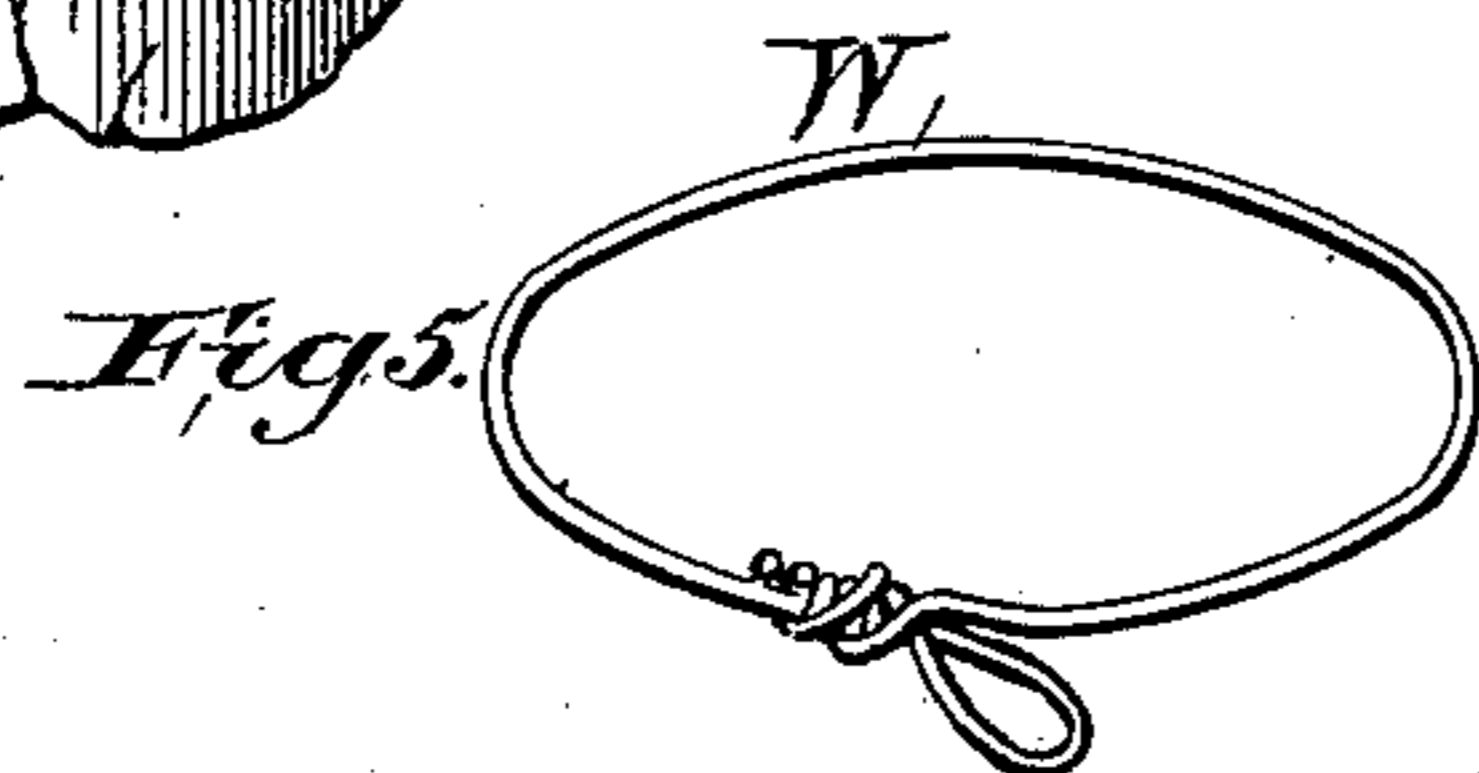
