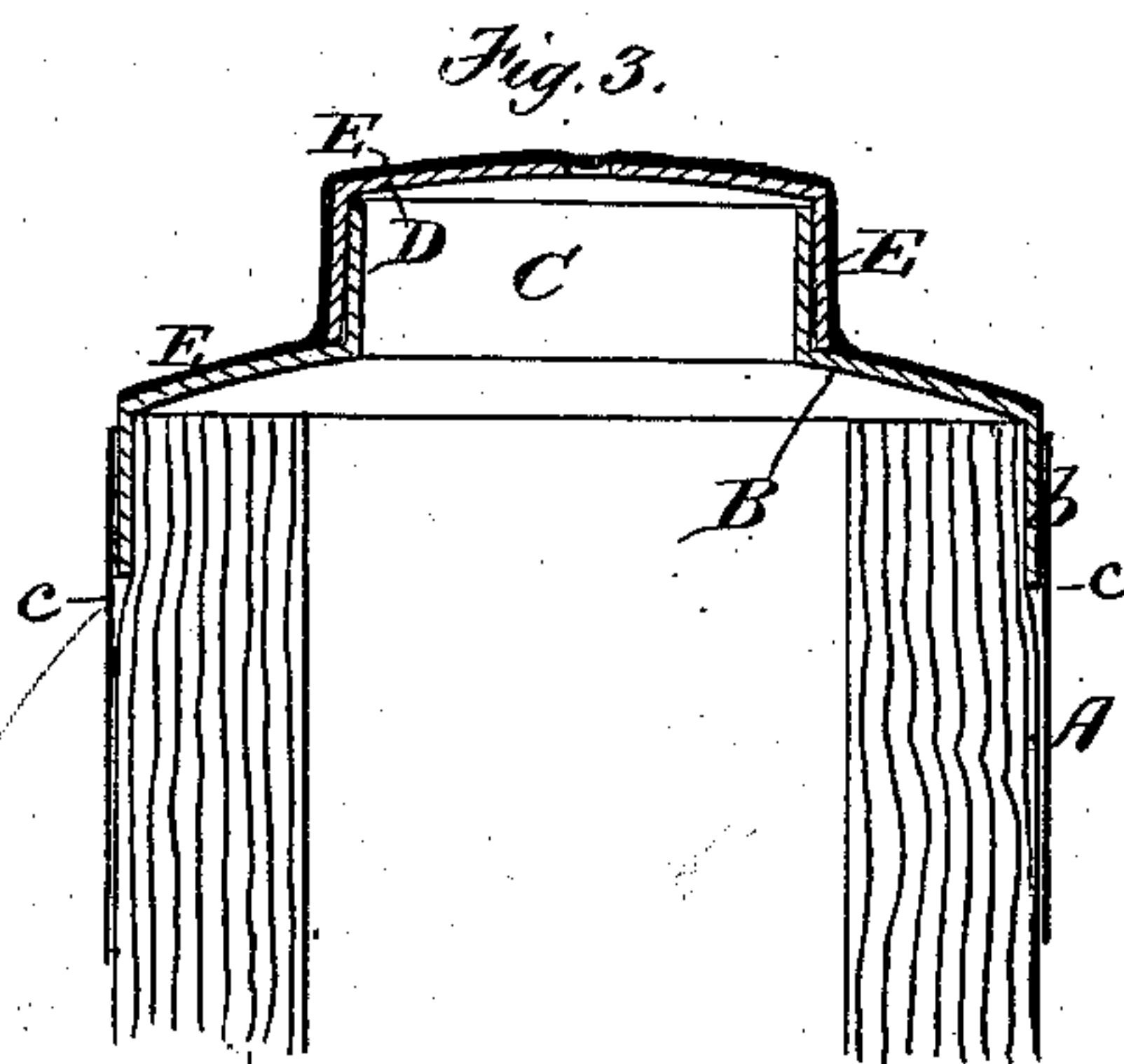
