

(No Model.)

R. PARKER.
BULB FOR ATOMIZERS.

No. 564,390.

Patented July 21, 1896.

Fig. 1.

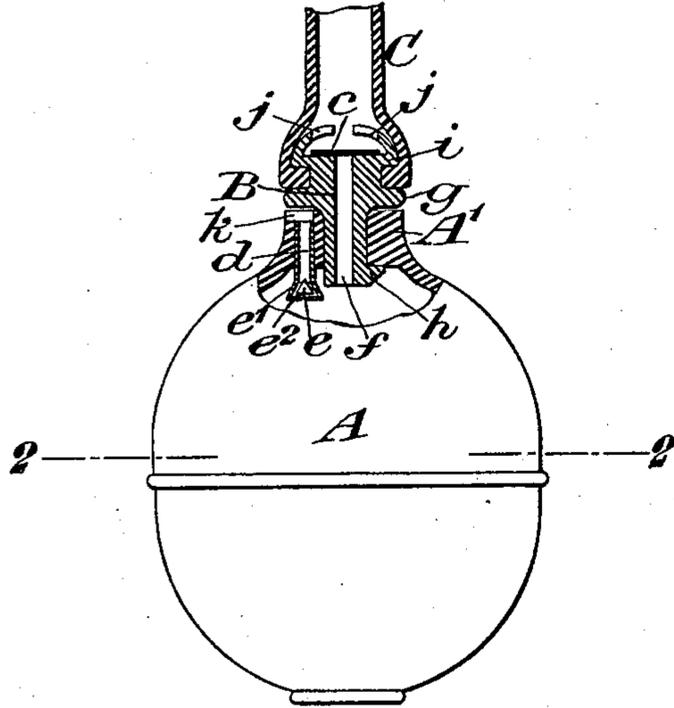


Fig. 2.

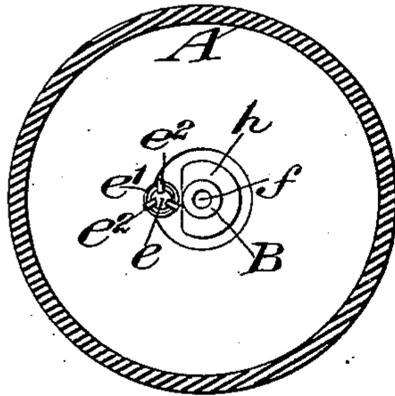
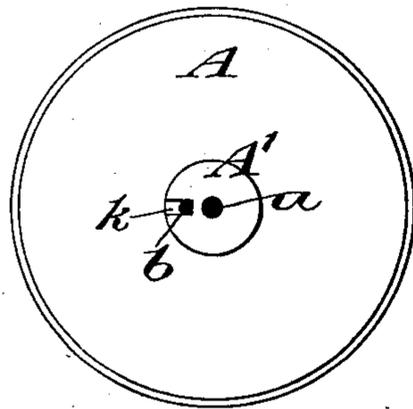


Fig. 3.



Witnesses:-
George Barry.
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UNITED STATES PATENT OFFICE.

RUSSELL PARKER, OF BROOKLYN, NEW YORK.

BULB FOR ATOMIZERS.

SPECIFICATION forming part of Letters Patent No. 564,390, dated July 21, 1896.

Application filed March 21, 1895. Serial No. 542,595. (No model.)

To all whom it may concern:

Be it known that I, RUSSELL PARKER, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Atomizers, of which the following is a specification.

I will proceed to describe my invention with reference to the accompanying drawings, which represent an atomizer embodying my invention.

Figure 1 represents in part a side view and in part a central section taken through the valves. Fig. 2 represents a transverse section taken in the line 2 2 of Fig. 1. Fig. 3 is a top view of the bulb without the valves and connections.

Similar letters of reference designate corresponding parts in all the figures.

A designates the bulb, made of flexible and elastic rubber of a suitable thickness to be collapsible within and by the pressure of the hand, and to be automatically distensible when relieved of such pressure, but having formed integrally with it, of the same material, a boss A' to give that part the necessary thickness and strength for the reception and retention of a neck or coupling-piece B, of metal or hard material, and of a separate tube *d*, of metal or hard material, the said neck or coupling-piece having at its outer end a seat for the eduction-valve *c*, and the said tube *d* having at its inner end the seat *e'* for the induction-valve *e*. The embossed part A' of the bulb has provided through it two separate openings *a b*, arranged, as shown in Fig. 3, side by side, the one, *a*, being for the reception of the neck or coupling-piece B, and the other, *b*, being for the reception of the said tube *d*.

The neck or coupling-piece B is of well-known form, having in it only a single passage *f* for the egress of air, and having flanges *g* and *h*, between which it is contained and held in the opening *a* of the boss A' of the bulb, and a third flange *i*, between which and

its middle flange *g* the end of the discharge-pipe C is held and retained. The outer flange has inwardly-turned lips, which constitute guards for the eduction-valve *c*, which is represented as consisting simply of a loose piece of thin sheet-rubber.

The seat *e'* of the induction-valve *e* is represented as formed in the tube *d* by conically expanding the inner end of the said tube. The said valve *e* is represented as consisting of a hollow cone of very thin metal, and when not held to its seat by pressure of air in the bulb it is retained against dropping into the bulb by means of spurs *e²*, projecting inward from the edge of the seat. The said tube *d* is located behind the flange *g* of the neck or coupling-piece B. In order to provide an inlet between the outer end of the tube *d* and the flange *g* of the neck, which projects over the outer face or end of the boss, there is formed in said outer face a notch or groove *k*, leading from the opening *b* through the side of the boss, and the tube *d* is inserted so far into the boss that its outer end terminates within the said channel.

What I claim as my invention is—

The combination with a flexible bulb having made integral with it a boss through which there is an opening for a discharge-pipe coupling and a second opening for an inlet-valve, of a coupling-neck inserted in said first-mentioned opening and having a flange which projects over the outer face or end of the boss, and a tube having at its inner end an inlet-valve seat inserted in said second opening, the said face or end having in it under said flange a notch or groove forming a communication from said second opening through the side of the boss, all substantially as herein described.

RUSSELL PARKER.

Witnesses:

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