

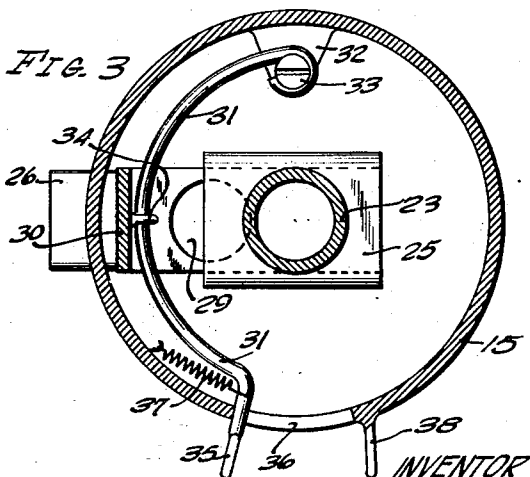
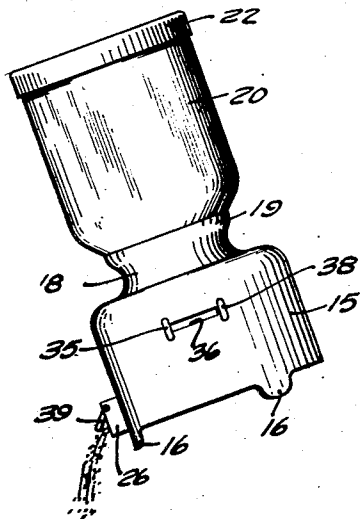
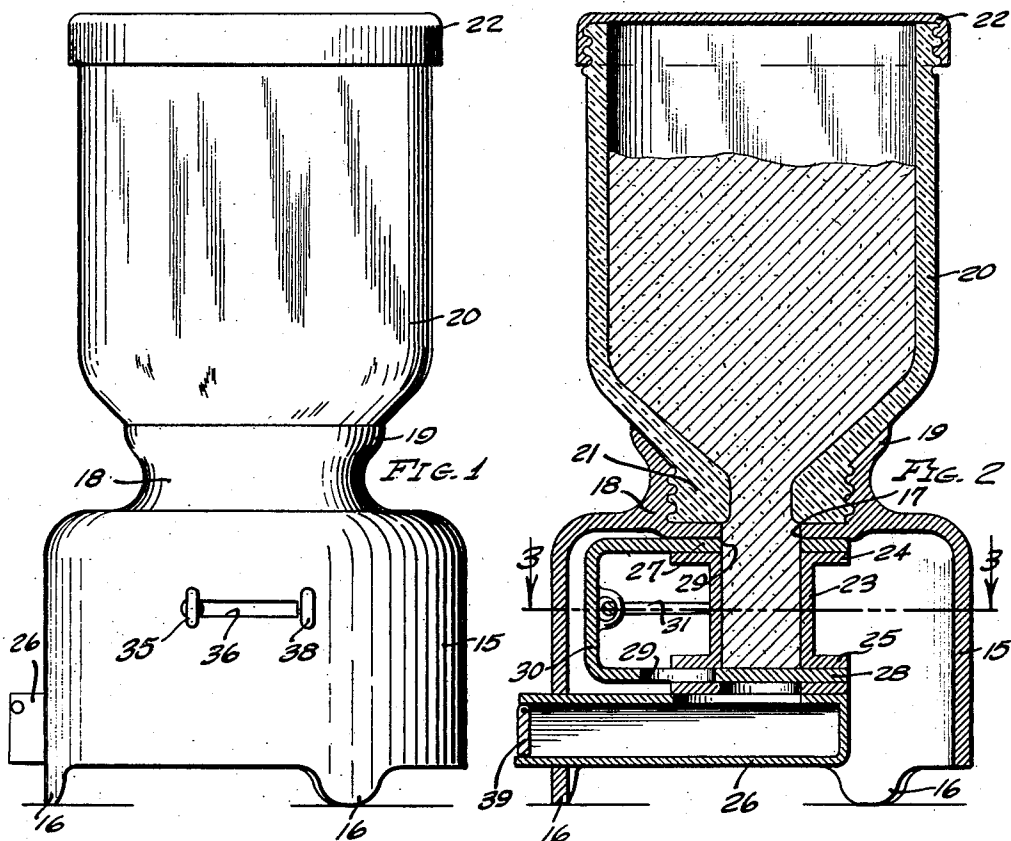
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G. N. ADAIR

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SUGAR DISPENSER

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SUGAR DISPENSER

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My invention relates to sugar dispensing devices for kitchen and table use of the type which maintains the sugar against contamination, and provides means for mechanically delivering measured quantities of the sugar contained therein.

