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UNIVERSAL COVER FOR CONTAINERS

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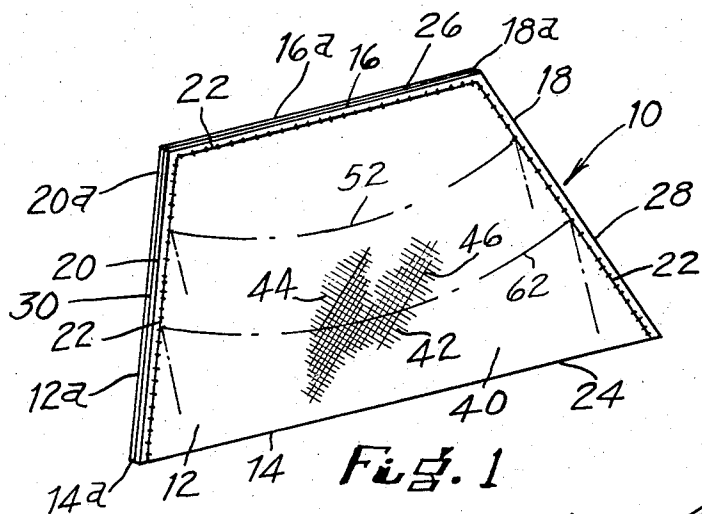


Fig. 1

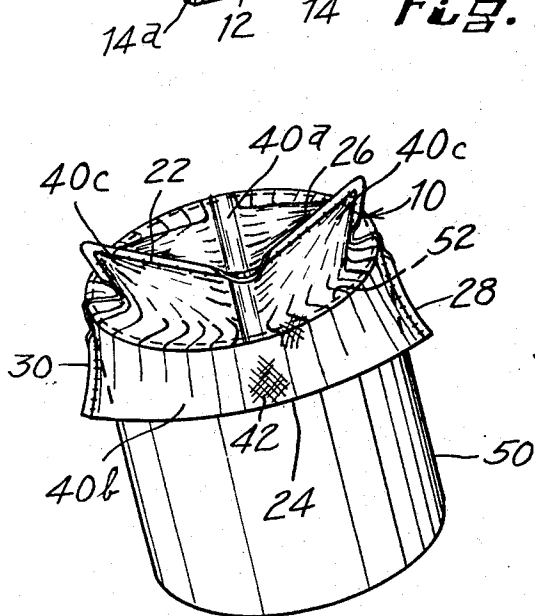


Fig. 2

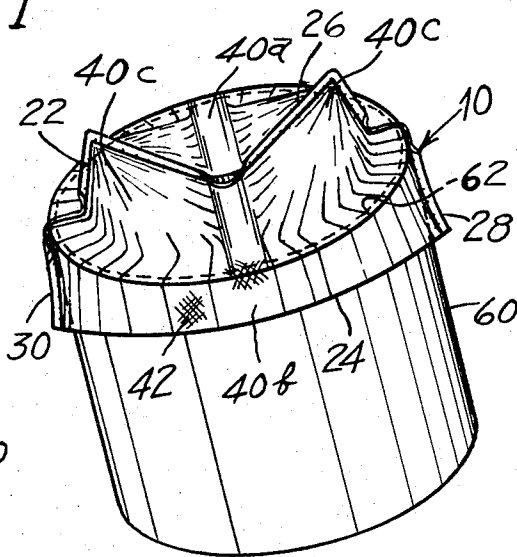


Fig. 3

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ABSTRACT OF THE DISCLOSURE

A flexible trapezoid-like shaped cover comprising identically shaped superimposed initially flat layers of sheet material having gripping means as a part thereof for retaining the cover stretched onto various sizes and shapes of the containers or the like.

The invention relates to a cover for enclosing containers and the like, as for example, open end barrels or kegs used for packaging, shipping, or transporting of material therein, and particularly to a universal flexible, foldable cover of predetermined size and shape that is adaptable to enclose any one of a plurality of containers of various shapes and sizes which come within the specific range for which the cover is made.

