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SEAL FOR BATHTUB BASES

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Fig. 1

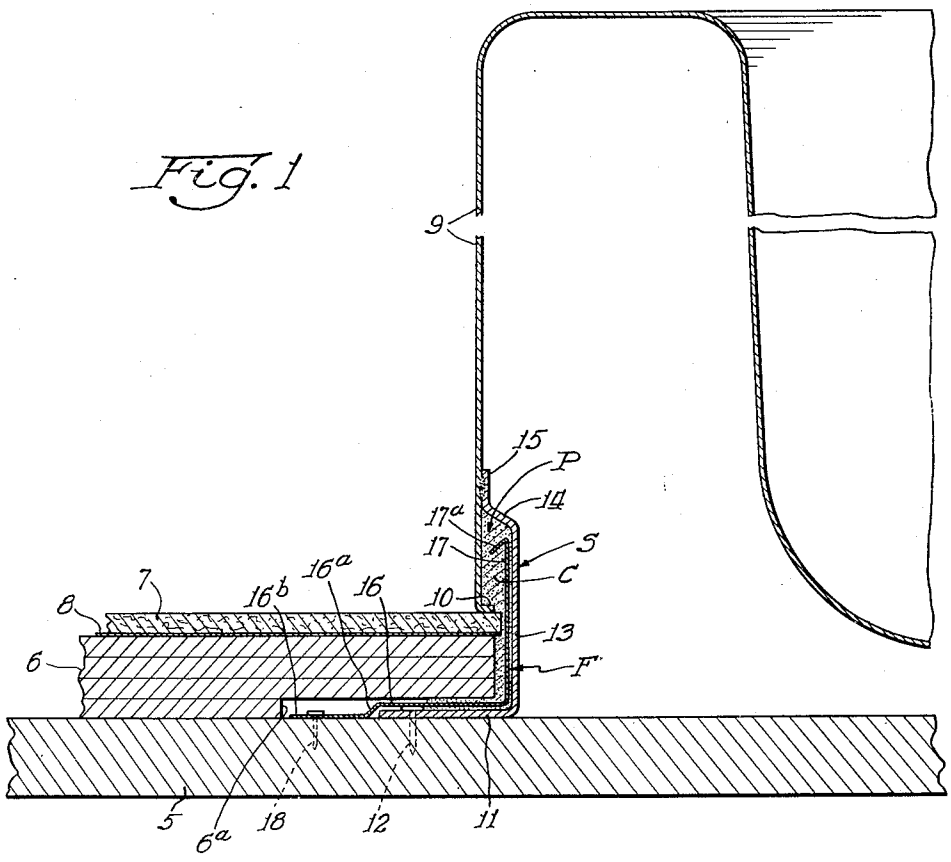
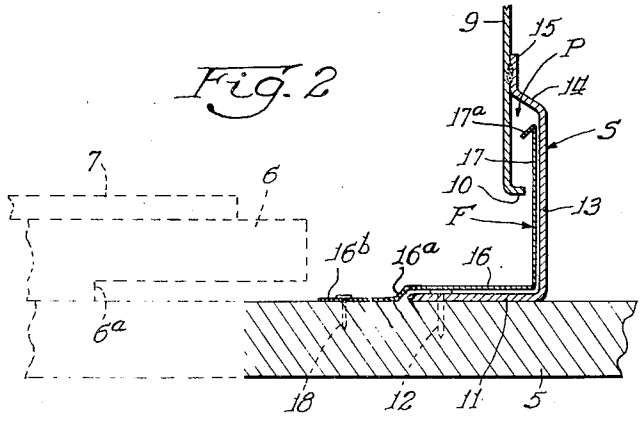


Fig. 2



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SEAL FOR BATHTUB BASES

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5 Claims. (Cl. 4—173)

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The present invention relates generally to bathtubs and the like, and it has especial reference to means for sealing the base of the tub to the floor structure.

It is one of the principal objects of this invention to simplify the construction of a bathtub seal such as contemplated herein and to improve the efficiency of such seal.

