(No Model.) 2 Sheets—Sheet 1.

J. S. PIHLSTRÖM.

WINDOW.

No. 337,193. Patented Mar. 2, 1886.

FIG. 2.

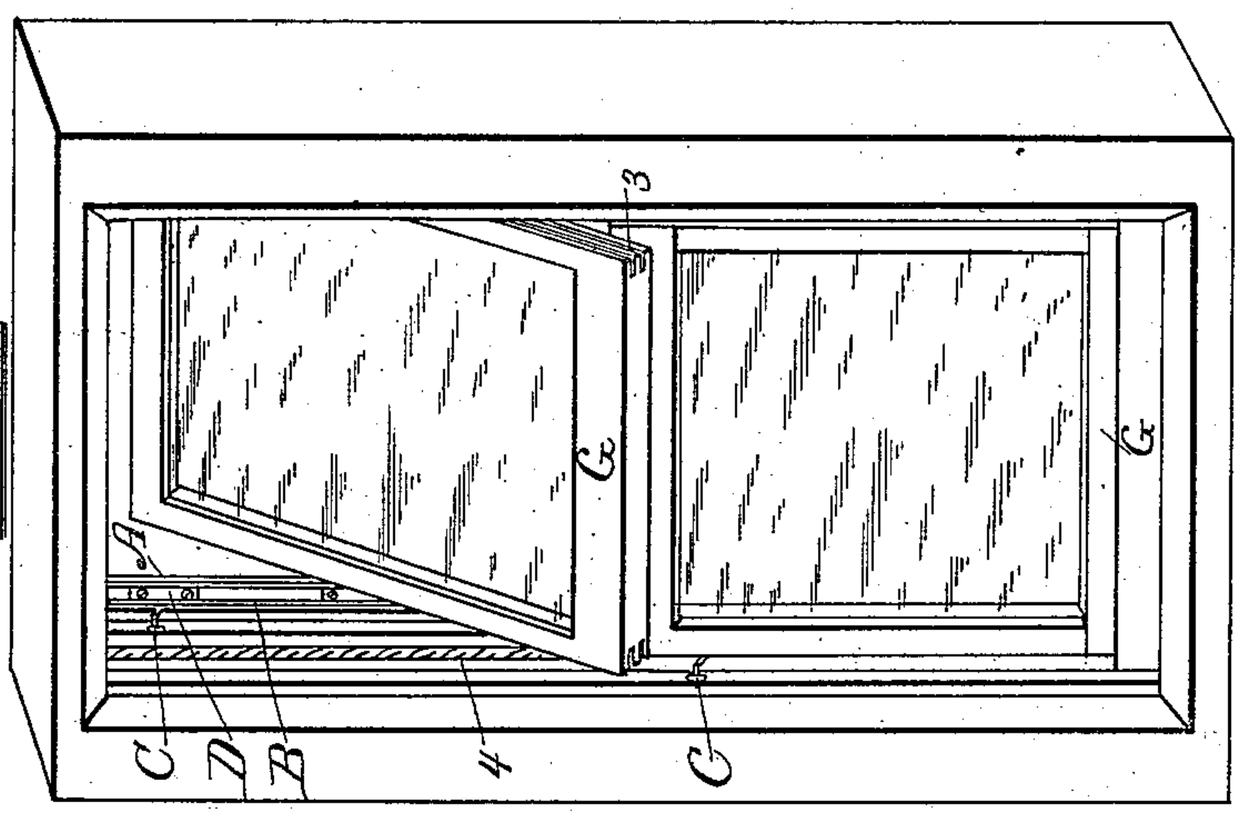
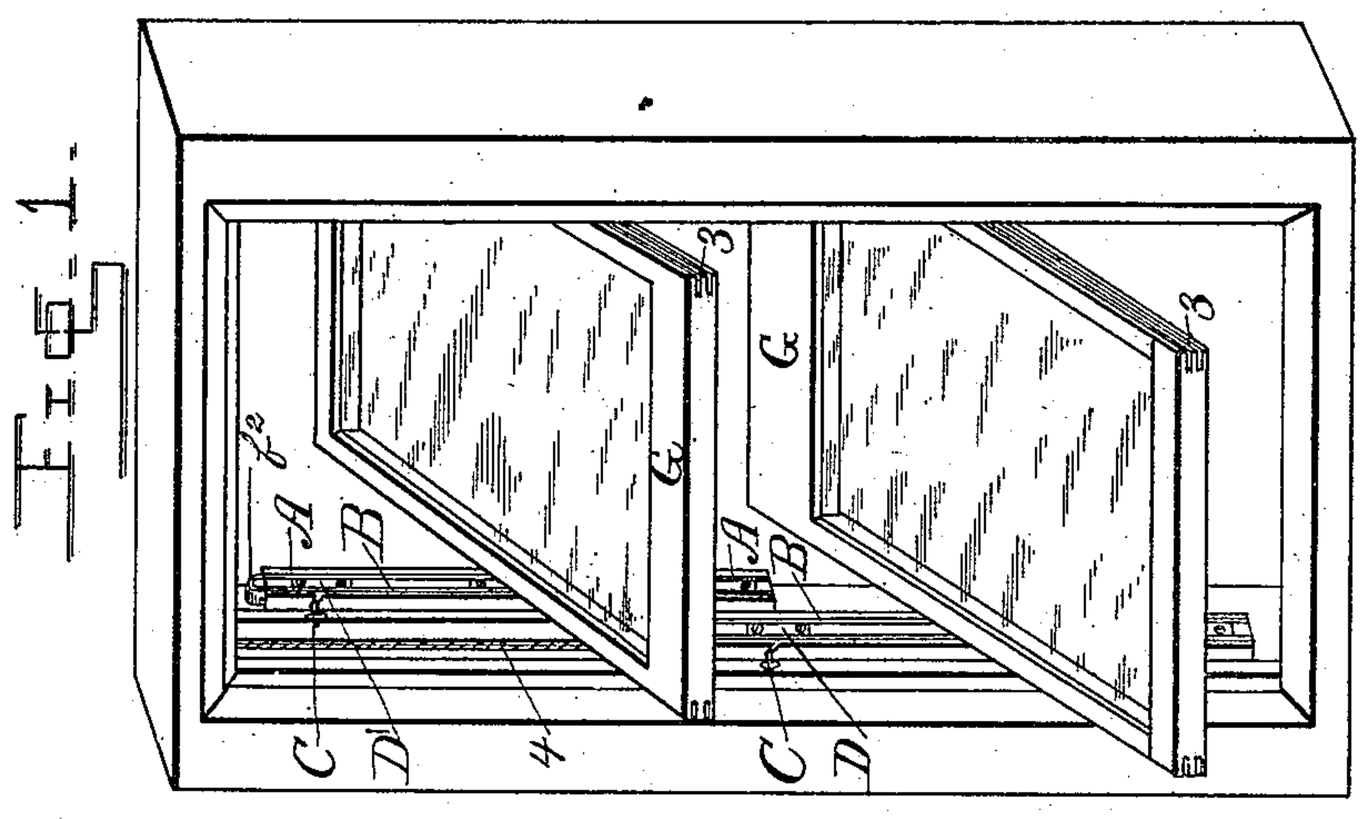


