July 10, 1956 F. J. LAMB 2,754,035

CONDIMENT HOLDERS

Filed May 29, 1952 2 Sheets-Sheet 1

FIG. 1

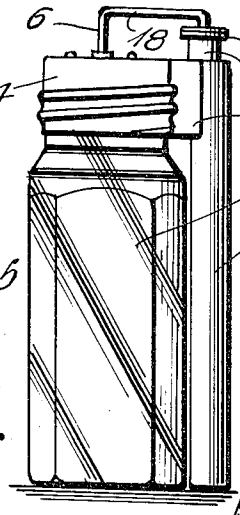


FIG. 2

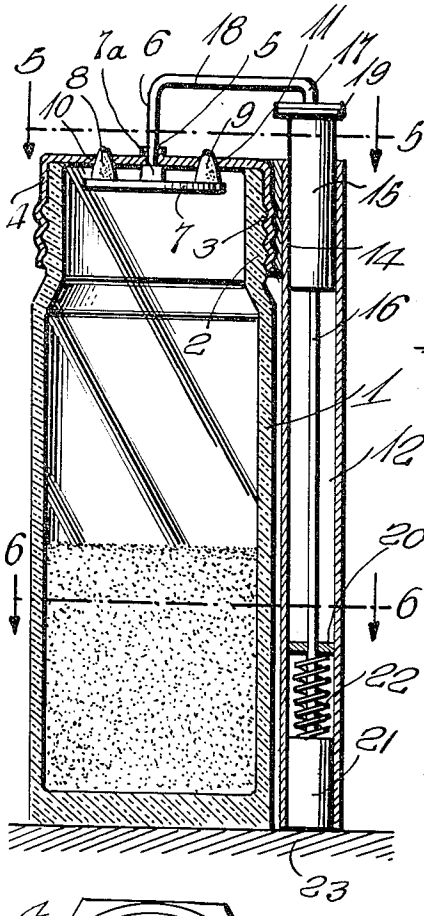


FIG. 3

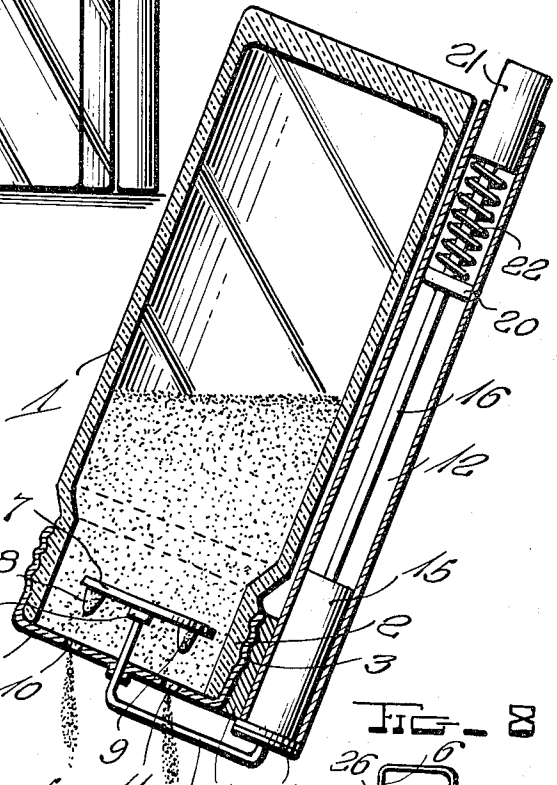


FIG. 4

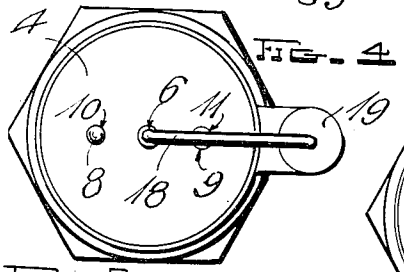


FIG. 5

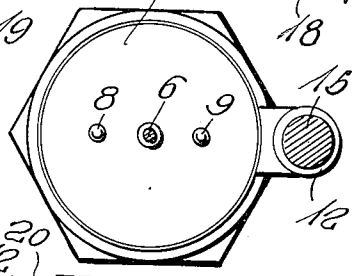


FIG. 6

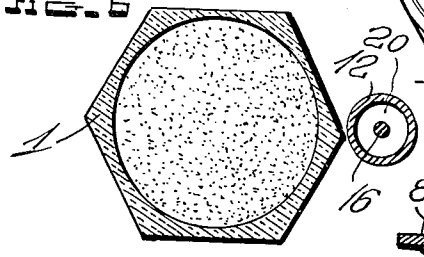


FIG. 7

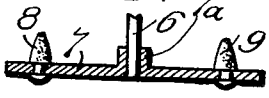
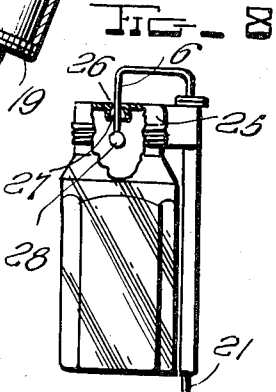


FIG. 8



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July 10, 1956 F. J. LAMB 2,754,035

