

No. 616,379.

Patented Dec. 20, 1898.

H. WEIL.
BOTTLE.

(Application filed Jan. 20, 1898.)

(No Model.)

Fig. 1

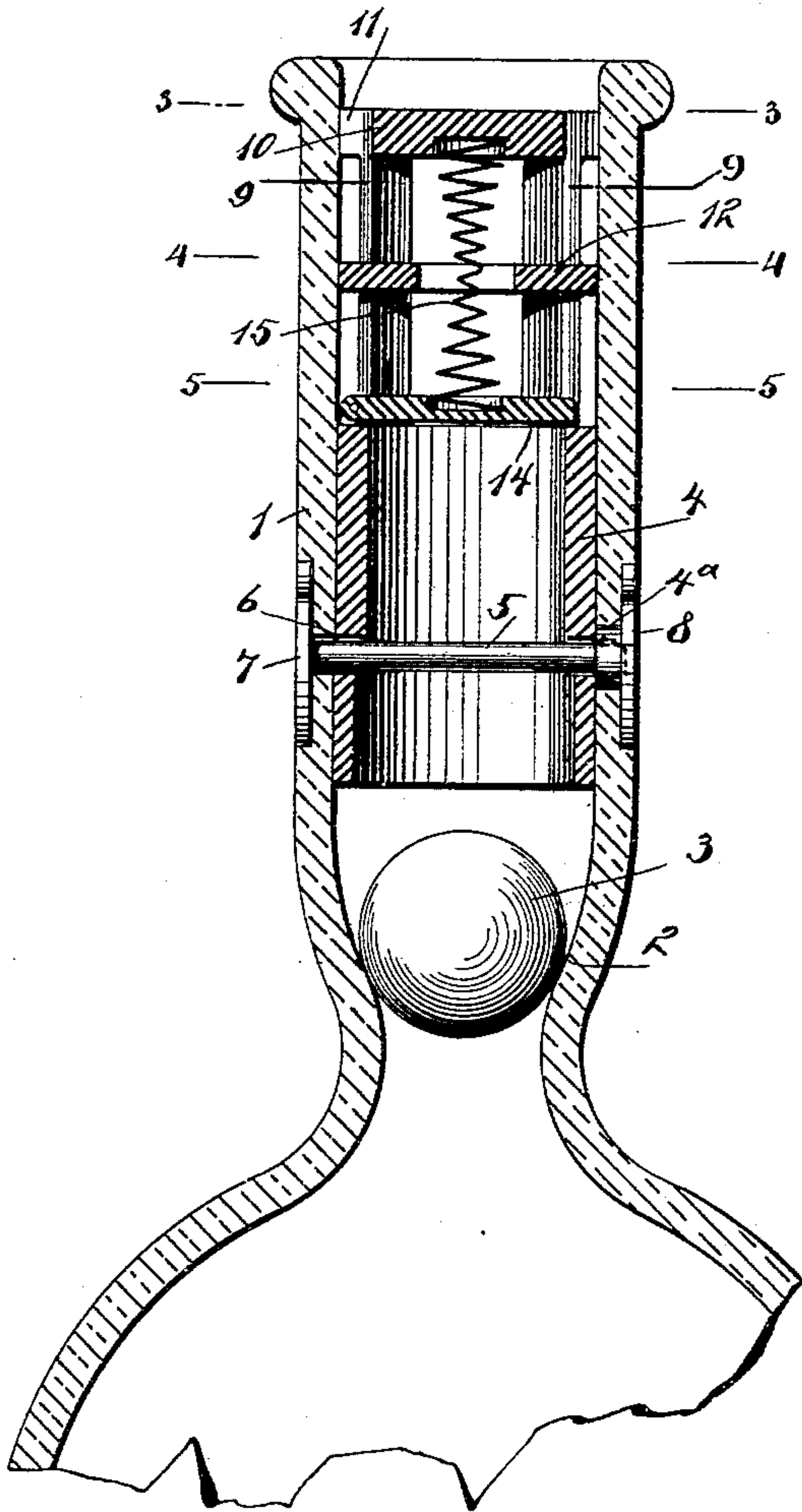


