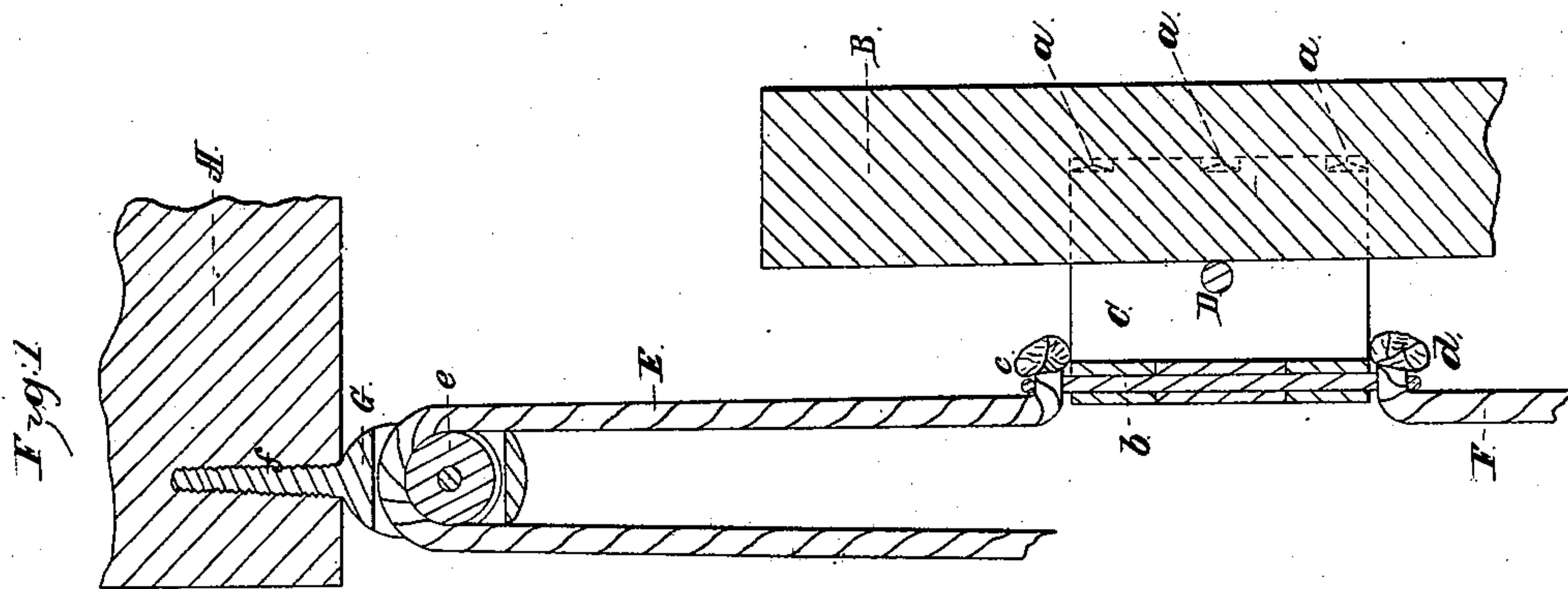
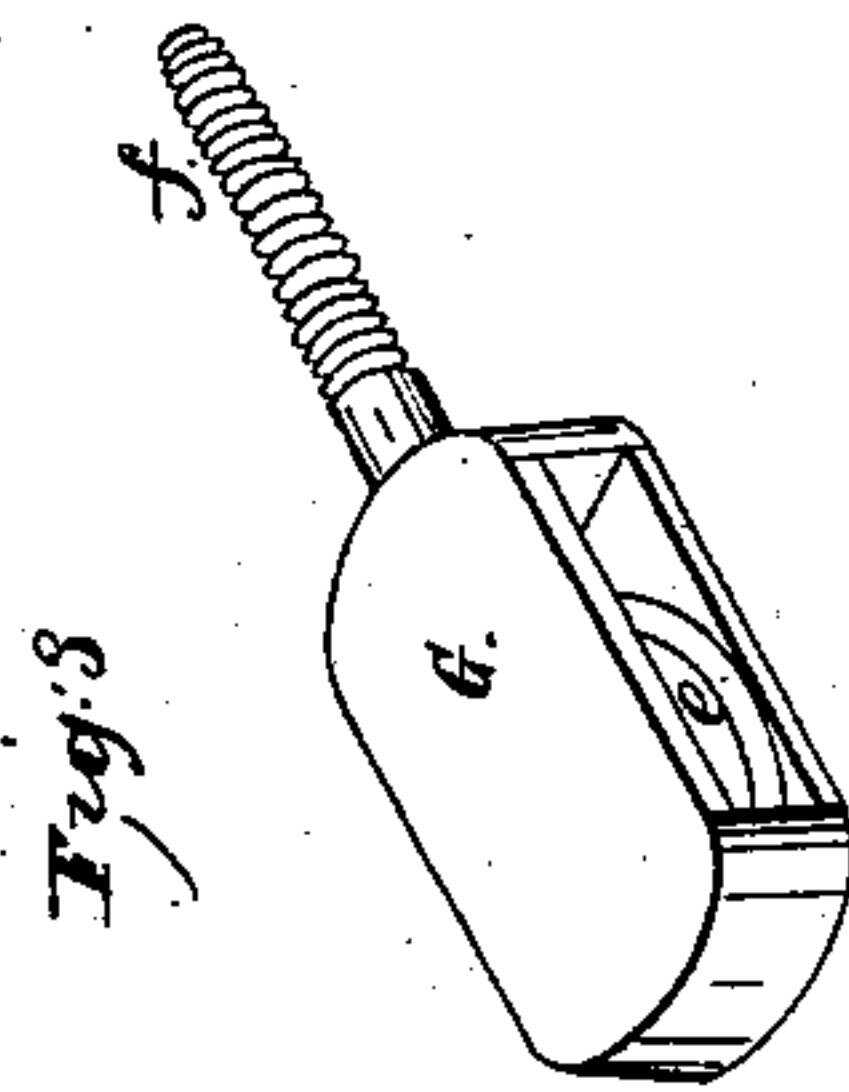
