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A. WICKSTROM

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DISPENSING DEVICE

Filed Feb. 16, 1931

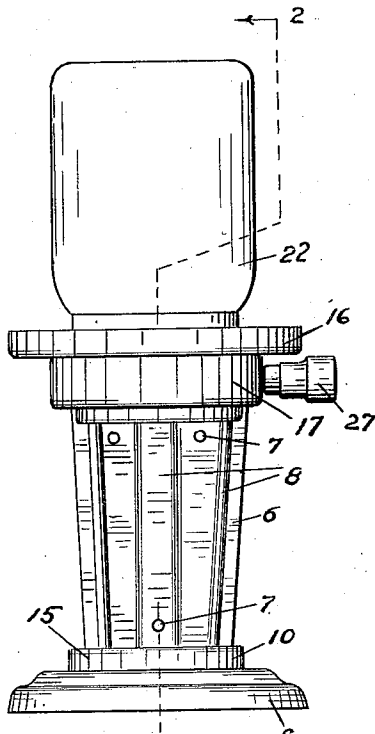


Fig. 1.

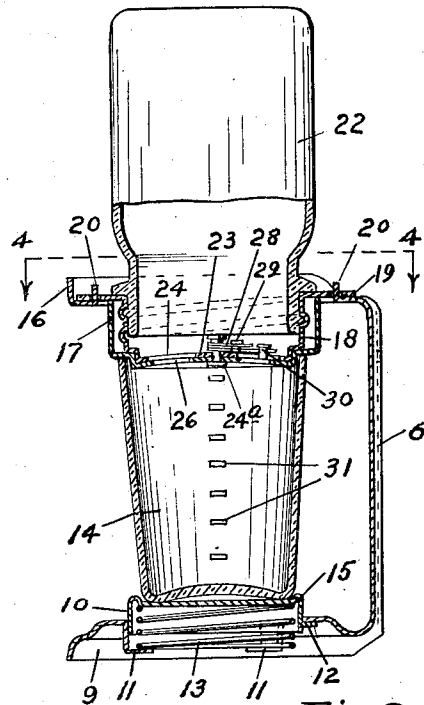


Fig. 2.

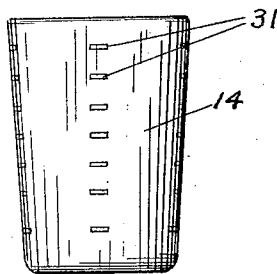


Fig. 3.

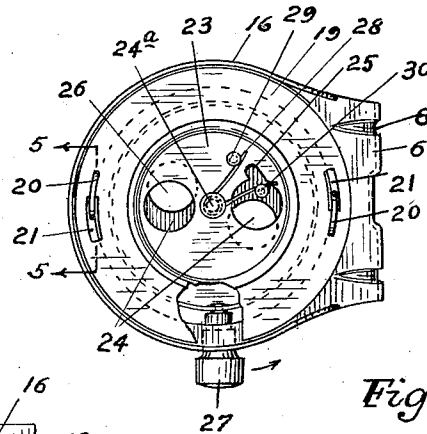


Fig. 4.

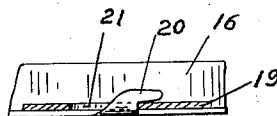


Fig. 5.

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DISPENSING DEVICE

Application filed February 16, 1931. Serial No. 516,002.

This invention relates to dispensing and measuring devices, and the primary object is to provide a mechanism that is particularly designed for use in kitchens of homes, restaurants, cafes, etc., to measure out given or desired quantities of granular substances such as coffee, tea, sugar, flour, spices, etc., in an efficient and practical manner. A further object is to provide a device of that character with a container for the main bulk of the substance in question that is so arranged and designed that it will not permit the escape of flavors and aromas from the substance to be dispensed, which is an important consideration, especially with edibles such as coffee granules where it is highly desirable to preserve the flavor and freshness until it is to be used. These and other objects will be more fully disclosed in the course of the following specification, reference being had to the accompanying drawings, in which:

Fig. 1 is a front elevation of the device with the receiving tumbler or receptacle removed.

Fig. 2 is a sectional elevation as on the irregular line 2—2 in Fig. 1.

Fig. 3 is an elevation of the receiving receptacle as seen when removed from the device.

Fig. 4 is a plan elevation as seen on the line 4—4 in Fig. 2, but with the storage container removed.

Fig. 5 is an enlarged detail sectional view as on the line 5—5 in Fig. 4.

Referring to the drawings more particularly and by reference characters, 6 designates a vertical section of a bracket or body member of the device and as such is provided with holes 7 through which screws or nails may be inserted to fasten the device onto a wall or other vertical support. The section 6 is preferably ribbed, as shown at 8, for reinforcing purposes. The lower end of the bracket section 6 terminates in an integral horizontal extension 9 having a central aperture in which is movably maintained a support member 10. This member 10 comprises a shallow, inverted sheet metal cup which is slidable between lugs 11 projecting downwardly from the base member 9, and its

movement upwardly is limited by small lugs 12. The member 10 is pressed upwardly under the action of a coil spring 13 which is compressed between the cup and the lower ends of the lugs 11. The member 10 serves as a support for the container 14 and preferably is provided with a bead 15 for the purpose of centering and yieldably retaining the container 14 in place.

