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STACKED MEASURING CUP

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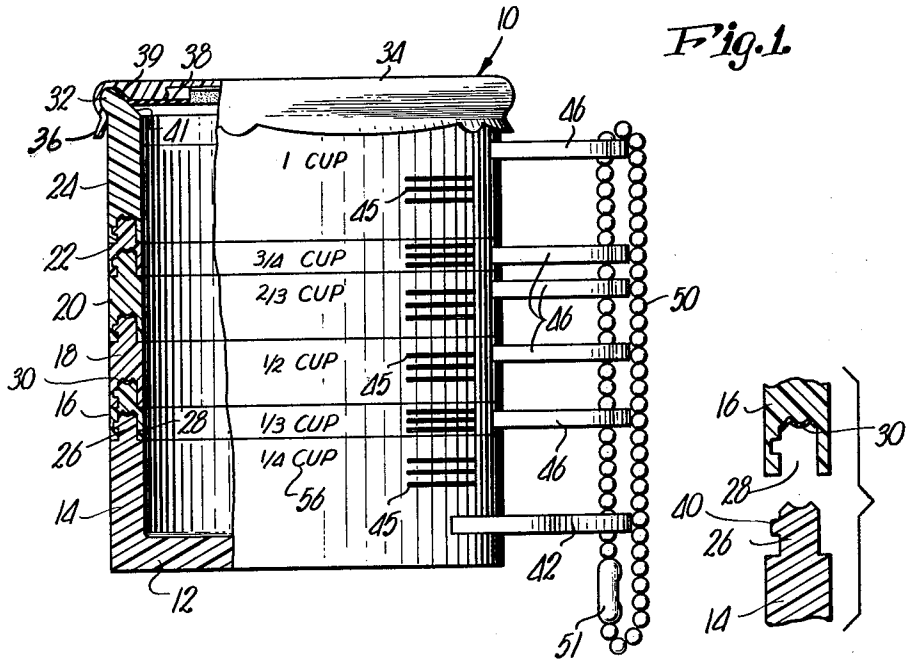


Fig. 1.

Fig. 3.

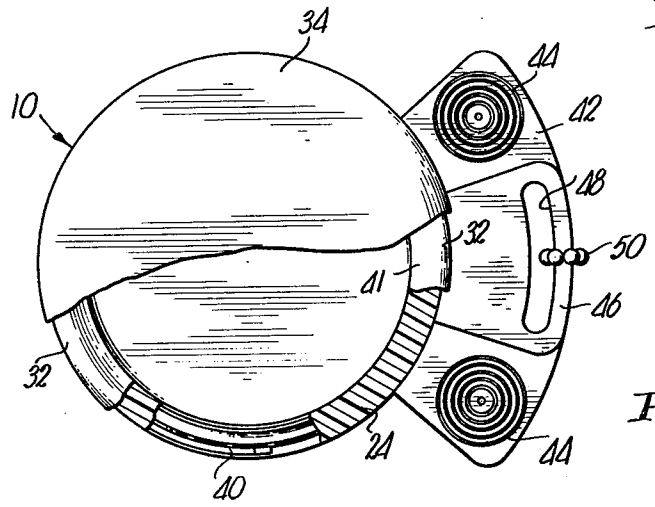


Fig. 2.

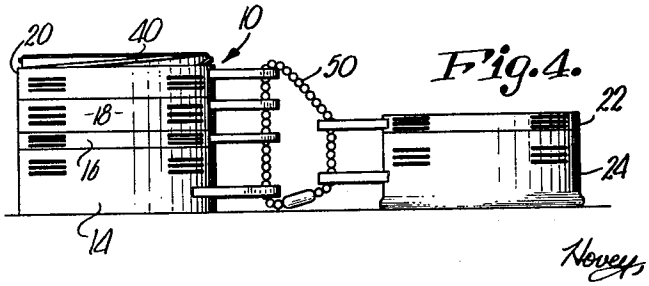


Fig. 4.

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STACKED MEASURING CUP

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This invention relates to measuring cups, and more particularly to a measuring cup having a series of superimposed wall extensions which may be selectively employed or removed to alter the capacity of the cup.

It is the primary object of this invention to provide a measuring cup assembly of variable capacity so that accurate measurements of different volumes may be readily made by the user.

