

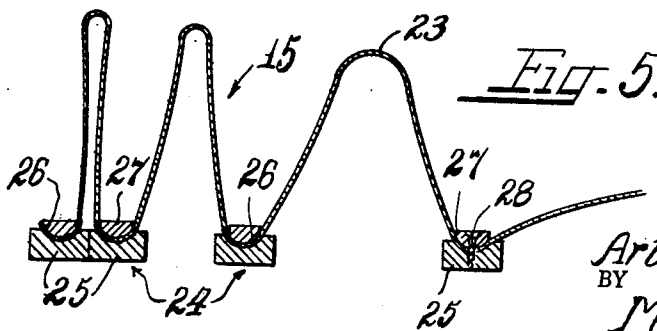
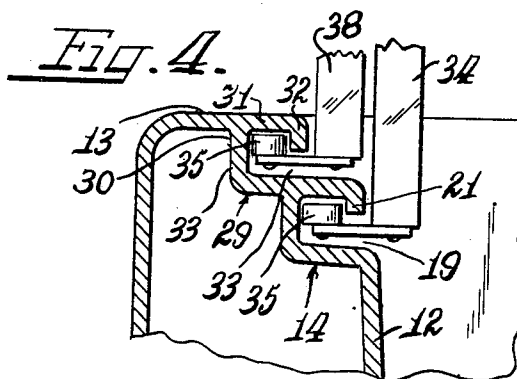
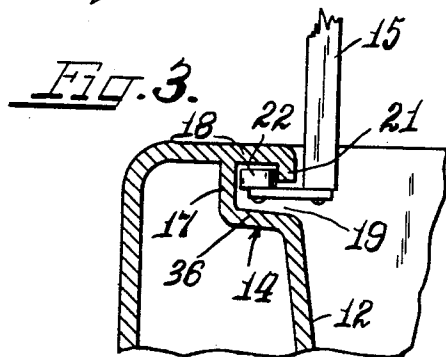
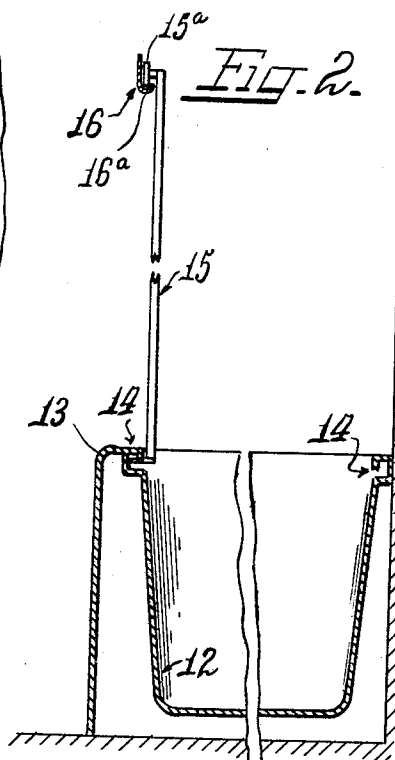
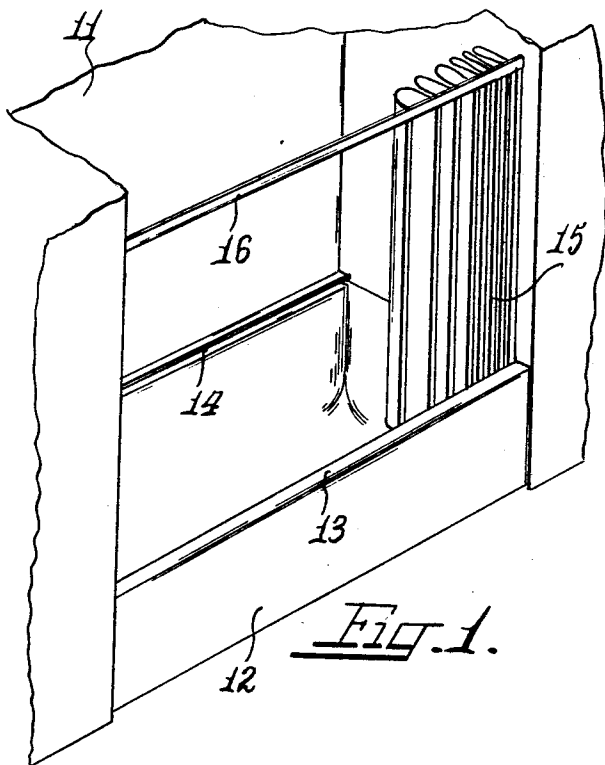
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BATH TUB CLOSURE AND TRACK THEREFOR

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ABSTRACT OF THE DISCLOSURE

A bath tub closure and track therefor characterized by an upper and lower track, the lower track being co-extensive and integral with at least one longitudinal side of a bath tub rim, and a foldable closure having stiffening members slidable on the tracks.

