Jan. 16, 1962 H. L. OWEN 3,016,993

BUILDING FRAMING UNIT

Filed June 18, 1959 5 Sheets-Sheet 1

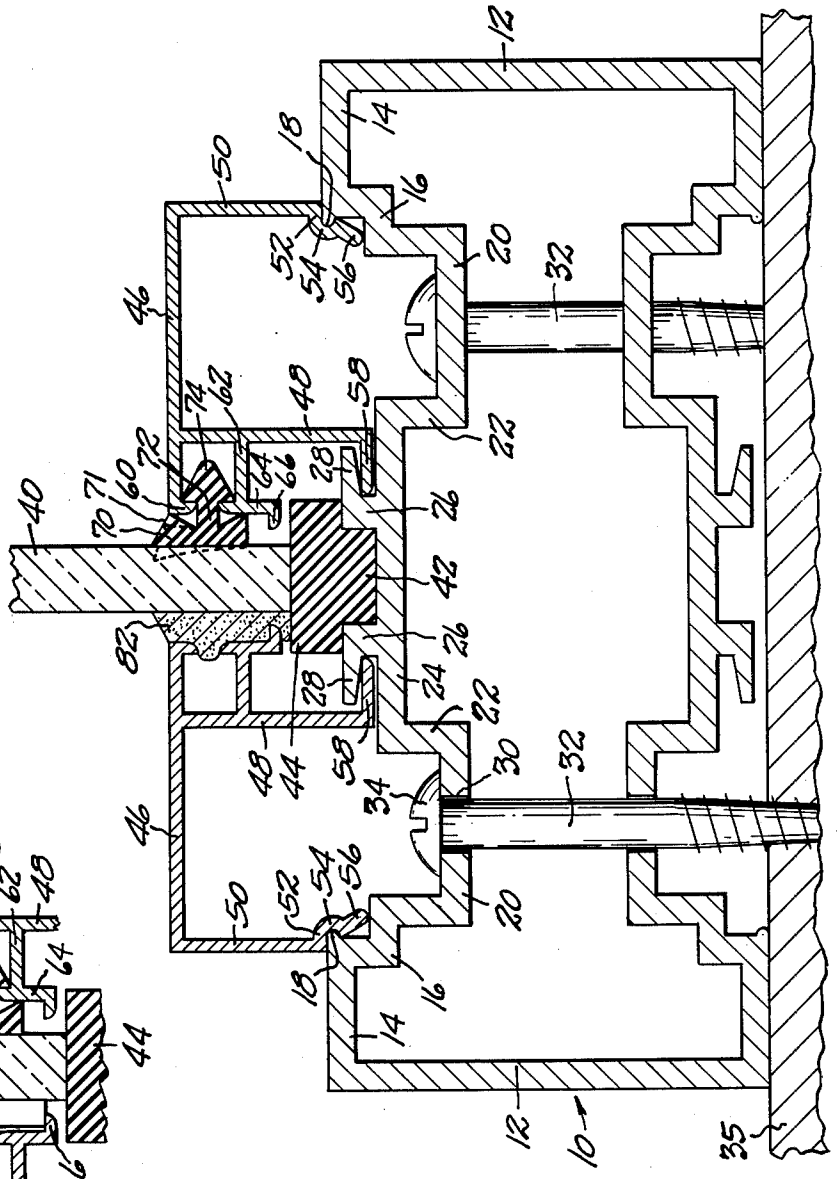

FIG. 1

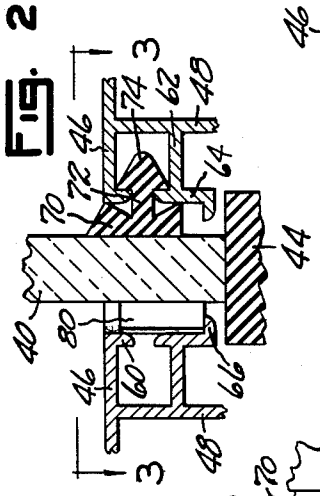

FIG. 2

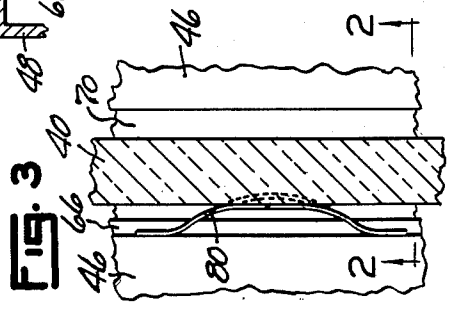

FIG. 3

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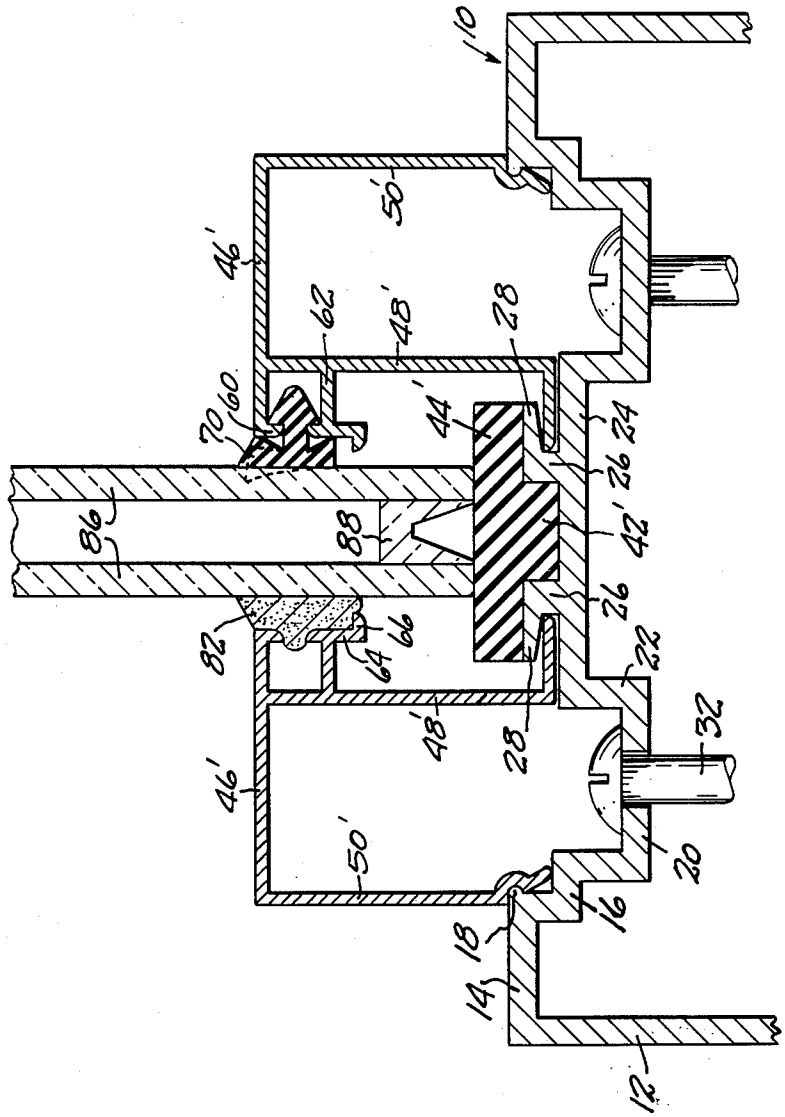

Fig. 4

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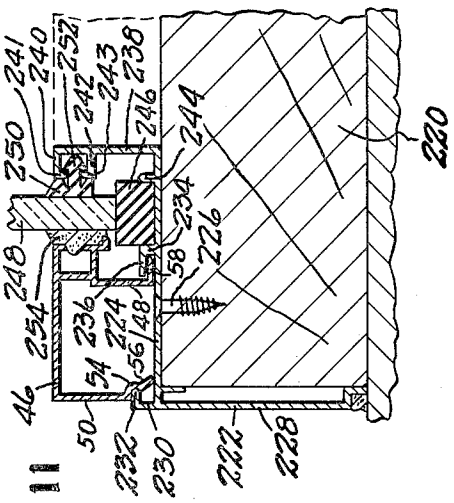

