June 28, 1932. A. J. LACKNER 1,864,836

PAPER RECEPTACLE

Filed Sept. 9, 1929

Fig. 1.

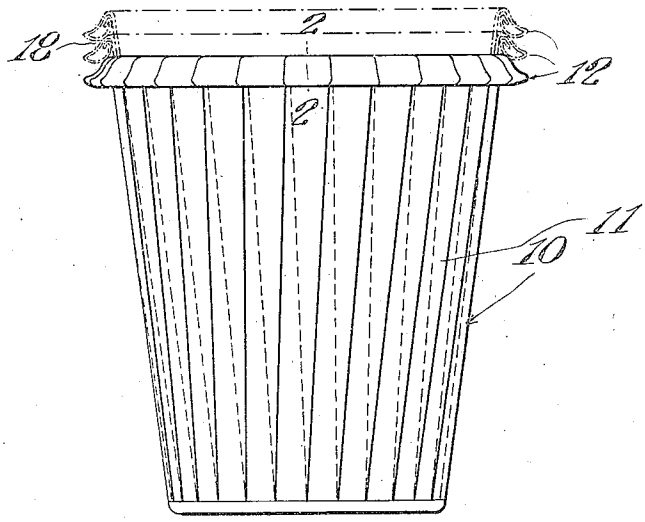


Fig. 4.

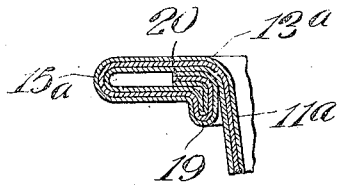


Fig. 2.

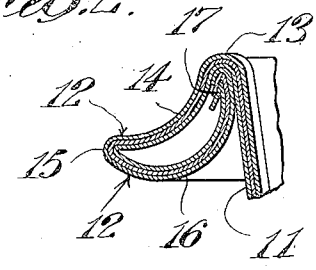
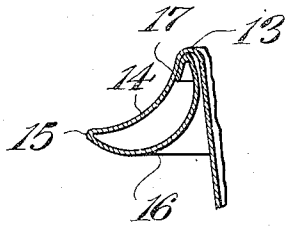


Fig. 3.



INVENTOR
Alexander J. Lackner
BY
Townsend & Decker
ATTORNEY

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UNITED STATES PATENT OFFICE

ALEXANDER J. LACKNER, OF WHITESTONE, NEW YORK

PAPER RECEPTACLE

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This invention relates to improvements in paper receptacles.

It is a primary object of the invention to provide a paper receptacle formed with plaited sides and having a reinforcing rim at its upper edge which will hold the cup more firmly in shape.

It is a further object to provide in such a cup a bead or flange at the upper edge by means of which the cups will be properly spaced for use in dispensers and the like.

The above and other objects will appear more fully from the following description when considered in connection with the drawing, in which:

Fig. 1 is an elevational view of a cup formed according to my invention.

Fig. 2 is a sectional view taken substantially on the line 2—2 of Fig. 1.

Fig. 3 is a similar view taken on the line 3—3 of Fig. 1.

Fig. 4 is a sectional view similar to Fig. 2 showing a modification of my invention.

Referring to the details of the drawing, the cup 10 is shown as formed from one piece of material having a bottom terminating in plaited sides 11 which continue to and form the upper reinforcing bead or rim flange 12.

The flange 12 includes an upper edge 13 and a downwardly and outwardly curved surface 14 with an outer projecting edge 15. The material of which the cup is formed continues in a lower layer 16 of the flange up to the cup body 10. In case it is desired to give greater thickness to the flange 14, 15, 16, the terminal ends of the thicknesses of paper may be bent downwardly as indicated at 17 although this is not essential.

In the formation of the rim flange disclosed the same may first be formed into a circular configuration and then flattened down by means of suitable dies into the form shown in the drawing, or else the cup may be folded directly into the shape shown. Either method has been found practicable with my invention.

In Fig. 4 I have shown a modification of my invention having the advantages of the first form of the invention. The cup shown in Fig. 4 is closely bent to form a rim flange substantially solid adjacent the cup and solid or hollow in its outer portion.

As shown the upper edge of the cup body 11*a* includes a bend 13*a* from which the material of the cup extends substantially at right angles to the axis of the cup outwardly to the projecting bead 15*a*. The material of the cup extends inwardly toward the cup from the bead 15*a* to the shouldered portion 19 which is in engagement with the cup body, the material terminating at this point or extending upwardly and outwardly between the layers forming the upper and lower right-angular surfaces as shown at 20. It will be understood that the terminal portions 20 may extend to a greater or less extent between the said upper and lower layers forming the rim flange and that the portions 20 may be terminated at any point between the cup body and the inside surface of the curve 15*a*.

The construction shown in Fig. 4 maintains the cup rigidly in shape and provides the projecting bead and positive spacing of the nested cups as in the first form of the invention.

It will be seen that a cup formed as described above has a substantial reenforcing rim at its upper edge which serves to hold the plaits of the cup in position and, due to the projecting character of the edge 15 of the flange, the cup body is relatively rigid. Furthermore, with the construction as disclosed, the beads or rim flanges on the cup serve to maintain the cups spaced where the same are placed in nested relation, as shown for example in dotted lines at 18, thus exposing the projecting flanges 15 so that they may be readily dispensed without confusion or failure of operation in the dispensing machines customarily employed.

Having now described my invention, I claim:

1. A paper cup formed with plaited sides terminating in an upper reinforcing rim flange, said flange including two layers curved about centers above the said flange and outwardly of the inner edge thereof, said layers being joined by an outwardly projecting bead.

2. A paper cup formed of one piece of ma-

terial including a bottom, plaited sides and an upper reinforcing rim flange, said flange being formed by bending the material of said cup outwardly at the upper edge of the cup, curving the same downwardly and then outwardly to form an outer projecting bead, bending the same inwardly and curving the same upwardly in spaced relation to said first named curved material to a position adjacent the cup body.

3. A paper cup formed with plaited and overlapping sides terminating in an upper reinforcing flange integral with said cup body, said flange including upper and lower layers extending in planes substantially at right angles to the axis of the cup and forming at their outer joined edges a projecting bead spaced from the cup body, said flange including a lower downwardly projecting bead formed integrally with said cup and flange and positioned beneath said right-angularly extending portions and positioned adjacent the body of said cup.

4. A paper cup formed with plaited sides terminating in an upper reinforcing flange, said flange being formed as a continuation of the material of said cup and extending outwardly from said cup body and then inwardly to a position to contact with said cup body and then upwardly and outwardly to position the terminal portion of the material of said cup between said outwardly and inwardly extending portions of said flange.

Signed at New York in the county of New York and State of New York this 6th day of September, A. D. 1929.

ALEXANDER J. LACKNER.