

No. 754,081.

PATENTED MAR. 8, 1904.

A. MÜLLER.
BATTERY STOPPER.
APPLICATION FILED OCT. 24, 1903.

NO MODEL.

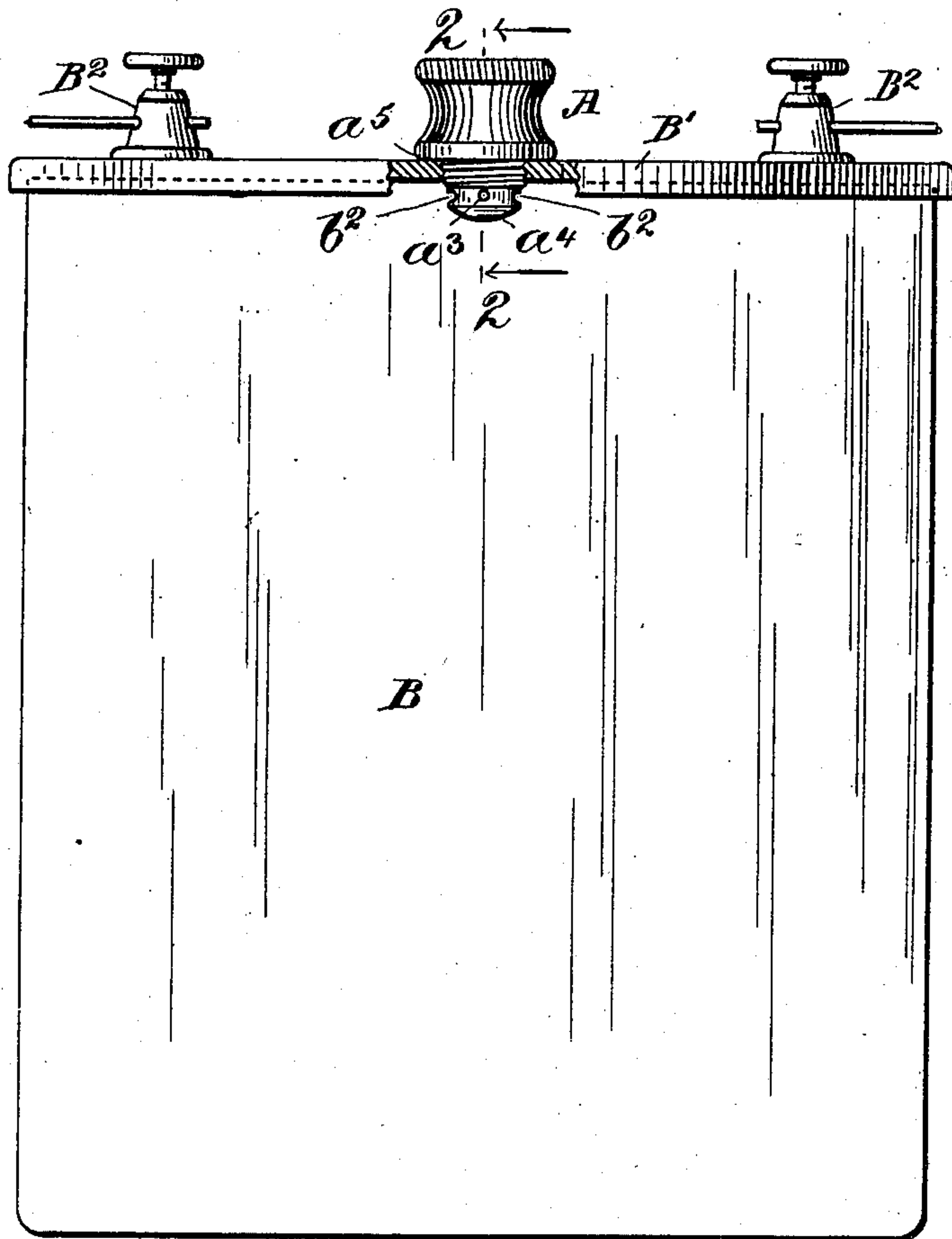


Fig. 1.

