R. GORTON.

DRINKING CUP.

APPLICATION FILED NOV. 28, 1913.

1,171,431.

Patented Feb. 15, 1916.

2 SHEETS—SHEET 1.

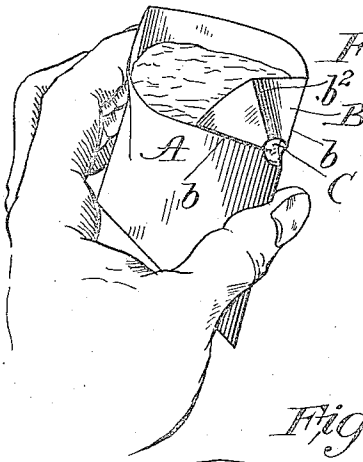


Fig. 1.

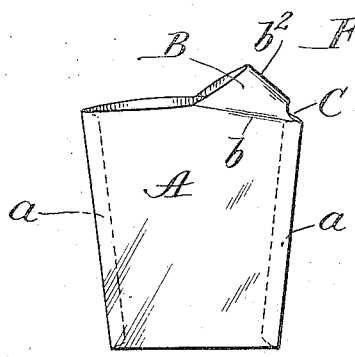


Fig. 2.

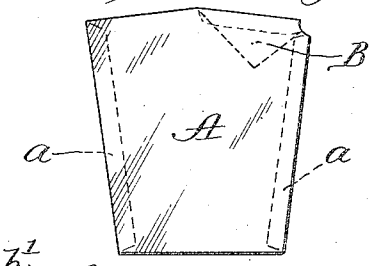


Fig. 3.

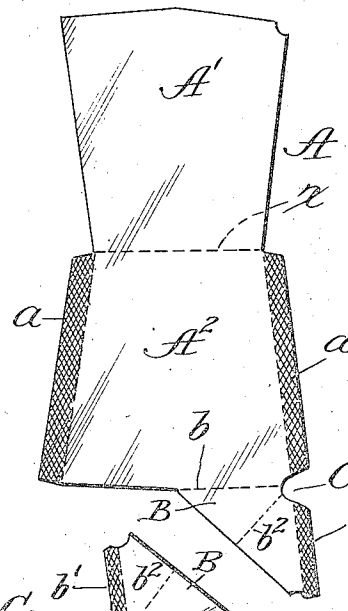


Fig. 4.

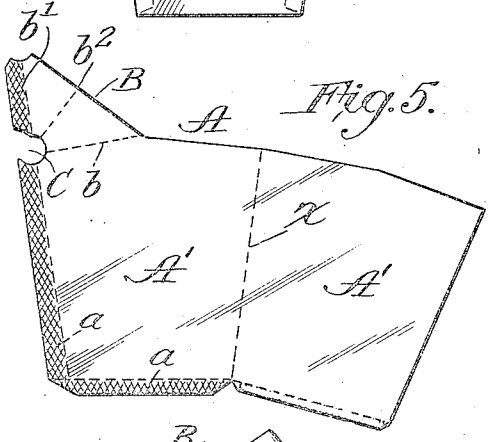


Fig. 5.

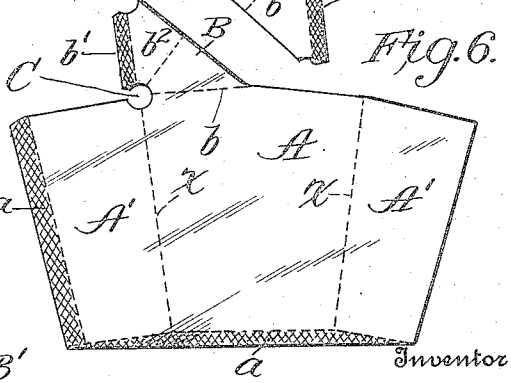


Fig. 6.

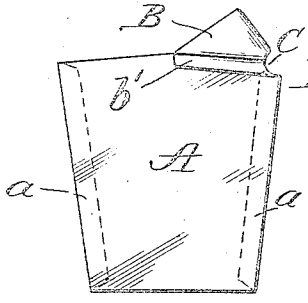


Fig. 7.

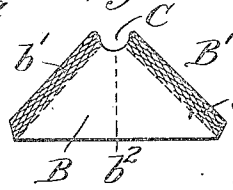


Fig. 8.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 9.

