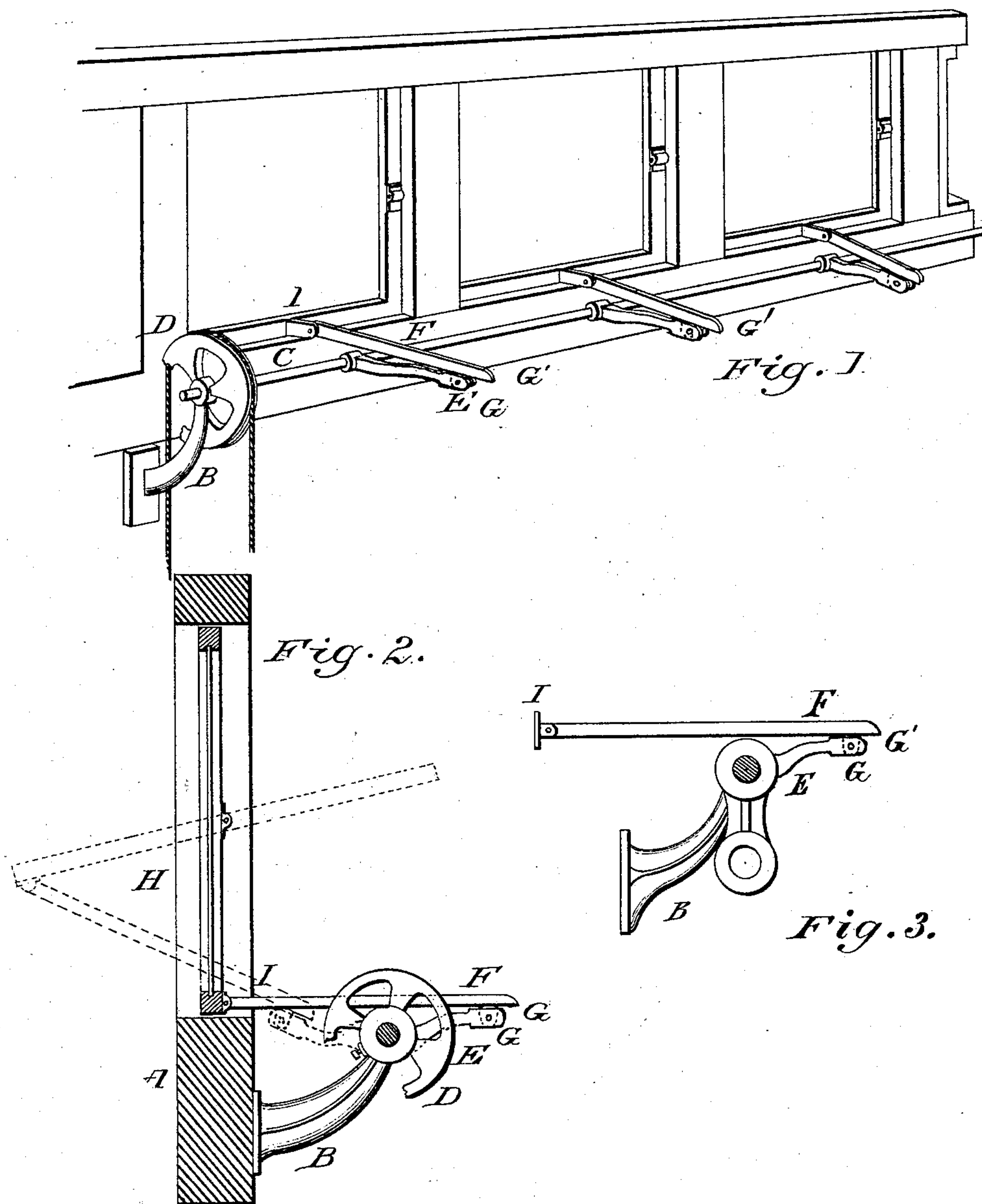


(No Model.)