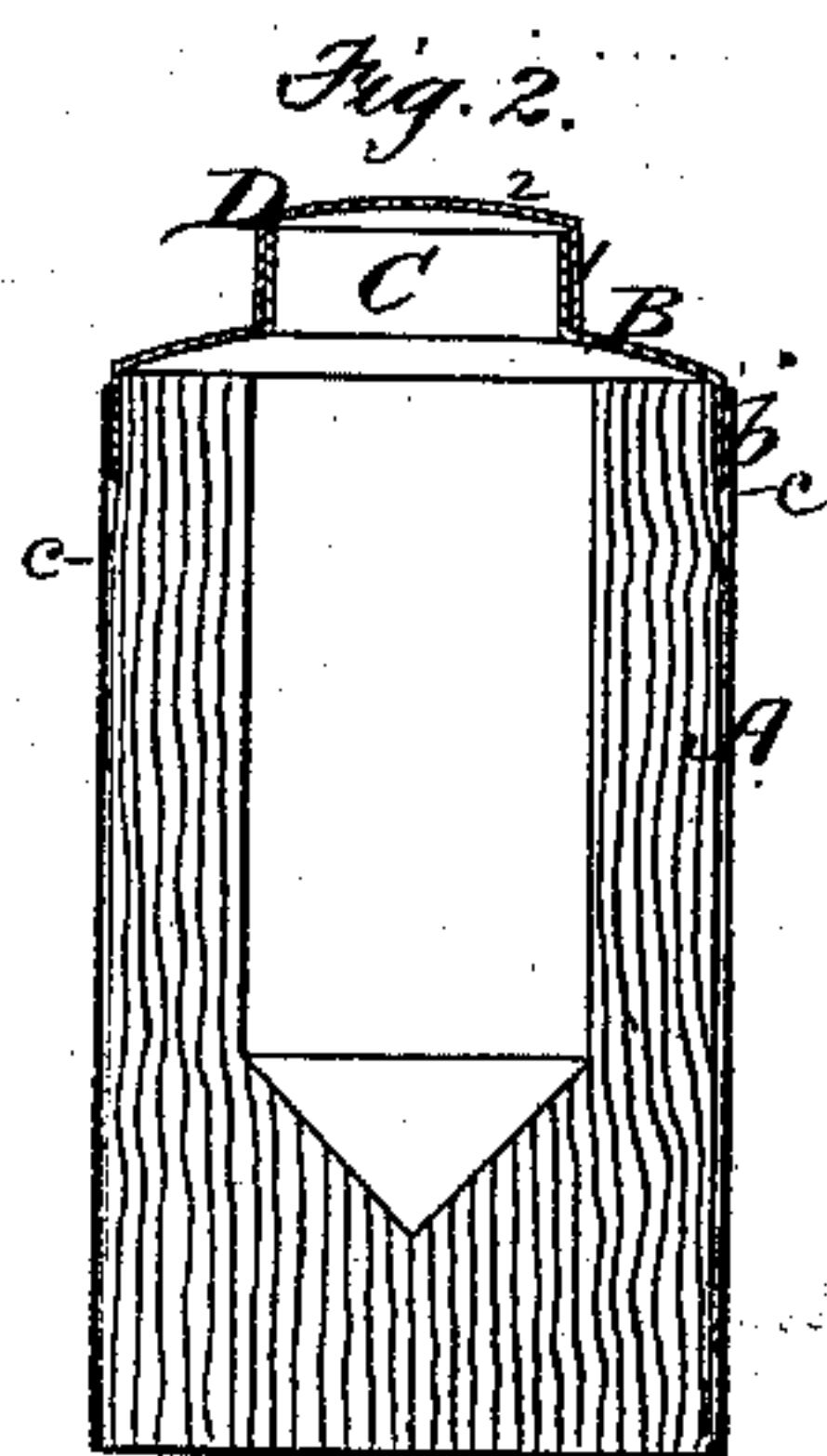
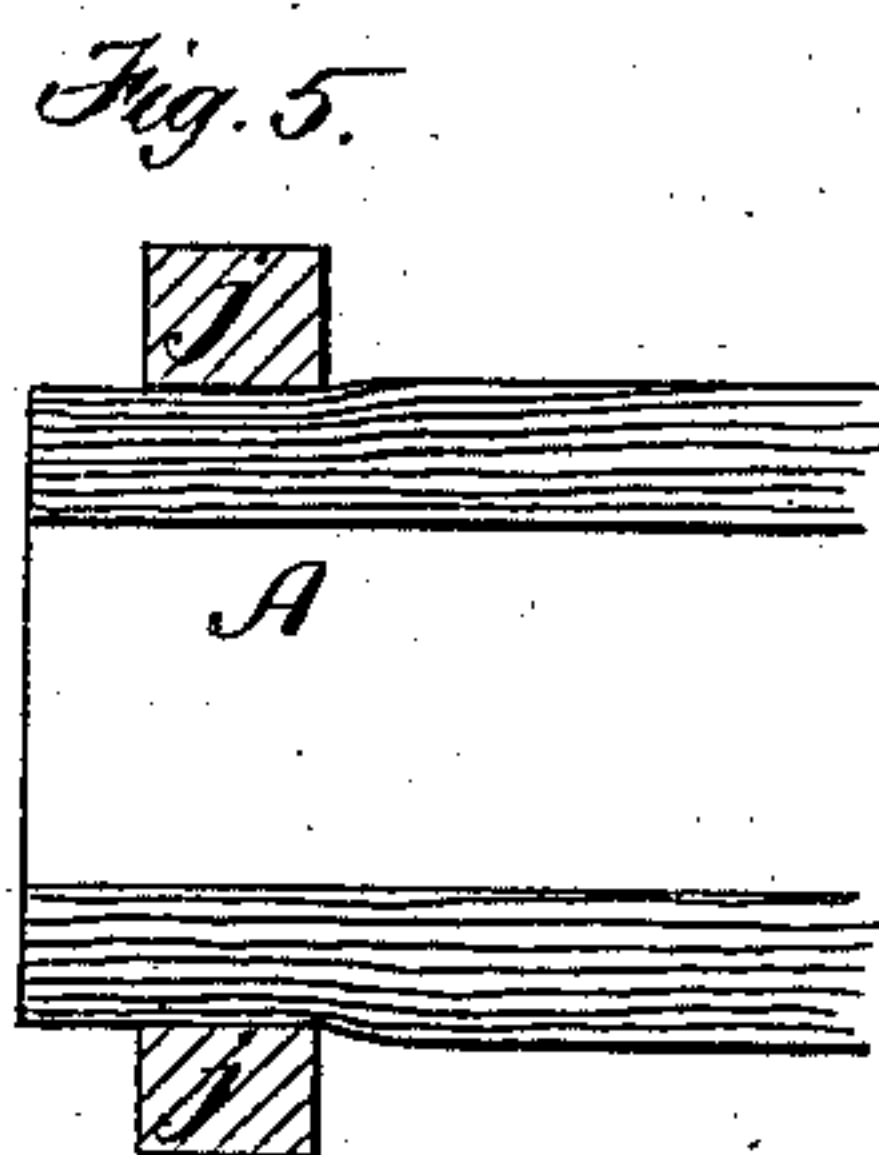
