Nov. 24, 1959 R. S. MILLARD 2,914,147

PANEL UNITS

Filed Dec. 24, 1956 4 Sheets-Sheet 1

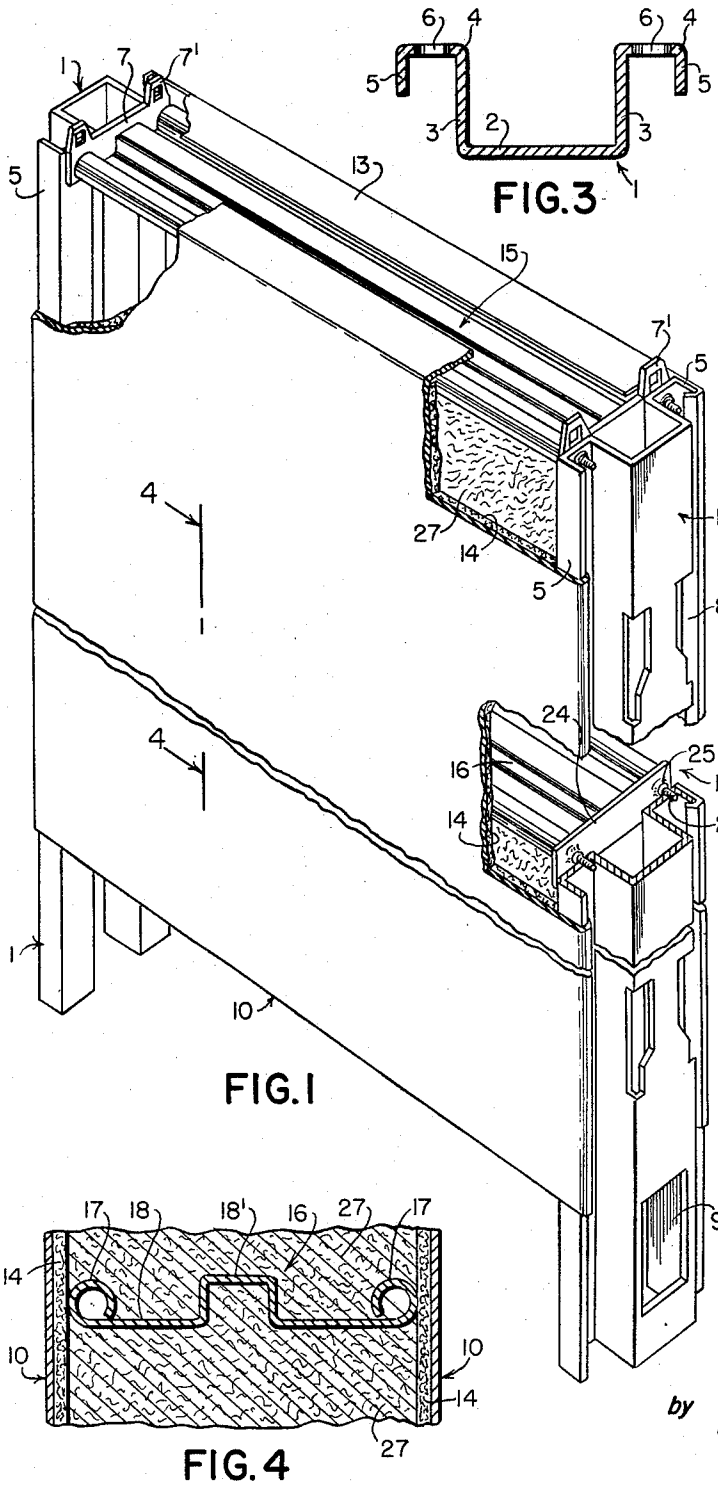


FIG. 1

FIG. 3

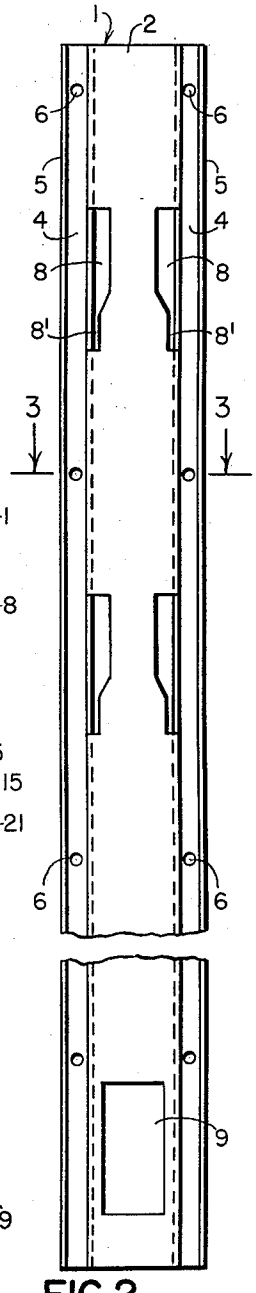


FIG. 2

FIG. 4

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PANEL UNITS

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FIG. 5

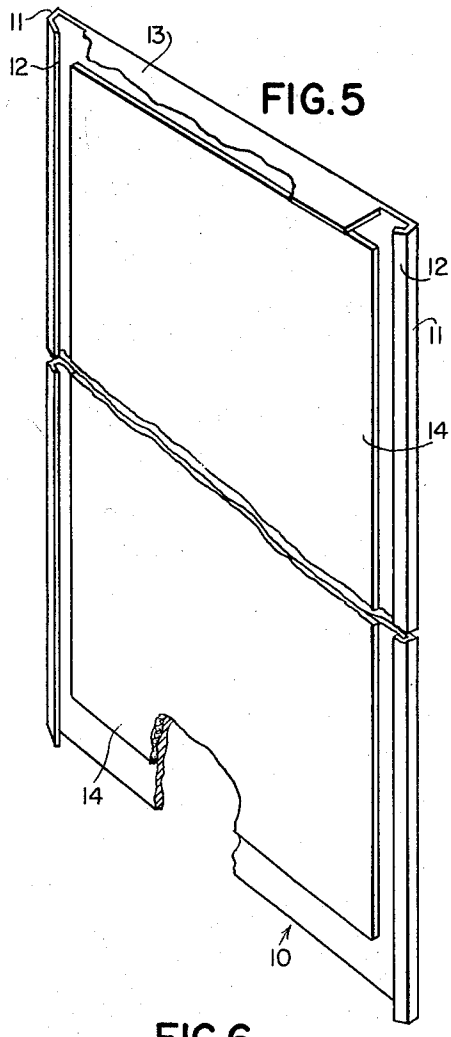


FIG. 6

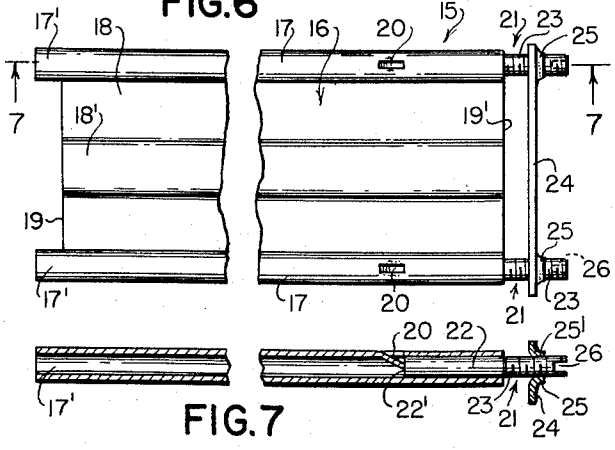
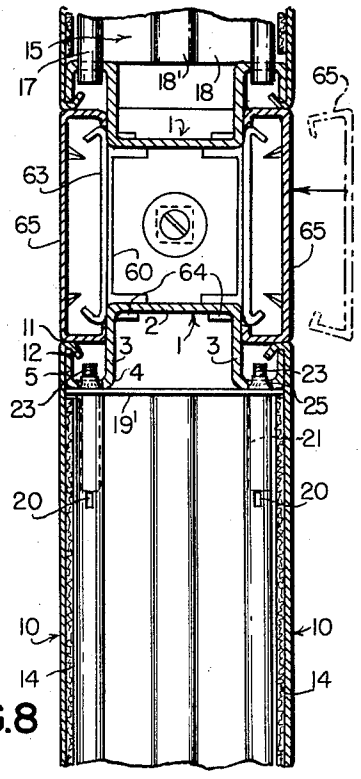
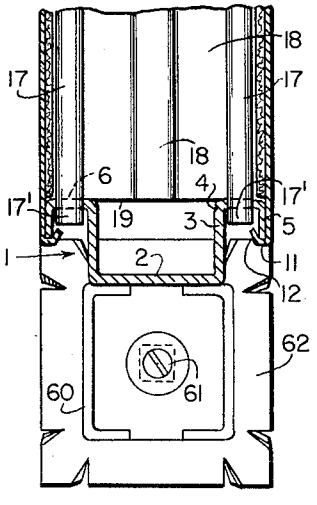


