

M. LANDE.
WINDOW.

APPLICATION FILED SEPT. 15, 1909.

Patented Mar. 8, 1910.

2 SHEETS—SHEET 1.

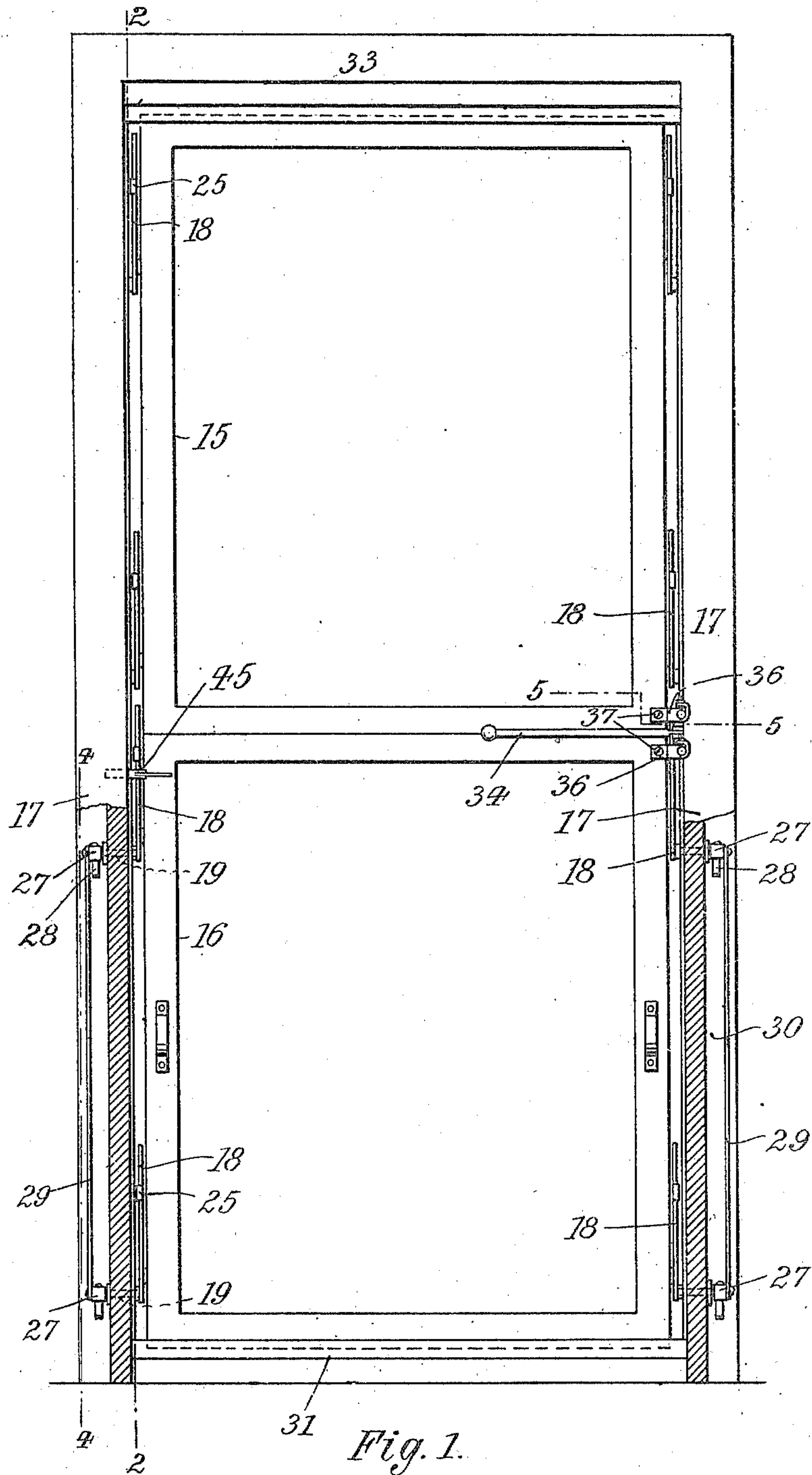


Fig. 1.

