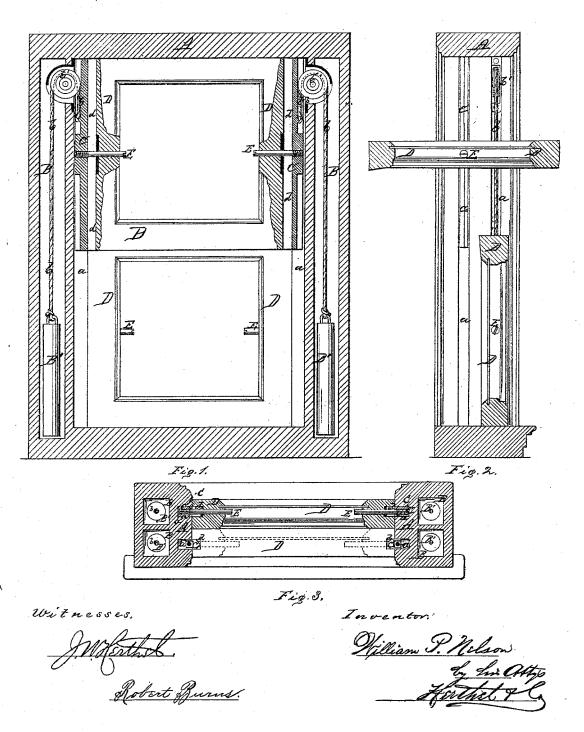
## WILLIAM P. NELSON.

## Improvement in Reversible Window Sashes.

No. 115,766.

Patented June 6, 1871.



## UNITED STATES PATENT OFFICE.

WILLIAM P. NELSON, OF ST. LOUIS, MISSOURI.

## IMPROVEMENT IN REVERSIBLE WINDOW-SASHES.

Specification forming part of Letters Patent No. 115,766, dated June 6, 1871.

To all whom it may concern:

Be it known that I, WILLIAM P. NELSON, of St. Louis, in the county of St. Louis and State of Missouri, have made certain new and useful Improvements in Reversible Sash and Window Supporters; and I do hereby declare that the following is a full and true description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of this invention consists in arranging metal guides within slots of the window-frame in combination with sash-weights for supporting the windows; also in pivoting the window-sashes to said guides so that the windows are reversible, in manner now to be

more fully described.

To enable those skilled in the art to make and use my said invention, I will now more fully describe the same, referring to the accompanying-

Figure 1 as a longitudinal sectional elevation; to Fig. 2 as a transverse sectional elevation; and to Fig. 3 as a sectional plan, showing gnides thrown in and out of position.

I provide the window-frame A with weightboxes B at sides thereof. Within said boxes are the balance weights B', suspended to cords b, passing over pulleys b', secured on top. In line where the windows are to slide the frame A has a slot or recess, a, its entire length. Within said slots a, fitted to slide, I arrange V-shaped hollow guides C, Figs. 1, 2, and 3. To said guides the end of the cord b is secured. The window-sashes D have a similar slot or recess, d, each side, and are pivoted by projecting pivots E to the guides C, as clearly shown in Fig. 1. It will be observed that the slots a of the frame and slots d of the window-sash allow sufficient horizontal play for the guides C to be drawn into engagement

with either slot. In order, therefore, to raise or lower the window, the pivots E are drawn out so that the guides C engage partly in each slot da, said guides thus acting in the place of the usual sash or parting strips for supporting and guiding the windows when raised or lowered. At the same time the windows are supported in any required position by the balance-weights B'. The windows being pivoted to the guides C they are readily reversible. To reverse the windows for purposes required, the operator presses back the sliding pivots E, which causes the guides C to be withdrawn from the window slot d and rest fully in slots a of the frame, thus leaving the windows free action to turn on their pivots, as shown in Fig. 2. When the windows are reversed or in closed position all lateral play can readily be avoided by simply throwing one or both guides into position. Also, it will be noted that said guides act as weather-strips.

My said improvements, in their use and application, avoid the dangerous ways ordinarily experienced in cleaning windows, prevent all unnecessary draft, dispense with sash or guide strips, permit the windows to be readily taken out for repairs, and in construction are simple,

cheap, durable, and easily applied.

Having thus fully described my said inven-

tion, what I claim is-

The combination of the sash D, pivot E, and guide C with the rope b and weight B, substantially in the manner and for the purpose set forth.

In testimony of said invention I have here-

unto set my hand.

WM. P. NELSON.

Witnesses:

WILLIAM W. HERTHEL, ROBERT BURNS.