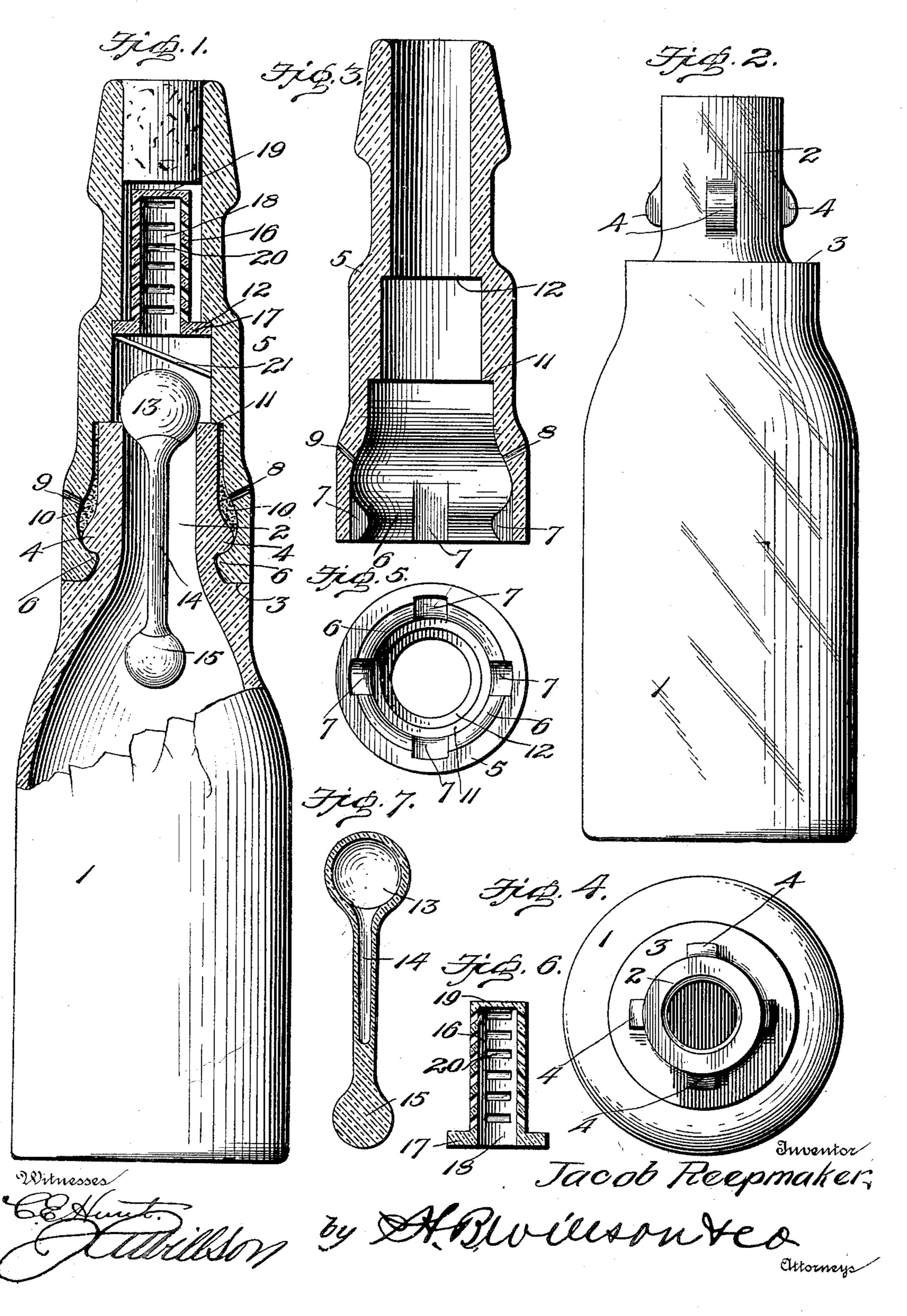
J. REEPMAKER. NON-REFILLABLE BOTTLE.

(Application filed Jan. 31, 1900.)

(No Model.)



UNITED STATES PATENT OFFICE.

JACOB REEPMAKER, OF ROTTERDAM, NETHERLANDS.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 649,752, dated May 15, 1900.

Application filed January 31, 1900. Serial No. 3,491. (No model.)

To all whom it may concern:

Be it known that I, Jacob Reepmaker, a subject of the Queen of the Netherlands, residing at Rotterdam, in the Province of South Holland, Netherlands, have invented certain new and useful Improvements in Non-Refillable 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 same.

The invention relates to non-refillable bottles.

