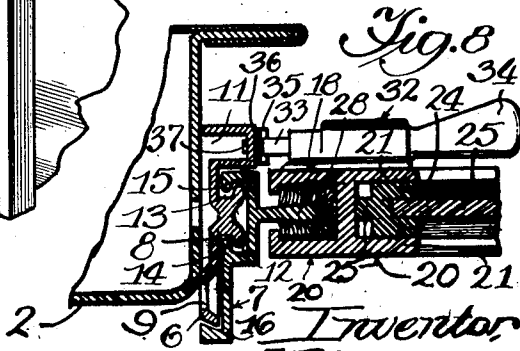
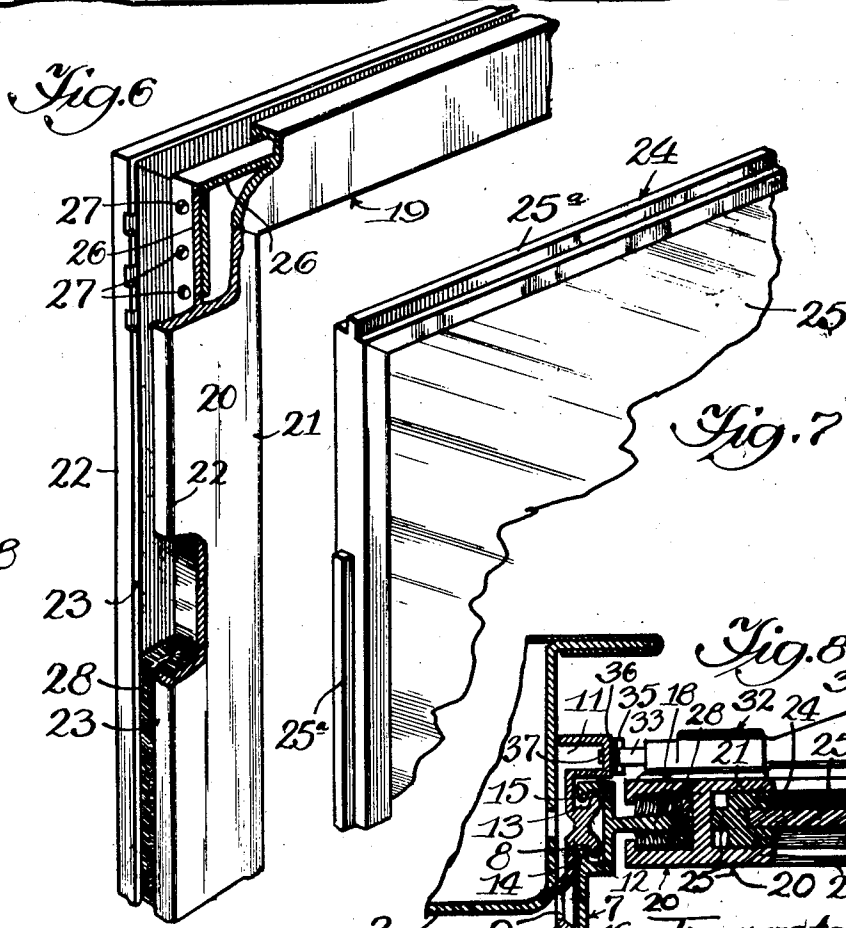
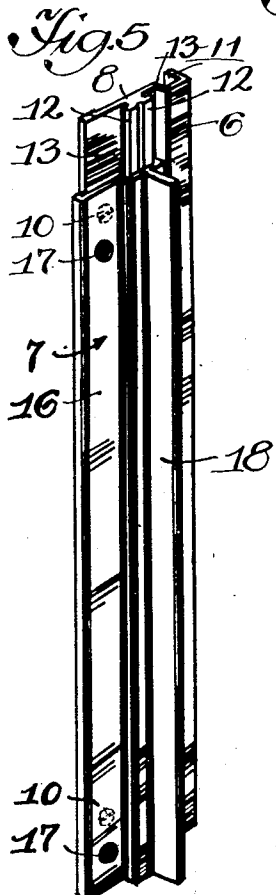
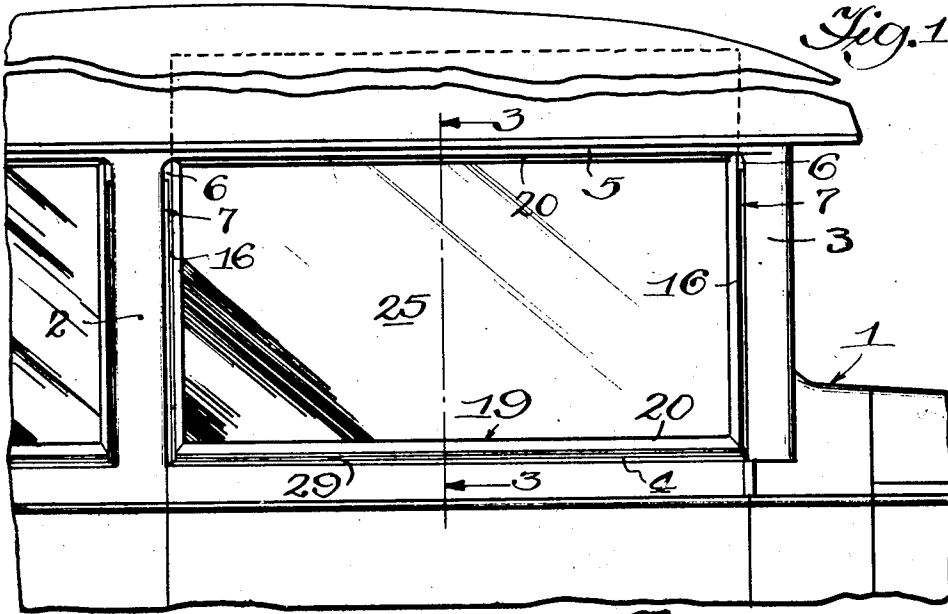


