

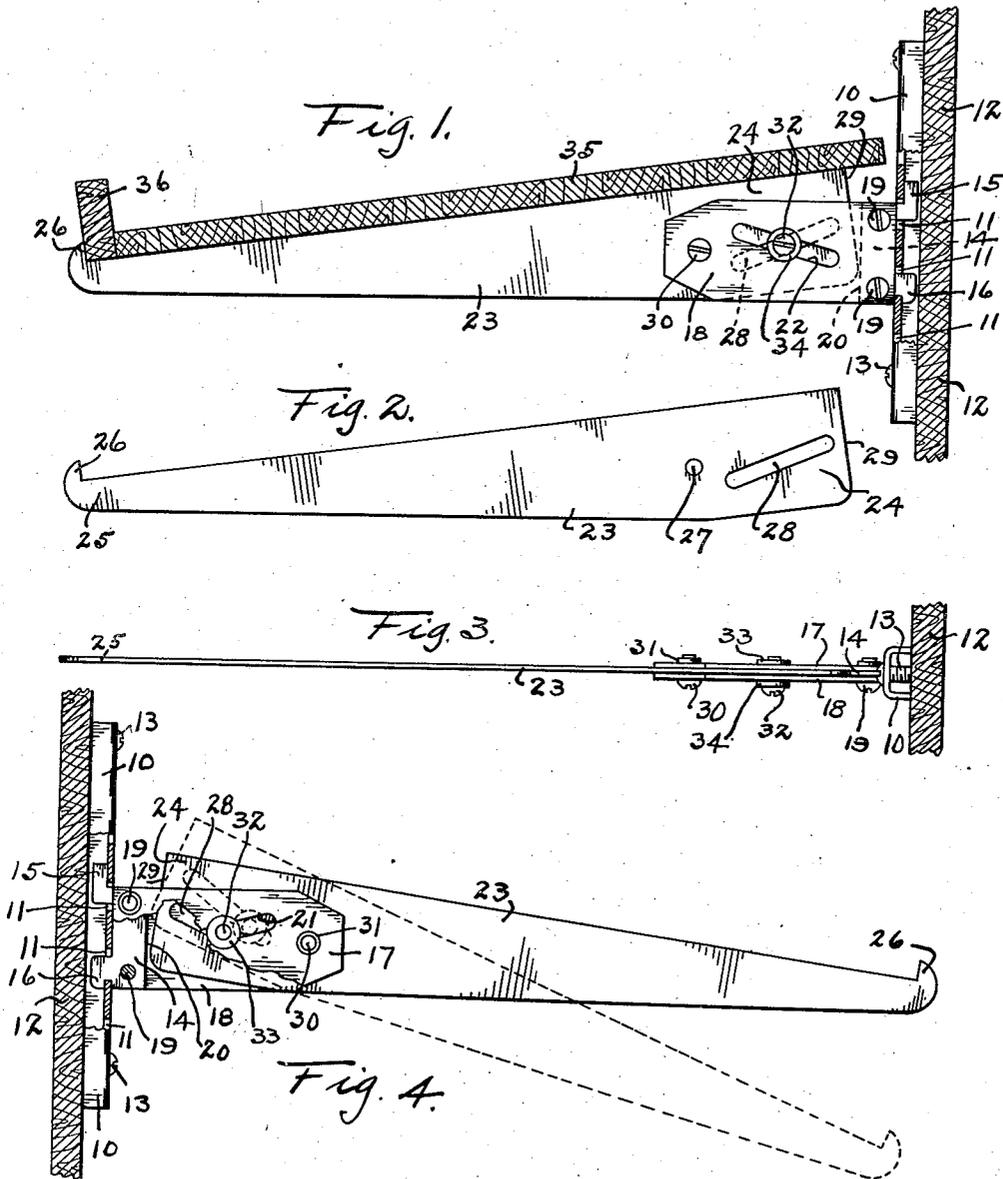
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F. W. ODIN

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ROCKABLE SHELF BRACKET

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INVENTOR,
FRANK W. ODIN,
By Herbert A. Reinturn,
ATTORNEY.