Another principal object of the present invention is to provide novel sealing means for a bathtub base, which means are capable of being easily and quickly installed between adjoining portions of the tub and the floor structure, the construction and arrangement of said sealing means being such that when the installation has been completed the seal will be obscured from view.

A further object hereof is to provide bathtub sealing means of a character which will prevent the formation of an unsightly crack or opening between the tub and the floor in the event there is any shrinkage of the flooring which would tend to draw the floor boards or tiles in a direction away from the tub base.

Still another object resides in providing a seal between the base of a tub and the flooring wherein the structural portions of the seal, including flashing means, are adapted for installation upon the rough or under-flooring and, after the top or finished flooring has been put in place, a plastic waterproof material is adapted and inserted through the end of said structural portion thus completing the seal.

Other objects, aims and advantages of this invention will be apparent to persons skilled in the art after the construction and operation of the seal contemplated herein is understood from the within description. It is preferred to accomplish these objects and to practice the invention in substantially the manner hereinafter fully described and as more particularly pointed out in the claims, reference being made to the accompanying drawings which form a part of this specification.

In the drawings:

Fig. 1 is a vertical section, through a tub base and adjoining flooring, showing a typical installation of the present seal structure.

Fig. 2 is a section similar to Fig. 1 showing the first stage of installation of the present seal structure.

The drawings are to be understood as being more or less of a diagrammatic character for the purpose of disclosing a typical or preferred form of the present invention. In these drawings like reference characters identify the same parts in the different views.

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As seen in Fig. 1 the flooring structure comprises the under or rough floor boards 5 on which are placed the top or finished flooring 6 such for example, as the plywood sheets. In the present arrangement, in lieu of tiling, the flooring sheets 6 may have a ply of linoleum 7 thereon with building paper 8 interposed therebetween. It is understood, however, that either linoleum or tiling may be used with the instant sealing means.

The front of the tub has a depending apron 9 which usually rests on the tiling or linoleum surface 7, or it may extend down to the rough flooring 5. In the present instance, by reason of the novel sealing means, it is preferable to have the tub apron contact the linoleum layer 7 while the major weight of the tub is supported by means extending down to and secured to the rough flooring 5. For this purpose an inturned foot 10 is formed along the lower margin of the tub apron 9 and an angle metal strip S is anchored to the lower region of the apron to extend down to the rough flooring boards 5. This angle metal strip S comprises a portion of the sealing means contemplated herein and it is positioned on the rough flooring 5 prior to laying the plywood sheets and linoleum or tile as clearly shown in Fig. 2.

The angle metal strip S of the seal structure comprises a basal member 11 projecting forwardly and under the foot 10 and is attached at spaced locations to the rough flooring by a plurality of nails 12 or the like. The upstanding member 13 of angle strip S is in a plane parallel with the plane of apron 9, and its major portion is spaced inwardly of said apron to provide an elongated pocket P between these parts. At its upper margin this upstanding member 13 has an ogee or S-shape bend therein to provide an outwardly inclined portion 14 projecting toward the apron and a flat upwardly directed lip 15 lying against the inner surface of apron 5 to which it is permanently anchored by welding or other convenient means. Thus the top of the pocket P is closed and the tub is supported on the rough flooring 5 by means of the sheet metal angle strip S.

Prior to laying the top flooring 6 and finishing ply 7, a flashing F is placed in position. This flashing F comprises a flexible strip of sheet metal such as lead, copper, water-proof fabric and the like of L-shape in cross-section which defines a horizontal bottom flange 16 overlying basal member 11 of the angle strip S and an up-

right or vertical flange 17 alongside and in front of the upstanding member 13 of said strip S. The forward portion of flange 16 is offset in a downward direction as at 16a to provide a flat region 16b lying on the rough flooring 5 outwardly beyond the edge of basal member 11, said flat region 16b being attached to said flooring by a plurality of nails 18. The top margin of the upstanding flange 17 of flashing F is bent downwardly as at 17a to provide an arrowhead upper terminal for the flashing.