It is a purpose of my invention to provide a sugar dispenser of the character above described which mechanically measures a single quantity of sugar or any multiples thereof, but which requires tilting of the dispenser to effect actual discharge of the sugar so that when measuring more than the single quantity of sugar the several quantities measured will accumulate within the dispenser and all will be discharged as a single quantity by one tilting movement of the dispenser.

A further purpose of my invention is to provide a sugar dispenser having a sugar holding receptacle which is readily removable to facilitate cleaning and to gain access to the mechanical parts of the dispenser for cleaning.

I will describe only one form of sugar dispenser embodying my invention and will then point out the novel features in claims.

In the accompanying drawing:

Figure 1 is a view showing in side elevation one form of sugar dispenser embodying my invention;

Fig. 2 is a central vertical sectional view of the dispenser shown in Fig. 1;

Fig. 3 is a horizontal sectional view taken on the line 3—3 of Fig. 2; and

Fig. 4 is a view showing the sugar dispenser tilted to effect discharge of sugar therefrom.

Referring specifically to the drawings, my invention in its present embodiment comprises a base 15 formed of metal or other suitable material and which, in the present instance, is of inverted cup-shaped form with its lower edge provided with protuberances 16, which constitute feet for supporting the base in slightly elevated position upon a support. The top of the base 15 is formed centrally with an opening 17 surrounded by an inverted cap 18 interiorly screw-threaded and preferably form-

ed integral with the base. The cap 18 is provided at its top with an annular flange 19, the inner wall of which is shaped to define a frusto-conical socket in which a sugar-holding receptacle or bowl 20 is adapted to seat. This receptacle is shown as formed of glass, and its neck 21 is exteriorly threaded for engagement with the threads of the cap 18 in order that the neck may be screwed into the cap and the receptacle as a whole thus supported in upright position on the base. The lower portion of the receptacle is of frusto-conical form so as to have a snug fit within the socket defined by the flange 19, and with the neck screwed home within the cap, it will be understood that the receptacle as a whole is firmly retained in upright position on the base.

This cover is readily removable to permit filling of the receptacle with sugar.

Within the base 15, and suitably secured to the under side of the top thereof so as to be in vertical alignment with the neck of the receptacle, is a tubular body 23 provided at its upper end with a head 24 which is secured to the base 15, and at its lower end with a head 25 to which latter a discharge chute 26 is secured. The heads 24 and 25 have openings in registration with the opposite ends of the body 23, and the heads are constructed to provide channels in which slide valves 27 and 28, respectively, are adapted to slide to control the passage of sugar through the openings and through the body. The valves 27 and 28 are provided with ports 29 which are disaligned vertically so as to alternately register with the respective ends of the body 23. The valves are rigidly connected so as to move simultaneously by a connecting portion 30, and the two valves are capable of being moved to either of two extreme positions by an operating lever 31 which, as shown in Fig. 3, is pivoted on a bracket 32 by means of a screw 33 and is wholly contained within the base 15. This lever is of arcuate form and its intermediate portion is extended through an eye 34 of the connecting portion 30. Its free end is bent outwardly at an angle to provide a handle

which operates in a slot 36 of the base 15. A spring 37, connected as illustrated in Fig. 3, operates to yieldably urge the lever 31 to the position shown in which the valves 27 and 28 occupy such positions that the opening of the valve 27 is in registration with the upper end of the body 23 while the opening of the valve 28 is out of registration with the lower end of the body 23.

