

No. 614,266.

Patented Nov. 15, 1898.

L. GULI.
WINDOW.

(Application filed Jan. 5, 1898.)

(No Model.)

2 Sheets—Sheet 1.

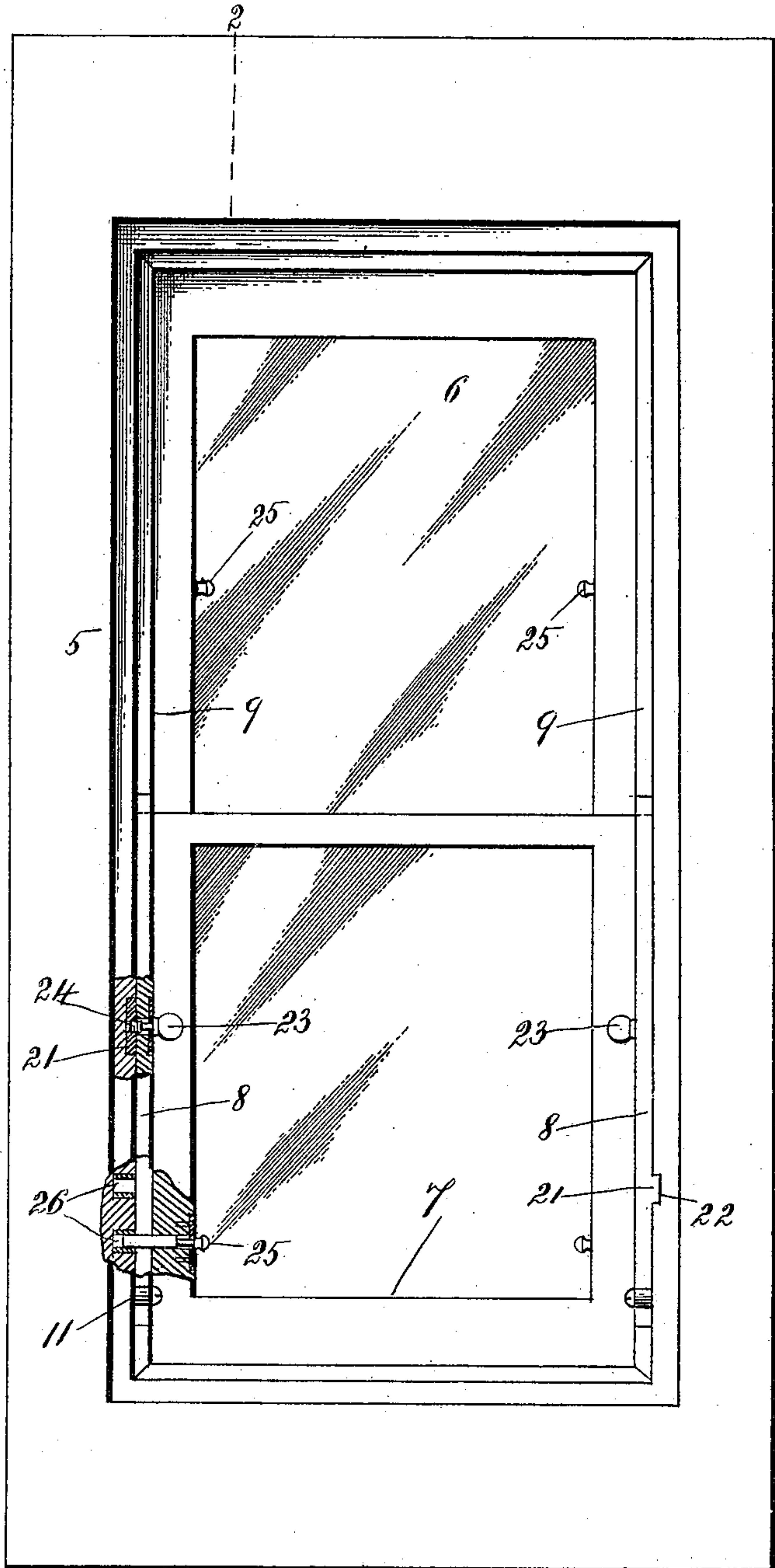


FIG. 1.

