Dec. 4, 1962 W. D. CHURCHMAN ET AL 3,066,636

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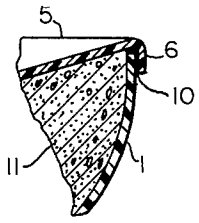


Fig. III

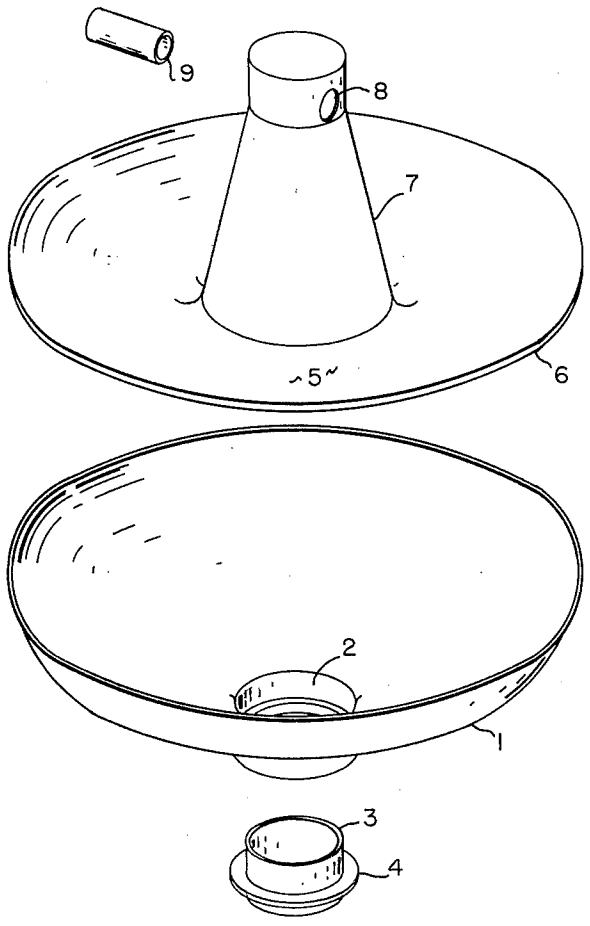


Fig. I

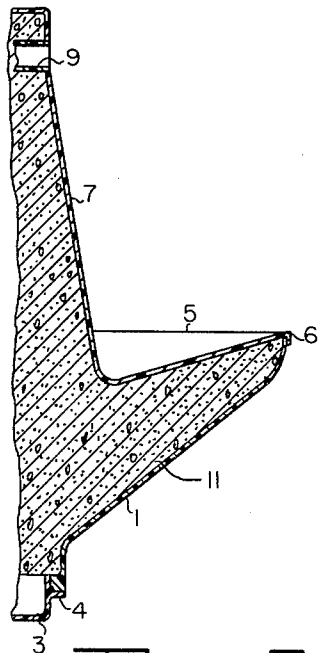


Fig. II

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This invention relates to a do-it-yourself kit which can be asembled to form a hollow shell suitable for use as a marker buoy or as a lantern or, when filled with a relatively heavy material such as conrete, as a boat anchor.

The principal object of this invention is to provide low cost components which can be assembled by unskilled persons and without the use of special tools to form an envelope which when filled with a relatively heavy material forms an anchor.

Another object of the invention is to provide a kit consisting of components which can be assembled easily to form a hollow shell suitable for use as a marker buoy or as a lantern.

A further object is to provide components which can be molded at low cost in single or multiple cavity molds, which can be shipped at low cost because of their light weight, and which can be assembled and filled with relatively heavy material, such as concrete, at low cost by the end user to form a boat anchor.

Still another object is to provide an improved anchor having a good looking outer shell moldled of plastic to protect a boat against the marking and scratching generally associated with metal anchors.

Another object is to provide a do-it-yourself kit which assembles to form an anchor that satisfies the demands of the ordinary users of boat anchors.

Other objects and advantages of the invention will become apparent upon perusal of the following description as illustrated by the accompanying drawings in which:

FIG. I is an exploded perspective view of components which fit together to form a hollow shell;

FIG. II is a fragmentary vertical sectional view reduced in size showing the components illustrated in FIG. I as they appear assembled and filled with concrete to form an anchor; and

FIG. III is an enlarged view showing the right hand portion of the anchor shown in FIG. II in detail.

The following description and the accompanying drawings are to be taken as illustrative of the invention but are not to impose limitations on its scope.

