

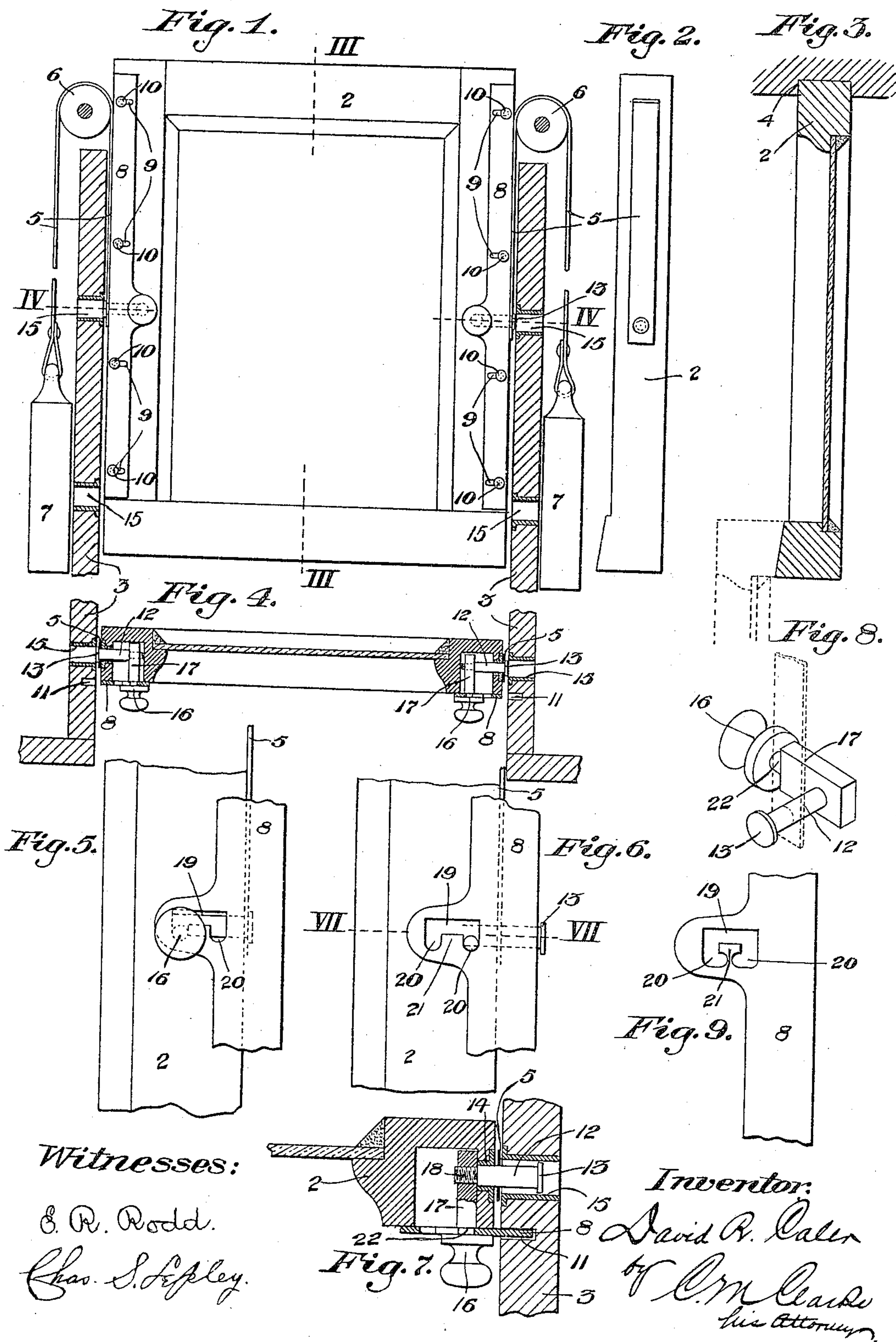
No. 816,431.

PATENTED MAR. 27, 1906.

D. R. CALER.

WINDOW.

APPLICATION FILED MAY 2, 1905.



UNITED STATES PATENT OFFICE.

DAVID R. CALER, OF GROVELAND, PENNSYLVANIA.

WINDOW.

No. 816,431.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, DAVID R. CALER, a citizen of the United States, residing at Groveland, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Windows, of which the following is a specification, reference being had therein to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a view in front elevation, partly in section, of one of my improved window-sashes, showing the connection with the sash-weight. Fig. 2 is an edge view of the sash detached, showing a portion of the sash-weight band. Fig. 3 is a vertical sectional view on the line III III of Fig. 1. Fig. 4 is a horizontal sectional view on the line IV IV of Fig. 1, showing the bolts and strips retracted. Figs. 5 and 6 are detail views on an enlarged scale, showing portions of the weather-strip and the operative relation therewith of the supporting and locking device. Fig. 7 is a horizontal sectional view on the line VII VII of Fig. 6. Fig. 8 is a detail view in perspective of one of the locking-bolts and the operative button therefor. Fig. 9 is a detail view of the middle portion of one of the strips, illustrating a modified form of locking-opening.

