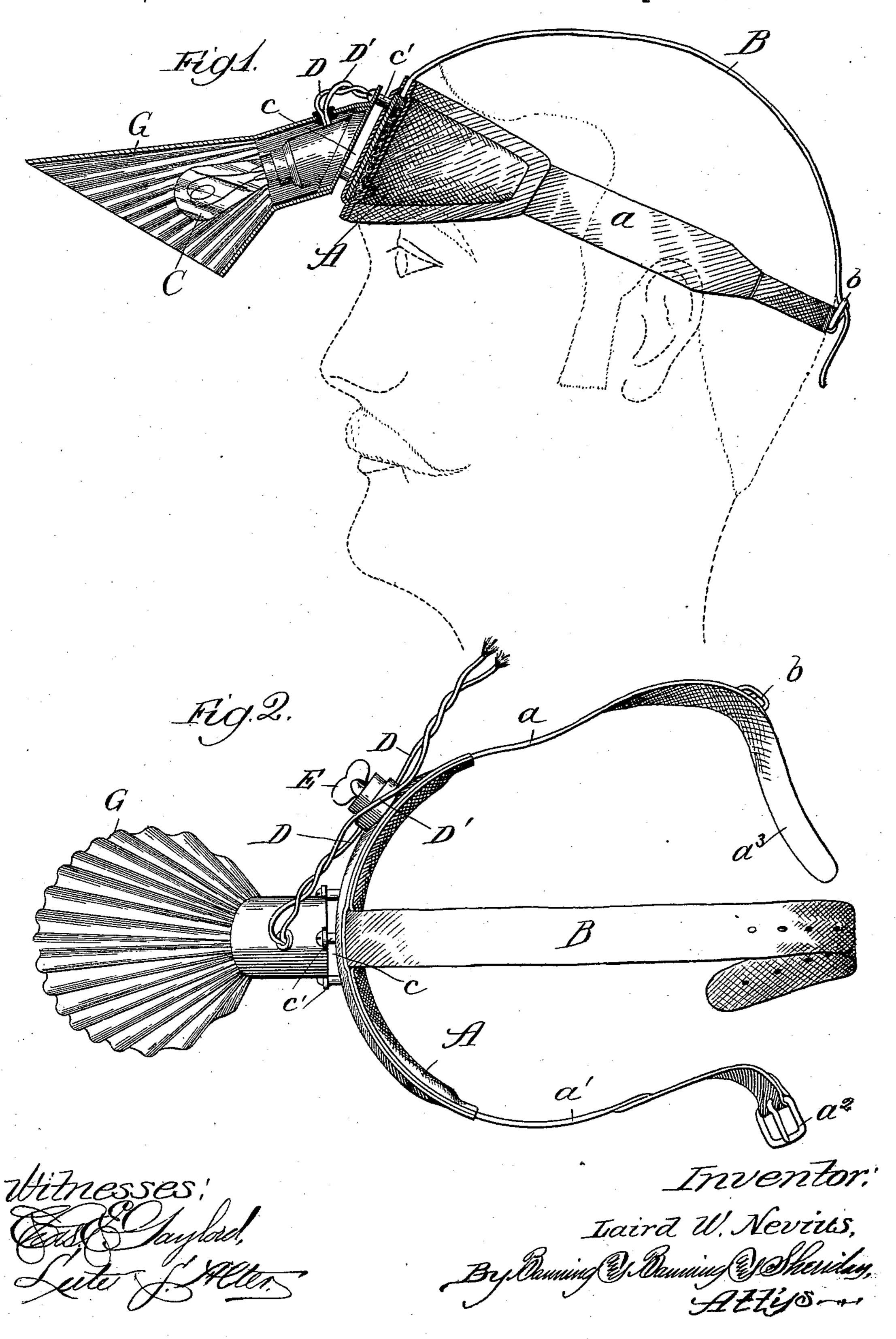
## L. W. NEVIUS.

ELECTRIC LIGHT AND HEAD GEAR FOR SURGICAL USE.

No. 581,129.

Patented Apr. 20, 1897.



## United States Patent Office.

LAIRD W. NEVIUS, OF CHICAGO, ILLINOIS.

## ELECTRIC LIGHT AND HEAD-GEAR FOR SURGICAL USE.

SPECIFICATION forming part of Letters Patent No. 581,129, dated April 20, 1897.

Application filed March 20, 1896. Serial No. 584,103. (No model.)

To all whom it may concern:

Be it known that I, LAIRD W. NEVIUS, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Electric Lights and Head-Gear for Physicians and Surgeons, of which the following is a specification.

The object of my invention is to provide a simple, economical, and efficient incandescent electric light and means for supporting it on the head, so that the physician or surgeon may use the same in operative surgery or dentistry; and the invention consists in the features, combinations, and details of construction hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of my improvement, partly in section, showing the means by which it is supported and positioned; and Fig. 2, a plan view of my improvement, looking at it from the top.

In operative surgery or dentistry, as well as in the general practice of medicine, it is often both desirable and necessary for the doctor to be provided with a light so arranged that the rays will be concentrated upon his work or the portion to be operated on, while at the same time leaving his hands free and his eyes unencumbered. This is particularly the case when operations have to be performed at night and the rays of surrounding lamps or lights might be apt to interfere with perfect conditions.

To provide an incandescent electric lamp so constructed that its rays may be focused or thrown on a desired object and arrange it to be efficiently worn on the head is the principal object of my invention.

In constructing my improvement I make a head-gear consisting of a band A, padded and cushioned, preferably, with non-conducting material to protect the forehead from the heat of the lamp. This band is provided with extending bands a a', one of which is provided with a buckle a<sup>2</sup> and the other with a strap a<sup>3</sup>, so that the same may be adjusted or tightened to fit any size of head. One of these portions a or a' may be made elastic, if desired, for the purpose of getting the necessary tension or fit on the head. A band B is secured to the front portion of the main band and arranged to be

passed across the top of the head and fastened to a buckle b on one of the bands a, so that this also is adjustable for the purpose of positioning the lamp at the right portion of 55 the head.

An incandescent lamp C is provided and secured to a base portion c, which is held out from the band on lugs c' so as to make an airspace c, through which the air may circulate 60 and keep the parts cool. The filaments of the lamp are provided with the usual terminals, to which are secured insulated cables D D', adapted to be connected with any suitable source of electric energy. A switch portion 65 E is arranged on the main portion of the band and connected with the cable D intermediate the sources of energy and the light, so that the operator has it at all times in his power to shut off or turn on the current when desirable 70 or necessary with the least amount of trouble and inconvenience. The lamp portion proper is provided with a shade and reflector G to concentrate and throw the rays in the desired manner as well as to keep them out of the eyes 75 of the operator.

The advantages of my improvement are obvious, as it will be seen that the surgeon, doctor, or dentist may wear one of these headgear lights and concentrate the light as described, thus enabling him to perform his operations with the greatest efficiency and skill.

I claim— In an incandescent lamp for surgeons, &c., the combination of an adjustable main band 85 adapted to fit around the head, an adjustable supplementary band secured to the main band and adapted to be passed across the top of the head, a non-heat-conducting pad or pads secured to the main band, a base portion, c, for 90 holding the electric lamp, lugs, c', by which the base portion is secured to the main-band portion so as to provide an air-space between such portions, a switch on the main-band portion, and a wire connecting the switch and 95 lamp and adapted to connect the parts with a source of electric energy, substantially as described.

LAIRD W. NEVIUS.

Witnesses:

THOMAS F. SHERIDAN, THOMAS B. MCGREGOR.