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M. H. BEST ET AL

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CLOSURE

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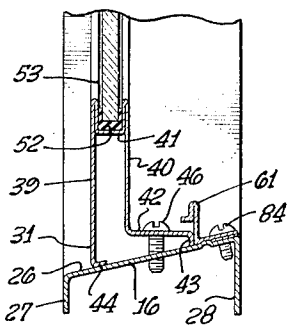
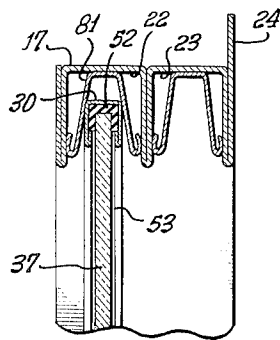
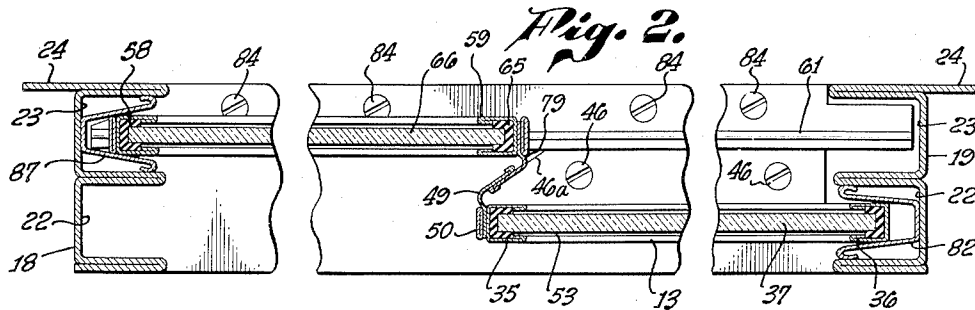
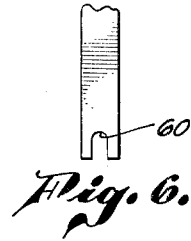
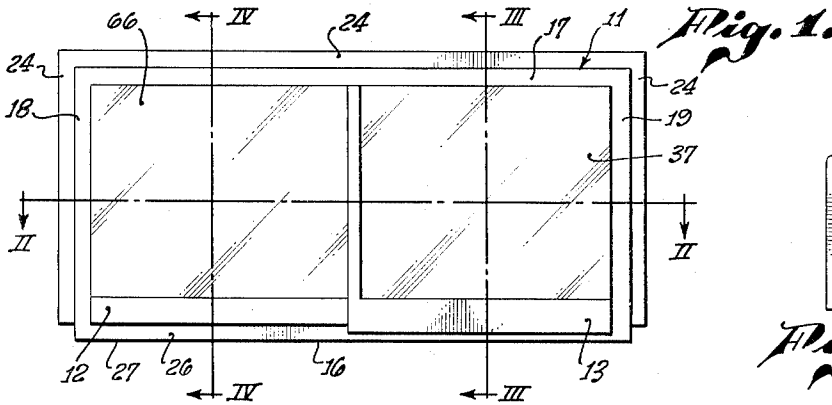


Fig. 3.

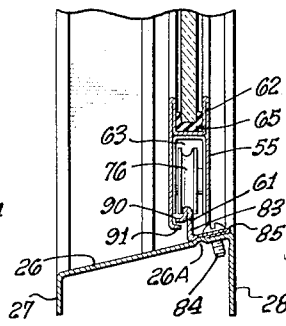
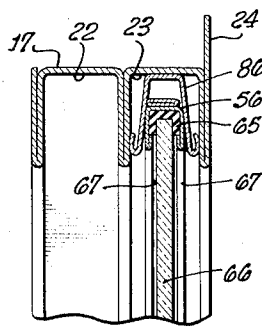
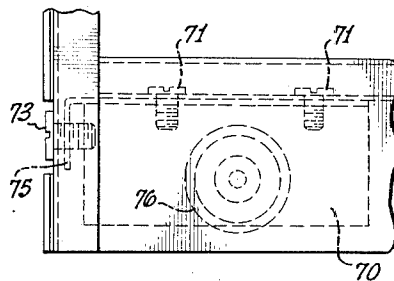
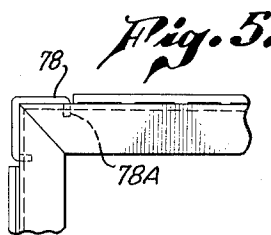


Fig. 4.



