(No Model.)

F. H. DE GUERRE & W. W. DE LANO.

REVERSIBLE SASH WINDOW.

No. 369,236. Patented Aug. 30, 1887.

FIG. 1.

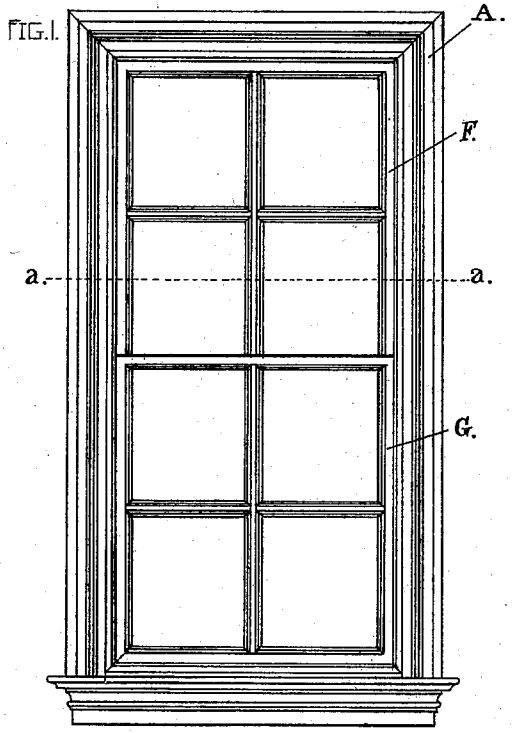


FIG. 2.

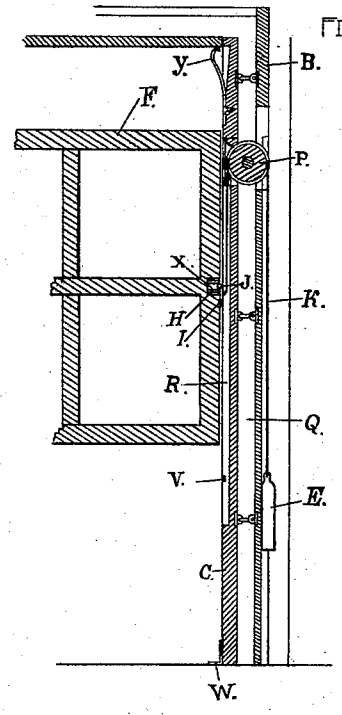


FIG. 3.

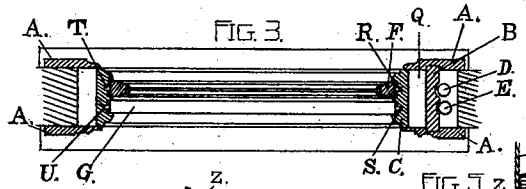


FIG. 4.

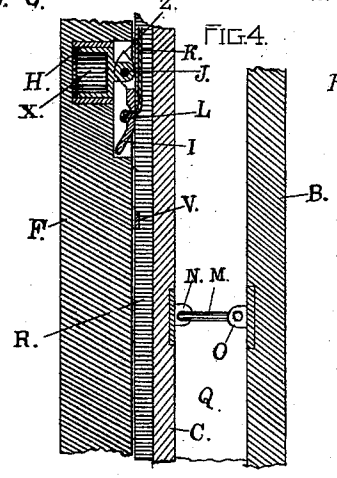


FIG. 5.

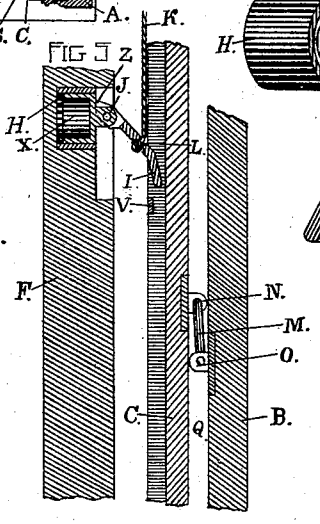


FIG. 6.

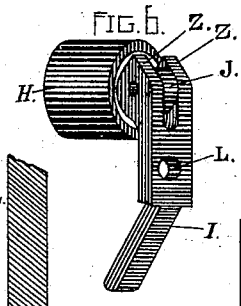
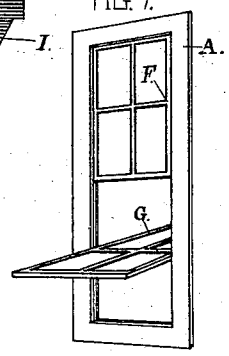


FIG. 7.



ATTEST.

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UNITED STATES PATENT OFFICE.

FRANK H. DE GUERRE AND WILLIE W. DE LANO, OF SAN FRANCISCO, CALIFORNIA.