WITNESS
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L. N. Fuller

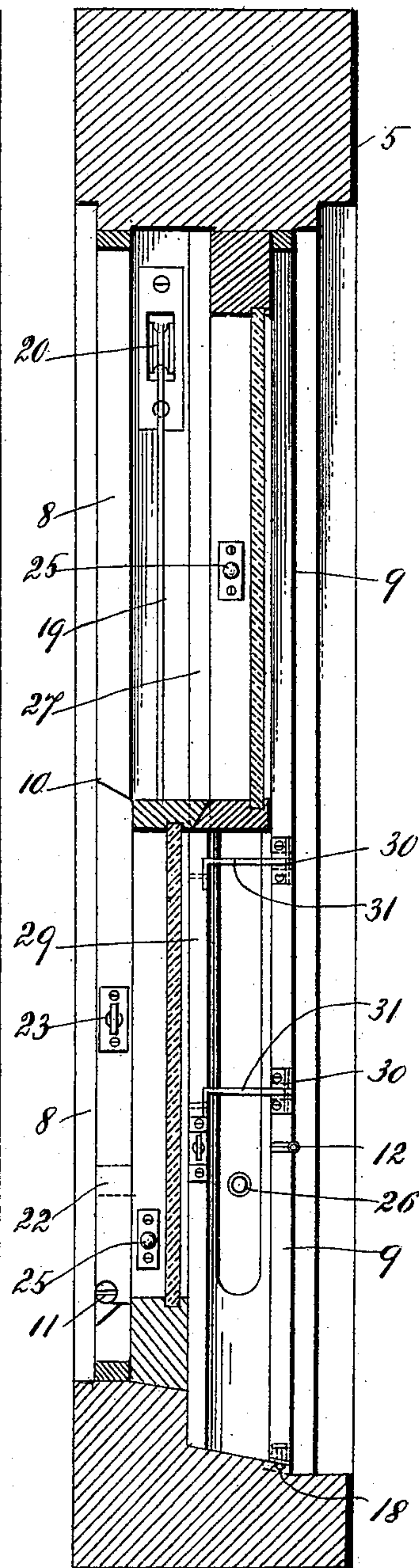


FIG. 2.

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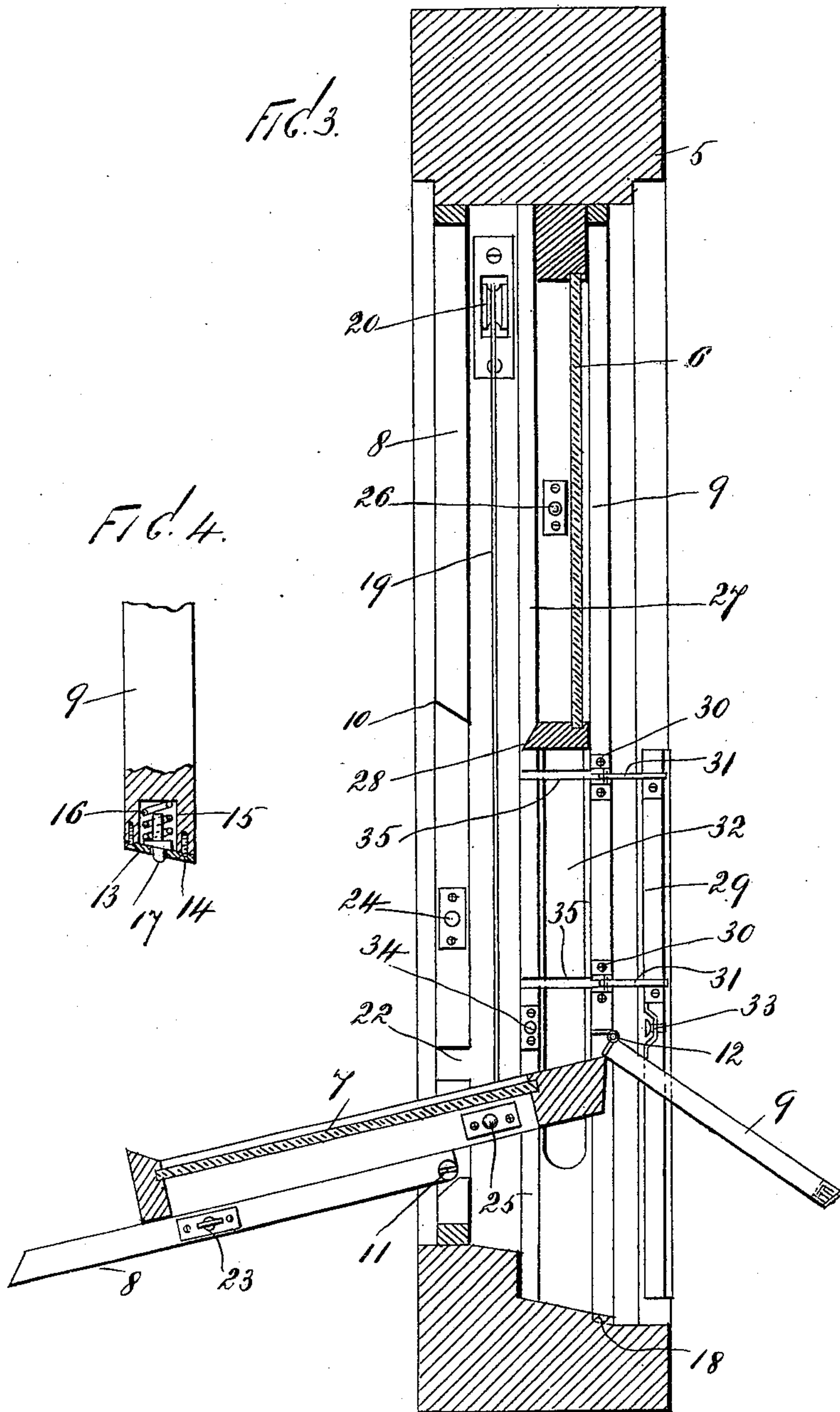
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WITNESS