After the strip S and the flashing F have been attached to the rough flooring 5 as above described the plywood sheets 6 may be installed. In order to accommodate the horizontal members of the flashing and strip, said plywood is recessed as at 6a along its under surface extending along its edge as shown in Fig. 1. The linoleum 7 or tiling may then be placed in position with the edges thereof inserted beneath the foot 10 of the tub apron as shown in Fig. 1. It will be seen that the pocket P is then partly closed at its lower portion and there is a spacing of the edges of the linoleum and plywood flooring away from the flashing. The ends of the sealing structure, it will be understood, are open so that a waterproof plastic cement or the like C may be forced into the pocket and said space by means of a suitable pump or gun, so as to approximately fill the pocket and the space, thus providing a definite and positive seal. This arrangement is such that should there by any shrinkage in the flooring tending to draw the floor structure away from the tub, the sealing means will remain in place and an unsightly gap or crack will not result.

While this invention has been described herein in its present preferred form or embodiment, it will be apparent to persons skilled in the art, after understanding the improvements, that various changes and modifications may be made therein without departing from the spirit or scope thereof. It is aimed in the appended claims to cover all such changes and modifications.

What is claimed is:

1. In combination with a floor structure and a tub apron having a foot portion as its lower edge resting on a portion of the floor structure, of sealing means adapted for installation between the floor structure and tub apron, comprising a sheet metal angle strip anchored to said tub apron above said foot portion and attached to the floor structure in a plane below and spaced from said foot portion, said strip being arranged to define a seal-receiving pocket alongside the lower region of said apron and the adjoining edge region of the floor structure; a flashing strip of flexible material arranged in said pocket and having a portion positioned between superposed members of said floor structure and attached to one of said members; and elastic sealing material in said pocket between said flashing strip and said apron base and also between said flashing strip and the adjoining edge region of the floor structure, said sealing material thereby spacing said flashing strip from said angle strip.

2. Means for attaching a tub to a floor structure having superimposed layers, said tub having an inwardly projecting foot along the lower margin of the depending tub apron adapted to rest on the surface of the upper layer of the floor structure; said attaching means comprising a sheet metal strip of L-shape cross-section the upstanding member of which is parallel with and spaced inward of the plane of the tub apron; an outwardly extending flange at the upper margin of said member; a vertical lip along the edge of said flange, said lip lying against and anchored to the inner surface of the tub apron above the plane of said foot; the horizontal member of said strip extending outwardly beyond the plane of the tub apron and being positioned between the superposed layers of the floor structure in a plane spaced below the plane of said foot; and means attaching said horizontal member to the lower layer of the floor structure.

3. Means for attaching a tub to a floor structure having superimposed layers with the lower edge of the tub apron resting on the outer surface of the top layer of the floor structure, said attaching means comprising an elongate sheet metal strip arranged with one marginal portion anchored to the tub apron above the top floor surface, the other marginal portion of said sheet metal strip being spaced inwardly of the tub apron and extending in a downward direction past the lower edge of the tub apron, said other marginal portion of the sheet metal strip having an outer edge region positioned between the superimposed layers of the floor structure and attached to the top surface of the lower layer, whereby to support the tub.

4. The arrangement defined in claim 3, including a flashing strip having an upstanding member between the tub apron and the adjacent marginal portion of the attaching strip, and the remaining portion of said flashing strip overlying the other marginal portion of the attaching strip and secured to the floor structure beyond the adjacent edge of the attaching strip.

5. Means for mounting a tub or the like on a floor structure with the lower edge of the tub apron resting on a surface of the floor structure, said attaching means comprising a supporting strip of sheet metal having a longitudinal attaching portion and a longitudinal foot portion, said attaching portion anchored to the tub apron above the floor structure and extending down inwardly of the tub apron past the lower edge of said apron; said foot portion inserted into the floor structure between the top and bottom surfaces thereof and securely anchored thereto, whereby to support the tub; and a flexible flashing strip having an upstanding longitudinal member positioned between the tub apron and said attaching portion of the supporting strip, the remaining portion of said flashing strip overlying said foot portion and secured to the floor structure beyond the adjacent anchored portion of said supporting strip.

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