Oct. 5, 1971 L. V. ALLGOOD 3,609,774

ROUGHING IN FRAME AND ACCESS PANEL TO TUB/SHOWER VALVES

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Fig. 1

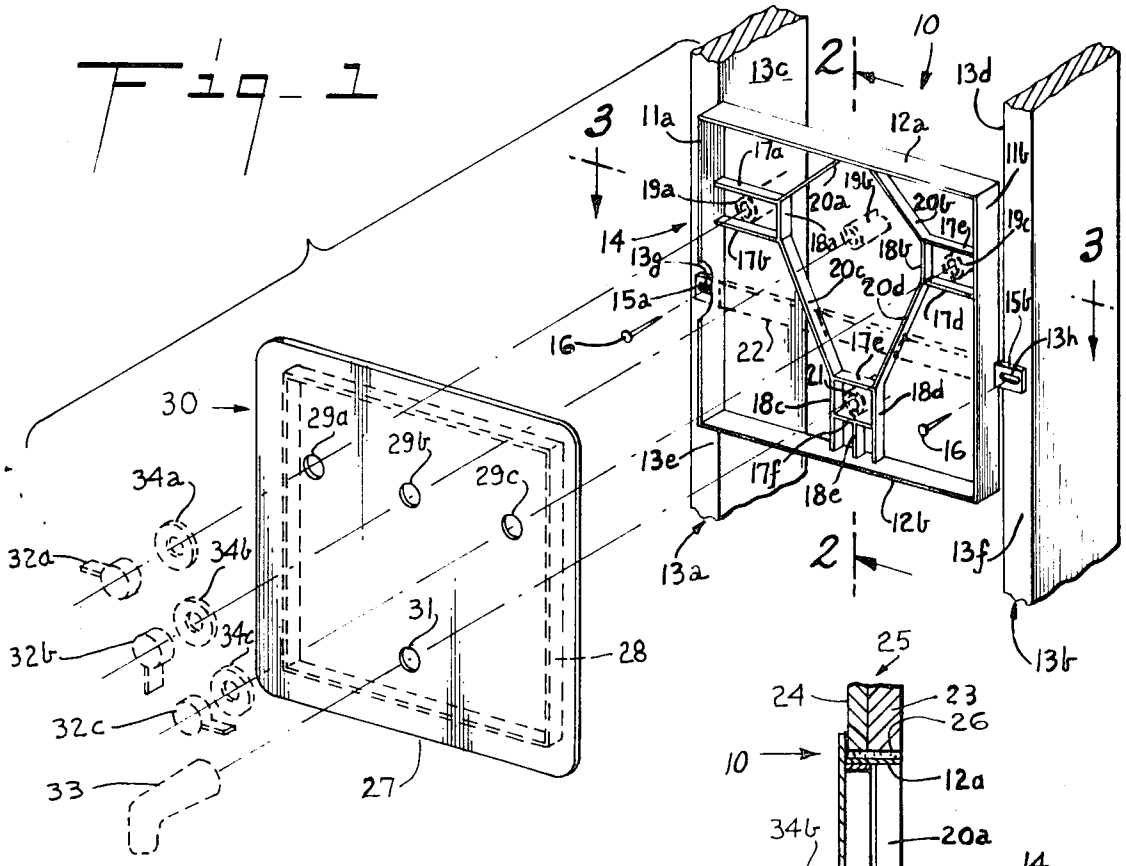


Fig. 2

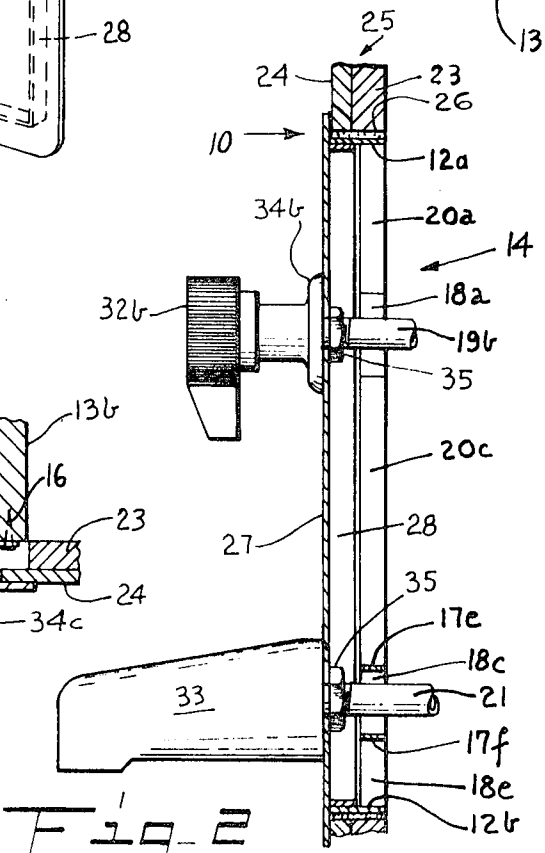
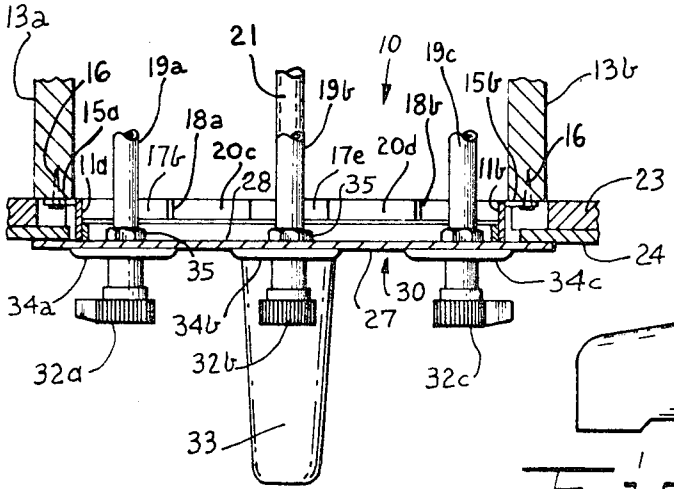


Fig. 3



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ROUGHING IN FRAME AND ACCESS PANEL TO TUB/SHOWER VALVES

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ABSTRACT OF THE DISCLOSURE

The disclosure is to two parts, a roughing in frame being first used by the plumber to extend in front of the forward edge faces of bathroom studs, to which the frame is affixed, the frame members being of approximately tile wall width, and hot, shower and cold water valve stems and mixed water conduit extending forwardly through the bracing within the rear part of the frame. Then a substantially rectangular panel plate of dimension to overextend the roughing in frame (and part of the tile therearound) is disposed with a rectangular frame extending inwardly therefrom in fit snugly within the forward part of the roughing in frame. The valve stems and conduit extend forwardly through holes in the panel plate, and when the respective valves and the mixed water spout are installed, the panel plate matches with the tile in finish while at the same time being removable in emergency, as to permit access to the mixing valve from which stems and conduit extend forwardly.

The invention relates to a roughing in frame about which the bathroom tile wall may be installed, the installation of this frame on the forward edge faces of bathroom studs permitting the hot water, shower, and cold water valve stems to extend through guide bracing therein. Then an access panel overextends the roughing in frame and tile therearound, and provides a substantially rectangular frame to extend within the roughing in frame. Handles and spout, installed on stems and conduit outwardly of their holes through the panel plate, complete the assembly. The panel plate matches the tile.

As a primary object the invention provides a roughing in member defining an area with a tile wall therearound, and through which hot water, shower, cold water stems and mixed water conduit extend; also there is provided an access panel through which stems and conduit extend to have respective handles and spot installed thereon to assemble the access panel against the tile as a rectangular frame on the panel inner face fits snugly within the roughing in frame.

It is also an important object of this invention to provide a roughing in frame and access panel of this class in which the roughing in panel first acts to define an area around valve stems and conduit about which tile may be installed, with the stems and conduit then extending through an access panel matching tile and overextending tile around roughing in frame when assembled, as by installing handles on valve stems and spout on conduit.

It is still another and important object of this invention to provide a roughing in frame and access panel of this class which serves to eliminate an area of tile otherwise employed in each bathroom, the access panel providing a tile matching plate behind valve stem handles and spout, while the access panel is removable to permit access, through roughing in frame, as to the mixing valve from which the valve stems and mixed water conduit extend.

It is yet another object of this invention to provide a roughing in frame and access panel of this class, with the guide bracing within the rear portion of the roughing in frame being expendable after the tile wall has been installed around the roughing in frame.