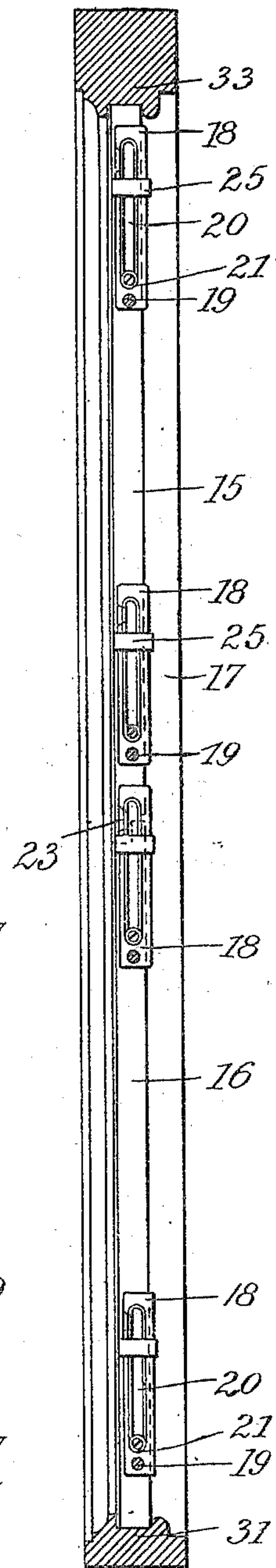


Fig. 2.

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951,442.

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2 SHEETS—SHEET 2.

Fig. 3.

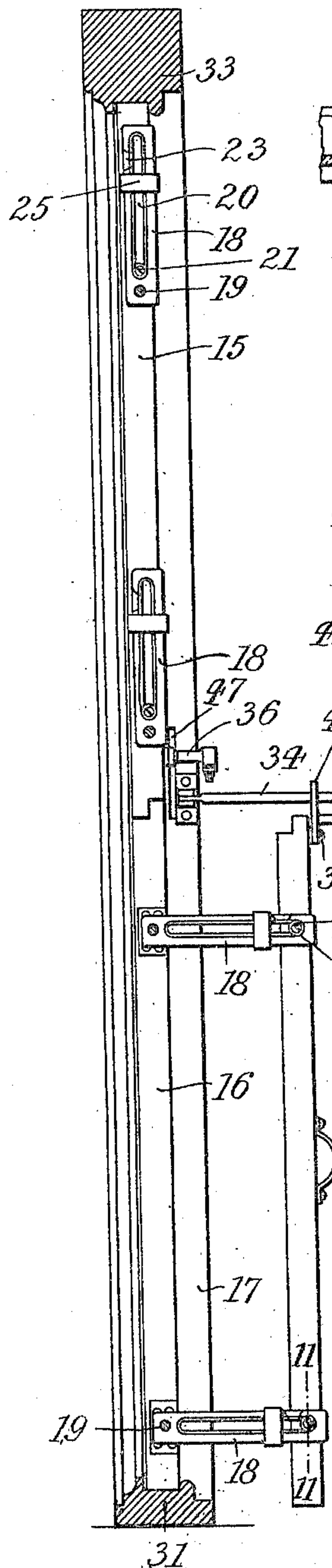


Fig. 5.

