

(No Model.)

P. ADELSON & L. PROLL.

REVERSIBLE WINDOW SASH.

No. 355,905.

Patented Jan. 11, 1887.

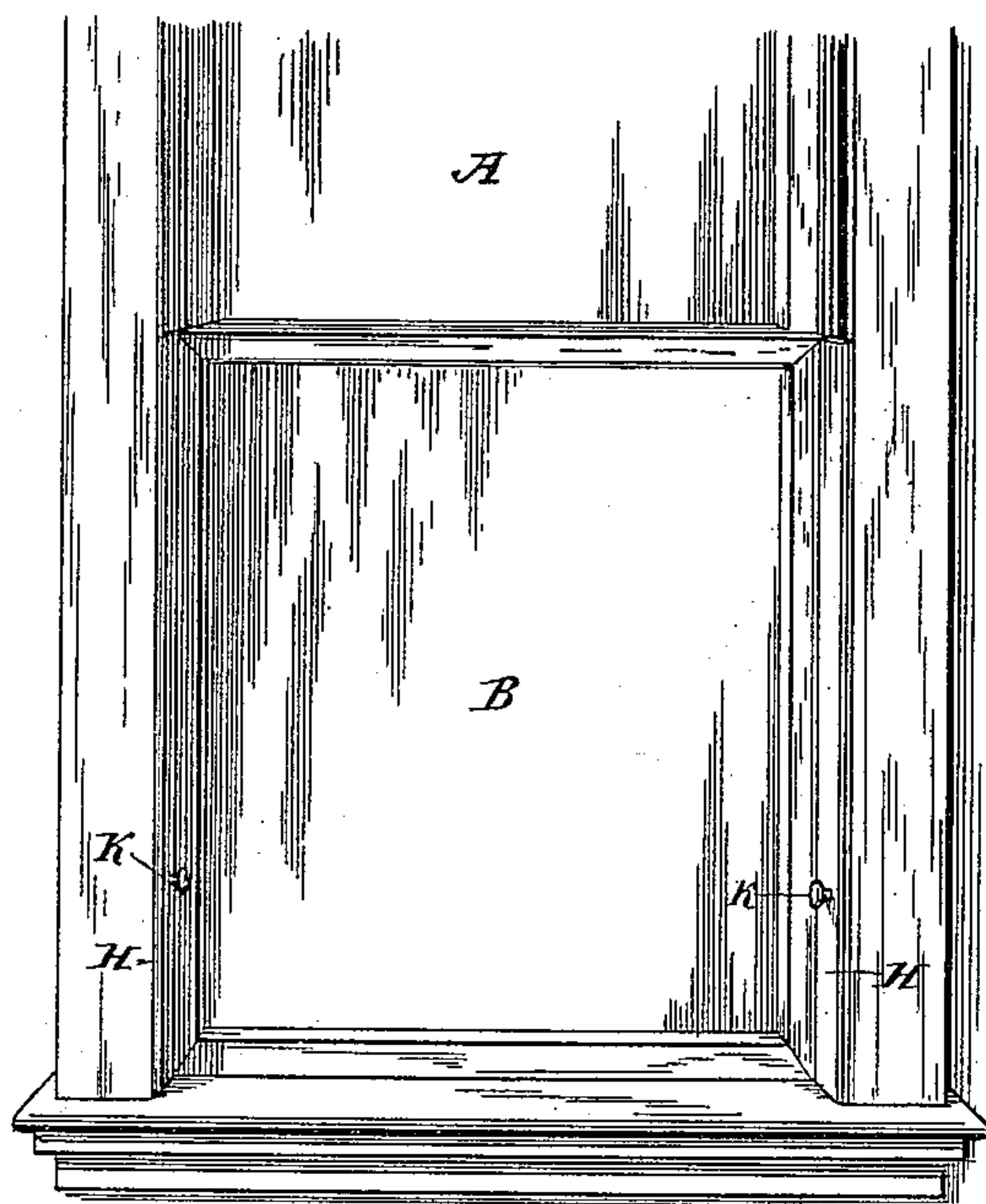


Fig. 1.