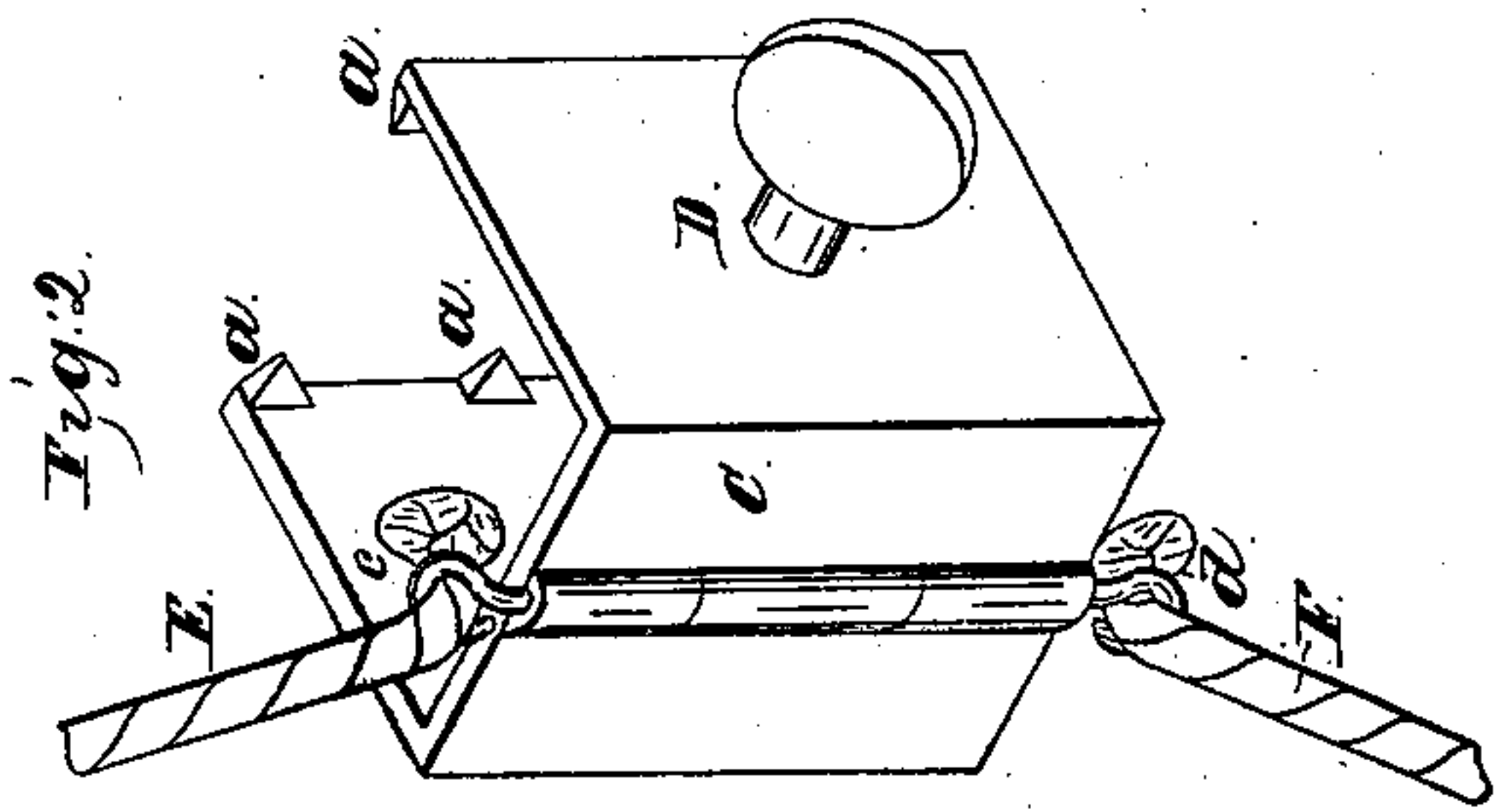


