

No. 877,155.

PATENTED JAN. 21, 1908.

H. D. WOOD, JR.
ELECTRICAL FACE STEAMER.
APPLICATION FILED JULY 3, 1907.

Fig. 1

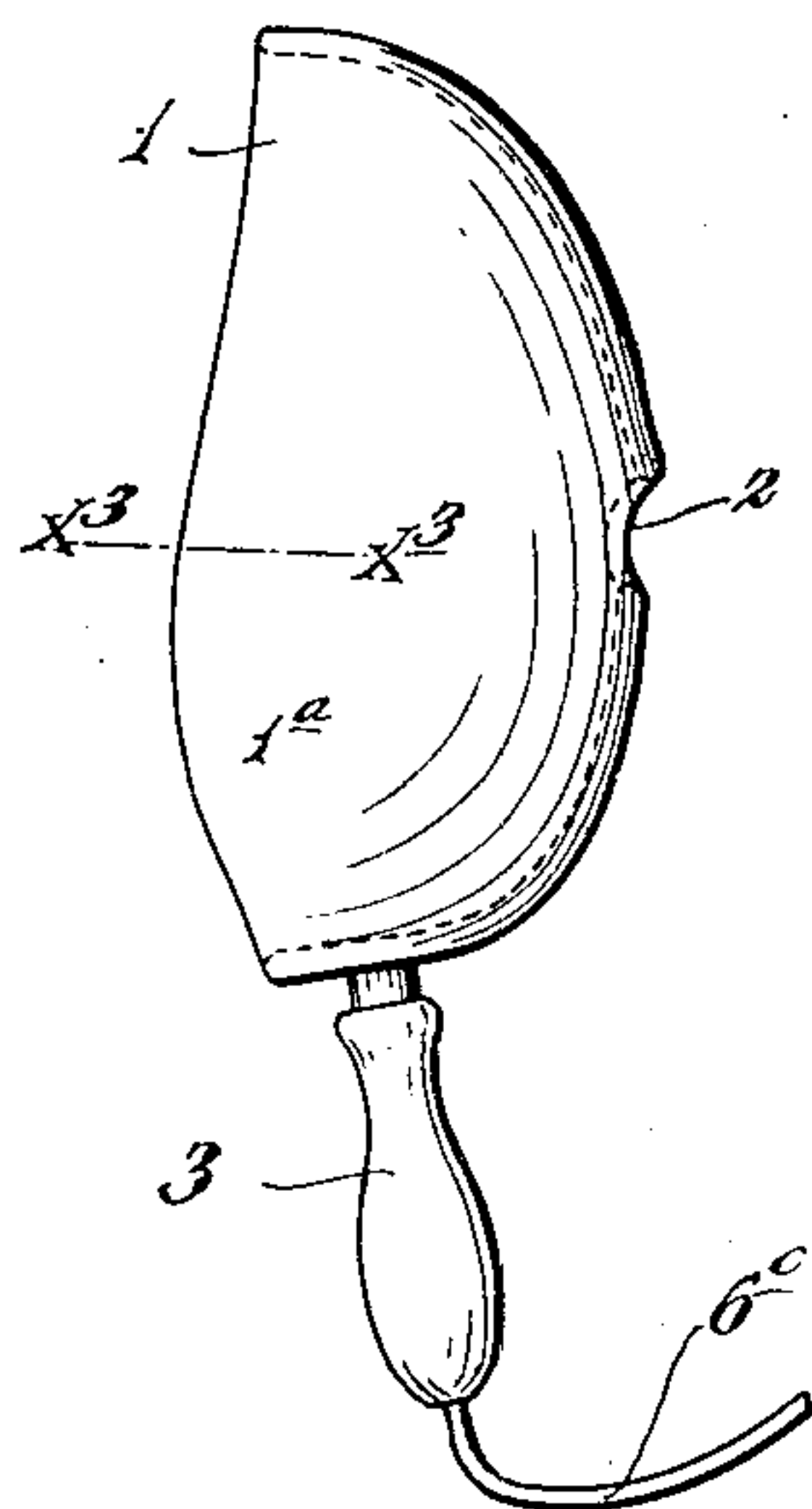


Fig. 2

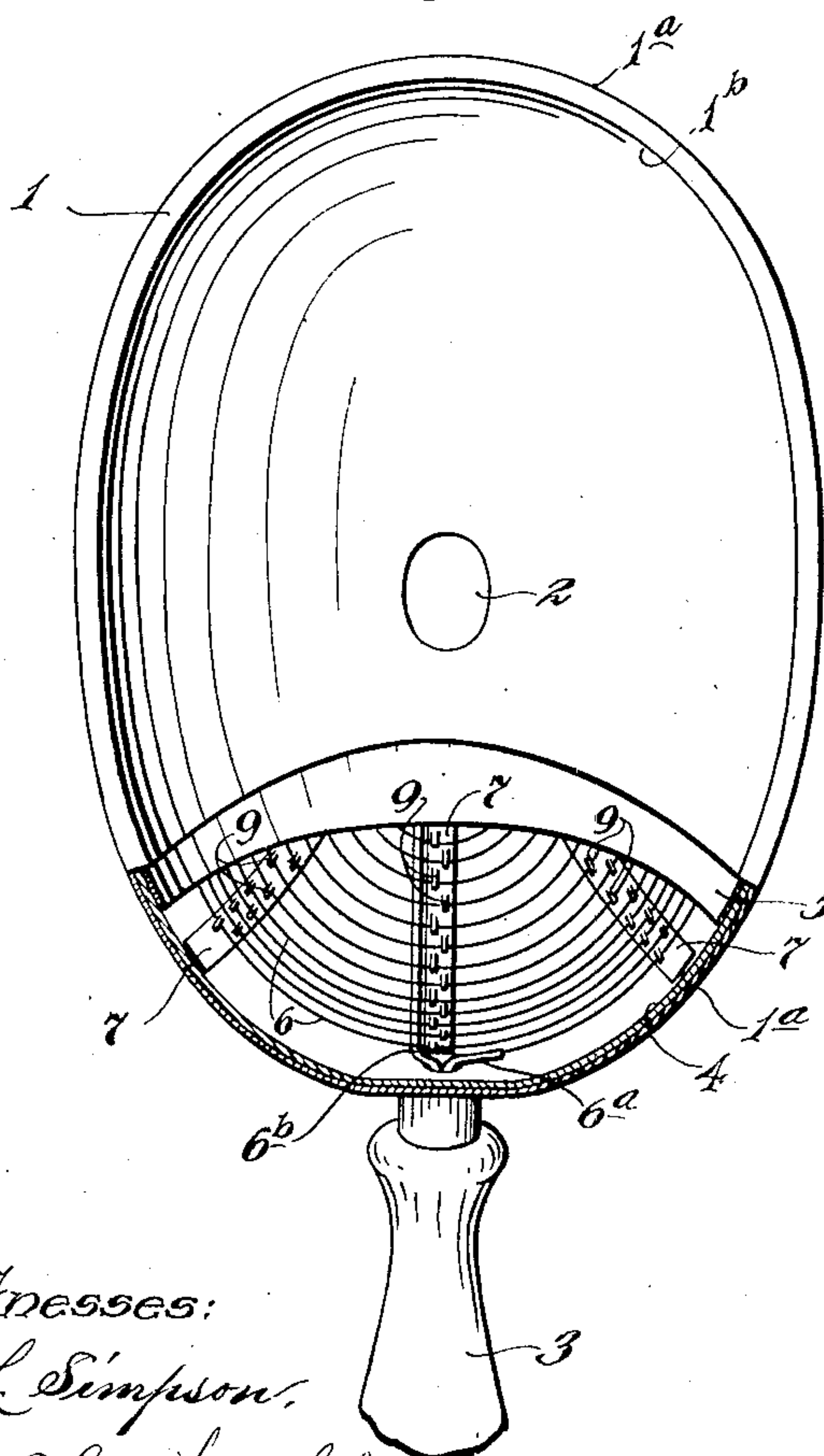


Fig. 3

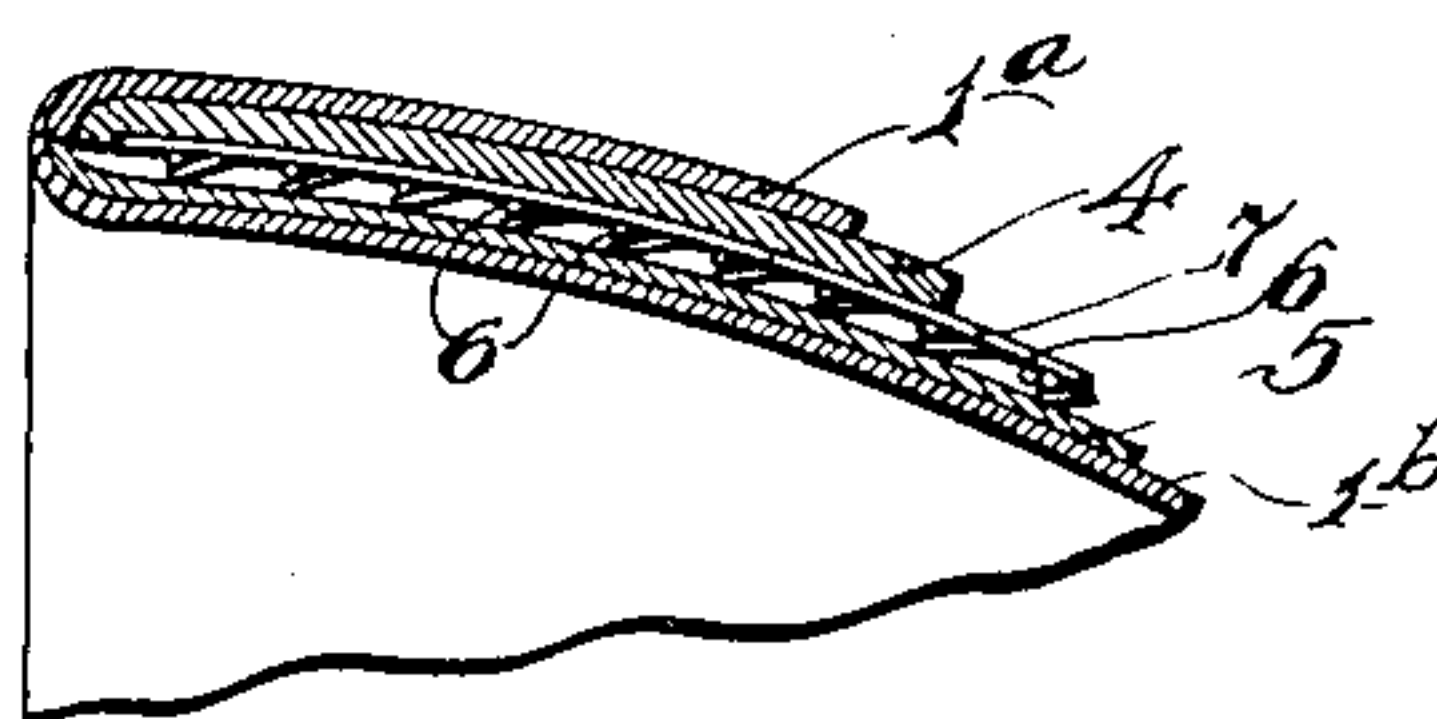
