

No. 686,670.

Patented Nov. 12, 1901.

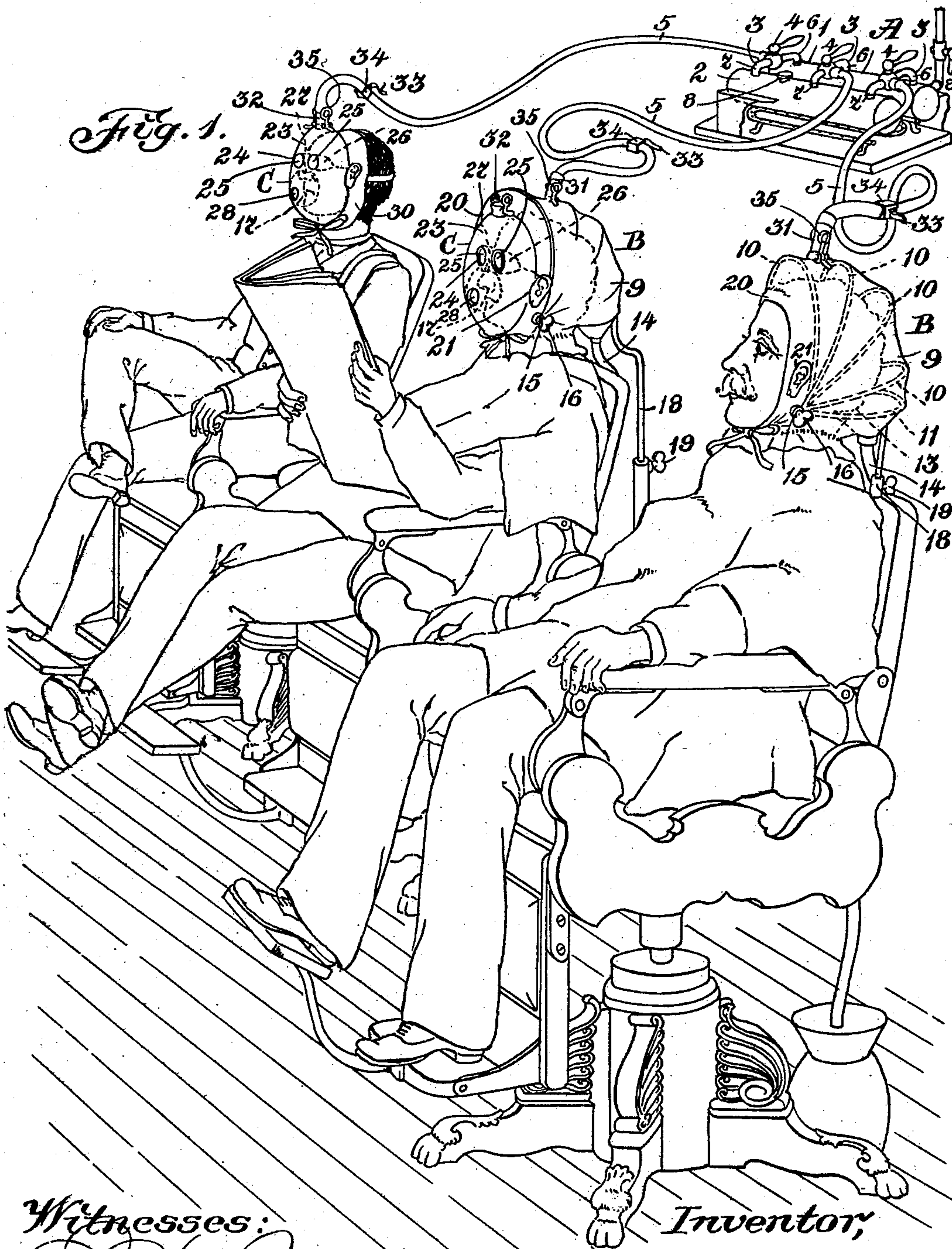
M. J. FITZGERALD.

DERMAL STEAMING APPARATUS FOR THE HEAD.

(Application filed Jan. 2, 1901.)

(No Model.)

