

Dec. 1, 1931.

J. R. JONES

1,834,710

PARTITION AND ANALOGOUS STRUCTURE

Filed Dec. 3. 1928

2 Sheets-Sheet 1

Fig. 1.

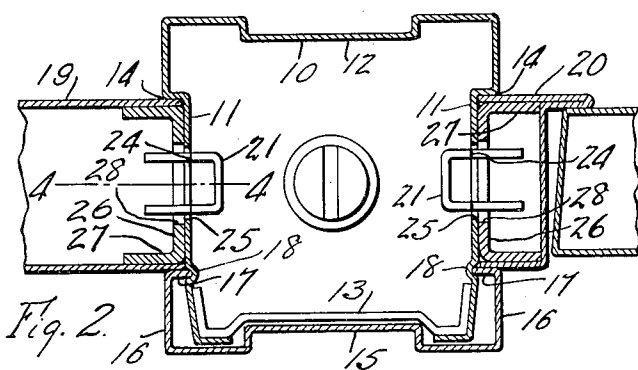


Fig. 2.

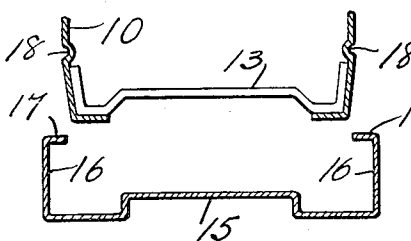


Fig. 3.

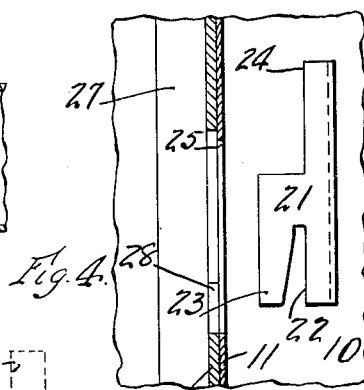


Fig. 4.

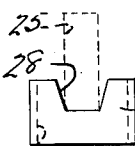


Fig. 7.