Fig. 2

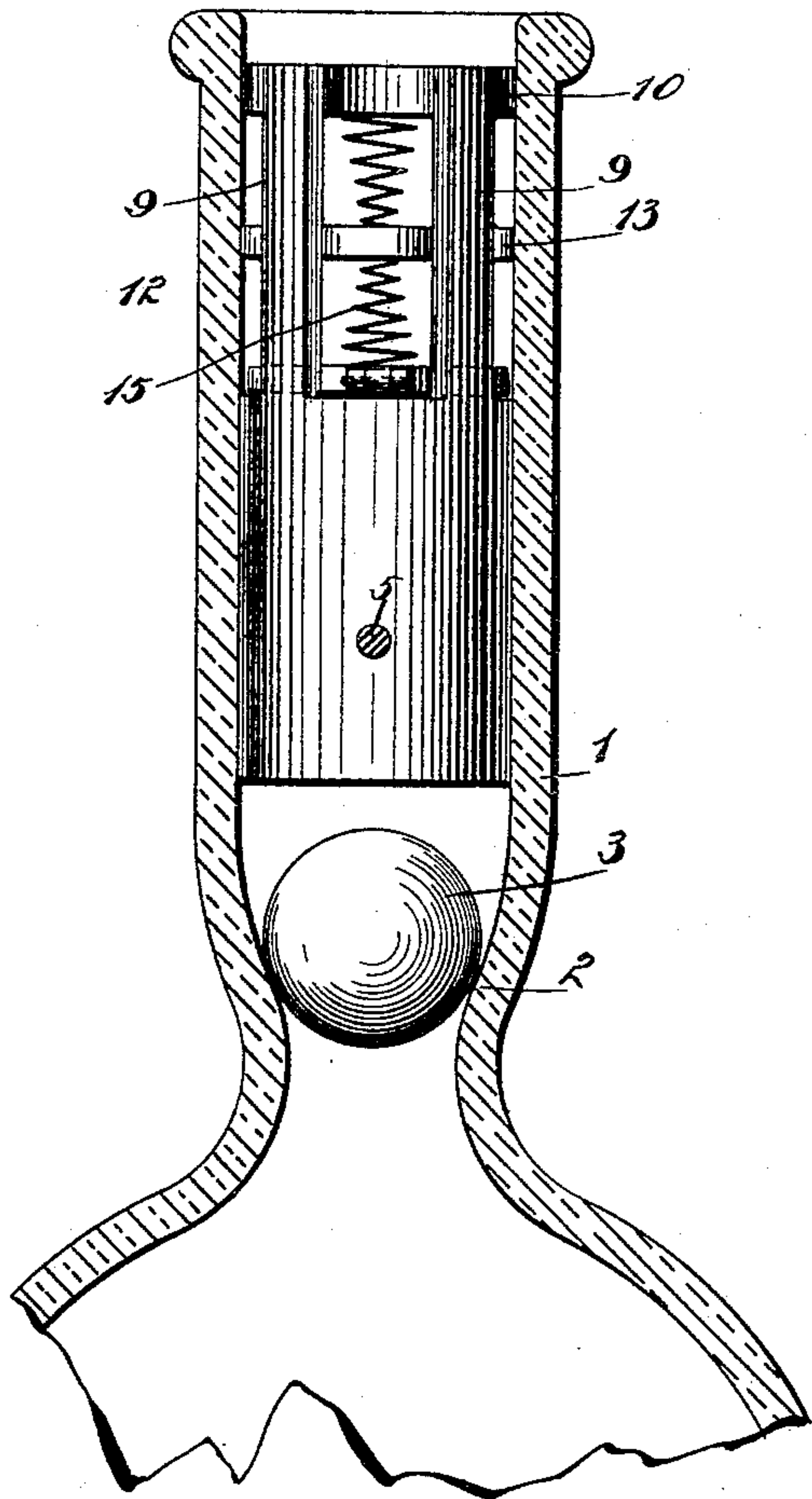