FIG. 1.



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R. G. DeWitt

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Attorney

(No Model.) 2 Sheets—Sheet 2.

J. S. PIHLSTRÖM.

WINDOW.

No. 337,193. Patented Mar. 2, 1886.

Fig. 4.

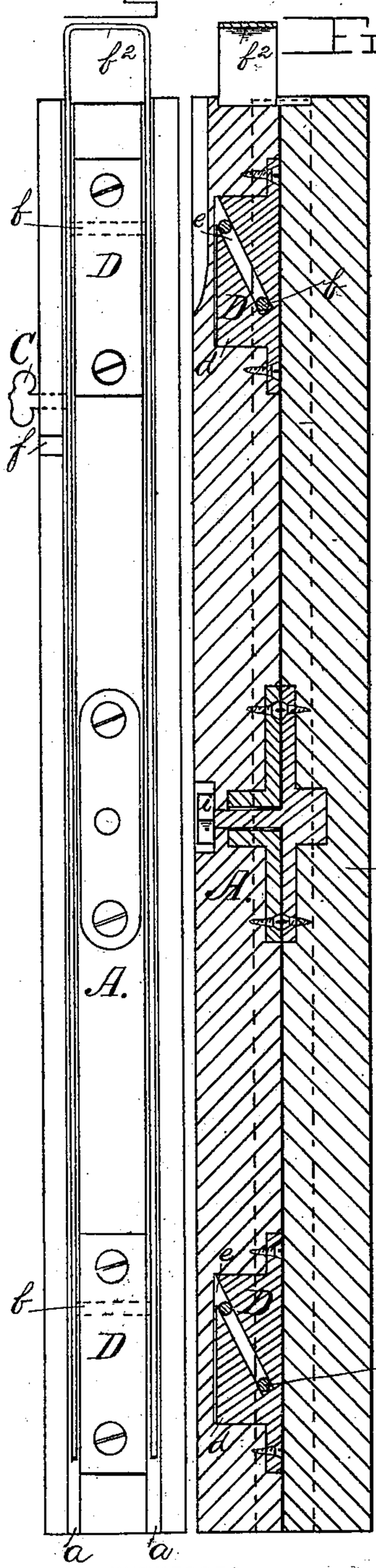


Fig. 3.