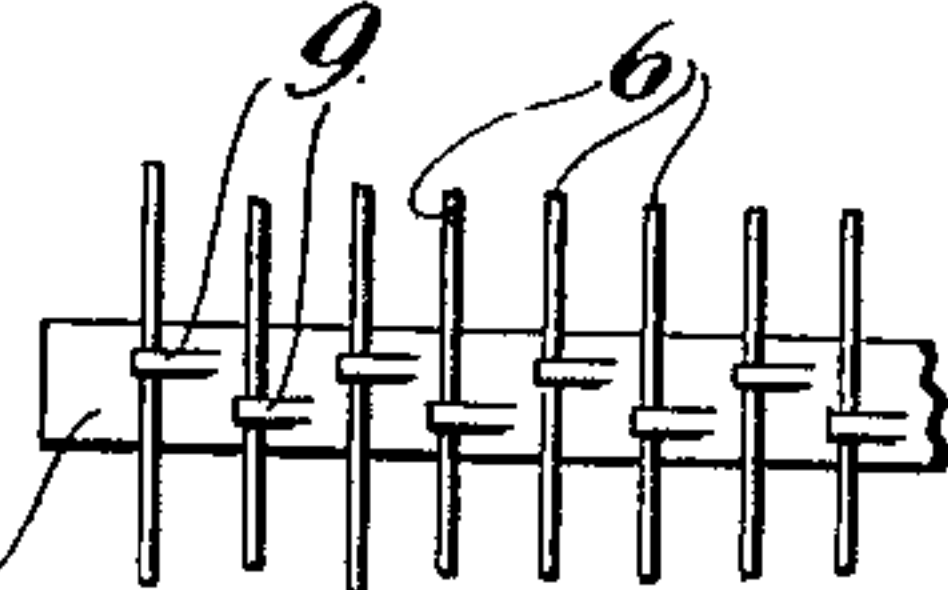


Fig. 4



Fig. 5



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UNITED STATES PATENT OFFICE.

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ELECTRICAL FACE-STEAMER.

No. 877,155.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed July 3, 1907. Serial No. 381,994.

To all whom it may concern:

Be it known that I, HIRAM D. WOOD, Jr., a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Electrical Face-Steamers; 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.

