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2,527,253

SHELF BRACKET

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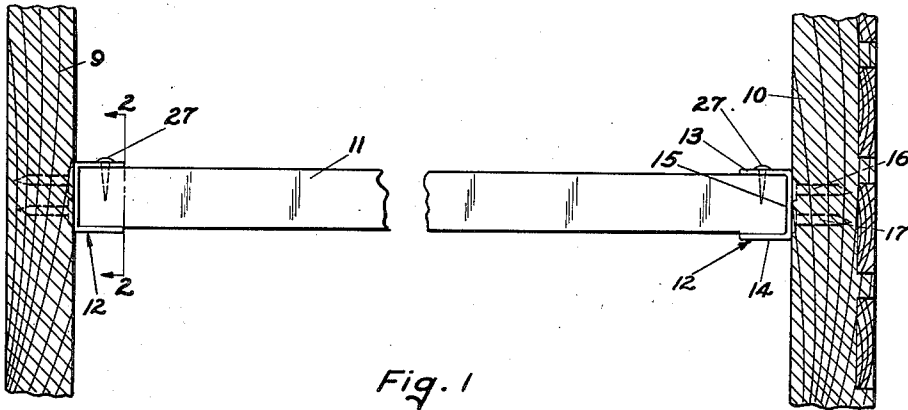


Fig. 1

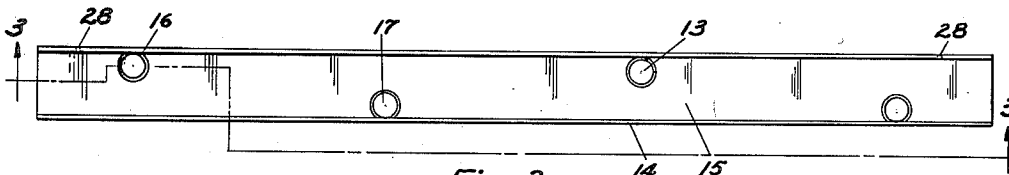


Fig. 2.

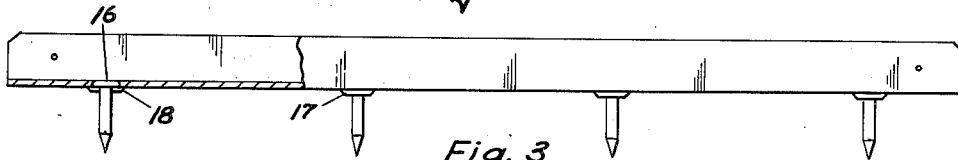


Fig. 3

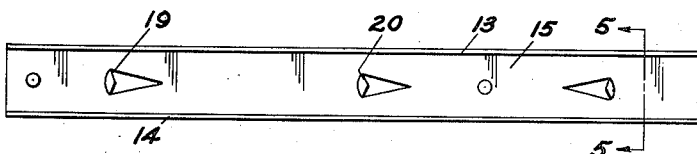


Fig. 4.

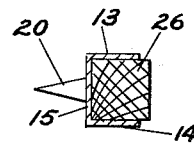


Fig. 5.

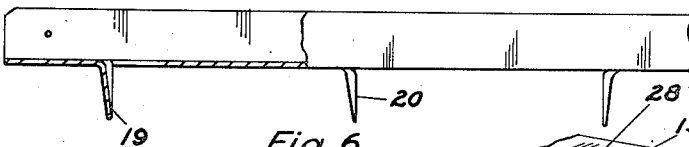


Fig. 6

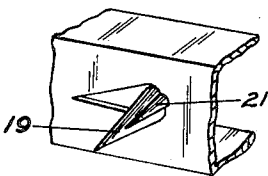


Fig. 7.

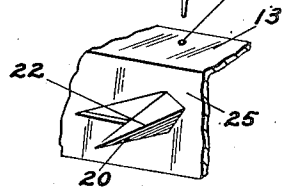


Fig. 8

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SHELF BRACKET

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1 Claim. (Cl. 248—239)

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The present invention relates to an improved form of shelf bracket.

To facilitate the ready erection of shelves, particularly by relatively unskilled persons, various proposals have been made to provide shelf sustaining strips and the like which lend themselves to comparatively easy installation.

It is one of the objects of the present invention to provide an integral structure, preferably metallic, which contains within itself both the means for sustaining the shelf as well as the means for securing the shelf sustaining devices to the walls to which they are to be attached.

It is a further object of the present invention to provide a shelf bracket in which the securing means are integral with the bracket, and also to provide means for driving the securing means without injury to the shelf bracket itself.

Other objects of the invention will appear from the further description when considered in connection with the concurrently filed drawing in which:

Fig. 1 is an elevational view partly in section of a completed shelf erected by means of the shelf bracket of the present invention, in its preferred form;

Fig. 2 is an elevational view along the extent of the shelf bracket and is substantially a view taken along the line 2—2 of Fig. 1;

Fig. 3 is a bottom plan view of the shelf bracket as shown in Fig. 2, a portion of it being shown in section;

Fig. 4 is a fragmentary elevational view similar to Fig. 2 but showing a different type of fastening means;

Fig. 5 is a section along the line 5—5 of Fig. 4, also showing a blow-receiving strip lying within the shelf bracket;

Fig. 6 is a bottom plan view partly in section of the device shown in Fig. 4;

Fig. 7 is a perspective view partly in section of a modification of the device shown in Fig. 4; and

Fig. 8 is a similar view to Fig. 7 of a still further modification of the device of the present invention.

