F. J. PLYM.

STORE FRONT CONSTRUCTION.

APPLICATION FILED MAR. 3, 1906.

968,076.

Patented Aug. 23, 1910.

Fig. 1.

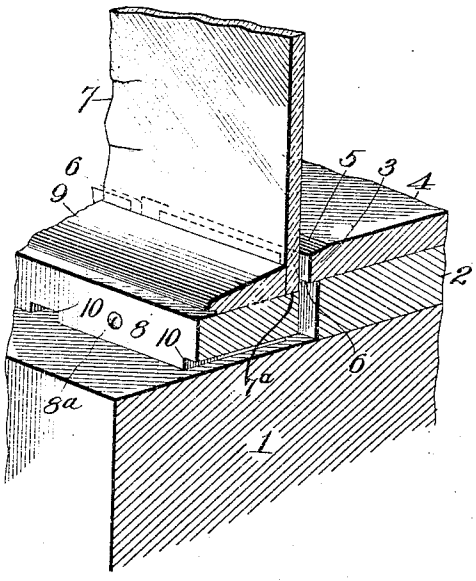


Fig. 2.

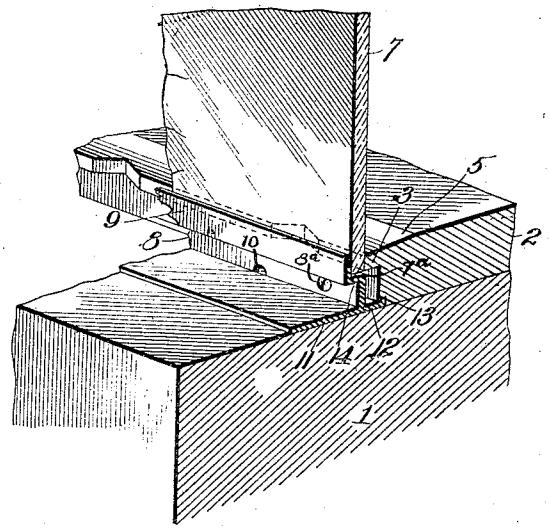


Fig. 4.

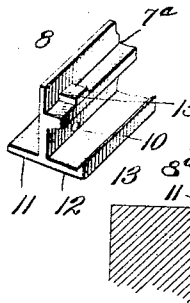


Fig. 3.

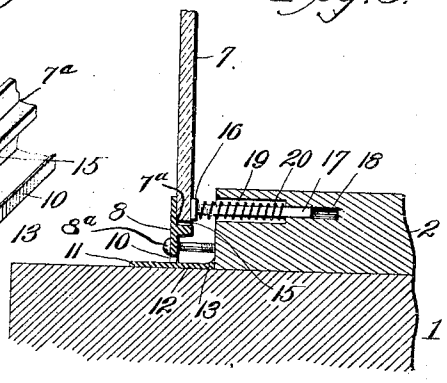
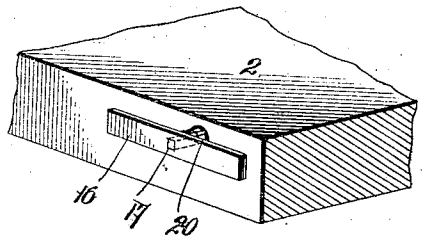


Fig. 5.



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UNITED STATES PATENT OFFICE.

FRANCIS J. PLYM, OF KANSAS CITY, MISSOURI.

STORE-FRONT CONSTRUCTION.

968,076. Specification of Letters Patent. Patented Aug. 23, 1910.

Application filed March 3, 1906. Serial No. 303,957.

To all whom it may concern:

Be it known that I, FRANCIS J. PLYM, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Store-Front Construction, of which the following is a specification.

This invention relates to store front constructions and more especially to means for securing window-glass in position of that class whereby a circulation of air over the inner surface of the glass is permitted and provision is made for the drainage of water produced by condensation on the inner side of the window glass or that which flows down upon the inner side of the glass during the washing of the same, and my object is to produce a construction of this character which is comparatively inexpensive and by which the window glass can be easily, quickly and reliably secured in place.

To this end the invention consists in certain novel and peculiar features of construction and organization as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawing, in which—

Figure 1, is a sectional perspective view of the lower portion of a window structure embodying my invention. Fig. 2, is a similar view of a slightly modified construction of the same. Fig. 3, is a vertical section of the lower portion of another form of window structure. Fig. 4, is a detail perspective view of a bar forming part of the window structure. Fig. 5, is a perspective view of a portion of the inner bar of the window structure of Fig. 3.

In the said drawing, 1 indicates a portion of the frame of a window, which portion may be the sill, the lintel or either of the jambs. Hereinafter said portion is referred to as the sill for convenience and also because it is shown in the drawing as underlying the other parts of the structure.

2 indicates a bar rigid with and upon the sill.

3 is a flange projecting forward beyond the outer edge of bar 2, which flange may form a part of the supporting bracket 4 secured upon bar 2, as shown in Fig. 1, and said flange is preferably beveled downward and outward at its upper side as at 5 in order to conduct any water that may fall thereon, to the vertical openings 6, formed in said flange, these openings being also to permit of a circulation of air as hereinafter referred to.

