

April 18, 1933.

M. H. SIDEBOTHAM

1,904,331

DRINKING CUP

Filed May 7, 1931

Fig. 1.

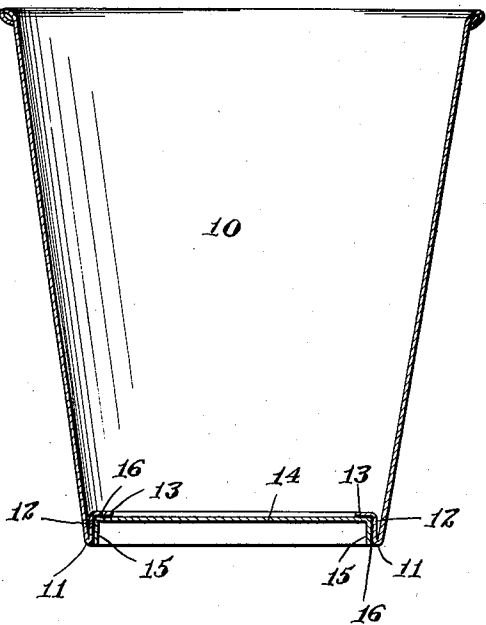


Fig. 2.

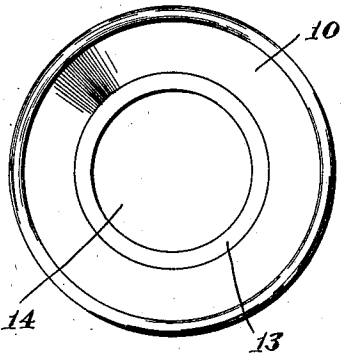
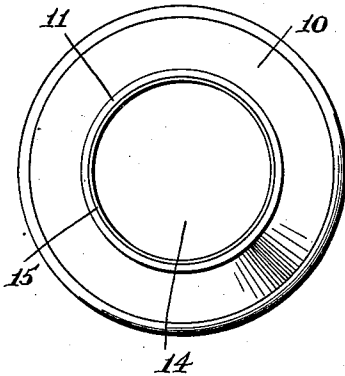


Fig. 3.



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UNITED STATES PATENT OFFICE

MELVIN H. SIDEBOTHAM, OF WEST NEWTON, MASSACHUSETTS, ASSIGNOR TO SPECIALTY AUTOMATIC MACHINE COMPANY, OF CHELSEA, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS

DRINKING CUP

Application filed May 7, 1931. Serial No. 535,699.

This invention relates to drinking cups and has particular reference to paper cups of tumbler shape capable of being nested, and usually obtainable singly from dispensing devices.

It is important that tumbler-shaped cups shall be leak-proof. Heretofore, so far as I am aware, the bottoms of such cups heretofore in use, frequently leak due to the very limited area of those portions which are glued together.

The object of my invention is to provide tumbler-shaped paper cups having bottom closures the margins of which are so extensively sealed, without requiring increase in the vertical dimensions of the cups to provide for such sealing, that liability of leakage is reduced to the minimum.

With said object in view, my invention consists in the structure of the improved cups substantially as hereinafter described and claimed.

Of the accompanying drawing:—

Figure 1 is a vertical section of one of my improved cups, enlarged beyond its usual dimensions.

Figure 2 is an inside view of the same.

Figure 3 is a bottom plan view of the same.

Similar reference characters indicate similar parts or features in all of the views.

The body 10, usually of tapering cylindrical form, has its lower margin turned inwardly to provide a folded edge 11 and an upwardly extending ring portion 12 from which a flange 13 extends directly inward.

A bottom disk 14 having a downwardly projecting edge flange 15 is of a size to snugly fit the annular angular recess afforded by the ring 12 and the flange 13 of the body of the cup.

When the body and the bottom disk are assembled, a suitable adhesive indicated at 16 is applied to unite two annular areas at an angle to each other, one being between the inner surface of the ring portion 12 and

the outer surface of the flange 15, and the other being between the under surface of the flange 13 and the upper annular margin of the disk 14.

It will now be understood that my improved cup comprises a body member 10 and a closure for the bottom thereof, said body and closure having two adhesively-united annular areas at an angle to each other, the area of the joined surfaces between the flange 13 and the margin of the disk 12 being horizontal, and the area of the joined surfaces between the ring portion 12 and the flange 15 of the disk being substantially vertical. This structure provides practically twice as much area of glued surfaces as exists in any prior paper drinking cup of which I am aware, thereby ensuring a reliably permanent tight joint between the two members of the cup.

Furthermore, the structure is such that each cup has a strong stiff bottom edge that is not likely to become broken in. This is due to the cup having at its bottom not only three ring-shaped portions, one within another, but also a flat annular flange integral with and at an angle to one of said ring-shaped portions.

Having now described my invention, I claim:

1. A paper cup comprising a body and a single-thick bottom closure therefor, said body and closure having two adhesively-united annular areas at an angle to each other.

2. A paper cup comprising a body and a single-thick bottom closure therefor, said body and closure having two adhesively-united annular areas one of which is horizontal and the other is substantially vertical.

3. A paper cup comprising a body and a single-thick bottom closure therefor, said body and closure including three ring-shaped portions one within another and a

flat annular portion integral with and at an angle to one of said ring-shaped portions.

4. A paper cup comprising a body having an inwardly turned lower margin with an intermediate connecting ring-shaped portion, and a closure disk having a downwardly extending flange inside the said ring-shaped portion of the body, all of the contacting areas of the two members of the cup being adhesively connected.

In testimony whereof I have affixed my signature.

MELVIN H. SIDEBOTHAM.

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