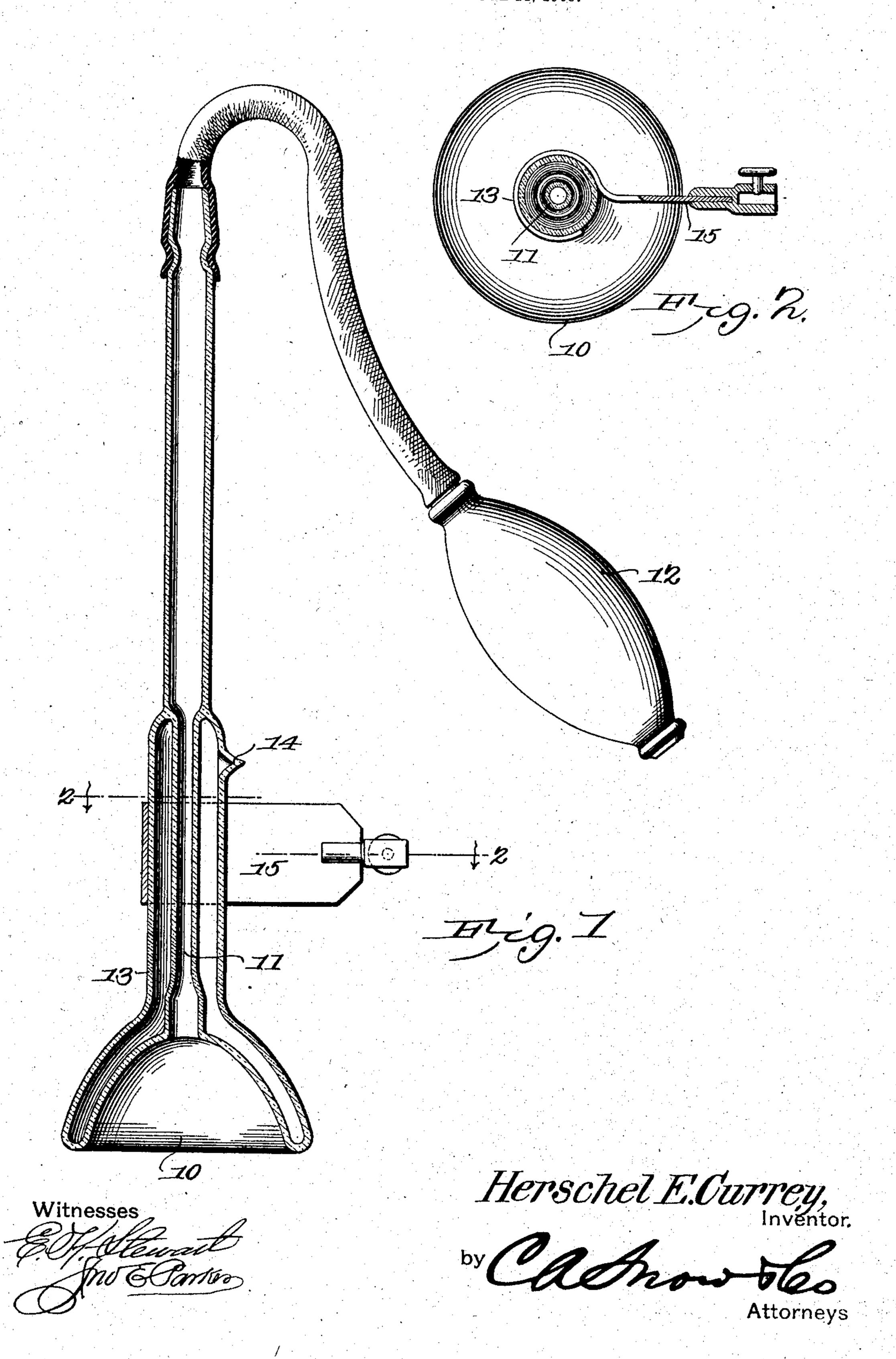
## H. E. CURREY. ELECTROTHERAPEUTIC APPARATUS. APPLICATION FILED JUNE 14, 1905.



## UNITED STATES PATENT OFFICE.

HERSCHEL E. CURREY, OF BAKER CITY, OREGON.

## ELECTROTHERAPEUTIC APPARATUS.

No. 796,114.

Specification of Letters Patent.

Patented Aug. 1, 1905.

