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BATHTUB SUPPORT

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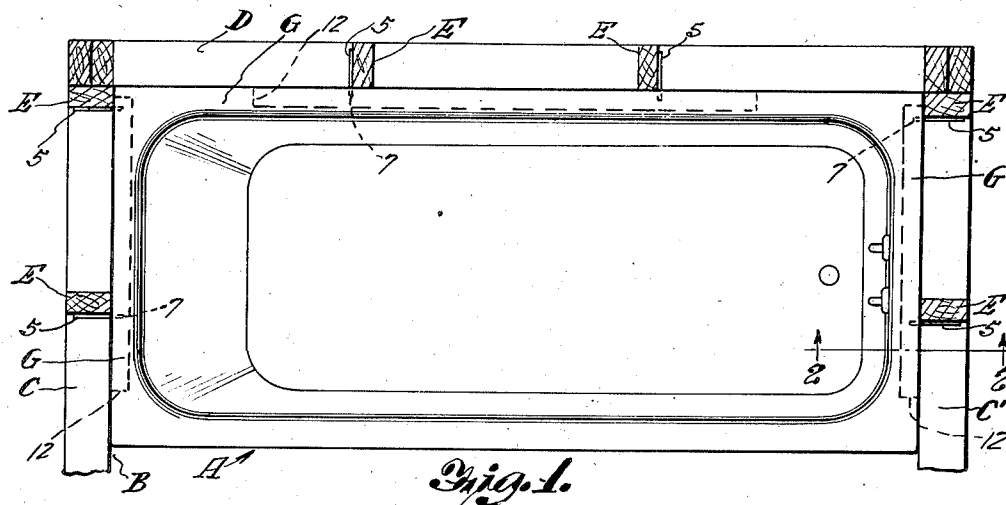


Fig. 1.

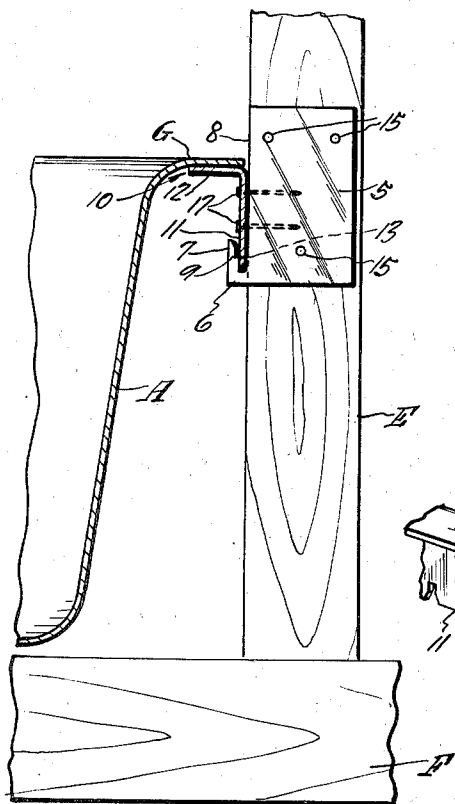


Fig. 2.

Fig. 4.

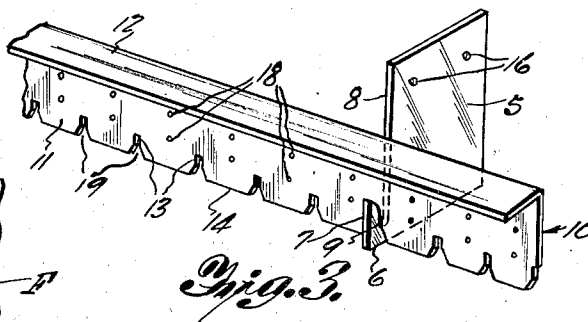
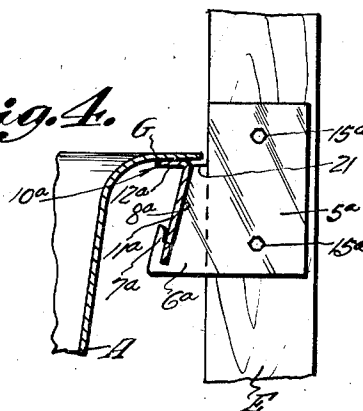


Fig. 3.

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BATHTUB SUPPORT

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3 Claims. (Cl. 4—173)

This invention relates to improvements in bathtub supports.

