(No Model.)

R. L. LARCOM.

ELECTRIC INHALER.

No. 512,723. Patented Jan. 16, 1894.

Fig. 4

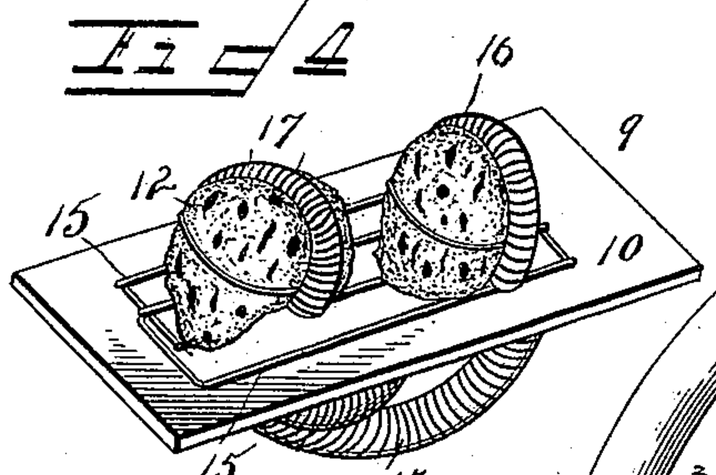


Fig. 1

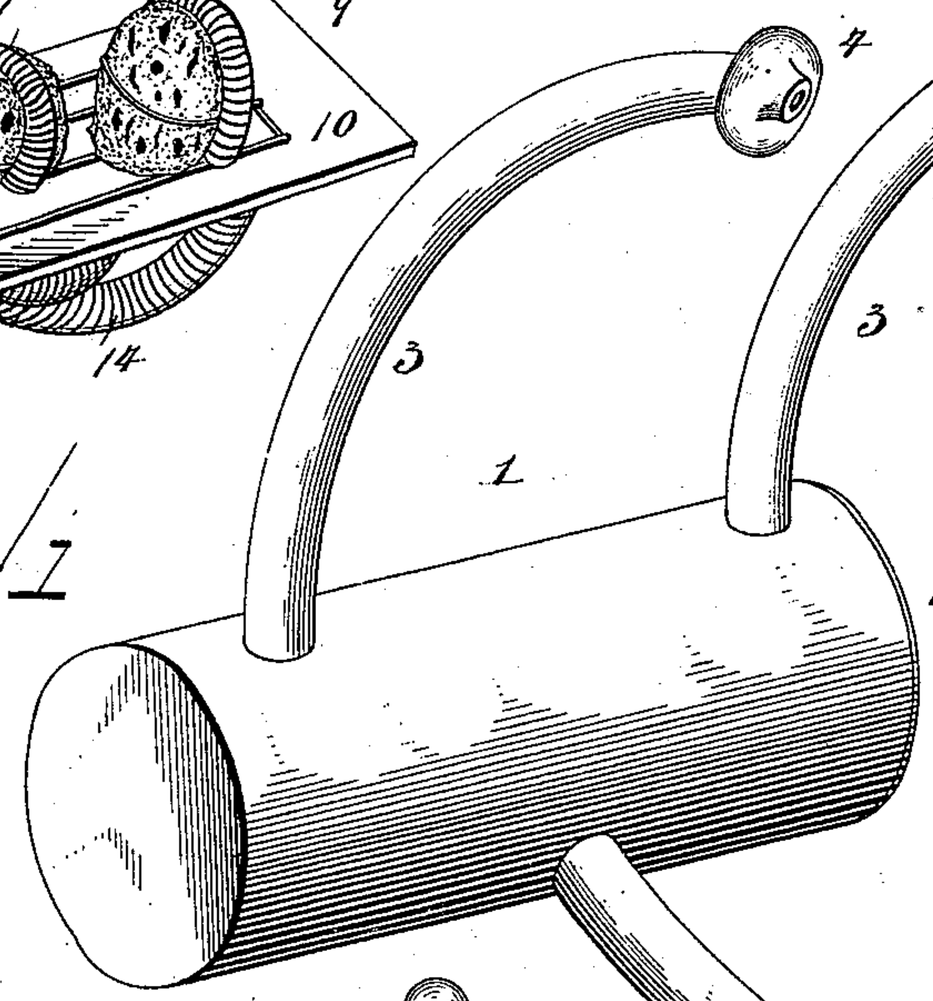


Fig. 6

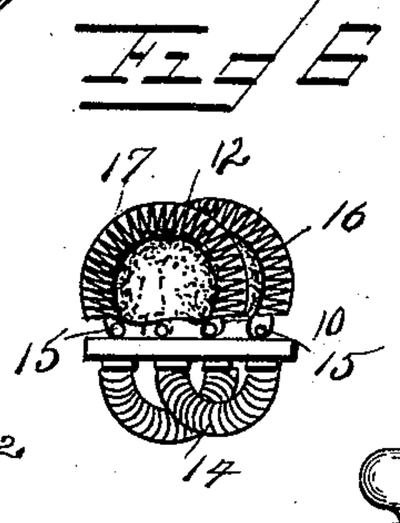