3 Sheets—Sheet 1.



Witnesses:

Robert L. Carlyle

Inventory

Michael J. Fitzgerald

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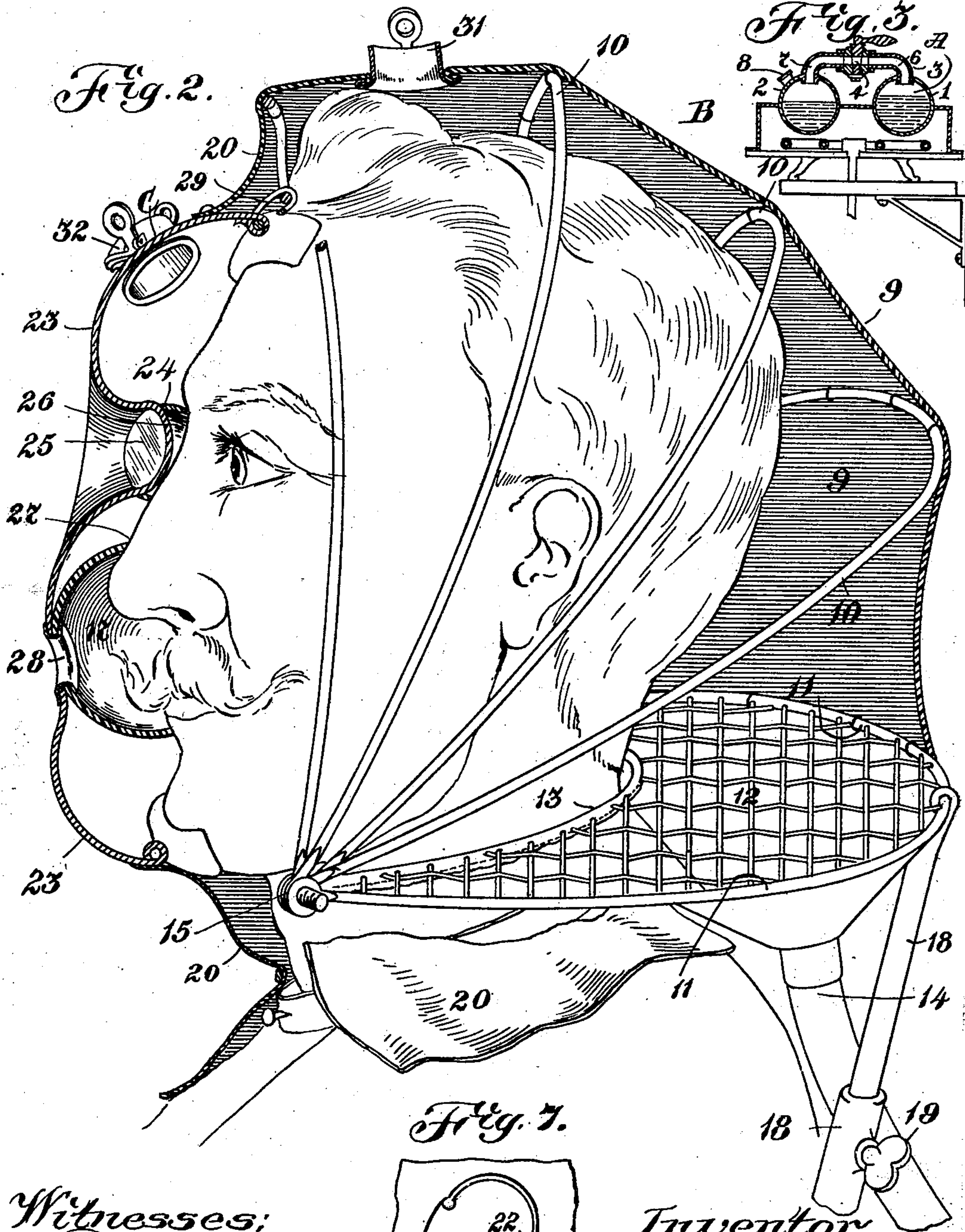
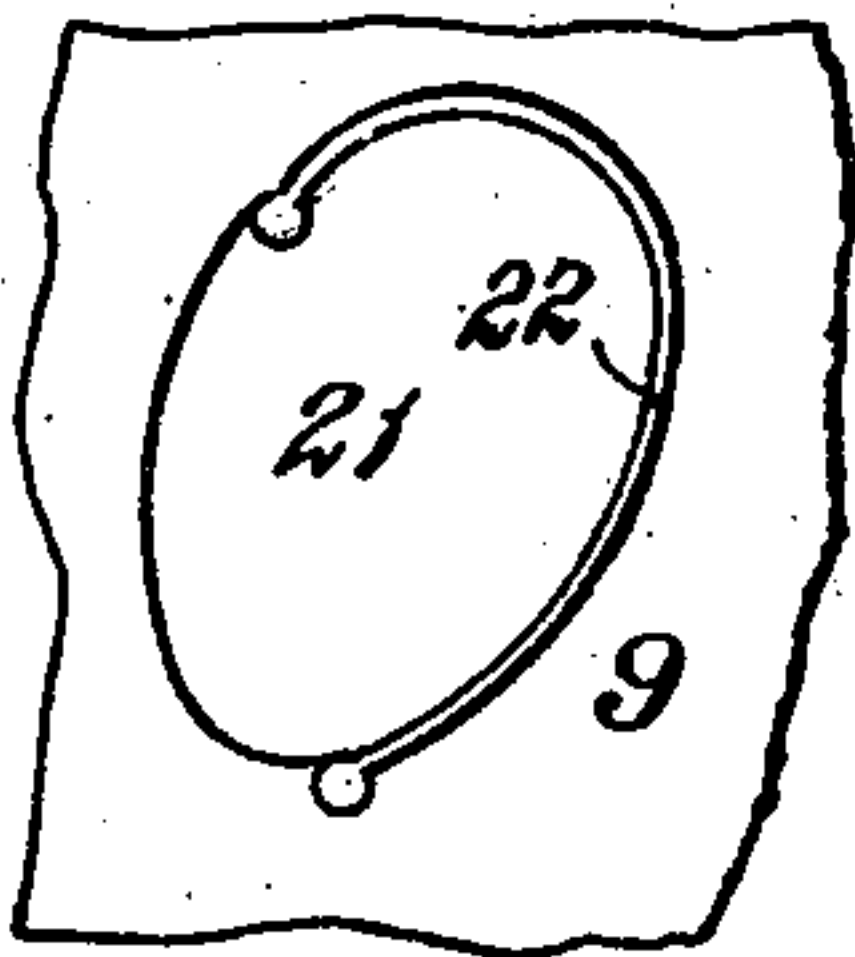


