

Oct. 13, 1953

A. SZABO

2,654,892

RELIEF CONTAINER FOR AUTOMOBILES

Filed July 20, 1950

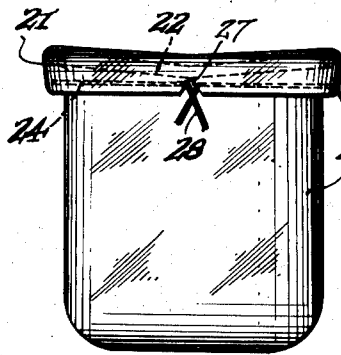


FIG. 1.

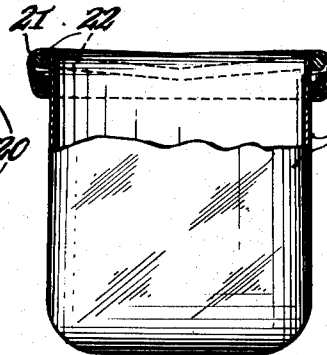


FIG. 3.

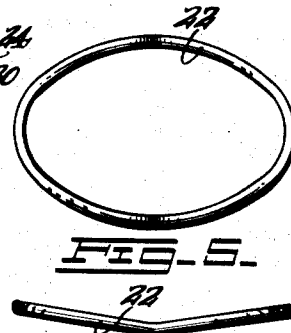


FIG. 5.

FIG. 6.

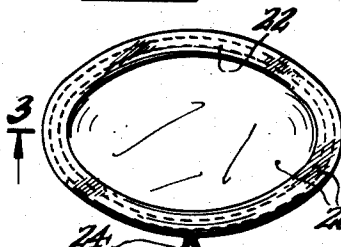


FIG. 2.

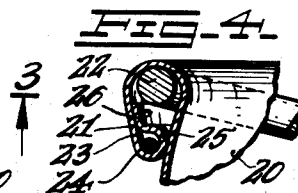


FIG. 4.

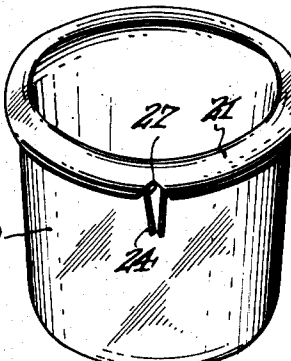


FIG. 7.

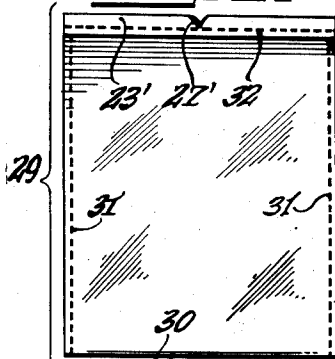


FIG. 8.

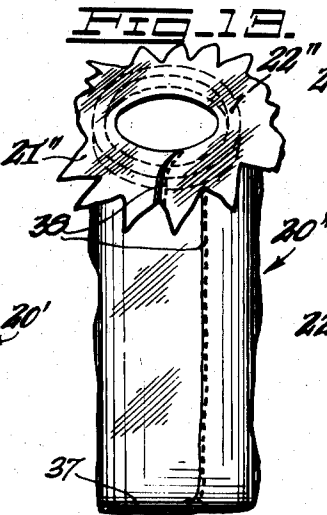


FIG. 13.

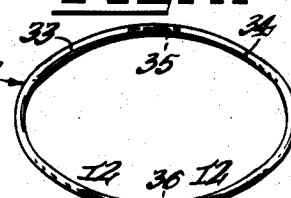


FIG. 10.

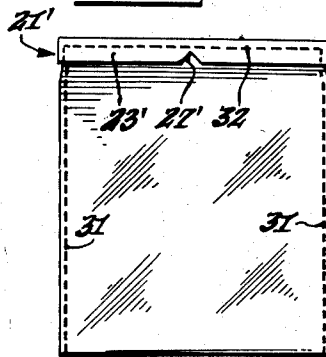


FIG. 9.

