July 3, 1934. N. MASCOLO 1,965,424

FACIAL TREATMENT APPARATUS

Filed May 7, 1932

Fig. 1.

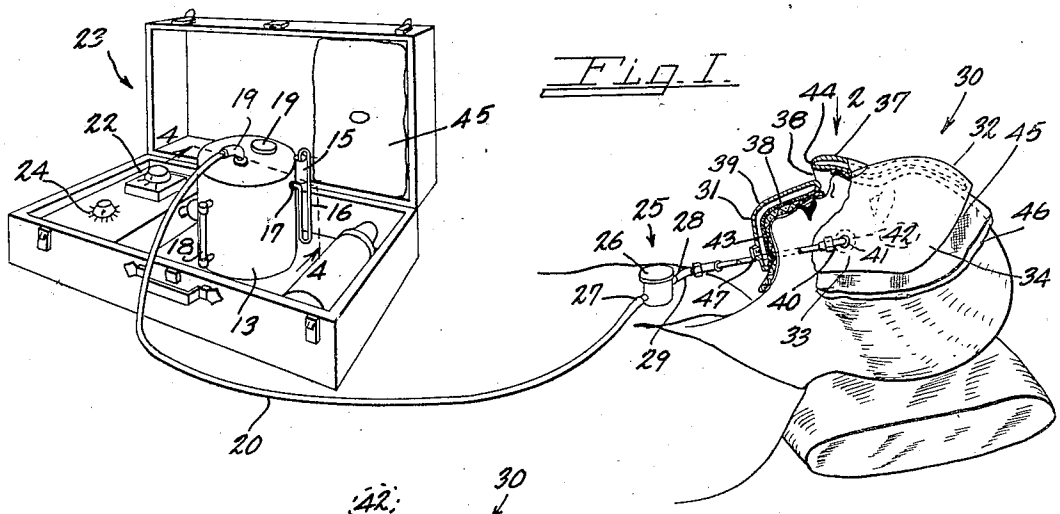


Fig. 2.

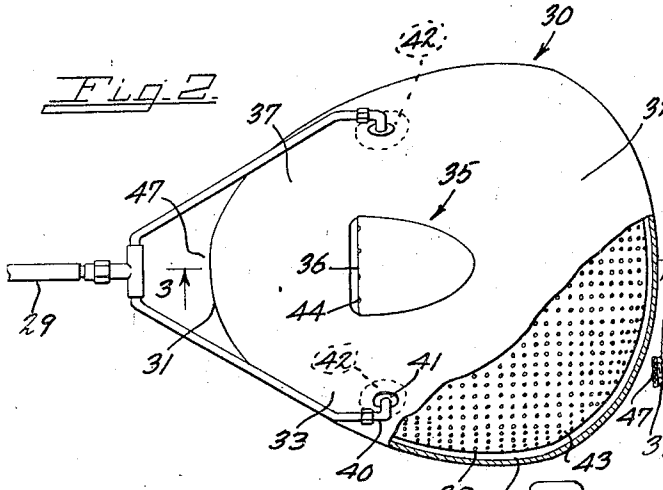


Fig. 3.

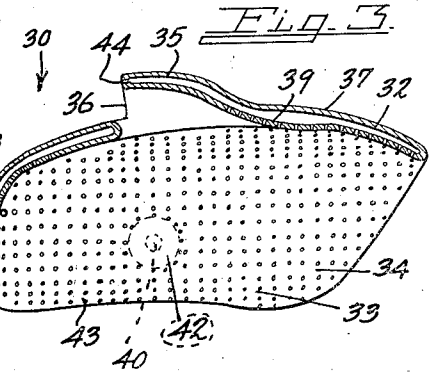


Fig. 4.