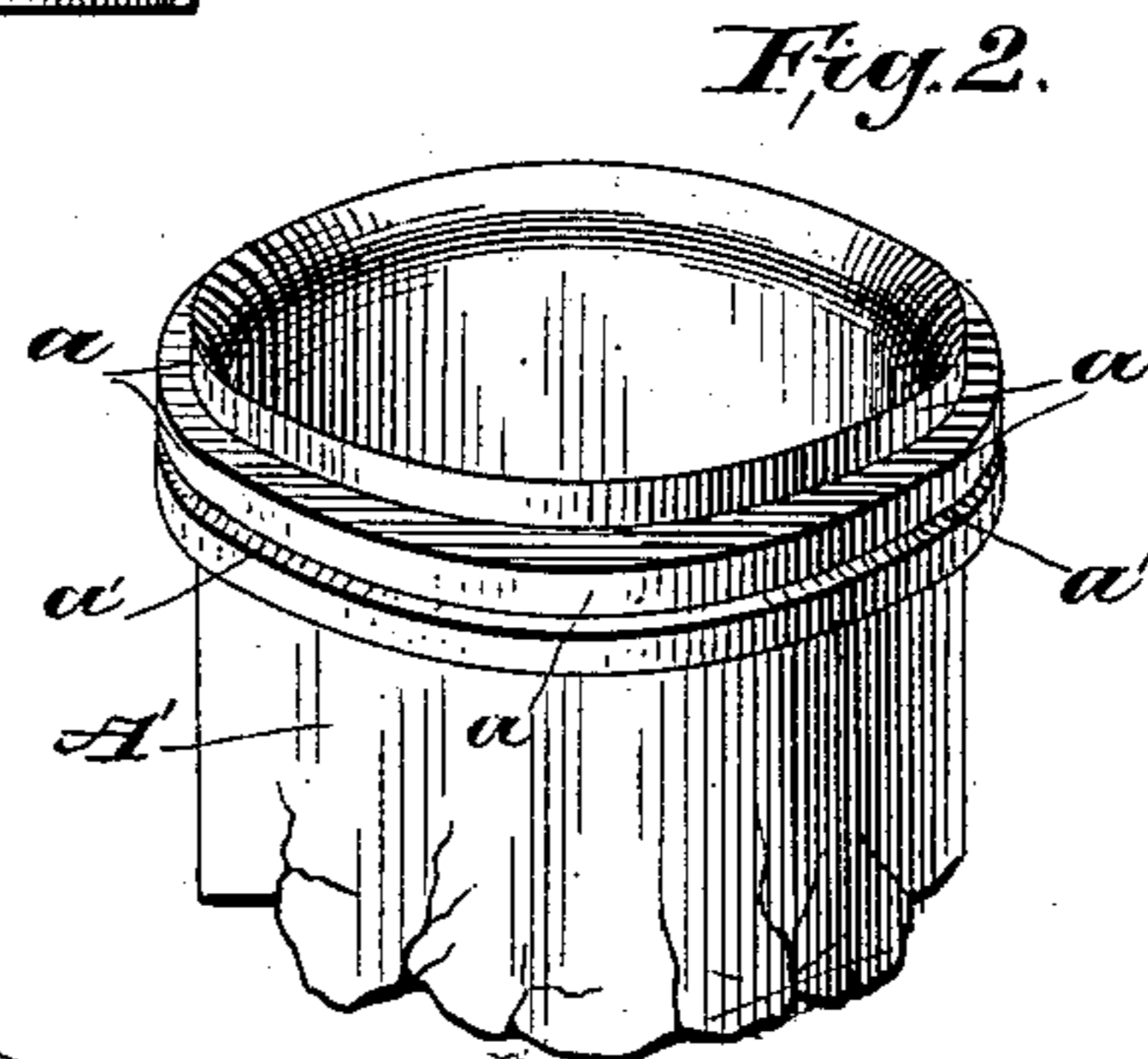
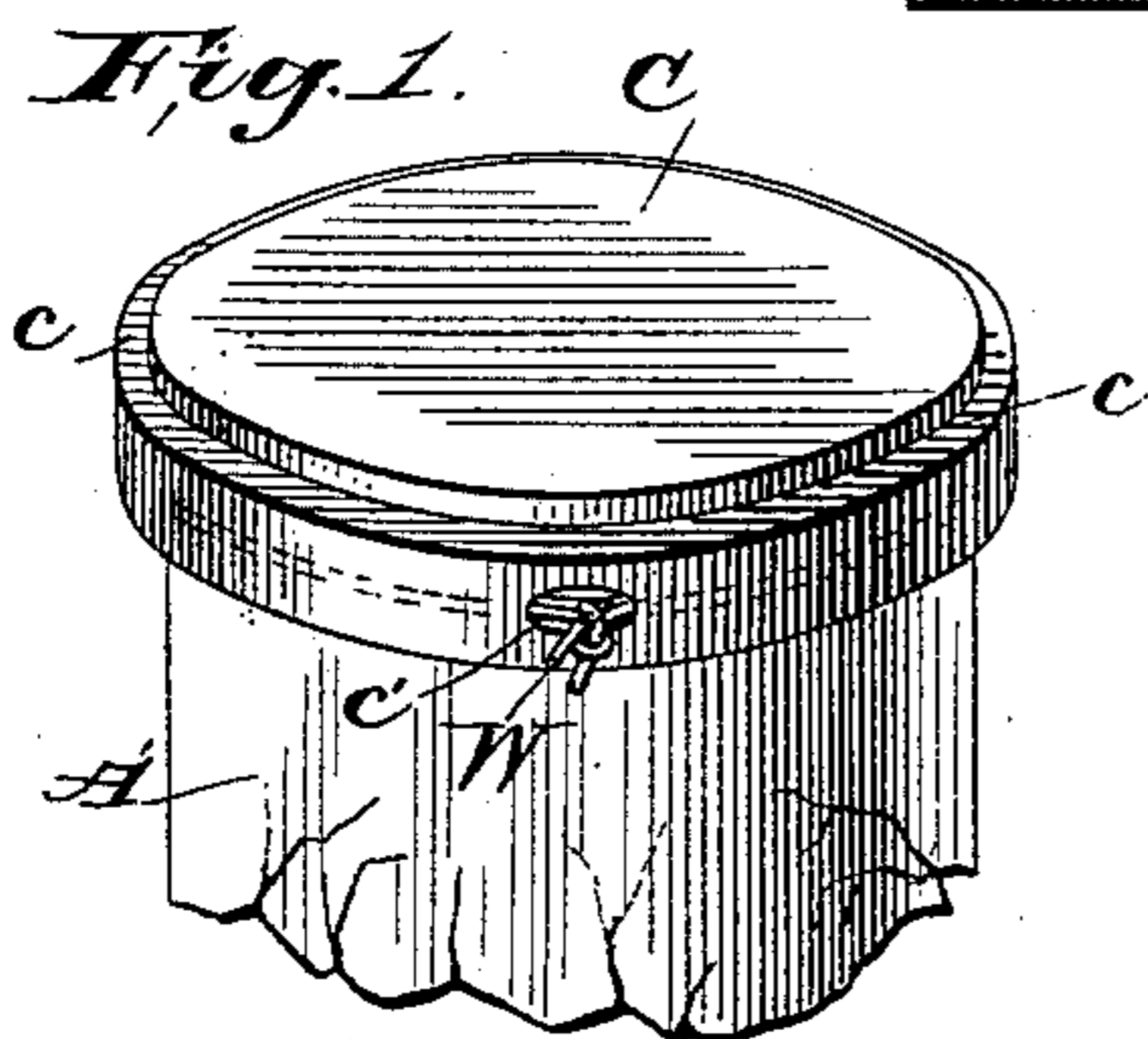
