Aug. 12, 1969 W. H. BENJAMIN 3,460,167

BATHTUB COVER

Filed May 9, 1967

FIG. 1.

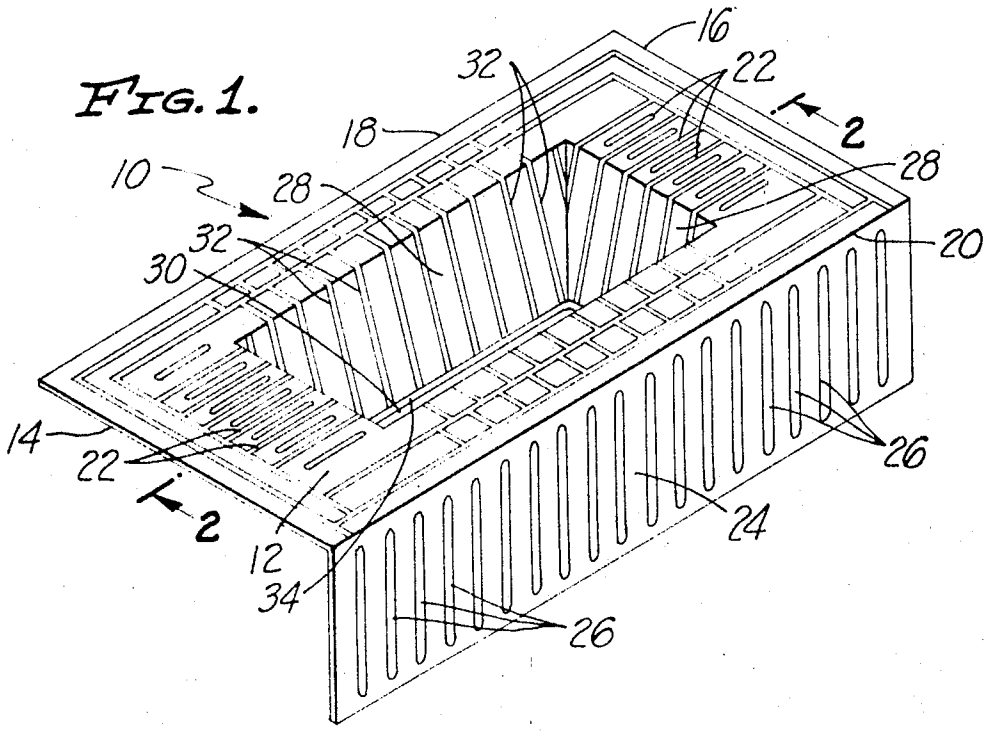
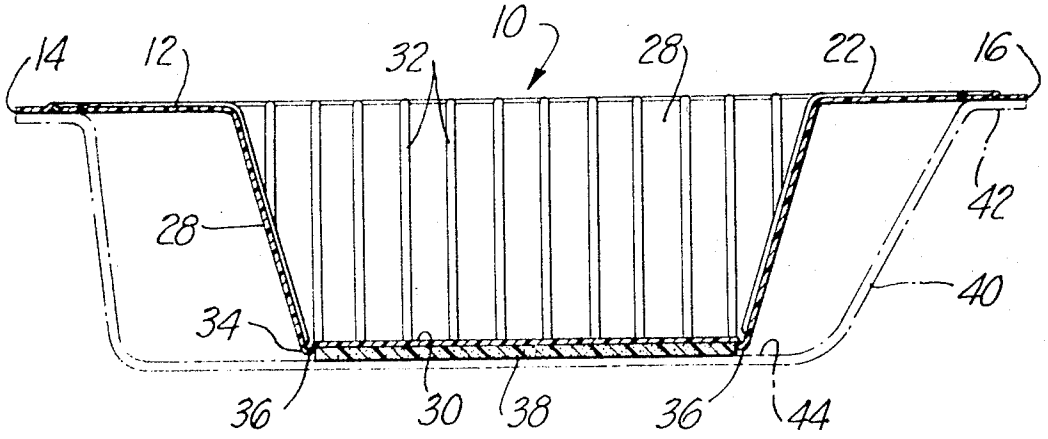


FIG. 2.



