Oct. 13, 1959 McFERRELL HOLLANSWORTH 2,908,471

SHELF-SUPPORTING BRACKET

Filed Dec. 13, 1956

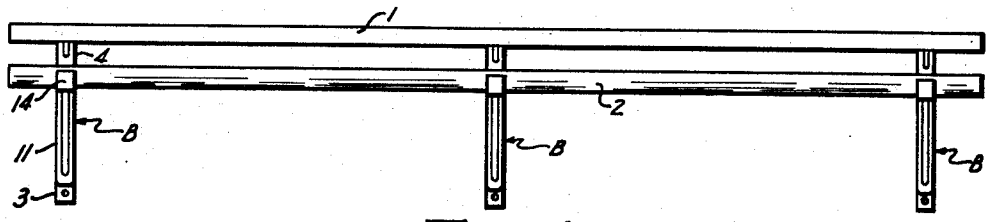


Fig. 1

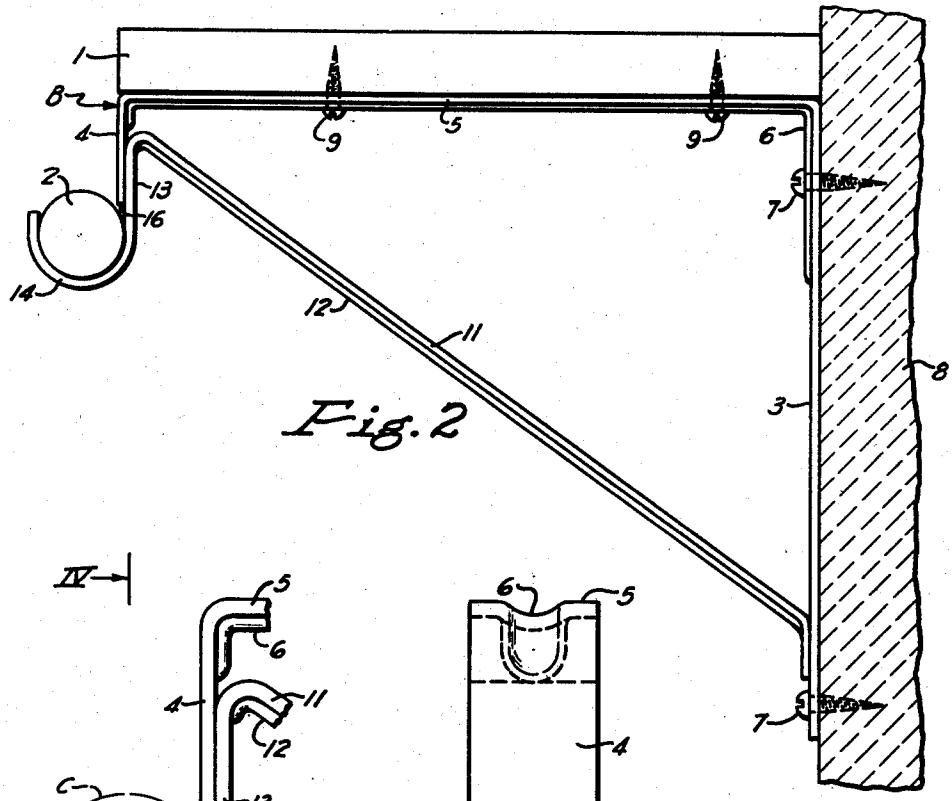


Fig. 2

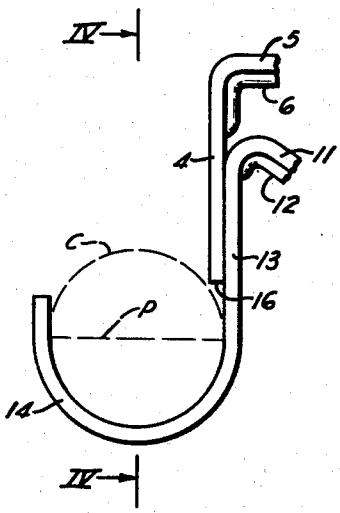


Fig. 3

Fig. 4

INVENTOR.
McFERRELL HOLLANSWORTH
BY
Brown, Critchlow, Flicker & Peckham
HIS ATTORNEY

United States Patent Office 2,908,471
Patented Oct. 13, 1959

2,908,471

SHELF-SUPPORTING BRACKET

McFerrell Hollansworth, Pittsburgh, Pa., assignor to McKinney Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application December 13, 1956, Serial No. 628,055

2 Claims. (Cl. 248—247)

This invention relates to brackets for supporting shelves, and more particularly those which support shelves in clothes closets.

It is among the objects of this invention to provide such a bracket that will not only support a shelf but also a horizontal pole from which garments can be hung, and that includes a pole-supporting hook in which a hanger pole can be locked.

In accordance with this invention the bracket includes a bar, a brace and a hook. The bar is bent to provide it with a long vertical back member having its upper end integrally connected by a horizontal shelf-supporting member to the upper end of a vertical front member. The back member is provided with fastener openings for securing it to a closet wall beneath a shelf. Beneath the horizontal portion of the bar there is an inclined metal brace that has its lower end secured to the lower part of the back member and its upper end secured to the back of the front member. An arcuate hook is connected to the front member and extends forward from it for receiving and supporting a hanger pole. The lower end of the front member is disposed in front of the rear inside surface of the hook and above the horizontal axial plane of the hook so that it will hold in the hook a pole having a diameter that is greater than the shortest distance between the front member and the opposite side of the hook. In other words, the hook has to be sprung farther open temporarily in order to permit the pole to be inserted in it.

