Oct. 6, 1936. P. G. SCHREUDERS 2,056,869

MEASURING DEVICE

Filed Dec. 17, 1935

Fig. 1.

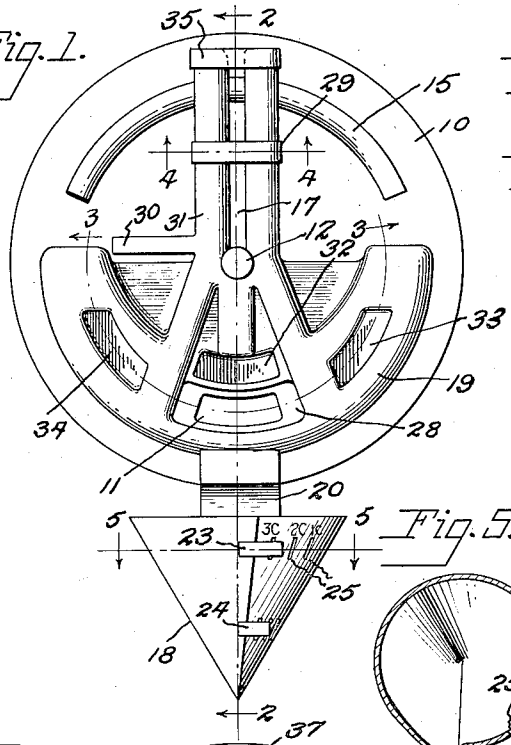


Fig. 2.

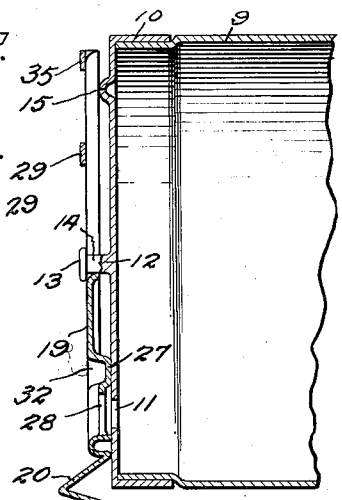


Fig. 4.

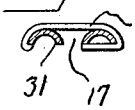


Fig. 5.

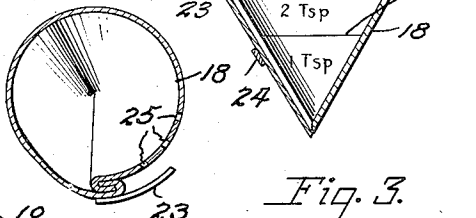


Fig. 7.

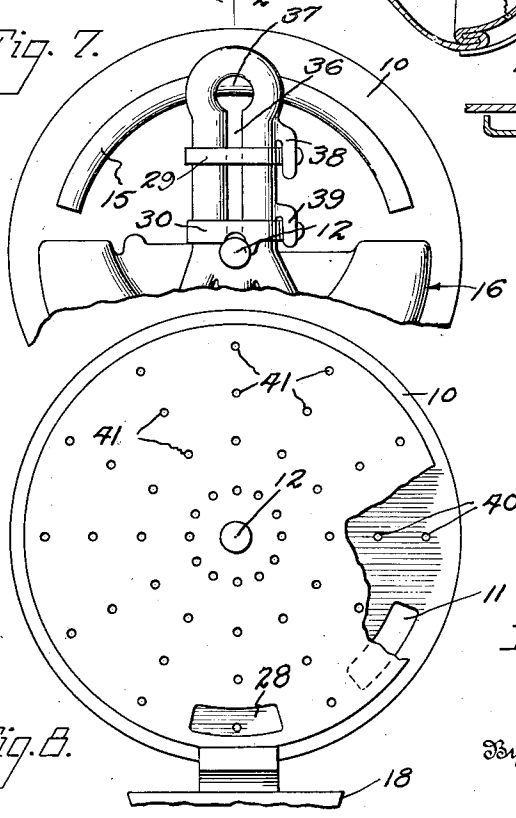


Fig. 3.

