Oct. 20, 1964 H. O. PAWSEY 3,153,526

HANGER BRACKET

Filed Feb. 25, 1963

FIG_4_

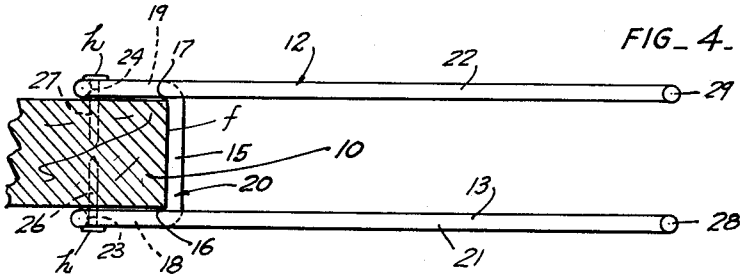


FIG_3_

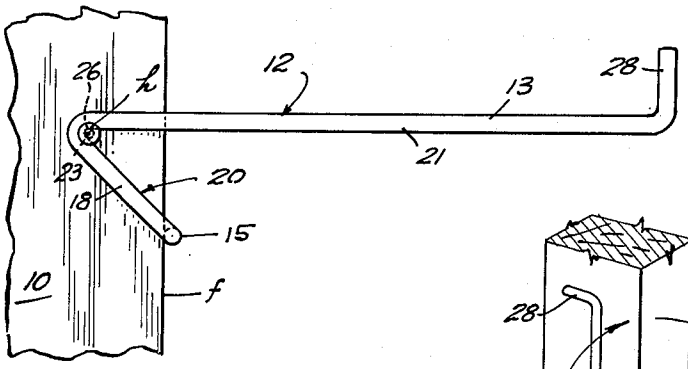


FIG_2_

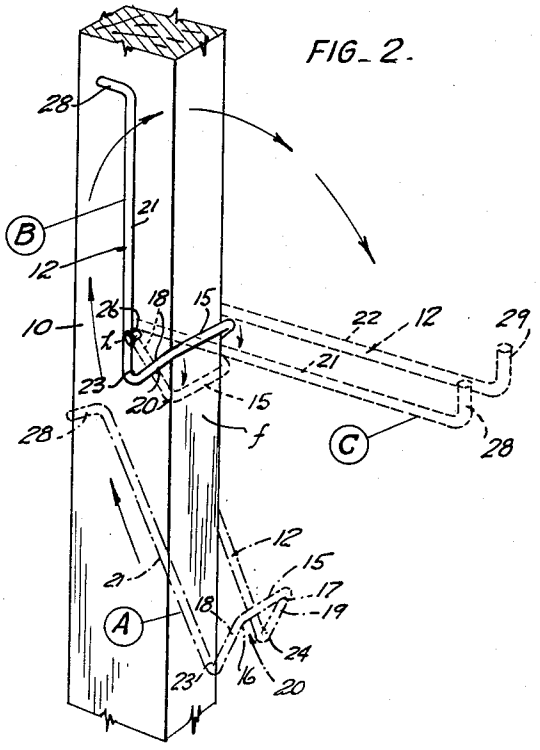
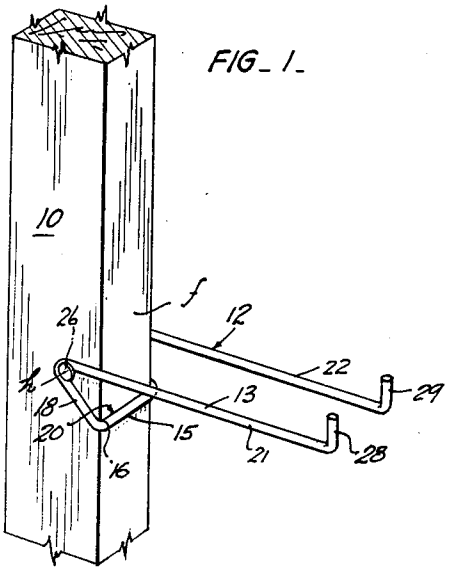


FIG_1_



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HANGER BRACKET

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This invention relates to hanger brackets and more particularly to a self securing bracket removably attachable to standard uprights.

The bracket of this invention is best suited for mounting on 2" x 4" studding which forms the rough framing for buildings, partitions and the like. The invention resides in the provision of a bracket so formed as to interlock with the studding and a pair of pins or the like projecting from the studding. This entails the provision of a bracket constructed to have bearing relation with the studding and the pins projecting therefrom.

These and other objects and advantages of the present invention will become apparent from a reading of the following description and claims in the light of the accompanying drawings in which:

FIG. 1 is a perspective view of a bracket embodying the present invention in use on a stud or structural upright.