INVENTOR
WILLIAM H. BENJAMIN
BY
EDWARD D. O'BRIAN
ATTORNEY

United States Patent Office 3,460,167
Patented Aug. 12, 1969

3,460,167

BATHTUB COVER

William H. Benjamin, 14002 Eastbrook, Bellflower, Calif. 90706

Filed May 9, 1967, Ser. No. 637,244
Int. Cl. A47k *13/00*
U.S. Cl. 4—173 1 Claim

ABSTRACT OF THE DISCLOSURE

A protective cover for bathtubs is disclosed which is formed from a self-supporting, somewhat flexible sheet of plastic. This cover is formed so as to be capable of engaging the normally exposed edges of a bathtub and overlaying all normally exposed portions of such a tub. It includes a centrally formed depression area which engages the central region of the bottom of a normal bathtub so as to hold the cover against undesirable slipping. The entire cover is designed so that it can be used with virtually any commonly encountered bathtub.

BACKGROUND OF THE INVENTION

The exposed finish of the surface of a bathtub is regarded as quite important as far as the ultimate user or purchaser of such a tub is concerned. If the tub finish is damaged prior to its ultimate use, obviously the tub is not as desirable as a bathtub having its finish intact and having its intended appearance. As a result of this type of factor, a number of efforts have been made to provide protective covers for bathtubs.

Such covers are primarily used during the installation of bathtubs so as to protect the finishes of such tubs from tools, debris and the like which might tend to damage these finishes. They are also capable of being used to protect an existing, installed bathtub during remodeling or other similar or related work. In all of these uses, a protective cover is normally positioned with respect to the bathtub so as to cover all of the areas of the tub which are normally exposed. In theory, any damage caused by falling debris, tools or the like will be done to the protective cover instead of the tub finish.

A number of different structures have been developed in order to accomplish the objective indicated in the preceding. Many of these structures have involved the use of pre-formed sheets of material intended to fit against all of the normally exposed contours of a bathtub. From a practical point of view, covers of this category are considered disadvantageous. This can easily be illustrated. A number of different shapes and styles of bathtubs are in common use. A cover which is designed to fit closely against the interior of one shape or style of bathtub normally will not fit the interior of another shape or style of bathtub. As a result of this, in order to supply market needs, a manufacturer of protective bathtub covers of this close-fitting type must have the necessary molds and the like to turn out a separate, different protective cover for each type of commonly available bathtub. This is economically disadvantageous. It is also economically disadvantageous for a manufacturer and/or a supplier to hold an inventory of differently shaped bathtub covers of the types necessary to fit all commonly available bathtubs.

Bathtub covers which are intended to fit closely against the interior of all normally exposed parts of a bathtub

are also considered to be somewhat disadvantageous for another, different type of reason. Not infrequently a certain amount of dirt or debris will be located against the interior surface of the bathtub, such as the bottom of the tub, before a protective cover is installed in such a tub. During installation of the protective cover, such dirt or debris may be overlooked, or even where it is noticed workmen may install the protective cover without removing this debris. As a result, a situation develops in which dirt or debris is trapped between the protective cover and the tub. If pressure is applied to the protective cover during construction or other operations, this dirt or debris may be ground into the finish of the tub, detrimentally affecting such finish.

In many cases other factors are considered to affect the acceptability of various prior bathtub covers. At times these covers have been made of materials which are substantially incapable of protecting a tub finish when these covers are subjected to significant physical or related abuse during construction or similar operation. Thus, for example, a paper or cardboard protective cover is apt to be damaged by contact with tools which are dropped, shoes of the workmen, or the like, particularly when damp, so as to give rise to the danger of damage to the finish of a tub.

Another factor which is important in this field is the ease of use of a protective cover for a bathtub. Such a protective cover should be relatively easy to install in a proper manner so as to protect the finish of a bathtub, or purchasers will not buy it and/or use it. Such a cover must also be relatively inexpensive since it is essentially a throw-away type of item designed to serve a temporary protective function and then to be discarded.