A projection 38 on the body 15 adjacent one end of the slot 36 provides a handle which is adapted to be gripped simultaneously with the gripping of the handle 35 for actuating the lever 31 against the tension of the spring 37 to move the valves 27 and 28 to the other extreme position in which the openings of the valves are reversed in position to close the upper end of the tubular body 23 and open its lower end.

Sugar as discharged from the body 23 is received in the chute 26 and it may be discharged from the latter by tilting the entire dispenser to the position shown in Fig. 4, in which the sugar gravitates from the chute.

A pivoted door 39 is mounted at the outer end of the chute so as to normally close the latter, but to gravitate to open position when the dispenser is tilted, and to thereby permit discharge of sugar from the chute.

In practice, sugar from the receptacle 20 is free to gravitate into and fill the measuring chamber defined by the bore of the body 23, the frusto-conical portion of the receptacle promoting this gravitational feed. Thus, with the body 23 filled with sugar, the sugar may be delivered into the chute 26 by operation of the lever 31 in the manner previously described. It will be noted that as a result of such operation the valve 27 closes the neck of the receptacle during discharge of the sugar from the body 23 so that a measured quantity of sugar is delivered to the chute. Following release of the lever, the spring 37 operates to return the valves to normal position in which the body 23 is again placed in communication with the receptacle to permit refilling thereof.

The lever 31 may be operated any number of times to discharge a predetermined amount of sugar into the chute 26 and by virtue of the fact that the chute 26 is disposed horizontally, the sugar delivered to the chute will remain and thus accumulate therein, its ultimate discharge being effected only by moving the dispenser to the tilted position shown in Fig. 4. Thus, provision is made for the mechanical measurement of a single quantity of sugar or any multiples thereof within the capacity of the chute 26 and without effecting discharge of the sugar from the chute, it being necessary to tilt the dispenser in order to produce final delivery of the sugar. Such mode of delivery prevents the disadvantage of accidental discharge of sugar from the dispenser in the

event of accidental operation of the valves.

Although I have herein shown and described only one form of sugar dispenser embodying my invention, it is to be understood that various changes and modifications may be made herein without departing from the spirit of the invention and the spirit and scope of the appended claims.

I claim:

1. A sugar dispenser comprising a hollow base having an opening in its top, a cap surrounding the opening, a sugar receptacle having a neck threaded in the cap so as to be supported in upright position on the base, a tubular body secured to the under side of the top of the base and constituting a measuring chamber vertically aligned with respect to said opening, heads on the opposite ends of the body, valves slidable in the heads and having vertically disaligned ports adapted to alternately register with the opposite ends of the measuring chamber according as the valves occupy one extreme position or another, a member connecting the valves by which the latter may be moved simultaneously, a lever pivoted within the base, an eye on the connecting member through which said lever extends, a spring engaging the lever to yieldably urge the connecting member to one extreme position in which the port of the upper valve registers with the measuring chamber while the port of the lower valve is out of registration with the measuring chamber, said base being provided with a slot and a handle on the base adjacent one end of the slot, and a handle on the lever extending through the slot and adapted to be gripped concurrently with gripping of the first handle to move the lever against the tension of said spring whereby the valves are moved to the other extreme position to reverse the position of said ports and open the lower end of the measuring chamber and close its upper end.

2. A sugar dispenser as embodied in claim 1 wherein a chute is disposed in receiving relation to the bottom of the measuring chamber and positioned to discharge sugar therefrom only when the dispenser is tilted.

3. A sugar dispenser as embodied in claim 1 wherein a horizontally disposed chute is secured to the lower head and provided with an opening to receive sugar as discharged from the measuring chamber, and a door pivoted within the outlet end of the chute for the purpose described.

4. A sugar dispenser comprising a base, a cap on the base, a sugar-holding receptacle having a neck threaded in the cap, a body secured within the base and providing a measuring chamber, valves operable to control the entrance and discharge of sugar to and from the measuring chamber, and a chute for receiving sugar as discharged

from the measuring chamber, said chute being horizontally disposed to retain the sugar therein and effect discharge only when tilted.

5 Signed at Los Angeles, in the county of Los Angeles and State of California, this 23d day of July, 1928.

GUS N. ADAIR.

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