July 26, 1960 E. E. FRANZ ET AL 2,946,157

CLIP FOR BATHROOM FIXTURES

Filed Dec. 8, 1958

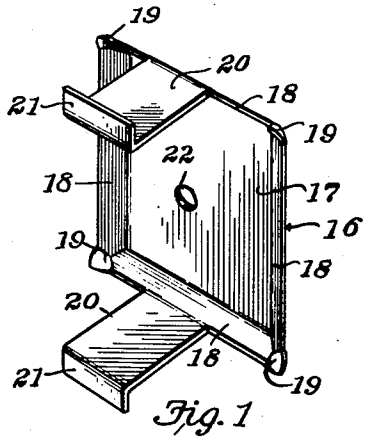


Fig. 1

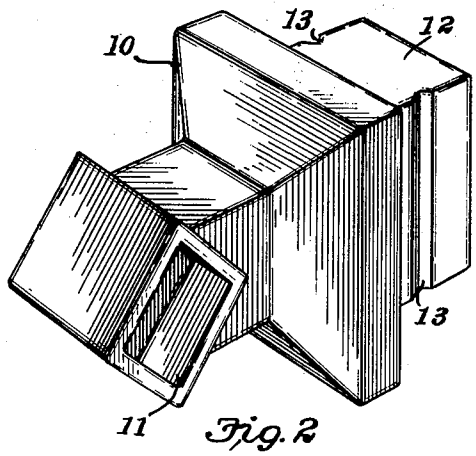


Fig. 2

Fig. 3

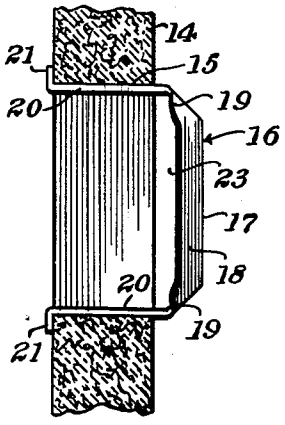
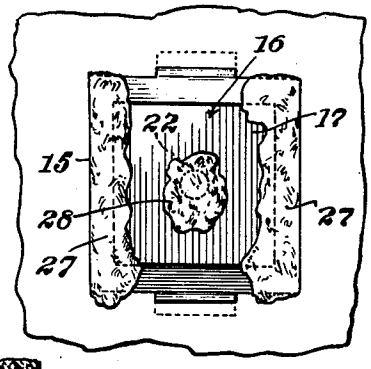


Fig. 5



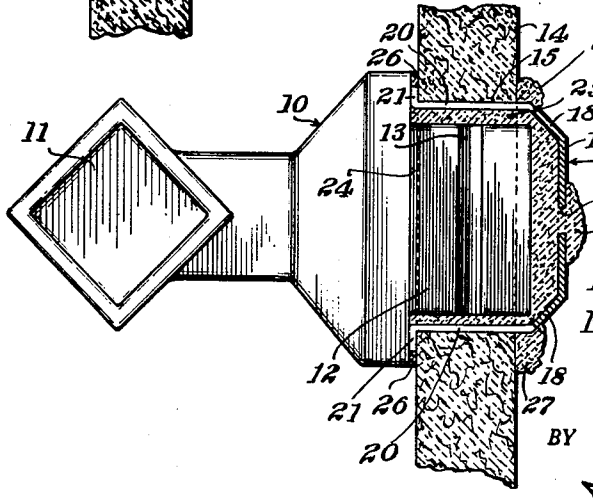


Fig. 4

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CLIP FOR BATHROOM FIXTURES

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5 Claims. (Cl. 50—22)

The invention relates to clips for attaching bathroom fixtures, and more particularly to a plaster retaining clip for insertion into an opening in a tile or similar wall forming a pocket for the retention of plaster of Paris around the conventional lug of a bathroom fixture.

Under present practice, the brackets for towel bars, soap dishes, tumbler holders and the like are formed of ceramic material provided with a rearwardly extending lug. A hole, of larger size than the cross-sectional area of this lug, is cut into the wall at the point where it is desired to attach the bracket. Plaster of Paris is then applied to all sides of the bracket lug and the lug is pressed into the hole in the wall.

Considerable difficulty has been experienced in securely attaching the fixture brackets in this manner, as it is necessary that the bracket be held against the wall under pressure until the plaster of Paris sets, as otherwise the bracket will soon become loose, requiring the removal of the bracket and resetting the same with fresh plaster of Paris.

