No. 773,237.

PATENTED OCT. 25, 1904.

## M. A. STERNFELS & P. REICHENBACHER. NON-REFILLABLE RECEPTACLE.

APPLICATION FILED DEC. 28, 1903.

NO MODEL.

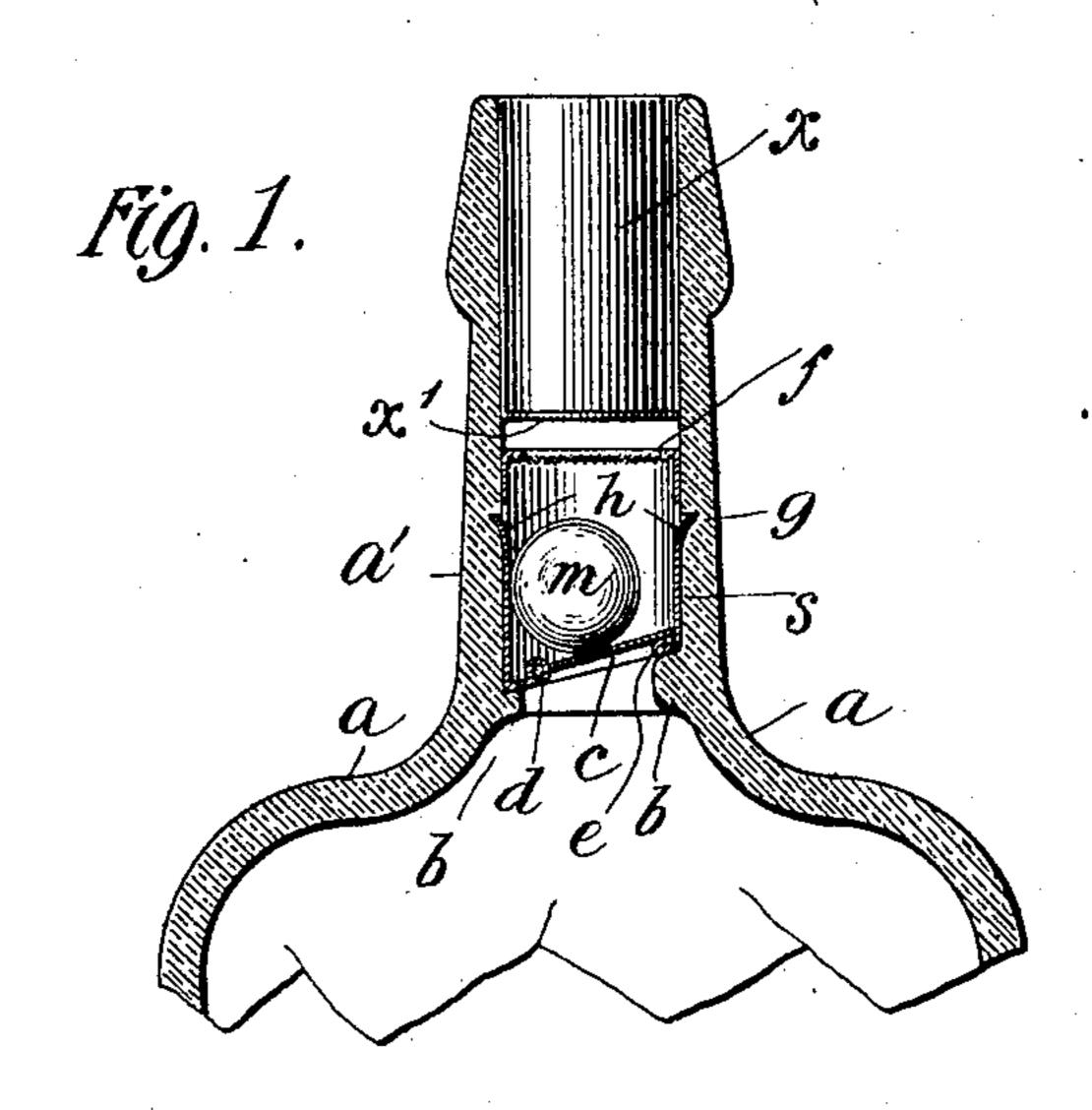
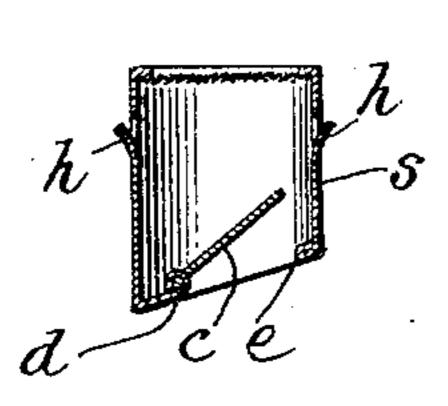


Fig. 3.

a

Fig. 4

Fig. 2.