CONDIMENT HOLDERS

Filed May 29, 1952 2 Sheets-Sheet 2

FIG. 9

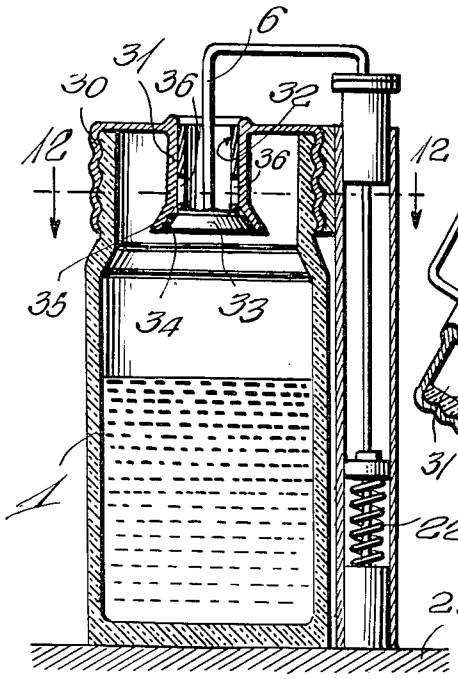


FIG. 10

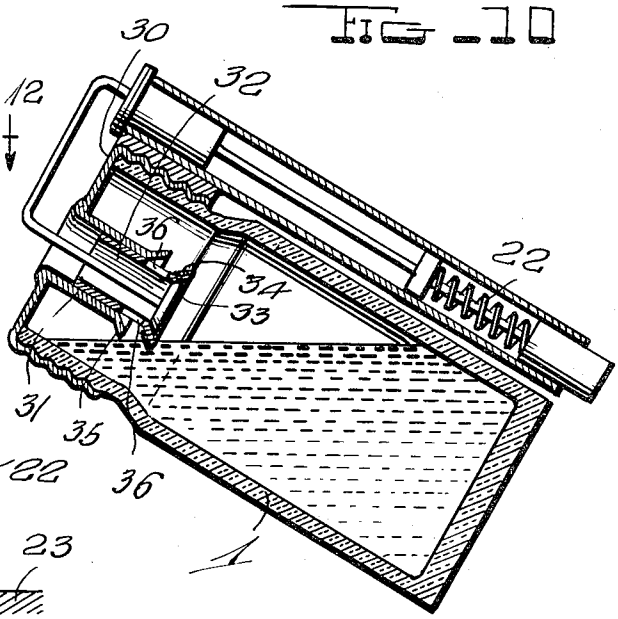


FIG. 11

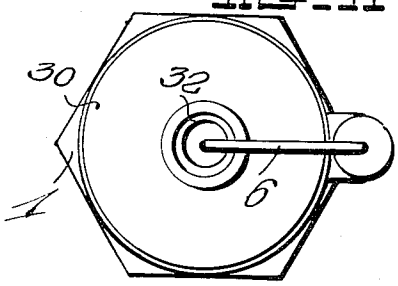


FIG. 12

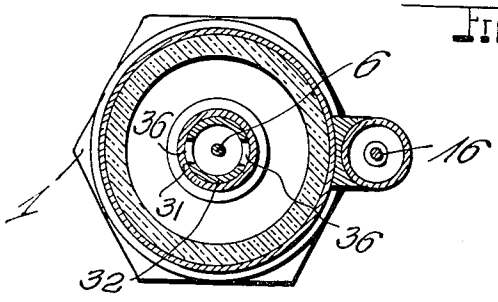


FIG. 13

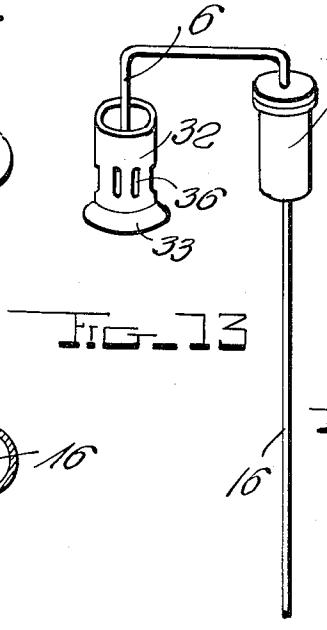


FIG. 14

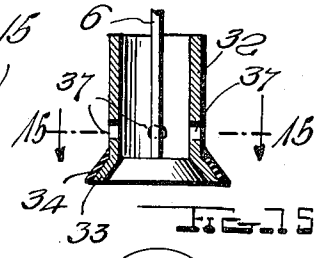


FIG. 15

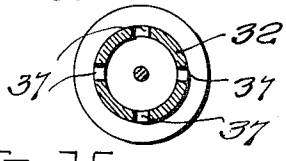
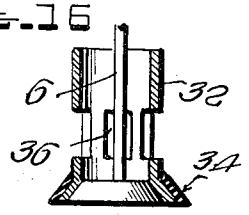


FIG. 16



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CONDIMENT HOLDERS

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Application May 29, 1952, Serial No. 290,725

2 Claims. (Cl. 222—501)

My invention relates broadly to condiment holders and more particularly to a construction of automatic closure for such holders for preventing conditions of humidity from effecting the contents of such holders.

One of the objects of my invention is to provide an improved construction of condiment holders provided with a spring actuated seal which operates to maintain the poring apertures of the holder closed during the periods that holder is not in use but which is effective to unseal the apertures as soon as the holder is raised from a supporting surface for use.

Another object of my invention is to provide a construction of closure for condiment holders in which a resilient sealing device is arranged interiorly of the pouring perforations of the cap of the holder and normally maintained in sealed position so long as the holder rests on the supporting surface but which is shifted to a position for unsealing the perforation when the holder is raised for shaking out the contents.

