

C. F. JENKINS.

PAPER VESSEL.

APPLICATION FILED DEC. 5, 1908.

935,029.

Patented Sept. 28, 1909.

Fig. 1.

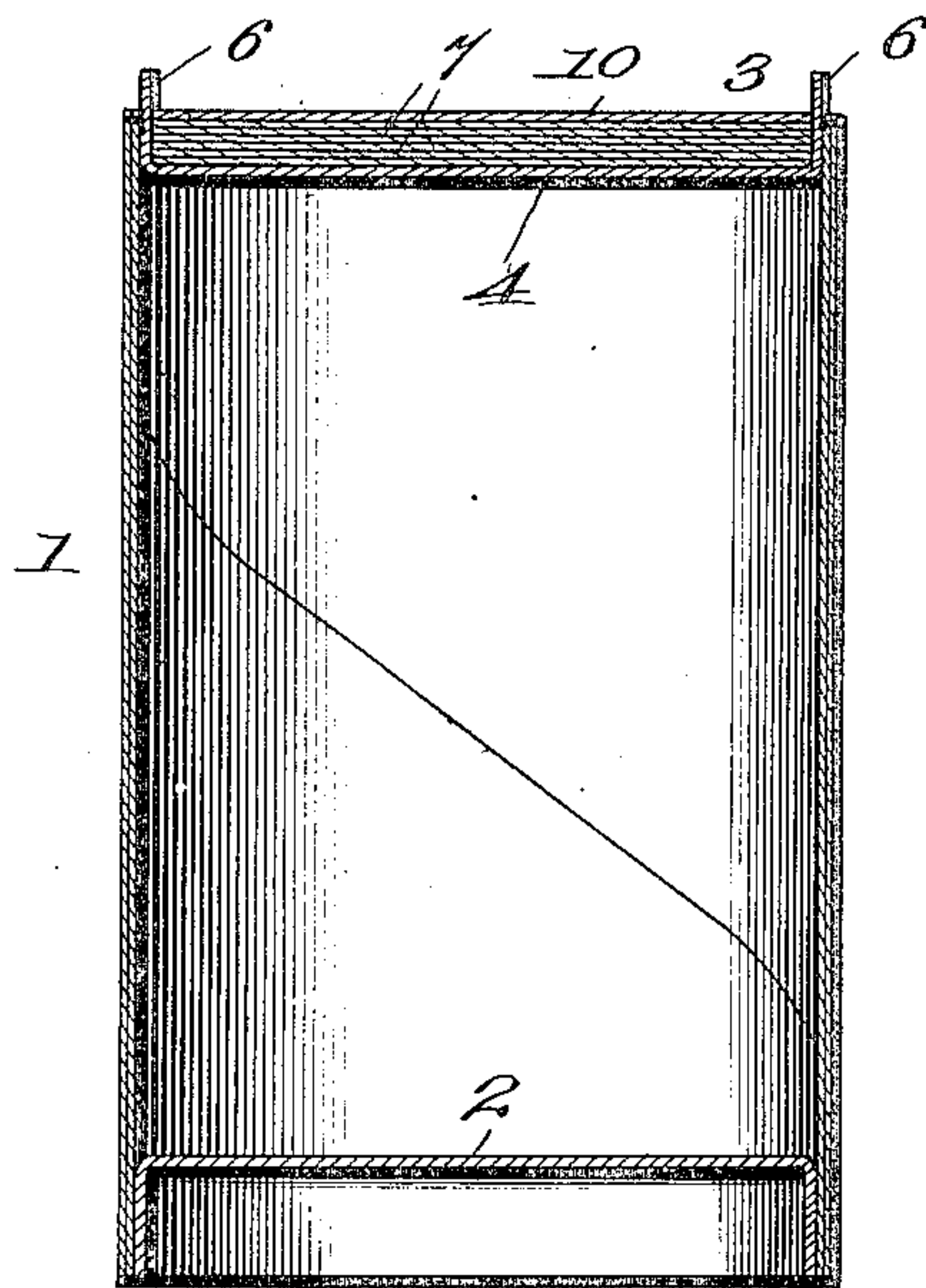


Fig. 6.