Fig. 7.



Witnesses:

D. Henry Marsh.
Robert L. Carlyle.

Inventor,

Michael J. Fitzgerald

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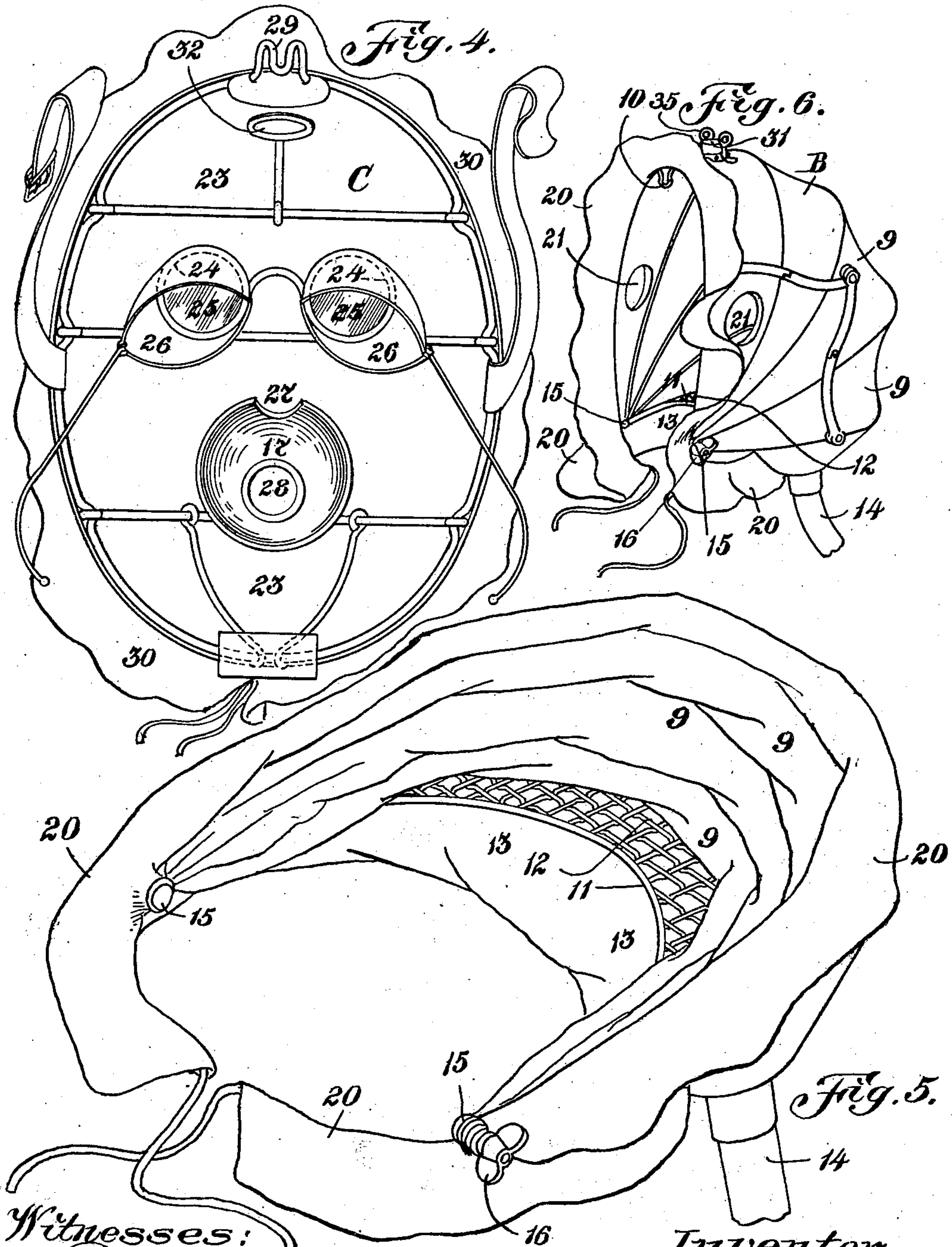
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3 Sheets—Sheet 3.



