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SHELVING CLIP AND UPRIGHT

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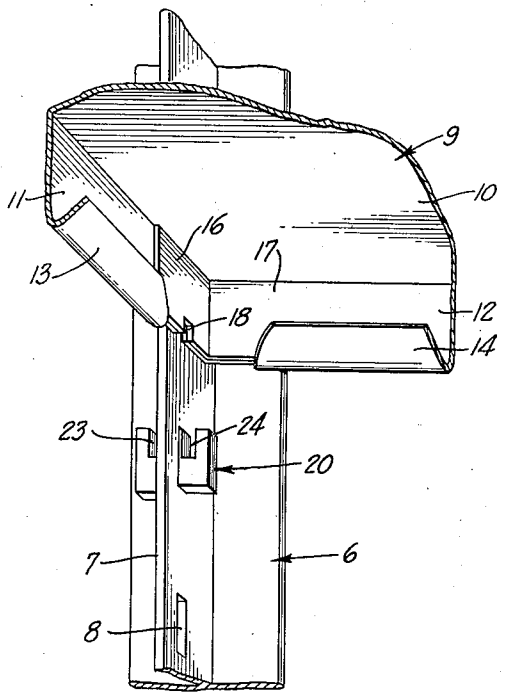


FIG. 1

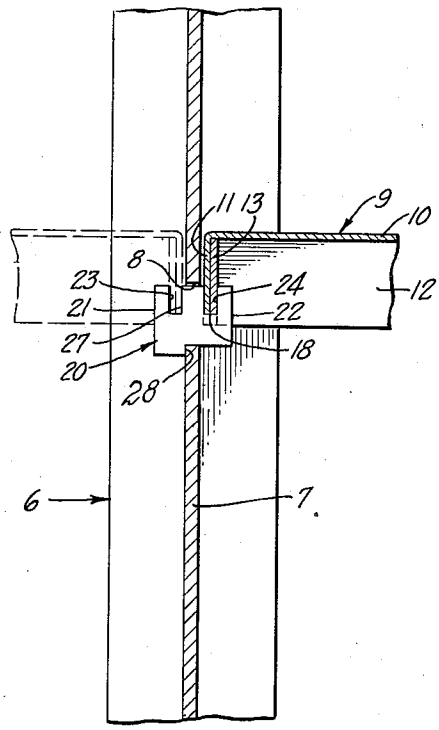


FIG. 2

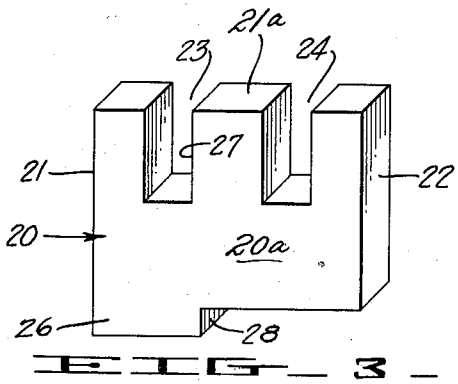


FIG. 3

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SHELVING CLIP AND UPRIGHT

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1 Claim. (Cl. 248—243)

This invention relates to that type of shelving known as commercial shelving and which is widely used by industry and institutions. It is particularly characterized by being rugged, rigid and comparatively easy and inexpensive to assemble, alter or knock-down.

The commercial shelving of the present invention is particularly characterized in its simplicity since it requires merely four T-shaped corner posts, sheet metal shelving of the size desired, and having a flanged rim. In accordance with the present invention, the central web of each of the T-shaped members includes a plurality of slots in which novel shelf mounting members or shelf clips are mounted to provide a support for the shelving effective to lock the shelving in place. Thus, to assemble the shelving, one does not require any tools, not even a hammer, since the weight of the several elements involved will retain them in place. If desired, some diagonal bracing may be provided, but this is not essential. The structure is by far the simplest of any presently available and special tools, wrenches, studs, clamps and the like are not required. Further, the shelving can be assembled, altered or knocked-down by unskilled labor.

It is in general the broad object of the present invention to provide shelving which may be quickly assembled from pre-fabricated structural shapes and sheet metal parts to the end that various units may be quickly assembled to provide shelving which is rigidly positioned but which can conveniently be adjusted.

