Dec. 13, 1955 W. A. BELTZ 2,726,772

AUXILIARY SHELF SUPPORTS

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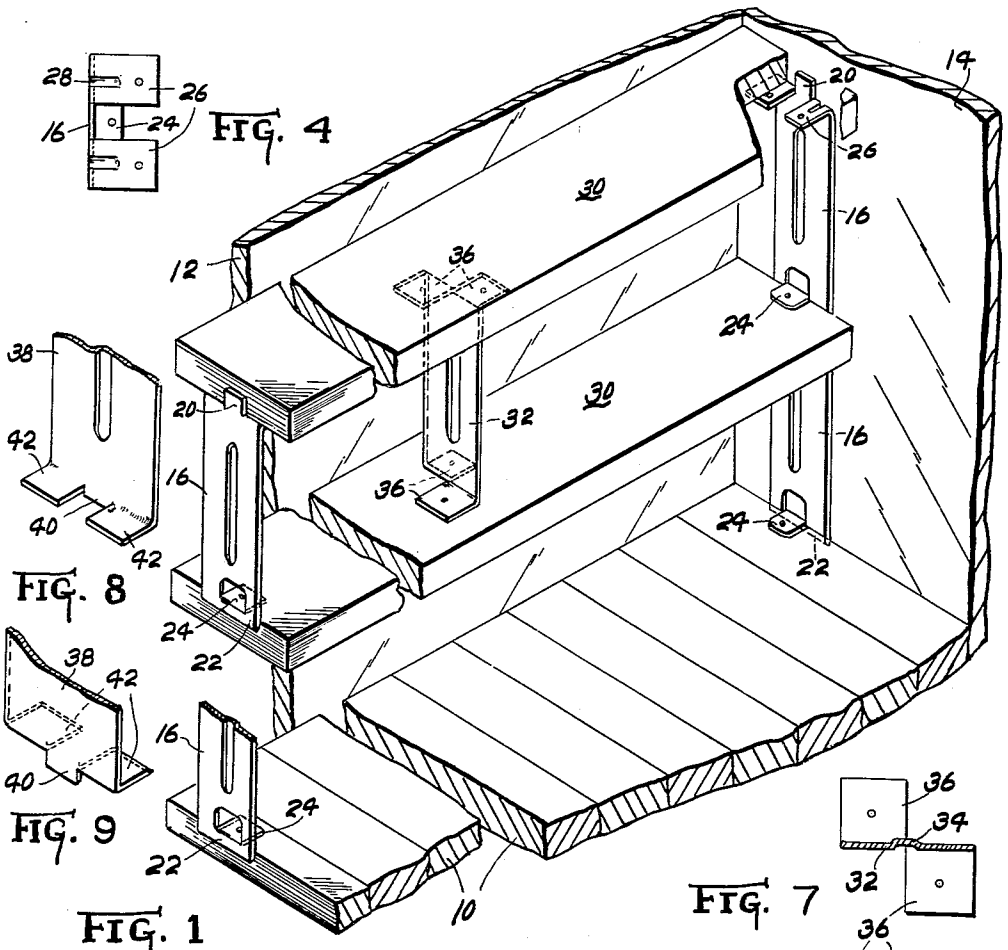


FIG. 1

FIG. 4

FIG. 8

FIG. 9

FIG. 7

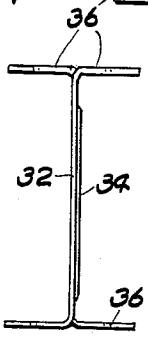


FIG. 5

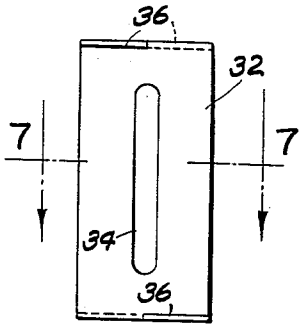


FIG. 6

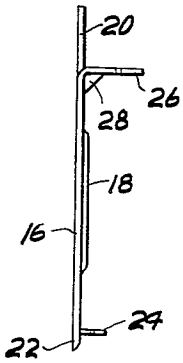


FIG. 2

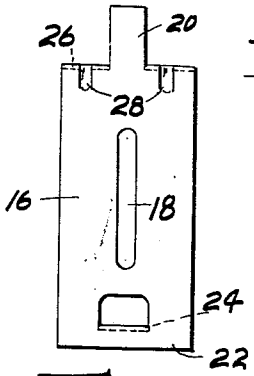


FIG. 3

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AUXILIARY SHELF SUPPORTS

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3 Claims. (Cl. 211—148)

This invention relates to new and improved brackets for building shelves without the use of fasteners or tools, and the principal object of the invention is to provide a simple, inexpensive, easily applied and installed bracket or the like for building shelving without the use of any tools, fasteners, etc. and at the same time providing an extremely strong and rigid shelf construction of any size or number of shelves desired.

Another object of the invention resides in the provision of the combination of a pair of brackets, each having extending ends or tabs, and laterally-formed projections spaced slightly inwardly from the ends or tabs, one of said ends being insertable next to an end wall or other vertical support and into the floor, or between a shelf and the wall, so that the bracket extends upwardly vertically along the wall, with a shelf or similar element which contacts the end walls and the upper ends of the brackets, resting on the inwardly-extending projections adjacent to the upper ends thereof, the shelf element clamping the brackets against the end walls, and the brackets supporting the shelf element.