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2 Sheets-Sheet 2

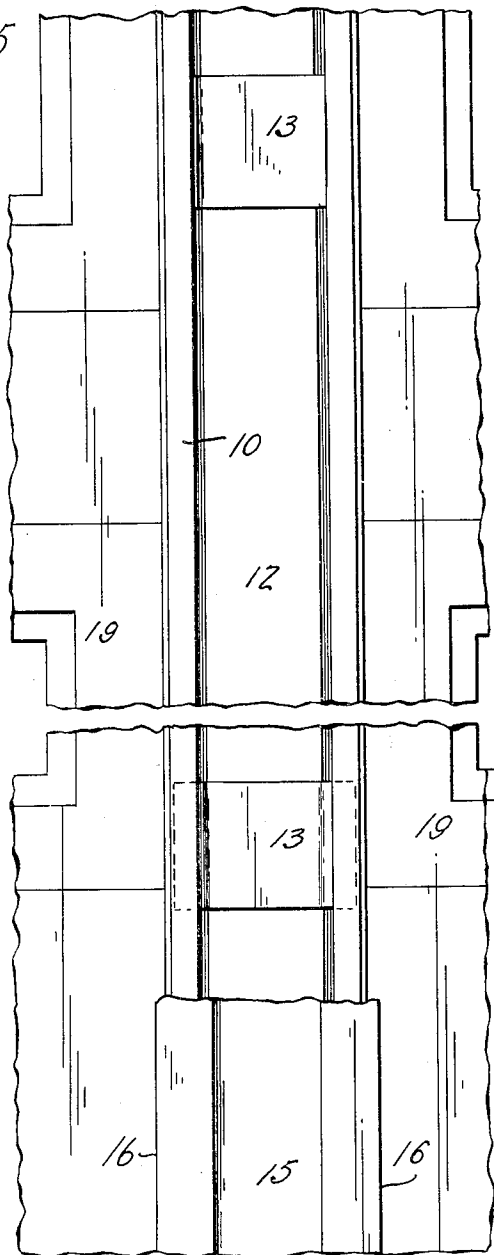
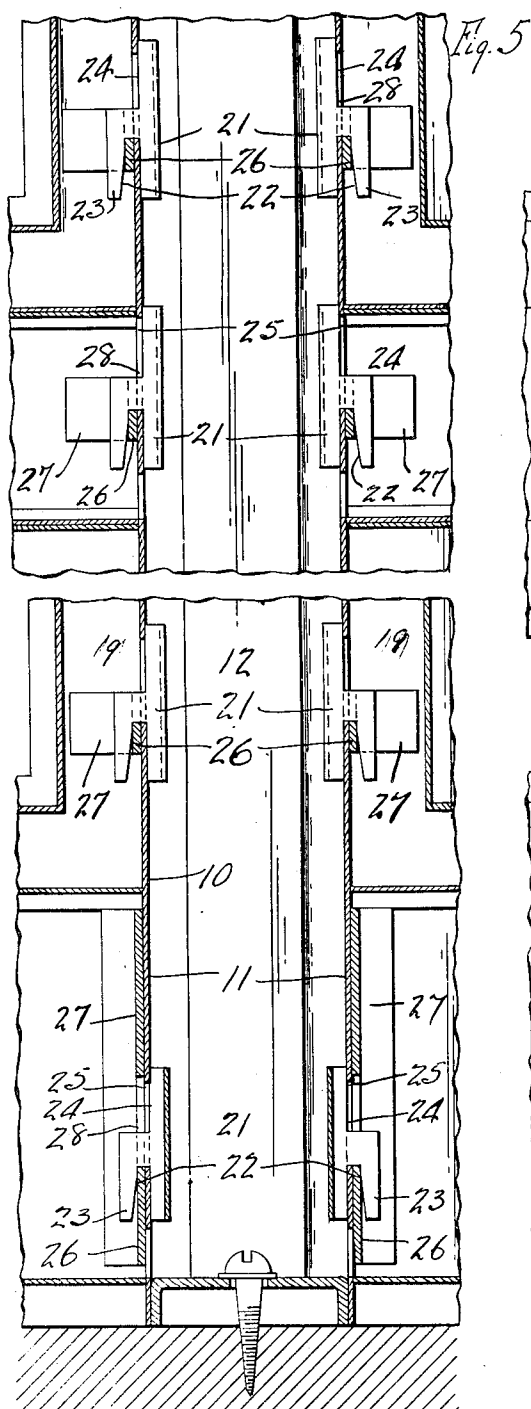


Fig. 6.

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UNITED STATES PATENT OFFICE

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PARTITION AND ANALOGOUS STRUCTURE

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This invention relates to partitions and analogous structures in which sections, units or members adapted to be fabricated at a factory, can be assembled and joined together at the place of installation to form the partition or structure, or to provide the same with molding or other finishing members or parts. Partitions or structures to which the invention is applicable may, for instance, be built up of metal panel sections, frames for doors or windows, or other units, including supporting posts or members for the associated sections, units or members previously fabricated to adapt them to be readily fitted or assembled together in the intended relation and to be demountably secured together.

One object of my invention is to provide a practical and desirable construction for such partitions or structures, whereby the units or parts thereof can be quickly and easily assembled and stationarily secured in position, and whereby the completed structure will have an attractive, finished appearance.

Other objects of the invention are to provide practical and desirable means of novel and simple construction for detachably but securely and rigidly fastening together adjoining units or parts of the structure; also to provide a molding or finishing member or analogous part adapted to be readily placed and secured in position on a supporting member of the structure by engagement of the interfitting, integral parts of said members to provide on the structure a molding, stop or other ornamental or finishing part; and also to improve partitions and analogous structures in the other respects hereinafter described and set forth in the claims.