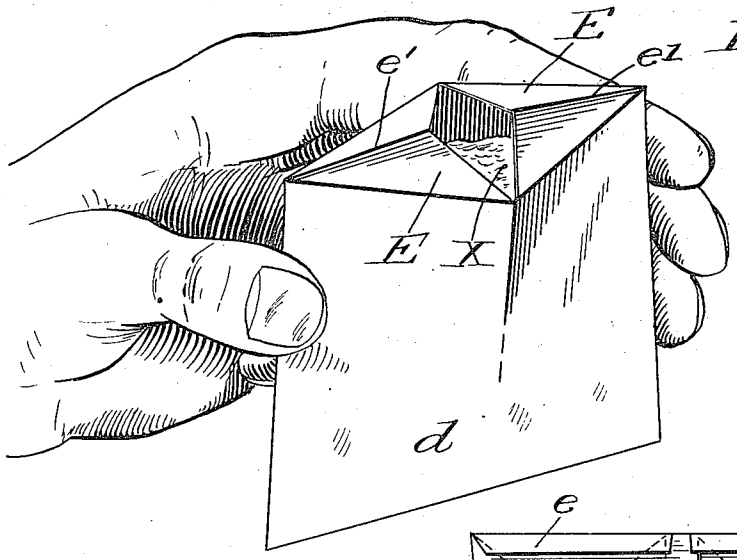


Fig. 10.

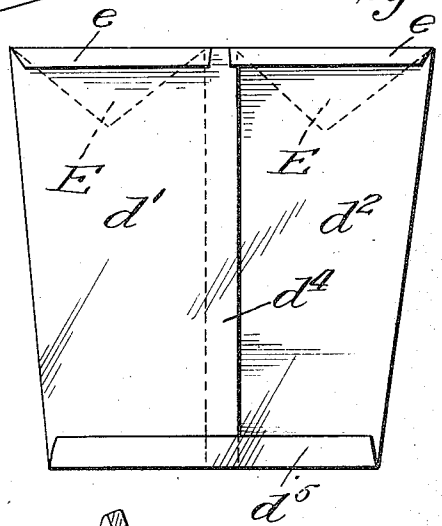


Fig. 11.

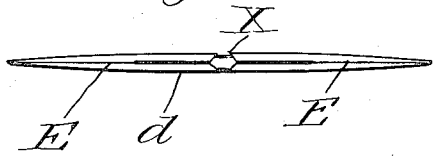
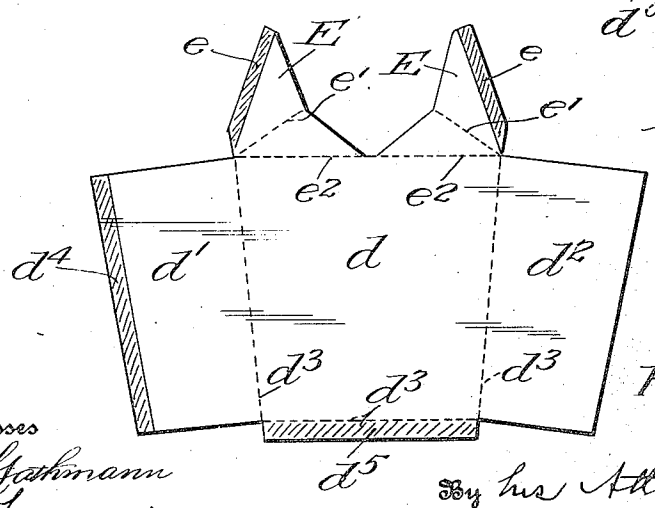


Fig. 12.



Witnesses

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UNITED STATES PATENT OFFICE.

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DRINKING-CUP.

1,171,431. Specification of Letters Patent. Patented Feb. 15, 1916.

Application filed November 28, 1913. Serial No. 803,576.

To all whom it may concern:

Be it known that I, ROBERT GORTON, a citizen of the United States, residing in West Newton, county of Middlesex, and State of Massachusetts, have invented certain new and useful Improvements in Drinking-Cups, of which the following is a specification.

My invention relates to that class of drinking vessels known as "sanitary drinking cups" which are usually made of paper or similar flexible material and are designed to be used only once or only by the same person. Such cups may be very cheaply made, are light and can be easily packed, stacked and stored and a very large number of them may be contained in a small space. Many cups of this class are so made that they can collapse or are normally collapsed for convenience of packing, stacking, or storing, and my invention relates particularly to cups of this kind. In such cups as heretofore made when in use the sharp edge of the cup, usually of paper, comes against the lips with danger of cutting or scratching, and when distended and filled, the part which is applied to the mouth of the drinker is quite narrow and often the contents of the cup is spilled in the act of drinking so as to wet the face of the drinker instead of properly passing into the mouth.