A further object of the invention resides in the provision of a device as above stated including a center bracket or support having opposite projections at both ends thereof for supporting a long shelf intermediate the ends thereof.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings in which:

Fig. 1 is a perspective view with parts in section illustrating the application of the invention;

Fig. 2 is a view in side elevation of one of the brackets;

Fig. 3 is a view in rear elevation of one of the brackets;

Fig. 4 is a top plan view thereof;

Fig. 5 is a view in side elevation of a center support;

Fig. 6 is a view in front elevation thereof;

Fig. 7 is a section on line 7—7 of Fig. 6;

Fig. 8 is a perspective view showing a modification of the lower end of one of the brackets, part being in section; and

Fig. 9 is a similar view thereof at the opposite side.

As shown in Fig. 1, the reference numeral **10** may indicate a floor or other horizontal support upon which the new brackets are to be maintained for making the shelving of the invention. This floor is usually of wood as found in the conventional home or other building, but it may be concrete, composition, or any other material. This invention contemplates that most shelving will be built in a closet or the like having a rear wall **12** and side or end walls **14**, only one of the latter being shown for clarity of illustration in Fig. 1.

The brackets under consideration each comprise a generally flat plate-like body portion **16** which is preferably ribbed or otherwise distorted as at **18** for adding strength thereto. One end of the plate **16** terminates in a tab **20** in extension thereof and the opposite end has an end edge or portion **22** which may be square or beveled, see Fig. 2,

for purposes to be described. The end portions or tabs **20** and **22** may be referred to merely as end portions for the bracket.

Inwardly from end **22** there is punched out or otherwise formed a lateral projection **24** extending at right angles to the general plane of the plate **16**. Adjacent the end **22** there are a pair of bent down ears or tabs **26** which may be strengthened by gussets **28** if desired.

In most cases the end **22** of the bracket **16** is thrust down between flooring **10** and end wall **14** as clearly shown in Fig. 1, so that the bracket **16** extends upwardly vertically along the wall **14**. In order to thus position the bracket **16** it may be necessary to manually form a small hole in the flooring **10** but this may ordinarily be accomplished by a screw driver or like tool found in every house. The two brackets **16** will be seen to lie parallel and facing each other with the tabs **24** and **26** extending toward each other.

A shelf element **30** is cut to length to just fit between the two end walls **14**. This shelf element is then set on the laterally-projecting elements **26** and thereupon wedges or binds the tabs **20** against the end walls. Of course, the rear edge of the shelf element **30** more or less abuts rear wall **12**, if the latter is present.

It will be seen that the shelf **30** jams or binds the brackets in place in conjunction with floor elements **10**, and the brackets in turn support the shelf. This construction can be repeated upwardly vertically as high as desired as indicated in Fig. 1. Also, it is to be understood that the first pair of brackets may be set up on an already existing shelf, usually found in the closet.

In cases where the shelf **30** is to be wide, i. e. over 6 inches, it is preferred to use a pair of brackets **16** at each end thereof adjacent the corners of the shelf members, but in cases where the shelf is relatively narrow, one bracket at each end is sufficient.

In cases where the shelf is long, it may require extra braces intermediate the ends thereof, and in this event, the brace of Figs. 5, 6, and 7 may be utilized. This brace consists of upright plate **32** ribbed at **34** and having a pair of oppositely offset tabs **36** at each end thereof. This brace is placed substantially as shown in Fig. 1.

All of the tabs may be provided with small holes for the reception of tacks or the like if it is found desirable to actually use a fastener, but these fasteners are not necessary and are usually completely dispensed with.

A modification of the bracket **16** is shown in Figs. 8 and 9 wherein the same is indicated at **38** and has a central outwardly extending tab **40** similar to that at **20** but at the opposite end thereof, and in this case there are a pair of laterally extending projections **42**. It is to be understood that the tabs **20** and **40**, as well as the end **22**, may be made very small because they merely are clamped between two other members and of themselves do not bear any weight.

It will be seen that the invention provides a very simple, economical, easily assembled shelf bracket construction. It is only necessary for the home owner to procure shelf members cut to length and then he is enabled to build as many shelves as he desires of a length occasioned by his particular closet conditions and of any width according to his own needs. The shelf is easily taken down if this is at any time found desirable and the brackets may be re-used in another location as and if desired.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed otherwise than as set forth in the claims, but what I claim is:

1. The combination of a supporting structure including a bottom member and end walls, with a shelf construction comprising a pair of brackets, each bracket having ends and a lateral single planar projection adjacent each

end, each one of said brackets having an end inserted between an end wall and the bottom member with a projection overlying the latter, the brackets standing upright in close contact with the respective end walls, and a shelf resting on the other single planar bracket projections, said shelf having a length to tightly press the other bracket ends into close clamped association with the respective end walls, whereby the brackets support the shelf and bottom member and the shelf cause the brackets to be tightly held in upright shelf-supporting condition.

2. The combination of claim 1 including a second set of like brackets, each being vertically aligned with a first bracket and having an end inserted between the end of the shelf and the respective end wall, a second shelf having a length to tightly clamp the other ends of the second set of brackets to the end walls, and projections on the second set of brackets to support the second shelf.

3. The combination of a supporting structure including a bottom member and end walls, with a shelf construction comprising a pair of brackets, each bracket having ends and a single plane lateral projection adjacent each end, each one of said brackets having an end inserted between an end wall and the bottom member with a projection flatly contacting the bottom member, the respective individual projections extending toward each other, the bottom member and the end walls causing the brackets to stand upright against the end walls, a shelf on the other projections tightly wedging the brackets against the end walls, the structure being otherwise free of fastenings, the shelf being unimpeded in an upward direction.

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