

April 12, 1932.

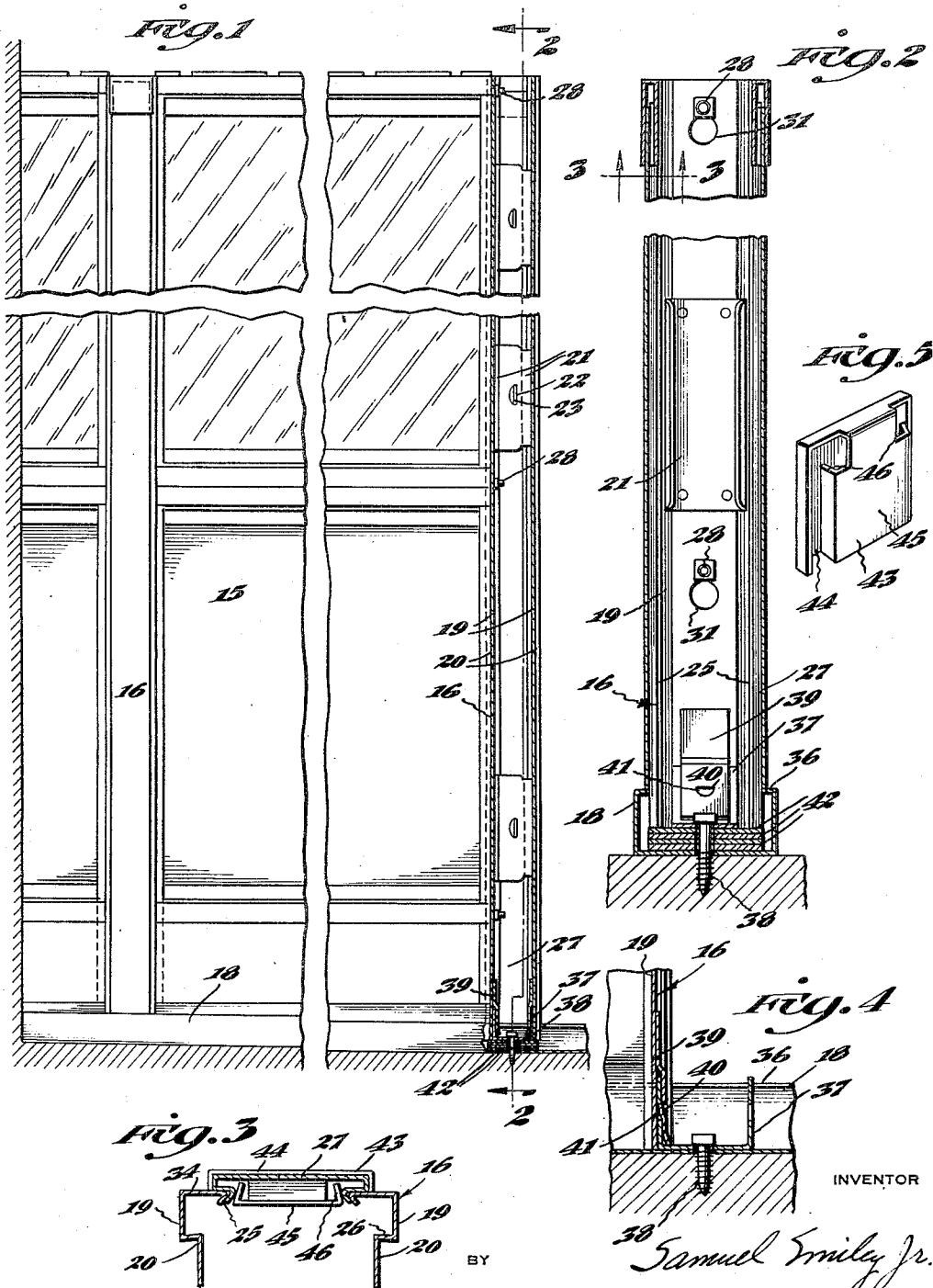
S. SMILEY, JR.