In the installation of so called "built-in" bathtubs where the back and one or both ends are set in the wall it has been the practice hitherto to support the tub by its base on the bathroom floor. Inasmuch as the joists for the floor are set on edge the natural shrinking of the wood acting as it does to decrease the width of the joists causes a gradual settling of the floor which in time allows the tub to settle pulling its edges from the wall and causing the formation of very unsightly and unsanitary cracks between the wall finish and the tub edges. This is a common sight in even relatively new houses, and could be overcome absolutely by the supporting of the tub from the wall studs clear of the floor and whereby the lateral shrinkage of the wood would have no effect on the relative positions of the wall and the tub.

It is the main object of this invention therefore to provide in a simple, inexpensive and conveniently used form a means whereby a built-in bathtub may be supported by its edges on the wall of the bathroom in such manner that the tub will be rigidly and substantially supported in place without resting on the floor at any point and will thus be entirely independent of any settling of the floor.

Another object is to provide a support of this kind which includes hangers for mounting on the wall studs and support bars or rests which are attached to the hangers and, engaging under the edges of the tub, act to support the same as desired, the said bars being of any suitable length and affording a wide contact or bearing surface which absolutely prevents any settling of the tub. This wide bearing surface is of particular importance and advantage in the case of the pressed steel tubs now being used for the reason that any relatively narrow or "sharp" bearing surface would have a tendency to bend and even puncture the relatively thin material of such a tub and would thus allow the tub to settle even though supported from the wall. Of course this could not happen in the use of this invention since the weight is distributed evenly along the entire length of the support bars.

Another object is to provide a tub supporting means of this kind which includes hangers for mounting on the studs, hooks extended at one edge of the hangers, and support bars of right-angled cross section having one web slotted at equally spaced intervals to engage the said hooks whereby the support bar may be secured to and

supported on the hangers, the said notches being so spaced that they will correspond to the usual spacing of the wall studs and no matter what the spacing of the studs the notches will properly fit and engage the hooks of the hangers.

Another object is to provide a tub supporting assembly of this kind wherein the hangers have an inclined and extended portion which will hold the support bar at an inclined position in such manner that the weight of the tub on the support bar will tend to lock the same in place and hold it back against the wall.

With these and other objects in view the invention resides in the novel construction and arrangement of parts as hereinafter fully set forth and claimed, reference being had to the accompanying drawing as showing certain preferred embodiments of my invention for purposes of exemplification.

In the drawing:

Figure 1 is a plan view of a built-in bathtub supported by my improved supporting means, the adjacent walls being shown in cross section.

Figure 2 is an enlarged vertical section along the line 2—2 in Figure 1.

Figure 3 is a perspective view of one hanger and supporting bar in engaged relation.

Figure 4 is a fragmental view similar to Figure 2 showing a modified form of hanger and bar.

Referring now with more particularity to the drawing the reference character A designates a bathtub of conventional form and adapted for mounting in the recess or alcove B. This recess B has the end walls C—C' and the rear or inner wall D, these walls being formed in usual manner of a framework made up of spaced studs E set up vertically and secured to the floor joists one of which is shown at F. The tub A has the usual end and rear flanges G turned outwardly and horizontally and adapted to fit nicely into the recess formed by the walls C—C' and D.

The foregoing parts and their arrangement are conventional and in carrying out my invention for use therewith I provide first a hanger, hanger plate or bracket 5 formed of heavy sheet material such as metal and a generally rectangular shape in width equal to or less than the width of the studs E. At the intended lower frontal portions of this rectangular plate 5 I provide a projecting toe or corner 6 disposed coplanar with the plate as a whole and extended upwardly in the form of a hook 7 spaced from the frontal edge 8 of the plate forming a narrow cleft 9. For use in engagement with the hanger 5 thus formed I provide a support bar, beam or member 10 of

elongated form made up from heavy sheet metal or the like bent along a longitudinal line forming a member having a right-angled cross section with a mounting web or flange 11 and supporting web or flange 12. The former web 11 has a plurality of evenly spaced notches 13 cut in its free or lower edge 14 and any one of these notches being adapted to receive and straddle the extended corners 6 of the hangers 5 while the web above the notch slips into the cleft 9 behind the hook 7 as shown in Figure 3. In this manner the support bar 10 is held against the frontal edge 8 of the hanger 5 with the mounting web 11 resting against the said frontal edge as shown.

