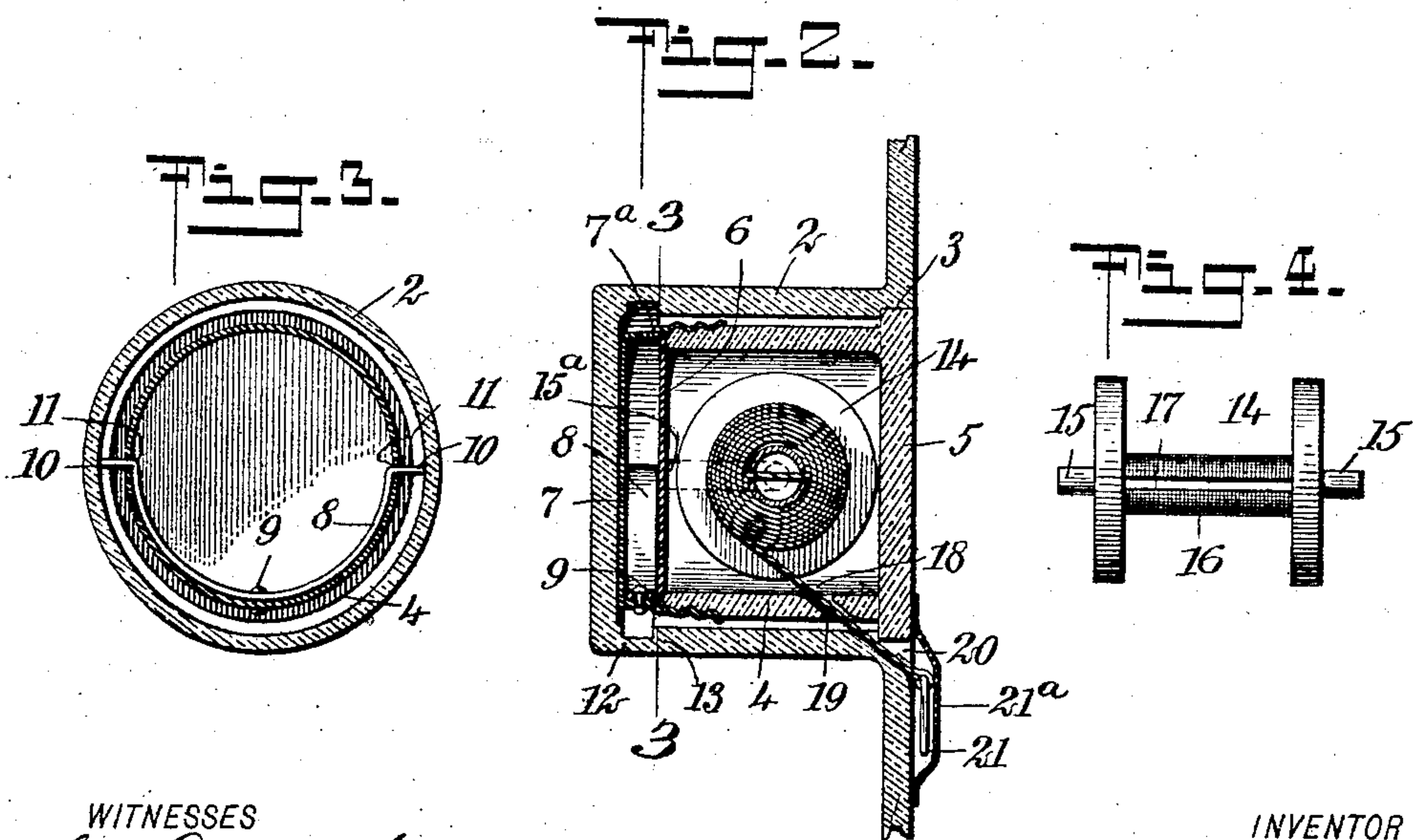
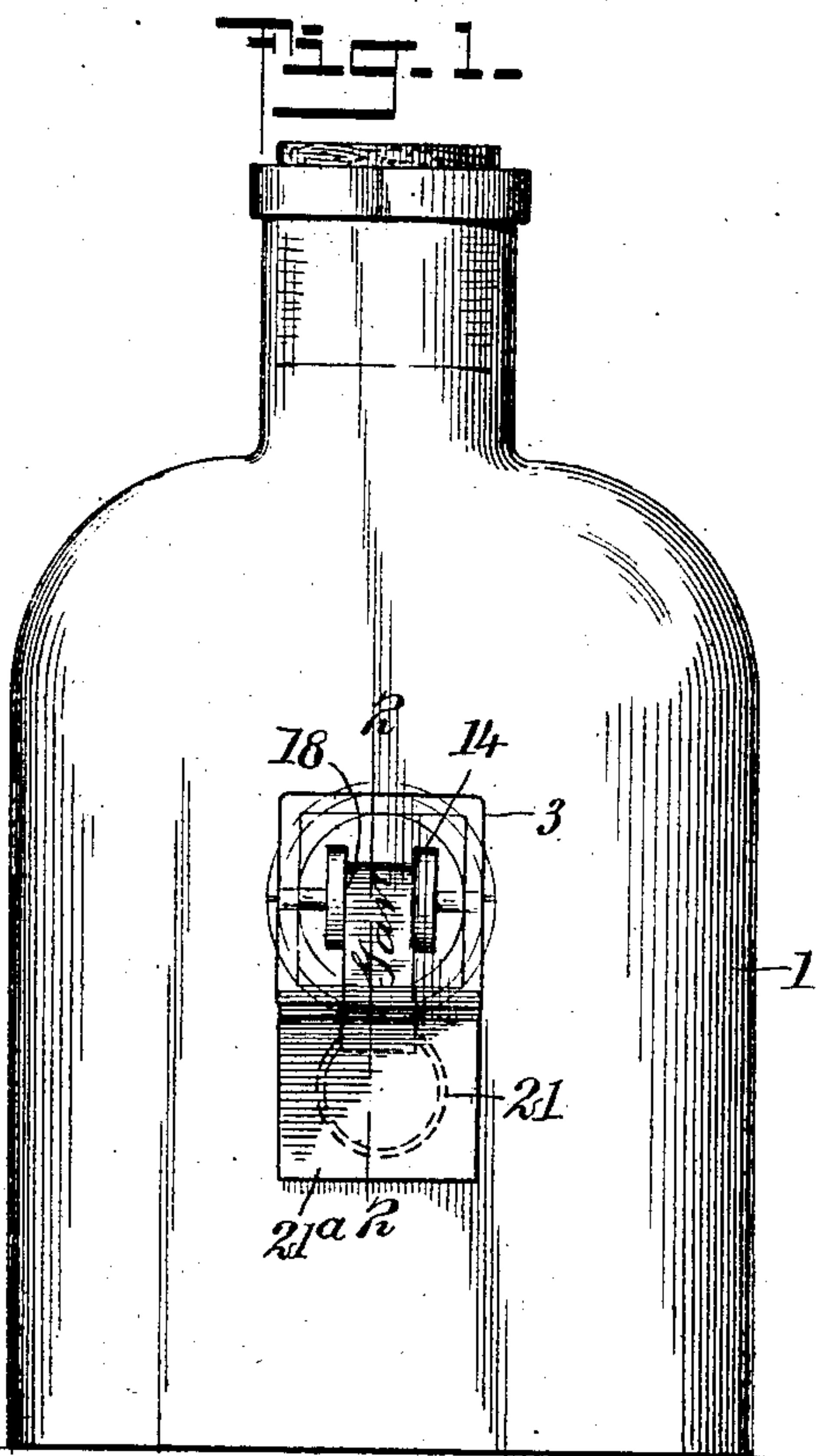