FIG. 2 is a view similar to that of FIG. 1 showing the manner of mounting the instant bracket for use.

FIG. 3 is a side elevation of FIG. 1 at slightly larger scale with respect thereto.

FIG. 4 is a plan view of FIG. 3.

In the drawing **10** indicates one of the upright scantling pieces of lumber otherwise known as a scantling and more commonly as a stud, which forms a part of the framing for a building wall or partition. These uprights **10** are usually standard Douglas fir timbers of rectangular cross section 2" x 4" in dimension. However, for purposes of the present invention it may be said that the bracket is constructed to engage parallel sides of such upright as well as the end wall therebetween.

The bracket of the present invention, designated **12** in the drawings, is constructed for mounting on an upright member such as the one **10** illustrated. Although standard studding is called a "two by four" this is so because it is what is left from a 2" by 4" unit of length of wood cut from a log. With loss of material by sawing and surfacing on four sides the actual dimension of a standard two by four is 1⅝" by 3⅝ inches.

Accordingly the bracket **12** of the present invention is best suited for standard studding **10** although it will be appreciated that the principle of the invention is equally applicable to other sized timbers and/or scantlings.

The bracket **12** comprises a single strand of wire or rod **13** of suitable diameter in cross section to provide the necessary rigidity. In the present disclosure the wire or rod **13** is illustrated as being approximately ¼ inch diameter in relation to the standard 2" x 4" stud **10**. I have found hot rolled steel rod to be the most satisfactory material.

The single strand of wire **13** is of any length suitable to provide a lateral bracket for a needed reach. For example, if brackets **12** are to support a shelving board or boards, the length of the wire **13** is determined by the width of shelving to be supported.

In accordance with the present invention the wire or rod **13** has a medial portion **15** dimensioned to bear against the front face **5** of the upright member upon which the bracket **10** is to be mounted. Each end of the medial portion **15** terminates in a right angle bend **16** and **17** providing a pair of parallel legs **18** and **19**, respectively, of a U-shaped member **20**. The mid portion **15** thus forms a straight bight of the U-shaped member **20**. The legs **18** and **19** of member **20** are so spaced as to bear

against the sides of the upright scantling **10** and thus embrace the same within the U-shaped member **20**. Thus it will be seen that the single wire or rod has a U-shaped mid section. The remaining portion **21** and **22** of each leg **18** and **19**, respectively, is disposed to lie in the same plane as the latter and parallel to each other but at an angle of less than 90° with respect to the U-shaped member **20**. In the present disclosure the U-shaped member **20** is disposed at 45° relative to both remaining portions **21** and **22**. The portions **21** and **22** are the bracket arms of the entire unit upon which shelving or other loads can be supported.

Between each leg and the remaining portion thereof is an arcuate bight or bend. Between leg **18** and its remaining portion **21**, the bight is designated **23** and a like angle bend **24** is disposed between the leg **19** and its remaining portion or arm **22**. The arcuate bights **23** and **24** are identical and preferably conform to a radius comparable to that of a standard nail or screw shank or stud pins for reasons now to be explained.

In the drawing I have shown a pair of nails **26** and **27** driven into the upright member **10** from each side thereof. These nails are driven into the member **10** at precise locations determined by the angular disposition of the bracket arms **21** and **22** relative to the U-shaped member **20** and the length of the legs **18** and **19** thereof. As best seen in FIGS. 3 and 4 the nails **26** and **27** are axially aligned and adapted to coincide with the axis of the arcuate bend of each bight **23** and **24**. It will therefore be appreciated that the bights **23** and **24** will partially circumscribe the respective nails **26** and **27** on the sides of the upright **10**. Thus the nails **26** and **27** support the bracket **12** at the desired elevation upon the upright **10**. It should here be noted that a single rod or stud pin extending through the upright **10** with each free end projecting beyond the side walls of the latter would be equivalent to the nails.

When the bracket arms **21** and **22** extend horizontally from their mounting on the nails **26** and **27** the medial portion **15** of the U-shaped member **20** bears against the front face *f* of the upright and thus counteracts or limits pivotal movement of the bracket **12** in a clockwise direction FIGS. 1 and 3 so that the bracket arms **21** and **22** remain in horizontal, shelf or article supporting position.

FIG. 2 illustrates the mounting and/or demounting of the bracket **12** of the present invention relative to an upright such as the one **10**. With the angle between the legs of the U-shaped member **20** known along with the distance between the medial portion **15** and the axis of the arcuate bights **23–24**, the location at which the nails **26** and **27** are to be driven into upright **10** can be predetermined. This is done by instructions to the user or by means of a template sold along with the bracket **12**. Once the nails **26** and **27** are driven into the upright with their heads *h* properly spaced therefrom to receive the wire or rod **13**, the bracket **12** can be mounted.

