(No Model.)

J. E. JONES.

WEATHER STRIP.

No. 435,841. Patented Sept. 2, 1890.

Fig. 1.

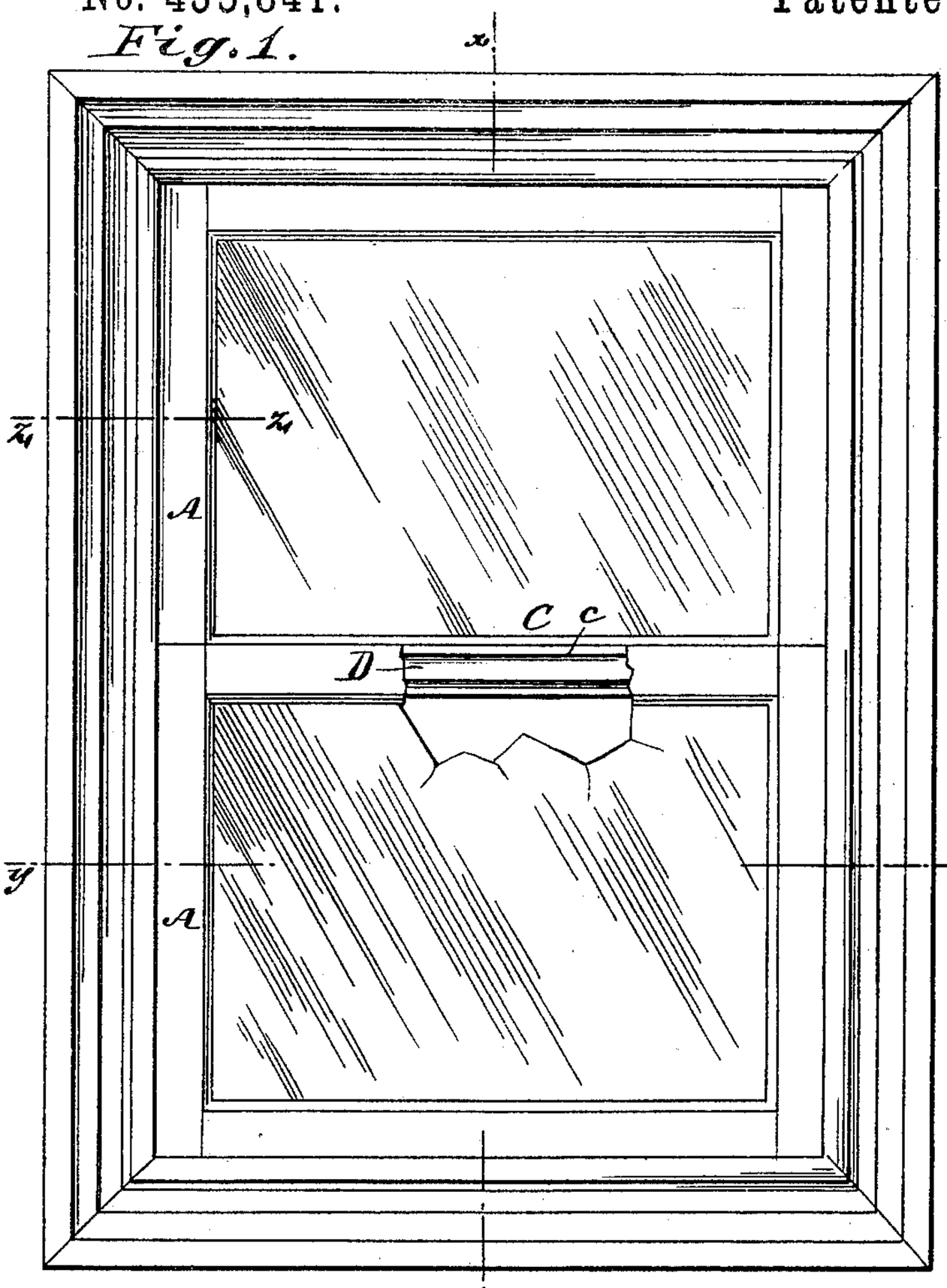


Fig. 2.

