Dec. 10, 1935. J. B. MYERS 2,023,537

MEASURING AND DISPENSING DEVICE

Filed Feb. 5, 1935

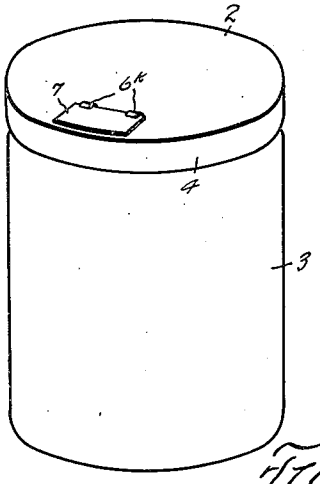


Fig. 1

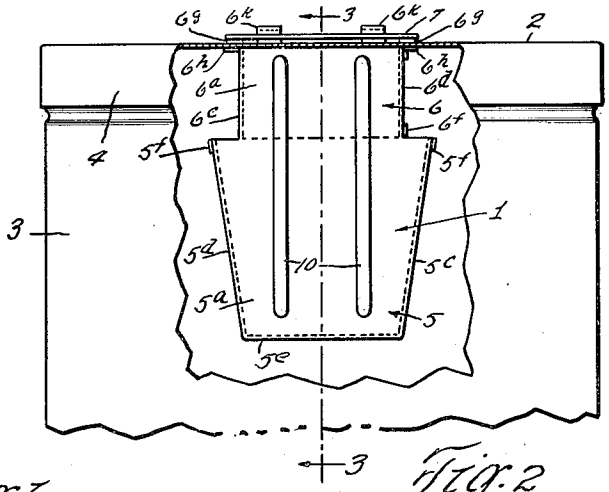


Fig. 2

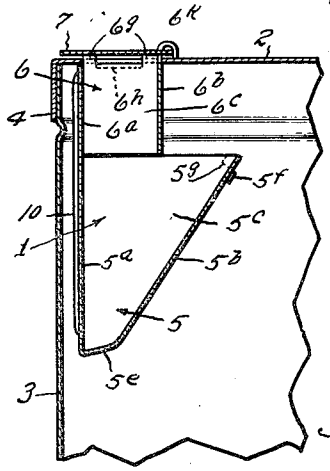


Fig. 3

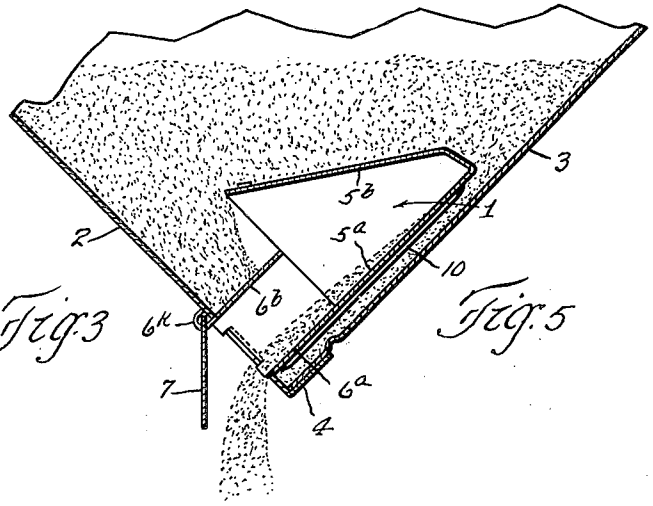


Fig. 5

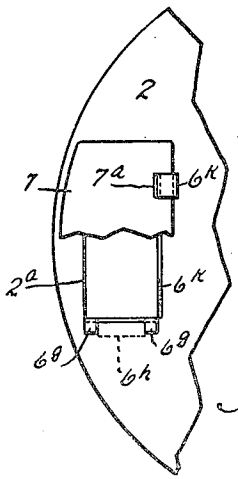


Fig. 4

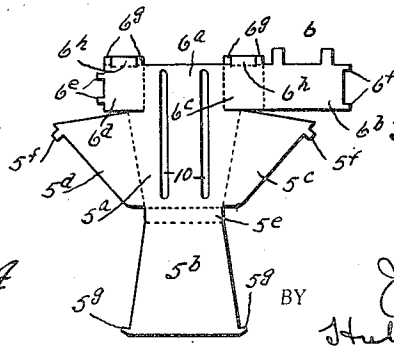


Fig. 6

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Patented Dec. 10, 1935 2,023,537

UNITED STATES PATENT OFFICE

2,023,537

MEASURING AND DISPENSING DEVICE

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Application February 5, 1935, Serial No. 5,076

7 Claims. (Cl. 221—98)

This invention relates to a measuring and dispensing container, and more particularly to a unit in the form of a lid that may be applied to containers and incorporating a measuring and dispensing device. Thus, it is the purpose of my invention to provide, especially for culinary use, a lid that may be placed upon cans or containers of given size in which such granular material as ground coffee and other commodities whose bulk is formed of small particles are supplied to consumers, to the end that the contents of the containers may be properly protected and preserved while affording immediate and convenient access thereto.