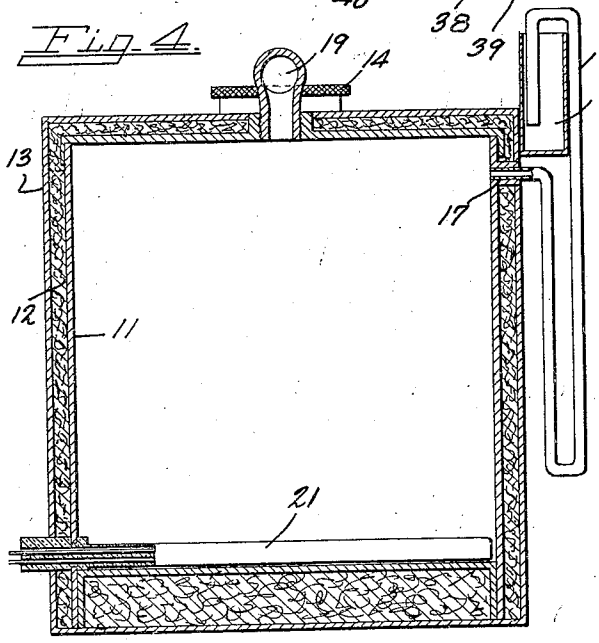
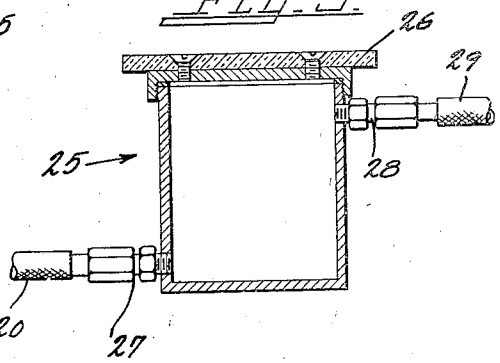


Fig. 5.



INVENTOR.
NINO MASCOLO
BY Hazard and Miller
ATTORNEYS.

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FACIAL TREATMENT APPARATUS

Nino Mascolo, Los Angeles, Calif.

Application May 7, 1932, Serial No. 609,905

4 Claims. (Cl. 128—256)

My invention relates to an apparatus for treating the face with steam, in which a mask is placed over the face and the steam gently injected through the mask and a towel to thereby steam the face of the person undergoing the treatment.

An object and feature of my invention is the construction of a portable apparatus or equipment in which I provide a steam generator preferably electrically heated, a closed cup to contain a medicament through which the steam passes, and a mask formed of flexible rubber for fitting over the face. This mask has a double wall with a steam space therebetween, and the inner wall is provided with perforations for the passage of steam.

In treating a person, a medicated gauze is first placed over the face, allowing a space at the nose and mouth for breathing, a thick absorbent towel with a nose and a mouth breathing space is then placed on the gauze, and a mask fitted over the towel. The mask is provided with a molded nose portion to accommodate the patient's nose, and at this molded portion there is quite a large opening affording plenty of space for the air circulation for breathing either through the nose or the mouth.

In the steam generator I provide a closed water container with electrical heating elements in the bottom. I provide a water cup with a siphon connection to the interior of the generator, this being to take care of excess steam pressure. The cup for the medicament is located, preferably, close to the base of the mask and this has a closure cap through which solid medicated preparations may be inserted in the cup. These soften under the steam and the medicament is carried by the steam. The mask is, preferably, mainly formed of metal and has two inlet tubes on opposite sides. Directly opposite these tubes on the inner wall there is a metal baffle plate to cause spreading of the steam to prevent direct contact of the injected steam through perforations until the steam has diffused through the mask, and thus somewhat reduce the pressure.

My invention is illustrated in the accompanying drawing, in which:

Fig. 1 illustrates a perspective view of my appliance, illustrating the mask in use, the mask being partly broken away.

Fig. 2 is a plan view of the mask taken in the direction of the arrow 2 of Fig. 1 partly broken away.

Fig. 3 is a longitudinal section of the mask on the line 3—3 of Fig. 2 in the direction of the arrows.

Fig. 4 is a vertical section through the steam generator.

Fig. 5 is a vertical section through the medicament cup.

Referring first to the steam generator construction of Fig. 4. This shows a container 11 having heat insulation 12 and an outer covering 13. A filler opening and cap 14 is provided for providing water. A water cup 15 is attached to the outside adjacent the top and in this dips a siphon tube 16, this tube entering the container adjacent the top 17. A gauge glass 18 is provided to indicate the water level, and a steam outlet 19 has a flexible hose 20 connected thereto. An electric heating unit 21 rests on the bottom of the container. The heat controls are by a main rheostat control 22 illustrated as housed in the carrying case 23, and a secondary rheostat 24 is used to regulate the heat of the variation of the medium temperature, the main rheostat being regulated in low, medium and high circuits.

A medicament cup 25 has a removable cover or cap 26. This is provided with a steam inlet 27 connected to the hose 20 and a steam outlet 28 connected to the outlet hose 29. In this cup is placed a solid medicament in the form of tablets, pill-like articles, or crystals, which become softened by the steam and the medicinal properties are carried by the steam.