REVERSIBLE SASH-WINDOW.

SPECIFICATION forming part of Letters Patent No. 369,236, dated August 30, 1887.

Application filed November 17, 1886. Serial No. 219,117. (No model.)

To all whom it may concern:

Be it known that we, FRANK H. DE GUERRE and WILLIE W. DE LANO, citizens of the United States, residing in the city and county of San Francisco and State of California, have invented a new and useful Reversible Sash-Window, of which the following is a specification.

Our invention relates to improvements in windows; and it consists in the construction and arrangement of the casing and sash by means of a certain device for reversing the sash for the purpose of washing the outside of the same without going outside. It will be understood by reference to the accompanying drawings and the letters referring thereto.

Figure 1 is a front elevation; Fig. 2, a sectional view showing a broken part cut vertically; Fig. 3, a horizontal section cut through the broken line *a a*. Figs. 4 and 5 are broken sections of the sash, the side stiles, and their connections; Fig. 6, a perspective view of the connecting-lever guide-pivot. Fig. 7 is a perspective view to show the sash turning upon the pivot H.

A represents the window-casing; B, the fixed side stile; C, the movable side stile; D and E, the sash-weights; F, the upper and G the lower sash; H, the sash-pivot; J, the joint of the pivot guide-lever; I, the pivot guide-lever; L, the opening to receive the weight-cord; M, the connecting-lever; N, the joint connecting with the movable stile; O, the joint connecting with the fixed stile; P, the sheave for the sash and weight-cords; Q, the recess to receive the movable style C. The grooves R, S, T, and U are for the lever I to operate in, and V represents the stop for the lever I. The stop-lock W holds the movable stile C when the lower sash is down and the window locked, whether the upper lock is employed or not. This stop-lock W is an angle-iron, (shown clearly in Fig. 2,) which is rigidly secured to the lower end inside of the movable stile C. When the dasher G is fully down, it rests upon this angle-iron, and consequently the style C cannot be lifted. The spring-lock Y also prevents the stile C from being raised, and the angle-iron is an auxiliary device thereto.

The following is the construction of our improved windows: We form the casing A in appearance similar to the ordinary window-casing, and place the fixed side stile, B, back, as shown, and form the recess to receive the movable style C. The movable stiles C have the guide-grooves R, S, T, and U for the lever I to operate in, and the stop V catches the lever I when the window is to be washed, as will be shown. The window is raised and lowered like other windows now in use, the guide-lever I falling into the side rail of the sash and leaving the sash to slide up and down like an ordinary sash; but when the window is to be washed or cleaned the sash is raised to the top of the frame, where the upper corner of the sash strikes the lock-spring Y, throwing the same out. The movable side stile, C, is then raised, swinging back from the sash, freeing the same from the sash-grooves, parting-bead, &c., and allowing the sash to swing or revolve freely upon the pivot or journal H, while the lever I is held by the weight-cord out into one of the grooves R, S, T, or U. The sash F or G is then lowered until the lever I passes behind the stop-bar V, thus stopping the sash and holding the same firmly at the proper point to be washed and swung around, turning upon the pivot H and bringing the outside of the glass so as to be washed from the inside of the window. When the glass is washed, the sash is replaced by raising the same until the lever I is raised out from the rest V, and the movable side stile, C, is brought down so that the sash-grooves in the same embrace the edges of the sash in the usual way, and at the same time the spring Y passes under the top bar of the frame and locks the side stile in the position shown in Fig. 2. The lever I is kept from rising higher than shown in Fig. 5 by the projections or points Z Z.

We do not confine our invention to the holding of the sash for washing, for it may be employed for ventilation, or for operating screens or other slides employed for windows, such as sliding blinds.

Having thus described our invention, what we claim and desire to secure by Letters Patent, is—

1. In windows, the combination, with a window-casing grooved and provided with a fixed stile, B, of a vertically and laterally movable

stile, C, connected by links M to said fixed stile, and vertically grooved, as described, of the sash provided with a pivot recessed into it, an angular lever hinged to this pivot and attached to a sash-weight cord passed over a pulley, the extension-guide I, adapted to be received in a vertical groove in said movable stile, and a device for locking down the said movable stile, substantially as described.

2. The improved article of manufacture for the purpose described, consisting of the angular lever L, perforated and provided with a contracted extension I and stops Z Z, in combination with the pivot H, hinged to said lever, substantially as described.

3. The combination, with a window casing and sash, of a laterally and vertically movable stile, C, links connecting this stile with the window-casing, and a holding-down spring, Y, substantially as described.

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WILLIE W. DE LANO.

Witnesses:
S. F. DE LANO,
E. H. THARP.