FIG. 7

FIG. 8





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PANEL UNITS

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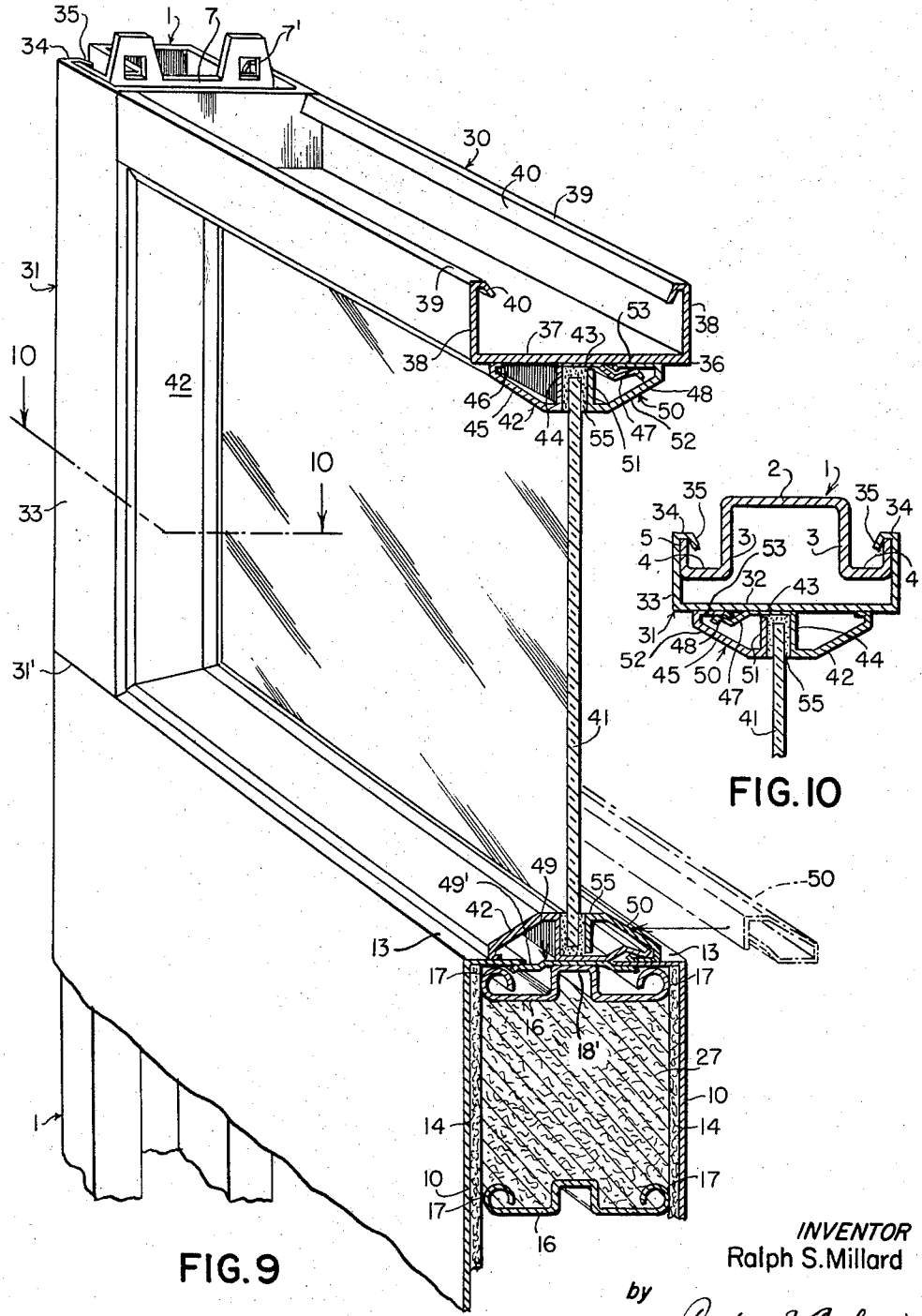


FIG. 9

FIG. 10

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PANEL UNITS

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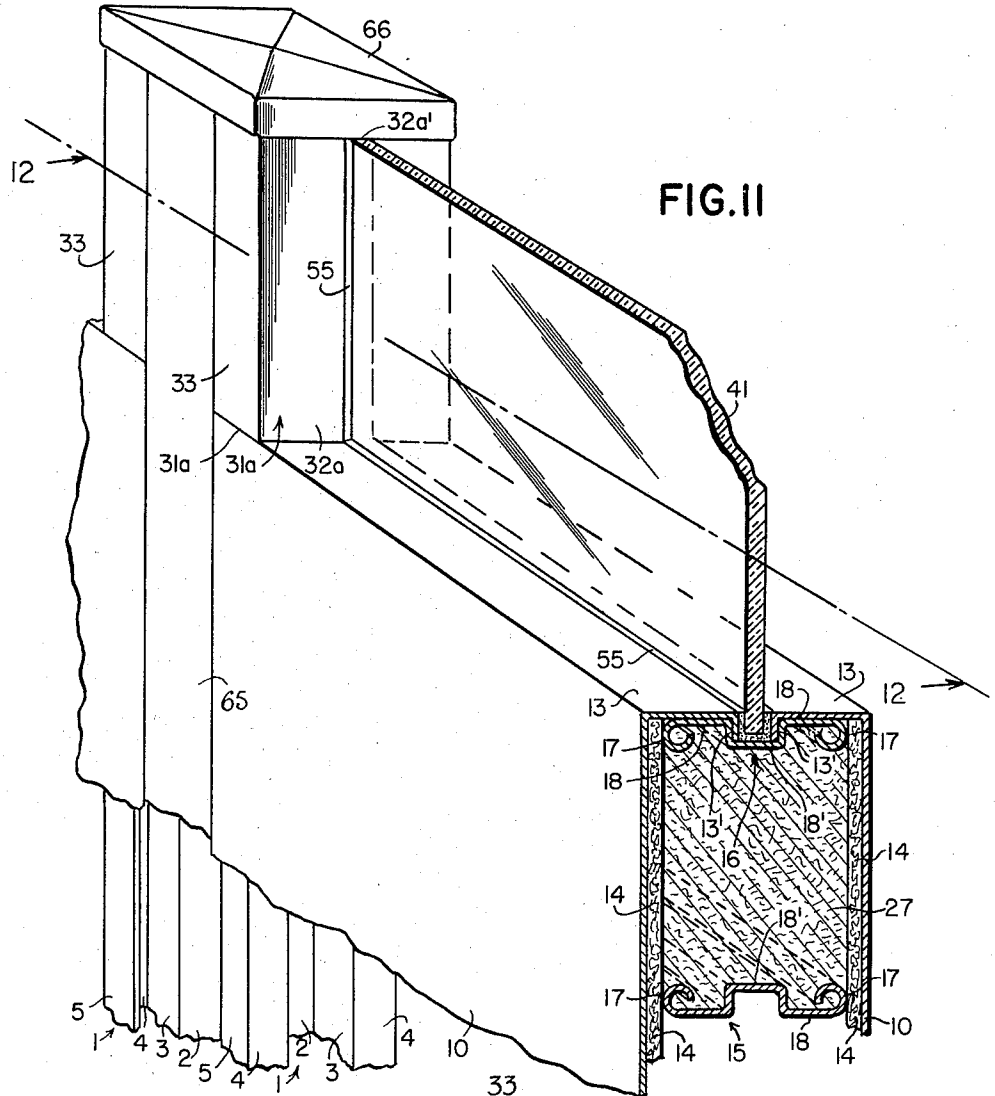