The do-it-yourself kit comprises four elements or components: a first kit element 1 molded in one piece and consisting of a hollow generally bowl-shaped shell defining an opening 2 in its bottom, a second kit element 3 consisting of a plug that has a flange 4 and that functions to close the opening 2, a third kit element 5 molded in one piece and consisting of a generally saucer-shaped cover having a flange 6 which provides a snap fit with the generally bowl-shaped shell and having an upstanding hollow stem 7 defining aligned apertures 8 therethrough, and a fourth kit element 9 consisting of a tube of a size to fit snugly in the aligned apertures 8. The four kit elements are made of any synthetic resin which can withstand fresh or salt water and which is strong and durable and are assembled into a hollow water-tight shell or envelope by securing the plug 3 in the opening 2 in the

shell 1, the tube 9 in the aligned apertures 8 in the stem 7, and the cover 5 on the generally bowl-shaped shell 1. Such water-tight shell is well suited as a marker buoy or if the plug 3 is omitted and the synthetic resin is translucent is well suited as a lantern of the type used as a colored light in garden parties.

The four kit elements are supplied with a container of plastic cement and a small sack of cement for making concrete as a do-it-yourself kit and can be assembled and filled with concrete by an unskilled person at his home without the use of special tools. The plastic cement is applied by the end user around the ends of the tube 9 which is received snugly in the aligned apertures 8 in the stem 7 and is applied along the inside of the flange 6 of the cover 5 that then is snapped over the upper edge of the generally bowl-shaped shell 1. FIG. III best shows the flange 6 snapped over the upper edge of the shell 1 with the numeral 10 identifying a layer of plastic cement. This forms a water-tight shell, except for the opening 2 in the bottom of the generally bowl-shaped kit element 1. The tube 9 functions to receive a fastening device such as a rope or a chain for attaching the assembled kit elements, for example, to a boat. The shell then is inverted from its position shown in FIG. II and concrete 11 is poured through the opening 2 to fill the shell and to provide weight as illustrated in FIG. II. When it hardens, the concrete helps hold the kit elements together. The plastic cement then is applied to the edge of the flange 4 of the plug 3 and the plug is inserted into the hole 2 in the bottom of the kit element 1 to form a concrete-filled, water-tight shell which is useful as a boat anchor.

The anchor with its plastic shell is good looking particularly when such shell is attractively colored and is of low cost because the kit elements are molded at low cost and can be shipped at low cost because of their light weight. Even though the kit elements are light in weight, the anchor is relatively heavy because of its concrete filler. Assembly by the end user at his home lowers the cost even further. The plastic shell protects a boat against the marking and scratching generally associated with metal anchors.

The anchor satisfies the demands of the ordinary users of boat anchors. It is compact for its weight, it is better looking than an ordinary metal anchor, it is rugged and durable, when given enough slack rope or chain to tip over from its position shown in FIG. II, it will, because of the concave design of its generally saucer-shaped cover 5, dig into the bottom to hold a boat, and it is streamlined to allow the anchor to free itself from potential snags.

Various modifications in details of construction may be made without departing from the spirit and scope of the invention.

Having described the invention, we claim:

1. A shell for an anchor comprising, in combination, a first kit element consisting of a hollow generally bowl-shaped shell defining an opening in its bottom, a second kit element consisting of a plug for such opening, a third kit element consisting of a flanged generally saucer-shaped cover having a snap fit with the generally bowl-shaped shell and an upstanding hollow stem defining an aperture therethrough, and a fourth kit element consisting of a hollow member of a size to fit snugly in such aperture, whereby securing the plug in the opening, the member in

the aperture, and the cover on the generally bowl-shaped shell assembles the four kit elements into a hollow shell which when filled with a relatively heavy material forms an anchor.

2. An anchor comprising, in combination, a first kit element consisting of a hollow generally bowl-shaped shell defining an opening in its bottom, a second kit element consisting of a plug for such opening, a third kit element consisting of a flanged cover having a snap fit with the generally bowl-shaped shell and an upstanding stem defining an aperture therethrough, a fourth kit element consisting of a hollow open-ended member of a size to fit snugly in such aperture, the assembled kit elements forming an envelope, and a concrete filler within such envelope.

References Cited in the file of this patent

UNITED STATES PATENTS

2,553,798	Van Deventer	May 22, 1951
2,767,506	Robinson	Oct. 23, 1956