Fig. 11

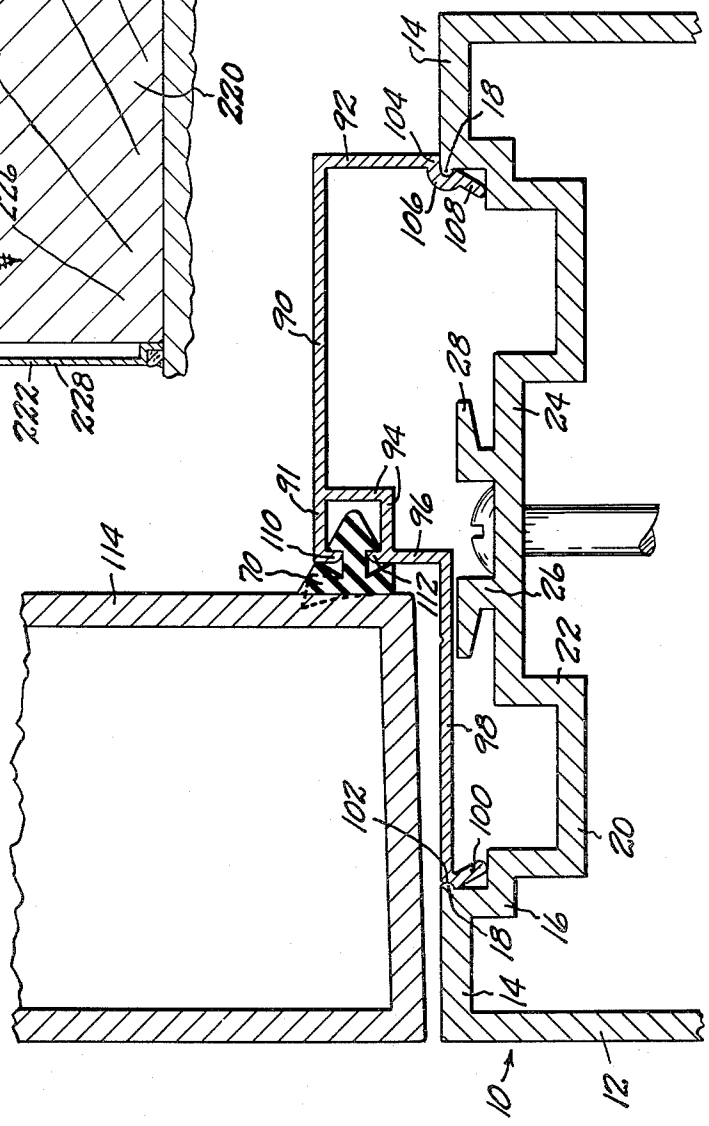

Fig. 5

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FIG. 6

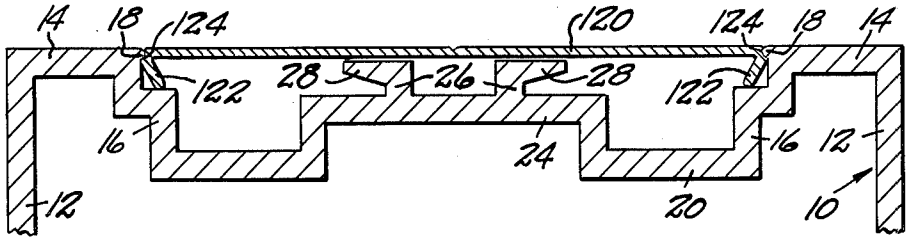

FIG. 7

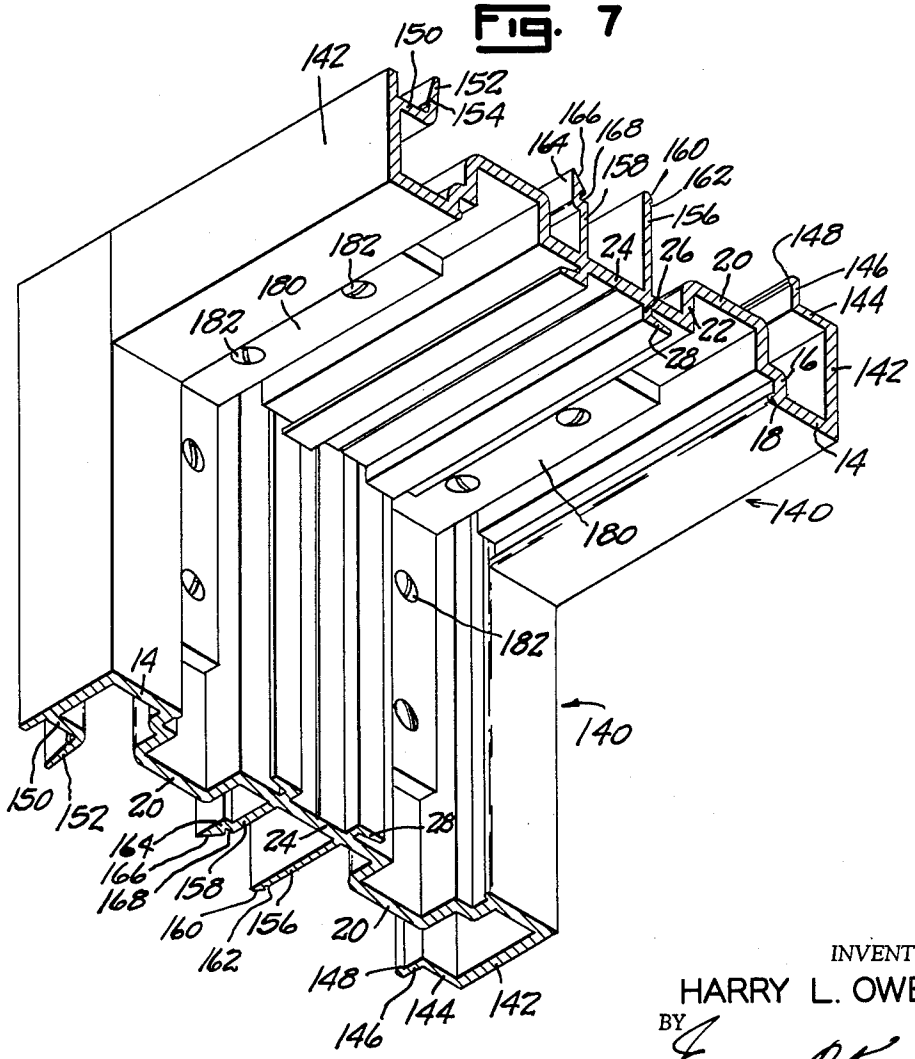

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FIG. 8

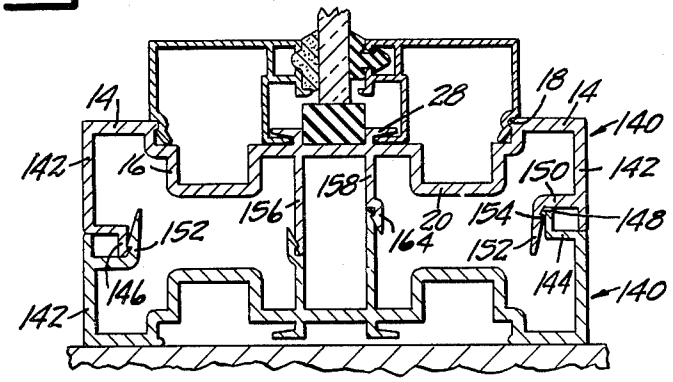


FIG. 9

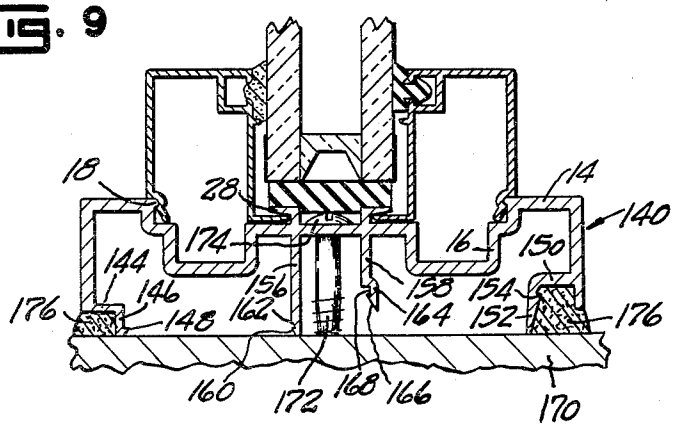
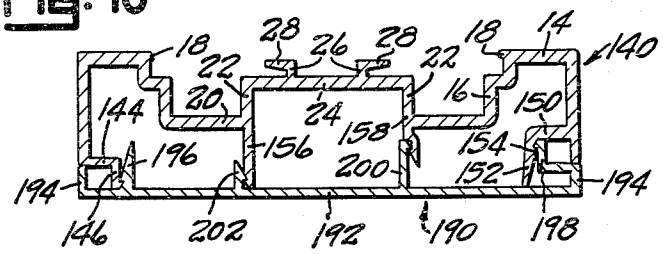


FIG. 10



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3,016,993

BUILDING FRAMING UNIT

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Filed June 18, 1959, Ser. No. 821,140
5 Claims. (Cl. 189—34)

This invention relates to building framing units, and more particularly to building framing units designed for use in store fronts, building facings and in what has come to be known as curtain wall construction.

