

E. J. LATTA.
 MEDICAL DEVICE FOR TREATING VENEREAL DISEASES.
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Fig. 1.

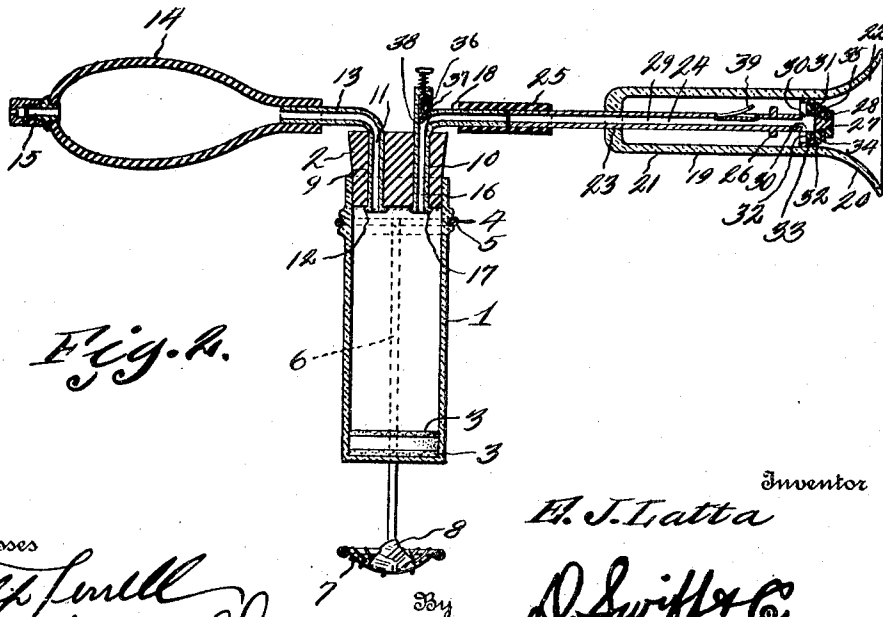
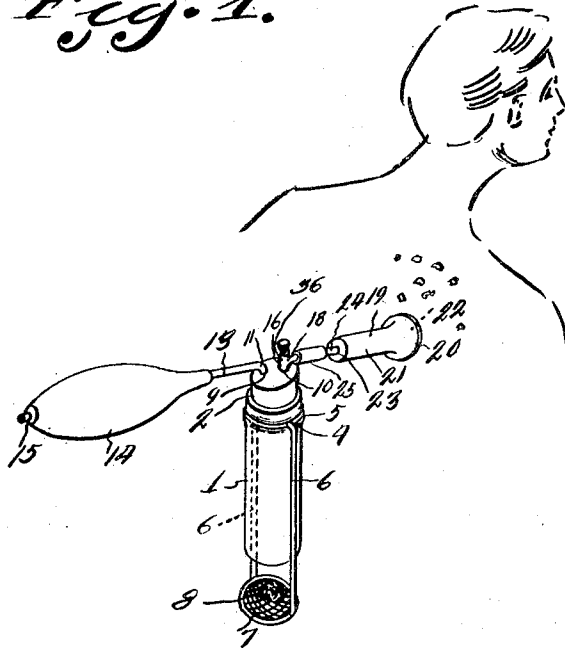


Fig. 2.

Witnesses

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MEDICAL DEVICE FOR TREATING VENEREAL DISEASES.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ELBERT J. LATTA, a citizen of the United States, residing at Lincoln, in the county of Lancaster, State of Nebraska, have invented a new and useful Medical Device for Treating Venereal Diseases; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved medical device for treating venereal diseases, for instance, such as syphilis and other skin eruptions and abrasions, and an object of the invention is to provide a simple, efficient and practical device of this kind for carrying out the system of treatments.

A further object of the invention is to provide a combined suction cup and pump having a plunger which when moved outwardly creates a vacuum or suction in the cup, which is placed adjacent the body to be treated, so as to increase the size of the cutaneous pores or arterioles, in other words to dry cup the flesh or skin so as to enlarge the cutaneous pores in order that they will more readily absorb the medical vapors or fumes. By enlarging the cutaneous pores any accumulated sebum that they may contain is removed. Upon an inward movement of the plunger, the fume or vapor is forced through the plunger into the vacuum or suction cup, in order to be absorbed into the pores of the skin.

A further object of the invention is to provide means to contain the medicine, there being means suspended from the first means, whereby the medicine may be heated, thus making the fumes more pleasing to the sensitive cutaneous nerves, and at the same time more readily taken up by the sub-cutaneous absorption.

