

UNITED STATES PATENT OFFICE.

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TRANSOM-LIFTER.

SPECIFICATION forming part of Letters Patent No. 476,037, dated May 31, 1892.

Application filed March 25, 1892. Serial No. 426,399. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. COLTON, a citizen of the United States, residing at Chicago, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Transom-Lifters, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in transom-lifts; and among the objects in view are to provide for the maximum amount of travel of the stirrup with the least amount of movement of the screw, to prevent loss of the screw by being turned out too far, to insure positive lock of the rod, and to provide a neat and efficient transom-lift in which the parts can be readily assembled and not liable to get out of order or lost. I provide a saddle or stirrup with a pin or projection to engage an opening in the back of the rod and screw-thread the shank of this stirrup into or upon the body of the operating-screw, which is oppositely threaded into or upon the support thereof, through which latter the rod works in an elongated aperture. A spring is interposed to normally keep the rod and projection on the stirrup in engagement and hold the same locked. Slight movement of the screw in one direction gives the stirrup considerable travel. With the screw turned in one direction the rod is pressed to its innermost position, from which it is easily moved outward against the tension of the spring when it is desired to move the rod in either direction. With the screw turned in the other direction the rod is drawn and held against the outer walls of the slot in which it moves, and at the same time the stirrup is drawn outward with its pin or stop still in engagement with the hole or notch in the rod, thus making it a burglar-proof lock.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a face view with a portion in

section, showing my improvements. Fig. 2 is a central longitudinal section through the rod and my improvements. Fig. 3 is a horizontal section on the line 3 3 of Fig. 2. Fig. 4 shows in perspective the parts constituting my present invention separated, but in their relative positions. Fig. 5 is a section through a modified form of lock and stirrup. Fig. 6 is a section through a modified form of stirrup.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the rod, provided upon its rear face with a plurality of holes or notches *a* and at one end with a thumb or finger piece *A'* of any known or approved form. The upper end is designed for connection in any suitable way with a transom of any construction. In any event the operation will be substantially as hereinafter explained. The upper end of the rod may be guided in any suitable manner—as, for instance, by a guide-eye B, which may be held to its base *B'* in any suitable way, rotatably or not, as may be preferred. The lower end of the rod is guided through elongated openings *c* upon opposite sides of the shell C, which is secured to the base in any desired manner and the base held to the casing by any approved means.

The shell C has a neck *C'*, with which the stem or body *d* of the screw D engages. As shown in Figs. 2 and 3, the neck of the shell is interiorly threaded and the stem of the screw is exteriorly threaded to engage with the same, and the stirrup or saddle E has a shank *e*, which is exteriorly threaded to engage interior threads on the body *d* of the screw. The stirrup is designed to encircle the rod A, and upon its inner face is provided with a teat or cross-bar *e'* to engage the holes or notches in the back of the rod, as seen in Figs. 2 and 3.

Instead of making the body *d* of the screw with exterior threads, as seen in Figs. 2 and 3, I may sometimes form the neck of the shell with exterior threads and the flange of the screw with interior threads to engage therewith and the body of the screw with exterior threads to engage an interiorly-threaded socket in the stirrup or saddle, as seen in Fig. 5. This is the preferable form for some

reasons, as it makes a more compact arrangement and there is not so much projection from the casing.

F is a spring confined in the shell, and, as shown in Figs. 2 and 3, it is held between the front face of the rod and the shoulder c^3 of the neck of the shell, and the shank of the stirrup passes through the spring. In the form shown in Fig. 5 the spring is held in position within the shell with one bearing-point against the front face of the rod and the other against the head or outer end of the screw.

I may sometimes form the saddle or stirrup with a separate teat e' , as seen in Fig. 6, and I may also sometimes bore the body of the shank, as seen in Fig. 6, and arrange the spring within the chamber thus formed, as seen in Fig. 6.

The parts are readily assembled before the rod is passed through the holes in the shell. The screw-nut and the shank of the stirrup are oppositely threaded either to the right on the shank or vice versa; but it is preferred that the nut should be left-hand, as by this construction the same is turned in the usual direction to lock the rod against movement and persons not familiar with the construction would have no difficulty in manipulating the same. The stirrup moves with the screw-nut, and but slight movement of the nut is required to move the rod either in or out. With the nut turned to the left, as in Fig. 2, the stirrup is at its inmost throw and the rod free to be moved outward to disengage it from the pin of the stirrup, and the rod can then be pushed up or down, as may be desired. When the nut is turned to the right, it draws the stirrup and rod outward until the rod bears against the outer walls of the slots in the shell and the parts are firmly locked against all movement.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as new is—

1. A transom-lift rod, lock, and guide com-

prising an apertured shell, a stirrup movable therein and embracing the rod, and a screw-nut having screw-threaded engagement with the shell and engaging the stirrup, substantially as specified.

2. The combination, with a shell having passages for the rod and threaded neck, of a stirrup having threaded shank and a screw-nut having stem threaded for engagement with the neck and with the stirrup, substantially as specified.

3. The combination, with a shell having passages for the rod and a threaded neck, of a stirrup having threaded shank and embracing the rod and a screw-nut having a stem having threaded engagement with the neck and with the shank of the stirrup, the stem of the stirrup and the stem of the nut being oppositely threaded, substantially as and for the purpose specified.

4. The combination, with a shell having threaded neck and passages for a rod, of a screw-nut having a stem with threaded engagement with the neck of the shell, a stirrup embracing the rod and having threaded engagement with the nut, and a spring arranged within the shell and bearing upon the outer face of the rod, as set forth.

5. The shell having opposite apertures for the rod and an interiorly-threaded screw-neck, a stirrup having exteriorly-threaded shank and cross-bar, a spring, and a screw-nut having stem threaded exteriorly and interiorly, the parts being detachable and adapted to serve with a transom-lift rod, substantially as specified.

6. A stirrup for a transom-lift, having a cross-bar, and a threaded neck and aperture for the rod, the neck being bored for the reception of a spring, as set forth.

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

GEORGE A. COLTON.

Witnesses:

HENRY H. MUNGER,
CHAS. L. MUNGER.