No. 868,516. PATENTED OCT. 15, 1907.

C. B. WILTSE.

BOTTLE.

APPLICATION FILED JULY 7, 1906.

2 SHEETS—SHEET 1.

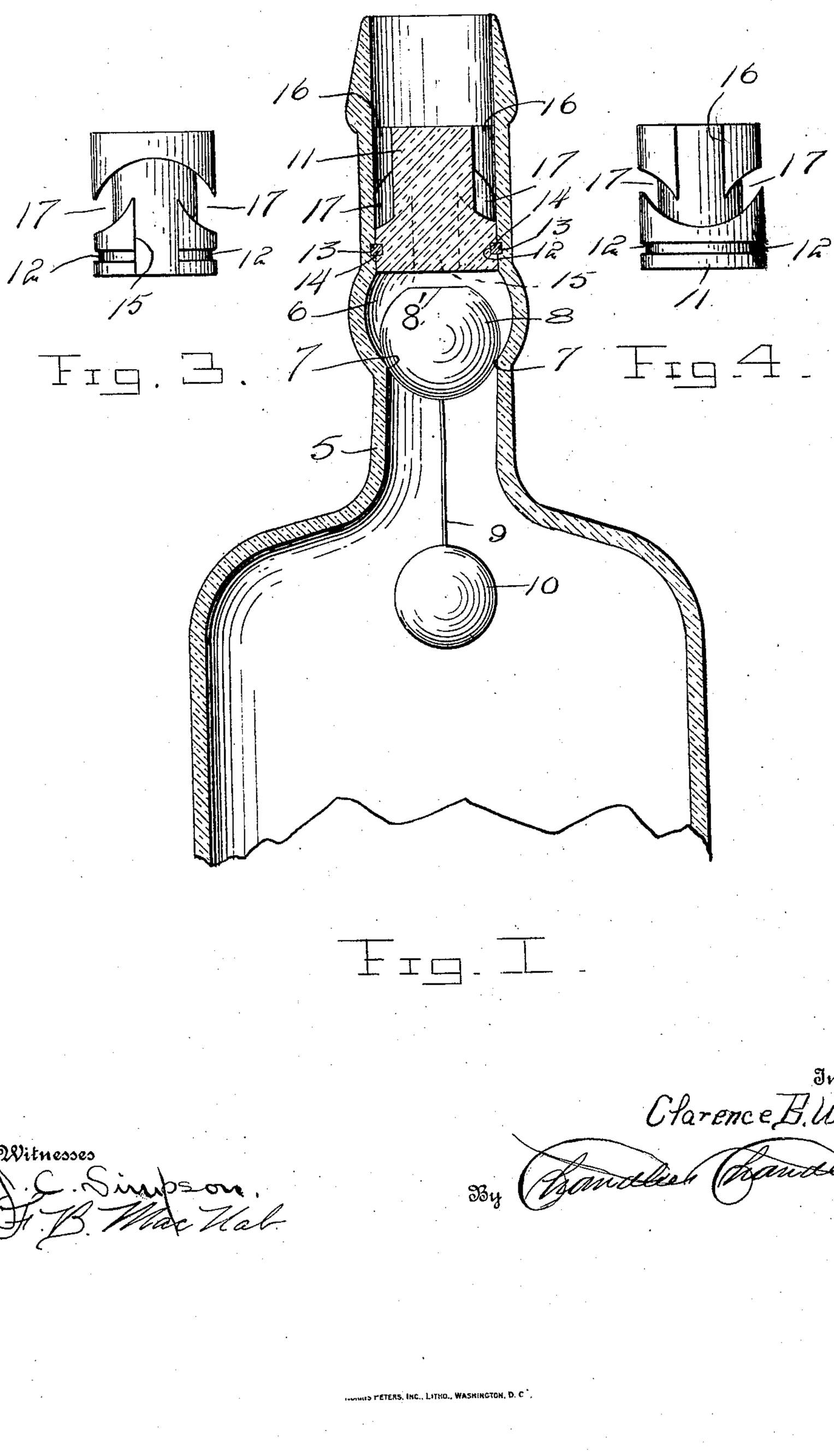

Fig. 1.

Fig. 3.

Fig. 4.

Witnesses
J. C. Simpson.
F. B. MacNab

Inventor
Clarence B. Wiltse.
By Cornelius & Cornelius
Attorneys

JAMES PETERS, INC., LITHO., WASHINGTON, D. C.