The object of the invention is to provide a bottle of this character which shall be simple of construction, durable in use, and comparatively inexpensive of production and which after its original contents have been decanted cannot be surreptitiously refilled, thus barring unscrupulous persons from refilling a bottle which has once contained a high grade of goods with goods of an inferior quality.

To this end the invention consists in certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the drawings, Figure 1 is a vertical sectional view of my improved bottle. Fig. 2 is a side elevation of the body of the bottle, the neck being removed. Fig. 3 is an enlarged vertical sectional view of the neck removed from the body of the bottle. Fig. 4 is a top plan view of the body of the bottle, the neck being removed. Fig. 5 is a bottom plan view of the neck of the bottle. Fig. 6 is a vertical sectional view of the baffle device or tube. Fig. 7 is a vertical sectional view through the weighted valve.

Referring to the drawings, 1 denotes the body of the bottle, provided with a tubular neck 2, at the base of which is formed an annular shoulder 3 and from the sides of which project radially lugs 4.

5 denotes the neck of the bottle, which is placed over the tubular extension 2 and rests upon the shoulder 3. At the lower end of the neck is formed an inwardly-projecting annular flange or ledge 6, which is provided with notches 7 to correspond to and receive the lugs 4 of the tubular extension of the body. After the neck has been placed upon the tubular extension of the body, with the

recesses 7 registering with the lugs, the neck is pressed down until its lower end engages the shoulder 3, and then by giving the neck 55 a slight turn the lugs 4 are brought over the ledge or annular flange 6, thus preventing the removal of the neck by lifting it up. In this position I lock the parts against rotation. I do this by forming in the neck, above the 60 annular ledge, two holes 8 and 9, the former being a pouring-hole and the latter a venthole. Through the pouring-hole I inject or otherwise introduce into an annular pocket 10, formed between the neck and the tubular 65 extension, a cementitious fluid or compound, which after hardening will securely lock the neck and body of the bottle against rotation one with respect to the other. The vent-hole 9 permits of the escape of air in the 70 introduction of the cementitious fluid or compound. The neck of the bottle is formed with an interior annular shoulder 11, which abuts against the upper end of the tubular extension and prevents the escape of the 75 cementitious fluid or compound at that point, and above this shoulder 11 is formed another annular shoulder 12 of less diameter than the shoulder 11.

13 denotes a ball-valve, which is preferably 80 hollow and is provided with a hollow shank 14, the lower end of which is provided with a weight 15.

an annular flange 17, which snugly fits the 85 interior wall of the bottle between the shoulders 11 and 12 and abuts against the latter and is thereby prevented from being withdrawn from the neck of the bottle. This tube is provided with a central passage-way 18 and 90 a closed top 19, while along its sides are formed apertures 20, the walls of which incline downwardly from the inner periphery of the tube to its outer periphery, and thereby prevent the tampering with or unseating of the valve 95 by the introduction of a wire or tool.

Arranged within the bottle-neck between the ball-valve and the baffle device is a valve-stop 21, which limits the movement of the valve when the bottle is inverted for the purpose of decanting its contents and prevents the valve closing the passage 18 of the baffle-tube. The bottle cannot be refilled while in an upright, inverted, or in a horizontal posi-

tion, and its contents can only be decanted by inverting it. If placed in a horizontal position, the weight 15 would assume such a position as to hold the valve 13 in its seat in the tubular extension of the bottle.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my improved bottle will be readily apparant ent without requiring an extended explanation.

It will be seen that the device is simple of construction, that said construction permits of its manufacture at small cost, and that it is exceedingly well adapted for the purpose for which it is designed.

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 the invention, what is claimed, and desired to be secured by Letters Patent, is—

A non-refillable bottle comprising a body portion formed with a tubular extension provided at its lower end with an annular shoulder 3, above which is formed an outwardly-projecting annular flange or ledge having ver-

tical notches, a separate neck, the lower end 30 of which is adapted to abut against the shoulder 3 and formed with a shoulder 11 adapted to abut against the upper end of the body extension, said neck being provided at its lower end with inwardly - projecting radial lugs 35 adapted to engage said notches and be turned under said ledge, the interior wall of said neck above its lugs being of greater diameter than the exterior wall of the body extension, thereby forming an annular chamber, said 40 neck being provided with a filling-hole and a vent-hole through the former of which is adapted to be inserted a cementitious binder, a ball-valve 13 seated in the upper end of said extension provided with a shank 14 carrying 45 a weight 15 at its lower end, a valve-stop arranged above the ball-valve, and a baffle device secured in the neck above the valvestop, substantially as and for the purpose set forth.

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

JACOB REEPMAKER.

Witnesses:

S. LISTOE,

E. MULLER.