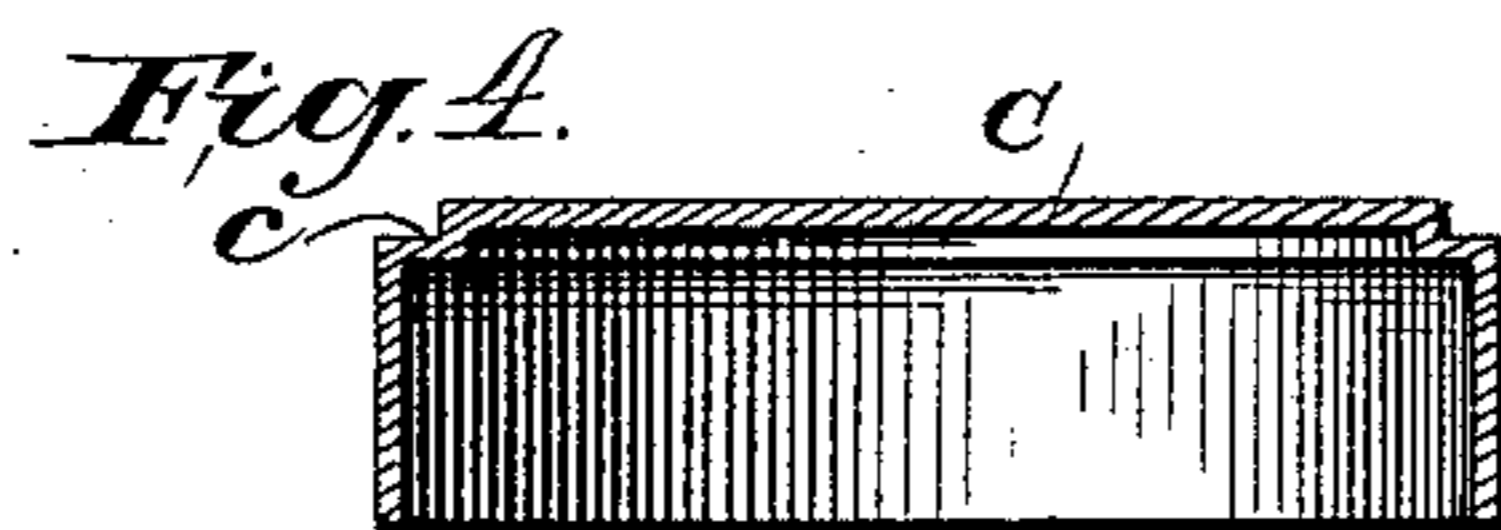