The upper end of the bracket section 6 terminates in an integral ring member 16 disposed in vertical alignment above the members 9 and 10. This ring member 16 has a large central opening to accommodate a cup member 17—18. The portion 18 of this cup member has a relatively wide flange 19 which rests upon the ring member 16 and is releasably interlocked therewith by friction fingers 20, which are rigid with the ring member 16 and project through slots 21 in the flange 19 so that when the flange member is placed over the fingers 20 and slightly rotated, the fingers will positively engage over the flange to firmly retain it in place upon the ring section 16.

In addition to the flange 19 the cup section 18 is provided with a threaded collar section to receive a conventional type of container such as a Mason jar 22. At the lower end of the threaded section of the member 18 it is provided with a floor section 23 having a pair of ports 24, one of which is notched out as at 25. The cup section 17 fits under and about the section 18 and it is rotatably secured thereto as by a suitable pin or rivet 24a.

The bottom of the section 17 is provided with ports 26 adapted to register with the ports 24 when the two cup sections are in the relative positions shown in Figs. 2 and 4. This position of the section 17, with respect to the section 18, is obtained by rotating the former on the axis 24a and by means of a button or hand piece 27 secured to the section 17, preferably at one side, where it is within convenient reach of the operator. The registering positions of the ports 24—26 is normally prevented by the action of a spring 28 which is preferably anchored on the pin 24a and has one end in engagement

with a second pin 29 on the floor section 23, while its other end engages a pin 30 secured to the outer cup section 17.

The previously noted notch 25 is provided in order to accommodate the pin 30 to permit a full closing of the two cup sections with respect to each other. The operation of the device may be briefly explained as follows:

The material to be dispensed is filled into the container 22 before the same is in any way attached to the device. When the same is properly filled the double unit cup section 17—18 is removed from the ring member 16 by being slightly turned to free it from the securing fingers 20. The unit thus removed is then tightly screwed down upon the neck of the container 22 with a result that the container is kept in substantially as tight a condition as if the ordinary cover were applied to the jar. It is of course understood that the ports 24—26 will always be maintained in a closed condition until opened under the action of the hand piece 27. The container 22 and the double unit cup section which has been attached thereto, as above described, is now put in place upon the ring section 16 and secured by being attached under the securing fingers 20. The device, as far as the storage container and dispensing mechanism, is now in readiness for use.

The receiving container 14 is now put in place by being moved horizontally under the cup section 17—18, and this can easily be done by first depressing the member 10 to permit the necessary clearance for the container 14. The cup section 17—18, as above described, is preferably provided with a notched out, annular groove, as indicated in Figs. 1 and 2, to releasably receive the upper end of the container 14. The container 14, which is preferably an ordinary tumbler for purpose of economy, is provided with graduations 31 by which the quantity of dispensed material may be measured. Thus, if the operator wishes to measure out a certain quantity of material such as coffee, sugar, flour, salt, or similar substance, he merely pushes the button 27 rearwardly to open the ports 24—26, and as the material flows into the glass 14 the level of it will of course raise, and as soon as it reaches the desired graduation the operator has only to release the button 27 to permit the ports 24—26 to close under the action of the spring 28.

From the foregoing description, read in the light of the disclosure as evidenced by the drawing, it will be seen that I have devised a mechanism which is not only cheap and economical to construct but is also efficient and very practical for domestic as well as restaurant and hotel use.

It is understood that suitable modifications may be made in the structure as disclosed, provided such modifications come within the spirit and scope of the appended claims.

Having now therefore fully illustrated and described my invention, what I claim to be new and desire to protect by Letters Patent is:

1. A device of the character described comprising a storage receptacle arranged in a discharging position above a receiving receptacle, means for controlling the discharge of material from the storage receptacle to the receiving receptacle, and means for yieldingly pressing the receiving receptacle upwardly into sealing engagement with respect to the storage receptacle.

2. A device of the character described comprising a storage receptacle arranged in a discharging position above a receiving receptacle, means for controlling the discharge of material from the storage receptacle to the receiving receptacle, and means for yieldingly pressing the receiving receptacle upwardly into sealing engagement with respect to the storage receptacle, said discharge controlling means including a manually openable, normally spring closed valve.

3. A device of the character described comprising a pair of upper and lower horizontal supports, a storage receptacle secured in inverted position upon the upper support, a receiving receptacle disposed upon the lower support, means for pressing the lower support upwardly to yieldingly retain the receiving receptacle thereon, and means for controlling the discharge of material from the storage receptacle to the receiving receptacle.

4. A device of the character described comprising a receiving receptacle, an upwardly spring pressed support for the receptacle, a dispensing mechanism disposed above the receptacle and having an annular recess for releasably engaging the upper end of the receptacle.

5. A device of the character described comprising a support, a storage container, a valved cap for the container, and means for detachably securing the cap to the support with the container in an inverted position, said means including a slotted flange extending from the cap and securing fingers extending from the support for engagement in the slots of the cap flange.

Signed at Minneapolis, Minnesota, this 12th day of February, 1931.

ALFRED WICKSTROM.