The primary object of this invention is to provide a novel, simple and inexpensive building framing construction whose versatility for use in different applications and for use in connecting different building elements is great, and which can be assembled or erected rapidly and easily.

A further object is to provide a structural unit of this character comprising a structural or frame element and moldings which snap into operative position relative to said element and which are firmly anchored but, nevertheless, readily removable.

A further object is to provide a construction of this character having moldings interlocked therewith and serving to position therebetween panels held in place at one surface thereof by glazing clips operatively positioned by said moldings and confined within glazing material and held at another surface by a flexible resilient strip positioned by a molding in contact with the surface of a panel, so that said panel is free to rock relative to said molding.

A further object is to provide a building element with means to accommodate locking of moldings and related parts thereto and provided with grooves extending lengthwise thereof to accommodate brackets interconnecting adjacent angularly extending similar elements without interfering with interlock of moldings with said elements.

A further object is to provide a building element mounting panel-retaining moldings by a snap interlock in which the parts interlock at spaced parts thereof and independent of the panel to be retained.

A further object is to provide a building element to which panel-retaining moldings are secured by a novel dual interlock, in which one interlock is resilient and another interlock is rigid, said resilient interlock being positioned to form a fulcrum of said molding upon exertion of pressure on said panel and said rigid interlock resisting movement of said molding relative to said fulcrum.

A further object is to provide a structural channel member adapted to support a molding with a snap interlock and usable individually or engageable with a similar channel member at multiple snap interlocks to form a rigid tubular structural element without the use of securing means.

Other objects will be apparent from the following specification.

In the drawings:

FIG. 1 is a transverse sectional view illustrating one embodiment of the invention;

FIG. 2 is a fragmentary transverse sectional view taken on line 2—2 of FIG. 3 and illustrating the use of a metal clip in the construction;

FIG. 3 is a fragmentary sectional view taken on line 3—3 of FIG. 2;

FIG. 4 is a transverse sectional view of another embodiment of the invention designed to mount a thermal glass panel;

FIG. 5 is a fragmentary sectional view illustrating another embodiment of the invention, mounting a door stop;

FIG. 6 is a fragmentary sectional view of the invention mounting a cover plate;

FIG. 7 is an isometric fragmentary view illustrating frame members of a modified embodiment of the invention interconnected with similar angular extending frame members;

FIG. 8 is a transverse sectional view illustrating the use of frame members as shown in FIG. 7 for mounting a thin panel;

FIG. 9 is a transverse sectional view illustrating another use of the embodiment of the invention shown in FIG. 8 to mount a thick panel;

FIG. 10 is a transverse sectional view of another assembly using the embodiment of the invention shown in FIG. 8; and

FIG. 11 is a transverse sectional view illustrating another embodiment of the invention.

Referring to the drawings which illustrate the preferred embodiments of the invention, and particularly to FIGS. 1, 2, and 3 thereof, the numeral **10** designates a frame member formed of metal of substantially uniform wall thickness throughout and preferably of tubular or channel stock of substantially rectangular cross-sectional shape. The frame member **10** is preferably provided with a pair of opposed substantially parallel plain walls **12** and with one or a pair of intervening walls **14**. The walls **14** may be similar, as illustrated in FIGS. 1 and 7, with both thereof configured, or one wall **14** of a frame member may be configured and the other may be plain. Similarly, it will be understood that angularly disposed walls of a frame member may be configured, such as two walls extending at right angles to each other.

In the form illustrated, each wall **14** has a pair of stepped portions **16** preferably spaced equally from the longitudinal edges thereof and defined in part by a beaded overhanging shoulder **18** at its outer surfaces. The stepped or shouldered portions **16** extend lengthwise of the frame member and inwardly projecting therefrom are longitudinal U-shaped channel or inset portions **20**. The channel portions **20** are preferably similar and symmetrical and are narrow and terminate with inner walls **22** thereof spaced apart and extending outwardly to a wall portion **24** inset from the plane of the marginal wall portions **14** and preferably slightly inset relative to the stepped portions **16**. A pair of L-shaped hook members project outwardly at **26** from the central wall portion **24** and extend lengthwise of the frame member, said portions **26** preferably being spaced equally from the adjacent channel portions **22**. The flanges **28** of said L-shaped hook members **26** extend outwardly and oppositely and preferably are similar in shape and size and are symmetrically arranged. Apertures **30** may be formed at spaced points in the frame member, as in the bottom portions of the channel portions **22**, each to accommodate the shank **32** of a securing member, such as a screw having a head **34** positioned in said channel portion, as seen in FIG. 1. The shanks of the screws are threaded into or otherwise secured to building framing members **35**, as shown in FIG. 1. It will be understood that the securing members may constitute bolts or any other type of fastening means for anchoring member **10** to a supporting building structure.

The frame members **10** may be secured to a building to extend around an opening, such as a window opening, which is to be spanned by a panel or by a plurality of panels. In the latter case frame members may span the opening to form mullions or dividers. The frame members outlining an opening and those constituting dividers may be interconnected to define a rigid structure in the manner illustrated in FIG. 7 and as described hereinafter.