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INVENTOR

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ATTORNEYS

UNITED STATES PATENT OFFICE.

LORENZO GULI, OF NEW YORK, N. Y.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 614,266, dated November 15, 1898.

Application filed January 5, 1898. Serial No. 665,610. (No model.)

To all whom it may concern:

Be it known that I, LORENZO GULI, a citizen of the United States, residing at New York, (Brooklyn,) in the county of Kings and State of New York, have invented certain new and useful Improvements in Windows, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to windows; and the object thereof is to provide improved means for holding the window-sashes in an open position for the purposes of ventilation and also improved means whereby the sashes may be turned out of the frame inwardly in order that the windows may be washed or cleaned; and with this and other objects in view the invention consists in the construction, combination, and arrangement of parts hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a front view of a window-frame, showing the sashes mounted therein, said frame and said sashes being provided with my improvement and part of the construction being shown in section; Fig. 2, a section on the line 2 2 of Fig. 1; Fig. 3, a view similar to Fig. 2, showing the lower sash turned inwardly out of the frame; and Fig. 4, a sectional view of a detail of the construction.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in said drawings I have shown at 5 an ordinary window-frame and at 6 the upper or lower sashes mounted therein, and the said sashes are held in place by the usual beads or strips 8 and 9. The inner bead or strip 8 is divided at 10, and that part thereof below said division-point is pivoted or hinged at 11 and is adapted to turn downwardly and inwardly, as shown in Fig. 3, and the lower part of the beads or strips 9 is hinged at 12, and the lower end thereof is beveled, as shown at 13, this construction being best shown in Fig. 4, and said lower end is also provided with a metal plate 14, and formed therein is a chamber 15, in

which is mounted a spiral spring 16, and passing through the metal plate 14 is a pin 17, which is provided with a collar against which the lower end of the spring 16 rests, and the end of said pin is adapted to enter a cavity or recess 18, formed in the bottom of the window-frame, and the said hinged part of the bead or strip 9 is adapted to be turned outwardly, as shown in Fig. 3.

The sashes 6 and 7 are supported by the usual cords 19, which move over pulleys 20, mounted in the upper portions of the side of the window-frame, and said cords may be connected with the sashes in any desired manner, and the lower portions of the strips or beads 8, which are pivoted at 11, are provided with lugs 21, which are adapted to enter corresponding recesses 22 (shown in full lines in Figs. 1 and 3 and in dotted lines in Fig. 2) when said hinged portions of said strips are in their normal position, and the said hinged portions of the strips 8 are provided with screws 23, which are adapted to enter corresponding holes 24 in the sides of the window-frame, so as to secure the said hinged portions of the strip 8 in position. The lower sash is also provided at each side and near the lower end thereof with bolts 25, which pass through suitable openings formed in the side of the sash and which enter corresponding sockets 26 in the sides of the frame, and the object of this construction is to provide means for locking the lower sash in the closed position and also for adjusting said sash vertically for ventilation purposes, and any desired number of said sockets 26 may be formed in the side of the window-frame, and the upper sash is provided with similar bolts 25. As thus constructed it will be observed that the lower portions of the beads or strips 8 may be turned inwardly and downwardly, as shown in Fig. 3, and the lower sash 7 may be turned inwardly and downwardly, so as to bring the outer surface thereof in position to be cleaned.

