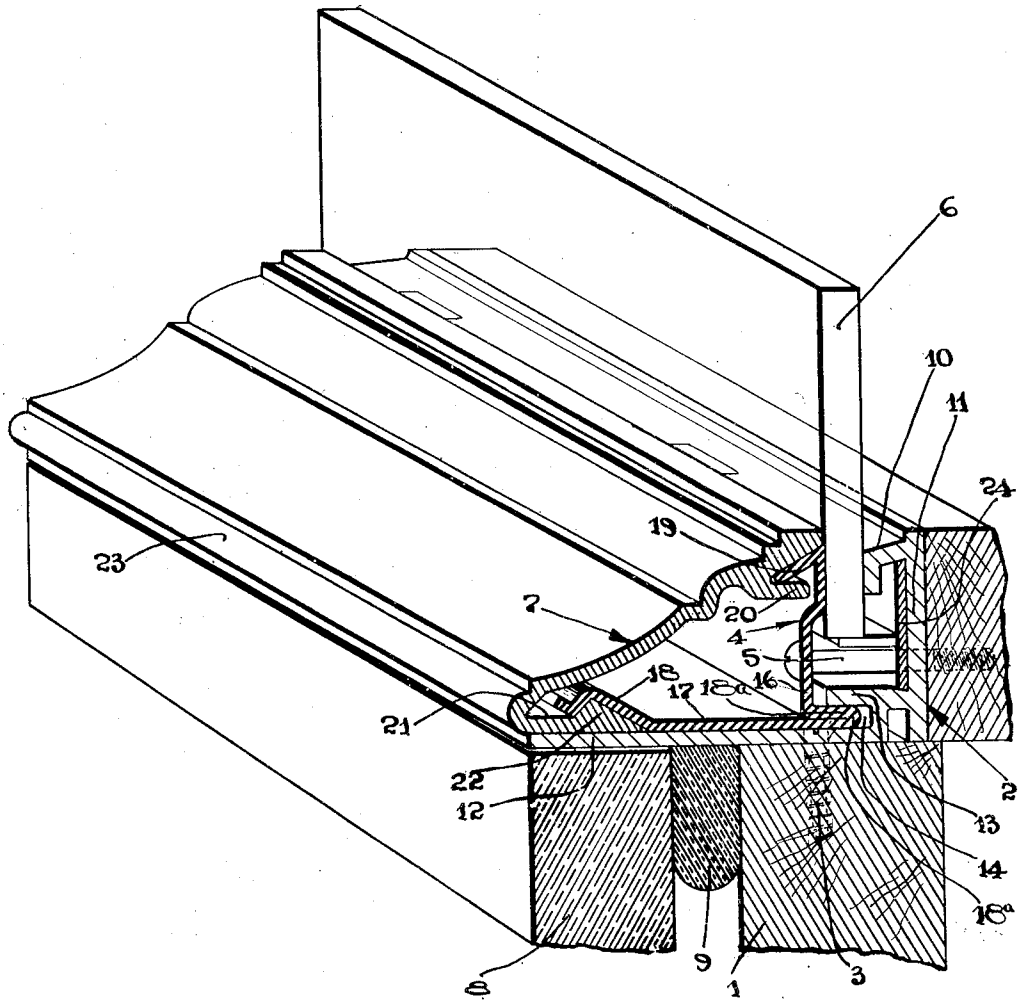
March 19, 1935. F. W. CURRIER ET AL 1,994,464

STORE FRONT CONSTRUCTION

Filed Jan. 26, 1934 3 Sheets-Sheet 1

Fig. 1.



