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United States Patent Office.

WM. MAURER, OF BUFFALO, NEW YORK.

IMPROVEMENT IN WINDOWS.

Specification forming part of Letters Patent No. 49,426, dated August 15, 1865.

To all whom it may concern:

Be it known that I, WILLIAM MAURER, of Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Windows; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a sectional front elevation or inside view of a window constructed according to my invention. Fig. 2 is a partial horizontal section of the same, the line x x, Fig. 1, indicating the plane of section. Fig. 3 is an edge view of the same. Fig. 4 is a transverse vertical section of the same, the plane of section being indicated by the line y y, Fig. 1.

Similar letters of reference indicate like parts.

This invention relates to a window constructed on what is commonly known as the "French plan"—that is to say, with two wings which swing on hinges and open and close like a door.

The improvement consists in giving to each sash a rising-and-falling motion in addition to the revolving motion by means of spring-levers, which bear on the hinges in such a manner that the sill can be made higher on the inside, and yet the window will swing open without difficulty, and the entrance of water is effectually prevented. A follower fitted in the upper cross-bar of the frame closes up the gap, which otherwise would remain open, between the upper edges of the sashes and the frame whenever both sashes are closed. Suitable hook-bolts retain the sashes when the same are closed.

A represents the frame of a window, which is constructed in the ordinary manner, of wood or any other suitable material, and to which the sashes B are attached by hinges a, as clearly snown in Fig. 1 of the drawings. The sashes are somewhat lower than the open space in the frame, and their hinges rest on levers b, which extend through the jambs c, and are subjected to the action of springs d, by means of which said sashes, when free to follow the action of the springs, are raised so that the same swing

clear of the strip e, which is secured to the sill on the inside. The object of this strip is to prevent the entrance of rain when the window is closed and fastened.

In order to effect the closing or fastening, each sash is provided with a hooked bolt, f, which can be made to catch under a notched plate secured to the edge of the weather-strip e. The outer portion of the upper cross-bar of the frame extends down far enough for the sashes to strike against them when the same are depressed to their lowest position, and a follower, g, is fitted into said cross-bar in such a manner that when both sashes are depressed the follower will descend and rest upon the upper edges of the same to prevent effectually the entrance of rain or of cold air. Said follower is suspended from a cord, h, which passes up over a pulley, i, secured to the upper edge of the top cross-bar of the frame, and thence over another pulley, j, and down to the springlever which serves to raise one of the sashes. By this arrangement a positive upward motion is given to the follower, though it will rise by the action of the sash pressing against it as soon as the hook-bolt is turned open. The inherent gravity of the follower carries the same down when both sashes are depressed. Said follower extends from one side of the window to the other, and in order to prevent it from warping a wire is inserted, which also increases its weight and enables it to descend with facility as soon as the sashes are depressed.

A window of this construction is perfectly tight. It effectually prevents the entrance of rain or moisture, and it can be readily opened and closed.

I claim as new and desire to secure by Letters Patent—

1. The application of spring-levers in combination with sashes which have a swinging and a rising-and-falling motion, substantially as and for the purpose set forth.

2. The use of a follower in combination with the rising-and-falling sashes, substantially as and for the purpose described.

WILLIAM MAURER.

Witnesses:

PETER WEX,

J. Domedion.