Nov. 3, 1936. A. S. DRIVER 2,059,565

METAL PARTITION

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Fig. 2.

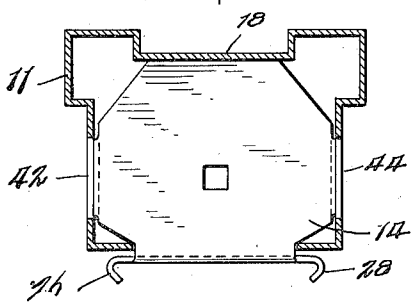


Fig. 1.

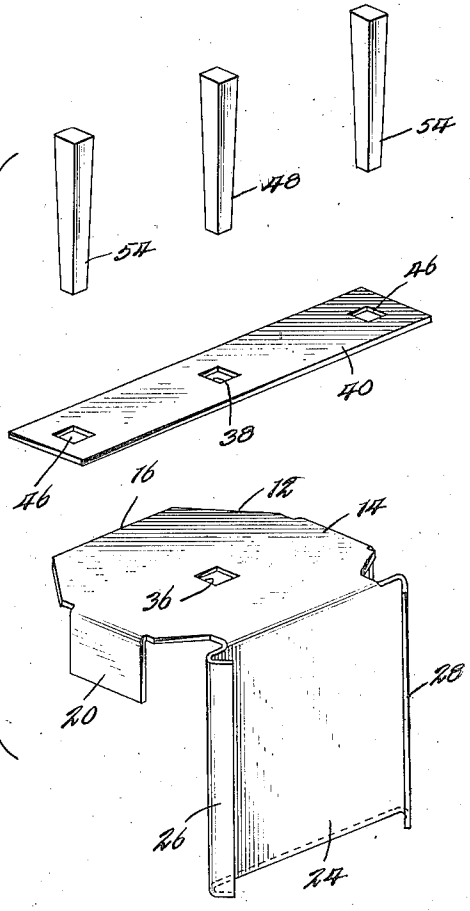


Fig. 3.

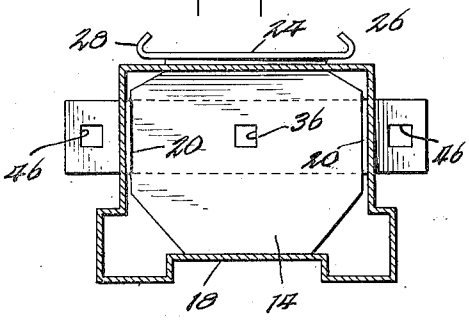
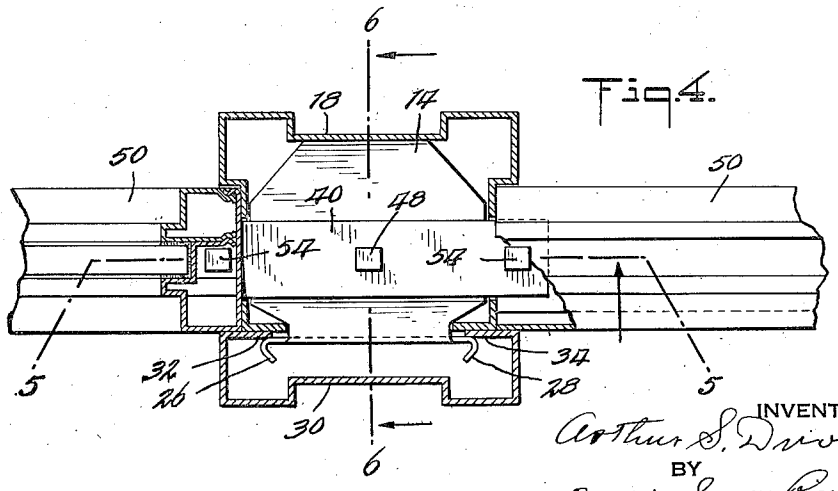


Fig. 4.



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METAL PARTITION

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Fig. 5.

