Oct. 5, 1937. A. DOHERTY 2,094,782

METAL CAPPING AND TRIM FOR TILE CONSTRUCTION

Original Filed Jan. 22, 1936

Fig. 1.

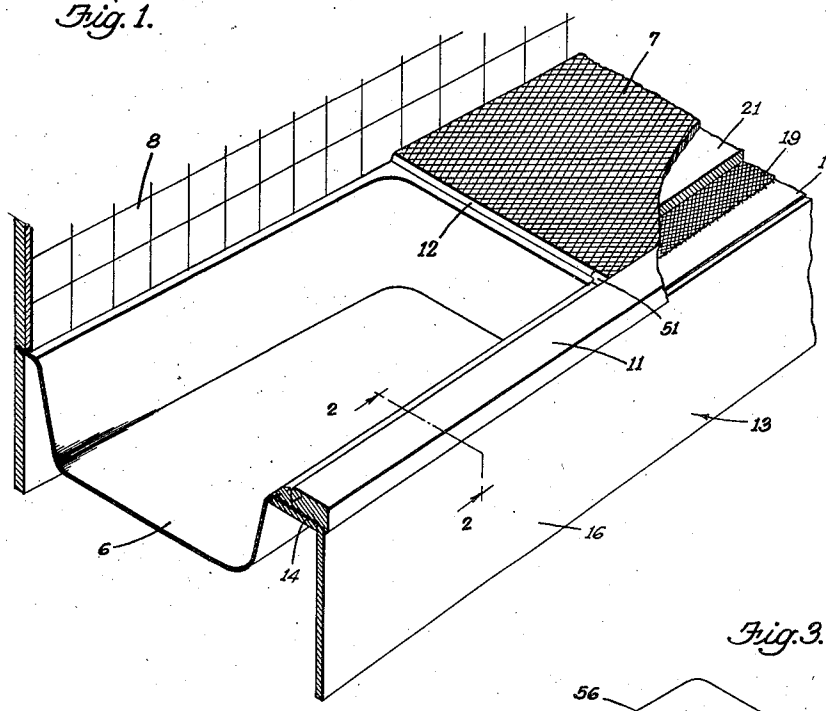


Fig. 3.

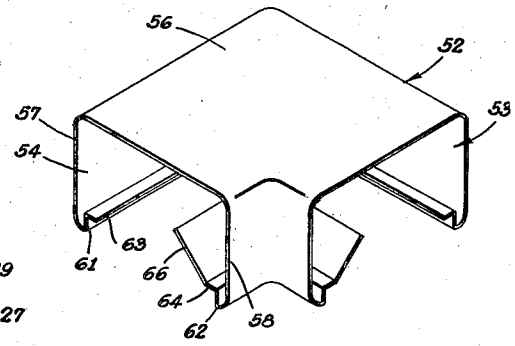
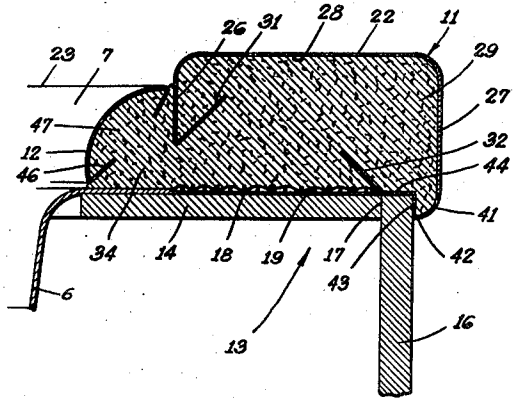


Fig. 2.



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METAL CAPPING AND TRIM FOR TILE CONSTRUCTION

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Refiled for abandoned application Serial No. 60,250, January 22, 1936. This application January 23, 1937, Serial No. 122,092

8 Claims. (Cl. 72—0.5)

This invention relates to tile construction of the type commonly employed in connection with sinks, tubs, and similar plumbing fixtures.

An object of my invention is to provide a novel and improved type of trim for use in finishing edges and corners of such tile construction.

A more detailed object of the present invention is to provide trim for tile drain-boards and the like, which, instead of being made of ceramic tile in accordance with conventional practice, is formed of sheet metal.

A still further object is to provide trim, such as capping, corners, quarter-round moulding, and the like, constructed of sheet metal as indicated, but formed of hollow, substantially channel construction whereby it is adapted to be filled with plastic, cementitious material prior to or at the time of installation.

Yet another object in this connection, is to provide anchoring flanges within the channel shapes above mentioned, and other details of construction to be described in greater detail hereinbelow, whereby greater security of the trim, and the more rigid and permanent mounting thereof in association with any appropriate tile features, are assured.

