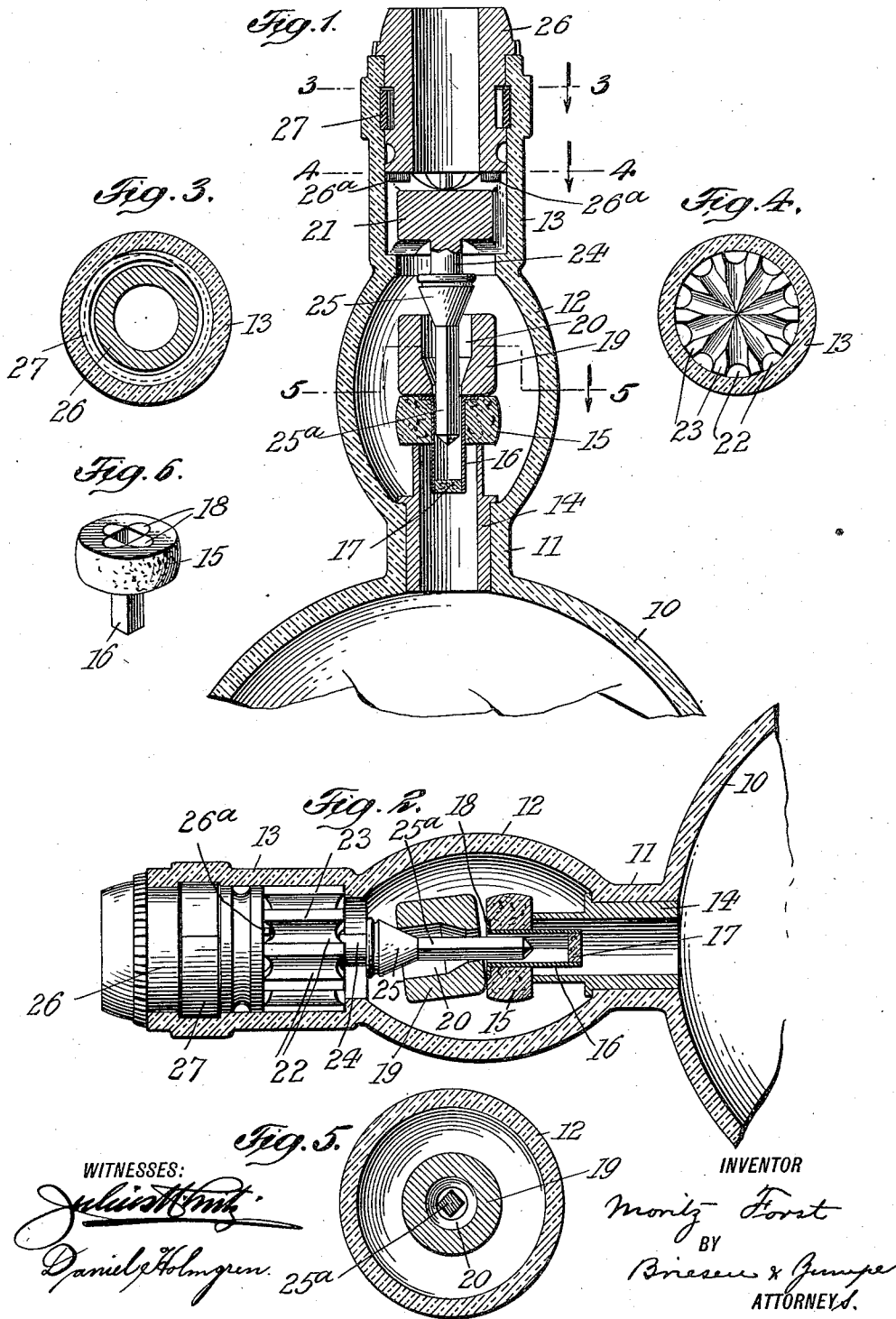


M. FORST.
NON-REFILLABLE BOTTLE.
APPLICATION FILED OCT. 24, 1911.

1,031,704.

Patented July 9, 1912.



UNITED STATES PATENT OFFICE.

MORITZ FORST, OF NEW YORK, N. Y., ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-SIXTH TO JOSEPH N. SCHULTZ, ONE-SIXTH TO CHARLES POLK, AND ONE-SIXTH TO ISIDOR ROSENBLUTH, ALL OF NEW YORK, N. Y.