FIG.11

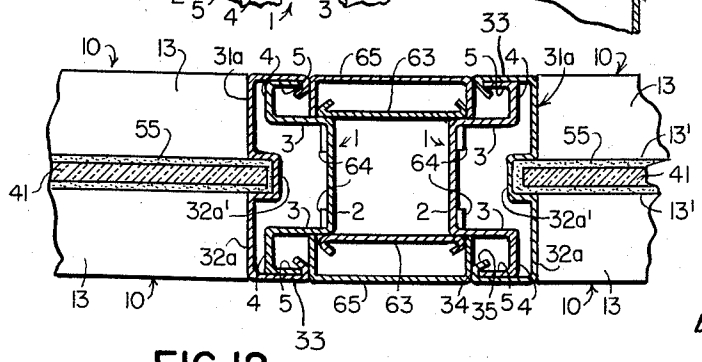


FIG.12

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2,914,147

PANEL UNITS

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Application December 24, 1956, Serial No. 630,178

14 Claims. (Cl. 189—34)

This invention relates to improved panel units, and more particularly to certain novel improvements in the panel units disclosed in U.S. Patent 2,766,855.

The improved panel units of this invention are designed for assembly into demountable metal partitions composed of flush panel units, glazed panel units, and door frame units having similar shaped framing uprights. These panel units are each assembled from a pair of wall facing sheets interiorly surfaced with a sound deadening layer or sheeting, and packed with a sound deadening filler, such as fibreglass, the panel facing sheets having rebent side edge portions designed to engage the outturned flanges forming a part of the framing uprights.

An important feature of this invention relates to the provision of improved stretcher devices which are arranged in spaced parallel relationship and extend between and are supported by the framing uprights, and which may be manipulated when assembled therewith to exert a predetermined drumhead stretch on the panel facing sheets and thereby increase the resistance of the panel facing sheets to buckling and deformation, and insure smooth and flush wall facing surfaces. These stretcher devices each comprise a stretcher member which may be formed from a continuous sheet metal strip shaped by a rolling operation to present tubular flange formations along the side edges theerof, with one or more longitudinal extending ribs formed in the web section thereof, and which serve to further reinforce and strengthen the stretcher members, and thus permit the stretcher members to be formed from a rather light gauge sheet metal strip.

The tubular flange formations present end extensions at one end of the stretcher member which extend slightly beyond the adjacent end of the web section thereof and which are designed to project into paired conforming holes in the adjacent framing upright, and provide support for the adjacent end of the stretcher member, and with the terminal end of the web section of the stretcher member designed to brace against the inside face of the adjacent framing upright. The other end of the stretcher member is square cut so that the terminal ends of the tubular flange formations and the adjacent terminal end of the intermediate web section thereof together present a square cut end which is positioned adjacent the other framing upright when the panel unit is assembled. A pair of threaded studs are telescoped into the straight cut ends of the tubular flange formations, and the inserted ends thereof seat against abutment lugs punched from the tubular flange formations so as to provide interior abutments against which the inserted ends of the studs are designed to rigidly seat.

A spreader plate having a pair of threaded holes therein, receives the outwardly projecting threaded end portions of the paired studs and is designed to brace against the inside face of the adjacent framing upright. Paired holes, in the adjacent framing upright, which may be similar to the paired holes in the opposite framing upright, receive the threaded end portions of the studs so that the ends of the studs are readily accessible from the outside face of the upright. To retain the adjacent end of the stretcher member against play or movement when assembled between framing uprights of the assembled panel unit, collar formations are formed on the outside face of each stretcher plate in surrounding relation to the threaded holes therein. These collar formations project into and snugly fit within the paired holes in the adjacent framing upright, so that when the panel unit is assembled, the stretcher plate is maintained in rigid position with respect to the framing upright. The projecting terminal ends of the threaded studs present polygonal wrench receiving sockets whereby the studs may be rotated from the exterior of the adjacent framing upright in a manner to manipulate the stretcher plate into pressure engagement with the adjacent inside face of the framing upright, and to thereby exert the desired drumhead stretch on the panel facing sheets of the assembled panel unit.

The use of stretcher devices, made in accordance with this invention, permits high speed and low cost assembly of the panel units. For example, the panel facing sheets may be painted and finished on the outside face thereof so as to present finished wall surfaces, before the panel facing sheets are assembled with the framing uprights and stretcher devices, thus avoiding handling of the relatively heavy panel units in the paint or finishing room. The internal framing uprights and stretcher devices may be formed from metal strip previously treated and rustproofed so as to require no further finishing.

In forming a glazed panel unit in accordance with this invention, similar uprights and similar stretcher devices are used as above described, the lower flush wall section of the glazed panel unit being faced by panel sheets of appropriate height and assembled to the lower sections of the framing uprights in the manner above described. A window frame, comprising a pair of vertical frame members and a top horizontal frame member and having glass mouldings secured thereto, are assembled together to provide a U-shaped frame, no horizontal bottom frame member being used. The vertical frame members are so shaped as to telescope over the upper sections of the paired framing uprights.

In place of a lower horizontal frame member, the panel facing sheets which form a part of the lower section of the glazed panel unit are formed to present inturned flanges which seat over a stretcher member formed as above described, and the lower glass retaining moulding is positioned thereover. The upper inturned flange portions of these panel facing sheets thus serve as the lower horizontal framing member of the window frame, thereby producing a glazed panel unit with a minimum number of crevice lines, which is attractive in appearance and sturdy in construction, and which may be assembled at less cost than glazed panel units as heretofore constructed.

Both flush panel units and glazed panel units may be constructed and assembled in accordance with this invention by high speed production methods at relatively low cost, to provide panel units of the highest quality which meet the exacting requirements of modern building interiors.

Various other novel features and advantages of this invention will be apparent from the following description considered in connection with the accompanying drawings, in which:

Fig. 1 is a perspective view of one of the improved flush panel units of this invention, certain parts being broken away to reveal the stretcher devices and other structural details.

Fig. 2 is an elevational view of one of the two framing uprights forming a part of each panel unit.

Fig. 3 is a horizontal cross-sectional view of the framing upright as viewed along line 3—3 of Fig. 2.

Fig. 4 is a fragmentary cross-sectional view of the flush panel unit as viewed along line 4—4 of Fig. 1, this view showing the cross-sectional configuration of the stretcher member.

Fig. 5 is an elevational view of one of the two insulated facing sheets which form the wall facings of each flush panel unit.

Fig. 6 is a fragmentary plan view of one of the several stretcher devices contained within each flush panel unit, and comprising a stretcher member and associated spreader studs and spreader plate.

Fig. 7 is a fragmentary longitudinal cross-sectional view of the stretcher member, spreader stud and spreader plate, as viewed along line 7—7 of Fig. 6.

Fig. 8 is a horizontal cross-sectional view taken through a series of connected flush panel units of this invention as they appear when assembled together to provide a straight run partition.

Fig. 9 is a fragmentary perspective view of the upper portion of the fully assembled glazed panel unit of this invention, having a single pane of glass set in the sash frame thereof, this view also showing in dotted lines the removable glazing strip as it appears when removed.

Fig. 10 is a fragmentary transverse cross-sectional view taken through the vertical leg of the sash frame and the adjacent framing upright as the same appears when viewed along line 10—10 of Fig. 9.