Fig. 2

Fig. 5

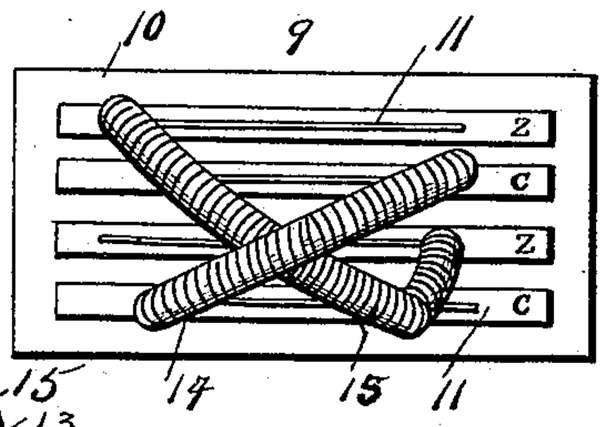
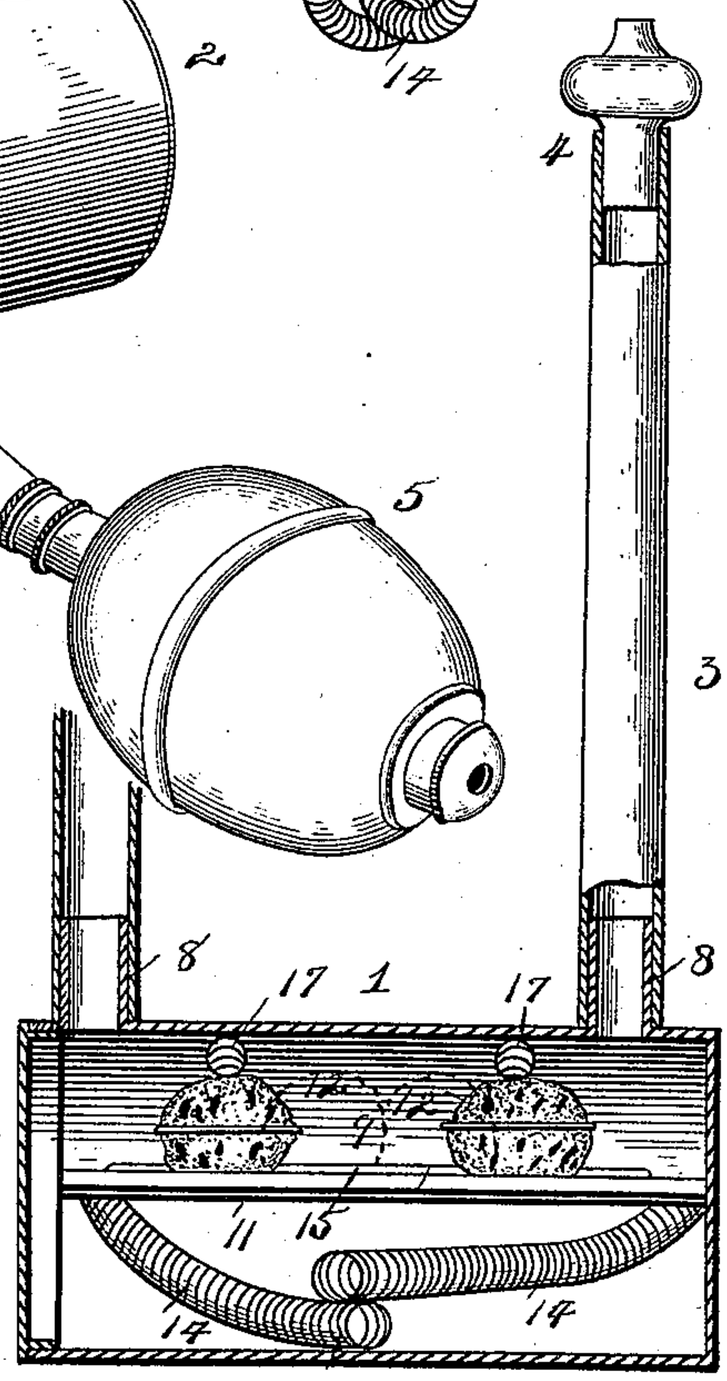
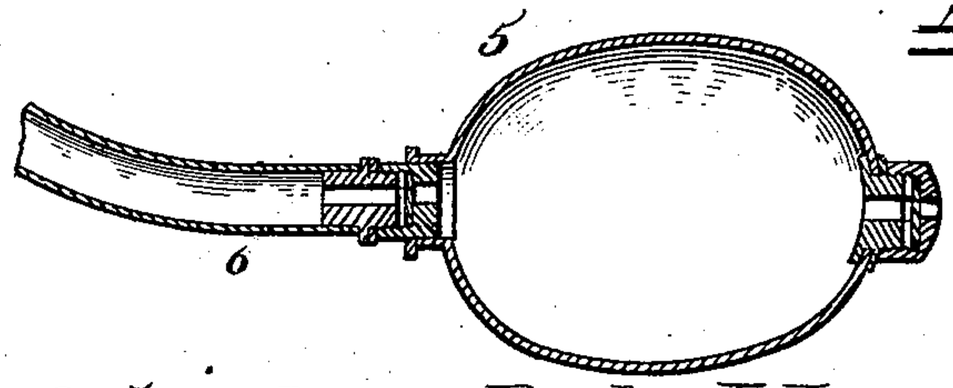


Fig. 3





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REUBIN L. LARCOM, OF FANDON, ILLINOIS.