1,853,090

PARTITION AND POST CONSTRUCTION

Filed Jan. 19, 1929

4 Sheets-Sheet 1



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1,853,090

PARTITION AND POST CONSTRUCTION

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4 Sheets-Sheet 2

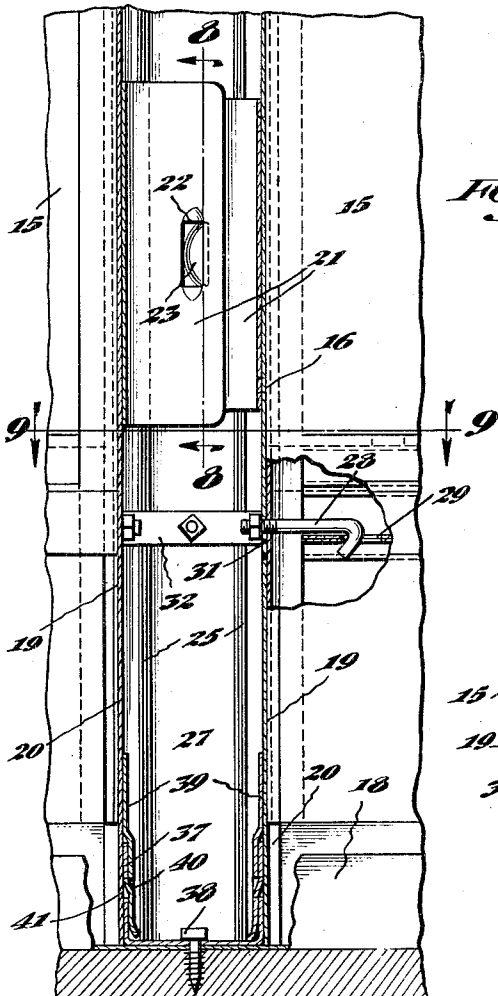
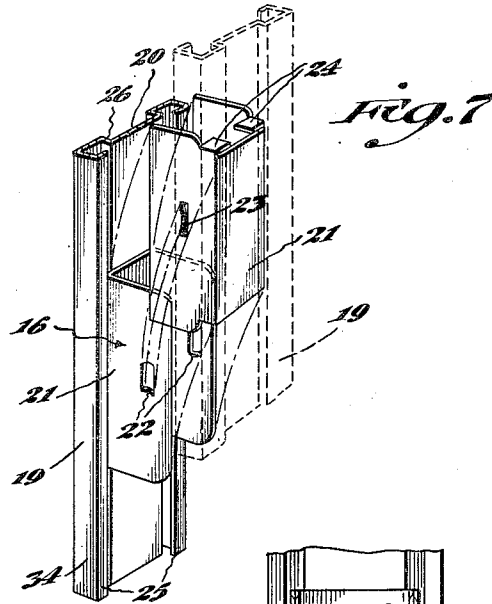
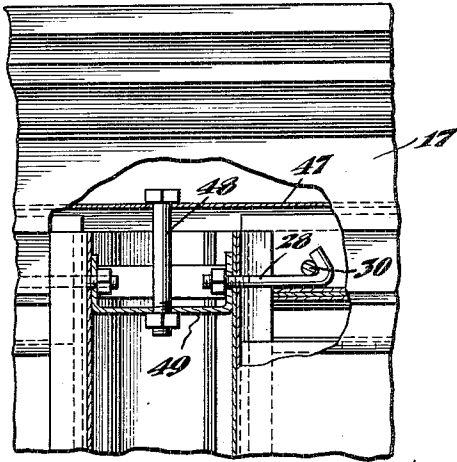


