May 23, 1944. W. J. HENDERSON 2,349,724

DUAL SHAKER

Filed Aug. 12, 1940

Fig. 3.

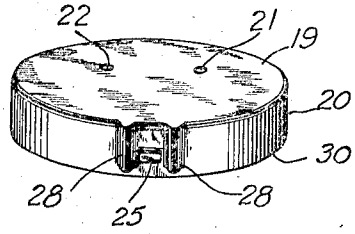


Fig. 4.



Fig. 1.

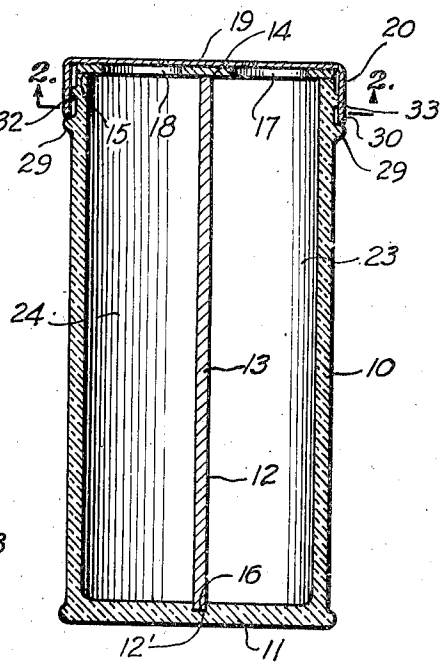


Fig. 5.

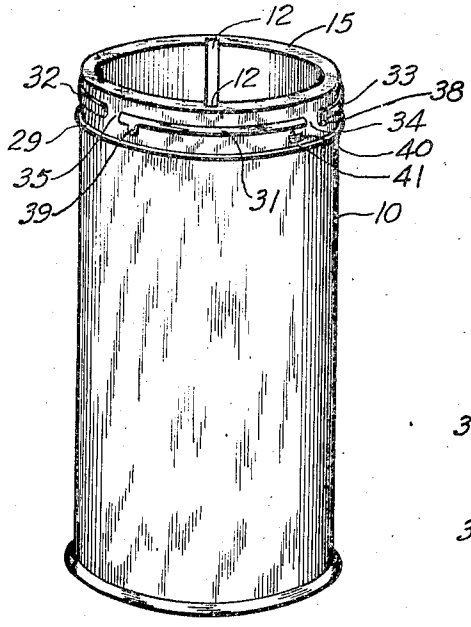


Fig. 2.

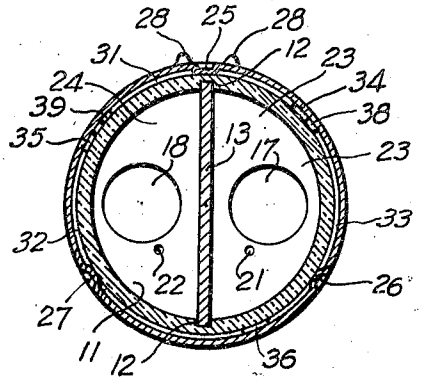
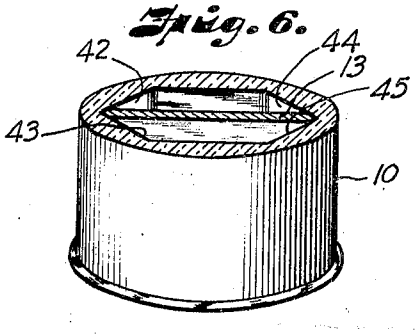


Fig. 6.



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DUAL SHAKER

Welch J. Henderson, Kansas City, Mo.

Application August 12, 1940, Serial No. 352,247

5 Claims. (Cl. 65—45)

My invention relates to dual shakers, and more particularly to a container that can be used both for the sale and storage of condiments and shaking, or distributing thereof onto whatever may be desired.