Fig. 11 is a fragmentary perspective view of the upper portion of a railing high partition panel with screening glass mounted thereon, and the post cap which covers the upper end of adjacent panel uprights; and

Fig. 12 is the horizontal cross section taken through two adjacent railing high panel units as the same would appear when viewed along line 12—12 of Fig. 11.

Similar reference characters refer to similar parts throughout the drawings and specification.

The interchangeable flush panel units as shown in Figs. 1 and 8 have substantially flush facing surfaces presented by a pair of metal panel facing sheets **10** supported by a pair of framing uprights **1** which extend the full height of the panel unit and are connected together by a series of horizontal extending stretcher devices **15** of this invention.

Each of the paired framing uprights **1** is formed from a single strip of relatively heavy sheet metal rolled into a double S formation as illustrated in Figs. 1, 2 and 3 to provide a main web **2**, a pair of parallel extending inner legs **3**, and a pair of intermediate webs **4** flaring outwardly from the inner legs **3** and extending substantially parallel to the main web **2**, the intermediate webs **4** each terminating in an outturned outer leg **5** spaced from and extending substantially parallel to the inner legs **3**.

Each of the framing uprights have paired holes **6** formed in the intermediate webs **4** thereof, the paired holes **6** being vertically spaced a distance of one to two feet apart. The upper end of each framing upright **1** has a lug plate **7** welded thereto, each lug plate presenting a pair of apertured lugs **7'** designed to be keyed to a continuous cornice (not shown) which extends horizontally over the assembled panel units to provide an attractive appearing and rigid partition structure.

The two wall forming panel sheets **10** are mounted on each side of the framing formed by the framing uprights **1** and the horizontally spaced stretcher devices **15**. As shown in Fig. 5, each facing sheet **10** presents a squared edge portion **11** along each vertical edge thereof which terminates in a rebent lip portion **12** designed to embrace the free end edge of the outer leg **5** of the adjacent framing upright. The upper horizontal edge of each facing sheet **10** has an inturned flange **13** designed to overhang the adjacent stretcher device **15** which is connected to the upper ends of the panel forming uprights **1** as shown in Fig. 1. The inside face of each panel sheet **10** has a fibrous backing sheet **14** cemented thereto and covering substantially the entire inner surface area thereof as shown in Fig. 5 The fibrous backing sheet **14** is preferably made of a fibrous felt which has sound-deadening qualities.

Each of the stretcher devices **15** comprises a stretcher member **16** shaped in the form shown in Figs. 1, 4, 6, 7, 8 and 9. The stretcher members are formed from metal strip of suitable gauge and width, whose side edge portions are shaped to provide a pair of tubular flange formations **17** connected by an intermediate web section **18**. The web section **18** is preferably deformed to provide one or more longitudinally extending ribs **18'** which serve to reinforce and stiffen the stretcher member, and which can therefore be made from relatively light gauge sheet metal. In forming and shaping the stretcher members **15**, a continuous metal strip may be fed through a forming machine having a series of roller dies of appropriate shape. The metal strip, before it is formed, may be weakened by transverse cuts which define the terminal ends of the respective stretcher members. The formed metal strip can then be broken by bending along the transverse cut lines, to provide a series of stretcher members **16** of desired length.

It will be noted by referring to Figs. 6 and 8 that the tubular flange formations **17** of each stretcher member present end extensions **17'** which extend slightly beyond the adjacent terminal end **19** of the web section **18**. The end extensions **17'** of the tubular flange formations are designed to extend into the paired holes **6** formed in the intermediate webs **4** of the adjacent framing upright as shown in Figs. 1, 2 and 8, when the adjacent terminal edge **19** of the web section **18** is in seating abutment against the inside face of the intermediate webs **4** of the adjacent framing upright. The opposite end of the stretcher member **16** presents a square cut terminal edge **19'** throughout its width. Abutment lugs **20** are punched by a simple cutting and punching operation from the tubular flange formations **17** adjacent the square cut end **19'** thereof. Each lug **20** as formed is driven into the interior of the tubular formation for a sufficient distance to provide a rigid abutment against which the terminal end of its spreader stud **21** may seat.

Each spreader stud **21** presents a cylindrical body section **22** shaped to snugly but easily telescope into the terminal end of the tubular flange formation **17**, with the inner terminal end **22'** of the stud designed to rigidly seat against the abutment lug **20** formed in the tubular flange formation **17**. Each stretcher stud **21** also presents a threaded section **23**, designed to project outside the terminal end **19'** of the stretcher member **16**, as shown in Figs. 6 and 7, and to support a stretcher plate **24** formed from sheet metal. Each stretcher plate **24** has a pair of punch holes formed therein which are so punched as to form collar formations **25** on the outer face of the stretcher plate as shown in Figs. 6, 7 and 8. The collar formations **25** are so shaped as to snugly extend into the paired holes **6** formed in the intermediate webs **4** of the adjacent framing upright **1**.

The internal surfaces of the punched-out collar formations **25** are tapped to provide internal threads **25'** designed to cooperate with the threads formed on the threaded section **23** of the stretcher studs **21**. The outer terminal end of each stretcher stud **21** presents a polygonal socket **26** as shown in Figs. 6 and 7, and into which a suitable socket wrench element may be inserted to rotate the stretcher studs **21**.

It will be appreciated that when the paired stretcher studs **21** are rotated, the stretcher plate **24** supported thereby and threaded thereto will travel along the thread-

ed sections 23 of the paired stretcher studs. It will be further noted that the socket forming ends of the stretcher suds 21 project outwardly between the outer legs 5 and the adjacent intermediate legs 3 of the adjacent framing upright, and thus can be readily manipulated from a position outside the adjacent framing upright of the panel unit. By rotating the stretcher studs 21 in the proper direction, the stretcher plate 24 supported thereby can be readily brought into pressing abutment against the adjacent inside faces of the intermediate webs 4 of the adjacent framing upright 1, and thus drive the opposite terminal edge 19 of the stretcher member 16 against the inside face of the intermediate webs 4 of the opposite adjacent framing upright 1. Thus, by a proper manipulation of the stretcher studs 21, the outer legs 5 of both pairs of framing uprights may be driven into pressing engagement with the inside faces of the squared edge portions 11 of the paired panel facing sheets, so as to thereby exert the desired drumhead tension on the panel sheets 10.

In assembling this inproved panel unit, a sound deadening and cushioning sheet 14 is adhesively bonded to the inside face of each of the formed panel sheets 10, and the panel sheets sent to the paint department for surface finishing. A formed and finished panel facing sheet can then be placed on a table or conveyor with the inside face uppermost, and a pair of framing uprights 1 positioned to interlock with the adjacent inturned edge portions 11—12 of the finished panel facing sheet. The stretcher devices 15 are then placed in spaced relation between the framing uprights, with the paired tubular end extensions 17' at one end of each stretcher member 16 inserted into the paired holes 6 in the adjacent framing upright, and with the stretcher studs 21 carried by the opposite end of each stretcher member 16 inserted into the adjacent paired holes 6 of the other adjacent framing upright, and so that the threaded sections 23 of the studs project through the paired holes 6.

Slabs of sound deadening filler 27 such as fibreglass are then deposited in the pockets formed by the adjacent stretcher members 16 and uprights so as to fill these pockets with sound deadening insulation. The companion panel facing sheet 10 is then telescoped endwise over the upper ends of the framing uprights 1 in the manner of a sliding cover, with the inturned side edge portions 11—12 of the companion facing sheet in interlocked relation with the adjacent outer legs 5 of the paired framing uprights, and until the top flange 13 of the facing sheet seats against the adjacent tubular flange formation 17 of the uppermost stretcher member 16 as shown in Fig. 1. The exposed end portions of the threaded studs 21 can then be rotated from the exterior of the adjacent framing upright in a manner to manipulate the interior stretcher plate 24 into tight pressure engagement with the inside face of the adjacent upright, thereby spreading apart the paired framing uprights 1 and placing the desired drumhead tension on the panel facing sheets 10. It will also be noted that the stretcher members 16 are so formed that the tubular flange formations 17 thereof will snugly abut the adjacent inside faces of fibrous backing 14 and thus brace the panel sheets 10.