In the accompanying drawings:

Fig. 1 is a front elevation of a sectional partition embodying my invention.

Fig. 2 is a sectional plan view, on an enlarged scale, through a post and adjoining partition sections on line 2—2, Fig. 1.

Fig. 3 is a fragmentary view of the parts shown in Fig. 2, showing the molding member of the post disconnected from the sup-

porting member but in position to be secured in place on post.

Fig. 4 is a fragmentary, vertical section on line 4—4, Fig. 2, showing abutting sections of the partition and the fastening device for said sections.

Fig. 5 is a longitudinal, sectional elevation on an enlarged scale through one of the posts and adjoining sections at opposite sides thereof, and showing the fasteners securing the parts together.

Fig. 6 is a broken front elevation of the parts shown in Fig. 5, a portion of the molding member being broken away to show the supporting member of the post in front elevation.

Fig. 7 is an end elevation of one of the fillers for the partition elements.

As shown in Fig. 1, the partition is built up of a plurality of upright posts and intermediate separable units or sections, which may be of metal base sections, glazed upper sections and a door frame, or sections of other character, depending upon the desired character or purpose of the partition. Also, as shown, the sections are of corresponding width so that they are interchangeable thereby permitting the door frame to be placed in one or another desired position, and any of the other sections to be interchanged or replaced by sections of different design or character if desired.

Each of the posts shown comprises a hollow, sheet metal main or supporting member 10 which may be stationarily secured in position in any usual or suitable manner and is preferably of substantially U-shape in cross section, having opposite side walls 11 formed integrally with and connected by a back wall 12. At its front side the supporting member is open between the front edges of the side walls, which are held spaced apart by transverse spreaders or connecting pieces 13, welded or otherwise secured at their ends to the front portions of the side walls 11 at suitable intervals lengthwise of the post. The side walls 11 are bent to form, or are provided with, longitudinal stops or shoulders 14 for the adjoining partition sections or units, each of which sections or units is adapt-

ed to be placed in position between two posts with their rear faces bearing against the shoulders or stops 14, in which position the sections or units are held by a removable molding or trim member 15. The molding member, see Figs. 2 and 3, is of channel form and is adapted to straddle the front portions of the side walls 11 of the supporting member 10 and cover the same and the opening between them, forming a front molding or finishing strip for the post. The side flanges or walls 16 of the molding extend rearwardly outside of the side walls of the supporting member 10 and are provided with opposing inturned edges 17 which extend towards each other and are adapted to seat in opposing, outwardly facing, narrow depressions or grooves 18 formed in the side walls of the supporting member. These grooves extend vertically or lengthwise of the supporting member, preferably just in front of the plane of the front faces of the adjoining partition sections or units so that when the molding 15 is secured in place with its edges seated in the grooves 18, the inturned edges 17 of the molding will form stops or shoulders in front of the partition units to hold these in place between the shoulders 17 and the opposing rear shoulders 14 on the supporting member.

Preferably the front portions of the side walls 11 of the supporting member converge forwardly slightly so that the channel-shaped molding 15 can be readily placed with its side flanges straddling the converging portions of the side walls 11, when by pressing the molding rearwardly, its side flanges, will yield and ride over the converging portions of the side walls 11 and snap into the grooves 18, whereby the molding will be retained in position on the supporting member. Thus, the molding or removable member is secured in place on the supporting member by opposed, integral, inturned portions on one member seated in opposed, outwardly facing grooves or seats in integral wall portions of the other member, the inturned portions being retained in the seats by the resilience of one of the members, and separate or additional fastening devices for the removable member are unnecessary. This greatly simplifies the construction and facilitates the securing of the parts together. Furthermore, there are no parts which require to be adjusted or manipulated to secure the parts together and no parts which can work loose or be improperly adjusted so as to prevent a secure, tight connection between the supporting and removable members. The molding member can be pried off of the supporting member by a suitable tool to enable the removal of the partition sections or units from between the posts or supporting members.