A mask 30 has a chin portion 31 to fit under the chin, a forehead portion 32 to fit over the forehead, cheek portions 33, temple portions 34, and a molded nose section 35 which projects upwardly. This leaves an opening 36 underneath the nose section through which the person undergoing treatments can breathe either through the nose or through the mouth. The mask is made with an outer wall 37 and an inner wall 38, thus leaving a space 39 for the circulation of steam. The steam inlet is by means of connectors 40 which attach to a metal disk 41 secured to the outer wall 37. It is desirable to have a metal plate or disk 42 embedded in the inner wall and facing the outer wall against which the inlet steam will impinge. This is to prevent there being a very hot section of the mask directly opposite the steam inlet. The steam thus diverges in all directions from the inlet to the mask and is discharged through a series of perforations 43 in the inner wall. These perforations are spaced fairly uniformly over the whole of the inside of the mask except immediately adjacent the steam inlet. At the tip of the nose section there are

a few fine perforations 44 for the discharge of the steam, this being for the purpose of allowing the person under treatment to breathe a certain amount of the steam.

In placing the mask over the face, a thick towel 45 is used immediately under the mask. This towel has an opening for the nose for breathing, and underneath the towel there is, preferably, a medicated gauze 46, this having some preparation for treating the skin.

In using my appliance, the patient preferably reclines and after fitting the gauze, the towel, and the mask, and providing a medicament in a medicament cup, the heat may be applied to the steam generator to supply steam. The device is designed to operate at substantially atmospheric pressure. Therefore, the steam generated would be at a temperature in the boiler about 212° F. If the steam is generated too rapidly, it blows outwardly through the siphon tube 16 and condenses in the condensation cup 15. Should the heat in the boiler decrease so that the steam condenses therein, water will be drawn from this condensation cup back into the boiler. The hot steam takes up the medicament properties of the material in the medicament cup so that these may have their action on the skin as the towel becomes saturated with the steam and, therefore, moist. The towel protects the face from direct impingement of the steam and allows the face to be thoroughly steamed. The operation may be continued any suitable length of time and during this time the person having treatment can easily breathe and may also breathe a certain amount of the medicated steam.

It is advisable to have a drain outlet in the mask, therefore, I provide a drain plug 47, which is formed in the chin portion of the mask. I prefer to form the mask of metal, such as aluminum, in which case it is not necessary to use the baffle plate 42 to diffuse the steam, but should the mask be made of molded rubber, which would conform more to the shapes of different faces, it would be advisable to use this baffle plate.

The siphon cup 15, having water therein, not only siphons water into the container of the steam generator but also acts as a condenser for steam blown out through the pipe 16, which steam would be condensed in the water in the cup 15, and thus act as a type of safety valve.

Various changes may be made in the details of construction without departing from the scope of the invention as defined by the appended claims.

I claim:

1. In a facial treatment apparatus, a face mask with chin, cheek, and forehead parts, and a molded nose section, the nose section having an open space for breathing, the mask having an inner and outer wall with a hollow space therebetween, means for injecting steam through the outer wall into the hollow space, the inner wall having a series of perforations to diffuse the steam over the face of the person taking treatments, the end of the molded nose section having perforations for ejection of steam into the path of the air breathed in through the opening.

2. In a facial treatment apparatus, the combination of a hollow face mask having an inner and an outer wall, said mask being molded to fit a person's face and having a molded nose section with an opening for greathing through the mouth or nose, the inner wall of the mask having perforations for diffusion of steam, a pair of steam inlets connected to the outer wall on each side at about the center, and a medicament cup having a steam inlet on one side and a steam outlet on the other side, the steam outlet being connected to the steam inlet of the mask.

3. In a facial treatment apparatus, a hollow mask for placing over the face having perforations on the inside for diffusion of steam, a medicament cup, a steam connection to the cup and from the cup to the mask, the medicament cup having an inlet adjacent the bottom and an outlet adjacent the top, and a removable cover for placing a medicament therein.

4. In a facial treatment apparatus, a face mask having an outer and an inner wall spaced apart, the walls being molded to conform to the shape of the chin, the cheeks, temple and forehead of a person and having an outwardly molded nose section with an opening at the end of such latter section to permit breathing through the nose and mouth of a patient, steam inlets at opposite sides of the cheek portion through the outer wall, the inner wall having a series of perforations except for an imperforate section opposite the steam inlets for diffusion of steam over the face of a person taking treatments, the end of the molded nose section having a series of fine perforations to discharge steam into the path of air being breathed in by the person taking treatments.

NING MASCOLO.