J. H. GILMAN.

TRANSOM.

APPLICATION FILED JAN. 11, 1909.

924,656. **Patented June 15, 1909.**

2 SHEETS—SHEET 1.

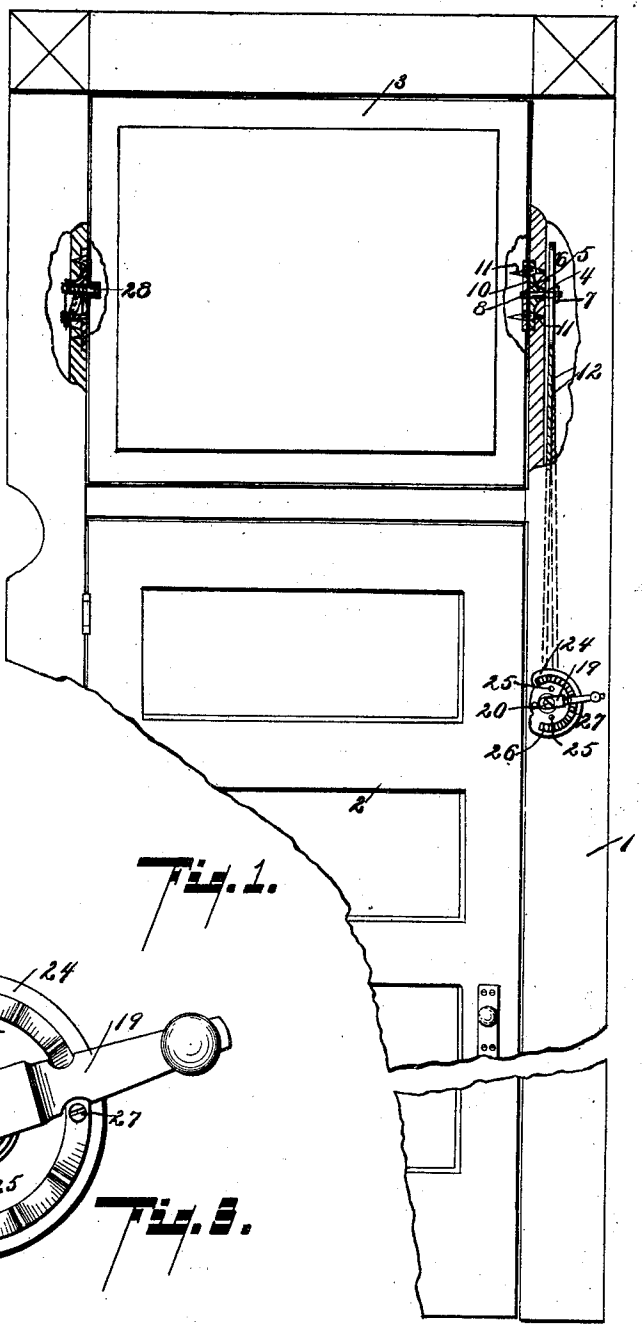


Fig. 1.

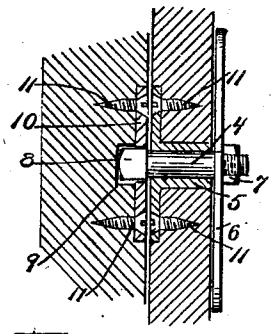


Fig. 2.

Fig. 3.

Witnesses:

Gertrude Tallman.

China Woodruff.

Inventor,

John H. Gilman

By Chappell & Earl

Att'y.

THE NORRIS PETERS CO., WASHINGTON, D. C.

J. H. GILMAN.

TRANSOM.

APPLICATION FILED JAN. 11, 1909.

924,656. **Patented June 15, 1909.**

2 SHEETS—SHEET 2.

Fig. 2.

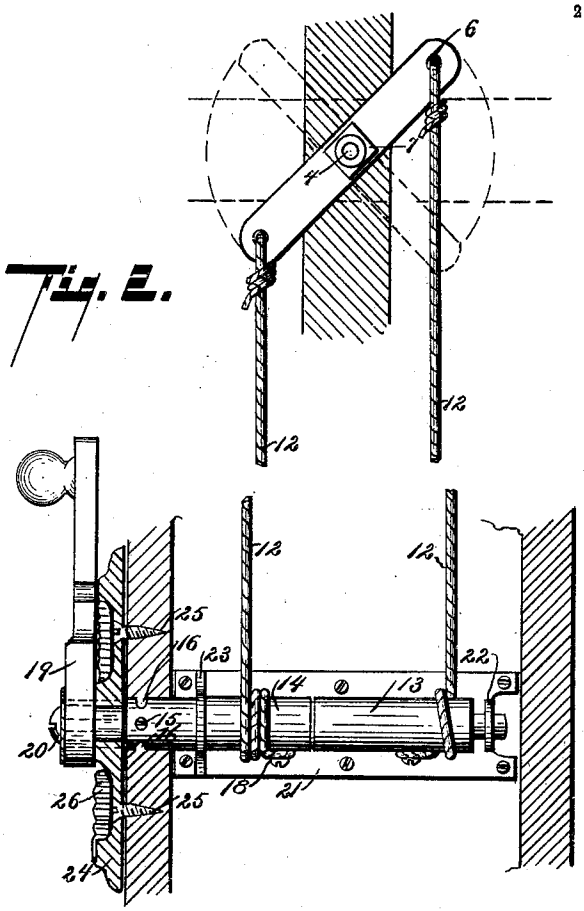


Fig. 4.