Other and further objects will be apparent when the specification herein is considered in connection with the drawings, in which:

FIG. 1 is an isometric development view of the two parts of the invention and of the apparatus associated therewith;

FIG. 2 is an elevational view, part in section, taken along line 2—2 of FIG. 1; and

FIG. 3 is a plan view, part in section, taken along line 3—3 of FIG. 1.

Referring now in detail to the drawings in which like reference numerals are applied to like elements in the various views, a roughing in frame **10** is shown in FIG. 1 comprising left and right risers **11***a*, **11***b*, and upper and lower runners **12***a*, **12***b* joined together to form a rectangular frame element **14** with connection tabs **15***a*, **15***b* extending centrally from the outer, rear surface portions of the risers **11***a*, **11***b*. The distance from the outer surface of riser **11***a* to the outer surface of riser **11***b* is indicated in FIG. 1 as being substantially equal to the distance between opposed inner faces **13***c*, **13***d* of the bathroom studs **13***a*, **13***b*. Also, it is indicated in FIG. 1 that the rear face of the tabs **15***a*, **15***b* fall in the plane of the rear edges of the risers **11***a*, **11***b*, and runners **12***a*, **12***b*, thus to extend over the forward edge faces **13***e*, **13***f* of the aforesaid studs **13***a*, **13***b*. The connectors or connection tabs **15***a*, **15***b* may have narrow, preformed slots **13***g*, **13***h* whereby nails **16** may be passed through the slots **13***g*, **13***h* and driven into the studs **13***a*, **13***b* to position the frame **10** with relation thereto.

The roughing in frame **10** is braced within the risers **11***a*, **11***b* and the runners **12***a*, **12***b*, but only across the rear portions of the risers and runners. Thus the frame element **14** includes brace members that are no more than half the width of the aforesaid risers and runners **11***a*, **11***b*, **12***a*, **12***b*. These brace members in form of horizontally extending members **17***a*, **17***b* with vertically extending member **18***a* thereinbetween, surround the hot water valve stem **19***a*; and correspondingly, on opposite side of the frame **10**, horizontally extending members **17***c*, **17***d*, with vertically extending member **18***b* surround the cold water valve stem **19***c*. Also, diagonally extending members **20***a*, **20***b* extend from the under side of the top runner **12***a* to the tops of the respective vertically extending members **18***a*, **18***b*. Also the bracing includes vertically extending members **18***c*, **18***d* upstand above the lower runner **12***b* centrally thereof and are connected across the top, and above the mixed water delivery conduit **21**, by horizontally extending member **17***e*, with a lower horizontally extending member **17***f* below the conduit **21** also extending between the uprights **18***c*, **18***d*.

Furthermore, as an additional brace, an upright **18***e* may be provided to upstand from substantially the midpoint of the upper surface of the lower runner **12***b* to the under side of the lower horizontally extending member **17***f*. The bracing is also shown as including a diagonally extending member **20***c* between the bottom of the upright member **18***a* and the top of the upright member **18***c*. Also, and corresponding, the bracing is shown as including a diagonally extending member **20***d* between the bottom of the upright member **18***b* and the top of the upright member **18***d*. Thus the valve stem **19***b* which extends from the mixing valve, not shown, to select the direction of mixed water to shower or tub, is shown widely surrounded by brace members **20***a*, **18***a*, **20***c*, **17***e*, **20***d*, **18***b* and **20***b*.

Between the tabs **15***a*, **15***b* in FIG. 1, there is shown in dotted lines a cross-member **22** which would pass through a slot therefor in each of riser **11***a*, diagonally

extending member **20***c*, diagonally extending member **20***d* and in riser **11***b*, and thus the respective tabs **15***a* and **15***b* would comprise the left and right ends of such member **22**, as employed when it could be considered desirable strongly to brace the roughing in frame **10**, as an optional manner of construction.

