May 8, 1951 W. E. AMBERG 2,552,474

CONICAL PAPER DISH AND BLANK THEREFOR

Filed Oct. 29, 1947

Fig. 1

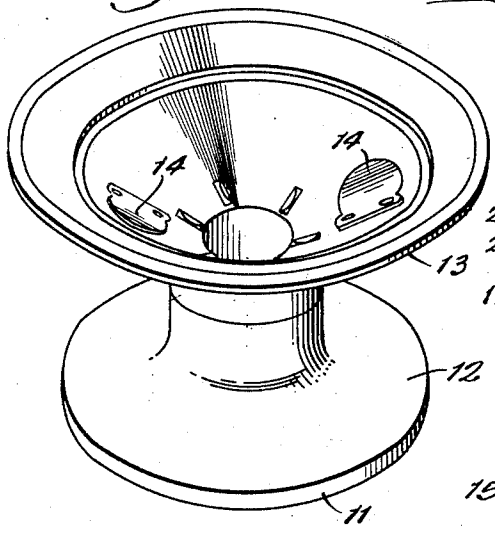


Fig. 2

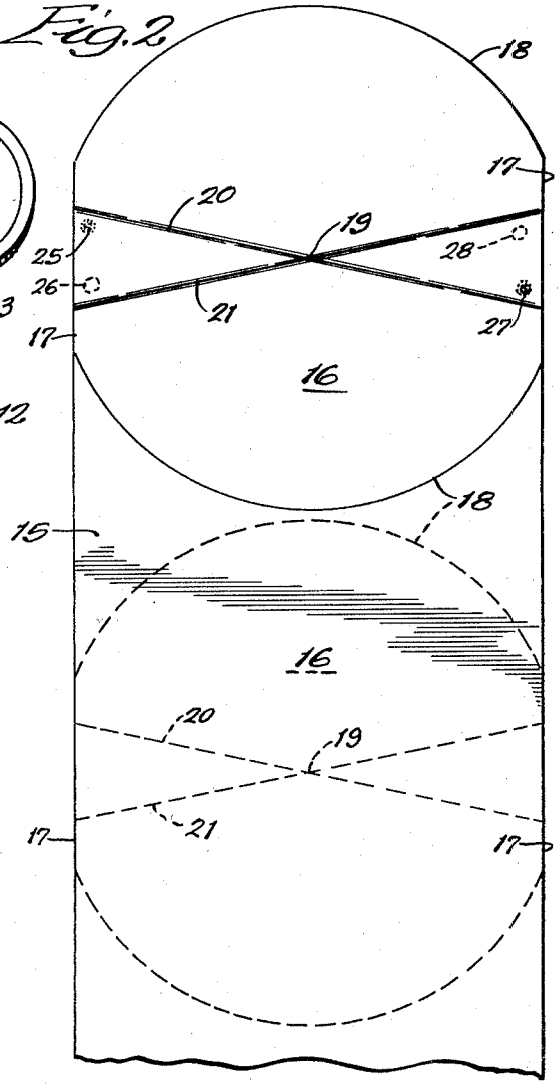


Fig. 3

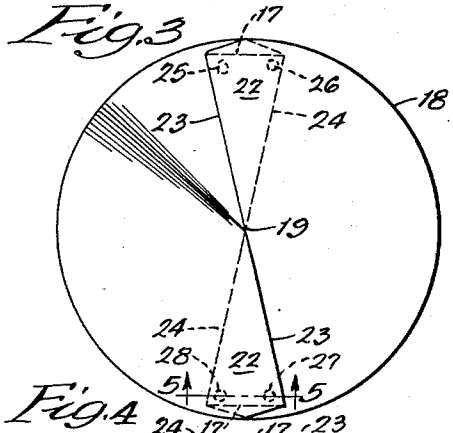


Fig. 4

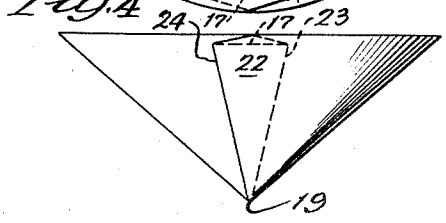
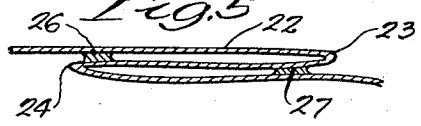


Fig. 5



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CONICAL PAPER DISH AND BLANK THEREFOR

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2 Claims. (Cl. 229—1.5)

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This invention relates to conical paper dishes and the blanks from which they are formed.

An object of the invention is to provide a conical paper dish of the kind familiarly used at soda fountains for the service of ice cream portions, formed from a flat blank and so shaped as to substantially reduce the amount of paper required for the formation of the dish.

Another object of the invention is to provide a conical paper dish with a circular lip but which is formed from a non-circular blank.

Another object of the invention is to provide a shallow dish of this type with flaps or plaits protruding from the under edge of the dish to engage fingers or grippers in a bowl of the conventional paper dish holder.

Another object of the invention is to provide a conical paper dish with the flaps secured to the dish body to facilitate the handling of the dishes after their formation and their insertion into the dish holders.