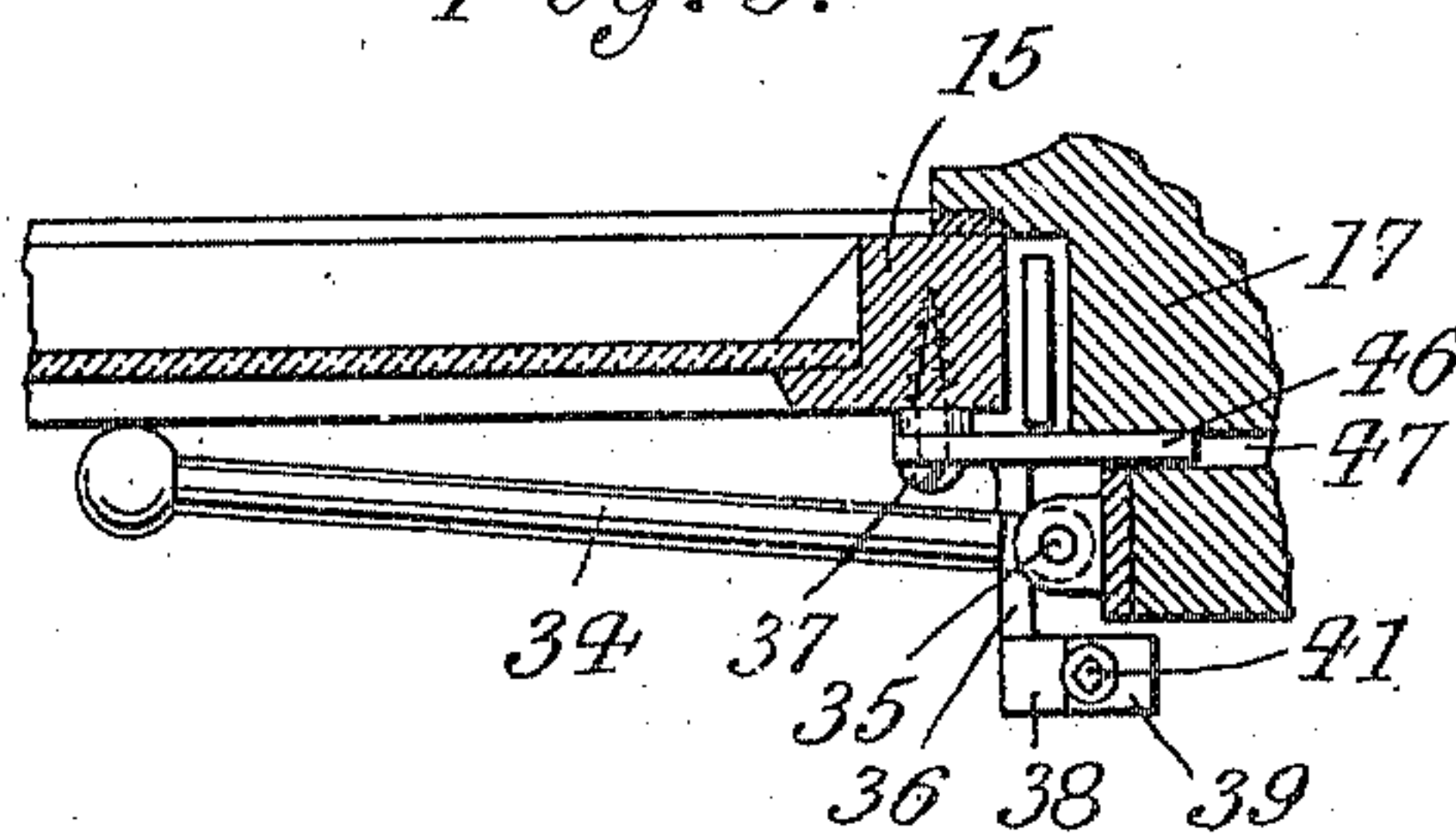


Fig. 4.

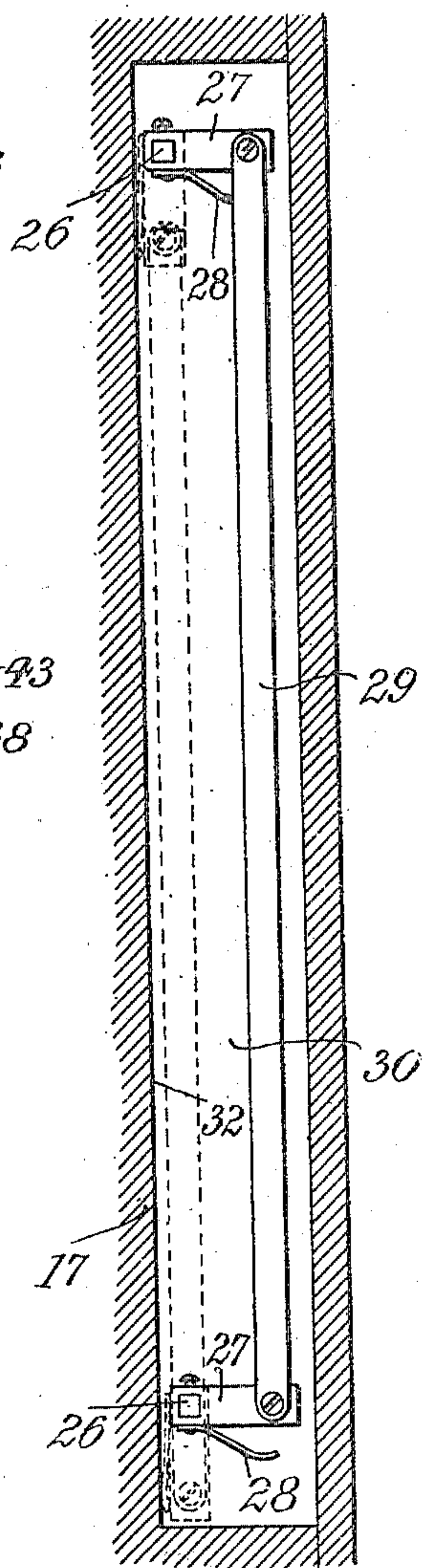


Fig. 6.