In instances where the frame is to encircle a panel **40**, such as a plate glass panel, two spaced positioning members or stop members **42** are mounted at the bottom frame member to support the bottom edge of such panel. The members **42** are preferably of T-shape in cross-section, as

illustrated, with a portion thereof fitting between the legs 26 of the L-shaped hook portions 28 and with a cross-head portion 44 overlying the flanges 28 and of a depth to position the panel-supporting surface thereof in a plane above the plane of the top faces of walls 14 of said bottom frame members. Members 42 are preferably formed of hard rubber, fiber, composition material or the like.

A pair of similar moldings extend full length of the panel-receiving opening along both faces of each margin of the panel 40. The moldings are preferably of the configuration shown in FIG. 1. Each molding is preferably formed of metal, such as aluminum, of substantially uniform wall thickness throughout. The moldings are preferably of substantially C-shape in cross-section with wall portions 46 from which substantially parallel leg portions 48 and 50 project in spaced relation. Outer leg portion 50 extends full length of the molding and has an inset 52 extending longitudinally thereof defining a shoulder and forming a part of a hook 54 shaped to fit snugly around the bead 18 and to underlie said bead. An inwardly inclined flange 56 projects from hook 54. Leg 48 extends full length of the molding, and is of a width to extend adjacent to or in engagement with the outer surface of the wall portion 24 of frame member 10, and has an elongated outturned foot or flange 58 seating behind the hook flange 28 and with its free edge preferably engaging the part 26 of said hook.

The wall 46 of each molding preferably projects beyond the leg 48 and terminates in a longitudinal angularly projecting flange 60 extending from wall 46 in the same direction as leg 48. The leg 48 has projecting therefrom intermediate its width and in a direction away from leg 50 and toward the panel 40 a flange of T-shaped cross-section having a portion 62 preferably substantially parallel to and spaced from the wall 46 and flange 58 and a cross-plate 64 which terminates in a longitudinal angularly extending flange 66 projecting toward the panel 40. The adjacent edges of the flange 60 and the cross-plate 64 are spaced to provide a slot communicating with the space defined by the parts 46, 48, 60, 62 and 64 for purposes to be described.

Each of the molding parts will preferably have at least a measure of resilience which will accommodate snapping thereof into interlocking supported engagement upon the frame members 10. The interconnection of the parts is effected by introducing the foot flange 58 of each molding laterally beneath the flange 28 of the hook 26, 28, with the outer surface of inclined or bevel flange 56 bearing on frame head 18, and then pressing inwardly upon the molding leg 50 in the direction of its plane. The inclined flange 56 rides over the bead 18 incident to such pressure application until such time as the hook-forming or grooved portion 54 registers with said bead. At this time the shoulder part 52 will preferably bear upon the wall portion 14 of the frame 10 to provide a tight continuous longitudinal seal or lock between the frame wall 14 and the molding leg 50. Note that the interlock can be effected independently of panel 40, that is, either with panel 40 in place or not in place.

A preformed elongated resilient sealing strip is interposed between the inner molding and the panel 40, said strip preferably being formed of rubber, synthetic rubber or a yielding plastic material such as a vinyl resin. The strip is preferably substantially T-shaped in cross-sectional form, having a wide cross-head portion 70 thereof adapted to bear against the panel 40 and having a neck portion 72 of a thickness to extend through the passage between the molding parts 60 and 64 and terminating in an anchor portion 74 which preferably is of a cross-sectional configuration similar to an arrowhead, so as to provide shoulders to seat against the inner surfaces of the parts 60 and 64. The thickness of the part 70 is preferably such as to bear firmly against both the panel 40 and the surface of the member 60. The exposed edge 71 of said strip will preferably be inclined or beveled relative to molding wall 46 and to panel 40, as illustrated. Also, the strip will preferably normally assume the position illustrated in dotted lines in FIG. 1 prior to assembly of the parts including panel 40 into position, as illustrated in FIG. 1.

At the outer surface of each panel 40, metal clips 80, preferably constituting elongated bent spring strips, will be inserted between panel 40 and the outer molding at spaced points. The strips 80 will normally be configured substantially as illustrated in dotted lines in FIG. 3, so that they are flexed and deformed incident to insertion to the position shown in FIGS. 2 and 3. It will be observed in FIG. 2 that molding flange 66 forms a support for the spring 80, limiting its insertion into the groove between the panel and the molding and assuring predetermined location thereof. Caulking material 82 is inserted between the panel 40 and the outer molding, as illustrated in FIG. 1, after the clips 80 have been positioned, and such caulking material will preferably flow around the lower flange portion 66 and into the slot between the molding parts 60 and 64, as illustrated in FIG. 1.

A modified form of molding useful for anchoring a thick panel, such as a thermal glass panel consisting of a pair of spaced glass panels 86 having a marginal seal 88 therebetween, is illustrated in FIG. 4. The principal difference in the moldings in FIGS. 1 and 4 is that the leg portions 48′ and 50′ of the molding channels shown in FIG. 4 are slightly wider than the leg portions 48 and 50 of the molding channel shown in FIG. 1, and are preferably spaced apart a lesser distance to compensate for the increase in overall thickness of the thermal panel 86, 88 compared to the thickness of the thin or unit panel 40. Similarly, the panel-supporting members 42′ may have cross-head portion 44′ wider than the head 44 of part 42 to accommodate the greater thickness of the thick panel or thermal glass. The same association of parts thus exists in the construction for mounting a thick thermal glass panel as exists for mounting a thin panel, and the same mode of assembly is practiced. It may also be mentioned that the purpose of the increased width of the legs 48′ and 50′ of the molding channel is to permit gripping of thermal panels 86 spaced inwardly from their margins a distance greater than is shown in FIG. 1 and sufficient to insure against exposure to view of the marginal structural parts of the thermal panel, such as the intervening marginal strip 88 between panes 86.