Among the general objects of the invention are the production of a device of the above character that is simple and inexpensive of manufacture; that is designed with a view of expediting assembly; that is especially convenient of use, and that measures the dispensed commodity with a degree of accuracy sufficient for all practical purposes.

These and other objects and advantages will appear as I proceed to describe the invention in detail, reference being had to the accompanying drawing in which Fig. 1 is a perspective view of a container equipped with my invention; Fig. 2 is a fragmentary elevational view of the container with parts broken away to reveal the measuring and dispensing receptacle; Fig. 3 is a section on the line 3—3 of Fig. 2; Fig. 4, a partial plan view of the container; Fig. 5 is a fragmentary sectional side elevation of the container showing the parts as they appear during a pouring operation; and Fig. 6 is a view of the blank from which the measuring and dispensing receptacle is formed.

The measuring and dispensing receptacle, designated generally by the reference numeral 1, is incorporated in a lid 2 for use on a container 3. In the present case, the container is cylindrical, and may consist of a can made of tin or other suitable material, and the lid 2 has a peripheral flange 4 that fits snugly over the open end of the container and is preferably held thereto by friction although, if desired, the same may be attached by threads, bayonet joint or any other well known expedient. A rectangular opening 2^a is formed in the lid 2 adjacent one edge thereof.

The measuring and dispensing receptacle 1 consists of two major portions, a vessel 5, and a discharge chute 6, and the same is preferably formed from a single piece or blank of sheet metal of the shape shown in Fig. 6. The chute 6 is made up of front and rear walls 6^a and 6^b, respectively, and end walls 6^c and 6^d. The vessel 5 is composed of corresponding walls 5^a, 5^b, 5^c and 5^d, with an additional bottom wall 5^e. The parts of the blank from which these various walls are constructed are designated by the same reference characters. In the formation of the receptacle 1, the blank shown in Fig. 6 is bent on the dotted lines, as will be readily understood, and when so formed, the parts are held in proper relation by the interlocking lugs 5^f, 5^g, 6^e and 6^f. Rising from the corners of the walls 6^c and 6^d are relatively narrow lugs 6^g, between which are wide tongues 6^h. The tongues 6^h are bent outwardly at right angles to the ends of the discharge chute 6 before the receptacle 1 is applied to the lid 2. Now when the receptacle is applied to the lid with its discharge chute in register with the rectangular opening 2^a, the tongues 6^h will bear against the underside of the cover while the lugs 6^g will project upwardly through the corners of the opening and properly position the receptacle with respect to the lid. The lugs 6^g are now bent down against the lid so as to secure the parts together. Straps 6^k extend from the upper edge of the rear wall 6^b through the opening 2^a and are engaged through slots 7^a of a cover 7 and curled over rearwardly. The hinge connection thus formed between the cover 7 and the lid 2 is loose enough to permit said cover to swing under the influence of gravity. Consequently it opens automatically when the container is tilted or inverted in a pouring operation, as illustrated in Fig. 5, and closes when the container is returned to upright position.

It will be observed that the only connection between the discharge chute 6 and the vessel 5 is confined to the cross section of the front wall 6^a of the chute, and to impart rigidity to the structure throughout this region, ribs 10 are formed in the front of the receptacle and extend vertically over a good portion of the walls 5^a and 6^a.

In the operation of the device, when the container is tilted or inverted, the granular contents accumulate about the receptacle 1, a certain amount gathering between the lid 2 and the open end of the vessel 5, where the latter extends beyond the rear and ends of the discharge chute 6, and when the vessel is returned to upright position, this material drops into the vessel 5. From now on, each time the container is inverted in a pouring operation, the material previously deposited in the vessel 5 will flow through the discharge chute 6—the lid 7 gravitating to open position to permit of such discharge—and a fresh supply of the material will be deposited between the open end of the vessel 5 and the lid 2 so that

it may drop into the vessel when the container is next swung to upright position.

Having thus described my invention, what I claim is:

1. In combination with the lid of a container for granular material or similar commodity, said lid having a rectangular opening whose front edge is adjacent the periphery of the lid, a measuring and dispensing receptacle comprising a rectangular discharge chute whose outer end is attached to the inner side of the lid in register with said opening and a measuring vessel supported solely by the inner end of the chute and having a substantially rectangular open top whose rear and side edges are disposed a material distance outwardly of the corresponding sides of the chute, and a cover hingedly supported over said opening for free swinging movement and normally reposing in parallel and close relation to the outer surface of the lid.