Witnesses:
J. Henry Marsh.
Robert L. Carlyle.

Inventor,
Michael J. Fitzgerald

UNITED STATES PATENT OFFICE.

MICHAEL J. FITZGERALD, OF BOSTON, MASSACHUSETTS.

DERMAL STEAMING APPARATUS FOR THE HEAD.

SPECIFICATION forming part of Letters Patent No. 686,670, dated November 12, 1901.

Application filed January 2, 1901. Serial No. 41,836. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL J. FITZGERALD, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Dermal Steaming Apparatus for the Head; 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, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide an apparatus for the treatment of the complexion, to improve the same, and to cure or remove cutaneous diseases and blemishes; and said invention consists in subjecting the part that is affected to the action of a medicated vapor from a source of supply.

The invention consists in a means for confining the vapor to the head and face, or either, as the case may require, means for adjusting the same to various angles and heights, and novel construction which makes it possible to expeditiously and conveniently separate the several parts of the apparatus to insure safety and effectiveness when applied.

My invention also consists in providing a means for the protection of the eyes and ears from the vapor and permitting the patient to breathe freely the outside air while undergoing treatment.

To accomplish all these objects, my invention consists in the features of construction and the combination of parts hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved vapor-generator, the hood and mask applied to a person, a second having only the hood applied, and a third with the mask portion of the apparatus in use. Fig. 2 is a sectional view through the hood and mask, showing the same enlarged and the means of supporting and adjusting the hood portion. Fig. 3 is a sectional view of the vapor-generating vessel and connecting-tubes. Fig. 4 is a front view of the mask portion; Fig. 5, a view of the hood detached from the mask, showing the hood collapsed when not in use. Fig. 6

is a modification of the hood; Fig. 7, a detail to be referred to.

In order to enable those skilled in the art to make or use my invention, I will now describe the same in detail, referring to the drawings, wherein—

