

Oct. 25, 1932.

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1,883,871

INTERLOCKING CONSTRUCTION FOR METAL PARTITIONS

Filed July 13, 1929

2 Sheets-Sheet 1

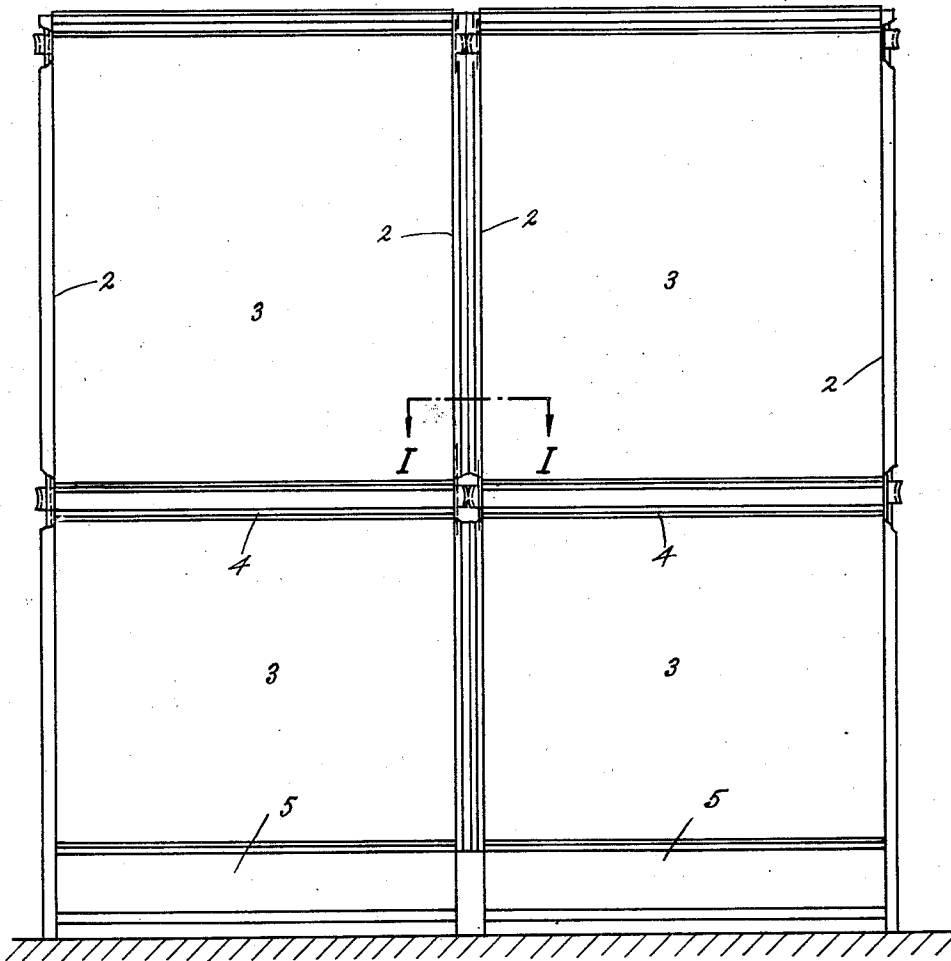


Fig. 1.

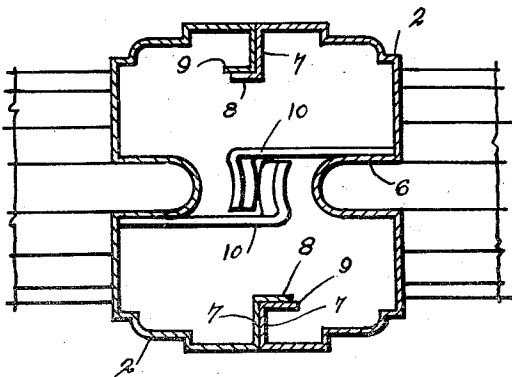


Fig. 2.