It is a further object of my present invention to provide a construction of the general character indicated, which will be relatively simple and inexpensive in construction, of a highly ornamental and attractive appearance and yet of such a nature that it harmonizes in a highly satisfactory manner with practically any design and/or color of tile and the other finish with which it is associated, and which will be generally superior in efficiency and serviceability.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of the preferred forms of my invention which are illustrated in the drawing accompanying and forming part of the specification. It is to be understood that I do not limit myself to the showing made by the said drawing and description, as I may adopt variations of the preferred forms within the scope of my invention as set forth in the claims.

This application is a substitute for abandoned application Serial No. 60,250, filed January 22, 1936.

Referring to the drawing:

Figure 1 is a perspective view showing a sink and tile drain-board construction having sheet metal trim for the tile construction and embodying the principles of the present invention operatively associated therewith.

Figure 2 is an enlarged, detail view in vertical section, the plane of the section being indicated by the line 2—2 of Figure 1 and the direction of view by the arrows.

Figure 3 is a perspective view showing a modification wherein my invention is embodied in a corner, this shape being suitable to connect two strips of the capping extending angularly with respect to each other.

In terms of broad inclusion, the present invention contemplates the substitution of the capping, corners, moulding and other shapes, constructed of the sheet metal, preferably rust proof and non-corrosive, in place of corresponding shapes formed of ceramic tile conventionally used as a finishing trim for tile construction such as drain boards and the like. Being formed of sheet metal these shapes are of substantially hollow channel construction thereby adapting them to be filled with plastic cementitious material preferably of the same composition as that used as the grouting in which the tile themselves are laid and imbedded. An anchoring flange is provided along at least one lateral edge of each of the shapes, these flanges being imbedded within the cementitious material and serving to anchor the metal shapes positively and permanently in operative association with the balance of the tile construction.

Describing my invention in greater detail, Figures 1 and 2 illustrate two different shapes of trim embodying the principles of the present invention and used in place of conventional ceramic trim as finish for a conventional sink 6, tile drain boards 7, and tile splasher board 8. The two shapes of the trim here illustrated are capping 11 and quarter-round moulding 12 to be described more particularly hereinbelow.

In accordance with conventional practice, the sink 6 and tile 7 are supported upon a suitable wood cabinet construction 13 comprising a substantially horizontal shelf 14 and a facing board 16 extending vertically downwards from the forward edge 17 of the shelf 14. The sink 6 is disposed in a suitable aperture in the wood shelf 14 and the tile 7 of the drain board are supported upon the remaining portion of the shelf 14. It is customary to protect the upper surface of the shelf 14 by a layer of impervious material, such as tar paper 18 or the like, upon which is superimposed a sheet of expanded metal lath 19 or its equivalent. Plastic ce-

mentitious material 21 is spread upon the lath 19 and the tile 7 are disposed upon and preferably imbedded in this cementitious material or grouting 21.

The tile 7 extends to within only approximately two inches of the plane of the outer face of the facing board 16; and it is customary to employ a tile capping as finish trim extending from the edge of the tile 7 to and preferably slightly beyond the plane of the facing board 16. The upper surface of this capping is elevated slightly above the plane of the upper surface 23 of the tile 7, whereby a ridge is provided adapted to prevent water from flowing over the forward edge of the drain board and causing all such water to flow longitudinally of the drain board and thence into the sink 6.

It is also customary to use suitable ceramic moulding along the edge of the drain board 7 which is proximal to the sink 6 and along that edge of the capping which extends along the edge of the sink 6 where there is no drain board 7. It is an inherent disadvantage of trim constructed of ceramic material that it is extremely subject to being damaged when struck by any hard object. Even a relatively light blow by the sharp corner of any such object as a sauce pan will so nick the glazed surface of the tile that it not only is rendered definitely unsightly but is also made extremely unsanitary because of the fact that the glazed surface is broken away from the relatively pervious body of the ceramic material thereby making it impossible to prevent bacteria from penetrating the pervious material which underlies the glaze.

Consequently the present invention contemplates the substitution of the corresponding shapes of trim constructed of the sheet metal instead of the conventionally used ceramic tile and to equip such sheet metal shapes with details of construction whereby they are rendered practically immune from being damaged when struck even relatively hard blows, and whereby they are anchored positively and permanently in proper operative position with respect to the balance of the tile construction.

With this end in view, I have provided the shapes constructed of sheet metal of rust proof and non-corrosive type, preferably stainless steel inasmuch as this particular metal was easily worked to produce the desired shapes and is altogether inert as far as being discolored or otherwise damaged by the ordinary chemicals which are apt to come in contact therewith in ordinary kitchen use. Furthermore, stainless steel has an unusually beautiful appearance, which causes it to harmonize perfectly with practically any type and color of tile construction and with practically any type of interior finish of other furnishings in the room where it is installed.

