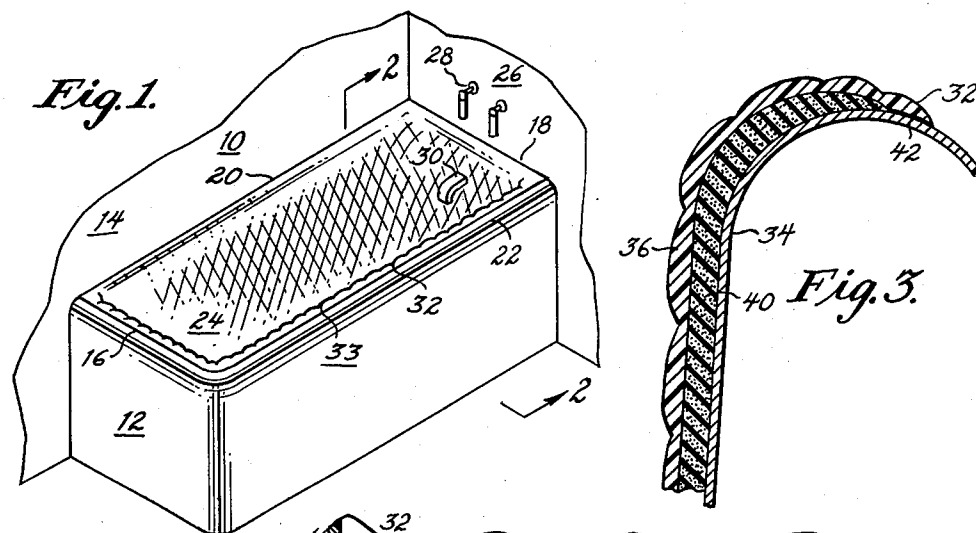
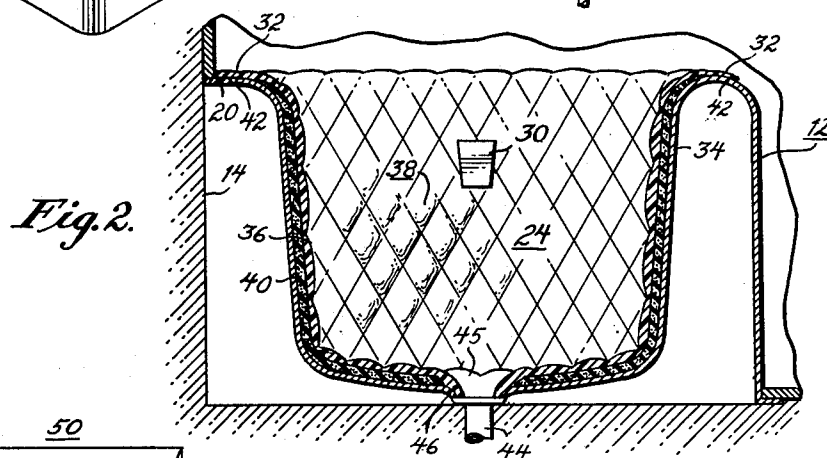
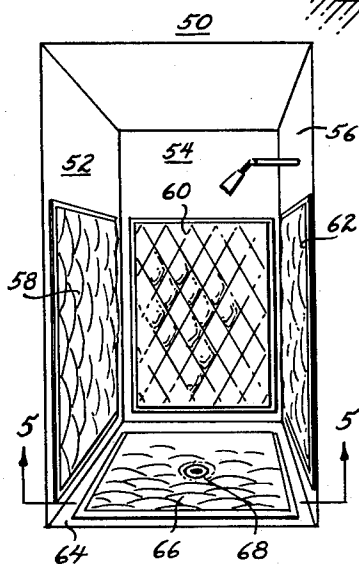
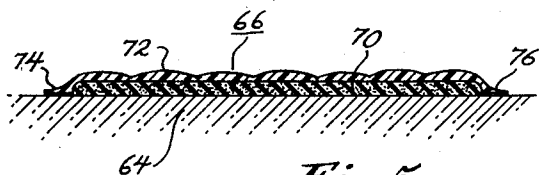


May 19, 1964

H. G. SPIER
BATHROOM SAFETY LINER
Filed Aug. 6, 1962

3,133,292



INVENTOR
HANS G. SPIER
BY *Arthur H. Seidel*
ATTORNEY.

1

3,133,292

BATHROOM SAFETY LINER

Hans G. Spier, 1 Prince Edwards Lane, Media, Pa.

Filed Aug. 6, 1962, Ser. No. 215,181

1 Claim. (Cl. 4—185)

In general, this invention relates to a new and improved safety liner for stall showers and bathtubs. More particularly, it relates to a safety liner which can be secured to a bathtub or a stall shower without suction cups or straps to provide a decorative, easily cleaned, and safe liner.

In the past, stall showers have been lined with foam rubber cushions and rubber mats which had to be held in place by straps or suction cups. Both of these methods of securing the liner to the bathtub had distinct disadvantages. Water could get under the mat and it would tend to float therefore becoming unsuitable for its intended purpose. Thus suction cup units tend to loose their suction after continued use and also lift up from the bathtub or shower floor.

Additionally, both of these prior art units make no provision for securing the liner around fixtures in the tub or shower.

It is the general object of this invention to avoid and overcome the foregoing and other difficulties of prior art practices by the provision of a new and improved protective safety liner for stall showers and bathtubs.

Another object of this invention is to provide a new and improved protective safety liner for stall showers or bathtubs in which all points on which an accidental body impact due to a fall or slippage are covered.

Another object of this invention is to provide a better protective safety liner for metal stall showers and bathtubs which can be custom built to the dimensions of the unit.