The sides of the window-frame are also provided with the usual central beads or strips 27, and said beads or strips 27 are divided at 28, and the lower part 29 thereof is pivotally connected with the lower portion of the outer beads or strips 9 at 30 by means of arms 31,

which are secured to the said lower portion 29 of the beads or strips 27, and said lower portion 29 of the said beads or strips 27 is adapted to be turned outwardly, as shown in Fig. 3, or inwardly, as shown in Fig. 2, and the position shown in Fig. 2 is the normal position of said portions 29 of the beads or strips 27, and before the lower sash 7 can be turned inwardly and downwardly, as shown in Fig. 3, the said hinged portions 29 of the beads or strips 27 must be swung outwardly into the position shown in said Fig. 3, and at the same time the lower portion of the sash 7 strikes the lower hinged portions of the beads or strips 9 and forces said hinged portions of said beads or strips outwardly, as is also shown in said figure.

When the lower sash is lowered, the upper sash may also be lowered and turned outwardly in the same manner, this operation being rendered possible by reason of the hinged portion 29 of the central beads or strips 27, and the sides of the window-frame are preferably provided with vertical grooves 32 to facilitate the movement of the upper sash and to provide room for the cords by which it is suspended.

The lower portion of the sashes have no support except the cords by which they are suspended, and the connection between said cords and said sashes is made in such manner as to allow the sashes to turn inwardly and downwardly, as shown and described, and the lower portions 29 of the central beads or strips 27 are provided with a screw or similar device 33, which is adapted to enter a corresponding hole or socket 34, formed in the sides of the frame, whereby said portions 29 of the beads or strips 27 may be secured in their normal position, and the sides of the frame are provided with transverse grooves 35, in which the pivoted arms 21 rest. By means of this construction the lower sash may be turned inwardly and downwardly whenever desired for the purposes of cleaning, and the upper sash may also be lowered and turned inwardly and downwardly into a similar position, and both sides of the window may thus be washed or cleaned from inside the room or compartment, and by means of the bolts 25 and the corresponding sockets 26, formed in the frame, both sashes may be adjusted for ventilation or similar purposes whenever desired.

As a further improvement in said window the face of the sill is stepped, as shown in Fig. 2, to bring the face or rest for the outer sash below that of the inner sash. In this way when the normal positions of the sashes are reversed a clearance or space is left between the adjacent ends, whereby the outer sash may be swung in the manner referred to.

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

1. A window-frame provided with upper and lower sashes which are supported by the

usual cords, said frame being also provided with the usual side beads or strips between which the sashes are placed, the inner beads or strips being divided centrally and the lower portions thereof being pivoted or hinged at their lower ends, the outer beads or strips being also divided, and the lower portions thereof being hinged to the stationary portions, and the central beads or strips being divided centrally of the frame and connected with arms which are pivoted to the frame outside of the upper sash, substantially as shown and described.

2. A window-frame provided with upper and lower sashes which are supported by the usual cords, said frame being also provided with the usual side beads or strips between which the sashes are placed, the inner beads or strips being divided centrally and the lower portions thereof being pivoted or hinged at their lower ends, the outer beads or strips being also divided and the lower portions thereof being hinged to the stationary portions, and the central beads or strips being divided centrally of the frame and connected with arms which are pivoted to the frame outside of the upper sash, and means for holding the movable or pivoted portions of said beads or strips in their normal positions, substantially as shown and described.

3. A window-frame provided with upper and lower sashes which are supported by the usual cords, said frame being also provided with the usual side beads or strips between which the sashes are placed, the inner beads or strips being divided centrally and the lower portions thereof being pivoted or hinged at their lower ends, the outer beads or strips being also divided and the lower portions thereof being hinged to the stationary portions, and the central beads or strips being divided centrally of the frame and connected with arms which are pivoted to the frame outside of the upper sash, and means for holding the movable or pivoted portions of said beads or strips in their normal positions, said sashes being also provided with means whereby they may be vertically adjusted when in their normal positions, substantially as shown and described.

4. A window-frame provided with upper and lower sashes which are supported by the usual cords, said frame being also provided with the usual side beads or strips between which the sashes are placed, the inner beads or strips being divided centrally and the lower portions thereof being pivoted or hinged at their lower ends, the outer beads or strips being also divided, and the lower portions thereof being hinged to the stationary portions, and the central beads or strips being divided centrally of the frame and connected with arms which are pivoted to the frame outside of the upper sash, and means for holding the movable or pivoted portions of said beads or strips in their normal positions, said sashes being also provided with means whereby they

may be vertically adjusted when in their normal positions, consisting of bolts which are passed through the sides thereof, and into corresponding sockets formed in the sides of
5 the frame, substantially as shown and described.

In testimony that I claim the foregoing as

my invention I have signed my name, in presence of the subscribing witnesses, this 31st day of December, 1897.

LORENZO GULI.

Witnesses:

L. M. MULLER,
M. A. KNOWLES.