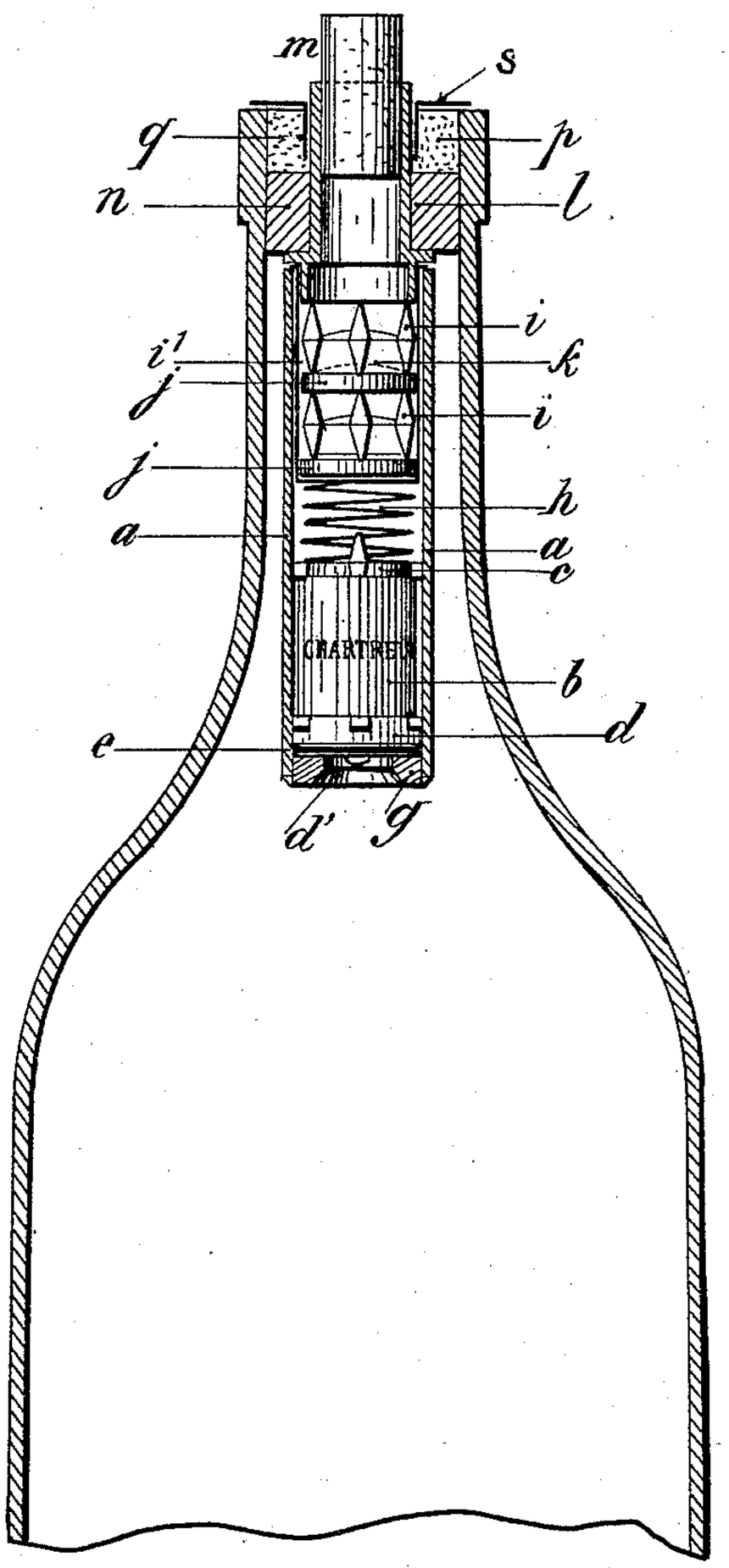
(No Model.) 2 Sheets—Sheet 1.

# P. B. NOËL.

## MEANS FOR PREVENTING THE FRAUDULENT REFILLING OF BOTTLES.

No. 431,148. Patented July 1, 1890.

FIG.1




Witnesses
Livingston Emery
John Fr. Dyer.

Inventor
Pierre Bernard Noël
by Briesen & Knauth
Attorneys

(No Model.) 2 Sheets—Sheet 2.

