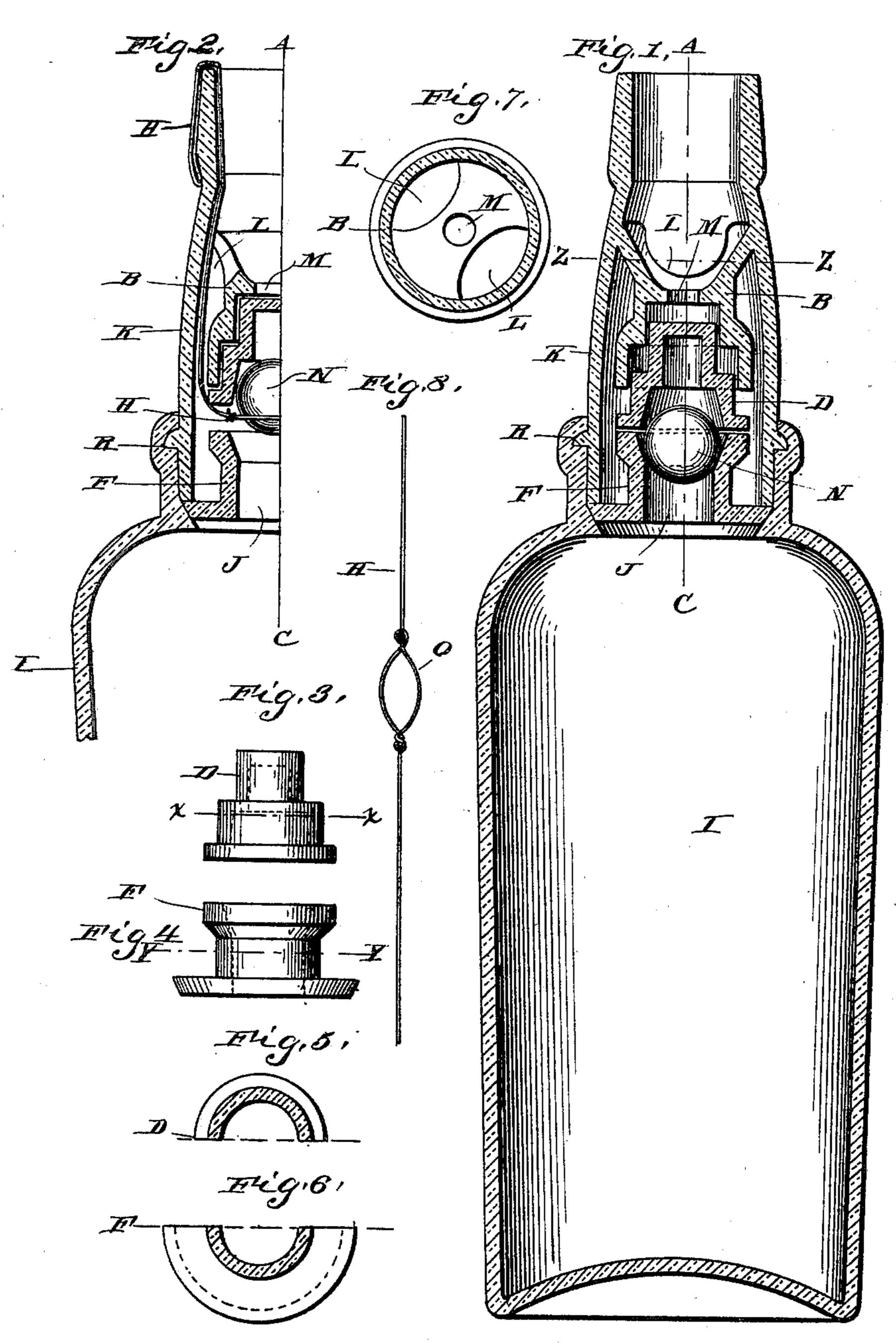
## A. A. FRENCH. BOTTLE.

(Application filed Dec. 12, 1898.)

(No Model.)



Witnesses; Wilson C. Sterling E. E. Brooks.

Alfred a French By Frank Highly attorney

## United States Patent Office.

ALFRED A. FRENCH, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF TO SHERMAN W. WATTERSON, OF SAME PLACE.

SPECIFICATION forming part of Letters Patent No. 626,418, dated June 6, 1899.

Application filed December 12, 1898. Serial No. 698,961. (No model.)

To all whom it may concern:

Be it known that I, Alfred A. French, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of 5 Ohio, have invented certain new and useful Improvements in Bottles, of which the following is a specification.

My invention relates to bottles or other kinds of receptacles for holding liquids; and to the object of my invention is to provide a receptacle in which the liquid may be readily poured out, but which cannot be refilled after it is emptied.

