J. F. WOLLENSAK.

TRANSOM-LIFTERS AND SASH CENTERS COMBINED.

No. 184,125. Patented Nov. 7, 1876.

*Fig. 1.*

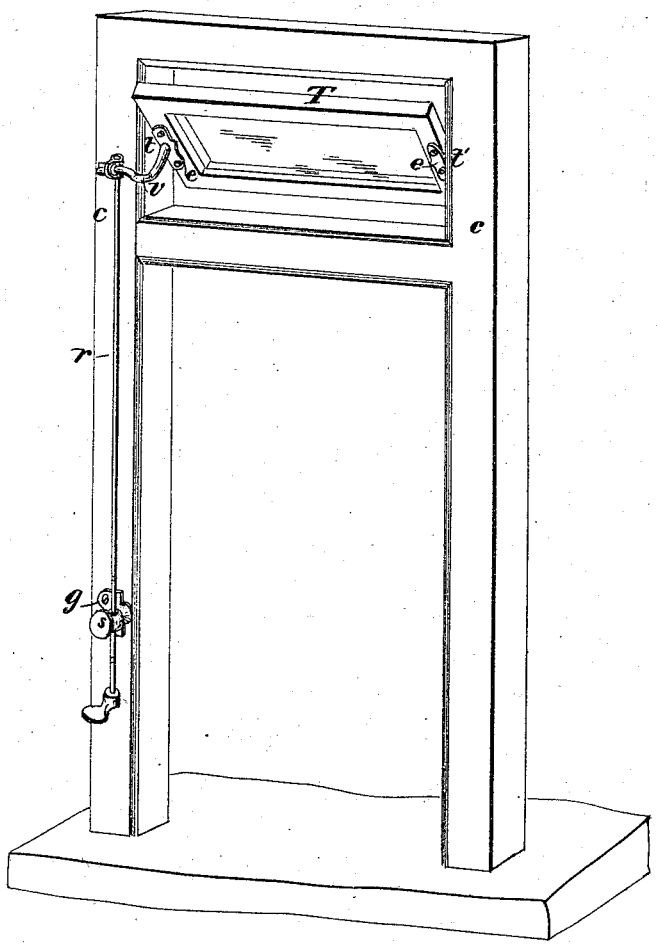
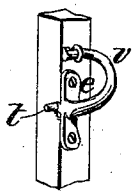



*Fig. 2.*


*Fig. 3.*

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# UNITED STATES PATENT OFFICE.

JOHN F. WOLLENSAK, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN TRANSOM-LIFTER AND SASH-CENTER COMBINED.

Specification forming part of Letters Patent No. **184,125**, dated November 7, 1876; application filed August 7, 1876.

*To all whom it may concern:*

Be it known that I, JOHN F. WOLLENSAK, of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Combined Transom-Lifter and Sash-Center; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation, and Figs. 2 and 3 are views showing details of the construction.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention is an improvement upon the transom devices patented to me by Letters Patent of the United States, No. 136,801, dated March 11, 1873, and 148,538, March 10, 1874; and consists in a new construction of the centers or pivots upon which the transom is journaled, and in the combination therewith of the lifting and locking rod; by which the transom is operated from below.

In the drawings, *c* is the casing of the door and transom-opening, and T is the transom, secured to the casing by trunnions *t t'*, which are attached to the face or back of the transom-sash by means of screws or rivets passing through their inner ends, such inner ends being expanded and made flat, as shown at *e*, to fit the sash and accommodate the fastening screws or rivets.

The plates of one or both pivots may be adapted to fit the end edges of the transom-sash instead of its face or back; but such construction would be less desirable than that shown in the drawings. One of the pivots is cast or constructed with an arm, *v*, projecting from it in such a direction that its outer end will come in line with the lifting and locking rod *r*, which, extending through one or more guides, *g*, is adapted to be locked by a clamping-screw, *s*, as described in my former patents, above referred to.

The upper end of the rod is provided with a coupling-block, *m*, to which the end of the arm *v* is secured by a bayonet-joint, such as is well known in thill-couplings, and clearly shown in Fig. 2. By raising the rod *r* the transom is closed.

The end of the arm *v*, carrying the coupling-block *m*, forms a stop, which, striking against the casing, arrests the movement of the transom when it is either completely closed or opened, and assists in holding it in position.

Sash-centers have been heretofore applied to the edge of the sash, requiring a slot to be cut out of the face of the frame or casing to admit the pivots, thereby marring the appearance of the structure, and necessitating the use of short pivots, and the consequent liability of the sash to fall out as soon as the wood shrinks. But with my improved construction the cutting away is avoided, the sashes may be made to fit closely in the frames, and pivots of any desired length can be used, thereby avoiding all danger of the falling of sash, however the wood may shrink.

The curving of the arm *v* to form a stop, furthermore, obviates all necessity for stops or rabbets on the sash-frame, and dispenses with all joints and friction-rollers. It also renders the longitudinal movement of the lifting-rod short and almost vertical, thereby overcoming a great objection to those now in use.

The construction thus possesses all the merits of my former invention with other new and important advantages not heretofore obtained in this class of devices.

The curving of the arm *v* downward so as to cause the raising of rod *r* to open, and the lowering of said rod to close, the transom would, of course, be an obvious equivalent of the construction here shown. So, too, the attachment of one pivot to the front or back, and the other to the edge, of the sash will be a mere equivalent, as it enables both pivots to be made of any suitable length, and applied without cutting away the wood-work.

I claim as my invention—

1. A transom-pivot, *t*, constructed with a flat supporting and fastening plate, *e*, provided with holes, through which to screw or

rivet it to the face of the sash, said pivot projecting at right angles to the edge of the plate, as set forth.

2. A transom-pivot, *t*, combined with a projecting arm, *v*, formed as a portion thereof, by which to operate the transom-sash, substantially as described.

3. In combination with a transom pivoted in line with or near its center, a curved arm, *v*, adapted for connection with the lifting-rod, and also to operate in connection therewith as a stop to limit the movement of the transom-sash, substantially as described.

JOHN F. WOLLENSAK.

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