Another important object of the invention is to provide in a cup as aforementioned, means for quickly, easily and releasably securing various wall extensions to the cup to effect capacity changes.

A further important object of the invention is to provide a cup having seal means to insure that the cup will not leak at the zone of joinder of the wall extensions to the cup.

A further important object of the invention is to provide means for keeping all of the cup components of the assembly together to insure their ready availability, yet permitting shifting of the components not being employed at a particular time to positions which do not interfere with the utilization of the cup, the cup being properly balanced regardless of the amounts of liquids or solids contained therein and irrespective of the number of components used to form the cup.

A still further important object of this invention is to provide a measuring cup which is practical, can be economically manufactured from relatively inexpensive materials, yet is appealing in design and provides a highly attractive kitchen accessory for use by the housewife.

In the drawing:

FIGURE 1 is an elevational view of the assembled measuring cup of this invention, parts being broken away and shown in cross section to reveal details of construction;

FIG. 2 is a plan view of the cup of FIG. 1, parts of the top and uppermost extension being broken away for clearness;

FIG. 3 is a fragmentary, enlarged, exploded, cross-sectional view of the upper rim of a cup component and the lower edge of an extension to show the groove and seal for receiving the rim; and

FIG. 4 is a side elevational view of the cup showing the disposition of a number of separable extensions when removed from the cup to reduce the capacity thereof.

The measuring cup broadly designated **10** in FIGS. 1 and 2, includes a base **12** having a normally upright, tubular side wall **14**, and a plurality of tubular wall extensions **16**, **18**, **20**, **22** and **24**. The extensions **16–24** are disposed in superimposed relationship on wall **14** to provide increased capacity for cup **10**.

The upper edge of wall **14** is provided with an externally threaded rim **26** of reduced dimensions which is complementally received within a groove **28** in the lowermost edge of extension **16**. A seal **30** in the nature of a thin rubber liner is carried within groove **28** and is engaged by the uppermost edge of rim **26** to positively prevent any leakage of liquids at the zone of joinder of extension **16** and wall **14**. To this end, the uppermost edge of rim **26** may be of sharpened configuration as shown in FIG. 3 for "biting into" seal **30** thereby effecting a positive liquid-tight seal.

Similarly, the uppermost edge of extensions **16**, **18**, **20** and **22** are provided with rims identical to rim **26** of wall **14** and are received within grooves in extensions **18**, **20**, **22** and **24** which are identical to groove **28** of extension **16**. Also, seals identical to seal **30** are positioned within each of the respective grooves to effect a liquid-tight seal.

The uppermost extension **24** is preferably provided with an annular bead **32** thereon surrounding the open top thereof. A circular cover **34** is provided to releasably extend in covering relationship over extension **24** when it is desired to close cup **10**. A peripherally extending, outwardly directed, scalloped skirt **36** on cover **34**, is disposed to frictionally engage bead **32** of extension **24** for releasably maintaining cover **34** in place. A thin sealing gasket **38** on the inner face of cover **34** has a bevelled portion **39** for complementally engaging the bevelled surface **41** on extension **24** adjacent bead **32**. Gasket **38** prevents any leakage of fluid from within cup **10** when cover **34** is in place.

It is to be noted that cover **34** may be disposed on base **12** with skirt **36** frictionally engaging side wall **14** when it is desired to have cup **10** uncovered for any period of time.

Each rim **26** has a number of circumferentially spaced threads **40** thereon which are unconnected and which are of a relatively large pitch so that the respective extensions can be secured in place by a small amount of rotation of the particular extension with respect to the remainder of the assembled cup **10**. Thus, the respective extension may be placed upon the rim of the next lowermost extension or base **12**, and then be secured in place by a short twisting motion. Likewise, the respective extensions may be removed from the assembled cup **10** in order by a simple twisting motion in the opposite direction.

A plate **42** extends outwardly from the outer surface of side wall **14** on base **12** and extends in circumscribing relationship around an arcuate portion of base **12**. Thus, the normally horizontally disposed plate **42** serves as handle means for cup **10** and, to this end, it may be provided with a roughened surface which may be in the nature of concentric grooves **44** on the upper surface of plate **42** and disposed in positions to be gripped by the thumbs. Alternatively, the upper surface of plate **42** may be provided with any roughened texture to facilitate the antislip properties of plate **42**. In addition, side wall **14** and extensions **16–24**, are provided with circumferentially extending grooves **45** therein on the outer surface thereof for providing antislip means therefor in the vicinity at which cup **10** is to be grasped.

