Nov. 11, 1941. E. H. MANGER 2,262,368

CONDIMENT DISPENSER

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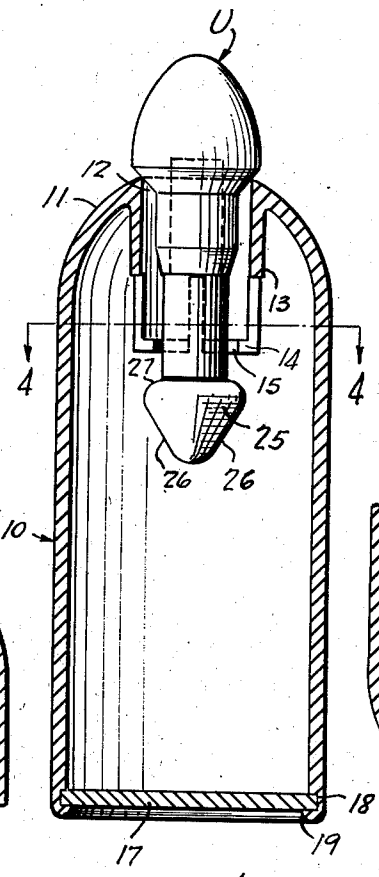



FIG. 1

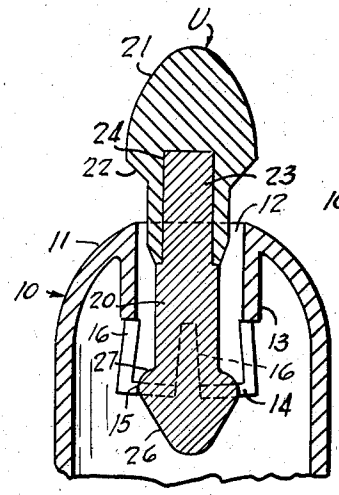



FIG. 2

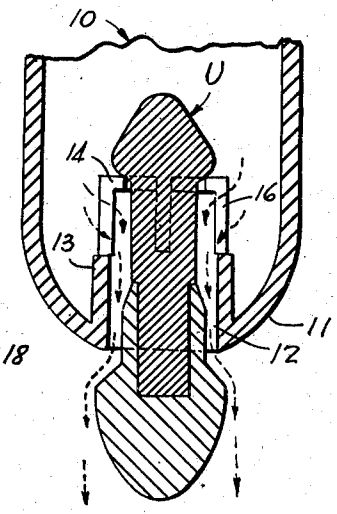



FIG. 3

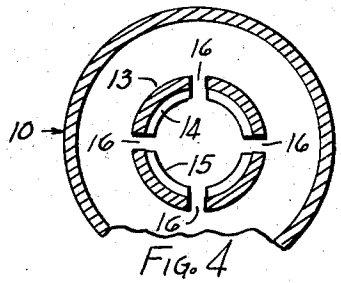



FIG. 4

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## CONDIMENT DISPENSER

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2 Claims. (Cl. 65—57)

This invention has to do with condiment dispensers such as are commonly employed for the dispensing of salt and pepper at the eating table.

Ordinarily table salt will maintain a free running condition, which is the most desirable for table dispensing, if it is kept dry. If the salt absorbs moisture from the surrounding atmosphere it loses its free running ability as it becomes damp and caky and clogs up the openings through which it is dispensed.

The art of salt shakers has long recognized the desirability of keeping table salt in a dry state, and to this end various shakers have been proposed which purport to completely close the interior of the salt containing part from the atmosphere during periods of non-use. However, the now known shakers in this field present certain undesirable features which are intended to be obviated by this invention.

In carrying out this objective the invention contemplates a salt shaker having one end formed with a dispensing opening in which is mounted a valve member. This valve member is detachably held in operative position, and normally controls the dispensing opening. However, the valve member may be completely removed when it becomes necessary to fill the interior of the shaker with a fresh supply of salt. Thus, another object is the provision of a shaker having a dispensing and charging opening with which is associated a valve unit that acts as a stopper for said charging opening.

More in detail this invention has in view, as an object, the provision of a salt shaker of the character above noted which includes a salt containing member terminating at one end in a dispensing opening. Extending inwardly into the container from the edges of the dispensing opening is a skirt which terminates at its lower extremity in an inturned flange. The skirt is rendered of a slit construction for a short distance above the flange to permit of a required amount of expansion thereof.

A valve member is carried at one end of a stem which is mounted within the skirt, and the lower end of this stem carries means cooperating with the said flange for yieldably maintaining the valve member and stem in effective position.