It will be noted that no welding operations are required when assembling flush panel units made in accordance with this invention. The stretcher members 16 may be economically formed on an automatic sheet metal forming machine, and the formed strip, previously cut-weakened to define stretcher members 16 of desired length, may then be broken to provide the separate stretcher members. The abutment lugs 20 may then be punched into the tubular flange formations 17 of the stretcher members adjacent one end thereof. The threaded holes 25' in the stretcher plates 24 may be formed by first punching paired holes therein to provide the desired collar formations 25 on one face thereof, and the punched holes then threaded to receive the threaded sections 23 of the stretcher studs 21.

Each glazed panel unit, as illustrated in Fig. 9, is constructed from a pair of framing uprights 1 upon which a pair of panel forming sheets 10 are mounted to provide a lower packed panel section of the desired height. The packed lower section of each glazed panel unit is constructed similarly to the full height flush panel unit illustrated in Figs. 1 and 8, and heretofore described. Stretcher devices 15 are also employed to brace and stiffen the lower packed panel section of the glazed panel unit, and provide the means for applying drumhead tension to the panel facing sheets.

The panel facing sheets 10 for the lower packed panel section are made to the proper height to permit the insertion of a U-shaped sash frame 30 between the upper sections of the paired framing uprights 1 of the glazed panel unit. The panel facing sheets for the lower packed panel section are of less height but otherwise similar to the panel facing sheets 10 previously described, and present a squared edge portion 11 and a rebent lip portion 12 along each vertical side edge thereof which are designed to interlock with the outer legs 5 of the adjacent framing uprights 1. Each panel facing sheet 10 for the packed panel section of the glazed panel unit also presents an inturned flange 13 which also serves as the lower horizontal rail member of the sash frame as shown in Fig. 9. The stretcher devices 15 for the lower packed panel section of the glazed panel unit are in all respects similar to the stretcher devices 15 previously described, each comprising a stretcher member 16 with associated spreader studs 21 and spreader plate 24.

The space between the upper extensions of the framing uprights 1 is designed to receive a U-shaped sash frame 30 which comprises a pair of vertical framing members 31 and a top horizontal framing member 36 each of generally U-shaped cross section as shown in Figs. 9 and 10. Each vertical framing member 31 comprises a web portion 32 terminating in outturned flange portions 33. Each outturned flange portion 33 presents a squared vertical edge portion 34 terminating in a rebent lip portion 35 to thereby provide guideways for the sash frame 30 when telescoped over the outer legs 5 of the framing uprights 1.

The upper horizontal framing member 36 as shown in Fig. 9 presents a web portion 37 and a pair of facing flange portions 38. Each flange portion 38 presents a squared edge portion 39 and an inwardly rebent lip portion 40 which provide a finishing edge for the exposed flange portions and also reinforce the horizontal framing member. The ends of the horizontal framing member 36 are designed to snugly abut the web portions 32 of the vertical framing members 31 as shown in Fig. 9. The vertical framing members 31 and upper horizontal framing member 36 may be rigidly secured together by welding or internal bracing brackets (not shown) so as to present the outer surfaces of the flange portions 38 of the horizontal framing member 36 in flush relation to the outer surfaces of the flange portions 33 of the vertical framing members 31. When the assembled U-shaped sash frame 30 has been telescoped into final position between the upper sections of the spaced framing uprights 1, the squared lower ends 31' of the vertical framing members 31 will snugly seat against the adjacent inturned flanges 13 of the adjacent panel sheets therebelow as shown in Fig. 9, with the outer surfaces of the flange portions 33 of the vertical framing members 31 flush with the outer faces of the panel sheets 10 therebelow.

Mouldings are provided to removably retain a glass pane or screening panel 41 within the sash frame 30 as shown in Fig. 9, each moulding comprising a moulding strip 42 secured in fixed position, and a removable moulding strip 50. The fixed moulding strip 42 is se-

cured to the web portion 32 of each vertical framing member 31, and to the web portion 37 of the upper horizontal framing member 36. A fourth fixed moulding strip 42 is provided to seat against the paired inturned flanges 13 of the panel facing sheets 10 which form a part of the packed panel section of the glazed panel unit.

Each fixed moulding strip 42 presents a groove forming wall portion 44 rising from the base portion 43 thereof and which merges into an attractively contoured moulding portion 45 which terminates in an inturned foot portion 46 seating against the base portion of the adjacent framing member 31 or 36. An offset flange portion 47 terminating in a flared lip 48 extends from the base portion 43, the offset flange portion 47 being formed to resiliently retain the removable moulding strip 50 associated therewith.

The base portion 43 of one moulding strip 42 is secured as by welding to the web portion 37 of the upper horizontal frame 36, and the base portion 43 of a fixed moulding strip 42 is secured as by welding to the web portion 32 of each of the vertical framing members 31. The adjacent ends of the horizontal moulding strip 42 and the vertical moulding strips 42 are beveled and interfitted to provide a finished moulding frame. The U-shaped sash frame, comprising the upper horizontal framing member 36 and the vertical framing members 31, each having a fixed moulding strip 42 secured thereto, presents the completed sash frame ready to be telescoped into position over the outer legs 5 of the upper sections of the framing uprights.

The lower horizontal moulding strip 42 presents its base portion 43 in seating relation to a metal seating strip 49, as shown in Fig. 9. The seating strip 49 is supported by the upwardly extending longitudinal rib formation 18' associated with the top stretcher member 16 which is positioned at the upper end of the lower packed panel section. The seating strip 49 may be provided with offset side edge portions 49' which provide support for the inturned flanges 13 of the panel facing sheets 10. The lower horizontal fixed moulding strip 42 is welded to the seating strip 49 and the side edge portions 49' thereof telescoped under the inturned rail forming flanges 13 of the lower packed panel section before the U-shaped sash frame is inserted. The ends of the lower horizontal fixed moulding strip 42 are beveled as shown in Fig. 9 to smoothly interfit with the lower beveled ends of the moulding strips 42 which are fixed to the vertical sash framing members 31.

Each removable moulding strip 50 is constructed to be applied to the opposite face of the installed screening panel 41 and to removably interlock with the offset flange portion 47 of the adjacent fixed moulding strip 42. Each removable moulding strip 50 presents a groove forming wall portion 51 which merges into a moulding portion 52 corresponding in contour to the moulding portion 45 of the fixed moulding strip 42. The moulding portion 52 is provided with an inturned flange 53 terminating in a flared lip portion. The removable moulding strip 50 is applied by inserting the flange portion 53 thereof under the resilient offset flange portion 47 of the fixed moulding strip 42, with the terminal end of the flange portion 53 positioned adjacent the base portion 43 of the fixed moulding strip 42. The adjacent ends of the removable moulding strips 50 are beveled so as to interfit together to provide a substantially continuous removable moulding frame. Putty or mastic 55 is inserted in the groove formed by the wall portions 44 and 51 of the moulding strips to secure the screening panel 41 in position.

The fully assembled U-shaped sash frame 30 is telescoped into the space provided therefor between the upper extensions of the framing uprights 1, with the outer legs 5 thereof serving as trackways for the vertical framing members 31 of the sash frame. The sash frame 30 is pushed into position until the squared ends 31' of the vertical frame members 31 snugly seat against the inturned flanges 13 of the adjacent panel sheets 10. As thus assembled, the outer faces of the flange portions 33 of the vertical framing members 31 are flush with the outside faces of the adjacent panel sheets 10.

