

(No Model.)

W. W. MANGUM, Jr.
BOTTLE.

No. 578,648.

Patented Mar. 9, 1897.

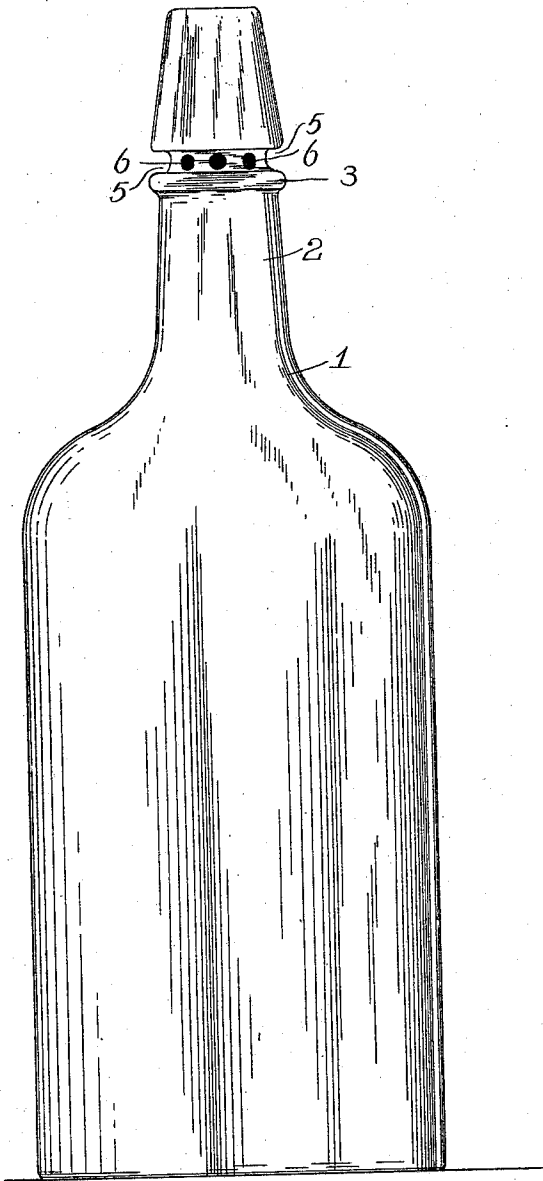


Fig. 1.

WITNESSES

S. M. Sillis
J. E. Tappan

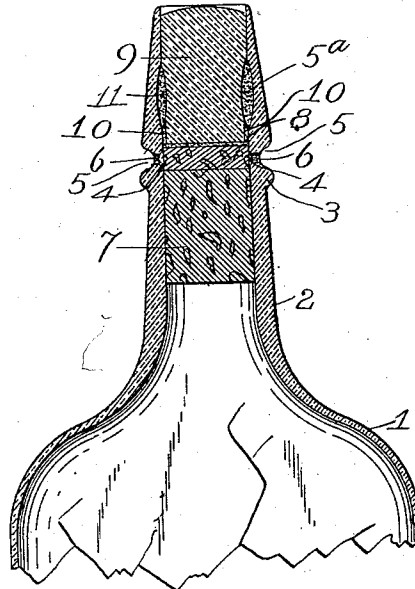


Fig. 2.

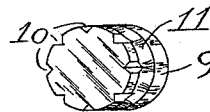


Fig. 3.

INVENTOR,
William W. Mangum, Jr.
by *John Wedderburn*
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM W. MANGUM, JR., OF NIXON, TENNESSEE.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 578,648, dated March 9, 1897.

Application filed September 12, 1896. Serial No. 605,653. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. MANGUM, Jr., a citizen of the United States, residing at Nixon, in the county of Hardin and State of Tennessee, have invented certain new and useful Improvements in Bottles; and I do hereby 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.

My invention relates to certain new and useful improvements in bottles and stoppers therefor, the object of the same being to provide a simple and cheaply-constructed bottle which after the contents thereof have once been removed cannot be again filled without detection or in its original condition.