It is a purpose of my invention to provide a dual shaker of the above mentioned character, which is simple in construction and which can be made cheaply enough that it can be utilized for the sale of condiments, such as pepper and salt, for example, and which is attractive in appearance and practical in operation.

It is a further purpose of my invention to provide a device of the above mentioned character, that comprises a body portion that is closed permanently at one end thereof and which is open at the other end thereof, and which is provided with a partition therein to divide the same into a plurality of compartments to be used as a container for different condiments, so that, for example, salt and pepper could be kept in the same shaker in the two compartments thereof for selective use.

It is a further purpose of my invention to provide a container of the above mentioned character, which has a wall provided on the open end thereof that is secured to the partitioning means that divides the body portion into a plurality of chambers and to the top edge of the open end of the body portion in a manner such that the finely divided material in one compartment of the container cannot escape into the other compartment, and so that the finely divided material cannot escape from the container except in a controlled manner.

It is a further purpose of my invention to provide a dual shaker of the above mentioned character that has a body portion provided with partitioning means of such a character as to prevent escape of the finely divided contents of one chamber into the other, the same, preferably, comprising a partitioning member of fibrous material, such as cardboard, which is fitted tightly in position so as to be compressed against the body portion to seal the partition to the body portion tightly.

It is a further purpose of my invention to provide a cap or closure member for the container that is adapted to be removed therefrom for filling the two compartments of the container and is easily attached to and detached from the container, said closure member being provided with openings that are adapted to align with openings in the wall that is secured to the container at the open end thereof, so as to make the selective discharge of the contents of the compartments, or chambers, of the container, possible.

It is a further purpose of my invention to provide a device of the above mentioned character, in which the container and the closure member are provided with cooperating means for limiting the rotation of the closure member between two alternative positions, and provide cooperating means whereby the closure member is removable from the body portion only in one position thereof and capable of being mounted on the body portion in only one relation thereto, said cooperating means further comprising means for impeding the movement of the closure member in a position thereof in which one of the openings of the closure member is aligned with one of the openings of said wall, and stop means operating to limit the movement of the closure member to a position such that the other opening of the closure member is aligned with another opening in said wall when such stop means are in engagement.

It is still another purpose of my invention to provide a wall at the open end of the body portion, between the body portion and the closure member, that is made of compressible fibrous material, such as cardboard, for example, with which the cap member, or closure member, is held in close engagement, so as to seal the space between the closure member and the wall to prevent any of the finely divided material, such as salt, or pepper, that may be in the containers, from getting into the space between the rotatable cap member and the stationary wall, thus assuring the smooth operation of the device and that only the kind of condiment that is desired will be discharged therefrom when the device is adjusted, with one or the other of the holes in the closure member in alignment with the appropriate hole in the wall.

Other objects and advantages of my invention will appear as the description of the drawing proceeds. I desire to have it understood, however, that I do not intend to limit myself to the particular details shown or described, except as defined in the claims.

In the drawing:

Fig. 1 is a vertical sectional view through my improved dual shaker.

Fig. 2 is a section thereof taken on the line 2—2 of Fig. 1.

Fig. 3 is a perspective view of the removable cap, or closure member.

Fig. 4 is a perspective view of the end wall detached.

Fig. 5 is a perspective view of the body portion before the partition has been placed in position therein, and

Fig. 6 is a fragmentary perspective view of a modified form of body portion.

Referring in detail to the drawings, my improved dual shaker comprises a body portion, which may be of any desired outer contour, but is shown as being cylindrical, the side wall portion being indicated by the numeral 10. Said body portion has a closed end wall 11, which would, of course, be the bottom of the container. In the form of the invention shown in Figs. 1, 2 and 5, the body portion is provided with a pair of grooves 12 running lengthwise of the side wall portion 10, that receive the partition member 13 closely, the partition member being made of such size as to fit snugly in the grooves and being, preferably, made of cardboard, or similar material, so as to also act as sealing means between itself and the body portion of the device, which is, preferably, made of glass, or similar material.

