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ADJUSTABLE CANTILEVER BRACKET

Filed Jan. 24, 1941

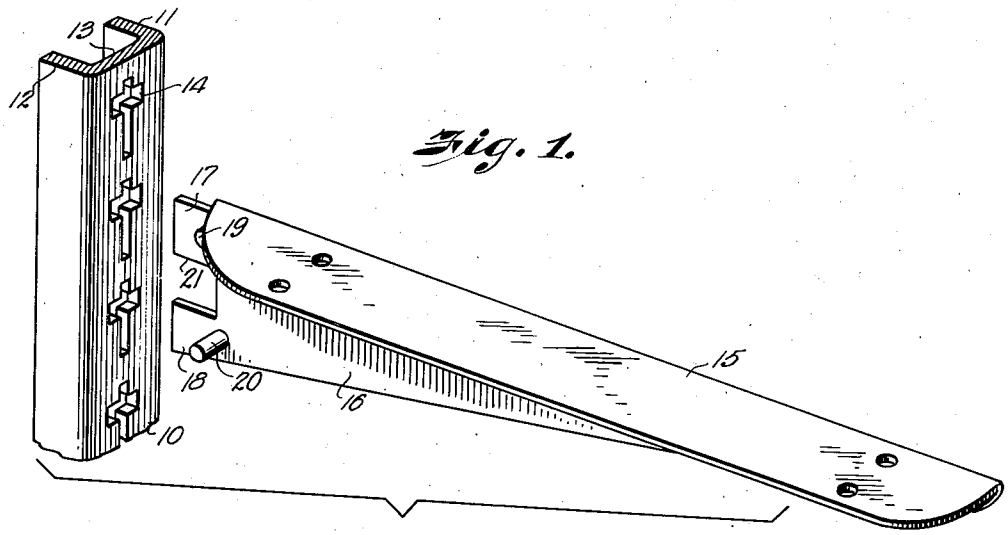


Fig. 1.

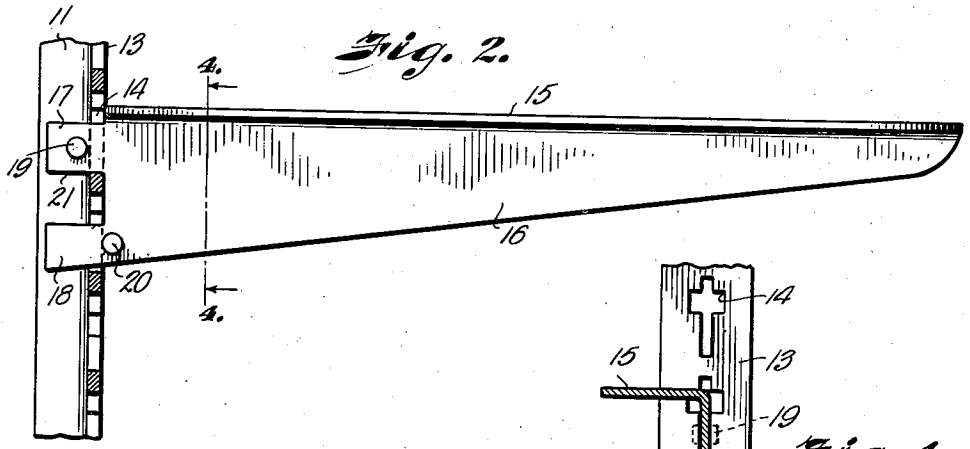


Fig. 2.

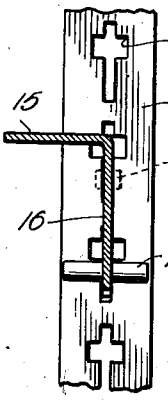
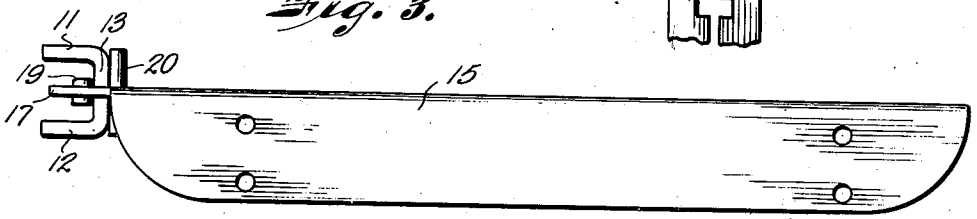


Fig. 4.