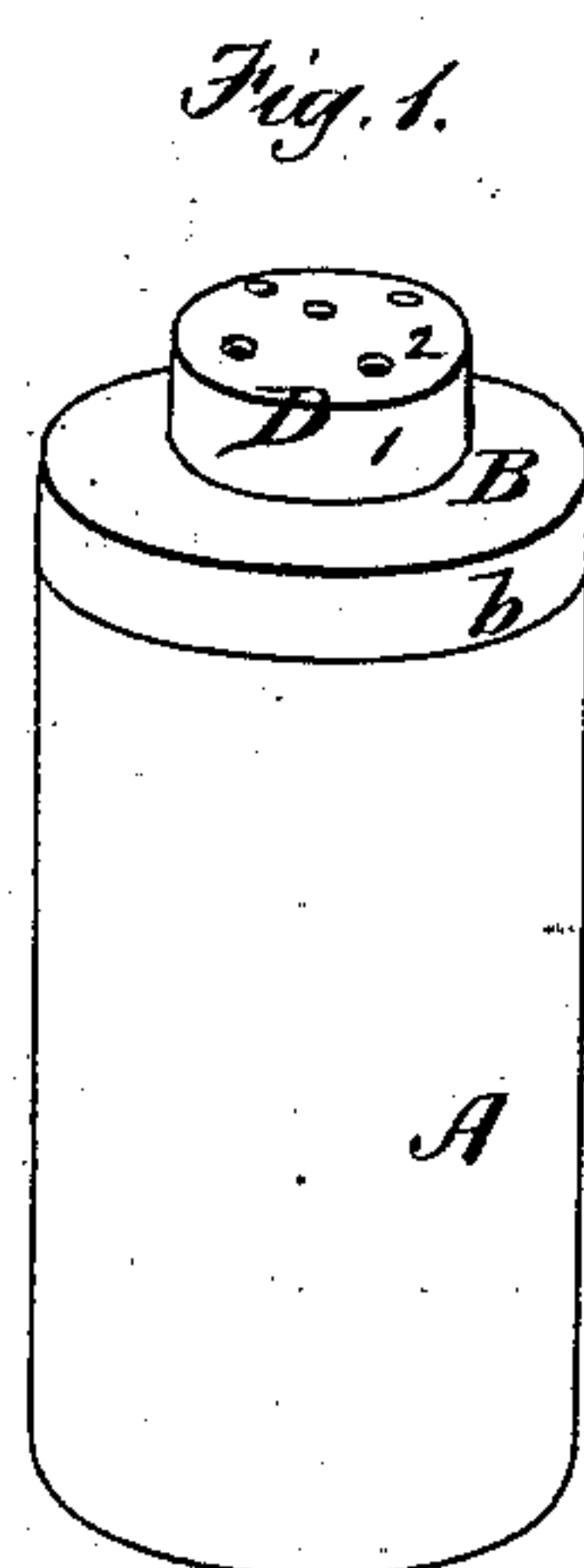
