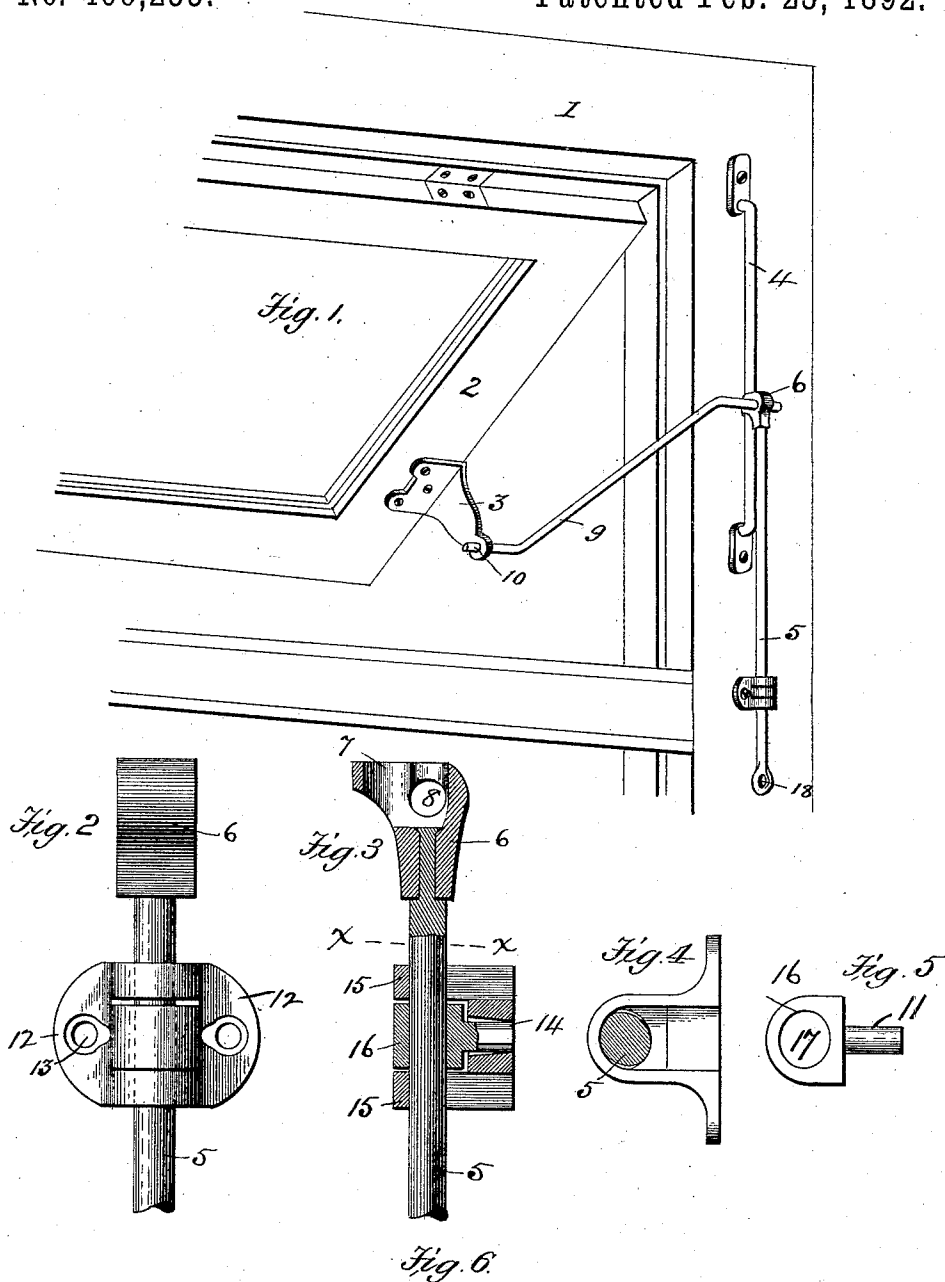


(No Model.)

G. J. DICKSON.  
TRANSOM LIFTER.

No. 469,233.

Patented Feb. 23, 1892.



Witnesses  
J. R. Cornwall  
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Fig. 6.  
Inventor,  
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by Annie Goldsborough  
Attys.

# UNITED STATES PATENT OFFICE.

GILBERT J. DICKSON, OF ALBANY, NEW YORK, ASSIGNOR TO THE G. J. DICKSON MANUFACTURING COMPANY, OF SAME PLACE.

## TRANSOM-LIFTER.

SPECIFICATION forming part of Letters Patent No. 469,233, dated February 23, 1892.

Application filed October 12, 1891. Serial No. 408,434. (No model.)

*To all whom it may concern:*

Be it known that I, GILBERT J. DICKSON, a citizen of the United States, residing at Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Locks for Transom-Operating Rods; 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.

