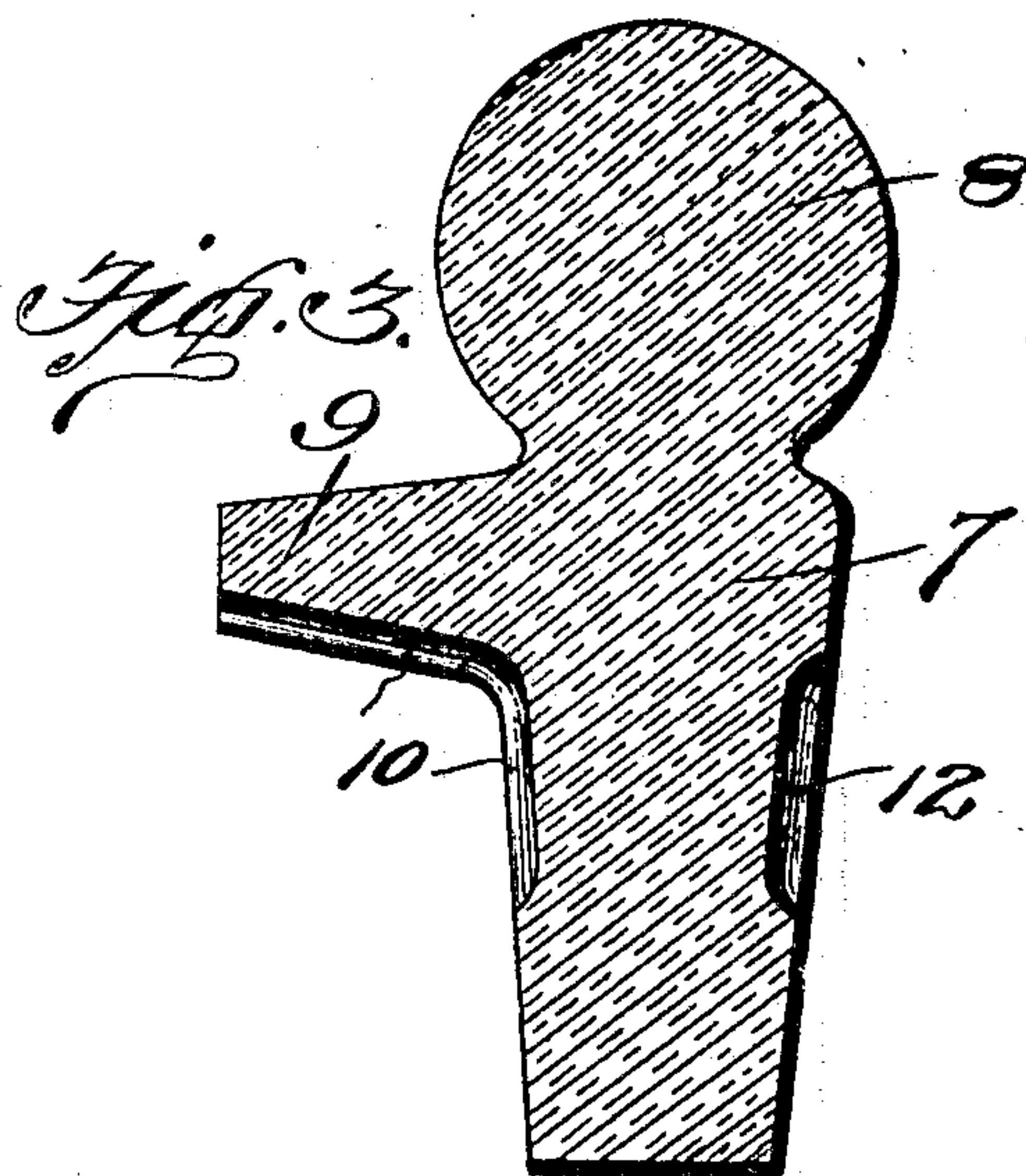
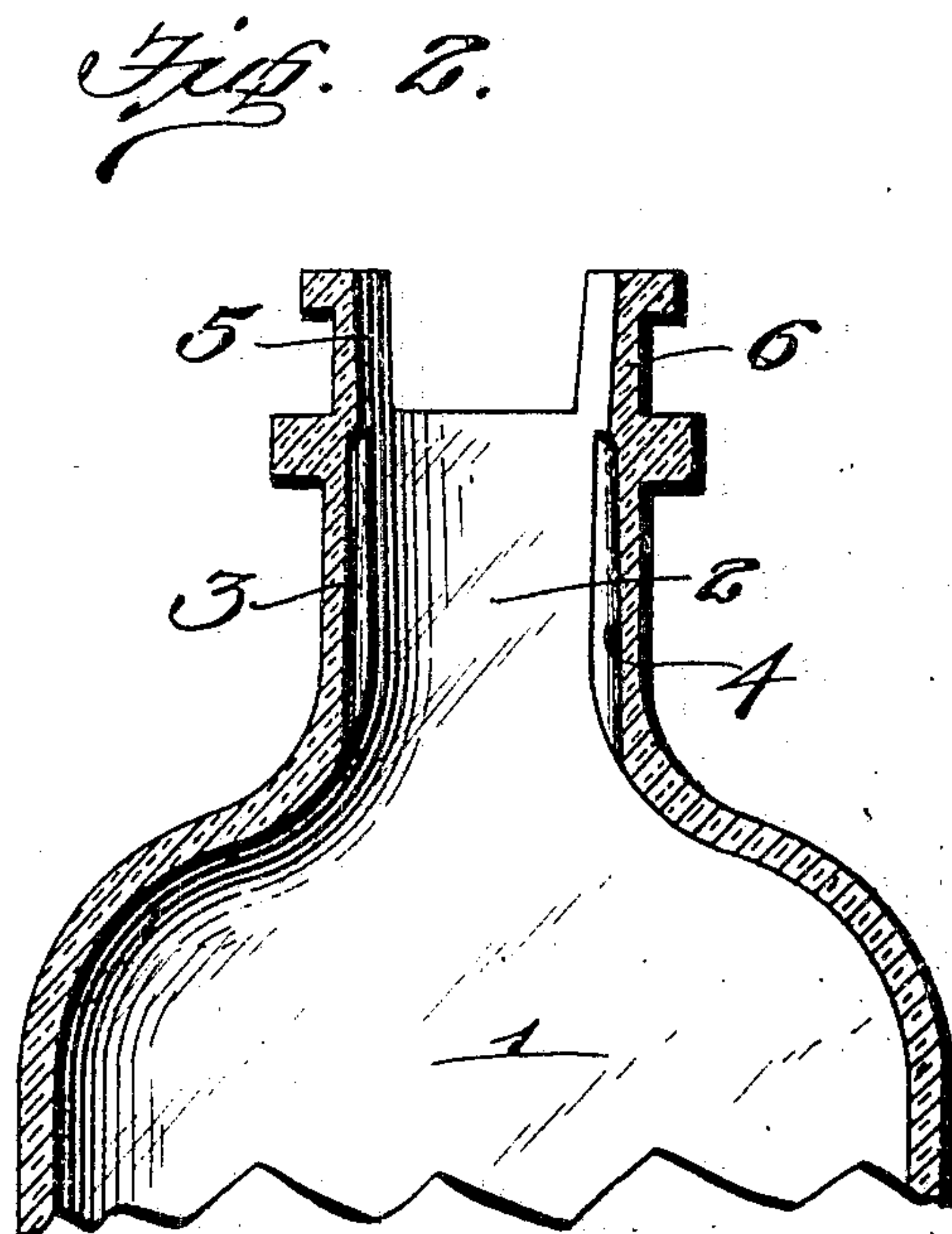