Heretofore, flexible covers were either custom made for each container or had draw strings, elastic bands or the like to reduce its larger size in order to accommodate and grip smaller size containers. Other covers were simply loosely fitted over the open end of the containers whereby they were easily blown off or accidentally removed therefrom and the contents of the container subject to contamination or harmful exposure of one form or other depending upon the material.

The instant invention solves many of the previous problems encountered and does so without the use of additional means mentioned above for gripping and maintaining the cover on the containers of various sizes and shapes. Also, no special precaution need be taken in applying the cover of the instant invention since it need not be positioned squarely onto the container and will grip the container just as well if applied at an angle thereto.

Briefly, the invention comprises a preform of flexible sheet material which can be made in various ways. The preform has an open bottom side or edge of greater peripheral length than that around the largest open end portion of the range or group of various size and shape containers to be encountered. It has a closed top side or edge of less peripheral length than that around the smallest open end portion of the various size and shape containers to be covered. A closed sidewall extends from the bottom side or edge and converges toward the top side or edge. The cover is simply pulled over the rim or open end portion of a container until the portion within the inwardly tapered or converging sidewall between the bottom and top side corresponding to the distance around the rim grips the rim or portion surrounding the open end.

Therefore, one object of the invention is to provide a preformed cover which can enclose a plurality of containers having rim or end portions of various shapes and sizes. Another object of the invention is to provide a universal foldable cover made of economical flexible sheet material to fit a variety of containers. Another object is to provide a universal flexible cover of predetermined shape which inherently grips various shapes and sizes of rims or end portions found on containers within a predetermined range.

Another object is to provide a universal foldable cover made of flexible sheet material which is oriented to pro-

vide a grip on the rim or end portion of the container. Other objects will be in part obvious or in part pointed out hereinafter.

In the accompanying drawings in which is shown one of various possible embodiments of the invention:

FIG. 1 is a perspective view of the preformed cover;

FIG. 2 is a perspective view of the cover pulled over the rim or end portion of a container, and

FIG. 3 is a perspective view of the same cover pulled over the larger rim or end portion of another container.

Illustrated in the drawings is one embodiment of several possible embodiments of the cover 10 which is composed of two superimposed layers or sheets 12 and 12a of flexible material. Each of the sheets 12 and 12a are identical in size and shape which is substantially that of a trapezoid. However, the sheets may be preformed into other workable geometric shapes such as triangles, cones, and others which have opposed inwardly tapered or converging sides. As shown the sheets 12 and 12a have wide bottom edges 14 and 14a and top edges 16 and 16a which are narrower than the bottom edges 14 and 14a. Extending upwardly from each end of the bottom side or edge to the top edge or side of each sheet are inwardly tapered or converging sides or edges 18 and 18a, 20 and 20a, which may or may not be of equal length. The cover 10 is preformed by securing, as by stitching at seam 22 or other suitable means, the sheets 12 and 12a together adjacent each of the sides or edges 16, 16a, 18, 18a, 20, and 20a. Thus, the cover becomes an integral piece wherein the edges 14 and 14a become an open bottom edge or side 24 which has a peripheral length greater than the distance around the largest rim or end portion of a series of containers to be fitted. The edges 16 and 16a secured together now become a closed top side 26 the peripheral length of which is less than that of the bottom edges 14 and 14a and less than the distance around the smallest rim or end portion of a series of containers to be covered.

Again, the edges 18 secured to the edge 18a form a closed tapered side 28 and edges 20 and 20a as secured form an opposite tapered side 30. Both of the secured sides 28 and 30 together forming an integral closed sidewall 40 extending from the open bottom side 24 and converging toward the closed top side 26.

Obviously, the cover could be made out of a single piece of material with or without seams; the sidewall 40 and hence the top side 26 could be extended upwardly to a point where opposed portions of the sidewall would intersect one another, and thereby increase the range of size and shapes of containers which the cover could accommodate. Likewise, the bottom side 24 could be enlarged or decreased to respectively increase or decrease the range of sizes of containers to be fitted.