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CLOSURE

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Original application June 5, 1950, Serial No. 166,208, now Patent No. 2,619,205, dated November 25, 1952. Divided and this application October 17, 1952, Serial No. 315,232

11 Claims. (Cl. 20—52)

This invention is concerned with closures and more particularly provides improvements in prefabricated closures having slidable panels.

The present application is a division of our co-pending application Serial No. 166,208 which was filed on June 5, 1950, and became Patent No. 2,619,205 on November 25, 1952.

The prefabricated closure of the invention has an all metal construction, save for possibly the panes, which eliminates all possibility of warpage and consequent troublesome and incorrect alignment of sliding and stationary members.

For easy operation of a closure having a sliding panel, it is highly important that the individual members of the closure be accurately fabricated and correctly assembled. Furthermore, it is desirable that the closure be so constructed that when installed the panels may be readily removed for the replacement of broken panes.

The closure of the invention is relatively inexpensive to fabricate, easily installed and may be readily disassembled, repaired or adjusted. It lends itself to mass manufacture, for it is built of a minimum number of rolled steel sections which give an exceptionally strong and sturdy construction. The jambs and head of the closure frame are of like construction as are certain panel members, thus lessening the cost of manufacture.

In preferred practice, the frame of the closure is completely assembled at the factory and shipped to the installation site in this condition. The sash or panel is shipped in a knocked down condition, assembled near the site and installed after the frame is in position in the wall.

Generally speaking, the panel or sash of the closure of the invention includes a bottom cross member having a groove on its upper inside face and a groove on its bottom face. We prefer to fabricate this member by rolling a sheet into an H section. In our preferred embodiment, there is a double thickness of the sheet on the sides of the top groove and a single thickness of the sheet on the sides of the bottom groove. A pane is mounted in the upper groove of the member.

Each mullion or upright member of the panel is manufactured by rolling a sheet into a U section, forming a longitudinal groove extending the length of the inside face of the mullion. We prefer to fasten the mullions at their lower ends to opposite ends of the bottom cross member by sheave or roller brackets which are disposed at the bottom corners of the panel within the bottom groove of the bottom member and in the grooves of the mullions. Sheaves are rotatably mounted within the brackets about axes transverse to the main plane of the panel.

The frame of the closure of our invention includes a head and two jambs. Each member has two elongated channels running the length of its inner face and is formed by bending a sheet so that in section it comprises two U's with a common center leg. All three legs of the U's are composed of a single thickness of the sheet. This

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construction gives an unusually sturdy and relatively inexpensive frame which is adapted to mass manufacture.

In one form of our structure, a track is mounted directly beneath one of the channels of the head on a sill which joins the lower ends of the jambs or as an alternative the track may be formed integrally with the sill from a metal sheet. The movable panel when positioned in the frame rides on the track with the bottom groove of the lower cross member straddling the track and a top cross member of the panel engaging an elongated spring weatherstrip disposed in the overlying channel of the head. The sheaves engage the track within the bottom groove of the lower member. In one embodiment of the closure of our invention, we provide an elongated housing with an open bottom which is disposed in the bottom groove and which encloses the sheave brackets and sheaves. The lower portion of the housing is constricted to engage slidably opposite sides of the track.

A stationary panel is mounted in the other channel or in an alternative, with the provision of a second track spaced from and parallel to the first track, a second movable panel may be used.

The present invention contemplates a novel manner of weather stripping or closing open spaces heretofore present in the construction of metal window frames and metal sash panels slidable in the plane of the window frame. The particular weather stripping problem to which this invention is directed is that of providing means for positively sealing and closing openings between the meeting stiles or mullions of two sash panels which are relatively movable. The invention also contemplates a weather stripping means for the track and roller means of a sliding panel. More specifically, this invention has for its principal objects the closing of open spaces normally existent between opposed meeting stiles of sliding sash panels when in closed position, the open spaces between a track and the bottom rail of a movable panel, and open spaces between a bottom rail, a track and a sill in the zone of meeting stiles of relatively movable panels.

