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ADJUSTABLE MEASURING CUP

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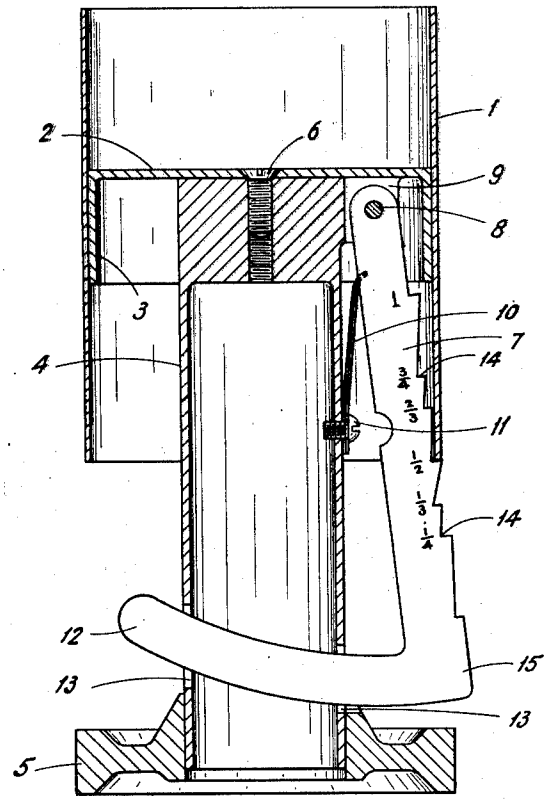


Fig. 1.

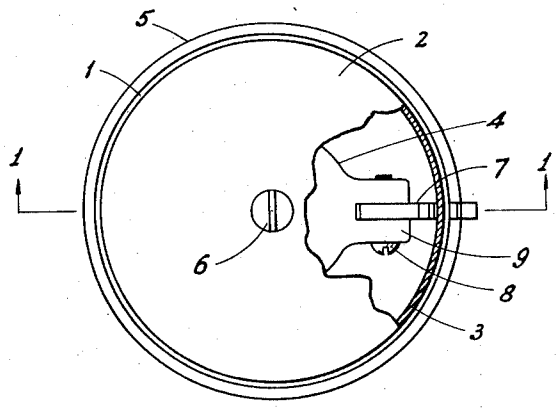


Fig. 2.

INVENTOR.
Cecelia S. Jansen.
BY Philips A. Minnis
ATTORNEY.

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ADJUSTABLE MEASURING CUP

Cecelia S. Jansen, Los Gatos, Calif.

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8 Claims. (Cl. 73—165)

This invention relates in general to measuring receptacles, and is more particularly concerned with the provision of an improved form of adjustable measuring cup suitable for household culinary purposes.

It is one of the principal objects of the invention to provide a measuring cup of simple and inexpensive construction which is readily and quickly adjustable to vary the capacity of the cup.

Another object is to provide such a cup which is well suited for use in measuring such semi-solid or plastic materials as lard, butter and the like, as well as for measuring both liquid and dry materials such as cooking oils, syrups, sugar, flour, etc.

A further object is to provide an adjustable measuring cup which is easily and conveniently used, and in which the parts are readily accessible for cleaning.

These and other objects, as well as additional advantages inherent in the invention, will best be understood and appreciated by reference to the following description of an illustrative embodiment taken in connection with the accompanying drawing thereof, wherein:

Fig. 1 is a cross section of a measuring cup embodying the invention, as viewed along the line 1—1 of Fig. 2;

Fig. 2 is a plan view of the cup, a portion being broken away to better illustrate certain details of construction.

In the illustrative embodiment, the cup is made up of a cylindrical open ended cup body 1 fitted over a plunger 2 which forms the bottom of the cup, these parts having a relatively close sliding fit so as to prevent leakage therepast while at the same time permitting easy manual adjustment of the cup body and plunger relative to each other to vary the capacity of the cup. The plunger 2 is preferably provided wtih a depending annular flange 3 serving both as a seal and also to provide an elongated bearing surface whereby to facilitate rigidity of the parts and promote ease of operation by minimizing any tendency toward binding between the plunger and cup body.

The plunger is also advantageously provided with a supporting standard 4 which may be of tubular form as illustrated, and provided at its lower end with a base or pedestal 5 serving to support the cup in upright position and also as a convenient hand hold in manipulating the cup. The standard 4 may be secured to the plunger 2 by any suitable means as, for example, the screw 6, and the pedestal 5 may be pressed onto the standard or otherwise firmly secured thereto.

A latch arm or lever 7 projects downwardly from beneath the plunger 2 where it is pivotally secured at its upper end by means of a pivot pin 8 passing through ears 9 formed on the upper end of the standard 4. A flat spring 10 secured to the standard 4 as by a screw 11 bears against the latch arm 7 and serves to yieldingly urge the latch arm outwardly into engagement with the cup body 1. The lower end of the latch arm 7 may be provided with a laterally projecting curved extension 12 passing through slots 13 in the standard 4 which serve as guides therefor.

The outer edge of the latch arm 7 is provided with a series of steps 14 at predetermined points forming stops for engagement by the lower edge of the cup body 1 to enable the cup body and plunger to be set in any of a plurality of predetermined positions of adjustment according to which of the steps is engaged with the cup body. The latch arm is provided with suitable indicia adjacent the steps, as shown, to indicate the capacity of the cup when the cup body engages with the corresponding step. In the particular embodiment illustrated, the steps 12 are arranged and marked for setting the cup to positions of 1, ¾, ⅔, ½, ⅓ and ¼, of a standard cup measure, and the lowermost step is provided to enable setting the cup body and plunger with the face of the plunger exactly flush with the upper rim of the cup body in which setting the cup will obviously have zero capacity. It will be understood that other settings might be provided for, if desired, by properly forming the steps 12, as will be apparent.