Even where great care is exercised in attaching the fixture brackets in this manner, it frequently happens that they are not rigidly attached to the wall. The reason for this is because there is nothing to retain the plaster of Paris around the lug of the fixture bracket except the side walls of the hole in the wall.

The present invention contemplates the provision of a plaster retaining clip adapted to be inserted through the usual hole which is cut through the wall, for retaining the plaster of Paris therein and causing it to be packed firmly around the lug within said hole, so as to overcome the above-named difficulties and disadvantages of present practice.

Another object of the invention is to provide a clip of this character formed of sheet metal or other suitable sheet material.

A further object of the invention is to provide a clip of the type referred to, which is in the form of a shallow cup or pan having forwardly disposed fingers for engagement with opposite walls of the hole in the wall, so as to position the cup or pan inwardly of the hole in the wall, to substantially close the inner end of said hole and provide a pocket for retaining the plaster around the lug of the fixture bracket.

A still further object of the invention is to provide such a clip in which a slight space is provided between the peripheral portion of the clip and the inner end of the hole in the wall, whereby some of the plaster will be extruded through this space onto the rear surface of the wall, forming an anchor for the bracket lug which is embedded in the plaster within said hole in the wall.

It is also an object of the invention to provide a clip of the character referred to in which an aperture is formed in the clip to permit additional plaster to be extruded therethrough to provide an additional anchor therefor.

The above and other objects, apparent from the drawing and following description, may be attained, the above

described difficulties overcome and the advantages and results obtained, by the apparatus, construction, arrangement and combinations, subcombinations and parts which comprise the present invention, a preferred embodiment of which, illustrative of the best mode in which applicants have contemplated applying the principle, being set forth in detail in the following description and illustrated in the accompanying drawing.

In general terms, the invention may be briefly described as comprising a clip formed of sheet metal or other suitable material, in the shape of a substantially rectangular pan or shallow cup, having forwardly or outwardly disposed fingers with oppositely bent terminal ends.

The clip to which the invention pertains is adapted to be inserted through the conventional hole cut through a tile or similar wall of a bathroom or the like, and disposed inwardly of the inner surface of the wall. The fingers upon the clip contact opposite sides of the hole in the wall, the oppositely bent terminal ends thereof contacting the outer or room surface of the wall and limiting inward movement of the pan or shallow cup.

The perimeter of the pan portion of the clip is slightly smaller than the hole in the wall, so as to permit plaster of Paris to be extruded therebetween, and the corners of the pan are preferably bent outward to increase the amount of plaster extruded at these points. An aperture is preferably formed in the central portion of the pan, through which some of the plaster may also be extruded.

The improved clip is designed for attaching the conventional ceramic or similar fixture bracket having a rearwardly extending lug thereon for insertion into a hole which is cut into a tile or other wall and embedding in plaster of Paris therein.

In use, the clip is inserted through the hole in the wall, and plaster of Paris is applied, by a trowel or the like, to all surfaces of the rearwardly extending lug of the fixture bracket. The lug, with plaster of Paris thereon, is then inserted into the hole in the wall and the fixture bracket is pressed firmly toward the wall surface.

This causes the lug to become firmly embedded in the plaster of Paris within the pocket thus formed, some of the surplus plaster being extruded around the perimeter of the pan and upon the rear or inner surfaces of the wall and pan, forming an anchor to hold the entire assembly firmly in position, while some of the plaster is extruded through the center aperture in the pan forming an additional anchor.

Having thus briefly described the nature and construction of the invention and its use, reference is now made to the accompanying drawing illustrating a preferred embodiment of the invention, in which;

Fig. 1 is a detached perspective view of the improved clip to which the invention pertains;

Fig. 2 is a detached perspective view of a conventional ceramic fixture bracket adapted to be secured to a wall by means of the improved clip;

Fig. 3 is a vertical transverse section through a wall having a hole cut therein for attachment of a conventional fixture bracket, showing the clip to which the invention pertains positioned through said hole in the wall preparatory to insertion of the lug of the fixture bracket;

Fig. 4 is a vertical transverse section through a wall with the improved clip positioned through the hole in the wall and a conventional fixture bracket attached to the wall, the lug of the bracket being shown embedded in plaster firmly packed within said hole in the wall and retained therein by the clip; and

Fig. 5 is an elevation of the rear or inner surfaces of the wall and clip, showing the manner in which surplus

plaster is extruded around and through the clip to form anchors.