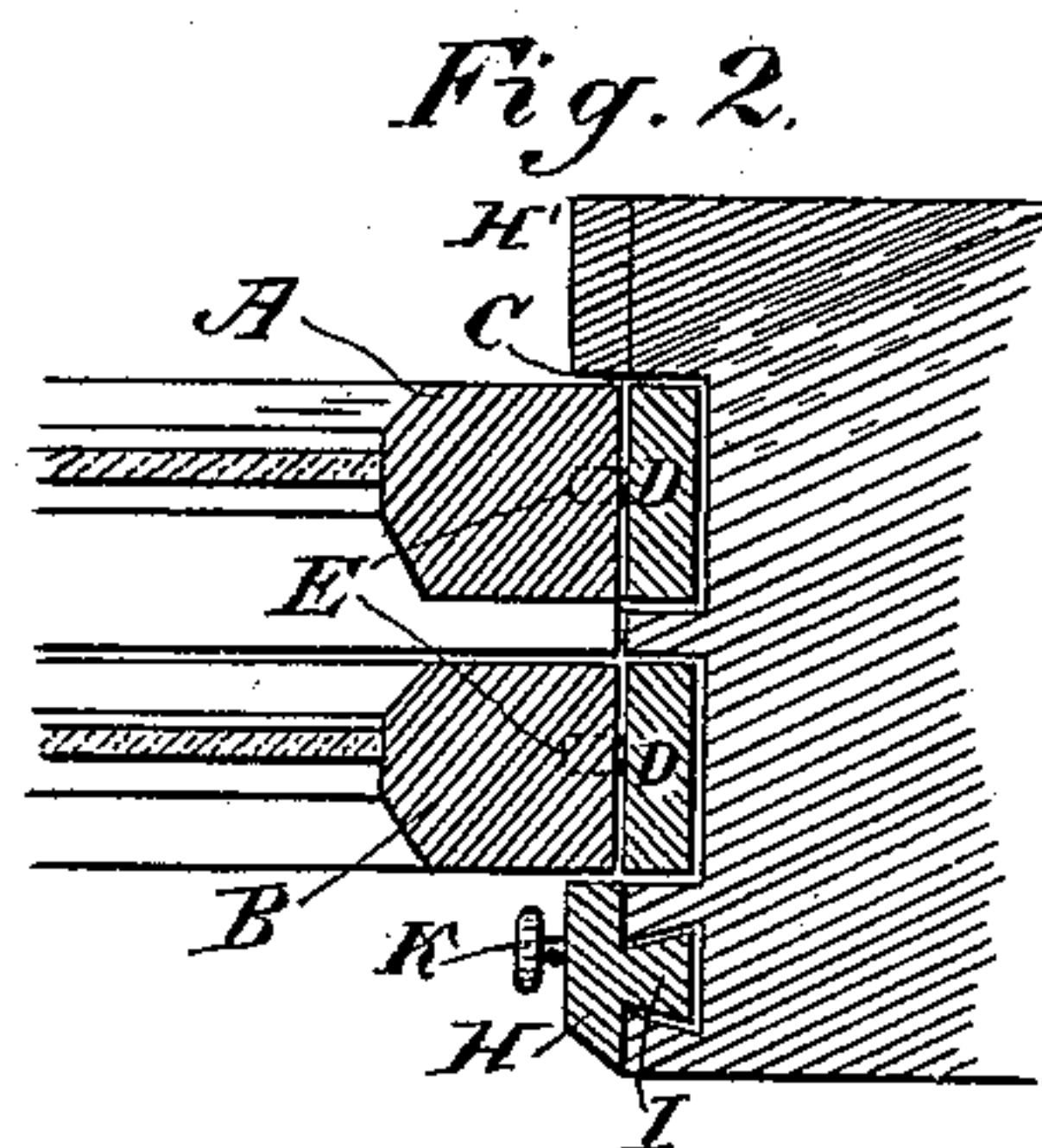


Fig. 2.