The shelf bracket preferably takes the form of an elongated channel having flanges of equal length and a web which is as wide or possibly slightly wider than the depth of the flanges. In any event, the web is to be of a size which would just comfortably admit the ends of the board from which the shelf is to be made. The web, in case a channel form is employed, is provided with fastening means which may either take the

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form of nails which penetrate the web and are suitably secured thereto, or may take the form of struck out prongs made from the material of the web itself.

As a further alternative, one of the flanges may be omitted, thus constituting the device in effect an angle iron consisting of two flanges meeting at right angles, one of the flanges being provided with the fastening means of the type hereinafter more fully described.

In its preferred embodiment the device is that substantially shown in Figs. 1, 2 and 3. Thus suitable walls 9 and 10 may serve as the space between which the shelf 11 is to be provided.

The shelf bracket itself, two of which are indicated in Fig. 1, consists of a channel broadly designated by the reference numeral 12, which is made up of two flanges 13 and 14 united by the web 15. Suitable fastening means, as for example nails 16 and 17, may be driven through the web itself, and are preferably countersunk as shown at 18 in Fig. 3. The nails 16 and 17, and others of the same kind, are preferably offset or staggered relative to the center line running longitudinally of the web 15.

An alternative form is shown in Fig. 4, in which the web 15 has struck out outwardly therefrom prongs 19 and 20, which are provided with reinforcing means to keep them from being distorted when driven into the sustaining wall. These prongs may for instance be provided, as shown in Fig. 7, with a reinforcing rib 21, or may be made partly semicircular in cross-section, as for example, the prong 19, whose shape is apparent from the cross-sectioned portion of Fig. 6.

As a further alternative the prong 20 may be made triangular in cross-section with a sharp angle 22 along the median line thereof, as clearly shown in the perspective view of Fig. 8.

Fig. 8, moreover, illustrates a further modification of the invention in which the bottom flange 14 has been omitted, so that the device consists only of the flange 13 and a flange 25 which corresponds to the web 15 when the channel shaped structure is employed.

When erecting the device of the present invention, for example, if it is made in channel form, a blow-receiving strip 26 which may be of wood or any other suitable material, and which is indicated in the cross-sectional portion shown in Fig. 5, is inserted into the channel with one side thereof in contact with the inside of the web 15. The strip 26, it will be noticed, is somewhat thicker than the length of the flanges 13 and 14. With the strip 26 inserted in the channel between

the flanges 13 and 14, the prongs 20 or the nails 16 or 17, if that particular form is employed, are lightly pressed against the wall 9, whereafter by means of a hammer or mallet one pounds upon the blow-receiving strip 26, thereby driving 5 the prongs 19 or 20, or the nails 16 and 17, etc. into the wall 9.

A similar strip is then affixed to the other wall 10 in exactly the same manner.

The blow-receiving strip 26 is of course removed 10 after the channel has been secured to the supporting wall. Thereafter the shelf 11 may be slid into the two opposed channels, thus forming a shelf. If desired, and to prevent the shelf from being withdrawn by sliding, additional securing 15 brads or tacks 27 may be driven through a suitable opening 28 in the upper flange 13.

If the device takes the form shown in Fig. 8, the blow-receiving strip can nevertheless be used in such a manner that the flange 13 (Fig. 8) is laid on top of the strip 26, while the other flange 25 which carries the fastening means, lies against 20 the side of the strip, whereafter with the strip, being of course thicker than the flange 13, the prongs 20 or nails 16 and 17, etc., can be driven into the wall 9 or 10. The strip may then be removed but in this case the shelf is laid on top of the flange 13 instead of being housed between the flanges 13 and 14. If desired a brad may be driven upwardly into the shelf through a hole 25 28 so as to secure the shelf to the sustaining flange 13.

In connection with the construction shown in Figs. 1, 2 and 3, it is desirable to have the nails 16 and 17 which are countersunk at 18, spot welded or similarly permanently affixed to the web 15, as this prevents the nails from being accidentally withdrawn and lost.

The angle iron strip or channel strip of the present invention may be made of relatively thin metal and can be easily constructed by a single stamping operation in case the prong type of construction is used, or by the use of a comparatively simple nailing machine, which drives the nails 16 and 17 through the web 15 at the same time countersinking them and perhaps also welding 30 them in place.

Self evidently brackets of various thicknesses can be provided to be used with various standard types of shelving lumber, such as $\frac{1}{2}$ ", 1" and the like. For most commercial purposes the width 5 between the flanges 13 and 14 may be slightly over $\frac{3}{4}$ " so as to receive boards $\frac{3}{4}$ " in thickness.

It is evident of course that the shelf bracket of the present invention need not entirely be made of metal, as the web and flange may consist of a suitably shaped plastic material provided only that the securing means such as the nails are made of a sufficiently hard material to permit driving them into a wall structure without bending or fracture.

Accordingly applicants claim:

A shelf bracket comprising an elongated channel having a web and flanges, nails driven through the web thereof and secured thereto, and extending from the outside of said web said nails being simultaneously insertable into a supporting wall 20 by means of a wooden strip disposed in said channel and extending beyond the flanges thereof.

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