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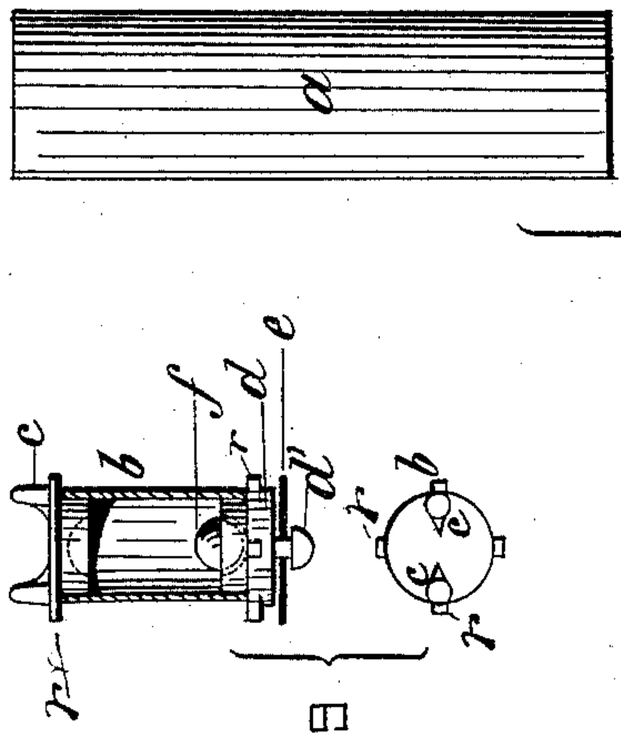

FIG. 9

FIG. 11



FIG. 10

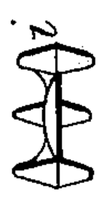

FIG. 6

FIG. 7

FIG. 8

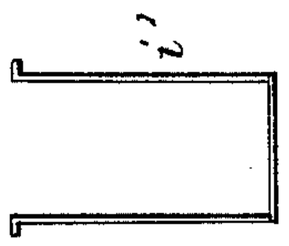

FIG. 4

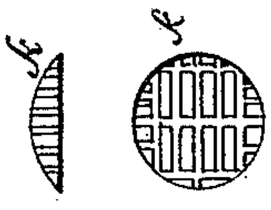

FIG. 5

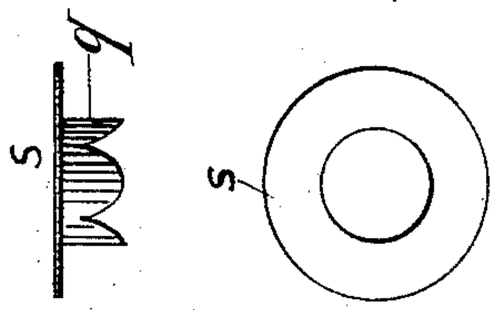

FIG. 2

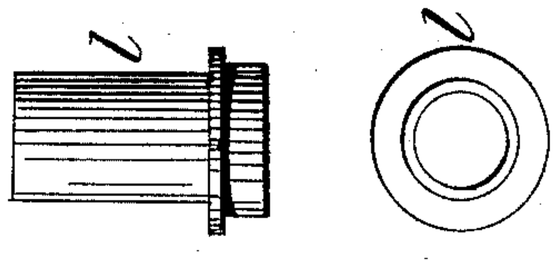

FIG. 3

Witnesses:

Albin M. Long.

Alex. Scott

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Pierre Bernard Noël

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# UNITED STATES PATENT OFFICE.

PIERRE BERNARD NOËL, OF PARIS, FRANCE.

## MEANS FOR PREVENTING THE FRAUDULENT REFILLING OF BOTTLES.

SPECIFICATION forming part of Letters Patent No. 431,148, dated July 1, 1890.

Application filed March 7, 1890. Serial No. 343,071. (No model.) Patented in France April 4, 1889, No. 197,203.

*To all whom it may concern:*

Be it known that I, PIERRE BERNARD NOËL, of the city of Paris, France, have invented Improved Means for Preventing the Fraudulent Refilling of Bottles and other Containers, (for which I have obtained Letters Patent in France for fifteen years, dated April 4, 1889, No. 197, 203,) of which the following is a full, clear, and exact description.

My invention relates to improved means for closing bottles and other liquid-containers, with a view to prevent the fraudulent refilling of bottles bearing labels indicative of the high-class quality of the original contents of the bottle.

The invention is illustrated in the accompanying drawings, forming part of this specification, wherein—

Figure 1 shows a sectional elevation of the improved closure. Figs. 2 to 11 show elevation and plan views of each detail separately.