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ROCKABLE SHELF BRACKET

Frank W. Odin, Chicago, Ill., assignor to Syndicate Glass, Inc., Indianapolis, Ind., a corporation of Indiana

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1

This invention relates to an adjustable bracket of the type employed for supporting shelves and the like, although it is conceivable that other uses may be found for the invention. A preliminary object of the invention is to provide an exceedingly simple structure whereby the bracket supporting member may be adjusted throughout a wide range of inclinations and be fixed in any selected position against shifting from that position, all with an exceedingly simple mechanism. Further objects and advantages of the invention, including the embodiment of the invention in a construction that is quite simple to produce and has a low cost of production, will become apparent to those versed in the art in the following description of one particular form of the invention, as illustrated in the accompanying drawing, in which

Fig. 1 is a view in side elevation and partial section of a structure embodying the invention;

Fig. 2, a view in side elevation of the shiftable arm of the bracket;

Fig. 3, a view in top plan of the assembled bracket, and

Fig. 4, a view in side elevation and partial section from the reverse side of the structure in respect to that shown in Fig. 1.

Like characters of reference indicate like parts throughout the several views in the drawing.

A mounting plate 10 is selected to have any suitable conformation, herein shown as being U-shaped in cross section. This mounting plate 10 is provided with a plurality of spaced apart slots 11 and is mounted against a vertical wall 12 in the present showing by means of screws 13. A foot 14 is provided to have upturned and downturned feet 15 and 16 respectively, so proportioned that the upper foot 15 may be entered through a slot 11 and lifted to the uppermost end of that slot to permit the lower foot 16 to be entered through the next slot below, and then the entire foot 14 pushed downwardly to have both feet 15 and 16 bear against the inner-face of the mounting plate 10, as indicated in Figs. 1 and 4.

To this foot 14 are secured side plates 17 and 18 of identical shape and size. These plates 17 and 18, being attached to opposite sides of the foot 14—herein shown as by means of the screws 19—are spaced apart forwardly of the foot 14 a distance equal to the thickness of that foot. That is, the plate 17 and 18 extend for a distance beyond the outer terminal edge 20 of the foot 14. Each of these plates 17 and 18 is provided with a slot 21 and 22 respectively, to slope upwardly and outwardly forwardly of the edge 20 of the foot 14. These two slots 21 and 22 are in exact transverse alignment.

A supporting arm 23 is provided to have any suitable shape, herein shown as being of that form indicated in Fig. 2 where the arm tapers from a rear end portion 24 outwardly to a narrow end

2

25 in respect to vertical height and carries an upturned abutment 26. The rear end portion 24 is provided with a hole 27 therethrough substantially midway between the top and bottom edges of that portion 24. Then this portion 24 is further provided with a slot 28 therethrough confined in that portion and between the hole 27 and the rear end 29 of the arm. This slot 28 slopes, as viewed in Fig. 2, from below the center of the hole 27 and thence upwardly and rearwardly.

The arm 23 is rockably mounted between the side plates 17 and 18 by passing a pivot pin through those plates and the hole 27 of the arm. In the present showing this pin consists of a screw 30 engaged with a thin nut 31 on the outside of the plate 17, and being of that diameter to permit the arm 23 to rock therearound between the plates. A screw 32 is passed through the slot of the plate 18, the slot 28 of the arm 23, and the slot 21 of the plate 17, to screw-threadedly engage with a thin nut 33. Preferably, a washer 34 is carried under the head of the screw 32 to bear against the plate 18, the diameter of this washer 34 exceeding the width of the slot 22.

As indicated in Figs. 1 and 4, the slots 21 and 22 are inclined in opposite direction from the inclination of the slot 28 in the arm 23. Thus the screw 32 has to pass through the slots 21 and 22 at those positions therealong which will permit the screw 32 to pass through the limited exposed length of the slot 28.