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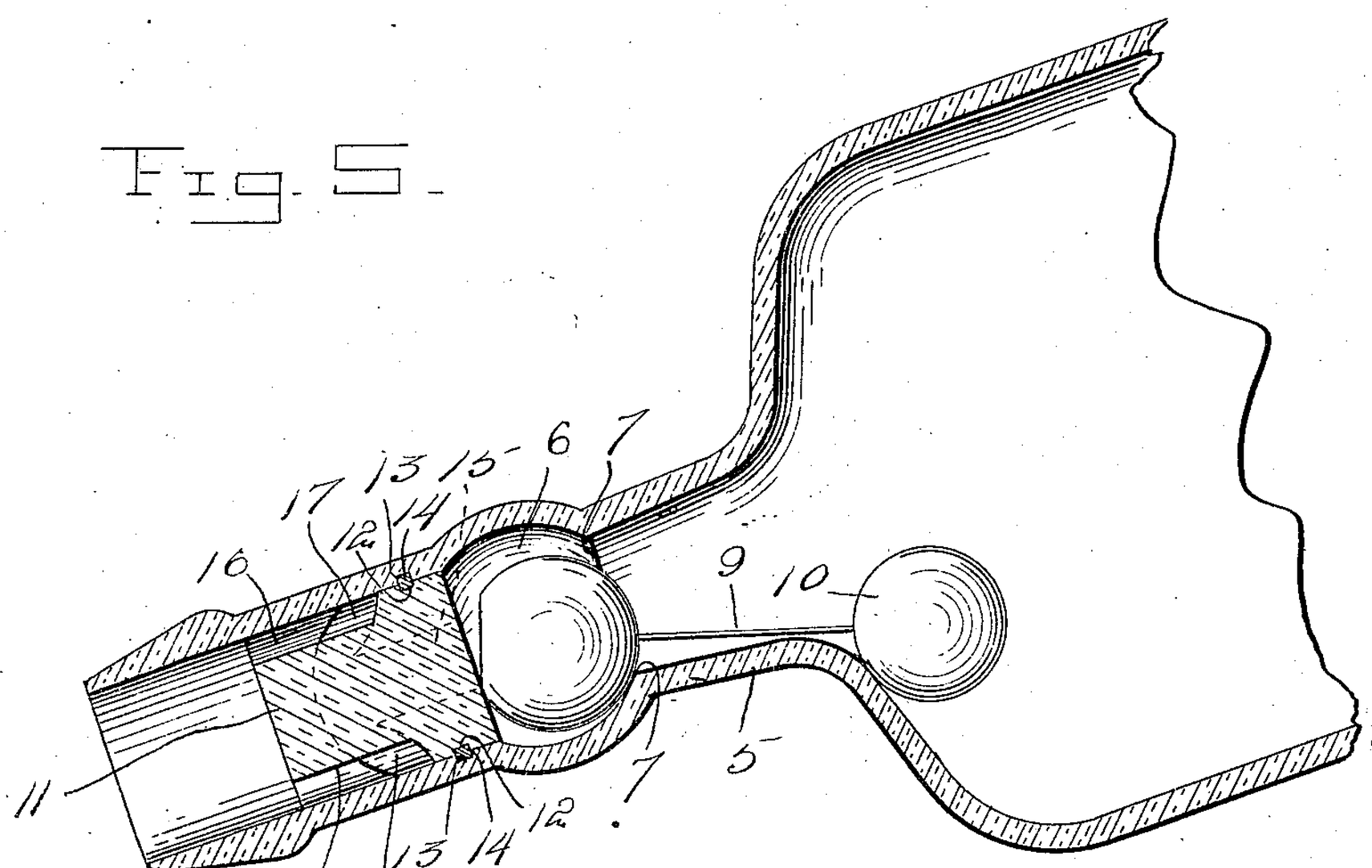
2 SHEETS—SHEET 2.

Fig. 5.



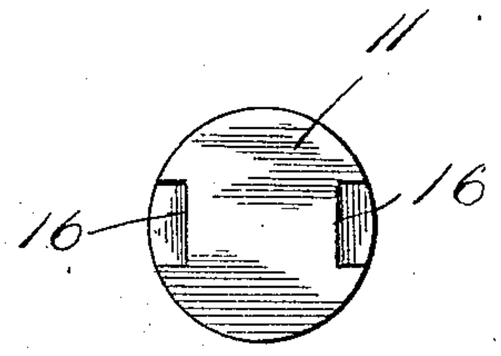


Fig. 2.

