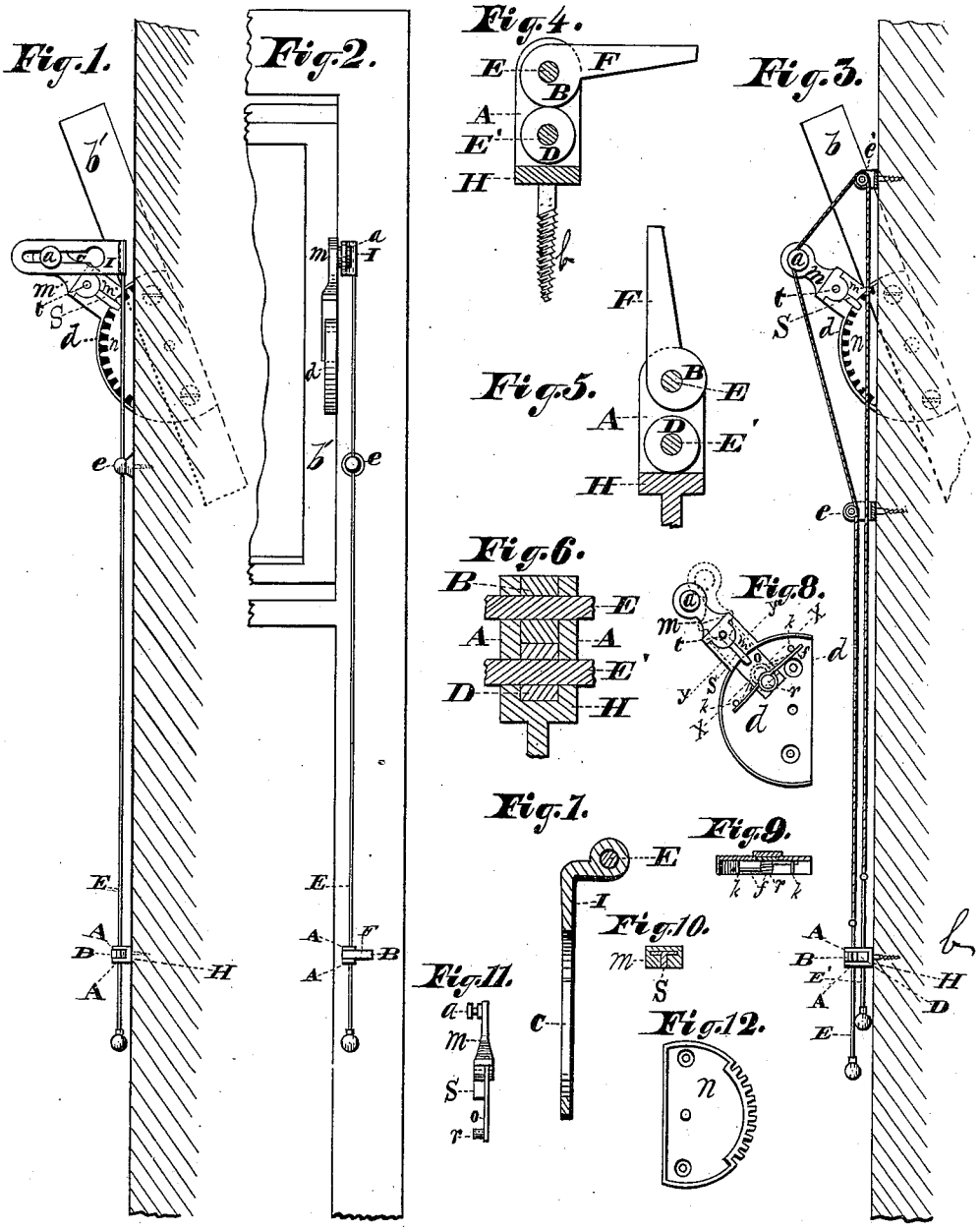
(Model.)

G. J. DICKSON.

TRANSOM LIFTER.

No. 332,794. Patented Dec. 22, 1885.



Witnesses:
David E. King.
William McClure

Inventor:
Gilbert J. Dickson.

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

GILBERT J. DICKSON, OF ALBANY, NEW YORK.

TRANSOM-LIFTER.

SPECIFICATION forming part of Letters Patent No. 332,794, dated December 22, 1885.

Application filed June 8, 1882. Renewed July 24, 1885. Serial No. 172,498. (Model.)

To all whom it may concern:

Be it known that I, GILBERT J. DICKSON, of Albany, New York, have invented certain new and useful Improvements in Transom Lifters and Adjusters, of which the following is a specification.

My invention relates to improvements on the transom-adjuster for which Letters Patent of the United States No. 259,297 were granted to me on the 13th day of June, 1882, and to an improved means for operating the same.