The object of my invention is to provide means for preventing injury or discomfort to the lips or mouth and the liquid from wasting or spilling in this way.

In carrying out my invention I may employ paper cups of any usual or desired kind and I apply to such a cup a guard so constructed and arranged that it will prevent water or other liquid from spilling from the cup when it is applied to the mouth, and will also prevent injury or discomfort thereto.

My invention is most useful when applied to collapsible drinking cups, made of paper or similar material, in which the two sides of the cup are normally flat and in close contact with each other, but which, when held in the hand by its opposite edges may be distended to receive the liquid. Cups of this kind are particularly subject to the objections above mentioned, *i. e.*, when they are distended the part of the cup which receives the lips or which is placed next the mouth is sharp and uncomfortable and relatively narrow and the liquid is apt to spill. To cups of this kind I apply a guard which prevents injury to the mouth and the spilling of the liquid.

In one form of my invention the guard or the body of the cup near its upper edge is formed with an exit opening for the liquid, or such opening may be formed partly in the guard and partly in the body of the cup. The guard is made collapsible so that it may be folded into a flat condition either inside the cup or outside thereof and the arrangement is such that when the cup is distended the guard automatically assumes a position which will prevent scratching or cutting and also the waste of liquid.

In another form of the invention I employ two guards which, when the cup is opened or distended, form a cover open at its middle portion only, thus providing a filling and drinking opening which is guarded to prevent cutting, scratching or spilling.

In the accompanying drawings I have illustrated some ways in which my invention may be used.

Figure 1 is a perspective view showing a drinking cup of ordinary construction with my guard applied. Fig. 2 is a perspective view of the cup shown in Fig. 1 showing how the blank is folded and cemented. Fig. 3 is a side elevation of the cup shown in Figs. 1 and 2 indicating how the guard may be folded and arranged within the cup when the latter is collapsed. Fig. 4 is a plan of a blank from which the cup shown in Figs. 1, 2 and 3 may be made. Fig. 5 shows a plan of another form of blank which may be used. Fig. 6 illustrates still another blank which may be employed. Fig. 7 shows a modification in which the guard is made of a separate piece and attached to the cup. Fig. 8 is a plan view of the guard shown in Fig. 7. Fig. 9 is a perspective view of a modified form of the invention. Fig. 10 shows a side elevation thereof. Fig. 11 is a top plan view of the same, and Fig. 12 is a plan view of the blank from which said cup is made.

The cup A, shown in Figs. 1 to 4 inclusive may be made from a blank such as indicated in Fig. 4. As there shown the body of the cup is made of two parts A′ and A^2. The part A^2 has paste-carrying portions *a* which may be attached to the part A′ in the usual manner, the blank being bent on the line *x* as usual. The part A^2 of the cup is formed

in one piece with an extension B from which the guard is formed. The blank is creased or scored at b and at b^2 and paste is applied at b'. A recess is formed at C which provides a pouring opening in the finished cup. If the blank be bent at x and the parts a are bent around the blank member A′ and secured in the usual manner, or as indicated in Figs. 2 and 3, the body of the cup will be produced. The paste-carrying portion b' of the blank is then attached to the portion A′ of the cup and when so attached the cup will be complete as indicated in Figs. 1, 2 and 3. The guard is collapsible, that is, it may be folded on the line b^2 so that when the cup is collapsed the guard will be contained within the cup between the parts A′, A^2, as indicated in Fig. 3. When the cup is distended, by holding it in the hand and pressing with the thumb and fingers, as indicated in Fig. 1, the guard will automatically rise to a horizontal position, and when the cup is filled with liquid the guard will remain in this position or will rise slightly as indicated in Figs. 1 and 2. The liquid passes from the orifice C when the cup is tilted. All the liquid will enter the mouth of the drinker and there is no possibility of waste and the scratching or cutting of the lips is prevented.

There are various ways in which the cup with the guard may be made from blanks of various shapes.

In Fig. 5 the blanks are of the shape shown and are provided with paste-carrying portions a and they are divided by a creased line x. The guard B is creased at b and b^2 and carries paste at b'. This blank may be folded in an obvious manner to produce a cup with a guard of the character before described, a pouring opening being provided at C.

