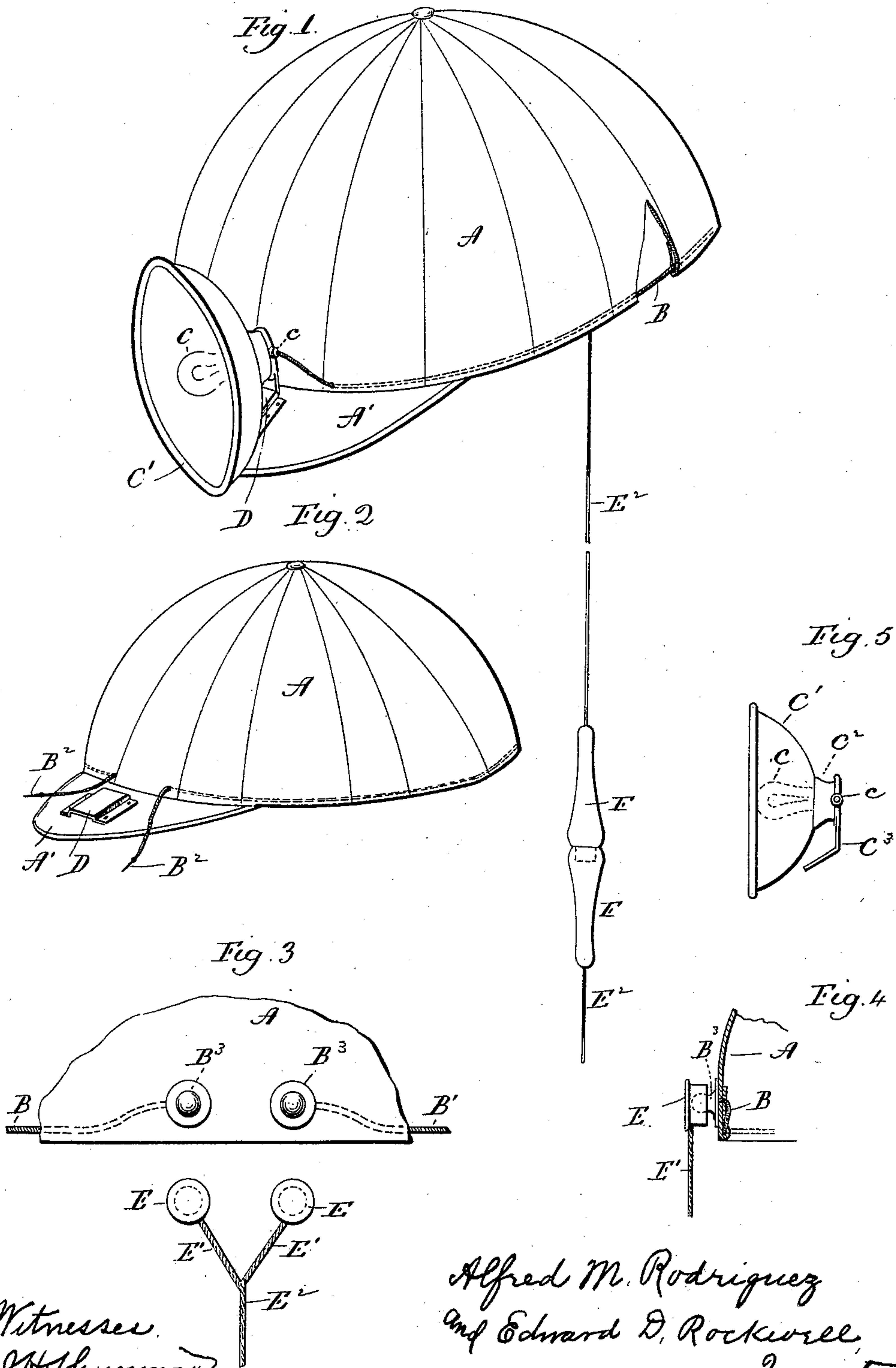


(No Model.)

A. M. RODRIGUEZ & E. D. ROCKWELL.
ELECTRIC LIGHT HEAD GEAR FOR PERSONAL WEAR.

No. 539,192.

Patented May 14, 1895.



Witnesses.
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UNITED STATES PATENT OFFICE.

ALFRED M. RODRIGUEZ, OF BROOKLYN, NEW YORK, AND EDWARD D. ROCKWELL, OF BRISTOL, CONNECTICUT.

ELECTRIC-LIGHT HEAD-GEAR FOR PERSONAL WEAR.

SPECIFICATION forming part of Letters Patent No. 539,192, dated May 14, 1895.

Application filed February 25, 1895. Serial No. 539,614. (No model.)

To all whom it may concern:

Be it known that we, ALFRED M. RODRIGUEZ, of Brooklyn, in the county of Kings and State of New York, and EDWARD D. ROCKWELL, of Bristol, in the county of Hartford and State of Connecticut, have invented a new Improvement in Electric-Light Head-Gear for Personal Wear; and we do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of a cap constructed in accordance with our invention and having an electric lamp applied to it; Fig. 2, a similar view of the cap with the electric light removed; Fig. 3, a broken rear view of the cap, showing the contact-buttons provided for the removable attachment of the spring-sockets connected with the body-wires; Fig. 4, a detached broken view, partly in vertical section and partly in elevation, showing one of the spring-sockets applied to one of the contact-buttons; Fig. 5, a detached view, in side elevation, of one form which the lamp may assume.

Our invention relates to an improved cap, particularly designed for the use of bicyclists, the object being to produce a cap adapted to be worn like an ordinary cap, and also to have an electric-lamp removably connected with it.