Fig. 6

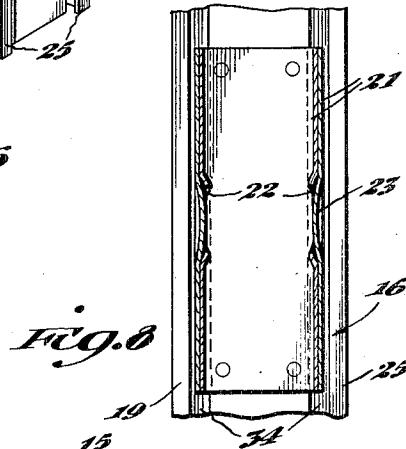


Fig. 8

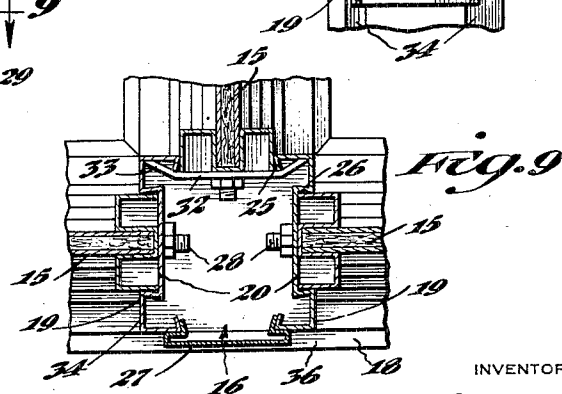


Fig. 9

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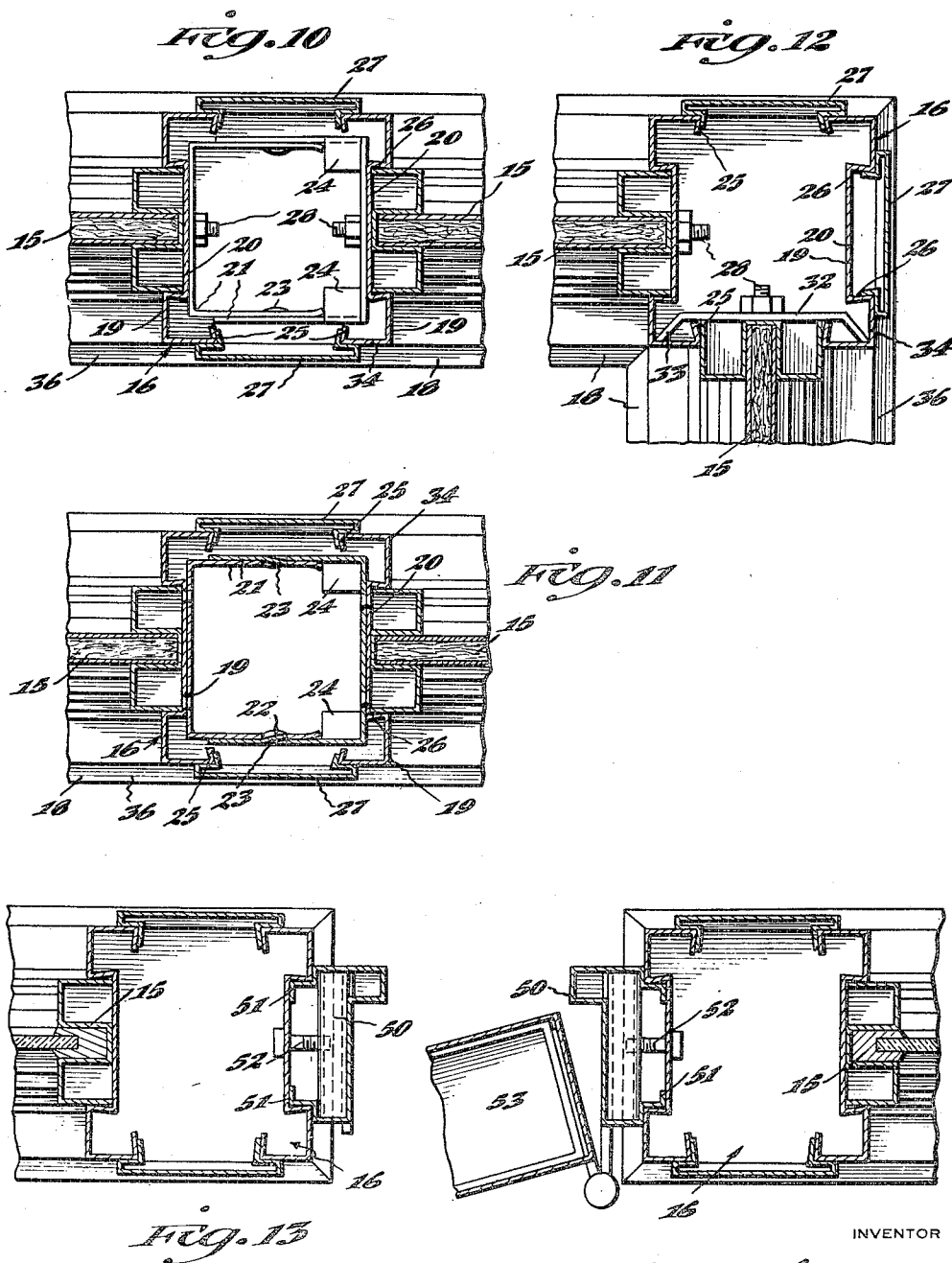
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PARTITION AND POST CONSTRUCTION

