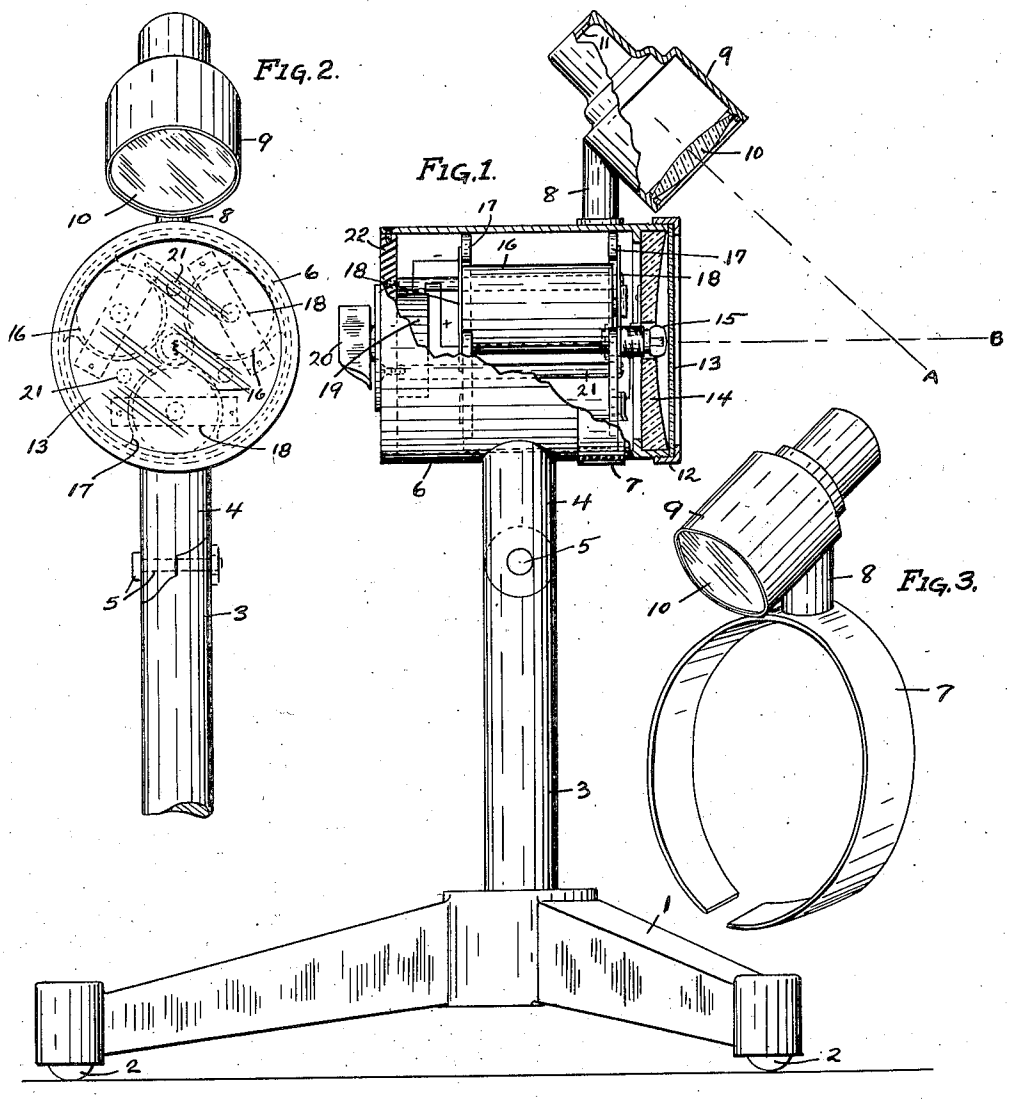
Oct. 6, 1936. L. M. COOPER 2,056,421

APPARATUS FOR EXAMINING THE SKIN

Filed Aug. 6, 1935



INVENTOR
LILLIAN M. COOPER
BY
Miller Boyken & Bried
ATTORNEY

Patented Oct. 6, 1936 2,056,421

UNITED STATES PATENT OFFICE

2,056,421

APPARATUS FOR EXAMINING THE SKIN

Lillian M. Cooper, San Francisco, Calif., assignor to Elmo Sales Corporation, Philadelphia, Pa., a corporation of Delaware

Application August 6, 1935, Serial No. 34,902

4 Claims. (Cl. 88—39)

This invention relates to magnifying apparatus or instruments for examining the skin, particularly of the face and neck of persons afflicted with various skin disorders, and the invention has for its principal object improvements in such apparatus which will make such examinations easier and more certain, and also which will give the patient some idea of the condition of the locality on the face being studied and discussed by the specialist using the apparatus. Other objects and advantages of the invention will appear in the following description and accompanying drawing,

In the drawing Fig. 1 is an elevation of the apparatus shown partly in section to reveal the internal construction of the same.

Fig. 2 is a front view of the upper portion of the apparatus.

