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CLOTHES HANGER ATTACHMENT

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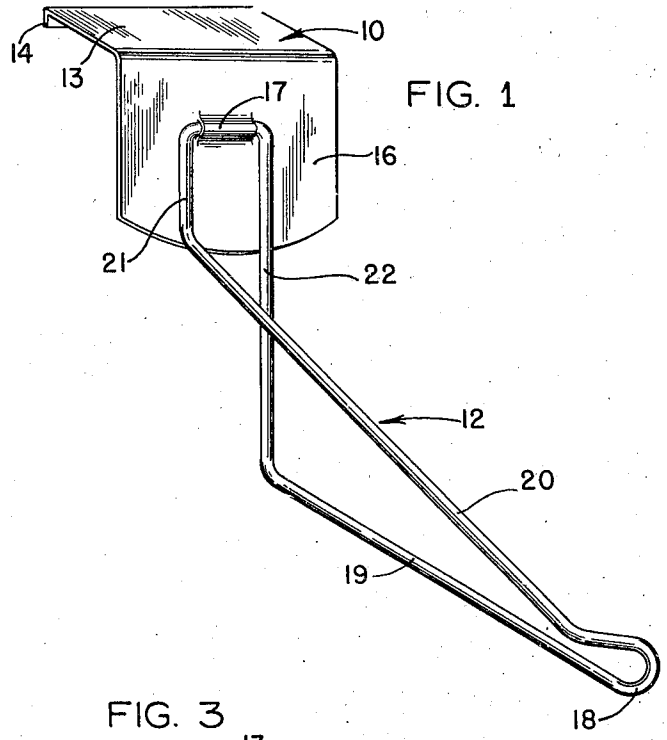


FIG. 1

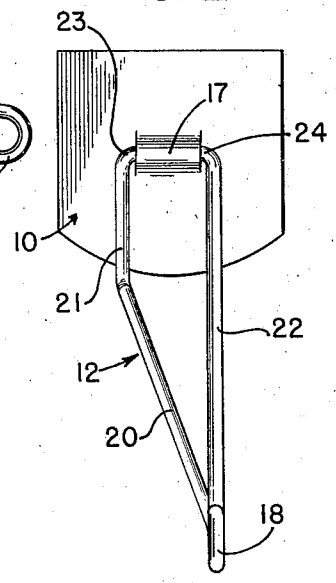


FIG. 2

FIG. 3

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CLOTHES HANGER ATTACHMENT

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5 Claims. (Cl. 211—106)

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This invention relates to clothes hangers and more particularly to a clothes hanger attachment adapted to be detachably secured to a door or wall and to support a plurality of clothes hangers.

Heretofore, there have been devised door clothes hanger attachments which were adapted to be secured on the inner face or from the top edge of a closet door for the purpose of supporting a number of clothes hangers with various articles of clothing thereon in the interior space within the closet that would normally be wasted. While these prior hanger devices have proven useful and satisfactory to a limited extent, they nevertheless possessed certain deficiencies in their construction and operation which made them undesirable from the standpoint of the ultimate consumer. The principal reasons for these deficiencies were inherent in the construction of those prior devices. Because these hanger attachments comprising a bracket member and a bent rod member were adapted to be detachably secured together, the securing means or the parts by which the various separate elements were assembled as a unit were structurally insufficient and inadequate to accomplish their intended purposes.

In some devices, separate bosses or detents were provided to hold the rod member within the bearing element of the door bracket. But it was found in actual operation that upon the rapid closing of a closet door with a full load of clothes suspended on hangers from the attachment, the rod member tended to pivot or lift slightly away from the bracket and the retaining boss, thereby permitting the rod to spill the clothing on the floor.

Others of these prior devices were such that the rod member had the undesirable tendency of pivoting about a vertical axis with respect to the bracket since there was no provision for proper bearing engagement against the door or bracket to prevent such movement. If the door were closed rapidly, the rod member would turn one way or the other so that the clothing supported thereon would be thrown to one side in a position to be caught between the door and the jamb upon full closing of the door. Also in some structures some part of the rod member was adapted to bear against the door panel with the result that additional means such as a pad had to be provided to prevent disfigurement of the door.

