

(No Model.)

2 Sheets—Sheet 1.

J. FINNEGAN.
TRANSOM LIFTER.

No. 466,739.

Patented Jan. 5, 1892.

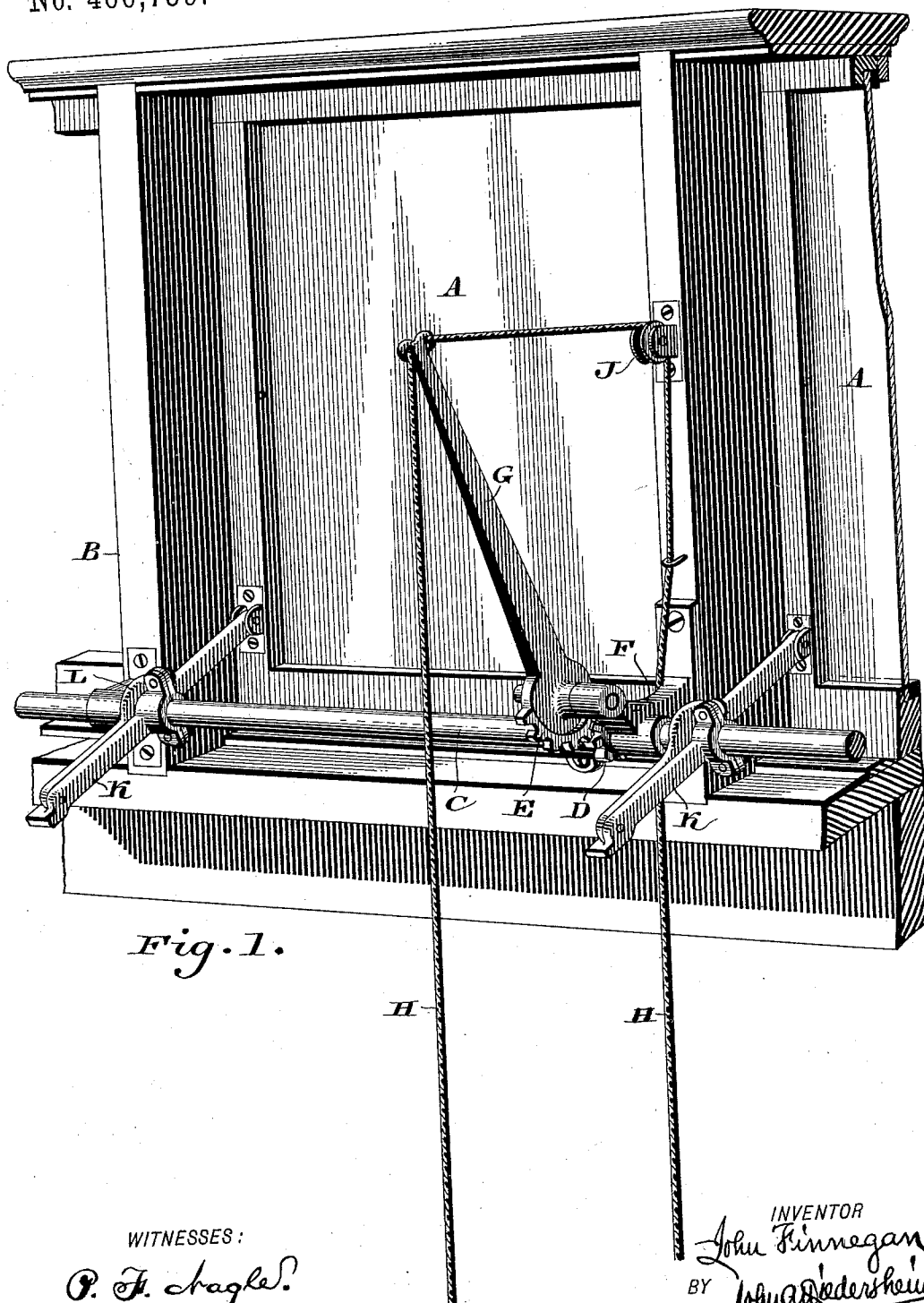


Fig. 1.