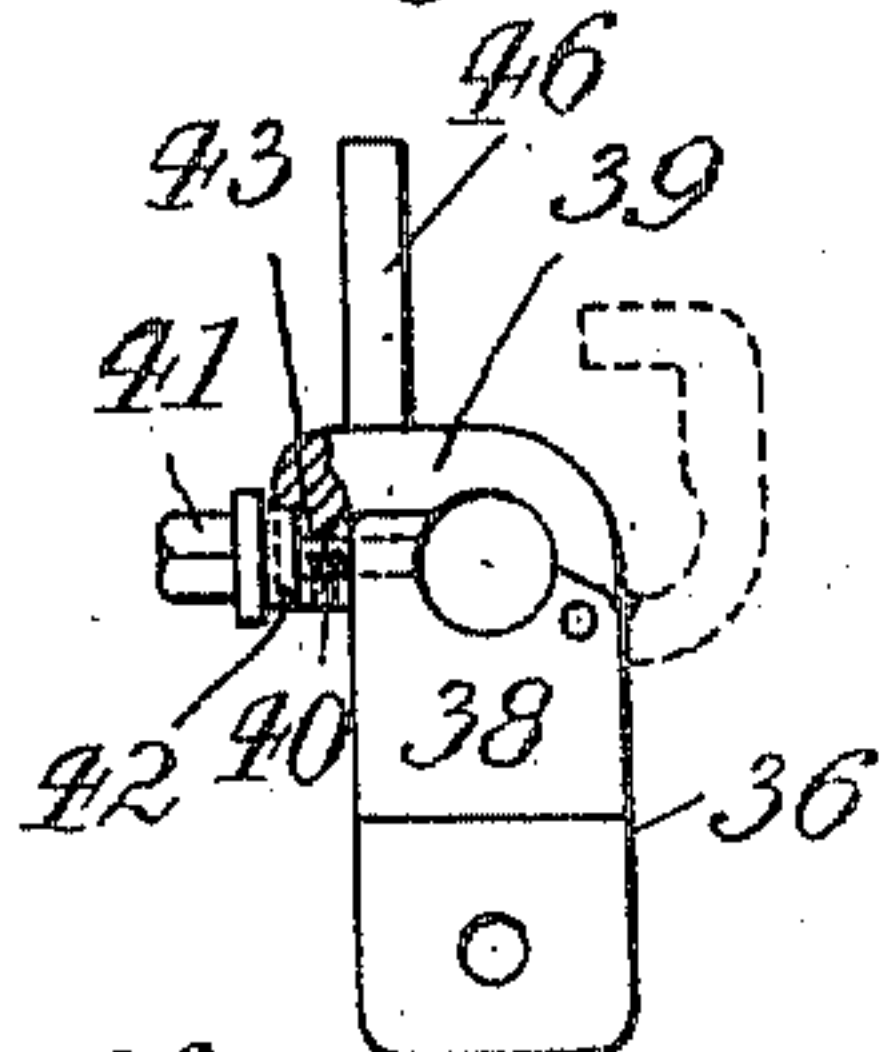


Fig. 7.