Generally speaking, the present invention contemplates provision of a pair of diagonally arranged interlocking members carried by respective stiles which are positioned in opposed relation when the relatively movable sliding sash panels are closed. Beneath the interlocking members is provided a resilient dam or stationary block to seal the space between the bottom edges of the interlocking members, the sill, the bottom rail of one member and the track on the sill upon which another panel may slide. A resilient saddle member is carried by the bottom rail of the movable panel for cooperation with the resilient block and a weather strip housing is carried by the bottom rail of the movable panel for tightly slidably grasping opposite faces of the track, thus providing a weather-tight seal for the entire length of the bottom rail of the movable panel.

The closure of our invention will be more clearly understood in light of the following detailed description and accompanying drawings. The description and drawings are directed to a window but it is evident that many of the features described and illustrated are applicable to a door.

Fig. 1 is a front elevation of a presently preferred form of a window of our invention, having a sliding and a stationary sash.

Fig. 2 is a fragmentary horizontal section of the window of Fig. 1 taken along line II—II, showing two interlocking baffles which close the passageway between the two spaced sashes.

Fig. 3 is a fragmentary cross section of the window taken along plane III—III of Fig. 1, including the movable sash.

Fig. 4 is a fragmentary cross section of the window taken along plane IV—IV of Fig. 1.

Fig. 5 is a fragmentary elevation of the sliding sash of the window of Fig. 1, showing in particular the manner of joining the corners.

Fig. 6 is a fragmentary end view of the sliding sash of the window illustrated in Fig. 1.

Fig. 7 is a fragmentary perspective view of a sill and sash panels at the meeting stiles and shows weather-stripping means embodying this invention.

Fig. 8 is a fragmentary exploded view showing weather-stripping means carried by the bottom rail of a movable sash panel.

Fig. 9 is a fragmentary transverse horizontal sectional view taken through the meeting stiles of sash panels embodying this invention.

Fig. 10 is a sectional view of a modification of head and jambs shown in Figs. 2, 3 and 4.

As shown in Fig. 1, the window is made up of a rectangular frame 11, with a movable panel or sash 12 and a stationary panel 13, both mounted in the frame.

The frame comprises a sill 16, a top horizontal member or head 17, and two upright members or jambs 18, 19 connected respectively to opposite ends of the sill and head.

The two jambs and the head are similar in construction. Each of the jambs and the head has two parallel channels 22, 23 running the length of the inner face of each member and a flange 24. Each member is integrally formed of a single sheet of steel so rolled that in cross section it comprises two U's with a common center leg. All three legs of the U's are composed of a double thickness of the sheet, with the bases of the U's having a single thickness. The flange which is on the inner side of the window frame is formed by extending an outer thickness of one of the outer legs rearwardly of the bases of the U's.

In an alternative, the jambs and the head may be constructed as shown in Fig. 10. In this alternative, the rearwardly extending flange is on the outer side instead of the inner side of the window and is formed as before by extending an outer thickness of one of the outer legs rearwardly of the bases of the U's. The outer thickness of the other one of the outer legs is extended rearwardly a short distance to form a stop 25 for plaster.

As shown in Figs. 3 and 4 the sill, which also is made of a rolled piece of steel, has a top sill section 26 which slopes downwardly from the inner to the outer side of the window and two downwardly extending flanges 27, 28 formed integrally with the sill section.

The stationary sash or panel (see Figs. 2 and 3) has an upper cross member 30, a lower cross member 31 of irregular cross section, and two mullions or stiles 35 and 36 which are fastened respectively to opposite ends of the lower and upper members. A pane of glass 37 is held in a circumferential groove on the inner edge or face of the sash formed of the cross members and mullions.

The two mullions and the upper cross member are each fabricated from a sheet of steel rolled into a U section with the ends of the legs of the U folded in upon their respective sides. The legs and bases of the U define the groove holding the pane of glass.

