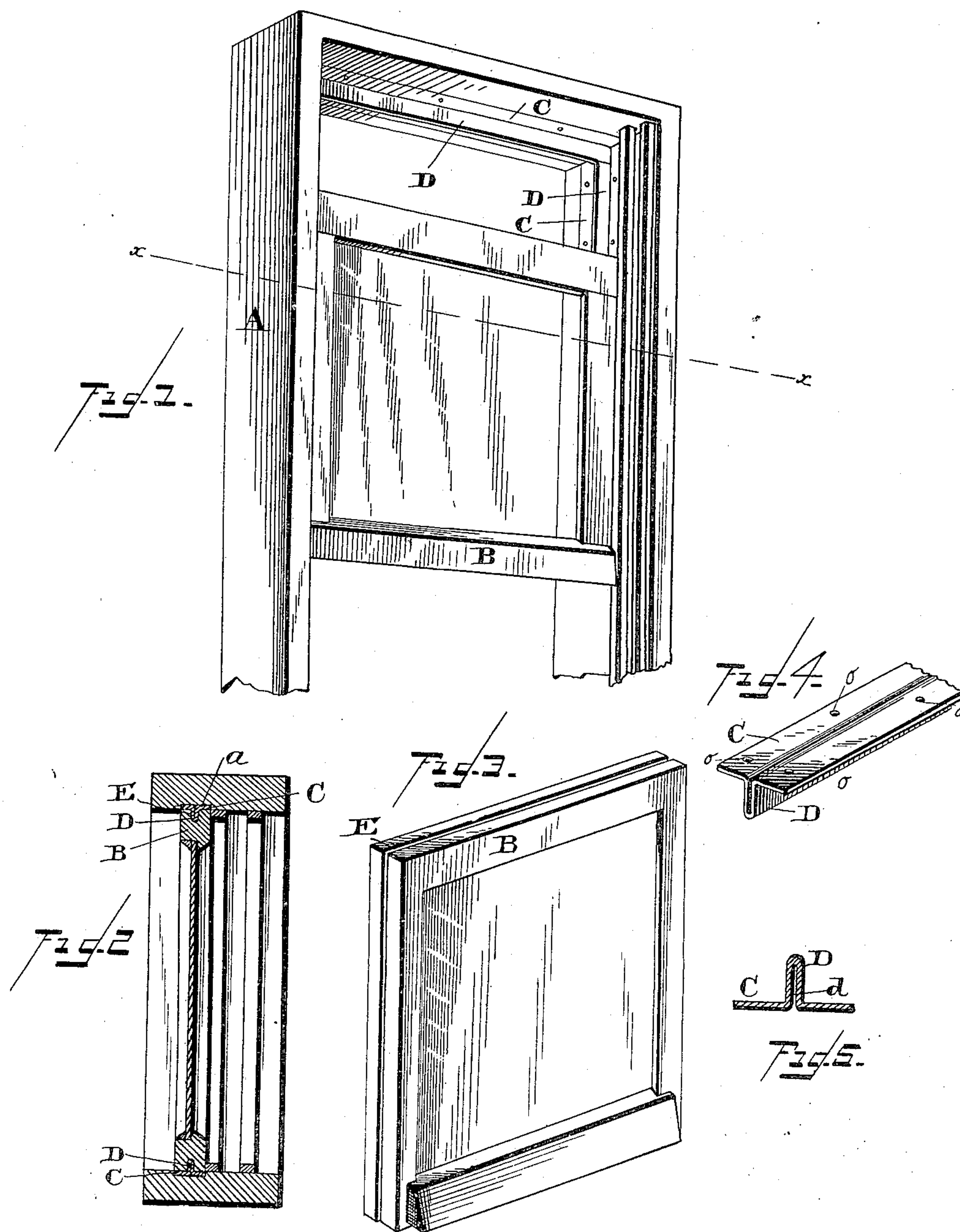


(No Model.)

A. C. SIMS.
WEATHER STRIP.

No. 424,905.

Patented Apr. 1, 1890.



WITNESSES
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UNITED STATES PATENT OFFICE.

ALBERT CLINTON SIMS, OF WINONA, KANSAS.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 424,905, dated April 1, 1890.

