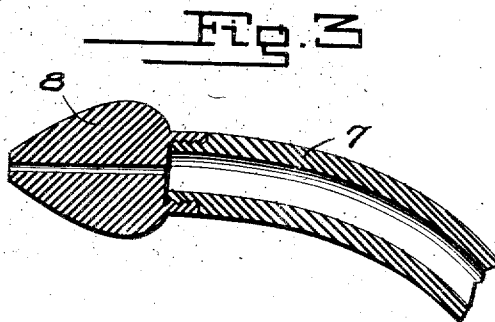
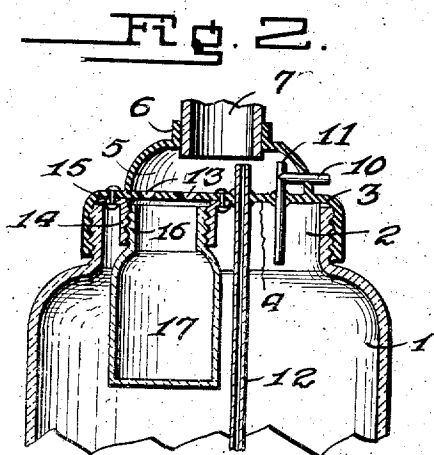
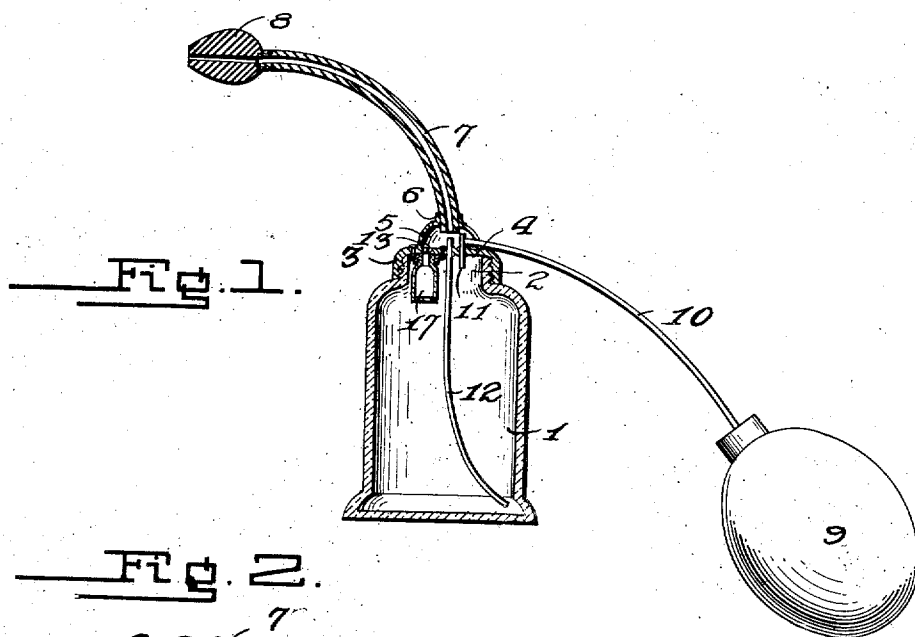


1,018,193.

Patented Feb. 20 1912.



Witnesses
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UNITED STATES PATENT OFFICE.

FERDINAND W. HINKLE, OF LOS ANGELES, CALIFORNIA.

ATOMIZER.

1,018,193.

Specification of Letters Patent.

Patented Feb. 20, 1912.

Application filed July 18, 1910. Serial No. 572,615.

To all whom it may concern:

Be it known that I, FERDINAND W. HINKLE, a citizen of the United States of America, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Atomizers, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to devices for spraying the throat and nostrils, and the principal object of the same is to provide a sprayer or nebulizer that can be readily attached to a suitable receptacle and in which means are provided for catching the waste or drippage so that the same will not gain access to the receptacle.

In carrying out the objects of the invention generally stated above it will be understood, of course, that the essential features thereof are necessarily susceptible of changes in details and structural arrangements, one preferred and practical embodiment of which is shown in the accompanying drawings, wherein:—

Figure 1 is a vertical sectional view of the improved sprayer. Fig. 2 is an enlarged fragmentary vertical sectional view. Fig. 3 is a detail fragmentary sectional view of the discharge tube and nozzle.

Referring to the accompanying drawings by numerals, 1 designates the receptacle which forms a part of the improved sprayer, and which is provided with an externally threaded neck 2. An internally threaded cap 3 is detachably engaged with said neck, said cap being equipped with a horizontal partition plate 4 which provides an upper chamber 5 from which a neck 6 projects. A discharge tube 7 has one end fitted in said neck 6, the other end of said tube 7 being externally threaded for detachable engagement with the nozzle 8. A compression bulb 9 has a tube 10 extending therefrom which enters the chamber 5 and is equipped with an angular extension 11 that extends through plate 4 and delivers air to the interior of the receptacle. Adjacent the extension 11, a delivery tube 12 extends

through plate 4, one end of said tube 12 entering the chamber 5 beneath neck 6, the other portion of said tube projecting into the base of the receptacle.

Plate 4 is provided with perforations 13, and depending from said plate and surrounding the lower ends of said perforations, is a tube 14 that is fastened to said plate by means of rivets or other fastening means which pass through the outturned upper flange 15. Tube 14 is internally threaded and the externally threaded neck 16 of a drip receptacle 17 detachably engages the same.

It will be understood from the foregoing that by compressing bulb 9, air will be forced into the receptacle 1 and force the contents therefrom through tubes 7 and 12 and nozzle 8 to cause the said contents to spray, in a manner well understood.

In using the device, the liquid not discharged from tube 7 and chamber 5 will flow through the perforations 13 of plate 4 and be caught by the receptacle 17.

The cap 3, as will be readily apparent, supports the drip receptacle, delivery, discharge and air tubes, so that by unscrewing the said cap from the receptacle 1, free access can be had to said receptacle.

The discharge, delivery and air tubes are preferably formed of flexible material, such as rubber, and the cap and partition plate are formed of light metal, such as aluminum.

What I claim as my invention is:—

A device of the character described comprising a receptacle, a cap for said receptacle, said cap provided with a central opening at the top thereof, a pipe held in said opening and having its lower end depending within the cap, a discharge nozzle on said pipe, a partition plate in said cap, said plate provided with perforations in one portion thereof, an internally threaded tube depending from said plate and entirely surrounding said perforations, said tube having an annular flange, means for securing said flange to said plate, a drip receptacle threaded in said tube, a delivery tube pass-

2
ing through said partition plate adjacent
said drip receptacle and having its outlet
end located to one side of the center of the
inlet end of the discharge pipe, terminating
5 short of the lower end of the discharge
pipe, a tube passing through said cap and
provided with an annular extension adapt-
ed to pass through said plate and extend

into said receptacle, and means for supply-
ing air into said tube.

In testimony whereof I hereunto affix my
signature in presence of two witnesses. 10

FERDINAND W. HINKLE.

Witnesses:

LOUIS S. EATON,
GEO. D. BAILEY.