Witnesses
J. C. Simpson
F. B. MacHat

Inventor
Clarence B. Wiltse.

By Bowdlear Bowdlear

Attorneys.

NORRIS PETERS, INC., LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CLARENCE B. WILTSE, OF MOUNT KISCO, NEW YORK.

BOTTLE.

No. 868,516. Specification of Letters Patent. Patented Oct. 15, 1907.

Application filed July 7, 1906. Serial No. 325,098.

To all whom it may concern:

Be it known that I, CLARENCE B. WILTSE, a citizen of the United States, residing at Mount Kisco, in the county of Westchester, State of New York, 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.

This invention relates to bottles and has for its object to provide a bottle so constructed that having once been emptied, it cannot be re-filled, especial attention being paid to the provision of means for preventing the introduction of any implement into the bottle to unseat the valve thereof in an attempt to re-fill the bottle.

It is to be understood that I do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person skilled in the art.

In the drawings forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a vertical section of the present bottle, showing the valve mechanism thereof, the lower portion of the bottle being broken away. Fig. 2 is a top plan view of the guard. Fig. 3 is an elevational view of the guard, showing the lower passages. Fig. 4 is a view taken at right angles to Fig. 3, showing the upper passages. Fig. 5 is a sectional view showing the position of the parts as the bottle is emptied.

Referring now to the drawings, the present bottle has a neck 5 which is enlarged between its ends, to form a valve chamber 6, the union of this chamber with the lower portion of the neck forming a shoulder which acts as a valve seat 7. A ball valve 8 is located in the chamber and is of a size to rest upon the seat 7, to close the lower portion of the neck, and this valve has a depending stem 9, provided with a weight 10 which lies within the body of the bottle and is thus arranged to hold the valve 8 upon its seat when the bottle is turned into horizontal position. The valve 8 has its upper face flattened as at 8′.

A cylindrical guard 11 is engaged in the neck above the valve chamber and has a circumscribing groove 12 adjacent to its lower end which registers with a horizontal circular groove 13 formed in the inner surface of the neck, for the reception of an expansible retaining washer 14.

Longitudinal passages 15 are formed in the guard at diametrically opposite points, opening through the bottom of the guard and terminating short of the upper end thereof, and similar diametrically opposite passages 16 extend downwardly from the top of the guard and terminate short of its bottom, the passages 16 being offset half way around the guard from the passages 15, to bring them midway between the latter. The passages 15 extend above the lower end of the passages 16, as shown, and diagonal passages 17 connect the inner end of each longitudinal passage with the adjacent passages, so that there is formed a continuous passage around the guard, and offset vertical passages communicating with the continuous passage and with the ends of the guard.

It will be understood that, when the bottle is tilted sufficiently to un-seat the valve 8, liquid will pass from the bottle and through the several communicating passages of the guard beyond the latter. When the bottle is returned to upright position, the valve 8 will return to operative position, and the introduction of any implement into the valve chamber to un-seat the valve, will be prevented by the tortuous nature of the passages through the guard. When the bottle is tilted, the edge of the flattened portion bears against the underneath surface of the guard, and thus constitutes a fulcrum for permitting the valve to move to its limit away from the seat at one side thereof, and to consequently increase the size of the liquid discharge opening between said valves and seat. The same result is obtained when the bottle is wholly reversed from the position of Fig. 1. In this last named position, the flattened portion 8′ will rest wholly upon the flattened underneath surface of the guard.

What is claimed is:

The combination with a bottle having a valve seat in its neck, and an enlarged portion above the seat, of a ball shaped valve on said seat and of less diameter than said enlarged portion, said valve having a depending portion carrying a weight, and a guard arranged at the upper end of said enlarged portion, and having passages cut into the sides thereof, said guard having a flat underneath surface, said valve having a flattened upper surface designed to engage said underneath surface wholly or with its edge portion.

In testimony whereof, I affix my signature, in presence of two witnesses.

CLARENCE B. WILTSE.

Witnesses:
WM. RHINEHART,
WM. T. SUTTON.