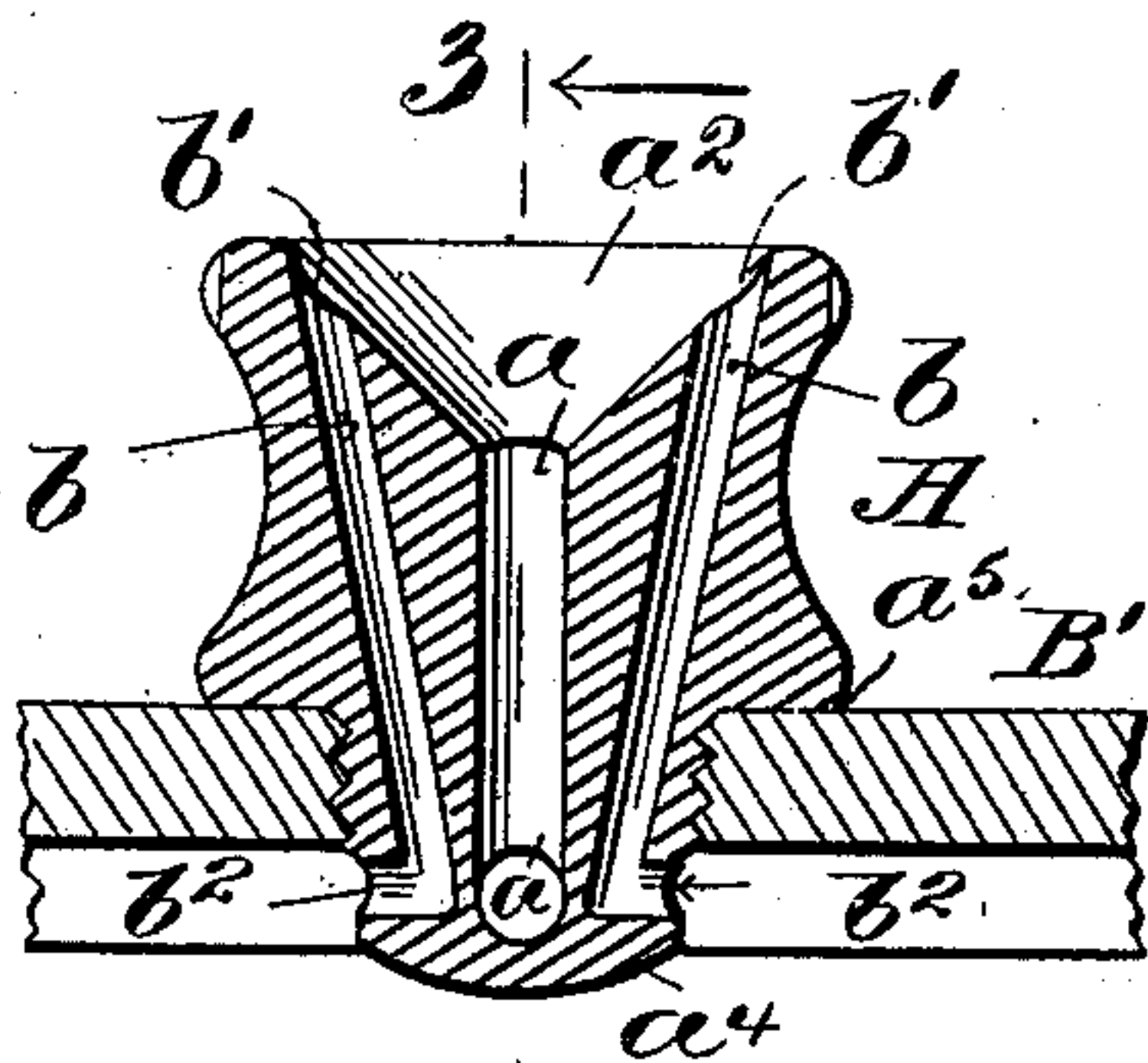


Fig. 2.