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Filed Jan. 26, 1934 3 Sheets-Sheet 2

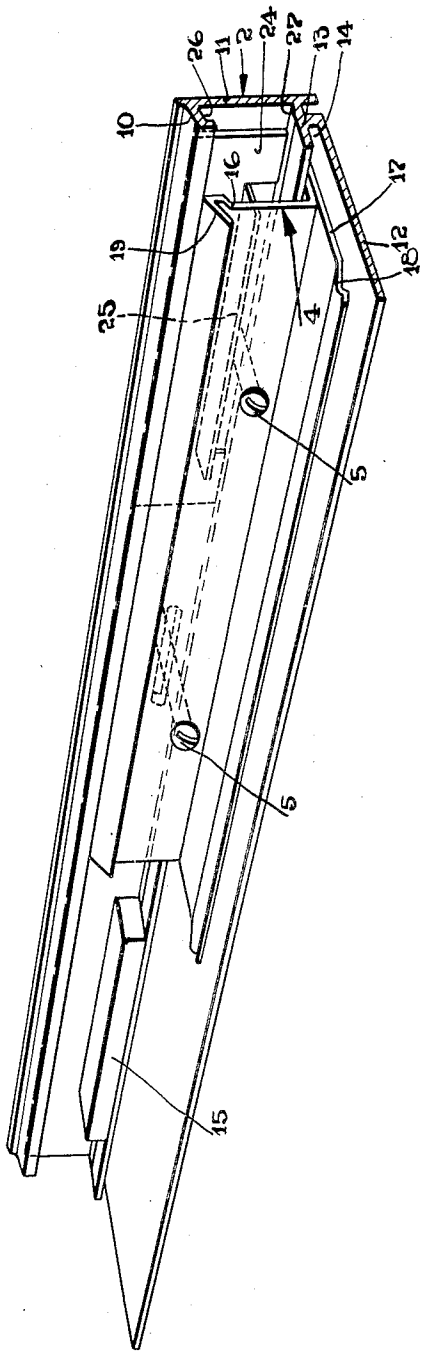


Fig. 2.