In assembling these flush panel units and glazed panel units in a partition structure as shown in Fig. 8, suitable floor studs 60 are secured to the building floor as by floor bolts 61 in proper spaced relation. The lower ends of the panel uprights 1 are supported upon suitable shims 62 by means of which the panel units may be accurately leveled. The adjacent panel units are secured together by connecting clips 63, having dog elements 64 designed to be inserted into the clip receiving slots formed in the uprights. The clips 63 are then driven downwardly so that the dog elements 64 thereof seat within the contracted ends 8' of the clip receiving slots. A continuous cornice (not shown), suitably keyed to the cornice connecting lugs 7' at the upper end of each framing upright 1, further stiffens and strengthens the partition structure. Post covers 65 as shown in Fig. 8 span the space between adjacent panel units, and are removably held in position by the clips 63 which secure the panel units in aligned relation.

The stretcher devices of this invention are also used in the assembly of rail high panel units upon which opaque or transparent screening glass may be mounted, as shown in Figs. 11 and 12. These rail high panel units are composed of panel facing sheets 10 with fibrous backing sheets 14 secured to the inside faces thereof. Each of the vertical edges of the panel facing sheets presents a squared edge portion 11 and a rebent edge portion 12 which receive the free edge of the outer leg 5 of the adjacent panel upright in the manner heretofore described and also illustrated in Fig. 11.

Each panel facing sheet 10 also presents an inturned rail forming flange 13 along the upper horizontal edge thereof which terminates in a downwardly extending lip portion 13' as shown in Fig. 11. The uppermost stretcher device 15 is positioned directly adjacent the inside face of the inturned flanges 13, with the tubular flange formations 17 thereof in bracing relation to the adjacent fibrous backing sheets 14. It will be noted by referring to Fig. 11 that the stretcher member 16 of the uppermost stretcher device is inverted, so that the web section 18 thereof provides bracing support for the inturned flanges 13 of the panel facing sheets 10, and as thus inverted, the channel shaped longitudinally extending rib 18' thereof presents the channel groove uppermost and in a position to receive the lower edge of one or more panes of screening glass 41, held in position therein by a suitable mastic compound 55. The downturned lip portions 13' of the horizontal flanges 13 of the panel facing sheets 10 extend into the channel groove of the longitudinal rib 18' as shown in Fig. 11 to further strengthen the assembly, the inturned flanges 13 thus presenting finished rail or ledge forming surfaces.

The vertical edges of the glass pane 41 are retained in position by a pair of vertical framing members 31*a*, each having a squared lower end 31*a*' which snugly seats against the inturned flanges 13 of the panel facing sheets 10 therebelow. The outturned flange portions 33 of each vertical frame member 31*a* also present their outer faces substantially flush with the outer faces of the panel sheets 10 therebelow. Each outturned flange portion 33 of each vertical frame member 31*a* presents a squared edge portion 34 and rebent lip portion 35 designed to receive the free edge of the outer leg 5 of that part of the framing upright 1 which extends the desired distance above the panel facing sheets 10. The web portion 32*a* of each vertical framing member 31*a* is provided with a vertically extending channel-shaped glass receiving groove 32*a*' which substantially corresponds to the groove formed by the channel rib 18' of the uppermost stretcher member 16 except that it may be slightly narrower. The vertical

edges of the screening glass **41** are retained in the vertically extending grooves **32***a'* formed in the web portions of the framing members **31***a* as by a mastic composition **55**. The top horizontal edge of the screening glass **41** is usually left as a free edge.

A series of rail high panel units having screening glass mounted thereon as shown in Fig. 11, may be erected to provide a continuous partitioning structure when the adjacent framing uprights **1** thereof are secured together by the vertically spaced connecting clips **63**, as shown in Fig. 12. The spaces between adjacent uprights are enclosed by a pair of post covers **65** designed to detachably grip and be retained by the vertically spaced connecting clips **63**. The lower ends of the adjacent framing uprights **1** are fixedly secured to the building floor by suitable floor bracing means which form no part of this invention. If rugged rigidity is required, metal posts of H-shaped cross section may be provided to extend any desired distance upwardly between the adjacent framing uprights **1**, with the lower end of the H-shaped posts rigidly secured to the building floor by floor connecting devices. The upper ends of adjacent framing uprights **1** and the upper ends of the vertical framing members **31***a* are preferably square cut and may be enclosed within a telescoping post cap **66** of ornamental design.

It will be noted by referring to Fig. 11 that only the uppermost stretcher device **15** presents its stretcher member **16** in inverted position so as to present its inverted longitudinal rib **18'** in position to provide a glass pane receiving groove. The stretcher devices **15** which are below the uppermost stretcher device, preferably present their longitudinal ribs **18'** in upwardly extending position and in the manner shown in Figs. 1 and 9. The stretcher devices **15** associated with the rail high panel unit illustrated in Fig. 11 present tubular formations **17** having end extensions **17'** which project through conforming holes in the intermediate webs **4** of the adjacent upright, and also include a spreader plate **24** and spreader studs **21** at the other end thereof to provide the means for applying drumhead tension to the panel facing sheets **10** in the manner heretofore described.

Rail high panel units may be constructed and assembled as above described without any welding operation, can be quickly assembled in the same manner as the full height flush panel units shown in Fig. 1 and in the manner heretofore described. These rail high panel units may be provided with screening glass **41** as shown in Fig. 11, or if desired, the screening glass may be eliminated and a counterplate mounted directly over the inturned flanges **13** of the panel facing sheets.

While certain novel features of this invention have been disclosed and are pointed out in the annexed claims, it will be understood that various omissions, substitutions and changes may be made by those skilled in the art without departing from the spirit of this invention.

What is claimed is:

1. A metal panel unit, including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly, a pair of spaced framing uprights positioned between said facing sheets, each of said framing uprights presenting a web section and a pair of outer legs joined to the web section, said outer legs presenting free edges seating within the adjacent grooves formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, a plurality of adjustable stretcher devices extending between said framnig uprights and operative to spread said framing uprights and drive the outer legs thereof into predetermined pressure engagement with the rebent edges of the panel sheets and thereby place said panel sheets under stretching tension, each of said stretcher devices including a sheet metal stretcher member having tubular flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a web section joining said tubular flange formations, means for supporting one end of said stretcher member in bracing relation against the web section of the adjacent framing upright, the other end of said stretcher member presenting a pair of threaded spreader studs extending into the adjacent ends of said tubular flange formations, abutment means within said tubular flange formations against which the inner ends of said spreader studs are designed to seat, a spreader plate having threaded holes through which the threaded portions of said studs extend, the adjacent framing upright having paired holes in the web section thereof through which the adjacent ends of said spreader studs extend, and means at the projecting ends of said spreader studs to which a tool may be applied and whereby said spreader studs may be rotated to thereby drive said spreader plate into predetermined pressure engagement with the inside face of the web section of the adjacent upright and thus cause said spreader device to exert spreading pressure against said framing uprights and stretching tension on said facing sheets, and sound insulating material filling the pockets defined by the adjacent spreader devices and framing uprights.

2. A metal panel unit, including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly, a pair of spaced framing uprights positioned between said facing sheets, each of said framing uprights presenting a web section and a pair of outer legs joined to the web section, said outer legs presenting free edges seating within the adjacent grooves formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, a plurality of adjustable stretcher devices extending between said framing uprights and operative to spread said framing uprights and drive the outer legs thereof into predetermined pressure engagement with the rebent edges of the panel sheets and thereby place said panel sheets under stretching tension, each of said stretcher devices including a sheet metal stretcher member having tubular flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a web section joining said tubular flange formations, one end of said stretcher member presenting tubular end extensions designed to project through conforming holes in the adjacent web section of the adjacent upright when the adjacent end of the web section thereof is in bracing relation against the inside face of the adjacent web section of the upright, the other end of said stretcher member presenting a pair of threaded spreader studs extending into the adjacent ends of said tubular flange formations, abutment means within said tubular flange formations against which the inner ends of said spreader studs are designed to seat, a spreader plate having threaded holes through which the threaded portions of said studs extend, the adjacent framing upright having paired holes in the web section thereof through which the adjacent ends of said spreader studs extend, and means at the projecting ends of said spreader studs to which a tool may be applied to rotate said spreader studs and drive said spreader plate into predetermined pressure engagement with the inside face of the web section of the adjacent upright and thus cause said spreader device to exert spreading pressure against said framing uprights and stretching tension on said facing sheets, and sound insulating material filling the pockets defined by the adjacent spreader devices and framing uprights.

