

No. 691,803.

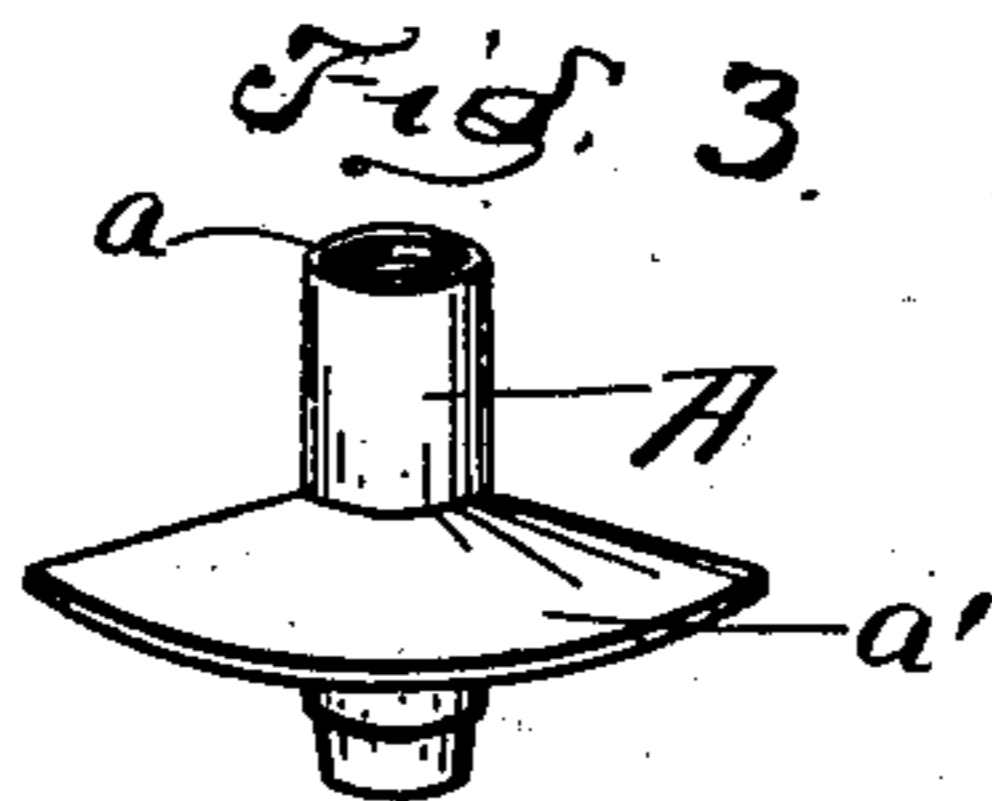
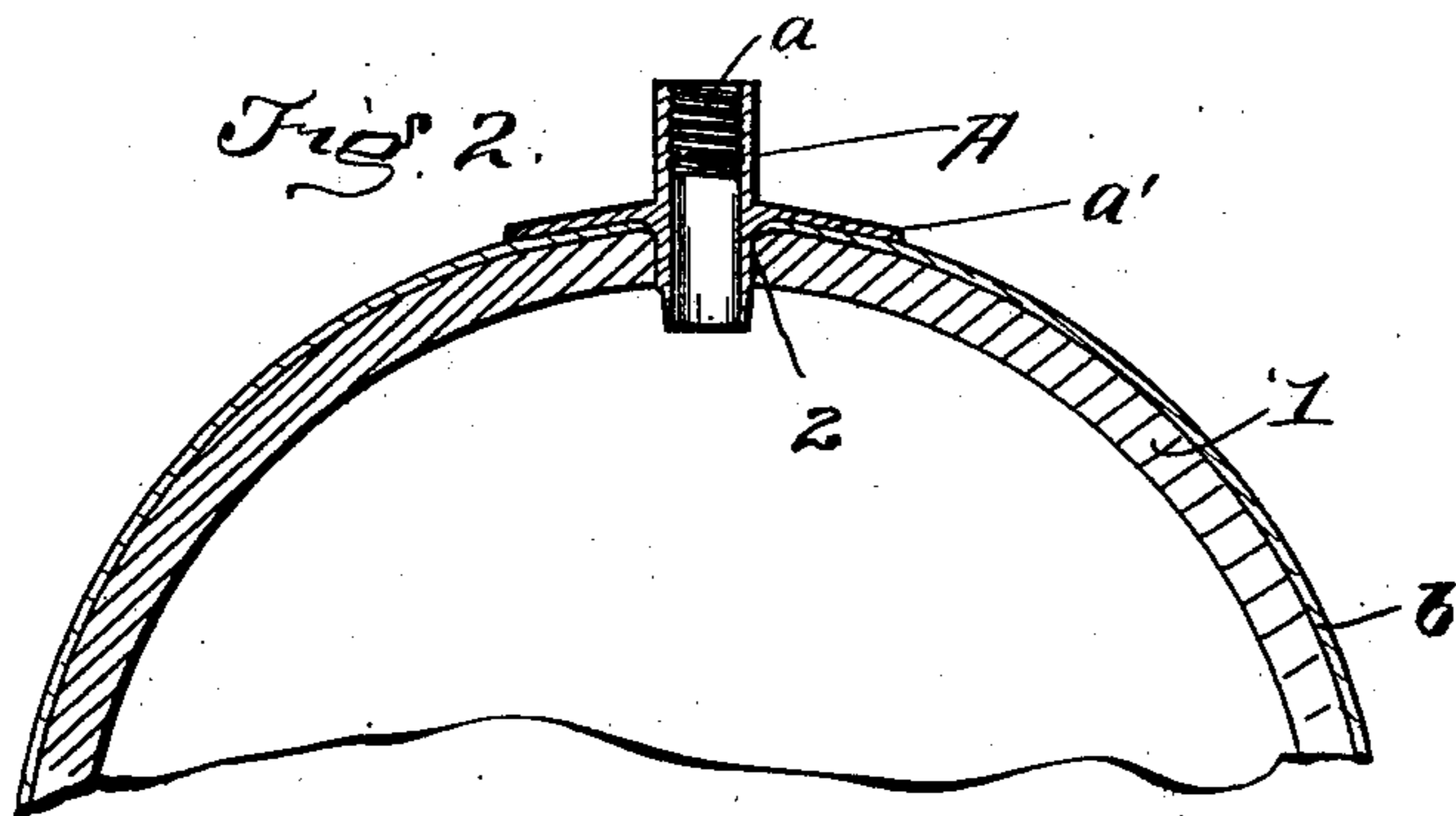