Another more detailed object of the invention is the provision of a salt shaker of the character above noted in which this means at the lower end of the stem takes the form of an enlargement having oppositely inclined conical surfaces. Each of these conical surfaces is effective to spread the slit skirt upon engagement with the flange, and thus permit insertion or withdrawal of the valve carrying stem.

The invention has particularly in mind the provision of a salt shaker having a structure which renders the same susceptible of manufacture by the molding of a suitable plastic such as a phenol condensation product. The above described structure at the dispensing end of the shaker is particularly adapted to such manufacturing operations, particularly when the bottom of the shaker is provided in the form of a separate piece which is incorporated into the structure after formation of the remainder of the container.

Another object of the invention is the provision of a salt shaker of the character above noted which includes a valve unit that cooperates with a dispensing opening, and which unit is removable as such from the opening to permit filling of the container.

In a salt shaker of the character above noted the valve unit is ordinarily freely movable. Thus should a salt shaker be accidently knocked over and assume a horizontal position on a table cover there has, with the now known devices, been a grave likelihood of the salt running out and spilling on the table. This is, of course, undesirable, and with this condition in mind this invention has in view, as an important object, the provision of a salt shaker including a dispensing opening with which is associated a valve unit together with baffle means for preventing salt from running out of said dispensing opening when the shaker is in a horizontal position.

In a salt shaker made in accordance with the above noted objectives this baffle means will be provided by the unslit portion of the skirt.

It is notable that the slit portion of the skirt serves two purposes. As has been pointed out, it provides for the expansion and contraction of the skirt to permit positioning and removal of the valve unit. It is also noted that when the shaker is in an inverted position the enlargement on the stem engages the flange, and the opening therein is, therefore, closed by this enlargement. Were it not for the presence of the slits on the side of the skirt there would be no passage through which the salt could pass to get to the dispensing opening. However, these slits in the skirt provide such a passageway.

Various other more detailed objects and advantages of the invention will in part become ap-

parent, and in part be hereinafter stated, as the description of the invention proceeds.

The invention, therefore, comprises a condiment dispenser in the form of a cylindrical container which terminates at one end in a rounded nose portion formed with a dispensing opening. Extending inwardly into the container from the edges of this dispensing opening is a cylindrical skirt the lower portion of which is slitted. Extending inwardly from the lower edge of this skirt is a ring-like flange which is also slitted in accordance with the slitting of the lower portion of the skirt. A valve unit comprising a stem that carries at one end a valve member designed to effectively seal the dispensing opening is normally positioned within said skirt, the stem of the valve unit carrying at its lower edge an enlargement having oppositely inclined conical surfaces either of which is adapted to engage the said flange and expand the slit portion of the skirt so as to permit positioning or removal of the valve unit. Under ordinary conditions of use the web engages the enlargement to limit movement of the valve member into open position, while the unslit portion of the skirt acts as a baffle for preventing the salt from running out of the shaker should the same be accidently knocked over into a horizontal position.

For a full and more complete understanding of the invention reference may be had to the following description and accompanying drawing, wherein

Figure 1 is a vertical section taken through a salt shaker made in accordance with the precepts of this invention,

Figure 2 is a detailed sectional showing taken on the plane of Figure 1, of the upper portion of the shaker, showing the valve unit in one stage of insertion,

Figure 3 is a similar detailed view of the upper end of the shaker in an inverted position showing the position of the valve as the salt is being dispensed, and

Figure 4 is a horizontal section looking from the top. This view is taken about on the plane represented by the line 4—4 of Figure 1 with the valve unit removed.

Referring now to the drawing, wherein like reference characters denote corresponding parts, attention is called to the fact that the present shaker has been designed with the particular thought in mind of manufacturing the same from a moldable plastic such as a phenol condensation product. It is recognized that there are many materials and compositions which fall within the broad class of plastics, and it is further noted that the container could probably be made from metal by suitable spinning operations. One property which the material employed should have is that of elasticity to a required degree, as will be pointed out later.

Figure 1 shows a generally cylindrical container 10 which terminates at one end in a rounded nose 11 which is formed with a dispensing opening at 12. This dispensing opening 12 is preferably circular, and extending into the interior of the container 10 from the edges thereof is a skirt 13. Due to the ring-like formation of the opening 12 this skirt 13 is substantially cylindrical in formation. At its lower edge the skirt 13 carries an inwardly extending ring-like flange 14 which defines an opening 15. It is noted that the lower portion of the skirt 13 is slit above the flange 14 a required distance, and this slitting is carried over into the web 14, the slits being identified by the reference character 16.

The above described slit construction is tied up with the elastic properties of the material employed in making the container 10 and skirt 13. As illustrated, these parts are preferably integral, and it is important that the skirt 13 be sufficiently elastic to permit of the expansion of the slit portion thereof, with the subsequent return to normal position when the force of expansion is removed.

