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H. E. ALLAN

2,148,421

SELF-MEASURING DISPENSER

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Fig. 1

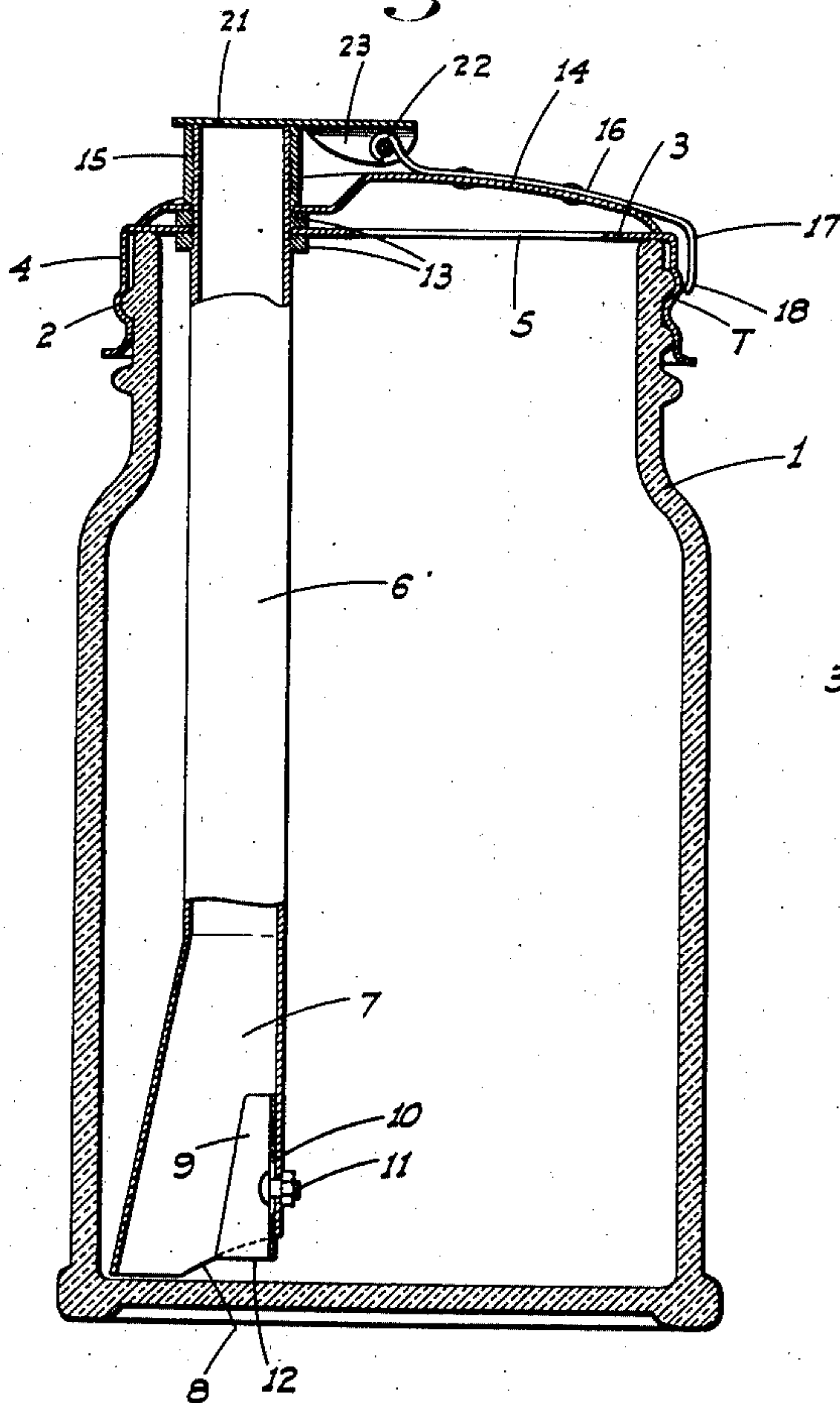


Fig. 2