3. A metal panel unit, including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly, a pair of spaced framing uprights positioned between said facing sheets, each of said framing uprights presenting a web section and a pair of outer legs joined to the web section, said outer legs presenting free edges seating within the adjacent grooves

formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, a plurality of adjustable stretcher devices extending between said framing uprights and operative to spread said framing uprights and drive the outer legs thereof into predetermined pressure engagement with the rebent edges of the panel sheets and thereby place said panel sheets under stretching tension, each of said stretcher devices including a sheet metal stretcher member having tubular flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a web section joining said tubular flange formations, means for supporting one end of said stretcher member in bracing relation against the web section of the adjacent framing upright, the other end of said stretcher member presenting a pair of threaded spreader studs extending into the adjacent ends of said tubular flange formations, abutment means within said tubular flange formations against which the inner ends of said spreader studs are designed to seat, a spreader plate having threaded holes through which the threaded portions of said studs extend, the adjacent framing upright having paired holes in the web section thereof through which the adjacent ends of said spreader studs extend, said spreader plate presenting collar formations extending into the adjacent web holes to thereby center said spreader plate, the ends of said spreader studs presenting wrench connecting formations whereby said spreader studs may be rotated to thereby drive said spreader plate into predetermined pressure engagement with the inside face of the web section of the adjacent upright and thus cause said spreader device to exert spreading pressure against said framing uprights and stretching tension on said facing sheets, and sound insulating material filling the pockets defined by the adjacent spreader devices and framing uprights.

4. A metal panel unit, including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly, a pair of spaced framing uprights positioned between said facing sheets, each of said framing uprights presenting a web section and a pair of outer legs joined to the web section, said outer legs presenting free edges seating within the adjacent grooves formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, a plurality of adjustable stretcher devices extending between said framing uprights and operative to spread said framing uprights and drive the outer legs thereof into predetermined pressure engagement with the rebent edges of the panel sheets and thereby place said panel sheets under stretching tension, each of said stretcher devices including a sheet metal stretcher member having tubular flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a web section joining said tubular flange formations, one end of said stretcher member presenting tubular end extensions designed to project through conforming holes in the adjacent web section of the adjacent upright when the adjacent end of the web section thereof is in bracing relation against the inside face of the adjacent web section of the upright, the other end of said stretcher member presenting a pair of threaded spreader studs extending into the adjacent ends of said tubular flange formations with the inner ends thereof abutting against internal lugs struck from said tubular flange formations, said spreader studs supporting a spreader plate having threaded holes through which the threaded portions of said studs extend, the adjacent framing upright having paired holes in the web section thereof through which the adjacent ends of said spreader studs extend, said spreader plate presenting collar formations extending into the adjacent web holes to thereby center said spreader plate, the ends of said spreader studs presenting wrench connecting formations whereby said spreader studs may be rotated to thereby drive said spreader plate into predetermined pressure engagement with the inside face of the web section of the adjacent upright and thus cause said spreader device to exert spreading pressure against said framing uprights and stretching tension on said facing sheets, and sound insulating material filling the pockets defined by the adjacent spreader devices and framing uprights.

5. A metal panel unit, including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly, a pair of spaced framing uprights positioned between said facing sheets, each of said framing uprights presenting a pair of inner legs, a main web joining said inner legs, a pair of outer legs, and a pair of intermediate webs joining said inner and outer legs, said outer legs presenting free edges seating within the adjacent grooves formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, a plurality of adjustable stretcher devices extending between said framing uprights and operative to spread said framing uprights and drive the outer legs thereof into predetermined pressure engagement with the rebent edges of the panel sheets and thereby place said panel sheets under stretching tension, each of said stretcher devices including a sheet metal stretcher member having tubular flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a ribbed web section joining said tubular flange formations, means for supporting one end of said stretcher member in bracing relation against the adjacent intermediate webs of the adjacent upright, the other end of said stretcher member presenting a pair of threaded spreader studs extending into the adjacent ends of said tubular flange formations, abutment means within said tubular flange formations against which the inner ends of said spreader studs are designed to seat, a spreader plate having threaded holes through which the threaded portions of said studs extend, the adjacent framing upright having paired holes in the intermediate webs thereof through which the adjacent ends of said spreader studs extend, the ends of said spreader studs presenting wrench connecting formations whereby said spreader studs may be rotated to thereby drive said spreader plate into predetermined pressure engagement with the inside face of the intermediate web of the adjacent upright and thus cause said spreader device to exert spreading pressure against said framing uprights and stretching tension on said facing sheets, and sound insulating slabs filling the pockets defined by the adjacent spreader devices and framing uprights.

6. A metal panel unit, including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly, a pair of spaced framing uprights positioned between said facing sheets, each of said framing uprights presenting a pair of inner legs, a main web joining said inner legs, a pair of outer legs, and a pair of intermediate webs joining said inner and outer legs, said outer legs presenting free edges seating within the adjacent grooves formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, a plurality of adjustable stretcher devices extending between said framing uprights and operative to spread said framing uprights and drive the outer legs thereof into predetermined pressure engagement with the rebent edges of the panel sheets and thereby place said panel sheets under stretching tension, each of said stretcher devices including a sheet metal stretcher member having tubular flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a ribbed web section joining said tubular flange formations, one end of said stretcher member presenting tubular end extensions designed to project through conforming holes in the adjacent intermediate webs of the adjacent upright when the adjacent end of

the ribbed web section thereof is in bracing relation against the inside face of the adjacent intermediate webs of the upright, the other end of said stretcher member presenting a pair of threaded spreader studs extending into the adjacent ends of said tubular flange formations with the inner ends thereof abutting against internal lugs struck from said tubular flange formations, said spreader studs supporting a spreader plate having threaded holes through which the threaded portions of said studs extend, the adjacent framing upright having paired holes in the intermediate webs thereof through which the adjacent ends of said spreader studs extend, said spreader plate presenting collar formations extending into the adjacent web holes to thereby center said spreader plate, the ends of said spreader studs presenting wrench connecting formations whereby said spreader studs may be rotated to thereby drive said spreader plate into predetermined pressure engagement with the inside face of the intermediate webs of the adjacent upright and thus cause said spreader device to exert spreading pressure against said framing uprights and stretching tension on said facing sheets, and sound insulating slabs filling the pockets defined by the adjacent spreader devices and framing uprights.

7. A metal panel unit, including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly, a pair of spaced framing uprights positioned between said facing sheets, each of said framing uprights presenting a web section and a pair of outer legs joined to the web section, said outer legs presenting free edges seating within the adjacent grooves formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, a plurality of adjustable stretcher devices extending between said framing uprights and operative to spread said framing uprights and drive the outer legs thereof into predetermined pressure engagement with the rebent edges of the panel sheets and thereby place said panel sheets under stretching tension, each of said stretcher devices including a sheet metal stretcher member having tubular flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a web section joining said flange formations, means for supporting one end of said stretcher member in bracing relation against the web section of the adjecent framing upright, the other end of said stretcher member presenting a pair of threaded spreader studs extending into the adjacent ends of said tubular flange formations, means within said tubular flange formations for rotatably supporting the inner ends of said spreader studs, a spreader plate having threaded holes through which the threaded portions of said studs extend, the adjacent framing upright having paired holes in the web section thereof through which the adjacent ends of said spreader studs extend, and means at the projecting ends of said spreader studs whereby said spreader studs may be rotated to thereby drive said spreader plate into predetermined pressure engagement with the inside face of the web section of the adjacent upright and thus cause said spreader device to exert spreading pressure against said framing uprights and stretching tension on said facing sheets, sound insulating material filling the pockets defined by the adjacent spreader devices and framing uprights, said facing sheets presenting rail-forming flanges extending inwardly along the upper horizontal edges thereof and between said framing uprights, said inturned flanges being braced by the adjacent stretcher member positioned directly therebelow.