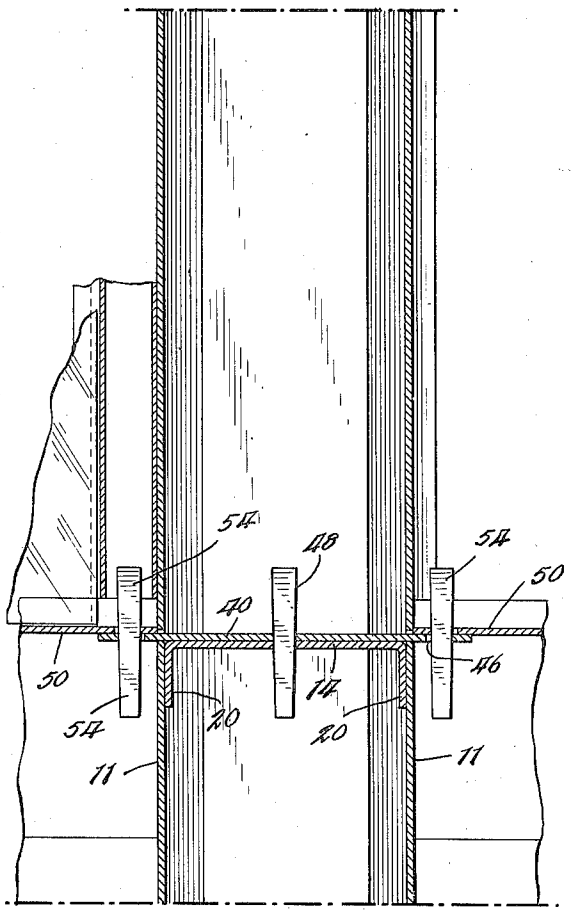
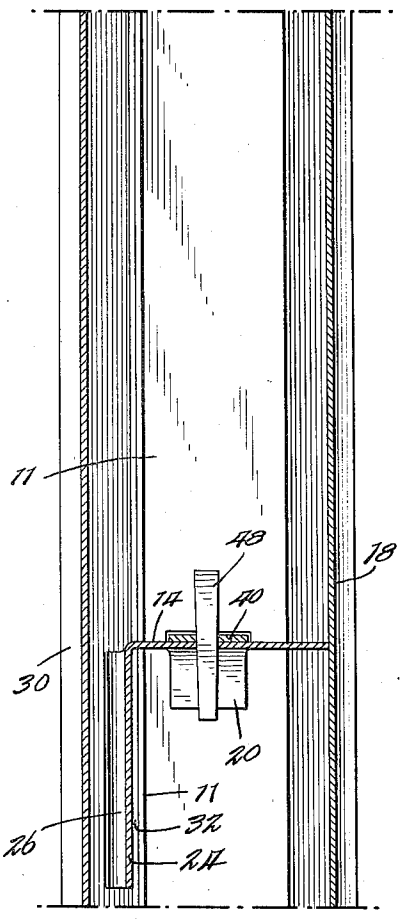


Fig. 6.



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2,059,565

UNITED STATES PATENT OFFICE

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METAL PARTITION

Arthur S. Driver, New York, N. Y., assignor to Partitions, Inc., New York, N. Y., a corporation of New York

Application November 10, 1931, Serial No. 574,138

15 Claims. (Cl. 189—34)

The present invention relates to metal partitions.

An object of the invention is to provide, in connection with a metal partition post, means secured within the post for maintaining the post shape and contour.

Another object of the invention is to provide, in connection therewith, means securable to the post and by which partitions, sections or walls may be rigidly attached to the post.

A still further object of the invention is to provide a post construction including a post-contour maintaining member which is also a pilaster securing member and, in addition, serves as a means by which there may be secured rigidly within the post a metal wall or partition attaching device which is preferably so arranged as to provide throughout the partition, at a predetermined height, bracing means extending along the length of the partition, not only along the panel sections thereof but continuing through the hollow metal post, thus providing a structure particularly resistant to twisting and other strains to which the partition is subjected in use.

Further objects of the invention will appear from the following description taken in connection with the accompanying drawings which illustrate, by way of example, a preferred embodiment of the invention and in which,—

Figure 1 is a perspective view of a series of separated parts constructed in accordance with the invention;

Figure 2 is a horizontal sectional view through a post before assembly on the job;

Figure 3 is a similar view but looking upward into the post and showing the addition of the panel frame attaching means;

Figure 4 is a horizontal sectional fragmentary view through a partition and particularly through one of the posts thereof after assembly on the job;

Figure 5 is a vertical sectional view taken on the line 5—5 of Figure 4;

Figure 6 is a vertical sectional view through the post of Figure 4 and taken on the line 6—6 of said figure.

