

Jan. 13, 1953

D. P. CHRISTIE
ADJUSTABLE MEASURING CUP

2,625,044

Filed July 18, 1949

Fig. 1.

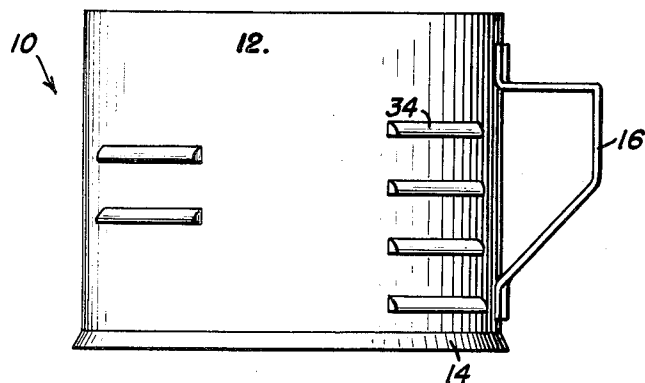


Fig. 2.

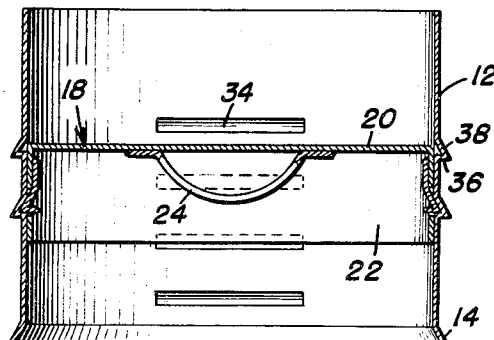


Fig. 3.

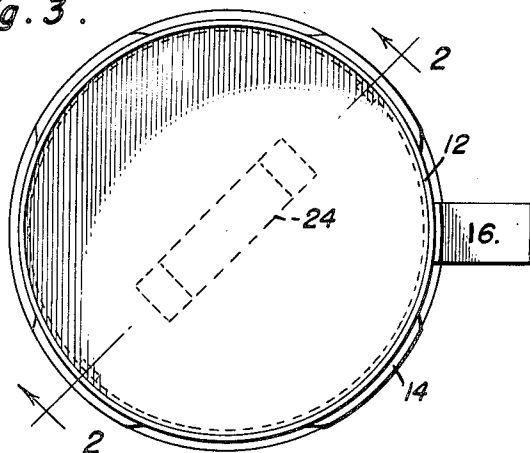
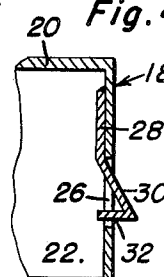


Fig. 4.



Douglas P. Christie
INVENTOR.

BY *Almonce A. Orison*
and *Harvey E. Jacobson*
Attorneys

UNITED STATES PATENT OFFICE

2,625,044

ADJUSTABLE MEASURING CUP

Douglas P. Christie, Townsend, Mont.

Application July 18, 1949, Serial No. 105,294

2 Claims. (Cl. 73—429)

1

This invention comprises novel and useful improvements in an adjustable measuring cup, and more specifically pertains to a measuring receptacle particularly adapted for measuring and discharging therefrom non-liquid substances such as shortening and the like.

The principal object of this invention is to provide an adjustable measuring cup for kitchen use in which the volume of the same may be readily varied, together with provision for completely discharging the material measured in the cup.

A further object of the invention is to provide an improved measuring cup having an adjustable bottom, together with improved means for securing the adjustable bottom in various adjusted positions, and for readily inserting the removable bottom into the cup as desired.

And a final important object of the invention is to be specifically enumerated herein is to provide an improved adjustable measuring cup which shall be of simple, inexpensive, light weight construction and yet may be easily disassembled for cleaning the same.

These, together with various ancillary features and objects of the invention which will later become apparent as the following description proceeds, are attained by the present device, a preferred embodiment of which has been illustrated by way of example only in the accompanying drawings, wherein:

Figure 1 is a side elevational view of the preferred embodiment of the invention;

Figure 2 is a central vertical sectional view through the device of Figure 1 and taken substantially upon the plane of the section line 2—2 of Figure 3;

Figure 3 is a top plan view of the embodiment of Figure 1; and

Figure 4 is a fragmentary vertical sectional detail view showing the construction of the latch means of the adjustable cup.

Referring now more specifically to the accompanying drawings, wherein like numerals designate similar parts throughout the various views, it will be seen that the numeral 10 designates generally the improved measuring cup forming the subject of this invention and which comprises chiefly a hollow cylindrical body 12 open at its upper and lower ends, the lower end being downwardly and outwardly flared, as at 14, to provide a conical guide surface for a purpose which will later be apparent.

