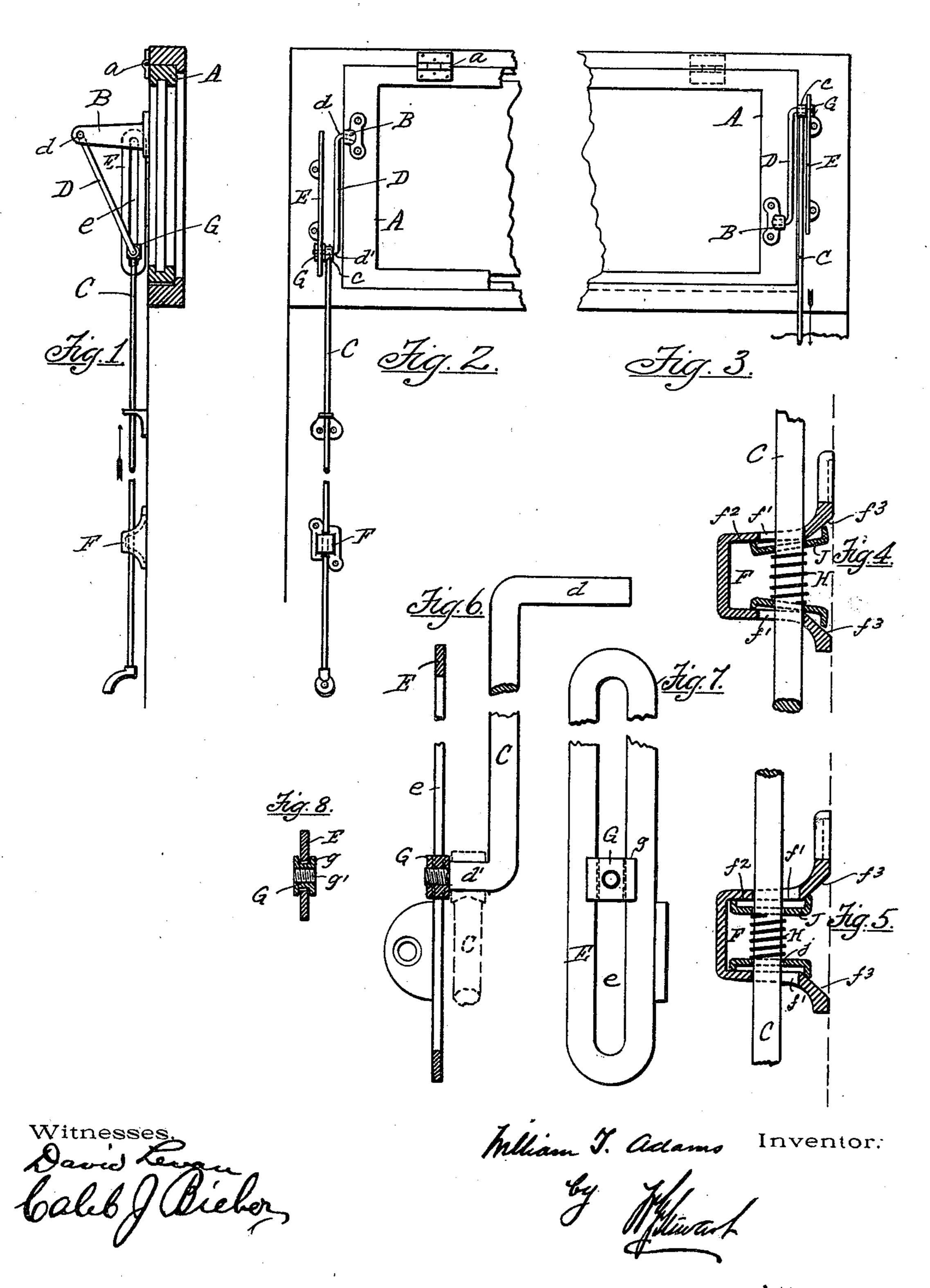
W. T. ADAMS. TRANSOM LIFTER.

(Application filed Oct. 11, 1898.)

(No Model.)



Attorney.

United States Patent Office.

WILLIAM T. ADAMS, OF READING, PENNSYLVANIA, ASSIGNOR TO THE READING HARDWARE COMPANY, OF PENNSYLVANIA.

TRANSOM-LIFTER.

SPECIFICATION forming part of Letters Patent No. 626,213, dated June 6, 1899.

Application filed October 11, 1898. Serial No. 693, 231. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. ADAMS, a citizen of the United States of America, and a resident of Reading, county of Berks, State 5 of Pennsylvania, have invented certain new and useful Improvements in Transom-Lifters, of which the following is a specification.

My invention relates to transom-adjusters; and it consists, first, in an improved guide to and operating connection for the operatingrod, and, second, in an improved automatic locking mechanism for said rod.

These improvements are fully described in connection with the accompanying drawings, 15 and the novel features are set out in the claims.

