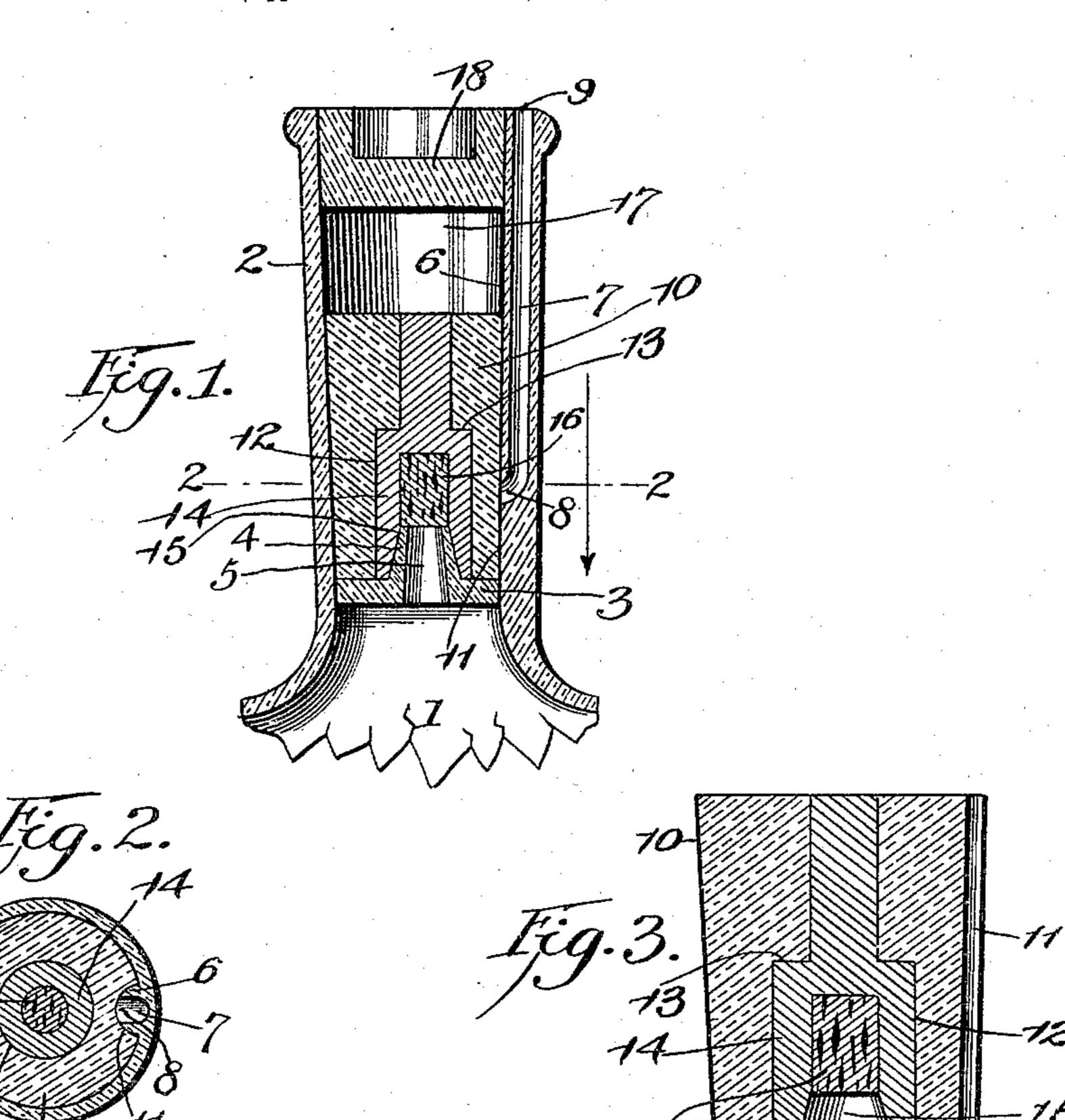
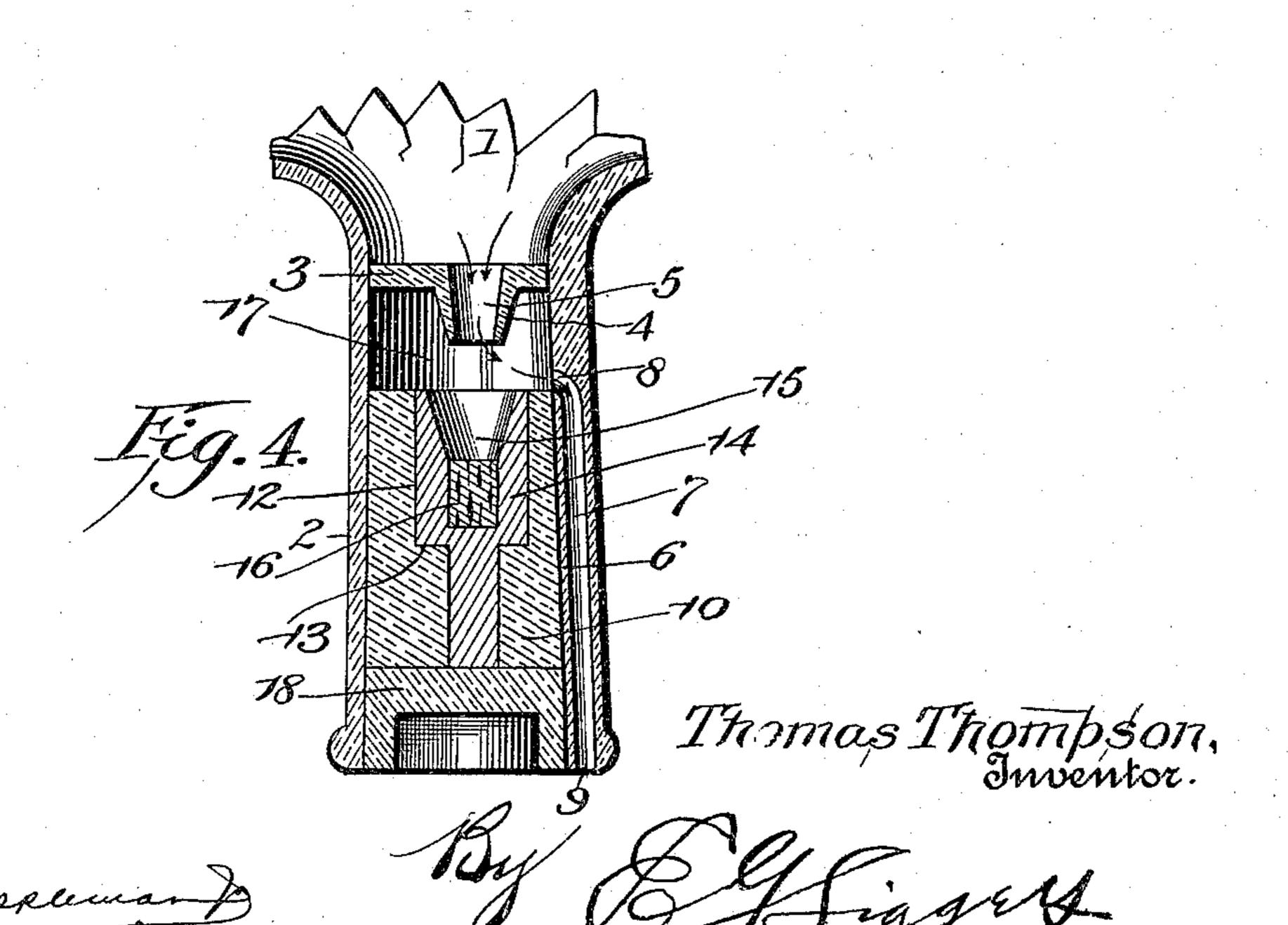
T. THOMPSON. BOTTLE.