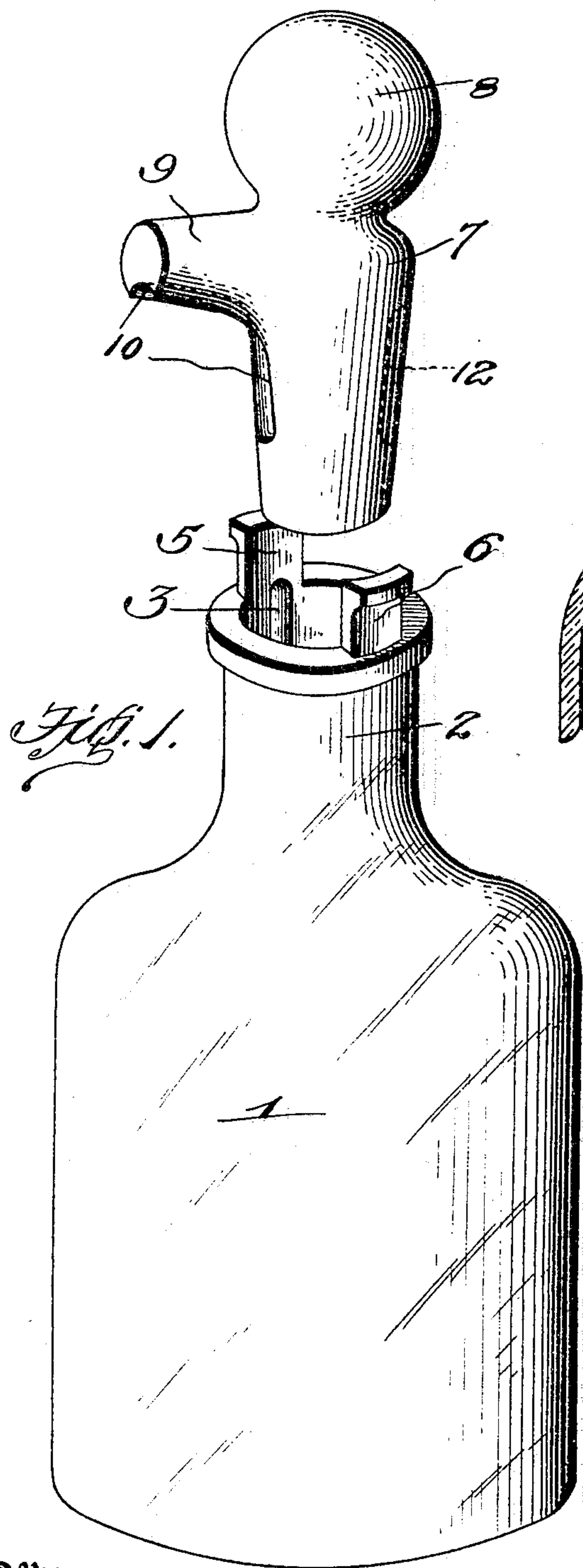