When the roughing in frame **10** is installed about the stems **19***a*, **19***b*, **19***c* and the conduit **21**, as mounted on the bathroom studs **13***a*, **13***b* as shown in FIG. 1, the bathroom may then be finished, including around the frame **10**, with the tile wall **25** being installed outwardly of the studs, not shown in FIG. 2. As indicated, the tile wall **25** comprises inward lath or stud contacting material **23**, with the tile **24** then being installed upon the lath **23** and with the tile blocks being mortar set together, also mortar **26** is indicated in FIG. 2 as disposed just above the runner **12***a* and under the lath **23** and tile **24**. The roughing in frame **10** thus serves to block out an area over which tile is not to be employed, whereas the lath **23** and tile **24** may readily be installed around the outer elements (risers and runners) of the frame **10**, which can be kept in position thereby. Then it follows that the access panel **30** may be installed to extend within the roughing in frame **10**, as will be hereinbelow described. Finally the hot water, shower and cold water valve stem handles may be installed outwardly of the panel plate **27**, and the panel plate, with outside finish to match the tile, is fixedly positioned as part of the finished bathroom.

The access panel **30** comprises the access plate **27**, of substantially rectangular shape and of a finished appearance to match the tile, at least as to outer surface. On the back side of the panel plate **27** a rectangular flange element **28** is provided of depth or width not greater than about half the depth or width of the roughing in frame members **11***a*, **12***a*, **11***b*, **12***b* thus to fit within these members outboard of its hereinabove described bracing and guide members. As the access panel **30** is thus fitted into the roughing in frame **14**, the valve stems **19***a*, **19***b*, **19***c* extend through horizontally aligned holes **29***a*, **29***b*, **29***c* therein, while the mixed water conduit **21** extends through a lower hole **31** therein spaced below the central valve stem hole **29***b*. Prior to installing the access panel **30** over valve stems and conduit, nuts **35** have been threaded upon the outer ends of these elements with nut contact faces outwardly, and thus these nuts **35** serve as prepositioned stops against which the access panel **30** bears while the respective handes **32***a*, **32***b* and **32***c* are installed on the outer ends of the respective hot water, shower and cold water valve stems **19***a*, **19***b* and **19***c*. Also, the mixed water delivery spout **33** is installed upon the outer end of the conduit **21** to bear against the outer face of the panel plate **27**, as the nut **35** bears on the inner side of the plate **27**, thus to effect firm anchorage. Noticeably adapter rings **34***a*, **34***b* and **34***c* are assembled to bear against the outer face of the panel plate **27** as the handles **32***a*, **32***b* and **32***c* are connected on to complete the final assembly.

It should be noticeable that the bracing within the rear portion of the roughing in frame **10** are designed as strength members to serve to hold the frame **10** in shape and square at the corners until the tile wall **25** has been built in around it, at which time the tile wall itself should be more than ample to hold the roughing in frame members as disposed. In this case, these bracing members should have no further use, as they will only be in the way in case the access panel **27** may be taken off to afford access to the mixing valve, not shown, but to the rear of the position of the roughing in frame. Thus, all of these bracing members **20***a*, **17***a*, **17***b*, **18***a*, **20***c*, **18***c*, **17***e*, **17***f*, **18***e*, **18***f*, **18***d*, **20***d*, **17***d*, **17***e* **18***b* and **20***b* may be torn out after the tile wall has been installed. Also, the roughing in frame **14** may be dispensed with after the tile wall has been installed, since it will then be no longer needed, except to fill the space between tile wall and the flange **28** of the access panel **30**. However, since the panel plate **27** is of size to overextend the tile **24** all around, when the handles **32***a*, **32***b* and **32***c* and the spout **33** are installed, the panel plate **27**, as urged by the assembly of handles and spout to bear upon the tile that it overextends, will distribute itself substantially centrally in substantially equal overlap of the tile. However, the roughing in frame need not be removed; also the bracing need not be removed, at least not until the first time it may be necessary to have access, by way of the access panel **30**, to get at the mixing valve, not shown, and to the rear.

The invention also includes roughing in frames and access panels for shower stalls where no bath tub may be involved. In such a case one or two stems may extend from an inner space between studs, and it is only necessary to provide bracing of strength to support the roughing in frame in form while the tile wall is being filled in around it, while the guiding bracing only has to clear the one or two valve stems that extend forwardly for outside manipulation. Exemplary of a single valve stem to be guidably braced through the roughing in frame and to extend through a single hole in the panel plate, would be a shower valve stem that has a substantially long handle outwardly of the panel plate and in being turned through an arc, operates valving at the mixing valve to turn on hot water, cold water, to regulate mixture flow and to effect cut off. Optionally, if two valve stems extend forwardly from mixing valve, one will be to turn on and regulate the hot water and one to turn on and regulate the cold water from exteriorally of the access panel. Noticeably, these valve stems, aforesaid, place no limitations as to symmetery of disposition of holes in the panel plate.

