Sept. 18, 1923. 1,468,534

J. LANG

SHAKER

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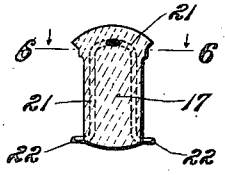

FIG. 5

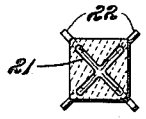

FIG. 6

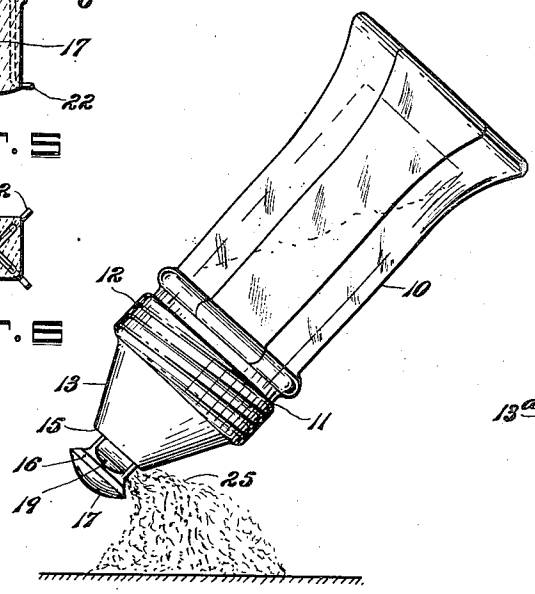

FIG. 1

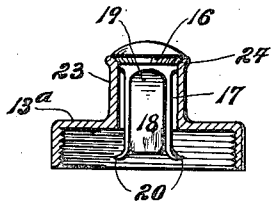

FIG. 4

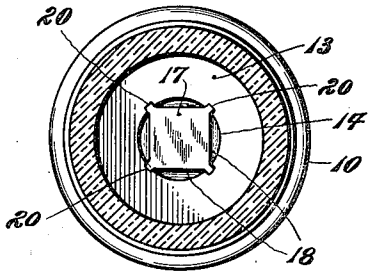

FIG. 3

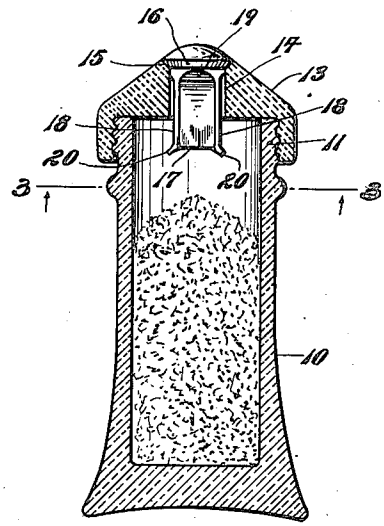

FIG. 2

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WITNESS:

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UNITED STATES PATENT OFFICE.

JOHN LANG, OF PHILADELPHIA, PENNSYLVANIA.

SHAKER.

Application filed November 21, 1922. Serial No. 602,474.

To all whom it may concern:

Be it known that JOHN LANG, a citizen of Rumania, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, has invented new and useful Improvements in Shakers, of which the following is a specification.

This invention relates to dispensing devices and it has more particular reference to that type of article which is generally designated as a shaker for salt, pepper, powdered sugar and similar seasonings, flavoring, corrective and antiseptic substances, and it has for its main object the provision of a perfectly sanitary device.

Another object of this invention is to provide a shaker of the nature referred to, which when not in use, effectively preserves the contents from atmospheric and other action tending to produce deterioration or other adverse condition.

With the foregoing primary objects in view this invention comprehends the provision of a gravity fall closure for shakers that is peculiarly fashioned so that the contents when emitted are deflected away from the closure portion proper whereby any liability to corrosion or the coating of said closure portion proper is effectively prevented.

In the further disclosure of this invention reference is to be had to the accompanying sheet of explanatory drawings constituting a part of this specification, and in which like characters of reference designate the same or corresponding parts in all the views.

Figure 1 is a side elevation or view of a salt shaker embodying my invention, the shaker being illustrated in operative position to discharge the content.

Figure 2 is a central vertical section thereof.

Figure 3 is a horizontal section taken substantially on the line 3—3 in the preceding figure and drawn to an enlarged scale for the sake of clearness.

Figure 4 is a sectional view of a slightly modified form of shaker closure.

Figure 5 is a longitudinal section of a modified form of the gravity fall closing member; and

Figure 6 is a sectional plan taken substantially on the line 6—6 of Figure 5.

Referring to the drawings the numeral 10 designates a container which may be made of glass, metal, porcelain or other appropriate substance, that indicated in Figure 1, 2 and 3, being intended to represent glass, and said container is provided at its upper part with a threaded or screwed neck 11 on which fits the correspondingly threaded flange portion 12 of the closure 13, also made from glass. This closure 13 is preferably made conical as shown and is holed axially at 14 and provided with a ground seat 15 on which beds or seats the correspondingly ground valve portion 16 of a gravity fall member 17 which is made rectangular in cross section to provide parallel walls 18, the upper ends whereof are curved at 19 to run or flare away to points in juxtaposition to the lower edge of the valve portion 16 for the purpose hereafter explained. This gravity fall member 17 may be made of metal as shown in Figures 1 to 4 inclusive, in which event the lower angular points are appropriately fashioned to constitute outwardly projecting tongues 20 which serve in use to prevent the fall member 17 from accidental detachment or removal from the bore 14 of the closure 13 but at the same time permit of its limited longitudinal movement therein as will be clearly understood on an examination of the drawings.

In some instances where it is desirable that the fall member 17 be also made of glass, I preferably embed therein cruciform disposed wires 21 as shown in Figures 5 and 6, said wires being embedded in the member 17 at the time it is moulded or blown and the ends of the wires are laterally turned outwards at 22 after the parts 13, 17, are assembled and thereby serving in use in like manner to the tongues 20, aforesaid.

Should it be desirable to make the closure 13 of metal, I preferably fashion same as shown in Figure 4, wherein the numeral 13ª designates said closure which is formed with a neck 23, ground at 24 to constitute the seat for the fall device 17 as above set forth with respect to the other figures of the drawings.

From the foregoing it will be readily seen that a shaker 10, provided with a closure as described will automatically gravitate to open position to dispense the contents when inverted or shook, whilst the contents designated by the numeral 25 in Figure 1, will be guided through the bore by the walls 18 and deflected by the curved parts 19 thereof away from the valve portion 16 or ground seat 15 or 24. On the other hand it will also be readily seen that when the shaker 10 is set

down in normal position the fall member 17 will automatically gravitate to assume the closed position shown in Figure 2 bringing the valve portion 16 into sanitary closure upon the seat 15 or 24, any substance accidentally adhering to the head of the member 17 being easily wiped off without fear of its being forced between the valve and seat.

Whilst I have described and shown preferred embodiments of my invention I wish it clearly understood that I do not limit myself to the precise details of shape, pattern or materials enumerated, but consider myself at liberty to make such other changes as may be required to adapt the invention to particular service conditions, such other changes however being limited to the scope of the appended claim.

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

In a shaker the combination with a container, of a closure having an axially longitudinal bore formed at its outer end to constitute a valve seat, and a longitudinally movable valve member located in said apertured closure, said valve member being formed with opposed parallel faces the outer ends whereof are flared in juxtaposition with the valve portion proper, and cruciform wires embedded in the valve members having their free ends outwardly turned to constitute laterally projecting limiting fingers for preventing the valve from accidental displacement relative to the closure.

In testimony whereof I affix my signature.

JOHN LANG.