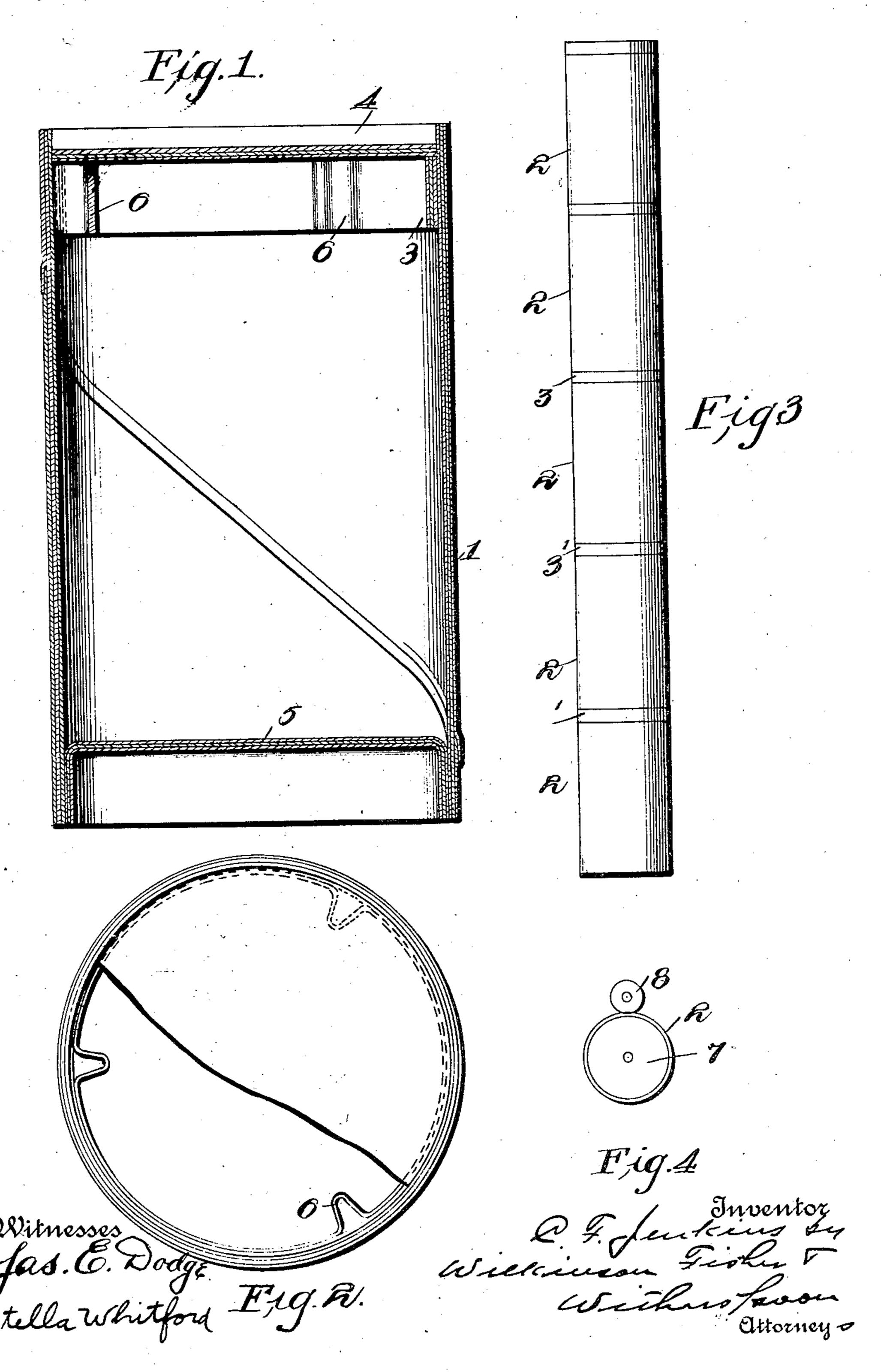
C. F. JENKINS.