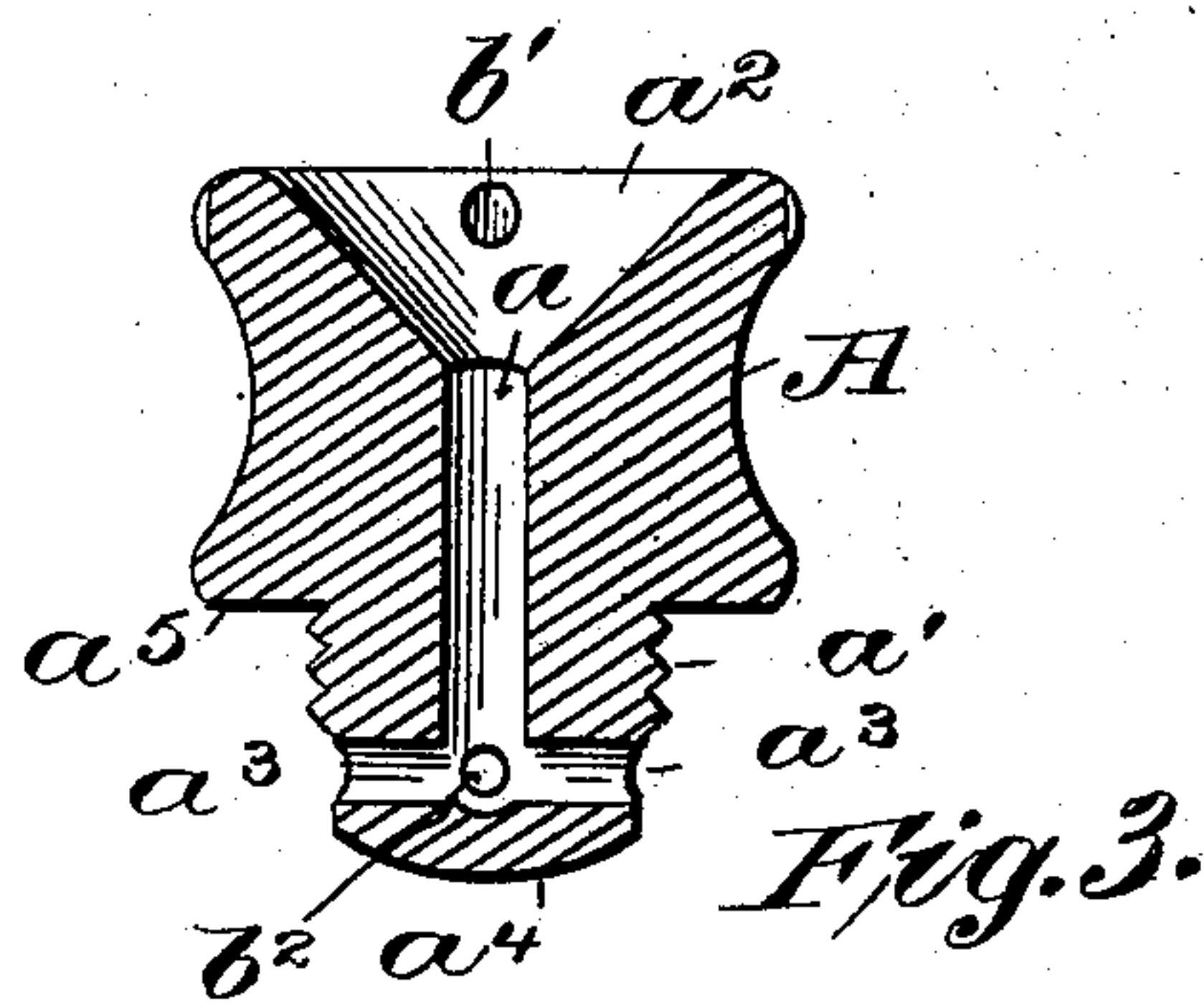


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

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BATTERY-STOPPER.

SPECIFICATION forming part of Letters Patent No. 754,081, dated March 8, 1904.

Application filed October 24, 1903. Serial No. 178,337. (No model.)

To all whom it may concern:

Be it known that I, ALBERT MÜLLER, a resident of the city of New York, borough of Manhattan, county and State of New York, have invented certain new and useful Improvements in Battery-Stoppers, of which the following is a full, clear, and exact description.

