No. 614,487. Patented Nov. 22, 1898.

R. E. MORRISON.

BOTTLE.

(Application filed Sept. 11, 1897.)

(No Model.)

FIG. 1

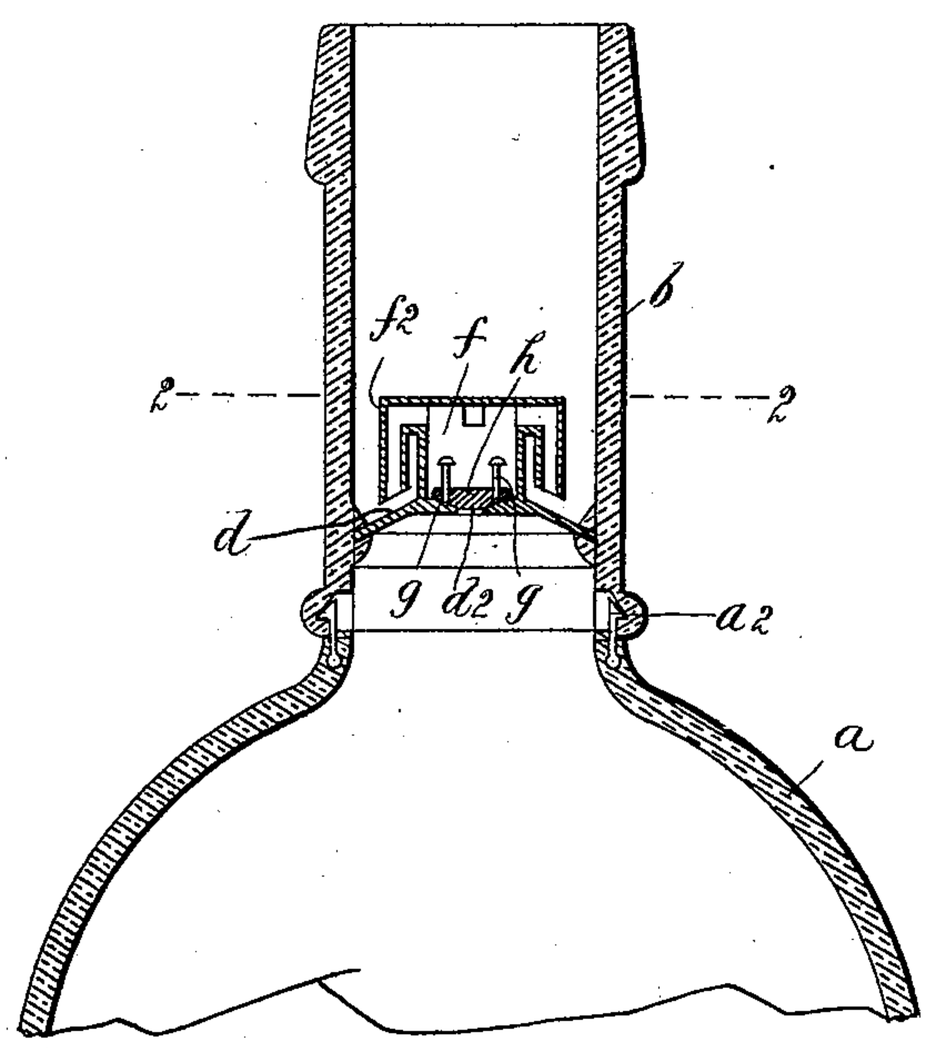
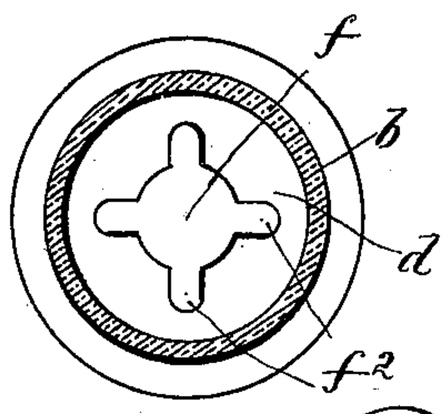


FIG. 2.



WITNESSES:

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BOTTLE.

SPECIFICATION forming part of Letters Patent No. 614,487, dated November 22, 1898.

Application filed September 11, 1897. Serial No. 651,341. (No model.)

To all whom it may concern:

Be it known that I, ROBERT E. MORRISON, a citizen of the United States, residing at Rutherford, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Bottles, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

My invention relates to bottles, and more particularly to a class of non-refillable bottles which are designed to prevent the dilution of the contents of an original package or the substitution for said contents of an article of any inferior or equal grade of material.

The object of the invention is to provide a bottle of the above-described class that can be readily filled and then so sealed as to render a tampering with the same impossible without so mutilating the bottle as to render it obvious that the same has been tampered with.

A further object is to provide a bottle that having been once filled will permit of the withdrawal of the contents therefrom while preventing the introduction of matter after the original contents have been withdrawn.

A still further object is to provide a bottle that will accomplish the ends of the invention which is of simple construction, efficient in operation, and of a comparatively slight expense to manufacture.

