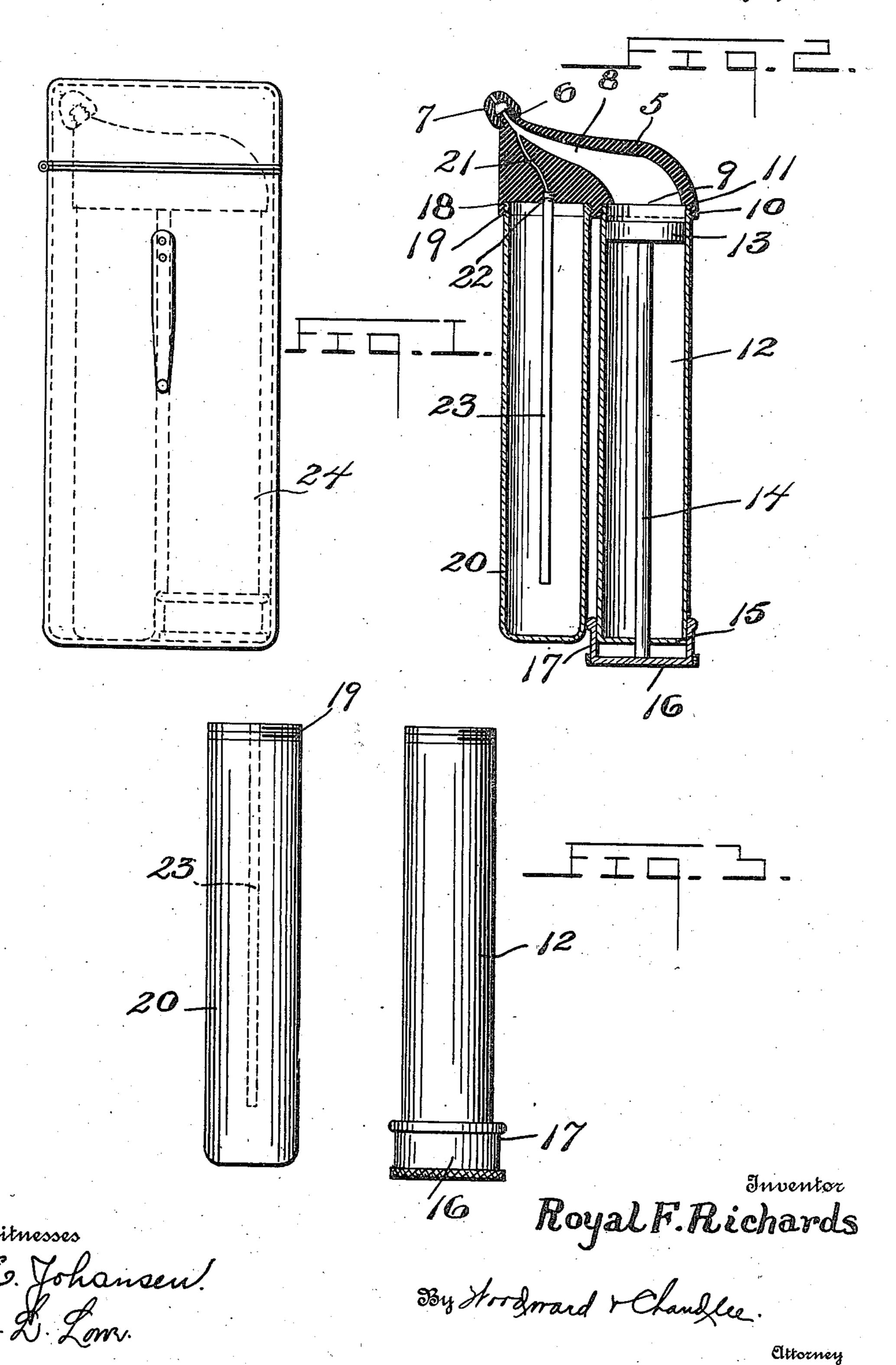
R. F. RICHARDS. POCKET ATOMIZER. APPLICATION FILED APR. 15, 1910.

963,179.

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UNITED STATES PATENT OFFICE.

ROYAL F. RICHARDS, OF LOS ANGELES, CALIFORNIA.

POCKET-ATOMIZER.

963,179.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ROYAL F. RICHARDS, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles 5 and State of California, have invented certain new and useful Improvements in Pocket-Atomizers, of which the following is a specification.