Although the cover may be constructed of various types of flexible sheet materials, such as plastic, canvas, metal foil and others, it may be desirable to provide sheet material which is woven or embossed so as to have the texture of woven material or similar thereto whereby the material will firmly grip the rim of the containers. In FIG. 1 is shown a weave or texture 42 on the sidewall 40 of the sheet material 12 in which the strands 44 and 46, woven or embossed thereon, are situated at an angle to bottom side 24 and hence to the rim of a container, is found to increase the gripping power of the material when stretched over the rim of the container. This is because many more strands are in frictional engagement with the surface of the rim than if the strands 44 were oriented perpendicular to and the strands 46 parallel to the bottom side. Both strands 44 and 46 are frictionally engaging the rim when arranged at an angle while only a few of the parallel strands 46 would be engaging the rim when arranged parallel with the edge of the rim.

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In FIG. 2 is shown a circular container 50 having a small annular rim or open end portion 52 over which the cover 10 has been stretched. The approximate place where the rim 52 first contacts the inner surface of the sidewall 28 is shown in phantom line 52 in FIG. 1.

Upon stretching the cover over the annular rim 52, the central portion 40a of the sidewall 40 between the sides 28 and 30 becomes taut in a direction normal to the seam 22 and the overhanging portion or skirt 40b is of less height due to the fact that there is less material at that portion of the cover. However, if the barrel or container 50 was oval in shape obviously the skirt 40b would be of equal or greater in height depending upon how much narrower the rim of the container is relative to its greater transverse dimension.

Also, the overhanging portion 40b extending downwardly firmly grips the outer surface of the container below the rim. In fact, the depth of contact the skirt 40b has with the outer surface of the container is approximately the same from the center toward the seam at each side 28 and 30 of the cover 10. As shown, in stretching the cover over the rim of a container, excess material, which extends from each side of the depressed taut portion 40a along the seam 22, takes the form of a pair of ears 40c which can be folded down if desired due to its flexibility. However, the material firmly grips the entire peripheral portion of the rim to maintain the cover in place.

In FIG. 3 the same size cover 10 is shown stretched over a larger container 60 having a rim portion 62 of the same shape as rim 52 but of greater peripheral length than rim 52. In this respect, the rim 62 first contacts the inner side of the sidewall 40 at approximately the place indicated by the phantom line 62 in FIG. 1 and which is below that of the rim 52. Obviously, the same conditions as described above are still true except that the overhanging skirt 40b is of less height than that shown in FIG. 2 and the ears 40 take a slightly different shape due to the larger diameter of the rim 62. Proportionately, the amount of material gripping the identically shaped rims 52 and 62 are substantially the same for each identical unit of peripheral length of the rims.

It is obvious from the above description and drawings that a large range of different sizes and shapes of containers can be covered by the cover of the instant invention. Also, that many possible modifications in addition to those set forth above may be made of the disclosed invention. It is deemed unnecessary to depict all of the various sizes and shapes in view of the fact that the cover is flexible, foldable and therefore obviously adaptable to fit various sizes and shapes. Another possible obvious em-

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bodiment of the invention would be to preform the cover out of flexible material in the shape of a cone or cup shaped which is but a cone with the vertex of the cone cut off.

It has thus been shown there has been provided by this invention a preformed cover in which the various objects hereinabove set forth together with many practical advantages are successfully achieved. As many possible embodiments may be made of the above invention and as many changes might be made in the embodiment above set forth, it is to be understood that all matter hereinabove set forth or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

What is claimed is:

1. A cover adaptable to fit over and grip the end portion of any of a series of containers having end portions of various peripheral length, shapes and sizes, which comprises:
 - a preform of flexible sheet material having means solely part of the material for firmly gripping and maintaining the cover onto the end portion of a container when the cover is stretched thereover;
 - an open bottom side of greater peripheral length than the end portion of any of the containers in the series of the containers to be covered;
 - a closed top side of predetermined length opposite the bottom side, said top side being of less peripheral length than the end portion of any of the containers in the series of containers to be covered; and
 - a closed sidewall including opposed identically shaped portions of the sheet material extending from the bottom side and converging to the top side.
2. A cover according to claim 1 wherein the preform is trapezoidal-like in shape.
3. A cover according to claim 1 wherein the flexible sheet material is textured to increase the gripping power of the material.
4. A cover according to claim 3 wherein the textured sheet material includes strands which are situated at an angle to the bottom side.

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