No. 883,844.

PATENTED APR. 7, 1908.

F. H. WATERMAN.
FRAUD DETECTING BOTTLE.
APPLICATION FILED JAN. 5, 1907.



WITNESSES
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UNITED STATES PATENT OFFICE.

FRANK HERBERT WATERMAN, OF NORWELL, MASSACHUSETTS.

FRAUD-DETECTING BOTTLE.

No. 883,844.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed January 5, 1907. Serial No. 350,895.

To all whom it may concern:

Be it known that I, FRANK HERBERT WATERMAN, a citizen of the United States, and a resident of Norwell, in the county of Plymouth and State of Massachusetts, have invented a new and Improved Fraud-Detecting Bottle, of which the following is a full, clear, and exact description.

This invention relates to fraud-detecting bottles; that is, bottles which are provided with means for indicating whether the contents is genuine.

The object of the invention is to produce a bottle of this class which is simple in construction, but which will operate effectively to prevent the fraudulent refilling and re-selling of the bottle with a spurious mixture.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

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 side elevation of a bottle constructed according to my invention; Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1, and upon an enlarged scale; Fig. 3 is a cross section taken on the line 3—3 of Fig. 2; and Fig. 4 is a side elevation of a reel which constitutes a feature of the invention.

Referring more particularly to the parts, 1 represents the body of the bottle, which may be of any common form such as that shown. This body is provided, however, with an inwardly projecting pocket 2, which is formed on the side wall thereof, as indicated. The body of this pocket may be of cylindrical form, and in the wall of the bottle at the entrance to the pocket, an angular socket 3 is formed, which is preferably of square form as indicated. Within this pocket 2 there is received a cup 4, the body of which is of substantially cylindrical form, as indicated. This cup is formed with a bottom or head 5, which is formed integral therewith, and this head is of substantially square outline so as to fit the socket 3. The arrangement is such that the cup may be inserted in the pocket so that the head 5 fits nicely in the socket, lying flush with the outer face of the wall of the bottle. Like the bottle, this cup 4 is made of glass. The inner end of the cup is closed by a disk 6, of circular form, which is applied

thereto as indicated, the said disk being held in place by a metal cap 7 which screws upon the end of the cup. This cap 7 is formed with an inset or shoulder 7^a against which the disk rests, which holds the disk against the end of the cup, and is provided on its inner side with a semi-circular bow spring 8, which is attached at its middle point 9 by a rivet or similar fastening device.

