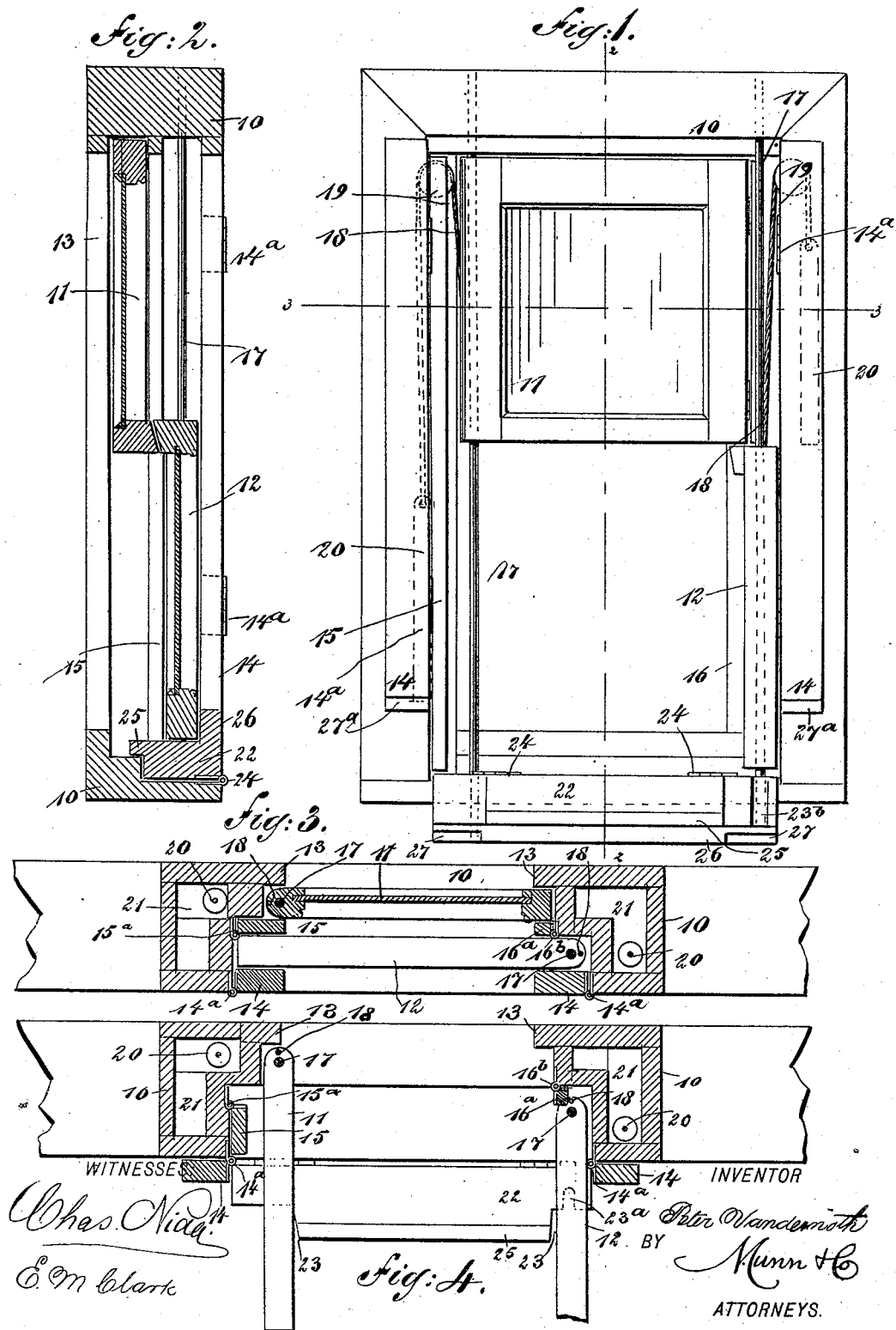


(No Model.)

P. VANDERNOTH.
WINDOW.

No. 494,047.

Patented Mar. 21, 1893.



UNITED STATES PATENT OFFICE.

PETER VANDERNOTH, OF NEW YORK, N. Y.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 494,047, dated March 21, 1893.

Application filed July 25, 1892. Serial No. 441,126. (No model.)

To all whom it may concern:

Be it known that I, PETER VANDERNOTH, of New York city, in the county and State of New York, have invented a new and Improved Window, of which the following is a full, clear, and exact description.

My invention relates to improvements in windows; and the object of my invention is to produce a window having vertically sliding sashes of the usual kind and having also means for swinging the window sashes wide open and raising them to the upper portion of the frame, thus opening the entire window aperture so as to permit the free circulation of air and also facilitate the passing in and out of various articles.

A further object of my invention is to construct and arrange the several parts of the window so that the movements of the sashes shall be positive and easy, and so as to permit the sashes to be cased up tightly and have the appearance of an ordinary window.

To these ends my invention consists in certain features of construction and combinations of parts, as will be described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is an inside elevation of a window embodying my invention, with the inner bead strips and the lower sash open. Fig. 2 is a vertical section on the line 2—2 in Fig. 1, but with all parts of the window closed. Fig. 3 is a sectional plan of the closed window, on the line 3—3 in Fig. 1; and Fig. 4 is a similar section, but with both sashes swung open.

