(No Model.)

E. S. MERRILL.

TRANSOM LIFTER.

No. 532,080. Patented Jan. 8, 1895.

Fig. 2.

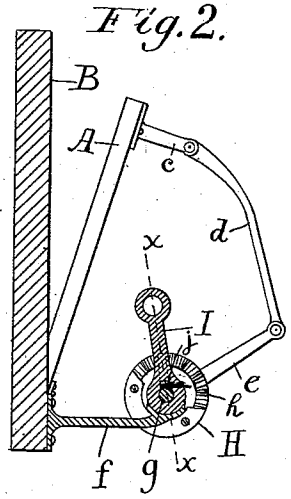


Fig. 1.

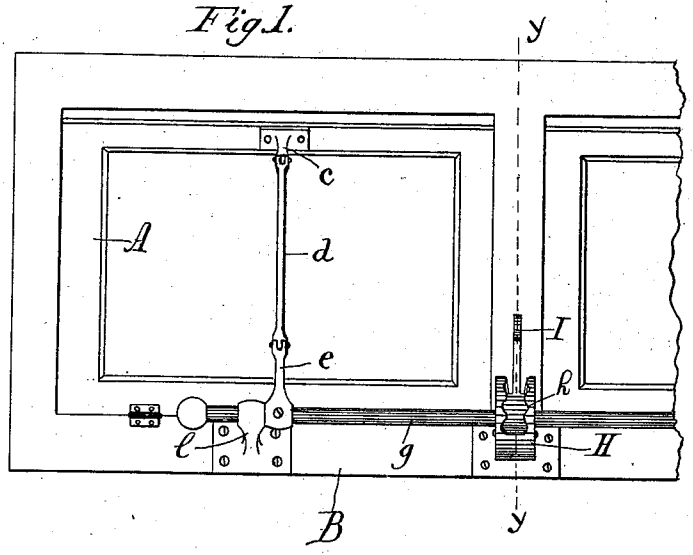


Fig. 4.

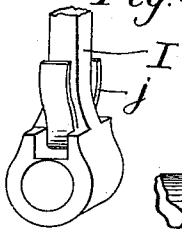
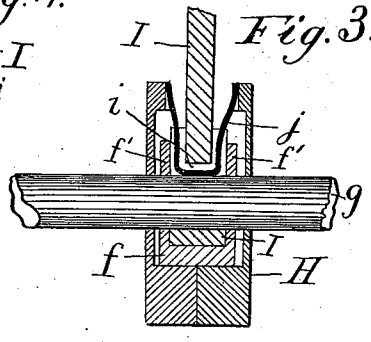


Fig. 3.



Witnesses:
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Inventor:
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by S. W. Bates
his Atty.

UNITED STATES PATENT OFFICE.

EDWARD S. MERRILL, OF PORTLAND, MAINE.

TRANSOM-LIFTER.

SPECIFICATION forming part of Letters Patent No. 532,080, dated January 8, 1895.

Application filed April 24, 1894. Serial No. 508,783. (No model.)

To all whom it may concern:

Be it known that I, EDWARD S. MERRILL, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Devices for Operating and Securing Transoms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a device for operating and securing transom lights and it is more particularly designed to be used in connection with the swinging ventilators such as are used in street cars and railway cars, &c.

The main object of the device is to apply to the operating mechanism a holding appliance which will retain the ventilator in any desired position.

The operating mechanism to which my invention has been particularly adapted consists of a shaft journaled adjacent to the ventilator; an arm on said shaft opposite each ventilator and a link connecting said arm with the sash of the ventilating window.

By the application of my device to be hereinafter described, the shaft may be firmly retained in any desired position.

I have illustrated in the accompanying drawings a car ventilator fitted up with my improved holding device.

In the drawings, Figure 1 is a front view. Fig. 2 is a section on the line *y y* of Fig. 1. Fig. 3 is an enlarged section on the line *x x* of Fig. 2, and Fig. 4 is a detail of the handle lever.

B represents as herein shown, the casing of the car, and A is the swinging ventilator sash hinged at the bottom and swinging out from the top. The sash is operated by a rod or shaft *g* journaled in suitable bearings *l* (only one of which is shown) and having an arm *e* opposite each sash. The arm *e* is connected with the sash by means of a link *d* pivoted by one end to the end of the arm *e* and by the other to the arm *c* attached to the upper part of the sash A.

The mechanism already described is old and well known and its operation will be readily understood from its construction.

I secure to the shaft *g* a handle lever I of any suitable shape for the purpose of turning said shaft. The lever I is secured on the shaft between the ends of two ears *f'* on the end of a stud *f* which is secured to the casing B. A cylindrical casing H made as herein shown in two parts, is attached to the stud *f* and surrounds the handle lever I, the shaft *g* passing through the center of said casing H. The cylindrical casing H has a peripherical slot or opening within which the lever I swings for the purpose of turning the shaft and the inner surface of this opening, or that portion next the lever I, is formed into teeth or corrugations *h*.

The lever I is provided near where it is attached to the shaft with a lateral opening *i* through which passes a U-shaped spring *j* which extends up at each side of the lever I and fits in the corrugations *h* of the casing H. A recess is formed in the lever I adjacent to the opening *i* where the spring passes through to form a bearing for the edges of the spring and to prevent it from slipping. It will be readily seen that the force of the spring will force the ends thereof into the corrugations *h*, and so hold the lever and the shaft firmly in place. The tension of the spring and the form of the corrugations are such that the ends of the spring will slip from one recess to the other as the lever is turned but it will hold the lever in place against all ordinary jarring, the action of the wind and other causes which would ordinarily tend to force it open.

It is evident that other forms of spring than that herein shown may be secured to the lever I in such a way as to play in the corrugations *h* so that I do not wish to limit myself to the U-shaped spring described.

I claim—

1. The herein described device for operating and securing transom lights consisting of a shaft journaled in suitable bearings, levers connecting said shaft with the transom light, a handle lever secured to said shaft and having a transverse opening through it adjacent to said shaft, a U-shaped spring passing through said opening and having its ends projecting upward at each side of said lever, a cylindrical casing for inclosing the base of said lever said casing having a peripherical slot or opening within which the le-

ver swings, the sides of said slot or opening having corrugations into which the ends of said spring fit to hold said lever in place.

2. The herein described device for operating and securing transom lights consisting of a shaft journaled in suitable bearings, levers connecting said shaft with said transom light, a handle lever secured to said shaft, a spring secured to said lever and having a free end extending out from the side thereof, a cylindrical casing for inclosing the base of said lever, said casing having a peripherical slot or opening having corrugations into which the end of said spring fits to hold said lever in place.

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

EDWARD S. MERRILL.

Witnesses:
S. W. BATES,
E. L. STANWOOD, Jr.