The lower cross member 31 is integrally formed of a steel sheet shaped to have an open sloping bottom, a relatively long first side 39 lying in a plane parallel to the plane of the pane, and a shorter second side 40 spaced from and parallel to the first side. A top portion 41 having a longitudinal groove joins the upper ends of the first and second sides. A third portion 42 extends perpendicularly and outwardly from the lower end of the second side. A short flange 43 extends downwardly from the outer end of the third portion. The lower end of this flange defines the upper side of the sloping bottom. A second flange 44 extends inwardly from the lower end of the first side in the plane of the bottom side.

The third portion and the first flange of the bottom

member form a raised step through which several screws 46 pass, fastening the stationary sash to the sill. The end 46A of the raised step adjacent to the middle of the window is closed, thus preventing the flow of rain along the sill between the stationary and movable panels.

An elongated baffle 49 (Fig. 2) is held to the outer face of the mullion 35 by a double thickness member 50 and a screw (not shown). The baffle extends at an angle from the mullion toward the movable sash and the jamb 19. This baffle interlocks with a similar baffle 79 of the closed movable sash, thereby blocking the passageway between the spaced sashes.

Four elastic seals 52 of U-shaped cross section are disposed respectively in the grooves of the inner edges or faces of the four sides of the stationary sash, with the base of the U abutting the bottom of the groove and with the legs of the U extending about halfway up the sides of the groove. These seals may be extruded from rubber or other elastomer. The seals of the mullions and of the upper member are retained in their respective grooves by the folded-in portions of the mullions and upper member, i. e. the ends of the legs of the seals about the ends of the folded-in portions of the mullions and upper member.

A mastic seal 53 may be placed over the rubber seals to further assure that the sash is weathertight.

The mullions and the top member may be formed integrally and mitred at the corners, leaving a metal connection, which is bent until the mitred edges fit together. However, we prefer to join the mullions and the top member of the stationary panel with clips 78 (as shown in the movable panel of Fig. 5) which are springy right angled members having tits 78A, which are sprung into place in holes in the adjacent members at the corners. The lower member is fastened at both of its ends to the mullions by two brackets 70 (only one shown in Fig. 5) which are disposed inside of the member, with an end of each bracket extending into the groove of the adjacent mullion. A screw 73 fastens each mullion to its associated bracket and two screws 71 hold the lower member to the bracket.

The movable panel or sash (see Fig. 2 and Fig. 4) is made up of a lower cross member 55, an upper cross member 56, and two mullions 58, 59 which are fastened respectively at opposite ends of the lower and upper members.

The mullions and the upper member of the movable sash have the same cross sections and are each formed of sheets of rolled steel as their counterparts in the stationary panel. The mullions of the movable sash have slots 60 (see Fig. 6) at their lower ends which permit the straddling of a track 61 by the mullions, when the sash is slidably mounted thereon.

The lower cross member is formed integrally from a sheet of steel rolled into an H section, so that it has top and bottom longitudinal grooves 62, 63. There is a double thickness of the sheet on the sides of the top groove and a single thickness on the sides of the bottom groove.

The movable sash, like the stationary sash, has a circumferential groove encircling its inner edge and in which there are disposed four elastic channel-shaped seals 65. The seals are identical with those of the stationary panel and are retained in the groove of the upper member and the mullions by the folded-in portions of the sides of these members. A pane of glass 66 is mounted in the seals, with mastic 67 forming a further seal.

Two sheave or roller brackets 70 (only one shown) are disposed respectively at the lower corners of the movable sash (see Fig. 5) inside the bottom groove of the lower cross member and inside the grooves of the respective mullions. Each bracket is fastened to the cross members by two screws 71, whose heads lie on the bottom of the groove on the inner face of the bottom member. Each mullion is fastened to its adjoining sheave bracket by a single screw 73 which extends through the mullion

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and a threaded hole of a lug 75 of the sheave bracket. Each lug is an extension of the top of the bracket, bent downwardly over an open end of the bracket. Each lug is just short of reaching the bottom of the groove of the adjacent mullion.

A sheave 76 is rotatably mounted within each bracket with its axis of rotation transverse to the bottom groove of the lower cross member.

The sheave brackets have a two-fold purpose.