Secured to the partition member 13 is an end wall member 14, which is, preferably, of a disk-like character and is, preferably, made of compressible fibrous material, such as cardboard. The members 13 and 14 are, preferably, secured together by an adhesive at their contacting portions, and the peripheral edge 15 of the wall 10 is, preferably, also sealed to the end wall member 14 by means of an adhesive, the partition 13 being of such length that when the wall 14 is secured firmly to the peripheral edge 15 of the side wall 10, the bottom edge 16 of said partition 13 will be snugly in engagement with the groove 12' in the bottom 11 of the container. If desired, in order to assure a seal between these parts, an adhesive can be placed on the bottom edge 16 of the wall 13 before it is put in place, although this is ordinarily not necessary, as the member 13 will fit tightly enough in the groove 12' to provide a seal.

The wall 14 is a disk-like member, as will be clear from Fig. 4, and is provided with a pair of openings 17 and 18, which are located at equal distances from the center of the disk-like wall 14 and, preferably, diametrically opposite each other, as shown clearly in Fig. 2.

Detachably mounted on the body portion of the shaker is a closure, or cap member, 19, which is provided with a peripheral depending flange 20 and with openings 21 and 22, which are so located that when the member 19 is rotated on the body portion, the opening 21 will be in alignment with the opening 17, in one position of said closure member, and the opening 22 will be in alignment with the opening 18, in another position thereof, but the openings 21 and 22 cannot be both aligned with the openings 17 and 18 at the same time, and as will be obvious from Fig. 2, a position of the closure member 19 can be readily obtained, in which neither of the openings 21 and 22 aligns with the openings 17 and 18, which will be the position of the cap, or closure member, 19 when the device is not in use as a shaker, but only as a storage receptacle.

Means is provided for assembling the cap or closure member 19 in proper relation to the body portion of the container, so that the openings 21 and 22 will properly cooperate with the openings 17 and 18 to make it possible to shake the material from either the compartment 23 or 24, as the case may be, or to prevent any escape of the contents of either the compartment 23 or the compartment 24. Said means comprises certain formations on the outer face of the wall 10 near the edge portion 15 thereof, and certain formations on the removable cap or closure member 19. Said cap or closure member is provided with a plurality of identical indentations 25, 26 and 27. The indentations 25 is located between a pair of out-struck ribs 28 on the depending flange 20, which are so spaced and located as to form a finger piece for engagement of the finger, or thumb, of the operator of the device to move the cap to the desired position to open the compartment from which the material is to be shaken. In the arrangement shown, the distance between the indentation 25 and the indentation 27 is the same as the distance between the indentation 26 and the indentation 27, but the distance between the indentation 26 and the indentation 25 is less than that between the other indentations. As will be clear from the explanation given below, this makes it possible to assemble the removable closure member 19 in only one position on the body portion of the device.

The body portion of the device is provided on the cylindrical wall portion 10 thereof with a continuous annular rib, or bead, 29, which runs entirely around the same and which acts as guard means to prevent the sharp bottom edge 30 of the flange 20 of the cap member 19 from being accidentally engaged by the fingers in rotating the cap, or closure member. Spaced from the continuous bead, or rib, 29 are a plurality of rib portions that are circumferentially aligned, but have gaps between the same, comprising the rib portions 31, 32 and 33. The rib portion 31 is spaced from the rib portions 32 and 33 to provide the gaps 34 and 35 between the same. A gap 36 is also provided between the ends of the ribs, or beads, 32 and 33. The distance between the gaps 35 and 36 is the same as the distance between the indentations 27 and 26, while the distance between the gaps 36 and 34 is the same as the distance between the identations 26 and 25, and that between the gaps 34 and 35 is the distance between the indentations 25 and 27. Of course, the indentations 25, 26 and 27 are slightly shorter than the length of the gaps, so that these will readily pass therethrough when properly located relative to these gaps. As there is a difference in the distance between the gaps and a difference in the distance between the indentations, there is only one position in which the indentations will pass through the gaps, which is that when the indentation 25 is aligned with the gap 34, the indentation 26 aligned with the gap 36, and the indentation 27 aligned with the gap 35.