Still another object of my invention is to provide a construction of displaceable valve for the cap of condiment holders in which a resilient seal is mounted within the cap of the condiment holder and is operated by a spring mechanism which is effective to displace the valve from sealed position whenever the condiment holder is removed from a supporting surface and which assists in maintaining the valve in sealed position while the holder is resting upon the supporting surface.

A further object of my invention is to provide a construction of displaceable valve which may be readily housed within the cap of a condiment holder and controlled in position by a spring mechanism which is shiftable to either of two limiting positions, one limiting position of which serves to maintain the valve closed and the other limiting position of which serves to shift the valve to open position depending upon whether the condiment holder is resting upon a supporting surface or whether the holder is raised to a position for shaking the contents therefrom.

Still another object of my invention is to provide a construction of valve for controlling the opening and closing of the perforations in the cap of a condiment holder where the value is formed by a disc carrying upwardly extending resilient projections thereon adapted to seal or unseal the perforations in the cap according to the position of spring actuated means associated therewith.

Still another object of my invention is to provide a construction of valve for the closure cap of a condiment holder where the valve is constructed by a cylindrical member apertured in the side walls thereof and provided with a peripheral annular resilient gasket thereon displaceable into sealed or unsealed relation with an annular seat carried by the interior of the closure cap of the holder with spring means for controlling the position of the valve depending upon whether the holder is resting upon or removed from the supporting surface.