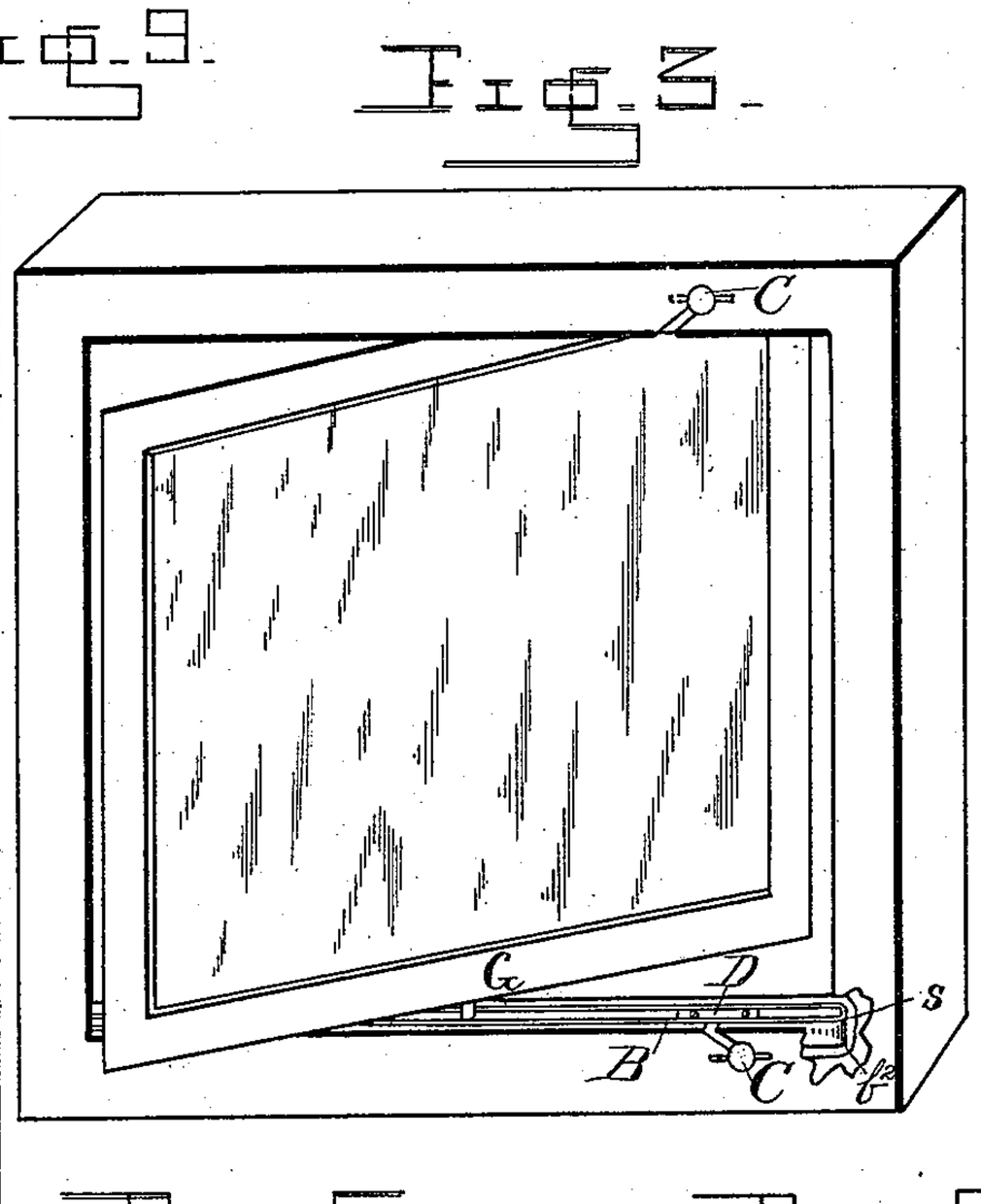


Fig. 5.

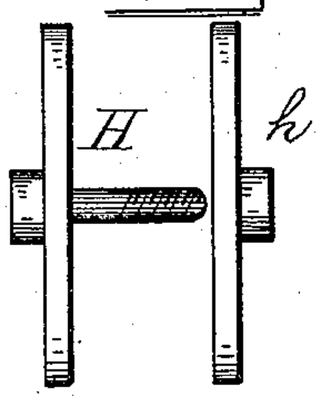


Fig. 6.

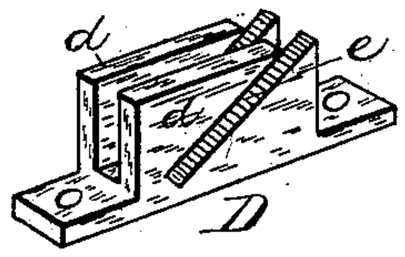


Fig. 7.

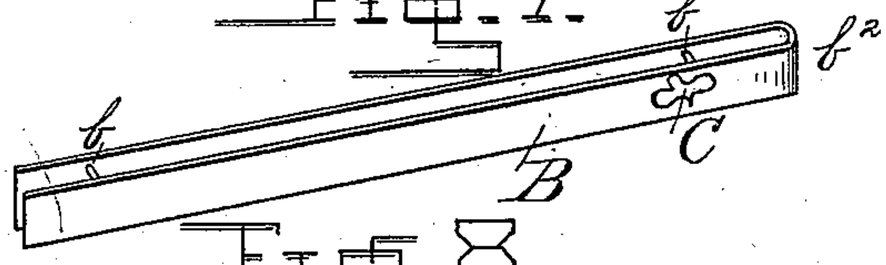
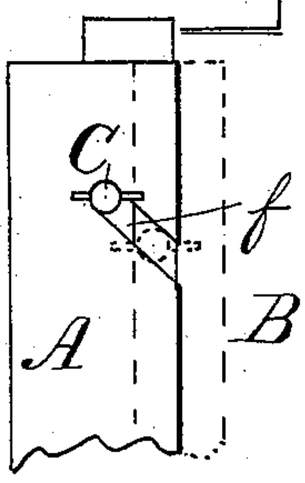


Fig. 8.



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UNITED STATES PATENT OFFICE.

JOHN S. PIHLSTRÖM, OF CHICAGO, ILLINOIS.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 337,193, dated March 2, 1886.

Application filed September 21, 1885. Serial No. 177,717. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. PIHLSTRÖM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Windows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to windows, and particularly to that class of windows in which the window-frame is centrally pivoted, so as to swing and turn within the frame; and it consists of means for holding the window in any position to which it may be turned, and for locking the window, when closed, so that it cannot be turned, all as more fully hereinafter described and particularly claimed.

My invention is illustrated in the accompanying drawings, in which Figures 1, 2, and 3 are perspective views of a window-frame and the sash with my invention applied, and Figs. 4, 5, 6, 7, and 8 detail views of my improvement.

My invention may be applied to the ordinary sash-cord window-frames or to windows in which other means or no means are provided for raising and lowering the windows vertically, and to heavy plate-glass windows, which are not raised or lowered, but are hung from a central pivot.

In Figs. 1 and 2 I have shown my improvements applied to a sash-cord window, and in Fig. 3 to a window not raised or lowered, and to which my invention is applied principally for the purpose of making such a window weather-tight when closed.