The invention relates to improvements in mounting guide means for folding or sliding closures for the open side or sides of a bath tub.

Presently, bath tubs are fitted with slidable or foldable closure doors which are guided at their upper ends in suspended tracks and at their lower ends in tracks that are adhesively or otherwise detachably secured to the related rim of a bath tub. The adhesive securement of such tracks to the bath tub rim is not entirely satisfactory primarily because the adhesive deteriorates in use, or because the adhesive is not adequately secured to the bath tub rim, with resultant leakage of water between the track and its mounting surface. Further, such tracks are constructed for ready association with guide brackets or rollers carried on the lower edge of the closure and are such as to permit water to escape between the track and the closure. Also, where the track is installed on the upper rim of the tub, difficulties may arise for users getting in and out of the tub or cleaning or otherwise reaching into or out of the tub, because of the projecting track, resulting in inconvenience and accident hazard.

The present invention is concerned with the novel construction of a closure track integral with the bath tub rim and of such design as to prevent water leakage and to locate the track in a position least inconvenient and hazardous to a user. More specifically, the effective rim of the tub is formed with one or more inwardly facing tracks of such construction as to overlay the outside surface of the lower margin of the closure and thus avoid the presence of any gap through which water can escape. Also, the track being integral with the tub rim, there is no possibility of it separating from the rim. Further, since the upper edge of the rim is flat, without the track projecting therefrom, substantially less inconvenience and hazard results than with prior art structures. The invention also includes a novelly constructed foldable curtain assembly of such character as to compel the folds thereof to be located within the area above the bath tub.

It is therefore an object of the invention to provide a bath tub with an integral closure track.

Another object is to provide a bath tub with a closure track of such character as to prevent the escape of water when the closure is in closed position.

Another object is to provide a bath tub with a closure track of such character as to locate the track below the upper surface of the bath tub rim.

It is another object of the invention to provide a foldable closure curtain of novel construction.

Still another object of the invention is to provide a track structure of the character disclosed which is inexpensive to produce and very effective and efficient in use.

The structure by means of which the above noted and other objects and advantages of the invention are attained

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will be described in the following specification, taken in conjunction with the accompanying drawings, showing preferred illustrative embodiments of the invention, in which:

FIGURE 1 is a perspective view of a recessed bath tub installation embodying features of the invention.

FIGURE 2 is a transverse sectional view of the bath tub installation illustrated in FIGURE 1.

FIGURE 3 is an enlarged detail sectional view of the track and associated foldable curtain illustrated in FIGURES 1 and 2.

FIGURE 4 is an enlarged sectional view of a track structure intended for use with slide-by doors.

FIGURE 5 is a detail horizontal sectional view of a fragment of the foldable curtain.

In the accompanying drawing illustrating a representative installation of a bath tub and closure assembly, a shower tub alcove 11 of standard design and arrangement has therein a bath tub 12. The tub 12 illustrated is generally of conventional manufacture, except it has formed integral with at least its longitudinal rim sections 13 the track 14. Tracks have been shown on each of said rim sections so as to adapt the tub for right or left hand installation in the alcove and only the track 14 on the outside or exposed rim is used in the installation to be presently described. Where the tub is designed to have more than one exposed rim, the track may be extended around one or more and portions of the rim.

The track 14 on the exposed rim section constitutes guide means for the lower end of a movable closure such as the foldable closure 15 illustrated. The upper end of the closure is suitably guided in an overhead track 16 of any conventional construction. Preferably, this overhead track 16 is configured substantially as best shown in FIGURE 2, so as to provide an elongated trough 16a to receive guide support rollers 15a carried by the closure.

The track 14, best shown in FIGURE 3, is integrally formed with the bath tub, the upper rim of which is offset outwardly to provide a ledge 36 and then upwardly to define a side wall 17. The wall 17 terminates at its upper edge in an intumed flange 18 that overlies and is spaced from ledge 36 so as to define an inwardly opening track channel 19. The free edge of the flange 18 is formed with a depending lip 21. This track serves as a guideway for the lower end of the closure 15, said closure being provided on or adjacent to its bottom edge with rollers 22 that are engaged in the channel 19 and retained in place by lip 21.

It should be quite evident at this time that because the bottom edge of the closure is located below flange 18 there is no likelihood of water escaping from within the enclosed tub area to the outside. Any water entering the channel 19 will find its way back into the tub by flowing off the ledge 36, which may be inclined in the direction of the inside of the tub to facilitate such drainage.