The capping 11 comprises an elongated strip of sheet metal, preferably stainless steel as above described, bent along both lateral edges to provide a channel construction in the form of two spaced and preferably parallel side walls 26 and 27 joined along their upper edges by a web portion 28. This channel construction being hollow, it is well adapted to being filled with plastic cementitious material, preferably the same grouting as that used as the bonding material for the tile 7 of the drain board proper. The function of the grouting 29 with which the capping 11 is filled is twofold: first, to fill the interior of the capping and thereby provide a solid construction which supports the web portion 28 and side walls 26 and 27 in such a manner that danger of their becoming dented when struck is reduced to a minimum; and, second, to provide a suitable bond between the capping 11 and the balance of the tile construction. With this latter function in view, I have provided anchoring flanges 31 and 32 upon the lower edges of the side walls 26 and 27 respectively, these flanges 31 and 32 extending obliquely upwards into the hollow interior of the channel construction, i. e. towards the web portion 28, as is clearly shown upon Figure 2. As is readily apparent from the illustration, these flanges are securely imbedded within the grouting 29 and thereby establish a positive and permanent bond between the metal capping 11 and the grouting. The inner side wall 26 is preferably materially shorter than the outer side wall 27, thereby leaving an opening 34 under the inner side wall 26 through which the grouting 29 extends. This enables the grouting 29 within the channel and the grouting 21 under the tile 7 to unite adhesively while they are in plastic condition and for both groutings 21 and 29 to harden simultaneously and become integrally joined.

One of the more important features of the capping 11 is a lip 41 provided upon the lower edge of the outer side wall 27, this lip being adapted to extend downwards along the outer face of the facing board 16 for a predetermined distance past the plane of the upper edge thereof. It is a common fault of the ceramic capping conventionally used that the grouting which necessarily must be employed to fill the space between the upper surface of the wood cabinet construction and the lower edge of the ceramic capping resting thereupon, soon becomes dislodged, thereby leaving an exceedingly unsightly and positively unsanitary opening between the capping and the wood cabinet. The lip 41 provided upon my improved metal capping not only obviates the necessity of using any such grouting, but it produces a much more sightly arrangement which also is much more sanitary because it extends downwards beyond the upper surface of the cabinet and thereby positively prevents seepage between tile and the wood. This lip 41 is provided through the expedient of a reverse bend 42 at the lower edge of the outer wall 27 from which a vertical portion 43 leads to a horizontal supporting flange 44 adapted to engage the upper edge of the facing board 16. From the edge of the supporting flange 44, the anchoring flange 32 inclines upwards and inwards as shown.

Another of the shapes which I have found it expedient to construct of sheet metal in place of the conventionally used ceramic tile, is quarter-round moulding 12 which is used wherever a break in the tiled surface occurs, for example: along the edge of the drain board 7 which is proximal to the sink 6. The shape 12 is also of channel construction, the web portion and side walls. However, being merged into each other so as to produce a substantially quarter circle when viewed in transverse section. From each edge of the quarter round moulding thus produced an anchoring flange 46 extends obliquely inwards to be imbedded in the grouting 47 which is adapted to be placed within the channel.

It is obvious that other shapes of trim, such as a corner 51 to join two angularly extending runs of quarter-round moulding 12, can be constructed advantageously of sheet metal and provided with an anchoring flange or anchoring flanges in accordance with the principles of the invention here-

inabove described. Also, suitable connecting shapes for joining angularly extending runs of capping 11 can be provided, such as the corner 52 illustrated upon Figure 3. This corner 52, as will readily be understood, comprises two joined and angularly extending channels 53 and 54 each of which comprises a web portion 56 and side walls 57 and 58. For the purpose of making the corner 52 reversible, so that it can be used in either an inner or outer corner, and thereby avoiding the necessity of providing two separate designs for these two uses, I prefer that both side walls 57 and 58 of both channels 53 and 54 be provided with depending lips 61 and 62, both lips 61 and 62 also carrying the horizontally extending supporting flanges 63 and 64 and one or both of these supporting flanges 63 and 64 carrying the obliquely extending anchoring flanges 66. It should be explained that when using the corner 52 as an outside corner, i. e. wherein the longer walls 57 of the two channels 53 and 54 define the outer edge of the construction, it is intended that the workman making the installation clip the shorter wide walls 58 about midway between the top and bottom edges thereof thereby effectually shortening these walls, and leaving a space thereunder through which the grouting can extend when the shape is installed, this opening serving substantially the same function as the opening 34 in the capping 11 previously described. However, when the corner 52 is used as an inside corner, i. e. wherein the shorter walls 58 define the outer edge of the construction, the workman should clip the longer walls 57, thus leaving the opening for the reception of grouting under these walls.