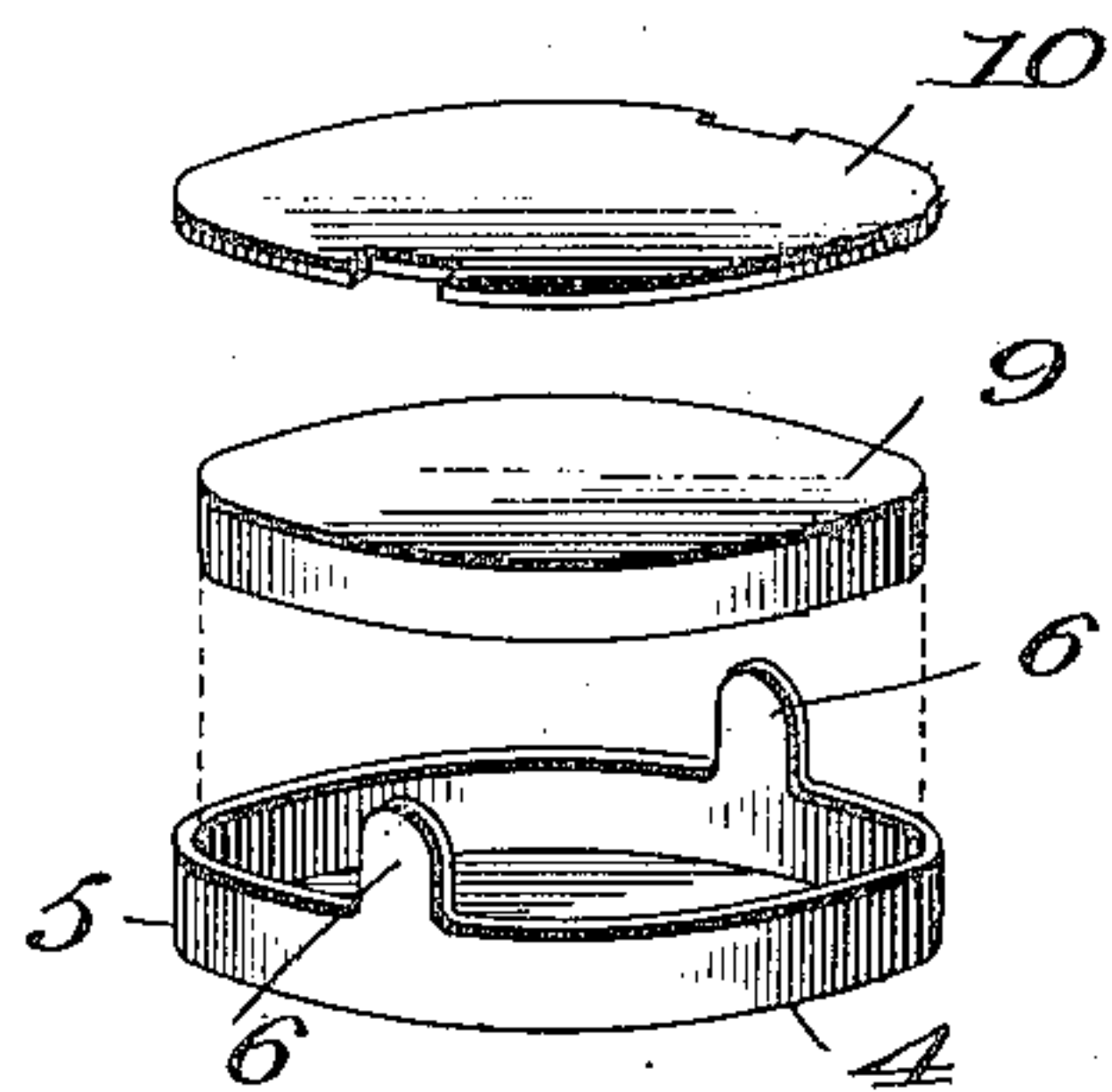


Fig. 2.