In actual use for each installation a number of the hangers 5 are provided together with several lengths of the bar 10 and then a pair of hangers is mounted on the studs E at the back and both end walls of the recess B as by nails or screws 15 driven through holes 16 in the hangers and into the studs as shown in Figure 1. These hangers are of course located with the hooks 7 turned forwardly or toward the tub A and are located below the level of the tub rim G as it stands in the recess. Three lengths of the bar 10 are then put into use by hooking the notched webs 11 over the hooks 7 so that one length of bar rests under each of the back and two end rims of the tub with the webs 11 turned outwardly under the tub rims in position to engage and support the tub by its rim as clearly shown. The hangers 5 are located at the proper height so that when the bars 10 are put in place the tub will be supported clear of the floor line or joists F and to complete the installation the bars are themselves secured to the studs E by nails or screws 17 driven through apertures 18 in the webs 11 and into the edges of the studs. In this manner the tub A is supported wholly from the wall studs E and no settling of the tub can ever occur. Since the bars 10 as used must span at least the space between adjacent studs and actually will extend even further as shown in Figure 1 the weight of the tub is carried over a relatively long bearing surface along almost the entire length of the tub rims and no settling can occur due to settling of the tub itself down over its supports.

The notches 13 in the bars 10 are located in evenly spaced relation corresponding to the variations in spacing of wall studs in general practice so that no matter what the actual spacing of the studs may be some of the notches will correspond to the position of the hooks 7 of the hanger secured to the faces of the studs. This spacing generally varies in multiples of two inches and the notches 13 would thus be two inches apart. To facilitate the fitting of the notches over the hooked corners of the hangers the lower extremities of the notches are flared out as indicated at 19 and of course the actual width of both the clefts 9 and notches 13 is but slightly greater than the thickness of the material from which the hangers and bars are formed so that these parts fit together relatively tightly. The apertures 18 are located in vertically spaced and aligned pairs intermediate the notches 13 so that they will line up with the frontal edges of the studs E for nailing thereto.

In Figure 4 is shown a modified form of hanger 5a where the toe or corner 6a is enlarged and extended and the frontal edge 8a of the hanger extends upwardly from the hook 7a at an inclination sloping upwardly and back toward the rear edge 20 of the hanger. This frontal edge 8a is thus disposed forwardly of the stud E and is cut back sharply at 21 some distance above the hook 7a just below the level of the tub rim G so that the remainder of the hanger rests flush with the stud and will not interfere with any wall finish applied thereto. The support bar 10a has its supporting web 12a turned at somewhat less than a right angle to the mounting web 11a so that while the latter lays back at an incline against the hanger the former will stand out horizontally beneath the tub rim G. This inclination of the bar 10a results in the weight of the tub being supported rearwardly of the hook 7a and acting to press the bar back against the hanger as clearly shown in Figure 4. Any tendency of the bar to swing outward from the stud is thus overcome and the bar need not be nailed in place. In lieu of the nails 15 holding the hangers in place cap screws 15a may be used as in Figure 4.

While I have herein set forth certain preferred embodiments of my invention it is understood that I may vary from the same in minor structural details so as best to provide a practical device for the purposes intended, not departing from the spirit of the invention and within the scope of the appended claims.

I claim:

1. In a supporting means for hanging a tub on wall studs, hangers secured to the studs, toes extended from the hangers, hooks turned upwardly from the toes and spaced from the adjacent edges of the hangers forming clefts behind the hooks, and support bars hung on the said hooks and secured to the studs.

2. In a supporting means for hanging a tub on wall studs, hangers secured to the studs, toes extended from the hangers, hooks turned upwardly from the toes and spaced from the adjacent edges of the hangers forming clefts behind the hooks, support bars hung on the said hooks and secured to the studs, the said support bars being of right-angled cross section having one web notched to slip into the clefts behind the hooks on the hangers, and the other web being turned outwardly and engaging the tub.

3. In a supporting means for hanging a tub on wall studs, hangers secured to the studs, toes extended from the hangers, hooks turned upwardly from the toes and spaced from the adjacent edges of the hangers forming clefts behind the hooks, support bars hung on the said hooks and secured to the studs, the said support bars being of right-angled cross section having one web notched to slip into the clefts behind the hooks on the hangers, the other web being turned outwardly and engaging the tub, and the said toes of the hangers having inclined outer edges above the hooks whereby the support bars will lean back towards their upper edges toward the studs.

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