Referring now more particularly to the embodiment of the invention illustrated in the accompanying drawing, in which similar reference characters refer to similar parts throughout the several views, a conventional ceramic towel bar fixture bracket is indicated generally at **10**.

This bracket has the usual laterally disposed socket **11** therein to receive one end of a towel bar in usual and well known manner, and is provided with the conventional rearwardly disposed lug **12** having the usual grooves **13** upon opposite sides thereof.

In usual practice, in order to attach the fixture bracket **10** to a tile or similar wall **14**, a hole **15** of larger size than the lug **12** is cut through the wall. Plaster of Paris is applied to all surfaces of the lug **12**, by a trowel or the like, and the lug with the plaster thereon is then inserted into the hole in the wall and the bracket pressed against the outer or room surface of the wall. This pressure must be maintained until the plaster has completely set.

Otherwise, the brackets frequently become loose after a short time. Even where extreme care is used in attaching such fixture brackets to walls under present practice, it often happens that the brackets are not firmly secured in place. This is because the hole **15** in the wall is open at its inner or rear end so that there is nothing to hold the soft plaster therein, and as a consequence, instead of being compressed between the lug **12** and the walls of the hole **15**, a part of the soft wet plaster may be pushed entirely through the hole in the wall and may drop down on the inner side of the wall.

In order to overcome these difficulties and disadvantages, the plaster-retaining clip indicated generally at **16** has been provided. This clip may be formed of sheet metal or other suitable material, and comprises the substantially rectangular pan, or shallow cup portion **17**, having the upturned, angular rim flanges **18** around its perimeter, the corners **19** of which are preferably angularly bent as best shown in Figs. 1 and 3.

Forwardly disposed fingers **20** are formed at two opposite edges of the pan **17**, the terminal ends thereof being oppositely bent as at **41**. One or more apertures may be formed in the pan **17** for a purpose to be later explained. As shown in Figs. 1, 2 and 5, a central aperture **22** is formed in the pan.

In using the clip **16** to attach a fixture bracket **10** to a wall, a hole **15** of the same size and shape as in conventional practice, is cut through the wall **14** as shown in Figs. 3, 4 and 5. The clip **16** is then inserted through this hole in the wall, as best shown in Fig. 3, with the fingers **20** thereof in frictional contact with the upper and lower sides of the hole **15** and the out-turned terminal ends **21** of the fingers in contact with the outer or room surface of the wall **14**.

This positions the pan portion **17** of the clip spaced slightly beyond the inner surface of the wall **14** as shown in Fig. 3, leaving a slight space between the margin of the pan **17** and the inner surface of the wall **14**, as indicated at **23** in Figs. 3 and 5.

Plaster of Paris, or the like, is then applied heavily to all surfaces of the lug **12** of the fixture bracket **10**, as by a trowel, and the plaster-coated lug **12** is inserted into the hole **15** in the wall **14**, the fixture bracket being pressed toward the wall **14** to the position best shown in Fig. 4, the rear face **24** of the bracket contacting the out-turned terminal ends **21** of the clip fingers **20**.

This causes the soft, wet plaster as shown at **25** to be pressed tightly within the hole **15**, around the lug **12** of the bracket, and within the pan **17** of the clip, which retains the plaster around the lug and within the hole in the wall, so that the bracket is firmly attached to the wall.

A small surplus amount of plaster will be squeezed out of the front of the hole **15** in the wall, filling the space between the rear surface **24** of the bracket and the front surface of the wall **14**, as indicated at **26** in Fig. 4. Additional surplus plaster is squeezed out of the rear end of the hole **15**, around the margin of the pan **17**, as shown at **27** in Figs. 4 and 5, and a small amount of surplus plaster is squeezed rearwardly through the aperture **22** in the pan, as shown at **28**.

When the plaster sets, these surplus portions thereof which have been squeezed out of the hole **15** in the wall, form anchors to firmly secure the bracket to the wall. The plaster of Paris will also fill the vertical grooves **13** in the lug **12** of the fixture bracket, further assisting in retaining the bracket firmly in position upon the wall.

From the above it will be obvious that a simple, inexpensive and efficient means is provided for firmly and permanently attaching ceramic fixture brackets and the like to walls formed of tiles or similar material, the clip embodying the invention retaining the wet plaster in the hole in the wall, so that it will be compacted under pressure around the lug of the bracket, within said hole in the wall, while any surplus plaster will be squeezed out around the margin of the clip, and through the aperture therein, forming anchors to more securely attach the fixture bracket to the wall.