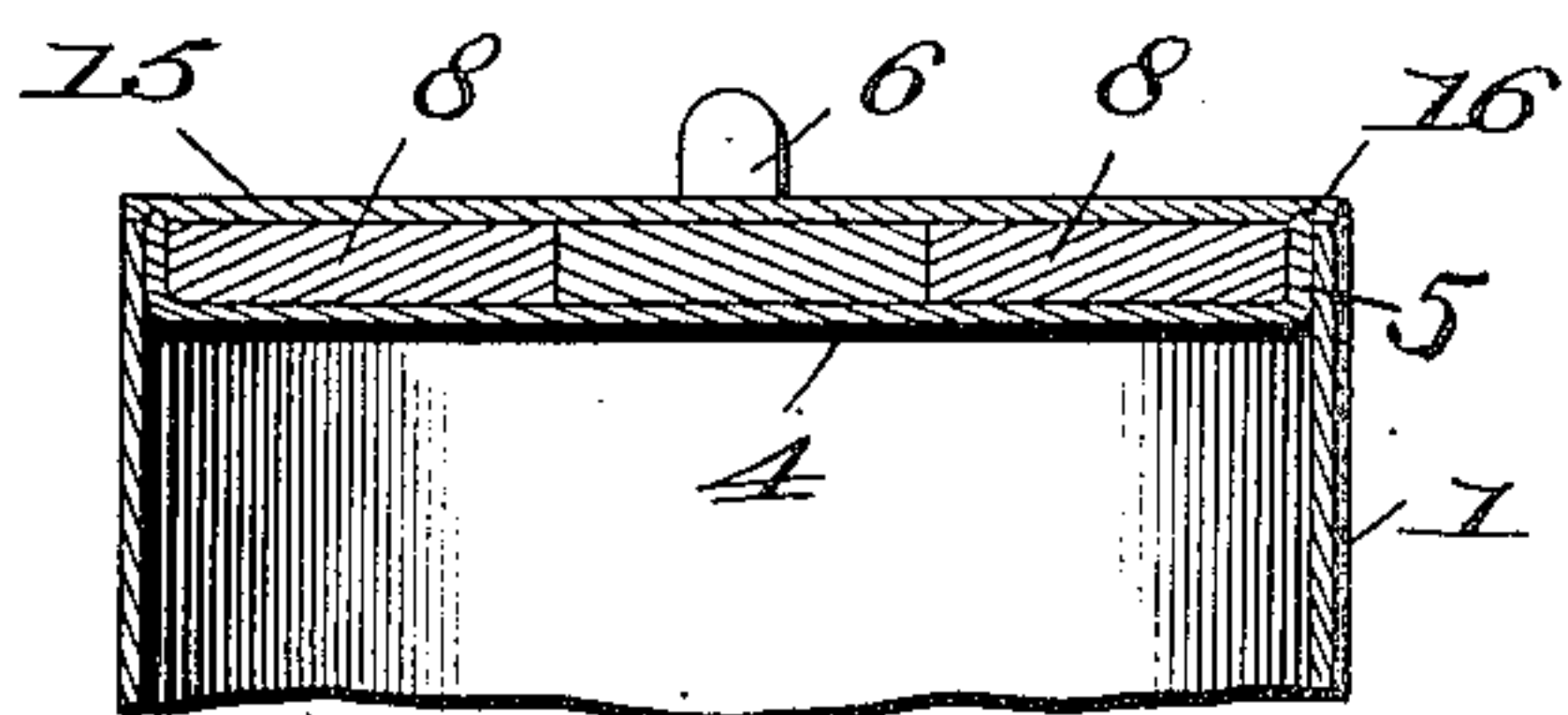


Fig. 4.