The combination of parts constituting the invention is such as to enable the liquid contained in a bottle or other vessel to be poured off, but to render impossible fraud on the consumer by the refilling of the empty bottle or vessel.

The improved means comprise the following parts:

*a* is a cylindrical valve-chamber, of glass or other material, and *b* is a cylindrical plunger, also of glass or other material, closed at its upper end by a plug *c*, of the same material, having a bottom *d*, having on its under side a stud *d'*, serving to retain an india-rubber disk *e*, which constitutes the valve, both the head *c* and bottom *d* of the valve being provided with radial studs *r*, serving to center said valve in the valve-chamber *a*. The body portion *b* of the valve bears on its interior a mark or name denominating the contents of the bottle, visible through the glass; and it also contains a lead ball *f*, serving to weight the valve sufficiently to keep the india-rubber disk upon its seat *g*, this action being further assisted by a coiled spring *h*, bearing against the head *c*, and confined between it and the lower one of two rings *j*, upon which are supported one or more baffles *i*, serving to prevent the introduction of any instrument for the purpose of opening the valve. A strainer *k*, preferably of convex form, is fitted within one of the baffles. The baffles are supported within the valve-cylinder *a* by a stirrup-piece *i'*.

*l* is a glass or other mouth-piece fitting in the upper end of valve-cylinder *a* and projecting through the mouth of the bottle, (in which it is held central by a packing-ring *n*, of cork or other material,) and which is closed by a cork *m*.

*s* is a capsule of metal, enameled or otherwise, or made of other suitable material, bearing any suitable indications, the tubular notched portion *y* of which capsule fits around the tubular mouth-piece *l*, while its flanged part *o* covers the mouth of the bottle or other container, into which it is hermetically sealed by a luting of special material *p*.

In order to pour off the contents, the cork *m* is removed and the bottle tilted or inverted, whereupon the gravity of the liquid contained assists the weight of the body part *b* to overcome the spring *h*, and so move the valve from its seat to allow the liquid to escape past the valve and through and around the rings *j* and baffles *i* and strainer *k* to the mouth-piece *l*. If, now, after emptying the bottle, or nearly so, it be brought to the upright position, any attempt to refill it with liquid will be rendered ineffectual, inasmuch as the passage of the liquid will be arrested by the valve *e*, which is pressed on its seat by the weight of the body portion *b*, the stress of spring *h*, and the gravity of the liquid which it is sought to introduce. Even should the bottle or container be placed in a horizontal position, or be turned mouth downward, the valve would still close under the action of the liquid sought to be introduced, and thus prevent any liquid from entering the bottle. Moreover, the insertion of any kind of tool into the bottle-neck for the purpose of opening the valve will be prevented by the baffles *i*.

I claim—

1. In a means for preventing the fraudulent refilling of bottles and other containers, the combination of a valve carried by a hollow movable plunger, said plunger being adapted to carry the valve by gravity against and away from a seat in the lower end of a tubu-

lar casing *a*, which is confined within the bottle, and of a spring *h*, tending to press the plunger against the seat, as described.

2. In a means for preventing the fraudulent refilling of bottles and other containers, the combination of a valve carried by a plunger and closing by gravity against the seat in the inner end of a tubular casing, a spring *h* tending to press it against its seat, and of one or more baffles *i*, constructed as herein specified, alternated with annular distance-pieces *j*, the parts *i* and *j* being held in position by a stirrup-piece *i'*, and serving to prevent the introduction of an instrument for opening the valve, while permitting the pouring off of the contents, as described.

3. In a means for preventing the fraudulent refilling of bottles and other containers, the combination of a valve carried by a plunger and closing by gravity against a seat in the inner end of a tubular casing, a spring *h* tending to press it against its seat, and of one or more baffles *i*, constructed as herein specified, alternated with annular distance-pieces *j*, the parts *i* and *j* being held in position by a stirrup-piece *i'*, and serving to prevent the introduction of an instrument for opening the valve, while permitting the pouring off of the contents, the whole being contained in a glass cylinder *a*, carrying the valve-seat at its inner end and secured in the mouth of the bottle by a glass mouth-piece *l*, cork packing *n*, and a seal or luting *p*, protected by a capsule *s*, substantially as described.

The foregoing specification of my improved means of preventing the fraudulent refilling of bottles and other containers signed by me this 19th day of February, 1890.

PIERRE BERNARD NOËL.

Witnesses:

R. J. PRESTON,

ALBERT MOREAU.