When the user desires to adjust the cup to reduce its capacity, the latch arm 7 may be depressed against the action of the spring 10 by pressing against the heel 15 of the latch arm so as to disengage it from the cup body, thereby freeing the cup body for sliding movement downwardly over the plunger 2, and the cup may then be reset by releasing the latch arm and pressing the cup body into engagement with whichever step is selected for the capacity desired.

When it is desired to increase the capacity of the cup it is only necessary to pull the cup body upwardly away from the plunger until its lower edge passes over the step corresponding to the desired capacity, the spring 10 automatically snapping the step into place beneath the edge of the cup body, and the latter is then pressed backward against the step whereupon the cup is

accurately set for the capacity corresponding to that step.

It will be apparent from the foregoing that the measuring cup embodying my invention is quickly and easily adjusted to accurately vary the capacity of the cup. It will also be observed that the cup is not only useful for measuring liquids and dry materials, but is also especially suited for measuring such plastic materials as lard, butter and the like. Such materials may either be packed into the cup, or the cup may be thrust open end first into the material to fill it, and the charge then levelled off with the rim of the cup by means of a knife or other straight edge. The entire charge of material may then be ejected from the cup by adjusting the cup body and plunger as above described so that the plunger is brought flush with the upper rim of the cup body. The charge of material is thus quickly and cleanly discharged from the cup.

It is also to be observed that the cup body and plunger are entirely independent of each other so that they may quickly and easily be separated from each other for cleaning purposes and as readily fitted back together again.

It will be understood that while I have illustrated but a single embodiment of my invention, various modifications and alterations may be made in the design, proportions, and construction of the same without departing from the scope and spirit of the invention, and I deem myself entitled to all such modifications and alterations as fall within the scope of the appended claims.

Having now described my invention and in what manner the same may be used, what I claim as new and desire to protect by Letters Patent is:

1. An adjustable measuring cup comprising a cup body having an axially adjustable bottom therein, and a movable latch arm operatively associated with said bottom and having its upper end pivotally secured therebeneath, said arm being provided with a series of stops for selective engagement with the cup body to enable setting of the latter and its bottom in any of a plurality of predetermined positions of adjustment.

2. An adjustable measuring cup comprising an open ended cup body having an axially adjustable bottom therein, and a movable arm mounted beneath and operatively associated with said bottom, said arm being provided with a series of steps for selective engagement with the lower rim of the cup body to enable setting of the latter and its bottom in any of a plurality of predetermined positions of adjustment while leaving the cup body free for withdrawal from the bottom away from said steps without disengagement of the latch from said rim.

3. An adjustable measuring cup comprising a cup body having an axially adjustable bottom therein, said cup body and bottom being freely withdrawable from each other to separate the same and a resiliently urged latch arm mounted beneath and operatively associated with said bottom for engagement with the lower rim of said cup body, said latch arm being provided with a series of steps on its surface forming stops for selective engagement with said rim to enable setting of the latter and its bottom in any of a plurality of predetermined positions of adjustment while leaving the cup body free for withdrawal from the bottom away from said steps without disengagement of the latch from said rim.

4. An adjustable measuring cup comprising a cup body having an axially adjustable bottom therein, said cup body and bottom being freely withdrawable from each other to separate the same, and a latch arm mounted beneath and operatively associated with said bottom, said latch arm being provided with a series of steps on its surface for selective engagement with the cup body to enable setting of the latter and its bottom in any of a plurality of selected positions of adjustment while leaving the cup body free for withdrawal from the bottom away from said steps without disengagement of the latch from said cup bottom.

5. An adjustable measuring cup comprising a cup body having an axially adjustable bottom therein, a pivoted latch arm mounted beneath and operatively associated with said bottom for cooperation with said cup body to enable setting of the latter and its bottom in any of a plurality of predetermined positions of adjustment, said latch arm having a lateral projection thereon, and a standard depending from said bottom and provided with a slot for the reception of said lateral projection to guide said latch arm.

6. An adjustable measuring cup comprising a cup body having an axially adjustable bottom therein, said bottom having an unobstructed plane face across which a straight edge may be freely passed to scrape it clear of adhering material, and a movable latch arm mounted beneath and operatively associated with said bottom, said arm being provided with a series of stops for selective engagement with the cup body to enable setting of the latter and its bottom in any of a plurality of predetermined positions of adjustment.

7. An adjustable measuring cup comprising a cup body having an axially adjustable bottom therein, a supporting pedestal depending centrally from said bottom for supporting the cup in upright position, and a resiliently urged latch arm mounted beneath and operatively associated with said bottom to normally engage said cup body and to be yieldingly disengageable therefrom, said latch arm being provided with a series of stops for selective engagement with the cup body to enable setting of the latter and its bottom in any of a plurality of predetermined positions of adjustment.

8. An adjustable measuring cup comprising a cup body having an axially adjustable bottom therein, said cup body being freely withdrawable forwardly from said bottom to separate the same, a supporting pedestal depending centrally from said bottom for supporting the cup in upright position, a resiliently urged latch arm mounted beneath and operatively associated with said bottom, said latch arm being provided with a series of steps for selective engagement with the cup body to enable setting of the latter and its bottom in any of a plurality of selected positions of adjustment while leaving the cup body free for withdrawal forwardly from said bottom away from said steps.

CECELIA S. JANSEN.