## C. A. LEECH. PAPER RECEPTACLE. APPLICATION FILED MAR. 16, 1915. Patented Jan. 4, 1916. 1,166,841.

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## UNITED STATES PATENT OFFICE.

CHARLES A. LEECH, OF KEWANEE, ILLINOIS.

PAPER RECEPTACLE.

1,166,841.

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**Specification of Letters Patent.** 

**Patented Jan. 4, 1916.** 

Application filed March 16, 1915. Serial No. 14,698.

To all whom it may concern:

to render the receptacle sanitary and liquid 55 resisting or non-porous.

Be it known that I, CHARLES A. LEECH, a citizen of the United States, residing at Kewanee, in the county of Henry and State 5 of Illinois, have invented a new and useful Paper Receptacle, of which the following is a specification.

The present invention appertains to receptacles or containers, and aims to provide 10 a receptacle constructed of paper or similar material and of unique formation, whereby it will be substantial, practical and thoroughly efficient in use.

It is also within the scope of the inven-15 tion to provide a paper or similar receptacle which will be sanitary or hygienic in use, which has a novel bottom construction, which has a novel mouth construction for receiving a cap, and which is otherwise im-20 proved in its details to enhance the utility thereof.

provision of a receptacle having the features above noted, and which may be inexpen-25 sively and readily manufactured. With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the 30 details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without de-**35** parting from the spirit of the invention. The invention is illustrated in the accompanying drawing, wherein— Figure 1 is a vertical section of one form of the invention, parts being broken away. 40 Fig. 2 is an enlarged sectional detail taken on the line 2-2 of Fig. 1. Fig. 3 is a fragmental view illustrating a modification. Fig. 4 is a fragmental view illustrating another form of the invention. Fig. 5 is a sec-45 tional view of a receptacle having a swinging cover and bail. Fig. 6 is an elevation of the device illustrated in Fig. 5, portions being broken away. In carrying out the invention, reference 50 being had to Figs. 1 and 2, wherein one form of the invention is depicted, the body 1 of the receptacle is constructed from a sheet or blank of paper or other suitable material, which may be paraffined or otherwise treated

The receptacle may be of various sizes, shapes, and materials, according to the nature of the use to which the receptacle is to be put. As illustrated, the body 1 of the re- 60 ceptacle is tapered, but this is not to be construed as limiting the shape or contour of the body.

The sheet or blank is rolled or bent to form the body 1, and the edge portions of 65 the sheet are glued, cemented or otherwise secured together, in overlapped condition, as indicated at 2.

The bottom construction of the receptacle includes the following features. The lower 70 end of the body 1 is provided with a reëntrant or inner upturned fold 3 of any suitable width or height, and the raised bottom 4 which is disposed within the body 1 is provided with a downturned marginal flange or 75 A further object of the invention is the portion 5 tucked between the fold 3 and the lower end of the body 1, whereby the bottom 4 will be effectively supported. Staples or other securing elements 6 are engaged through the lower end portion of the body 80 1, the flange 5 and the fold 3, to render the bottom construction substantial. The bottom 4 is preferably constructed of the same material as the body 1, although various materials may be employed. It will be noted 85 that the staples or securing means 6 will be disposed below the bottom 4 and out of contact from the contents of the receptacle. The mouth construction of the receptacle is as follows. The upper end of the body 1 90 is provided with an integral reëntrant or inner downturned fold 7 fitting snugly against the body, and the fold 7 is provided with a second fold 8 which is disposed within the fold 7 and projects upwardly. The 95 fold 8 terminates short of the upper end of the body 1 to provide a shoulder for receiving thereon, the cardboard disk 8<sup>a</sup> or other cap or closure for the receptacle. Thus, the inner or second reëntrant fold 8 provides a 100 seat for the disk or cap, and the double fold provides two reinforcing bands within the upper end portion of the body to reinforce the mouth of the receptacle. If desired, a band or ring 9 may be se- 105 cured between the folds 7 and 8, to assist in strengthening the mouth of the receptacle, and to assist in supporting the disk or cap 8<sup>a</sup>.

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It is preferable to provide a protective flange 25 of the bottom 24. The upper end strip 10 glued lightly upon the upper end of the body 20 is provided with an outer of the body 1 and turned downwardly over downturned fold 27, and the fold 27 has the outer side of the body and over the inner 5 side of the fold 7, whereby the strip 10 will protect the mouth portion of the body. The strip 10 can be readily removed when the contents of the receptacle are to be poured out, and this will prevent the contents from being contaminated by dust, or other ex-10 traneous matter which might have settled upon the mouth portion of the receptacle. If desired, a bail or handle 11 constructed of wire or other suitable material, may be provided for carrying the receptacle. This 15 bail 11 is provided with inturned terminal fingers 12, which are engageable in diametrically opposite apertures 13 provided in the upper end portion of the body 1 and fold 7 20 slightly above the fold 8, whereby the fingers 12 will project inwardly over the disk or cap 8<sup>a</sup> to retain the cap seated within the mouth of the receptacle. The ends of the bail 11 may be separated or spread, to 25 retract the fingers 12 from over the disk or cap 8<sup>a</sup>, when it is desired to remove the disk or cap for opening the vessel. One or more staples or other securing elements 14 are engaged through the upper end 80 portion of the body 1 and the fold 7 above the fold 8, to strengthen the mouth portion of the receptacle, and to hold the parts together.

