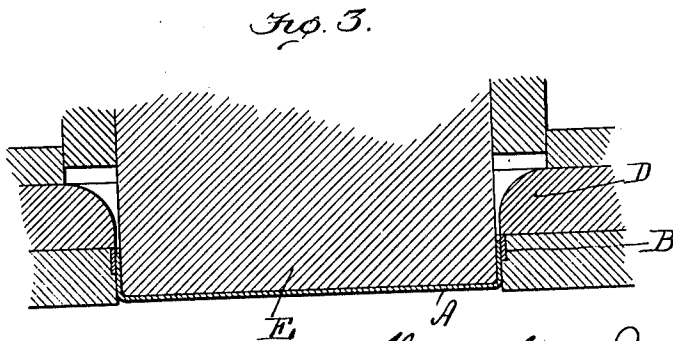
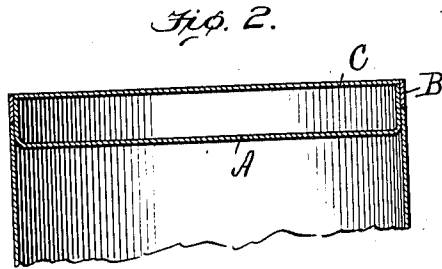
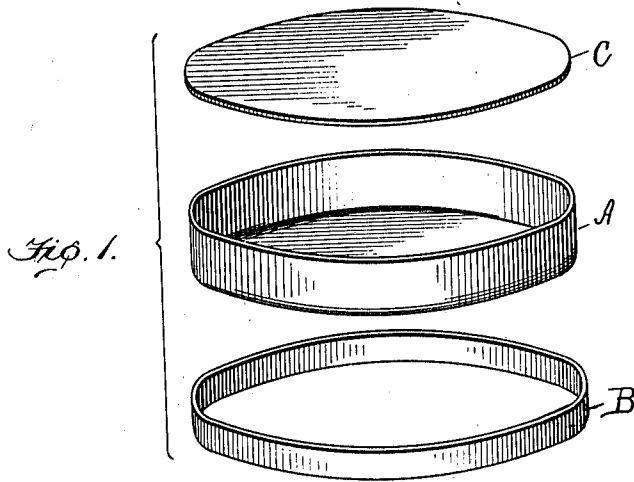


C. F. JENKINS.
METHOD OF MAKING RECEPTACLE CLOSURES.
APPLICATION FILED FEB. 17, 1910.

988,716.

Patented Apr. 4, 1911.



Witnesses

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METHOD OF MAKING RECEPTACLE-CLOSURES.

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Specification of Letters Patent.

Patented Apr. 4, 1911.

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To all whom it may concern:

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

In many cases, it is desirable to provide paper boxes and bottles with closures or covers which project above the receptacle in such manner that they may be conveniently grasped by the hand for removal and replacement, and to have such covers externally flush or continuous with the exterior surface of the receptacle which they close, so that a label or the like may extend smoothly over the joint and form an effectual seal. It is also often desirable that the cover should have in its top no recess in which foreign matter may collect, and further sometimes desirable that the cover should be hollow and should have an approximately plane interior surface. In making such closures of paper, it is advantageous to form the body of the cover by pressing a paper disk to cup-like form and making its diameter approximately equal to the internal diameter of the receptacle to be closed, so that it may be inserted therein, plug-like. Practically, paper pressed to cup form will not retain its shape after it is released, and for this reason it is usual to form it while wet and subject it to high heat before it is released. This involves cost that is often prohibitory.

To secure the advantages and at the same time avoid the evils above suggested is the principal object of this invention, and this object is attained by forming the cup above mentioned and immediately forcing it into a paper ring which becomes a permanent part of the cover and which also serves ends other than retaining the cup in proper form, as will presently appear.

In the accompanying drawings, Figure 1 shows one above the other three parts of which the closure preferably consists. Fig. 2 shows in side elevation, partly in diametrical section, the upper portion of a receptacle with the novel closure in place. Fig. 3 illustrates, diagrammatically, one step in the process of forming the closure, the parts of

the cover being shown in diametrical section.

In these figures, A represents a paper disk pressed into cup-like form, B a paper ring to encircle the flange of the cup and project slightly above its margin, and C a plane paper disk to fit in the projecting part of the ring and rest upon the margin of the cup with its upper face flush with the upper end face of the ring. The rings may be formed in any desired manner, for example, by dividing a suitable tube into short sections. A ring is placed directly below and in alignment with a cup-forming ring die D and a co-acting plunger E. Upon the descent of the plunger a suitable paper disk is pressed into cup-like form, in the usual manner and is pressed into the ring until it projects to some distance below the ring and its upper margin lies at such distance below the upper end of the ring that a disk of the desired thickness will accurately fill the space and be flush with the ring when it itself rests upon the flange of the cup. The cup being thus inserted in the ring, the latter is securely held against marginal expansion when both are released, and the disk C may then be added in any convenient manner, completing the closure and leaving it ready for use.

The thickness of the ring used should be equal to the thickness of the wall of the receptacle to be closed, so that when the downwardly projecting portion of the cup is inserted, plug-like, in the receptacle, the ring forms a continuation of the receptacle upon the end of which it rests. Obviously, in cases where the cover may have a recess in its upper side, the disk C may be omitted, although the cover in this case will have less strength.

What I claim is:

1. The method of forming closures for paper receptacles which consists in forming a short tube or ring, forming a paper cup adapted to fit closely in said ring, forming a disk adapted to fit closely within the ring, pressing the cup into the ring until its bottom portion projects from the ring and its side wall or flange lies below the latter's opposite margin, and pressing the disk into the ring and against the cup's margin.
2. The method of forming paper closures for paper receptacles, which consists in pro-

viding a short dry tube or ring, pressing a
dry paper disk into cup form and pressing
it into said ring until its margin is below
the plane of the ring's upper margin and its
5 bottom projects from the ring, and pressing
a closely fitting paper-disk into the ring
above the cup.

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

CHARLES FRANCIS JENKINS.

Witnesses:

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R. CRAIG GREENE.