Assuming that the cap, or closure member, 19 is off the body of the container and is to be placed in position thereon, the same is placed into the position above stated and the indentations passed through the gaps. Upon such positioning of the parts, it is impossible to turn the cap member 19 in the wrong direction, as the rib portion 33 is provided with an integral lug, or projection, 38 at the end thereof with which the indentation 25 will engage, if an attempt is made to turn the cap member 19 in the wrong direction. If the cap member 19 is turned in the proper direction, the indentation 25 will travel along under the rib portion 31, the indentation 26 will travel along under the rib portion 33, and the indentation 27 will travel along under the rib portion 32, the spacing of the parts being such that when this relative re-

lationship exists the cap member 19 will be held snugly in sealing engagement with the wall 14 of fibrous material.

The rib portion 31 is also provided with an integral stop lug, or projection, 39, with which the indentation 25 engages when the cap member 19 reaches the limit of its rotation away from the position that it has when first assembled with the body portion. When the indentation 25 is in engagement with the lug 39 the opening 21 will align with the opening 17 and the contents of the compartment 23 can be shaken out through the openings 17 and 21. The lug, or projection, 40 is also provided on the wall 10 between the rib 29 and the rib 31, to provide a restricted passage 41 between the lug 40 and the rib 31. Upon rotation of the closure member 19 away from the position in which the openings 21 and 17 are in alignment, into the position in which the opening 22 aligns with the opening 18, the indentation 25 will reach a position where it is confined between the lug 40 and the rib portion 31 in the narrow passage 41. While the indentation 25 will pass through this passage, sufficient friction is created to be noticeable and with a little experience the operator of the device will be able to tell when this position has been reached and will stop the rotation of the closure member 19 in proper position to have the opening 22 properly align with the opening 18, so that the contents of the chamber, or compartment, 24 can be shaken therefrom.

Instead of providing a body portion such as described above, the body portion of the device can be made as shown in Fig. 6, in which the interior of the body portion, instead of being made cylindrical, is made polygonal, no longitudinal grooves 12 being necessary in this form of container. As the partition member 13 is made to fit in the groove, or recess, that is provided between the two adjacent flat faces 42 and 43, and the two adjacent flat faces 44 and 45 on the inner side of said container, the tendency is for the side edges of the partition 13 to compress so as to conform to the shape of said walls, which at their junctions, form a tapering bottomed groove for receiving the partition 13.

What I claim is:

1. A container having a body portion having a closed end and an open end, means in said body portion dividing the same longitudinally into compartments, a wall of compressible fibrous material secured in fixed position on said dividing means and on the edge of said body portion at said open end thereof, said wall having a pair of openings therein each leading into one of said compartments, a rotatable closure member having a pair of openings therein each adapted to be aligned with one of the openings in said wall while the other thereof is out of alignment with the other opening in said wall, and means for mounting said rotatable closure member detachably on said body portion in snug face to face engagement with said wall for limited rotation, comprising projections on said closure member and said body portion interengaging to lock said closure member on said body portion except in one position thereof, the projections on said closure member including a stop projection, and projections on said body portion engageable by said stop projection on said closure member to limit rotation of said closure member relative to said body portion in opposite directions, the stop projection on said closure member engaging one of the stop projections on said body portion with one of the openings in said wall in alignment with one of the openings in said closure member and engaging the other stop projection on the body portion with the interengaging projections on said body portion and closure member in unlocked relative position.