an outer upturned fold 28, which fold 28 is in turn provided with an inner reëntrant or 70 downturned fold 29 within the upper end portion of the body 20. The fold 29 is provided with an inner reëntrant or upturned fold 30 which terminates below the upper end of the body 20 to provide the rabbet or 75 seat for receiving the cap or disk 31. As illustrated the cap or disk 31 has a marginal downturned flange 31<sup>a</sup> which is adapted to be received between the folds 29 and 30 for providing an air and liquid tight joint. 80 The body 20 may be provided with a bail 32 having the terminal inturned fingers 33 engageable through the apertures 34 provided in the folds 27, 28 and 29, and the upper end portion of the body 20 above the 85 fold 30 the fingers 33 being normally engageable over the cap or disk 31 for holding it in place. The body or receptacle 35 illustrated in Figs. 5 and 6, is provided at its upper end 90 or mouth with a swinging cover or cap 36, and a wire or similar bail 37 has one end portion pivotally engaged, as at 38, to the upper end portion of the body 35 at the base of the cover 36, and the other end por- 95 tion of the bail 37 is engaged upon the free end portion of the cover 36, as at 39. The free end portion of the bail 37 is provided with a depending loop 40 adapted to hang over the side of the body 35 when 100 the cover 36 is closed, and to engage over a nib, lug, or other projection 41 carried by the body 35, in order that the bail 37 will hold the cover 36 closed. The loop 40 may be readily disengaged from the nib or lug 105 41 to release the cover 36, and by swinging the bail 37, the cover may be readily swung open. The features of the different forms may be employed in various styles or types of 110 receptacles, according to the circumstances, and the receptacle may be utilized for many different purposes as will suggest themselves to those familiar in the art. Vessels constructed in accordance with the present in- 115 vention are of advantage in numerous respects, which need not be itemized at length, since they will be apparent. If desired, the body of the receptacle

- In Fig. 3, there is illustrated a modified 35 form adapted particularly for use as a nursing bottle, or for kindred purposes, the body 15 having at its upper or smallest end, an outturned and downwardly projecting fold 16 provided with a second or upturned fold 40 17, whereby the folds 16 and 17 provide reinforcing bands for the mouth of the receptacle or bottle, and also provide means for receiving thereon a nipple. A staple 18 is preferably engaged through the folds 17 45 and 16 and the upper end portion of the body 15 astride the division 19 between the ends of the folds 16 and 17, to hold the parts in place.
- In the variation delineated in Fig. 4, the 50 body 20 is of the same general construction as the body 1 of the first form, with additional structural features. Thus, the lower end of the body 20 is provided with an outer upturned fold 21, having a second or down-

55 turned fold 22, and the fold 22 is provided may be made with the return or reëntrant 120 with an inturned or reëntrant fold 23 within fold overlapping the marginal flange of the the lower end portion of the body 1. The bottom, or the body may be stopped flush bottom 24 is disposed within the body 20 with the flange of the bottom without a above the fold 23 and is provided with marlower fold. The receptacle provides a de-60 ginal downturned flange or portion 25 resirable advertising medium, which may be 125 ceived between the fold 23 and the lower utilized by manufacturers, for advertising end of the body 20. Staples or other securpurposes. By the provision of the end folds ing elements 26 may be engaged through all of the body, the body may be reversed, that of the folds, together with the lower end is, either the small or large end may be used 65 portion of the body 20 and the marginal for holding the bottom, while the other end 130

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is used for receiving the cap. Any number of folds or bands at the ends of the body may be employed, according to the strength desired, or the folds may be eliminated in
5 certain instances, if desired.

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Having thus described the invention, what is claimed as new is:

 A receptacle comprising a tapered paper body having an integral reëntrant
 fold at its small end fitting snugly against the body, said fold having a second fold therein terminating short of said end of the body to form a seat for a closure disk.
 A paper receptacle having a reëntrant

fold at one end, said fold having a second 15 fold therein terminating short of the said end of the body to form a seat for a closure, a bail having terminal portions engageable through the first mentioned fold at points spaced from the second mentioned fold and 20 arranged to hold the closure in place. In testimony that I claim the foregoing as my own, I have hereto affixed my signa-

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as my own, I have hereto affixed my signature in the presence of two witnesses. CHARLES A. LEECH.

Witnesses: John T. Cummings, Louis P. Cronan.