

No. 825,371.

PATENTED JULY 10, 1906.

W. E. ADAMS.
SASH OPENER.

APPLICATION FILED MAY 26, 1905.

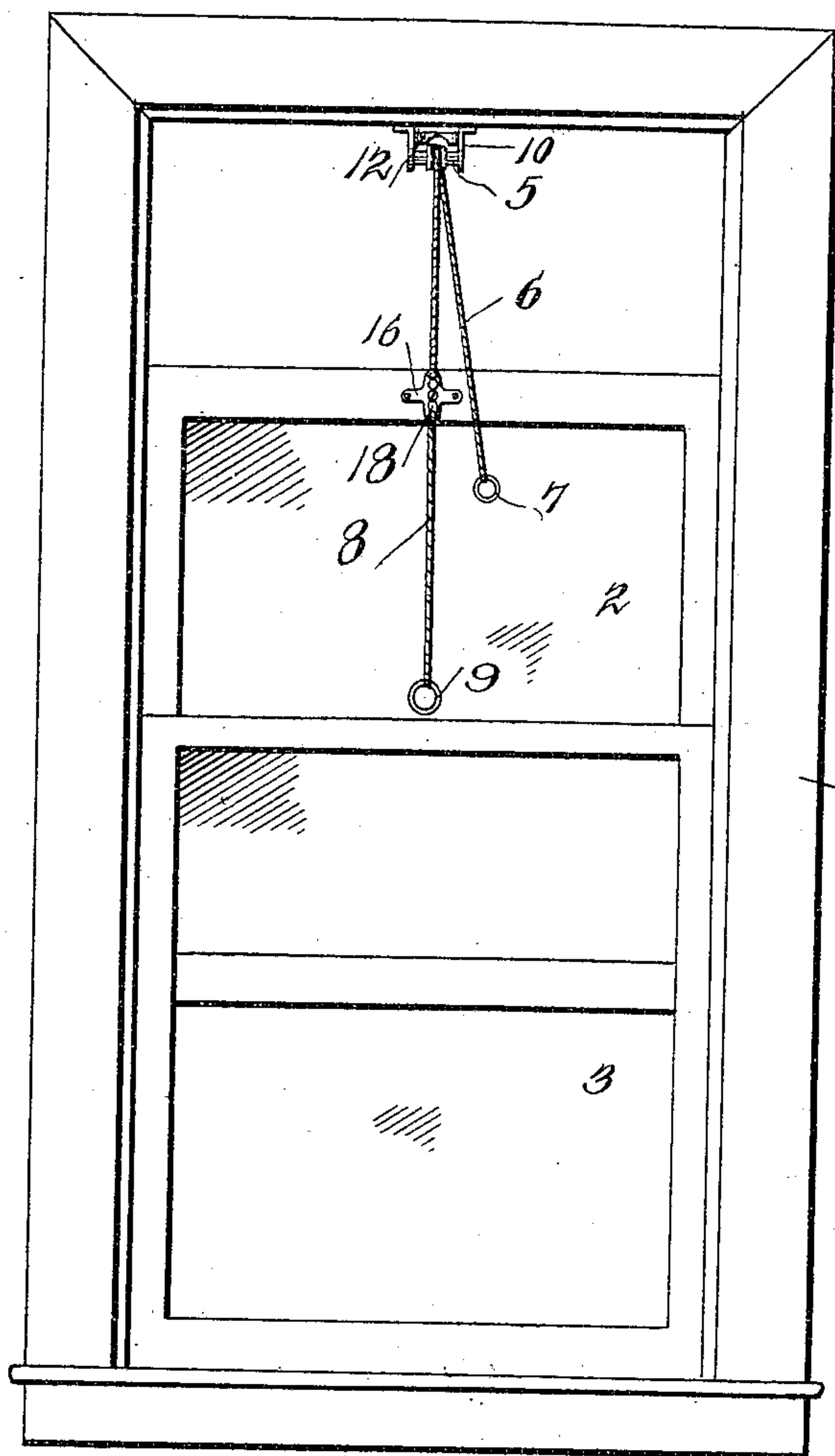


Fig. 1.