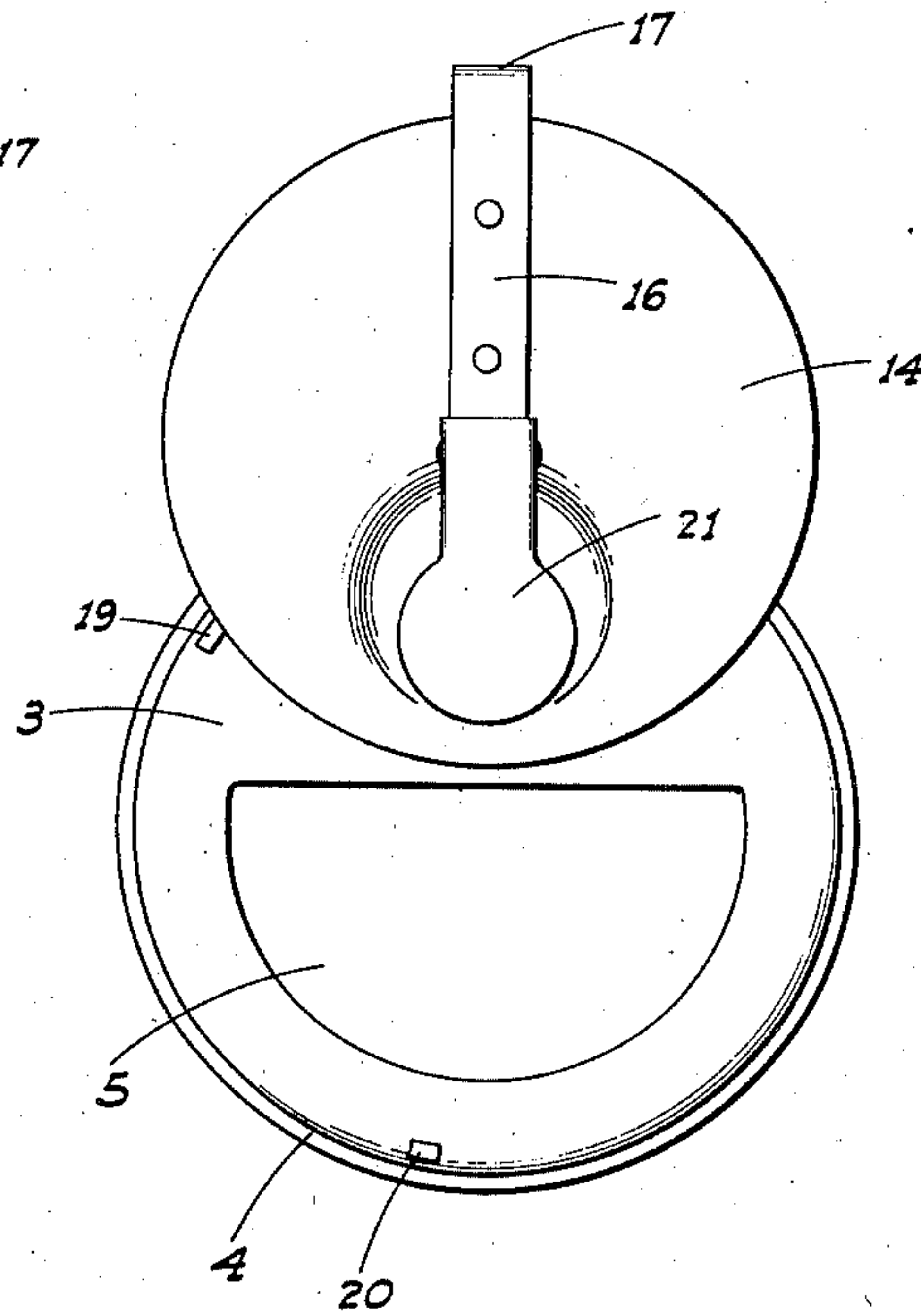


Fig. 4

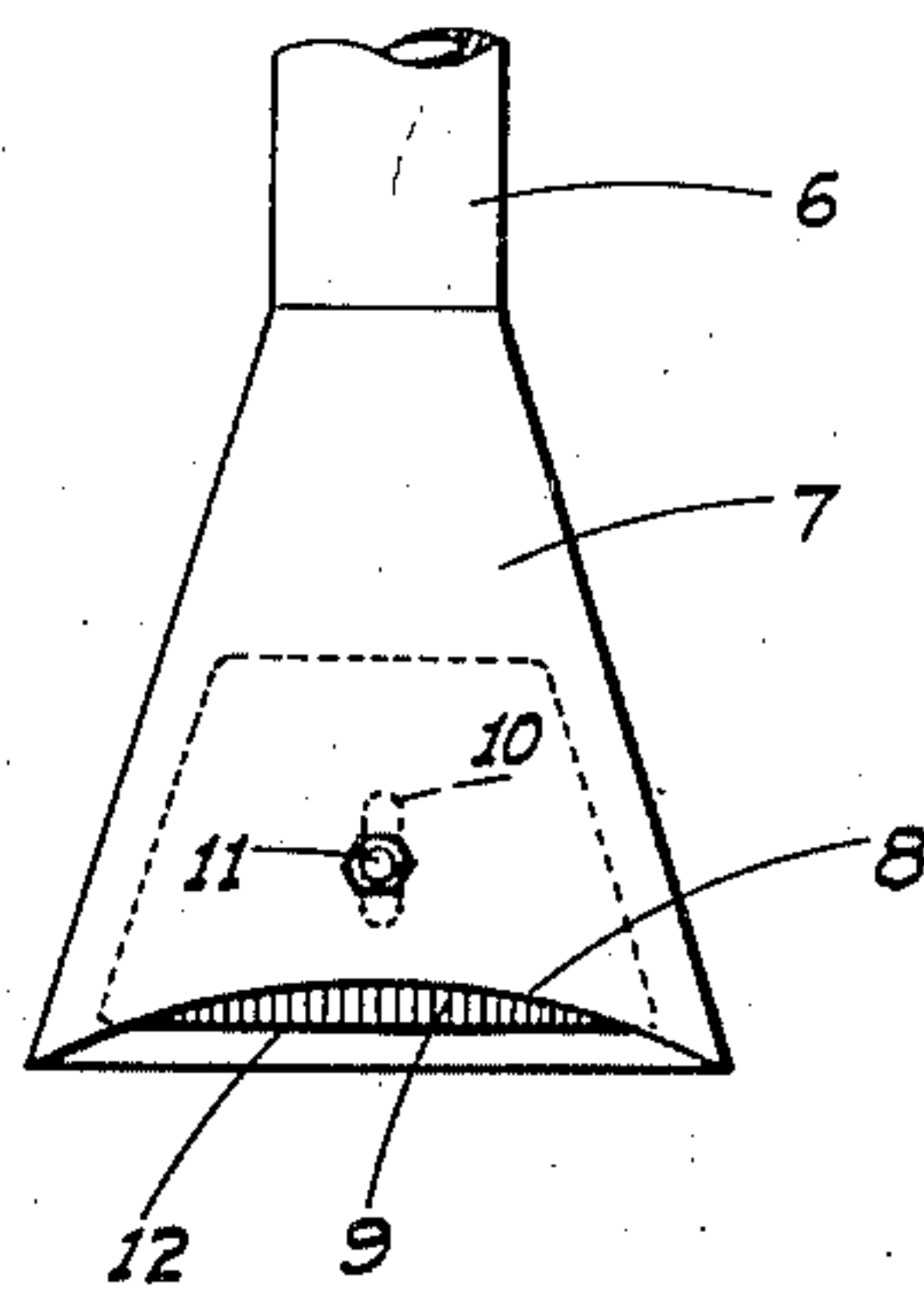
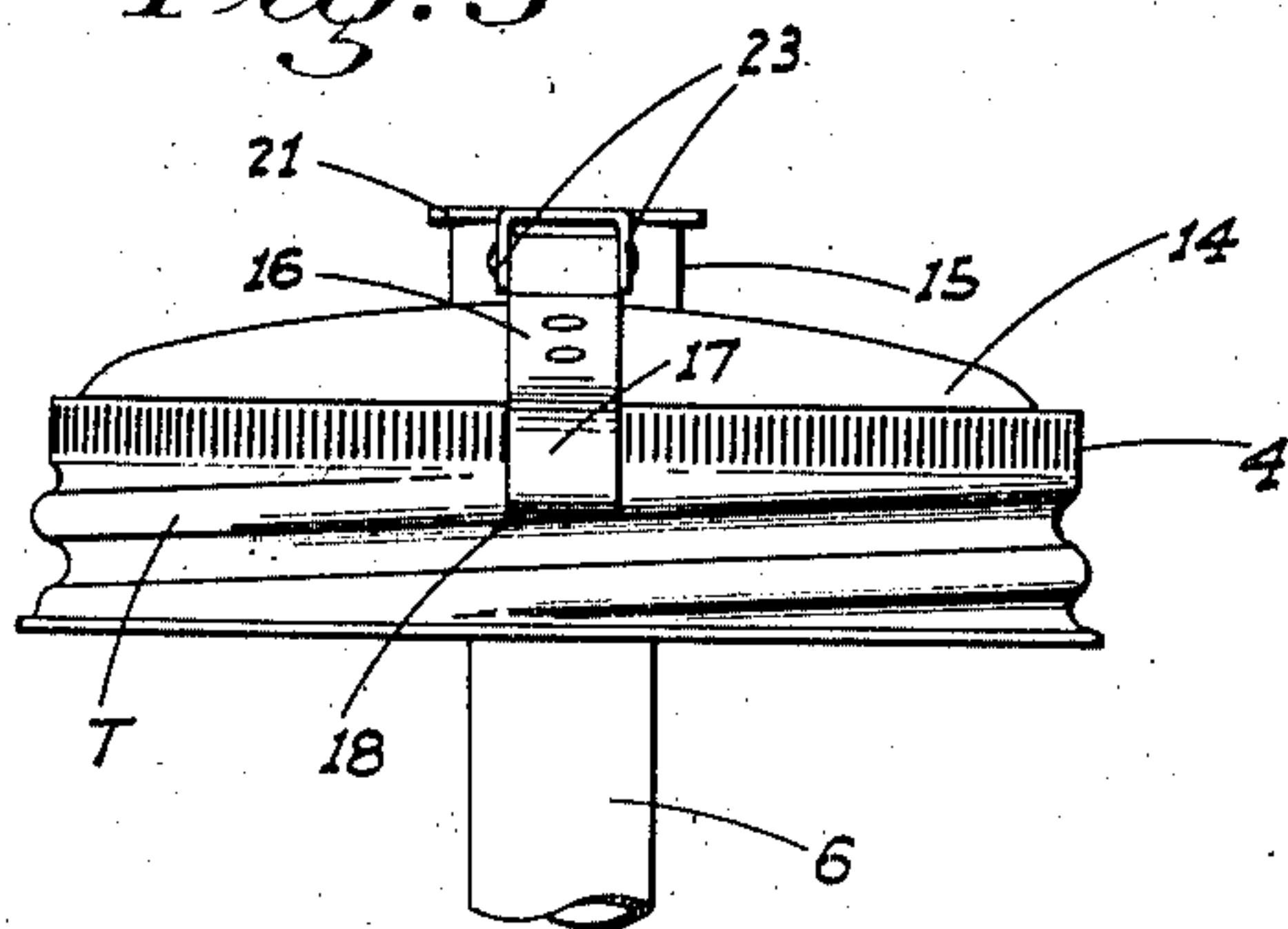


