

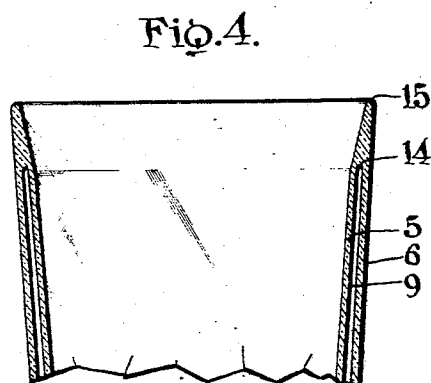
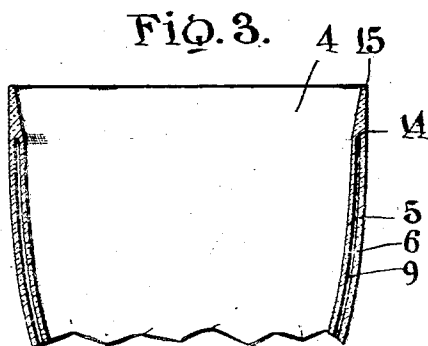
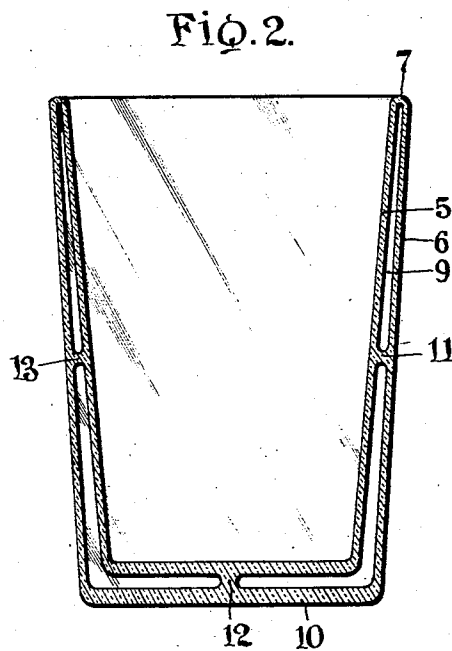
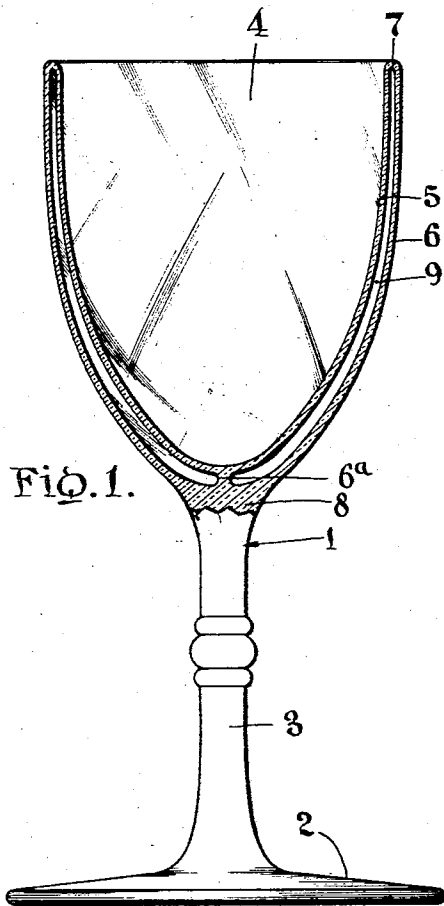
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DRINKING TUMBLER

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DRINKING TUMBLER

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6 Claims. (Cl. 65—66)

This invention relates to a drinking tumbler and more particularly to a drinking tumbler provided with double walls, the space between the inner and outer walls having the air exhausted therefrom to a greater or lesser degree thus forming a rarefied gas between the double walls, to prevent the deposit or precipitation of condensed moisture on the exterior of the tumbler.