7 indicates the window-glass, the same being disposed in Figs. 1 and 2, against the outer edge of the flange 3, the lower edge of the glass fitting in a rabbet 7^a formed in the upper inner corner of a bar 8, resting upon the sill and disposed outward of and spaced from the outer edge of bar 2, so as to provide a chamber between said bars, the flange 3 forming the top of said chamber, and the sill forming the bottom of said chamber in Fig. 1.

In Fig. 1, the rabbet is produced by securing a strip 9 upon bar 8, in any suitable manner. Bar 8 is provided at suitable points with passages 10, extending from its inner to its outer edges so as to establish communication between the outer atmosphere and the chamber hereinafter referred to.

In Figs. 2, 3, and 4, the bar 8 is shown as of metal of proper cross sectional form to provide the inwardly-facing rabbet 7^a, and in said figures the metal bar is shown as equipped with an outwardly-projecting base flange 11, and with an inwardly projecting base flange or gutter 12, the same being preferably flanged upward at its inner edge as at 13 to guard against water working its way inward between sill 1 and bar 2.

Bar 8 is provided at the bottom of the rabbet in Fig. 2, with apertures 14 and in said figure and Figs. 3 and 4, lead or equivalent lugs 15 are provided at the bottom of the rabbet as a rest for the lower edge of the window glass so as to insure a firm and rigid support for the same without danger of the glass becoming chipped. The lugs also keep the glass spaced from the bar so that the air may circulate through the apertures 14, which being covered by the glass, cannot easily be clogged up with dirt or other foreign substance.

In Figs. 3 and 4 the cross sectional form of the bar 8 is different from that of said bar in Fig. 2, the bars however, being the same in principle.

In Figs. 3 and 5 the bar 2 is provided in lieu of the flange 3 provided with openings 6, with a series of plates 16, pressing the window glass outwardly against bar 8, said plates having stems 17 fitting non-rotatably by preference, in openings 18 in said bar 2,

said openings being enlarged diametrically at 19 to accommodate the helical springs 20, which fit loosely on stem 17 and bear at their opposite ends against bar 2 and plate 16.

In Figs. 2 and 3 the preferred method of securing bar 8 in place is by means of a series of wood screws 8^a, the same extending through the bar into bar 2.

With the parts arranged as described it is obvious that water flowing down over the inner face of the glass will pass through openings 6 (Figs. 1 and 2) and between and over the plates 16 of Fig. 3, down into the chamber between bars 2 and 8, and then pass outward through the passages 10, though it is to be understood that, because of the fact that free circulation of air is provided for around the edges of the glass, there will be but little condensation, the air draft serving to evaporate the moisture before it can settle to an appreciable extent upon the inner face of the glass. Because of this the window glass will be kept free from frost and will be more continuously serviceable than where the window glass is secured in place without provision for circulation of air over its inner face.

From the above description it will be apparent that I have produced a store front construction embodying the features enumerated as desirable and I wish it to be understood that I do not desire to be restricted to the exact details of construction shown and described as obvious modifications will suggest themselves to one skilled in the art.

Having thus described the invention what I claim as new and desire to secure by Letters Patent, is:—

1. A window casing having a bar equipped with an outwardly-projecting flange having an opening through it, a second bar having a passage and also having a longitudinal rabbet opposite said flange, and spaced from the first-named bar to form a chamber establishing communication through the opening in the flange of the first-named bar with the inner atmosphere and through the passage in the bar having the rabbet, with the outer atmosphere, and a transparent plate seated in said rabbet and held therein by said flange.

2. A window casing having a bar equipped with an outwardly-projecting flange having an opening through it, a second bar having a passage and also having a longitudinal rabbet opposite said flange, and spaced from the first-named bar to form a chamber establishing communication through the opening in the flange of the first-named bar with the inner atmosphere and through the passage in the bar having the rabbet, with the outer atmosphere, a transparent plate seated in said rabbet and held therein by said flange, and means connecting the two bars, for clamping the transparent plate against the flange of the first-named bar.

3. A window casing having a bar equipped with an outwardly-projecting flange having an opening through it, a second bar having a passage and also having a longitudinal rabbet opposite said flange, and spaced from the first-named bar to form a chamber establishing communication through the opening in the flange of the first-named bar with the inner atmosphere and through the passage in the bar having the rabbet, with the outer atmosphere, a transparent plate seated in said rabbet and held therein by said flange, and a flange projecting from the said second bar toward the first-named bar and forming the bottom of said chamber.

4. A window casing provided with a bar, a second bar spaced from the first-named bar to form a chamber and provided with a longitudinal rabbet and at its lower edge with a gutter flange forming the bottom of said chamber and also provided with passages establishing communication between said chamber and the outer atmosphere, a transparent plate situated in said rabbet, and means projecting from the first-named bar and engaging the glass plate to hold the same reliably in said rabbet.

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

FRANCIS J. PLYM.

Witnesses:
H. C. RODGERS,
G. Y. THORPE.