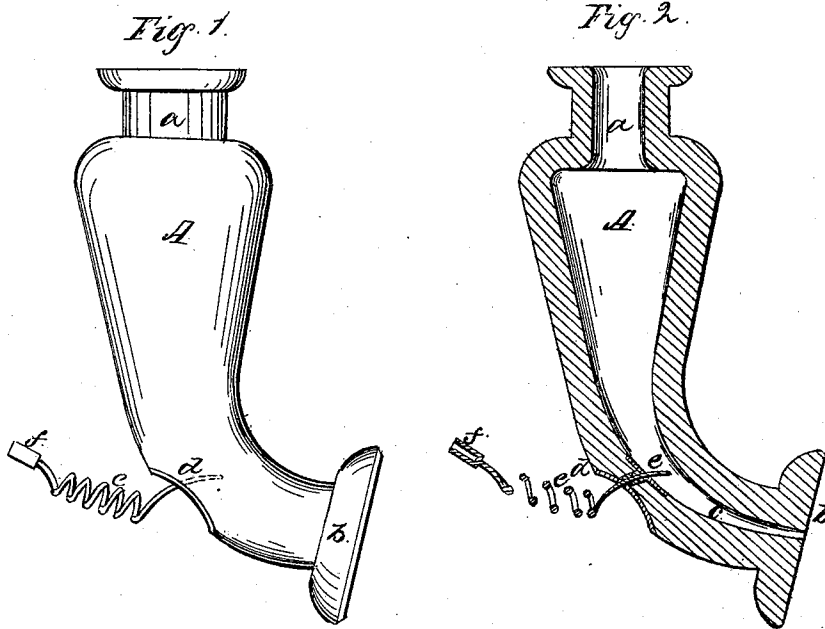


A. PAIGE.

Electric Apparatus for Medical Use.

No. 36,231.

Patented Aug. 19, 1862.



Witnesses:
J. P. Hale
L. F. Leland

Inventor:
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UNITED STATES PATENT OFFICE.

ABRAM PAIGE, OF SPRINGFIELD, MASSACHUSETTS.

IMPROVEMENT IN ELECTRICAL INSTRUMENTS FOR MEDICAL PURPOSES.

Specification forming part of Letters Patent No. **36,231**, dated August 19, 1862.

To all whom it may concern:

Be it known that I, ABRAM PAIGE, a citizen of the United States of America, and a resident of Springfield, in the county of Hampden and State of Massachusetts, have made a new and useful invention having reference to the application of medicaments to the human body for the cure of diseases thereof; and I do hereby declare the same to be fully described in the following specification, the drawings accompanying the same exhibiting the apparatus used in the said application of medicaments.

My invention is based on the employment of electric agency or an electric current to facilitate the impregnation of the skin or a diseased part of the body with a liquid medicament.

Figure 1 represents a side view, and Fig. 2 a longitudinal section, of the apparatus or means adopted by me in the application of medicaments by electrical agency.

A is a bottle or vessel made of glass or some other non-conductor of electricity, it being made of a tapering and curved form, and terminating at one end in an open neck, *a*. At its opposite extremity it has a foot or disk, *b*, through the center of which a fine conduit, *c*, leads from the inner chamber or part of the vessel A, in manner as shown in the drawings.

There is a lateral or branch passage, *d*, leading out of the conduit *c*. Into this passage and the conduit, and so as to reach to or nearly to the outer end of the conduit, a metallic wire, *e*, is led, such wire, before entering the said lateral passage, being wound helically and made to terminate in a socket, *f*, or some other suitable means of connecting it to the wire of an electrical battery or machine.

The liquid medicament to be infused into the diseased surface or part is to be placed within the vessel A, and the latter is to have the flat face of its foot or disk *b* arranged with respect to the said surface in such manner that the medicating-fluid may pass through the conduit *c* and come into direct contact with the said surface. Under these circumstances a current of electricity is to be caused to flow through

the wire *e* and into the diseased part. To accomplish this the wire is to be connected with one of the current-wires of a battery, while the other current-wire is applied to some part of the patient's body. The battery being in action, the electricity will flow into the patient and will carry more or less of medicating-fluid with it, and cause it to enter and penetrate the diseased part.

The vessel A from time to time is to be moved so as to carry the disk *b* or the mouth of the conduit-throat in contact with nearly all, if not all, of the part into which it may be desirable to cause the medicament to penetrate. The face of the base or disk *b* may be covered with sponge, soft leather, cloth, or other suitable porous substance. Through this instrument the electricity will be in action on a small portion of the fluid and will drive it into the skin or diseased part with an astonishing effect. The supply of fluid being constant at the extremity of the conducting-wire the whole of the diseased part may be operated on without breaking the contact of the instrument with it or stopping the action of the electric current.

It will be evident that the form of the above-described instrument or apparatus may be varied somewhat and still preserve in it the novel features by which it operates to effect its intended purpose. Lotions, liniments, or other liquids for curative or other purposes may thus be applied to a diseased surface or part of a person's body, and so as to operate thereon with far more beneficial effect than when simply washed on the surface or laid thereon by the modes heretofore in practice.

I therefore claim as my invention—

For the application of medicaments for curative purposes by electrical agency, the instrument or apparatus substantially as hereinbefore and described and represented.

ABRAM PAIGE, M. D.

Witnesses:

F. P. HALE, Jr.,
L. F. LELAND.