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4 Sheets-Sheet 3



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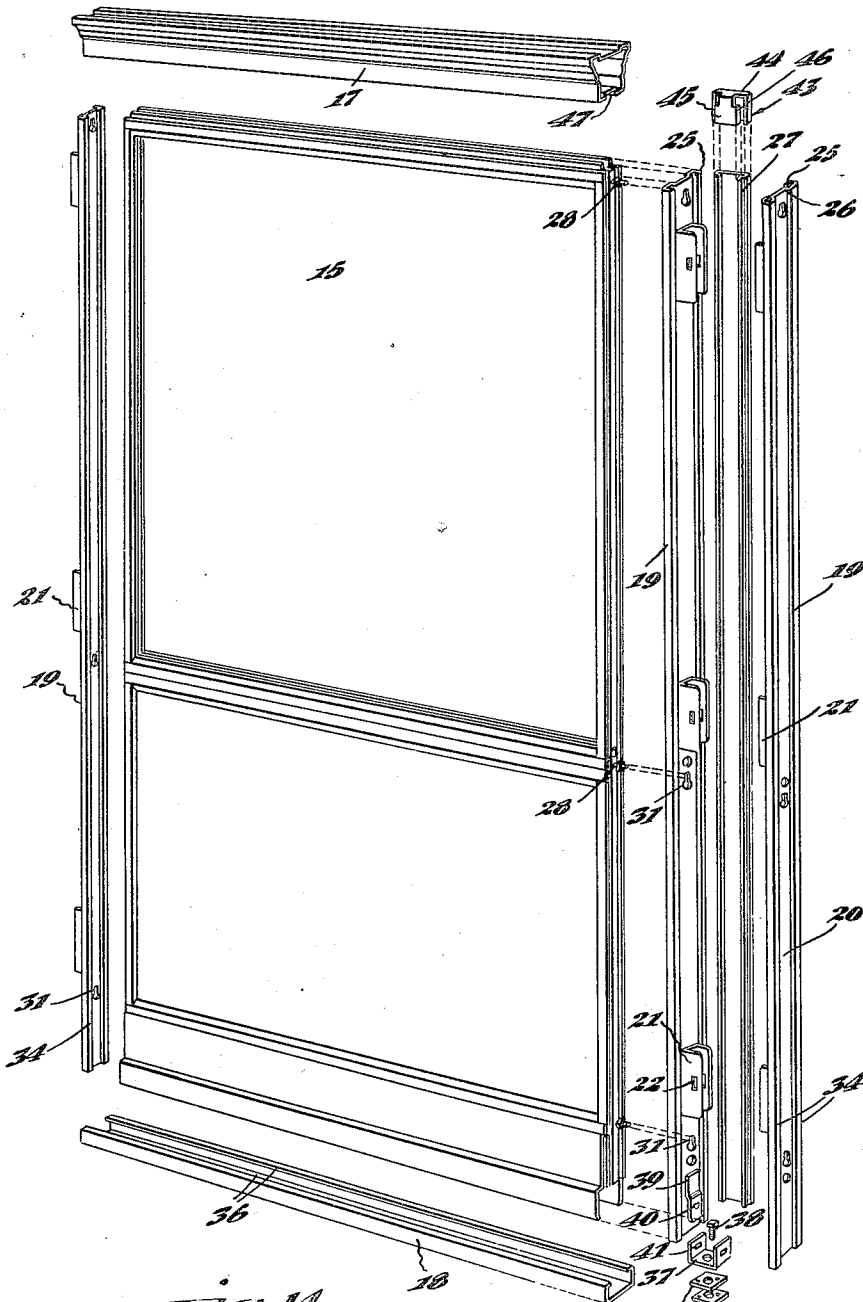
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PARTITION AND POST CONSTRUCTION

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4 Sheets-Sheet 4



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UNITED STATES PATENT OFFICE

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PARTITION AND POST CONSTRUCTION

Application filed January 19, 1929. Serial No. 323,588.

