Sept. 5, 1939.

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2,171,651

MEASURING AND DISPENSING CAP FOR RECEPTACLES

Filed Jan. 30, 1939

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

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Fig. 3 is a vertical central sectional view, taken on line III—III of Fig. 2. Fig. 4 is a plan view of the blank from which the plates of the device are formed; and, Fig. 5 is an enlarged detailed fragmentary sectional view taken through a portion of the device, on line V—V of Fig. 3. Primarily the device embodying this invention is adapted for use with a fruit jar 8 of the type having an externally screw-threaded neck 10 through which passes the material stored in receptacle 5, when it is desired to empty all or a portion of the same therefrom. In conveniently disposing the measuring and dispensing cap for use the same should be attached to a suitable vertical support 12, such as the face of a wall or the surface of the wood trim about a window, cupboard or the like. A bracket 14 is provided for this purpose and a shoe 16 slidably engageable with bracket 14 is secured directly to the supporting surface as shown in Figs. 1 and 2. A screw-threaded collar 18, movable to position circumscribing neck 10, merges with annular wall 20 through which is provided a pair of slots 22 and 24 respectively. Collar 18 and annular wall 20 may be continuous and formed of sheet metal or the like, through the medium of spinning or drawing. These parts may also be created by die-casting 30 and wall 20 should continue downwardly and be reduced in diameter to present a spout 26. Valve plates 28 and 30 respectively, are disposed to partition and space within annular wall 20 when the same are in the operative position. Each of these plates is hingedly or pivotally mounted through the medium of a pintle 32 supported exteriorly of annular wall 20 and the outwardly extended ear 34, having perforation 35 therethrough, is in the illustrated embodiment, the specific detail embodying the means for interconnecting either of plates 28 or 30 to pintle 32. Each plate is similarly formed from sheet metal and may be first blanked to present the part as illustrated in Fig. 4. Means should be formed directly on each plate 28 or 30 as the case may be, for the operator to grasp and move the same about pintle 32, and in the illustration shown, a knob 38 is attached to a laterally extended portion 40. This laterally extended portion is bent at right angles to receive knob 38 and it is conceivable that one skilled in the art might again form a thumb engaging surface on laterally extending portion 40 by again turning this part at
right angles to the outer plane of the said portion which now supports knob 38.

Means for releasably holding each plate in the operative position is desirable and a member, such as lip 42 may be formed integral with the material from which the plates are created without additional dependend to the end that an effective and desirable holding element is presented. Each lip 42 is turned and embossed as shown in detail in Fig. 5, and the embossment 44 thereof enters socket 46 which is pressed inwardly from the outer face of annular wall 20 at the point where lip 42 is positioned when the plates are releasably positioned condition.

Slots 22 and 24 are protected so that finely ground coffee, or similar materials, will not escape as plates 28 and 30 are drawn therethrough. In the case of the lower plate 30, the bead 48 presents an inwardly and downwardly inclined face which deflects the material passing through the measuring compartment 50, to such an extent that it passes lower slot 24 in spaced relation thereto.

A unique arrangement for providing a sealing member as well as a deflecting surface, is built into this cap and specifically shown in Fig. 5.

Ring 52 is at the zone of juncture between collar 18 and annular wall 20. This ring has an upwardly and outwardly disposed flange 54 which rests against the edge of neck 10 and follows this edge as the receptacle is moved into and out of screw-threaded collar 18. It may be desirable to split flange 54 as at 56 so that the range of movement may be increased.

Skirt 58 integral with ring 52 has a downwardly and inwardly inclined face which deflects the material passing from receptacle 8 away from the upper slot 22 for the aforesaid purpose.

When upper plate 22 is closed, the material in receptacle 8 will rest directly upon the upper face of this plate and due to the formation of skirt 58, the angle of repose of the material at this point will be such as to preclude its accidental movement through slot 22 wherein plate 20 is positioned. The operation of this measuring and dispensing cap for receptacles is simple in that when receptacle 8 and the cap embodying this invention, are related as shown in the drawing, or what ever is to be dispensed will rest against upper plate 28. Swinging this plate about pin 32 will allow the material in receptacle 8 to move down against lower plate 30, after which upper plate 28 is closed to set off a charge of material which is fed through 26 when lower plate 30 is opened. The measuring compartment 50 may be of any desired size. For example, a predetermined amount of coffee may be measured and fed so that the strength of batches thereof may be the same from time to time merely because of the exact amount which is set out in the compartment and fed through 26 into the vessel wherein the coffee is made.