In the drawings, A is an outer side part of a window-sash having its inner central part provided with two slots, *a a*, running its entire length. These slots are designed to receive a locking device, B, consisting of a double plate or two metal strips united at the top and left open at the bottom. The top part, b^2, extends over and above the central cut-out portion of the sash. The lock is provided with cross-rivets *b* and a thumb-nut, C, and it is held in place by plates D, let into the inner central portion of the part A, so as to be flush therewith. The plates D are provided on their under side with lugs *d*, through which a diagonal slot, *e*, is cut. When the plates D are set in place, the rivets *b* are in the slots *e*, which slots act as supports and guides for the rivets when the plate is given a diagonal movement, as hereinafter described. The part or strip A is provided with a diagonal slot, *f*, in which is placed the thumb-piece C.

G is the inner part of the window-sash, which holds the glass, and its outer sides are doubly slotted, as shown at 3, to correspond to the slots *a a* in part A, for the purpose of receiving the lock B, as hereinafter described. Part G is secured to part A by a central pivot-bolt, H, extending through a plate, *h*, in part A, and screw-threaded to receive a nut, *i*, placed within a socket, *j*, in part A, as shown in Fig. 9. By tightening this nut sufficiently the part G is held at any position on part A to which it may be turned. Cords may be secured in slots in the inner upper sides of part A.

By means of the thumb-piece C, attached to the lock B and adapted to slide in slot *f* of part A, the lock may be given a diagonal movement, so as to enter the slots 3 in the inner part, G, of the window-sash. When the two parts are thus connected, the window is closed and prevented from being turned. On sliding the thumb-piece C back up the slot the catch is disengaged, and the window can be turned all the way over or at any point desired, and there held, and both windows by the use of the usual cords can be raised or lowered.

The thumb-piece C may be dispensed with, if desired, and the lock B be disengaged from the inner window-frame by the use of a small lever, which may be inserted under the top piece, b^2, and the lock thereby raised.

Both sides of a window and the upper and lower sashes are provided with my improvements, as shown.

My improvements I have found to be of great convenience in washing and repairing windows, as the windows can be turned entirely over and held at any convenient position; also, for the purposes of ventilation, as the separate windows can be arranged at any angle and at different heights, to permit of partial or entirely open ventilation; also, by the use of the double slot and the double plate a perfectly close weather-tight joint is obtained.

In the use of some windows, especially of heavy plate-glass windows, which are swung from a pivot, it has been found difficult, if not impossible, to make a close weather-joint at the top and bottom between the sash and the frame.

By the use of my improvement, as illustrated in Fig. 3, this difficulty is overcome. The bottom or top (one or both) of the sash is slotted, and the part A and the locking device are applied thereto in the same manner as to the sides; but in this arrangement a recess, *s*, is cut into one side of the window-frame, to receive the end b^2 of the locking-plate when the lock is slid sidewise to unlock the window-sash and the part A. When unlocked, the sash is free to turn on its pivot. When locked, a close joint is formed between the sash and the lower part, A, by both parts of the locking-plate filling the slots in the respective parts along the line of junction.

I am aware that it is old to pivot sashes to sliding strips, and to lock the sash to the sliding strip by tongues, or by a diagonally-sliding plate placed in a mortise in the sash and engaging a mortise in the sliding strip.

Having thus described my invention, what I claim is—

1. A window-sash centrally pivoted to a sliding side or end strip, so as to turn entirely around within said strip, in combination with the locking device placed within said strip and extending through it and beyond one end, and suitable means for sliding the locking device in and out of the sash, whereby, when the sash and strip are locked together, a tight weather-joint is obtained between the sash and the strip their entire length, substantially as described.

2. In a window-sash, the slotted side or end piece, G, provided with the slotted plates D, in combination with the locking device B, provided with cross-rivets adapted to slide diagonally in said plates and within and out of the piece G, substantially as described.

3. In a window-sash, the locking device B, consisting of two metal strips united at one end, adapted to fit and slide in the sash, substantially as described.

4. A window-sash consisting of the slotted strips A, slotted sash G, the sash and said strips pivoted centrally together, the diagonally-sliding locking device B, secured to the side strips, the slotted plates D, placed within said strips to hold and guide the locking device, and means for sliding the locking device, constructed and operated substantially as herein shown and described.

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

JOHN S. PIHLSTRÖM.

Witnesses:
LARS P. NELSON,
THERON DURHAM.