The window frame 10 is of the usual kind, and the upper and lower sashes 11 and 12 are also of the usual kind, these being held to slide vertically in the frame between the outer and inner bead strips 13 and 14 and the center or parting strips 15, 16 and 16^a. The outer bead strips 13 are of the usual kind, and secured rigidly to the frame 10. The inner strips 14 are hinged to the sides of the frame, as shown at 14^a so that they may be swung inward and permit the swinging of the sashes, as hereinafter described. The parting strip 15 is also hinged to the frame, as shown at 15^a, and this may be swung inward, as shown in

Fig. 4, so as to be out of the way of the swinging sashes 11 and 12. The lower portion 16 of the opposite parting strip is rigid, but the upper portion 16^a swings inward so as to clear the free edge of the upper sash 11, this portion being attached to the frame by hinges, as shown at 16^b in Figs. 3 and 4.

The sashes 11 and 12 are held to slide vertically on guide rods 17, but each sash slides only on one rod and the rods are arranged on opposite sides of the window frame. The sashes are thus held to swing on the rods, and as the rods are on opposite sides of the frame, the sashes may both be thrown wide open at the same time and will in no way interfere with each other. This is an important feature of the invention, as if the sashes were hinged on the same side of the frame, they could not both be opened wide at the same time.

The sashes are provided with the usual sash cords 18 which run over pulleys 19 pivoted in the upper portions of the frame in the usual way, and the cords are attached to the ordinary sash weights 20 which are held to move in the boxes 21 in the frame. This balancing arrangement is of the usual kind.

The window is provided with a swinging sill 22 which is cut away at the ends, as shown at 23, so as to permit it to fold inward and allow the central portion to project against the outer bottom portion of the frame, and the sill is connected by hinges 24 to the frame, the hinges being arranged so as to show but little when the sill is closed. In the free edge and at one end of the sill is also a recess 23^a which fits over one of the guide rods 17 when the sill is closed. The sill has its free edge formed into a ledge 25 which overlaps the outer bottom portion of the frame, as shown best in Fig. 2, and the sill has also an upwardly extending flange 26 which when the sill is closed abuts with the inner edge of the lower sash rail and thus forms a casing for the sash, as shown in Fig. 2. The flange 26 at its ends and on the under side is rabbeted, as shown at 27, so that when the sill is closed the said rabbeted portions will fit against similar rabbeted portions 27^a on the lower ends and inner sides of the inner bead strips 14. This arrangement provides for a smooth surface when the several parts are closed and

a tight joint. The object of the swinging sill is to permit the lower sash to be dropped below its normal position, so that it will be entirely clear of the upper sash, and then both sashes may be swung open, after which both may be raised to the upper portion of the window frame if desired.

The operation of the window is as follows:—

When the several parts are closed, as shown in Fig. 2, the bead strips will act in the usual way to guide the window sashes, and the window frame will have the appearance of a common frame. When the parts are in this position, the sashes may be raised and lowered in the usual way. If, however, the sashes are to be swung open, the lower sash is raised slightly so as to clear the sill 22, and the latter is swung outward and downward and the inner bead strips 14 are also swung open. The parting strip 15 is swung inward into the position shown in Fig. 4, and this permits the inner sash to be swung inward into the position shown in the same figure, and if the upper sash is to be also swung inward the parting strip 16^a is thrown back into the position shown in Fig. 4, thus freeing the upper sash 11 and it may be swung upon the rod 17 which supports it.

It will be seen then from the foregoing description that the window may be used in the ordinary way and that, if necessary, both sashes may be thrown entirely open and in a way to leave the full aperture of the window unobstructed.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A window comprising a frame having a movable sill, parallel guide rods arranged on

opposite sides of the frame, and overlapping window sashes held to slide and swing on the guide rods, the lower sash being adapted to rest normally on the sill, substantially as described.

2. A window comprising a frame having a swinging sill thereon, vertical guide rods arranged in opposite sides of the frame, and window sashes held to slide and swing on the guide rods, the window sashes being held on separate rods, substantially as described.

3. A window comprising a frame having an inwardly swinging sill, vertical guide rods arranged in opposite sides of the frame, counterbalanced window sashes held to slide and swing on the guide rods, each sash being held on an independent rod, and inwardly swinging parting strips and bead strips secured to the window frame and adapted to overlap the sashes, substantially as described.

4. In a window, the combination of the swinging sashes, and an inwardly swinging sill arranged beneath and upon which rests the lower sash, the sill having an upwardly extending flange 26 to abut with the inner side of the lower sash rail, substantially as described.

5. In a window, the combination of the frame, the swinging sashes held therein, the inward-swinging bead strips hinged to the frame adjacent to the sashes, the strips having rabbeted lower ends, and the swingingsill arranged beneath the lower sash and having rabbeted ends to fit the rabbeted ends of the bead strips, substantially as described.

PETER VANDERNOTH.

Witnesses:

WARREN B. HUTCHINSON,
C. SEDGWICK.