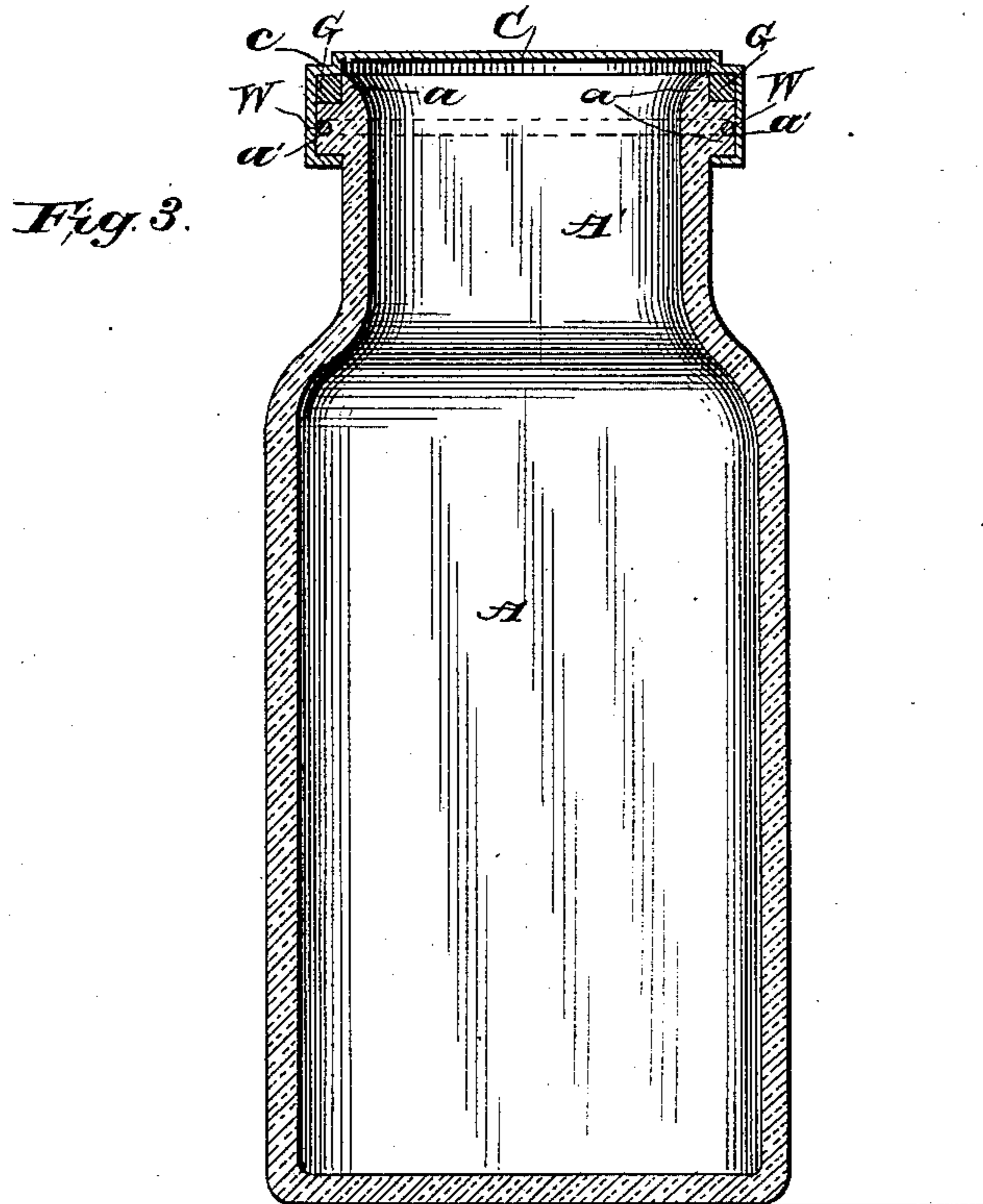