My invention relates to improvements in window-sashes, and has for its object to provide a sash which is capable of being raised and lowered by the usual sash-weights and of being pivotally located in the frame at various heights upon supporting pivotal bolts, permitting the frame to be turned around for the purpose of washing, together with an improved weather-strip attachment at each side adapted to enter receiving-grooves in the sash-frame and to be located therein, whereby the sash may be raised and lowered in the ordinary manner, while the strips will play in the grooves.

An advantage of the invention is that the strips act as guides for the window-sash, obviating the necessity of the usual parting-heads, which are thereby dispensed with, thus enabling the window to be tightly fitted against perfectly plane sides of the frame and to be capable of being turned, as stated.

The invention consists generally of the embodiment, with the frame and sash, of the foregoing features and of the details of construction, as shall be more fully hereinafter set forth.

Referring now to the drawings, 2 represents the sash, which may be of any suitable construction, slidingly mounted in the ordinary window-frame 3, the inner faces of which are, however, left perfectly plane, as shown in Fig. 4, while the upper portion of the frame is provided with a horizontal rabbeted recess 4, into which the upper edge of the sash is inserted when raised. The sash is supported at each side by the usual sash-cords, preferably made in the form of thin metallic tapes or bands 5, preferably galvanized, passing around pulleys 6, located upon supporting-bolts mounted in the upper portion of the frame in the usual manner at each side, and provided with the customary weights 7, by which the sash is balanced at whatever position it may assume.

8 represents a weather-strip plate located at each side of the frame, provided with horizontal slots 9, through which pass the securing-screws 10, providing for lateral movement of the strips, while the sash-frame at each side is provided with receiving-grooves 11, into which the strip may be inserted, as shown in Fig. 7.

For the purpose of engaging the lower terminals of the sash-weight tapes 5 I provide bolts 12, having at their outer terminals enlarged heads 13, preventing the disengagement of the bands 5, the bolts being shiftably mounted in bearings 14, set in the sides of the sashes.

15 represents a receiving-socket, one of which is arranged at each side of the sash-frame at varying levels, as shown, into which the bolts 12 may be thrown. The purpose of such bearings is to lock the sash at different heights, either entirely closed, as in Fig. 1, or at a lower level when it is desired to ventilate the room or to turn the sash, as stated, and it will be seen that these bolts may be shifted in and out without disengagement from the weight-bands. For the purpose of actuating the bolt 12 I provide a locking-key 16, having an outer button-head and a shank 17, with which the bolt 12 is connected by a threaded inner terminal 18, thus facilitating assemblage of these parts. The strip 8 at each side is provided with a receiving-socket 19, having at each side depressed locking-openings 20 at each side of an intervening abutment 21, while the shank 17 is provided immediately underneath the head with a reduced portion 22, adapted to be shifted up into the main opening 19 from either of the

end openings 20 or to an intermediate position above the abutment 21. By this construction it will be seen that the bolt 12 may be shifted in and out independent of the strip 8 and that the strip may be shifted independent of the key-shank 17 by merely turning said shank upwardly into register with opening 19 and shifting the strip independent of it either into or out of groove 11. In either position it will be in interlocking engagement with the key, while also operating to lock said key against backward movement when inserted in the outer socket 20, or against outward movement when inserted in the back socket 20. It will thus be seen that these parts cooperate with each other and that the sash can be locked in either direction; also, to lock the weather-strip, while permitting the bolts to be withdrawn independent of the strip for raising or lowering the window, and also to allow the window to be turned by first withdrawing the strip and also the bolt, the bands 5 alone supporting the sash pivotally.

25 The device is comparatively simple in construction, efficient in operation, and will perform its various functions in a satisfactory and workmanlike manner without liability to get out of order and provides a combined

reversible sash, sash-lock, and weather-strip in compact inexpensive form. 30

It will be understood that the invention may be changed or varied as to its details of construction or otherwise by the skilled mechanic; but all such changes are to be considered as within the scope of the following claim. 35

What I claim is—

In a window sash and frame, the combination of a sash-frame provided with variably-located bolt-sockets and strip-grooves, laterally-adjustable locking-bolts provided with outwardly-extending key-shanks, weather-strip plates secured upon the face of the sash at each side and adapted to engage the sash-grooves, means for securing the sash-strips in operative and inoperative positions, said strips being provided with locking-apertures arranged to engage the key-shanks, with supporting sash-weights and bands engaging the terminals of the locking-bolts, substantially as set forth. 40 45 50

In testimony whereof I affix my signature in presence of two witnesses.

DAVID R. CALER.

Witnesses:

CHAS. S. LEPLEY,
C. M. CLARKE.