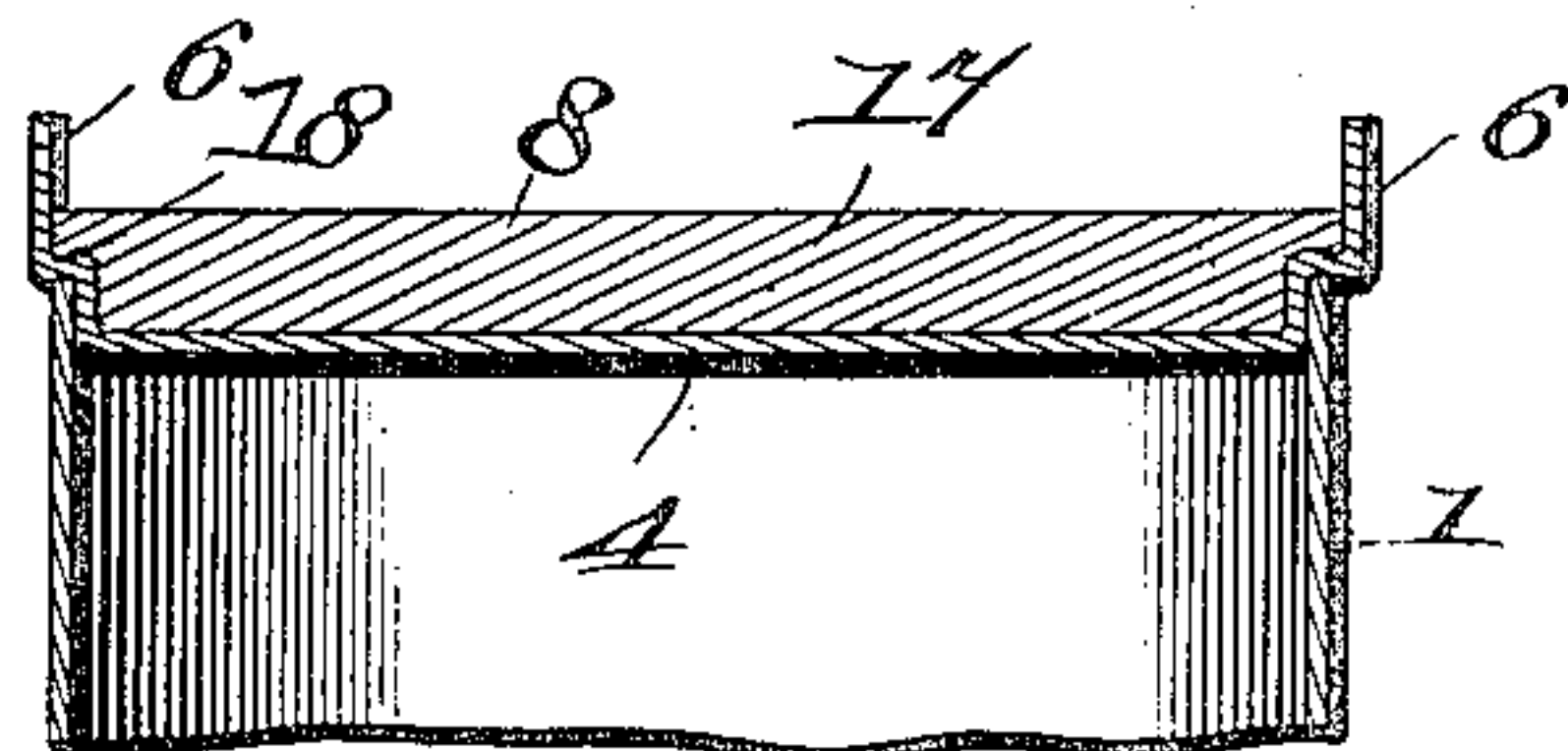


Fig. 3.