Each bracket serves to hold one of the mullions to the bottom horizontal member. Secondly, the sheave brackets when fastened to their respective mullions and to the lower horizontal member, hold the sash on the track.

The mullions of the movable sash are fastened at their upper ends to the upper cross member by the clips 78, L-shaped with the ends of the legs of the L bent inwardly to form the tits 78A (Fig. 5). Each clip is placed around an upper corner of the sash, with the tits respectively inserted into two holes in the outer faces of the upper member and one of the mullions.

When the movable sash panel is in closed position, (Fig. 2), open space normally exists between the opposed meeting stiles or mullions of the movable and stationary panels. Means to close and weather seal this space is provided by a pair of cooperative, diagonally arranged interlocking members 49 and 79 which extend from the top to the bottom of the sash panels. The interlocking member 49 may be secured in any suitable manner to the edge face of mullion 35 by a member 50 and interlocking member 79 may be similarly secured to the edge face of mullion 59. The interlocking members may be made of metal and are normally bent inwardly slightly beyond their ultimate closed position so that they press tightly against each other in a plane extending diagonally between the meeting mullions.

The stationary sash is held in an upright position in the front channel 22 of the head and the jamb 19 by two elongated spring weatherstrips 81 and 82. The weatherstrips are made of stainless steel and each has a cross section of a U with diverging legs. The outer ends of the legs are folded outwardly and rearwardly. The weatherstrips are disposed in their respective channels, with the base of the U abutting the bottom of the channel and the folded portions of the legs resting against the sides of the channel. The weatherstrip of the head only extends from the jamb 19 to a point slightly beyond the middle of the frame, i. e. only so far as the stationary sash extends.

The movable sash is slidably mounted on the track 61 of a guide member 83 which is fastened to the sill parallel to the stationary sash by several screws 84 which pass through a base 85 of the guide. The guide member is integrally formed from a piece of stainless steel, with the base of the guide having a double thickness of the sheet for a portion of its width. The edge of the lower thickness abuts an elongated bead 26A of the sill. The bead together with the lower thickness assures that the guide will be correctly positioned on the sill. The track lies directly beneath the channel 23 of the head. The movable sash when positioned in the frame rides on the track with its top cross member slidably engaging a spring weatherstrip 86 in the channel 23 of the head and when in the closed position, the mullion 58 of the sash engages a spring weatherstrip 87 of the jamb 18.

The track extends longitudinally through the bottom groove of the lower cross member and the slots of the mullions, with the rotatable sheaves engaging the track. The track has a horizontal flange 90 which in conjunction with an adjacent inwardly extending flange 91 of the lower cross member of the movable sash provides a further weather seal.

The movable panel can be rolled along its track from one end of the frame to the other. It should be noted that the weatherstrip of the head not only serves as a seal, but also as a friction lock for holding the movable panel whenever it is placed along the track.

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The window is installed in a structure in the following manner. The frame alone is first positioned in a wall of the structure. The sashes are assembled in a glazier's shop as described above. The several weatherstrip members may be placed in the frame at the factory or at the side after the frame is placed in the wall.

Next the mullion 36 and the upper member of the assembled stationary sash are inserted into channels 22 of the head and jamb, and with fastening of the lower member of this sash to the sill by the several screws 46, the sash is rigidly and correctly positioned in the frame.

The sliding sash and guide member are simultaneously placed in the frame. The lower member of the assembled sash is placed astraddle the track of the guide member with the sheaves engaging the track. The upper member of the assembled sash is inserted in the channel 23 of the head, and the guide member with the sash mounted thereon is forced into its proper position on the sill with the lower thickness of the base of the guide abutting the bead of the sill. The base of the guide is then fastened to the sill by several screws 84. Both panels may be readily removed from the frame by simply removing the several mounting screws.

A modification of the window and the weatherstrip means therefore contemplated by this invention are illustrated in detail in Figs. 7, 8, 9 and 10. The general features of the window is similar to that described above and only the features differing from the previously described window will be now mentioned.