Fig. 3

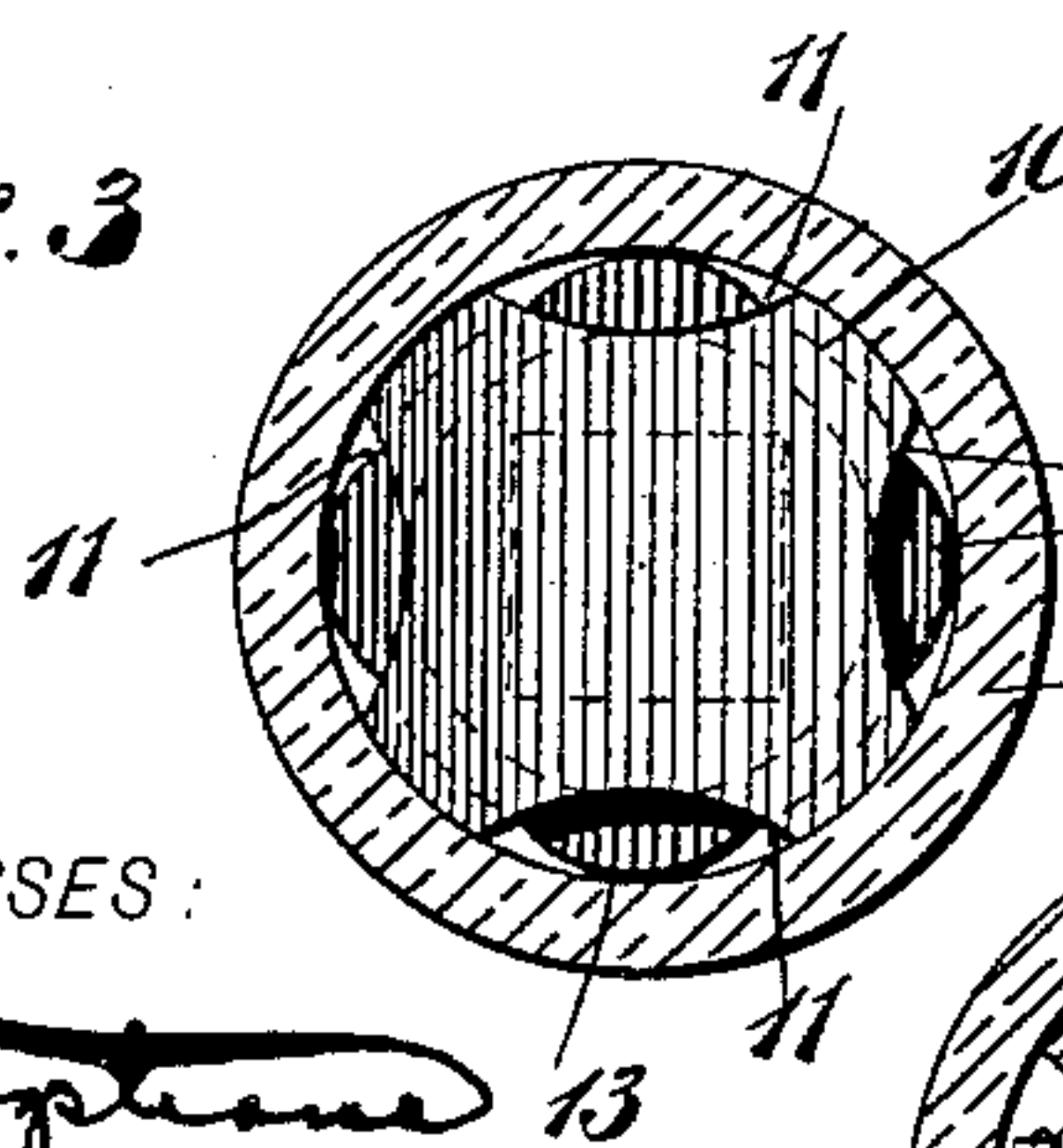


Fig. 5