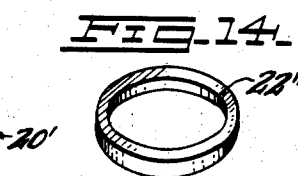


FIG. 14.

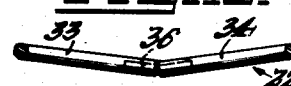


FIG. 11.



FIG. 12.

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2,654,892

RELIEF CONTAINER FOR AUTOMOBILES

Alexander Szabo, Perth Amboy, N. J.

Application July 20, 1950, Serial No. 174,836

1 Claim. (Cl. 4-110)

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The subject of the present invention is a new and useful article of manufacture constituting a relief container particularly valuable for use by anyone travelling by way of automobile and while in or near the automobile, at a time such that immediate relief must be had and yet no comfort station or the like is within quick reach.

This invention has been made with the idea of providing an emergency container for the purpose described, as for receiving a deposit of urine; with the new container comprising a waterproof bag of limply flexible material, a ring unit for temporary assembly with the bag adjacent to its open top to distend said top, and means carried by the bag and manipulable for detachably coupling the ring member and the bag in said temporary assembly.

The bag, being limply flexible, may be normally, that is, prior to use, collapsed into very small bulk.

Also, according to the invention, the bag is contemplated to be of one-use utility, that is, to be discarded after one use; and, accordingly, a feature of the invention is that the bag is made of such a limply flexible and exceptionally inexpensive material as cellophane, Pliofilm or the like.

Further, according to the invention, the bag material should be so tough and strong that hard, tight twisting of the bag material adjacent to its mouth, after the bag has received its deposit and then after removing the ring unit, may be relied on to collapse the top of the bag in a way to prepare for most efficacious use of the means aforesaid pursuant to another intended utility of said means, which is to close the bag leak-proof at its top; in preparation for opening and emptying the bag at a later time and at a suitable place, for there sanitarily disposing of the bag contents and, separately, disposing of the bag itself. Cellophane, Pliofilm or the like is a material which is, also, of the strong and tough nature just referred to.

Various other objects, features and advantages of the invention will be hereinafter pointed out or become apparent.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claim in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a side elevation of one now favored

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embodiment of the invention, with the ring and bag assembled to establish a relief container of one kind, ready for use.

Fig. 2 is a top plan view of said container.

Fig. 3 is a transverse vertical section, taken on the line 3-3 of Fig. 2, but, in view of the extreme thinness of cellophane, Pliofilm or the like, with hatching omitted at the portions of the bag here shown in section; this omission for the purpose of keeping the drawing as clear as possible.

Fig. 4 is a fragmentary, enlarged showing of the upper left-hand portion of Fig. 3.

Fig. 5 is a top plan view of the ring member of Figs. 1-4.

Fig. 6 is a side elevation of said member.

Fig. 7 is a top perspective view of the bag of Figs. 1-4, shown spread open at its top as though distended by the ring member.

Fig. 8 is an elevational view, showing a modified construction for the bag; with all of certain stitchings completed.

Fig. 9 is a view similar to, and showing the bag of, Fig. 8, but with the parts rearranged after completion of said stitchings.

Fig. 10 is a view similar to Fig. 5, but showing a ring structure modification.

Fig. 11 is a view similar to Fig. 6, showing said ring modification.

Fig. 12 is an enlarged fragmentary detail view, this being a section taken on the line 12-12 of Fig. 10.

Fig. 13 is a top perspective view of another now favored embodiment of the invention, with the ring and bag assembled to establish a relief container of a kind other than illustrated in Figs. 1-12, ready for use.

Fig. 14 is a top perspective view of the ring member of Fig. 13, detached.

