

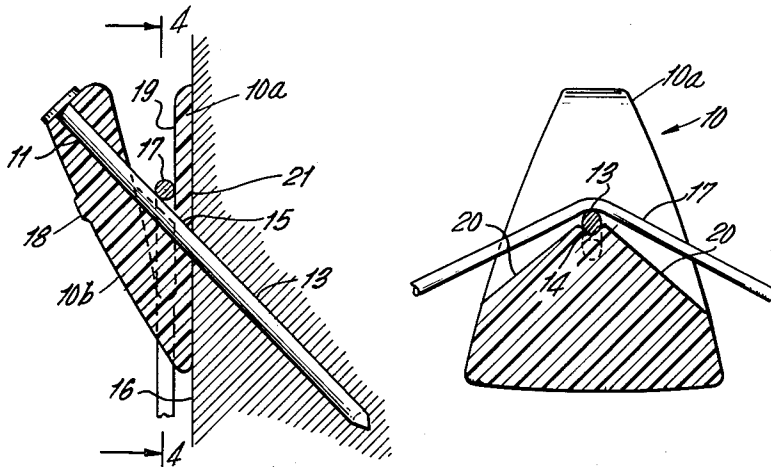
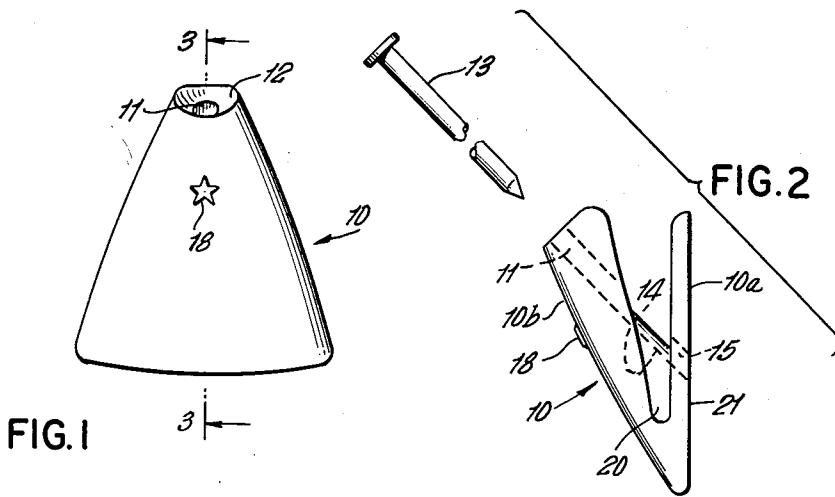
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HANGER

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3,063,669
HANGER

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This invention relates to hangers employed for hanging pictures, mirrors and other heavy objects on walls.

In performing such hanging operations according to customary practice, it has been found that a number of problems have arisen. Thus, it has been found difficult to align properly the nails employed to secure such hangers. Moreover, the supporting members, such as the wire used in conjunction with the picture or other objects to be hung, is subject to slippage and consequent misalignment of such picture or other object supported thereby. Moreover, in some cases the wire will abrade the hanger or produce undesirable concentration of stress thereon.

Furthermore, the affixation of the nail in the hanging operation frequently results in undesirable chipping or other damage to the wall to which the hanger is secured.

Accordingly, it is an object of the present invention to provide an improved hanger which incorporates means for aligning the nail used therewith in a suitable position.

Another object of the invention is to provide a hanger of the character indicated which has improved means for resisting abrasion by wires or other flexible members employed for hanging pictures, mirrors and other heavy objects.

Another object of the invention is to provide a hanger of the character indicated which has means for minimizing the stress concentrations produced by such wires or other flexible members.

Another object of the invention is to provide a hanger of the character indicated which has improved means for reducing the slippage of such wires or other flexible members.

Another object of the invention is to provide a hanger of the character indicated which is adapted to minimize chipping and other damage to the wall to which it is secured.

Another object of the invention is to provide a hanger of the character indicated which has improved means for resisting deformation due to the stresses imposed thereon during operative use.

A further object of the invention is to provide a hanger of the character indicated which is composed of a plastic material.

Yet a further object of the present invention is to provide an improved hanger of the character indicated which is of inherently simple design and which may be economically manufactured.

Other and further objects of the invention will become apparent from the following description as read in connection with the accompanying drawing.

In the drawing:

FIGURE 1 is a front elevational view of a portion of one embodiment of the present invention;

FIGURE 2 is an exploded side view of the said embodiment of the invention;

FIGURE 3 is a cross-sectional view taken about the line 3—3 of FIGURE 1 and depicting said embodiment of the invention in operative position; and

FIGURE 4 is a cross-sectional view taken about the line 4—4 of FIGURE 3.

As shown in the drawing, one form of the instant invention comprises a plastic hanger which is abutable against a wall so as to reduce chipping thereof during affixation of the hanger upon the wall surface. Thus, as appears in FIGURE 1 of the drawing, this form of the

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invention includes a hanger, generally designated by the numeral 10 and composed of a plastic or other elastomeric material. This hanger is provided with an aperture 11 and an inclined marginal perimeter 12 surrounding said aperture 11, said marginal perimeter 12 serving as a seat for the nail hereinafter referred to.