8. A partition forming panel unit, including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly, a pair of spaced framing uprights positioned between said facing sheets, each of said framing uprights presenting a web section and a pair of outer legs joined to the web section, said outer legs presenting free edges seating within the adjacent grooves formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, a plurality of adjustable stretcher devices extending between said framing uprights and operative to spread said framing uprights and drive the outer legs thereof into predetermined pressure engagement with the rebent edges of the panel sheets and thereby place said panel sheets under stretching tension, each of said stretcher devices including a sheet metal stretcher member having flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a web section joining said flange formations, the web section of each stretcher member having a channel-shaped longitudinally extending reinforcing rib, means for supporting one end of said stretcher member in bracing relation against the web section of the adjacent framing upright, the other end of said stretcher member presenting a pair of threaded spreader studs rotatably connected thereto, a spreader plate having threaded holes through which the threaded portions of said studs extend, the adjacent framing upright having paired holes in the web section thereof through which the adjacent ends of said spreader studs extend, and means at the projecting ends of said spreader studs whereby said spreader studs may be rotated to thereby drive said spreader plate into predetermined pressure engagement with the inside face of the web section of the adjacent upright and thus cause said spreader device to exert spreading pressure against said framing uprights and stretching tension on said facing sheets, sound insulating material filling the pockets defined by the adjacent spreader devices and framing uprights, said panel facing sheets presenting rail-forming flanges extending inwardly along the upper horizontal edges thereof and between said framing uprights, a seating strip secured to the longitudinal rib of the adjacent stretcher member and providing bracing support for the inner edges of said inturned flanges, and a glass moulding strip capping said inturned flanges and secured to said seating strip.

9. A partition forming panel unit including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly and presenting rail forming flanges extending inwardly along the upper horizontal edges thereof, a pair of spaced framing uprights positioned between said facing sheets and each presenting a web section and a pair of outer legs joined to the web section, said outer legs presenting their free edges seated within the adjacent grooves formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, and a plurality of stretcher members positioned between said framing uprights and facing sheets and each having a pair of flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a web section joining said flange formations, the uppermost of said stretcher members being positioned in bracing relation to the inturned flanges of said facing sheets and having a reinforced rib extending longitudinally thereof which presents an upwardly facing groove exposed between the inner terminal edges of said inturned flanges for the reception of a screening panel.

10. A partition forming panel unit including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly and presenting rail forming flanges extending inwardly along the upper horizontal edges thereof, a pair of spaced framing uprights positioned between said facing sheets and each presenting a web section and a pair of outer legs joined to the web section, said outer legs presenting their free edges seated within the adjacent grooves formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, a plurality of stretcher members positioned between said framing uprights and facing sheets

and each having a pair of flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a web section joining said flange formations, the uppermost of said stretcher members being positioned in bracing relation to the inturned flanges of said facing sheets and having a reinforced rib extending longitudinally thereof which presents an upwardly facing groove exposed between the inner terminal edges of said inturned flanges for the reception of a screening panel, and a pair of channel-shaped framing members telescoping over the outer legs of the upper extensions of the adjacent framing uprights, each of said framing members presenting a depressed groove in the web portion thereof designed to receive the vertical edges of a screening panel.

11. A partition forming panel unit including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly and presenting rail forming flanges extending inwardly along the upper horizontal edges thereof, a pair of spaced framing uprights positioned between said facing sheets and each presenting a web section and a pair of outer legs joined to the web section, said outer legs presenting their free edges seated within the adjacent grooves formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, a plurality of stretcher members positioned between said framing uprights and facing sheets and each having a pair of flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a web section joining said flange formations, the uppermost of said stretcher members being positioned in adjacent relation to the inturned rail forming flanges of said facing sheets, a seating strip supported by the uppermost stretcher member and providing bracing support for the inner edges of said inturned rail forming flanges, a screening panel retaining strip capping said inturned rail forming flanges and secured to said seating strip, a pair of vertically extending channel-shaped framing members each having the lower end thereof in seating relation against the inturned rail forming flanges of said facing sheets and presenting side flanges having rebent edges interlocking with the outturned flanges of the upper extension of the adjacent framing upright, and a screening panel retaining strip secured to the web portion of each of said vertical framing members.

12. A partition forming panel unit including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly and presenting rail forming flanges extending inwardly along the upper horizontal edges thereof, a pair of spaced framing uprights positioned between said facing sheets and each presenting a web section and a pair of outer legs joined to the web section, said outer legs presenting their free edges seated within the adjacent grooves formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, a plurality of stretcher members positioned between said framing uprights and facing sheets and each having a pair of flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a web section joining said flange formations, the uppermost of said stretcher members being positioned in adjacent relation to the inturned rail forming flanges of said facing sheets and having an upwardly projecting reinforced rib extending longitudinally thereof, a seating strip supported by the longitudinal rib of the uppermost stretcher member and providing bracing support for the inner edges of said inturned rail forming flanges, a screening panel retaining strip capping said inturned rail forming flanges and fixed to said seating strip, a pair of vertically extending channel-shaped framing members each having the lower end thereof in seating relation against the inturned rail forming flanges of said facing sheets and presenting side flanges having rebent edges interlocking with the outturned flanges of the upper extension of the adjacent framing upright, and a screening panel retaining strip secured to the web portion of each of said vertical framing members.

13. A partition forming panel unit including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly and presenting rail forming flanges extending inwardly along the upper horizontal edges thereof, a pair of spaced framing uprights positioned between said facing sheets and each presenting a web section and a pair of outer legs joined to the web section, said outer legs presenting their free edges seated within the adjacent grooves formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, a plurality of stretcher members positioned between said framing uprights and facing sheets and each having a pair of flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a web section joining said flange formations, the uppermost of said stretcher members being positioned in adjacent relation to the inturned rail forming flanges of said facing sheets, a screening panel retaining strip supported by the web section of the uppermost stretcher member, and a U-shaped sash frame presenting a pair of channel-shaped framing members extending vertically and telescoping over and interlocking with the flanges of the adjacent uprights and a channel-shaped framing member extending horizontally between and connected to the upper ends of said vertical framing members, the lower ends of said vertical framing members being in seating relation against the inturned rail forming flanges of said facing sheets, and a screening panel retaining strip secured to said horizontal framing member and each of said vertical framing members.

14. A partition forming panel unit including in combination, a pair of spaced metal facing sheets having their vertical edges rebent inwardly and presenting rail forming flanges extending inwardly along the upper horizontal edges thereof, a pair of spaced framing uprights positioned between said facing sheets and each presenting a web section and a pair of outer legs joined to the web section, said outer legs presenting their free edges seated within the adjacent grooves formed by the rebent edges of the facing sheets, a sound insulating liner secured to the inside surface of each facing sheet and extending between said framing uprights, a plurality of stretcher members positioned between said framing uprights and facing sheets and each having a pair of flange formations along the sides thereof in bracing relation to the adjacent insulating liners and a web section joining said flange formations, the uppermost of said stretcher members being positioned in bracing relation to the inturned flanges of said facing sheets and having an upwardly projecting reinforced rib extending longitudinally thereof, a seating strip supported by the longitudinal rib of the uppermost stretcher member and providing bracing support for the inner edges of said inturned rail forming flanges, a screening panel retaining strip capping said inturned rail forming flanges, and a U-shaped sash frame presenting a pair of vertical framing members and a horizontal framing member connected to the upper ends thereof, said vertical framing members telescoping over and interlocking with the upper extensions of the adjacent framing uprights and having the lower ends thereof in seating relation against the inward turned rail forming flanges of said facing sheets, and a screening panel retaining strip secured to said horizontal framing member and each of said vertical framing members.

References Cited in the file of this patent

UNITED STATES PATENTS

1,708,351	Auld	Apr. 9, 1929
2,061,702	Goddard et al.	Nov. 24, 1936
2,766,855	Johnson et al.	Oct. 16, 1956