The ordinary conventional drinking tumbler is formed with a single wall and in the ordinary course of usage is partially filled with an iced liquid, or liquid having a temperature that is substantially below the temperature of the surrounding atmosphere. The reduced temperature of the liquid is readily conducted by the wall of the tumbler and there is a tendency caused by the contact of the exterior side of the chilled tumbler wall with the atmosphere to condense moisture from the atmosphere upon the exterior side of the tumbler wall and an accumulation of condensed moisture being formed in sufficient quantity the moisture will run down the exterior side of the tumbler wall and onto the tumbler support. This action is especially noticeable in the warmer seasons when the atmosphere is very humid and the difference in temperature between the atmosphere and liquid is great, and has made necessary the use of mats or coasters beneath tumblers in order to absorb or catch the condensate and prevent the discoloring of table covers or surfaces.

The present invention has for its primary object to provide a drinking tumbler which will prevent the condensation of moisture on its exterior when it contains a liquid having a temperature below that of the surrounding atmosphere and therefore eliminate the necessity of using mats or coasters.

A further object is to provide an improved drinking tumbler having double walls and a rarefied air space between the inner and outer walls.

Still further objects of the invention are to provide a double walled drinking tumbler having a hermetically sealed air space between the inner and outer walls; to provide a double walled drinking tumbler of reinforced construction; to provide a double walled drinking tumbler with a suitable fine drinking edge and other objects and details of construction will be more particularly pointed out in the following description and set forth in the claims.

In the drawing:

Fig. 1 is a side view of a drinking tumbler of

the goblet type, the double wall portion thereof being shown in section.

Fig. 2 is a vertical section of a drinking tumbler showing the double wall construction.

Fig. 3 is a fragmentary vertical section of the goblet shown in Fig. 1 with another form of drinking edge.

Fig. 4 is a fragmentary vertical section of the tumbler shown in Fig. 2 with another form of drinking edge.

The drinking tumbler indicated generally at 1, in Fig. 1, is formed of glass, china or any other suitable composition and is provided with a base 2, stem portion 3 and bowl portion 4. The bowl portion 4 has the inner wall 5 and outer wall 6 which are united at the top in a continuous rolled drinking edge 7. The outer wall 6 may either be an integral continuation of the stem 3 as shown in Fig. 1 or the bowl may be formed separately from the stem, in which case the outer wall 6 would be cemented or otherwise rigidly attached to the stem substantially at 8.

Space 9 is formed between the walls 5 and 6 and in the process of manufacture, the air is withdrawn to a greater or lesser degree from space 9, thus forming a rarefied space between the inner and outer walls. The presence of rarefied space 9 between walls 5 and 6 serves as an extremely efficient non-conductor of heat and will prevent the condensation of moisture on the exterior of wall 6 when the bowl contains a liquid having a lower temperature than the surrounding atmosphere, the wall 5 will remain substantially at the temperature of the liquid and wall 6 substantially at the temperature of the atmosphere.

In another form of the invention, it is recognized that the air in space 9 need not be withdrawn and that space 9 may be hermetically sealed to prevent any contact of the air in space 9 directly with atmospheric air and that the hermetically sealed air space will be a sufficient nonconductor of heat to prevent the condensation of moisture on the exterior of wall 6 particularly when the difference in temperature between the liquid in the bowl and the atmosphere is not great. In tumblers in which the walls are extremely thin, it is desirable to reinforce them by a web member 6a, formed between the two walls.

The tumbler shown in Fig. 2 is of ordinary shape and is provided with the double walls 5 and 6, the walls also forming a double walled base, wall 6 having portion 10 which serves as the supporting base of the tumbler. In Fig. 2, three

reinforcing webs 11, 12 and 13 between the double walls are shown and in this construction separate spacer members can also be used in place of the integral webs 11, 12 and 13.