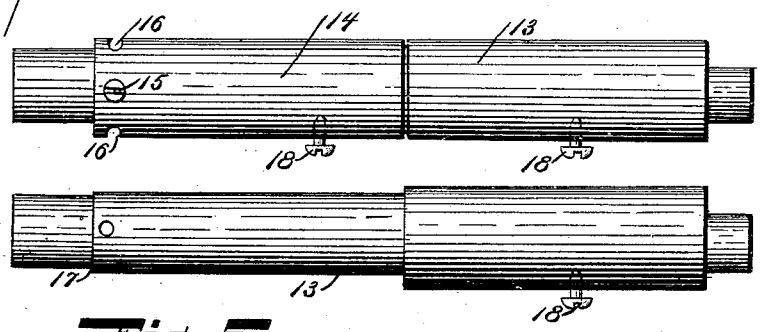


Fig. 5.

Witnesses:

Gertrude Tallman

Phina Woodruff.

Inventor,

John H. Gilman

By Chappell & Earl

Att'y.

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN H. GILMAN, OF KALAMAZOO, MICHIGAN.

TRANSOM.

No. 924,656. Specification of Letters Patent. Patented June 15, 1909.

Application filed January 11, 1909. Serial No. 471,692.

To all whom it may concern:

Be it known that I, JOHN H. GILMAN, a citizen of the United States, residing at Kalamazoo, county of Kalamazoo, and State of Michigan, have invented certain new and useful Improvements in Transoms, of which the following is a specification.

This invention relates to improvements in transoms, pivoted windows and the like.

The main objects of this invention are: First, to provide an improved lifter for transom or pivoted windows or the like, which is very inconspicuous and is, at the same time, entirely satisfactory in use and easy to use. Second, to provide an improved lifter for transoms, windows and the like, which can be collapsed into a very compact package and one which is easily and quickly applied.

Further objects, and objects relating to structural details, will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure embodying the features of my invention is clearly illustrated in the accompanying drawing, forming a part of this specification, in which:

Figure 1 is a detail elevation of a transom structure embodying the features of my invention, portions being broken away to better show the relation of the parts, and portions being indicated by dotted lines. Fig. 2 is an enlarged detail vertical section, showing structural details of my improved lifter. Fig. 3 is a plan view of the adjusting crank and escutcheon plate. Fig. 4 is a plan view of the adjusting shaft. Fig. 5 is a plan view of the adjusting shaft with one of its parts removed. Fig. 6 is a detail section showing details of one of the pivots.

In the drawing, similar reference numerals refer to similar parts throughout the several views.

Referring to the drawing, the casing 1 is of the usual construction, the door 2 being hung therein and the transom 3 being arranged above the door, as is common practice. The transom 3 is pivoted in the casing, one of the pivots 4 thereof being provided with a bearing 5, which is seated in the casing, the pivot being arranged therethrough and being provided with a cross piece 6 on its inner end. This cross piece is secured to the pivot by means of the nut 7.

The pivot is provided with a rectangular head 8 which engages an aperture 9 in the plate 10, the plate 10 being secured to the transom by means of the screws 11. The plate 10 is preferably countersunk in the transom and the bearing plate 5 is countersunk in the casing to permit the very close fitting of the parts.

The cross piece 6 is connected to the adjusting shaft by means of the cords or cables 12. These cords or cables are wrapped in opposite directions around the shaft, so that, when it is turned in one direction, the transom is thrown one way, and, when turned in the other direction, it is thrown the other way. This adjusting shaft is preferably made up of two adjustably connected parts, as 13 and 14, the parts 14 being sleeved upon the parts 13 and adjustably secured thereto, as by means of the set screw 15, which is adapted to be arranged through the holes 16 in the sleeve to engage the hole 17 provided therefor in the shaft member 13. The details are illustrated in Figs. 4 and 5.

The cords are connected to the shaft parts or members by means of the screws 18, and, by adjusting the shaft members relative to each other, the proper tension on the cords can be secured to bring the transom into proper normal position and to take any slack out of the cords.

The adjusting shaft crank 19 is secured to the shaft by means of a suitable screw 20, which is threaded into the end of the shaft member 13. The adjusting shaft is supported by a bracket-like member 21, having bearings 22 and 23 thereon, the shaft being adapted to be inserted longitudinally into the bearings.

