(No Model.)

P. WEBER.

WINDOW.

No. 401,614. Patented Apr. 16, 1889.

Fig. 1.

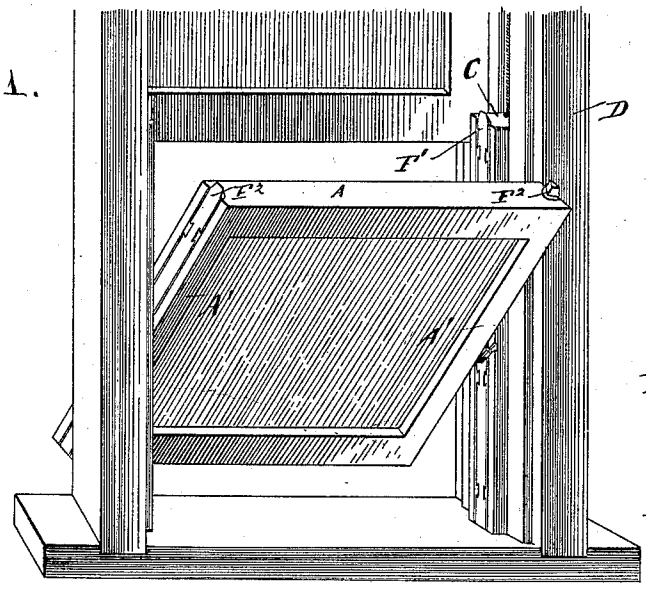


Fig. 2.

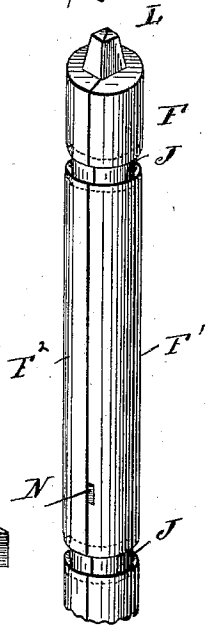


Fig. 3

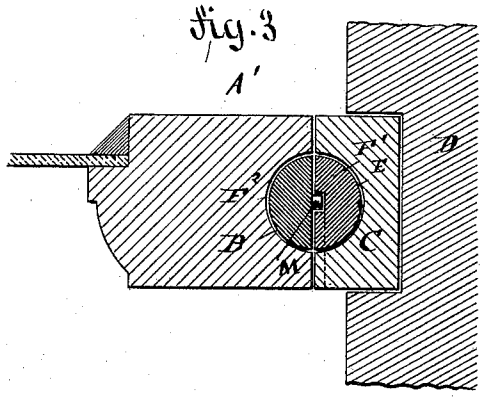


Fig. 4.

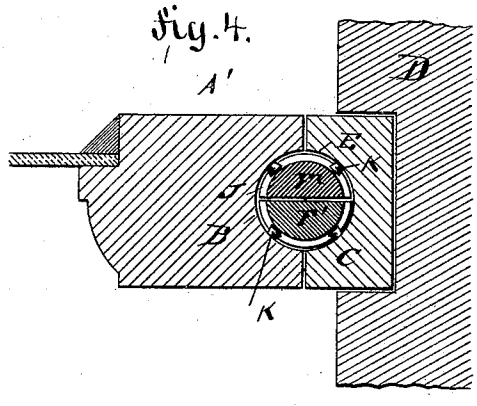
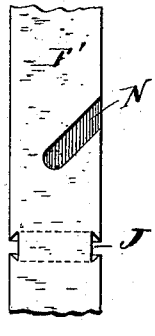


Fig. 5.



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WINDOW.

SPECIFICATION forming part of Letters Patent No. 401,614, dated April 16, 1889.

Application filed October 20, 1888. Serial No. 288,649. (No model.)

To all whom it may concern:

Be it known that I, PAUL WEBER, of the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Windows, of which the following is a specification.

The object of my invention is to hang a sash in such a manner that it can readily be swung into the room to facilitate washing and cleaning, or can be removed entirely.

The invention consists in the construction and combination of parts and details, as will be fully described and set forth hereinafter, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a sash provided with my improvement, the sash being swung outward. Fig. 2 is an enlarged detail perspective view of the split key-rod. Fig. 3 is an enlarged horizontal sectional view of one side bar of the sash, showing the key-rod so adjusted that the sash can be swung. Fig. 4 is a similar view showing the key-rod so adjusted as to lock the sash. Fig. 5 is a detail view of part of the inner surface of one section of the key-rod.

