March 22, 1927. 1,621,923

A. CRISCI

NONREFILLABLE BOTTLE

Filed April 13, 1925

Fig. 1

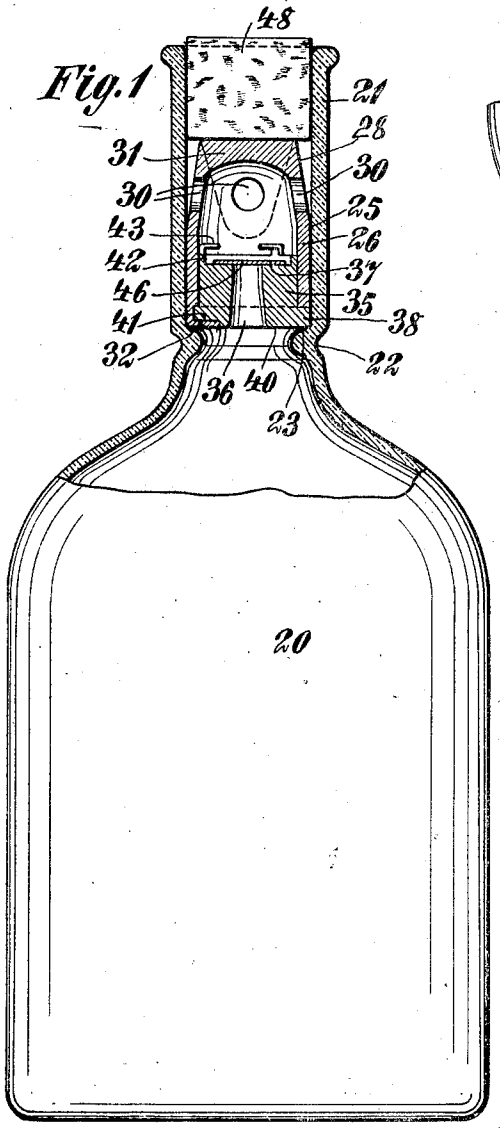


Fig. 3

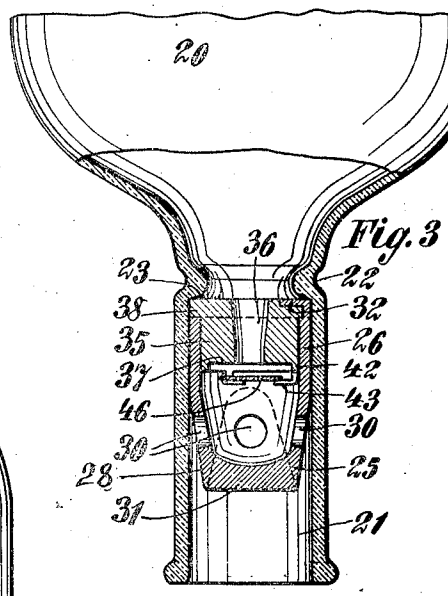


Fig. 4

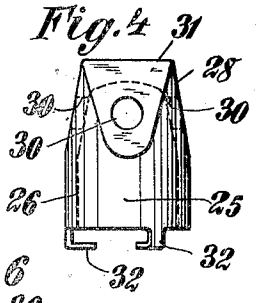


Fig. 6

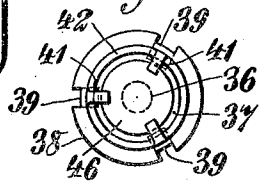


Fig. 2

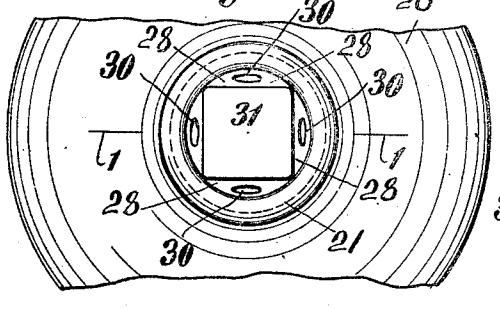
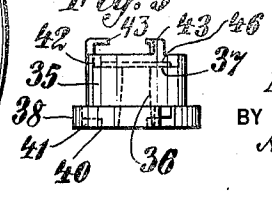


Fig. 5



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UNITED STATES PATENT OFFICE.

ARTURO CRISCI, OF NEW YORK, N. Y.

