

(No Model.)

G. J. DICKSON.
TRANSOM OPERATOR.

No. 463,141.

Patented Nov. 17, 1891.

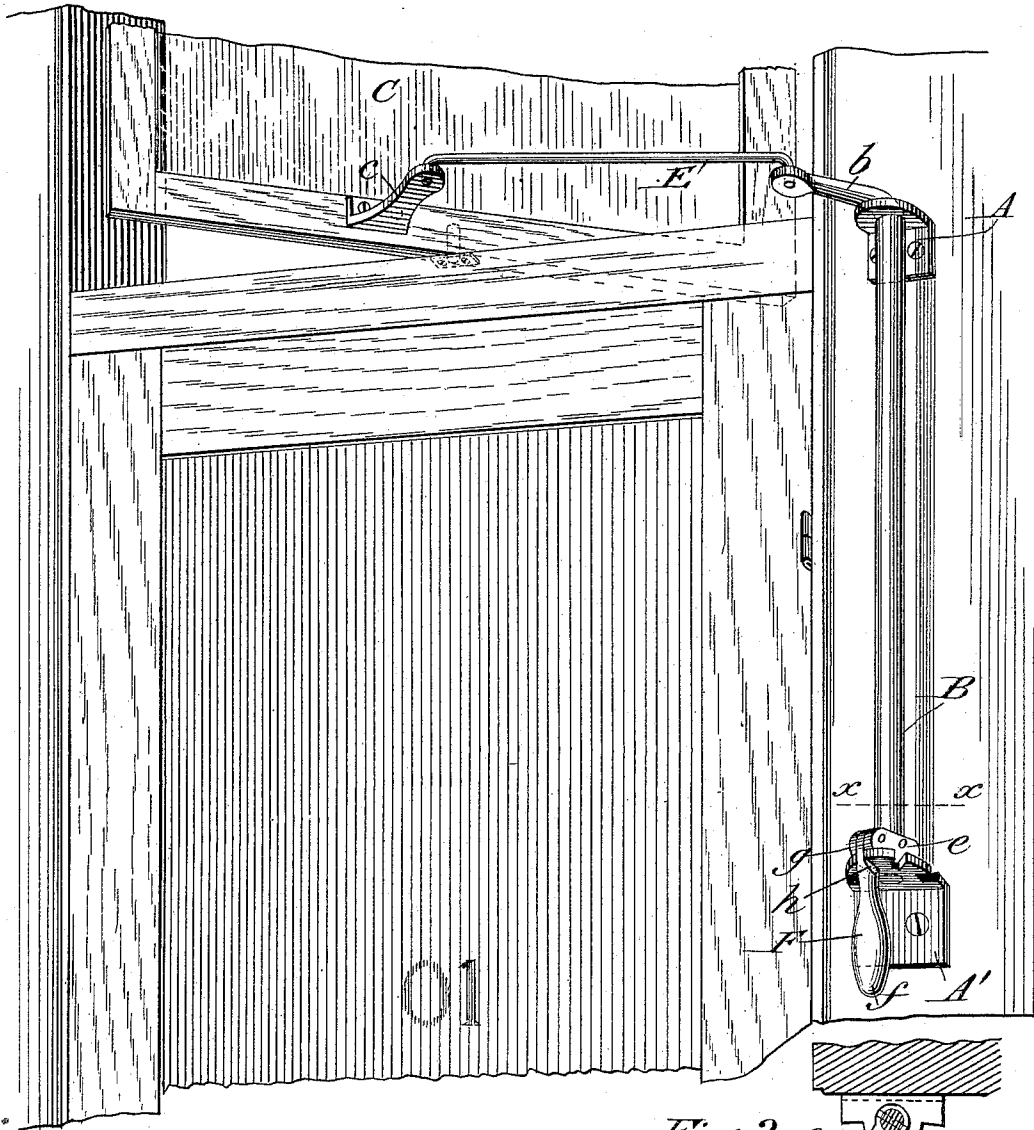


Fig. 1.

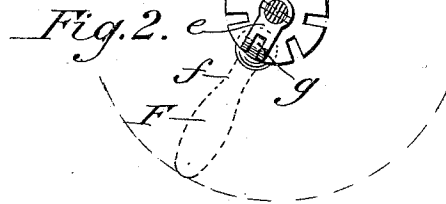


Fig. 2.

Attest:

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UNITED STATES PATENT OFFICE.

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

TRANSOM-OPERATOR.

SPECIFICATION forming part of Letters Patent No. 463,141, dated November 17, 1891.