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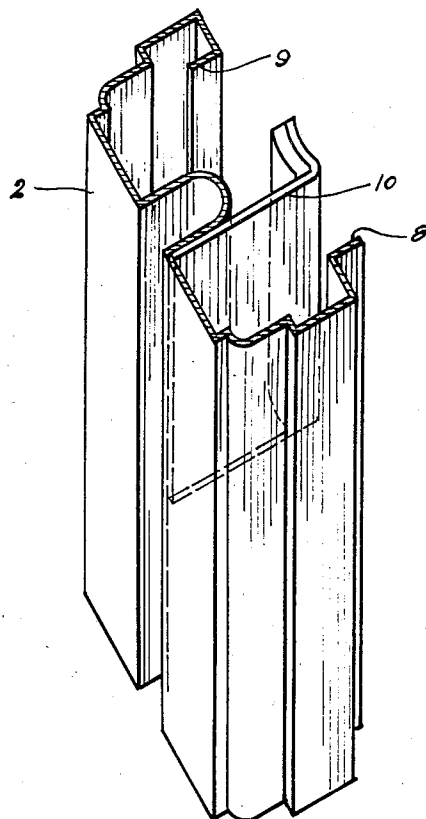


Fig. 3.

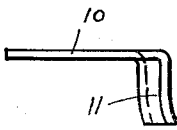


Fig. 4.

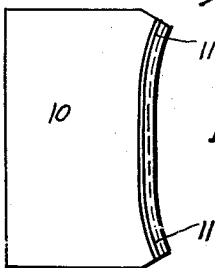


Fig. 5.

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UNITED STATES PATENT OFFICE

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INTERLOCKING CONSTRUCTION FOR METAL PARTITIONS

Application filed July 13, 1929. Serial No. 378,065.

The present invention relates to metallic partitions, and more particularly construction providing interlocking engagement between adjacent members, such for instance as stiles in panel units. It is among the objects of the invention to provide a construction which is easily assembled, and which is highly efficient for obtaining rigidity of structure between adjacent panel members. Another object is the provision of means for securing adjacent units in a fixed but detachable relation, whereby further units may be added or intermediate units may be removed or interchanged in a partition already erected. Other objects and advantages will appear as the description proceeds.

To the accomplishment of the foregoing and related ends, the invention, then, consists of the features hereinafter fully described, and particularly pointed out in the claims, the following description and the annexed drawings setting forth certain structure embodying the invention, such being illustrative however of but one of the various ways in which the principle of the invention may be employed.

In said annexed drawings:—

Fig. 1 is an elevational view showing a portion of a partition in accordance with the invention; Fig. 2 is an enlarged sectional detail taken on the plane indicated by line II—II, Fig. 1; Fig. 3 is an isometric view of a detailed feature of construction; and Figs. 4 and 5 are end and side views respectively of a further detail.

Referring to the drawings, there are shown panel sections including stiles 2, stretchers or filler elements 3, and rail members 4. Below, a base section 5 and mop strip assembly completes the structure adjacent the floor. The verticals or stile members 2 are preferably formed of sheet metal, and of generally channel cross section with a longitudinal recess or groove 6 in the web portion to receive the panel filling element or stretcher 3. The flanges of these channel stiles may be rebent inwardly, as at 7, and one or both of such rebent flanges may be further rebent laterally. Where both rebent flanges are further rebent, it is desirable that one be outturned, as at 3,

and the other in-turned, as at 9. Such flanges may accordingly cooperate in nesting relation, whereby to secure close alignment, and the further rebends moreover insure effective closure of the joint. Thus any two of such stiles may be mated together, and in a manner further to prevent possibility of passage of light through the joint. The same type of construction may be applied likewise to the mating horizontal framing members where desired.

Secured to the mating members in such manner as to provide holding engagement, are interlocking projections or clips, for instance in the form of hooked tongues 10 extending in alignment in the channel member. By providing such projections with an interlocking surface 11 presenting a slight bevel or taper, interengagement and tightening is facilitated.