As shown, the rear wall of the supporting

member 10 and the front wall of the molding 15 are provided with depressed face portions to produce a paneled effect, but it will be understood that the exposed surfaces of the post may be plain or of any other desired surface contour to produce a desired finish, or for other desired purposes.

Fig. 2, which is a cross section through a post and the adjacent portions of adjoining partition sections, shows a panel section 19 secured at the left hand side of the post, and a door frame or stop member 20 secured at the right hand side of the post, but it will be understood that the construction will be similar whether the partition sections or units at opposite sides of the post may be a panel section and a door frame, as shown, or partition units or sections of other type.

The partition section or unit 19 which, as shown, is made up of separable panel frames and base and intermediate horizontal rails, is secured to the supporting member 10 of the post as follows:

The edge of the partition section 19 abuts against the outer face of the side wall 11 of the supporting member with the rear face against the shoulder 14 on the side wall, and before the molding 15 is placed in position, the partition section is secured to the side wall of the supporting member by a suitable number of fastening devices 21, each of which, as shown, consists of a U-shaped metal piece having parallel side walls which are provided with vertical slots 22 which extend upwardly from the lower edges of the side walls, thus forming tongues 23, spaced from the body of the fastener and the lower ends of which preferably have bevelled inner edges. The side walls of the fastening device are also preferably cut away at their upper edges to provide stops 24 at the upper end of the fastening device, see Fig. 4. The side wall of the supporting member 10 is provided at suitable intervals in its height, opposite the abutting vertical edges of the elements of the section 19 with openings 25, see Fig. 5, and the partition section is provided adjacent each opening 25 with a transverse edge wall or part 26 adapted to bear against the outer face of the side wall 11 beneath the lower end of the opening 25. In the construction shown, see Figs. 2 and 5, the partition section 19 is provided at its vertical side edge with channel or U-shaped metal fillers or spacers 27 which extend between and are welded or otherwise secured to the front and rear walls of the component elements of the section 19, the cross piece of each spacer forming one of the transverse edge walls 26 which abuts against the side wall 11, but the partition section could be of any other suitable construction provided a transverse edge wall portion 26 for engagement by the fastening device. The fillers 27 preferably have tapered slots 28 registering

with the openings 25 in the supporting member, see Fig. 7.

When the partition section 19 has been placed in position, with the transverse edge wall 26 abutting against the side wall of the supporting member 10, the tongue of the fastener 21 is passed through the opening 25 in the side wall 11 and is then driven down so that the abutting portions of the side wall 11 and the edge wall 26 of the partition section will enter the slots 22 of the fastener and will be clamped and held together between the tongue and body of the fastener. The body of the fastener is longer than the opening 25 in the side wall so that in applying the fastener to secure the parts, the tongue of the fastener will pass through the opening 25, but the shoulder 24 at the upper end of the fastener will strike the upper edge of the hole 25 and thus prevent the fastener from accidentally falling through the hole and being lost.

As explained, the fasteners 21 are applied to secure the partition section 19 to the supporting member 10 before the molding member is secured in position over the open front of the supporting member. Therefore, the fasteners 21 can be readily passed through the open front of the supporting member and inserted into the openings 25 and driven home by a hammer or other suitable tool. After the partition section has been secured to the supporting member by means of the fasteners, as explained, the molding is secured in position covering the open front of the supporting member, completing the post, as before explained.

When it is desired to remove a section of the partition to be replaced by a different section, or for dismantling the partition or other purpose, the molding 15 can be pried off of the supporting member of the post and the fastening devices 21 released by driving them upwardly by means of a hammer or tool, thereby releasing the partition section.

The door frame or member 20 at the opposite side of the post is secured in the same manner by like fastening devices 21.