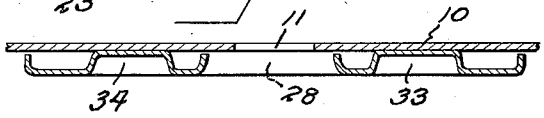
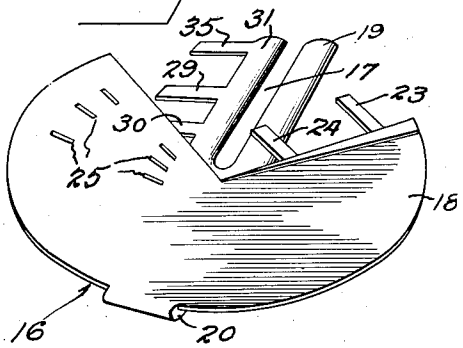


Fig. 6.



Inventor

Peter G. Schreuders

Fig. 8.

By Mason Fenwick & Lawrence

Attorneys

Patented Oct. 6, 1936 2,056,869

UNITED STATES PATENT OFFICE

2,056,869

MEASURING DEVICE

Peter G. Schreuders, Tacoma, Wash.

Application December 17, 1935, Serial No. 54,880

7 Claims. (Cl. 221—98)

This invention relates to receptacles; and more particularly, apparatus in the form of an attachment to facilitate and control the dispensing of the contents of the receptacle.

Where the ordinary can having a removable top is used, such as the "baking powder can", the removal of the top in order to dispense the contents results frequently in the spilling of the contents due to the top sticking and in the exertion of undue force in the removal of the same. In my invention it is not necessary to remove the top in order to remove the contents. The use of a can and top is generally required in order to fill the receptacle, and it is highly desirable to be able to discharge the contents without the removal of the top.

The principal object of my invention is to provide a can of the removable top type, having a weakened portion in the top that may be removed to permit the discharge of the contents, and an attachment that can be readily placed in position to control the discharge of the contents of the can.

Another object is to provide an attachment of stamped metal in flattened contour, which can readily be manually shaped into operative position.

Still another object is to provide a measuring container as a part of the attachment, the container assuming a flat surface in its preformed condition and adapted to be manually shaped into a container as the attachment is put in operative position.

Another object is to provide the measuring container with adjustable means so that the content size of the container may be varied.

Other objects of the invention will be disclosed in the specification and claims forming a part hereof.

In the drawing:

Figure 1 is a top plan of the attachment;

Figure 2 is a vertical section taken on line 2—2 of Figure 1;

Figure 3 is a vertical section taken on the line 3—3 of Figure 1;

Figure 4 is a vertical section taken on the line 4—4 of Figure 1;

Figure 5 is a horizontal section taken on the line 5—5 of Figure 1;

Figure 6 is a top plan of the attachment in unassembled position;

Figure 7 is a fragmentary top plan of a modified form of the attachment; and

Figure 8 is a top plan of another modified form of the attachment.

Referring to the drawing, in which similar parts are designated by like numerals:

Numeral 9 designates a can having a top 10, the top 10 having a discharge port 11 normally closed by a weakened material forming a part of the top 10. A stud 12 is positioned in the center of the top and has a shoulder 13 extending beyond the shank portion 14. A semi-circular projection 15 extends partly around the periphery of the top 10. A disc 16, as shown in Figure 6, forms a part of the package and is usually placed on top of the can 9, the disc 16 being inserted by way of the slot 17 around the stud 12. The disc 16, as shown in Figure 6, is a stamping having the measuring receptacle 18 folded over onto the dispensing apparatus 19.

Upon the can 9 being received, the disc 16 will be removed from around the stud 12, the measuring receptacle 18 being folded back from the disc 16 on the connection 20, the sides being brought together in overlapped relation, as shown in Figure 5, straps 23 and 24 adapted to extend into openings 25 being held in locked adjustable position. Each of the openings 25 represents a respective measurement, such as one cup, two cups, or three cups. The capacity of the measuring receptacle is decreased as the sides are drawn together. On the inside of the measuring receptacle, are placed marks 26, one above the other, to facilitate the measuring of the contents dispensed. The discharge port 11 is then formed in the top of the can 9 by breaking out the weakened metal. The disc 16 is then placed on the top of the can 9 by sliding the disc 16 by way of slot 17 around the stud 12, as shown in Figure 1. The disc 16 rests on the projection 15, placing the whole plate under tension and assuring a close fit. A projection 27 carried by the disc 16 offsets the projection 15 and likewise presents a bearing surface. An opening 28 in the disc 16 is adapted to align with the discharge port 11 in the top 10. Securing members 29 and 30 extend out from arm 31, and if it is desired to permit the port 11 to be closed by closure 32, which is accomplished by sliding the disc 16 on the stud 12, only member 29 will be bent over the slot 17. However, if port 11 is to be closed by the solid portions 33 or 34, then securing member 30 will be bent over the slot 17 adjacent to the stud 12, preventing any sliding movement in the slot 17. In any case, the securing member 35 will be bent over at the end of the slot 17 to prevent displacement.