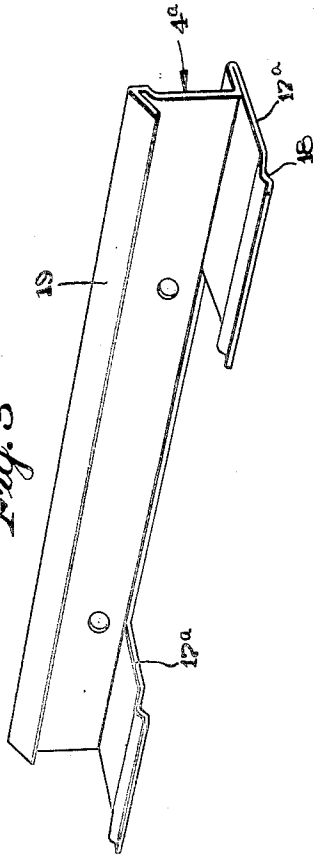


Fig. 3

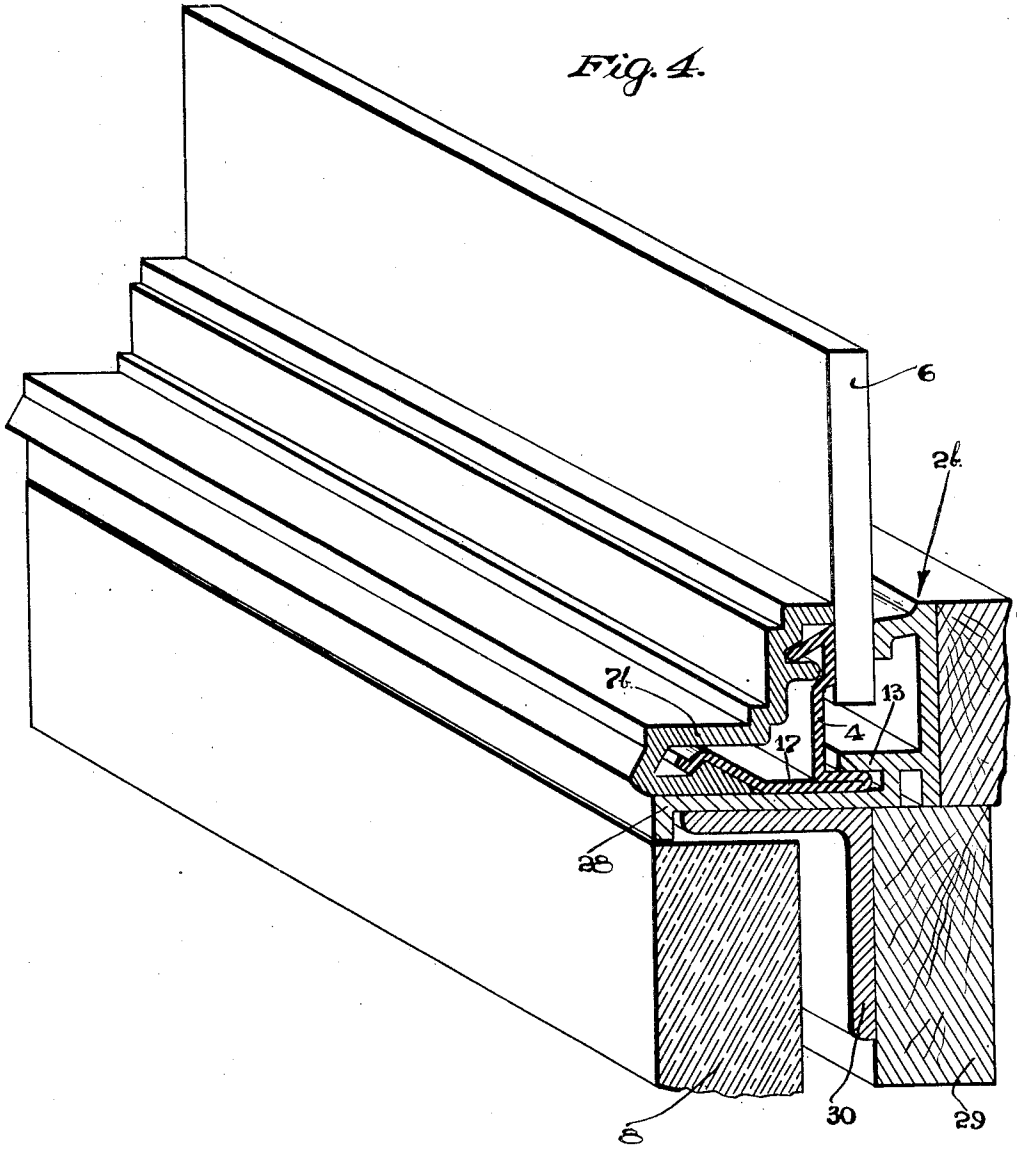
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Fig. 4.



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1,994,464

STORE FRONT CONSTRUCTION

Frederick W. Currier and Edward F. Toney, Pittsburgh, Pa., assignors to Pittsburgh Plate Glass Company, a corporation of Pennsylvania

Application January 26, 1934, Serial No. 708,421

4 Claims. (Cl. 20—56.4)

The invention relates to store front construction employing metal strips or bars for the reception of the glass, and constitutes an improvement on the structures of the F. W. Currier Patents Nos. 1,458,397 and 1,458,398. It has for its principal objects, the provision of a construction which is easily applied and presents an improved appearance; the provision of a construction having improved clamping members for the glass positively guided into position, so that when the securing screws are applied, one flange of the member is pressed against the glass, and the other flange which extends at right angles thereto, is maintained in contact with the flange of the rear sash bar, and thus provides an adequate securing or locking means for the cover plate; the provision of improved means for securing the cover plate releasably in position; and the provision of a construction in which the flange of the rear sash bar or back strip acts as a guide in positioning the paneling surrounding the window and serves as a finishing strip for the edges of said paneling. Certain embodiments of the invention are illustrated in the accompanying drawings, wherein:

Figure 1 is a perspective sectional view of one form of the construction. Fig. 2 is a detail perspective view. Fig. 3 is a detail perspective view showing a modified form of clamping member. And Fig. 4 is a perspective view showing a modification.

Referring to the construction shown in Figs. 1 and 2, 1 is the sash frame of the usual wooden construction; 2 is a metal sash bar which is seated in the sash frame and secured in position by means of the screws 3; 4 is one of a number of clamping members moved into clamping engagement with the glass plate by means of the screws 5; 6 is the glass plate which is clamped between the sash bar and the clamping members; 7 is the cover strip or plate which lies over the clamping means and has releasable interlocking engagement with the clamping members as later described; and 8 is an ornamental paneling preferably of carrara glass lying in front of the sash frame 1 and positioned with respect to such sash frame by means of the usual plastic cementing material 9.