Referring now to the drawings more in detail, and first to Figs. 1-7, the bag, which is designated 20, is made as already stated of cellophane, Pliofilm or any other suitable plastic obtainable having the extreme thinness, strength and toughness, and limp flexibility, typical of cellophane or Pliofilm as now commercially available at trifling cost. As the bag 20 is illustrated, it may be assumed to be formed to the general shape indicated, that is, to have, in addition to its main body, a downturned upper marginal portion 21, with the latter, of course, running all around the open top of the bag.

This upper marginal portion 21 is for disposal as just mentioned, for providing, between the same and the main body of the bag 20, a pocket for temporarily having positioned therein a ring

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structure or member such as indicated at 22. To provide a tunnel (23, Fig. 4), for a drawstring 24, said marginal portion 21, along its edge which is its bottom edge when said marginal portion is downturned, is upturned (as at 25, Fig. 4), all around the mouth of the bag, and the top edge (26, Fig. 4) of this upturned portion is suitably secured, as adhesively, to the adjacent face of the marginal portion 21. With the drawstring 24 in its tunnel 23, the end portions of the former extend through a notch-like aperture (27, Figs. 1 and 7) interrupting the continuity of the tunnel.

On placing the ring 22 in its said pocket surrounding the upper end of the bag 20, and on then pulling the drawstring 24 tight and tying the same as indicated at 28 in Fig. 1, the said pocket is in effect closed all around its bottom. This temporarily assembles the container, with the top mouth of the bag held distended; and thus an emergency container pursuant to the invention is provided, ready for use. The non-uniplanar aspect of the ring 22 in side elevation (see, especially, Fig. 6) is to be noted. This feature of said ring renders the container particularly feasible and convenient of use when the person requiring relief must obtain such relief while in squatting position with the thighs separated.

On completion of the emergency deposit in the bag 20, the drawstring 24, previously preferably tied with a bow-knot, is at its knot untied; and then, following removal of the ring 22, the mouth-adjacent portion of the bag is twisted hard, tight on itself, and while this portion of the bag is held thus twisted, the top of the bag is closed and sealed leak-proof by wrap around and tying of the drawstring 24. For this wrap around and tying of the drawstring it need not be removed from the tunnel 23; since the general collapse of the upper part of the bag consequent upon said hard, tight twist, gives such slack to the part of the length of the drawstring normally in the tunnel 23 that end portions of the drawstring may be drawn through the aperture 27 sufficiently long to permit said wrap around and tying.

The bag shown in Figs. 8 and 9, and there designated 20', is illustrative of a construction wherein the bag is cut from a flat sheet of cellophane, Pliofilm or the like, and then stitched together at various places.

As here shown, the bag 20' is made of an elongate rectangular piece of the sheet material; with the width of said piece the same as the length of the bottom horizontal line in either of these views, and with the length of said piece twice the length indicated at 29 in Fig. 8. In other words, the bottom of the bag is along a fold line 30, and the sides of the bag are stitched along the lines 31, 31. To make the bag waterproof along the lines of stitching 31, a liquid coating of suitable plastic nature may be applied along said lines. The elements 21', 23' and 21' correspond, respectively, to the elements 21, 23 and 21; while in lieu of the adhesive above referred to as used relative the edge 26 mentioned in connection with Fig. 4, a stitching 32 is applied along the entire length of the tunnel 23'.

As will be understood, the ring 22 may be made in one piece or of a plurality of pieces suitably joined together; and said ring may be of any suitable material or materials. As the ring is shown in Figs. 5 and 6 it is rigidly fixed in its non-uniplanar extension already referred to; and so may be conveniently wholly made of a

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suitable plastic, for strength and light weight.

The modified ring unit of Figs. 10-12, as a whole designated 22', is made of a plurality of parts so constituted and so interconnected as to provide for an adjustability of the ring, as to compensate for differences in body contours typical between, for instance, an adult and a child. Here each of two main like parts 33 and 34 of the ring constitutes one-half of the ring; and these ring-halves are coupled permanently, at opposite sides of the ring, by identical cylindrical inserts 35 and 36, of rubber, preferably of such a rubber as is used at the tread portions of automobile tires, that is, a rubber which is quite freely yet somewhat stiffly elastically deformable.