The extremities of the spring 8 are bent outwardly in a radial direction so as to form fingers 10 which extend through openings 11 formed in the side wall of the cap, as indicated. On the inner side the wall of the pocket 2 is provided with a circumferential groove 12, so that a retaining shoulder 13 is formed extending continuously around the pocket. The arrangement is such that when the cup is forced into the pocket, the fingers 10 will be forced inwardly by the wall of the pocket. When the cup has become seated, the fingers 10 come opposite the groove 12 and the resiliency of the bow then forces them outwardly so that they engage in the groove behind the shoulder 13. In this way they effectually lock the cup against being removed by ordinary methods. In this connection, it will be understood that the cup could only be withdrawn by disengaging the ends of the spring 8 from the groove, and this is impossible by reason of the fact that the spring cannot be reached from the exterior.

Within the cup 4 there is provided a reel 14, the construction of which is shown in Fig. 4. This reel is provided with trunnions or gudgeons 15, which are slid into longitudinal grooves 15^a formed in the side walls of the cup, and the neck 16 of the reel is provided with an elongated slot 17 which facilitates the winding of the tape 18 upon the reel, as will be readily understood. The outer end of this tape extends downwardly through an opening 19 which is formed in the lower side of the cup in an inclined direction, and beyond this opening the tape passes downwardly to the outer side of the bottle through a notch or recess 20 which is formed in the lower edge of the socket and pocket as shown. Beyond the notch 20 the end of the tape is provided with a ring 21 which facilitates its being drawn out, as will presently be described. In order to prevent the tape from being accidentally pulled, its loose end is covered by a gummed sheet of paper adhering to the side of the bottle and constituting a protector 21^a.

The manner in which the bottle operates to detect fraud is substantially as follows: Previous to placing the tape within the cup and inserting the cup in the wall of the bottle
 5 as described, the tape is marked, by printing or otherwise, with the trademark of the bottler or seller of the goods, and other matter which may describe or distinguish the contents of the bottle, such as fac-simile signatures of the proprietor or the like. When
 10 the filled bottle is sold, the purchaser will pull out the tape, removing the same completely from the reel. By the markings upon the tape it will then become known
 15 whether the bottle is genuine, and a tape which has once been removed from the bottle, cannot be replaced, by reason of the fact that the cup 4 cannot be removed, in order to enable the tape to be wound again upon the
 20 reel; hence, if a bottle is sold having the reel without the tape, it will indicate at once that the selling of the bottle is irregular, and the contents of the bottle probably not genuine.

It should be understood that the disk 6
 25 operates to hold the reel in position, and the shoulder 7^a holds the disk so that it does not press the spring 8 in such a way as to prevent its free movement.

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

1. A bottle of the class described, having a pocket formed in the wall thereof, a cup received in said pocket, means for locking said
 35 cup against withdrawal when seated in said pocket, a tape carried in said cup adapted to have marks indicating the genuineness of the contents of the bottle and adapted to be withdrawn through the wall thereof, said
 40 tape being unattached within said cup whereby said tape cannot be replaced in its former condition after complete withdrawal.

2. A bottle of the class described, having a pocket formed in the wall thereof, a cup re-

ceived in said pocket, means for locking said 45 cup in said pocket to prevent the removal thereof, a reel mounted in said cup, and a tape wound on said reel and passing to the exterior of said bottle, whereby said tape may be withdrawn. 50

3. A bottle of the class described, having a pocket formed in the wall thereof, a cup received in said pocket, means for locking said cup against removal from said pocket, a reel carried by said cup, and a tape wound upon 55 said reel, the wall of said cup having an opening through which said tape passes to the exterior of said bottle, whereby said tape may be withdrawn from said reel.

4. A bottle of the class described, having a 60 pocket formed in the wall thereof, a cup mounted in said pocket, a removable cap applied to the inner extremity of said cup, said pocket having a shoulder formed on the inner side of the wall thereof, means carried 65 by said cap for engaging said shoulder and operating to lock said cup against withdrawal when seated, a reel mounted in said cup, and a tape carried upon said reel and passing to the exterior of said bottle. 70

5. A bottle of the class described, having a pocket formed in the wall thereof, a cup received in said pocket, means for locking said cup against withdrawal, a reel rotatably mounted in said cup, and a tape wound on 75 said reel, the wall of said cup having an opening through which said tape passes, and the edge of said pocket having a notch therein through which said tape passes to the exterior of said bottle, whereby said tape may 80 be withdrawn from said reel.

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

FRANK HERBERT WATERMAN.

Witnesses:

MELVIN LITTLE,
 ANNIE N. LITTLE.