No. 782,104.

PATENTED FEB. 7, 1905.

F. BRUNNER.
BOTTLE.

APPLICATION FILED SEPT. 22, 1904.



Witnesses
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UNITED STATES PATENT OFFICE.

FREDERICK BRUNNER, OF TIFFIN, OHIO.

BOTTLE.

SPECIFICATION forming part of Letters Patent No 782,104, dated February 7, 1905.

Application filed September 22, 1904. Serial No. 225,498.

To all whom it may concern:

Be it known that I, FREDERICK BRUNNER, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have
 5 invented certain new and useful Improvements in Bottles; and I do 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
 10 same.

This invention relates to improvements in bottles.

The object of the invention is to provide a bottle and a stopper for the same whereby the
 15 contents of the bottle may be easily and accurately dropped, the construction of the bottle and stopper being such that the bottle may be readily sealed after being used.

A further object is to provide a bottle of
 20 this character which will be simple in construction, inexpensive, and well adapted to the purpose for which it is designed.

With these and other objects in view the invention consists of certain novel features of
 25 construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a
 30 perspective view of a bottle constructed in accordance with the invention, the stopper being shown removed from the neck of the bottle and immediately above the same. Fig. 2 is a vertical sectional view through the upper end
 35 of the bottle, and Fig. 3 is a similar view of the stopper.

Referring more particularly to the drawings, 1 denotes a bottle having a neck 2, in the inner wall of which are formed oppositely-
 40 disposed vertical grooves or channels 3 and 4. On the upper end of the bottle-neck, immediately above the channels 3, are formed upwardly-projecting lugs 5 and 6. Adapted to be inserted in the neck of the bottle is a stop-
 45 per 7. On the upper end of the same is formed a knob 8, and on one side of said stopper, at the upper end of the same, is formed a laterally-projecting spout 9. In one side of the stopper is formed a groove or channel 10, which ex-
 50 tends from near the lower end of the stopper

upwardly to and along the under side of the spout 9 and terminating at the end of the same. On the opposite side of the stopper is formed a vertically-disposed groove or channel 12, which extends from near the lower end of the
 55 stopper to near the upper end of the same.

When the stopper is inserted within the neck of the bottle, the same may be turned to bring the lower portion of the slot 10 into
 60 alinement with the upper portion of the slot 3, thereby forming a continuous passage from the interior of the bottle to the end of the spout 9. When the stopper is in this position, the groove 12 on the opposite side of the same
 65 will be in alinement with the groove 4, formed in the adjacent side of the bottle-neck. The arrangement of the lugs 5 and 6 above the grooves 3 and 4 will coact with the grooves
 70 10 and 12 in the bottle-stopper to form continuous passages on each side of the stopper when the grooves in the same and said bottle-neck are in alinement.

When the parts are in the position just described and the bottle tilted, the contents
 75 of the same will be caused to flow through the passage formed by the grooves 3 and 10 and will be discharged from the end of the spout 9 in the form of drops. The passage formed by the grooves 4 and 12 of the oppo-
 80 site side of the stopper permits the ingress of air to the bottle, which facilitates the discharge of the contents of the same. By turning the bottle-stopper a slight distance in one
 85 direction or the other the grooves in the same and the neck of the bottle will be moved out of alinement, the grooves 3 and 4 of the bot-
 90 tle-neck being covered by the walls of the stopper, while the grooves 10 and 12 in the latter will engage the walls of the bottle-neck. When the stopper is in this latter position, the
 95 neck of the bottle will be closed or sealed, thus quickly converting the bottle-stopper from a dropping device to a sealing device. The channels 3 4 being formed immediately under and in line with lugs 5 6, the latter
 100 serve as indicators in turning the stopper to a position to discharge or to seal the mouth of the bottle.

By the use of a bottle constructed and pro-
 vided with a stopper of this character the

contents of the same may be quickly and accurately discharged in the form of drops without removing the stopper.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

A bottle having formed in the inner wall of its neck oppositely-disposed vertical grooves, upwardly-projecting segmental lugs formed

on the upper end of the bottle immediately above said grooves, to indicate the location of the grooves, in combination with a stopper having a laterally-projecting spout, and vertically-disposed grooves formed on its opposite sides, one of said grooves being continued to the end of said spout, said stopper being adapted to be inserted in said bottle-neck and turned to bring the grooves in the neck and stopper into and out of alinement whereby the bottle may be opened or sealed, substantially as described.

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

FREDERICK BRUNNER.

Witnesses:

JEREMIAH REX,
LUDWIG BADER.