(No Model.)

J. PETIT.  
CLOSURE FOR JARS.

No. 361,369.

Patented Apr. 19, 1887.



Witnesses  
Wm R. Davis.  
Chas. C. Coulter

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Attorney.

# UNITED STATES PATENT OFFICE.

JOSEPH PETIT, OF BORDEAUX, FRANCE.

## CLOSURE FOR JARS.

SPECIFICATION forming part of Letters Patent No. 361,369, dated April 19, 1887.

Application filed February 17, 1887. Serial No. 227,952. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH PETIT, a citizen of the French Republic, residing at Bordeaux, in France, have invented certain new and useful Improvements in Sealing-Caps for Jars and other Like Vessels, of which the following is a full, clear, and exact description.

Figure 1 is a perspective view of the neck of a jar or bottle with its sealing cap or capsule. Fig. 2 is a like view of the neck of the jar without the sealing-cap, illustrating the construction thereof. Fig. 3 is a vertical transverse section of a jar illustrating my invention. Fig. 4 is a like view of the sealing cap or capsule detached, and Fig. 5 is an isometric view of the unsealing-wire detached.

The objections to the use of tin in the construction of vessels for containing preserves, and more especially that class of preserves which contain more or less acid, are well known, and many efforts are being made to substitute glass vessels for the tin vessels heretofore employed. The great difficulty encountered in the use of glass is in obtaining a hermetic closure to prevent fermentation and deterioration of the material contained in such vessels, and so far as I know this has heretofore not been obtained, except by comparatively costly and laborious means.

The object of this invention is to provide a means whereby a hermetic closure of glass vessels may be readily obtained in a cheap manner, and whereby the vessel may be as readily opened for removal of the contents.