NON-REFILLABLE BOTTLE.

1,031,704.

Specification of Letters Patent.

Patented July 9, 1912.

Application filed October 24, 1911. Serial No. 656,375.

To all whom it may concern:

Be it known that I, MORITZ FORST, a citizen of Austria, residing at New York city, county and State of New York, have invented a new and Improved Non-Refillable Bottle, of which the following is a specification.

This invention relates to a bottle of novel construction which effectively prevents unauthorized refilling.

The bottle is provided with means for loosening up the discharge valve from time to time, so that the free flow of the liquid is not liable to be impeded by reason of the valve sticking to its seat.

In the accompanying drawing: Figure 1 is a longitudinal section through the neck of a bottle embodying my invention, showing the parts in an upright position; Fig. 2 a similar section showing the bottle in a horizontal position; Fig. 3 a cross section on line 3—3, Fig. 1; Fig. 4 a cross section on line 4—4, Fig. 1; Fig. 5 a cross section on line 5—5, Fig. 1, and Fig. 6 a perspective view of the valve.

A bottle or similar receptacle 10 is provided with a neck comprising a lower cylindrical section 11 and an upper bulged section 12 carrying the head 13. Into the cylindrical section 11 is rigidly fitted a tubular sleeve 14, open at both ends. The upper end of this sleeve constitutes the seat for an axially reciprocative and rotatable valve 15 preferably made of cork or other light material. This valve is provided with a central bore into which is fitted a hollow angular stem 16 entering sleeve 14 and closed at its lower end by plug 17, while its upper slitted ends are upset against the upper face of the valve as shown at 18 Fig. 6. Upon valve 15 is normally supported a weight 19 having a central bore 20 which is contracted toward its lower end. Into the lower end of head 13, is fitted a freely rotatable cylinder 21 having a fluted periphery so as to here provide a plurality of liquid ducts 22 and intervening ribs 23. From the center of cylinder 21 depends a pin 24 having a coniform head 25 which is adapted to enter bore 20 of weight 19 when the bottle is tilted. From head 25 there depends in turn

a squared arbor 25^a passing through weight 19 and into the hollow of the squared valve stem 16.

It will be seen that when cylinder 21 is rotated, it will through arbor 25^a and stem 16, rotate valve 15 upon sleeve 14, so that the valve may be loosened up from time to time, and thus insure the free egress of the liquid. Above cylinder 21, there is fitted into head 13, a tubular nozzle 26 which is rotatably secured within the head by an annulus 27 fitted into alined grooves of the head and nozzle. Nozzle 26 is provided at its lower end with a pair of diametrically disposed prongs 26^a adapted to enter a pair of opposed grooves 22 of cylinder 21. Thus by turning the nozzle, the prongs by engaging ribs 23, will turn cylinder 21, so as to impart by the latter, the desired rotation to valve 15. When the bottle is in an upright position, weight 19 will tightly hold valve 15 to its seat to prevent refilling. So also when the bottle is in a horizontal position, the weight will by the tapering head 25 be held against the valve (Fig. 2), so that in this or a similar position, refilling is likewise prevented.

For dispensing the contents of the bottle, the latter is inclined in the usual manner, when the liquid will flow through tubular sleeve 14, open valve 15, bulged neck section 12, peripheral ducts 22 of cylinder 21, and out through the central bore of nozzle 26. As soon as the bottle is again righted, valve 15 will return to its seat, such return being assisted by the descending weight 19 bearing upon the valve.

I claim:

1. A non-refillable bottle provided with a valve seat arranged within the bottle neck, an axially reciprocative and rotatable valve engaging the same and adapted to control the liquid discharge, a tubular nozzle rotatable within the bottle head, a fluted rotatable cylinder engaged by the nozzle, a squared arbor depending from the cylinder and operably engaging the valve, and an apertured weight encompassing the arbor and arranged above the valve.

2. A non-refillable bottle comprising a tubular sleeve, a valve engaging the same, a

hollow squared stem extending from the
valve into the sleeve, an apertured weight
engaging the valve, a rotatable fluted cyl-
inder above the weight, a headed pin de-
5 pending from the cylinder and having a
squared arbor that engages the valve stem,
a rotatable nozzle above the cylinder, and
prongs on the nozzle that engage said cylin-
der.

MORITZ FORST.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