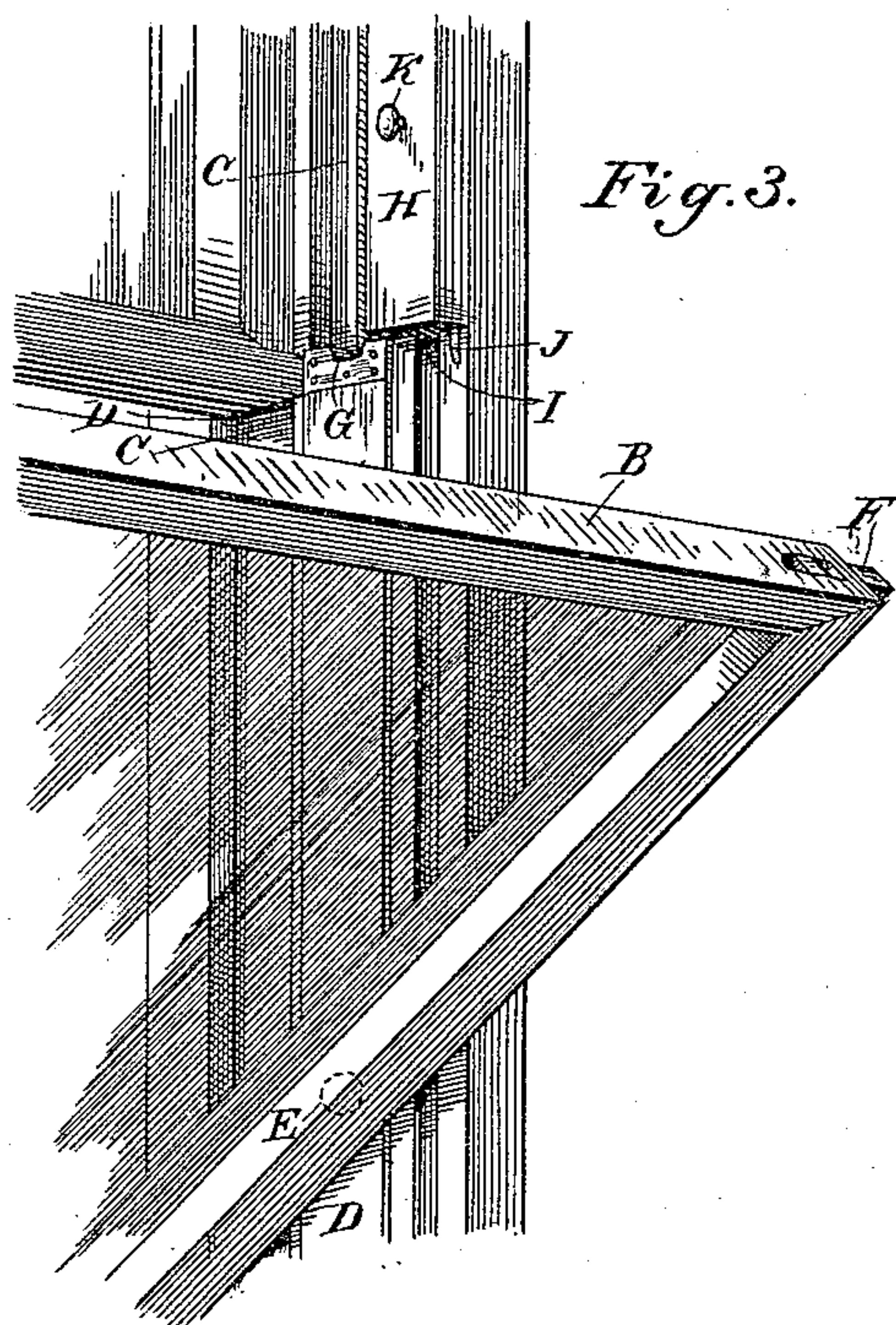


Fig. 3.