A indicates a vapor-generating vessel adapted to receive a quantity of water, which may be supported in a convenient place over any suitable heater for the purpose of generating steam. The vessel A is preferably in the form of a cylinder 1, having a similar chamber 2 provided for the purpose of holding the medicated liquid, and each chamber is connected by a series of piping 3 above the level of the liquids and terminating in a three-way cock 4, that connects with the flexible tubing 5. By this construction it will be seen that the tubing being of sufficient length it may convey the vapor to different points, as might be needed in a tonsorial or dermatologist's establishment where several attendants are employed, and a sufficient number of connections 3 are provided to facilitate the work being done by two or more attendants even though there were the same application of the vapor needed by more than one person at the same time. Any one of the cocks 4 admits vapor either from the plain steam-chamber 1 to the tubes 5 through inlet-pipes 6 or from the chamber 2 to the tubes 5, shutting off the inlet-pipes 6 through inlet-pipes 7, or by turning the plug in the three-way cock 4 into a central position the two inlets 6 and 7 will both be opened, allowing the two kinds of vapor contained in the vessel A to amalgamate at this point and enter the particular tube 5 to which it may be attached. This means is adopted for the reason that a plain vapor may be needed or a full-strength medicated vapor or the latter diluted where the vapor full strength might prove too severe. The two cylinders are each provided near their ends on the upper side with nozzles 8 for the purpose of connecting with a water-supply pipe, while the second nozzle will permit a funnel being used to fill with the medicated liquid that is to be converted into vapor. While the cylinders shown here are both horizontal and I employ a length of gas-pipe with a series of jets under each, I do not confine myself to this par-

ticular design, as any double boiler might be used provided it could be properly connected.

I will now describe the collapsible hood B and the mask C, with the several parts that make their construction. Shown in Fig. 2 is the principal view of this part of the apparatus, in which 9 indicates a flexible covering and is retained in shape by bail-formed wires 10, the lowermost one of which, 11, having a mesh of wire 12 extending from one side to the other, and is recessed at 13 to conform to the back of a person's neck, the mesh 12 serving as a support for loose hairs or women's hairs and prevents any clogging in the drainage-tube 14, which is at the lower part of the flexible cover 9, and the bails 10 and 11 all connect, forming a swivel joint or hinge 15 on each end, and when the hood is needed the joined bails referred to are extended to the limit of the flexible covering 9 and retained in a locked position by a suitable thumb screw and nut 16 on each side, the whole forming a permanent fixture, each of the bails forming the hinge 15 in connection with the screw 16. It will readily be seen that owing to the hinge-joints 15, that connect these supporting-levers, any time that the attendant desires these joints 15 may be manipulated in a manner to cause the hood to collapse. The frame that supports this hood is connected with a telescoping brass tube 18 and a thumb-screw 19, which will admit a variety of elevations of the hood B conforming to the different statures of persons when seated, and it may be inserted into the upholstery of the back of a chair, as shown in Fig. 1, or be extended to the floor on a portable base and be free to be moved from one location to another, also as shown in Fig. 1. A surplus of the flexible covering (indicated by 20) extends forward of the bail, that assumes a vertical position when the hood is in use and is intended to make a suitable barrier to prevent any vapor escaping when the scalp only is being treated, the lower ends of this surplus 20 being tied together under the chin, as shown. In this part 20 on each side are two openings 21, the same being provided with spring-wires 22 to snap around the ears, and thus keep them outside of the steam-space, and while protecting them from the same permit a person to hear as usual. (Shown in Fig. 7.)

The mask C is a wire frame of such curvature as to make a suitable support for a covering 23, which may be molded in asbestos or any material best adapted and have two openings 24 24, that have mica fillings 25 25, through which a person may see to read, the inside of each frame having shield portions 26 26, that resemble a pair of eye-protecting spectacles commonly worn by drivers to protect the eyes from dust and cold. The wire frame has also connected to it on the side nearest the face a hollow hemispherical rubber piece 17, notched on its upper side at 27 for the nose, while the remaining portion forms a cushion that surrounds the mouth.

This part 26 forms a chamber in which the outside air is admitted through an aperture 28, rendering breathing easy at all times. The upper edge of the frame is bent into a hook 29 and engages with the bail 10 nearest to it. The surplus 20 is now drawn over the outside of the mask and, as before, tied under the chin, forming one steam-space from the back of the head to in front of the face; but should it prove that a person needed only facial treatment, the mask being detachable from the hood portion, a similar surplus of flexible material 30 is fixed to the mask, and by the spectacles being hooked on over the ears and this surplus 30 tied under the chin, as in the case of using the hood, the mask becomes a distinct steam or vapor chamber needing no other support except the person's head, which may be in a reposed position, if wanted, as a man is while being shaved in a barber's chair.

