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BRACKET AND HOLDER FOR INVERTED CONTAINER OF
BULK MATERIAL, WITH MEANS FOR DISPENSING
MEASURED QUANTITIES OF SAID MATERIAL
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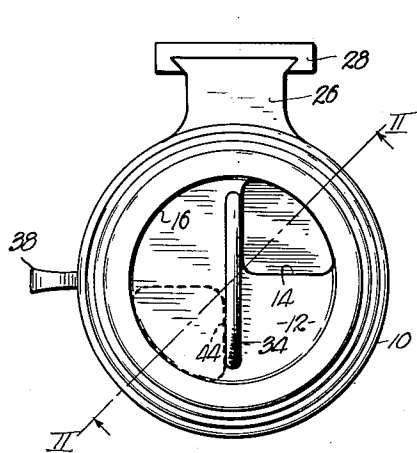


Fig. 1.

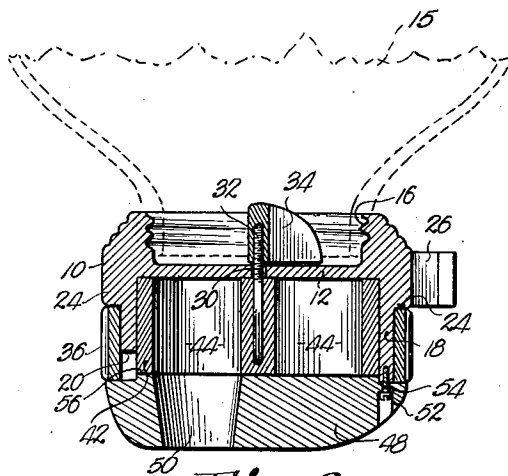


Fig. 2.

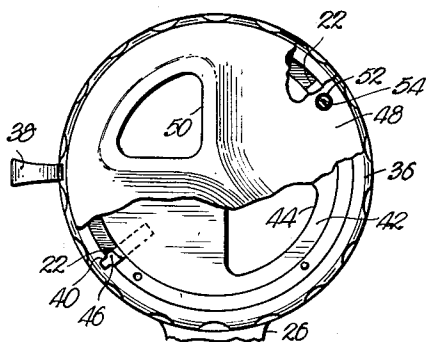


Fig. 3.

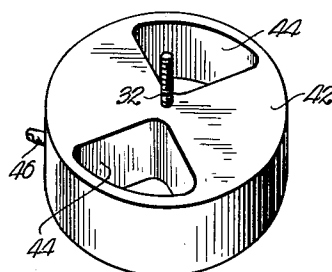
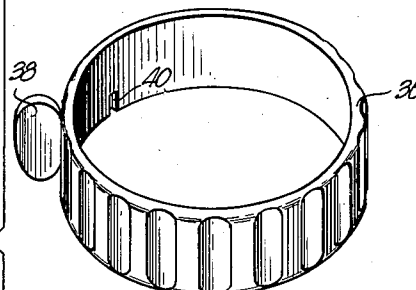
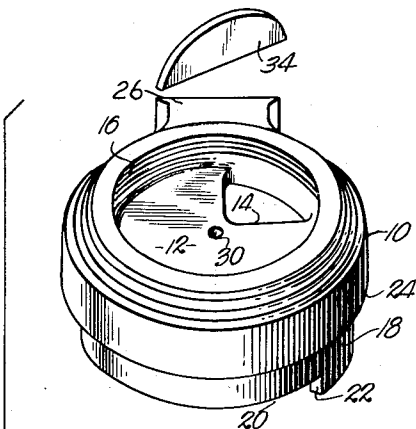


Fig. 4.

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BRACKET AND HOLDER FOR INVERTED
CONTAINER OF BULK MATERIAL WITH
MEANS FOR DISPENSING MEASURED
QUANTITIES OF SAID MATERIAL

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Application February 11, 1946, Serial No. 646,773

1 Claim. (Cl. 222-362)

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This invention relates to means for feeding bulk materials from a container thereof in measured quantities and has for its primary aim the provision of an attachment for packaged goods such as coffee, tea and flour that may be mounted upon a suitable support to hold the package until all the contents thereof have been fed therefrom.

One of the salient objects of this invention is to provide a measuring and feeding bracket for packaged bulk materials that may be constructed of a number of moldable units, all of which are in a cooperative nested relation when the bracket is assembled.

A further object of this invention is to provide feeding means for packaged goods having unique and novel interrelated parts for agitating the material and dispensing the same in measured quantities upon manual manipulation of one of the parts of the bracket.

Further objects of the invention include the particular way in which the component elements of the feeding bracket are formed to interengage and become an operative assembly with a minimum amount of labor during the manufacture thereof. Details of construction and particular forms of the component units of the bracket, all of which allow molding the units from plastics or the like, will be emphasized as the following specification progresses and as the form of the invention shown in the accompanying drawing is understood. In said drawing—

Fig. 1 is a top plan view of a measuring and feeding bracket for bulk materials made in accordance with the present invention.

Fig. 2 is a cross sectional view taken on line II—II of Fig. 1.

Fig. 3 is an inverted plan view with parts broken away; and

Fig. 4 is a perspective stretch-out view showing all of the component units of the bracket in their proper relation and ready for assembly.