It should be understood that the particular shapes chosen for illustration and description herein are merely exemplary and that whatever other shapes may be necessary to be used as trim in finishing tile construction may be provided in accordance with the principles of the present invention, being made of sheet metal and formed in hollow channel configuration to receive cementitious grouting and having the anchoring flanges to be imbedded therein in the manner hereinabove described. Also, where circumstances permit, these additional shapes may be provided with the supporting flanges and depending lips as will readily be understood.

I claim:

1. As a new article of manufacture, a trim for tile construction comprising an elongated strip formed of sheet metal and bent to present spaced side walls having their upper edges joined by a web and defining a channel member, and an anchoring flange extending obliquely toward said web from the outer edge of each of the side walls thereof, one of said side walls being shorter than the other to leave an opening thereunder for the reception of grouting, and the other of said side walls terminating in a reverse bend defining an overhanging lip, and a seat portion spaced inwardly from the outer edge of said lip and adapted to rest on the edge of the structure supporting said tile construction.

2. As a new article of manufacture, a trim for tile construction comprising an elongated strip formed of sheet metal and bent to present spaced side walls having their upper edges joined by a web and defining a channel member, and an anchoring flange extending obliquely toward said web from the outer edge of each of the side walls thereof, one of said side walls terminating in a reverse bend defining an overhanging lip, and a seat portion spaced inwardly from the outer edge of said lip and adapted to rest on the edge of the structure supporting said tile construction.

3. As a new article of manufacture, capping trim for tile construction, comprising an elongated strip of sheet metal bent to present spaced side walls defining a channel member, a seat portion extending inwardly from adjacent the lower edge of one of said side walls and adapted to rest upon the edge of the structure supporting said tile construction, said side wall terminating in a lip adapted to extend beyond and conceal said edge of said supporting structure and having a reverse bend therein leading to said seat.

4. As a new article of manufacture, capping trim for tile construction, comprising an elongated strip of sheet metal bent to present spaced side walls defining a channel member, a seat portion extending inwardly from adjacent the lower edge of one of said side walls and adapted to rest upon the edge of the structure supporting said tile construction, said side wall terminating in a lip adapted to extend beyond and conceal said edge of said supporting structure and having a reverse bend therein leading to said seat, and an anchoring flange extending obliquely into said channel member from the edge of said seat.

5. Tile construction comprising a supporting structure, a layer of cementitious grouting material supported thereon, tile disposed upon and imbedded in said grouting, and capping trim comprising a sheet metal channel member having an inner side wall disposed adjacent said tile and imbedded within said grouting, and an outer wall disposed beyond the plane of the outer face of said supporting structure and extending beyond the plane of the surface of said supporting structure on which said grouting is supported to conceal the edge of said supporting structure.

6. Tile construction comprising a supporting structure, a layer of cementitious grouting material supported thereon, tile disposed upon and imbedded in said grouting, and capping trim comprising a sheet metal channel member having an inner side wall disposed adjacent said tile and imbedded within said grouting, and an outer wall disposed beyond the plane of the outer face of said supporting structure and extending beyond the plane of the surface of said supporting structure on which said grouting is supported to conceal the edge of said supporting structure, said outer wall having a reverse bend and engaging said outer face of said supporting structure, and a supporting flange extending from adjacent said reverse bend and engaging said supporting surface along said edge thereof.

7. Tile construction comprising a supporting structure, a layer of cementitious grouting material supported thereon, tile disposed upon and imbedded in said grouting, and capping trim comprising a sheet metal channel member having an inner side wall disposed adjacent said tile and imbedded within said grouting, and an outer wall disposed beyond the plane of the outer face of said supporting structure and extending beyond the plane of the surface of said supporting structure on which said grouting is supported to conceal the edge of said supporting structure, said outer wall having a reverse bend and engaging said outer face of said supporting structure, and a supporting flange extending from adjacent said reverse bend and engaging said supporting surface along said edge thereof,

and cementitious grouting material filling said channel and bonded to that on which said tile are supported.

8. Tile construction comprising a supporting structure, a layer of cementitious grouting material supported thereon, tile disposed upon and imbedded in said grouting, and capping trim comprising a sheet metal member having an inner side wall disposed adjacent said tile and imbedded within said grouting, and an outer wall disposed beyond the plane of the outer face of said supporting structure and extending beyond the plane of the surface of said supporting structure on which said grouting is supported to conceal the edge of said supporting structure, said outer wall having a reverse bend and engaging said outer face of said supporting structure, and a supporting flange extending from adjacent said reverse bend and engaging said supporting surface along said edge thereof, cementitious grouting material filling said channel and bonded to that on which said tile are supported, and an anchoring flange extending obliquely into said channel from the edge of at least one of said side walls and imbedded within said grouting material.

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