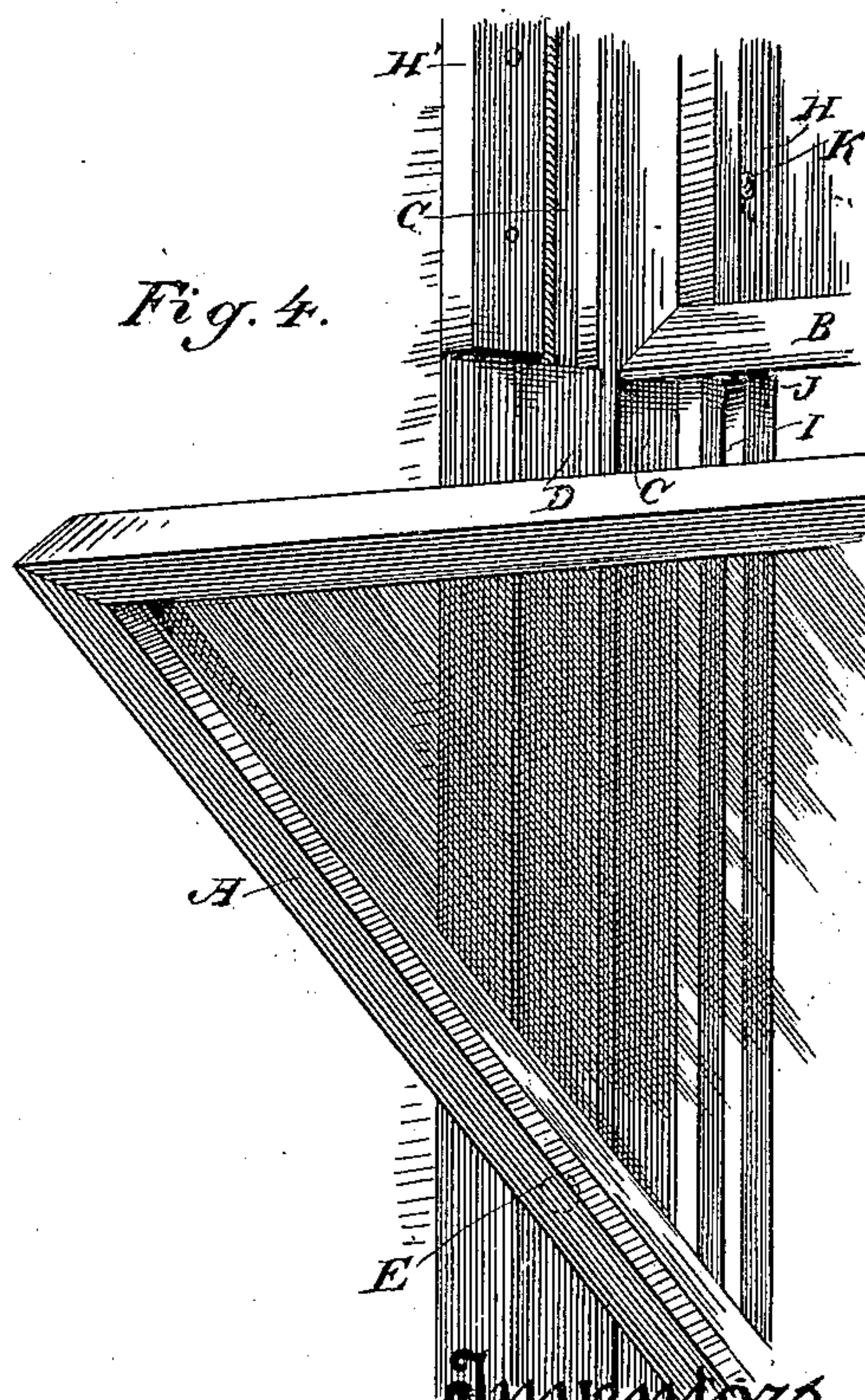


Fig. 4.

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UNITED STATES PATENT OFFICE.

PHILIP ADELSON AND LOUIS PROLL, OF SAN FRANCISCO, CALIFORNIA.

REVERSIBLE WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 355,905, dated January 11, 1887.

Application filed October 13, 1886. Serial No. 216,182. (No model.)

To all whom it may concern:

Be it known that we, PHILIP ADELSON and LOUIS PROLL, both of the city and county of San Francisco, State of California, have invented an Improvement in Reversible Window-Sashes; and we hereby declare the following to be a full, clear, and exact description of the same.

Our invention relates to certain improvements in that class of window-sashes which are journaled so as to turn or pivot upon their horizontal journals for the purpose of reversing the sash, so that access may be had to the glass on either side.

It consists in the devices which we shall hereinafter fully describe and claim.

The window-sashes are pivoted or journaled midway of their length to shoes, so that they may turn about their journals to any desired position, and they have also a spring or other locking-bolt at the top, by which they are connected with the shoes when turned in a vertical position. In combination with this device is a sliding adjustable strip for the lower sash and a stationary strip for the upper sash to keep out the dust and wind.