The sash bar 2 and the cover strip 7 are preferably extruded metal sections, while the clamping members 4 are formed of sheet metal bent to the desired shape. The showing in Fig. 1 is that of the construction at the bottom of the window, but it will be understood that a similar construction is used at the sides and top with the exception that the gutter 10 which is shown in Fig. 1 is not required in the construction at the sides and top of the window.

The sash bar 2 consists of a back strip 11 whose upper edge engages the rear face of the sheet 6 and a base strip 12 which lies at right angles to the back strip and extends forward a substantial distance to the front of the sash frame 1 so as to provide a space for receiving the panel 8. The sash bar is installed before the panel 8 is applied so that the base strip 12 thus becomes a guide for the location of the panel 8 whose front face lies flush with the edge of the base strip. The base strip thus acts as a finishing strip for the upper edge of the panel materially adding to the appearance of the construction and protecting the edge of the paneling from chipping or other injury. The sash bar is also provided with a flange 13 which is spaced above the base strip 12 to provide the guide slot 14 in which the clamping member is guided, as later described. The flange 13 also acts as a support for the wooden blocks 15 (Fig. 2) upon which the lower edge of the glass plate 6 rests. The clamping members 4 each comprise an upright clamping plate 16 and a base plate 17 which rests upon the base strip 12. At the juncture of the clamping plate and base plate is a flange 18*a* which fits into the slot 14. The base plate is provided adjacent its outer edge with a locking groove 18, while the upper edge of the clamping plate is provided with a locking flange 19. These locking devices cooperate to hold the cover strip 7 in position.

The cover strip 7 may be of any desired ornamental configuration, and is provided at its inner edge with a flange 20 adapted to fit beneath the flange 19 when the cover strip is pushed into position, as indicated in Fig. 1. The outer edge of the cover strip is provided with a recurved flange 21 carrying a bead 22 adapted to fit into the locking groove 18 when the parts are positioned as indicated in Fig. 1. The cover strip is positioned by resting it upon the base strip 12 and sliding it inward in a direction at right angles to the glass plate until it arrives at the position indicated in Fig. 1, at which time it is locked in position by the interlocking parts on the clamping members 4. In order to detach the cover plate, a screw driver or other tool is pushed in between the plate 6 and the edge of the cover strip and twisted, thus springing the cover strip outward until it is released from engagement with the flange 19 and locking groove 18. The outer edge of the cover strip is preferably provided with a bead 23 which projects out past the edge of the cover strip 12. This not only gives an ornamental appearance, but permits of an adjustment of the cover plate in and out due to the use of different thicknesses of glass without detracting from the appearance of the construction or giving any indication that such adjustment has been made, such as would be the case if the bead 23 were not used and the edge of the cover plate came flush with the edge of the base strip. It will be noted that the cover strip entirely fills the

space between the panel 8 and the glass plate 6 so that a distinctive appearance is secured with only the cover strip and the edge of the base strip 12 showing between the two glass members 6 and 8.

The use of the guide slot 14 is connection with the flange 18*a* on the clamping member 4 is of substantial advantage as it acts as a stabilizer for the clamping member when it is moved in by the clamping screws 5, and any tendency of the base plate 12 to spring up due to the bending in of the clamping plate 16 under the action of the screws is avoided. If the guide device were not used, the base plate carrying the locking groove 18 would either be sprung up or offer very little resistance against moving up, so that the locking engagement with the bead 22 on the cover strip would not be secure and firm as is the case with the construction as shown in which the base plate 17 is held firmly against the base strip 12.

In order to insure against any engagement of the edge of the glass plate 6 and the screws 5, the separator members 24 shown most clearly in Fig. 2 are employed. These separator members are provided with tongues 25 which are pressed out and lie between the screw and the edge of the glass plate, as indicated in Fig. 1, so that the edge of the glass plate is protected from possible injury by reason of accidental contact with the screws. In order to hold the separator members in position in the sash bar, the recess in which they fit is preferably beveled away slightly, as indicated at 26 and 27 (Fig. 2). The separator members are thus yieldingly held in the position in which they are placed in the recesses in the sash bar.