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MILTON A. STERNFELS AND PAUL REICHENBACHER, OF NEW YORK, N. Y.

## NON-REFILLABLE RECEPTACLE.

SPECIFICATION forming part of Letters Patent No. 773,237, dated October 25, 1904.

Application filed December 28, 1903. Serial No. 186,802. (No model.)

To all whom it may concern:

Be it known that we, MILTON A. STERNFELS and Paul Reichenbacher, citizens of the United States, and residents of the borough 5 of Manhattan, city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Non-Refillable Receptacles, of which the

following is a specification.

Our invention relates to improvements in non-refillable receptacles; and the object of our invention is to provide a cheap and effective device which will prevent a receptacle once filled and emptied from being again <sup>15</sup> filled. The devices of this nature heretofore devised are so constructed that after the receptacle has been once filled and emptied the entire device and bottle become useless. With our device, however, after the bottle is 20 emptied the neck of the bottle may be broken off without injury to the stopper, which may be repeatedly used in new bottles, thus effecting a great saving in expense. We attain this object by the device illustrated in the ac-<sup>25</sup> companying drawings, in which—

Figure 1 is a vertical sectional view of our improved device. Fig. 2 is a view of the stopper. Fig. 3 is a view of the valve. Fig. 4 is a view of the neck of the bottle.

Similar letters refer to similar parts through-

out the several views.

A tubular stopper s to fit within the neck of a bottle is provided at one end with a valve c, hinged at d to a valve-seate, the hinge end of the 35 valve being below the horizontal plane of the free end. At the other end of the stopper is provided a perforated or gauze shield f. We also find it desirable to place within the stopper s between the valve c and the screen f a ball m. 4° This stopper is secured within the neck of the bottle by means of a shoulder b, formed on the inner surface of the neck of the bottle, upon which the tubular stopper s rests, and a recess or groove g, formed in the neck of the 45 bottle above the shoulder b. Lugs h h are provided on the tubular stopper s to engage the recess or groove g in the inner surface of |the neck of the bottle when the stopper s rests upon the shoulder b. These lugs hh may be 5° stamped or cut out of the stopper itself, as

shown. When the stopper is inserted into the neck of the bottle, it will rest upon the shoulder b, which will prevent its being forced into the bottle, and the lugs h h will engage the recess or groove g, so that it can- 55 not be withdrawn from the bottle. When the contents of the bottle are removed, however, the neck of the bottle may be broken, and the tubular stopper may be removed without injury and again used as often as desired. The 60 stopper is preferably made of non-corrosive material.

The neck of the bottle is made sufficiently long to permit a cork or other sealing device to be inserted above the tubular stopper. 65 When a cork is used for closing the bottle, we secure to the lower side of the  $\operatorname{cork} x$  a metallic disk x' to prevent the corkscrew or other cork-removing device from injuring the shield f.

The parts of the stopper being assembled the bottle is filled in the usual manner, and our improved stopper is inserted in the neck until it rests upon the shoulder b. The lugs h h will then engage the recess g, so that the 75 stopper cannot be removed. The bottle is then corked or otherwise sealed in the usual When it is desired to remove the manner. contents of the bottle, the seal is broken and the cork removed. The bottle is then tilted 80 in the usual manner, when the weight of the contents of the bottle will force the valve c open, and the desired quantity of the contents may be poured out. When the bottle is placed in an upright or normal position, the valve c 85 will close and prevent anything from being forced into the bottle, but will not interfere with the removal of its contents, and the screen f and ball m will prevent the opening of the valve by external means.

Having thus described our invention, what we claim is—

In a device of the character set forth, the combination of a bottle, a neck provided with an inclined shoulder located at the lower por- 95 tion thereof, said shoulder being larger on one side than upon the other, forming a seat on the larger side at a point higher than the seat formed upon the lower side of the shoulder, said neck being further provided with 100 oppositely-disposed cut-out portions substantially centrally disposed within the neck, an integral cylindrical stopper provided with outwardly-projecting lugs and an inclined lower face partially cut away, a gauze shield formed within the upper face of the stopper, a hinged valve secured to the lower face of the stopper adapted to close the cut-out portion thereof, and a ball-valve mounted within the stopper, said stopper being adapted to seat upon the shoulders within the neck and be securely held in position by means of the

lugs extending from the same which engage in the recesses of the neck, substantially as described.

Signed at New York city, in the county of New York and State of New York, this 15th day of December, A. D. 1903.

MILTON A. STERNFELS. PAUL REICHENBACHER.

Witnesses:
Justin S. Galland,
Andrew Foulds, Jr.