(Application filed June 17, 1899.)

(No Model.)





UNITED STATES PATENT OFFICE.

THOMAS THOMPSON, OF LIMA, OHIO.

SPECIFICATION forming part of Letters Patent No. 640,976, dated January 9, 1900.

Application filed June 17, 1899. Serial No. 720,949. (No model.)

To all whom it may concern:

Be it known that I, THOMAS THOMPSON, a citizen of the United States, residing at Lima, in the county of Allen and State of Ohio, have 5 invented a new and useful Bottle, of which

the following is a specification.

This invention relates to bottles; and the object in view is to provide, in connection with a bottle of any usual or preferred form, so simple and effective means to prevent the ready refilling of the bottle after it has been emptied. At the same time provision is made whereby the original contents of the bottle may be readily poured out by simply invert-15 ing or tilting the bottle to the proper angle.

Other objects and advantages of the invention will be fully pointed out in the course of

the ensuing description.

The invention consists in a bottle embody-20 ing certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claims.

In the accompanying drawings, Figure 1 is 25 a sectional view through a bottle constructed in accordance with this invention, said view being taken longitudinally of the neck and extending through the egress-passage. Fig. 2 is a cross-section through the neck, taken 30 adjacent to the cap and showing the relation of the cap to the lower end of the egress-passage. Fig. 3 is an enlarged detail longitudinal section through the cap. Fig. 4 is a sectional view showing the position of the parts 35 when the bottle is inverted for pouring out the liquid.

Similar numerals of reference designate corresponding parts in all the figures of the draw-

ings.

In the drawings forming part of this application, 1 designates the body of the bottle, which may be of any suitable size and any preferred form, said bottle being provided with a neck 2. Fitted in the lower portion 45 of the neck is a plug 3, which is stationary and provided with an upwardly-extending nipple 4, having a central opening 5, which continues downward through the plug and communicates with the interior of the bottle. 50 This nipple is preferably conical as to its outer surface, tapering from the base toward its

upper end, which is of relatively smaller diameter.