A still further object of this invention is the provision of a water-tight liner for a stall shower or bathtub which can be semipermanently bonded without damage to the tub or shower finish.

Another object of this invention is the provision of a new and better protective safety liner for bathtubs and showers which provides a resilient cushion decorative in nature and easily cleanable.

Another object of this invention is to provide a new and better protective safety liner for stall showers and bathtubs which may be easily mounted and will be resistant to water, soaps, detergents and conventional bath salts.

Another object of this invention is to provide a new and better protective safety liner for stall showers and bathtubs having a calendered or quilted pattern on the exposed lining surface.

Other objects will appear hereinafter.

For the purpose of illustrating the invention there is shown in the drawings forms which are presently preferred; it being understood, however, that this invention is not limited to the precise arrangements and instrumentalities shown.

FIGURE 2 is a pictorial view of a bathtub provided with a custom built protective safety liner designed in accordance with the principles of the present invention.

FIGURE 2 is a cross sectional view of the bathtub of FIGURE 1 taken along lines 2—2.

FIGURE 3 is an enlarged sectional view of the right side of the bathtub shown in FIGURE 2.

FIGURE 4 is a pictorial view of a stall shower provided with protective safety liners in accordance with the principles of the present invention.

FIGURE 5 is a cross sectional view of the bottom of the stall shower shown in FIGURE 4 taken along lines 5—5.

Referring to FIGURE 1, there is shown therein an

2

installation generally designated by the numeral 10 including a bathtub 12 mounted against a wall 14.

The bathtub 12 has a front edge 16 and a back edge 18. The back edge 18 is flush against a second wall 26 at right angles to wall 14. The bathtub 12 has one side edge 20 abutting wall 14. A second side edge 22 is parallel to the side edge 20.

The bathtub 12 has a basin portion 24. Hot and cold water valves 28 mounted on wall 26 control the flow of water through a faucet 30 adapted to fill the basin 24 with water.

Within the basin 24, there is mounted a custom built protective safety liner 33 built in accordance with the principles of the present invention. The safety liner 33 has a flanged outer edge portion 32 adapted to fit over top edges 16, 18, 20 and 22 of the bathtub 12.

The safety liner 33 is adapted to be placed against the metal or porcelain wall 34 of the basin 24. The liner 33 consists of an outer exposed layer 36 of a solid elastomer, or flexible thermo-plastic, or the like, and an inner layer 40 consisting of closed cell foam rubber of the natural or synthetic type.

The exposed layer 36 is preferably made of polyethylene, polyvinylchloride, or Teflon (polytetrafluoroethylene) in order to render the layer resistant to chemical, abrasive or other mechanical attack. This surface layer can contain woven or otherwise positioned fibers as a means of reinforcement and/or decoration, or as a means of providing anti-slippage properties. Also, layer 36 is impervious to water, soap, detergents, shampoo, etc. As can be seen in FIGURE 3, the outer layer has an embossed or molded profile pattern 38 on its exposed surface so as to provide better anti-slipping qualities. In the particular embodiment shown, the profile pattern 38 is quilted.

The outer layer 36 is adapted to overlies the inner foam rubber layer 40 along all exposed edges of the safety liner 33. This outer flanged portion 32 insures that the inner foam rubber portion 40 is not exposed to water, soap or the like.

The flanged portion 32 is adhesively secured to the metal tub portion 34 by a waterproof permanently soft gum or adhesive coating 42. This coating allows the liner to be removed for replacement without damage to the metal finish, whether porcelainized, painted or unpainted. The drain pipe 44 of the bathtub 12 is not covered by the liner 33. Rather, an opening 45 is made in the bottom of the liner 33 and a flanged extension of the layer 36 is formed around the drain 44 and designated by the numeral 46. A similar provision is made about the faucet 30.

It can readily be seen that all rims and edges of the bathtub which one might accidentally hit are provided with a continuous resilient cushion so as to limit injuries due to a fall or slippage in the tub.

In FIGURE 4, there is shown protective safety liners of standard size which can be utilized in a stall shower 50. The stall shower 50 has side walls 52 and 56 and a back wall 54.

Protective safety liners 58, 60 and 62 are adhesively secured to walls 52, 54 and 56 respectively. The bottom 64 of the stall shower 50 is covered with a protective liner 66 having provision for uncovering the drain 68.

As can be seen in FIGURE 5, the bottom protective liner 66 is similar in construction to the liner 33 shown in FIGURE 1. Liner 66 includes a closed cell foam rubber layer 70 covered with an exposed layer 72 having overlying flanged portions 74 and 76 which are adapted to be adhesively secured to the bottom 64 of the shower 50.

It can readily be seen that the safety liner of the present invention can be manufactured in various shapes and

3

sizes in accordance with the needs of the user. For example, one liner 58 is secured to wall 52. If desired, liner 58 may be made smaller so that four or more such liners would be required to cover the same space.

The present invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof and, accordingly, reference should be made to the appended claim, rather than to the foregoing specification as indicating the scope of the invention.

I claim:
A protective liner for bathtubs and showers comprising a resilient layer, a water and soap repellent layer bonded to said resilient layer, said repellent layer having edge

4

portions overlapping edges of said resilient layer, and an adhesive coating on an exposed surface of said edge portions for securing said repellent layer to a supporting surface, said adhesive coating securing said layers in a manner whereby the protective liner can be removed for replacement without damage to the supporting surface.

References Cited in the file of this patent

UNITED STATES PATENTS

10	2,055,629	Marvin	Sept. 29, 1936
	2,080,601	Cappuccio	May 18, 1937
	2,264,672	Levine	Dec. 2, 1941
	3,045,254	Cook et al.	July 24, 1962