As indicated in Fig. 11, and as shown clearly in Fig. 12 in the case of the insert 36, these inserts are always substantially entirely housed inside the main ring parts 33 and 34, and in cylindrical recesses in said parts such as shown in Fig. 12. These recesses are of the same length, so that one-half of the length of an elastic insert 33 or 34 is housed in each recess. Each insert half is securely locked in its appointed recess, in any suitable way, by forced fit otherwise.

As a result, the ring unit 22', with say the rod-like inserts 35 and 36 both elastically biased to extend as shown in Fig. 12 in the case of the insert 36, thus to urge the ring-halves 33 and 34 for relative extension as shown in Fig. 12, may nevertheless be temporarily rearranged to increase or decrease the angle of divergence between the planes of said ring-halves.

Referring to Figs. 13 and 14, the modification here shown incorporates a bag 20'', assumed to be made of the same material as that specified for the bags 20 and 20'; and a circular ring 22''. The bag 20'' is further shown as made like the bag 20' from a substantially rectangular piece of sheet material, but stitched across its bottom as at 37 and then up along the entire length of one side as at 38. In order to make the bag waterproof along the lines of these stitchings, the bag may be further treated as explained in connection with the stitchings 31. The ring 22'' may be of relatively small diameter, as compared with even the lesser transverse dimension of the ring 22 or 22', and may be entirely rigid; in view of the anatomical location of the male urine discharge orifice. The bag 20'', while of less mouth opening area than the bag 20 or 20', is desirably of greater length than either of the two bags last-named; that is, all the bags are desirably of the same storage capacity.

Because of the slenderization of the bag 20'' heightwisely thereof, parts corresponding to the tunnel 23, the drawstring 24 and the aperture 27 may be dispensed with and are not shown as included. To prepare the device of Figs. 13 and 14 for use, the upper marginal portion of the bag 20'' running around its top open mouth is downturned as at 21'' to provide a pocketing channel for the ring 22''. With said ring in said channel, the now established top opening of the bag 20'' will be held distended while the desired emergency deposit is made. On completion of said deposit, and following removal of the ring 22'', the mouth adjacent portion of the bag 20'' is twisted hard, tight on itself, and retained thus tightly twisted until a time and place arrive such that disposal of the contents of the bag and of the bag itself can properly be effected.

While I have illustrated and described the preferred embodiments of my invention, it is to be

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understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claim.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

As a new article of manufacture, a portable emergency container for the uses described, comprising a water-proof open top bag of limply flexible material, a removable elliptical non-planar ring unit for temporary assembly with the bag adjacent to its top to distend said top and to serve as a handle for the container, said ring unit being circular in cross-section, and means carried by the bag and adapted to be manipulated for detachably coupling the ring unit and the bag in said temporary assembly, said means including the upper portion of the bag, said upper portion of the bag being downturned to provide a downwardly facing channel extending around the bag for receiving therein said ring unit, said downturned upper portion of the bag near the lower edge of said downturned portion incorporating a tunnel running around the bag

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and having an aperture, and a drawstring extending along said tunnel and having its end portions passed through said aperture to the outside of the bag, said ring unit having opposed half-sections with aligned end portions, said aligned end portions having axially disposed socket portions extending inwardly from their ends, and preformed elastic inserts having their ends inserted into adjacent socket portions for connecting said aligned end portions of the half-sections of the ring unit, said inserts being elastically biased to hold said half-sections extended upwardly and outwardly, said bag and ring unit constituting a transportable container.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
348,738	Hackenberg	Sept. 7, 1886
629,434	Farmer	July 25, 1899
1,078,083	Blood	Nov. 11, 1913
1,127,151	Alford	Feb. 2, 1915
1,458,640	Chase	June 12, 1923
1,995,830	Barnaby	Mar. 26, 1935