No. 833,607. PATENTED OCT. 16, 1906.

J. C. KIMSEY.

PAPER RECEPTACLE.

APPLICATION FILED OCT. 22, 1903.

Fig. 1.

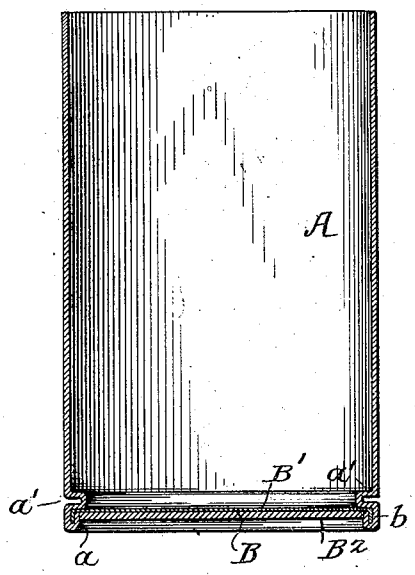



Fig. 2.

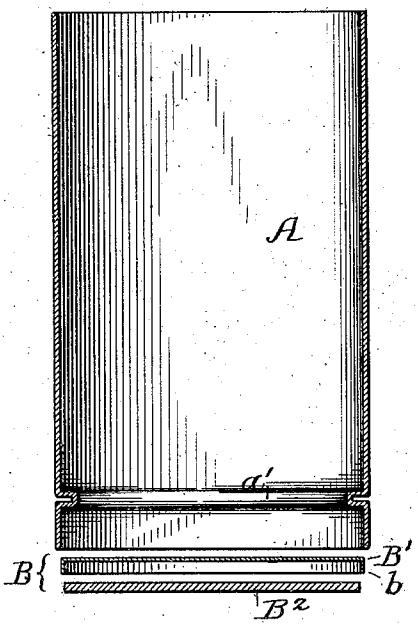



Fig. 3.

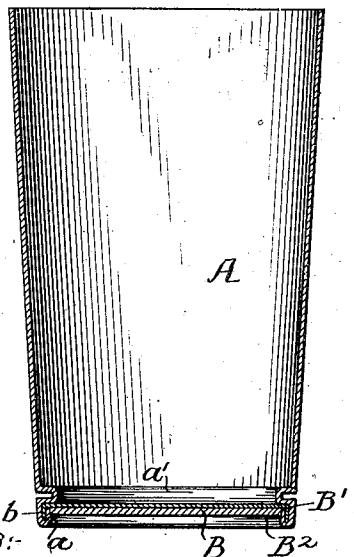
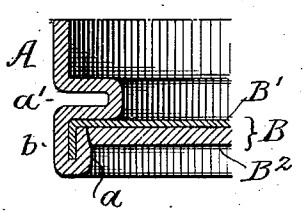



Fig. 4.




Witnesses:-
Titus H. Jones.
Augustus B. Coppe

Inventor-
James C. Kimsey.
by his Attorneys,
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# UNITED STATES PATENT OFFICE.

JAMES C. KIMSEY, OF PHILADELPHIA, PENNSYLVANIA.

## PAPER RECEPTACLE.

No. 833,607. Specification of Letters Patent. Patented Oct. 16, 1906.

Application filed October 22, 1903. Serial No. 178,149.

*To all whom it may concern:*

Be it known that I, JAMES C. KIMSEY, a citizen of the United States, and a resident of Philadelphia, in the county of Philadelphia, State of Pennsylvania, have invented a Paper Receptacle, of which the following is a full and complete specification.

This invention relates to that class of vessels or receptacles which are made entirely of paper, including bottles, tumblers, &c.

The object of this invention is to provide a simple and effective means for attaching the bottom in such a manner as to provide a water-tight joint properly reinforced to prevent rupture.

This invention is a modification of the invention particularly claimed in a patent granted to me on the 9th day of January, 1906, No. 809,812.

In the accompanying drawings, Figure 1 is a vertical sectional view showing the application of my invention to a tubular paper vessel or bottle. Fig. 2 is a similar view, but showing the parts separated or before they are united. Fig. 3 is a vertical sectional view showing the application of the invention to a vessel having tapered sides, and Fig. 4 is an enlarged detailed sectional view illustrating the joint.

Though I have illustrated my invention as applied to a bottle and a tumbler made of paper, it will be obvious that the same may be with equal advantage applied to paper vessels of other shapes wherein it is desired to provide a strong and tight joint between the bottom and sides.

Referring to Figs. 1 and 2, A is a tubular body, and B a bottom. The bottom is made up of two paper disks securely and firmly connected to the lower end of the body to form a tight, strong, and durable joint.

In carrying out my invention one of the two disks, as B′, of the bottom is made of stiff paper, the surrounding outer edge of which is crimped to form a laterally-projecting peripheral flange *b*, while the other disk, $B^2$, is a plain disk, somewhat thicker than the disk B′ and of less diameter than the same.

For the purpose of stiffening and reinforcing the joint at the bottom the tubular body A is formed with an internal bead or annular flange *a*′, against the under side of which the bottom impinges, the said bead or flange preventing the bottom from working up. This bead or flange is preferably formed before the disks forming the bottom are applied and is preferably struck or rolled from the paper tube with the two layers comprising the same slightly separated from their connected edge, whereby the body of the vessel will yield slightly at this point, and thus protect the joint by relieving any sudden jar.

In applying the bottom the disk B′ is first inserted in the lower end of the tubular body A, with the flange thereof projecting downwardly and fitting snugly against the inner side of the tube. The lower end of the tubular body A is then turned inward over the flange *b*, forming the binding-flange *a*, the edge of which latter preferably impinges against the body of the disk B′. The disk $B^2$ is now forced into the lower end of the body of the receptacle against the under side of the disk B′, so as to impinge against the inturned flange *a* and press the same tightly against the flange *b*, whereby the latter is clamped between the aforesaid flange *a* and the body or tube and the joint so formed maintained by the disk $B^2$. The meeting surfaces of the disks B′ and $B^2$ may be glued together. In practice, however, I have found that this is not absolutely necessary, inasmuch as the frictional engagement of the disk $B^2$ with the inturned flange *a* is sufficient to secure the joint or connection for ordinary purposes.

In Fig. 3 the invention is shown as applied to a tumbler the body portion of which has tapered walls. The flange in this instance may be used, so that the lower edge of one tumbler fitting into another may rest against the flange *a*′, preventing them being wedged together, as would be the case if the flange were not provided.

The paper vessel constructed as herein shown and described is preferably coated inside with a waterproof material, such as paraffin, and when the same is applied the inner part of the joint or inner edge of the bottom is filled with such material, which prevents moisture from entering the joint.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a paper receptacle, the combination with the paper body having an internal bead *a*′ near the lower end thereof, of a bottom therefor comprising a paper disk B′ fitting snugly into the lower end of the body against the bead and having a downwardly-projecting peripheral flange *b* impinging against the inner side of said body, and over the lower

edge of which flange the lower end portion of the body is bent or turned forming an upwardly-projecting binding-flange *a* within the flange *b*, and a thick clamping-disk $B^2$ of such size with respect to the lower end of the body thus formed so that it fits snugly therein and presses the flanges *a* and *b* together and against the wall of the main body.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES C. KIMSEY.

Witnesses:
THOS. SHALLCROSS, Jr.,
J. E. TAYLOR.