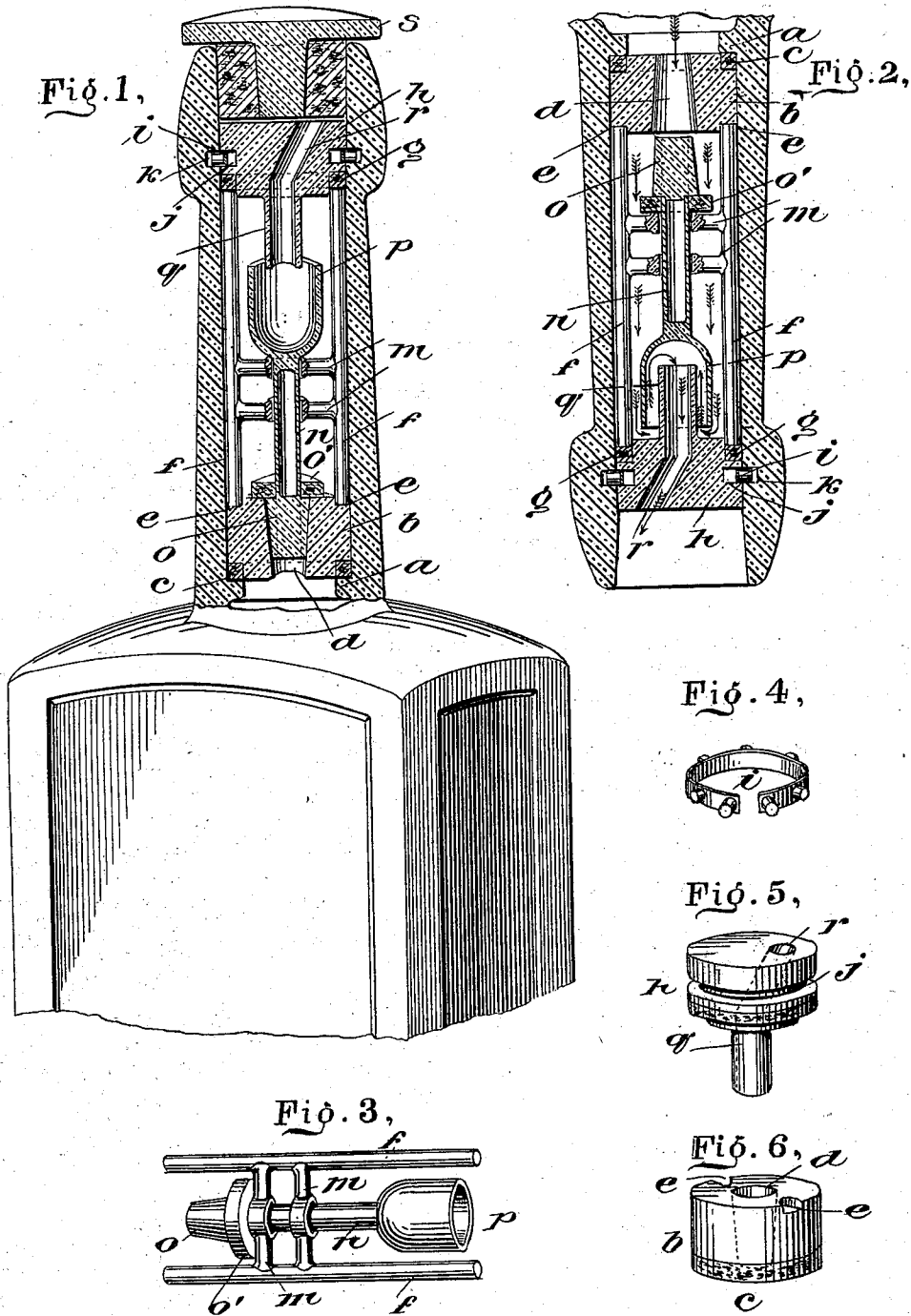


No. 726,811.

PATENTED APR. 28, 1903.