Also, in tub/shower combinations, there is no limitation as to valve stem and conduit arrangement as may be gathered from the drawings. Nor will it be necessary, in cases, to have three valve stems extended to the access panel. Rather one valve stem may be actuated from forward of access panel to turn on the shower and mix water from hot and cold sources back at the mixing valve. In other cases, two valve stems may be extended forwardly of the access panel, one to select shower use, and one to regulate hot and cold mixture back at the mixing valve. Also, in such cases, the spout for water into tub may not have to be disposed centrally through the lower part of the panel plate but other relative disposition may be desired.

The invention in an aspect includes method which may be developed with prosecution, since an essential member, necessary at outset, may later be expended in part, or optionally, entirely removed.

Also, the structures disclosed are not to place limitations upon the disclosure, since roughing in frames may be of different construction, and also access panels may be differently formed. The claims as drafted introduce the combination of a roughing in frame and an access panel, and novelty may be established from ensuing procedures.

I claim:

1. The combination of a roughing in frame and access panel for the water control means of a bath shower combination, wherein said roughing in frame comprising spaced apart risers and runners forming a rectangular frame element, the depth of said frame element being substantially equal to the thickness of the tile wall within which said frame element is received and the width of said frame element being substantially equal to the spacing between adjacent studs which support said wall, connector means including opposed connector tabs formed on the side of said frame elment which is juxtaposed said studs each of said tabs being formed to extend outwardly in a perpendicular manner from a location intermediate the ends of said risers, and wherein said access panel comprising a substantially rectangular panel plate having an inwardly directed continuous flange member

dimensioned to snugly fit within said frame element, said flange member being formed inwardly of the outer periphery of panel plate, whereby a uniform overhang is formed on said plate extending around said flange member, aperture means being formed in said access panel for penetration of said water control means, said water control means including fitting means mounted thereon which engage and firmly secure said access panel to said roughing in frame, and wherein guide and brace means are formed within and integral with said frame element, said guide and brace means being formed in that portion of said frame element which juxtaposed said studs and being of such a thickness so as not to interfere with the flange member formed on said access panel when said flange member is received within said frame element, and said guide and brace means guidably receiving said water control means.

2. The combination as claimed in claim 1 in which said water control means includes a hot water valve stem, a shower valve stem and a cold water valve stem, and a conduit for a bath spout arranged below said stems and in which the vertical distance between upper and lower runner is some bit greater than the distance between said stems and said conduit, and in which said fitting means comprises handle means for the respective hot water valve stem, shower valve stem and cold water valve stem and a bath water spout.

3. Combination as claimed in claim 2 in which said guide and brace means is formed with small rectangular frames which surround the hot water valve stem, the cold water valve stem, and the bath spout conduit.

4. The combination as claimed in claim 2 in which said guide and brace means includes a substantially octagonal frame which surrounds the shower valve stem.

5. The combination as claimed in claim 1 in which

said connector means includes a horizontally extending member between said tabs and passing through those portions of said risers juxtaposed said studs and said guide and brace means includes two diagonally extending elements.

6. The combination as claimed in claim 1 in which said connector tabs have horizontally extending slots therein, whereby nails may be passed through said slots and driven into through the outer edge faces of adjacent bathroom studs, and thereinto with nail heads to lodge against said tabs thus to affix said tabs to said studs with outermost extent of said roughing in frame substantially flush with outer surface of said tile wall, as installed outwardly of said bathroom studs outer surfaces.

References Cited

UNITED STATES PATENTS

1,414,792	5/1922	Seither	4—191
1,630,906	5/1927	Ricken	49—465
1,946,207	2/1934	Haire	137—359
2,231,276	2/1941	McGarry	137—359
2,295,888	9/1942	Bucknell et al.	4—1
2,314,950	3/1943	Pope	4—191
2,460,005	1/1949	Gruen	4—191
2,661,677	12/1953	Lingelbach	248—57
2,729,414	1/1956	Clank	248—57
2,793,721	5/1957	Sterud	49—465
3,491,486	1/1970	Caruth	49—463

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