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SUGAR DISPENSER

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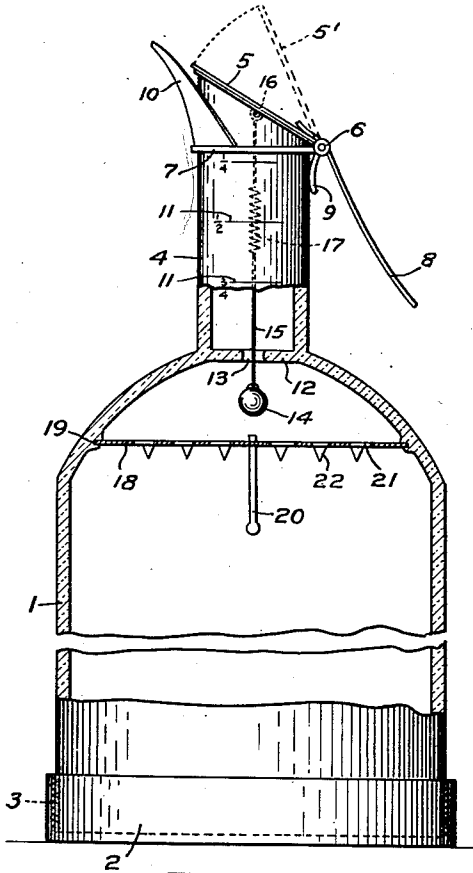


Fig. 1.

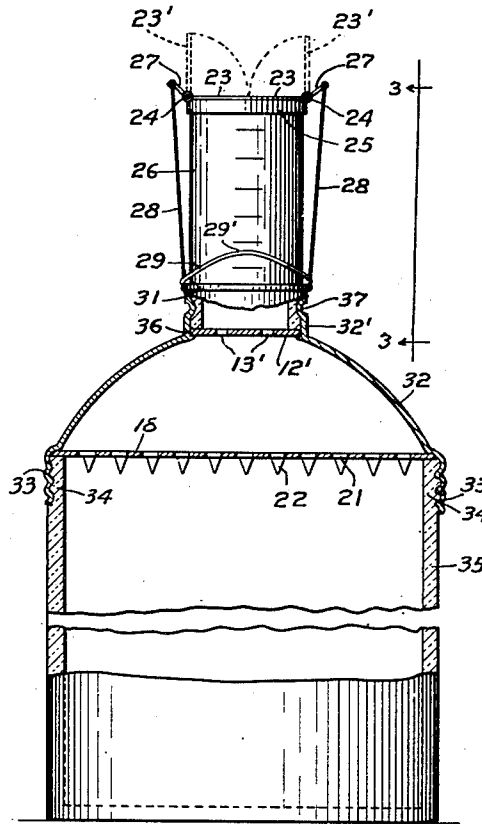


Fig. 2.

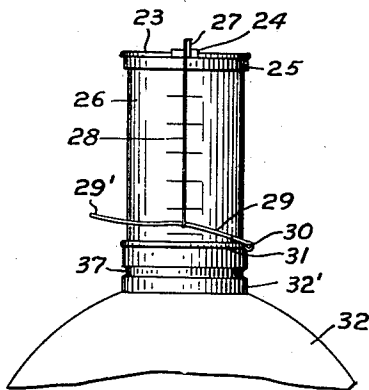


Fig. 3.

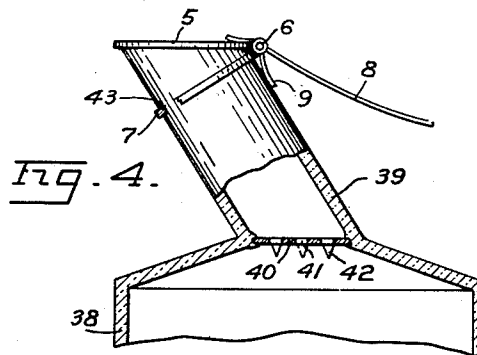


Fig. 4.