In the window of this embodiment a sill 100 may be integrally formed with an upstanding longitudinally extending track 101 spaced intermediate longitudinal edges of the sill, the top surfaces of said sill being normally inclined downwardly to the outside of the window. Carried by track 101 may be a U-section cap 102 of corrosion-resistant metal such as stainless steel. The corrosion resistant cap 102 facilitates smooth operation of rollers supporting a movable panel 99 and also provides a smooth finished surface which cooperates with weatherstrip means as hereinafter described.

A stationary panel 103 (Fig. 7) may include a bottom rail 104 formed of depending side walls having their bottom edges cut at a bias to correspond generally with the inclination of the sill. The stationary bottom rail 103 may be secured to the sill in any suitable manner as by angle clips 105.

The movable panel 99 may include a bottom rail 106 having side walls 107 defining a downwardly facing opening or groove 108.

Means for weatherstripping open spaces normally present between bottom rail 106 of the movable panel and a track and sill comprises an elongated U-section housing 109 tightly received between side walls 107 within the downwardly facing groove 108 and extending for the entire length of rail 106. The housing 109 includes depending spaced side walls 110 having lower longitudinal portions thereof converging so as to contact and press against, as at 112, opposite side faces of track cap 102. The lowermost margins of converging portions 111 may be flared outwardly. Thus as the movable panel slides along track 102, pressure contact at 112 of the weather strip housing 109 is maintained and passage of air, rain, or foreign matter, upwardly through downwardly facing groove 108 and across the track is positively prevented.

The movable panel 99 may be supported on track 102 by rollers mounted in sheave brackets 114 carried at each end of bottom rail 106. Only one sheave bracket 114 is described, said bracket 114 being of U-section and nested between walls 110 of the elongated weather strip housing 109. Each sheave bracket 114 carries a roller 115 for rollable contact with the top of the track cap 102. The sheave bracket 114 disposed at the end of the rail 106 below the meeting mullions may be provided with laterally spaced forwardly extending side projections 116 and a top projection 117 spaced above side projections 116.

Held by projections 116 and 117 and having a T-head accommodated therebetween may be a saddle member 119 of any suitable resilient material such as rubber, rubber composition and the like. The saddle member 119 includes depending spaced legs 120 and 121 which are adapted to straddle the track 101. The leg 121 may be longer than leg 120 and slidably contacts in sealing relation the adjacent top surface portion of a resilient block or dam 122.

The resilient block 122 may be secured to sill 100, as by means of a metal insert extending through and fastened to the sill in the vertical planar zone defined by the meeting mullions when the panels are in closed position. The block 122 is provided with an inclined bottom surface corresponding to the inclination of the sill and a top flat horizontal surface 123. The inner edge face 124 of the block is seated against the opposed face of the track in tight relation and the outer face 125 of the block is seated tightly against the adjacent inner face portion of bottom rail 103 of the stationary panel. It will thus be apparent that the resilient block 122 acts as a dam or obstruction to prevent air or rain from entering the space between the stationary panel and the opposed portion of the track.

The interlocking members 49 and 79 are each provided with bottom edge faces 127 and 128 respectively which seat upon the top surface of the resilient block 122. There is thus provided by means of the resilient block 122 and the interlocking members 49 and 79 a tight weather-proof seal between the sill and the meeting stiles or mullions of the window sash panels. The interlocking member 79 carried by the movable panel is adapted to slide upon the top surface 123 of the block 122 when closing, negative tolerance being provided so that a tight seal is accomplished.

In Fig. 9 is illustrated a slightly different modification of the interlocking members used between the meeting stiles of the window panels. In this modification an elongated vertically and intermediately disposed thin spring-like metal strip 130 may be carried by the stile 131 of the stationary panel. The strip 130 lies against the inner face of the interlocking member 132 and is bent so as to normally extend outwardly and away from the inner face of member 132. Thus when the interlocking member 133 carried by the stile 134 of the movable panel closes with the interlocking member 132, the spring strip 130 is pressed between the two interlocking members and affords a tight weather seal for the entire height of the interlocking means.

Assembly of windows embodying this invention is conveniently performed on the job site. The movable and stationary panels may be preassembled and glazed. The stationary panel is first fixed in the window frame and then the resilient block 122 is secured to the sill with opposed edge faces tightly abutting the track and the stationary panel. The cap 102 is fitted over the track with a portion of one leg pressed against the top of block 122. The movable panel may then be positioned in the frame.