NONREFILLABLE BOTTLE.

Application filed April 13, 1925. Serial No. 22,640.

This invention relates to a nonrefillable bottle.

The object of the invention is the production of a non-refillable device, which can be easily inserted and secured in the neck of a bottle, and which will allow a fluid to flow from the bottle, but prevent a fluid to flow into it. The second object of the invention is the production of a nonrefillable bottle of very simple construction, with parts that can be easily repaired and replaced. A third object of the invention is the production of a nonrefillable bottle, which will prevent a fluid under pressure to enter it, when placed upside down.

Fig. 1 represents a side elevation of an exemplification of the improved nonrefillable bottle with a section on the line 1, 1 of Fig. 2; Fig. 2 shows a fragmentary top plan view of the nonrefillable bottle; Fig. 3 indicates an elevation similar to Fig. 1 placed upside down; Fig. 4 shows an elevation of a detail; Fig. 5 indicates an elevation of a detail and Fig. 6 represents a top plan view of Fig. 5.

A bottle is indicated with the body portion 20 having the neck 21, which is bulged in at 22 to form the seat 23.

The nonrefillable device of the bottle comprises, a housing designated in its entirety by the numeral 25, and comprises the cup shaped shell 26 with the four tapered upper side walls 28, each with an outlet port 30, and the head or roof 31. Clamping lugs 32 extend from the lower edge of the shell 26.

Within the lower open end of the shell 26 is secured a plug 35, having the outlet port 36, the top face and valve seat 37, and the flange 38 at its lower end with the recesses 39 in its side wall and the bottom face 40. Recesses 41 are formed in the bottom face 40, which join with the recesses 39. An annular upper flange 42 with the guide lugs having the members 43, extends from the said top face 37. A discharge valve 46 is adapted to seat on the valve seat 37, and is guided when separated therefrom by the guide lugs having the members 43. The upper face of the flange 38 of the plug 35 bears against the lower edge of the shell 26, and the clamping lugs 32 are seated in the recesses 39 and 41 to clamp the plug 35 to the housing 25.

The nonrefillable device is located in the neck 21, with the bottom face 40 of the plug 35, seated on the seat 23. A cement may be used to fasten said bottom face 40 to said seat 23. A cork 48 is shown in the upper portion of the neck 21 of the bottle.

The bottle is indicated in its upright position in Fig. 1, in which position the valve 46 is seated on its seat 37, and no fluid can enter the bottle through the port 36. When it is desired to discharge any of the fluid from the bottle it is placed upside down as shown in Fig. 3 or tilted with its neck 21 downwardly, and the discharge valve 46 will drop and bear on the members 43 of the guide lugs and open the outlet port 36, through which the fluid will flow to enter the housing 25, and will be discharged from the latter through the ports 30, enter the neck 21 to be discharged from the latter.

It will be noted that if any attempt is made to force a fluid into the bottle when it is located in its upside down position, the force of the fluid entering through the ports 30 into the housing 25, will force up the valve 46 and close the port 36 preventing the fluid entering the bottle.

The nonrefillable device may be used in the neck of a bottle without a valve seat in its neck, in which case the device may be securely held in place by means of cement.

When a bottle with a bulged in valve seat in its neck is used, it may tightly fit therein and be secured in place without cement.

Having described my invention what I desire to secure by Letters Patent and claim is:

1. In a nonrefillable device of the character described the combination of a cup shaped shell with outlet ports, clamping lugs extending from the lower end of the shell, a plug inserted in the open end of said shell, said plug having an outlet port therethrough, and clamped to said shell by the clamping lugs of the latter, said plug having a valve seat on the end opposite the clamping lugs of the shell, guide lugs extending from the end of the plug having the valve seat and a discharge valve adapted to seat on valve seat and guided by said guide lugs.

2. In a nonrefillable device the combination of a housing comprising a cup shaped cylindrical shell having tapered upper side walls with outlet ports, clamping lugs extending from the lower end of the shell,

a plug inserted in the open end of said shell, said plug having an outlet port therethrough and clamped to said shell by means of the clamping lugs of the latter, said plug having a valve seat on the end opposite the clamping lugs of the shell, guide lugs extending from the end of the plug having the valve seat and a discharge valve adapted to seat on said valve seat and mounted in proper position by said guide lugs.

In testimony whereof I affix my signature.

ARTURO CRISCI.