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SUGAR DISPENSER

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10 Claims. (Cl. 221-62)

This invention relates to granulated sugar dispensers for use on the dining table and has for its object an improved dispenser adapted to replace the customary sugar bowl, and which will enable the user to accurately gage the amount of sugar poured out while not restricting him to any fixed amount, and which will also permit the sprinkling of sugar, as upon pancakes, mush, sliced fruit or the like.

Other features and advantages of the invention will appear in the following description and accompanying drawing.

In the drawing, Figure 1 is an elevation of one form of my improved sugar dispenser, portion being shown in section to better reveal the internal construction.

Figure 2 is a view similar to that of Figure 1, but shows a modified closure construction as well as other features.

Figure 3 is a side view of a portion of Figure 2 as seen from the line 3-3 of Figure 2.

Figure 4 shows the upper portion of a further modification in the flow controlling guard at the base of the measuring spout of the dispenser, also the general arrangement of the spout.

Before describing my invention it may be said that sugar dispensers as at present used in restaurants consist of a simple jar with a spout on top through which the sugar runs out when the jar is sufficiently tilted, but when pouring the sugar from such a dispenser into, say a cup of coffee, there is no means of knowing how much has been poured in as the sugar promptly becomes invisible upon entering the cup. To avoid this, a user commonly pours the sugar from the dispenser to a spoon to measure it and then into the coffee.

Prior patents show various forms of dispensers which will definitely measure or limit the amount which runs out upon each inversion of the container, but insofar as it is known such devices do not provide for running out of small fractional amounts, nor large amounts, say two or three teaspoonfuls without several inversions of the container.

The present invention overcomes the shortcomings of the dispensers above considered in providing for the discharge of any reasonable amount of sugar with a single inversion or tilting of the container, yet gives an accurate measurement of the amount flowing out of the spout.

Briefly described, the invention may be said to consist of a jar or suitable container for the granulated sugar which is preferably transparent, and which is provided on its upper end with

a sugar measuring neck or spout. This neck or spout must be of transparent material, or at least a portion of its wall for the length thereof should be transparent, and it constitutes a measuring receptacle. This neck or spout is preferably closed at the outer end by a suitable hinged lid, or otherwise, so that upon opening of the cap the sugar can freely or rather instantly flow from the neck to empty the same. In order to prevent the body of the sugar in the container following the measured amount decided upon and which it is desired to eject from the spout, I provide a suitable guard or restriction at the base of the neck or spout, and which guard will only permit the sugar from the container proper to run rather slowly into the neck when the container is inverted or tipped at a sufficient angle. Thus the sugar may be allowed to run into the transparent neck to fill it up to the desired point as indicated by suitable indicia marked on the side of the neck, the end of the spout quickly uncovered, and the measured contents of the neck instantly discharged and the lid permitted to close before any appreciable amount of sugar has again entered through the guard aforementioned.

As a further feature of the invention I may provide a screen or sieve at a point below the guard to prevent any lumped or caked sugar from closing off the guard, and which screen preferably will incorporate provisions to aid in breaking up any lumps which may be formed so that they will freely pass the guard after passing the screen.

Several modifications and possible changes in detail of the invention are shown in the drawing.

In Figure 1 the jar or container is indicated at 1 as being made of glass open to its full diameter at the bottom for filling with sugar, and provided with a metal closure cap 2 which may be screwed over the lower end of the jar as indicated at 3. In this showing the sugar measuring neck or spout is indicated at 4 and is formed integrally with the body and terminating at its upper end at an angle as indicated, the outer end being covered by a sheet metal lid 5 pivoted at 6 to a suitable strap 7 which seats around the neck in a slight groove formed therein (see 43 in Figure 4). The lid 5 is provided with a downwardly extending finger lever 8 which may be pressed to open it to the dotted position shown at 5', and the lid is normally closed by a suitable spring 9.

As an optional feature I provide a splash guard

10 adjacent the high end of the nozzle, and which guard is preferably made of thin sheet metal or transparent material such as Celluloid, plastic, or the like, and is held in place by the band 7 clamping it into the groove 43. The object of this splash guard will be later explained.