To the upper side of both the hood and the mask are two inlet-nozzles 31 and 32, respectively, and by common lock-coupling 35, similar to those used on steam-piping connecting the ends of flexible tubes 5, which I employ, may be conveniently connected to either, as the case may require, while a cap or plug might be provided to close the opening when not connected with the supply-tube 5. Adjacent to the end of each tube 5 is a small lever 33, which may be fulcrumed in a sleeve 34 and free to slide on any one of the tubes by an eccentric formed on the lower end of the lever. The attendant can shut off the vapor by operating this lever so that the eccentric will compress the tubing 5 without resource to the generator, probably remotely located.

Having described the several parts that enter into the construction, little need be said to expatiate the advantages of this apparatus over those in use at present, and the need of this class of an apparatus having the foretold advantages is the result of close observation and practice with devices already introduced to the public.

What I claim, and desire to secure by Letters Patent, is—

1. In a dermal apparatus the combination of a hood B and a face-mask C each having inlets 31 32 for vapor from a source of supply, said hood and mask having detachably-connected wire frames whereby a device of a single unitary nature is produced capable of use with both hood and mask and with either, a drain-pipe 14 connected therewith, and a support adapted to hold the hood in a fixed position for the purpose specified substantially as set forth.

2. In a dermal apparatus the combination of a hood B and a face-mask C each having inlets 31 32 connecting with a source of vapor-supply, said hood and face-mask having detachably-connected wire frames to support coverings whereby a device of a single unitary nature is produced capable of use with

both hood and mask and with either, the hood-frame consisting of a series of bails 10 and 11 terminating in a swivel-joint on each side of the hood, a drain-pipe 14 connecting
5 with the hood and a support adapted to hold the hood in a fixed position relatively to the head for the purpose specified substantially as set forth.

3. In a dermal apparatus the combination
10 of a hood B and a face-mask C each having inlets 31 32 connecting with a source of vapor-supply, said hood and mask having detachably-connected wire frames to support coverings whereby a device of a single unitary
15 nature is produced capable of use with both hood and mask and with either, the hood-frame consisting of a series of bails 10 and 11 all terminating in a swivel-joint on each side
20 of the hood, a drain-pipe 14, a support adapted to hold the hood in a fixed position relatively to the head, projecting portions 20 and 30 of the hood and mask coverings to confine the vapor when necessary, for the purpose specified substantially as set forth.

25 4. In a dermal apparatus the combination of a hood B and a face-mask C each having inlets 31 32 connecting with a source of vapor-supply, said hood and mask having detachably-connected wire frames to support cov-
30 erings whereby a device of a single unitary nature is produced capable of use with both hood and mask and with either, the hood-frame consisting of a series of bails 10 and 11 all terminating in a swivel-joint on each side
35 of the hood, a drain-pipe 14, a support adapted to hold the hood in a fixed position relatively to the head, projecting portions of the hood and mask coverings 20 and 30 to confine the vapor when either is used separately,
40 shielded openings for the eyes in the mask, a shield, 17, for the mouth having an open-

ing, 28, in the mask for respiration, for the purpose specified substantially as set forth.

5. In a dermal apparatus the combination of a hood B having an inlet 31 connecting
45 with a source of vapor-supply, said hood having a wire frame to support a covering whereby a device of a single unitary nature is produced, said frame consisting of a series of bails 10 and 11 terminating in a swivel-joint
50 on each side of the hood and a support adapted to hold the hood in a fixed position relatively to the head, for the purpose specified substantially as set forth.

6. In a dermal apparatus the combination
55 of a face-mask C having an inlet 32 for vapor from a source of supply, said mask having a wire frame to support a covering whereby a device of a single unitary nature is produced, said frame consisting of wires having such
60 curvature as to hold the covering away from the face; the cover 23 having openings 21 and 28 and shields 26 for the eyes and 17 for the mouth, for the purpose specified substantially as set forth.

7. In a dermal apparatus the combination
of a hood B having an inlet 31 connecting
with a source of vapor-supply, said hood hav-
ing a wire frame to support a covering where-
by a device of a single unitary nature is pro-
duced; said covering having openings 21 in
each side thereof, the supporting-frame con-
sisting of a series of bails jointed at the sides
for the purpose specified substantially as set
forth.

Witness my hand this 10th day of Decem-
ber, A. D. 1900.

MICHAEL J. FITZGERALD.

In presence of—

DELAVAN C. DELANO,
THEOBALD H. MULLEN.