As appears in FIGURE 2, a nail 13 of conventional form may be employed with the hanger 10, the said nail being receivable in the aperture 11. This aperture 11 is inclined at a predetermined angle deemed suitable for hanging purposes.

As may be seen in FIGURE 2, the hanger 10 is of generally V-shaped conformation, one leg 10a of said V-shaped conformation being disposable in vertical position to conform with the vertical disposition of a wall, the other leg 10b of said conformation being inclined in a direction generally corresponding to the inclination of said nail.

The aperture 11 is aligned with a channel 14 communicating between the legs 10a and 10b, the said channel 14 also being aligned with an aperture 15 formed in the leg 10a.

When the nail 13 is inserted into the apertures 11 and 15, as well as the channel 14, and driven into a wall 16 so as to dispose the hanger for operative use, as appears in FIGURE 3, a wire 17 or other flexible member attached to a picture or other heavy object in the customary manner may be disposed upon the nail in the position depicted in the last-mentioned figure. The position of the wire 17 upon the nail 13 may be advantageously noted by observing the position of the mark or indicia 18 provided upon the external surface of the leg 10b. This mark or indicia 18 is preferably in the form of a boss having a star-shaped conformation, the center of said boss being at an elevation corresponding with the position of the said wire 17 upon the nail 13.

It will be noted that when the wire 17 is in the position depicted in FIGURE 3, it tends to be wedged against the outer surface 19 of the leg 10a. Since the surface so presented is that of the plastic material of which the hanger is composed, a somewhat resilient gripping action is exerted between said surface 19 and the wire 17, thereby preventing undesirable slippage of said wire and consequent misalignment of any object attached thereto.

It will also be seen in FIGURE 4 that the said wire rests solely upon the nail 13 and the inclined surfaces 20 of the hanger 10 do not contact the wire 17. Instead, these surfaces 20 define that portion of the hanger 10 which is disposed between its legs 10a and 10b and which includes the channel 14, the said portion of the hanger serving as a sturdy base for the channel 14. However, since the wire 17 makes no contact with the inclined surfaces 20, the possibility of abrasion thereof by the wire 17 is eliminated. Any tendency of the wire to cut or extrude the plastic material is similarly eliminated.

It will also be seen that since the hanger 10 is composed of a plastic material and since the inward face 21 of the leg 10a presents a planar surface and of a generally triangular conformation and abutable against the surface of the wall 16, any tendency of the nail to chip or otherwise damage the said wall 16 will be resisted by said face 21 when in abutment with the wall 16. This resistance will also be augmented by the yieldability of the plastic material which will tend to support the wall surface against deformation radial of the opening formed by the nail 13.

It will also be seen that the entire length of the nail 13 which protruded from the wall during operative use is supported by the hanger and that the inclination of the nail is determined by the inclination of the apertures 11 and 15 and the channel 14 formed in the hanger. Hence, the nail is automatically inclined at the desired angle and

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maintained at such angular inclination. Moreover, since the wire 17 is disposed against the surface 19 of the leg 10a and at a short distance from the wall 16, its moment arm with respect to said surface 19, as well as with respect to the wall 16, is quite small, thereby minimizing any tendency towards bending the nail. Thus, the hanger and nail are seen to be of inherently strong design.

The embodiment of the invention illustrated and described herein above has been selected for the purpose of clearly setting forth the principles involved. It will be apparent, however, that the present invention is susceptible to being modified in respect to details of construction, combination and arrangement of parts which may be resorted to without departure from the spirit and scope of the invention as claimed.

I claim:

1. A hanger comprising a member having a pair of legs in V-shaped conformation, one of said legs being disposed vertically and the other being inclined relative thereto, said vertically disposed leg having an outer planar surface for abutment against a wall, said legs having aligned apertures, means defining a channel extending between said apertures for receiving a nail inserted in said apertures, said channel being inclined relative to the inner surface of said vertically disposed leg and including an open recessed portion extending between the confronting surfaces of said legs for exposing the nail to support a flexible member.

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2. A hanger as set forth in claim 1, said member having lateral surfaces inclined outwardly and downwardly from said open recessed portion.

3. A hanger as set forth in claim 1, at least the inner surface of said vertically disposed leg being formed of plastic material to resiliently grip such flexible member.

4. A hanger comprising a member having a pair of legs in V-shaped conformation, one of said legs being disposed vertically and the other being inclined relative thereto, said vertically disposed legs having an outer planar surface for abutment against a wall, said legs having aligned apertures, means defining a channel extending between said apertures, a nail inserted in said apertures and seated in said channel, said channel being inclined relative to the inner surface of said vertically disposed leg and including an open recessed portion extending between the confronting surfaces of said legs for exposing the nail to support a flexible member.

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