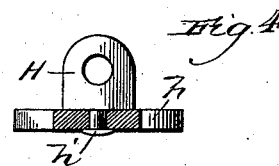
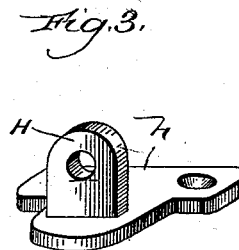
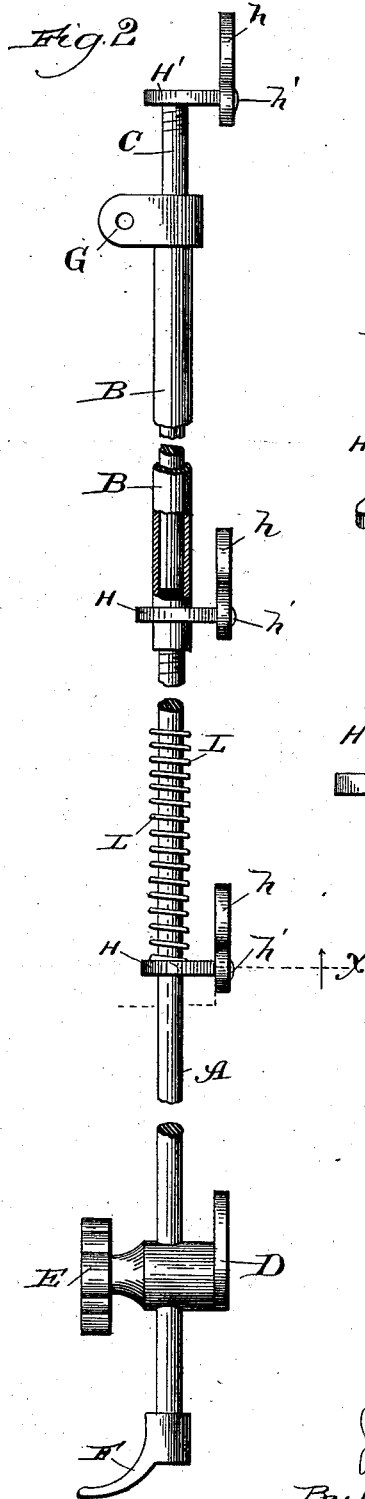
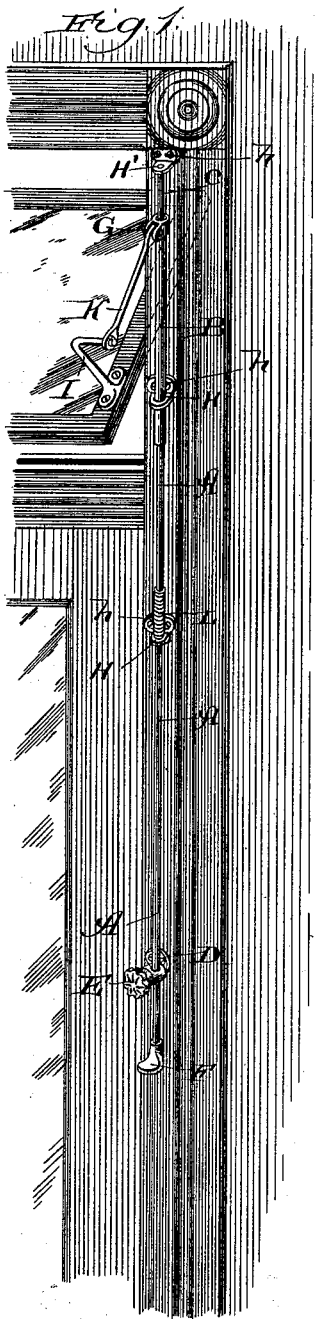


(No Model.)

J. F. WOLLENSAK.
TRANSOM LIFTER.

No. 384,182.

Patented June 5, 1888.



Witnesses:
Edw. C. Gaylord
George S. Payson

Inventor:
John F. Wollesak
By *Banning & Banning*
Attys

UNITED STATES PATENT OFFICE.

JOHN F. WOLLENSAK, OF CHICAGO, ILLINOIS.

TRANSOM-LIFTER.

SPECIFICATION forming part of Letters Patent No. 384,182, dated June 5, 1888.

Application filed January 14, 1888. Serial No. 260,764. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. WOLLENSAK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Transom-Lifters, of which the following is a specification.

This invention is an improvement upon my Patent No. 310,352, dated January 6, 1885, wherein a hollow lifting-rod was shown having a continuous bearing upon the stationary guide-rod.

The object of my present improvement is to dispense with the long hollow lifting-rod having a continuous bearing upon the stationary guide-rod, and in place thereof to substitute a lifting-rod solid at its lower end and hollow above, the hollow part bearing upon a guide-rod fixed at its upper end only, and also to provide the lifter with guide-eyes whose feet or flanges, by which they are attached to the door-frame, may be changed from one side of the lifting-rod to the other without removing the eyes from the rod.