This invention relates to partition or wall construction, and is particularly directed to a metal fabricated partition constituted by panels joined to form any wall combination 5 and length desired, and sectional posts suitably joining the panels and easily attachable to the panel frames. The wall is of such formation as to present a highly finished appearance and molding effects at the posts 10 and at the connection of the partition to the floor and to the ceiling, a base strip being provided to conceal the attachment to the floor and a cornice between the upper edge of the partition and the ceiling.

15 It is an object of this invention to provide an improved partition fabricated of upright sections quickly set up or built, in which none of the fastening means are visible, and the finished effect is that of panels and posts therebetween, and the top and bottom of the partition neatly finished with a cornice and base strip respectively.

Another object is to provide a sectional post for use in the partition in which the sections are respectively attachable to adjoining panels and drawn together into post assembly, and in the set-up partition presenting the appearance of a solid post. The post sections are provided with cooperating means for snapping the same together in the post assembly for positively binding the sections together without the use of extraneous fastening elements.

Another object is to provide a base strip or channel for receiving the lower edge of the partition and concealing the attachment of the respective posts to the floor, the connection of the posts to the floor being adjustable as to height relative to the strip to suitably level the partition panels when the floor is uneven, with the base strip secured to the floor and following the uneven floor line.

Another object is to provide means for attaching partitions at right angles to the joined post sections as drawn together in a straight partition, and furthermore to provide snap cover plates for convenient and rapid application to any side of the post not abutted by a partition, thereby concealing

the attachment means or the open sides of the assembled post.

Another object is to provide snap cover plates for concealing any given side of the post, which cover plates are extensible as to 55 length to accommodate for variance in the distance from the base strip to the cornice, which variation occurs when the floor is uneven and the base strip does not regularly follow the lower edge of the partition. 60

Further objects and advantages will be more fully set forth in a description of the accompanying drawings, forming a part of this specification, in which:

Figure 1 is a side elevation of a partition 65 showing the fabricated post construction of the present invention incorporated therein, the post being shown in section in this view.

Figure 2 is a sectional view taken on line 2-2, Figure 1, detailing the post and the 70 manner of securing the same to the floor.

Figure 3 is a sectional view taken on line 3-3, Figure 2, illustrating the extensible feature of the cover plates.

Figure 4 is a fragmentary sectional view 75 of the post showing the bracket for securing the post to the floor and one side of the post removed.

Figure 5 is a perspective view of an extension piece of a cover plate. 80

Figure 6 is a fragmentary view partly in section showing the joinder of the panels at the post and the manner of attaching the cornice to the post.

Figure 7 is a perspective view of a short 85 length of post illustrating the interlocking snap clips for securing the post sides together.

Figure 8 is a sectional view taken on line 8-8, Figure 6, detailing the registering depression and tangs of the post clips. 90

Figure 9 is a sectional view taken on line 9-9, Figure 6, illustrating the post in transverse section and showing the manner of attaching a right angle extending panel to the 95 open side of the post.

Figure 10 is a sectional view taken transversely of the post, illustrating the same in a straight line partition and showing the interlocking clips in top plan view. 100

Figure 11 is a transverse sectional view taken through the post at the point of the clips showing the clips in section and illustrating the registering openings and tangs.

Figure 12 is a sectional view taken similar to Figure 10 but showing the post embodied in a corner arrangement with the panels extending at right angles therefrom.

Figure 13 is a horizontal sectional view taken through a door showing the manner of securing the door frame to the post.

Figure 14 is a perspective view illustrating a panel and the various elements of the post and the cornice and bottom rail, this view illustrating the parts in disassembled position.

Referring to the drawings, the panels or partition sections 15 are shown as disposed between posts 16 in various wall arrangements. A cornice 17 is shown secured along the top edge of the formed wall and adapted to be secured against the ceiling. A base strip 18 is provided to conceal the connections of the posts to the floor and to embellish the joinder of the partition with the floor.

The fabricated post may be assembled as the partition is set up, the respective halves of each post being primarily secured to the respectively adjacent edges of adjoining panels.

As shown in Figure 14, each post comprises a pair of lengths of channel iron 19, and each channel iron is provided with longitudinal grooves 20 pressed into its outer face. These post sections are assembled with the channels thereof facing inwardly. U-shaped clips 21 are riveted or welded to the inner faces of the channels, there being a plurality of these clips secured along the length of each channel iron at spaced intervals.