Similar letters of reference indicate corresponding parts.

The sash A, which is made in the usual manner, is provided in the outer edge of each side bar, A′, with a longitudinal semicircular groove, B. The sash fits snugly between two sliding rails, C, mounted to slide in the usual guideways of the window-frame D, and each sliding rail C is provided in that surface adjacent to the outer edge of the corresponding side bar, A′, with a longitudinal groove, E, which grooves E, when registering with the grooves B of the corresponding side bar, A′, form circular holes extending from the top to the bottom of the sash at each side edge.

The locking device consists of a key-rod, F, formed of two semicircular rod-sections, F′ and F^2, of which the former is placed into the semicircular groove E of the sliding rail C and the section F^2 into a semicircular groove, B, in the outer edge of the side bar, A′, of the sash. Each section F′ and F^2 is provided with a series of semicircular dovetailed grooves, J. One groove J is provided a short distance from the end of the key-rod and one at the middle, said grooves being so located that the ends of the half-groove in one section register with the ends of the corresponding half-groove in the other section, so that the grooves in the two sections form an annular dovetailed groove extending entirely around the key-rod. In the grooves E and B dovetailed pins K are secured in such a manner that they can pass into the dovetailed grooves J. The upper end of the key-rod is squared to form a head, L, to which a key can be applied for turning the key-rod, said head being countersunk in the upper edge of the sash and sliding rail C. From the inner surface of each section F^2 a pin projects, which can pass into a downwardly-inclined notch, N, in the inner surface of the section F′.

The sash A is placed between the sliding rails C in such a manner that the pins M can pass into the grooves N, the sash thus being supported by said pins. The headed pins K, passing into the dovetailed grooves, hold the key-rod F to the sliding rails C and the side bars, A′, of the sash, and prevent any longitudinal movement of said key-rod.

When the inner surface of the locking-sections F′ and F^2 are in line with the adjacent edges of the sliding rails C and side bars, A′, as shown in Fig. 3, the sash can be swung on the pivots M, as shown in Fig. 1, and thus cleaned very conveniently. The sash is then brought into its vertical position between the sliding rails C, and by means of an implement applied on the head L of the key said locking device is turned on its longitudinal axis and brought into the position shown in Fig. 4—that is, so that the adjacent edges of the locking-sections are parallel with the plane of the sash and at right angles to the adjacent end surfaces of the sliding rails C and side bars, A′—thus locking the sash in position between the sliding rails and preventing swinging the sash inward or outward.

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

1. The combination, with a sash having a longitudinal semicircular groove in the outer edge of each side bar, of sliding rails in the window-frame having longitudinal semicircular grooves in the edge adjacent to the side edges of the sash, and a split key-rod mounted

to turn in said grooves, substantially as set forth.

2. The combination, with a sash having a longitudinal groove in the outer edge of each side bar, of sliding rails in the window-frame, each having a longitudinal semicircular groove in that edge adjacent to the side edge of the sash, a split key-rod in the two adjacent grooves of the sash and rail, and guide-pins projecting from said grooves into the grooves in the key-rod, substantially as set forth.

3. The combination, with a sash having a longitudinal semicircular groove in the outer edge of each side bar, of sliding rails in the window-frame, each having a longitudinal semicircular groove in that edge adjacent to an edge of the sash, a key-rod composed of two semi-cylindrical sections in each pair of grooves at each side of the sash, pins passing from the grooves in the sash and sliding rail into grooves in the semi-cylindrical sections of the key-rod, and a pin or pivot on each key-rod section in the sash, which pins can pass into grooves in the key-rod sections in the grooves of the sliding rails, substantially as set forth.

4. The combination, with sliding rails and a sash having longitudinal grooves in each side edge, between which rails the sash can swing, of a split key-rod composed of two semi-cylindrical sections, which key-rod is placed in grooves formed in the sash and rails, each key-rod being provided at its upper ends with a head countersunk in the top of the sash, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

PAUL WEBER.

Witnesses:
ROBERT FULLERTON,
CHAS. GRANT.