Fig. 3 is a detached perspective view of the eye piece and its frictional band for holding it at any point of adjustment around the body of the instrument.

In further detail the apparatus comprises a heavy base or tripod 1, preferably of metal, and provided with rubber or cork leg inserts 2 for supporting the tripod on a smooth table without slipping, and from the upper side of the tripod rises a relatively short central post or column 3 to the upper end of which a shorter section 4 is pivoted by means of a clamping pivot 5. The upper end of the short section 4 of the post is integrally secured to the lower side of a transversely disposed cylinder 6 or casing of relatively large diameter, while resiliently gripped to the exterior of the casing 6 is a split spring ring 7 from which projects a short post 8 to the outer end of which is mounted an eye piece or viewing microscope comprising a lens barrel 9 with one or more object glasses 10 mounted in its forward end, and its rearward end 10 being of reduced diameter and having a viewing aperture 11 which may or may not be fitted with an eye piece lens. The microscope may be revolved around the axis of cylinder 6 and by reason of its spring ring 7 clamping the same will stay wherever placed. It may also be slid longitudinally of the casing if desired, though its furthest forward position is up against the screw collar 12 on the front end of the casing, and when in that position its axis A is directed angularly downward to cross the axis B of the casing, though, as stated, the microscope may be swung around to either side of the casing, but of course its center line will always preferably cross the center line of the casing.

The extreme forward end of the casing is fitted with a plain glass disk 13 in back of which is a silvered concave mirror 14 perforated in its center, and projecting forward from the central opening is a small electric bulb 15 actuated from three small dry cells 16 positioned in a rack 17 fitting between spring contact strips 18 suitably wired to connect the batteries in series, while a rheostat 19 wired to bulb 15 and having a control handle or knob 20 at the rear end of the casing serves to adjust the light from a low glow to full intensity, or off altogether. The entire inner assemblage including batteries and bulb are supported as a unit on several longitudinal rods 21 secured to the rear removable head 22 of the casing, and which head is preferably of insulating material.

The focus of the concave or magnifying mirror is such that when a patient's face is substantially at the intersection of the center lines A and B he will be able to see his skin greatly magnified in the mirror, or that is, that portion or area to which the microscope is directed. The height of the instrument is such as to make it convenient for a seated patient to hold his face in the crossing focal lines when the instrument is on a table, though the casing 6 may be tipped up or down on the post or pedestal to adjust it properly, and the revolvable microscope permits any angle of sight to study a given area of the skin, either under natural light when correctly available, and/or by mixture of artificial light from the bulb 15, or by any intensity of the same up to its maximum capacity. With some conditions of daylight the concave mirror 14 itself, without the aid of light from bulb 15, will be found satisfactory, especially in the examinations of such facial blemishes as where the particular color is important to observe.

Having thus described my improved apparatus and the general manner of its use, what I claim is:

1. Apparatus for examining the skin, comprising a pedestal, a casing mounted at the upper end of the pedestal, a concave mirror at one end of the casing with its reflecting surface directed outwardly, an electric bulb mounted in a recess in said mirror, means for supplying electric current to said bulb, and a viewing magnifier carried on the outer side of said casing directed at an angle substantially to cross the axis of said concave mirror forwardly thereof, said mirror formed and arranged to reflect a clear magnified image of an object positioned in front of it.

2. Apparatus for examining the skin, comprising a pedestal, a casing mounted at the upper end of the pedestal, a concave mirror at one end

of the casing with its reflecting surface directed outwardly, an electric bulb mounted in a recess in said mirror, means for supplying electric current to said bulb, and a viewing magnifier carried on the outer side of said casing directed at an angle substantially to cross the axis of said concave mirror forwardly thereof, and means mounting said viewing magnifier on said casing in a manner to be revolvable bodily around said casing and slidable longitudinally thereon, said mirror formed and arranged to reflect a clear magnified image of an object positioned in front of it.

3. Apparatus for examining the skin, comprising a pedestal, a casing mounted at the upper end of the pedestal, a concave mirror at one end of the casing with its reflecting surface directed outwardly, an electric bulb mounted in a recess in said mirror, means within said casing for supplying electric current to said bulb, and a viewing magnifier carried on the outer side of said casing directed at an angle substantially to cross the axis of said concave mirror forwardly thereof, and means for varying the intensity of light from said electric bulb, said mirror formed and arranged to reflect a clear magnified image of an object positioned in front of it.

4. Apparatus for examining the skin, comprising a pedestal, a casing mounted at the upper end of the pedestal, a concave mirror at one end of the casing with its reflecting surface directed outwardly, an electric bulb mounted in a recess in said mirror, means for supplying electric current to said bulb, and a viewing magnifier carried on the outer side of said casing directed at an angle substantially to cross the axis of said concave mirror forwardly thereof, said recess being in the center of said mirror and said bulb projecting forward of said mirror so that its light will be reflected forwardly therefrom, said mirror formed and arranged to reflect a clear magnified image of an object positioned in front of it.

LILLIAN M. COOPER.