The spacing of the clips corresponds on each pair of post sections and the inwardly extending arms of one clip overlap the arms of the adjacent clip. As detailed in Figure 7, the overlapped clips are provided with apertures 22 and the overlapping clips with depressions providing inwardly disposed fangs 23 presenting sharp edges for engaging the edges of the respective apertures. These fangs and apertures register when the post is assembled, the inwardly extending fangs snapping into the apertures and positively interlocking the clips together against lateral displacement.

As shown by the dot and dash lines of movement in Figure 7, the post sections are disassembled by moving one relatively longitudinally upon the other. As illustrated in Figure 10, the upper and lower edges of the straddling clip are provided with inwardly turned flanges 24 adjacent the base of the clip for engaging the straddled arms of the opposing clip and thereby spacing the post elements.

The construction provided by the longitudinal grooves in the post sections provides corner moldings (see the transverse sectional views of the post) and the grooves 20 are used for the purpose of receiving and concealing the edges of the panel frames secured to the post. The post sections 19 are spaced apart by the respective clips, leaving two sides of the post open. The opposing longitudinal edges of the flanges of the post sections are turned inwardly and slightly underturned to provide longitudinal flanges 25 corresponding in inclination to the side walls 26 of the longitudinal grooves in the faces of the sections.

The longitudinal grooves 20 are dovetailed and the construction thereof and the formation and relation of the inner edges 25 of the sections is for the purpose of receiving spring cover plates 27 as best shown in Figure 12. These cover plates are used whenever the grooves 20 or the spaces between the post sections are not abutted by a panel end and thereby hide the unused attaching means or cover the open sides of the post as the case may be.

In those instances where the frame of the panels about the depressions or grooves 20 in the front faces of the post sections, the frames are secured by means of hook bolts 28 either hooked through a web 29 (see Figure 6) of the panel or hooked around a cross pin 30, the screw-threaded ends of these bolts extending through the edge of the panel frame and traversing apertures 31 in the base of the groove 20 in the post section.

The apertures 31 in the post sections are of the key type for receiving the end of the bolt with the nut initially thereon and have the conventional reduced portion which the bolt traverses when the section is set in position so that the nut can be drawn down against the section.

In those instances where the panel frame comes up to the post on an open side, as best shown in Figure 12, clip elements 32 are provided. These elements are bolted at intervals to the edge of the frame transverse thereto and have turned ends 33 extending into and engaging the inner corners of the formed corner moldings 34 of the respective post sections.

The base strip 18 into which the partition is secured is of channel iron formation, the channel facing upwardly to receive the wall and having inturned edges 36 to provide an additional molding effect along the base of the wall.

At the point of attachment of each post to the floor, a U-shaped clip 37 is provided having its upwardly disposed arms at right angles to the longitudinally disposed channel and secured within the channel by means of a screw 38 passing into the floor. As detailed in Figure 6, a plate 39 is secured to

the inner face of each post section at the lower end thereof, this plate being provided with an offset lower end having an inwardly disposed tang 40 presenting an upwardly disposed sharp edge. This tang is engageable within an aperture 41 in an upwardly extending arm of the clip 37 which extends between the plate and the body of the section when the post is assembled relative to the floor. When the spring tang 40 is snapped into position and the lower end of the post section is engaged over the arm of the attaching clip, it is impossible to withdraw the same. A positive interlocking is assured.

A device is provided for maintaining the lower ends of the posts in accurate horizontal line regardless of the irregularity of the surface of the flooring. This is accomplished by introducing a series of shims 42 between the U-shaped clip or bracket 37 and the channel base strip 18.

The base strip follows the line of the floor and the panels and post are, by means of the shims, adjustable relative thereto. Inasmuch as the cover plates 27 which are snapped into position on the unused side of the post are cut to a determined length, as the regular distance between the top of the base strip and the underside of the cornice in an even floor, it follows that as the post and panels are elevated relative to the base strip, the cover plates will be short of the proper length.

The cover plate is therefore made extensible and an element 43 is provided telescopically engaging the upper or lower end of the cover plate. This element consists of a front portion 44 engaging over the face and sides of the cover plate, and a rear portion 45 extending down from the top edge thereof and having inwardly turned side flanges 46 engaging the inwardly turned flanges of the cover plate. The length of the cover plate is varied by sliding this element relative thereto, the cover plate and extension piece being maintained in fixed telescopic position by frictional fit.

