

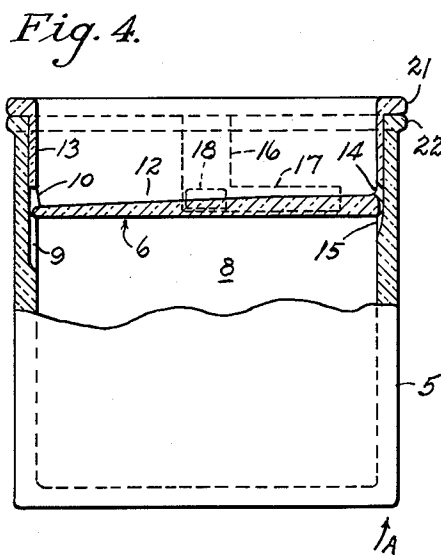
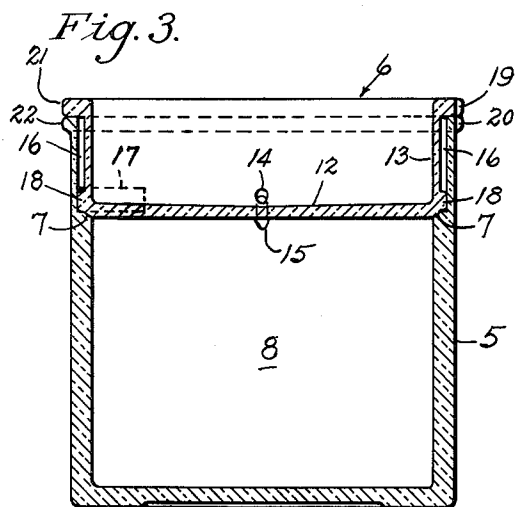
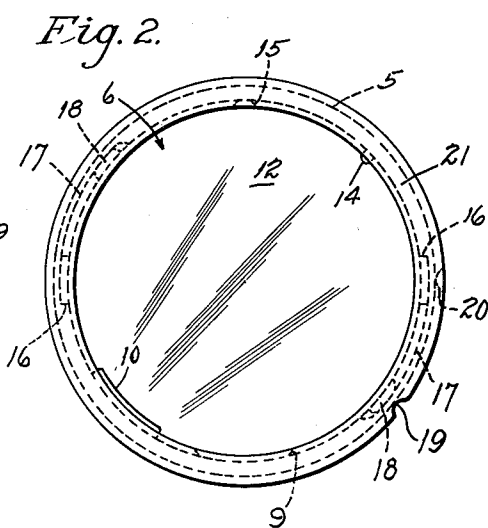
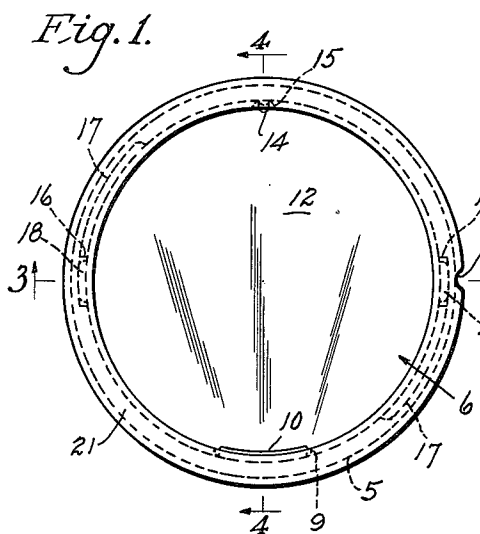
March 16, 1948.

L. J. LASKIN

2,437,784

NONSPILLABLE CUP

Filed Sept. 4, 1944



INVENTOR.
Louis J. Laskin
BY *Carlos G. Stratton*
ATTORNEY

UNITED STATES PATENT OFFICE

2,437,784

NONSPILLABLE CUP

Louis J. Laskin, Los Angeles, Calif., assignor to
William I. Zidell and Louis J. Laskin, both of
Los Angeles, Calif., doing business as Lasdell
Products Co., Los Angeles, Calif., a partnership

Application September 4, 1944, Serial No. 552,643

6 Claims. (Cl. 65—13)

1

My invention relates to a non-spillable cup, and has for an object to provide a cup that will hold liquid and has the dual advantage of being capable of being drunk from and yet will minimize spilling if tipped over on its side.

Another object of the invention is to provide a cup with a cover that will prevent spilling when the cup is upright, and at the same time the cup can be drunk from without removing the cover.

Further objects are to provide a cup of the character mentioned whose cover can be easily removed for filling the cup and which cover can be moved to an entirely closed position that will prevent all liquid from spilling from the cup, irrespective of the position of the cup.

