No. 879,766. PATENTED FEB. 18, 1908.

W. HARRISON.

BOTTLE.

APPLICATION FILED JUNE 12, 1907.

Fig. 1,

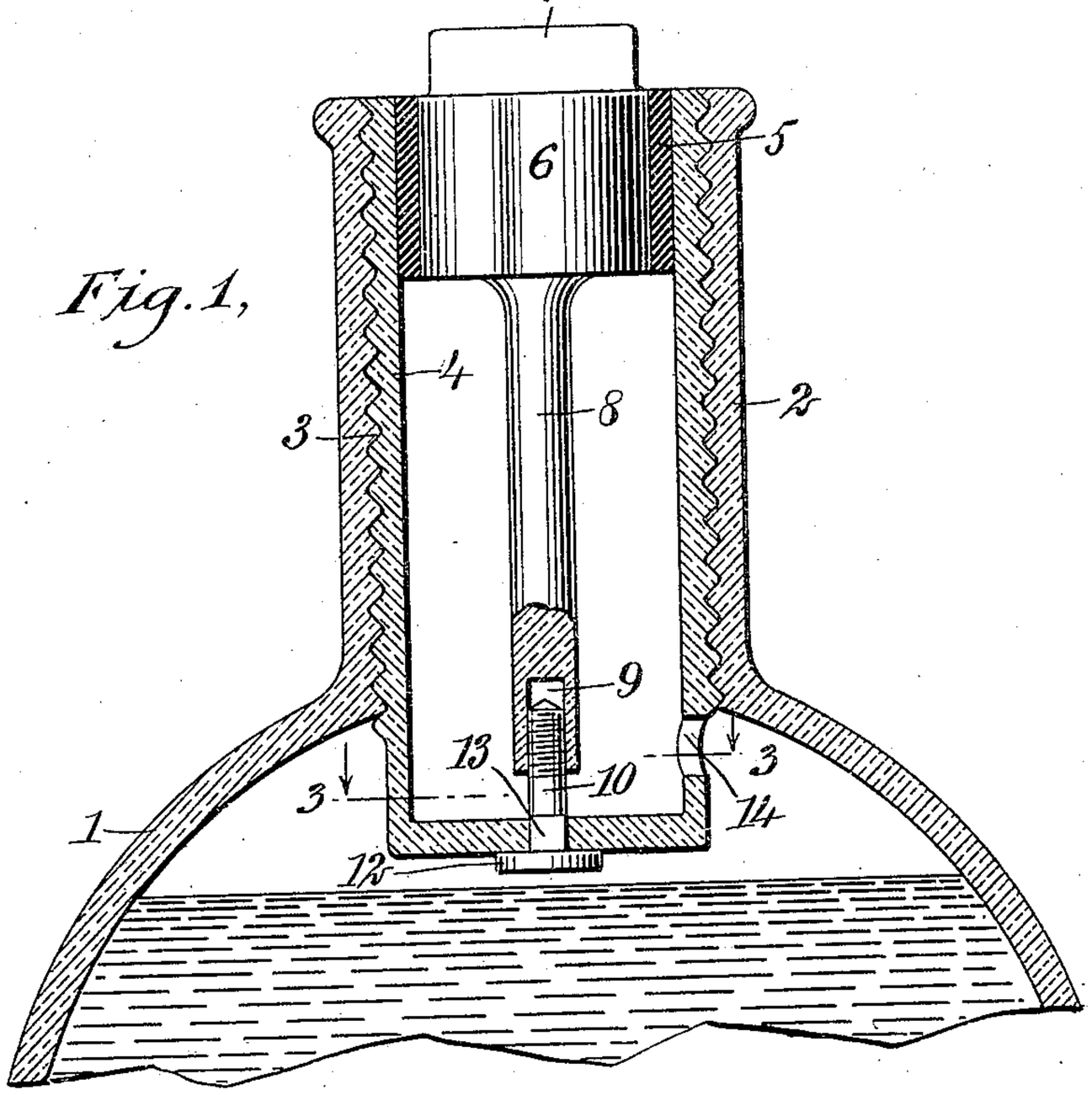


Fig. 2,

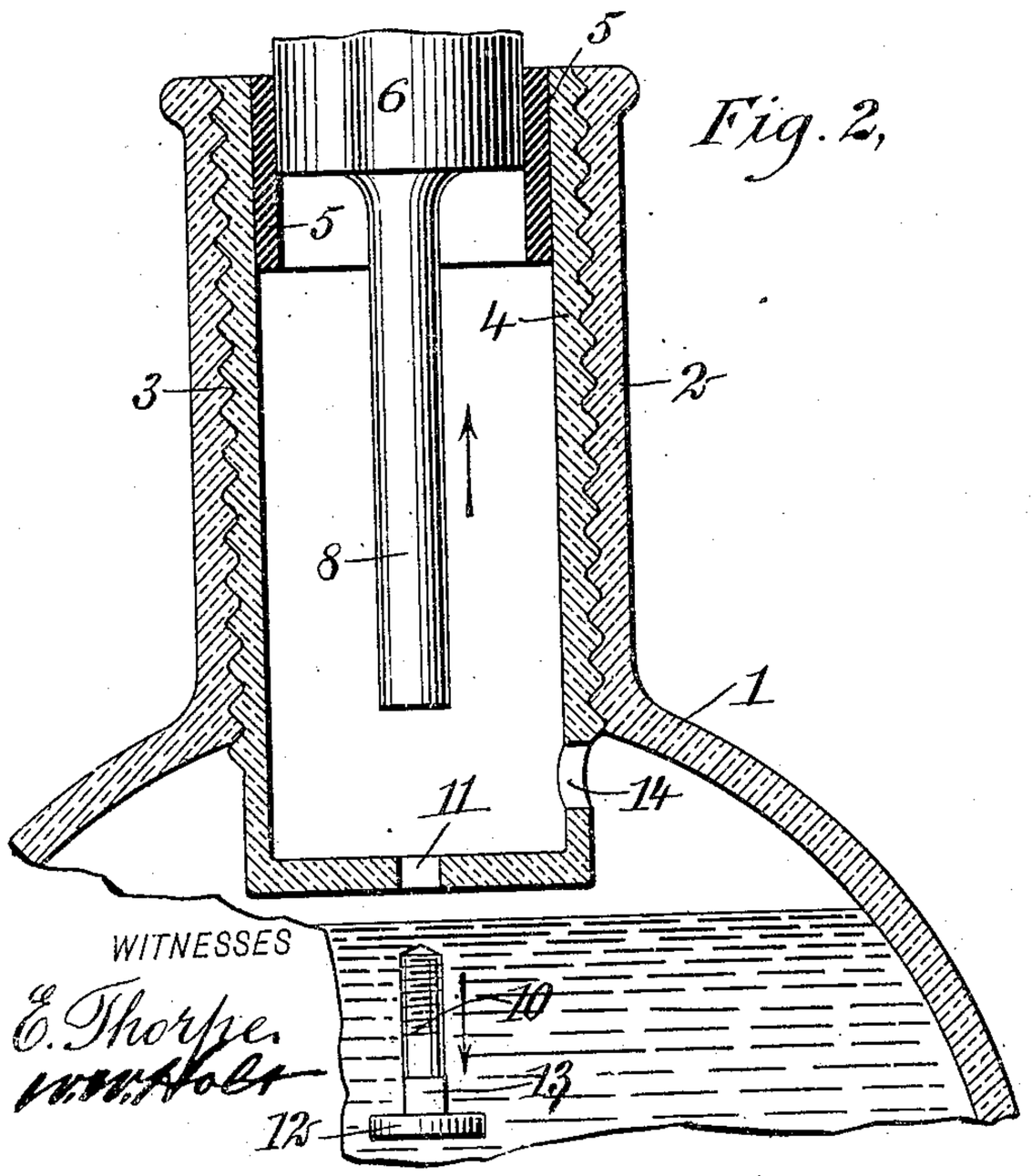
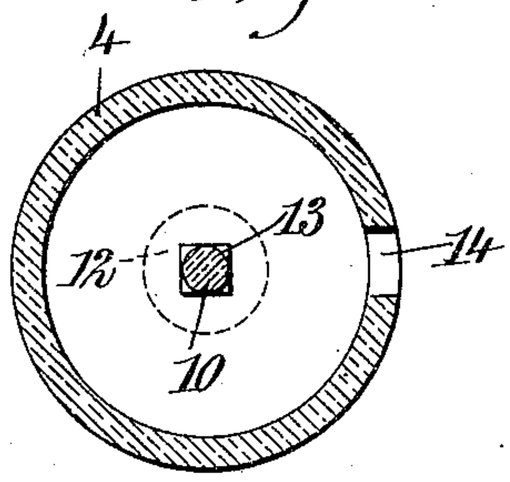


Fig. 3.



WITNESSES

E. Thorpe.

INVENTOR

William Harrison

BY Munn & Co

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WILLIAM HARRISON, OF DAY DAWN, WESTERN AUSTRALIA, AUSTRALIA.

BOTTLE.

No. 879,766. Specification of Letters Patent. Patented Feb. 18, 1908.

Application filed June 12, 1907. Serial No. 378,474.

To all whom it may concern:

Be it known that I, WILLIAM HARRISON, a subject of the King of Great Britain, and a resident of Day Dawn, Murchison, Western Australia, Australia, have invented a new and Improved Bottle, of which the following is a full, clear, and exact description.