Referring in detail to the drawings, a hollow metal post 11 has fixed within it a contour maintaining attaching member 12 which includes a plate 14 horizontally arranged within the post and having the rear edge 16 contacting with a portion 18 of the post and having vertically extending wings 20, herein shown as being in the form of lugs or ears bent downwardly from the plate 14, which have surface contact with opposite interior walls of the post and are rigidly attached or secured thereto, preferably by welding.

One wall of the post 11 is open entirely or at least above the plate 14 or where, as is usual, there are several of these plates, the wall may be partly closed but open at least above the plates to permit access to the interior of the post.

Projecting from the plate 14 is a pilaster securing portion 24 which, in the form shown, has two pilaster engaging cams 26 and 28, a pilaster 30 (Fig. 4) having one end 32 hooked behind the cam 26, for example, whereupon the other end 34 of the pilaster or cover plate may snap into position behind the cam 28 merely by manual pressure.

The plate 14 is provided with an opening 36 with which is adapted to register a similar opening 38 provided in a rail attaching plate 40 adapted to be inserted horizontally through openings such as the opposed slots 42 and 44 provided in the post 11 at the level of the top of plate 14. The ends of the attaching plate 40 extend beyond the post walls, as shown in Figs. 3, 4 and 5, and are provided with wedge receiving drawing openings 46 similar to the openings 36 and 38.

The attaching plate 40 is inserted in the post to rest upon the plate 14, whereupon a wedge 48 is inserted in the post through the opening in its wall above the plate 14 and is driven into registering openings 38 and 36 with a hammer or similar tool. A pair of rails 50 are provided for cooperation with the post 11 and are provided with drawing openings in their ends so that, when the rail ends rest upon the attaching plate ends, as shown in Fig. 5, the drawing openings in the rails will overlie the drawing openings in the attaching plate, whereupon wedges 54 may be driven through the pairs of substantially registering drawing openings, thus securing the rails in rigid relation to the post.

The pilaster or cover plate may be assembled as hereinabove described as soon as all the wedges 48 in the post have been driven into position or after the rails have been attached.

The assembling device including the plate 14 not only maintains the post contour during shipment and erection on the job but also insures permanent maintenance of the post shape and contour, and also provides a means for attaching the rails rigidly to the post through the attaching plate 40, whose drawing openings in cooperation with wedges 54 hold the rails rigidly to the post.

It will also be understood that the invention

permits assembly of the posts and rails of a metal partition on the job without the use of any tool save a hammer or its equivalent, the construction permitting of exceptionally rapid assembly by eliminating the necessity of employing turning tools which of necessity require slower operation.

It will be evident that various changes may be made in the particular specific embodiment above described without departing from the invention as defined in the appended claims.

What is claimed is:

1. In combination in a metal partition, a hollow metal post having a wedge access opening in its wall, an assembly device therewithin comprising a plate intermediate the post ends having post-contour maintaining portions in engagement with the interior walls of the post and preventing relative movement of the post walls, a rail support having a portion extending through the post wall, wedge means securing said rail support to said plate, a rail supported by said portion, and means assembled to said post for covering said wedge access opening.

2. In combination in a metal partition, a hollow metal post, an assembly device fixed therewithin comprising a plate having post-contour maintaining portions in engagement with the interior walls of the post and preventing relative movement of the post walls, said plate having a wedge receiving opening, a rail support contiguous to said plate and projecting in opposite directions through and beyond the post walls and having a wedge receiving opening, a wedge fastening element in said wedge receiving openings and securing said plate and rail support together, and a rail fixed to and supported by each projecting portion of said rail support.

3. In combination in a metal partition, a hollow metal post, an assembly device fixed therewithin comprising a plate having post-contour maintaining portions in engagement with the interior walls of the post and preventing relative movement of the post walls, a rail support contiguous to said plate and having ends projecting in opposite directions through and beyond the post walls, and provided with rail-drawing openings, wedge fastening means securing said plate and rail support together, within the post, rails carried by the rail support ends, and wedge devices in said rail drawing openings and securing said rails to said rail support ends.

