March 30, 1937. M. NIEMI 2,075,049

PAPER CUP

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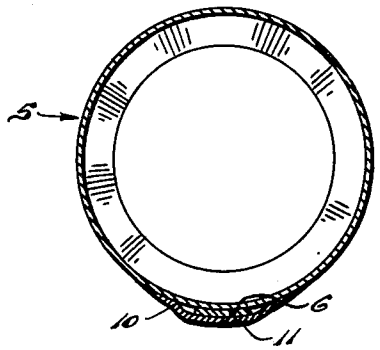


Fig. 3.

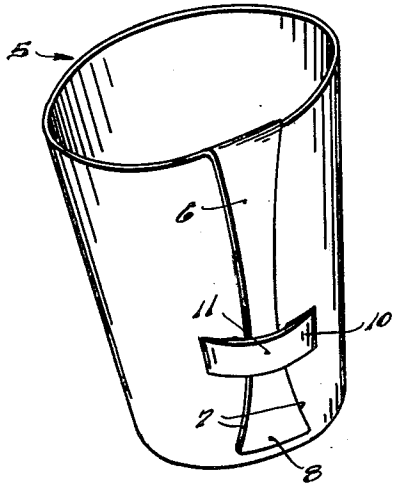


Fig. 1.

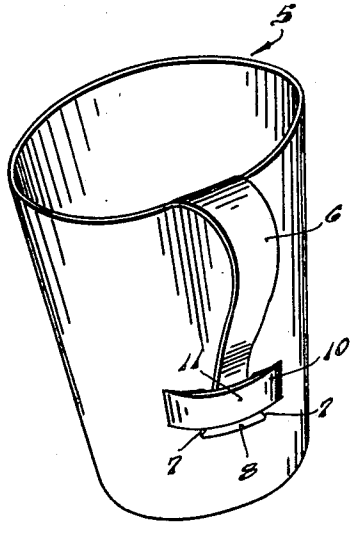


Fig. 2.

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PAPER CUP

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11 Claims. (Cl. 229—52)

This invention relates to paper drinking cups of the character produced by molding a container from paper pulp or pressing the same from paper parchment or other like or suitable material and particularly has reference to the provision of a handle for such class of article.

The object of the invention is to provide a perfected handle, the simplicity of construction, peculiar adaptability to a nesting of one cup within another, and the rigidity of the handle in use rendering the arrangement especially advantageous over prior developments directed to a similar end.

The invention consists in the novel construction, adaptation, and arrangement of parts hereinafter described and claimed.

In the drawing:

Figures 1 and 2 indicate, in perspective, the now preferred embodiment of the invention, the views being respectively taken with the handle in its collapsed and extended positions; and

Fig. 3 is a horizontal section taken through the supporting strap by means of which the free end of the handle-forming member is connected to the cup.

Having reference to the drawing, the cup which I illustrate generally by the numeral 5 is or may be conventional, excepting only that I form the same with a relatively narrow longitudinal extension 6 preferably formed as an integral part of the material of the cup, said extension being relatively flexible and desirably of a length approximating the height of the cup with the lateral edges 7 in proximity of the free end 8 diverging outwardly in forming the end somewhat to the shape of a swallow tail.

Said extension operates as the handle for the cup and, as indicated in Fig. 1, is returned upon itself in proximity of the upper edge of the cup to extend parallel with the cup side in what I refer to as the normal collapsed position of the same. In retaining said handle relative to the cup, a horizontal strap such as 10 is used, said strap being located in proximity of the base of the cup but spaced above the same with its opposite ends cemented to the cup sides in the formation of a bridge portion 11 through which the free end of the handle-forming extension is received. Said bridge portion, more particularly, is located in spaced relation above the extremity of the extension 6 with the width of the opening being less than the cross-sectional area of said extremity to prevent the latter being drawn through the bridge.

In the use of the cup, the handle is formed by drawing the extension 6 upwardly through the bridge portion of the strap 10, the diverging lateral edges at the extreme end of the extension wedging into the bridge opening to provide a yieldable grip on the lower end of the handle to afford a relatively rigid connection between the handle and the cup. The cups, where the same are produced from sufficiently permanent material such as paper parchment, may be washed and re-used. With the handles restored to their inoperative position, a plurality of the cups may be readily nested, one within another, for packing.

I represent the strap 10 as extending about a relatively minor portion only of the cup sides. For re-inforcing purposes in preventing the strap from becoming dislodged under stress, the same may extend about the entire circumference of the cup in the form of a collar. Staples can be utilized in place of cement to secure the strap, such being impractical, however, with the more commonly used wax-paper cup by reason of the tendency of the latter to tear.

The invention and the use of the same is believed clear from the foregoing. It is my intention that the invention be limited only within the scope of the hereto annexed claims.