G. HAYES.
TRANSOM LIFTER.

No. 280,035.

Patented June 26, 1883.



Witnesses:

Charles Hayes
E. J. Clark, Jr.

Inventor:

Geo. Hayes.

UNITED STATES PATENT OFFICE.

GEORGE HAYES, OF NEW YORK, N. Y.

TRANSOM-LIFTER.

SPECIFICATION forming part of Letters Patent No. 280,035, dated June 26, 1883.

Application filed April 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HAYES, a resident of the city, county, and State of New York, have invented a new and useful device for opening, closing, and self-locking (in either position) sashes or valves, of which the following is a specification.

The nature of my invention consists in a device arranged in combination with the sash or valve of a turret, clear-story window, or any other place where it may be advantageously employed, and by means of this device the sash or valve may be readily opened and closed and automatically locked in either position. The said device comprises the following elements, to wit: A lever or bar, one end of which is pivoted or hinged to the sash or valve; near its other end, beneath and hinged or pivoted to a lever or arm extending outward from (being attached to or upon) a shaft or axle supported by brackets attached to the wall, casing, or other suitable part of the structure the lever attached to the sash is provided with an extension or projection extending out beyond the point of its attachment to the shaft lever or arm, which extension constitutes a stop or lock to prevent the dropping of the joint when the levers are extended and the sash open. The combination of levers and their connection with the shaft or axle is such that when the sash is closed it cannot be opened from outside, being effectually locked shut. When open, the levers are extended in a line from the axle or shaft. The "stop" on the sash-lever, by preventing the dropping of the joint, effectually holds the sash open and prevents its being closed by the wind, &c. The shaft or axle is rotated by cords, pole with hook end, or any other suitable means, so that the sash or valve may be quickly and easily opened or closed from any distance below. By extending the shaft and duplicating the levers, &c., the same may be adapted to open and close a series of sashes or valves, as desired.

In the drawings accompanying, Figure 1 shows in perspective a series of clear-story sashes, inside of which, and at a suitable distance therefrom, is arranged a shaft having at one end a wheel or segment to which the shaft is connected. To the latter is attached the vibrating or revolving arm. The connecting-link or thrust-lever is shown attached to one

end of the vibrating arm by a joint with a stop projection. The other end of this link or thrust-lever is shown as attached to the sash by a joint or hinged connection. Upon the shaft a series of vibrating or revolving arms are shown with the connecting-link or thrust-lever connecting each with the sash, and there may be as many of these as there are sashes to be moved. Fig. 2 is a detail view, partially sectional, in which the entire combination of elements necessary to the complete device are shown in their proper connection. Dotted lines in this view are given to represent the movements and positions of sash or valve when open. Fig. 3 is a view showing an equivalent device in which a shaft may be dispensed with when used for one sash.

A represents clear-story wall, to which are attached brackets B, supporting the shaft C, forming journal or bearings therefor.

D represents the wheel, arranged to be revolved or partially revolved with the shaft C, to which it is secured.

E represents the vibrating or revolving arm or spur-lever, attached to the shaft C or wheel or its drum equivalent.

F represents the connecting or thrust lever, joined to the arm E at G by a joint having the extension G' as a stop to prevent the dropping of the joint when extended to full length, at which time the sash is open.

H represents the sash, pivoted or hinged either at center, top, or bottom, or any other suitable point, and to this is attached the connecting-lever F by a hinged or pivoted joint, about as at I.

In Fig. 3 is shown a modification. The operating-lever projects directly from the shaft or axle upon which it turns, (or with which) and an arm at an angle therewith is arranged for operating it by cord or hand.

What I claim, and desire to secure by Letters Patent of the United States, is—

The combination consisting of sash H, lever or bar F, stop G', lever or arm E, shaft C, and wheel, drum, or revolving lever D, constructed and arranged to operate as shown and described.

GEORGE HAYES.

Witnesses:

CHARLES HAYES,
HENRY WOOLLETT.