Other and further objects of my invention reside in the

construction of a humidity-proof closure cap for condiment holders for reducing the tendency of condiments such as salt to clog under conditions of large percentages of humidity as set forth more fully in the specification hereinafter following by reference to the accompanying drawings in which:

Figure 1 is a side elevational view of the condiment holder constructed in accordance with my invention and showing the holder at rest on a supporting surface with the closure cap sealed; Fig. 2 is a view similar to the view shown in Fig. 1 but illustrating the structure on a larger scale in vertical section with the valve in the closure cap sealed; Fig. 3 is a view similar to the view shown in Fig. 2 but illustrating the holder raised from the supporting surface and the valve seal displaced under spring action to open position so that the condiment holder may be used to shake the contents therefrom; Fig. 4 is a top plan view of the condiment holder; Fig. 5 is a transverse sectional view taken substantially on line 5—5 of Fig. 2; Fig. 6 is a transverse sectional view taken substantially on line 6—6 of Fig. 2; Fig. 7 is a fragmentary vertical sectional view on an enlarged scale through the displaceable valve used in the form of my invention illustrated in Figs. 1–7; Fig. 8 is a side elevational view broken away and shown in section illustrating a modified form of valve which may be employed in the condiment holder of my invention; Fig. 9 is a vertical sectional view taken through a further modified form of valve construction for condiment holders embodying my invention, the view illustrating the position of the valve in closed position; Fig. 10 is a view of the condiment holder similar to the view illustrated in Fig. 9 but showing the valve moved to open position to allow the use of the condiment holder for shaking the contents therefrom; Fig. 11 is a top plan view of the form of my invention illustrated in Figs. 9–10; Fig. 12 is a transverse sectional view taken on line 12—12 of Fig. 9; Fig. 13 is a perspective view of the form of valve and control means in Figs. 9–12; Fig. 14 is a vertical sectional view through the valve per se, showing apertures therein of a preselected size; Fig. 15 is a horizontal sectional view taken through the valve of Fig. 14; and Fig. 16 is a vertical sectional view through a valve of the type shown in Fig. 14, but showing larger apertures in the form of slots therein.

My invention is directed to a construction of condiment holder which is highly efficient in maintaining a seal for the contents of the holder at all times while the holder is not in use. As soon as the holder is raised for purposes of use the seal is automatically opened and the holder is ready for discharge of the contents thereof. The construction of the holder of my invention is such that the holder may be readily employed for holding various kinds of materials both of the powder variety and the liquid and semi-liquid variety. In addition to the use of the structure of my invention as a holder and dispenser for salt and pepper, I may also use the device in its modified form and in certain larger sizes thereof as a holder and dispenser for semi-liquids or liquids and also for coffee, tea, tobacco and the like.

Referring to the drawings in more detail reference character 1 designates the container which may be formed from glass and provided with a neck portion 2 carrying screw threads 3 over which the screw threaded cap 4 is readily attachable. The screw threaded cap 4 is provided with a central aperture 5 through which the vertically extending wire member 6 projects from the interior of the closure cap. The end of the wire member 6 carries a disc 7 having a central hub 7a thereon forming an abutment stop or spacer member with respect to the interior surface of closure cap 4. The disc 7 has a multiplicity of upwardly extending projections which I have shown at 8 and 9. For purposes of illustrating my inven-

tion only a pair of these projections has been shown but it will be understood that any number of such projections may be provided. These projections are formed from resilient material such as soft rubber and they protrude through aligned tapered perforations **10** and **11** in closure cap **4** forming a seal when the projections **8** and **9** are engaged through the perforations **10** and **11**. However, the disc **7** is floatably supported through wire member **6** and is capable of being displaced to a position below the closure cap **4** where projections **8** and **9** entirely clear the perforations **10** and **11** so these perforations are open as represented for example in Fig. 3 or disc **7** is capable of being maintained in a position immediately adjacent the interior of closure cap **4** with stop **7a** in abutment with the interior of the surface of closure cap **4** where projections **8** and **9** wholly fill the seal perforations **10** and **11**. This is accomplished by the arrangement of spring mechanism which I have shown.

The spring mechanism is housed within a spring retainer tube **12** which is fastened to one side of the closure cap **4** as represented at **14**. The spring retainer tube **12** has the upper end thereof closed by the cylindrical guide member or plug **15** having an axial passage therethrough for rod member **16** which is turned over upon itself at its upper end **17** and connects to the wire member **6** through connecting portion **18**. The rod member **16** is thus substantially U shaped at its upper extremity and is capable of being displaced upwardly and downwardly through plug **15** and carries the disc **7**. The cylindrical guide member or plug **15** carries an annular stop flange **19** thereon which determines the linear distance through which wire member **6** may move and the distance through which disc **7** may be displaced.