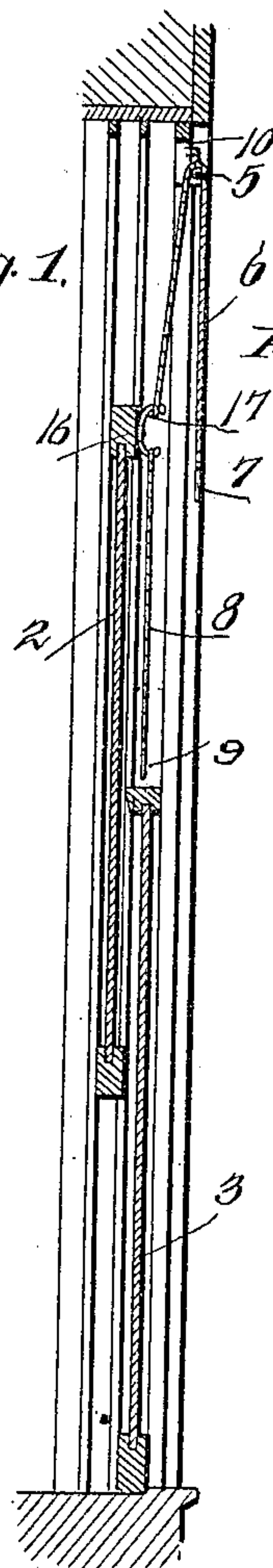


Fig. 2.

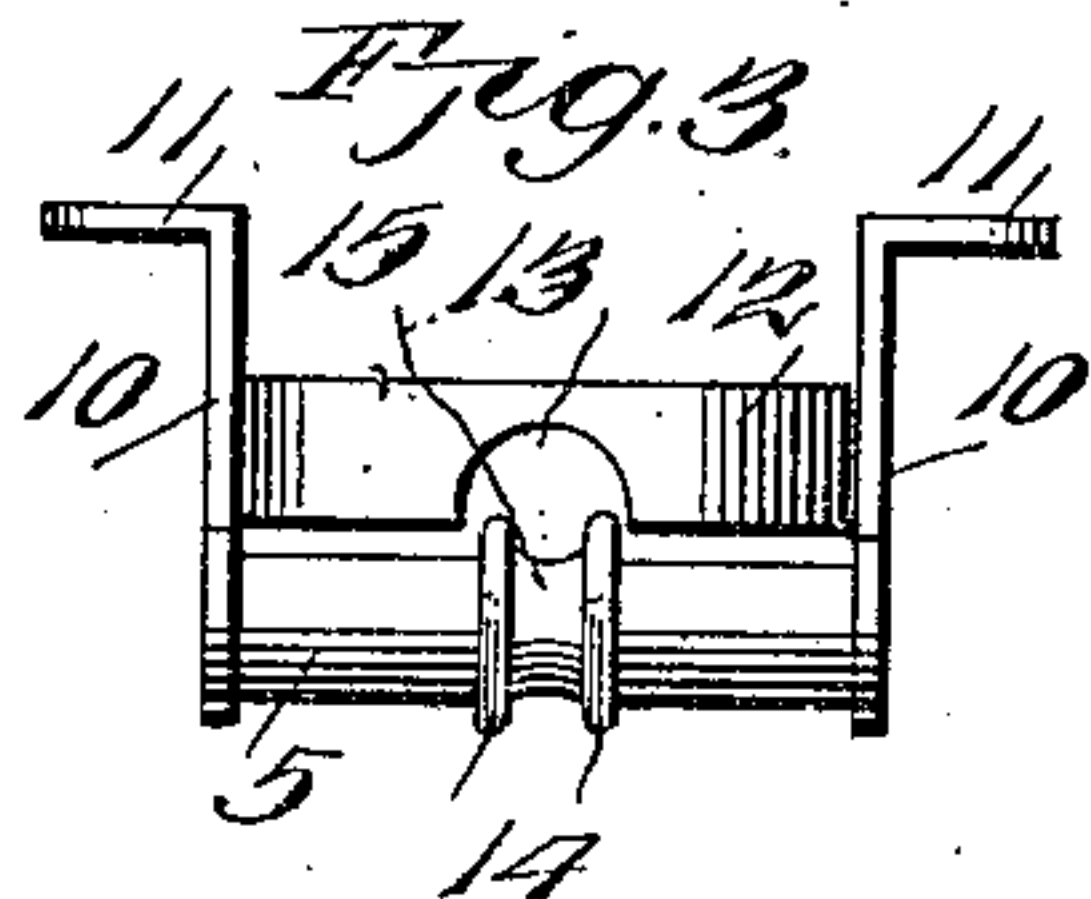


Fig. 3.