Now when the screw 32 is not tightly drawn up, the arm 23 may be rocked as indicated in Fig. 4. In this rocking travel the screw 32 will have to travel in both the slots 21, 22 and the arm slot 28, as indicated by the dash lines in Fig. 4. Then by drawing up the screw 32 snugly, the arm 23 is very securely fixed in the selected position, by reason of the different inclinations of the respective arm and plate slots.

As indicated in Fig. 1, the arm 23 may have a shelfboard 35 supported thereon with a forward ledge strip 36 held in position by reason of the abutment 26. The exact shape of the arm 23 from the hole 27 outwardly to the end 25 is immaterial insofar as the gist of the invention is concerned.

While I have herein shown and described my invention in the one best form as now known today, it is obvious that structural variations may be employed without departing from the spirit of the invention, and I therefore do not desire to be limited to that precise form beyond the limitations which may be imposed by the following claims.

I claim:

1. A rockable shelf bracket comprising mounting means; a member extending from said means and having a slot therethrough inclined from the horizontal; an arm; means rockably mounting

3

the arm on said member to have an arm portion swingable across said slot, said arm portion having a slot therethrough inclined oppositely to said member slot; pin means passing through both of said slots; and means for clamping together said arm and said member through said pin means.

2. A rockable shelf bracket comprising a mounting member; a foot interengaging with said member; a pair of spaced apart plates extending from said foot; an arm having a portion extending between said plates; a pin extending from said portion and engaging said plates, about the axis of which pin said arm may rotate; said portion having a slot inclined from the horizontal; each of said plates having a slot therein laterally aligned one with the other and both inclined from the horizontal oppositely from said arm slot; a pin extending through said three slots and slidable therealong; and means engaging said last pin to clamp said arm portion between said plates.

3. A rockable shelf bracket comprising mounting means; a member extending from said means and having a slot therethrough inclined from the horizontal; an arm; means rockably mounting the arm on said member to have an arm portion swingable across said slot, said arm portion having a slot therethrough inclined oppositely to said member slot; pin means passing through both of said slots; and means for clamping together said arm and said member through said pin means; the angle of inclination from the horizontal of both of said slots being equal.

4. A rockable bracket comprising mounting means; a member extending from said means and having a slot therethrough inclined from the horizontal; an arm; means rockably mounting the arm on said member to have an arm portion swingable across said slot, said arm portion having a slot therethrough inclined oppositely to said member slot; pin means passing through both of said slots; and means for clamping together said arm and said member through said pin means; said arm having a shelf supporting length extending from said rockably mounting means, and said arm portion being on the opposite side of said rockably mounting means.

5. A rockable shelf bracket comprising a mounting member; a foot interengaging with said member; a pair of spaced apart plates extending from

4

said foot; an arm having a portion extending between said plates; a pin extending from said portion and engaging said plates, about the axis of which pin said arm may rotate; said portion having a slot inclined from the horizontal; each of said plates having a slot therein laterally aligned one with the other and both inclined from the horizontal oppositely from said arm slot; a pin extending through said three slots and slidable therealong; and means engaging said last pin to clamp said arm portion between said plates; said slots being positioned between said first pin and said mounting member.

6. In a rockable arm adjustable supporting means, a base member; a plate extending from said member; an arm having a portion overlapping said plate; a pivot pin carried by an outer portion of said plate, and about which said arm may be rocked to have said arm portion rock over said plate between said pivot and said base member; said arm portion being provided with a linear slot therethrough inclined to slope downwardly and forwardly between the rear end of said arm portion and said pivot; said plate having a like linear slot therethrough but inclined to slope upwardly and forwardly of the plate; said two slots crossing one another in the general nature of the lines of a letter X; and a clamp pin extending through the intersection of said slots; whereby tendency of the pin to slide along one slot under load on said arm is slidingly resisted by reason of the reverse inclination of the other slot, and travel of the arm forces said clamp pin to travel longitudinally, relatively of both slots, thereby variably spacing the clamp pin from said pivot.

FRANK W. ODIN.

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