Another disadvantage of several forms of these earlier attachments resulted from the type of means by which the bent rod was secured and supported in the bracket. In these forms the ends of the bent rods were held in the bearing

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members formed from the thin-walled bracket, but when a full load of clothes was hung on the rod, the effect of the load being amplified by the leverage of the rod, the bearing members alone were unable to withstand the relatively high pressure and consequently gave way and released the rod member. The full load was put on the bearing members and was not spread over a wider surface or distributed by a proper bearing contact between the rod member and the bracket.

These earlier devices also required additional manufacturing operations which necessarily increased the cost of production of the article which was salable primarily in a low priced field.

It is, therefore, one of the objects of the present invention to provide an improved clothes hanger attachment that is adapted to be detachably secured to a wall or door and to support a plurality of clothes hangers with clothing thereon.

Another object of the present invention is to provide an improved clothes hanger attachment of the foregoing character wherein the rod member is securely but detachably secured to the bracket member, the bearing contact between the rod member and the bracket being such that a full load is not put upon the bearing member and no pivotal movement of the rod member about a vertical axis with respect to the bracket is permitted.

Still another object of the present invention is to provide a strong and efficient door clothes hanger attachment of simple and inexpensive construction which may be readily assembled by the consumer and applied to a door without disfigurement thereof.

Other and further objects and advantages of the present invention will become apparent as this description progresses, reference being had to the accompanying drawing, in which:

Figure 1 is a perspective view of a door clothes hanger attachment comprising a preferred embodiment of my invention;

Fig. 2 is a front elevational view of the same; and

Fig. 3 is a side elevational view of the same.

The door clothes hanger attachment illustrated in the drawing comprises but three main individual elements, i. e., a bracket 10, a thin felt pad 11 and a supporting hanger or rod member 12. The bracket 10 may be formed from a thin section of strong sheet metal and is of such shape and dimensions to permit its securement to the top of a door. It comprises a horizontal portion 13, which is adapted to extend along the top sur-

face of a door, a short depending lip or retaining flange 14 on one side and a relatively long depending plate member 16 on the other which plate member is adapted to lie flush against the door. The thin felt pad 11 is secured to the inner face of the long depending plate member 16 and serves to space the bracket 10 from the door to prevent disfigurement thereof. The longer vertical portion 16 of the bracket 10 is also provided with a horizontally extending bearing or retaining element 17 having openings at each end and which is pushed out from the vertical portion 16 so as to be integral therewith.

The rod member 12 comprises a single length of rod that may be bent upon itself and so shaped as to provide a loop 18 at its outer end, a horizontal bottom arm 19, an upwardly extending diagonal arm 20, a short vertical portion 21 extending upwardly from the diagonal arm 20, a longer vertical portion 22 extending upwardly from the bottom horizontal arm 19 and horizontal end portions 23 and 24 which are inwardly directed from the upper extremities of the vertical portions 21 and 22, respectively. The inturned end portions 23 and 24 are adapted to be received within the respective open ends of the horizontal bearing member 17 so as to pivotally support the rod member 12 from the bracket 10 for movement about a horizontal axis.

As shown more particularly in Fig. 2 of the drawing, the bottom horizontal arm 19 in assembled position on the bracket 10 is disposed substantially at right angles to the door or to the plane of the vertical portion 16 of the bracket 10, while the upwardly extending arm 20 is in a vertical plane that is angular with respect to the door or bracket 10 and with respect to the horizontal arm 19. As a result, the vertical portions 21 and 22 of the rod member 12 in operable position are spaced apart so as to provide elongated and spaced two point bearing contacts between the rod member 12 and the vertical portion 16 of the bracket 10.