ELECTRIC INHALER.

SPECIFICATION forming part of Letters Patent No. 512,723, dated January 16, 1894.

Application filed September 29, 1893. Serial No. 486,806. (No model.)

To all whom it may concern:

Be it known that I, REUBIN L. LARCOM, a citizen of the United States, residing at Fandon, in the county of McDonough and State of Illinois, have invented a new and useful Electric Inhaler, of which the following is a specification.

My invention relates to an electric inhaler in which the medicine to be inhaled is stored in sponges which are in circuit with an electric battery, whereby when the circuit is completed the current passes through the sponges and electrolyzes the medicine, the vapor thus produced being forced into the nostrils of the patient by means of a syringe bulb or equivalent construction.

The objects and advantages of my invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings: Figure 1 is a perspective view of an inhaler embodying my invention. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a longitudinal section on the line 3—3, of Fig. 2. Fig. 4 is a perspective view of the battery plate and attachments removed from the container. Fig. 5 is a plan view showing the disposition of the zinc and copper strips and connections. Fig. 6 is an end view of the battery plate.

Similar numerals and letters of reference indicate corresponding parts in all the figures of the drawings.

1 designates a casing or container of cylindrical form which is provided with a removable cap 2, and connected to this casing are the ejecting tubes 3 provided with tips 4 of the usual or any preferred construction. The ejecting tubes are preferably of rubber or similar elastic material.

5 represents a syringe bulb which is connected by means of a flexible conducting tube 6 to a nipple 7 connected to the casing and communicating with the interior thereof. The ejecting tubes are connected to the casing by means of similar nipples 8.

9 represents the battery which consists essentially of a slide or supporting plate 10, metallic strips 11 secured to this slide or plate, connections between said strips, and sponges 12 connected to the conducting wires and adapted to be adjusted toward and from each other to complete or break the circuit. The slide or supporting plate 9 is preferably of hard rubber, or similar non-conducting material, which is removably fitted in the casing or container by means of oppositely disposed guides 13 arranged in said casing to receive the side edges of the slide. The zinc and copper strips which are secured to one side of the slide or supporting plate, and are designated in the drawings by the letters *z* and *c*, respectively, are alternately disposed and are connected in multiple arc by means of the coiled connections 14. Straight wire conductors 15 are arranged in parallel lines upon the opposite side of the slide from the metallic strips, each wire being connected at its opposite ends to one of said strips.

In the construction which I have illustrated, two copper and two zinc strips are employed, and therefore by the above described arrangement the outer conductors, or those which are arranged near the side edges of the slide are connected respectively, to zinc and copper strips, and the inner conductors are similarly connected, respectively, to zinc and copper strips. Connected to the copper conductors is a copper terminal 16 and connected to the zinc conductors is a similar terminal 17. Said terminals are arched or loop shaped and embrace sponges 12 which are secured therein against displacement.

The sponges are designed to be saturated with the medicament after having previously moistened the sponges in boiling water and wrung them dry, after which the slide is fitted in the guides of the casing or container and the removable cap is replaced. The metallic strips should be moistened with acidulated water, or its equivalent as an excitant. The electric current thus generated passes through the conductors and the terminals to the sponges, and the latter being deficient conductors cause a diffusion of the current which is thus brought into contact with the medicament and vaporizes the latter by electrolysis. It will be understood that only electrolyte medicines may be used successfully with the above apparatus.

Having described my invention, what I claim is—

1. In a device of the class described, the combination of a casing or container, ejecting tubes and a syringe bulb connected thereto, a slide removably fitted in said casing or container, a battery carried by said slide, and sponges connected to the terminals of the battery circuit, substantially as specified.

2. The combination with a casing or container having connected ejecting tubes and a syringe bulb and provided with opposite interior guides, of a battery having a supporting plate which fits slidably in the said guides, and sponges connected to the terminals of the battery circuit, substantially as specified.

3. The combination with a suitable casing or container having ejecting tubes and a connected syringe bulb, of an inclosed battery having metallic strips connected in multiple arc, conductors connected to said strips and looped terminals connected at opposite ends, respectively, to conductors which are connected to different metals, and sponges secured within the looped terminal, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

REUBIN L. LARCOM.

Witnesses:
J. L. CARSON,
A. H. CARSON.