July 9, 1957 P. H. WACHTER 2,798,637

LINER AND REFUSE RECEPTACLE

Filed April 12, 1955

FIG. 1.

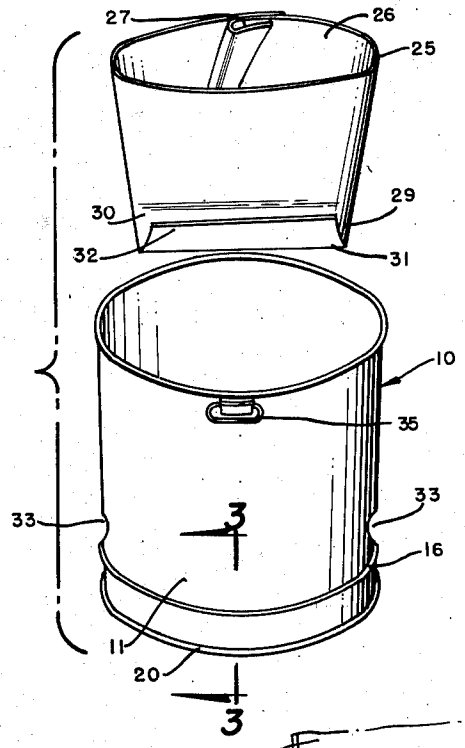


FIG. 2.

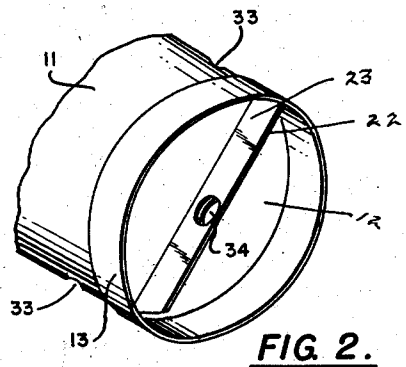
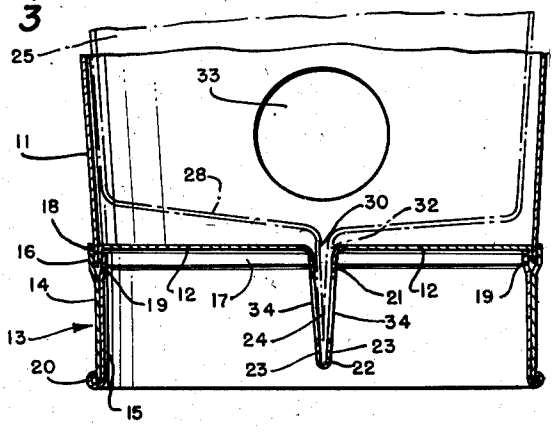


FIG. 3.



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LINER AND REFUSE RECEPTACLE

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4 Claims. (Cl. 220—65)

The present invention relates to liners for receptacles and, more particularly, to a new and improved removable liner formed from folded sheets of waste paper, such as newspapers and the like.

Heretofore liners for receptacles such as garbage cans have been made from papers of various polygonal shapes or in the form of paper bags of different sizes, and at considerable expense. Accordingly, an important object of the present invention is to provide a sanitary paper liner or refuse holder for receptacles, made from one or more sheets of old newspapers and the like at a minimum expenditure of time, effort and cost.

A further object consists in providing a refuse receptacle such as a garbage can or pail with a bottom which is raised a limited distance above the lower end of the receptacle, and has a transverse centrally disposed slot or vent for receiving the lower end of the folded paper liner. Preferably, a substantially V-shaped depending member is connected to the underside of the bottom of the receptacle so as to form a recess communicating with the slot and which is arranged to receive the lower folded end of the liner. The paper liner formed from at least one sheet of old newspapers is initially folded to conform in size and shape to the inner wall of the receptacle and has its lower end shaped to provide a depending folded closed tapered portion which terminates in a transverse centrally disposed retaining rib which is insertable into the recess in the bottom of the receptacle so as to be anchored therein. The tapered arms of the V-shaped member are arranged to frictionally engage the depending central rib on the lower end of the liner with a wedging action so as to releasably maintain the liner in a fixed position. In order to facilitate the easy insertion of the preformed paper liner into the receptacle and the depending central rib into the recess in the bottom of the receptacle, means in the form of finger openings are provided.

Other objects and advantages of the invention will become apparent from the following description when taken in conjunction with the accompanying claims and drawings.

Referring to the drawings in which is shown a preferred embodiment the invention may assume:

Figure 1 is a side view of a receptacle constructed in accordance with the present invention and showing a folded paper liner above the receptacle prior to insertion of the same into the receptacle;

Figure 2 is a perspective view of the bottom of the receptacle shown in Figure 1; and

Figure 3 is an enlarged sectional view taken substantially along the line 3—3 of Figure 1.