A further object of the invention is to provide a two way valve or similar device which will permit air to be passed through the plunger finding exit through an outlet. Or if so turned, it will permit or allow the fumes to pass from the glass shell inward to the vacuum chamber through the plunger.

A further object of the invention is to provide a spring retaining device for the plunger.

In practical fields, the details of construction may necessitate alterations falling within the scope of what is claimed.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings, and claimed.

In the drawings:—

Figure 1 is a view in perspective of the improved medical device for treating venereal diseases.

Fig. 2 is a sectional view through the same.

Referring more especially to the drawings, 1 designates a tubular receptacle, which may be constructed of any suitable material, preferably glass, and may be of any suitable shape, preferably, cylindrical, and is provided with a rubber stopper 2. This receptacle is designed to contain a suitable medicine, the fumes of which are to be injected into the cutaneous pores of the skin or flesh. This medicine is designed to be placed between suitable asbestos disks 3, which are to be arranged in said receptacle. Preferably, the medicine is to be compounded into a tablet. At the upper portion of the receptacle, an annular groove 4 is provided, for the reception of an annular ring 5, projecting downwardly from which, at diametrically opposite points, are arms 6, the lower extremities of which merge into or are connected to a suitable wire basket 7. This basket is designed to contain a wad of asbestos 8 saturated in alcohol, so that when lighted, while suspended under the receptacle 1, the medicine in said receptacle will be heated. The stopper 2 is provided with two apertures 9 and 10, and arranged in the aperture or opening 9 is a tube 11 having a bead or rib 12 at its lower end to prevent the tube from pulling upwardly through the stopper. This glass tube 11 has a laterally bent portion 13, to which is secured in any suitable manner a rubber bulb 14 having a suitable check valve 15, whereby air may be drawn into the bulb and expelled through the tube 11, which will cause the vapor or fumes from the medicine in the receptacle 1 to be forced through the tube 16, which is arranged in the aperture or opening 10, for the purpose to be hereinafter stated. The lower end of the tube 16 has a bead or flange 17, to prevent the tube 16 from being pulled through the rubber stopper. The tube 16 is provided with a right angle extending portion 18.

A suitable cupping device 19 is provided, and comprises an outwardly flared portion 20 and a cylindrical extension 21,

The outwardly flared portion 20 is designed to engage the skin or flesh to be treated, so that by the actuation of a plunger in the cylindrical extension 21, the skin or flesh may be dry-cupped. In other words, the flesh or skin is drawn or sucked into the cup, (a suction or vacuum having been created in the vacuum chamber 22 between the plunger and the surface of the skin) thereby increasing the size of the cutaneous arterioles so that the pores will be more susceptible to the absorption of the medical vapor. This cupping device may be constructed of any suitable material, preferably glass, and passing through an opening 23 of the cylindrical extension 21 is a tubular plunger rod 24, which is connected to the right angle extension 18 by the rubber coupling tube or connector 25, so that the passage of the extension 18 will register with the passage of the plunger rod 24. The plunger rod 24 may be constructed of any suitable material, and has an annular collar 26 integral therewith, and provided at its extremity with a threaded extension 27, to receive the nut 28. The passage 29 through the plunger rod 24 terminates in laterally extended ports 30, and mounted upon the plunger rod between the collar 26 and the nut 28 is a suitable plunger 31. This plunger is permitted movement between the collar 26 and the nut 28, therefore, when the plunger is adjacent the nut 28, the ports 30 are closed, and when the plunger is adjacent the collar 26, the ports 30 are open. This plunger comprises the two metal washers 32, between which the leather washer 33 is arranged, which leather washer flanges over one of the metal washers 32, as shown in Fig. 2. A washer 34 of any suitable metal is secured between the nut 28 and the shoulder 35. In order to cup the skin or flesh, the plunger is disposed in Fig. 2, the outwardly flared end 20 of the cupping device fitting over that portion of the flesh or skin to be treated. The plunger is then moved toward the opening 23, creating a vacuum or suction in the vacuum chamber 22, thereby sucking or drawing the flesh into the cupping device, which will increase or enlarge the cutaneous pores. While the pores are so enlarged, the plunger is moved in the opposite direction, thereby uncovering the ports 30. At the same time, the plunger is moving in the opposite direction, the bulb 14 is pressed, expelling the air through the tube 11, causing the fumes from the heated medicine to rise and pass through the tube 16 through the plunger 24 and out through said ports into the vacuum chamber 22, whereby the enlarged cutaneous pores may absorb the medicinal properties of the fumes.