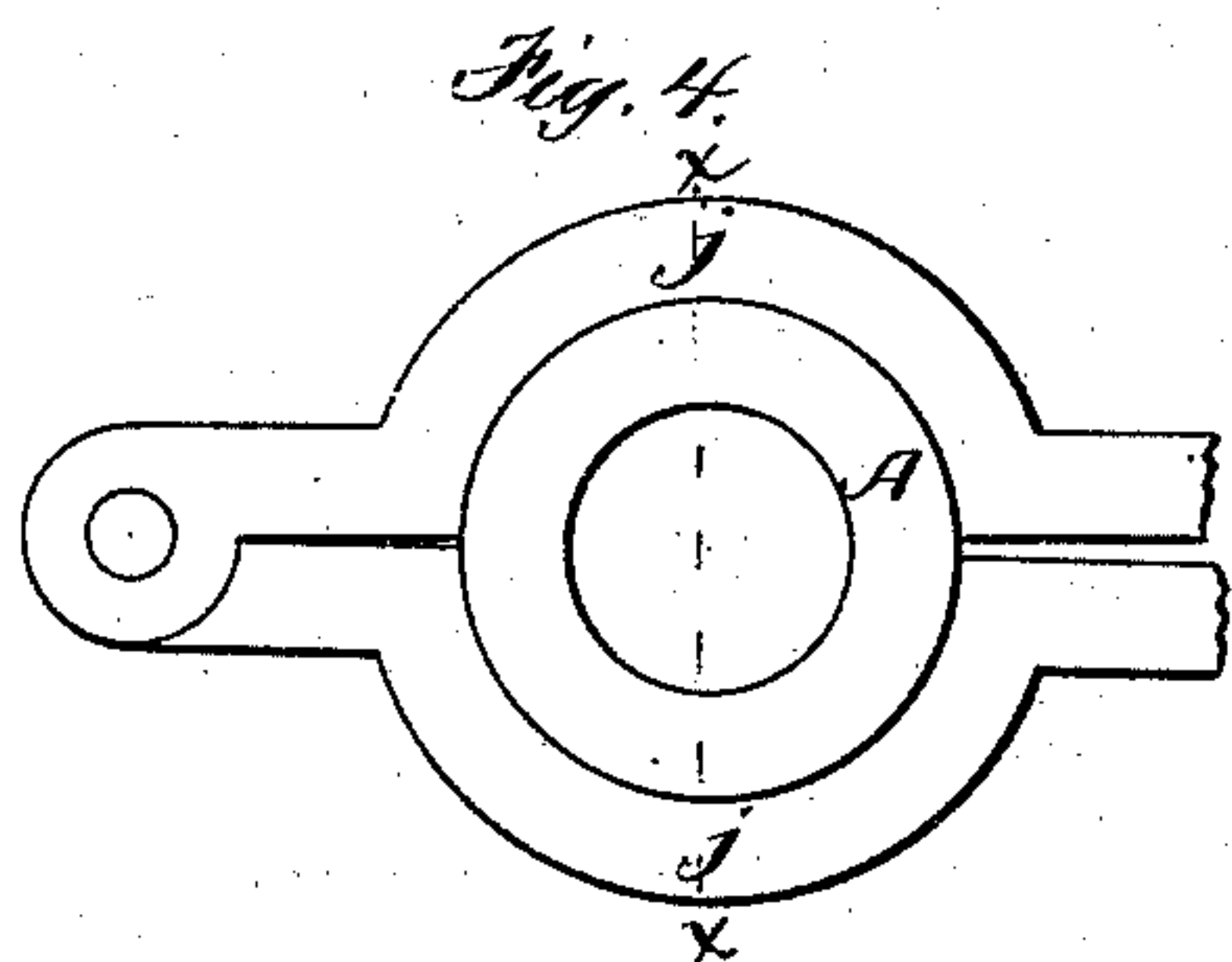


