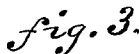
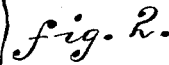
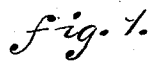


S. A. BISHOP.  
TRANSOM LIFTER.

Patented Sept. 16, 1884.



N.B. Brown  
W. P. Stevens.

INVENTOR:  
S. A. Bishop  
BY Munn & Co

N. PETERS. Photo-Lithographer, Washington, D. C.

# UNITED STATES PATENT OFFICE.

SAMUEL A. BISHOP, OF SMETHPORT, PENNSYLVANIA.

## TRANSOM-LIFTER.

SPECIFICATION forming part of Letters Patent No. 305,274, dated September 16, 1884.

Application filed March 19, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL A. BISHOP, a citizen of the United States, residing at Smethport, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Transom-Operators, of which the following is a description.

This invention relates to that class of devices used for opening and closing transoms, skylights, and other windows which are out of reach. The object of the invention is to hold the transom when closed, to apply power advantageously in opening it, and to hold it braced in the open position.

To this end my invention consists in the construction and combination of parts forming a transom-operator, hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical section of a portion of a house, showing my device in side elevation. Fig. 2 is a front elevation of the same, and Fig. 3 is a horizontal section at *x x* of Fig. 1.

A represents a window or door casing.

B is the transom window sash, hinged, as usual, at C, to the casing A.

D is a bell-crank lever, which is one of the main characteristics of my invention. This lever is pivoted to a base-piece, E, which is firmly secured to the window-casing A. It is provided with two arms, *d* and *d'*. The arm *d* is connected with the transom by a rod, F, in which there is an offset or crook to accommodate the form of the casing. Rod F is pivoted to the transom by a base-piece, G.

H is the operating-rod, which will be made of a length suitable to bring its handle *h* within reach of persons standing on the floor. The upper end of rod H is connected with the arm *d'* by a rod, J. In operation the rod *h*, being drawn down, tips the bell-crank lever backward and opens the transom to the position shown in dotted lines. By pushing the rod upward the transom will be closed. It will be seen that the arm *d'* is in a position, when the transom is closed and likely to be stuck fast, to be acted on to the best advantage by the hand-rod H.

As a modification, I may use a cord, L, in-

stead of the rod H. In this case the cord will pass over a pulley, M, and down again, so that both ends are within reach. The pulley will be mounted in a bearing which is secured to the casing higher than the transom-operator. One strand of the cord will be secured to the arm *d'*. By pulling upon this strand the transom will be opened, and by pulling upon the other strand the transom will be closed. There may be knobs low down on the casing, and holes or loops in the bar H or cord L, to engage the same to hold the transom closed, or to hold it open to any extent desired.

For operating skylights, the same device is applicable, the cord attachment serving best, guides being placed to carry the cord as may be required.

The two arms *d* *d'* of the lever D are parallel at their outer ends for about one-half their entire length. About midway each arm bends toward the other at an angle of forty-five degrees, forming a base to rest on the window-casing. The base of the arm *d* prevents the window being pushed farther than to its jamb, so that the window cannot be slammed shut. The base on arm *d'*, when the lever is drawn down, will rest on the casing and support the window in its open position, as shown in dotted lines, the arm *d'* being now at *d''*. Thus the lever D, with its two bases, serves to stop the window either in its open or closed position.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with a hinged transom, of a bell-crank operating-lever hinged upon the transom-casing, a connection hinged at one end to the transom and at the other to one arm of the bell-crank, an operating-rod, and a connection hinged at one end to the rod and at the other end to the opposite arm of the bell-crank, the said bell-crank having two bases nearly at right angles to each other to rest on the window-casing, as described.

SAMUEL A. BISHOP.

Witnesses:

DELANO R. HAMLIN,  
ROBT. KING.