2. A container having a body portion having a closed end and an open end, means in said body portion dividing the same longitudinally into compartments, a wall of compressible fibrous material secured in fixed position on said dividing means and on the edge of said body portion at said open end thereof, said wall having a pair of openings therein each leading into one of said compartments, a rotatable closure member having a pair of openings therein each adapted to be aligned with one of the openings in said wall while the other thereof is out of alignment with the other opening in said wall, and means for mounting said rotatable portion in snug face to face engagement with said wall for limited rotation, comprising projections on said closure member and said body portion interengaging to lock said closure member on said body portion except in one position thereof, the projections on said closure member including a stop projection, projections on said body portion engageable by said stop projection on said closure member to limit rotation of said closure member relative to said body portion in opposite directions, the stop projection on said closure member engaging one of the stop projections on said body portion with one of the openings in said wall in alignment with one of the openings in said closure member and engaging the other stop projection on the body portion with the interengaging projections on said body portion and closure member in unlocked relative position, and means on said body portion between said stop projections thereon engaged by said stop projections on said closure member to retard rotation of said closure member to define a position of said closure member with the other opening therein in alignment with the other opening in said wall.

3. A container having a body portion having a closed end and an open end, means in said body portion dividing the same longitudinally into compartments, a wall of compressible fibrous material secured in fixed position on said dividing means and on the edge of said body portion at said open end thereof, said wall having a pair of openings therein each leading into one of said compartments, a rotatable closure member having a pair of openings therein each adapted to be aligned with one of the openings in said wall while the other thereof is out of alignment with the other opening in said wall, and means for mounting said rotatable closure member detachably on said body portion in snug face to face engagement with said wall for limited rotation, comprising projections on said closure member and said body portion interengaging to lock said closure member on said body portion except in one position thereof, the projections on said closure member including a stop projection, projections on said body portion engageable by said stop projection on said closure member to limit rotation of said closure member relative to said body portion in opposite directions, the stop projection on said closure member engaging one of the stop projections on said body portion with one of the openings in said wall in alignment with one of the openings in said closure member and engaging the other stop projection on the body portion with the interengaging projections on said body portion and closure member in unlocked relative position, and

means on said body portion between said stop projections thereon engaged by said stop projections on said closure member to retard rotation of said closure member to define a position of said closure member with the other opening therein in alignment with the other opening in said wall, said openings in said closure member being smaller than the openings in said wall and spaced with the centers thereof closer together than said openings in said wall to provide an intermediate position of said closure member sealing both compartments.

4. A container having a body portion having a closed end and an open end, means in said body portion dividing the same longitudinally into compartments, a wall of compressible fibrous material mounted in fixed position on said dividing means and on the edge of said body portion at said open end thereof, said wall having a pair of openings therein each leading into one of said compartments, a rotatable closure member detachably mounted on said body portion in snug engagement with said compressible wall, said closure member having a pair of openings therein spaced so as to be each adapted to be aligned with one of the openings in said wall by rotation of said closure member on said body portion, a stop projection on said closure member, stop projections on said body portion engageable by said stop projection on said closure member to limit rotation of said closure member relative to said body portion in opposite directions and a formation on said body portion between said stop projections retarding rotation of said closure member upon said closure member reaching a position with one of the openings in said closure member in alignment with one of the openings in said wall and with the stop projection on said closure member spaced from both said stop projections on said body portion.

5. A container having a body portion having a closed end and an open end, means in said body portion dividing the same longitudinally into a pair of compartments, a transverse end wall of compressible fibrous material mounted in fixed position on the open end of said body portion, said wall having a pair of openings therein each leading into one of said compartments, a rotatable closure member detachably mounted on said body portion, said closure member having a pair of openings therein, one adapted to be aligned with one of the openings in said wall and the other with the other of the openings in said wall by rotation of said closure member on said body portion relative to said wall, cooperating means on said closure member and said body portion to detachably hold said closure member in snug sealing engagement with said wall, comprising a circumferential rib on said body portion extending entirely there-around except for a plurality of short interruptions therein and a plurality of circumferentially extending projections on said closure member shorter than said interruptions engaging said rib, and stop projections on said body portion engaged by one of said projections on said closure member to limit rotation of said closure member in opposite directions.

WELCH J. HENDERSON.