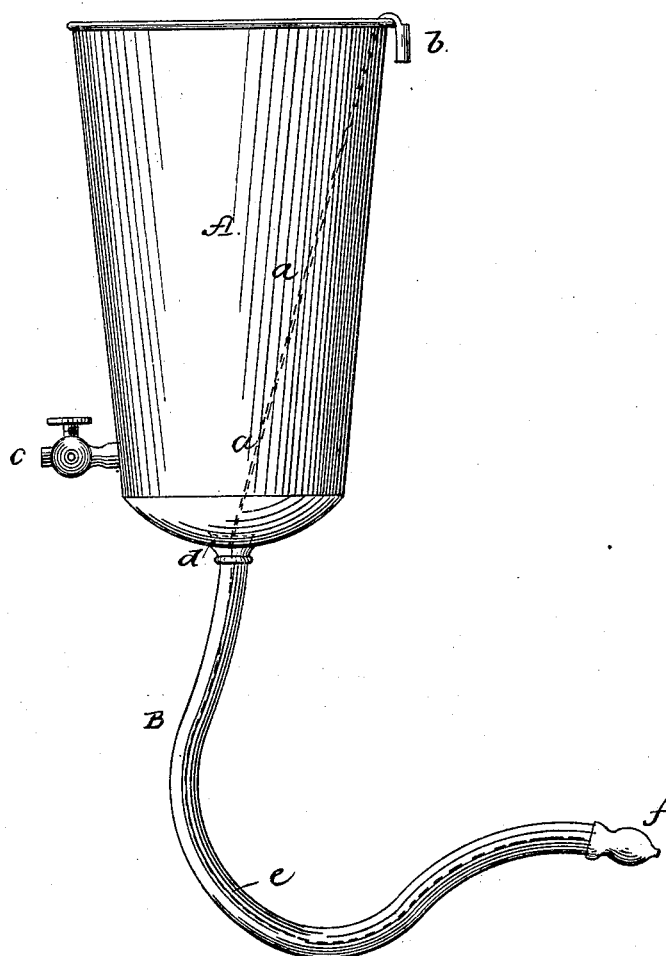


S. E. ADAMS.
Electro-Nasal Douche.

No. 109,367.

Patented Nov. 22, 1870.



Witnesses
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UNITED STATES PATENT OFFICE.

SAMUEL E. ADAMS, OF SPRINGFIELD, OHIO.

IMPROVEMENT IN ELECTRO NASAL DOUCHES.

Specification forming part of Letters Patent No. **109,367**, dated November 22, 1870.

I, SAMUEL E. ADAMS, of the city of Springfield, in the county of Clarke and State of Ohio, have invented certain Improvements in the Application of Electricity for Medical Purposes, of which the following is a specification:

My invention consists in the construction of the nasal douche and syringe with conducting-wires, or their equivalents, leading through their ejecting-pipes, and connected with an electric battery, for the purpose of conveying the electricity, in combination with the water or other fluid, to the diseased parts, thereby combining in one application the medical virtues of both agents as a curative means.

By repeated experiments I have ascertained that a current of electricity cannot be conveyed with a stream of water through a tube without a conducting-wire, except through a very short distance, and even then requiring a very powerful battery. I use a douche with either a metal or glass reservoir. In using the latter I employ a thin strip of metal in the reservoir, to which the conducting-wire (which leads through the tube) is attached at one end, while the other end, reaching to within about half an inch of the nozzle-piece, is left free in the tube. The thin metal strip passes up through the reservoir, and hooks over the edge of the same. On its outer end is a small tube of metal, into which the wire from the battery is inserted to complete the circuit, the patient taking one of the electrodes in his hand, or having it applied by the operator to any other part of his body, as desired.

When the reservoir is made of metal, the conducting-wire, which traverses the tube leading from the reservoir, is simply attached to a button or plate of metal inside of the latter, and the connection with the battery is made by means of a screw-cup, which is fastened to the metal reservoir near its lower part.

In using a syringe, I make the connection with the battery in the same manner, the conducting-wire leading through the discharge-

pipe in the same way as in the douche. This pipe, as well as that in the douche, must in all cases be made of rubber or other non-conducting material.

Figure 1 is a view of a nasal douche embodying my invention.

A is the reservoir; B, the discharge pipe or tube; *a*, the strip of metal leading down through the reservoir to the wire *e*. Both the strip of metal and the wire are shown in dotted lines, the wire *e* traversing the tube B.

On the end of the strip *a* which hooks over the edge of the reservoir is seen the small tube *b*, into which the end of the connecting-wire attached to the battery is inserted to complete the circuit.

The strip of metal *a* and its tube *b* are used in the glass reservoir, and the screw-cup *c* is used in the douche, having a metal reservoir, the conducting-wire *e*, which leads through tube B, having the metal button *d* (seen in dotted lines at the bottom of reservoir A) attached to its upper end.

I do not claim either the douche or the syringe as any part of my invention, as the same has been used before; but the application of electricity in combination with water or other fluid in the manner described I believe to be new.

I claim as my invention—

1. The combination of electrical apparatus with the douche and syringe, in the manner described, for the purposes set forth.

2. The manner of conveying electricity to the affected parts, when the circuit is formed by means of a metallic conductor in connection with a stream of water or other fluid passing through a tube, in the manner described, for the purposes set forth.

S. E. ADAMS.

Witnesses:

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