The neck or spout 4 is preferably of uniform diameter and relatively long. Its capacity should be equal to the greatest amount of sugar desired to be measured before discharging upon the container, say one teaspoonful or more if desired, and it is graduated on its exterior surface with suitable figures to denote how much sugar is in it when the container is inverted. Such graduations are indicated at 11 in the drawing. At the point of juncture of neck 4 with the container is a constricting wall 12 formed with a relatively small orifice 13. The size of this orifice should be such that when the container is inverted the sugar will run relatively slowly into the larger nozzle or neck and gradually fill the same up to the various points of graduation one after the other, and so that at any instant upon a quick opening of the lid 5 by a pressure of the finger against the lever 8, all of the sugar already within the neck will instantly discharge itself before any appreciable amount can run through the restricted orifice 13. The lid 5 is of course immediately released as soon as the sugar has run out of the neck and whereupon the gradual filling of the neck takes place over again and a subsequent discharge of more sugar may be made if desired, whereas if the container is replaced on the table what sugar there is in the neck will run back into the container.

In using the container in the manner described, the actual period of time the lid 5 is opened to discharge the sugar need not be more than half a second, during which time the amount of sugar running through restricted orifice 13 need not be considered, though it may be allowed for in placing the graduations 11 on the neck of the device if desired.

A feature which may be incorporated in the device to absolutely stop any of the slight outflow from orifice 13 during the discharge of the measured quantity in the neck, consists in the use of a small ball valve 14 suspended on a wire 15, pivotally connected to the under side of the lid at 16. This wire 15 may incorporate a small spiral spring portion 17, and when this is used the ball 14 will at once seat itself against the under side of the restricted opening 13 as the lid 5 is opened.

A further and important feature of the device is the provision of a transversely arranged screen disc at 18. This disc is preferably frictionally snapped into place in a groove 19 and is provided with a handle 20 so that it may be forcibly withdrawn if desired for cleaning. The screen holes 21 in this disc are preferably somewhat smaller than the holes through the guard 13 so as not to pass any lumps which might clog the guard. The holes are preferably formed by punching the metal downwardly and permitting the punched out metal to project downwardly in the form of teeth 22 which will have a tendency to break up any lumps of sugar when the container is inverted. The small handle 20 will aid to this end.

When the container is inverted, if the lid 5 is permitted to snap closed too abruptly especially before the last of the sugar has left the nozzle, there may be a tendency to throw some

of the sugar laterally of the nozzle. This is prevented by the use of the guard 10 previously described. A proper use of the container, however, would not require the guard 10 to be used.

While I show one restricted orifice 13 in the guard 12, it is of course evident that it may have two or more, if their total area is of a size to restrict the flow sufficiently into the nozzle 4 when the same is inverted and so that upon opening of the lid 5 the bulk of the contents of the neck 4 will be almost instantly discharged before any substantial amount of sugar will again come through the restricted opening or openings.

It is of course evident that the lid 5 may take various forms, the showing in the present drawing being merely illustrative and in no way limiting in the form of lid to be provided.

In Figures 2 and 3 a two-leaf lid is shown and wherein the two leaves of the lid each of which covers half of the upper end of the spout are designated 23. These half lids are each pivoted at 24 to a suitable band 25 which passes around the upper end of the neck of the spout here designated 26, and an extension 27 from the hinged end of each half lid is linked as by a wire 28 with a spring wire hand lever 29 loosely embracing the lower end of the neck and secured at 30 to a wire band 31.

By this construction the inherent resiliency of the spring wire 29 forces the links 28 upwardly to normally snap the lids closed, and a downward pressure of the projecting end 29' of the spring wire will instantly open both lids to the dotted position shown at 23'. By continuing the downward movement of the finger engaging the portion 29' of the spring wire, the finger will slip off of it and permit the lids to snap closed.

In the construction shown in Figure 2 the spout 26 is made of glass or transparent plastic, preferably the latter, and it is held in place at its lower end in a sheet metal stamping 32 which is formed with a threaded lower end 33 to screw over the upper threaded end 34 of a glass or other suitable jar or container 35. This construction simplifies the adaptation of the invention to an ordinary glass jar or common type of sugar dispensing container which has the upper end threaded. In other words, it merely becomes necessary to unscrew the present metal cap and nozzle provided on an ordinary sugar dispenser and screw the cap 32 of applicant's dispenser in its place.