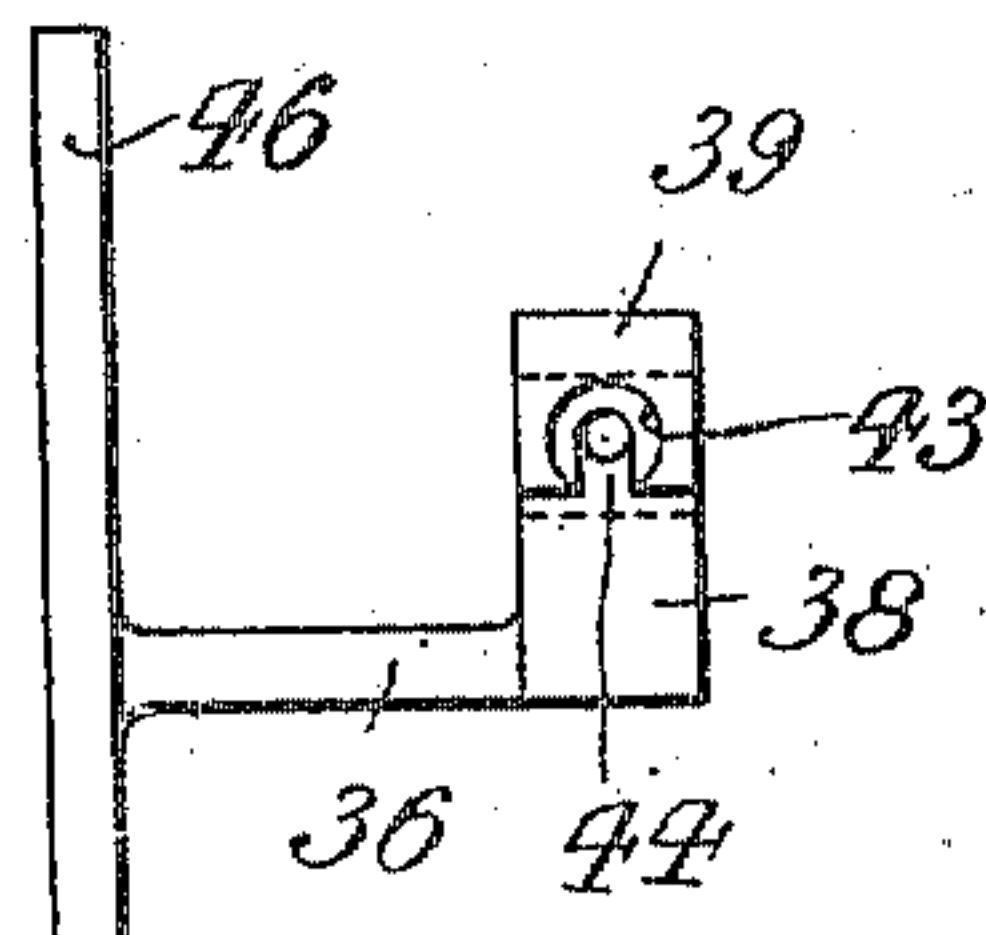


Fig. 11.

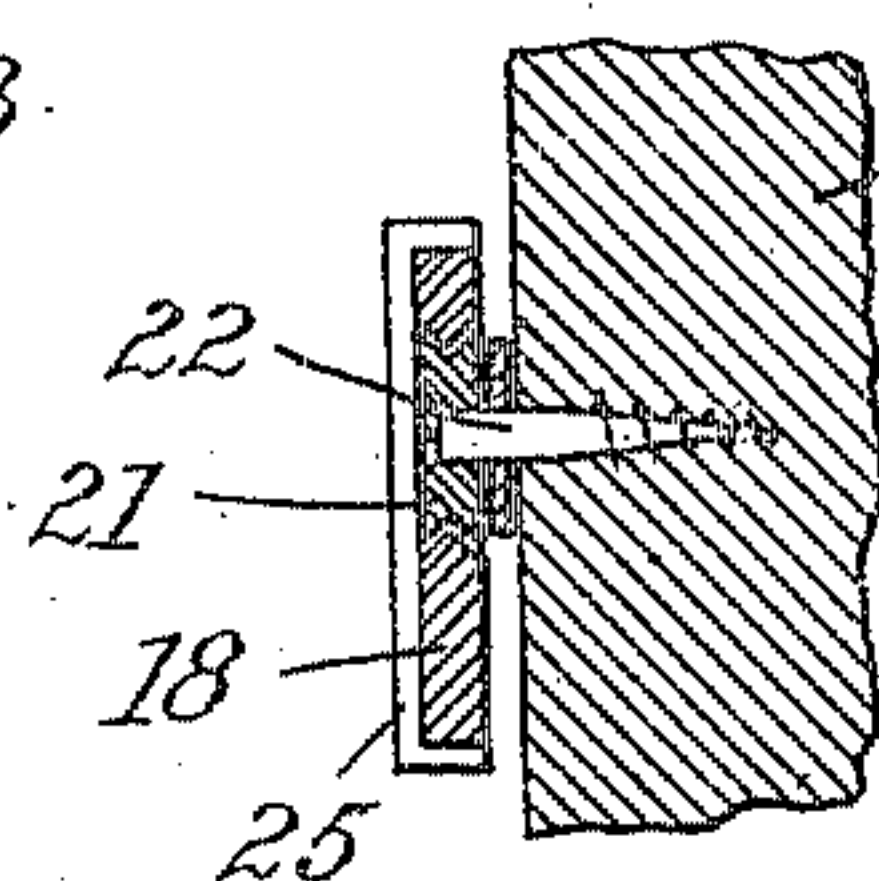


Fig. 10.