The fumes are created by the heat from

the lighted alcohol saturated asbestos wad, as soon as the skin is ready to receive or absorb the fumes, the plunger is pushed inwardly toward the skin. The tube 16 has an upwardly protruding extension 36, having an exit opening 37. Where the right angle extending portion 18 connects to the tube 16, a suitable two way valve 38 is provided, and when turned so that the exit 37 is in open communication with the passage through the plunger rod 24, the air to be passed through the plunger finds its exit through the outlet 37. In other words, when the plunger moves outwardly, the washer 31 being in contact with the washer 34, and the ports 30 closed to the vacuum chamber 22 but in communication with the interior of the cylindrical extension 21, the air from the interior of the extension 21 passes out through the outlet 37. However, when the valve is turned or positioned to put the passage of the tube 16 in communication with the passage 29, the medicinal fumes are forced from the receptacle 1 by pressing the bulb 14 through the plunger, toward and into said vacuum chamber. The absorption of the fumes takes place by dilating the capillaries and arterioles enlarging the pores of the skin and allowing the particles of material in the form of gases or vapors or fumes to pass in. The lymphatics and blood stream take up the fumes or gases or vapors and they thus become evenly distributed thereby producing no pain, no shock, and no abscess. A steel leaf spring is secured to the plunger rod 24, and which spring 39 is released when the plunger is withdrawn to a sufficient position outwardly of the extension 21, so that said spring will engage the end of the extension 21, to hold said plunger at the limit of its outward movement, for owing to the vacuum created in the chamber 22, there is a tendency for the plunger to turn toward said vacuum chamber. However, by depressing the spring, the plunger rod 24 may be depressed so as to move through the opening 23, therefore, in this case, said spring retaining device will assume a position on the inside of the glass extension 21, when the plunger is pushed inwardly.

The process of dry-cupping the flesh or skin is accomplished by placing the cup over the desired portion of the flesh, after which successive reciprocatory movements are imparted to the piston so as to dilate or enlarge the pores of the skin. The process of dry-cupping brings to action several important physiological functions. First, that of increased size of the cutaneous arterioles. Second, a moderate transient hyperemia and blood stasis. Third, the increasing of the size of the cutaneous pores, removes any accumulated sebum that they may contain. It

also acts as a mild counter irritant, and thus through the reflexes awakens the physiological function of the internal organs. The effects of counter irritation in changing the action of the living organism is well established, this despite the mystery that surrounds the phenomenon. The advantage to all who will give this matter a moment of serious thought. Especially in the administration of drugs through the integument that are expected to effect the entire organism.

Vaporizing or fuming.

The object of vaporizing or fuming is that the particles may be brought to the finest possible state of subdivision, in order that they may more readily pass through the diminutive cutaneous openings. Another advantage is that the remedy is applied warm, and hence more pleasing to the sensitive cutaneous nerves, and more readily taken up by the subcutaneous absorption.

The invention having been set forth, what is claimed as new and useful, is:—

1. In a combination pump and vacuum dry-cupping device, the combination of a cup having a cylindrical extension and a plunger rod guided in said extension and provided with a plunger through which said rod partially moves, said plunger when moved outwardly through the extension causing vacuum to be created in said cup, to draw the flesh into the cup dilating the pores thereof, said plunger rod being hollow, of means for forcing the medical fumes through the plunger rod and into the cup to be absorbed into the cutaneous pores,

when the plunger is moved inwardly, said hollow plunger rod having a pair of ports to be covered and uncovered by the plunger, whereby a vacuum may be created in the cup when covered, and medical fumes to be forced into the cup when uncovered.

2. A combination pump and vacuum dry-cupping device, comprising a cylindrical elongated hollow body having an outwardly flared portion at one end constituting a cup to engage that part of the skin to be treated, and provided with a chamber, a hollow plunger rod guided in said hollow body, the inner end of said rod having spaced collars, a plunger mounted upon the rod to have a limited movement between said collars, said hollow rod having ports between the collars to be uncovered and thrown in communication with said chambers by said plunger to permit fumes to enter the chamber and to be closed from communication with said chamber by the plunger to cause a vacuum in said chamber.

3. In a device for heating medicine, a receptacle to receive the medicine, and provided with an annular groove at its upper portion, a ring in said groove provided with depending arms, a basket connected to the lower end of said arms to receive an alcohol saturated asbestos wad to be lighted whereby the medicine may be heated.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ELBERT J. LATTA.

Witnesses:

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