The preferred embodiment of the invention is illustrated in the accompanying drawings, in which

Fig. 1 is a front view of a shelf and hanger pole supported by brackets;

Fig. 2 is an enlarged side view of one of the brackets supporting the shelf and pole;

Fig. 3 is a further enlarged side view of the front end of the bracket; and

Fig. 4 is a vertical section taken on the line IV—IV of Fig. 3.

Referring to Figs. 1 and 2 of the drawings, a wooden shelf **1** and a hanger pole **2** are shown supported in a clothes closet by three of my brackets B. However, they could be supported by one or any number of the brackets, depending upon whether or not the ends of the shelf and pole rest on cleats fastened to the walls of the closet at the opposite ends of the shelf. Where the shelf and pole are supported by cleats, only the center bracket would be necessary for preventing the shelf and pole from sagging.

Each bracket is formed most suitably from only two separate elements. One of these elements is a metal bar provided with two right angle bends to provide it with a relatively long vertical back member **3** substantially parallel to a much shorter front member **4**, the upper ends of these two members being integrally connected by a horizontal member **5** on which the shelf rests. The bar can be stiffened by providing it with a central corrugation **6** extending lengthwise of the bar. The back

member **3** is provided with two or more holes, through which fastening members **7** of any suitable kind can be driven into the closet wall **8** behind the bracket in order to support it. The horizontal member of the bracket likewise can be provided with holes for screws **9** or the like that will hold the shelf in place on the bracket.

The other element of the bracket is a metal brace **11** made of the same material as the bar and likewise provided with a longitudinal corrugation **12** for stiffening it. The brace is inclined and has its lower end bent downward and welded or otherwise secured to the front of the lower part of back member **3**. The front or upper end of the brace likewise is bent downward and has a short vertical portion **13** rigidly secured to the back of front member **4**. The upper end of the brace continues to extend down below the front member and then is curved forward and up to form a hook **14** at the front of the bracket.

The hook describes a 180° arc having a radius substantially equal to the radius of the hanger pole **2** that is to be inserted in the hook, so that the lower half of the pole will fit against the semi-circular surface of the hook as shown in Fig. 2. The horizontal axial plane of the hook cuts through the upper ends of the semi-circular part of the hook, as shown by the broken straight line P in Fig. 3. The hook also has substantially parallel upper portions directly above the axial plane just mentioned, the rear straight portion extending from that plane up to the lower end **16** of the front member. That lower end **16** is located where its front edge will be intersected by or slightly above an imaginary circle C concentric with the inside of the hook. As will be apparent, the circle has the same circumference as the hanger pole **2**. Consequently, the shortest distance between the lower end **16** of front member **4** and the opposite or front side of the hook is a little less than the diameter of the pole, so that in order to insert the pole in the hook from above, the pole must be forced down into it by springing the hook open far enough to permit the pole to enter. This springing is a very small amount and the hook will return to it original form as soon as the pole is seated in it. The lower end **16** of the front member will then form a stop surface which holds the pole down in the hook and prevents it from being dislodged accidentally.

The stop surface **16** also is useful in mounting the brackets in place. The brackets can be mounted on the hanger pole, on which they will be retained by the stop surfaces, and then the pole can be used as a handle to hold all of the brackets against the closet wall at the correct level while they are being fastened in place or while their positions are marked for later fastening.

According to the provisions of the patent statutes, I have explained the principle of my invention and have illustrated and described what I now consider to represent its best embodiment. However, I desire to have it understood that, within the scope of the appended claims, the invention may be practiced otherwise than as specifically illustrated and described.

I claim:

1. A closet shelf bracket comprising a shelf-supporting metal bar bent to form a long vertical back member having its upper end integrally connected by a horizontal member to the upper end of a short vertical front member, the back member being provided with fastener openings for mounting it against a closet wall beneath a shelf, an inclined metal brace beneath said horizontal member secured at its lower end to the lower part of said back member, the upper end of the brace being secured to the back of said front member, and an arcuate hook connected to said front member and extending forward

therefrom for receiving a hanger pole, the hook having a lower portion forming half of a circle for receiving and supporting a circular pole, the lower end of said front member being disposed in front of the rear inside surface of the hook and above the horizontal axial plane of the hook, the free end portion of the hook extending above said plane and being springable away from said front member, and the lower end of said front member being located outside of said circle but spaced from said free end portion a distance less than the diameter of said circle, whereby to hold in the hook a pole having a diameter greater than said distance.

2. A closet shelf bracket comprising a shelf-supporting metal bar bent to form a long vertical back member having its upper end integrally connected by a horizontal member to the upper end of a short vertical front member, the back member being provided with fastener openings for mounting it against a closet wall beneath a shelf, an inclined metal brace beneath said horizontal member secured at its lower end to the lower part of said back member, the upper end of the brace having a short downwardly bent portion secured to the back of said

front member, and a slightly resilient arcuate hook integral with the lower end of said short portion of the brace and extending forward beneath the lower end of said front member for receiving a hanger pole, the hook having substantially parallel upper portions connected by a curved lower portion forming half of a circle, the lower end of said front member of the bar terminating at the upper half of said circle and outside of it, the lower end of said front member being spaced from the opposite free end portion of the hook a distance less than the diameter of said circle, whereby to form a downwardly facing stop surface to hold in the hook a pole having a diameter substantially as great as said circle.

References Cited in the file of this patent

UNITED STATES PATENTS

640,662	Kane	Jan. 2, 1900
837,555	Freson	Dec. 4, 1906
887,272	Robinson	May 12, 1908
918,415	Berger	Apr. 13, 1909
1,789,276	Kenney	Jan. 13, 1931
2,783,961	Weber	Mar. 5, 1957