No. 622,209 Patented Apr. 4, 1899.

S. J. DECKARD.

FACIAL VAPORIZER.

(Application filed Nov. 26, 1898.)

(No Model.)

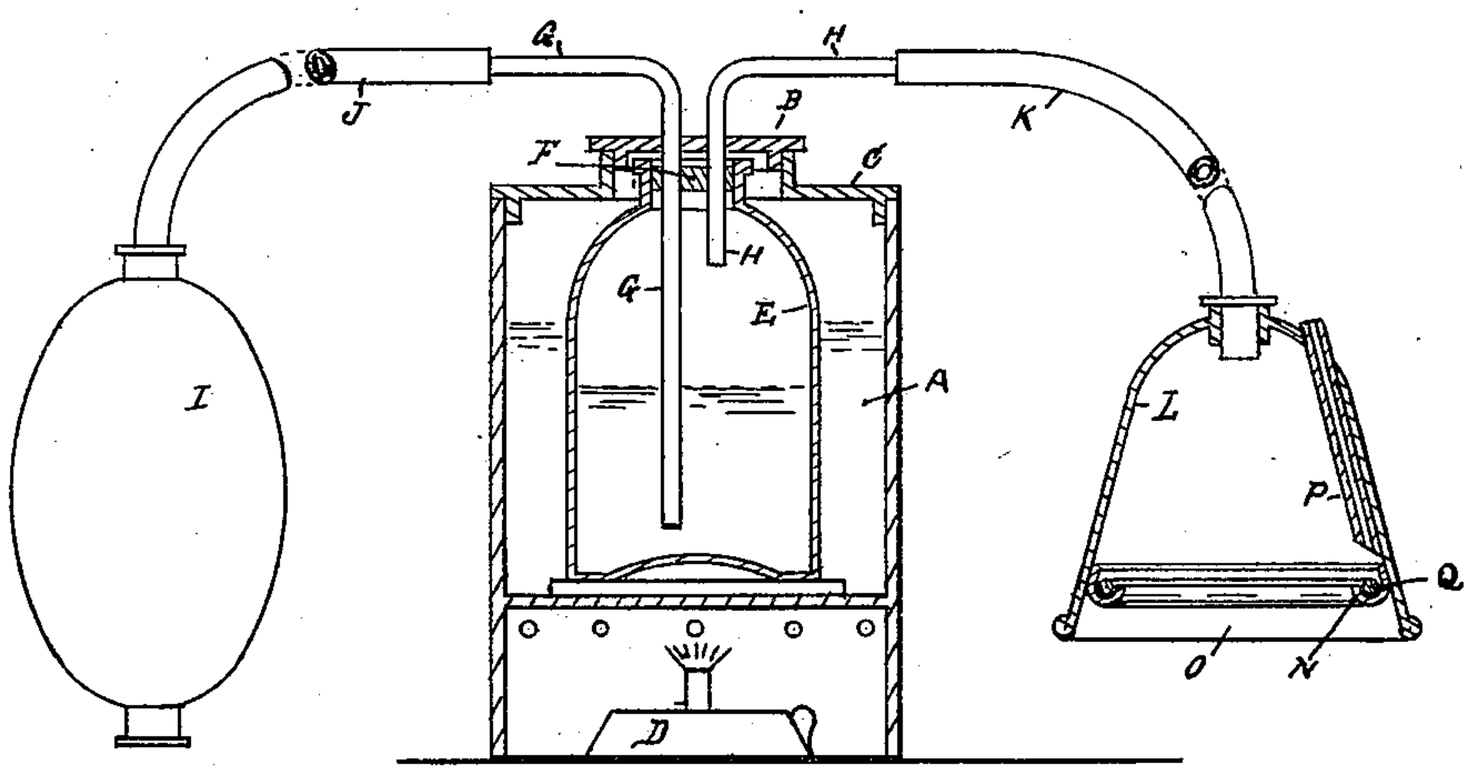

Fig. 1.

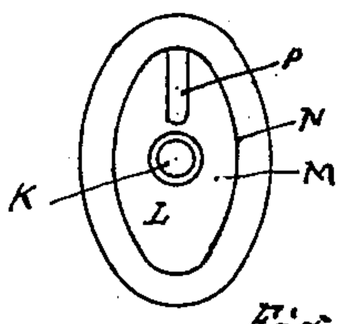

Fig. 3.