H. SAWYER.
Bluing-Package.

No. 224,731.

Patented Feb. 17, 1880.



Witnesses.

E. B. Trainchild
Geo. S. Turner

Inventor
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UNITED STATES PATENT OFFICE.

HENRY SAWYER, OF CHELSEA, MASSACHUSETTS.

BLUING-PACKAGE.

SPECIFICATION forming part of Letters Patent No. 224,731, dated February 17, 1880.

Application filed January 19, 1880.

To all whom it may concern:

Be it known that I, HENRY SAWYER, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Bluing-Packages, of which the following is a specification.

This invention has for its object to provide an improved article of commerce and manufacture—viz., a package for dry powdered or granulated bluing for laundry use—which can be economically manufactured and will hold the bluing securely and protect it from dampness and the atmosphere until it is required for use, and can be readily opened to allow the bluing to be poured into the neck of a bottle without the slightest liability of soiling the hands of the person opening and using the package, or of wasting the bluing or allowing it to be deposited on the outside of the bottle into which it is poured.

To these ends my invention consists in the improved bluing-package, which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of a bluing-package, without the label or wrapper, embodying my invention. Fig. 2 represents a longitudinal section of the same with the label in position. Fig. 3 represents an enlarged section of the top of the package, showing the sealing-wax or cement or other coating that seals the perforated cap and secures it to the top of the casing. Fig. 4 represents a side view of a device used to compress the end of the wooden cylinder. Fig. 5 represents a section on line *xx*, Fig. 4.

The same letters refer to the same parts in the figures.