G. AURNHAMER.
NON-REFILLABLE BOTTLE.
APPLICATION FILED FEB. 20, 1903.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE AURNHAMER, OF WEST HOBOKEN, NEW JERSEY, ASSIGNOR OF TWO-THIRDS TO AUGUST ADOLPH SCHLEGEL AND STEPHEN WEISS, OF UNION HILL, NEW JERSEY.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 726,811, dated April 28, 1903.

Application filed February 20, 1903. Serial No. 144,232. (No model.)

To all whom it may concern:

Be it known that I, GEORGE AURNHAMER, a subject of the Emperor of Germany, residing in West Hoboken, county of Hudson, State of New Jersey, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

This invention relates to that class of devices adapted to be permanently secured in the neck of a bottle and which while permitting free discharge of the contents thereof prevent refilling.

In the accompanying drawings, Figure 1 shows the upper part of the bottle with the neck and parts located therein in section. Fig. 2 shows a longitudinal section of the bottle-neck only inverted for discharging the contents of the bottle. Fig. 3 is a detailed view showing the valve that is contained in the bottle-neck with a cup-shaped enlargement on the upper end of the stem; Fig. 4, a detailed view of the expansible washer employed to retain the parts in the neck of the bottle; Fig. 5, a detailed view of the upper member of the organization, having a peripheral groove in which the expansible washer is seated; and Fig. 6 shows the lower member of the organization, in which is formed the opening for discharge of the contents of the bottle and the seat for the valve.

The neck of the bottle is formed at its lower end with an internal annular flange *a*, upon which is seated a plug *b*, provided with a washer *c*, of cork or other suitable material, in which is centrally formed a conically-shaped passage *d*. On the upper face of the part *b* and at diametrically opposite points are formed seats or sockets *e* to receive vertical stems or rods *f*, upon the upper ends of which bears an elastic washer *g*, of cork or other suitable material, surrounding an upper plug *h*, held in the neck of the bottle by the expansible washer *i*, contained in the annular groove *j*, formed in the part *h* and having studs or projections entering an internal annular groove *k*, formed in the neck of the bottle. The members or rods *f* are connected by cross-pieces *m m*, enlarged at the center

and formed with apertures for the reception of the stem *n* of a valve *o*, seating in the conical valve-seat *d* and having a disk *o'*, of cork or other appropriate material, bearing upon the top of the member or plug *b*. The upper end of the valve-stem above the cross-pieces *m m* is cup-shaped, as at *p*, and preferably its depth is somewhat greater than the diameter.

Opening into the cup *p* is a tube *q*, extending downwardly from the member or plug *h* and formed in one piece therewith or attached thereto. A passage *r* in the plug, preferably arranged obliquely, extends from its upper surface into communication with the tube *q*.

The various parts described may be made of any appropriate material, although glass is preferred on account of its cheapness and because it will not impart any taste or odor to the contents of the bottle.

Obviously when the bottle is inverted the contents thereof will pass, as indicated by the arrows in Fig. 2, and be discharged through the passage *r*, the ordinary stopper *s* being removed. Should the attempt be made to introduce a liquid into the bottle, it would fall into the cup *p* on the upper end of the valve-stem, and the gravity effect of the liquid or its impact upon the cup would act to seat the valve *o* and prevent the passage of the liquid into the bottle through the valve-opening *d*. Furthermore, any attempt to introduce an instrument or wire to manipulate the valve could only result in forcing it into its seat *d*.

I claim as my invention—

1. In a device for preventing refilling of bottles, the combination with the bottle-neck of the upper and lower plugs, a valve closing a passage in the lower plug, a cup or receptacle on the other end of the valve, and a tubular projection on the upper plug extending toward the cup, and communicating with a discharge-opening in the plug.

2. In a device for preventing refilling of bottles, the combination of the lower plug seated upon an internal annular flange in the bottle-neck, the upper plug fixed in the bot-

tle-neck by means of an expansible washer,
a valve closing a passage in the lower plug,
the valve-stem and cup or receptacle on the
upper end of the stem opposite a passage in
5 the upper plug, and means for supporting
and guiding the valve-stem interposed be-
tween the upper and lower plugs.

In testimony whereof I have hereunto sub-
scribed my name.

GEORGE AURNHAMER.

Witnesses:

JAS. H. RUGGLES,
WM. L. CLARK.