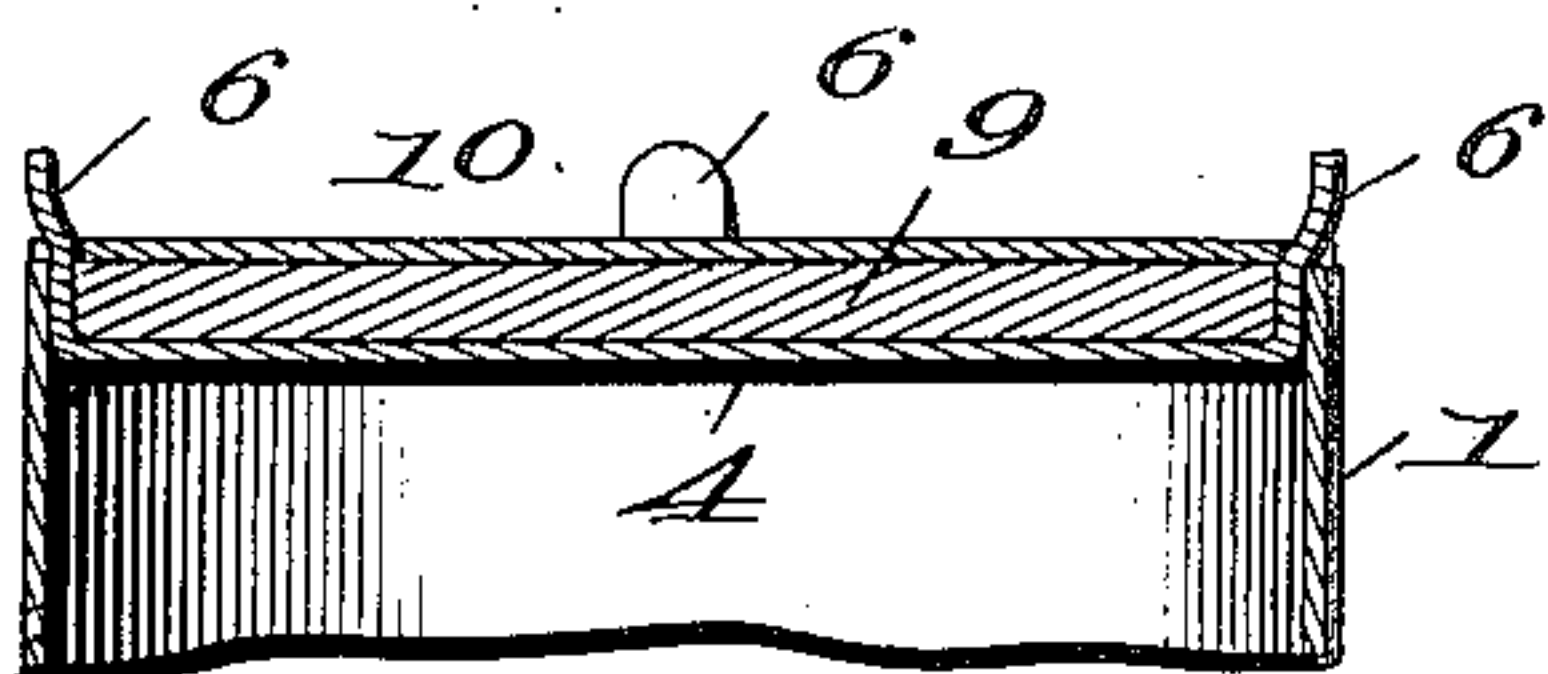
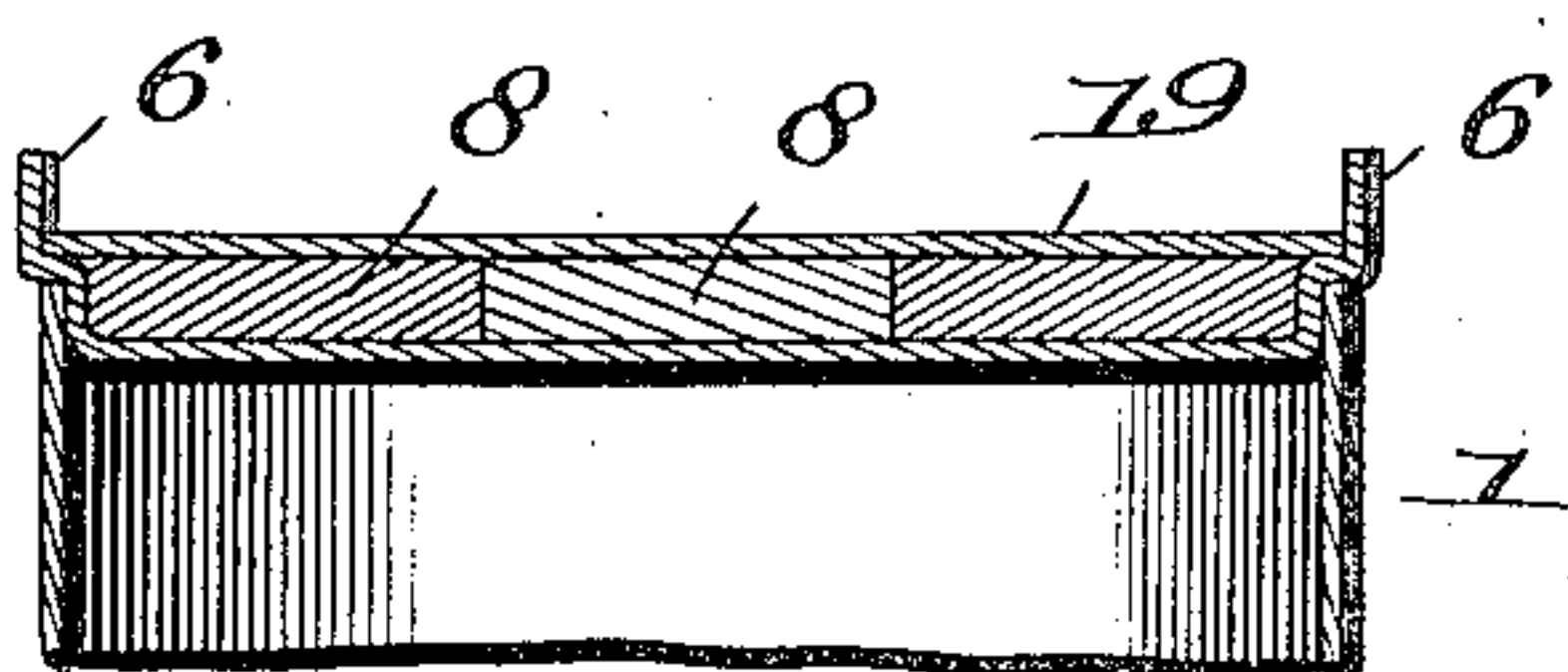


Fig. 5.