To these ends the invention consists in the peculiar construction of the neck or mouth of glass jars, bottles, and other receivers for preserves, and in the combination therewith of a hermetic seal and means for removing the seal, substantially as hereinafter fully described, and as set forth in the claims.

In the drawings, A indicates the glass jar, and A' the neck and mouth thereof, provided with a peripheral flange, *a*, whose upper face constitutes the seat for a rubber gasket, and whose lower face forms a retaining-shoulder for the sealing cap or capsule. In the flange *a* is formed a peripheral groove, *a'*, for the reception of a wire, W, by means of which the seal of the bottle or jar A may be broken, as hereinafter described.

The capsule C consists of a cylinder of such

diameter as to fit over the annular shoulder *a*, and of such length as to admit of its being bent under the said shoulder *a*. The periphery of the capsule C is depressed, the depressed portion *c* fitting over the mouth and around the edge of the neck of the jar and resting on the rubber gasket G, seated on the shoulder *a*.

The sealing-cap has in its body on a line registering with the groove *a'*, or substantially so, an opening, *c'*, for the passage of the ends of the unsealing-wire W.

The mode of sealing and unsealing the jar may be briefly described as follows, the sealing being preferably effected in a suitable machine: A rubber gasket, G, is placed upon the shoulder *a* around the mouth of the jar. A wire, W, of suitable length, is then laid in the groove of said shoulder. The cap or capsule is now placed upon the mouth of the jar, the ends of the wire W being passed through the opening *c'*. Pressure is now applied to the top of the capsule, to compress the rubber gasket until the upper contracted portion of the capsule incloses the mouth of the jar, when the edge of the sealing-cap is bent in under the shoulder *a*. If desired, the wire may be applied after the sealing-cap has been secured to the jar, by introducing one end through the opening *c'* and pushing the same around the flange *a* in the groove *a'* until the other end reaches the opening *c'*. It is obvious that in this manner a hermetic closure is obtained and the sealing cap or capsule firmly held in position. The ends of the wire W may now be twisted or simply bent over the capsule in opposite directions.

When it is desired to break the seal of the jar, the wire ends are untwisted or bent out, and on pulling upon the wire ends in opposite directions the capsule is cut in two. This may also be effected, and in a much easier way, by forming a loop at one end of the wire and fastening the other end securely to said loop or to the wire, as shown in Fig. 5.

To cut the capsule, it will be only necessary to insert a suitable instrument—such as the point of an ice-pick, a nail, or an awl—into the loop, and rotate the wire around the neck of the jar, as will be readily understood.

By means of the construction of neck and capsule described a hermetic closure of the mouth of the jar is obtained, since the rubber

gasket G, when compressed, is caused to bear tightly upon the shoulder *a* around the mouth of the jar and against the top and inner periphery of the sealing cap or capsule C. If it is desired to isolate the contents of the jar from the capsule, this may be effected by interposing a disk of vegetable parchment or of pure tin-foil.

It will of course be understood that the described means for sealing vessels, although especially designed for glass jars, may be applied to cans or vessels made of other material.

What I claim is—

1. A vessel provided with a flange encompassing its open end near the mouth, said flange having a groove in its outer face, a rubber gasket seated on said flange, and a sealing cap or capsule fitting over the mouth of the vessel, the gasket, and the said flange, and having its edge bent under the flange, said cap or capsule being provided with an opening in its vertical wall, in combination with a wire seated in the

groove of the flange, the ends of said wire projecting through the opening of the cap or capsule, substantially as and for the purpose specified.

2. As a means for breaking the seal of sealed vessels, the combination, with the vessel and a sealing cap or capsule fitted over the open end thereof and firmly connected therewith, of a wire arranged around the vessel, under the cap, between the point of connection and the mouth of the vessel, the ends of said wire projecting through the cap and being connected together to form an eye or loop, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 29th day of January, 1887.

JOSEPH PETIT.

Witnesses:

CAMILLE CHARROPPIN.

JULES PAROD.