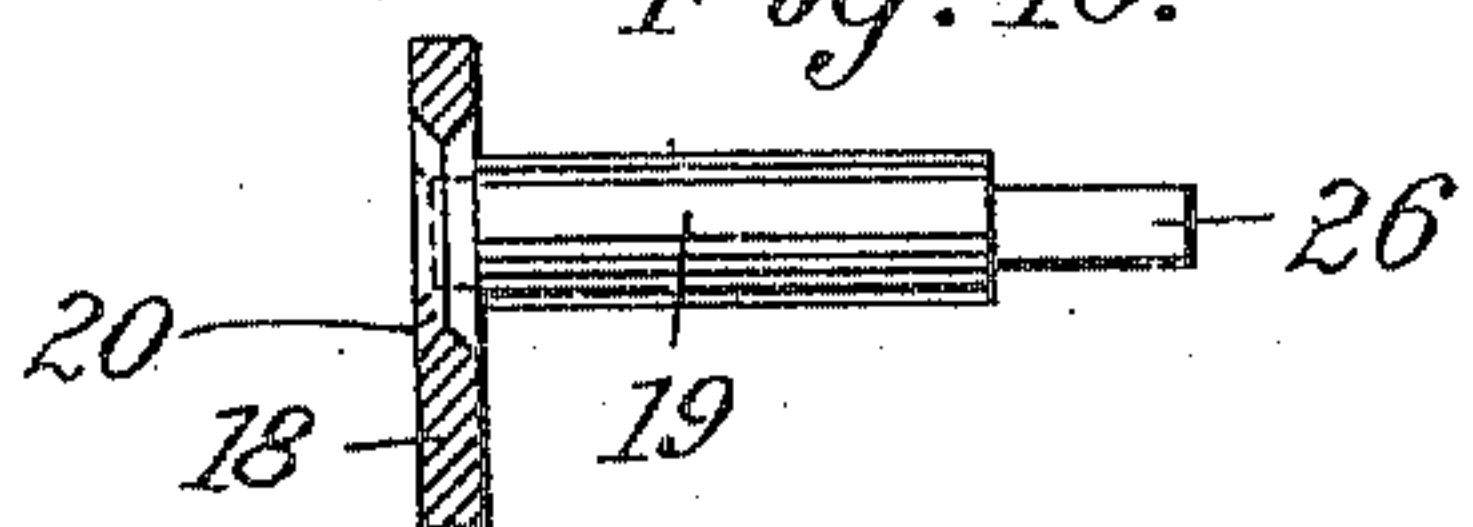


Fig. 9.