The neck 2 is provided with an internal longitudinal rib 6 at one side, said rib being 55 substantially semicylindrical in cross-section. This rib is hollow throughout its entire length or provided with a longitudinal egress-passage 7, through which the liquid contained in the bottle passes in pouring out the contents 60 of the bottle.

At a point just above the upper end of the nipple 4 a port or outlet-opening 8 is provided between the passage 7 and the interior of the neck 2. The passage-way 7 is con- 65 tinued to the extreme upper edge of the neck,

opening out at the point 9.

Arranged in the neck is a movable gravitycap 10, which is substantially cylindrical in cross-section and made, preferably, slightly 70 tapering. This cap is provided on one side with a longitudinal groove 11 to fit and slide upon the hollow rib within the neck. The cap is provided with a longitudinal bore or opening 12, the upper portion of the bore be- 75 ing of a less diameter than the lower portion, so as to leave an intermediate internal shoulder 13. Within said bore is fitted a correpondingly-shaped plug 14, inserted from the lower large end of the bore and held in place 80 by reason of its bearing against said shoulder and fitting tightly within the bore. The lower end of the plug 14 is provided with a longitudinal recess or socket 15, extending partially through the cap, and in the upper end of said 85 socket is placed a cork 16 or piece of soft material, which will seal or tightly close the entrance to the body of the bottle by bearing snugly and firmly against the upper edge of the nipple 4. The plug 14 may be made of 90 wood or some analogous material, so as to afford a tight fit upon the nipple 4, the recess or socket 15 being tapered to correspond with the taper of the outer surface of the nipple 4. The cap 10 is free to move longitudinally 95 within the neck of the bottle by gravity. When the bottle is in normal position, the cap fits over the nipple and no liquid can be introduced into the body of the bottle. When the bottle is inverted or sufficiently tilted, the 100 cap will slide toward the upper or outer end of the neck, thus opening the passage-way of

the neck and at the same time opening the port leading to the egress-passage 7, thereby enabling the contents of the bottle to be poured off. After the bottle has been primarily filled through the main opening 17 in the neck the cap 10 is inserted in the neck and afterward a suitable stopper 18, preferably of glass, is inserted in the upper end of the neck and cemented or otherwise permanently secured in place, so that it cannot be removed without fracturing the neck.

From the foregoing description it will be seen that I have provided simple means which may be used in connection with any usual or preferred form of bottle which will render difficult the refilling of the bottle with spurious or adulterated liquid after the bottle has once been emptied, thus protecting the manufacturer against the subsequent use of the

20 bottle by unscrupulous dealers.

The bottle requires no special manipulation, as the cap acts by gravity and its operation is entirely automatic, the cap closing the entrance to the bottle when the bottle is set in an upright position and opening the egress-passage when the bottle is inverted or suffi-

ciently tilted.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described bottle will be apparent to those skilled in the art without further description, and it will be understood that changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described the invention, what is claimed as new, and desired to be secured

by Letters Patent, is—

1. A bottle provided with an internal rib extending the entire length of the neck and containing a liquid-passage the discharge end of which is flush with the extreme edge of the neck and the inner end of which terminates intermediate the length of the rib in a curved bend which opens into the neck and forms an

outlet-port, in combination with a solid imperforate gravity-cap free to slide longitudinally within the neck to open and close the outlet-port, and grooved to fit around said 50 mile grabatentically as graphical

rib, substantially as specified.

2. A bottle provided with an internal rib extending longitudinally of the neck and containing a liquid-passage, the discharge end of which is flush with the extreme edge of the 55 neck, and the inner end of which terminates intermediate the length of the rib in a curved bend which opens into the neck and forms an outlet-port, a stationary plug in the base of the neck having a central opening surrounded by a conical nipple, and a solid imperforate gravity-cap, free to slide longitudinally within the neck to open and close the outlet-port and having a conical seat to fit said nip-

ple, substantially as specified.

3. A bottle provided with an internal rib extending longitudinally the entire length of the neck, and containing a liquid-passage, the discharge end of which is flush with the extreme edge of the neck, and the inner end 70 of which terminates intermediate the length of the rib in a curved bend which opens into the neck and forms an outlet-port, a stationary plug in the base of the neck having a central opening surrounded by a conical nipple, 75 a solid imperforate gravity-cap free to slide longitudinally within the neck to open and close the outlet-port, a metal plug fitted tightly in the cap and having a shouldered engagement therewith and provided with a recess 80 having a flared end portion forming a conical seat for the nipple, and a cork seated in the base of said recess to rest on and seal the nipple, substantially as set forth.

In testimony that I claim the foregoing as 85 my own I have hereto affixed my signature in

the presence of two witnesses.

THOMAS THOMPSON.

Witnesses:
Amos Keller,
William Mumaugh.