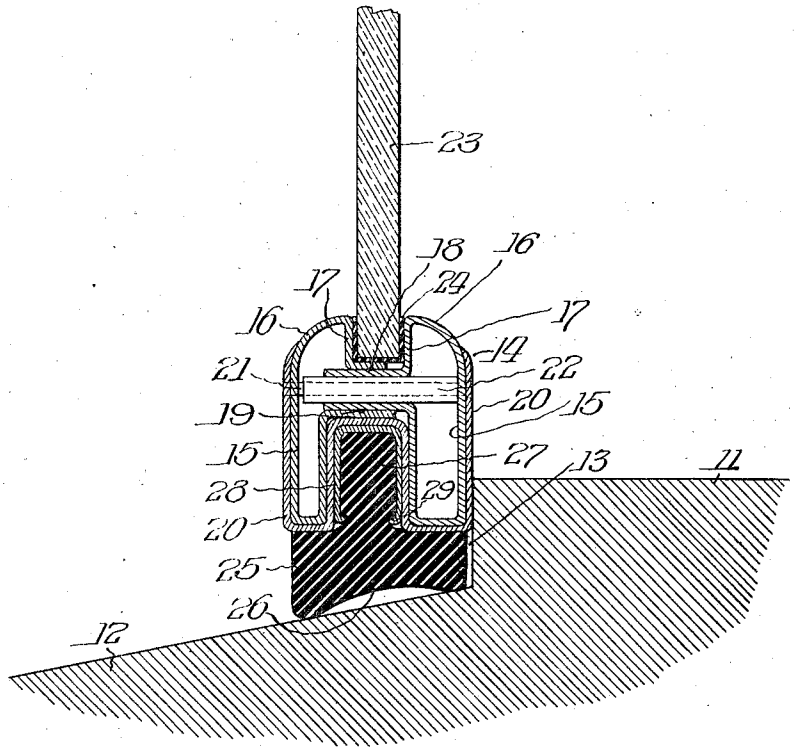
G. H. FORSYTH.

SASH CUSHION.

APPLICATION FILED OCT. 27, 1913.

1,149,145. Patented Aug. 3, 1915.



Witnesses:

S. B. Barrett

Lewis J. Ernest

Inventor:

George H. Forsyth,

By Lothrop, Bell & Lothrop

Attys

UNITED STATES PATENT OFFICE.

GEORGE H. FORSYTH, OF CHICAGO, ILLINOIS.

SASH-CUSHION.

1,149,145. Specification of Letters Patent. Patented Aug. 3, 1915.

Original application filed October 27, 1903, Serial No. 459,775. Divided and this application filed October 27, 1913. Serial No. 797,462.

To all whom it may concern:

Be it known that I, GEORGE H. FORSYTH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sash-Cushions, of which the following is a specification, this application being a division of my copending application, Serial No. 459,775, filed October 27, 1903.

This invention relates to metal constructions which are more particularly, though not exclusively, designed for use in railway cars, the object of the invention being the provision in connection with a car window sash of cushioning means whereby to afford a resilient abutment as the sash is lowered, to effectually exclude the elements, and to adapt the lower sash edge to the variations in conformation of the window sill, and a special object of the invention being improved means of assembling and retaining the cushion in place in the sash.

In the accompanying drawing is set forth in transverse vertical section a fragmentary portion of a sash with the cushioning strip assembled in preferred relation thereto. As, however, certain modifications are practicable without departure from the essence of the invention or the material sacrifice of its advantages it is to be understood that the drawing and the description based thereon are to be taken in an illustrative and not in an unnecessarily limiting sense.

Referring to the drawing, 11 designates the usual inside window sill and 12 the offset inclosed outer sill upon which and bearing against the vertical wall 13 of the offset rests the window sash indicated generally at 14. In making up the stile and rails from the sash members I take a pair of sheet metal strips that are bent longitudinally to the substantially duplicate cross-sectional form shown in the drawing, each member forming an outer side wall 15 of the stile, a glazing bead 16, and the side walls 17 of a reëntrant groove in the outer edge of the stile, the meeting margin of the strips being overlapped as shown, to form transverse walls of double thickness for the bottoms 18 and 19 of the glass-receiving groove and the said reëntrant groove, respectively. The two longitudinal halves of the stile thus formed and joined are secured together by a longitudinally bent clamp-strip 20 which is so shaped as to embrace the side walls 15 preferably under tension and also enter and fit the reëntrant groove in the outer edge of the stile; and the side walls 15, together with the margins of the clamp-strip 20 are securely united by transverse pins 21 that are surrounded by spacing sleeves 22, which latter are somewhat less in length than the distance between the inner sides of the walls 15, thereby permitting the latter to be drawn together to cause the beads 16 to snugly grip the glass indicated at 23, a rubber or other resilient packing strip 24 being fitted to the edge of the glass.

In the reëntrant groove on the bottom of the sash I mount a novel cushioning member for the sash, the same consisting of a strip 25 of yielding material, preferably rubber, which preferably is formed with a longitudinally channeled or transversely concave lower face 26 which adapts the same to a close fit on sills having different degrees of transverse inclination, and also adapts the cushion to variations from a straight line which are sometimes found in the longitudinal dimension of the sill, owing to the camber of the car-body. The cushion is secured to the lower edge of the sash-bar by means of an integral upwardly projecting tongue 27 which lies within the reëntrant groove of the sash-bar and is preferably embraced by a channel-shaped metal clip 28 slidably mounted within the groove and having inwardly turned margins 29 which bite into the neck of the tongue and securely grip the latter. The upper corners of the clip 28 are rounded, as shown, opposite the corners of the reëntrant groove in order to avoid any interference with the transverse compressibility of the sash-bar. The clip 28 is readily insertible in the groove and is held therein frictionally and also by the clamping action of the clamp strip 20 under the tension of the pins 21.

I claim:

1. The combination with a sash member, having in its lower edge a reëntrant groove, of a rubber cushion having its lower face longitudinally channeled and its upper face provided with a longitudinal tongue, a metallic clip engaging the tongue of the cushion and slidably mounted within the sash groove, and means to clamp the walls of the reëntrant groove upon the clip, substantially as described.

2. The combination with a hollow longitudinally divided metal sash bar having a reëntrant groove in its lower edge, of a cushioning strip having a tongue adapted to enter said channel, a hollow metal clamp in said channel embracing said tongue and provided with inturned edges adapted to grip the neck of the latter, and means for compressing the sides of said channel on said clamp and tongue comprising transverse tensioning members, substantially as described.

3. A window sash having along its inner edge a glazing groove, said sash comprising two sections separable in the plane of the sash and groove, and releasable means to removably secure the two sections together upon the glass seated in the groove.

4. A window sash having along its inner edge a glazing groove and along its outer edge a cushion-retaining groove, said sash comprising two sections separable in the plane of the sash and grooves, and releasable means to removably secure the two sections together upon the glass and cushion seated in the respective grooves.

5. The combination with a sash, of a cushion for the lower rail thereof, said cushion comprising a body portion disposed beneath the lower face of the sash rail and having a lower marginally lipped portion, the cushion body supported directly above the lipped portion by the said lower face of the sash.

6. The combination with a sash, of a cushion for the grooved lower rail thereof, said cushion comprising a body portion extending beneath the lower face of the sash rail beyond the groove and having an upper tongue seated within the groove and also having marginal lip portions separated by a longitudinal channel, the cushion body supported by the said lower face of the sash directly above the lip portions.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

GEORGE H. FORSYTH.

Witnesses:
LEWIS T. GREIST,
MARY C. BROWER.