The zone of the meeting stiles or mullions and sill are thus effectively provided with weatherstrip means by the novel arrangement of the resilient block 122, resilient saddle member 119, interlocking vertical members, and the weatherstrip housing carried by the bottom rail.

It is understood various changes and modifications may be made in the arrangement of the window frame and sash panels and the weatherstripping means therefor. All such changes coming within the scope of the appended claims are embraced thereby.

We claim:

1. Weatherstrip means for a frame having a downwardly inclined sill and an upstanding track mounted on the sill, the combination of: a stationary panel lying in a plane parallel to the track and having an upright mullion adjacent the center of the frame; a slidable panel mounted on the track and having an upright mullion in proximity

to the mullion of the stationary panel and a bottom rail having a downwardly facing groove therein receiving the track; a block of resilient material seated on the sill, pressed between the track and the stationary panel, in the planar zone of the mullions when the panel is in closed relation; a baffle member on each mullion extending diagonally between said mullions in interlocking relation to close the space between said mullions above said block; the bottom edge of the baffle member on the stationary panel being seated in tight contact on the top surface of the block and the bottom edge of the member on the movable panel being slidable upon the top surface of the block; a saddle member of resilient material carried within the groove of the bottom rail below the mullion, said saddle member having a depending leg extending below the rail and slidable upon the opposed top surface portion of the block into sealed relation therewith; and an elongated housing carried within the groove and having depending inwardly biased legs in sliding engagement with opposite side faces of the track.

2. In a closure having a frame with a sill and a track mounted on the sill, the combination comprising: a first panel spaced from and parallel to the track with an upright mullion of the panel beyond the middle of the frame, a second panel slidably mounted on the track and having an upright mullion beyond the middle of the frame with the panel in a closed position and a lower cross member with a groove in its bottom face, an elastic block affixed to the midsection of the sill between the spaced panels with a side of the block abutting the track beneath the movable panel, a baffle fastened to each mullion and extending at an angle therefrom toward the other end of its panel and toward the other panel, the two baffles being disposed to interlock and close the passageway between the spaced panels above the block with the slidable panel in its closed position, an elastic saddle disposed within the groove of the cross member at the baffle end of the movable panel with the two legs of the saddle member straddling the track and with the end of one of the legs sealing against the block with the slidable panel in its closed position, and an elongated housing with an open bottom disposed in the lower groove with the lower portion of the housing being constricted to engage slidably opposite sides of the track and with an end of said housing sealing against said saddle member.

3. In a closure having a frame with a sill and a track mounted on the sill, the combination comprising: a first panel spaced from and parallel to the track with an upright mullion of the panel beyond the middle of the frame, a second panel slidably mounted on the track and having an upright mullion beyond the middle of the frame with the panel in a closed position and a lower cross member with a groove in its bottom face, an elastic block affixed to the midsection of the sill between the spaced panels with a side of the block abutting the track beneath the movable panel, a baffle fastened to each mullion and extending at an angle therefrom toward the other end of its panel and toward the other panel, the two baffles being disposed to interlock and close the passageway between the spaced panels above the block with the slidable panel in its closed position, an elastic saddle disposed within the groove of the cross member at the baffle end of the movable panel with the two legs of the saddle member straddling the track and with the end of one of the legs sealing against the block with the slidable panel in its closed position, an elongated housing with an open bottom disposed in the lower groove with the lower portion of the housing being constricted to engage slidably opposite sides of the track, and with an end of said housing sealing against said saddle member, and two sheaves disposed respectively at the lower corners of the movable panel inside the housing and engaging the track within the housing.

4. In a combination with a frame for a sliding window and having a sill provided with a track and a first panel

movable relatively to a second panel, said panels being mounted in said frame: means for closing openings between said sill and transversely spaced meeting stiles of said panels comprising, a resilient block carried by the sill below the meeting stiles and having a top surface, an inner edge surface pressed against said track below one panel and an outer edge surface pressed against the inner opposed face portion of the bottom rail of the other panel; a resilient saddle member carried by the said one panel provided with depending legs straddling said track and having the bottom edge face of the outer leg slidable upon the top surface of the block in sealing relation; and a pair of baffle members carried by opposed stiles on said panels adapted to interlock in closed position and having bottom edges in sealing contact with the top surface of said block.