The body 12 may conveniently be provided with a handle member 16 of any desired construction.

2

Slidable within the cylindrical interior of the body member 12 is a movable bottom in the form of a piston indicated generally at 18, this piston having a head or top wall 20 and a depending annular skirt 22 which is slidably and guidingly received in the cylindrical interior of the body 12. A depending handle portion 24 may be conveniently attached to the under surface of the top 20 and in the interior of the piston 18 whereby the user may insert his hand through the lower end of the receptacle body 12 and manipulate the piston as desired.

The piston is provided with preferably two or more notches or vertically disposed slots 26 in the skirt 22 thereof, and latch means are extendable through these slots or notches for locking the piston in adjusted position. These latch means may conveniently comprise metallic fingers of a flexible material, these fingers having a vertically disposed portion 28 which may be spot welded or otherwise rigidly attached to the inner surface of the skirt 22 above the notches, the vertical portions 28 having depending outwardly inclined portions 30 which extend through the notches 26 and which, at their lower ends, terminate in horizontal, inwardly turned flanges 32. At appropriate, vertically spaced intervals, the interior cylindrical wall of the receptacle body 12 is provided with outwardly depressed portions 34 forming recesses, these recesses having a horizontally extending bottom wall 36 and an inclined top wall 38, the recesses being appropriately shaped to receive the inclined and horizontal portions 30 and 32 of the latch members.

As will be readily understood, the locking recesses are positioned at appropriate distances so that the piston, when latched thereto by the latch members, will provide any predetermined and desired volume for the measuring cup.

From the foregoing, the operation of the device will now be readily understood. With the parts disassembled, it is merely necessary to insert the piston in the lower end of the receptacle body 12, the same being guided in this engaging position by means of the flaring portion 14, the latter serving to compress the resilient fingers to enable the device to be inserted in the cylindrical bore of the body. The cup is then pressed upwardly to the desired position for attaining any predetermined volume, whereupon the latching fingers will engage in the locking recesses and retain the movable bottom of the cup in the proper position. The cup may now be filled with a non-liquid material such as lard, flour or the like, and the exact volume obtained by levelling off the top

3

of the measuring cup with a knife or the like. When it is desired to empty or discharge the contents of the cup, it is merely necessary to push the piston member entirely through the cup, thereby completely discharging the contents of the same.

This device offers the advantage over conventional measuring cups in that the exact volume desired may be attained by always leveling the substance measured across the top of the cup and sticky substances, as lard, or the like, may be positively expelled from the cup, thereby dispensing the exact volume measured.

From the foregoing, the construction and operation of the device will be readily understood, and further explanation is believed to be unnecessary.

In view of the foregoing description taken in conjunction with the accompanying drawings, it is believed that a clear understanding of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention, the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and within the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. A measuring receptacle comprising a cup having open upper and lower ends, a piston slidable in said cup and forming a movable bottom to vary the contents of the receptacle and to empty the latter, said receptacle having a plurality of vertically spaced recesses in the interior wall thereof and a latch means carried by said piston and yieldingly engageable in said recesses, said piston having a top and a depending skirt,

4

said skirt having notches therein and resilient fingers secured to the inner wall of said skirt and extending through said notches for engagement with said recesses, said fingers comprising said latch means.

2. A measuring receptacle comprising a cup having open upper and lower ends, a piston slidable in said cup and forming a movable bottom to vary the contents of the receptacle and to empty the latter, said receptacle having a plurality of vertically spaced recesses in the interior wall thereof and a latch means carried by said piston and yieldingly engageable in said recesses, said piston having a top and a depending skirt, said skirt having notches therein and resilient fingers secured to the inner wall of said skirt and extending through said notches for engagement with said recesses, said fingers comprising said latch means, said fingers comprising metallic strips with vertical portions secured to said piston, outwardly inclined portions depending from said vertical portions and horizontal inturned flanges on the lower ends of said inclined portions, said inclined portions and horizontal flanges being movable in said notches.

DOUGLAS P. CHRISTIE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
59,186	Coates	Oct. 30, 1866
808,967	Arrowsmith	Jan. 2, 1906
1,202,101	Read	Oct. 24, 1916
1,625,056	Sandy	Apr. 19, 1927
1,934,138	Paul et al.	Nov. 7, 1933
2,024,418	Aughney	Dec. 17, 1935
2,496,268	Chester	Feb. 7, 1950