Brackets for household use in the measuring and dispensing of comminuted dry substances such as coffee, tea, flour, etc. have heretofore been provided but have been objectionable from the standpoint of manufacturing cost and care required in keeping the bracket in a sanitary condition.

The measuring and feeding device made in accordance with my invention is capable of being molded from phenolic substances or plastic materials and after the component units of the device are produced, they may be assembled without machining of any kind to allow their parts to function in holding the bracket assembled, lim-

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iting the movement of the measuring rotor, providing a unique manually manipulable actuating member and affording means for attaching a threaded material container in place.

In the drawing, the numeral 10 designates a substantially ring-shaped body having a partition 12 therein to bottom a container 15 when the bracket is in use. This partition 12 has a port 14 formed there-through and internal threads 16 receive external threads on container 15. A skirt 18 on body 10 has an elongated notch 20 defined by stop shoulders 22 as will be more fully hereinafter described. The outside diameter of skirt 18 is less than the outside diameter of the main portion of body 10 to present an overhanging annular wall 24. Body 10 has a radially projected supporting ear 26 integral therewith, fittable into a fixture 28 which in turn may be mounted upon any suitable support. Partition 12 of body 10 is provided with a bore 30 for the passage of pintle 32 upon which an agitator 34 is mounted when the parts are assembled. The upper end of pintle 32 is screw-threaded to engage the internal threads in agitator 34, all as illustrated in Fig. 2.

An actuating collar 36 transversely fluted at its exterior surface has a radial finger piece 38 thereon and a cavity 40 formed therein. This cavity 40 extends outwardly from the interior smooth surface of collar 36 and is not visible when the bracket is assembled. The inside diameter of collar 36 is substantially the same as the outside diameter of skirt 18 forming a part of body 10 for this collar 36 circumscribes said skirt 18, as shown in Fig. 2.

A rotor 42 having a pair of transverse openings 44 provided therein carries pintle 32 and likewise mounts a radial pin 46, the outer end whereof enters cavity 40 of collar 36. The outside diameter of rotor 42 is substantially the same as the inside diameter of skirt 18 for this rotor fits within body 10 to have one of its flattened faces directly underlie partition 12. A lower section 48 has a discharge port 50 provided therein. This discharge port 50 should have substantially the same cross sectional area as transverse openings 44 and port 14. A number of marginal perforations 52 are molded in lower section 48 to receive screws 54 that enter skirt 18, to hold section 48 in place against skirt 18.

An annular shoulder 56 on section 48 has substantially the same diameter as the outside diameter of rotor 42 and when this section 48 is positioned, shoulder 56 enters the lower part of skirt 18 to lie against the flattened face of rotor

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42. The outside diameter of lower section 48 is substantially the same as the outside diameter of collar 36 and therefore, a flush cylindrical outer face is created when all of the units of the bracket are in their operative positions. The outer surface of skirt 18, the shoulder 24 and the upper surface of the lower section 48 all cooperate to form an external groove adapted to receive the collar 36. Pin 46 travels in elongated notch 20 and when this pin 46 is against one of stop shoulders 22, one of the openings 44 is in register with discharge port 50. The other opening 44 in rotor 42 is then in register with port 14 where materials may freely drop into opening 44 which is then bottomed by the smooth upper face of lower section 48.

Manifestly when one of openings 44 overlies discharge port 50, the top of this opening 44 is covered by partition 12. As collar 36 is oscillated, openings 44 alternately come into register with port 14 and discharge port 50 respectively and the material from container 15 is fed therefrom in amounts equal to the cubical capacity of openings 44.

It is apparent from the foregoing that the several component units of the bracket may be molded and assembled with speed and at relatively low cost. Cleaning of the device may be accomplished merely by removing the three screws 54 and unscrewing agitator 34, whereupon the entire assembly may be parted as shown in Fig. 4.

The structural details just above emphasized cooperate to insure a positively acting efficient measuring and feeding instrumentality and many changes and alterations may be made without departing from the spirit of the invention or scope of the appended claim.

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

A measuring and feeding bracket for packaged bulk materials comprising a cylindrical body provided with a transverse, horizontal partition intermediate the ends thereof, said partition being provided with an inlet port; means in the body for supporting a package of bulk material above the partition where the contents thereof will freely flow through said inlet port; an annular skirt forming a part of said body at the lowermost end thereof and having an outside

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diameter less than the outside diameter of the remainder of said body presenting a continuous down-turned shoulder on the body; a closure member for the lowermost end of the skirt having a discharge port therein offset with respect to said inlet port, the outside diameter of said closure member being greater than said outside diameter of the skirt, presenting a continuous upwardly facing shoulder opposite the first mentioned shoulder; a rotor carried by the closure member within the body below said partition for oscillation therein, said rotor having a pair of openings arranged whereby one opening is in register with the inlet port as the other opening registers with the discharge port; an annular collar circumscribing the skirt and spanning the distance between the shoulders, the said skirt having a semi-circular notch formed in the lowermost edge thereof, defining a slot above the last mentioned shoulder in register with the body between the partition and said closure member; and a pin extending through said slot and joining the rotor and said annular collar whereby upon oscillation of the annular collar, said rotor is oscillated to alternately bring each of said openings of the rotor into register with the inlet port and the outlet port respectively, said collar and said rotor being on opposite sides of the skirt in closing relationship to said slot.

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