This invention relates to atomizers and 10 has for its object to provide an atomizer of a size and character to be easily carried in the pocket and one which will be relatively

simple and thus cheap.

Another object is to provide an atomizer 15 which may be easily and quickly cleaned when the parts are clogged, and which will also include few parts so that the chance of breakage or derangement is reduced to a minimum.

Another object is to provide a structure in which leakage from the reservoir will be prevented.

In the drawings forming a part of this specification, and in which like numerals of 25 reference indicate similar parts in the several views, Figure 1 is a view showing the present atomizer within a carrying case provided therefor, Fig. 2 is a view of the atomizer removed from the case, and shown in 30 sections, Fig. 3 is a view showing the cylinder and the reservoir removed from the cap member.

Referring now to the drawings, the present atomizer comprises a cap member 5 hav-35 ing an upwardly and laterally directed nose 6 at one upper corner upon which there is threaded a spraying nozzle 7. The nose 6 has a passage 8 opening therethrough, and extending laterally and downwardly within 40 the cap member 5, to the side thereof opposite to the nose 6, where the passage opens through the bottom of the cap member. The passage is enlarged from the nose 6 to the opening of the passage just referred to, which is indicated at 9, and this opening is surrounded by an interiorly threaded recess 10 formed in the bottom of the cap member. This recess includes a bottom 11, which thus forms a shoulder surrounding the passage 8, and screwed into the recess, there is the upper end of a cylinder 12, having a piston 13 slidably mounted therewithin and provided with a plunger rod 14. This plunger rod extends outwardly through the bottom 15 55 of the cylinder, as shown, and has a finger piece 16 at its lower end, surrounded by an

upwardly extending flange 17, which is arranged to extend over the lower end of the cylinder when the piston is at the upward limit of its movement.

Adjacent to the recess 10, there is formed in the under face of the head member 5, a second circular interiorly threaded recess 18, which receives the upper threaded end 19 of a reservoir 20 which is preferably made 65 of glass or other transparent material. A passage 21 opens centrally into the recess 18, and extends upwardly to join the passage 8. The passage 21 joins the passage 8 at an angle, as shown, so that when air is forced 70 through the passage 8, it will tend to cause a vacuum within the passage 21, and thus draw air therethrough. The lower end of the passage 21 is interiorly threaded as shown at 22, and threaded into these threads 75 there is the upper end of a vertical tube 23 which extends downwardly within the reservoir 20.

The reservoir is of approximately the same length as the cylinder 12, and when 80 the finger piece 16 has been pushed up to the upward limit of its movement, the flange 17 extends between the lower ends of the reservoir and the cylinder, and is frictionally engaged therebetween to hold the pis- 85 ton against downward movement, and also to hold the lower ends of the reservoir and cylinder separated, and thus prevent any

breakage of the parts.

A carrying case 24 is provided to receive 90 the complete atomizer.

What is claimed is:—

1. An atomizer comprising a head member having spaced interiorly threaded recesses in its under face, said head member 95 having passages communicating with the recesses, and connected within the head mem-3 ber, a nose carried by the head member, said nose having a passage formed therethrough communicating with the first named pas- 100 sages, a spraying nozzle carried by the nose, a cylinder removably engaged with the threads of one of the recesses, a reservoir removably engaged with the threads of the other recess, a tube located within the reser- 105 voir and communicating with the passage of the reservoir recess, a piston within the cylinder, and a rod connected with the piston for movement thereof to force air through the passage communicating with the cylin- 110 der recess.

2. An atomizer comprising a head mem-

ber having one upper corner extended laterally to form a nose, said head member having spaced circular recesses in its under face provided with interior threads, said head member having a passage opening through the nose and communicating with the recess at the opposite side of the head member from the nose, said head member having a second passage communicating with the first named passage adjacent to the nose and communicating with the other recess, a reservoir having threads engaged with the threads of the second named recess, a tube communicating with the second named passage and extending downwardly within the reservoir,

a cylinder having threads engaged with the threads of the first named recess, a piston within the cylinder, a piston rod carried by the piston and extending downwardly through the lower end of the cylinder, a 20 finger piece carried by the lower end of the rod, and a flange carried by the finger piece, and arranged for engagement between the cylinder and the reservoir.

In testimony whereof I affix my signature, 25

in presence of two witnesses.

ROYAL F. RICHARDS.

Witnesses:

LEANDER O. HATCH, ADELAIDE K. CONQUER.