In the event it is desired to use the frame construction described above for the purpose of outlining a door opening provided with a door stop, a construction of the character illustrated in FIG. 5 may be employed. In this construction the stop molding is anchored by the frame member 10 and is preferably of substantially uniform wall thickness throughout. The stop molding preferably includes a member of channel cross-section having a base or outer wall portion 90, a leg portion 92, a stepped wall portion 94, a second leg portion 96, and a wall portion 98 substantially parallel to the channel base 90 projecting from the free end of the leg 96 in a direction away from leg 92. The wall 98 is preferably provided with an inclined terminal flange 100 extending at an acute angle to the wall 98 and preferably is notched at 102 at its outer corner to interlock with the bead 18 at one side of the frame member. The arrangement is such that when the parts 102 and 18 interlock and the stop is operatively positioned, the outer face of the wall 98 will be substantially flush with the outer faces of the walls 14 of frame member 10. The leg 92 will preferably be provided with shoulder 104 at an inset hook part 106 of U-shape having an outwardly facing groove adapted to receive and interlock with the opposite bead 18 of frame member 10. An inclined flange 108 projects from the part 106, as shown, to accommodate a camming action deflecting the wall 92 incident to pressure thereon in its plane and at right angles to wall 90 to effect a snap lock

of part 106 with the adjacent molding bead 18. A portion 91 of the wall 90 of the stop overlies the stepped wall part 94 and carries an inturned longitudinal flange 110 aligned with the leg 96. A second inturned flange portion 112 projects from and forms a continuation of the leg 96, there being a slot between the parts 110 and 112 which accommodates anchorage of a resilient stop strip 70 of the same construction above described and illustrated in FIG. 1. The strip 70 in this instance forms a yielding sealing abutment for engagement with a door 114.

In the event a frame member 10 is to be used in such a position that a configured face thereof is exposed and such exposure is not desired, a face plate may be anchored thereto to present a flush smooth appearance to the frame, as illustrated in FIG. 6. In such a construction the face plate 120 has acute angle return bent inclined or convergently arranged flanges 122 at its opposite margins, and its outer corner portions are notched at 124. The plate 120 is of a width to span the inset part of the frame wall between and flush with parts 14 and is applied in place by inward pressure guided by sliding of the inclined flanges 122 upon the frame beads 18 until the notches 124 seat behind the beads 18 to effect a snap lock.

It will be apparent from the foregoing that the frame member accommodates attachment thereto of moldings, door stops, face plates, and other building elements, so that the frame members can be used universally to meet substantially all conditions and problems which are encountered. The snap lock of these elements provides a weather-tight seal at the joints between the same and the frame. Also, where required, molding members or other attachment members may carry yielding strips adapted to engage panel members. These yielding strips may be preformed parts, such as the part 70, having some compressibility so that they may be squeezed as applied in order to effect assured seal between the mounting part and a panel or door. Thus, if any deviation occurs in the thickness of a panel or door, strips 70 will compensate therefor and at the same time will effectively provide a water-tight seal between the panel or door and the molding carrying said strips. The construction also permits removal of members assembled with or carried by the frame by a simple prying operation, as by prying under the shoulder 52 of a molding and thereby flexing the leg 50 to release the anchorage of parts 54 and 56 at the bead members 18. This is accommodated in part by the compressibility of the member 70. As a result of such removability it will be apparent that the moldings or other members, such as door stops or face plates employed in the device need not be anchored by the use of securing screws. Instead, a continuous smooth decorative surface may appear at all exposed parts, as at the exposed outer faces of the parts 46 and 50 in FIG. 1, 46' and 50' in FIG. 4, 90, 91, 98 and 92 in FIG. 5, and 120 in FIG. 6.

A modified embodiment of the invention is illustrated in FIGS. 7, 8, 9 and 10, and entails the use of a frame member 140 which is provided with a confiured wall having substantially the same configuration as the configured walls of the frame member 10 described above, so that the same reference numerals will be applied thereto as are applied in identification of the same parts in the previously described embodiment of the invention, and specifically parts 14, 16, 18, 20, 22, 24, 26 and 28. A pair of longitudinal marginal flanges or legs 142 project from the marginal wall portions 14 of the frame member 140 preferably in parallel relation to each other and of substantially equal width. One of the legs 142 carries a longitudinally inturned flange 144 preferably substantially parallel to marginal wall portion 14, and from this flange projects outwardly a longitudinal flange 146 substantially parallel to and inwardly offset from the adjacent marginal leg 142 and terminating in a longitudinal rib 148 at its inner face. The opposite leg portion 142 has projecting therefrom a flange 150 extending inwardly therefrom in substantially parallel relation to the adjacent wall portion 14 and terminating in a longitudinal flange portion 152 at its inner end substantially parallel to adjacent leg 142 and having at its outer face a beveled surface terminating in a longitudinal outwardly projecting rib 154. The parts are so proportioned that the spacing between the free edge of each of the flanges 146 and 152 from the plane of the outer faces of the wall portions 14 is equal. Likewise, the width of each flange portion 146 is equal to the spacing of the plane common to the edges of flanges 146 and 152 from the free edge of the leg 142 from which flange 150 projects. Likewise, the widths of the flanges 144 and 150 are so correlated that when two similar frame members are assembled together, as illustrated in FIG. 8, the portions 148 and 154 of the cooperating frame members 140 will interengage and interlock as seen in FIG. 8. Such interlocking may be accommodated by a snap action incident to riding of the shoulder 148 on the beveled edge of the flange 152 of the other part until the shouders 148 and 154 engage and interlock.

