

C. F. JENKINS.
PAPER RECEPTACLE.
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954,104.

Patented Apr. 5, 1910.

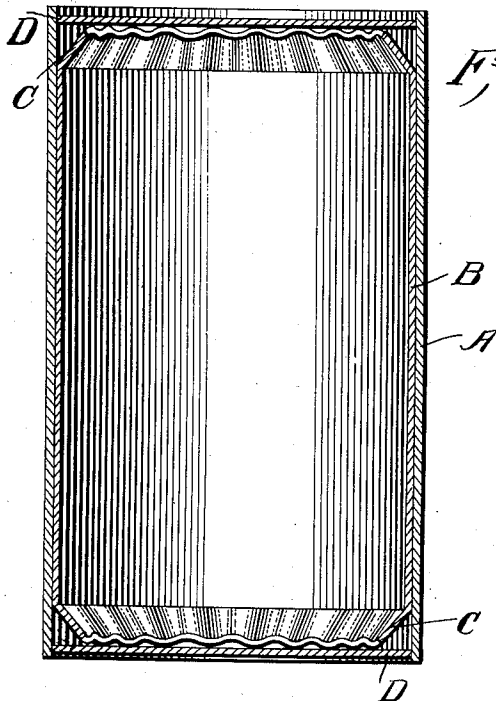


Fig. 1.

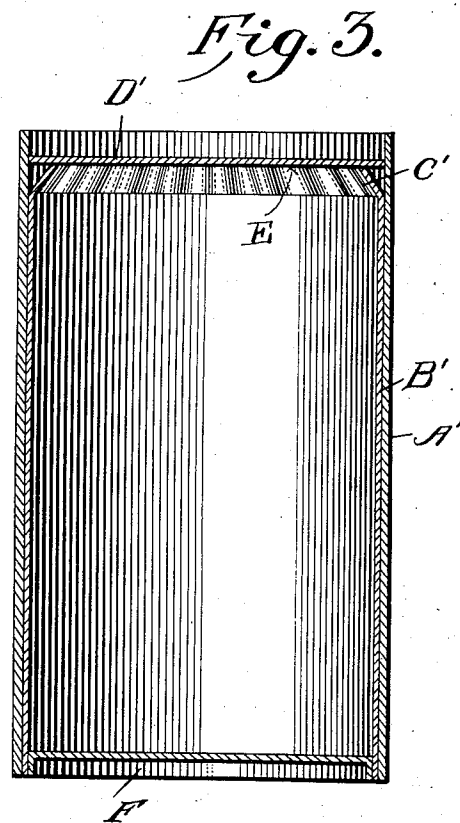
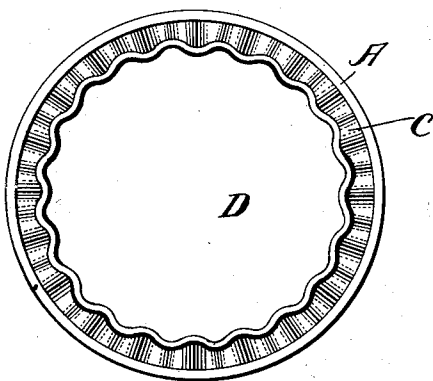


Fig. 3.

Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

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PAPER RECEPTACLE.

954,104.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES FRANCIS JENKINS, citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Paper Receptacles, of which the following is a specification, reference being had therein to the accompanying drawing.

In making boxes, usually of paper, having interior and exterior tubular layers and provided with independently formed closures inserted after the formation of the body, it is often desirable to cut the inner layer or tube shorter than the other, so that its ends may serve as shoulders or stops for the subsequently inserted ends or closures. When, however, the inner layer is very thin, the shoulder lacks desirable width.

An object of this invention is to avoid this evil without material expense, and at the same time to increase the stiffness of the end portions of the body, where a thinner closure may safely be used. This is done by crimping and bending inward in roughly conical form the end portion of the inner tube.

In the accompanying drawings, Figure 1 is an axial section of a closed cylindrical box embodying my invention. Fig. 2 is a plan or end view of the same box with the top closure removed. Fig. 3 is a section similar to Fig. 1, showing a slight modification.

In these views, A represents a cylindrical tube, which may be of paper wound spirally or otherwise, and B an inner tube closely fitting within the tube A and having each end portion C bent inward, usually with corrugations as shown, so that its ends or edges are parallel to the ends of the projecting outer tube and at some distance within the walls thereof. The two tubes may be formed independently, the smaller being afterward inserted in the larger, the larger may be wound upon the smaller, or the two may be

formed simultaneously, the method of forming not being here material. When the body has been formed, preferably plane, disks D are inserted in the projecting end portions of the outer tube and pressed down against the edges of the inwardly bent portions of the inner tube completing the box. If the thin inner tube has considerable natural stiffness, the corrugated portions when given a proper angle add very materially to the lateral stiffness of the ends of the box and therefore the end disks may be made quite thin.

Boxes such as those thus far described are not suitable for liquids, but if the inner tube B', Fig. 3, has its end faces made plane at E and parallel to the end of the outer tube A', the closure D' may be cemented to such plane face, and if the whole be given a waterproof coating, it will serve for liquids. As suggested in Fig. 3, either novel construction may be used at one end only of the box while the other end of the compressed tube may be closed by other devices, such, for example, as the flanged disk F.

What I claim is:

1. A box body made up of an outer tube of uniform cross-section and an inner tube closely fitting therein and having one end portion corrugated and bent inward at an oblique angle and its free margin at some distance within the plane of the outer tube's end.

2. A paper box body consisting of an outer tube and a shorter inner tube closely fitting therein and having one end portion carried inward to form a conical frustum terminating in a thin edge in position to meet a plane closure inserted in the end of the outer tube.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES FRANCIS JENKINS.

Witnesses:

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