The invention consists of a bottle having a contracted neck with oppositely-disposed circumferential grooves upon the inner and outer surfaces of said neck, forming a weakened portion, which is also provided with a series of perforations, and an internal annular recess in said neck, a sealing-cork of ordinary construction adapted to fit within the lower end of said neck, a thin disk of cork adapted to fit upon the sealing-cork, and a stopper of porcelain, glass, or other suitable material having longitudinal and peripheral grooves upon the outer surface thereof adapted to fit within the upper end of the neck of said bottle and be held in place by means of hydraulic or other cement.

The invention also consists in other details of construction and combinations of parts, which will be hereinafter more fully described and claimed.

In the drawings forming part of the specification, Figure 1 represents an elevation of a bottle constructed according to my invention. Fig. 2 is a vertical central longitudinal section through the same, showing the sealing-cork and stopper in place. Fig. 3 is a detail perspective view of the stopper.

Like reference-numerals indicate like parts in the different views.

The bottle 1 has a contracted neck 2, provided with an ordinary bead 3 at a point intermediate of its outer ends. The said neck is also provided with oppositely-disposed circumferential grooves 4 5, located on the outer and inner surfaces, respectively, there-

of, forming a web of thin or weakened material between the upper and lower parts of said neck, and with an internal annular recess 5^a above said grooves. The said web is itself formed with a series of perforations 6 6 therein. Fitting within the lower end of the neck 2 is a sealing-cork 7 of ordinary construction, provided for the purpose of preventing the liquid contents of the bottle from leaking out of the bottle. Also fitting within the neck and located just above the sealing-cork 7 is a disk 8, of cork or other suitable material, and above the disk 8 is a stopper 9, of porcelain, glass, or the like, the same being provided with longitudinal grooves 10 10 in its outer surface, near its lower end, and with an annular groove 11 just above the groove 10. The said stopper 9 is held in place by means of hydraulic or other cement, which is applied to the upper part of the neck 2 in a plastic condition and afterward permitted to harden or set around the stopper 9.

The bottle is filled in the usual way, and afterward the sealing-cork 7 is inserted into place. The disk 8 is then applied, and afterward the upper end of the neck is filled with cement in a plastic condition. The stopper 9 is then inserted into place, forcing the cement up around the sides thereof and into the grooves 10 and 11 in its outer surface. The stopper 9 preferably lies just below the upper end of the neck 2, so that it is impossible after the cement has hardened to insert a tool into the end of the neck for the purpose of removing the stopper.

To remove the contents of the bottle, a light blow is given to the upper end of the neck 2, which cracks the same along the line of the circumferential grooves 4 and 5, detaching the upper end of the neck from the lower part thereof. The sealing-cork 7 may then be removed by a corkscrew or in any suitable way and the liquid contents of the bottle poured off. The disk 8 prevents the cement surrounding the stopper 9 from coming in contact with the sealing-cork 7, and the cork 7 serves the double function of preventing the contents of the bottle from leaking out accidentally and of preventing any broken particles of glass from falling into the bottle when the neck is broken.

The device is extremely simple in construc-

tion, can be cheaply made, and is effective for the purpose for which it was designed.

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

5 A bottle having a contracted neck with oppositely-disposed circumferential grooves in the inner and outer surfaces thereof, and a series of perforations in the weakened portion
10 of the neck formed by said grooves and an internal annular recess just above said grooves, in combination with a sealing-cork fitting within the lower end of said neck, a disk of cork or other light material fitting within said
15 neck just above said sealing-cork and a stopper of glass, porcelain, or the like, fitting within the upper end of said neck having lon-

gitudinal grooves in its outer surface near its lower end, and an annular groove just above said longitudinal grooves, the said stopper being held permanently in place by means of cement located between the outer surface of said stopper and the inner surface of said neck, and fitting within the grooves in said stopper and the annular recess in said neck, substantially as and for the purpose described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM W. MANGUM, JR.

Witnesses:

W. C. DOHERTY,

W. P. STORY.