The objects of my present improvements are, first, to simplify and perfect the construction of my transom-locking device and render it more compact in form and more positive in operation; second, to provide for operating said locking device by means of either rods or cords; and, third, to provide simple and effective fastening devices for securely holding said operating rods or cords without inflicting damage thereto. I attain these objects by means of the mechanisms illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved transom-adjuster and operating-rod as applied to a transom; Fig. 2, a front elevation of same; Fig. 3, a side elevation of a modified form of appliances for operating my transom-adjuster. Figs. 4 and 5 are longitudinal sections of the fastening device for operating-rod, shown, respectively, in locked and unlocked positions; Fig. 6, a modified form of fastening device adapted to use with two operating rods or cords; Fig. 7, a horizontal section of arm of operating-rod; Fig. 8, a detached side elevation of my transom-adjuster; Fig. 9, a section of same at the line *x x;* Fig. 10, a section of operating-arm for same at the line *y y;* Fig. 11, a detached side elevation of said operating-arm, and Fig. 12 a detached side elevation of the stationary plate of my transom-adjuster.

As represented in the drawings, H is a stud for the fastening device for the operating-rod E. Said stud is provided with a screw, *b*, for securing it in place, and with lugs A, furnished with openings, through which the operating-rod E is adapted to slide freely; B, an eccentric cam fixed between the lugs A and adapted to receive a partial rotatory movement around the rod E, which serves as a pivotal center for said cam. The cam B is provided with an arm, F, by means of which the requisite motion can be imparted to said cam. When the arm F is moved into the horizontal position shown in Fig. 4, the full part of the cam B will be brought to bear against the upper face of the stud H, so as to clamp the rod E in the openings in said cam and in the lugs A in such manner that it will be held immovable. On restoring the arm F to its perpendicular position the rod E will be released to slide freely in the cam B and lugs A. The rod E slides through a guide-stud, *e*, and, as shown in Figs. 1 and 2, said rod is provided at its upper end with an arm, I, having a slot, *c*, which engages with a pin, *a*, on the arm *m* of the transom-adjuster. The arrangement of the last-named parts is such that a sliding movement of the rod E in either direction will produce a rotatory movement of the transom-adjuster in a corresponding direction.

The arrangement above described is one I prefer for operating and securing the transom-adjuster at any desired point of its movement.

The modification shown in Fig. 6 is designed for the use of two reversely-moving operating rods or cords, or for a combination of two rods with flexible cords or chains. In said modification a roller, D, is placed between the lugs A, under and in contact with the cam B. The second operating-rod, E′, passes through a second set of openings in the lugs A and an opening through the axial center of the roller D, and the arrangement of the parts is such that when the arm F of the cam B is moved into a horizontal position the cam B will then press against the roller D with sufficient force to bind the rods E and E′ and prevent them from being moved. The rods E and E′ are connected by means of cords or other suitable means to the operating-arm *m* of the transom-adjuster, one of said cords leading from the upper side of said arm over a pulley, *e′*, and thence to the rod E′, and the other of said cords leading from the under side of the operating-arm *m* to the rod E.

My improved transom-adjuster consists of a movable plate, *d*, and a stationary plate, *n*. Both of said plates are of a segmental form, and are pivoted together by a center pin, which permits the movable plate *d* to swing

freely over the stationary plate *n*. The latter is provided around its circular edge with teeth or indentations, and is rigidly secured to the casement for the transom. The movable plate *d* is secured to the edge of the transom *b'*, to correspond in position to the stationary plate *n*. The plate *d* is provided with a radial arm, *m'*, in which a longitudinal T-shaped opening is made for receiving a sliding plate, O, and to the latter a detent, S, is rigidly secured at right angles to the face of said plate. The detent S is adapted to engage with the teeth on the periphery of the plate *n* and effect the locking together of the plates *d* and *n* at any required degree of angularity. The sliding plate O is provided with a stud, *r*, to which is connected a spring, *f*, whose outer ends bear against the pins *k*, so as to force said sliding plate toward the center of the plate *d*. The operating-arm *m* is pivoted to the outer end of the sliding plate O, and the normal position of said arm is in direct line with the radial arm *m'*, to which position the spring *f* constantly exerts its force to move said operating-arm.

On the application of side pressure in either direction to the operating-lever *m*, so as to move it on its pivotal center, the first effect is to draw back the detent S from its engagement with the teeth of the stationary plate *n*, after which the continued pressure will cause the transom to move in the direction in which the pressure is applied, and on the cessation of the pressure upon the operating-lever *m* the spring *f* will move the sliding plate O inwardly and cause the detent S to re-engage in the teeth of the plate *n* and lock the transom in the desired position.

I claim as my invention—

1. The combination, with the operating-rod E, provided with a slotted arm, I, rigidly secured to said rod and adapted to engage with the operating-arm *m* of the transom-adjuster, of the eccentric-cam lever F, having the operating-rod E at its pivotal center, and adapted to operate substantially as specified.

2. In a transom-adjuster, the combination, with a stationary segmental plate, *n*, having teeth or indentations formed on its convex edge and a movable segmental plate, *d*, concentrically pivoted to the stationary plate *n*, and provided with a radial arm, *m'*, the said arm having a longitudinal slot for receiving a sliding plate, O, provided with a detent, S, and spring *f*, as herein described, of the operating-arm *m*, pivoted to the sliding plate O, and fulcrumed on the end of the radial arm *m'* in such manner that when moved in either direction the said operating-arm *m* will centrifugally retract the detent S from the teeth of the stationary plate *n*, as herein specified.

GILBERT J. DICKSON.

Witnesses:
DAVID E. KING,
WALTER DICKSON.