Dec. 13, 1949 J. C. BROWN 2,490,994

HOOK OR HANGER

Filed July 31, 1947

Fig. 1

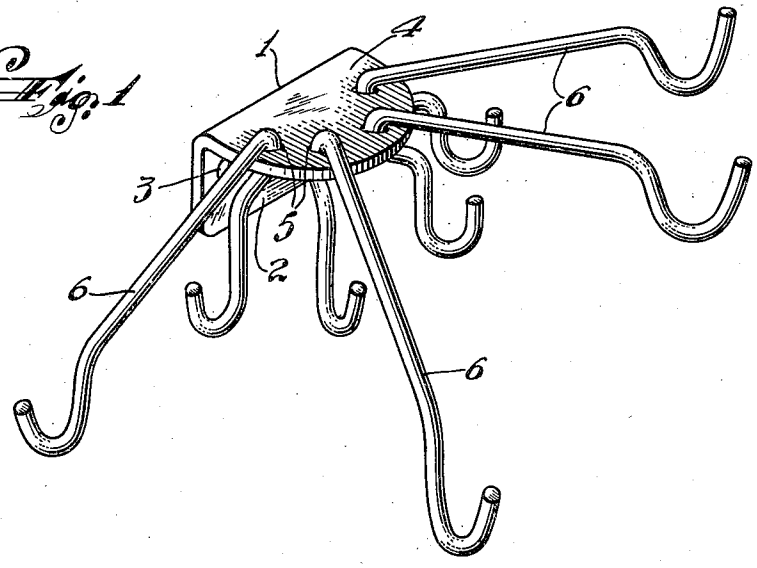


Fig. 2

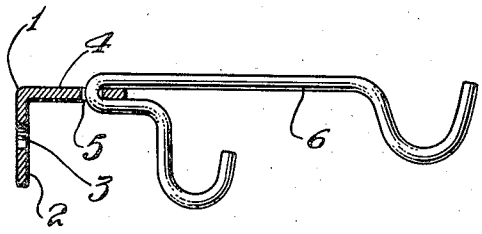


Fig. 3

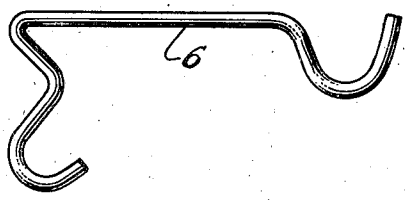
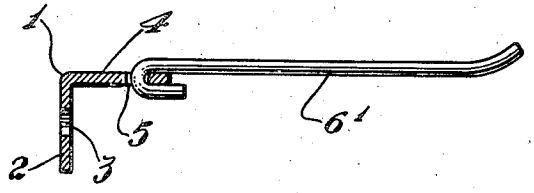


Fig. 4



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HOOK OR HANGER

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1 Claim. (Cl. 211—96)

1

The present invention relates to hooks or hangers of a type adapted for use in hanging a wide variety of objects such as kitchen utensils, small tools, sewing utensils, wardrobe items such as ribbons, belts and ties, and the like. More particularly, the invention relates to a multiple hook or hanger made of a minimum number of individual parts, which is accordingly pleasing in appearance, simple in construction and economical to manufacture, and which is arranged for easy attachment to a wall or door or other suitable support.

Multiple hooks or hangers of known construction generally comprise a bracket having multiple bearing elements and a plurality of individual hooks or hangers arranged on a bolt or pin adapted to be supported between the bearing elements. This construction does not lend itself to providing a hook or hanger of a minimum number of individual parts, or of minimum cost of manufacture.

The invention is characterized by a horizontal plate having perforations inset from its edge with a preformed partially-bent wire threaded in at least some of the perforations whose superposed weight-supporting body portions are connected together by a single circular bend completed after the wire is emplaced in its perforation with such a radius that the parts of the superposed body portions adjacent to the bend grippingly but slidably engage both upper and lower surfaces of the plate for thus holding the body portions firmly and non-tiltingly horizontal even when they are weight-supporting.

Other aspects and objects of the invention will be more fully apparent as the description proceeds in conjunction with the accompanying drawing, wherein:

Figure 1 is a perspective view of a multiple hook or hanger in accordance with the present invention.