A further object of the present invention is to provide a novel type of shelf support which holds shelving in assembled position on four upright support members.

Another object of the present invention is to provide a novel form of shelf support means which can be readily engaged or disengaged with a corner support and which does not require any close fit for its operation.

An additional object of the present invention is to provide a novel corner support which may be readily and simply fabricated of usual structural steel elements.

Other objects and features of advantage in addition to the foregoing will appear hereinafter wherein the present preferred form of commercial shelving is disclosed. In the drawing accompanying and forming a part hereof,

Figure 1 is a perspective view of a portion of shelving in position for assembly.

Figure 2 is a cross-section taken through a portion of the assembled shelving, showing the assembly.

Figure 3 is a perspective view of the shelf clip shown in Figures 1 and 2.

Referring to the drawings, I utilize four spaced T-shaped corner posts, generally indicated at 6, each having a central web 7. Each corner post is of light metal construction but each is adequate as a column for support of the shelving.

In accordance with this invention, the central web of each T-shaped corner post 6 is provided with a plurality of spaced rectangular slots generally indicated at 8.

Each slot is adapted to receive a shelf clip generally indicated at 20 to support shelving, generally indicated at 9.

The shelving 9 includes a planar shelf support portion 10 having depending flanges 11 and 12 formed along each side thereof. The flanges 11 and 12 are each bent upon themselves as at 13 and 14 respectively to provide additional strength and rigidity to the shelf. The flanges 13 and 14 are cut away adjacent each corner post and metal plates 16 and 17 are inserted along flanges 11 and 12 retained in place as by welding to provide additional support and rigidity at each corner. Plate 16 and flange 11 are notched as at 18 to fit in one of the shelf receiving notches provided in the shelf clip 20, as appears in Figure 1.

As shown in the drawings, the clip 20 incorporates a rectangular base 20*a* and three upright fingers 21, 21*a* and 22 spaced equidistantly along one longitudinal edge of the base. Two of these fingers, 21 and 22, extend from the extreme ends of the base. Slots 23 and 24 are formed between the individual fingers.

A fourth finger 26 extends perpendicularly from the opposite longitudinal edge of the base, the fourth finger beginning at one end of the base and extending inwardly therefrom, finally terminating in a shoulder 28. The shoulder is positioned at a point short of the middle of the base but farther along the base toward the center than the one edge 27 of the central finger 21*a*. All of the four fingers and the base are of the same cross-section, being constructed from a single piece of rigid material.

As indicated, the base portion 7 of the T-shaped base member 6 has a slot 8 therein. The slot is of sufficient width to receive the clip, of sufficient height to receive the end of the clip having the finger 22 thereon, but of insufficient height to receive the end of the clip bearing the fourth finger 26. The slot 8, as can be seen in the drawings, has its long dimension placed longitudinally of the base 7 of the T. When assembled, the clip assumes the orientation seen in Figures 1 and 2 and provides support for the end flanges of the shelves.

To assemble the shelving, it is merely necessary to provide the four corner posts and insert a shelf clip at the desired elevation on each of the corner posts. By then placing a shelf in position with notch 18 in each shelf in engagement with a notch one of the shelf clips, the corner posts are secured together and further shelving can be provided as desired at selected elevations. It will be observed that the shelving can be readily assembled without the use of tools and by very simple mechanical manipulation, not requiring any skilled labor.

I claim:

In combination a clip comprising a rectangular base; three upright fingers spaced equidistantly along one longitudinal edge of said base, two of said fingers extending from the extreme ends of said base; a fourth finger extending perpendicularly from the opposite longitudinal edge of said base, said fourth finger beginning at one end of said base and extending inwardly therefrom, said fourth finger terminating in a shoulder, said shoulder being positioned at a point short of the middle point of said base but farther along said base than one edge of the central finger of said three fingers, all of said four fingers and said base being of the same cross section; and a corner post of T-shape in cross section, the base of said T having a narrow rectangular slot therein of sufficient width to receive said clip and of insufficient height to receive the end of said clip bearing said fourth finger but of sufficient height to receive the other end of said clip, said slot having its long dimension placed longitudinally of the base of said T, said clip being so

mounted in said slot, said combination constituting a support for end-flanges of two shelves.

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