Nov. 20, 1934.

F. J. PLYM ET AL
WINDOW CONSTRUCTION
Filed Jan. 7, 1933

1,981,192

2 Sheets-Sheet 1



Witness:
Chas. E. Goussier

Inventor:
Francis J. Plym
Ivor G. Barclay
Attorney:
Parkinson & Lane

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2 Sheets-Sheet 2

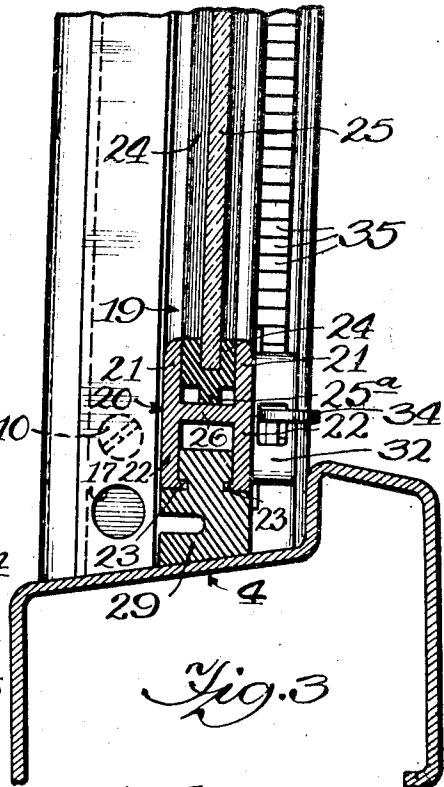
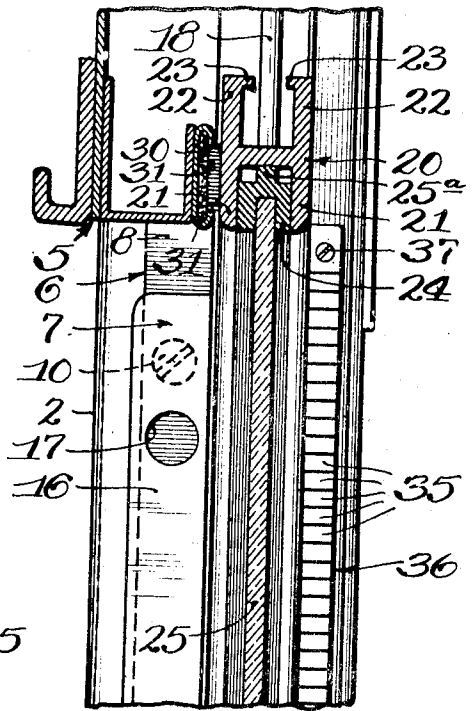
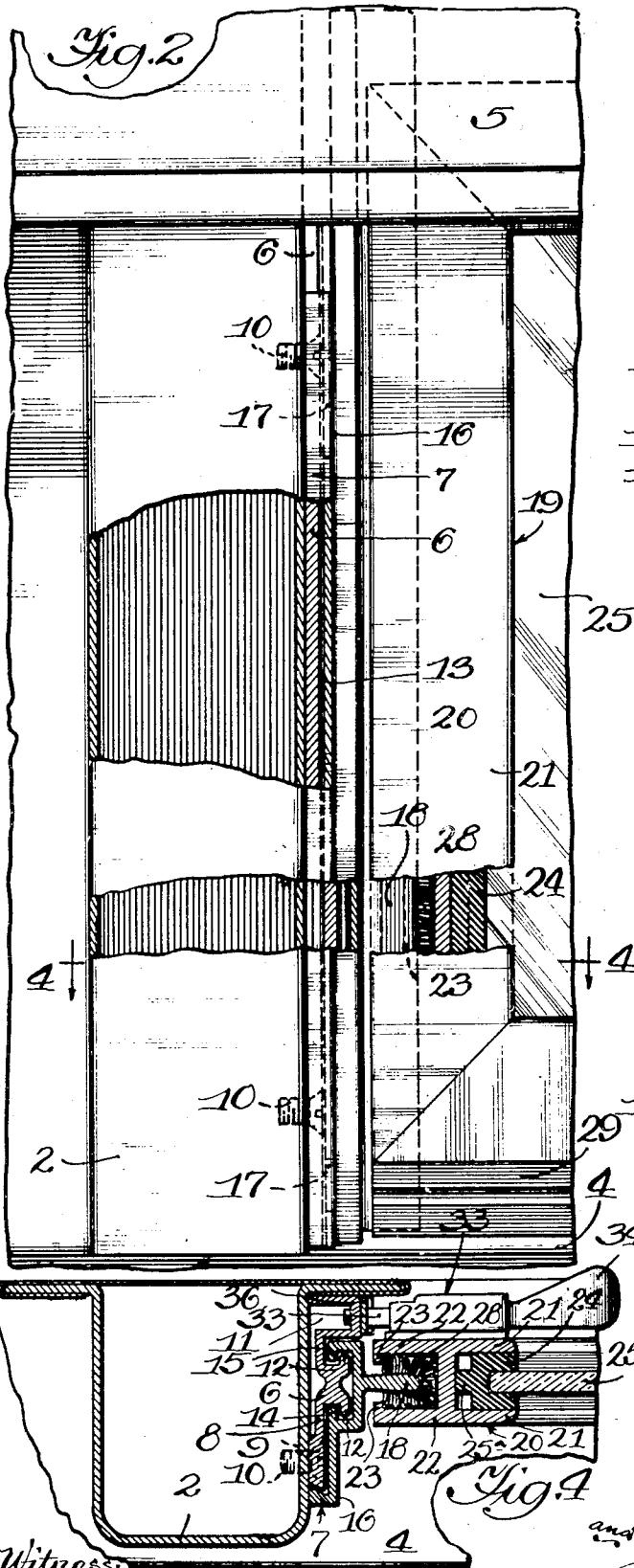


Fig. 3

Inventor,
Francis J. Plym,
and
Ivor G. Barclay
Atty.
Parkinson & Lane.

Witness:
C. M. H. H. H.

UNITED STATES PATENT OFFICE

1,981,192

WINDOW CONSTRUCTION

Francis J. Plym and Ivor G. Barclay, Niles, Mich.,
assignors to The Kawneer Company, Niles,
Mich., a corporation of Michigan

Application January 7, 1933, Serial No. 650,653

8 Claims. (Cl. 189—73)

The present invention consists in a novel window construction and more particularly in such a window construction for busses, railroad coaches and other structures in which a sliding sash may be employed or is desirable.

Among the objects of the present invention is to provide a novel frame construction having telescoping jamb sections which are capable of relative movement for assembly and detachment, but which are prevented from sliding movement when the sash is raised or lowered.

A further object is the provision of novel interengaging jamb sections, one of which is provided with a rib or guide upon which the sash slides. In the embodiment disclosed, one of the sections serves as a retaining means for the other and this retaining member is attached to the vertical support or frame of the window.