The foldable closure 15 may be of any type suitable for track mounting; however, it is preferred to use a closure such as is best illustrated in FIGURE 5. As there shown, the foldable closure comprises a sheet 23 of flexible shape retaining material such as cloth or plastic. It has secured thereto at spaced intervals a plurality of stiffening members or stays 24 which extend the entire height of the sheet. Each of these stiffening members comprises a rigid rail 25 longitudinally recessed, as at 26, on the face thereof, which is disposed against the sheet material. A rider strip of rigid material 27 is laid over the opposed face of the sheet. This strip has a configuration on its abutted face responding substantially to the recess configuration of the rail, so that when the rail 25 and strip 27 are secured together, as by screws 28, the sheet is clamped securely therebetween. Each of these

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stiffening members or stays will carry on its respective ends the guide rollers 15a and 22. When the closure is moved into collapsed position, the material of the sheet extending between adjacent stiffening members will be urged into an accordian fold, the folds of which will be disposed inwardly over the bath tub all as illustrated in FIGURE 5. Such folding is assured by the recess configuration.

In instances where slide-by panels are to be installed, as illustrated in FIGURE 4, the rim of the tub 13 will be formed with a pair of integral tracks 14 and 29, one above the other, and with the upper track offset outwardly from the lower track. The lower track is constructed like the single track described hereinabove and like numerals are used to identify corresponding parts. The upper track 29 is formed by carrying a vertical wall 30 upwardly from the outer edge of top flange 18 of the lower track. This wall 30 terminates in an inwardly extending top flange 31 having a depending lip 32 on its free inner edge to define a channel 33. One of the panels 34 has its guide roller 35 engaged in track 14, whereas the other panel 38 has its guide rollers 35 engaged in the other track 29. This arrangement is such that seepage of water past the lower edges of the panels to the outside of the bath tub is prevented by the presence of the integral tracks 14 and 29.

The structure recited is such as to form the tub with a flat upper rim, without a projecting track surface, so that the track is not an obstacle inhibiting entry or egress from the tub or preventing use of the flat rim thereof.

Although I have described preferred embodiments of the invention in considerable detail, it will be understood that the description thereof is intended to be illustrative, rather than restrictive, as details of the structures may be modified or changed without departing from the spirit or scope of the invention. Accordingly, I do not desire to be restricted to the exact construction described.

I claim:

1. An enclosure assembly including a bath tub having a peripheral rim, and at least one integral track coextensive with at least one longitudinal side of said rim, wherein the track opens inwardly toward the basin portion of the tub, and said track comprises an outwardly lateral offset in said rim.

2. The enclosure assembly recited in claim 1, in which the closure is slidable in said track.

3. The enclosure assembly recited in claim 2, in which the closure is foldable.

4. The enclosure assembly recited in claim 1, in which a second track is integral with said rim and is coextensive with and parallel to said one track,

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5. The enclosure assembly recited in claim 4, in which the tracks are arranged above one another.

6. The enclosure assembly recited in claim 4, in which the tracks are arranged one above the other and the upper track is offset outwardly from the lower track.

7. The enclosure assembly recited in claim 4, in which a closure is slidable in each track.

8. The enclosure assembly recited in claim 1, in which the track includes a flange overhanging said offset, and a depending lip on the free edge of said flange.

9. In an enclosure assembly, including a lower track integral with a bath tub rim and an overhead track spaced thereabove, said assembly having a one piece foldable closure extending between and slidable in said tracks, said closure including means to compel the folds of said closure to project inwardly over said tub when the closure is in collapsed condition, and said lower track including a channel opening inwardly toward the basin portion of the tub and lying below the upper plane of the bath tub rim.

10. The enclosure assembly recited in claim 9, in which the closure is comprised of a sheet of foldable material having stiffening members spaced apart therealong.

11. The enclosure assembly recited in claim 10, in which the stiffening members each comprise an elongated rigid rail one end of which includes slidable means for connecting the stiffening member into the lower track channel, and the rail is recessed on one face to receive the foldable sheet thereover, and a rider strip nested in said recess over said foldable sheet connected to said stiffening member.

References Cited

UNITED STATES PATENTS

1,785,636	12/1930	Leber	4-148
2,092,426	9/1937	Riddell	4-149
2,095,645	10/1937	Lewis	4-149
2,197,385	4/1940	Ricken	4-149
2,747,200	5/1956	Finkel	4-148
2,885,000	5/1959	Merrill	4-149
2,897,514	8/1959	Collins	4-154
2,897,515	8/1959	Collins	4-154
2,911,654	11/1959	Bruno	4-149
3,037,555	6/1962	Kochanowski	4-154
3,205,547	9/1965	Riekse	4-154

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