SUMMARY OF THE INVENTION

An objective of the present invention is to provide new and improved bathtub covers which, to a significant degree, tend to overcome limitations and disadvantages of prior protective bathtub covers such as the various disadvantages and limitations indicated in the preceding discussion. It is an intention of this invention to provide protective bathtub covers which are relatively inexpensive, which may easily be installed, which are designed so as to be capable of fitting bathtubs of a number of different sizes and shapes, and which are capable of effectively and efficiently protecting the finish of a bathtub. Various other objects of the invention will be more fully apparent from a detailed consideration of this specification and the accompanying drawing.

As an aid to understanding this invention, it can be indicated that it concerns protective bathtub covers, each of which is formed of a self-supporting, somewhat flexible sheet of plastic so as to include an upper surface and a flat side attached to an edge of the upper surface so as to extend therefrom. A bathtub cover of this invention includes what is referred to as a depression formed in the center area of the upper surface so as to extend from the upper surface in the same direction as the flat side. Such a depression has a bottom generally parallel to the upper surface. A cellular elastomeric pad is attached to the bottom so as to be capable of engaging the bottom of a bathtub.

In use, the upper surface of a cover as disclosed overlays the upper portion of a bathtub and edges of it are, if desired, temporarily attached to edges of the tub by an adhesive tape or similar means. In this position the elasto-

meric pad engages the bottom of the central region of the tub so as to prevent undesired slipping of the cover. This pad is of such a character that it will give and accommodate debris or the like so as to avoid damage to the bottom of the tub. When used in this manner, the flat side covers the normally exposed side of the tub so as to protect it against damage to the finish.

DESCRIPTION OF THE DRAWING

FIG. 1 is an isometric view of a presently preferred embodiment of a protective bathtub cover of this invention; and

FIG. 2 is a cross-sectional view taken at line 2—2 of FIG. 1 showing, with dotted lines, the general shape of a bathtub and how the cover fits with respect to such a tub.

It will be realized by those skilled in the art that the accompanying drawing is primarily intended to illustrate a presently preferred embodiment of a protective bathtub cover of this invention. Since the invention can be embodied within differently appearing protective covers, the drawing is not to be taken as limiting the invention in any respect.

DETAILED DESCRIPTION

In the drawing there is shown a protective bathtub cover **10** of the present invention formed using a single sheet of plastic material. The cover **10** has a substantially flat upper surface **12** of a rectilinear shape. This surface **12** has parallel ends **14** and **16** and parallel side edges **18** and **20**. It is normally preferred to locate on the surface **12** a plurality of ridges **22** in the nature of corrugations which serve to give the entire upper surface **12** a degree of stability while permitting the use of as thin a material as reasonably possible in forming the surface. These ridges **22** nevertheless permit the upper surface **12** to be somewhat flexible.

Attached to the side edge **20** so as to extend at an angle of substantially 90° from the surface **12**, is a substantially flat, rectilinear side surface **24**. This side surface **24** is the same length as the side edge **20**; if desired, it may be provided with ridges **26** corresponding to the ridges **22** on the surface **12**. The upper surface **12** is preferably formed so that its peripheral dimensions correspond to the upper dimensions of most conventional or common bathtubs. The side surface **24** is also preferably dimensioned so as to correspond to the dimensions, including height, of a conventional bathtub.

Centrally located within the upper surface **12** is a generally rectilinear depression consisting of vertical walls **28** and a substantially flat bottom wall **30** which is parallel to the upper surface **12**. The walls **28** may contain various ridges **32** corresponding to the ridges **22** and **26** previously described. The ridges **32** serve to increase structural strength while permitting the use of relatively thin material. Around the periphery **34** of the bottom wall **30**, there is located a small bead or groove **36** which extends generally away from the upper surface **12** so as to space the bottom wall **30** towards the upper surface **12** a comparatively short distance from the lower ends of the various walls **28**. On the side of the bottom wall **30** remote from the upper surface **12** a pad **38** is attached to the bottom wall **30** as by the use of a conventional adhesive.

The nature of this pad **38** is considered to be quite important. It is thick enough to extend from the bottom wall **30** a short distance beyond the lower ends of the walls **28** and the bead **36**. It is preferably formed of a cellular, elastomeric material such as a polyurethane foam composition so as to have exposed cell edges on the side away from the bottom wall **30**. A polyurethane material is preferred for use in the pad **38** because of the physical properties of polyurethane, such as resistance to attack and the like. The exposed cellular edges of the pad **38** enable this pad to exercise great holding power so as to resist movement.