Referring to the drawings, 10 indicates a refuse receptacle, such a garbage can or pail, which may be of any suitable durable material, such as galvanized metal and of any desired size and shape. As shown, the body 11 is of cylindrical configuration and has a raised disc-shaped bottom 12 spaced above the lower end of the receptacle preferably by the provision of a cylindrical depending extension 13 formed of an outer annular member 14 and an inner annular member 15 (Fig. 3). The upper ends of the members 14 and 15 terminate in spaced flanges 16 and 17 between which is inserted the lower end 18 of the body of the receptacle 11 and the depending annular flange 19 formed on the outer periphery of the bottom 12. The flanges 16 and 17 may then be pressed or crimped so as to clamp the end 18 and the flange 19 thereto in a fixed position. The lower ends of the members 14 and 15 may be bent to form an annular ground-engaging reinforcing bead 20.

The bottom 12 is provided centrally with a transverse slot 21 substantially the same length as the width of the receptacle 10. A substantially V-shaped depending member 22 registers with the slot 21 and is of the same width. The member 22 extends downwardly from the raised bottom 12 to a point short of the lower end of the receptacle so as to coact with the slot 21 to provide a transverse recess 24 for releasably receiving the folded lower end of the liner 25 for the purpose and in the manner as subsequently to be described.

The paper liner 25 may be made of one or more sheets of old newspaper and is initially folded to substantially the same size and shape as the interior of the receptacle 10 so as to form an open mouth or top 26. The opposed overlapping sides of the newspaper sheets may be folded or bent to provide a connection as at 27 (Fig. 1). The lower end portion of the paper is then drawn inwardly towards the center as at 28 (Fig. 3) and the opposed sides pressed together as at 29 to form a centrally disposed depending end portion 30 which is folded transversely as at 31 to provide a centrally disposed reinforcing rib 32 which overlaps the portion 30 and coacts therewith when inserted into the recess 24 (Fig. 3), to yieldably engage with a wedging action the adjacent arms of the V-shaped member so as releasably to maintain the liner in a fixed position within the receptacle. Manifestly, the liner 25 may be folded or formed in other suitable ways so as to provide the desired strength to the sides and closed bottom of the liner when the parts are assembled. In order to facilitate the initial insertion of the preformed paper liner 25 into the receptacle, the latter is preferably provided with opposed finger openings 33 for advancing the liner downwardly into the receptacle. Additionally, the arms 23 of the V-shaped member 22 are formed with aligned centrally disposed openings 34 through which the fingers may be inserted so as to force the yieldable spaced sides 30 and 32 of the liner into wedging engagement with the walls of the recess 24. The openings 33 and 34 also allow the fingers to be inserted into the receptacle so as to withdraw the liner 25 and its lower end and central rib portions therefrom.

Thus, simple, efficient, sanitary, and economical means are provided whereby a sheet of folded newspaper or waste paper may be formed into a liner and releasably maintained in a fixed position within the receptacle. Moreover, by dispensing with the use of expensive bags and substituting therefor newspapers which are cheap and which may be readily formed into several thicknesses, an inexpensive, readily insertable and removable liner is provided, for preventing the sides of the receptacle from getting dirty and which may be readily withdrawn therefrom. The receptacle may be provided at its upper end with handles 35 in the opposite sides thereof for lifting and transporting the same. In order to empty the contents of the receptacle, it is merely necessary to turn the can upside down to discharge the liner therefrom. This action is facilitated by reason of the openings 32 which allow the fingers to engage the liner so as to force the same outwardly from the receptacle. Thus, means are provided for insuring the central folded bottom portion of the liner remaining closed and from accidentally open-

ing when discharging the liner and its contents from the receptacle.

While the receptacle or cam 10 is shown formed of three pieces, it will be manifest that it could with equal efficiency be made of two pieces without departing from the invention.

It will be understood that the form of the invention shown is merely illustrative and that such changes may be made as come within the scope of the following claims.

I claim:

1. In combination with a receptacle, a paper liner formed from at least one sheet of newspaper, said receptacle having a bottom spaced from the lower end thereof, said bottom having a centrally disposed transverse slot, a substantially V-shaped member depending from said slot so as to form a recess therewith, the newspaper forming the liner being folded to provide a flexible body portion of substantially the same size and shape as the receptacle, the lower end of the liner being folded to provide a depending centrally disposed portion insertable through said slot into said recess so as to be anchored therein, and said V-shaped member having aligned openings in opposite sides thereof for engaging the lower end of the liner so as to position the same in said recess.

2. In combination with a receptacle as called for in claim 1 in which the opposite sides of the receptacle adjacent the bottom thereof have side openings for facilitating the insertion of the liner into the receptacle.

3. In combination with a receptacle, a paper liner formed from at least one sheet of newspaper, said receptacle having a bottom spaced from the lower end thereof, said bottom having a centrally disposed transverse slot, spaced substantially V-shaped depending members connected to the sides of the slot so as to form a recess therewith, the newspaper forming the liner being folded to provide a flexible body portion of substantially the same size and shape as the receptacle, the lower end of the liner being folded to provide a depending centrally disposed portion having an upwardly extending end portion overlapping the same, and the overlapping portions being insertable through said slot into said recess to frictionally engage the adjacent walls thereof and the depending members, so as to be releasably connected to the receptacle.

4. In combination with a receptacle, as called for in claim 3, in which the opposite sides of the receptacle adjacent the bottom have side openings for facilitating the the insertion of the preformed liner into the bottom of the receptacle, said V-shaped member having aligned openings in opposite sides thereof for engaging the lower end of the liner so as to position it in said recess.

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