WITNESSES:

P. F. Chagler.
L. Douville.

INVENTOR
John Finnegan.
BY John A. Gersheim.
ATTORNEY.

(No Model.)

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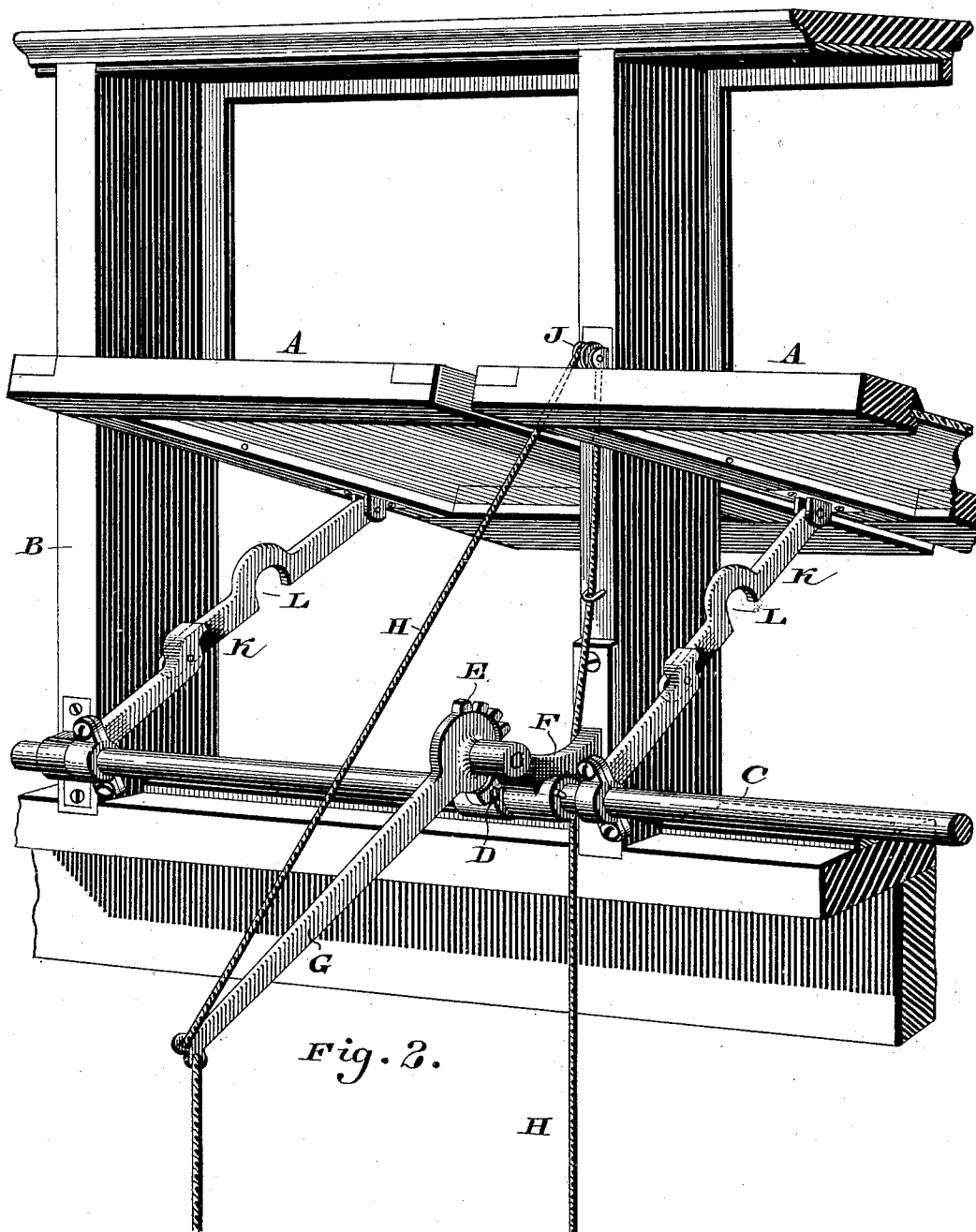


Fig. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN FINNEGAN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THOMAS
DEVLIN & CO., OF SAME PLACE.