Another object is the provision of a novel bus window having jamb sections, one of which is attached to the window frame by suitable attaching means such as screws or the like, and the other section interengaging the first section and covering the attaching means, but being provided with openings permitting access to the attaching means. In the illustrated embodiment, the second section is adapted to slide on the first section so as to conceal the attaching means and prevent them from working loose and out. The present construction permits the removal of not only the entire window structure, but also the removal of the jamb sections as a unit or assembly rather than as separate members.

A still further object is the provision of a novel jamb assembly to a portion of which the ratchet hardware controlling the sliding sash is attached. This portion of the jamb assembly is provided with a rearwardly facing channel forming a space for screws used in the tapping of the hardware without striking the main support of the frame. This construction also brings the ratchet out further towards the center of the window for convenient operation.

Yet another object of the invention is to provide a novel sash construction, the rails of which are formed with an inwardly projecting double flange glass rebate into which is seated a rubber or other retaining strip for holding the glass, and an outwardly extending double flange between which is retained a yielding carpet-like weathering means.

A further object of the invention is the provision of a window construction provided with a novel weathering means permitting free and un-

interrupted sliding movement of the sash. This weathering means provides a wiping contact with the guide or rib on the jamb so as to keep this guide member free from dust and foreign particles. It further has the advantage of absorbing shocks and will not become packed or hard by continued use.

Still another object is the provision of a novel weathering strip at the top of the frame and forming a wiping contact with the upper rail of the sash.

A still further object is the provision of a novel weathering means on the lower sash rail and adapted to contact the sill when the sash is in a closed position. In the disclosed embodiment, this weather strip is moulded rubber or other resilient material suitably anchored in the sash.

Further objects are to provide a construction of maximum simplicity, efficiency, economy and ease of assembly, and such further objects, advantages and capabilities as will later more fully appear, and are inherently possessed thereby.

The invention further resides in the combination, construction and arrangements of parts illustrated in the accompanying drawings, and while there is shown therein a preferred embodiment, it is to be understood that the same is susceptible of modification and change and comprehends other details and constructions, without departing from the spirit of the invention.

Referring to the drawings:

Fig. 1 is a fragmentary view in side elevation of a bus or other vehicle in which the novel window construction may be employed.

Fig. 2 is an enlarged fragmentary view in side elevation of the window, with parts broken away to more clearly disclose the inner construction.

Fig. 3 is a fragmentary enlarged view taken in a plane represented by the line 3—3 of Fig. 1.

Fig. 4 is a view in horizontal cross section taken on the line 4—4 of Fig. 2.

Fig. 5 is a view in perspective of the sectional jamb construction at the sides of the frame.

Fig. 6 is a fragmentary view in perspective of the sash construction with parts thereof broken away to more clearly disclose the interior structure.

Fig. 7 is a fragmentary view in perspective of the resilient or rubber retaining strip for holding the glass in the sash.

Fig. 8 is a fragmentary view in horizontal cross section through the frame and sash construction, showing the jamb sections and sash being removed as a unit.

Referring more particularly to the disclosure

in the drawings, the embodiment selected to illustrate the invention is shown as mounted in a bus or other vehicle 1 having an opening defining a window, the sides thereof comprising 5 vertical supports 2 and 3, a sill 4 and a head plate 5.

Connected to the vertical supports 2 and 3, are telescoping jamb sections 6 and 7, the under section 6 being provided with a web 8 having at 10 its one edge spaced counter-sunk openings 9 for the reception of screws, bolts or other attaching means 10 for connecting the jamb structure to the vertical supports 2 and 3, and at its other 15 edge this web is provided with a rearwardly facing channel 11, the purpose of which will be later more fully explained. The central portion of the web is provided with oppositely extending ears or ribs 12 forming channels 13 between the same and the web. These channels are adapted 20 to receive inwardly extending flanges or ribs 14 and 15 on the jamb section 7 whereby these sections interengage and telescope so as to prevent lateral removal of one from the other.

Thus the jamb sections are interlocked and 25 can be assembled or removed only as a unit, although the sections may be engaged or disengaged by a sliding longitudinal movement prior to their insertion in the window or after they have been removed therefrom. The outer portion 16 of the section 7 forms a finish strip and 30 is adapted to cover the openings 9 and the attaching means 10 for the inner jamb section to prevent the screws or bolts from working loose and out. However, the section 7 is provided 35 with spaced openings 17 which, upon a raising or upwardly sliding movement of the section 7, may be brought into registry with the attaching means 10 so as to permit their removal or attachment as desired.