The movement of rod member **16** through spring retainer tube **12** is guided in an axial and linear direction by means of the inner spacer member **20** through which the rod member **16** extends. The rod member **16** terminates in a cylindrical guide member or plug **21**. A coil spring **22** is interposed between the fixed inner spacer member **20** and the inner end of the cylindrical guide member or plug **21** and tends to continuously urge cylindrical guide member or plug **21** in an outward direction. When the condiment holder is raised from a supporting surface as illustrated in Fig. 3 coil spring **22** is freed to eject cylindrical guide member or plug **21** and correspondingly to move cylindrical guide member or plug **15** from the ejected position shown in Fig. 2 to the position shown in Fig. 3 where stop flange **19** abuts against the upper end of retainer tube **12**. Coil spring **22** serves as a dynamic balance storing up energy in the position illustrated in Fig. 2 when the condiment holder is resting upon its supporting surface. Under this condition cylindrical guide member or plug **15** is ejected through the top of retainer tube **12** and disc **7** which is connected with rod member **16** is moved to a position in which projections **8** and **9** close the perforations **10** and **11** in closure cap **4**. However, the potential energy stored in spring **22** by virtue of the support of the condiment holder on the surface **23** is converted into kinetic energy as soon as the condiment holder is raised from supporting surface **23** to the position illustrated in Fig. 3 for displacing cylindrical guide member or plug **21** upon the end of the condiment holder but retracting cylindrical guide member or plug **15**. Thus, the cylindrical guide members or plugs **21** and **15** occupy opposite positions in the retainer tube **12** depending upon whether the condiment holder is resting upon a supporting surface as in Fig. 2 or whether the condiment holder has been raised from the supporting surface as in Fig. 3. That is to say, the cylindrical guide members or plugs **21** and **15** occupy alternate positions in the opposite ends of spring retainer tube **12**. Cylindrical guide member or plug **21** is fully within one end of spring retainer tube **12** when cylindrical guide member or plug **15** is ejected from the opposite end of spring retainer tube **12** in the arrangement illustrated in Fig. 2

whereas the opposite condition occurs in the arrangement illustrated in Fig. 3 where cylindrical guide member or plug **15** is displaced wholly within one end of spring retainer tube **12** while cylindrical guide member or plug **21** is ejected from the opposite end of spring retainer tube **12**.

In lieu of the form of double valve formed by projections **8** and **9** which I have described herein, I may provide a construction of cap **25** as represented in Fig. 8 having central aperture **26** therein through which wire member **6** extends. In this arrangement the aperture **26** extends downwardly providing an annular seat **27** against which a ball member **28** formed from resilient material such as rubber or neoprene or other synthetic product is adapted to seat. When the condiment holder is raised in the position illustrated in Fig. 8 the coil spring **22** is effective to eject plunger **21** and correspondingly move the wire member **6** to a position in which resilient ball **1** is displaced from annular seat **27**. Under these conditions the material within the container **1** may be readily scattered from the container.

There are conditions in which a semi-fluid must be dispensed and wherein a wholly different type of valve structure is desirable as represented in Figs. 9–16. In this arrangement the same type of spring control mechanism which I have heretofore described is employed but the cap which is applied to container **1** substantially differs in construction than that heretofore described. In Figs. 9 and 10 I have shown a cap **30** applied to container **1** wherein the cap is provided with an inwardly depending cylindrical portion **31** adjacent the center thereof. The wire member **6** extends axially downwardly through the inwardly depending cylindrical portion **31** and carries an inner cylinder **32**. The inner cylinder **32** is provided with an outwardly flared skirt **33** on the solid end of the inner cylinder **32** which carries a resilient gasket **34** which seats against the annular seat **35** on the end of inwardly depending cylindrical portion **31**. The inner cylinder **32** is provided with slits **36** which are normally covered by the inner cylindrical member **31** in the closed position of the receptacle in Fig. 9 thereby blocking access of air to the interior of the contents of receptacle **1**. Coil spring **22** which is effective upon wire member **6** insures a tight sealed closure of inner cylinder **32** with respect to cylindrical portion **31**. However, when the receptacle is removed from suspending surface as in Fig. 10 cylindrical guide member or plug **21** is projected beyond the bottom exteriorly of receptacle **1** under the action of spring **22** and inner cylinder **32** is projected into the receptacle **1** uncovering the slits **36** with respect to cylindrical portion **31** and allowing the semi-liquid from receptacle **1** to readily flow out through the center cylindrical aperture formed by cylindrical member **31**.