Obviously, to one skilled in the art, the cap embodying this invention, may be made to present physical characteristics vastly different from those shown in the drawing, and it is desired to be limited in the enjoyment of this invention only by the spirit thereof and scope of the appended claims.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. In combination with a receptacle of the type having a screw-threaded neck, a measuring and dispensing cap comprising a collar circumscribing the neck and in screw-threaded engagement therewith; an annular depending wall merging with said collar at one edge thereof provided with a plurality of spaced apart slots extending there-through and partially therearound in horizontal planes; a plate extending through each slot respectively and across the space within the wall to form a measuring compartment; a pintle on the annular wall and passing through the plates for swingably mounting the same; a knob on each plate exteriorly of the annular wall; and a dent for each plate to releasably hold the same in a position extending across the space within the annular wall.

2. In combination with a receptacle of the type having a screw-threaded neck, a measuring and dispensing cap comprising a collar circumscribing the neck and in screw-threaded engagement therewith; an annular depending wall merging with said collar at one edge thereof provided with a plurality of spaced apart slots extending there-through partially therearound in horizontal planes; a plate extending through each slot respectively and across the space within the wall to form a measuring compartment; a pintle on the annular wall and passing through the plates for swingably mounting the same; a knob on each plate exteriorly of the annular wall; and a dent for each plate to releasably hold the same in a position extending across the space within the annular wall.

3. In combination with a receptacle of the type having a screw-threaded neck, a measuring and dispensing cap comprising a collar circumscribing the neck and in screw-threaded engagement therewith; an annular depending wall merging with said collar at one edge thereof provided with a plurality of spaced apart slots extending there-through and partially therearound in horizontal planes; a plate extending through each slot respectively and across the space within the wall to form a measuring compartment; a pintle on the annular wall and passing through the plates for swingably mounting the same; a knob on each plate exteriorly of the annular wall; and a dent for each plate to releasably hold the same in a position extending across the space within the annular wall.

4. In combination with a receptacle of the type having a screw-threaded neck, a measuring and dispensing cap comprising a collar circumscribing the neck and in screw-threaded engagement therewith; an annular depending wall merging with said collar at one edge thereof provided with a plurality of spaced apart slots extending there-through and partially therearound in horizontal planes; a plate extending through each slot respectively and across the space within the wall to form a measuring compartment; a pintle on the annular wall and passing through the plates for swingably mounting the same; a knob on each plate exteriorly of the annular wall; and a dent for each plate to releasably hold the same in a position extending across the space within the annular wall.
ture between said collar and wall, said ring being secured to the inner face of the annular wall and provided with an upwardly and outwardly inclined yieldable flange serving to engage the edge of said receptacle neck to establish a seal between the receptacle and the measuring and dispensing cap, said ring having a downwardly and inwardly inclined skirt thereon terminating above the uppermost slot to deflect material entering the measuring compartment from said slot.

5. In combination with a receptacle of the type having a screw-threaded neck, a measuring and dispensing cap comprising a collar circumscribing the neck and in screw-threaded engagement therewith; an annular depending wall merging with said collar at one edge thereof provided with a plurality of spaced apart slots extending therethrough and partially therearound in horizontal planes; a plate extending through each slot respectively and across the space within the wall to form a measuring compartment; a pindle on the annular wall and passing through the plates for swingably mounting the same; a knob on each plate exteriorly of the annular wall; and a dent for each plate to releasably hold the same in a position extending across the space within the annular wall, said pindle being mount-
ed on the outer face of the annular wall, each of said plates having a perforated ear projecting outwardly through the associated slot for engagement with said pindle.

6. In combination with a receptacle of the type having a screw-threaded neck, a measuring and dispensing cap comprising a collar circumscribing the neck and in screw-threaded engagement therewith; an annular depending wall merging with said collar at one edge thereof provided with a plurality of spaced apart slots extending therethrough and partially therearound in horizontal planes; a plate extending through each slot respectively and across the space within the wall to form a measuring compartment; a pindle on the annular wall and passing through the plates for swingably mounting the same; and an operating knob on each plate respectively, said plates having laterally extending portions at the edges thereof for supporting the knobs in spaced relation with the annular wall, said portions each having an intumated lip formed to frictionally engage the outer face of said annular wall when the associated plate is in a position extending across the space within the annular wall.

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