*J. Le Ferre,  
Sash Balance.*

*N<sup>o</sup> 64,988.*

*Patented May 21, 1867.*



*Witnesses:  
Samuel N. Piper.  
L. E. Batcheller.*

*Inventor:  
John Le Ferre  
By his Attorney,  
H. M. Mason & Son.*

# United States Patent Office.

JOHN LE FERRE, OF CHARLESTOWN, MASSACHUSETTS.

*Letters Patent No. 64,988, dated May 21, 1867.*

## IMPROVED WINDOW-SASH ELEVATOR.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN LE FERRE, of Charlestown, in the county of Middlesex, and State of Massachusetts, have invented a Window-Sash Elevator, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a vertical section through a window-frame and its sash, with my elevator applied thereto.

Figures 2 and 3, details, representing my elevator detached.

To provide a convenient means whereby a sash may be readily raised and lowered within its frame is the object of my invention, which consists in a hinged clamp confined at or near the upper end of the sash by a screw, the window being opened by pulling a cord, one end of which is secured to the upper end of the clamp, while the other end of the cord is led over a pulley pivoted to a block, the upper end of which is provided with a screw-thread for securing it in place in the upper side of the window-frame, a cord being also fastened to the lower end of the clamp for the purpose of pulling the sash down.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A is the window-frame, and B the sash, around which, at any convenient point, is clasped the hinged plate C, provided with projections *a*, which, after being placed against the sash, are prevented from slipping by clamping the screw D. The upper and lower ends of the rod or pin *b*, on which the hinged plate swings, is bent around in the form of eyes, *c d*, to which are secured cords E F, that, E, leading upward over a pulley, *e*, which turns freely in a block, G, the upper end of which is provided with a screw-thread, *f*, by which it is secured to the under side of the window-frame, the cord E leading down within reach of the party desirous of raising the window. The cord F leads directly down from its eye *d*, and is also within reach when the window is up and requires pulling down. It is evident that the hinged plate C may be affixed to the cross-bar at the upper end of the sash to be raised, instead of attaching it to the portion of the sash above shown and described, in which case the plate would occupy a horizontal instead of a vertical position, and the position of the eyes would be changed to conform to the requirements of the case.

### Claim.

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

The hinged plate C, with its projections *a*, eyes *c d*, and screw D, in combination with the block G, provided with its screw-thread *f*, and carrying the pulley *e*, substantially as and for the purpose set forth.

his  
JOHN X LE FERRE.  
mark.

Witnesses:

P. E. TESCHEMACHER,  
L. E. BATCHELLER.