The lower end of the cylindrical container 10 may be closed in any preferred manner, although the invention has particularly in mind the use of a separate bottom element such as shown at 17 in Figure 1. The peripheral edges of the bottom 17 are received in a groove 18 formed in the lower edge of the cylindrical part 10, the latter being peened over as represented at 19, to permanently secure the bottom 17 in position.

A valve unit is referred to in its entirety by the reference character U, and is shown as consisting of a stem 20 which carries at its upper end a valve member 21. This valve member 21 is formed with a conical surface at 22 which is designed to engage the edges of the opening 12 to seal the latter. This valve member 21 will preferably be rounded in the manner illustrated so that its curvature blends in with that of the nose portion 11 of the container; this for appearance effects.

The valve member 21 is also preferably made of the same plastic material employed in the manufacture of the container 10. However, the stem 20 may be made from any appropriate material such as metal, and this stem 20 may have a reduced shank 23 which is fitted within a recess 24 formed in the valve member 21.

At its lower end the stem 20 carries an enlargement 25 having oppositely inclined conical surfaces 26 and 27. At the meeting of the conical surfaces 26 and 27 the largest diametrical dimension of the enlargement 25 is defined, and this is somewhat in excess of the diameter of the opening 15 but less than the inner diameter of the skirt 13.

The mode of usage of the above described shaker may be briefly outlined as follows. With the valve unit U removed a required amount of salt is charged into the container through the opening 12. The valve unit U is now positioned by inserting the enlargement 25 through the opening 12 into the skirt 13. Upon engagement of the conical surface 26 with the flange 14 the latter, together with the slit portion of the skirt 13, is expanded, permitting the enlargement 25 to pass the flange 14. After this passing is accomplished the web 14 will assume the normal position illustrated due to the inherent resilience of the material from which the skirt is made.

When a salt shaker rests in the upright position depicted in Figure 1, gravity will cause the conical surface 22 to engage the edge of the opening 12 and seal the interior of the container 10 from the atmosphere. Thus the salt is kept in a dry state. When the salt is to be dispensed, as in table use, the shaker is inverted, whereupon the valve unit assumes the position shown in Figure 3. In this position the conical surface 22 is spaced from the edge of the opening 12, but this movement is limited by engagement of the enlargement 25 with the flange 14. In this position salt from the interior of the container 10 runs down through the slits 12, into the skirt 13, about the stem 20, and thence out in the

space between the conical surface **22** and the edge of the opening **12**.

In this connection it is notable that the dispensing opening defined is substantially ring-like in character, thus diffusing the salt in a manner which is highly desirable for table dispensing.

Should the shaker be accidently knocked over into a horizontal position the unslit portion of the skirt **13** acts as a baffle which prevents salt from spilling out.

When it is desired to remove the valve unit for salt charging purposes it is merely necessary to grasp the valve member at **22**, and exert an upward pull thereon. Upon engagement of the conical surface **27** with the flange **14**, the latter, together with the slit portion of the skirt, spreads sufficiently to permit the enlargement **25** to pass the flange **14**.

While a preferred specific embodiment of the invention is hereinbefore set forth it is to be clearly understood that the invention is not to be limited to the exact construction illustrated and described, because various modifications of these details may be provided in putting the invention into practice within the purview of the appended claims.

I claim:

1. A condiment dispenser of the character described comprising a container having a side wall and an integrally joined top end wall formed with a dispensing opening, a skirt integrally joined to said top end wall and extending from the edges of said dispensing opening inwardly into the interior of said container, the portion of said skirt adjacent its inner end being expansible, a valve unit assembled in said skirt, a valve member carried at the outer end of said unit and cooperating with said dispensing opening, and abutment means carried at the inner end of said unit cooperating with the inner end of said skirt to limit movement of said unit whereby movement of said valve member with respect to said dispensing opening is limited, said abutment means also being adapted to cooperate with said expansible portion of said skirt to expand the same to permit of insertion or removal of said valve unit in or from said skirt.

2. A condiment dispenser of the character described comprising a container carrying a dispensing and charging opening at one end, a cylindrical skirt extending from the periphery of said opening into said container and carrying resilient fingers adjacent to the inner end of said skirt, inwardly extending lugs carried by said fingers, an axially movable valve unit in said skirt and carrying a dispensing and charging closure valve member at one end, and an enlargement carried adjacent the other end of said valve unit and provided with oppositely disposed cam surfaces for urging the separation of said lugs and resilient fingers during insertion and withdrawal of said valve unit from said container and cylindrical skirt.

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