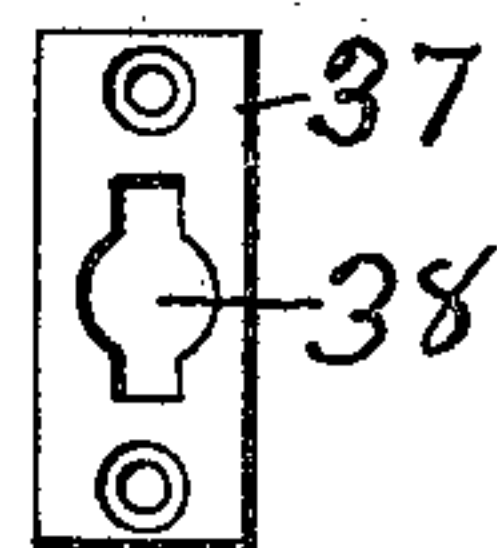
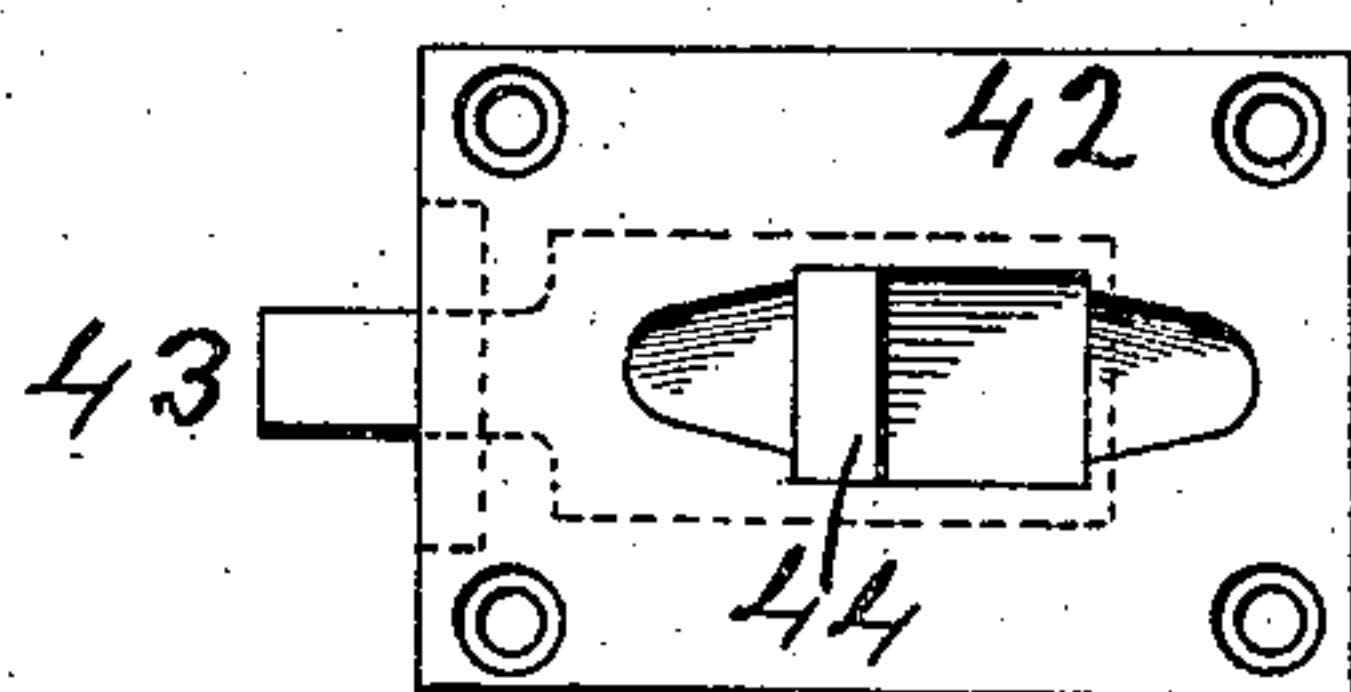


Fig. 8.



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UNITED STATES PATENT OFFICE.

JACOB N. SCHERNER, OF CHICAGO, ILLINOIS.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 767,172, dated August 9, 1904.

Application filed April 9, 1902. Serial No. 102,036. (No model.)

To all whom it may concern:

Be it known that I, JACOB N. SCHERNER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Windows; 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 appertains to make and use the same.

This invention relates to improvements in windows, and has for its object to provide a convenient means whereby the glazed window-sash may be swung inward and downward from the inclosing frame to permit of free access thereto either for the purpose of cleaning the same or to facilitate the work of making repairs. The mechanism employed for this purpose also provides a locking feature for both the upper and lower sash and supports them at different points to which they may be raised or lowered in the casing.

In the drawings, Figure 1 is an elevation looking from the inside, some of the parts being shown in section illustrating details. Fig. 2 is a broken-away horizontal section. Fig. 3 is a vertical longitudinal section, and Figs. 4, 5, 6, 7, and 8 are detached details of the locking and manipulating features.

A represents the window-casing, B the sill, and C the lintel, all of which will ordinarily be of the usual construction, as the improvement is adapted to be applied to windows already in use as well as new structures.