My invention has for its especial object to provide an electrical face steamer, particularly adapted for use by barbers in giving face massages and by physicians in the treatment of acne and other diseases of the face.

To the above ends the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings, Figure 1 is a view in side elevation, showing the improved face steamer. Fig. 2 is a view in elevation with some parts sectioned and some parts broken away, looking at the inner or concave face of the electrical steamer. Fig. 3 is an enlarged detail taken in section on the line $x^3 x^3$ of Fig. 1; and Figs. 4 and 5 are views, respectively, in edge elevation and plan, showing certain of the electric wires and mica strips for spacing the same apart.

The body of the face steamer is in the form of a bowl, indicated as an entirety by the numeral 1. This bowl has such marginal form that it is adapted to closely fit over the face of a person to whom it is applied, and at its central portion it is provided with an air passage 2. When the bowl is applied to the face, the nose of the person to whom it is applied will come close to the air passage 2 so that a good supply of air for breathing purposes will be available. The bowl is adapted to be held by a handle 3 suitably secured thereto.

The exterior convex and concave surfaces of the bowl 1 are formed by thin metal shells 1^a and 1^b , respectively, the edges of which are preferably overlapped at the rim of the bowl, as best shown in Fig. 3. These metal shells 1^a and 1^b are preferably of aluminium and they are spaced apart sufficiently to make room for outer and inner asbestos lining sheets 4 and 5, respectively, and wires 6 and spacing strips 7. The wire 6 extends

through the handle 3 and is provided with insulated or wound end sections 6^a , 6^b , the latter of which extends radially into the handle 3 close to the air passage 2. The wire from the end section 6^b is wound with convolutions that increase successively until they follow closely to the rim of the bowl and finally joins the end portion 6^a . The convolutions of this wire 6 are located between the outer and inner asbestos sheets 4 and 5, and they are spaced apart by radially disposed insulating and spacing strips 7, preferably of mica. These strips 7 are formed with laterally pressed wire retaining lips 9, as best shown in Figs. 4 and 5. The outer asbestos sheet 4 is heavy enough to prevent the outward radiation of any considerable amount of heat, while the inner asbestos sheet 5 is very thin, so that it will not to any considerable extent prevent the inward radiation of heat from the hot wire 6, but is, nevertheless, heavy enough to afford an electrical insulation between the wire and the inner metal shell 1^b .

As shown in Fig. 1, the wire terminals or end portions 6^a — 6^b outward of the handle 3 are united in a cable 6^c that connects to a contact head 10, adapting it for application to an ordinary incandescent lamp socket. As is evident, when current is turned onto the wire 6 a very considerable amount of heat will be produced, and this will be radiated into the bowl. In giving a face massage, wet cloths are placed on the face of a person receiving the treatment, the bowl is then applied over the wet cloths and the current is turned on. As has been proved in practice, sufficient heat can be very quickly produced by this device, used in the way indicated to generate steam or hot vapor, such as required for good results in a face massage or similar treatment.

The aluminium lining or inner shell does not absorb moisture from the wet cloths or towels and, hence, protects and preserves the wiring. Furthermore, aluminium does not corrode, and also makes the device thoroughly antiseptic.

As the bowl is rigid, the internal wires are held in permanent arrangement and, hence, are not liable to be broken, as is the case where the wiring is applied in a flexible device. A thin coating of silicate of soda or "water glass" is preferably applied to the internal wires and also to the inner surface of the aluminium shells.

What I claim is:

1. In a face steamer, the combination with a bowl made up of inner and outer shells of non-absorbent material, said bowl having an air passage at its intermediate portion, of wiring located around said air passage in the spaces between the said inner and outer shells and insulated therefrom, substantially as described.
2. In a face steamer, the combination with a metal bowl made up of thin inner and outer shells, the said bowl having an intermediately located air passage and a projecting handle, of wiring located around said air passage in the space between said inner and outer shells and insulated therefrom, substantially as described.
3. In a device of the kind described, a metal bowl made up of thin inner and outer shells, of an asbestos sheet seated against the inner surface of said outer shell, a wire having increasing convolutions located between

said inner shell and said asbestos sheet and insulated from said inner shell, and radially disposed spacing strips having projections engaging said wire and holding the convolutions thereof spaced apart, substantially as described.

4. In a face steamer, the combination with a metal bowl having an air passage at its central portion and made up of inner and outer shells slightly spaced apart, of a wire having increasing convolutions located between said inner and outer shells and surrounding the air passage of said bowl, and a heat insulating sheet interposed between said outer metal shell and said wiring, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HIRAM D. WOOD, JR.

Witnesses:

H. D. KILGORE,

F. D. MERCHANT.