March 3, 1936. A. S. DRIVER 2,032,922

POST FOR STEEL PARTITIONS

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Fig. 1.

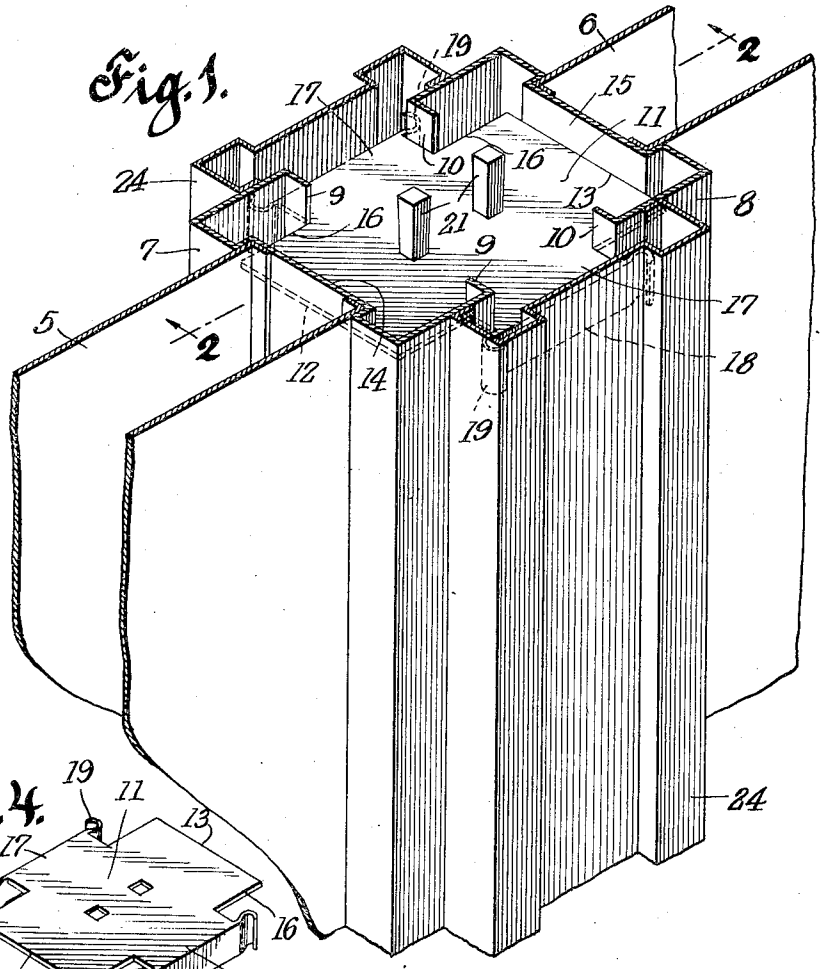


Fig. 4.

Fig. 2.

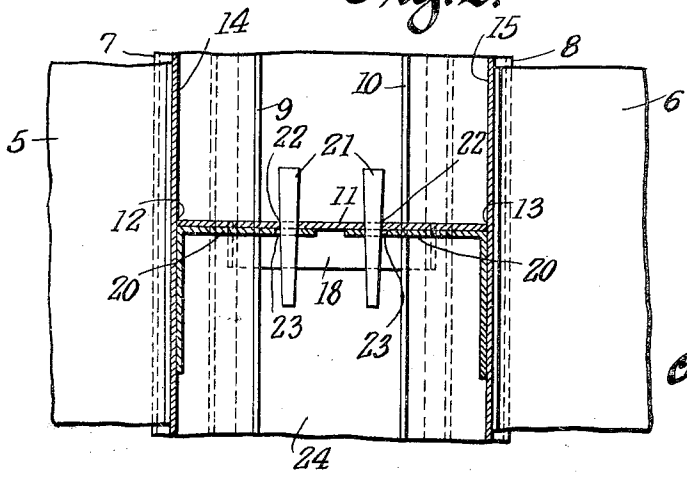
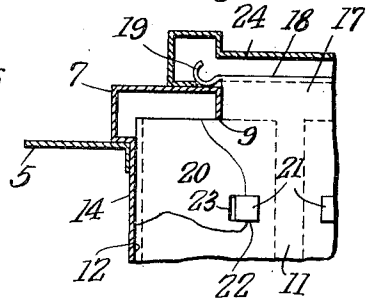


Fig. 3.