In order to effect an interlock as illustrated in FIG. 8, it is necessary to provide means preventing lateral disengagement of the shoulders 148 and 154. For this purpose each frame member 140 is preferably provided with two parallel flanges adjacent the central portion thereof. As here shown in FIGS. 7, 8 and 9, such flanges may consist of a flange 156 projecting from wall 24 spaced from the center thereof and preferably substantially aligned with the shank 26 of one of the hook portions 26, 28. A second flange portion 158 is spaced from the longitudinal center of frame member 140 the same distance as flange 156 and, as shown in FIGS. 7, 8 and 9, preferably is aligned with the shank portion 26 of the other hook 26, 28 of the frame unit 140. Both members 156 and 158 preferably extend longitudinally full length of the frame member 140, and the width of the flange member 156 will preferably be such that its free edge lies in a plane common to the free edges of the flanges 146 and 152. Flange 156 preferably terminates in a beveled surface 160 at the margin thereof facing away from the flange 158, and this beveled surface is interrupted by a longitudinal notch 162 spaced a slight distance from the free edge of the flange 156. The flange 158 is of narrower width than flange 156 and terminates in a laterally offset portion 164 having a beveled marginal surface 166 at the face thereof confronting the flange 156. A groove 168 interrupts the beveled face 166. The widths of the flanges 158 and 156 and the spacing of the notches 162 and 168 from the wall 24 of the frame member, are so correlated that when a pair of frame members 140 are placed in registering relation with their flanges 156 and 158 extending in the direction of each other, two interlocks will be provided between aligned flanges 156 and 158, as shown in FIG. 8, which interlocks are effected at the same time that a snap lock is effected between the parts 148 and 154, as seen in FIG. 8.

By virtue of the fact the interlocks between flanges 156 and 158 are located oppositely, relative lateral displacement of the two frame sections 140 is prevented. At the same time the abutting edges of the legs 142 of the assembled frame members 140, seen in FIG. 8, define a continuous decorative longitudinal central groove in the assembled structure which does not reveal the sectional character of the resulting tubular frame assembly, but when such edges are beveled, may provide means to accommodate a prying tool to facilitate separation of the constituent assembled frame members 140. It will be understood, also, that the frame members 140 need not be assembled in tubular form, but may be used individually mounted upon a building structure 170 by means of securing members 172, such as screws or bolts whose shanks extend through longitudinally spaced openings (not

shown) in the wall 24 and with the head portion 174 thereof seated in the recess between the hook lock portions 26, 28. In this instance the free edges of the flanges 146, 152 and 156 will bear against the structural member 170 and a caulking compound 176 will fill the cavity at each side of the structural member 140 between the building member 170 and the free edge of the part or wall 142 at each margin of the member 140.

The manner in which the structural members or framing members, either of the type shown in FIGS. 1 to 6 or in the type shown in FIGS. 7 to 10, may be secured together in angularly extending relation to define adjacent sides of a wall opening or to define interconnection between marginal frame members and division bars can be effected, is illustrated in FIG. 7. Angle members 180 fit in the channels 20 of angularly disposed frame members, as seen in FIG. 7, and are secured therein by the use of securing screws 182 extending therethrough and anchoring in the channel part 20. It will be understood, of course, that where a division bar is entailed, the division bar will preferably be tubular in form, such as the frame member 10, or a tubular assembly as shown in FIG. 8 formed of two frame members 140 interlocked together. In such instances, each division bar may have angle members 180 secured thereto at opposite faces thereof and anchored to the adjacent angularly extending frame members with which it is to be connected.

In instances where the frame members 140 are to be employed to form a tube-type unit flat at three sides thereof and configured at only one side or face thereof, an arrangement as shown in FIG. 10 may be employed, using with a single frame member 140 a member 190 of the type having a flat or plain face member 192 from which project marginal narrow flanges 194 comparable to the flanges 142 of member 140. Similarly, beveled flange 196 may be provided comparable to the flange 152 of the frame member 140 adapted to interlock with the stepped flange 146, 148 of frame member 140. At its opposite margin each member 190 may have a stepped flange 198 adapted to interlock with flange 152 of frame member 140. Intermediate flanges 200 and 202 may be provided similar to flanges 156 and 158, respectively, of frame members 140 and adapted each to interlock with one of said frame members 156, 158. In this construction, as seen in FIG. 10, the spacing of the flanges 200 and 202 will be symmetrical and equal to the spacing of the flanges 156 and 158, but such flanges may be aligned with wall portions 22 of the frame 140 if desired instead of being more closely spaced as shown in FIG. 8.

It will be understood that the moldings described above will cooperate with and have a snap interlock with frame units 140 just as said moldings interlock with frame members 10 as described above. Also, it will be understood that advantage may be taken of different widths of different molding members for the purpose of accommodating panel members of different widths. Thus it will be apparent that the molding members used at the opposite faces of a panel need not be of the same width and, in such cases, will accommodate panels of widths or thicknesses different than can be accommodated by the use of moldings of the same width. Also, it will be apparent that the larger the number of different widths of molding members provided, the greater will be the range of intermediate sizes or thicknesses of panels which can be accommodated by using a molding of one width at one face of a panel and a molding of another width at the opposite face of the panel.

One important consideration of the snap lock of the molding on the frame members is that a positive non-releasable lock occurs adjacent the panel between the hook 28 of the frame member and the foot or flange 58 of each molding, while the snap lock feature is remote from the panel and is effected at the bead 18 of the frame member adjacent the side margin of the frame member. This is an important consideration because any pressures acting upon the panel, such as wind pressure, which tend to pivot a molding, act in such a way that the fulcrum for such pivoting is the frame bead 18, but pivotal movement about that fulcrum is positively prevented by the non-releasable interlock between the frame hook 28 and the molding foot 58.