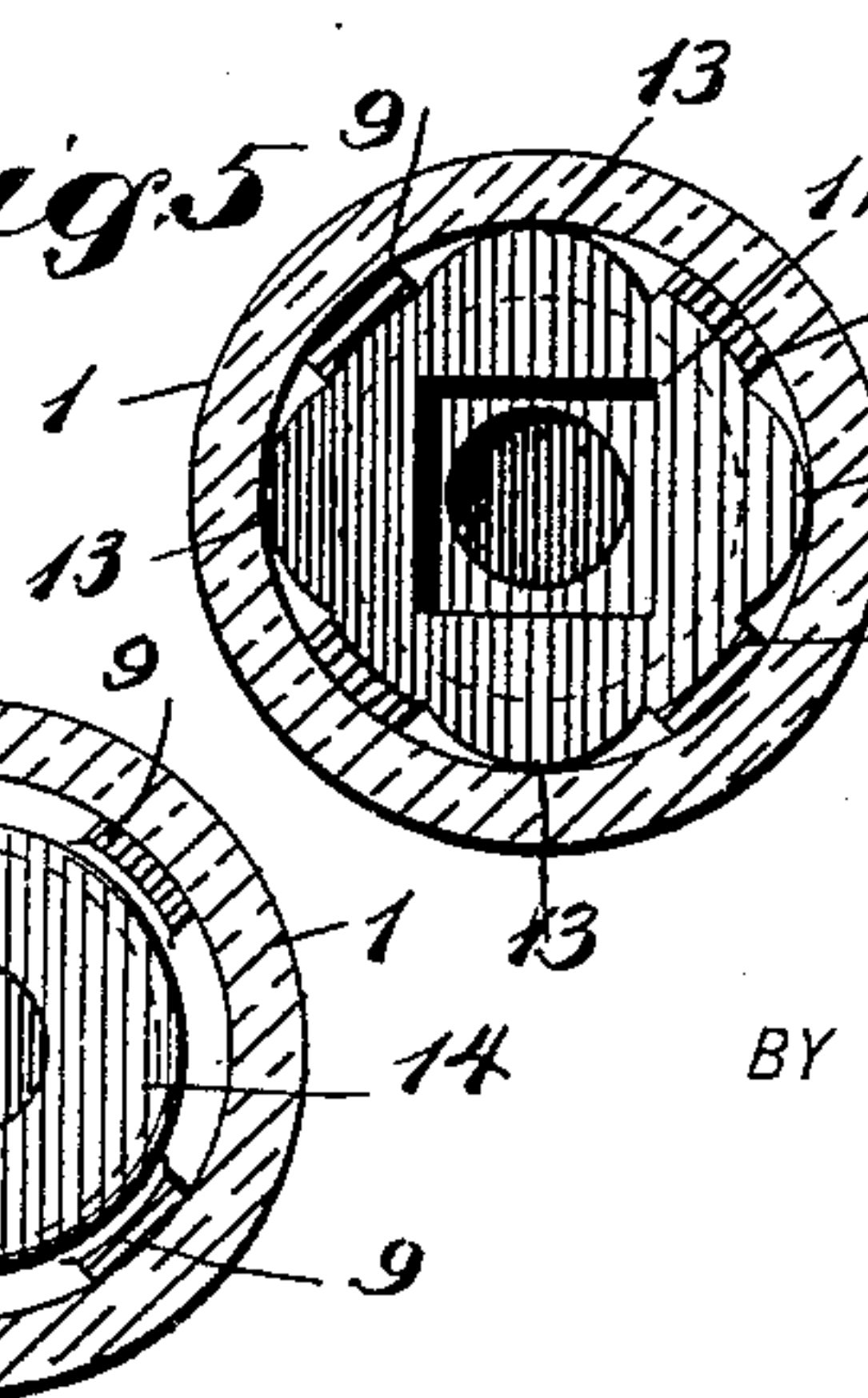
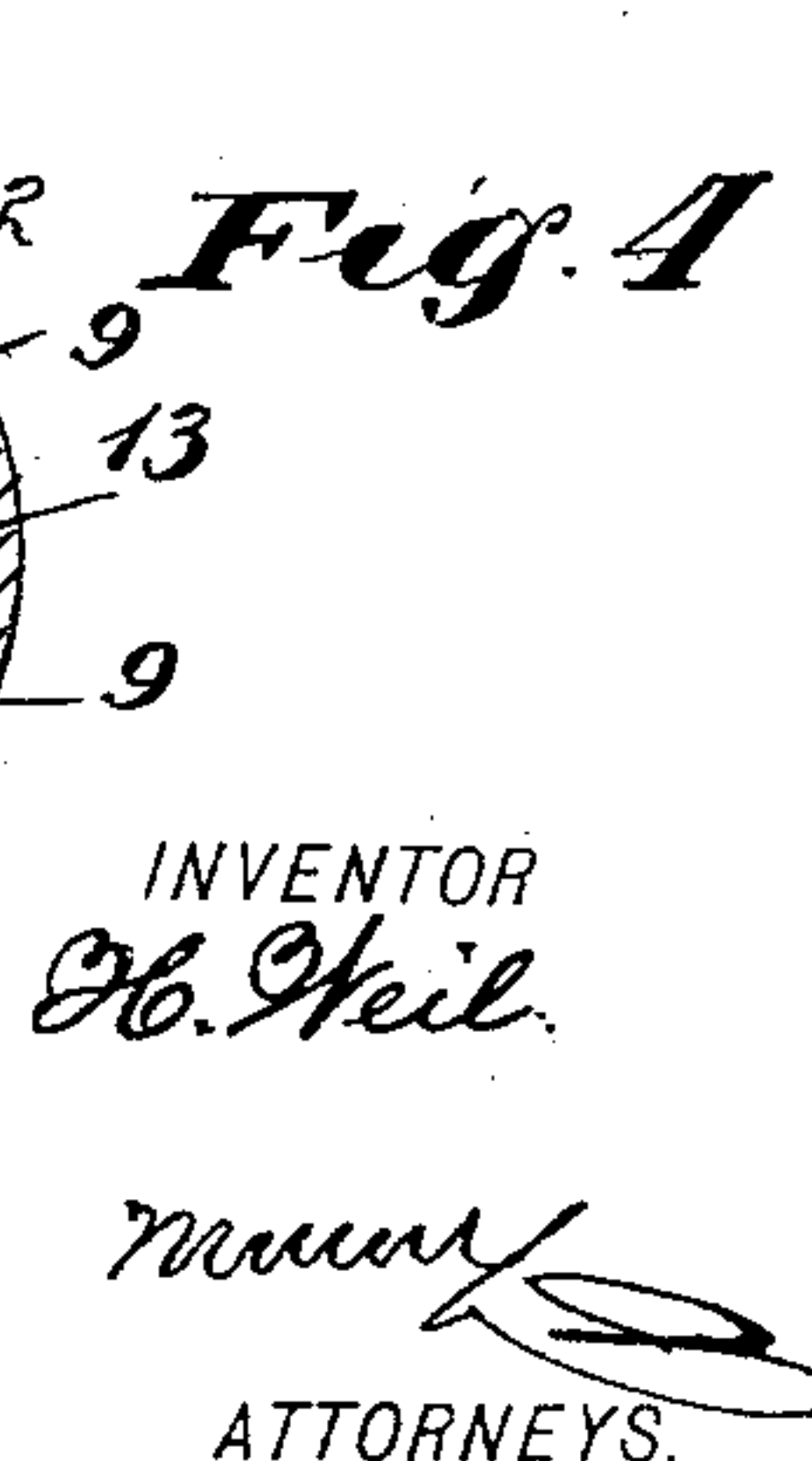