The cornice 17 is secured along the top edge of the wall flanges, the top edges of the respective panels engaging in a longitudinal depression 47 in the underside of the cornice. The cornice is secured to the assembled partition by means of center bolts 48 drawn between the cornice and a web plate 49 secured at the top of each post between the respective sections thereof.

As disclosed in Figure 13, door jambs 50 are shown used in combination with the fabricated posts of this invention. These door jambs are formed of metal and have longitudinal flanges 51 extending from the rear sides thereof adapted to fit within the respective longitudinal grooves 20 in the post sections, the jambs being held in position in the grooves by means of screws 52 and a door 53 is hung on one of said jambs.

It will be apparent from the description that the post structure may be disassembled and attached to the respective panels, or that the post may be set up as a solid post, the manner of building the post in to the particular wall combinations depending largely on the environment.

The features of the panel construction, the manner of attaching the cornice thereto, the construction of the door frame, and the means for attaching the panel connecting strips to the panel edges are claimed in co-pending applications, Serial No. 427,777, filed February 17, 1930, and 461,004, filed June 13, 1930, which has matured into Patent 1,844,696, issued February 9, 1932.

Having described my invention, I claim:

1. A post construction, comprising, a pair of inwardly facing channel strips each having a longitudinal groove in its web face, arms extending inwardly from each strip at intervals along its length and adjacently disposed on the respective strips, and registering depressions and prongs in the respective arms for interlockingly engaging adjacent arms of the channel strips.

2. A post construction, comprising, a pair of uprights each having corner moldings thereon forming a longitudinal groove in the outer face of the upright, arms extending inwardly from each upright at intervals along its length, the arms of each upright being adjacently disposed, and means in the respective arms for frictionally engaging the same to form a post of rectangular cross section, and the space between the adjacent moldings of respective uprights equal to the width of the grooves in the uprights.

3. A post construction, comprising, a pair of inwardly facing channels each having a longitudinal groove in its web face, inwardly extending interlocking arms adjacently disposed on the respective channels and spaced along the lengths thereof, and the side flanges of each channel having inwardly turned edges, the adjacent inwardly turned edges of opposing channels providing spaces equal in width to the longitudinal grooves in the faces of the channels.

4. A post construction, comprising, a pair of uprights providing moldings at each side edge and a dovetail longitudinal depression between said moldings, inwardly extending interlocking arms adjacently disposed on the respective channels and spaced along the lengths thereof, and the side flanges of each channel having inwardly and backwardly turned edges, the adjacent inwardly turned edges of the opposing channels providing a space equal in width to the longitudinal depression of the uprights.

5. A post construction, comprising, a pair of inwardly facing channels each having a dovetail longitudinal groove in its outer face, inwardly extending interlocking arms on the

respective channels spaced at adjacent intervals along the respective channels, the flanges of said channels having inwardly and backwardly turned edges, the adjacent turned edges of opposing channels providing a space equal in width to the longitudinal grooves in the face of the channels, and cover plates having inwardly yieldable flanges adapted to be snapped into the grooves or spaces.

6. A fabricated post, comprising, lengths of metal, inwardly extending U-shaped clips secured at adjacent intervals on the respective lengths of metal, the respective arms of the adjacent clips being adapted to interfit, and registering fangs and depressions formed on the engaging arms for interlockingly engaging said clips for maintaining said lengths of metal in rectangular post relation.

7. A fabricated post, comprising, lengths of metal having moldings formed along their edges, inwardly extending U-shaped clips secured at adjacent intervals on the respective lengths of metal, the respective arms of the clips being adapted to telescope, and registering fangs and depressions formed on the engaging arms for interlockingly engaging said clips for maintaining said lengths of metal in square post relation, the space across the faces of said lengths between the respective moldings thereof being of the same width as the spaced relation of adjacent moldings of the respective lengths.

8. The combination with a fabricated wall comprising posts and panels, said panels secured between said posts, of an upwardly opening channel base strip disposed along and containing the lower edge of said wall, shims disposed between the posts and the channel base strip, and means for attaching said posts to the floor.

9. The combination with a fabricated wall of an upwardly opening channel base strip disposed along and containing the lower edge of said wall, shims arranged in varying number at intervals between the wall and the channel base strip for leveling the wall relative to said strip, and means for attaching said wall to the floor.