Still other objects of my invention are to provide such a cup that is economical of manufacture, relatively simple, and of general superiority and serviceability.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description. However, the drawings merely show and the following description merely describes one embodiment of the present invention, which is given by way of illustration or example only.

In the drawings, like reference characters designate similar parts in the several views.

Fig. 1 is a top, plan view of a cup embodying the foregoing objects.

Fig. 2 is a view similar to Fig. 1, but showing the cover in a different adjusted position.

Fig. 3 is a transverse section, taken on the line 3—3 of Fig. 1.

Fig. 4 is a vertical section, taken on the line 4—4 of Fig. 1, and partly in elevation.

Referring more in detail to the drawings, the reference number 5 generally indicates the body of my present cup. The cover is generally indicated by the numeral 6. The inner face of the body 5 has a shoulder 7 upon which the cover 6 rests when in place.

To permit liquid in the bottom compartment 8 of the cup to flow past the cover, I provide a recess 9 that extends down below the shoulder 7, as best shown in Fig. 4. The cover 6 has a slotted opening 10 at the bend between the floor 12 and normally upright wall 13 of the cover. When the cover 6 is turned for the opening 10 to register with the recess 9, liquid in the compartment 8 may flow around the edge of the floor 12 and outside of the floor 12 of the cover,

2

whence it can be drunk. When the cover 6 is turned so that the opening 10 is out of register with the recess 9, then liquid in the bottom compartment 8 cannot flow therefrom.

To aid in such flow, an air vent 14 is arranged in the cover diametrically opposite the slotted opening 10, in the bend between the floor 12 and the normally upright wall 13. A small recess 15 is arranged in the inner face of the body 5 of the cup, through and below the shoulder 7, diametrically opposite the recess 9. Thus, when the slotted opening 10 is in register with the recess 9, the air vent 14 is in register with the recess 15; and when the slotted opening 10 is out of register with the recess 9, the vent 14 is out of register with the recess 15.

The floor 12 of the cover 6 is preferably pitched to slope downward toward the slotted opening 10, as indicated by the shade lines on the bottom 12 in Figs. 1 and 2.

A locking means may be employed for my present cup, if desired. A satisfactory form is shown in the drawings, to wit, bayonet grooves at opposite sides of the inner face of the cup, above the shoulder 7. Each bayonet groove comprises a vertical groove section 16 and a horizontal groove section 17. Lugs 18 on opposite sides of the outer circumference of the cover 6 engage in the bayonet grooves. That is to say, in order to lock the cover 6 in the body 5, the cover is inserted in the body with the lugs sliding downwardly in the vertical groove sections 16. Then the cover is turned, thus causing the lugs to travel in the horizontal groove sections 17, thereby locking the cover in position. To remove the cover, this operation is, of course, reversed. Notches 19 and 20 are made in the lips 21 and 22 of the cover and body, respectively. When the notches are in vertical alinement, the lugs 18 are alined with the vertical groove sections 16, so that the cover is in an unlocked condition and may be lifted off. It is to be understood that my present cup may be used with or without said locking lugs and bayonet grooves. Due to the relatively close fit between the cover and the body, there is friction, and even without the aforescribed locking means, when the cover is turned so that the openings 10 and 14 are out of register with the recesses 9 and 15, a partial vacuum is created in the compartment 8, which tends to hold the cover in place on the cup.

The shoulder 7 is not only a support for the cover, but increases the vacuum caused by partial withdrawal of the cover 6, since the shoulder

provides an additional impediment to air entering the chamber 8 around the cover. This shoulder 7, therefore, increases resistance to removal of the cover 6.

My present cup has many uses, including use on shipboard, since it will prevent liquid in the cup from slopping out, even when the vessel is rolling considerably, and it is very useful as a baby cup to minimize spilling when the cup is upset, and many other uses.

In such uses, it is believed clear that a person drinks from the cup with the cover in place, as shown in Figs. 1 and 4. With the air vent 14 registering with the recess 15 and the slotted opening 10 registering with the recess 9, liquid will flow through the recess 9 and opening 10 when the cup is tipped at one side, as indicated by the arrow A in Fig. 4. The person then drinks the liquid that has escaped through the opening 10. To close the cup, the cover 6 is turned, which moves the openings 10 and 14 out of register with their respective recesses 9 and 15.

If the locking lugs 18 and bayonet grooves are used, the cover 6 may be lifted out of the body 5 when the lugs 18 are in register with the vertical groove 16 (indicated by the fact that the notches 19 and 20 are in alinement). To lock the cover in place, the lugs 18 are moved downward in the vertical grooves 16 and as the cover is turned, after the lugs reach the bottoms of the vertical grooves, the covers are locked in position.

In the hereunto appended claims, the word "cup" is to be taken to mean a class of containers that comprises both cups and mugs.