However, it is to be noted that before mounting the rod member 12 in operative-secured position on the bracket 10 with its inturned end portions 23 and 24 within the horizontal bearing member 17, the rod member 12 is somewhat different in shape than as above described. In disassembled condition the horizontal bottom arm 19, the diagonal arm 20, the vertical portions 21 and 22 may all be in substantially the same vertical plane so that the ends 23 and 24 instead of being inturned toward each other are in effect outwardly directed away from each other. It is not necessary, however, for the purposes of the present invention that the arms in disassembled position be in the same vertical plane, but it is essential that they be closer together or at a lesser angle with respect to each other than in their secured position.

Therefore, in mounting the rod member 12 in the bracket 10 it is necessary to spread apart the arms 19 and 20 against the inherent spring tension of the rod member 12, which tension tends to restore the various arms to their normal disassembled or unspread positions. The arms 19 and 20 are pulled apart a distance somewhat greater than the width of the bearing member 17 so as to permit the inturned ends 23 and 24 to become aligned with and be received in the open ends of the bearing member 17 when spreading pressure on the arms 19 and 20 is relaxed. Thus under the inherent tension of the rod member 12 its inturned ends 23 and 24 are securely held within

the bearing member 17, and any inadvertent withdrawal or removal therefrom such as would tend to occur when the door is rapidly closed or when the rod member 12 is jarred, is positively prevented. The engagement of the ends 23 and 24 within the bearing member 17 is so secure and positive that their removal therefrom may be accomplished only as a result of the specific intent of the user when disassembly is desired.

It is therefore apparent, in light of the foregoing description of the preferred embodiment of my invention, that a door clothes hanger attachment has been provided by which all the deficiencies and disadvantages of the prior devices have been entirely eliminated. It possesses none of the undesirable characteristics and is of such a simple construction that it lends itself to inexpensive production costs and at the same time it is strong and efficient. While it is also capable of being readily assembled and disassembled by the user, it will remain in assembled and in clothes supporting position under all extreme operating conditions.

The tendency of the rod member 12 to swing or pivot on a vertical axis with respect to the bracket 10 is successfully prevented by the spaced two point bearing engagement of the vertical rod portions 21 and 22 with the vertical face 16 of the bracket 10 in conjunction with the engagement between the inturned rod ends 23 and 24 and the bearing member 17. Also, because of the elongated engagement of the vertical rod portion 21 and of the upper end of the vertical rod portion 22 against an extended area of the vertical face 16 of the bracket 10, the bearing member 17 is relieved of much of its load. Since the rod member 12 is pivotally supported at its upper ends, the effect of a load of clothing suspended on hangers from the horizontal rod arm 19 is to pull the vertical rod portions 21 and 22 about the pivot point 17 and down into engagement against the vertical face 16 of the bracket 10. Thus, the forces exerted against the bearing member 17 are not direct but they are distributed over a wider area of the bracket 10, the bearing member 17 serving to hold the upper ends 23 and 24 of the rod member 12 in against the bracket.

Another advantage resulting from the aforesaid bearing engagement is that the rod member 12 is not caused to contact any part of the door so as to mar the same or require the provision of a pad. Instead, the thrust of the vertical portions 21 and 22 of the rod member 12 as it turns about its pivot point 17 is solely against the bracket face 16 and not against the door therebelow.

Although there has been shown in the drawings and described above one preferred embodiment of my invention, it will be apparent that variations and modifications thereof may be made without departing from the underlying principles of the invention. It is intended, therefore, by the following claims to include within the scope of the invention all such variations and modifications by which substantially the results of the invention may be obtained through use of substantially the same or equivalent means.

I claim:

1. A clothes hanger attachment comprising a bracket adapted to be secured to a door or wall, substantially horizontal bearing means on the outer vertical surface of said bracket, and a hanger member detachably and pivotally supported in said bearing means for pivotal move-

ment substantially on a horizontal axis, said hanger member having a horizontally extending arm, a diagonally and upwardly extending arm integrally connected at its outer end to the outer end of said horizontal arm and extending angularly thereto, a relatively short vertical portion extending upwardly from the inner end of said angularly disposed arm, a relatively long vertical portion extending upwardly from the inner end of said horizontal arm and horizontally directed end portions at the upper extremities of said vertical portions adapted to be received within said horizontal bearing means, said arms comprising spring elements adapted to be moved horizontally and angularly with respect to each other to permit insertion of said horizontal end portions within the horizontal bearing means and to maintain said end portions within said bearing means under the inherent tensional urge of said arms to restore themselves to their normal relative positions.