In mounting the bracket **12** the latter is inverted with the bracket arms **21–22** disposed open side up as in position A in FIG. 2. The spaced arms **21–22** straddle the upright **10** and are forced upwardly so that their extreme ends **28–29** engage the pins or nails **26–27** from behind (position B FIG. 2). The entire unit is thus moved upwardly, the extreme ends of the arms following a path simulated by the arrows in FIG. 2. Once the arcuate bights **23–24** engage the nails **26–27** the arms **21–22** are swung (clockwise FIG. 2), the entire bracket pivoting about the axes of the nails **26** and **27**. As soon as the medial portion **15** of the U-shaped member **20** engages the fore face *f* of the upright **10** further pivotal movement of the unit is limited (position C, FIG. 2). The

bracket arms 21–22 are now disposed horizontally i.e. at right angles to the upright 10 and are ready to receive and support a load.

The bracket arms 21 and 22 are suited to receive one end of a board or shelving (not shown) and it will be appreciated that several brackets may be set at variously spaced studs or uprights to support such shelving.

It should be noted that a single bracket having spaced arms 21 and 22, it is suitable for supporting garden tools such as rakes, shovels, hoes and the like. The head of such implements can be hung on the spaced bracket arms and the shank, pole or handle of the tool suspended therefrom between the arms 21 and 22.

It will also be appreciated that the angular disposition of the arms 21 and 22 relative to the U-shaped medial member 20 may be varied if desired. For example, the arms 21 and 22 may be at less than 45° relative to the member 20 and even parallel thereto for supporting boards on a slant to provide a display rack for mechandise and/or the like. It should here be noted that each of the bracket arms 21 and 22 have extreme ends 28 and 29 which are at right angles to the axes of the arms and extending upwardly therefrom so as to prevent removal of shelving or articles therefrom other than by intentionally lifting of articles up from the arms.

While I have described my hanger bracket in specific detail it will be appreciated by those skilled in the art that the same may be susceptible to variations, modifications and/or alterations without departing from the spirit of my invention. I therefore desire to avail myself of all variations, modifications and/or alterations as may fairly come within the purview of the appended claims.

What I claim as new and desire to protect by Letters Patent is:

1. A hanger bracket adapted to be mounted on a standard upright having stud pins extending co-axially from its side walls and comprising a single strand of wire having a U-shaped medial section providing a medial bight for engaging the front face of such standard upright below such pins and a pair of legs for embracing the side walls of such standard upright, the remaining portions of said wire being disposed at an angle of less than 90° relative to the portions of the legs of said U-shaped medial section to partially circumscribe such stud pins and to extend in parallel relation from either side of such standard upright for supporting a load.

2. A hanger bracket removably mountable on a standard stud having a pair of axially aligned pins projecting from its side walls comprising a single strand of wire having a U shape with a medial bight portion adapted to engage the front face of such stud and a pair of parallel legs spaced from each other to engage the side walls of such stud and having a less than 90° angular bend in each of said legs providing arcuate bights in spaced relation to said medial bight portion for partially circumscribing such pins whereby the remaining portions of said legs adapted to extend from such pins and beyond the front face of such stud for supporting a load.

3. A hanger bracket removably mounted on a standard stud having a pair of axially aligned pins projecting from its side walls comprising a single strand of wire having a U-shaped medial portion with a bight adapted to engage the front face of such stud and a pair of parallel legs spaced from each other to engage the respective side walls of such stud, the remaining portions of the legs of said U-shaped medial portion being disposed at 45 degrees with respect to the portions of the legs adjacent said bight of the medial portion providing arcuate bights for partially circumscribing such pins and at a distance from said bight of the medial portion whereby the latter engages the front face of said stud and the remaining portions of said legs extend beyond the front face of such stud for supporting a load.

4. For use on a standard upright having a pin projecting from at least one of its side walls and rearwardly from the front face of such upright; a hanger bracket comprising a single strand of wire having a U-shaped portion providing a bight for engaging the front face of such upright and a pair of legs for embracing the side walls of such upright, one of said legs of said U-shaped portion being adapted to engage such pin and having a terminal portion disposed at an angle of less than 90° relative to said one of said legs and in the same plane as said one of said legs for partially circumscribing such pin and to cooperate with the bight of said U-shaped portion for supporting the said terminal portion of said one of said legs in load bearing extended position forwardly of and beyond the front face of such upright.

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