The invention consists of the novel features of construction hereinafter set forth and described, and more particularly pointed out in the claims hereto appended.

Referring to the drawings, which form a part of this specification, Figure 1 is a sectional elevation of the upper portion of a bottle equipped with my improved apparatus, and Fig. 2 is a section of the neck on the line 2 2 of Fig. 1.

Like letters refer to like parts in both views.

In the drawings, *a* denotes a bottle of ordinary construction, with the exception that firmly attached to the upper part thereof is a spring-lock a^2, by means of which it is designed to permanently attach the neck *b*. Any desired number of these springs a^2 may be employed, as it is their function to so unite the bottle and its neck as to practically render the same one integral construction.

The neck *b* is provided interiorly with an annular depression adapted to coöperate with the spring-lock a^2 and so constructed as to insure a permanency of connection between the two. Near the base of the neck is firmly attached a partition *d*, having a central opening d^2. This partition is shaped approximately like the frustum of a hollow cone, the longitudinal opening d^2 being in the upper base thereof. Firmly attached to said partition I provide a hollow column *f*, which is equipped with a plurality of spouts f^2, consisting of an angular tubular portion, the free end of which comes in close proximity to the side of the partition *d* and are so shaped as to conform thereto. Secured to said partition *d* are vertical guides *g g*, upon which is mounted a vertically-movable valve *h*, adapted to keep the bottle normally sealed and to resist any efforts to introduce other matter therein.

The operation of my improved bottle is as follows: The bottle proper and the neck are made separately, and the bottle is filled with the desired material before said neck is applied thereto. The neck is provided with the apparatus above described, and when the bottle has been filled it is merely necessary to bring said bottle and said neck in the proper relation and by bringing the annular depression into operating contact with the spring-locks a^2 form a permanent connection between the two. When it is desired to remove any of the contents from the bottle, it is merely necessary to proceed as with the ordinary bottle, the valve *h* sliding vertically upon the guides *g*, thus permitting the liquid to escape into the column *f* and from thence through the open neck of the bottle by means of the spout f^2. When the bottle has been restored to its normal position, the valve *h* will drop, sealing the bottle by completely filling the opening d^2 in the partition *d*.

It will be observed that any efforts to refill the bottle will result in such a downward pressure on the valve *h* as will prevent the elevation of the same, thus insuring against such a refilling.

The construction of the partition and the

spout supported thereon is such that all the liquid may be drained from said bottle, it being obvious that such a result can be accomplished, inasmuch as the openings in said spout are below the level of the opening d^2, by means of which the liquid must escape.

The apparatus is shown in the drawings as being held in position by means of an annular groove in an abutment of the interior of the neck; but it is to be observed that said attachment may be secured within said neck by any desired means without departing from the spirit and scope of my invention.

It will also be observed that the apparatus is so applied as not to interfere with the application of an ordinary cork to the bottle.

By the means above described I have fully attained the objects of my invention, having produced a bottle that cannot be refilled under pressure and that will effect such a sealing of the same as will render a tampering therewith impossible without a noticeable mutilation of the bottle. I have also produced a bottle that is simple in construction, efficient in operation, and comparatively inexpensive to manufacture.

It is not my intention to limit my invention to the exact construction herein shown and described, as it is obvious that there may be many variations in minor details of construction without departing from the spirit and scope of my invention.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a bottle, the combination with the neck, of a partition having a centrally-arranged valved passage, a tubular column rising from said partition and surrounding said passage, and a plurality of depending spouts leading from the upper end of said column and extending parallel therewith toward the partition, substantially as described.

2. In a bottle, the combination with the neck, of a partition having a centrally-arranged valved passage, a tubular column rising from said partition and surrounding said passage, and a plurality of depending spouts leading from the upper end of said column and extending parallel therewith toward the partition and ending adjacent to said partition, substantially as described.

3. In a bottle, the combination with the neck, of a partition having a centrally-arranged valved passage, the said partition being conical and having its walls rising from its outer edge, a tubular column rising from said partition and surrounding said passage, and a plurality of depending spouts leading from the upper end of said column and ending adjacent to said partition, the lower ends of said spouts being inclined and practically parallel with the upper face of said conical partition, substantially as described.

4. In a bottle, the combination with the neck, of a partition having a centrally-arranged passage formed with an upwardly-facing valve-seat, upright guides rigid with and rising from said partition around said valve-seat, a valve sliding upon said guides, a tubular column rising from said partition and surrounding said passage and guides, and a plurality of depending spouts leading from the upper end of said column and extending parallel therewith toward the partition, substantially as described.

5. In a bottle, the combination with the neck, of a partition, a passage extending from said partition toward the mouth of the bottle, an outwardly-opening valve in said passage and a plurality of separate branch passages leading from the other end of said passage and extending practically parallel therewith and toward the partition.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 10th day of September, 1897.

ROBT. E. MORRISON.

Witnesses:
C. GERST,
A. C. VAN BLARCOM.