Fig. 3.



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ADJUSTABLE CANTILEVER BRACKET

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Application January 24, 1941, Serial No. 375,832

3 Claims. (Cl. 248—243)

Our invention relates to an adjustable cantilever bracket. It has been proposed to provide brackets to be used for supporting shelving and the like, many times. The constructions of the prior art have been of limited strength and some of them have been difficult of manufacture.

One object of our invention is to provide an adjustable cantilever bracket which is at once light and strong, can be simply and cheaply manufactured, and readily adjusted without the necessity of tools.

Other and further objects of our invention will appear from the following description.

In the accompanying drawing which forms part of the instant specification and is to be read in conjunction therewith and in which like reference numerals are used to indicate like parts in the various views;

Figure 1 is a perspective view, showing the supporting member and a bracket in separated relationship.

Figure 2 is a side elevation showing the support and bracket in assembled relationship with the support in section.

Figure 3 is a top plan view of the assembly shown in Figure 2.

Figure 4 is a sectional view taken on the line 4—4 of Figure 2.

Referring now to the drawing, the supporting member 10 is formed of a channel member having flanges 11 and 12, and a web 13. The web 13 is formed with a plurality of cross shaped slots 14. The bracket 15, per se, has a cross sectional shape of an angle iron, the vertical leg of which, 16, tapers outwardly from the support. The end of the leg 16 adjacent the support 10, is formed with a bifurcation, comprising an upper member 17 and a lower member 18. A pair of pins 19 and 20 are provided, as can readily be seen by reference to the drawing. The pin 19 is of a width sufficient to enter the horizontal portion of the cross shaped slot 14. The pin 20 is of such length that it will span the web 13 and contact the flanges 11 and 12 of the supporting member 10. This can readily be seen by reference to Figure 4.

The manner in which the bracket is inserted in the supporting member is readily apparent from the drawing. The lower member 18 fits into the vertical portion of the cross shaped slot just below the horizontal portion of the adjacent cross shaped slot, immediately above. The pin 19 enters the horizontal portion of the cross shaped slot. The bracket will then be allowed to move downwardly until the lower edge 21 of the member 17 contacts the base of the slot into which the pin 19 was fitted. The pin 19 contacts the rear side of the web 13, while the pin 20 lies across the front of the supporting member.

The turning moment is resisted by the web 13 and the flanges 11 and 12, due to the fact that the pin 20 spans the member 10 from web to web. Since the strength of the pins and the supporting member is high, due to the fact that they are rolled, or other structural steel members, a large turning moment will be resisted with the result that the bracket can be made to bear considerable weight.

Our bracket has many uses. The supporting member 10 may be secured against a wall or the like and the brackets used to support shelving. The supporting member 10 may be in a show case and the brackets may support steel shelving or the like. The brackets may be adjusted without any tools. They are strong and light, and yet inexpensive to manufacture. Once adjusted, they are held firmly in position with a minimum danger, against displacement, by accidental blows.

It will be understood that certain features and subcombinations are of utility and may be employed without reference to other features and sub-combinations. This is contemplated by and is within the scope of our claims. It is further obvious that various changes may be made in details within the scope of our claims without departing from the spirit of our invention. It is, therefore, to be understood that our invention is not to be limited to the specific details shown and described.

Having thus described our invention, we claim:

1. A support for shelves and the like, including in combination a vertical channel member having a web and a pair of flanges, said web being formed with a plurality of cross-shaped slots, a bracket member having an end formed with a pair of projecting lugs spaced to enter the vertical portions of a pair of said cross-shaped slots, a pin extending transversely through the upper of said projecting lugs, said pin having a length less than the length of the horizontal portion of a cross-shaped slot, and a second pin projecting horizontally adjacent said lower lug, said second pin longer than the horizontal portions of said cross-shaped slots and being of such length as to project across said web and said flanges.

2. A support as in claim 1 in which said bracket member is formed with a vertical leg and a horizontal leg, said projecting lugs being integral with said vertical leg.

3. A support as in claim 1 in which said bracket is formed with a vertical leg and a horizontal leg and said vertical leg is tapered outwardly and upwardly from adjacent said projecting lugs.

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