I claim as my invention:

1. In a partition or analogous structure, the combination of a hollow metal post having opposite side walls formed with narrow longitudinal grooves in their oppositely facing outer sides, partition units extending from said opposite side walls of the post and a hollow sheet metal molding having side walls adapted to straddle the side walls of the post and provided with inturned edges adapted to seat in said grooves and be retained therein by the resilience of the side walls of one of said members, said partition units being confined in place by said edges.

2. In a partition or analogous structure, the combination of a post having on its opposite side walls stop shoulders and having formed

in integral portions of the oppositely facing outer sides of said side walls narrow grooves spaced from said shoulders, partition units extending from said opposite side walls of the post and a hollow metal member having side walls with inturned edges adapted to straddle the post and seat in said grooves, said edges inturned towards each other and forming stop shoulders opposing the first mentioned shoulders for retaining said partition units in place between said shoulders.

3. In a partition or analogous structure, the combination of a hollow metal post having opposite side walls formed with narrow longitudinal grooves in their outer faces, said side walls being connected by a wall at the back of the post and being separated by an opening at the front of the post, partition units secured to said opposite side walls of the post and a sheet metal front member adapted to cover said front opening of the post and having side walls with edges turned towards each other and adapted to seat in said grooves and be retained therein by the resilience of the side walls of one of said members, said edges forming shoulders on the post overlapping the adjacent edges of said partition units.

4. In a partition or analogous structure, the combination of a stationary metal supporting post having opposite side walls and an open side between the same, said side walls being provided with outwardly facing narrow depressions, a partition unit arranged at one side of said post, and a channel-form metal post finishing-member which closes the open side of said post and the flanges of which have inwardly directed integral edges which project towards each other and are adapted to seat in said depressions and be retained therein by the resilience of integral wall portions of one of said members, said partition unit being confined in place by one of said edges.

5. In a partition or analogous structure, the combination of a stationary metal supporting post having opposite side walls and an open side between the same, said side walls being provided with outwardly facing narrow grooves, a partition unit arranged at one side of said post, and a hollow sheet metal finishing member which closes the open side of said post and has opposite side walls which straddle said post and are provided with inwardly directed integral edges which project towards each other and are adapted to seat in said grooves and be removably retained therein by the resilience of integral wall portions of one of said members, said partition unit being confined in place by one of said edges.

6. In a partition or analogous structure, the combination of a post having an opening in one wall, a unit arranged against said wall of said post and having a rigid wall fac-

ing said wall of the post and an opening adjoining said rigid wall, and a fastening device extending through said openings in said post and unit and having integral spaced
5 portions straddling and engaging portions of said facing walls adjacent one end of said openings for securing said unit to said post.

7. In a partition or analogous structure, the combination of a post having an opening
10 in one wall, a unit arranged against said wall of said post and having a rigid wall facing said wall of the post and an opening adjoining said rigid wall, and a fastening device passing through said openings in said
15 post and unit and having integral spaced portions straddling and engaging portions of said walls adjacent one end of said openings for securing said part to said post.

8. In a partition or analogous structure, the combination of a post having an opening
20 in one wall, a unit arranged against said wall of said post and having a rigid wall facing said wall of the post and an opening adjoining said rigid wall, and a fastening device
25 having connected parallel side walls passing through said openings in said post and unit and said side walls being slotted to straddle and engage portions of said walls of the post and unit adjacent one end of said openings
30 for securing said unit to said post.

9. In a partition or analogous structure, the combination of a post having an opening
in one wall, a unit arranged against said wall of said post and having a rigid wall
35 facing said wall of the post and an opening adjoining said rigid wall, and a fastening device having a tongue of less length than and spaced from the body of the fastening device, and one of said openings being of less
40 length than the body of said fastening device but long enough for the passage of said tongue, said tongue passing through said openings and said tongue and body of the fastening device straddling and engaging
45 portions of said walls of the post and unit adjacent one end of said openings for securing said unit to said post.

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