Figure 1 is a side elevation of my improved mechanism complete operatively connected to a transom-window. Fig. 2 is a front ele-20 vation of the same. Fig. 3 is a similar view to Fig. 2, but showing the transom-window arranged to swing in an opposite direction and the adjusting mechanism located on the opposite side. Fig. 4 is an enlarged cross-25 sectional view of the rod-locking mechanism, showing the rod in its normal locked position in the bracket. Fig. 5 is a similar view to Fig. 4, but showing the rod moved horizontally to release it for longitudinal action. Fig. 30 6 is an enlarged view, partly in section, showing more clearly the construction and connection of the link, guide-bracket, guide-block, and operating-rod; and Figs. 7 and 8 are additional views of the guide-bracket and of the 35 guide-block slidably mounted therein.

A represents a hinged transom-window having a bracket Battached to the face thereof. This bracket is connected, as usual, by means of a link D to an operating-rod C, which is 40 guided at its upper end in a slotted guidebracket E, fixed to the door-jamb, and also passes through a lower case or bracket F, which serves both to guide and lock the rod, this general construction being common in

45 transom-lifter mechanisms.

Referring first to the link connection and guide arrangement for the operating-rod, my improvements consist in employing, in connection with the guide-bracket E, a guide-50 block G, slidably engaged in the slot e of the bracket and mounted, together with the op-

erating-rod C, upon the lower arm d' of the connecting-link. As shown in Figs. 6, 7, and 8, the grooved guide-block G is engaged in the slot e of the guide-plate by springing 55 open said slot sufficiently to allow the passage through it of the flange g on the block, which latter upon the release of the spreading strain on the slotted plate is loosely engaged in the slot e, in which it slides freely, but cannot be 60 turned. The link D, formed of a round wire or rod, as shown, has an upper right-angled end d, pivotally connected to the transombracket B, and a lower right-angled end d'. Upon the latter is first strung the eye c of the 65 operating - rod, and the projecting screwthreaded portion d^2 is then screwed into the transom-opening g' in the guide-block. The parts may be readily set either for right or left position and to suit differently-hinged 70 windows, as indicated in Figs. 1 to 3. The guide-block G is not changed, but the rightangled end d' of the link is secured thereto either right or left, as may be needed, and the guide-bracket is located to suit the re- 75 quirements.

Referring now to the locking device for the operating-rod. For this purpose I employ an improved automatic lock adapted to be released by first moving the rod slightly in a 80 horizontal direction as it is seized to operate the transom. This mechanism is illustrated in Figs. 4 and 5, in which C represents the operating-rod, and F the lock case or bracket which is fixed to the door-jamb. The rod 85 passes through oblong openings f' in the case, which permit of a limited transverse movement of the rod. Within the case and loosely strung upon the rod are preferably two clamping-plates J, with a spring H arranged to 90 press each against the casing. The surface against which this plate bears is level at one side of the rod, as indicated at f^2 , and inclined on the opposite side, as indicated at f^3 , and the opposite ends of the plate J are arranged 95 to bear against these surfaces, respectively, so that a transverse movement of the plate. with the rod on which it is mounted, will eitherlevel or tilt it. This action will be readily understood from Figs. 4 and 5 of the draw- 100 ings, Fig. 4 showing the plates J tilted or "cocked" by the pressure of the spring, which

causes them to move upon their inclined bearings until the rod, which is moved horizontally with them, is locked against longitudinal movement by binding against the walls

of the openings in the plates, and Fig. 5 showing the rod moved horizontally in the oblong openings f' until the plates J are leveled and permit the rod to be freely moved up and down. This slight horizontal movement of

the rod is effected by the operator as he first seizes the finger-piece C' and is practically a part of the raising or lowering movement. As soon as released by the operator the rod is returned to its normal transverse position by the action of the spring H upon the clamp-

ing-plates and is automatically locked against longitudinal movement, each plate, as shown, serving to prevent movement in one direction.

What I claim is—

1. In a transom-lifter the combination with a transom-bracket, B, a vertically-arranged slotted guide-bracket, E, and an operating-rod, C, of a flanged rectangular guide-block, G, slidably sooned in said slotted bracket.

slidably secured in said slotted bracket as described and having a transverse opening therein, and a link, D, pivotally connected at one end to said transom-bracket and having a right-angled armor-pin at the other end rotatably engaged both by said guide-block

•

and by the operating-rod substantially as set 30 forth.

2. In a lock for a transom-operating rod, a case or bracket having a fixed inclined surface, as f^3 , and a clamping-plate loosely strung upon the rod and pressed against said 35 inclined surface of the case or bracket, said plate being movable horizontally with the rod and thereby leveled or tilted to clamp or release the rod substantially as set forth.

3. In a transom adjuster mechanism having a reciprocating operating-rod, a locking device therefor comprising a case or bracket having an enlarged aperture through which said rod passes and an inclined inner surface, a clamping-plate loosely strung upon said 45 rod, movable horizontally therewith, and having one end in slidable contact with said inclined surface, and a spring; said plate being normally tilted by the pressure of the spring to lock the rod and being leveled to release 50 the same by moving it horizontally with the rod, substantially as set forth.

Signed by me, at Reading, Pennsylvania, this 10th day of October, A. D. 1898.

WILLIAM T. ADAMS.

Witnesses:
GEO. E. TYSON,
WALTER B. CRAIG.