These and other features of the invention will be seen from the following detailed specification read in connection with the accompanying drawings forming part thereof and in which—

Fig. 1 is a perspective view of a holder for a conical paper dish designed to receive the dish of this invention;

Fig. 2 is a strip of paper from which the blanks of this invention are cut showing one complete blank and indicating in broken lines the pattern of the succeeding blank upon the strip;

Fig. 3 is a plan view of a dish incorporating this invention and formed from the blank;

Fig. 4 is an elevation of the dish shown in Fig. 3; and

Fig. 5 is a fragmentary section of the dish shown in Fig. 3, taken on the line 5–5.

Referring to the drawings, a dish holder designed to receive the conical paper dish of this invention is designated by the numeral 11. The holder is formed from suitable material and comprises a base 12 and a flat conical bowl 13. Within the bowl are the fingers or grippers 14 designed to retain the paper dish within the holder.

The numeral 15 indicates a strip of paper from which the blanks 16 of this invention are cut. The paper may be provided in sheets or rolls, depending upon the mechanism employed to cut the blanks.

As shown in Fig. 2, the blank 16 cut from the strip 15 is non-circular in form. The blank has the two opposed parallel straight edges 17 which are the edges of the blank from which the strip

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is cut and the two convex circular edges 18 which have the common center 19 and are of equal radius.

The straight edges 17 form equal chords of the circle generated upon the center 19 with the radius of the two circular edges 18. The use of a blank of this form permits the elimination of substantial waste in the cutting of the blanks as there is a saving not only of the portion of a circular blank which would extend beyond the straight edges 17 but all of the trim lying between successive blanks beyond those edges.

The blank 16 is formed into a conical paper dish by two creases 20 and 21 which extend across the full width of the blank and intersect at the center 19. The crease 20 is made by bending the blank downwardly along the line of the crease while the crease 21 is formed by bending the blank in the other direction along the line of the crease. These creases thus form two plaits 22, each in the form of an isosceles triangle with the apex at the center 19 and the base in the middle of the straight edge 17. When the blank is shaped for most efficient utilization of the paper, the base of the triangular plait 22 will be substantially one-half of the length of the straight edge 17.

The creasing and formation of the plait 22 will form two free edges 23 of the plait within the dish and two free edges 24 without the dish, as best indicated by the sectional view of the plait in Fig. 5. In order to facilitate handling of the dishes after their formation, both in the packaging of the dishes and in their utilization, the plaits are preferably secured to the dish body by means of the four areas of adhesive 25, 26, 27 and 28, which are placed adjacent the intersection of the creases 20 and 21 with the straight edges 17 of the blank. As only four areas of adhesive are applied, two of these are applied to the inner face of the blank and two to the outer face adjacent the straight edge 17 and that crease which forms the free edge of the blank upon the completion of the formation of the dish. Thus, as shown in Fig. 2, the crease 20 is to form the free edge on the inner face of the dish, and adhesive areas 25 and 27 will be applied at the intersection of the straight edges 17 and the crease 20, while the adhesive areas 26 and 28 on the other face of the dish blank will be applied adjacent the intersection of the straight edges with the crease 21. In this manner both free edges of the plait are secured to the blank body.

The application of the adhesive may be made in any conventional manner for the gluing of

paper cups and paper dishes and the adhesive may be any of the well known adhesives employed for that purpose.

With the dishes formed as described they are easily stacked into columns and may be fitted into the dish holder 11 by turning the blank within the bowl of the dish so that the free edges of the plaits are engaged by the fingers or grippers 14. If the cups are stacked in columns with the open mouth of the cup facing downwardly and the conical tip upwardly the dish holder 11 may be inverted and turned until the fingers 14 engage the free edges of the plait and the paper dish thus lifted from the stack.

Having thus shown and described one embodiment of the invention, it is to be understood that it is capable of many modifications. Changes, therefore, in the construction and arrangement may be made without departing from the spirit and scope of the invention as disclosed in the appended claims, in which it is intended to claim all novelty inherent in the invention as broadly as permissible, in view of the prior art.

I claim:

1. A blank for a conical paper dish having two diametrically opposed and equal curved convex edges having the same radius and center, and two diametrically opposed and equal parallel straight edges forming chords of a circle of the same radius as the convex curved edges generated from the same center, said blank having two crease lines extending inwardly from the straight edges and intersecting at said center.

2. A conical paper dish formed from a blank having two diametrically opposed and equal curved convex edges having the same radius and center and two diametrically opposed and equal parallel straight edges forming chords of a circle of the same radius as the convex curved edges generated from the same center, and plaited with two opposed triangular plaits, each plait having its apex at said same center and its base in the middle of the straight edge and equal to substantially one-half the length thereof.

WALTER E. AMBERG.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
1,015,085	Salstrom	Jan. 16, 1912
1,134,916	Sharon	Apr. 6, 1915
1,446,014	Lodge	Feb. 26, 1923
1,476,298	Green	Dec. 4, 1923
1,800,534	Jannings	Apr. 14, 1931
2,027,802	Wood	Jan. 14, 1936