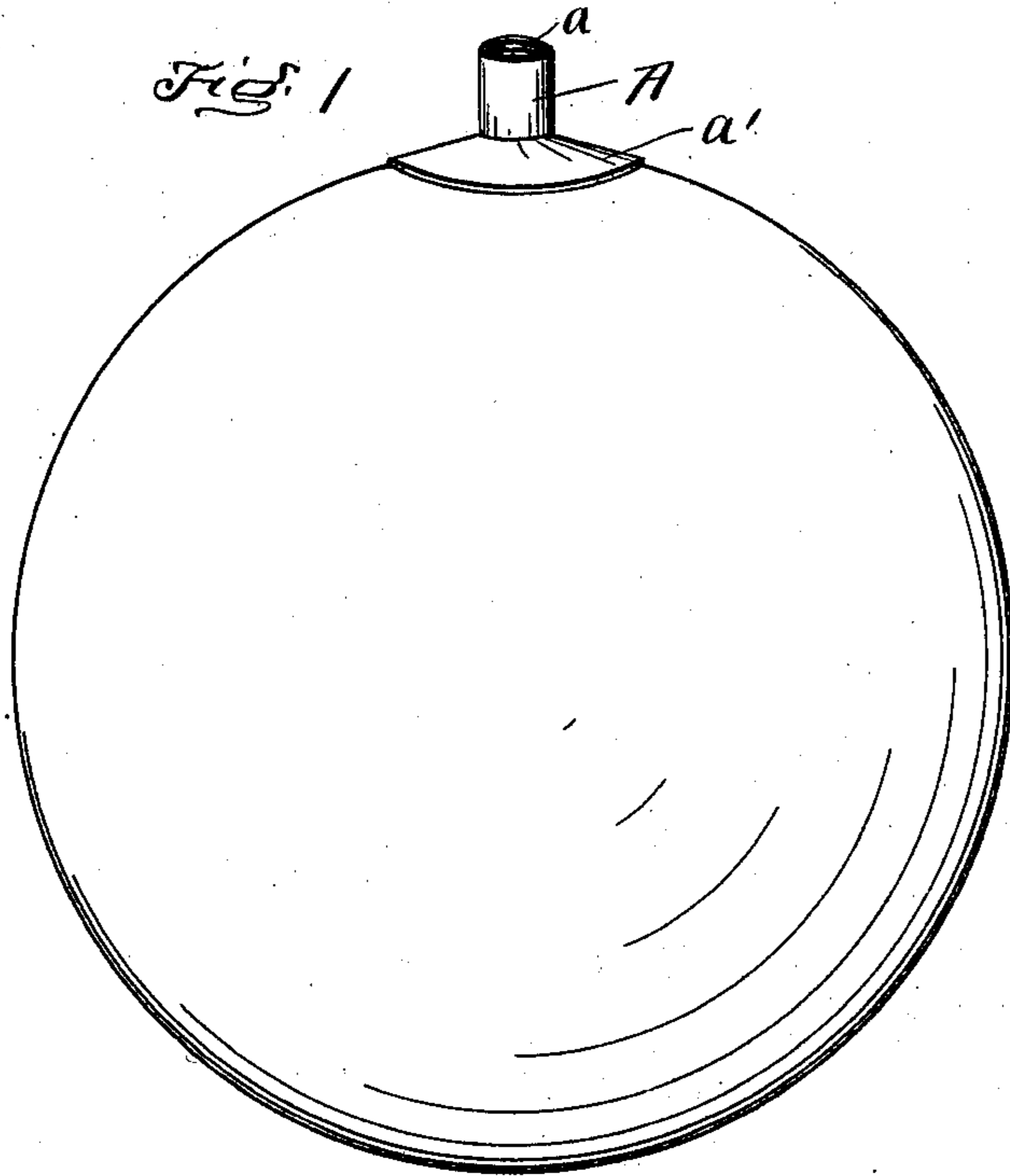
Patented Jan. 28, 1902.