In the foregoing description, certain terms have been used for brevity, clearness and understanding, but no unnecessary limitations are to be implied therefrom beyond the requirements of the prior art, because such words are used for descriptive purposes herein and are intended to be broadly construed.

Moreover, the embodiments of the improved construction illustrated and described herein are by way of example, and the scope of the present invention is not limited to the exact details of construction.

Having now described the invention or discovery, the construction, the operation, and use of preferred embodiments thereof, and the advantageous new and useful results obtained thereby; the new and useful construction, and reasonable mechanical equivalents thereof obvious to those skilled in the art, are set forth in the appended claims.

We claim:

1. A plaster-retaining clip for attaching a fixture bracket having a rearwardly extending lug to a wall having a rectangular hole therein to receive said lug, said clip comprising a substantially rectangular pan portion of smaller size than the hole in the wall, said pan having an angular continuous, unbroken marginal flange thereon, and forwardly disposed fingers at opposite marginal edges of the pan and terminating in oppositely disposed angular ends, said fingers being so spaced as to frictionally fit within opposite sides of the hole in the wall and said angular ends of the fingers being so located that they will contact the front surface of the wall to position the pan spaced rearwardly from the rear surface of the wall so as to retain plaster within the hole in the wall around the lug of the bracket, whereby surplus plaster will be squeezed out between the marginal flange of the pan and the rear surface of the wall forming an anchor to secure to the clip to the wall.

2. A plaster-retaining clip for attaching a fixture bracket having a rearwardly extending lug to a wall having a rectangular hole therein to receive said lug, said clip comprising a substantially rectangular pan portion of smaller size than the hole in the wall, said pan having an angular continuous, unbroken marginal flange thereon, the corners of said marginal flange being forwardly bent, and forwardly disposed fingers at opposite marginal edges of the pan and terminating in oppositely disposed angular ends, said fingers being so spaced as to frictionally fit within opposite sides of the hole in the wall and said angular ends of the fingers being so located that they will contact the front surface of the wall to position the pan spaced rearwardly from the rear surface of the wall so as to retain plaster within the hole in the wall around the lug of the bracket, whereby surplus plaster will be squeezed out between the marginal flange of the pan and

the rear surface of the wall forming an anchor to secure the clip to the wall.

3. A plaster-retaining clip for attaching a fixture bracket having a rearwardly extending lug to a wall having a hole therein to receive said lug, said clip comprising a pan portion of smaller size than the hole in the wall, an outwardly angled, continuous, unbroken marginal flange on said pan, and forwardly disposed fingers at opposite marginal edges of the pan and terminating in oppositely disposed angular ends, said fingers being so spaced as to frictionally fit within opposite sides of the hole in the wall and said angular ends of the fingers being so located that they will contact the front surface of the wall to position the pan spaced rearwardly from the rear surface of the wall so as to retain plaster within the hole in the wall around the lug of the bracket, and to cause surplus plaster to be squeezed out of the hole in the wall around the marginal edges of the pan forming an anchor to secure the clip to the wall.

4. A plaster-retaining clip for attaching a fixture bracket having a rearwardly extending lug to a wall having a hole therein to receive said lug, said clip comprising a pan portion of smaller size than the hole in the wall and having an aperture therein, an outwardly angled, continuous, unbroken marginal flange on the pan, and forwardly disposed fingers at opposite marginal edges of the pan and terminating in oppositely disposed angular ends, said fingers being so spaced as to frictionally fit within opposite sides of the hole in the wall and said angular ends of the fingers being so located that they will contact

the front surface of the wall to position the pan spaced rearwardly from the rear surface of the wall so as to retain plaster within the hole in the wall around the lug of the bracket, and to cause surplus plaster to be squeezed out of the hole in the wall through said aperture in the pan and between the marginal flange of the pan and the rear surface of the wall forming anchors for securing the clip and the fixture bracket to the wall.

5. In combination with a wall having an opening therein, a fixture bracket having a rearwardly extending lug, a plaster-retaining clip for attaching the fixture bracket to the wall, said clip comprising a substantially rectangular pan portion having an angular, continuous, unbroken marginal flange thereon, forwardly disposed fingers at opposite marginal edges of the pan and located through the opening in the wall, angular ends upon said fingers contacting the front surface of the wall, said pan being spaced rearwardly from the rear surface of the wall, said stud of the fixture bracket being positioned in the opening in the wall, and plaster filling said opening around said stud and extruded out between the marginal flange of the clip and the rear surface of the wall forming an anchor for securing the clip to the wall.

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