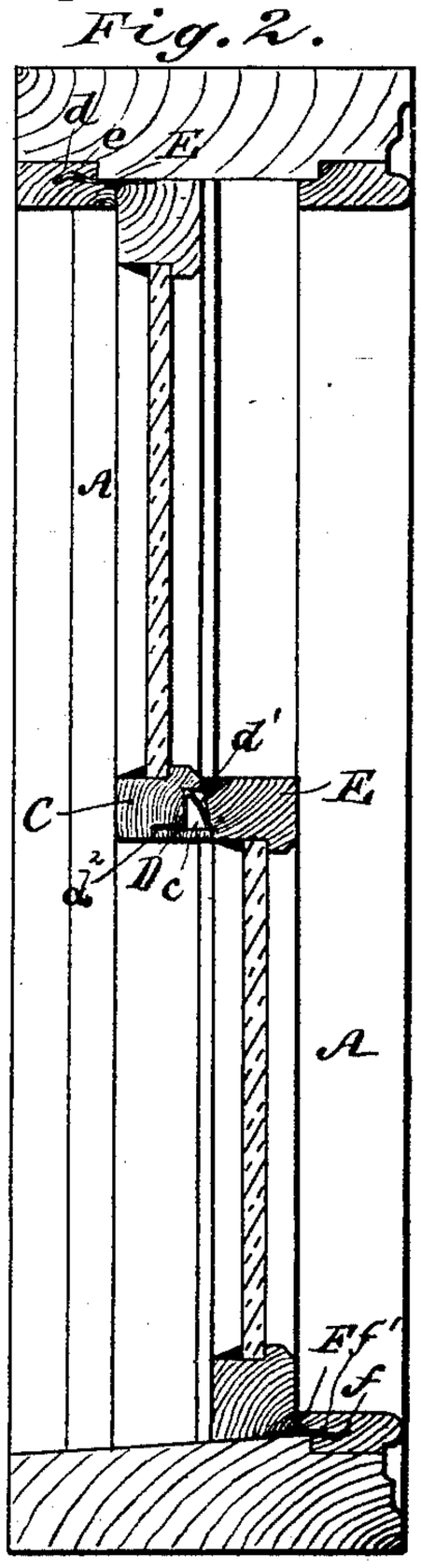


Fig. 3.

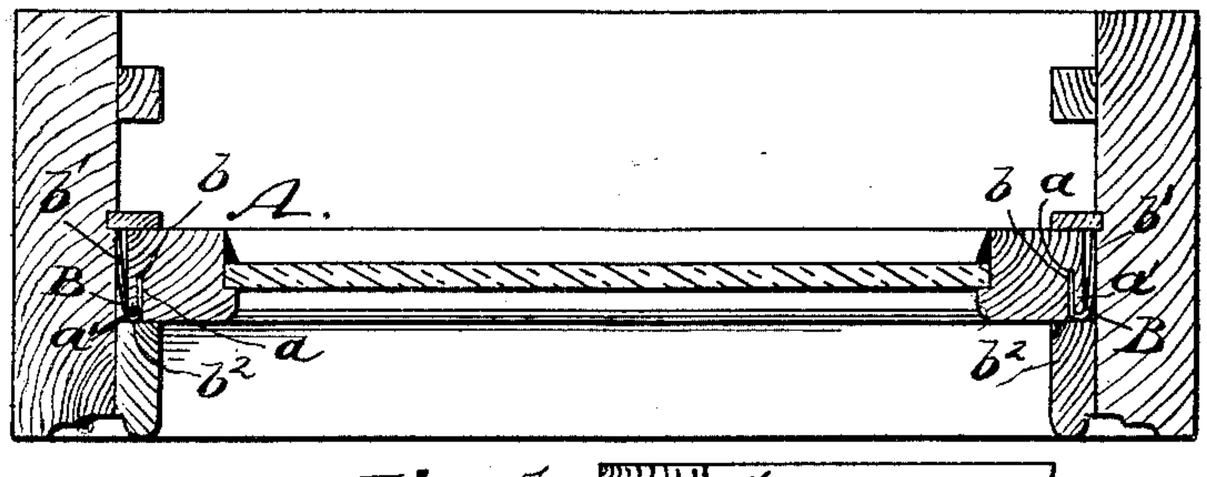


Fig. 4.