What I claim, is:—

1. A paper cup of the character described having a relatively narrow extension formed as an integral part of the cup material and projecting from the rim of the same, and, in spaced relation below the point of connection of the extension, providing a transverse strap cemented at its opposite ends to the cup side to provide a medial bridge portion located in the approximate vertical plane of the extension, said extension being bent in proximity of its point of connection and engaged through the bridge portion of the strap to normally retain the extension in contiguous relation as respects the side of the cup, the strap accommodating slide movement of the extension within the bridge portion for drawing the extension upwardly in providing a handle-forming loop between the strap and the upper connected end of the extension.

2. A paper cup of the character described providing a handle-forming strip, the upper end of which is fast to the cup in proximity of the rim of the same, and means operating to engage the free end of said strip in normally retaining the strip in contiguous relation as respects the side of the cup with an accommodation to a slide movement of the same upwardly in providing a handle-forming loop, said means comprising a

transversely extending bridge-forming band overlying the strip and secured at its opposite ends to the side of the cup.

3. A cup of the character described providing a flexible strip member having one end fast to the upper portion of the cup with the free end projecting downwardly to terminate in proximity of the base portion of the cup, and means secured to the cup in spaced relation below the upper secured end of the strip for slidably engaging the free end of the strip in normally retaining the strip in contiguous relation as respects the side of the cup, said means accommodating a looping of the strip between the upper fast end of the same and the slide connection therebelow to form a handle for the cup between said upper and lower points of connection of the strip.

4. In a cup of the character described, the combinattion with the cup, and a bridge-forming band secured over the side of the cup, a strip member having one end fast to the cup with its other end extending through the bridge portion of the band to accommodate a slide movement of the strip through the band in drawing the strip from a normal contiguous relation as respects the side of the cup to a looped handle-forming position spaced therefrom, the lateral edges of said strip member adjacent the extremity of its free end diverging outwardly to provide a wedge action between the same and the side walls of the bridge portion responsive to slide withdrawal of the strip member through the band, said wedge action affording a yieldable grip for securing the free end of the strip relative to the band in the looped handle-forming position of the strip.

5. In a cup of the character described, in combination with the cup, a horizontally disposed bridge-forming band carried by the cup to position the same at the approximate mid-height of the cup, and handle-forming means comprising a flexible strip member having one end secured to the cup in spaced relation above the band and adapted for movement in a vertical plane from a normal contiguous relation as respects the side of the cup to a looped disposition projecting outwardly from the cup, said strip member having its free end extending through the bridge portion of the band for slidably supporting the strip member relative to the cup.

6. The structure as defined in claim 5, wherein the lateral edges of the strip diverge outwardly from the bridge-forming band to provide a relative wedge action between the strip and the side walls of the bridge portion responsive to slide movement of the strip through the bridge portion from the normal contiguous to the looped handle-forming positions of the strip.

7. In a cup of the character described, the combination with the cup, and a strip member having connection at one end with the cup adapted for movement from a normal contiguous relation overlying the side of the cup to a handle-forming loop spaced therefrom, means carried by the cup for slidably supporting said strip member relative to the cup, said last-named means providing a bridge-forming portion arranged to receive the strip member between the bridge and the side of the cup.

8. A handle for a cup of the character described which comprises, in combination with a flexible strip one end of which is adapted to be attached to the cup in proximity of the lip portion of the cup, means adapted to be carried by the cup at the approximate mid-height of the latter and slidably receiving the other end of the strip to allow the strip to be drawn from a normal contiguous position as respects the side of the cup to a looped handle-forming position extending outwardly between the two points of connection.

9. A collapsible handle for a cup which comprises a flexible strip adapted to lie relatively vertically of the cup side and having its upper end attached to the cup in proximity of the lip of the cup, and cup-carried means supporting the lower end of the strip for vertical movement to allow the strip to be drawn upwardly for looping the same outwardly, said means being arranged to maintain the lower end of the strip relatively contiguous with the side of the cup.

10. A handle for a cup of the character described comprising a flexible strip disposed to lie approximately vertically along the side of the cup, and means carried by the cup to form a horizontal bridge between which and the side of the cup the strip is slidably received to accommodate movement of the strip in a vertical plane from a normal contiguous position as respects the cup side to a looped handle-forming position in which the body proper of the strip extends outwardly from the cup side.

11. A handle for a cup of the character described which comprises a flexible strip disposed to lie in an approximate vertical plane and having connection as between each of the two ends of the same and the cup to allow the body proper of the strip to loop outwardly between the two points of connection, one of said connections comprising a bridge-forming strap disposed in spaced relation from the other connection with the distance therebetween being less than the length of the strip, said strap slidably receiving the strip between the bridge and the side of the cup and acting to allow the body proper of the strip to be drawn from a contiguous position as respects the cup side to the looped handle-forming position.

MATTI NIEMI.