While I have illustrated and described what I now regard as the preferred embodiment of my invention, the construction is, of course, subject to modifications without departing from the spirit and scope of my invention. I, therefore, do not wish to restrict myself to the particular form of construction illustrated and described, but desire to avail myself of all modifications that may fall within the scope of the appended claims.

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

1. In a cup, a hollow body element having a shoulder extending around the inner circumference thereof, and a dished cover element nesting within the body element and engaging the shoulder, the body element having recesses therein extending through and below the shoulder, the cover element having a passage for the flow of liquid therethrough and having an air vent, the cover element being rotatable to move the passage and vent into register with the respective recesses to communicate the hollow of the body with the interior of the cover element, the passage and vent being arranged to be closed by the shoulder when the cover element is rotated upon the shoulder to a position placing the passage and vent out of register with said recesses.

2. In a cup, a hollow body element having a shoulder extending around the inner circumference thereof, and a dished cover element having a close-fitting, telescoping connection within the body element and engaging the shoulder, there being recesses in the body element extending through and below the shoulder and the cover element having a passage therethrough and a vent, the cover element being rotatable to move the passage and vent into register with the recesses to communicate the hollow of the body with the interior of the cover element, the passage and vent being arranged to be closed by the shoulder when the passage and vent are moved

out of register with the recesses, the close-fitting arrangement of the cover with the surrounding surface of the body and with the shoulder tending to produce a partial vacuum when the cover is moved outwardly from the body, to resist accidental removal of the cover from the cup.

3. In a cup, a body element having a shoulder extending around the inner circumference thereof, and a dished cover element nesting within the body element and engaging the shoulder, the body element having recesses in the body element extending through and below the shoulder, the cover element having a passage for the flow of liquid therethrough and having an air vent, the cover element being rotatable to move the passage and vent into and out of register with the recesses respectively, the passage and vent being arranged to be closed by the shoulder when the cover element is rotated upon the shoulder to a position placing the passage and vent out of register with said recesses, the floor of the cover element below the upper edge of the body element sloping from the vent downward to the passage.

4. In a cup, a hollow body element having a shoulder extending around the inner circumference thereof, and a dished cover element having a close-fitting, telescoping connection within the body element and engaging the shoulder, the cover having a lip closely overhanging around the upper edge of the cup, there being recesses in the body element extending through and below the shoulder and the cover element having a passage and a vent therethrough, the cover element being rotatable to move the passage and vent into register with the recesses to communicate the hollow of the body with the interior of the cover element, the passage and the vent being arranged to be closed by the shoulder when the passage is moved out of register with the recesses, the close-fitting arrangement of the cover with the surrounding surface of the body, of the lip of the cover with the upper edge of the cup, and of the cover with the shoulder tending to produce a partial vacuum when the cover is moved outwardly from the body, to resist accidental removal of the cover from the cup.

5. In a cup, a hollow body element having a shoulder extending around the inner circumference thereof, and a dished cover element nesting within the body element and engaging the shoulder, there being recesses in the body element extending through and below the shoulder and the cover element having passages therethrough, the cover element being rotatable to move the passages into register with the recesses to communicate the hollow of the body with the interior of the cover element, the passages being arranged to be closed by the shoulder when the passages are moved out of register with the recesses, and the body and cover having bayonet locking means arranged to lock the cover in the body element, and the body and cover having exteriorly discernible indicia arranged to be in alinement when the bayonet locking means is in an unlocked position.

6. In a cup, a hollow body element having an internal annular shoulder and diametrically opposite passageways extending through said shoulder, a close fitting cover element telescoping within the body element and hermetically closing same, the cover element forming a shallow basin and provided with diametrically opposite openings for fluid and air, said cover element being

axially rotatable in one direction to align the openings therein with said passageways to communicate the hollow of the body with the interior of the cover element and in another direction to move the openings therein out of alinement with said passageways to seal said body element, and means to lock said cover element on said body element.

LOUIS J. LASKIN. 10

REFERENCES CITED

The following references are of record in the file of this patent:

Number	Name	Date
178,693	White -----	June 13, 1876
608,590	Freund -----	Aug. 9, 1898
610,049	Henderson -----	Aug. 30, 1898
659,150	King -----	Oct. 2, 1900
729,583	Henslor -----	June 2, 1903
870,556	Harbour -----	Nov. 12, 1907
908,706	Sprinkle -----	Jan. 5, 1909
1,141,609	Canning -----	June 1, 1915
1,254,251	Magnus -----	Jan. 22, 1918
1,509,734	Langley -----	Sept. 23, 1924
2,003,657	Stubblefield -----	June 4, 1935
2,358,600	Seiten -----	Sept. 19, 1944

UNITED STATES PATENTS