The slits **36** in inner cylinder **32** are employed for facilitating the pouring of semi-liquids. It will be understood that the valve structure may be modified to meet the requirements in confiing and pouring various types of materials. In Figs. 14 and 15 for example I have shown circular apertures **37** provided in cylindrical member **32** in lieu of the slits employed in the form of my invention shown in Figs. 9–13 and in Fig. 16. These circular apertures are normally covered by the cylindrical portion **31** while the receptacle is resting upon a supporting surface such as **23**. However, when the receptacle is raised from the supporting surface the apertures **37** are uncovered by displacement of inner cylindrical member **32** with respect to outer cylindrical portion **31** enabling salt and pepper to be distributed from the apertures which are of small size; or when the apertures are of large size to enable the dispensing of coffee, tea, tobacco and the like.

I have described my invention in certain of its preferred embodiments but I realize that modifications and improvements may be made and I desire that it be understood that no limitations upon my invention are intended

other than may be imposed by the scope of the appended claims.

What I claim as new and desire to secure by Letters Patent of the United States is as follows:

1. A self closing condiment holder of the type including a cover having pereforate means therein and closure means for positively closing the perforate means in the cover at all times that the condiment holder is at rest on a supporting surface and automatically displaceable to a position uncovering the perforate means in the cover when the holder is raised from a supporting surface which comprises a condiment holder having a solid bottom and a cover member having perforate means therein, an internally disposed valve coacting with said perforate means, a rod member connected with said valve and extending upwardly through the perforate means in said cover member, said rod member being bent at an angle and extending over the top of said cover member and radially thereof and longitudinally downwardly external to one side of the condiment holder and terminating in a displaceable cylindrical guide member at the end thereof, a spring retainer tube located externally to one side of said receptacle enclosing said rod member and the said cylindrical guide member, spring means interposed between a portion of said spring retainer tube and said displaceable cylindrical guide member for normally biasing said rod member and said displaceable cylindrical guide member to an ejected position with respect to said spring retainer tube for maintaining said valve in a position uncovering the perforate means in said cover member so long as the condiment holder is raised from a supporting surface, the said cylindrical guide member being displaceable through said spring retainer tube against the action of said spring means when said condiment holder is rested upon a supporting surface for displacing said valve to a position closing the perforate means in said cover member, said valve comprising a central inwardly directed sleeve carried by the end of said rod member and coacting with the perforate means in said cover member, said inwardly directed sleeve being displaceable for effecting the closing or opening of the said perforate means in said cover member.

2. A self closing condiment holder of the type including a cover having perforate means therein and closure means for positively closing the perforate means in the cover of a condiment holder at all times that the condiment holder is at rest on a supporting surface and automatically displaceable to a position uncovering the perforate means in the cover of the condiment holder when the holder is raised from a supporting surface which comprises a condiment holder having a solid bottom and a cover member having perforate means therein, an internally disposed

valve coacting with said perforate means, a rod member connected with said valve and extending upwardly through the perforate means in said cover member, said rod member being bent at an angle and extending over the top of said cover member and radially thereof and longitudinally downwardly external to one side of the condiment holder and terminating in a displaceable cylindrical guide member at the end thereof, a spring retainer tube located externally to one side of said receptacle enclosing said rod member and the said cylindrical guide member, spring means interposed between a portion of said spring retainer tube and said displaceable cylindrical guide member for normally biasing said rod member and said displaceable cylindrical guide member to an ejected position with respect to said spring retainer tube for maintaining said value in a position uncovering the perforate means in said cover member so long as the condiment holder is raised from a supporting surface, the said cylindrical guide member being displaceable through said spring retainer tube against the action of said spring means when said condiment holder is rested upon a supporting surface for displacing said valve to a position closing the perforate means in said cover member, said valve consisting of a pair of coacting perforated cylindrical members with alignable perforations therein, one of said cylindrical members being attached to the pereforate means in said cover and projecting inwardly of said condiment holder and the other of said cylindrical members constituting said coacting part of said valve and having an outwardly extending annular projection thereon adapted to make abutting contact with the terminating end of the aforesaid cylindrical member when said rod member is displaced to a position for closing said valve by displacing the perforations in said cylindrical members out of alignment, said perforations being subject to alignment when said rod member is displaced by said spring means when said condiment holder is raised from the supporting surface.

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