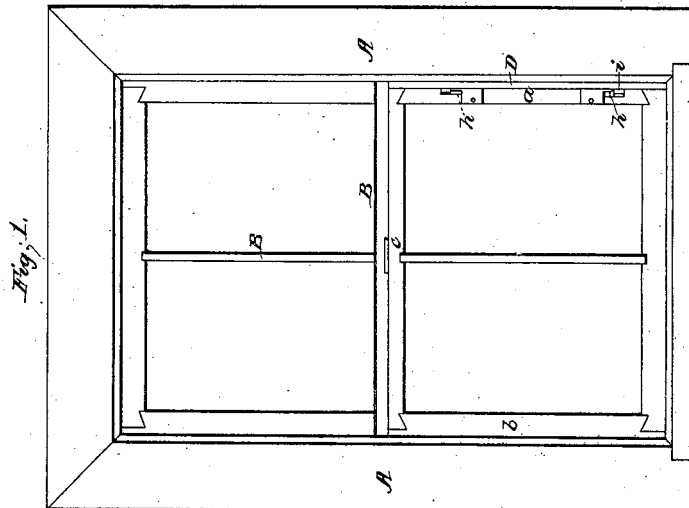
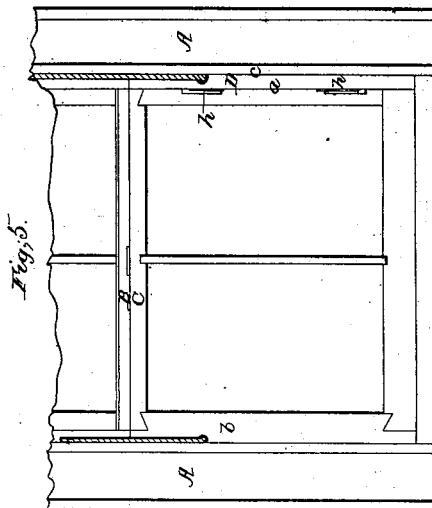
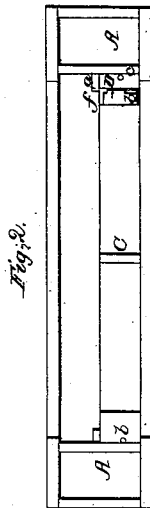
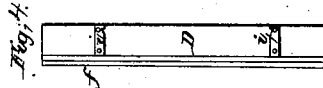
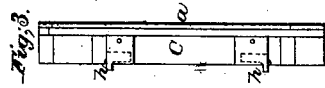


S. Wales.

Window

N^o 48,749.

Patented Jul. 11, 1866.



Witnesses;

*P. D. Hall Jr.
C. C. Fisher.*

*Inventor,
Sigmund Wales.*

*By his attorney,
R. H. Lutz.*

UNITED STATES PATENT OFFICE.

SIGOURNEY WALES, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN WINDOWS.

Specification forming part of Letters Patent No. 48,749, dated July 11, 1865.

To all whom it may concern:

Be it known that I, SIGOURNEY WALES, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Windows; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, in which—

Figure 1 is a front view of a window-frame and sashes as provided with my invention. Fig. 2 is a horizontal section taken through the lower sash and the window-frame. Fig. 3 is an edge view of the sash. Fig. 4 is a corresponding or inner side-view of the movable connection-piece of the sash. Fig. 5 is a vertical section of the sashes and window-frame and the said connection-piece.

The purpose of my invention is to enable a sash to be easily removed from the window-frame in order that the panes of the sash may be easily washed or cleansed.

In the drawings, A denotes a window-frame made in the ordinary manner, and having within it two sashes, B C, the frame being so constructed as to allow of either of the sashes being moved vertically within it.

In carrying out my invention I make the sash to which it is to be applied of a width somewhat less than the distance between the bottoms of its window-frame grooves diminished by the depth of one of them. In consequence of this I construct one side bar, *a*, of the sash C of a width less than that of the other, viz., *b*, and with the said sash and in the groove *c*, which is next adjacent to the lesser bar, *a*, I employ a connection bar or slide, D, to which I attach one of the cords of the sash balancing weights, the other cord being so connected to the under bar of the sash as to be easily disengaged therefrom after the sash may have been drawn out of the groove of the window-frame.

This connection bar or slide D may have a flange or rib, *f*, to overlap the outer side of the lesser bar of the sash in order to support the sash to better advantage than it would be were there no such flange or rib to the bar D. The said bar D, placed within the groove *c*, has the sash against it and its flange, and there should be bolts *h h* applied to the sash and catches *i i* applied to the bar D, for connecting the bar and sash together, such bolts being so arranged that they may be moved by a person when on the inner side of the sash. By withdrawing the bolts from their catches the sash and the connection-bar will be so separated as to enable a person to readily remove the sash from the window-frame and the bar D.

I would remark that in general only the lower sash of a window-frame need be provided with my invention, for it is that sash which is the most difficult to clean on the outside surface of its glass, on account of the necessity which exists of raising such sash in order to get access to the outside surface of its panes. As the lower sash while being raised will double or lap on the upper sash, access to the outer surface of the overlapping glass will be difficult, if not impossible, to be obtained.

What I claim as my invention is—

1. The combination and arrangement of the bar D and its fastening bolts and catches, or their equivalents, with the window-frame and the sash, the same being for the purpose as specified.
2. The combination of the flange or rib *f* with the bar D and the sash, applied together, and the window-frame, as described.

SIGOURNEY WALES.

Witnesses:

R. H. EDDY,
F. P. HALE, Jr.