In the drawings, Figure 1 is a perspective view of my improved transom-lifter in position for use upon a door-jamb. Fig. 2 is a side elevation thereof, partly in section. Fig. 3 is a perspective view of one of the guide eyes, and Fig. 4 a vertical section of a guide-eye upon the line *x x* of Fig. 2.

A is the lifting-rod; B, the tubular portion thereof; C, a guide-rod; D, the shell of the fastener; E, a thumb-screw binding the rod in the shell D; F, a handle for operating the rod; G, a collar encircling the upper end of the tubular portion of the lifting-rod; H, guide-eyes attached to the door-jamb; H', the upper eye, in which the upper end of the guide-rod is fastened; *h*, the adjustable flange thereof; *h'*, a pin or rivet passing through the adjustable flange and fixed to the guiding-piece of the guide eye; I, a bracket attached to the sash; K, a lifter-arm connecting the bracket I and the collar G, and L a spring surrounding the solid portion of the lifting-rod.

In constructing my improved transom-lifter I take a solid rod and screw or fasten one end thereof into a tube, which may be either an entire tube or so nearly one as to serve the purpose hereinafter described. This tube in

its turn passes over another rod also fixed at the upper end to the door-jamb in such a manner as to permit of the free play of the tube up and down upon this latter rod. The lower end of this tube passes through a guide-eye screwed to the jamb, and is thus prevented from being forced by the weight of the sash against the door-jamb, the guide-eye being so placed that even when raised to its highest position the lower end of the tube will not pass above it. Below this guide-eye I place another guide having immediately above and resting upon it a spiral spring, through which the solid portion of the lifting-rod passes, and upon which spring the tubular portion of the rod strikes when lowered. At the upper end of the tube I fasten in a secure manner a collar which is to be connected suitably with the lifting-arm of the transom, and which being carried up and down by the motion of the lifting-rod will move such arm, thus opening or closing the transom. I do not intend, however, to confine myself to the exact form of collar shown in the drawings, as the lifting-arm may be attached in any suitable manner to the tube.

In operating my transom-lifter I pass the solid portion of the lifting-rod through the fastener and guide-eyes, and screw or fasten its upper end firmly into the tubular portion. Into the upper end of this tubular portion I insert the lower end of the guide-rod C, and then attach the whole securely to the door-jamb or other place in which it may be desired to use the same by fastening the guide-eyes in place and attach the lifter-arm to the tubular portion. The operator by shoving upward upon the lifting-rod moves the tubular portion thereof up upon the guide-rod, which, carrying the lifting-arm with it, opens the sash. The reverse movement closes it. The lifting-rod is to be held in position by a thumb-screw or other device. In the downward movement of the tube it strikes upon the spring placed above the lower guide-eye, and its fall being softened thereby any breaking of glass by a too sudden or accidental lowering is prevented.

With the guide-eyes formerly in use, when it has been desired to adjust them upon one side or the other of the rod, it has been necessary to remove them entirely from the rod. This defect I obviate by forming these eyes, as

shown in the drawings more particularly in Fig.

4. I make the eye in two pieces joined together at right angles by a pin or rivet passing through the flange, which is provided with 5 holes to be screwed to the jamb, and into the piece which, projecting outwardly from the door, serves to guide the lifting-rod. From this mode of construction it results that the flange may be rotated about the pin, and thus changed 10 from one side of the rod to the other into any position in the plane of the door-jamb and need not be removed for the purpose of adjusting it.

The lower portion of the lifting-rod is described as solid. By this I mean that it does 15 not contain within it any guiding-rod as does the upper tubular portion, although of course it might be made of hollow material, if preferred.

What I claim as new, and desire to secure 20 by Letters Patent, is—

1. In a transom-lifter, guide-eyes comprising a guiding-collar and a flange pivotally con-

nected thereto, whereby the flange is adjustable in any position in the plane of the place to which it is attached, substantially as described. 25

2. In a transom-lifter, the combination of a lifting-rod comprising a lower solid portion and an upper tubular portion having a bearing on a solid guide-rod fixed at the upper end, and a solid guide-rod fixed at the upper end 30 and furnishing a bearing for the hollow lifting-rod, substantially as described.

3. In a transom-lifter, the combination of a lifting-rod comprising a lower solid portion and an upper tubular portion bearing upon a 35 guide-rod fixed at the upper end, a guide-rod fixed at the upper end furnishing a bearing for the hollow lifting-rod, a lifting-arm, and adjustable guide eyes, substantially as described.

JOHN F. WOLLENSAK.

Witnesses:

WILLIAM E. GILL,
GEORGE S. PAYSON.