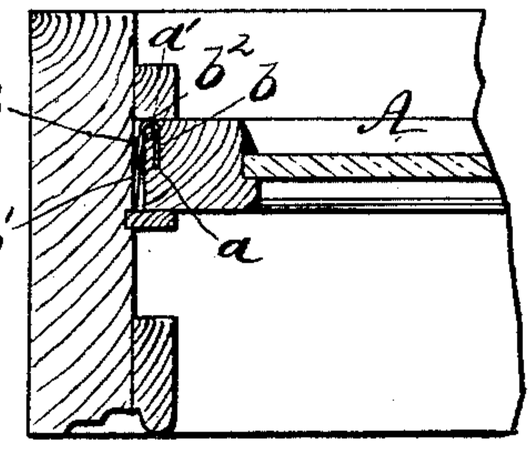
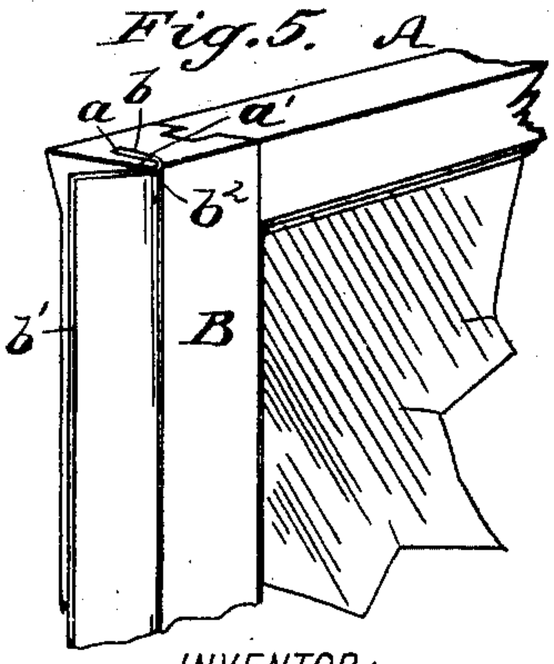


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN E. JONES, OF NEW YORK, N. Y.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 435,841, dated September 2, 1890.

Application filed November 1, 1889. Serial No. 328,903. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. JONES, of New York, in the county and State of New York, have invented a new and Improved Weather-Strip, of which the following is a full, clear, and exact description.

My invention relates to a weather-strip designed more particularly for windows; and the invention consists, principally, of a strip of spring metal bent longitudinally to be U-shaped in cross-section, applied to the edge of the sash, so that the outer part of the strip will press constantly against the window-frame.

The invention also consists of similar strips at the top and bottom of the sash and at the meeting-rails, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a broken front elevation of a window-frame and sash having my invention applied thereto. Fig. 2 is a sectional elevation of the same on line $x\ x$ of Fig. 1. Fig. 3 is a sectional plan view on line $y\ y$ of Fig. 1. Fig. 4 is a detailed section on line $z\ z$ of Fig. 1, and Fig. 5 is a detailed perspective view of one corner of the sash and weather-strip removed from the frame.

Along each side of the sash A is attached a weather-strip B, of sheet metal, preferably spring-brass, bent longitudinally to be substantially U-shaped in cross-section. The preferred form is shown clearly in Fig. 5, the plate being bent to form the member b, the outer member b', and the curve b^2. The member b is pressed into a slot a, formed in one of the outer surfaces of the sash parallel with and a short distance from the vertical edge of the sash. This slot forms a bridge a', which re-enforces the spring and prevents injurious crushing or buckling of the spring at any part. This bridge acts as a cleat to retain the strip in place, and the strip fits over it, so that the upper part of the bridge reaches up to the fold in the strip, and it at all times keeps the fold from being crushed by any side pressure that may happen to come upon the sash.

In a recess c, formed in the front edge of the meeting-rail C, is fitted the strip D, of spring metal. This is substantially U-shaped in cross-section, with a flange d^2 to fit in a slot in the sash, as shown in Fig. 2. The outer member d' by its spring action presses against the rail E, and forms a tight point when the sashes are closed.

At the top of the window in a slot d is fitted the metal spring plate or strip E, formed with a groove e, which deflects the outer edge of the plate downward to form a close contact with the upper edge of the sash, and at the window-sill is fitted in a slot f a similar strip F, which is slightly grooved at f' to normally elevate the outer edge of the strip, so it will have a sufficient spring-pressure against the bottom of the sash when closed to exclude air, dust, snow, rain, &c.

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

1. A sash formed with a slot in one of its outer surfaces, forming a bridge at the corner of the sash combined with a metallic strip U-shaped in cross-section, one of the members of the strip being inserted in the said slot, substantially as described.

2. A weather-strip composed of a ribbon of sheet metal bent longitudinally into U shape, in combination with a sash formed with a slot in its outer surface near to and parallel with the edge of the sash, one member of the strip being inserted in the slot, the other being held by spring-pressure against the window-frame, and the curve b^2 acting as a friction-surface against the window-cleat, substantially as described.

JOHN E. JONES.

Witnesses:
H. A. WEST,
C. SEDGWICK.