The lower sash-frame consists of the companion stiles 10 and the bottom rail 13 and the meeting-rail 14, and the upper sash-frame of the stiles 11, the top rail 12, and the meeting-rail 15 and the usual parting-strip 16.

The weights 17, the sash-cord 18, and the sheave 19 are all of the usual arrangement, and a detail description thereof will be omitted.

The companion socket-bolt plates 20 are recessed in the under side and respective ends of the bottom sash-rail, as shown in Figs. 1 and 3. These plates will be rigidly secured in place by means of any suitable fastening devices, such as screws. The companion pivot and locking bolts 21, Fig. 5, are inserted in

the socket-plates and have a longitudinal endwise movement therein. These bolts are each provided with a stem 22, forming a finger-grasp which projects outwardly through a slot 23 in the rail and through a plate 24, provided with a slot 25, having locking-recesses 26 at each end, as shown in Fig. 4. When the combined pivot and locking bolts are shifted to the limit of their movement in either direction, a partial turn is given to the bolts and the manipulating-stem made to engage one of the recesses 26, which prevents the bolts from having an accidental endwise movement. The outer ends of these companion bolts are cut away around, as at 27, to form a neck and provide a head end 28, as shown in Figs. 1 and 5. The lower loop ends 29 of the weight-cords engage in the neck part of the bolts and are retained in this position by the head ends 28.

The casing at each side will be provided with a number of recesses 30, with which the head ends of the bolts 21 may be made to engage in holding and locking the lower sash-frame at any point to which it is raised. When the lower half of the window is closed and the bolts made to engage the recess in line therewith, it is securely locked and cannot be opened from the outside.

The meeting-rail of the upper sash-frame is provided at each side with two corresponding pivot and locking bolts 31, as shown in Fig. 3 and indicated by dotted lines in Fig. 1. These bolts have precisely the same functions as those described for the companion bolts 21 in the lower part of the sash. The recesses 32 in the casing at each side provide for the locking of the upper part of the window in its closed position and at any point to which it may be lowered, as many recesses being provided for as necessary.

The stop-fastening strips 33 at each side are in two parts and separable on the line 34, the lower part 35 being removably held in place by one or more key-pins 36. The plates 37, Fig. 7, are rigidly secured to the lower part of the fastening-strip and are provided with a slot 38 for the convenient insertion and removal of the key-pins. The key end of these pins extends through the stiles into the casing,

as shown in Fig. 1, and when turned in one direction secures the strips in place, and when turned in the opposite direction to bring the cross-bar 39 into a vertical plane the pins may
 5 be withdrawn and the strips removed. The upper part 40 of the fastening-strips will ordinarily be secured in place by a number of screws 41, as it is not necessary to remove the same when the window is to be swung out of
 10 the casing.

An auxiliary locking device, consisting of a plate 42 and a bolt 43 recessed therein, is shown in Figs. 1 and 8. This bolt has an endwise adjustment, the inner end extending into
 15 the window-casing when in its locked position, and is manipulated by grasping the exposed head end 44. This auxiliary locking device is more especially intended as a means for temporarily holding both the upper and lower
 20 window-sash in place and thus prevent the same from accidentally falling out when the fastening-strips are removed. This device also provides additional locking means in connection with the pivot-locking bolts.

25 When it is necessary to swing the window inwardly from its casing for cleaning or other purposes, the lower part of the fastening-strips should be removed and the lower window-sash raised high enough to permit of the
 30 pivot-locking bolts engaging the bolt-recesses in the casing above the bottom one and forming a pivot on which the sash may be turned inward and downward to the horizontal position indicated by dotted lines in Fig. 3. The
 35 upper sash is also brought into the same position by first lowering the same vertically until its pivot-bolts will engage the recesses in the casing above those of the lower sash and then swung downwardly and inwardly and
 40 laid on top of the lower sash, as is also indicated by dotted lines in Fig. 3. By this arrangement convenient access may be had to all parts of the glazed surfaces 45 without

entirely removing the sash from the casing, making it unnecessary to stand on the outside 45 of the window during the operation of cleaning the same and at the same time avoiding attending danger.

Having thus described my invention, what I claim is— 50

1. In a window, the combination with the sash-frame, of the combined locking and pivot bolts secured to the under side of the bottom rail and having an endwise movement, the window-casing provided with recesses dis- 55 posed at intervals and with which the locking ends of said bolts are adapted to engage, whereby the sash-frame may be locked against being opened from the outside or turned inward and downward to a horizontal position, substan- 60 tially as set forth.

2. In a window, the combination with the sash-frames, of the combined locking and pivot bolts movably secured to the under side of the respective bottom rails, the casing provided 65 at intervals with locking-recesses, the weight-cords attached to the outer ends of said bolts, which when in their locking position provide pivot-bearings on which the sash-frames may be swung downward to a horizontal position 70 free from the casing, substantially as set forth.

3. In a window, the combination with the sash-rails, of the combined locking and pivot bolts movably secured to the under side thereof, the casing provided with recesses with 75 which said bolts are adapted to engage, the weight-cords secured to the pivotal ends of the bolts, the stop-fastening strips and the key-pins for removably retaining the strips in place, substantially as set forth. 80

In testimony whereof I affix my signature in presence of two witnesses.

JACOB N. SCHERNER.

Witnesses:

L. M. FREEMAN,
 L. B. COUPLAND.