My invention is illustrated in the accom-

15 panying drawings, in which—

Figure 1 is a sectional view of a bottle or other receptacle. Fig. 2 is a sectional view of the upper part of Fig. 1 on the line C A of Fig. 1. Fig. 3 is a side view of the valve D 20 shown in Fig. 1. Fig. 4 is a side view of the valve-seat F shown in Fig. 1. Fig. 5 is a sectional view of the valve D on the line X X of Fig. 3. Fig. 6 is a sectional view of the valveseat F on the line Y Y of Fig. 4. Fig. 7 is a 25 sectional view of the inner part of the neck of the bottle on the line Z Z of Fig. 1. Fig. 8 is a view of the wire used when the bottle is being filled, as hereinafter described.

Like letters refer to like parts throughout

30 the several views.

In Fig. 1 is shown a bottle or other receptacle for holding liquids. The receptacle is provided with a body portion I. Fitting into an opening in the top of I is a valve-seat F, 35 so constructed as to close up the top of the body I and at the same time to form a valveseat. The valve-seat F is provided with an opening J into the body I of the bottle. The opening J widens out in the upper part of 40 the valve-seat and receives a ball N. The ball N so closely fits the opening J that when in engagement with the opening no liquid can pass through the opening from above. Resting on the top of the valve-seat F is a 45 valve D, which is hollowed out, as shown in Fig. 1, thus providing a space for the ball N. At the point of engagement of the valve D with the valve-seat F the opening in the valveseat is made wider than the space in the valve 50 D, for the purpose hereinafter mentioned.

The bottle is provided with a neck K, which

is constructed separate from the body I and is attached to the body by means of a lap of the body I over the ridge R in the neck K or in any other suitable manner. The neck K 55 is provided with the part or guide B, which engages and holds in place and guides the movable valve D. The part B is provided with suitable openings L L (shown in Fig. 7) to admit the passage of liquids through the 60 neck of the bottle and is also provided with the opening M, for the purpose hereinafter explained. If desired, the valve-seat F may be made integral with the body I instead of being constructed separately and attached to 65 the body I. After the body I has been provided with a suitable valve-seat the neck is attached to the body. Before attaching the neck to the body of the bottle there is placed in the neck the valve D and the ball N, the 70 ball and valve being held up by the wire H, as shown in Fig. 2. The wire H is preferably made in two parts, looped at O, as shown in Fig. 8, the purpose of the loop being to hold the ball N.

When the parts are arranged and attached together as shown in Fig. 2, the valve and ball being raised the bottle can be readily filled. The liquid passes through the openings L L in the neck and through the open- 80 ing in the valve-seat F into the body of the bottle. After the bottle is filled the wire H is drawn out and the ball and valve drop and close the entrance to the body of the bottle.

When it is desired to empty the bottle, the 85 same is inverted and the ball and valve drop back and the liquid finds its exit through the same channel in which it entered. When, however, the bottle is emptied, it cannot be again filled.

If the bottle is held with neck upward, the valve D and ball N close the entrance to the body of the bottle. If the bottle is inverted and an attempt is made to force the liquid upward through the neck of the bottle, the 95 force of the liquid will be directed through the opening M in the part B of the neck, and the valve D will be forced upward into engagement with the valve-seat F, thus preventing the flow of liquid into the body of the 100 bottle.

If the bottle should be held in a horizontal

position and the valve should be withdrawn from engagement with the seat, it would still be impossible to force the liquid into the bottle. The opening in the valve-seat being larger than that in the valve the ball n would incline toward the entrance into the bottle, and if any liquid should find its way between the valve and seat while the ball N is in this position the ball would be immediately driven into the opening in the valve-seat, thus preventing the entrance of the liquid into the bottle.

The bottle thus constructed may be used to great advantage as a receptacle for liquids which it is desired to preserve free from pos-

sibility of adulteration.

In the past dealers in various kinds of liquids of more than ordinary value have frequently adulterated the same by withdrawing the liquid or part of the same from the bottle or receptacle in which they receive the liquid and introducing into the receptacle an inferior substitute. Where a liquid is furnished in the receptacle herein described, it is impossible to adulterate the same. The liquid may be readily poured out when desired, but no substitute can ever be introduced into the receptacle.

What I claim, and desire to secure by Let-

30 ters Patent, is—

1. In a bottle, in combination, a valve-seat

having an opening into the bottle, a valve adapted to engage the valve-seat and being on its under side hollowed out to receive a ball and the opening in the valve-seat at the 35 point of engagement with the valve being wider than the opening in the valve, a ball interposed between the valve and valve-seat and being adapted to engage the opening in the valve-seat, a neck provided with a guide 40 to hold the valve, the guide being provided with suitable openings for the discharge of the contents of the bottle, substantially as shown and for the purposes described.

2. In a bottle, in combination, a valve-seat 45 having an opening into the bottle, a valve adapted to engage the valve-seat and having on its under side a space to receive a ball, and the opening in the valve-seat at the point of engagement with the valve being wider 50 than the opening in the valve, a ball interposed between the valve and valve-seat and being adapted to engage the opening in the valve-seat, a neck provided with a guide to hold the valve, the guide having the opening 55 M and also suitable openings for the discharge of the contents of the bottle, substantially as and for the purposes shown and described.

ALFRED A. FRENCH.

Witnesses:

S. W. WATTERSON, WILSON C. STERLING.