

No. 656,659.

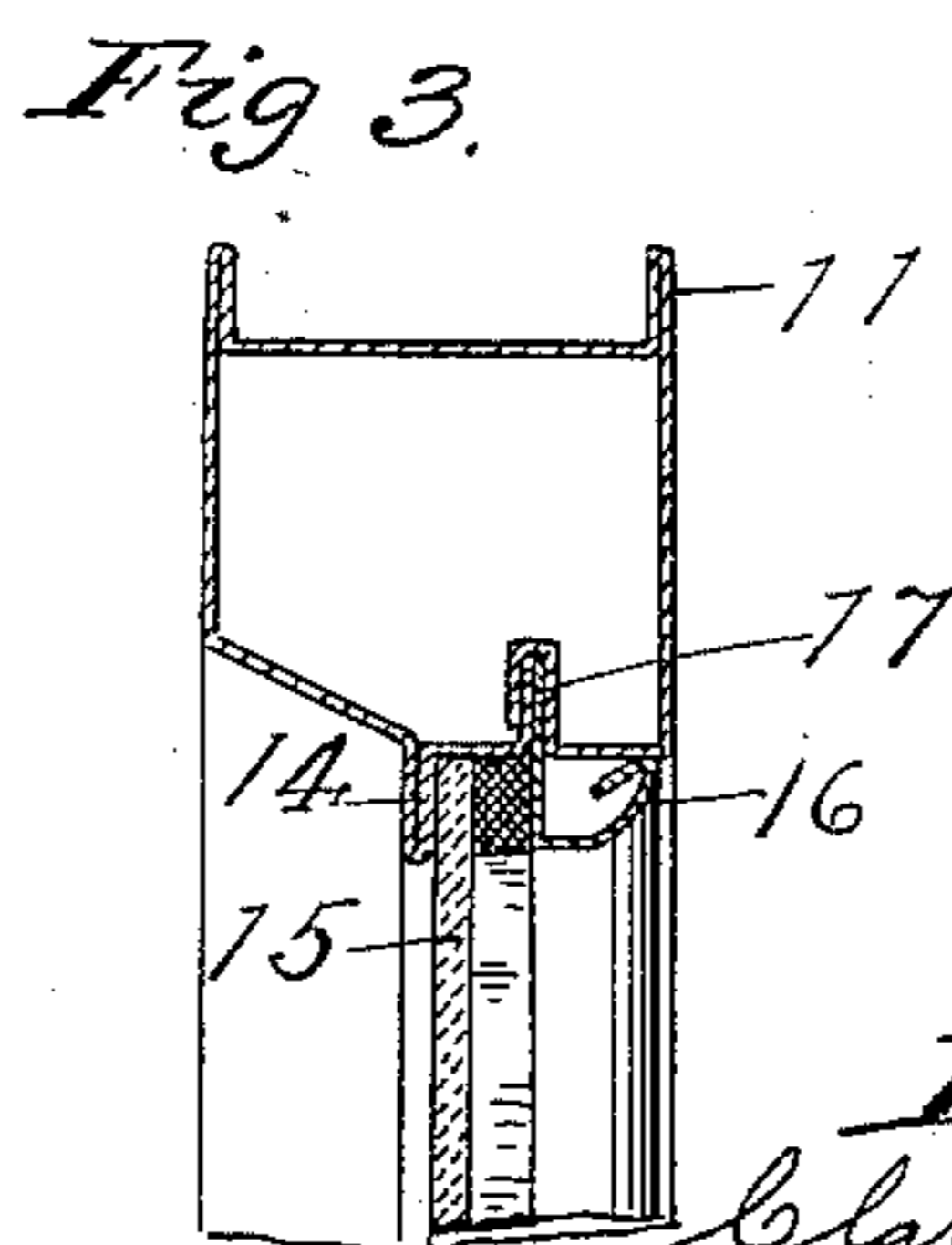
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C. D. PRUDEN.

METALLIC WINDOW FRAME AND SASH.

(Application filed Nov. 8, 1899.)

(No Model.)



Witnesses

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CLARENCE D. PRUDEN, OF MINNEAPOLIS, MINNESOTA.

METALLIC WINDOW FRAME AND SASH.

SPECIFICATION forming part of Letters Patent No. 656,659, dated August 28, 1900.

Application filed November 6, 1899. Serial No. 735,958. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE D. PRUDEN, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Metallic Window Frames and Sashes, of which the following is a specification.

My invention relates to improvements in metallic window frames and sashes; and it consists in the novel construction and arrangement of parts hereinafter set forth, reference being had to the accompanying drawings, forming part of this specification.

In the accompanying drawings, forming part of this specification, Figure 1 is a vertical section through a window frame and sash embodying my invention. Fig. 2 is a transverse section through the upper sash looking down upon the lower sash and showing the lower sash partly in section. Fig. 3 is a partial detail of the sash.

In the drawings, 2 is the top of the frame, 3 the bottom, and 4 the sides, formed of light sheet metal and suitably joined at the corners. The top and sides may be of any suitable configuration for architectural effect. The faces of the side pieces 4 are provided with outwardly-projecting vertical ribs 5, constituting guides for the window-sash, the metal between said ribs being inwardly bent to form a space 6 to receive the weight-chain 7. The metal of the frame sides between the sash-guides is carried inwardly to form a rib 8, over which rib fits the bent end 9 of a partition 10, extending transversely across the frame side. This partition 10 serves to support the front of the frame side and also to separate the weights, which are arranged upon opposite sides of the partition. The sash, which is also made of metal, is formed along its edge with flanges 11, which fit over the ribs 5, as shown in Fig. 2, and over stops 12 and 13, carried by the top and bottom of the frame. The inner faces of the sash are formed with central ribs 14, against which the glass 15 is placed, said glass being held in position by a removable strip 16, which fits into a groove 17 in the sash. When it is desired to place the glass in or remove

it from the sash, it is only necessary to lift the strips 16 from the grooves. A dust-proof joint is effected between the upper and lower sash by the flange 18, carried by the upper sash, and the flange 19, carried by the lower sash, said flanges overlapping, as shown in Fig. 1, when the sash is in closed position.

Among the advantages of my improved metal window-frame sash is the combination of ribs 5 of the frame with the ribs 11 of the sash. In case of any looseness between the frame and sash above mentioned the ribs can be bent toward each other to constitute a tight joint, and the space between the ribs 5 also gives room for the chain of the weight. Another advantage lies in the flanges carried by the upper and lower sash, which flanges constitute a dust-proof connection between the sash, and by being a part of the metal sash can be bent in case of looseness to maintain a tight joint. Another feature is the strips for holding the glass in the sash. These strips fit, as shown, in grooves in the sash, so that they can be easily inserted and removed, and thus can hold the glass in place without the use of supplementary securing devices.

I claim—

1. In a window frame and casing, the combination of the vertical stiles of the frame-body, provided with outwardly-projecting ribs, and a depressed portion between said ribs, and the sash provided with flanges or ribs adapted to fit over the ribs of said stiles.

2. A sheet-metal sash provided with an inwardly-extending flange against which the glass abuts, and formed with a groove adjacent to said flange to receive a detachable securing-strip.

3. A sheet-metal sash provided with an inwardly-extending flange against which the glass abuts, and a removable metal securing-piece adapted to be arranged in a groove adjacent to said flange to hold the glass against said flange.

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

CLARENCE D. PRUDEN.

Witnesses:

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