Another modified embodiment of the invention is illustrated in FIG. 11. This construction is particularly adapted for use applied to a wood or other framing member 220 mounted in the window opening of a building. The construction entails the use of an elongated frame member 222 of Z-section having a wall 224 bearing on the inner face of member 220 and secured thereto by securing means 226, such as a screw. A longitudinal leg or flange 228 forms a part of member 222 and extends across the outer edge of member 220. A longitudinal flange 230 forms a continuation of leg 228 projecting inwardly from wall 224 and terminating in a longitudinal bead or inturned flange 232. A longitudinal hook 234 projects from wall 224 intermediate its width and terminates in a flange 236 projecting angularly therefrom in the direction of the head 232.

From the marginal wall 224 opposite leg 228 a longitudinal wall 238 projects into the window opening, preferably perpendicularly. An integral C-shaped longitudinal retainer is formed at the inner or free margin of wall 238 and consists of spaced flanges 240 and 242. The flanges 240 and 242 have terminal lips 241 and 243, respectively, extending in the direction of each other. The frame wall 224 also has a longitudinal flange 244 interposed between and spaced from hook 234 and wall 238.

Blocks 246 are carried by the bottom frame members 222 to support the bottom edge of a panel 248, such as a glass pane. An elongated strip 250 of rubber or other resilient material has a longitudinal projection 252 supported and confined by the retainer flanges 240, 242 and provides an abutment for one surface, preferably the inner surface, of panel 248. A molding of the same construction as molding 46, 48, 50 of FIG. 1 is provided with foot portion 58 interlocked with hook 234, 236, and a spring latching part 54, 56 has a snap lock with bead 232. Caulking material 254, which may have a spring or springs similar to spring 80 of FIG. 2 imbedded therein, effects a seal between the panel 248 and the molding 46, 48, 50.

This construction has substantially the same advantages as the embodiments previously described. Thus the snap lock of the molding to the frame is effected by the same arrangement and is releasable in the same manner mentioned above, and the panel is spaced between the metal parts of the device and is engaged only by resilient member 250, caulking material 254 and imbedded springs, if such are used, and by the bottom stops 245.

While the various embodiments of the invention here illustrated in which moldings are shown to anchor the margins of a panel member illustrate a different type of seal between the molding and the panel member at the two faces of the panel member, it will be understood that the same type of seal may be employed at both of such faces. Thus a resilient preformed seal, such as the sealing strip 70, may be mounted at both the inner and outer faces of the panel, or both the inner and outer faces of the panel may be positioned by spring metal clips 80 imbedded in caulking material 82, if desired.

While the preferred embodiments of the invention have been illustrated and described, it will be understood that changes in the construction may be made within the scope of the appended claims without departing from the spirit of the invention.

I claim:

1. A building framing unit comprising a plurality of angularly disposed elongated frame members outlining a building opening, each frame member having an inner face interrupted by a longitudinal recess, a plurality of longitudinal parallel interlock parts carried by each member at its recess, two of said interlock parts of each member

constituting beads at opposite sides of said recess, angle members connecting adjacent frame members, each angle member having a pair of legs seated in the recesses of adjacent frame members, and an attachment member carried by each frame member and having a pair of spaced marginal longitudinal projecting portions, each projecting portion having an interlock part complementary to one of the interlock parts of said frame member, and one thereof being engageable by a snap fit.

2. A building unit comprising a frame member having a face interrupted by a longitudinal recess having an inwardly projecting bead at each of the opposite sides thereof, a pair of hooks carried by said member between said beads, a pair of moldings each having spaced inner and outer leg portions, said inner leg portion having a foot interlocking with said hook and said outer leg portion having a snap lock with one of said beads, the legs of each molding pressing outwardly against said hook and bead when operatively mounted on said frame member, and panel positioning means carried by each molding, each side of said frame recess having a step in parallel inwardly spaced relation to said bead and said outer molding leg portion including a bead-receiving groove and an inclined flange engaging said step.

3. A building unit comprising a frame member having a face interrupted by a longitudinal recess having an inwardly projecting bead at each of the opposite sides thereof, a pair of hooks carried by said member between said beads, a pair of moldings each having spaced inner and outer leg portions, said inner leg portion having a foot interlocking with said hook and said outer leg portion having a snap lock with one of said beads, the legs of each molding pressing outwardly against said hook and bead when operatively mounted on said frame member, and panel positioning means carried by each molding, and a molding having a longitudinal socket open at its inner face, one of said panel positioning means having a portion anchored in said socket.

4. A building unit comprising a frame member having a face interrupted by a longitudinal recess having an inwardly projecting bead at each of the opposite sides

thereof, a pair of hooks carried by said member between said beads, a pair of moldings each having spaced inner and outer leg portions, said inner leg portion having a foot interlocking with said hook and said outer leg portion having a snap lock with one of said beads, the legs of each molding pressing outwardly against said hook and bead when operatively mounted on said frame member, and panel positioning means carried by each molding, and a molding having a longitudinal socket open at its inner face, one of said panel positioning means constituting a strip of resilent material having a portion anchored in said socket and a projecting portion engaging said panel.

5. A building unit comprising a frame member having a face interrupted by a longitudinal recess, a plurality of longitudinal spaced parallel interlock parts carried by said member at said recess, at least one of said interlock parts constituting a bead at a side of said recess, and a member having a pair of spaced marginal longitudinal portions, each marginal portion of said last named member having an interlock part complementary to one of the interlock parts of said frame member, at least one interlock part of said last named member being resilient and having a releasable snap-fitting locking engagement with said frame bead, said interlock parts of said frame and last named member having firm frictional engagement when interlocked, a second frame member similar to said first named frame member and extending at an angle thereto, one end of one frame member abutting the margins of the recessed face of the other frame member, and an angle member secured to said frame member and having a pair of legs seating in the recesses of said frame members between the interlock parts of said last named member.

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