In the construction of Figures 2 and 3 the screen 18 is shown clamped between the cap 32 and the upper end of the jar. The restricting guard at the base of the neck is here indicated as 12' and shown with two relatively small openings 13'. This disc may be frictionally snapped into a slight internal depression 36 formed in the metal of the cap 32. The metal cap is also provided with a short neck 32' tightly engaging the outer diameter of the transparent nozzle or measuring neck 26, and preferably held in place by externally depressing as at 37 into a matching depression in the neck, and which of course may be extended entirely around the neck if desired.

In the construction shown in Figure 2 the upper end of the transparent measuring neck terminates straight off instead of being slanted as shown in Figure 1, but this is optional.

In Figure 4 the container is indicated at 38, the transparent measuring neck at 39, and the latter is shown extending at a slant from the container. This construction is optional with

any of the other features shown. In this figure of the drawing the guard or restriction at the lower end of the measuring neck is indicated at 40, and is shown as a screen having several restricted openings 41 which taken altogether should permit but a relatively slow flow of sugar into the measuring neck when the device is inverted. This screen may also have its openings punched to form projections 42 which would function the same as the projections 22 of Figure 1. By proper proportioning of the openings 41 in the construction shown in Figure 4 the guard could take the place of the screen 21 as well as the restricted opening 13 of Figure 1.

This guard 40 is preferably a thin metal or composition disc snapped tightly into a groove formed in the interior and at the base of the neck 39 as indicated. A lid has been shown on the outer end of the neck in this figure, but it has been already sufficiently described for the other figures.

In considering my invention as above described, it will be noted that one of the essentials is that the measuring neck must be transparent in order to carry out the most important feature of the invention, i. e. the provision for accurately measuring the amount of sugar one wishes to use before discharging the same into the cup or upon the food. This does not mean that the entire neck need be transparent, though this is preferable and is the simplest construction, but if a portion of the neck were transparent for substantially its length so that the sugar could be seen to the various gage or graduation points it would be sufficient.

It will be obvious from the construction that when it is desired to merely sprinkle some sugar upon the food, this may be easily done by partially opening the lid 5 and sprinkling the sugar from the partially inverted container to any degree desired.

Having thus described my invention and several of its modifications, what I claim is:

1. A granulated sugar dispenser comprising a container for the sugar provided with a discharge neck, a closure at the outer end of the neck, and a flow guard arranged and adapted to restrict the flow of sugar from the container to the neck below its ability to flow from the outer end of the neck when said closure is opened, said neck hav-

ing a transparent portion to show the amount of sugar flowing into the neck upon inverting the container.

2. A granulated sugar dispenser comprising a container for the sugar provided with a discharge neck, a closure at the outer end of the neck, and a flow guard adjacent the base of the neck adapted to restrict the flow of sugar from the container to the neck below its ability to flow from the outer end of the neck when said closure is opened, said neck having a transparent portion to show the amount of sugar flowing into the neck upon inverting the container and suitably graduated to show the amount of sugar contained in the neck.

3. In the construction as set out in claim 1, the outer end of said neck cut off at a slant, and said closure closing the slanted end.

4. In the construction as set out in claim 1, a valve for closing off said flow guard.

5. In the construction as set out in claim 1, said closure being a lid, and a valve for closing off said flow guard connected to said lid in a manner to close the guard when the lid is opened.

6. In the construction as set out in claim 1, said closure being a lid pivoted to open, and a splash guard on said neck in a position to prevent sugar being thrown laterally by the quick closing of the lid.

7. In the construction as set out in claim 1, a screen positioned between the container and said flow guard to keep lumps of sugar from choking the flow guard.

8. In the construction as set out in claim 1, a screen positioned between the container and said flow guard to keep lumps of sugar from choking the flow guard and provided with breaker projections extending toward the container space.

9. In the construction as set out in claim 1, said neck being entirely of transparent material and of unrestricted diameter at its outer end.

10. A sugar dispenser comprising a container for the sugar provided with a discharge neck, a closure at the outer end of the neck, an inlet adjacent the base of the neck, and a valve for closing said inlet, said neck having a transparent portion to show the amount of sugar flowing into the neck.

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