5 Figs. 3 and 4 show tumblers having a different form of drinking edge. It is desirable in a high grade tumbler to have thin light materials and especially to have a delicate thin drinking edge. In the usual course of filling a tumbler with
10 liquid, it is only filled partially and an appreciable space in the top remains unfilled. This customary partial filling renders it possible to move the tumbler or tilt it to one's lips without splashing the liquid over the side. In the
15 tumblers shown in Figs. 4 and 5 the walls 5 and 6 are joined at 14, which is a point above the usual height of the level of the liquid contained in a tumbler when the tumbler is in a horizontal position, and an attenuated drinking edge is
20 formed, the inner side of which is beveled to terminate in the narrow lip 15. In this form of the invention it will be seen that space 9 extends to a greater height than the level of the liquid and prevents the condensation of moisture on the exterior of the glass, and that the drinking
25 edge may be of substantially less thickness than the thickness of the double wall and intervening space.

In another form of the invention, the air confined between the spaced walls of the tumbler is carefully dried and kept in a substantially dry condition during the manufacture of the tumbler for the purpose of preventing the formation of a mist on the inner surfaces of the spaced walls
30 when the tumbler is later in use and the walls are subjected to varied temperatures.

Although only the preferred forms of the invention have been shown and described in detail, it will nevertheless be apparent to those skilled in the art, that the invention is not so limited but that various changes may be made therein without departing from the spirit of the invention or the scope of the appended claims.

I claim as my invention:

45 1. A drinking tumbler comprising double side and double bottom walls forming a rarefied closed gas space between all of the double walls, the upper portion of the walls having a thin integral drinking edge portion of single wall thickness for receiving the lips of a person drinking
50 from the tumbler.

2. An upright drinking tumbler comprising double side and double bottom walls forming a rarefied gas space extending to a substantially
55 horizontal plane spaced downwardly from the top of the tumbler, the outer surface of the tumbler being substantially continuous and uniform from its top to bottom edges, and a lip receiving drinking edge portion of single wall thick-

ness forming an upper integral portion of the tumbler, the inner portion of the walls constituting the drinking edge being in outwardly beveled form for receiving the lips of a person drinking from the tumbler.

3. An upright glass drinking tumbler comprising an inner wall and an outer wall, said walls extending entirely along the tumbler bottom and sides to a location adjacent the upper edge of the tumbler, said walls defining an air-tight
85 chamber, and a drinking edge portion formed along the upper portion of the tumbler, the thickness of the drinking edge portion being approximately equal to the thickness of one of the walls.

4. An upright glass drinking tumbler comprising spaced inner and outer walls, said walls extending along the bottom and sides of the tumbler and sealed at a location adjacent the upper edge of the tumbler, said walls defining an air-tight insulating chamber, and an attenuated
90 drinking edge portion formed along the upper portion of the tumbler beyond the location of sealing of the walls, the thickness of the drinking edge portion being approximately equal to the thickness of one of the walls.

5. A non-sweating drinking glass comprising a substantially one-piece glass body having inner and outer glass wall members substantially paralleling each other in nested relation and spaced apart to provide a heat insulating chamber therebetween whereby the outer surface of the glass is prevented from cooling concurrently with the pouring of a cold liquid into the inner wall member and thus is precluded from precipitating waters of condensation thereon, such insulating chamber attenuating upwardly toward the mouth of the glass, said body being provided with a self-sustaining base and the insulating chamber being substantially co-extensive with the side and bottom portions of the inner wall member to prevent the cooling of the adjacent portions of the outer wall member to a moisture condensing temperature.

6. A non-sweating drinking glass comprising a unitary glass body having inner and outer wall members hermetically sealing a rarefied air space therebetween for preventing the chilling of the outer surface of the glass when the inner wall contains a cold liquid whereby waters of condensation are prevented from accumulating on the outer surface of the glass, said glass body having its bottom portion shaped for self-support, said space being substantially co-extensive with the surface area of the inner wall member, the upper edge portion of the glass body being
120 attenuated to a thin drinking lip and said space terminating short of such drinking lip.

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