I have found that when accumulator or like batteries are used upon automobiles and other vehicles the jarring or vibration thereof causes the liquid contents of the closed battery jars or vessels to splash up against the cover thereof and through the opening in the vent plugs or stoppers usually employed in such battery vessels, thereby dripping upon the outside of the battery vessels and damaging the metal and other parts with which the acid liquid contents come in contact.

My invention has for its object to overcome these objections and to provide a simple and inexpensive stopper or plug to be applied to battery jars or containers and so constructed that the liquid contents thereof when agitated or shaken through the vibration or jarring of the vehicle carrying the same will not overflow, but will return through an inlet-passage in the stopper back into the interior of the vessel.

To these and other ends, which will hereinafter appear, my invention consists in the novel details of improvement hereinafter described, and summarized in the appended claims.

Reference is to be had to the accompanying drawings, forming part of this specification, wherein—

Figure 1 is a side elevation of a battery jar or vessel, showing my stopper applied. Fig. 2 is a vertical section thereof, taken on the line 2 2 in Fig. 1 looking in the direction of the arrows; and Fig. 3 is a vertical section of the stopper, taken on the line 3 3 in Fig. 2 looking in the direction of the arrows.

Similar letters of reference indicate corresponding parts in the several views.

Referring to the accompanying drawings, B indicates a battery jar or vessel, and B' the top or cover thereof, B² indicating the binding-posts.

A indicates my improved plug or stopper, preferably made of hard rubber, which is pro-

vided with a flared funnel-like mouth a^2 and with a vertical central passage or port a , leading from the bottom of the flared mouth down to and communicating with a transverse port or passage a^3 .

b b indicate ports or passages leading from the upper edge of the mouth of the stopper, as at b' b' , down to and communicating with the short intersecting ports b^2 b^2 , Fig. 2, near the bottom of the stopper.

The stopper is provided with a threaded portion a' and with a shoulder a^5 to permit its being tightly screwed into the lid or cover of the battery jar or container. When the stopper is in position upon the battery jar or vessel, as shown, the passages or ports described open into the interior of the vessel just below the cover, Fig. 1, and any liquid which may splash upwardly by reason of vibration or jarring of the battery will strike the imperforate bottom a^4 of the stopper, and yet gas generated by the agitated liquid acids readily escapes through the openings at the side of the plug or stopper and any liquid which may at the same time be forced through such openings will return into the vessel through the central port a .

It will be seen that the construction shown and described provides a stopper which will allow the venting of the gases produced by the agitation of the acid contents in the battery vessel, and at the same time any overflow of liquid which may be caused by the vibration or shaking of the batteries will be confined within the mouth of the stopper and return into the interior of the battery-jar through the inlet-port, thus preventing the acids dripping upon and damaging metal and other parts with which the same may come in contact.

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

1. The combination with a battery vessel, of a stopper in the top thereof provided with a funnel-like mouth and with an imperforate bottom and inlet and outlet ports leading from said mouth to the interior of the battery vessel above the imperforate bottom of the stopper.

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2. In combination with a closed battery-
container, of a removable stopper having a
funnel-like mouth, a transverse port near the
bottom of the stopper communicating with the
5 interior of the container, a vertical central
port leading from the mouth of the stopper
and intersecting the transverse port, and a
plurality of irregular ports or passages lead-
ing from the mouth of the stopper to the in-
10 terior of the container, substantially as de-
scribed.

3. A device for preventing the overflow of
battery vessels, comprising a plug provided
with a funnel-like mouth at the top and an
15 imperforate bottom, a transverse port near
said bottom, a central port leading from said
mouth and communicating with said trans-
verse port, and a plurality of vertical ports

leading from the mouth to the exterior of the
plug near the said bottom through intersect- 20
ing short ports, substantially as described.

4. A vent-stopper for battery vessels, pro-
vided with a flared mouth at the top and an
imperforate bottom, a transverse port near
said bottom, a central port leading from the 25
bottom of said mouth to and intersecting the
transverse port, an irregular port leading from
the upper edge of the mouth to the exterior
of the stopper near said bottom, said stopper
being provided with a shoulder and exterior 30
threads, substantially as described.

ALBERT MÜLLER.

Witnesses:

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