2. A clothes hanger attachment comprising a bracket adapted to be secured to a door or wall, a substantially horizontal bearing member on the outer vertical surface of said bracket, and a hanger member detachably and pivotally supported in said bearing member for pivotal movement substantially on a horizontal axis, said hanger member having outwardly extending arms angularly disposed relative to each other and integrally connected at their outer ends, vertical portions extending upwardly from the inner ends of said arms and inwardly and horizontally directed end portions at the upper extremities of said vertical portions adapted to be received and maintained within said bearing member, said arms comprising spring elements adapted to be forced apart under tension to permit insertion of the inwardly directed end portions within the bearing member and to maintain said end portions within said bearing member under the inherent tensional urge of said arms to restore themselves to their normal relative positions.

3. A clothes hanger attachment comprising a bracket adapted to be secured to a door or wall, a substantially horizontal bearing member on the outer vertical surface of said bracket, and a hanger member detachably and pivotally supported in said bearing member for pivotal movement substantially on a horizontal axis, said hanger member having a horizontally extending arm, an upwardly and diagonally extending arm integrally connected at its outer end to the outer end of said horizontal arm and extending angularly thereto, a relatively short vertical portion extending upwardly from the inner end of said angularly disposed arm, a relatively long vertical portion extending upwardly from the inner end of said horizontal arm and horizontally and inwardly directed end portions at the upper extremities of said vertical portions adapted to be received and maintained within said bearing member, said arms comprising spring elements adapted to be forced apart under tension to permit insertion of the inwardly directed end portions within the bearing member and to maintain said end portions within said bearing member under the inherent tensional urge of said arms to restore themselves to their normal relative positions.

4. A clothes hanger attachment comprising a bracket adapted to be secured to a door or wall, a substantially horizontal bearing member on the outer vertical surface of said bracket, and a hanger member detachably and pivotally supported in said bearing member for pivotal movement substantially on a horizontal axis, the hanger member having a horizontally extending arm, an upwardly and diagonally extending arm integrally connected at its outer end to the outer end of said horizontal arm and extending angularly thereto, a relatively short vertical portion extending upwardly from the inner end of said angularly disposed arm, a relatively long vertical portion extending upwardly from the inner end of said horizontal arm and horizontally and inwardly directed end portions at the upper extremities of said vertical portions adapted to be received and maintained within said bearing member, said arms and said vertical portions being disposed in substantially the same vertical plane when disengaged from said bearing member but adapted to be forced apart under tension into two converging vertical planes for insertion and maintenance of the inwardly directed end portions within the bearing member.

5. A clothes hanger attachment comprising a bracket adapted to be secured to a door or wall, a substantially horizontal bearing member on the outer vertical surface of said bracket, and a hanger member detachably and pivotally supported in said bearing member for pivotal movement substantially on a horizontal axis, the hanger member having a horizontally extending arm, an upwardly and diagonally extending arm integrally connected at its outer end to the outer end of said horizontal arm and extending angularly thereto, a relatively short vertical portion extending upwardly from the inner end of said angularly disposed arm, a relatively long vertical portion extending upwardly from the inner end of said horizontal arm and horizontally and inwardly directed end portions at the upper extremities of said vertical portions adapted to be received and maintained within said bearing member, said arms comprising spring elements adapted to be forced apart under tension to permit insertion of the inwardly directed end portions within the bearing member and to maintain said end portions within said bearing member under the tensional urge of said spring arms, and said vertical portions being spaced apart and adapted to engage the bracket below said bearing member.

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