The invention has in view the provision of a bottle which cannot be refilled after being opened and emptied, without the refilling thereof being clearly apparent. This is accomplished by my invention through the releasing of a device detachably connected to the stopper, said device dropping to the bottom of the bottle as the stopper is removed.

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 figures.

Figure 1 is a central, vertical, sectional view through the upper portion of an ordinary form of bottle with my improvement applied thereto showing the stopper in place as when the bottle is filled; Fig. 2 is a like view showing the stopper in the act of being withdrawn, and Fig. 3 is a cross section on the line 3—3 of Fig. 1, looking in the direction of the arrows.

Referring to the drawing, 1 indicates a bottle of any desired size or outward conformation, having a neck 2 which is uniformly threaded throughout its length, as indicated at 3. Screwed into the neck 2 is an exteriorly-threaded cup 4, which is preferably uniformly cylindrical and of such length as to project slightly below the bottom of the neck 2 when it is screwed to position. The bottle 1, as also the cup 4, may be made of any suitable material, as glass, hard rubber, etc.

Arranged within the cup 4 at its upper end, is a thimble 5, which is made of cork, rubber or other yielding material, and is designed to closely fit between said thimble and a stopper 6, the latter being also preferably constructed of glass. The stopper 6 has an angular portion 7 projecting from its upper end, and a stem 8 centrally depending from the opposite and lower side thereof. The stem 8 is of such length as to pass almost to the bottom of the guide 4, where it is provided with an interiorly-threaded bore 9. This threaded bore of the stem receives the threaded end of a screw 10 passing through an angular opening 11 in the bottom of the cup. The screw 10 is constructed with a head 12 to engage the under face of the cup bottom when in operative position, and also with a square or other angular portion 13 adjacent to the head to fit the opening 11.

In order that the liquid may freely flow from the bottle when inverted after the stopper is removed there is provided in one side of the cup 4 near the bottom thereof, an opening 14, which, as clearly shown in Figs. 1 and 2, is located below the neck of the bottle when the cup 4 is in place.

In applying my improvement to the bottle, the cup, stopper and other parts fixed thereto, as shown in Fig. 1, are assembled but removed from the neck of the bottle until the latter is filled. A cement is then applied to the threads of the neck or to the cup, and the latter thereafter screwed to position, as illustrated, the cement on hardening, preventing any further separation of the parts 2 and 4.

When it is desired to empty the bottle, the angular portion 7 may be given a few turns by hand or with a wrench, acting to separate the stem 8 from the screw 10, the latter falling to the interior of the bottle, after which the stopper may be bodily withdrawn.

Although I have described the preferred embodiment of my invention, I nevertheless regard the precise construction as immaterial provided the essential characteristics are employed as pointed out in the annexed claims.

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

1. A bottle having an interiorly-threaded neck, a cup exteriorly-threaded and screwed into said neck, a stopper in the cup, and means loosely passing through the bottom of the cup detachably connecting it with the stopper.

2. A bottle having a neck, a cup secured in said neck, a stopper closing the opening in the cup, and means detachably connecting the cup and stopper together and adapted to drop to the bottom of the bottle when said cup and stopper are disconnected.

3. A bottle having a neck, a cup secured in said neck, a stopper closing the opening in the cup, a stem projecting from the stopper within the cup and having an interiorly threaded bore, and a screw passing through

the bottom of the cup in threaded engagement with said bore.

4. A bottle having a neck, a cup secured in said neck having an opening in one side thereof leading into the bottle, a stopper closing the opening in the cup, a stem carried by the stopper having an interiorly-threaded bore, and a screw passing through the bottom of the cup and in threaded engagement with said bore.

5. A bottle having a neck, a cup secured in said neck, a stopper in the cup, a thimble interposed between the stopper and cup, and means for detachably connecting the stopper with the cup.

6. A bottle having a neck, a cup secured in said neck having an opening in one side thereof leading into the bottle, a stopper arranged in the cup and having an angular projection at its upper end, a thimble interposed between the stopper and cup, a stem fixed to the bottom of the stopper having an interiorly-threaded bore, and a screw passing through the bottom of the cup in threaded engagement with said bore.

7. A bottle having an interiorly-threaded neck, a cup exteriorly-threaded and screwed into said neck with an opening formed in one side thereof leading into the bottle, a stopper in the cup having an angular projection at the upper end thereof, a thimble interposed between the stopper and cup, a stem depending from the stopper having an interiorly threaded bore, and a screw passing through the bottom of the cup and threaded into said bore, said screw being formed angular where it passes through the cup.

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

WILLIAM HARRISON.

Witnesses:

A. W. PALFREYMAN,

J. BAILEY.