Fig. 3



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SELF-MEASURING DISPENSER

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5 Claims. (Cl. 221—98)

This invention relates generally to a dispenser, and in particular the invention is directed to a sugar dispenser for use in restaurants, homes and the like.

5 The principal object of the invention is to provide a sugar dispenser which is arranged so that upon inversion of the device, only a measured quantity of the granular sugar therein will be discharged. The device also is constructed to provide adjustable means whereby the measured amount discharged may be varied in quantity if desired.

Another object of the invention is to provide a dispenser, of the type described, which includes a novel lid mounting and locking arrangement.

Further objects are the provision of a dispenser which is sanitary, dust proof, and easy to fill.

15 A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawing similar characters of reference indicate corresponding parts in the several views:

Figure 1 is a sectional elevation of the device.

Figure 2 is a top plan with the lid in open position.

Figure 3 is a side elevation of the jar cover and illustrating the manner of locking the swinging lid thereto.

Figure 4 is a fragmentary side elevation of the adjustable intake funnel.

Referring now more particularly to the characters of reference on the drawing, the device comprises an open topped jar 1, preferably of glass; such jar being cylindrical and threaded exteriorly at its upper end as at 2. A jar cover includes a flat disc 3 and an annular depending flange 4 which has threads stamped therein and which is removably screwed on the threads 2 of the jar. The disc 3 rests on the upper edge of the jar when said jar cover is in place, there being a semicircular opening 5 cut in the disc to provide access to the jar for filling the same.