Witnesses  
Geo. A. Rymer.  
W. Max Small.

Fig. 8.

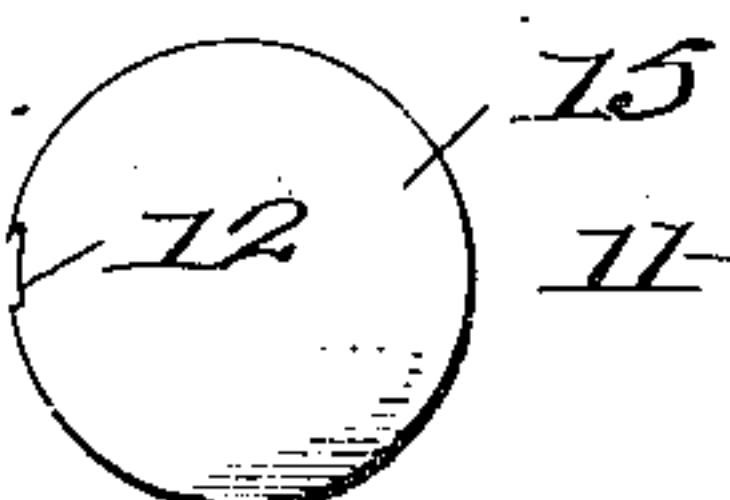


Fig. 7.

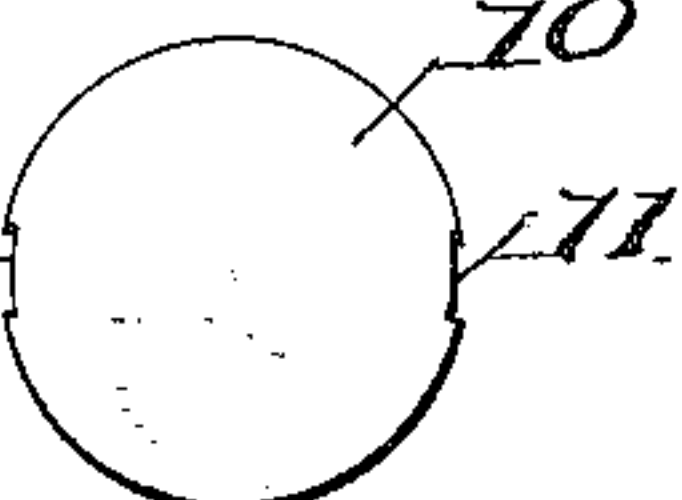
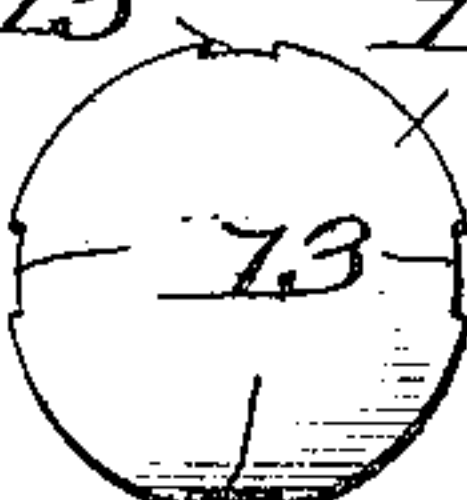


Fig. 9.



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# UNITED STATES PATENT OFFICE.

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## PAPER VESSEL.

935,029.

Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed December 5, 1908. Serial No. 466,146.

*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 Paper Vessels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates to closures for paper vessels, and has for its object the provision of a closure which will be easily applied by the ordinary bottle filling and capping machines now in use; one which will be efficient in action and cheap to construct; and one which will, when the closure is applied to milk bottles, permit the housewife to readily separate the cream from the milk.