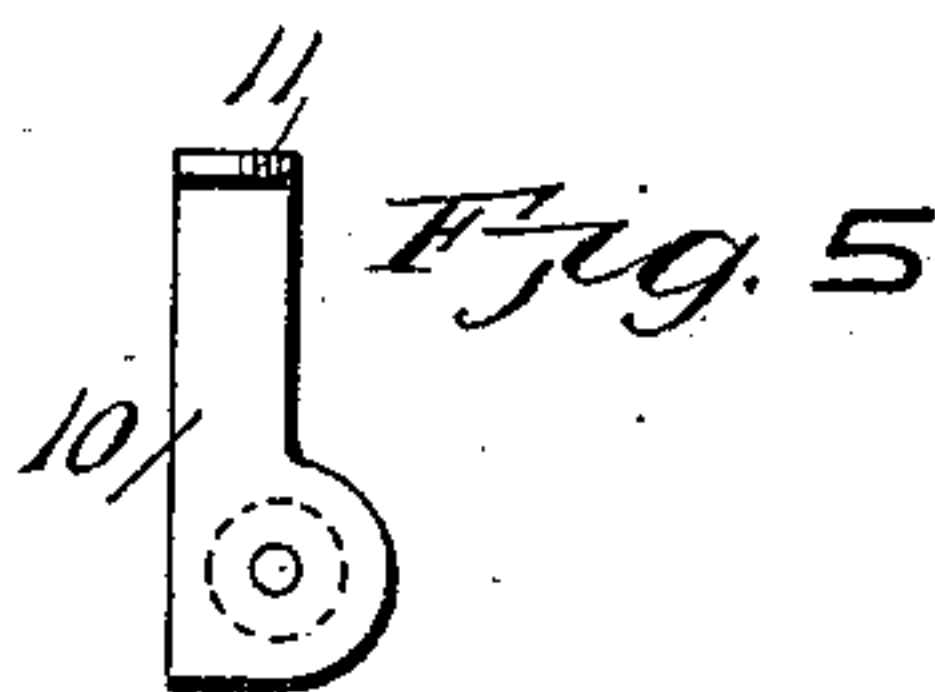


Fig. 5.