Application filed June 17, 1889. Serial No. 314,646. (No model.)

To all whom it may concern:

Be it known that I, ALBERT CLINTON SIMS, a citizen of the United States, and a resident of Winona, in the county of Logan and State of Kansas, have invented certain new and useful Improvements in Weather-Strips; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to 5 which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a window 15 frame or casing and sash fitted with my improved weather-strip. Fig. 2 is a transverse sectional view through the frame and sash. Fig. 3 is a perspective view of one of the sliding sashes removed from the frame or casing. 20 Fig. 4 is a perspective detail view of a portion of my improved metallic weather-strip, and Fig. 5 is a transverse sectional view of the same.

Like letters of reference denote corresponding 25 ing parts in all the figures.

This invention relates to weather-strips for windows fitted with sliding sashes, and has for its object to provide windows of that character with a simple, inexpensive, and durable 30 device, which will answer fully the purposes for which it is intended.

To this end my invention consists in the peculiar construction and combination of the fixed frame or casing, a metallic weather- 35 strip, and the sliding sashes, substantially as will be hereinafter more fully described and claimed.

Reference being had to the accompanying drawings, the letter A designates the window 40 frame or casing, and B one of the sliding sashes appertaining to the same. The weather-strip is of metal and is constructed, preferably, by bending a strip of zinc or other suitable metal into a T shape, as illustrated on the drawings, forming a flat web or base C, 45 and a projecting rib D, formed by doubling that part of the metallic strip upon itself. If desired, however, the strip may be cast or formed in any other suitable manner with the 50 rib or raised part D solid, instead of forming it by doubling the middle part of the strip.

The sides of the frame or casing A, as well as the top and bottom parts thereof, are recessed, as shown at *a*, to receive the base C of the weather-strip, so that the latter will lie 55 flush or even with the inner sides of the casing. The sliding sashes, one of which is shown at B, are provided on opposite sides with inward-projecting grooves E of such dimensions that they will fit the projecting ribs D. In 60 this manner it will be seen that these ribs or projections D, by fitting into the aforesaid recesses E of the corresponding sides of the sliding sashes, effectually exclude rain, snow, or dust without in the least interfering with the 65 easy operation of the sashes.

By constructing the metallic strips as shown in the drawings—that is to say, forming the raised part or rib D by doubling the metal upon itself, leaving a narrow space *d*—a cer- 70 tain amount of elasticity is given to this part, so as to enable it to fit closely in its appropriate groove E of the sliding sash, thereby taking up wear so as to insure a close fit at all times herein. 75

Although in the accompanying illustration of my invention I have shown my improved weather-strip as applied to window-sashes only, it will be seen that it may be applied in the same manner and with equal advantage 80 to sliding doors, &c., without deviating from the construction of the strip as herein shown.

In practice I manufacture these metallic strips in suitable length, which will easily be cut by the purchaser to the right size to fit 85 the windows or doors for which they are intended, for which they can readily be applied by any person of ordinary intelligence and without the assistance of skilled labor. The flat part or base C is provided with a series 90 of equidistant perforations or apertures *o*, by means of which the strip is fastened in place in the recessed part of the casing by means of tacks or screws inserted through these apertures. 95

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. As an improved article of manufacture, a metallic weather-strip consisting of a flat 100 base and a longitudinally-raised part or rib at right angles to the flat base, said flat base

being provided with series of equidistant perforations on opposite sides of the rib, substantially as and for the purpose set forth.

2. As an improved article of manufacture,
5 a metallic weather-strip composed of a flat strip of suitable metal bent or doubled longitudinally to form a raised rib at right angles to the flat base, and provided on opposite sides of said ribs with a series of equidistant apertures, substantially as and for the purpose set
10 forth.

3. The combination of the frame or casing recessed on its inner sides, the metallic strips provided with flat bases and having project-

ing ribs extending centrally at right angles 15 to the bases, the latter fitting in the recesses of the casing, and the sliding sash-frames grooved on opposite sides to receive the projecting ribs of the casing, substantially as set forth. 20

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

ALBERT CLINTON SIMS.

Witnesses:

CALVIN P. SNYDER,
JOEL C. LOUCKS.