In Figure 7, the construction is similar to that shown in Figure 1, except that a bayonet slot 36 is

shown, the disc being inserted over the stud 12 at the larger opening 37 and moved into position. Locking members 38 and 39 may be bent over the securing members 29 and 30.

In the modified form shown in Figure 8, the top of the can, in addition to the discharge port 11, has round openings 40 through which the contents may be shaken. The disc 16 has corresponding openings 41, which upon rotation of the disc will coincide with the openings 40 in the top. When the openings 40 and 41 coincide, the discharge port 11 and opening 28 in the disc will not be in alignment and vice versa. The measuring receptacle 18 forms a part of the disc 16.

As actually used, the disc 16 and measuring receptacle 18 will be shaped into operative form, placed in position on top of the can, the weakened material in discharge port 11 having first been removed. When the contents of the can are desired, the disc 16 will be either rotated to bring opening 28 into alignment with the discharge port 11, or, if already in alignment, but covered by closure 32, moved in a horizontal direction so as to uncover the discharge opening 28. The can 9 will then be tilted, as shown in Figure 2, the measuring receptacle 18 having previously been adjusted by means of straps 23 and 24, or the marks 26 on the inside of the receptacle may be utilized. Upon the desired amount of the material from the can having been dispensed, the discharge port 11 will be closed and the substance removed from the measuring receptacle 18.

Numerous variations may doubtless be devised by persons skilled in the art without departing from the principles of my invention. I, therefore, desire no limitations to be imposed on my invention, except such as are indicated in the appended claims.

What I claim is:

1. A closure member adapted to be used in conjunction with a dispensing receptacle having a discharge port and comprising a plate having an opening therein adapted to coincide with said discharge port, a measuring receptacle forming an integral part of said closure member and having the plane of its mouth substantially perpendicular to the closure member.

2. A closure member adapted to be used in conjunction with a dispensing receptacle comprising a plate having an opening therein adapted to coincide with a discharge port in said receptacle, a measuring receptacle forming an integral part of said closure member and having the plane of its mouth substantially perpendicular to the closure member, and adjustable means on said measuring receptacle to vary the holding capacity of said receptacle.

3. A dispensing receptacle comprising a top, a stud member extending from said top, said top having a discharge port, a closure member pivotally and slidably mounted on said stud and having an opening adapted to register with said discharge port and upon rotation or sliding to move out of such registration, a measuring receptacle forming a part of said closure member and having the plane of its mouth substantially perpendicular to said closure member.

4. A dispensing receptacle comprising a top, a stud member extending from said top, said top having a discharge port, a closure member pivotally mounted on said stud and having an opening adapted to register with said discharge port and upon rotation to move out of such registration, a measuring receptacle forming a part of said closure member and having the plane of its mouth substantially perpendicular to said closure member, and adjustable means on said measuring receptacle to vary the capacity of said receptacle.

5. A dispensing receptacle comprising a top, a stud member extending from said top, said top having a discharge port, a closure member having a slot formed therein placed over said stud, said stud extending through said slot and the closure member pivotally and slidably mounted on said stud, said closure member having openings adapted to coincide with said discharge port upon rotary or sliding movement of said closure member.

6. A dispensing receptacle comprising a top, a stud member extending from said top, said top having a discharge port, a closure member having a slot formed therein, said stud extending through said slot and the closure member pivotally and slidably mounted on said stud, said closure member having an opening adapted to coincide with said discharge port upon rotary or sliding movement of said closure member, a measuring receptacle forming a part of said closure member and having the plane of its mouth substantially perpendicular to said closure member.

7. A dispensing receptacle comprising a top, a stud member extending from said top, said top having a discharge port, a closure member having a slot formed therein, said stud extending through said slot and the closure member pivotally and slidably mounted on said stud, said closure member having an opening adapted to coincide with said discharge port upon rotation or horizontal movement of said closure member, a measuring receptacle forming a part of said closure member and having the plane of its mouth substantially perpendicular to said closure member, and adjustable means on said measuring receptacle to vary the capacity of said receptacle.

PETER G. SCHREUDERS.