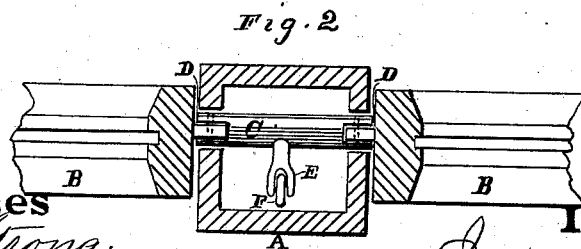
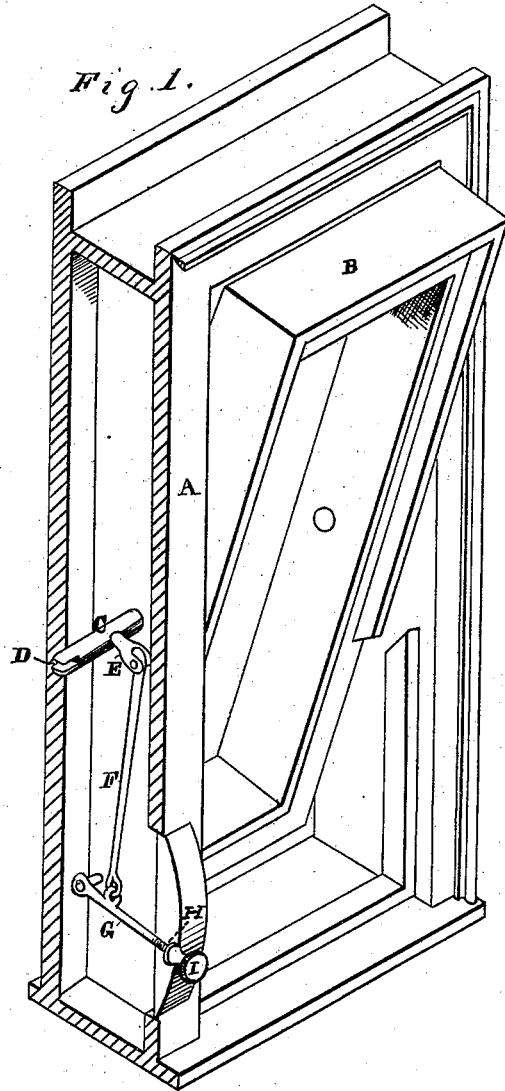


J. KELLY.
 Devices for Operating Window and Transom.
 No. 199,649. Patented Jan. 29, 1878.



Witnesses
Geo. H. Strong.
Jno. L. Borne

Inventor
James Kelly
By Dewey & Co. attys

UNITED STATES PATENT OFFICE.

JAMES KELLY, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN DEVICES FOR OPERATING WINDOWS AND TRANSOMS.

Specification forming part of Letters Patent No. **199,649**, dated January 29, 1878; application filed December 13, 1877.

To all whom it may concern:

Be it known that I, JAMES KELLY, of San Francisco city and county, State of California, have invented an Improvement in Devices for Operating Window-Sashes; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention without further invention or experiment.

My invention relates to certain improvements in devices for operating window-sashes, transoms and other doors, or the like, which are suspended so as to turn about an axis, and which may be situated out of convenient reach; and it consists in the novel combination of a rotating bar or axis with certain levers and connecting-rod, which communicate with a suitable set-screw or knob projecting out into the room, so that by a slight movement of the knob the window may be opened or closed, and it may likewise be secured by a turn of the knob, as hereinafter more fully described and claimed.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of my device. Fig. 2 is a horizontal section thereof.

A is the frame of a window, which is shown as containing two sashes, B B. In order to open or close these sashes they are mounted upon horizontal axes, so as to turn upon them.

My device is connected with these sashes in the following manner: C is a bar of wood or metal, of sufficient strength to serve the purpose. This bar is journaled horizontally, and extends into each of the sashes B, so as to serve as one journal for each, the other being opposite upon the outside. The bar C is slotted, as shown at D, to receive a stout plate,

which is fixed to the window-sash, so that when the bar is rotated the sash will also be turned; or the connection may be made by having a square end to the bar enter a square metal socket, or in any other suitable manner.

In order to operate this rotating bar C a short lever, E, projects from the center, and a connecting-rod, F, extends to any point where it is desired to place the operating-knob, and it will be manifest that this connection can be made in any direction and to any distance which may be desired. At the opposite end this rod F is connected with a lever, G, which projects out through a slot, H, conveniently made, so that a knob or screw, I, can be secured to the end of the lever for the purpose of operating it. This screw can be turned down, so as to fix the lever at any point at which it may be desired to have the sash stand, and when it is closed it is easily locked by means of this screw.

Having thus described my invention, I desire to secure by Letters Patent—

1. A device for operating turning sash, consisting of the rotary bar or journal C, connected with the sash or sashes B, and provided with the lever E, in combination with the connecting-rod F and lower lever G, substantially as herein shown and described.

2. The rotary bar C, lever E, connecting-rod F, and lever G, in combination with the locking and operating knob or set-screw I, substantially as herein described, for the purposes specified.

In witness whereof I have hereunto set my hand and seal.

JAMES KELLY. [L. s.]

Witnesses:

GEO. H. STRONG,
OLWYN T. STACY.