My invention relates to an improvement in means for operating transoms, and more particularly to improved devices for locking the operating-rod of a transom in any position to which it may be adjusted.

The object of the invention is to provide the operating-rod with locking mechanism adapted to be locked and unlocked by partially rotating the rod itself. This result I have attained by giving to the rod a substantially oval form in cross-section and passing it through a clamping-block formed with an opening contracted in diameter in one direction to prevent a full revolution of the rod and to releasably lock it therein at the desired position of adjustment. With this general feature of construction I have combined further details insuring a still higher degree of efficiency of operation in the complete device, all as hereinafter more fully described, and specified in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of a part of a door-frame and transom with my improvements applied thereto. Fig. 2 is an elevation of a portion of the operating-rod and the lock detached. Fig. 3 is a central vertical section of the rod and lock. Fig. 4 is a horizontal section on the line *xx* of Fig. 3. Fig. 5 is a plan view of the clamping-block detached, and Fig. 6 is a view in perspective of the lock guide or support.

Similar numerals of reference indicate similar parts throughout the several views.

The numeral 1 indicates the frame work of the door, and 2 the transom hinged thereto.

The transom-lifting mechanism consists of a bracket 3, secured to the transom, a guide-rod 4, secured in vertical position to the door-frame, and an operating-rod 5, provided with a

swiveled head 6, having a vertical opening 7 to receive the guide-rod 4 and having a transverse opening 8 to receive one end of a connecting-rod 9, the opposite end of which enters an opening 10, in the projecting end of the bracket 3.

The parts thus far described are of a common construction and constitute no part of my present invention, except in so far as they combine with the improved locking device which I am about to describe.

The lock consists of a guide or support formed with laterally-projecting lugs 12, formed with holes 13, as shown, to receive screws, which secure the guide in place upon the door-frame. The guide is also formed with an opening 14 to receive the stem 11 of the clamping-block and with forwardly-projecting loops 15, between which the clamping-block 16 is supported. The walls of the opening 14, as shown in Fig. 3, are slightly inclined to permit a limited rocking movement of the clamping-block.

The operating-rod 5 is of oval form in cross-section and extends through the opening 17 in the block 16, said opening being also of slightly oval form and having its diameter in one direction smaller than the greatest diameter of the rod, so that the latter cannot be given a full revolution within the block 16, but will bind against the walls of the opening when partially turned, as illustrated in Fig. 4. The upper end of the operating-rod 5 is swiveled in the head 6 to allow said rod to be freely turned therein.

The operation of the lock as thus described will be readily understood. When the operating-rod is turned so that its greatest diameter coincides with the greatest diameter of the opening in the block 16, said rod may be freely moved vertically to adjust the transom, and after such adjustment a partial turn of the rod will cause it to bind within the block 16 and thus firmly clamp it in its adjusted position. Any vertical strain upon the rod after it is clamped, as described, will tend to rock the block 16 slightly toward one or the other of the guide-loops 15, with the effect of further or more firmly clamping or binding the rod within the lock. When it is desired to adjust the transom, the rod may

be released by turning in the opposite direction to its original unlocked position, whereupon it may be raised or lowered and again locked in the desired adjustment. The lower end of the operating-rod may be formed with an eye 18, or a T-shaped end may be employed to facilitate the turning of the rod by means of a portable hooked rod or a suitable key to be engaged therewith, as will be readily understood.

While the lock is adapted for general use with various forms of transoms, it is designed especially for use where for any reason a short operating-rod must be employed—as, for example, where a heavy molding projects below the transom, or in buildings where it is preferred not to have a long rod hanging down the wall, or where, as in asylums or prisons, it is desirable to have the lower end of the operating-rod out of reach of the persons confined therein and accessible only by the portable rod or key above referred to.

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

1. In a transom-operating device, the combination, with a sliding and rotatable operating-rod of substantially oval and uniform cross-section throughout its clamping portion, of a clamping-block formed with an opening

through which said rod is adapted to slide and rotate, such opening being contracted in diameter in one direction to prevent a full rotation of the rod and to releasably bind it therein at any desired point of adjustment, substantially as described.

2. In a transom-operating device, the combination, with the operating-rod, of a lock consisting of a stationary support or guide and a clamping-block arranged therein, said block having an opening to receive the rod and having a limited rocking movement in its seat, substantially as described.

3. In a transom-operating device, the combination, with an operating-rod of substantially oval form in cross-section, of a lock consisting of a stationary support or guide formed with parallel loops and a beveled recess and a clamping-block formed with an opening having a contracted diameter in one direction and with a stem adapted to enter the beveled recess in the lock-guide, substantially as described.

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

GILBERT J. DICKSON.

Witnesses:

HARRY STUART,  
H. W. BULLOCK.