Application filed April 15, 1891. Serial No. 389,026. (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 Transom-Operating Devices; 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.

The invention relates to transom-operating devices, and has special reference to improvements in this class of devices designed with a view to dispense with the use of all objectionable springs, catches, grips, &c., and to provide a simple, effective, and durable device of the kind referred to which will be light, strong, and simple in construction and easy and positive in its action.

With these main objects in view the invention consists in the construction and arrangement of parts hereinafter described and illustrated, and more particularly pointed out in the appended claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a fragmentary perspective of a door with the improved device applied thereto, the transom appearing partially open and locked in position. Fig. 2 is a sectional detail on the line *x x*, showing the jointed rod-operating handle and its relation to the segmental holding-plate.

In the drawings the invention is represented as applied to a transom arranged to swing in a horizontal plane; but I would have it understood that it is also adapted to transoms swinging vertically. It is furthermore applicable for use in connection with hinged shutters and sashes generally.

Referring to the drawings, A A' denote angle-brackets attached to the door-frame and forming bearings for the vertically-arranged operating-rod B. The bracket A is located near the top of the door, and the bracket A' lower down at a point within convenient reach of persons of ordinary stature. The operating-rod B has a step-bearing in the lower bracket A', and is provided with a

crank-arm *b* at its upper end above the bearing in the top bearing-bracket A.

The transom C is shown in the drawings as pivoted on vertical pintles (the lower one of which is shown in dotted lines) and swinging sidewise in a horizontal plane.

The letter *c* denotes a short rigid arm secured to and projecting out from the frame of the transom, and to this arm the crank *b* on the operating-rod is connected by the link-rod E, whose ends are preferably bent and fitted into eyes in the ends of the arm *c* and the crank *b*.

The lower bearing-bracket A' has its horizontal flange formed into a segmental plate, as shown in Fig. 2 of the drawings, and the periphery of the plate is provided at intervals with notches for a purpose which will presently appear.

The operating-rod B is turned and locked in its different positions by what I term a "jointed detent-handle," as shown at F. This handle is formed in two parts, one of which *e* is rigidly secured to the rod immediately above and close to the upper surface of the lower bracket A'. This fixed part *e* of the jointed handle is preferably made of a length equal to the radius of the segment-plate of the bracket, so as to secure as great leverage as possible without having it project beyond the edge of the plate. The other part of the handle is denoted by *f*. It is preferably of a shape to form a convenient hand-hold and of a size to have sufficient heft or weight to act as a gravity detent. It is pivoted at its inner end in the forked or slotted end of the fixed part *e*, as represented at *g*, and its shank is flattened or reduced, as shown at *h*, so as to permit it to fit into the notches in the segmental plate before referred to. This construction of the handle of the operating-rod is an important feature of the invention, inasmuch as it forms a combined gravity detent which is self-locking and positive in action, and jointed handle of sufficient length to insure easy working of the heaviest transoms and which when not in use folds down out of the way.

As above stated, the length of the fixed part of the handle is about equal to the ra-

dius of the segment-plate. In this connection it is also preferable to arrange the width and depth of the notches and the breadth and thickness of the reduced part of the shank so
5 that the parts will fit snugly together without projections beyond the edge of the plate.

If preferred, instead of making the notches with straight sides, as shown, they may be slightly narrowed from the outer edge and the
10 reduced shank of the handle correspondingly shaped, so as to cause the latter to bind slightly in the notches.

Having thus fully described the invention, what I claim, and desire to secure by Letters
15 Patent, is—

1. In a transom-operating device, the combination of the vertical rod, the bearing-brackets in which the rod is journaled, the lower bracket having a horizontal segment-plate
20 with notches in its periphery, and a two-part jointed handle for turning the rod, one part of the handle being fixed on the rod above the plate and the hand-hold part being pivoted to the fixed part and overhanging the edge

of the plate and adapted to form a gravity- 25 detent for taking into the notches in its periphery, substantially as described.

2. The combination of the swinging transom C, the vertical operating-rod B, the bearing-brackets A A', in which the rod is journaled, the lower bracket having a horizontal
30 segmental plate with notches in its periphery, the crank *b* on the upper end of the rod, the arm *c* on the transom, the connecting-link E, and a two-part jointed handle for turning the
35 rod, the part *e* of the handle being fixed on the rod above the plate and the hand-hold part *f* being pivoted to the fixed part and overhanging the edge of the plate and adapted to form a gravity-detent for taking into the
40 notches in the periphery of the plate, substantially as described.

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

GILBERT J. DICKSON.

Witnesses.

B. M. GALLIEN,
H. W. BULLOCK.