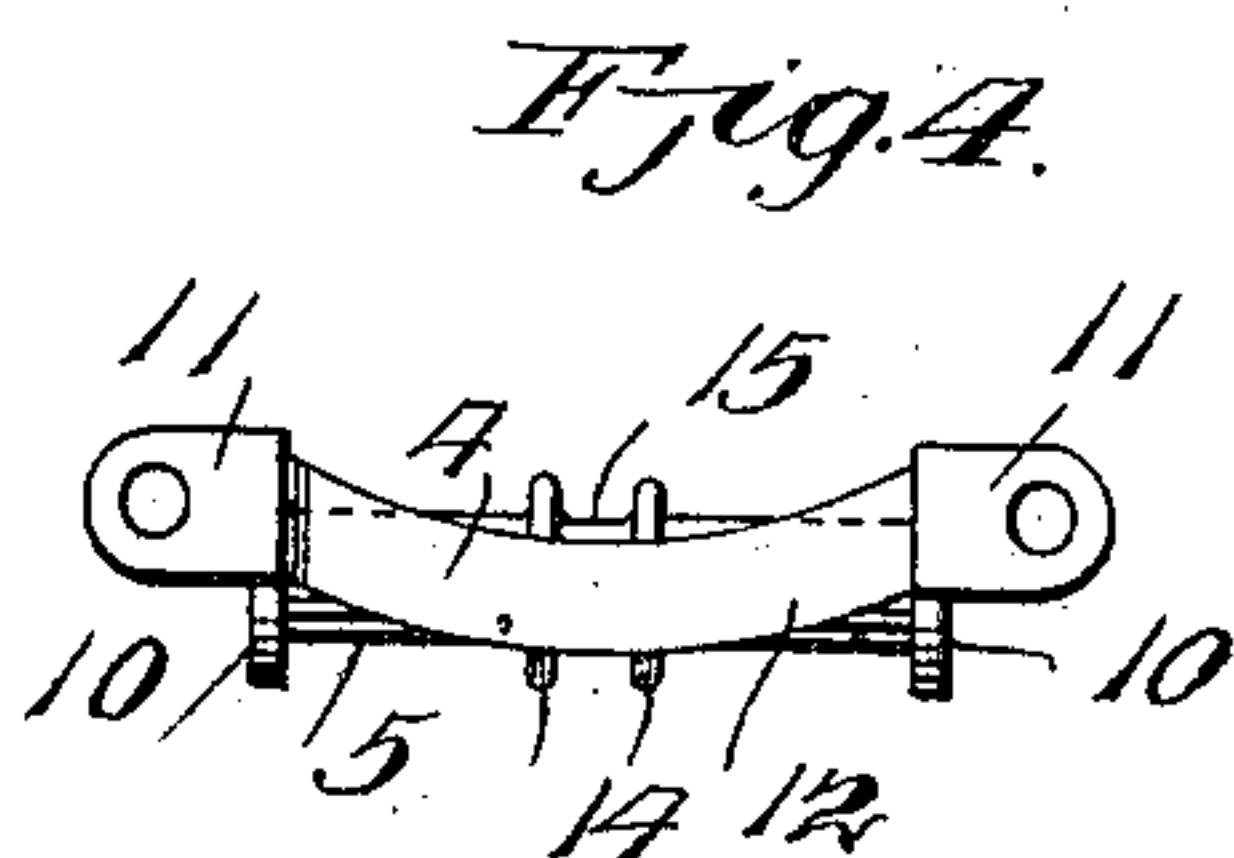


Fig. 4.

Fig. 6.

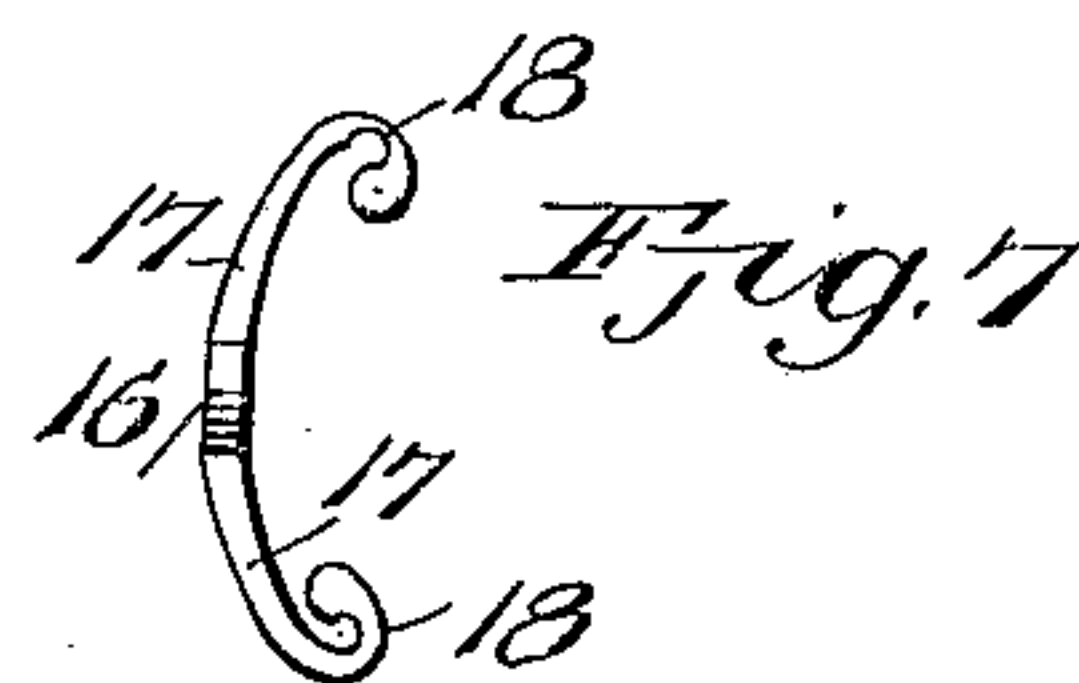
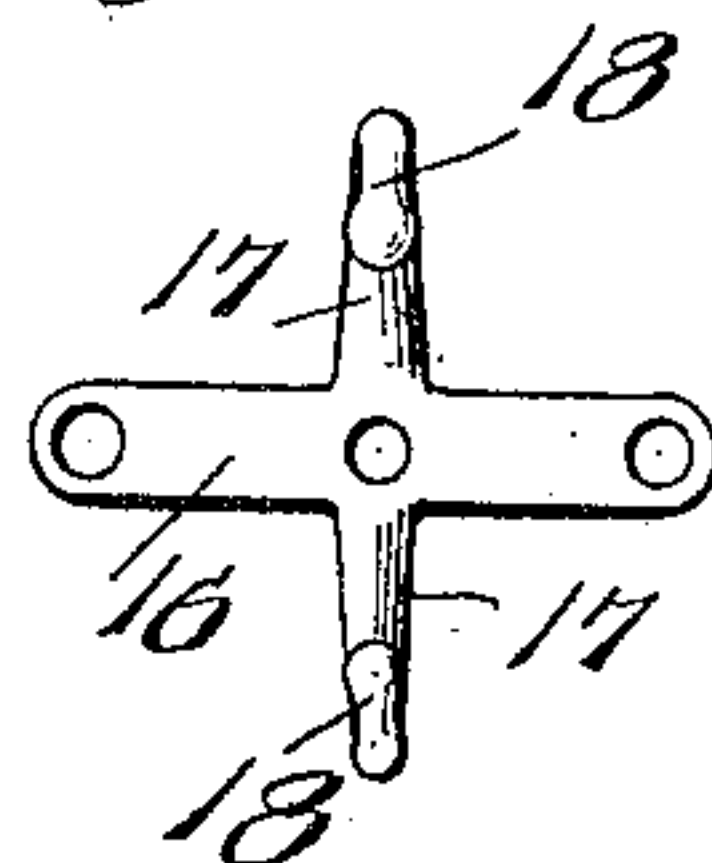