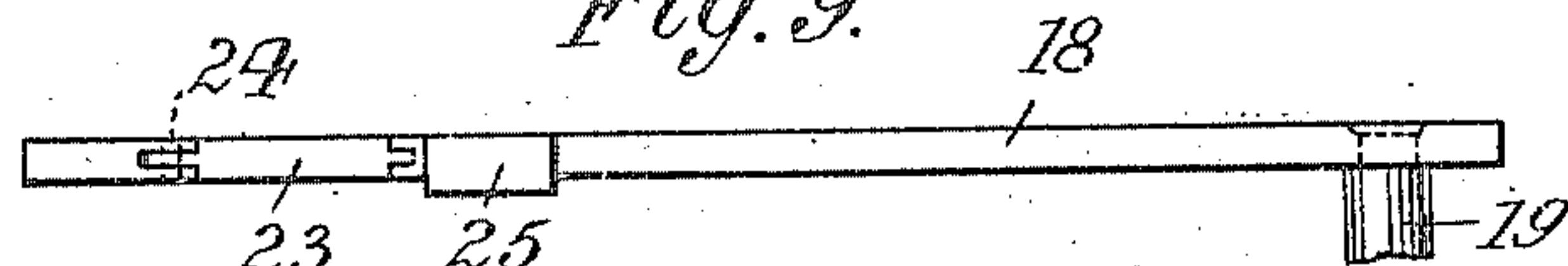
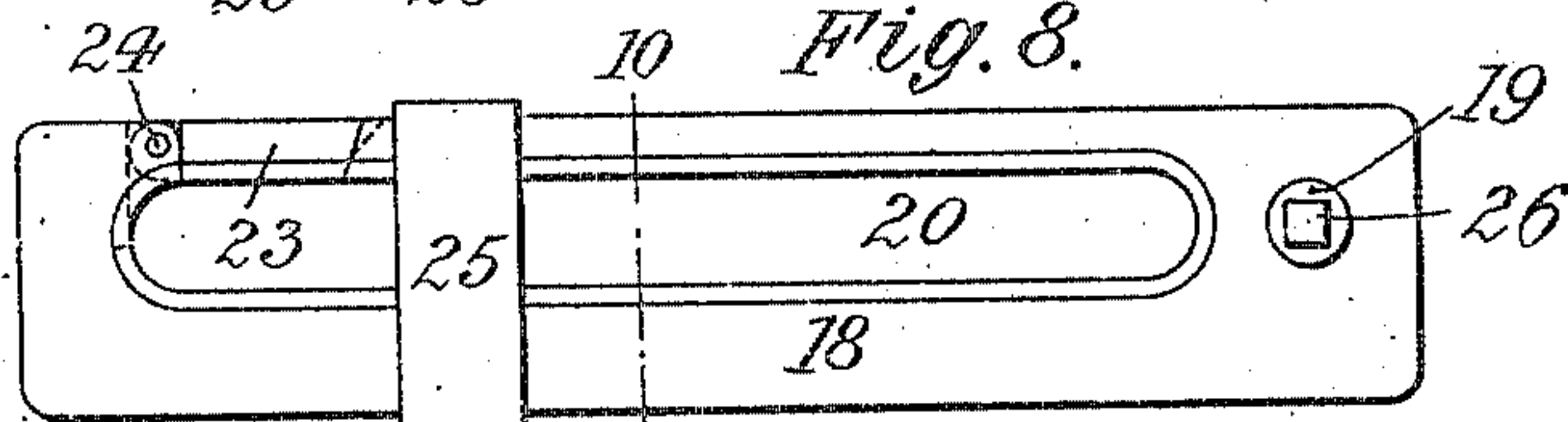


Fig. 8.



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UNITED STATES PATENT OFFICE

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WINDOW.

951,442.

Specification of Letters Patent.

Patented Mar. 8, 1910.

Application filed September 15, 1909. Serial No. 517,303.

To all whom it may concern:

Be it known that I, MAX LANDE, a citizen of the United States, residing at New York city, borough of Brooklyn, county of Kings, State of New York, have invented new and useful Improvements in Windows, of which the following is a specification.

This invention relates to a window which is of simple construction, may be readily manipulated and cleaned, insures ample ventilation and effectively protects children against falling out.

In the accompanying drawings: Figure 1 is an inner view, partly in section, of my improved window; Fig. 2 a vertical section on line 2—2, Fig. 1; Fig. 3 a similar section showing the lower sash opened; Fig. 4 an enlarged vertical section on line 4—4, Fig. 1; Fig. 5 a horizontal section on line 5—5, Fig. 1; Fig. 6 a front view, partly in section, of the sash lock; Fig. 7 a side view thereof with the clamp screw removed; Fig. 8 a side view of one of the sash supporting arms; Fig. 9 a plan thereof; Fig. 10 a cross section on line 10—10, Fig. 8, and Fig. 11 an enlarged vertical section on line 11—11, Fig. 3.

Opposite to each of the sashes 15 and 16 are fulcrumed to the jambs 17 of the window frame, a pair of arms 18. These arms are located near the upper and lower ends of their respective sashes and are fast on pivots 19 rotatably seated in the jambs. Each arm may be either swung upward into a vertical position, (Fig. 2), or downward into a horizontal position, (Fig. 3). Arms 18 have longitudinal slots 20 provided with beveled perimeters. These slots are adapted for the reception of grooved rollers 21 which are rotatably mounted on screws 22 extending laterally from both sides of the sashes. In order to introduce roller 21 into slot 20, arm 18 is provided with a latch 23 fulcrumed at 24, while a transverse brace 25 extending across the arm at the outer side thereof, serves to impart rigidity to the structure. Pivots 19 have squared outer ends 26 on which are mounted levers 27 carrying springs 28. The two levers located on the same side of each of the sashes are connected by a slightly bendable rod 29, the parts 27, 28 and 29 being received within a chamber 30, of jamb 17.