W. F. PATTON.

PROCESS OF FORMING FLOATS FOR STEAM OR WATER TRAPS.

(Application filed Apr. 25, 1901.)

(No Model.)



witnesses:
G. J. Rogers.
Chas. M. Ball

Inventor,
William F. Patton
By Chas. V. Miller
Att'y.

UNITED STATES PATENT OFFICE.

WILLIAM F. PATTON, OF TOLEDO, OHIO.

PROCESS OF FORMING FLOATS FOR STEAM OR WATER TRAPS.

SPECIFICATION forming part of Letters Patent No. 691,803, dated January 28, 1902.

Application filed April 25, 1901. Serial No. 57,391. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM F. PATTON, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented new and useful Improvements in the Process of Forming Floats for Steam or Water Traps, of which the following is a specification.

My invention relates to a new process for forming hollow seamless spheres, and more particularly floats for steam or water traps.

The invention consists, broadly, in forming a hollow sphere of paraffin, attaching the same to a screw-threaded nipple for engagement with the trap, and electroplating the paraffin sphere with copper, forming a hollow seamless copper sphere.

The invention consists in certain other steps, which will be hereinafter described and claimed.

This process may be carried out by the apparatus shown in the accompanying drawings.

In the accompanying drawings, Figure 1 is a perspective view. Fig. 2 is a sectional view of a portion of the ball and nipple. Fig. 3 is a perspective view of the nipple.

The paraffin sphere 1 is provided with an opening 2 and is formed by placing a quantity of melted paraffin in the cylindrical cavity of a sectional mold and rotating or rolling the mold about to cause the paraffin to adhere to the wall of the mold-chamber to form when cooled and solidified the completed sphere, the opening 2 being formed by an air-vent tube fitted in the mold. The nipple A is fitted within the opening 2 and is internally screw-threaded at *a* for engagement with the lever of a steam or water trap and is provided with a central projecting flange *a'*, which abuts against the outer surface of the paraffin sphere. The paraffin sphere is first subjected to a coating of plumbago; second, to a coating of iron by hydrogen, and, third, "cradled" or rolled about (immersed) in sulfate of copper preparatory to electroplating. It is then electro copper-plated to the desired thickness, thus producing a seamless ball free from solder and at the same

time light enough to float. The copper shell *b* is also united by this process to the nipple A.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The process of forming hollow, seamless metallic spheres, which consists in the following steps: the subjecting of a hollow paraffin sphere having a metallic nipple inserted therein, to a coating of plumbago, iron by hydrogen, and sulfate of copper, and then electro copper-plating to the desired thickness, substantially as described.

2. The process of forming hollow metallic spheres, which consists in the following steps: the formation of a base consisting of a hollow paraffin sphere having a metallic nipple inserted therein, and then electroplating the paraffin sphere to the desired thickness to form a surrounding shell joined to said nipple, substantially as described.

3. The process of forming hollow metallic spheres, which consists in the following steps: forming a hollow paraffin sphere having an opening, inserting a flanged metallic nipple in said opening with the flange upon the exterior of the sphere, and then electroplating the paraffin sphere and nipple to form a shell surrounding the sphere and joined to the wall and flange of the nipple, substantially as described.

4. The process of forming hollow metallic spheres which consists in the following steps: forming a hollow paraffin sphere having an opening, inserting a flanged metallic nipple in said opening with the flange upon the exterior of the sphere, subjecting the sphere to a coating of plumbago, iron by hydrogen, and sulfate of copper, and then electroplating to the desired depth, forming a shell surrounding the sphere and joined to said nipple, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM F. PATTON.

Witnesses:

CHAS. R. MILLER,
CHAS. M. BALL.