The escutcheon plate 24 receives the shaft and is adapted to retain it in its bearings, the plate being secured to the casing, as by means of the screw 25.

Mounted upon the escutcheon plate is a ratchet spring 26, arranged to engage the crank 19, the ratchet spring being corrugated

so that the crank slips from one corrugation to the other, and is thereby held in its adjusted position. This spring is secured to the escutcheon plate by means of a screw 27, the spring being curved as clearly appears in Fig. 3.

By this arrangement, the transom can be easily adjusted, and the adjusting means is very inconspicuous.

The pivot 28 is preferably adjustably supported, as is illustrated and described in my co-pending application, Ser. No. 482,103, which is a divisional hereof.

A further advantage of my improved lifter is that the parts may all be packed in a very compact package, as they are all readily disassembled, the package being of no greater length than that of the adjusting shaft. The structure is very easy to install, and, when installed is very simple and easy to operate.

I have illustrated and described my improvements in detail in the form preferred by me on account of structural simplicity and economy thereof, though I am aware that they are capable of considerable variation in structural details without departing from my invention. As these details will be readily understood by those skilled in the art to which this invention relates, I have not attempted to illustrate the same herein.

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

1. In a structure of the class described, the combination with a casing, of a transom; a pivot therefor, arranged to project into the casing; a cross-piece on said pivot arranged within the casing; an adjusting shaft arranged to project from said casing; connecting cords for said cross piece on said pivot to said shaft, said cords being arranged to be oppositely wound on said shaft; an escutcheon plate through which said shaft projects adapted to retain said shaft in position; a crank for said shaft; and a spring ratchet mounted on said escutcheon plate and arranged to engage said crank for securing it in its adjusted positions.

2. In a structure of the class described, the combination with a casing, of a transom; a pivot therefor, arranged to project into the casing; a cross-piece on said pivot arranged within the casing; an adjacent shaft arranged to project from said casing; connecting cords for said cross piece on said pivot to said shaft, said cords being arranged to be oppositely wound on said shaft; and means for securing said shaft in its adjusted position.

3. In a structure of the class described, the combination with a casing, of a transom; a pivot therefor, arranged to project into the casing; a cross-piece on said pivot arranged within the casing; an adjusting shaft arranged to project from said casing, said shaft comprising two adjustably connected parts; a bracket-like support for said shaft mounted within said casing; connecting cords for said cross piece on said pivot to said shaft, said cords being arranged to be oppositely wound on said shaft, one cord being connected to each part thereof; an escutcheon plate through which said shaft projects adapted to retain said shaft in position; a crank for said shaft; and a spring ratchet mounted on said escutcheon plate and arranged to engage said crank for securing it in its adjusted position.

4. In a structure of the class described, the combination with a casing, of a transom; a pivot therefor, arranged to project into the casing; a cross-piece on said pivot arranged within the casing; an adjusting shaft arranged to project from said casing; connecting cords for said cross piece on said pivot to said shaft, said cords being arranged to be oppositely wound on said shaft; means for adjustably securing said cords to said shaft; and means for securing said shaft in its adjusted position.

5. In a structure of the class described, the combination with a casing, of a transom; an adjusting shaft arranged to project from said casing; a bracket-like support for said shaft mounted within said casing; connecting cords for said transom to said shaft, said cords being arranged to be oppositely wound on said shaft; an escutcheon plate through which said shaft projects adapted to retain said shaft in position in said bracket-like support; a crank for said shaft; and a spring ratchet mounted on said escutcheon plate and arranged to engage said crank for securing it in its adjusted positions.

6. In a structure of the class described, the combination with a casing, of a transom; an adjusting shaft arranged to project from said casing; connecting cords for said transom to said shaft, said cords being arranged to be oppositely wound on said shaft; an escutcheon plate through which said shaft projects; a crank for said shaft; and a spring ratchet mounted on said escutcheon plate and arranged to engage said crank for securing it in its adjusted position.

7. In a structure of the class described; the combination with a casing, of a transom; an adjusting shaft arranged to project from said casing; a bracket-like support for said shaft mounted within said casing; connecting cords for said transom to said shaft, said cords being arranged to be oppositely wound on said shaft; an escutcheon plate through which said shaft projects adapted to retain said shaft in position in said bracket-like support; and means for securing said adjusting shaft in its adjusted position.

8. In a structure of the class described, the combination with a casing, of a transom; an

adjusting shaft arranged to project from said casing, said shaft comprising two adjustably connected parts; connecting cords for said transom to said shaft, said cords being arranged to be oppositely wound on said shaft, one cord being connected to each part thereof.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

JOHN H. GILMAN. [L. S.]

Witnesses:

CLORA E. BRADEN,

JESSIE MCILVAINE.