4. In combination in a metal partition, a hollow metal post, an assembly device therewithin comprising a plate having post-contour maintaining portions in engagement with the interior walls of the post and preventing relative movement of the post walls, said plate having a pilaster-securing portion extending therefrom, a rail support removably secured to said plate and having an end extending through the post wall, a rail fixed to and supported by said end, and a pilaster held to said post by said pilaster securing portion.

5. In combination in a metal partition, a hollow metal post, an assembly device fixed therewithin comprising a plate having post-contour maintaining portions in engagement with the interior walls of the post and preventing relative movement of the post walls, said plate having a pilaster-securing portion extending angularly therefrom, a rail support contiguous to said plate and projecting in opposite directions through and beyond the post walls, a fasting element securing said plate and rail support together, a rail fixed to and supported by each projecting portion of said rail support, and a pilaster held to said post by said pilaster-securing portion.

6. In combination in a metal partition, a hollow metal post, an assembly device fixed therewithin comprising a plate having post-contour maintaining portions in engagement with the interior walls of the post and preventing relative movement of the post walls, said plate having a pilaster-securing portion extending therefrom, a rail support contiguous to said plate and having ends projecting in opposite directions through and beyond the post walls, and provided with rail-drawing openings, fastening means securing said plate and support together, and a pilaster held to said post by said pilaster-securing portion.

7. In combination in a metal partition, a hollow post having vertically spaced pairs of opposed aligned openings in its vertical walls, post-contour maintaining members fixed within the post substantially at a level with said each pair of openings, a rail support associated with each post-contour maintaining member and having rail supporting ends extending through the openings of the pairs, and a wedge fastening element movable rectilinearly into locking position for securing each rail support in rigid relation to its associated post-contour maintaining member.

8. In combination in a metal partition, a hollow post having openings in its vertical walls, a fastening member fixed within the post at a level with said openings, a rail support contiguous to said fastening member and having rail supporting ends extending through said openings, and a wedge movable rectilinearly into locking position for securing said rail support in rigid relation to said fastening member.

9. In combination in a metal partition, a hollow post having aligned openings in opposite vertical walls intermediate the post ends and having a wedge access opening in proximity thereto, a fastening member fixed within, and in contact with opposite walls of the post, substantially at a level with said aligned openings, a rail support associated with said fastening member and having rail supporting ends extending through said aligned openings, wedge means securing the intermediate portion of said rail support within the post to said fastening member, and a cover for said access opening concealing said wedge means within the post.

10. A hollow metal partition post containing a post-contour maintaining plate fixed to the post walls, said plate being provided with an opening for securing cooperation with a rail support and having a pilaster-securing projection extending therefrom.

11. A hollow metal partition post containing a relatively flat post-contour maintaining plate provided with an opening for securing cooperation with a rail support, said plate having angularly bent portions fixed to the post walls and having an angularly extending pilaster-securing portion.

12. A rail attaching device for metal partitions comprising a flat rail drawing and supporting plate having a central post structure attaching portion provided with a wedge receiving opening, and having oppositely extending rail supporting ends each provided with a wedge receiving drawing opening.

13. In a metal partition, a hollow metal post containing a relatively flat post-contour main-

taining plate provided with an opening for securing cooperation with a rail support, said plate having angularly bent portions fixed to the post walls, a rail support cooperating with said plate and comprising a flat strip having a central portion provided with an opening registering with said first-named opening, and a wedge passing through said openings and securing said plate and strip together, said strip having oppositely extending rail supporting ends each provided with a drawing opening.

14. In a metal partition, a hollow metal post containing a relatively flat post-contour maintaining plate provided with an opening for securing cooperation with a rail support, said plate having angularly bent portions fixed to the post walls, and having an angularly extending pilaster-securing projection, a rail support cooperating with said plate and comprising a flat strip having a central portion provided with an opening registering with said first-named opening, a wedge passing through said openings and securing said plate and said strip together, said strip having oppositely extending rail-supporting ends each provided with a drawing opening, and a pilaster held to said post by said pilaster-securing projection.

15. In a metal partition, a hollow metal post containing a relatively flat post-contour-maintaining plate provided with an opening for securing cooperation with a rail support, said plate having angularly bent portions fixed to the post walls, a rail support cooperating with said plate and comprising a flat strip having a central portion provided with an opening registering with said first-named opening, and a wedge passing through said openings and securing said plate and strip together, said strip having oppositely extending rail supporting ends.

ARTHUR S. DRIVER.