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POST FOR STEEL PARTITIONS

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16 Claims. (Cl. 189—34)

In the construction of metallic or so-called "steel partitions", posts made up of complementary hollow shaped sections are usually employed, with special fastenings or clips for securing the post sections or "half-posts" together. These clips are manipulated partly inside and partly outside the post sections, usually one set at one side of the wall and another set at the opposite side of the wall.

The locating and securing of these clips partly inside and partly outside the post sections and the need for using them at both sides of the wall means a relatively heavy labor cost and the expenditure of considerable time in the erection of steel partitions. The fastenings heretofore employed for the post sections also in many cases are incapable of withstanding the twisting forces exerted on the post sections by long lengths of partitions attached to the post sections.

The objects of the present invention are to overcome and eliminate the objections found in the present practice, particularly those mentioned, and to provide simple, effective and inexpensive means for quickly and positively fastening the post sections together.

The novel features of construction, combinations and relations of parts by which the objects are attained are set forth in the following specification.

The drawing accompanying and forming part of the specification illustrates one commercial form of the invention, this being intended primarily for disclosure purposes, as the structure may be modified in various ways without departure from the true spirit and broad scope of the invention.

Fig. 1 is a broken perspective and sectional view of the post portion of a steel partition, illustrating the invention in use; Fig. 2 is a broken vertical sectional view as on substantially the plane of line 2—2 of Fig. 1; Fig. 3 is a broken sectional detail of a corner portion of the post with the new special fastener in position therein; Fig. 4 is a detached perspective view of the fastener alone.

In Fig. 1 two sections of steel partition are indicated at 5, 6, set into the opposite sides of a post made up of the half-post sections 7, 8. These half-posts may be of any desired configuration, according to the style of partition and they are shown as having at their opposing edges the angularly inturned flanges 9, 9, and 10, 10. The present invention makes these inside flanges unnecessary for fastening purposes and they may in fact be omitted, if the post sections have sufficient rigidity without them. They are however, utilized in the present disclosure as holding abutments.

The fastener for holding the half-posts or post sections together consists in the embodiment illustrated of a flat plate 11, which may be of sheet metal, shaped to fit the inside configuration of the post sections and secured horizontally in position bridging the post sections. Thus, the plate shown, has end edges 12, 13, abutting the end walls 14, 15, of the half-posts and side edges 16 abutting the edges of the inturned flanges 9, 9, and 10, 10.

Between opposed flanges, the fastener plate has neck extensions 17 abutting the opposed faces of the flanges. These neck extensions terminate in angularly-turned flanges 18 lying outside the space between the opposed post sections and at the edges these flanges have outwardly curved hooks or lugs 19 bearing against the outer faces of the post sections.

In the particular form of the invention here shown, angle pieces 20 are welded or otherwise suitably secured to the inside faces of the half posts, projecting toward each other as in Fig. 2 and forming in effect cooperating shelves on which the fastener plate rests. These shelves or supports may be struck inward from the metal of the post sections, but because of their bracing effect the welded-on angle pieces may be preferred.

Suitable fastenings may be employed for securing the fastener plate in bridging relation on the shelves or inwardly projecting lugs 20. In the present illustration, these fastenings take the form of drift pins 21 shown driven down through the registering openings 22, 23, in the plate and lugs 20 respectively, said openings being so placed that the drift pins will draw the half posts inward into tight abutting engagement with the edges of the fastener plate.

The outwardly curled lugs 19 serve as spring retainers holding the edge flanges of the post sections firmly engaged with the edges of the fastener plate and serve also as spring retainers for the pilasters 24 which are held in place by springing them over these lugs.

The fastener plates are inserted edgewise through the slots between the post sections, then turned horizontally and dropped down on the shelves or anchor lugs 20. The drift pins 21 can then be tapped down through the aligned openings 22, 23, to draw the post members tight together on the plate, which will then serve as a rigid tie bracing the post sections against twist-

ing movements and fastening them together as a solid unitary post. One or a number of the fasteners may be employed in a single post, depending upon the height of the post. These fasteners are relatively inexpensive and can be readily made with simple cutting and forming dies from sheet metal stock. They take up but small space in shipment and can be quickly placed from either side of the wall without requiring any special skill.