The section 7 is further provided with a longitudinally extending rib or guide member 18 40 upon which the sash member 19 slides. This sash member is provided with rails 20 each having an inwardly projecting glass rebate comprising spaced flanges 21, and outwardly projecting legs or flanges 22 provided with extensions 23, the ends thereof adapted to form shoulders for the reception of weathering means. The inwardly extending flanges 21 are adapted to 50 receive a rubber or other resilient retaining strip 24 for holding the glass 25 in position in the sash. This retaining strip 24 is provided with a rearwardly extending bead 25^a extending for substantially the entire periphery of the retaining strip as shown more particularly in Fig. 55 7, except for cut-out portions at certain or all of the corners, these cut-out portions being for the purpose of permitting overlapping of the webs 26 of adjacent rails. This construction is more clearly disclosed in Fig. 6 in which the web 60 26 of the upper rail extends beyond the ends of this rail and is bent inwardly and attached to the inside of the adjacent or side rail 20 by any suitable attaching means 27. By this construction, the adjacent rails are anchored together and form a rigid sash construction. The 65 abutting outer edges of the rails may be joined in any suitable manner as by welding or the like.

The outwardly extending legs or flanges 22 of 70 the side rails 20 receive and retain a weather-strip 28 of carpet-like structure with the pile or nap thereof extending inwardly and contacting the rib or guide member 18 of the jamb. This 75 weathering means by reason of the contact of

the pile or nap with the guide members, wipes this exposed guide member free from dust and any foreign particles, thereby keeping the same in a clean and polished condition. This carpet-like weather strip further prevents infiltration 80 of air as well as leakage of water, will absorb shocks to which the sash member may be subjected thereby maintaining the sash free from rattles, yet at the same time leaving the contacting surfaces free from unnecessary friction in 85 the operation of raising or lowering the sliding sash.

The outwardly extending legs or flanges 22 of the lower sash rail 20 are adapted to receive a 90 moulded rubber strip or resilient weather-strip or member 29 providing a weathering means between the closed sash and the sill 4. The extensions 23 on these legs or flanges, as well as those on the side rails, provide suitable anchorage and retaining means for the weathering 95 strip on each of these rails.

In order to provide a weather-tight engagement between the frame and the upper sash rail 20, the head plate 5 of the frame is provided with a longitudinally extending C-shaped clip 100 or retaining means 30 for holding a carpet-like weathering strip 31 having its nap or pile 32 wingingly contacting the outer surface of the upper sash rail 20. Thus the window is efficiently 105 weather-stripped on all four sides so as to provide a weather-tight closure.

A latch member 32 is mounted on one or both of the side rails for anchoring the sash in any desired position. Each latch member is provided with a bolt or plunger 33 adapted to be operated 110 by a handle 34, the plunger being adapted to seat within spaced notches 35 in a rack 36. This rack is mounted on the jamb section 6, the attaching means 37 therefor extending into the channel 11 in the back of this jamb section. 115 Such attaching means may be screws, bolts or the like.

Although the window construction is shown as mounted in a bus or automobile, it is to be understood that this structure is suitably adapted 120 for use in railroad coaches, Pullman cars, electric cars, or any other conveyance in which a slidable sash may be provided and a weather-tight construction is desired.

Having thus disclosed the invention, 125

We claim:

1. In a window construction, a frame therefor comprising a jamb section adapted to be mounted in the window opening, attaching means for anchoring said section to the vertical supports defining said opening, and a jamb section engaging said first section and covering said attaching means whereby to prevent such means from working loose and out. 130

2. In a window construction, a frame therefor 135 comprising a jamb section adapted to be mounted in the window opening, attaching means for anchoring said section to the vertical supports defining said opening, and a jamb section engaging said first section and covering said attaching means whereby to prevent such means 140 from working loose and out, said second section being slidable on said first section and provided with openings normally out of registry with said attaching means, but adapted to be 145 placed in registry therewith upon a sliding of said second section.

3. In a window construction, a frame therefor comprising a pair of telescoping jamb sections and means for attaching the under one of said 150