In carrying out my invention I take a solid cylinder of wood, A, and bore it out to form a receptacle of any desired size, leaving one end of the cylinder closed to form the bottom of the package. To the open end of the cylinder I apply a top, B, of sheet metal, having a circular flange, *b*, which is formed to inclose the end of the cylinder A. The diameter of the flange *b* is slightly less than the natural diameter of the end of the cylinder A, so that the latter has to be compressed before the flange *b* can inclose it.

The compression of the end of the cylinder may be effected by concave jaws *jj*, as shown in Figs. 4 and 5, said jaws holding the cylinder near its end until the top is applied. After the cylinder is released by the jaws the natural expansion of the wood against the flange *b* holds the top securely in place on the cylinder.

The top B is provided with a discharge-tube, C, of smaller diameter than the cylinder, said tube being of such size that it will enter the neck of an ordinary quart or pint bottle. The tube C rises about a quarter of an inch (more or less) from the top B.

D represents a cap, of sheet metal, which is composed of a flange, 1, and a perforated top, 2. The flange 1 is formed to inclose and fit snugly upon the tube C, and is preferably somewhat tapered, so that its pressure against the tube C will increase as it is pushed down thereon. When the cap is in place the lower edge of its flange is close to or in contact with the top B. The perforations in the cap are of sufficient size to permit the passage of grains or particles of bluing.

After the bluing is placed in the cylinder A the cap D is placed upon the tube C and the top of the package is dipped in a liquid cement, such as common sealing-wax or other suitable material which will solidify when exposed to the air. By this operation a coating, E, of such sealing-wax or other cement is applied, which covers the cap D and the surrounding portion of the top B, as shown in Fig. 3. This coating closes the perforations in the cap D and connects the cap firmly to the top B, so that the contents of the cylinder are tightly sealed.

The package is now ready for the market, a suitable label, *c*, being put upon the cylinder, such label preferably covering the entire periphery of the cylinder and the flange *b*, and assisting to hold the top in place on the cylinder.

When the package is to be used, if only a small portion of the inclosed bluing is wanted, the coating is removed from the perforations of the cap by punching through the coating into the perforations, and the bluing is shaken out as desired. If the bluing is to be put into water in a bottle, the coating E is cut or broken

away around the lower edge of the flange of the cap, thereby loosening the latter. The cap is then removed and the tube C is placed in the neck of the bottle, and the desired quantity is discharged into the bottle without any liability of spilling the bluing or soiling the fingers. If the coating is not removed from the perforations, the cap can be used again to keep the bluing in the package in case any remains therein.

The sides of the cap D, in connection with the top B, form a re-entrant angle at the lower edge of the flange of the cap. This angle not only causes a deeper and stronger accumulation of the coating E along the edge of the flange, as shown in Fig. 3, thereby strongly connecting the cap to the top, but it also affords a guide for the tool used to cut or break the coating and release the cap, so that the operation of opening the package can be performed very quickly, there being no difficulty in cutting in the proper line.

I claim—

1. A bluing-package having a discharge-tube in its top of smaller diameter than the package, and a cap covering said tube and secured to the package by a coating of cement or other suitable material, the sides of the cap and the top of the package forming an angle

which affords a guide for a tool to cut the coating, as set forth.

2. As an improved article of manufacture, the bluing-package herein described, consisting of a hollow cylinder of wood, open at one end, a metallic top secured to the open end of the cylinder and provided with a short discharge-tube of smaller diameter than the cylinder, and adapted to enter the neck of a bottle, a cap applied to the tube, and a coating, of cement or other suitable material, which secures the cap to the top of the package, as set forth.

3. As an improved article of manufacture, a bluing-package composed of a hollow cylinder of wood, compressed at one end, and a metallic top having a suitable discharge-opening, and a flange inclosing the compressed end of the cylinder and held in place by the expansion of the wood, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 16th day of January, 1880.

HENRY SAWYER.

Witnesses:

MOSES H. LEWIS,
MELVILLE J. BAKER.