Each extension **16–24** has a tab **46** extending outwardly from the outer surface of the respective extension and overlying plate **42**. Tabs **46** are provided with outer surfaces which are of pebbly texture to facilitate handling of cup **10** when the fingers of the hand are inserted between adjacent tabs **46** to carry cup **10**. It will be noted in FIG. 2 that the tabs **46** are of substantially lesser dimensions than is plate **42** to permit easy access to the end marginal areas of plate **42** if it is desired to carry cup **10** by grasping plate **42**.

Each tab **46** and plate **42** has an elongated aperture **48** therethrough disposed to receive an elongated, articulated member **50** for securing the extensions of cup **10** to base **12**. Member **50** is of the nature of a bead chain and passes through the respective apertures **48** and a fastener **51** interconnects the ends of the chain.

The elongated apertures **48** in tabs **46** and plate **42** permit the twisting of the extensions with respect to the base without the necessity of removing member **50**. This permits the ready addition to or elimination of one of the extensions **16–24** to the assembled cup **10**, while member **50** maintains all of said extensions **16–24** interconnected with side wall **14**. If, for example, the increment of capacity afforded by extension **24** is not desired during a particular utilization of cup **10**, extension **24** may be

quickly and easily disassembled from the remainder of cup **10** and shifted to a position along member **50** which will be out of the way and not hinder the utilization of the assembled cup **10** for measuring purposes. In FIG. 4, cup **10** is shown with extensions **22** and **24** removed from the remaining extensions and supported on a surface such as a tabletop. It is noted that extensions **22** and **24** may be suspended over the hand and out of the way of the remaining extensions and side wall **14** when the latter form cup **10**.

The respective extensions **16–24** are of sufficient size to add whatever increment of capacity to base **12** which may be desirable as determined by the use to be made of cup **10**. It is not contemplated that the extensions **16–24** must be of identical sizes. Rather, the sizes may vary and each extension be provided with suitable indicia **56** so that the volumetric increase of the capacity afforded by the utilization of a particular extension will be readily apparent to the user.

In the preferred embodiment illustrated in the drawing, the cup-shaped base **12** holds a convenient ¼ cup, and the succeeding extensions **16–24** are of respective sizes to increase the capacity to ⅓ cup, ½ cup, ⅔ cup, ¾ cup and one cup respectively. Manifestly, any increments of capacity increase may be suitably chosen and may further be indicated by indicia if desired.

It is contemplated that the components of cup **10** may be formed from readily available material such as plastic or the like, through the utilization of a relatively inexpensive molding process. Cup **10** may be made in highly attractive colors and presents a neat, practical kitchen item desirable for use by the housewife.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A measuring cup comprising:
a cup-shaped base having a side wall:
at least one tubular wall extension;
means including an internally threaded groove in said extension and a threaded rim on the base complementally received in the groove for releasably securing the extension to the side wall for selectively increasing the capacity of the cup, there being a seal in the groove disposed to be engaged by the rim when the extension is secured to the base; and
a member secured to the extension and the base for maintaining the extension within the proximity of the base, said extension being shiftable with respect to the member for permitting relative movement between the base and the extension while secured together by said member.

2. A measuring cup comprising:
a cup-shaped base having an annular, normally upright side wall;
handle means secured to the base, said handle means comprising a generally horizontally disposed plate secured to the outer surface of the side wall and extending partially around the side wall;
at least one tubular wall extension provided with tab means secured to and extending outwardly from the outer surface of said extension, said tab overlying the plate on the base, the tab being of lesser dimension than the plate for permitting access to the plate to be gripped as a handle, the plate and the tab having an aperture therethrough;
a pliable member passing through the respective apertures for fastening the extension to the base; and
groove means on the extension and rim means on the base provided with interlocking, intermittent screw and thread means whereby the extension may be secured or released from the base by slight relative rotation between the base and the extension.

3. A cup as set forth in claim 2, wherein said apertures in the plate and the tab respectively, are elongated to permit relative shifting of the base and the extension with respect to the member when the extension is rotated relative to the member to release the securing means.

4. A cup as set forth in claim 2, wherein the member extends into a closed loop passing through the said apertures and around the plate and tab.

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