2. In combination with a lid of a container for granular material or similar commodity, said lid having an opening adjacent the periphery of the lid, a measuring and dispensing receptacle comprising a discharge chute whose outer end is attached to the inner side of the lid in register with said opening and an upwardly flaring measuring vessel supported solely by the inner end of the chute and whose open top is of considerably greater area than the cross sectional area of the chute, said open top of the vessel and the bottom of the chute being in the same plane and the front walls of the chute and vessel being integral and in a common plane, and a cover hingedly supported over the aforesaid opening for free swinging movement and normally reposing in parallel and close relation to the outer surface of the lid.

3. In combination with a lid of a container for granular material or similar commodity, said lid having a rectangular opening whose forward edge is adjacent the periphery of the lid, a measuring and dispensing receptacle sustained by the lid and comprising a rectangular discharge chute that registers with said opening and a measuring vessel on the inner end of the chute whose open top extends beyond the rear and sides of the chute, ledges contiguous with the upper end of the chute for engagement with the inner side of the lid, lugs extending from the corners of the chute through the corners of the aforesaid opening and turned over the outer side of the lid for securing the receptacle to the lid, straps projecting from the rear wall of the chute through the opening, and a cover having slots loosely engaged over said straps, the straps being curled rearwardly to hingedly support the cover for free swinging movement.

4. In combination with the lid of a container for granular material or similar commodity, said lid having a rectangular opening whose front edge is adjacent the periphery of the lid, a measuring and dispensing receptacle sustained by said lid and formed of sheet metal and comprising a rectangular discharge chute that registers with the aforesaid opening and a measuring vessel on the inner end of the chute whose open top extends beyond the rear and sides of the chute, the front walls of the chute and vessel being in a common plane and having vertical ribs that extend a material distance above and below the junction of the chute and vessel to impart rigidity to the structure, and a cover hingedly supported over the opening of the lid for free swinging movement.

5. In combination with the lid of a container for granular material or similar commodity, said lid having a rectangular opening whose forward edge is adjacent the periphery of the lid, a measuring and dispensing receptacle sustained by the lid and formed of a single piece of sheet metal, the same comprising a rectangular chute and an upwardly flaring measuring vessel on the inner end of the chute that is rectangular in plan and having an open top of considerably greater area than the cross sectional area of the chute, the walls of the chute being formed of a continuous strip of the blank, the ends of said strip having axially extended lugs that cooperate to hold the chute in shape, the front walls of the chute and vessel being continuous and in the same plane, the side walls of the vessel being turned rearwardly from the front wall thereof while the bottom and rear walls of the vessel are continuous with the front wall, the lateral edges of the bottom and rear walls meeting the bottom and rear edges of the side walls, the rear and side walls having lugs cooperating to hold the vessel in shape, and a cover hingedly supported over the opening in the lid for free swinging movement.

6. In combination with the lid of a container for granular material or similar commodity, said lid having a rectangular opening whose forward edge is adjacent the periphery of the lid, a measuring and dispensing receptacle sustained by the lid and formed of a single piece of sheet metal, the same comprising a rectangular chute and an upwardly flaring measuring vessel on the inner end of the chute that is rectangular in plan and having an open top of considerably greater area than the cross sectional area of the chute, the walls of the chute being formed of a continuous strip of the blank, the ends of said strip having axially extended lugs that cooperate to hold the chute in shape, the front walls of the chute and vessel being continuous and in the same plane, the side walls of the vessel being turned rearwardly from the front wall thereof while the bottom and rear walls of the vessel are continuous with the front wall, the lateral edges of the bottom and rear walls meeting the bottom and rear edges of the side walls, the rear and side walls having lugs cooperating to hold the vessel in shape, lugs extending upwardly from the front and rear corners of the end walls of the chute and tongues intermediate the same, the tongues being turned outwardly for engagement with the inner side of the lid while said lugs project through the corners of the opening and are turned over the outer side of the lid, the rear wall of the chute having straps that project through the opening, and a cover for the opening having slots through which the aforesaid straps loosely extend, the straps being curled over rearwardly to form hinge supports for the cover.

7. In combination with the lid of a container for granular material or similar commodity, said lid having an opening, a measuring and dispensing receptacle comprising a discharge chute that registers with said opening and a measuring vessel on the inner end of the chute whose open top is of considerably greater area than the cross section of the chute, the chute having parts that abut the inner side of the lid and lugs that extend through the opening and engage the outer side of the lid, and a cover loosely supported over said opening by hinge straps on the chute.

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