Fig. 4



WITNESSES:

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HENRY WEIL, OF NEW YORK, N. Y.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 616,379, dated December 20, 1898.

Application filed January 20, 1898. Serial No. 667,292. (No model.)

To all whom it may concern:

Be it known that I, HENRY WEIL, of New York city, borough of Manhattan, county of New York, in the State of New York, have invented a new and Improved Bottle, of which the following is a full, clear, and exact description.

This invention relates to bottles of the non-refillable type; and the object is to provide a bottle of this character that shall be simple and comparatively inexpensive, and, further, to so construct the valve mechanism in the neck that it will be practically impossible to fill the bottle after it shall have been emptied of its original contents.

I will describe a bottle embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a vertical section of the upper portion of a bottle embodying my invention. Fig. 2 is a sectional view of the same with the valve mechanism in elevation. Fig. 3 is a section on the line 3 3 of Fig. 1. Fig. 4 is a section on the line 4 4 of Fig. 1, and Fig. 5 is a section on the line 5 5 of Fig. 1.

Referring to the drawings, 1 designates the neck of a bottle, contracted at its lower portion to form a valve-seat 2 for a ball-valve 3. Arranged in the bottle-neck is a tube 4 of any suitable material. The tube is secured in the neck by means of a bar 5, extended through opposite holes 6 in the bottle-neck and opposite holes 4^a in the tube. The bar has a fixed head 7 at one end and a movable head 8 at the other end. The heads 7 8 are seated in recesses in the bottle-neck, so that their outer surfaces are flush with the outer surface of the bottle-neck. The head 8 has a clutch connection with the rod 5, so that when once engaged with the rod it cannot be removed without breaking the parts. The rod 5 not only holds the tube in position, but serves as a stop or retarding device for the ball-valve when the bottle is tilted to discharge liquid.

Extended upward from the tube 4 are standards 9, the space between the standards pro-

viding ports for the discharge of liquid. At the upper end of the standards and connected thereto is a plate 10, having its edge between the standards concaved, as at 11, thus providing outlets for the liquid. Secured to the standards, intermediate of their ends, is a plate 12, the portions of said plate between the standards being convexed, as at 13. The convex portions engage their extreme outer edges with the neck of the bottle, and the object of these projections is to prevent the insertion of a wire or other instrument through a port to engage and lift the valve 14 and hold it open for the purpose of fraudulently filling the bottle.

The valve 14 is in the form of a flap-valve, hinged to and having its seat on the upper end of the tube 4. A light coiled spring 15 holds the valve 14 yieldingly on its seat. This spring is extended through an opening in the plate 12, and has its upper end engaged with the plate 10 and its lower end engaged with the valve.

In operation after filling the bottle with the liquid it is designed to contain the ball-valve is to be placed in the neck, and then the tube, with its attachments, is to be inserted and fastened, as previously described. A cork or other temporary sealing device may then be placed in or on the upper end of the bottle-neck. After removing the temporary sealing device the liquid may be decanted by tilting the bottle in the usual manner. The ball-valve will roll down against the rod 5 and the pressure of the liquid will open the valve 14 against the resistance of the spring 15. Should an attempt be made to refill the bottle while in an upright position, the closed valves will prevent the entrance of the liquid, and the valve 14, held by the spring, will prevent the entrance of liquid should the bottle be placed on its side in liquid.

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

1. A bottle, having the lower end of its neck contracted to form a valve-seat, a valve for engaging therewith, a tube secured in the neck above said valve, standards extended upward from the tube, the spaces between said standards providing ports, a plate con-

5 nected to the upper ends of said standards and
having concave portions between the stand-
ards, a plate connected to the standards be-
tween their ends and having convex portions
extended out between the standards a valve
seating on the upper end of the tube, and a
spring for yieldingly holding said valve
against its seat, substantially as specified.

10 2. A bottle, having the lower portion of its
neck contracted to form a valve-seat, a ball-
valve engaging therewith, a tube arranged
in the neck above the ball-valve, a flap-valve
seated on the upper end of said tube, stand-
ards extended upward from the tube, the
15 spaces between the said standards providing
ports, a plate connecting the upper ends of
said standards and having its edge portions
between the standards depressed toward the
center, a plate connected to the standards in-
20 termediate of their ends and having convex
portions extended out between the standards
in line with the depressions of the top plate,
and a spring engaging at its upper end with
the top plate and at its lower end with the
25 flap-valve, said spring passing through an

opening in the intermediate plate, substan-
tially as specified.

3. A bottle, having a valve-seat in the lower
portion of its neck, a ball-valve for engaging
therewith, a tube in the neck above the ball- 30
valve, a rod extended transversely through
the neck and through said tube, the said rod
serving to hold the tube in place and also act
as a stop for the ball-valve, a spring-plate
valve on the upper end of the tube, means 35
for holding the plate-valve yieldingly on its
seat, standards extended from the tube, the
spaces between said standards providing
ports, a plate connecting the upper ends of
said standards and having concave edge por- 40
tions between the standards, and a plate se-
cured to the standards intermediate of their
ends, the said plate having outward projec-
tions between the standards in line with the
concaved portions of the upper plate, sub- 45
stantially as specified.

HENRY WEIL.

Witnesses:

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SAMUEL ZIPRIS.