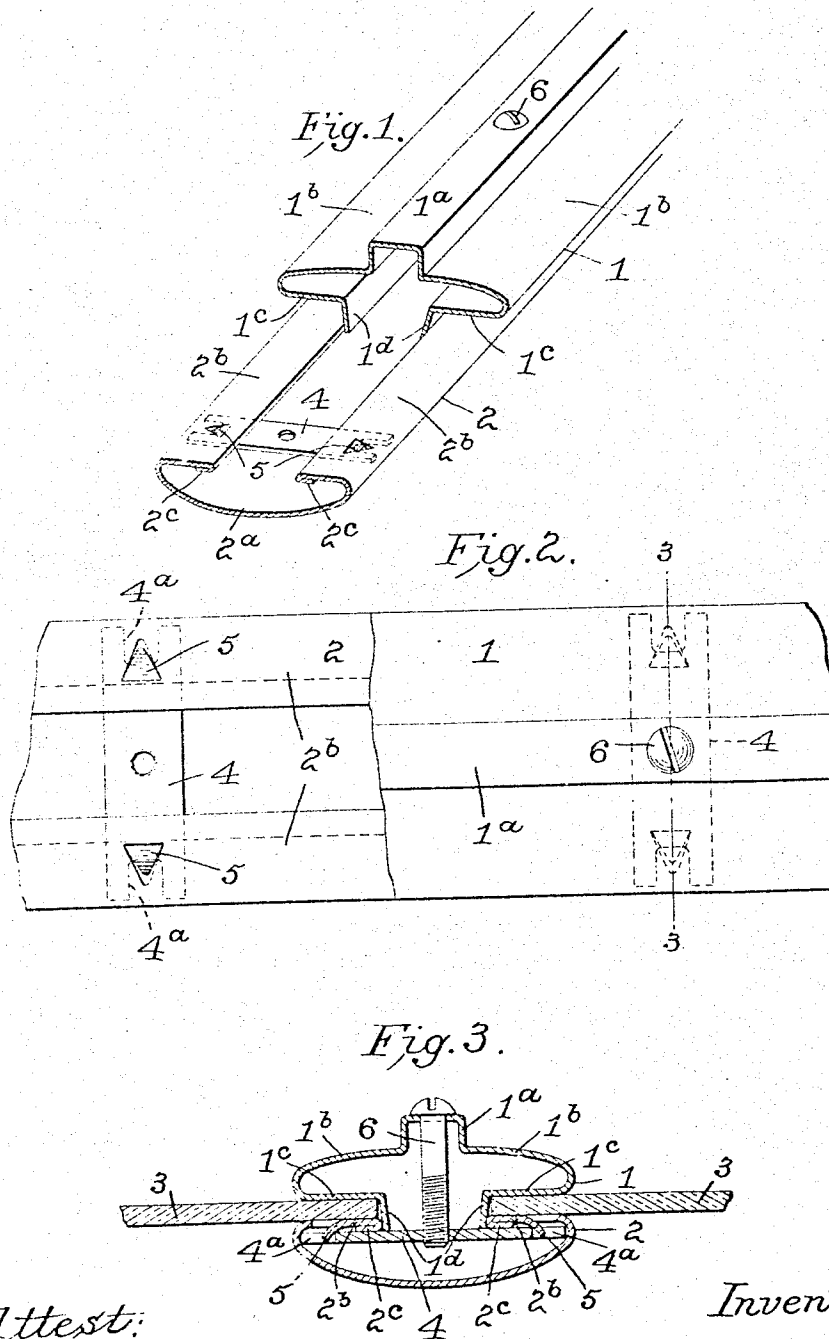


T. H. CLARK.
WINDOW CONSTRUCTION.
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1,012,190.

Patented Dec. 19, 1911.



Attest:

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UNITED STATES PATENT OFFICE.

THOMAS HENRY CLARK, OF CHICAGO, ILLINOIS.

WINDOW CONSTRUCTION.

1,012,190

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, THOMAS H. CLARK, citizen of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Window Construction, of which the following is a specification.

My present invention relates to improvements in means for securing together the members comprising the sash bars of metallic sashes for windows, so that the panes of glass may be held between said members.

The object of the invention is to provide a simple, strong, durable and efficient construction capable of being readily assembled, and the invention includes the novel features of construction hereinafter described and particularly pointed out in the appended claims.

The invention is shown as embodied in a muntin construction, and is illustrated in the accompanying drawings, in which:

Fig. 1 represents a perspective detail showing the location of the cross plates; Fig. 2 is a plan view partly in section; and Fig. 3 a section on line 3-3 of Fig. 2.

Referring by reference characters to this drawing, the members which constitute the parts of the muntin are indicated at 1 and 2, and may be made of any suitable metal, preferably galvanized iron bent into the shape shown. The member 1 is provided with a central raised rib 1^a on opposite sides of which the metal is curved outwardly as at 1^b and then curved or doubled back upon itself to form the glass holding portions of flanges 1^c. The inner edges of these flanges are bent or turned at a sharp angle as indicated at 1^d to cooperate with the edges of the opposing member. The said opposing member 2 has a main curved body portion 2^a with inwardly turned portions or flanges 2^b, the edges of which are preferably turned back upon themselves for stiffening or strengthening purposes; as indicated at 2^c and between which edges the flanges 1^d fit. When the two members are assembled with the glass panes 3, held therebetween as indicated in Fig. 3, the edges of the glass are clamped by the opposing flanges or faces 1^c and 2^b. To provide for connecting the two parts or members together in a simple and durable

manner, I provide a plurality of cross bars or plates 4 which have their ends resting in the space formed by the overturned portions forming the flanges 2^b, and these bars have their ends recessed or bifurcated, as indicated at 4^a. By striking down the metal of the flanges 2^b into these recessed or bifurcated portions, as indicated at 5, the cross bars are held firmly in position transversely of the sheet metal frame bars. The cross bars are provided with threaded openings for the reception of screws 6 which pass through corresponding openings in the companion frame member, and are screwed into the cross bars to draw the two parts firmly together.

I claim as my invention:

1. In metallic window construction, a pair of hollow sheet metal members adapted to clamp the glass between them, cross bars carried by one of said members and having recessed ends, the metal of said member being struck into engagement with said recessed ends, and securing devices connecting the other sash member with said cross bars, substantially as described.

2. In metallic window construction, a pair of hollow sheet metal members adapted to clamp the glass between them, cross bars carried by one of said members and having recessed ends, the metal of said member being struck into engagement with said recessed ends, and screws passing through the other member and engaging the cross bars.

3. In metallic window construction a hollow sheet metal member having inwardly turned spaced edges, forming a glass holding flanges, a second hollow sheet metal member having opposing glass holding flanges and angularly turned edges cooperating with the spaced edges of the first member, cross bars within the first named member having recesses engaged by projections from said first member and screws passing through the second member and engaging said cross bar.

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

THOMAS HENRY CLARK.

Witnesses:

JAS. J. O'BRIEN,
M. J. DORSEY.