TRANSOM-LIFTER.

SPECIFICATION forming part of Letters Patent No. 466,739, dated January 5, 1892.

Application filed October 24, 1891. Serial No. 409,645. (No model.)

To all whom it may concern:

Be it known that I, JOHN FINNEGAN, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Transom-Lifters, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a lifter for a transom, ventilator, shutter, window, &c., the same being constructed of a rock-shaft, a toggle-lever connected with said shaft and a transom, &c., a pinion on said shaft, and a toothed segment which meshes with said pinion and carries a lever, whereby by the operation of said lever the transom, &c., may be quickly, conveniently, and easily closed and opened, as will be hereinafter fully set forth.

Figures 1 and 2 represent perspective views of a transom or other window, respectively, in closed and open positions.

Similar letters of reference indicate corresponding parts in the two figures.

Referring to the drawings, A designates windows of the order of transoms or ventilators, and B designates the supporting-frame thereof. On the sill or other proper part of said frame is mounted the horizontally-arranged rock-shaft C, to which is keyed or otherwise secured the pinion D, with which meshes the toothed head or segment E, the latter being mounted to the bracket F on the frame B and connected with the lever G, whereby motions in reverse order may be imparted to said segment, and consequently to the rock-shaft C.

H designates cords, which are attached to the outer end of the lever G and extending therefrom in opposite directions, one of the cords passing over the pulley J on the frame B, both cords hanging in such manner as to be conveniently grasped and drawn down. In the present case the cords are continuous of each other; or, in other words, a single cord is employed, a proper portion of the

same passing through eyes in the lever as a means of attachment to the latter.

To the shaft C are secured the toggle-levers K, the latter being also attached to the windows A and having recesses L in the under side thereof, whereby said levers may fold closely on the shaft C when the windows are closed.

It will be seen that when one of the cords H is drawn or pulled it operates the lever G so as to rotate the pinion D and the shaft C, and thus unfold the toggle-levers, whereby the windows are opened. (See Fig. 2.) When the other cord is drawn or pulled, the lever is operated in reverse direction, whereby the toggle-levers are folded, and the windows accordingly drawn in and closed. (See Fig. 1.) In either case the windows remain in the position in which they are placed and cannot move until the lever G is operated, as the toggle-levers are out of center, whether folded or unfolded. It will also be seen that the lever is enabled to make a long sweep, and thus it quickly and easily operates the rock-shaft and connected parts.

I am aware that it is not new to employ a lever with a segmental head, a rock-shaft, on which said lever is mounted, and toggle-levers connected with said rock-shaft and windows for operating the latter, as shown in Letters Patent No. 396,357, dated January 15, 1889; but in said patent the segmental head is necessarily grooved for the reception of the operating-cord, and said lever has two arms, the same being on opposite sides of the rock-shaft. In the present case a single lever is employed, both lengths of the cord are connected with said lever, and the toothed segment and pinion are positive in their operation of the rock-shaft.

Wherefore I have made an improvement in the art, and claim as my invention—

1. A transom-lifter consisting of a rock-shaft, a toggle-lever connected with said shaft and the transom or window, said lever having a recess in its under side, a pinion on

said shaft, a toothed segment meshing with
said pinion, a lever carried by said segment,
and cords connected with said lever, said
parts being combined substantially as de-
scribed.

5 2. A toggle-lever adapted to be pivoted to
a window, a rock-shaft with which said lever
is attached, a pinion on said shaft, a toothed
segment meshing with said pinion, and an

operating-lever carried by said segment, said ro
parts being combined substantially as de-
scribed, forming an improvement in transom-
lifters, as stated.

JOHN FINNEGAN.

Witnesses:

JOHN A. WIEDERSHEIM,

A. P. JENNINGS.