Fig. 3 illustrates a modification in which the clamping member 4*a* is not provided with a continuous base plate, such as is shown at 17 in Fig. 2, but instead is provided with a pair of spaced plates 17*a*, which serve the same function, but which offer less resistance to the insertion and removal of the cover plate than the continuous base plate 17 of the Fig. 1 construction.

Fig. 4 illustrates a modification in which the cover plate 7*b* is of different contour from the cover plate 7 shown in Fig. 1. It will be understood that a wide variety of ornamentation and configuration may be employed in the cover strip. This construction also shows a base strip on the sash bar 2*b* which has at its outer end a downwardly turned flange 28 which is flush with the outer face of the panel 8. The sash frame in this construction includes the wooden member 29 and the angle member 30. The panel 8 is not necessarily of glass, but may be marble or metal or of wood coated with metal sheathing or of any other suitable material.

What we claim is:

1. In combination in a store front construction having a glass plate therein, a sash frame, a metal sash bar secured in the sash frame and comprising a back strip lying behind the glass plate and a base strip at right angles thereto, a flange on the sash bar beneath the edge of said plate spaced above the base strip to provide a guide slot, a clamping member having a flange fitting slidably into said slot and comprising a base plate seated on the base strip and a clamping plate at right angles thereto engaging the front face of the glass plate, screw means for drawing the clamping member toward the back strip, and a cover strip having its inner edge interlocked with the upper edge of the clamping plate, and its outer edge recurved and interlocked between the base strip and the outer edge of the clamping plate, said cover strip being releasable at both edges by a right line movement away from the glass plate.

2. In combination in a store front construction having a glass plate therein, a sash frame, a metal sash bar secured in the sash frame and comprising a back strip lying behind the glass plate and a base strip at right angles thereto, a flange on the sash bar beneath the edge of said plate spaced above the base strip to provide a guide slot, a clamping member having a flange fitting slidably into said slot and comprising a base plate seated on the base strip and a clamping plate at right angles thereto engaging the front face of the glass plate, said base plate having a locking groove at its outer edge, screw means for drawing the clamping member toward the back strip, and a cover strip having its inner edge interlocked with the upper edge of the clamping plate and its outer edge recurved and provided with a bead lying between the base strip and the clamping plate with said bead fitting into said locking groove, said cover strip being releasable at both edges by a right line movement away from the glass plate.

3. In combination in a store front construction having a glass plate therein, a sash frame, a metal sash bar secured in the sash frame and comprising a back strip lying behind the glass plate and a base strip at right angles thereto extending past the edge of said plate, a clamping member comprising a base plate seated on the base strip and a clamping plate at right angles thereto engaging the front face of the glass plate, said base plate having a locking groove at its outer edge and said clamping plate having an outwardly turned flange at its upper edge, screw means for drawing the clamping member toward the back strip, and a cover strip having a flange on its lower side adjacent its inner edge extending beneath and interlocking with said flange at the upper edge of the clamping plate, and having its outer edge recurved and provided with a bead lying between the base strip and the clamping plate with said bead fitting into said locking groove, said cover plate being releasable from the clamping member by a right line movement away from the glass plate.

4. In combination in a store front construction having a glass plate therein, a sash, a metal sash bar secured in the sash and comprising a back strip with an inwardly projecting flange at one edge for engaging the rear face of the glass plate, and a base strip at its other edge projecting past the edge of the glass sheet, a clamping member seated upon the base strip and having a flange for engaging the front face of the glass sheet, a screw extending past the edge of the glass sheet for drawing the clamping member toward the back strip, and a separator having a base slotted to receive said screw positioned against the back strip and a flange between the screw and the edge of the glass plate, said base just fitting the space between the base strip and the flange at the other edge of the back strip, and the opposing surfaces of said base strip and flange being beveled toward the rear to insure the retention of the separator in position.

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