In use, the protective bathtub cover **10** is merely set in place upon a bathtub such as the bathtub **40** indicated in phantom lines in FIG. 2. In this position the upper surface **12** engages the normal edge **42** found around the periphery of the upper surface of a bathtub. In this position the pad **38** engages the central region or area of the bathtub bottom **44** so as to tend to hold the entire protective cover **10** against any movement. If any dirt, debris, or the like should be within the bathtub in the area to be engaged by the pad **38**, by virtue of its flexible, resilient character, this pad **38** will give and bend so as to accommodate such dirt or debris. This is considered to be quite important in avoiding the dirt or debris being ground into the surface of the bathtub as various other operations such as construction operations are performed.

If desired, during such installation the edges **14**, **16** and **18** of the protective cover **10** may be secured in place as by the use of a pressure sensitive tape so as to prevent any tendency towards movement of the cover and any tendency for dirt or debris to seep into the bathtub around these edges. When the cover **10** is installed in this manner the side surface **24** overlays the side of the tub to protect it. If desired, the edges of this side surface **24** may be secured in place through the use of tape in the same manner as the edges of the upper surface **12** may be secured in place.

From a consideration of the use of the protective bathtub cover **10**, it will be realized that this cover **10** can be used with a large number of different bathtubs having different curvatures and the like because of the fact that it does not fit closely against the interior surfaces of such tubs. What has been referred to in the preceding as a depression is dimensioned so as to be normally spaced from the usual interior curved bathtub walls. The entire cover **10**, and in particular the upper surface **12**, is sufficiently flexible so as to be capable of deforming slightly in order to "give" so as to adjust for height limitations in various different bathtubs, and in particular variations in the bottom orientations of such tubs.

Such flexibility is achieved by the cover **10** by making the cover from a known type of plastic sheet. Various different types of plastics may be satisfactorily used. Thus, it is possible to use various styrene, ABS or similar polymer materials. Such materials possess sufficient physical strength to withstand abrasion, blows and the like. The inherent character of the cover **10**, when formed of such materials, is such that blows are normally absorbed by this cover or the pad **38** so as not to be directly transmitted to the interior finish of a bathtub. Further, such materials are water resistant and posses their strength characteristics even when subjected to moisture.

From the foregoing those skilled in the art will realize how the cover **10** tends to meet the various objectives of this invention. Because of the nature of this invention, it is to be considered as being limited solely by the appended claim forming a part of this disclosure.

I claim:

1. A protective bathtub cover which comprises:

a continuous cover sheet of a self-supporting, slightly flexible, water-resistant plastic material, said cover sheet having

(a) a substantially flat upper surface of a rectilinear shape provided with ribs and having parallel ends and parallel side edges;

(b) a substantially flat side surface attached to one edge of said upper surface so as to extend therefrom at about a 90° angle, said side surface being rectilinear and provided with ribs;

(c) a depression located in the central area of said upper surface, said depression having a bottom wall parallel to said upper surface and spaced from said upper surface;

said bathtub cover also including a cellular elastomeric pad attached to and covering said bottom wall of said depression on the side thereof remote from said

upper surface, the width and length of said pad corresponding to the width and length of said depression, said pad extending from said depression and said bottom wall, said pad having exposed cell edges on the side thereof remote from said bottom wall;

said upper surface being dimensioned so as to overlay the upper edges of a bathtub;

said side surface being dimensioned so as to overlay the normally exposed side of a bathtub; and

said depression and said pad being dimensioned so that said pad will engage the bottom of an interior of a bathtub when said protective cover is used with said depression being spaced from the normally curved interior walls of such a bathtub.

References Cited

UNITED STATES PATENTS

1,571,335	2/1926	Jarvis	4—173
2,575,236	11/1951	Slawson	4—173
2,583,714	9/1958	Darmstadt	4—173
3,045,254	7/1962	Cook et al.	4—173

LAVERNE D. GEIGER, Primary Examiner

H. J. GROSS, Assistant Examiner