5. Means as defined in claim 4 wherein the bottom rail of said other panel includes a downwardly facing groove and a downwardly facing elongated weatherstrip housing carried within the groove, said housing comprising inwardly biased elongated members slidably contacting opposite faces of the track.

6. A closure comprising a frame having a sill and a track on the upper surface of the sill formed integrally from a sheet of metal, the track being a doubled-over portion of the metal sheet, an elongated cap of corrosion-resistant material having a U section straddling the track and having an exterior smooth surface, a movable panel located within the frame and having a plurality of sheaves at the bottom rail thereof engaging the top of the cap, and an elongated inverted U-section weatherstrip housing nested within the bottom rail of the panel and having depending leg elements slidably grasping opposite sides of the cap.

7. In combination with a frame for a sliding window and having a sill provided with a track and a first panel movable relative to a second panel, said panels being mounted in said frame: means for closing openings between said sill and transversely spaced meeting stiles of said panels comprising, a resilient block carried by the sill below the meeting stiles and having a top surface, an inner edge surface pressed against said track below one panel and an outer edge surface pressed against the inner opposed face portion of the bottom rail of the other panel; and a pair of baffle members carried by opposed stiles on said panels adapted to interlock in closed position and having bottom edges in sealing contact with the top surface of said resilient block.

8. In combination with a frame for a sliding window and having an inclined sill provided with a track and a first window panel movable relative to a second window panel, said panels being mounted in said frame: transversely spaced meeting stiles on said panels, each of said stiles including a baffle member adapted to interlock in closed position with the baffle member of the adjacent meeting stile; means for closing openings between said sill and said meeting stiles and baffle members carried thereby comprising, a resilient block having a bottom inclined surface seated against said inclined sill below the meeting stiles, a top horizontal surface having sealing contact with the bottom edges of said baffle members, an inner edge surface pressed against said track

below one panel, and an outer edge surface pressed against the inner opposed face portion of the bottom rail of the other panel.

9. In combination with a frame for a sliding closure having a sill provided with a track and a first panel movable relatively on said track to a second panel, said panels being mounted in said frame: means for closing openings between said sill and transversely spaced meeting stiles of said panels comprising a block member carried by the sill below the meeting stiles and having a top surface, an inner edge surface sealingly contacting said track below one panel and an outer edge surface sealingly contacting the inner opposed face portion of the bottom rail of the other panel; a resilient saddle member carried by the said one panel provided with depending legs straddling said track and having the bottom edge face of the outer leg slidable upon the top surface of the block in sealing relation; and a pair of baffle members carried by opposed stiles on said panels adapted to interlock in closed position.

10. In combination with a frame for a sliding closure and having a sill member provided with a track and a first panel movable on said track relatively to a second panel, said panels being mounted in said frame: means for closing openings between said sill member and transversely spaced meeting stiles of said panels comprising block means carried by the sill member at the position of said meeting stiles with panels in closed position and having a top surface disposed above the top surface of the sill member and extending between and in sealing relation with opposed faces of said track and the meeting stile of the second panel spaced from said track; a resilient member carried by said first panel, slidably engaging said track, and provided with an outer portion slidable upon the top surface of said block in sealing relation; and a pair of baffle members carried by said meeting stiles and adapted to interlock in closed position in sealing contact.

11. In combination with a frame for a sliding closure including a first panel movable relative to a second panel, the combination of: a sill member provided with a track and a sill surface extending outwardly from said track; said first panel being movable on said track; transversely spaced meeting stiles on said panels having baffle members adapted to interlock in closed position; and means for closing openings between said sill member, meeting stiles, and bottom portions of interlocked baffle members comprising a block means carried by the sill below the position of the baffle members when interlocked, said block means having a top surface disposed above the sill surface and extending between and in sealing relation with the track and the meeting stile of the second panel; and resilient means carried by the meeting stile of the first panel, engaging the track, and having a bottom edge slidably sealingly engaging the top surface of the block.

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