With these ends in view, our invention consists in the combination with a cap, of electric wires permanently applied thereto, and terminating at their rear and forward ends in contact points adapting the cap to have an electric lamp and body wires removably connected with it.

Our invention further consists in certain details of construction and combinations of parts as will be hereinafter described, and pointed out in the claims.

In carrying out our invention, as herein shown, we employ a cap A, having a visor A', and of ordinary appearance and general construction. To this cap we permanently apply two electric wires B B, respectively extending from front to back in its opposite edges, within which they are concealed. For

convenience of description, these wires will be hereinafter spoken of as "cap-wires." At their forward ends the cap wires emerge from the cap at a point above the visor thereof, and terminate in contact-pins B² B², while the rear ends of the said wires terminate in contact buttons B³ B³, placed side by side in the same horizontal plane. The particular character of the terminals of the cap-wires may, however, be changed as desired.

As herein shown, the electric lamp C, which may be of any approved construction, is located centrally within a cup-shaped reflector C', furnished at its rear end with a neck or shank C², provided with two oppositely located nipples c c, which respectively receive the contact-pins B² B², forming the terminals of the forward ends of the cap-wires B B before described. From the said shank or neck C² depends a plate or foot C³, adapted to be inserted into a sheet-metal clip or socket D, secured to the upper face of the visor A', in the center thereof, whereby the lamp may be readily attached to and removed from the cap, which may therefore be worn with or without the lamp, as desired. To connect the lamp with the cap, its foot C³ is inserted into the socket D, after which the contact-pins B² B² are inserted into the nipples c c before mentioned. On the other hand, to remove the lamp, the contact-pins B² B² are withdrawn from the nipples c c, after which the foot C³ is withdrawn from the socket D.

The contact-buttons B³ B³ forming terminals for the rear ends of the cap-wires B B, are respectively designed to receive in removable attachment, spring sockets E E, respectively connected with wires E' E', which we shall hereinafter call the "body-wires" to distinguish them from the "cap-wires" B B. The contact-buttons B³ B³ and the spring sockets E E correspond, as shown, to the ordinary button and spring-socket of a glove-fastening, but of course, they may take a great variety of forms, and we do not limit ourselves to what we have shown.

The wires E' E' are woven together in a cable E², which passes downward under or over the coat of the wearer of the cap. The said body-wires are connected at their lower ends with a source of electric energy, such,

for instance, as a small dynamo carried by the bicycle and operated thereby, or a small storage battery, or by a small electric generator, or by any other source of electric energy, whether carried by the bicycle or the person wearing the cap. It will be found very convenient to pass the cable E^2 under the coat collar, and down under the coat, but of course that way of wearing the device is not essential, however convenient it may be.

In case the means employed for supplying a current to the lamp are carried by the bicycle, we shall preferably locate in the cable, a separable coupling of some approved construction, such, for instance, as the coupling shown in connection with Fig. 1, and consisting of two members F and F' , which it is thought do not need detailed description. These members remain coupled under ordinary conditions, but not so firmly but that they will separate under any unusual strain, so that in case the wearer of the cap should dismount from the machine without first separating the coupling members, they will separate themselves without injury to any of the connections, and without the danger of pulling his cap off. In case a storage battery or small generator is employed and carried in the pocket of the wearer of the cap, such a coupling would not be necessary.

It will be understood, of course, that when the lamp is removed from the cap, the body-wires are disconnected therefrom, leaving the cap free to be worn and used in exactly the same manner and with exactly the same freedom that it could be worn and used if it were not provided with permanently applied cap-wires terminating at their rear and forward ends in contact-points which may be arranged and concealed so that the cap will present the appearance of an ordinary cap, and will not be distinguished therefrom by the ordinary observer.

It will readily be seen that a lamp carried by the cap upon the head of a bicycle rider, possesses advantages which cannot possibly be secured by a lamp carried fastened to his wheel, or upon his breast, for the location of the lamp upon the cap enables the rider to throw the light in any direction with the utmost ease, the light following the direction in which he wishes to look, while on the other hand, a light fixed to the machine is limited to illuminating a small section of the road directly in front of the machine, and a light worn on the breast of the rider is also limited

to illuminating the contracted space which he can cover by moving his body.

It is apparent that in carrying out our invention the details of construction of the cap and the lamp and their various connections may be widely varied. We would, therefore, have it understood that we do not limit ourselves to the exact construction herein shown and described, but hold ourselves at liberty to make such changes and alterations as fairly fall within the spirit and scope of our invention. Thus, instead of employing the contact-points $B^2 B^2$ in the form of pins, they might be located entirely within the socket D , and adapted to have frictional engagement with the foot C^3 connected with the stem C^2 of the reflector C' . By arranging the contact-points within the socket D , they would be concealed from view and protected thereby, and would dispense with the manipulation of the points $B^2 B^2$ in removing and applying the lamp.

We are aware, however, that a fillet or band adapted to be worn on the head, and to have an electric lamp connected with it, is old, and we do not claim broadly means for adapting an electric lamp to be worn upon the forehead.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination with a cap adapted to be worn upon the head, of two cap-wires permanently applied thereto, and terminating at their rear and forward ends in contact points, substantially as set forth, and whereby an electric lamp and wires supplying a current thereto may be removably connected with the cap, substantially as described.

2. The combination with a cap adapted to be worn upon the head, of cap wires permanently located therein and terminating at their rear and forward ends in contact points, an electric lamp arranged to be removably connected with the cap and the contact points at the forward ends of the wires, and body-wires adapted to be removably connected with the contact points, forming the terminals of the rear ends of the cap wires, substantially as described.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

ALFRED M. RODRIGUEZ.
EDWARD D. ROCKWELL.

Witnesses:

FRED C. EARLE,
J. H. SHUMWAY.