Fig. 6 shows another form of blank similar in principle to those before described and as the manner of folding is obvious no further description is required.

In the forms of cup heretofore referred to, the guard B is made from the blank forming part of the blank for the body of the cup, but the guard may be made separately as indicated in Fig. 8 being, as there shown, of triangular form having a recess C to form part of the pouring opening and being provided with paste-carrying portions b' which may be applied to the cup in the manner indicated in Fig. 7.

I preferably fold the guard within the cup when the latter is not in use, so as to keep it clean, in the manner indicated in Fig. 3, but the guard may be distended or projected outward in the manner indicated in Fig. 7, thus providing a tab, handle or finger-piece which may be used for withdrawing the cups individually from a package.

In Figs. 9, 10, 11 and 12, I have shown a modification in which two guards are used and the drinking opening C shown in the remaining figures of the drawings is omitted. In this case the guards form a cup cover which is open only at its middle portion X. The liquid may be poured from either side of the cup, but no sharp edges are presented and danger of spilling is avoided.

A cup of this kind may be made in various ways, but preferably from a blank of the kind shown in Fig. 12 which comprises a body blank d, d', d^2 creased at d^3 and carrying paste at d^4, d^5. The middle blank d carries extensions E, E, provided with paste at e and being creased at e', e^2. This blank may be folded and the parts secured together in the manner indicated in Fig. 10. Normally the guards are folded and contained within the cup, as indicated by dotted lines, but when the cup is grasped in the manner shown in Fig. 9 and pressure is applied by the thumb and fingers the guards will rise into position for use.

I claim as my invention:—

1. A collapsible drinking cup open at the top for filling and having a relatively small or restricted delivery opening and provided with a collapsible lip guard bridging the cup from one side thereof to the other at one corner of the cup and to one side of its filling opening.

2. A drinking cup open at the top for filling and having a relatively small or restricted delivery opening near one corner thereof at the top and a collapsible lip guard bridging the cup from one side thereof to the other at one corner of the cup and on one side of its filling opening.

3. A collapsible drinking cup open at the top for filling and having a relatively small or restricted delivery opening and with its body portion provided with vertical edges about which the sides of the cup open and close to an equal extent, and a lip guard for said delivery opening united with the side edges of the cup near one corner thereof and extending therefrom toward the middle portion of the cup and covering only that portion of the filling opening between the delivery opening and the middle portion of the cup.

4. A collapsible drinking cup open at the top for filling and having a relatively small or restricted delivery orifice at one corner of the cup, and a collapsible lip guard bridging the cup from one side thereof to the other at one corner of the cup and on one side of its filling opening, said lip guard being of general triangular shape having its apex at one corner of the cup and its free edge, which is relatively wide and forms the base of the triangle, bridges the filling opening at one side thereof.

5. A sanitary drinking cup formed from a single piece of stock the open top of which

cup has extended thereacross to bridge the cup faces at a cup corner, a narrow strip constituting a mouthpiece the ends of which strip are secured to said cup faces so as to cover the cup rim at said places of attachment which strip thus secured partially closes the cup top, said cup rim and a free edge of said strip being coöperatively shaped and assembled with respect to one another to provide a restricted pouring opening.

6. A sanitary drinking cup formed from a single piece of stock the open top of which cup has extended thereacrosss to bridge the cup faces at a cup corner, a notched narrow strip constituting a mouthpiece the ends of which strip are secured to said cup faces so as to cover the cup rim at said places of attachment which strip thus secured partially closes the cup top, the notched portion of said strip being coöperatively assembled with respect to said cup corner to provide a restricted pouring opening.

7. A sanitary drinking up formed from a single blank folded upon itself substantially midway of its length to form a pair of opposing sides, of which one of said sides has projected from certain of its edges, flaps to fold over upon and be adhesively secured to corresponding edges of the other side, and of which one of said sides has projected from its remaining free edge at an angle thereto, a narrow strip, one edge of which is notched adjacent the juncture point of said side and strip, a part of which strip is adapted to be folded over upon and adhesively secured to the other cup side to provide a mouth piece having a restricted pouring opening therein.

In testimony whereof, I have hereunto subscribed my name.

ROBERT GORTON.

Witnesses:
A. W. BELCHER,
GEORGE B. GLIDDEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."