Referring to the accompanying drawings for a more complete explanation of our invention, Figure 1 shows the window closed. Fig. 2 is a horizontal section through the frame and sashes. Fig. 3 shows the lower sash turned out. Fig. 4 shows the upper sash pulled down and turned out.

A and B are the upper and lower sashes of an ordinary window, and C are the grooves or channels formed in the casing by the usual window-frame strips, for the purpose of guiding the sashes as they are raised or lowered. Instead of making the sashes of a width sufficient to extend into these channels, we make them enough narrower so that they will swing freely when pivoted without touching the guiding-strips.

D D are shoes of equal length with and of the same thickness as the window-sash, and having a depth equal to or a little greater than the depth of the channels C, so that when these shoes are secured to the edges of the sashes they will travel in the channels or guides and hold the sash in its proper position for being raised or lowered. Cords are at-

tached to these shoes in the same manner that they are usually attached to the edges of the sashes, and pass up over pulleys in the top of the window-frame, having the usual balance-weights attached to their opposite ends. In order to connect the sashes with these sliding shoes, pivot or journal pins E pass through the sashes near their centers and into the shoes, so that, when desired, the sashes may turn upon these pivots without displacing or disturbing the shoes, which remain in the guide-channels in the window-frame. At the top of the lower sash is a bolt or catch, F, which may be a spiral or other suitable catch, and in the top of the shoe, which is on a level with the top of the sash, is a corresponding notch or depression, G, into which the catch will fall when the window is turned so as to stand in its normal and vertical position parallel with the shoe. This catch is beveled, and the notch is also beveled, so that the catch will lock the sash firmly to the shoe and prevent any side motion or rattling. When in this position, the sash may be raised and lowered in the ordinary manner of window-sashes; but when it is desired to turn the sash for the purpose of reaching the outside glass, or for any other reason, it is only necessary to release the catches at the top, when the sash can be turned upon its pivots, swinging free of the inside of the guides of the window-frame, while the shoes or strips remain in place in the channels or grooves.

In order to prevent the entrance of wind or wet, we employ a strip, H, which fits upon the side of the window-casing so that its edge presses against the sash, covering the joint between the sash and the shoe so that no wind or dust may enter. This strip H has a dove-tailed tongue, I, fitting in a corresponding vertical groove or channel in the side of the window-casing. The strip is of approximately an equal length with the lower sash, extending from the window-seat at the bottom to a point near the level of the top of the lower sash. A spring, J, is fixed in the side of the window-casing, so as to press against the sliding strip H, and thus hold it at any point where it is desired. When the lower sash of the window is connected with its shoes, so as to move up and down in the groove or channel

in the window-casing, this strip will be drawn down so as to rest upon the window-seat, and thus cover the joint between the sash and the shoe, and will remain in that position while the window is being used in the ordinary manner.

If it is desired to turn the window-sash, the strips H upon each side are moved up by taking hold of the knobs K until they are clear of the top of the sash. The latch or catch is then released from the shoe and the sash upon each side, and the sash will then be free to turn about its journal-pins, as before described.

The weather-strip H' of the upper sash is applied from the outside, and does not need to be moved up or down, but remains stationary. When it is desired to turn the upper sash, the lower sash is first locked and then with its shoes and its weather-strips H is moved up to the top. The upper sash is then drawn down until it is clear of the lower one, and being thus released it may be turned in the same manner as described for the lower sash.

By this construction we greatly simplify the mechanism necessary in this class of sashes and at the same time provide an efficient protection from wind or dust, as well as prevent the rattling of the sash in case the joints become loose.

We are aware that window-sashes have been made to turn upon both horizontal and vertical journals, so that access may be had to the exterior glass, and that various devices have been employed for producing this movement, and we do not claim, broadly, a turning sash.

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

The swinging window-sash having horizontal journal-pins passing through its central portion and uniting it with shoes or strips which form a continuation with the edge of the sash and fit within the grooves or channels in the window-casing, and latches by which the sash is united with the shoes, in combination with the vertically-sliding protecting-strips H, having the operating-knob and the holding-spring, substantially as herein described.

In witness whereof we have hereunto set our hands.

PHILIP ADELSON.
LOUIS PROLL.

Witnesses:

WM. PROLL,
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