To these ends the invention consists in the details of construction and novel combination of parts more fully hereinafter disclosed, and particularly pointed out in the 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, is a longitudinal sectional view of a paper vessel with my closure applied thereto. Fig. 2, a similar view showing a modified construction of closure. Figs. 3, 4 and 5, represent in section still other modifications of the closure; while Fig. 6, represents in perspective the parts of the closure shown in Fig. 3, before they are assembled. Fig. 7, is a plan view of the top disk of the closure shown in Fig. 1. Fig. 8, a like view of the top disk shown in Fig. 2, and Fig. 9, a plan view of the top disk shown in Fig. 3.

1 represents any suitable paper vessel, but preferably a spirally wound paper milk bottle; 2 an inverted cup-shaped bottom closure, and 3 a large plug like or thickened disk like, top closure. The top closure 3 in all cases comprises an inverted cup 4, having the struck up flanges 5, from which may or may not project one or more ears or tabs 6, as may be desired, but in most cases a single tab will be found sufficient and desirable to withdraw the closure. Fitting into this cup 4, is a filling block of solid material, which

in Fig. 1, is shown as made up of a plurality of flat pieces 7, which may be disks of paper; in Figs. 2 and 5, as made up of a plurality of blocks 8, which may be paper-board or other material; while in Figs. 3 and 6, the filling block 9 is a solid piece of paper-board, wood or other material. Fitting over this filling block in Figs. 1 and 3, is a disk 10 preferably of paper; and this disk in Fig. 1, is or may be provided with notches 11, as shown in Fig. 7, to accommodate the two ears or tabs 6 of the cup 4.

Fig. 8 shows a single notch 12 in the edge of the disk 15 to accommodate the single tab 6 shown in Fig. 2; and Fig. 9 shows four notches 13 to accommodate the four tabs belonging to the cup 4 shown in Fig. 3. The disk 15 of Figs. 2 and 8, is provided with a circular groove 16 to receive the edge of the flange 5 of the cup 4, as shown.

In Fig. 4, the top disks 10 and 15 are dispensed with, and the filling block 17 is provided with a grooved flange 18, as shown, which fits over and receives the top edge of the cup 4. In this figure, as well as in Fig. 5, the notches are dispensed with; and in the latter figure the continuous smooth edge of the disk 19 jams down the ears or tabs 6, as shown, causing them to fit against the upper edge of the bottle 1, in the manner similar to that of the grooved flange 18 in Fig. 4.

In all the figures an inverted cup of liquid proof material is provided which furnishes a continuous surface, and prevents liquid getting into the stopper to swell the same; a solid thickened disk like or flattened plug like stopper is provided which is readily handled by the capping and filling machines now on the market; when this stopper is withdrawn the opening is sufficient for the housewife to readily skim off the cream; and the whole structure can be readily made from the waste paper produced by my bottle making machines. The tabs enable one to readily withdraw the stopper, although it is jammed down flush with the top edge of the bottle; and when the said stopper is so made flush with the said top the bottle presents a smooth top, which is considered very desirable by the boards of health of the various cities, in order to prevent dirt and germs collecting thereon and thereby spreading disease.



What I claim is:—

1. A paper vessel closed at one end with a flanged cup and provided at its other end with a plug stopper comprising a flanged cup  
5 having a tab integral with the flange, and extending in prolongation of the same; a filling material solidly fitting said cup; and a disk overlying said filling material, having a notch fitting said tab, substantially as de-  
10 scribed.
2. A paper vessel closed at one end with an inverted flanged cup; and having at its other end a plug stopper comprising a flanged cup provided with a tab, a filling material  
15 composed of a plurality of pieces solidly fitting the same and a notched disk fitting the tab and overlying the filling material, substantially as described.
3. A paper vessel closed at one end with  
20 an inverted flanged cup; and having at its other end a plug stopper comprising a

flanged cup provided with a tab, a filling material composed of a plurality of flat disks solidly fitting the same, and a disk over said filling material provided with a notch fitting  
25 said tab, substantially as described.

4. A spirally wound paper vessel closed at one end with an inverted flanged cup; and provided with a plug stopper composed of a flanged cup of liquid proof material having  
30 a tab integral with the flange; a plurality of layers of material solidly fitting said cup; and a notched disk fitting said flange and covering said layers, substantially as de-  
35 scribed.

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

CHARLES FRANCIS JENKINS.

Witnesses:

HENRY S. SHEDD,  
REVA JACKMAN.