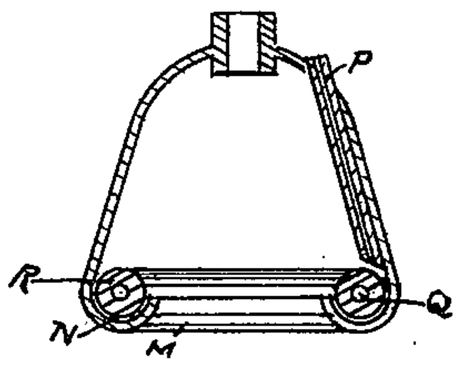

Fig. 2.

WITNESSES.

John Frances.

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Stephen J. Deckard. INVENTOR.

By Robert S. Carr. Atty.

UNITED STATES PATENT OFFICE.

STEPHEN J. DECKARD, OF HAMILTON, OHIO, ASSIGNOR OF ONE-HALF TO HENRY S. CARPENTER, OF SAME PLACE.

FACIAL VAPORIZER.

SPECIFICATION forming part of Letters Patent No. 622,209, dated April 4, 1899.

Application filed November 26, 1898. Serial No. 697,503. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN J. DECKARD, a citizen of the United States, and a resident of Hamilton, in the county of Butler and State of Ohio, have invented certain new and useful Improvements in Facial Vaporizers, of which the following is a specification.

My invention relates to facial vaporizers of that class adapted to apply a vapor under pressure to the surface of the skin; and the objects of my improvement are to provide a massage-bell through which medicated vapor may be passed under pressure and in contact with the skin to intercept the condensation and prevent scalding, whereby certain skin diseases may be cured and the face complexion may be beautified. These objects are attained in the following manner, as illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my apparatus with parts in section; Fig. 2, a vertical section of the bell; Fig. 3, an inverted plan of the bell-mouth as compressed.

In the drawings, A represents the tank of a water-bath, formed of sheet metal and provided with closely-fitting lids B and C. Lamp D, placed thereunder, raises the temperature of the water in the tank. Bottle E, provided with cork F, is inclosed in the tank, and glass tubes G and H, inserted through the cork and lid B, depend within the interior of the bottle, the former terminating near the bottom of the bottle, the latter just below the cork. The appropriate medicine in diluted form is placed in the bottle and heated to the desired temperature by the bath. The outer extremity of glass tube G communicates through flexible tube J with rubber bulb I, that serves to compress and force air into the bottle and under the surface of its contents. After the air in the bottle is medicated or the medicine vaporized it is carried out through glass tube H and through flexible tube K, connected thereto, and into the interior of massage-bell L. Said bell is constructed of soft india-rubber or other suitable yielding substance and in the form of a cone or inverted cup. The edge of its mouth or opening M is turned inward and upward to form annular groove or trough N, as shown in Fig. 2. For certain purposes the wall of the bell may be extended below the trough to form curtain O, as shown in Fig. 1. An exhaust-tube P, secured to the inside of the wall, leads from the interior of the bell just above the trough and discharges outside of the bell near the apex. A circular spring Q, formed of wire, is placed in the trough to keep the walls of the bell from collapsing and to keep its mouth in the form of a circle. Opposite sides of the wall and spring, however, may be pressed toward each other to cause the mouth of the cup to take an oblong shape, as shown in Fig. 3, to better adapt it to cover certain irregular surfaces to which it may be applied. Textile fabric R, as cheese-cloth or other suitable absorbent substance, may inclose the circular spring or be placed independently in the trough to absorb the descending condensation of vapor that forms on the wall and within the bell and that otherwise might cause a scalding of the skin by coming in contact therewith.

In operation the air compressed by the rubber bulb or other suitable pump or device is forced through the medicated solution in the bottle and thence to the interior of the bell. The heat of the water both facilitates the vaporization of the solution in the bottle and heats the vapor sufficiently to maintain a high temperature within the bell and in contact with the surface of the skin on which the mouth of the bell is applied until it escapes therefrom through the exhaust-tube. By placing the finger on and off the discharge-opening of the exhaust-tube the vapor may be caused to pass through the bell in an intermittent current or be retained therein as long as may be necessary. By the movement of the bell over the surface of the skin, with its mouth in close contact therewith, the skin is mildly kneaded and prepared to better respond to the beneficial and combined action of the heat and the medicated vapor.

Having fully described my improvement, what I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination with a bell, an exhaust-tube secured therein and a supply-tube lead-

ing thereto of an annular trough within the bell and a removable circular spring within the trough.

2. The combination with a bell constructed with an interior annular trough and with a supply and a discharge opening of a circular spring removably engaging with the bell and within the trough and an absorbent substance removably placed within the trough.

STEPHEN J. DECKARD.

Witnesses:
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W. A. HUME.