Figure 2 is a sectional view through the supporting bracket, showing one of the double hooks or hangers in assembled position.

Figure 3 is a side elevation of a double hook or hanger made from a single piece of wire and preformed as shown prior to insertion in a perforation in the bracket and prior to crimping into final relationship to the bracket arm.

Figure 4 is a view similar to Figure 2 of a modified form of hanger in accordance with the present invention in which each hanger has only a single object supporting element.

Referring to the drawings, the reference numeral 1 indicates a one-piece bracket having a

2

vertical arm 2 provided with a plurality of openings 3 for the reception of holding screws or the like, and having a horizontal arm 4 provided with a plurality of openings 5, each adapted to receive a double hook or hanger 6.

Each hook or hanger 6 is preferably made from a piece of heavy wire and preformed as shown in Figure 3 prior to insertion through an opening 5 of the bracket 1, each such hook being adapted to be crimped into such relationship with the opposite surfaces of the horizontal arm of the bracket and the perforation associated with such hook being spaced sufficiently from the edge of the bracket to enable the uppermost arm of the hook to assume a horizontal or substantially horizontal position.

The wire is preformed into the peculiar shape shown in Fig. 3, whereupon it is threaded into the aperture on the hanger plate. It is to be noted that the bend between the two hook-carrying arms is a single bend of less than a right angle so that after the wire is threaded into the aperture on the hanger-plate, the single bend is merely further bent until both upper and lower hooked arms frictionally engage the upper and lower faces respectively of that rectangular shaped piece of metal left between the aperture of the hanger-plate and its peripheral edge.

The single curved bend not only causes the hook-carrying arms to frictionally engage the hanger-plate, but the second application of bending pressure on the bend of Fig. 3, after the preformed wire is threaded through the aperture of the hanger-plate, causes a certain amount of deformation of the cross-sectional shape of that part of the wire so bent that it, in turn, contributes somewhat further to the frictional contacts that retard too ready pivoting of the hooked arms in the aperture. In other words, when in use, the arms are fairly readily adjustable to any position, but it takes positive force on the part of the operator to so adjust them whereupon they tend to remain in such adjusted position. Moreover, the close frictional contact of those portions of the arms that abut the hanger-plate assure maintenance of the arms in a horizontal position even though there is applied to them a tilting force by the utensil that each arm supports. Indeed, this tilting force is multiplied by the two utensils on each dual arm, yet the hanger-plate does not have to be unduly thickened to assure such horizontalness.

In the preferred form of the invention the hooks or hangers 6 are adapted to swivel on the horizontal bracket arm, and so the crimping op-

eration must be so performed as to enable the hooks or hangers to swivel. The same principles of construction are involved, however, in a multiple hook or hanger in which the hooks or hangers are crimped into fixed or non-swivelling relationship with the bracket arm, and this modification is accordingly considered to be within the scope of the present invention.

In Figure 4 the elements 1 to 5, inclusive, correspond to similarly numbered elements in Figure 2, but the hanger element 6' is of a different form and is provided with only a single object supporting arm.

The present invention lends itself to simple die-forming operations, and that it is not only possible to form the bracket and the hooks or hangers with a minimum number of operations, but that the crimping operations for a plurality of hooks in a single bracket, as well as for a plurality of hook and bracket assemblies, may be performed with a single set of dies, whereby a considerable saving is effected in the cost of assembly.

Although my invention has been described with specific reference to the accompanying drawing, various modifications and substitutions may be made within the spirit and scope of the invention, and I accordingly do not wish to limit my invention, except as defined in the appended claim.

I claim:

A hanger with a horizontal plate having spaced perforations inset from its edge to leave a substantially rectangular cross-sectional area between each perforation and the edge, a preformed partially bent wire threaded in each of some of the perforations having superposed hook-ended body portions of unequal length connected together by a single circular bend completed after the wire is emplaced in its perforation with such a radius that the parts of the superposed body portions adjacent to the bend grippingly but slidably engage both upper and lower surfaces of said rectangle that lies therebetween for thus holding the body portions firmly and non-tiltingly horizontal even when they are weight-supporting.

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