If the window is closed, the two sashes will be in vertical alinement and their rabbeted meeting rails will interlock, while

arms 18 will be swung up, so as to be received between the jambs and the stiles. If the lower sash is to be opened, it is tilted at its upper end, raised off sill 31 and drawn forward so as to swing its arms 18 into a horizontal position, (Fig. 3). In this position, the arms are maintained because the levers 27 will have been swung downward, so that their springs 28 will have become forced against walls 32 of chambers 30.

It will be seen that the sash is opened, not by being raised or by being swung on a pivot as heretofore generally practiced, but by being drawn to a greater or less extent forward into the room, so that the open sash will extend directly in front of the lower window opening. In this way fresh air may enter and foul air may escape around all four sides of the sash, while draft and dust are effectively excluded. By moving the sash farther outward or inward along arms 18, the area of the opening may be adjusted, as will be readily understood.

The upper sash is operated in the same manner as the lower sash, excepting that it must be tilted at its lower end, so as to permit its withdrawal from lintel 33.

Means are provided for locking the sashes in their open as well as in their closed position. These means consist of a rod 34 pivoted at 35 to one of the jambs 17, so as to be rotatable in a horizontal plane. Rod 34 is located opposite the junction of the sashes and is adapted to be engaged by a pair of clasps 36 rotatably secured at 37 to the meeting sash rails. Each clasp is provided with a relatively fixed jaw 38 and a movable jaw 39 which, when closed, are adapted to grasp rod 34. Jaw 38 is tapped for the reception of a set screw 40 having a squared head 41 and a collar 42. The latter is adapted to be received within a countersink 43 of movable jaw 39 slotted as at 44 for the reception of screw 40. Before the window is opened, rod 34 is swung into the room and after the sash has been set to the position desired, clasp 36 is so turned on its pivot 37 that rod 34 becomes seated therein, and then jaw 39 is closed upon the rod. Screw 40 is next advanced by a suitable key 45, the first turns of the screw serving to interlock jaws 38, 39 by the engagement of collar 42 with countersink 43, while the subsequent turns will cause the screw to be forced against rod 34, so as to lock the sash in its open position. In order to provide means for also locking the

sashes in their closed position, clasp 36 is provided with a finger 46 adapted to be projected into a recess 47 of one of the jambs 17 when the window is closed. Key 45 may be
5 utilized for securing the other side of the sash by being inserted into a corresponding recess of the other jamb, (Fig. 1).

If it is desired to clean the windows, latches 23 are opened and rollers 21 are withdrawn from arms 18, so that the sashes are
10 entirely disconnected from the window frame. They may also be disconnected in case of fire, when the entire space inclosed by the frame will be rendered available for
15 the purpose of escape.

It is obvious that the arms 18, instead of swinging into the room, may be made to swing outward.

My window is of simple construction, may
20 be readily manipulated, supplies an ample area for ventilation without causing draft, may be securely locked in its open or closed position, and prevents children from falling out.

25 I claim:

1. A window provided with an upper arm and a lower arm pivoted to the frame at each side of the sash, rollers on both sides of the sash engaging said arms, and means
30 for sustaining the arms in a horizontal position.

2. A window provided with an upper

slotted arm and a lower slotted arm pivoted to the frame at each side of the sash, rollers on both sides of the sash engaging the arm- 35 slots, and means for sustaining the arms in a horizontal position.

3. A window provided with an upper slotted arm having a latch and a lower
40 slotted arm having a latch, means for pivoting said arms to the frame at each side of the sash, rollers on both sides of the sash engaging the arm-slots, said rollers being held by the latches in removable engagement
45 with said slots.

4. A window provided with an upper arm and a lower arm pivoted to the frame at each side of the sash, rollers on both sides of the sash engaging said arms, levers connected to the arms, springs carried by the levers, 50 and a rod connecting said levers.

5. A window provided with an upper arm and a lower arm pivoted to the frame at each side of the sash, rollers on both sides of the sash engaging the arms, a rod pivoted to the 55 frame and rotatable in a horizontal plane, and means for locking the sash to said rod.

Signed by me at New York city, (Manhattan,) N. Y., this 14th day of September, 1909.

MAX LANDE.

Witnesses:

FRANK V. BRIESEN,
EDWARD SCHORR.