Fig. 7.

Witnesses

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SASH-OPENER.

No. 825,371.

Specification of Letters Patent.

Patented July 10, 1906.

Application filed May 26, 1905. Serial No. 262,385.

To all whom it may concern:

Be it known that I, WILLIAM E. ADAMS, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Sash-Openers, of which the following is a specification.

This invention relates to sash-lifts designed especially for application to the upper sash, and has for its objects to produce a comparatively simple inexpensive device of this character by means of which the upper sash may be readily opened or closed without disturbing the lower sash.

A further object of the invention is to provide an improved guide-roller for the operating-cord and an improved cleat or bracket for attaching the latter to the sash.

To these ends the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a front elevation of a window and its casing, showing the improved device applied for use. Fig. 2 is a vertical longitudinal section centrally through the window. Fig. 3 is a front elevation, on an enlarged scale, of the guide-roller. Fig. 4 is a top plan view of the same. Fig. 5 is an end view of the same. Fig. 6 is a front view of the cleat. Fig. 7 is a side elevation of the same.

Referring to the drawings, 1 designates a window frame or casing having movably disposed therein an upper sash 2 and a lower sash 3, these parts being of the usual or any improved construction, inasmuch as they constitute no part of my invention.

In accordance with my invention I attach to the upper end of the frame 2 and preferably at its transverse center a bearing member or bracket 4, having pivoted therein a guide-roller 5, on which is arranged for travel a cord or other flexible operating element 6, attached at one end to the upper end of the sash 2 and provided at its free end with a ring or other finger-piece 7, there being also attached to the upper part of said sash a depending cord or element 8, having a finger-piece 9.

The bracket 4 preferably comprises a pair of end members 10, having horizontal perforated ears 11 for attachment to the lower face of the window-frame and a connecting por-

tion or web 12, provided with a semicircular entrance opening or recess 13, through which the cord 6 may be readily entered for engagement with the roller 5, which latter is provided at its longitudinal center and in line with the recess 13 with a pair of spaced flanges 14, presenting a cord-receiving groove 15, extended around the roller and serving to prevent shifting of the cord longitudinally of the roller.

The cords 6 and 8 may be attached to the sash 2 in any appropriate manner, but are preferably connected through the medium of a member or cleat comprising a body portion 16, perforated at its ends and adjacent its longitudinal center for the reception of fastening-screws and having a pair of oppositely-disposed arms or portions 17, which curve slightly outward and terminate in returned portions or fingers 18, engaged, respectively, by the cords 6 and 8, it being noted that one of the arms projects upwardly, while the other extends downwardly from the body portion 16 when the cleat is positioned upon the window-sash.

In practice, supposing the window to be lowered from the top, as illustrated in Fig. 1, it is apparent that the same may be readily closed by grasping the finger-piece 7 and exerting downward friction upon the cord or element 6, while, on the other hand, if the sash be closed it may obviously be opened by grasping and drawing downward upon the cord 8. It is to be particularly noted that during the operation of closing the sash the cord 6 will travel freely upon the roller 5, thus facilitating the movement of the sash.

From the foregoing it is apparent that I produce a comparatively simple inexpensive device admirably adapted for the attainment of the ends in view, it being noted that minor changes in the details herein set forth may be resorted to without departing from the spirit of the invention.

Having thus described my invention, what I claim is—

In a device of the class described and in combination with a window frame and sash, of a bracket attached to the frame and comprising a pair of end plates having angularly-disposed perforated ears, and a web extended between and connecting said plates, said web having a transverse opening or recess, a

roller journaled in the end plates of the
bracket and having a pair of spaced flanges
presenting a cord-receiving groove in line
with the recess, and an operating-cord ar-
5 ranged for travel over the roller within the
groove and operatively connected with the
sash.

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

WILLIAM E. ADAMS.

Witnesses:

R. M. SILVERMAN,
THOMAS T. CROTTY.