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To all whom it may concern:

Be it known that I, HERSCHEL E. CURREY, a citizen of the United States, residing at Baker City, in the county of Baker and State of Oregon, have invented a new and useful Electrotherapeutic Apparatus, of which the following is a specification.

This invention relates to electrotherapeutic apparatus, and has for its principal object to provide a device for treating diseases of the blood and tissues by effecting electrical asepsis and stimulation and for the development

of various parts of the body.

A further object of the invention is to provide an electrotherapeutic apparatus in which the portion of the body to be treated is dilated or distended and local hyperemia effected by means of a vacuum and the parts then subjected to violet or ultra-violet rays produced in an attenuated atmosphere by a current from an electrostatic machine, Ruhm-korff coil, or any source of energy.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a sectional view of an electrotherapeutic appliance constructed in accordance with the invention. Fig. 2 is a sectional plan view of the same on the line 2 2 of Fig. 1.

Similar numerals of reference are employed to indicate corresponding parts throughout

both the figures of the drawings.

In carrying out the invention the suctioncup 10, formed of vitreous material, such as glass, is provided with a duct 11, leading to an air-exhausting means, which in the present instance is indicated in the form of a bulb 12. Surrounding the cup and a portion of the tube is a casing 13, from which the air is partly exhausted, forming a chamber containing an attenuated atmosphere of air or gas, the air being exhausted through a teat 14, which is sealed in the usual manner. This chamber entirely surrounds the vacuum-cup and is without any internal conductors or electrodes. To the exterior of the tubular portion of the chamber is fitted a clamp 15, constituting the terminal of an electric circuit. The circuit includes a source of energy for the production of static electricity—such, for instance, as a Holtz electrostatic machine, a Ruhmkorff coil, or the like—the object being to set the air or gas within the vacuum-chamber into vibration, and thus produce violet or ultra-violet rays, to the action of which the portion of the body within the vacuum-cup

is subjected.

The apparatus is intended for the enlargement of undeveloped glands and other portions of the body and for the treatment of diseased tissues. The vacuum-cup is placed over the parts to be treated and the air is exhausted from the cup to such an extent that the skin is drawn up closely into contact with the entire inner face of the cup. This operation distends the tissues, dilates the pores, and promotes local hyperemia, so that the affected parts are in a condition most favorable to be subjected to the action of the static electricity and the light-rays in the chamber. As the vacuum-chamber entirely surrounds the vacuum-cup, all of the portion of the body within the cup will receive the same treatment, and as the surface of the body is in intimate physical contact with the inner surface of the cup there is no air-gap which would tend to produce arcing.

It is found in practice that by subjecting diseased tissues to the action of light-rays while in a distended or dilated condition and surcharged with blood that asepsis may be effected and the tissues quickly restored to a normal healthy condition. The apparatus is further of considerable value in the development of certain glands or organs of the body, the physical distension under the effects of the vacuum-cup being rendered more or less permanent by the stimulating effect of the light-

rays and static electricity.

It is obvious that the invention is applicable to various forms of light-ray tubes and includes in its scope tubes of that class having internal electrodes.

Having thus described the invention, what is claimed is—

1. In electrotherapeutic apparatus, a vacuum-cup surrounded by a chamber containing an attenuated atmosphere.

2. In an electrotherapeutic apparatus, a vacuum-cup forming a portion of the wall of a light-ray chamber.

3. In electrotherapeutic apparatus, a casing

containing an attenuated atmosphere and arranged for the production of light-rays by an electric current, a portion of the wall of said casing forming a vacuum-cup into which the portion of the body to be treated may be drawn.

4. In electrotherapeutic apparatus, a casing containing an attenuated atmosphere and arranged for connection to one terminal of an electrostatic machine or the like, and means for distending or dilating the surface to be treated and forcing the same into intimate contact with the outer surface of said casing.

5. In electrotherapeutic apparatus, a vacuum-cup, a suction-tube leading therefrom, and a casing containing an attenuated atmosphere partly surrounding the cup and tube, said cup

and tube forming part of the wall of said casing, and a terminal connected to the outer portion of the casing and arranged for connection to an electrostatic machine or the like, whereby the part to be treated may be drawn into the cup into intimate contact with the wall thereof and subjected to the action of the light-rays of the casing, while in a dilated or distended condition.

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

HERSCHEL E. CURREY.

Witnesses:

J. H. Jochum, Jr., Jno. E. Parker.