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POCKET PORTABLE DRINKING CUP

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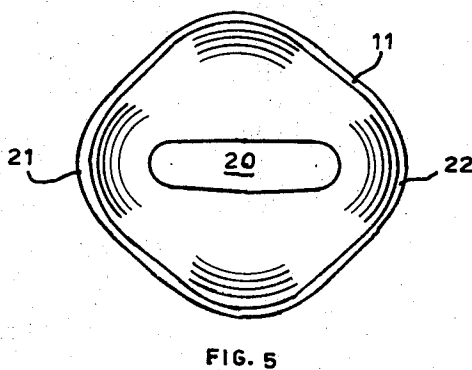
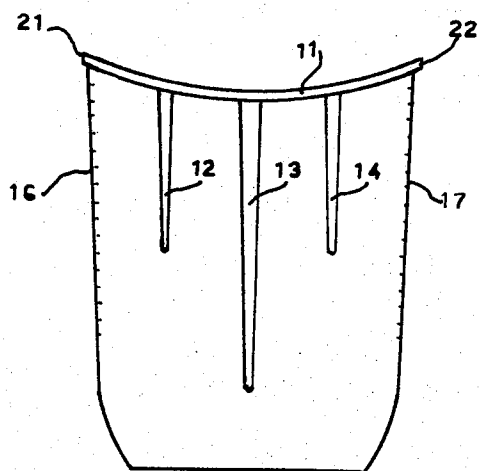
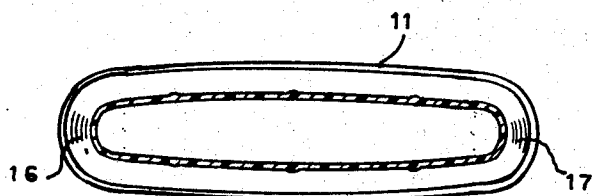
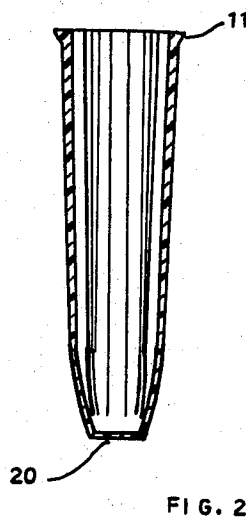
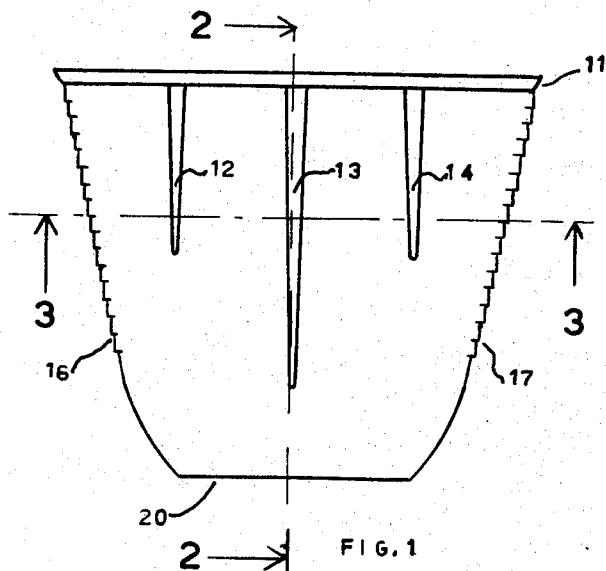


FIG. 4

FIG. 5

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POCKET PORTABLE DRINKING CUP

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1 Claim. (Cl. 150—5)

ABSTRACT OF THE DISCLOSURE

A drinking cup molded from polyethylene into a unit generally oblong in its horizontal sections and tapering towards the bottom. It is resilient so that when the narrower sides are pressed between the thumb and forefinger inwardly towards each other, the cup assumes a drinking cup shape with rounded protruding pour lips adjacent the narrow sides. It automatically returns to its normal molded shape upon release of the pressure.

This invention relates to a drinking cup designed to be of a generally flat shape in its normal state so as to fit nicely in a jacket pocket for carrying on the person, and to be easily pressed by hand between the thumb and forefinger into a drinking cup shape, the cup automatically returning to its normal state upon release of the hand pressure.

For a detailed description of the invention reference is made to the accompanying drawing in which:

FIGURE 1 is a side elevation of the cup in its normal state;

FIGURE 2 is a vertical section on line 2—2 of FIGURE 1;

FIGURE 3 is a horizontal section of line 3—3 on FIGURE 1;

FIGURE 4 is an elevation corresponding to FIGURE 1, except with the cup pressed into its drinking cup shape; and

FIGURE 5 is a view looking downwardly into the cup while in its drinking cup shape.

The cup is molded from a thermoplastic resin into an integral structure in the shape shown in FIGURES 1-3. It tapers from top to bottom so that each cross section is generally of an oblong shape. A bead 11 around the open edge of the cup, and vertical ribs 12, 13 and 14 are molded integral with the cup. Three ribs (not shown) correspond to ribs 12, 13 and 14 on the opposite side of the cup. Serrations 16 and 17 on the narrow sides of the cup serve as thumb and finger grips. The sides merge into the oblong shaped bottom portion 20.

The thermoplastic resin used is such that, for the particular thickness of the cup wall selected, the resiliency of the structure allows the narrow sides of the cup to be

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pressed inwardly to produce the drinking cup shape, and automatically to return to the normal shape without cracking under all ranges of climatic temperature in which the cup is used. With a wall thickness of .025 to .060 inch, polyethylene (Dow 990 M), or any other thermoplastic molding resin of similar plastic and resilient properties and strength, is satisfactory.

Dow polyethylene 990 M, a product of the Dow Chemical Company, has a density rating of 0.926 gram per cc. and an ultimate tensile strength rating of 1,600 lbs. per sq. in., compression molded.

The stiffness of the cup structure increases with increased wall thickness. A wide variation is permissible. It is necessary that the thickness be sufficient for the cup to return to its normal shape when the pressure is released from its sides. It should not be so stiff as to be unwieldy.

If a softer thermoplastic resin is used, a greater wall thickness is required.

The bead 11 and the ribs 12, 13 and 14, aid in causing the cup to assume its drinking cup shape.

Due to the relatively rigid bottom portion 20 and the tapered shape from top to bottom, sections of the cup at the upper portion flex more than at the lower sections. This causes the cup to have protruding lips 21 and 22 rounded when viewed downwardly into the cup adjacent the narrow sides when the cup is held in its drinking cup shape. Either lip functions as a pour spout.

The tapering shape also permits the cups to nest nicely together for storage and shipping purposes.

What is claimed is:

1. A pocket portable, integral thermoplastic resin molded drinking cup, which is generally oblong shaped in each horizontal cross section and tapers from top to bottom when in its normal state, said cup being sufficiently resilient to assume a drinking cup shape with protruding lips rounded when viewed downwardly into the cup adjacent the narrow sides when the narrow sides are pressed inwardly between the thumb and forefinger and automatically to return to its normal shape upon release of the pressure, said cup having a bead molded around its open edge and vertical ribs molded on its wide sides, the resilient properties of the cup correspond to one molded from polyethylene having a density of 0.926 gram per cc. and an ultimate tensile strength rating of 1,600 lbs. per sq. in. and having a wall thickness of .025 to .060 inch.

References Cited

UNITED STATES PATENTS

1,281,038 10/1918 McGhee.
3,201,111 8/1965 Afton.

DAVID M. BOCKENEK, *Primary Examiner*.