To engage framing members or stiles so constructed, it is merely necessary to bring the members to be mated into aligned and adjacent position, the hooked projections being displaced end to end with respect to each other, and then by an axial or relative longitudinal movement, the hook portions ride into interlocking engagement with each other, and the framing sections or stiles are thus held in position effectively. When it is desired to disengage such a connection, a slight axial or relative longitudinal movement allows of the withdrawing of the hooked members from their locking position with respect to each other, and the entire framing member and associated construction may then be bodily removed. It thus becomes possible to take out any panel from the center of an installation, or to add panels at the end, without necessity of interfering with the remainder of the structure.

Other modes of applying the principle of the invention may be employed, change being made as regards the details disclosed, provided the means stated in any of the following claims, or the equivalent of such, be employed.

I therefore particularly point out and distinctly define as my invention:—

1. In metallic partition construction, panel

units having framing elements of generally channel cross section, the flanges of said framing elements being rebent inwardly and thence being further rebent in the plane of the panel, one such rebend being toward and the other away from the web of the channel to align rebent flanges of a second similar framing element, and means for securing said framing elements together.

2. In metallic partition construction, panel units having framing elements of generally channel cross section with a longitudinal groove in the web portion thereof, the flanges of said framing elements being rebent inwardly, and thence being further rebent in the plane of the panel, one such rebend being toward and the other away from the web of the channel to overlap and align rebent flanges of the framing element of the second similar panel unit.

3. In metallic partition construction, panel units having framing elements of generally channel cross-section, and means for connecting adjacent framing elements, said means comprising inwardly-extending clips secured in the respective channel framing elements at spaced intervals and mating with clips on the adjacent channel framing element.

4. In metallic partition construction, channel units having framing elements of generally channel cross-section, and means for connecting adjacent framing elements, said means comprising inwardly-extending clips secured in the respective channel framing elements at spaced intervals and directed away from the web of the channel to mate with corresponding clips on the adjacent channel framing element.

5. In metallic partition construction, panel units having stiles of generally channel cross section, the flanges of each stile being rebent inwardly and thence being further rebent in the plane of the panel, one such rebend being toward and the other away from the web of the channel to overlap an inward rebend on the flange of a similar stile, and spaced clips secured to each stile to hold mating stiles together and prevent lateral displacement.

6. In metallic partition construction, panel units having stiles of generally channel shape with a stretcher receiving groove in the web portion, the flanges of each stile being rebent inwardly and thence being further rebent in the plane of the panel, one such rebend being toward and the other away from the web of the channel to overlap an inward rebend on the opposite flange of a similar stile, and spaced clips of angle section secured to the web portion of each stile to clamp adjacent stiles together and prevent lateral displacement.

7. In metallic partition construction, panel units having stiles of generally chan-

nel shape, the flanges of each stile being rebent inwardly and thence being further rebent in the plane of the panel, one such rebend being toward and the other away from the web of the channel to overlap an inward rebend on the opposite flange of a similar stile, and hooked projections extending from the web portion of each stile for interlocking engagement, such hooked projections having beveled entering surfaces.

8. In metallic partition construction, panel units having framing elements of generally channel shape with a stretcher receiving groove in the web portion, the flanges of each stile being rebent inwardly and thence being further rebent in the plane of the panel, one such rebend being toward and the other away from the web of the channel to overlap an inward rebend on the opposite flange of a similar framing element, and interlocking tongues projecting from the web portion of each framing element, whereby engagement and disengagement may be had by relative longitudinal movement of mated framing elements.

9. A wall construction, comprising panels, channel iron lengths having longitudinal grooves in their respective web faces engageable with the edges of said panels, means for securing said lengths to the panels, inwardly extending clips secured along the respective channel iron lengths at spaced intervals, and adjacent clips on the respective lengths interlockingly engaging to secure the panels together.

Signed by me this 18th day of June, 1929.
JOHN A. BOHNSACK.