The anchorage lugs 20 may extend the full width between the inturned flanges 9, 9, or 10, 10, of each half-post, bracing the latter against collapse, as indicated in Fig. 3.

What is claimed is:

1. In combination with the half-posts of a metal partition, opposed inwardly projecting lugs carried by said half-posts, a fastener plate generally conforming to the interior configuration of the half-posts and supported on said lugs, means for fastening the plate in position on said lugs including drift pins engaging openings in the plate and lugs for drawing the half-posts together into solid abutting post-contour-maintaining engagement with the plate, said plate preventing twisting movement of said half-posts.

2. As a new article of manufacture, a fastener for the half-posts of a metal partition, comprising a substantially flat plate having the general contour of the inside configuration of cooperating half posts and having at opposite edges projecting portions carrying pilaster holding snap lugs.

3. As a new article of manufacture, a fastener for the half-posts of metal partitions, comprising a substantially flat plate having the general contour of the inside configuration of cooperating half posts, said plate having projecting neck portions with flanges provided at the ends with outwardly bent pilaster holding lugs.

4. As a new article of manufacture, a fastener for the half-posts of metal partition, comprising a plate member having the general contour of the inside configuration of cooperating half-posts and provided with vertical drawing openings and wedge means therein for the drawing of the half-posts together toward the edges of said plate member.

5. As a new article of manufacture, a fastener for the half-posts of metal partition, comprising a plate member having the general contour of the inside configuration of cooperating half-posts and provided with means for the drawing of the half-posts together against the edges of said plate member, said plate having a projecting neck portion provided with pilaster holding lugs.

6. As a new article of manufacture, a fastener for the half-posts of metal partition, comprising a plate member having the general contour of the inside configuration of cooperating half-posts, said plate having a projecting neck portion terminating in a right angularly extending flange having lugs at the ends of the same for securing a pilaster.

7. As a new article of manufacture, a fastener for the post sections of metal partition, comprising a member of the same general contour as the inner configuration of the post sections and having a vertically extending flange formed with pilaster gripping means for securing a pilaster thereto against said post sections.

8. A metal-post assembly device comprising a post-contour maintaining plate portion having a projection at an angle thereto, said projection forming pilaster-engaging snap lockers.

9. A metal-post assembly device comprising a post-contour maintaining plate portion for preventing relative movement of opposed post faces, said plate portion having a projection forming pilaster-camming snap lugs for engaging and locking a pilaster to the post.

10. A metal-post assembly device comprising a post-contour maintaining portion for preventing twisting of the post and having a pilaster cam lock extending therefrom.

11. A metal-post assembly device comprising a post-contour maintaining plate portion for assembly within a post substantially at right angles to opposed post surfaces to lock them against relative movement, said plate portion having pilaster cam lock lugs extending therebeyond.

12. In combination with a hollow, metal, partition post, a horizontally supported post-contour maintaining plate bracing said post against twisting movement, said plate having a vertically extending portion projecting beyond the post contour and provided with pilaster securing lugs.

13. A fastener plate for cooperating metal half-posts of partitions having a substantially flat portion having the same general contour as the inner configuration of the cooperating half-posts and provided with drawing openings, said plate having angularly extending pilaster securing projections, and drawing means cooperating with said plate in said openings for bringing said half-posts into and holding them in predetermined fixed relation.

14. A hollow metal post construction including cooperating post sections, and devices within the post for drawing the sections into predetermined fixed relation to each other comprising horizontal plate elements having drawing openings in vertical alignment with each other, and wedge means in said openings frictionally holding said plate elements together.

15. A hollow metal post construction including cooperating post sections, and devices within the post for drawing the sections into predetermined fixed relation to each other comprising horizontal plate elements having drawing openings in vertical alignment with each other, and wedge means in said openings frictionally holding said plate elements together, one of said plate elements having a plurality of post engaging edges contacting the inner walls of said post and preventing twisting thereof.

16. A hollow metal post construction including cooperating post sections, and devices within the post for drawing the sections into and maintaining them in predetermined fixed relation with each other including horizontally arranged plate elements having vertical drawing openings and wedge means rectilinearly movable downwardly thereinto into rigid relation therewith.

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