10. A partition, comprising, panels, connecting strips secured along the adjoining edges of adjacent panels, spring plates secured at the lower end of said connecting strips, a U-shaped bracket having means on its arms cooperating with means on the plates for securing the bracket in interlocked connection to the plates of connected strips, a channel iron strip disposed along the lower edge of said panels and containing said edge, shims disposed between the bracket and the channel, and means for connecting said bracket to the floor through said shims and channel strip.

11. A partition, comprising, panels, strips secured along the adjoining edges of adjacent panels, means on said strips for inter-

locking adjoining strips, a channel iron strip disposed along the lower edge of said panels and containing said edge, a bracket secured to the lower ends of adjacent strips, shims disposed between the bracket and the channel, and means for connecting said bracket to the floor through the strip.

12. A wall construction, comprising, panels, a sectional post connecting said panels, a channel base strip disclosed along the lower edge of said posts and panels and containing said lower edge, a cornice secured along the top edge of said posts and panels, cover plates secured to the sides of said posts, shims disposed between said posts and said channel base strip for leveling the panels and posts relative to the base strip, said cover plates comprising telescoping sections, whereby said plates may be varied as to length to accommodate for variance in the distance from the top of the base strip to the underside of the cornice.

13. In combination with a wall, a channel base strip disposed along the lower edge of said wall and containing said lower edge, a cornice secured along the top edge of said posts and panels, cover plates secured to the sides of said posts, means for leveling the wall relative to the base strip, said cover plates comprising telescoping sections whereby said plates may be varied as to length to accommodate for variance in the distance from the top of the base strip to the underside of the cornice.

14. In combination, a wall, a channel base strip disposed along the lower edge of said wall and containing said lower edge, a cornice secured along the top edge of said posts and panels, cover plates secured to the sides of said posts, shims disposed between said wall and base strip for adjusting the wall relative to the base strip, said cover plates comprising telescoping sections whereby said plates may be varied as to length to accommodate for variance in the distance from the top of the base strip to the underside of the cornice.

15. A fabricated post, comprising, lengths of metal having corner moldings, interlocking means for securing said lengths of metal together, the spaces across the face of each metal length between the moldings being equal to the space between the adjacent corner molding of the respective lengths when the lengths of metal are interlocked.

16. A fabricated post, comprising, lengths of inwardly facing channel iron each having a longitudinal groove in its outer face, the inner edges of the side flanges of each channel iron length being inwardly turned and the space between the inwardly turned flanges of the adjacent edges of the respective channel iron lengths being equal to the width of the grooves in said channel iron lengths, panel frames engageable in the respective spaces between channel iron lengths, and a

series of clips for each panel frame secured transversely across the ends thereof and engaging in the inner corners of respective channel iron lengths.

5 17. A fabricated post, comprising, lengths of metal secured in spaced relation, the inner edges of the side flanges of each channel iron length being inwardly turned, panel frames engageable in the respective spaces between
10 the channel iron lengths, and a series of strips for each panel frame secured transversely across the ends thereof, each of said strips having turned ends engaging in the inner corners of the metal lengths.

15 18. A wall construction, comprising, panels, strips disposed along the vertical edges of said panels and having outwardly extending clips at spaced intervals along their length, and means for securing said
20 strips to said panels, the opposing strips of adjacent panels adapted to be secured together by adjacent interlocking clips.

19. A wall construction, comprising, panels, strips disposed along the vertical
25 edges of said panels and having outwardly extending clips at spaced intervals along their length, means for securing said strips to said panels, the opposing strips of adjacent panels adapted to be secured together by adjacent interlocking clips, and cover plates
30 adapted to be secured across the sides of the post formed by the joined strips.

20. A fabricated wall, comprising, panels, strips of metal having moldings formed along
35 their edges, said strips attachable along the edges of said panels with the panel edge fitting in the depression between the moldings, U-shaped clips secured at adjacent points on the respective strips of metal, the respective
40 arms of adjacent clips on the respective strips of adjoining panels adapted to interfit, and registering tangs and depressions formed on the respective engaging arms for interlockingly engaging said clips for connecting
45 said panels.

In witness whereof, I hereunto subscribe my name.

SAMUEL SMILEY, JR.

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