June 4, 1957 D. R. WILLIAMS 2,794,473

SEMI-FLEXIBLE RECEPTACLE

Filed Jan. 26, 1954

Fig.1

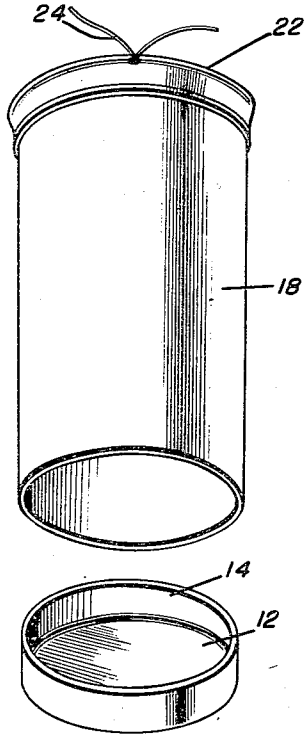
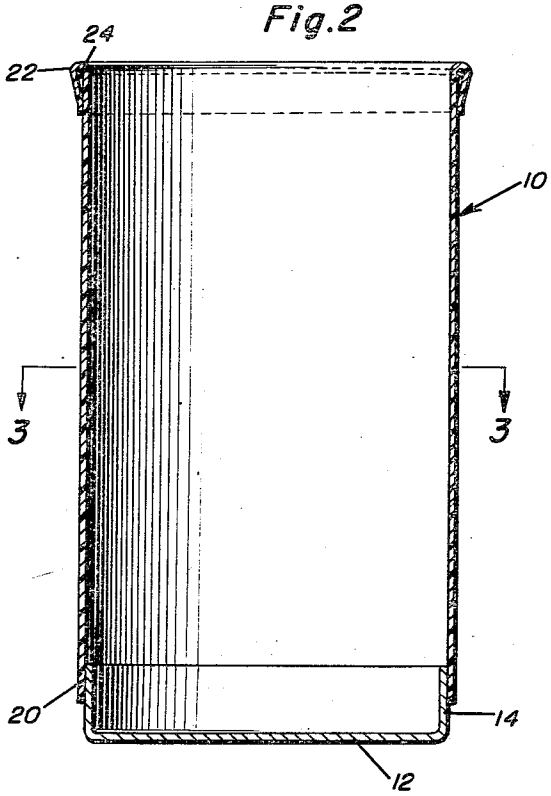


Fig.2



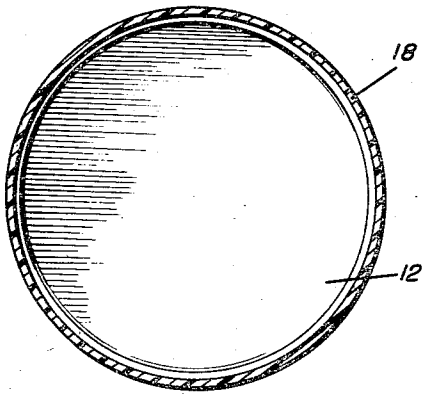


Fig. 3

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SEMI-FLEXIBLE RECEPTACLE

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1 Claim. (Cl. 150—0.5)

This invention relates to a semi-flexible receptacle and more specifically provides a substantially rigid molded base and a flexible tubular member secured thereto.

An object of this invention is to provide a semi-flexible receptacle having a rigid base and a flexible tubular portion constructed of plastic material.

Another object of this invention is to provide a semi-flexible receptacle having a rigid base which permits the receptacle to stand in an upright position.

A further object of this invention is to provide a semi-flexible receptacle which is an improvement over the flexible receptacles and which is inexpensive to manufacture, easily collapsible, and well adapted for the purposes for which the same is intended.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout and in which:

Figure 1 is a group perspective showing the tubular member and the molded base in disassembled positions;

Figure 2 is a longitudinal, vertical section taken substantially along the plane through the longitudinal center line of the receptacle of the present invention; and

Figure 3 is a top plan section taken substantially along section line 3—3 of Figure 2 showing the details of construction and the tubular member and the molded base.

Referring specifically to the drawing it will be seen that the numeral **10** generally designates the semi-flexible receptacle of this invention. The semi-flexible receptacle **10** includes a molded base **12** having an upstanding flange **14**. The upper end of the tubular member **18** has a reversely bent portion **22**, the bottom edge of which is fastened to the flexible tubular member **18** by heat sealing, sewing or other suitable means to form a continuous loop for receiving a drawstring **24** for closing the upper end of the flexible tubular member **18**. In applications requiring liquid-tight or so-called air-tight seals the loop is not made but rather the open top of the flexible tubular member **18** is sealed by conventional heat sealing methods, as for instance in the sealing of the open ends of plastic bags. Other suitable methods of closure may of course be used depending on the product to be packaged. The simplest closure and most desirable for many applications is to gather the top of the tubular member together tightly and to tie with suitable string, tape, wire tie, etc.

The particular length of the tubular member **18** may be changed without altering the manufacturing process. This in combination with forming the closure at the top at any desired height makes possible packaging a variety of quantities in any standard size package without loss of storage space such as would occur if a rigid container were only partly filled. Furthermore, in contrast to a completely non-rigid plastic bag, this receptacle can be made to stand upright when empty which greatly facilitates filling. The base **12** and the tubular member **18** are preferably constructed of polyethylene plastic or other types of plastic materials being either clear or colored as desired. As seen in Fig. 2 the member **18** overlaps the base flange **14** for a substantial distance. At the overlapping surfaces the base **12** and member **18** are fused together by heat and pressure to provide a sealed joint therebetween. In the preferred form of the invention, the wall thickness of the tubular member **18** will usually be between .0015" and .010". The base member **12** may have radially extended reenforcing ribs across the bottom of the base, and the particular thickness of the base **12** may be determined by the individual needs. Obviously, the receptacle **10** of this invention may be collapsed and shipped in a very small space when unfilled, and, of course, the device may be reused as desired.

This device represents an improvement over both the film or bag type plastic receptacle and the molded rigid type plastic receptacle for the following reasons in addition to those already mentioned.

When filled the package will stand in an upright position which permits improved display possibilities, aids in shipping, in storing, in refrigeration or otherwise, and which generally presents a better appearance as compared with film type plastic receptacles.

Use of the comparatively thin wall tubular member **18** permits a great saving in raw material over the molded rigid type plastic receptacle and yet in combination with the base **12** gives most of the advantages of the rigid container and results in space saving over the molded rigid type plastic receptacle when empty, making for less expensive storing and shipping costs.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claim.

What is claimed as new is as follows:

A successively usable receptacle for containing food stuffs and the like which has sufficient rigidity so that it will remain upright and open at the top for easy filling but which may be collapsed when not in use for ready storage, said receptacle comprising a rigid molded polyethylene base member having a flat bottom and an upstanding circular flange projecting upwardly from the bottom and providing rigidity in said base member, a tubular member of polyethylene plastic assembled with said base member with the lower end of the tubular member extending over the flange of the base member for a substantial distance and fused to the flange by heat and pressure to provide a sealed joint therebetween, said tubular member being of a thickness between .0015 and .010 of an inch so that the tubular member has sufficient rigidity to stand upright of itself when the container is being filled but remains sufficiently flexible so that the tubular member may be manually collapsed onto said base for storage in a small space when the receptacle is not being used, and means to close the tubular member at the end opposite the base when the receptacle contains objects therein.

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