A discharge tube 6 extends parallel to the axis of the jar and to one side of opening 5 from a point adjacent the bottom of the container through disc 3 to a termination outwardly thereof. The inner end of the tube is formed with an inverted funnel 7, a portion of the lower edge of which is disposed close to the bottom of the jar while the remaining portion is spaced somewhat

from the bottom as at 8. A plate 9 having an adjustment slot 10 therein is symmetrical with one side of and secured by a bolt 11 within the funnel 7 in position so that the lower edge 12 of said plate may be raised or lowered relative to edge portion 8. Adjustment of the position of edge 12 of plate 9 controls the amount of sugar which passes into tube 6 upon inversion of the jar 1.

The tube is fixed with disc 3 by means of a pair of hexagon nuts 13 threaded on the tube and between which nuts the disc is clamped. If desired, the nuts may be soldered to the disc. A circular and convex lid 14 to close opening 5 is mounted on the cover for horizontal swinging movement about the tube as an axis; the tube projecting through said lid and said lid being held in place by means of a sleeve 15 threaded on the outer end portion of tube 6 and frictionally engaging the portion of the lid surrounding the tube between said sleeve and the upper nut 13.

The swinging lid 14 is normally held in closed or locked position over the disc 3 by means of a radial finger 16 provided with a downturned end 17 having an inturned tip 18 which engages with one of the threads T of flange 4. With swinging movement of the lid, the tip engages under and rides down such thread T locking the lid in place. A stop 19 on the jar cover limits movement of the lid in a closing direction while another stop 20 limits opening movement thereof.

A closure flap 21 for the upper end of tube 6 is pivoted at one end on the inner end of finger 16 which is turned up to receive a pivot pin 22 extending between spaced depending ears 23 on the flap. The flap thus extends radially of the tube and maintains its position on the tube when the lid is swung open.

In use, the device is readily and rapidly filled with sugar by swinging lid 14 to expose opening 5 and pouring the sugar through the opening. Thereafter, the lid is closed, the tip 18 of finger 16 engaging thread T and locking the lid in place.

To obtain a measured amount of sugar, the jar is inverted and a certain amount will fall into the funnel and out of tube 6 as the flap 21 has swung away. As heretofore indicated, the amount discharged is controlled by the adjustment of plate 9.

While the present embodiment of the invention is a sugar dispenser, the invention may be used in a container for dispensing any granular material or liquids.

From the foregoing description it will be read-

ily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

Having thus described my invention, what I claim as new and useful and desire to secure by Letters Patent is:

1. In a dispenser including an open topped container, a metal cover for the container including a depending flange having threads stamped therein, the upper portion of the container being threaded to receive said flange in threaded engagement, said cover having a filling opening therethrough, a discharge tube extending through the cover to one side of the opening and depending into the container, a closure lid for the cover opening, said lid being mounted for swinging movement about the tube as an axis, and means on the lid to engage in one of said flange threads from exteriorly of the flange whereby to ride down the thread and secure the lid in closed position.

2. A device as in claim 1 including a stop to limit closing movement of the lid, and another stop to limit opening movement of the lid.

3. A device as in claim 1 in which said means comprises a radial finger fixed on the lid, the outer end of the lid being turned down beyond the periphery of the lid; there being an inturned tip on the lower end of such downturned portion of the finger.

4. A dispenser including an open topped con-

tainer, a cover for the container adapted to be removably mounted thereon, said cover having an opening therethrough of sufficient size for the ready filling of the container, an open ended dispensing spout mounted in and projecting from the cover to one side of the opening, a closure lid for the opening mounted on the spout for swinging movement about the spout as an axis and adapted when closed to engage the cover outwardly of and all about said opening, and a closure flap for the upper end of the spout, said flap being pivoted in connection with the lid for vertical swinging movement in a plane radially of the axis of the spout.

5. A dispenser including an open topped container, a closure member for the container, an open ended tube extending through the closure and depending into the container to a termination adjacent the bottom thereof, an inverted funnel mounted on the lower end of the tube whereby to divert a measured amount of material from the container into the tube upon inversion of said container, one lower edge portion of the funnel being disposed close to the bottom of the container, the remaining lower edge portion being spaced a substantially greater distance from said bottom, and a plate disposed in face to face engagement with the side of the funnel above said remaining lower edge portion, and means mounting the plate on the funnel for vertical adjustment relative to said remaining lower edge portion whereby to selectively vary the distance between said lower edge portion and the bottom of the container, and to thus vary the measured amount of material diverted into the funnel upon inversion of the container.

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