CLOSURE FOR PAPER PACKAGES.

APPLICATION FILED MAY 4, 1909.

943,307.

Patented Dec. 14, 1909.



## UNITED STATES PATENT OFFICE.

CHARLES FRANCIS JENKINS, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO SINGLE SERVICE PACKAGE COMPANY, A CORPORATION OF NEW JERSEY.

CLOSURE FOR PAPER PACKAGES.

943,307.

Specification of Letters Patent. Patented Dec. 14, 1909. Application filed May 4, 1909. Serial No. 493,913.

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 Co-5 lumbia, have invented certain new and useful Improvements in Closures for Paper Packages; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable 10 others skilled in the art to which it appertains to make and use the same.

This invention relates to spirally wound paper packages, and especially to the closures thereof, and has for its object the pro-15 duction of a cheap and efficient closure which will enable substantially the entire mouth of the bottle to be opened, and which may be inserted into said vessels after the manner of a plug stopper, all as will appear 20 hereinafter.

To these ends the invention consists in the novel details of construction and combinations of parts more fully hereinafter disclosed and particularly pointed out in the 25 claims.

Referring to the accompanying drawings forming a part of this specification in which like numerals refer to like parts in all the views:—Figure 1 represents a longitudinal 30 sectional view of a paper vessel provided with my closure. Fig. 2, a top plan view of the same with the closure partially broken away. Fig. 3, a tube divided into sections out of which the body portion, as well as the 35 ring seat for the closure may be formed, and Fig. 4, a diagrammatic view of a machine adapted for readily cutting the necessary parts from a continuous tube.

1 represents the body of the vessel which 40 is cut from sections 2 of a continuous tube in the manner well known. 3 represents a ring inserted into said body portion 1, which is likewise cut from the same tube from which the said body portion is cut; and 4 45 represents a suitable disk closure seating

upon the ring 3.

5 represents the usual inverted cup shaped bottom closure that is well known in this class of vessels, which is secured in place by 50 any suitable means.

In order to provide the ring seats 3 cheaply and quickly they are cut in sections 3' from the same continuous tube that furnishes the sections 2, as indicated in Fig. 3; and therefore the rings 3 are of the same 55 diameter as said body portion and are consequently too large to enter the same. In order to reduce them in diameter and to permit said rings to be inserted into said body portions 1, they are passed through a suit- 60 able machine and provided with the inturned crinkled portions 6, as illustrated in Fig. 2. This enables the said rings to be easily and quickly inserted into the body portions, and they rest therein by their own 65 resiliency and friction, or they may be supplied with an adhesive for firmly holding them in place as may be desired.

represents a suitable mandrel over which the spirally wound tube may be 70 placed and cut into suitable sections by the circular cutter 8, which cutter also severs the ring sections 3'. After the rings are severed they may be slipped along the mandrel 7 and subjected to a suitable mechan- 75 ism, not shown, and thereby provided without substantial cost with the crinkled

portions 6.

In filling and closing these bottles by machinery the ring 3 may be adjusted along 80 the length of the body 1, until the disk 4 rests upon the contents, while the air escapes around the edge of the disk. This causes the contents to completely fill the bottle without danger of spilling over, and when 85 the cementing material holding the ring in place has set, the whole constitutes a firm package.

What I claim is:—

1. In a bottle the combination with a 90 body portion; a bottom closure; and a top closure consisting of a disk and a ring forming a seat for said disk, said ring being of the same size as said body portion and provided with a crinkled portion permitting 95 the same to enter said body portion, substantially as described.

2. In a bottle the combination with a cylindrical spirally wound body portion; an inverted flanged cup shaped bottom closure; 100 a disk closing the top of said body portion; and a ring forming a seat for said disk, said ring being cylindrical and of the same diameter as said body portion, and provided with a crinkled portion 6 permitting it to enter said body portion, substantially as described.

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

CHARLES FRANCIS JENKINS.

Witnesses:

R. M. PARKER, T. A. WITHERSPOON.