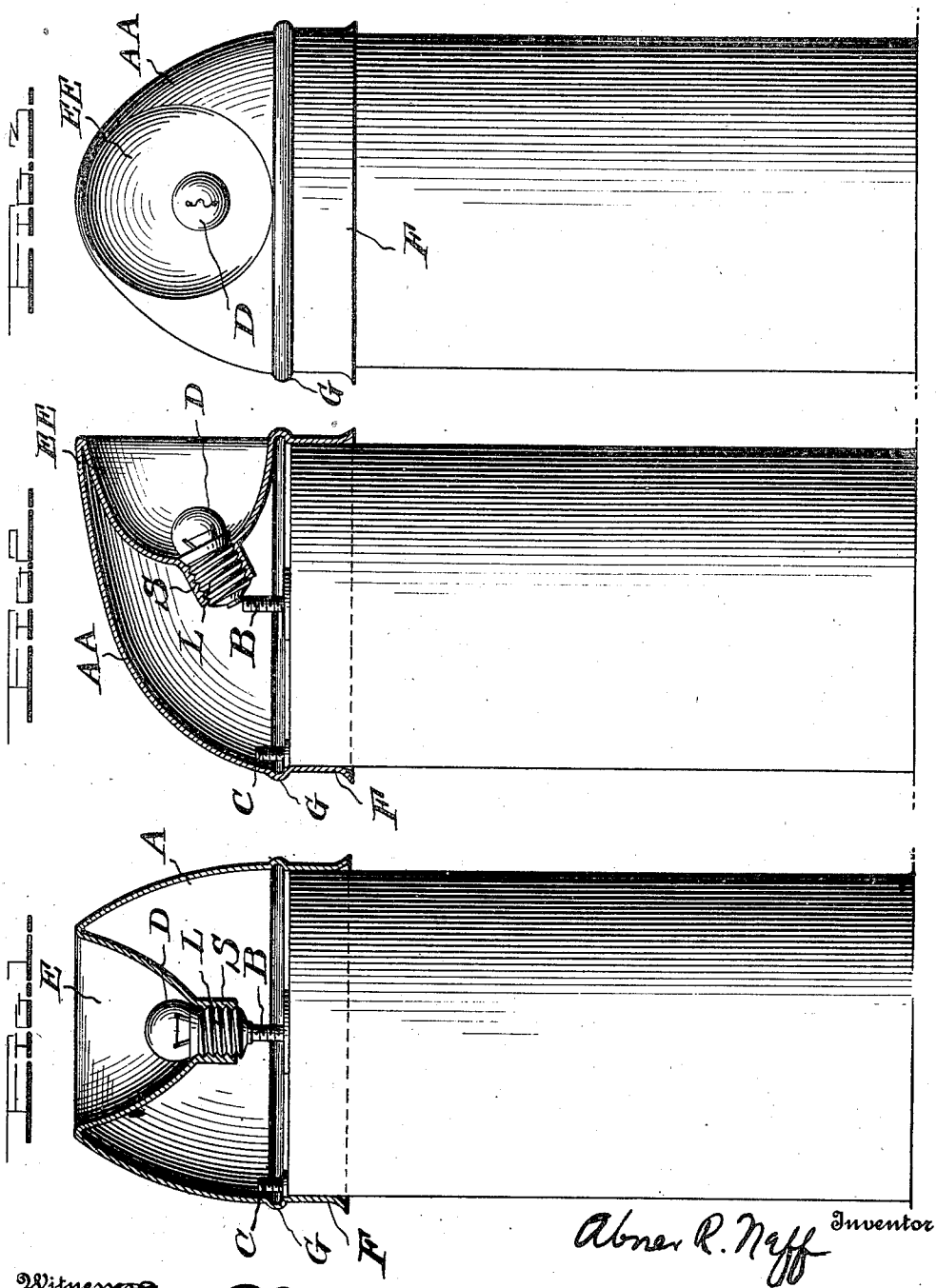
A. R. NEFF.

ELECTRIC CAP LIGHT.

APPLICATION FILED NOV. 20, 1913.

1,093,287. Patented Apr. 14, 1914.



Witnesses
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ELECTRIC CAP-LIGHT.

1,093,287. Specification of Letters Patent. Patented Apr. 14, 1914.

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To all whom it may concern:

Be it known that I, ABNER R. NEFF, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Electric Cap-Light, of which the following is a specification.

The object of my invention is to provide an electric cap light which shall combine the functions of electric bulb holder, reflector, current contact maker and light, which can be made in one piece, and for which there is no switch, insulation or other usual devices or parts required.

It is a primary object of my invention to provide an electric cap light and reflector combined which can be conveniently used with the ordinary commercial dry battery.

It is also an object of my invention to provide a modified form of my invention capable of reflecting light at right angles to the dry battery to which the cap light is fitted.

A further object of my invention is the provision of a simple form of cap for the operation of the light by simply sliding the cap on the top of a dry battery, and which will turn the light on or off by lowering or raising the cap on the dry battery.

Simplicity and consequent economy or cheapness of manufacture are also objects of my invention.

It is also an object of my invention to provide an electric cap light which can be conveniently employed by automobile users to locate leaks in gas line, etc., and which can also be used in coal mines where there is dangerous gas.

It is also an object of my invention to provide a cap member of such form as to render this electric cap light available for use on different batteries, where there may be unevenness or difference in length of the poles, by merely raising or lowering the cap to the necessary extent on the different batteries.

Figure 1 is a longitudinal vertical section of my electric cap light, applied to an ordinary dry battery, the battery being shown in elevation; Fig. 2 is a similar view of a modified form of my invention, in which the reflector is positioned to reflect light laterally; Fig. 3 is a front elevation of the form of my invention illustrated in Fig. 2. Like characters of reference are employed to designate identical parts in the several views.

In the form of my invention illustrated in Fig. 1, I provide a metal cap A having an interior peripheral groove G near its base and having the edge of the metal cap A forming a slightly flaring peripheral flange F of sufficient depth to allow the cap to be readily fitted over a dry battery. My metal cap A is shaped so that a portion of it forms a reflector E, which is provided with a socket S in which is mounted the base L of a small incandescent lamp D. In the primary form of my invention, illustrated in Fig. 1 the reflector portion of the metal cap is centrally positioned and reflects light in a longitudinal direction relative to the battery on which the cap is mounted. The cap and reflector are integrally formed, and the socket may be secured to or formed with the reflector.

It is within the contemplation of my invention to form slits or openings on the sides of metal cap A, to admit of wiring to terminals should it be desired to use my invention in connection with two or more batteries. My invention is intended for use with any standard commercial dry battery. The metal cap itself forms the conducting member and no switch, insulation, or the like is employed. In the drawings, B indicates the positive terminal and C the negative terminal of the battery.

The mode of using my electric cap light is to slide the cap over the top of a dry battery, until the outer edge of the metal cap makes a connection with the negative pole or terminal of the battery and the base of the incandescent lamp contacts with the positive pole or terminal in the center of the dry battery, thus completing the circuit and producing the light. To shut off the light, the cap is raised slightly, which disconnects the base of the lamp from the positive terminal and breaks the circuit.

The metal cap flange which fits over top of battery is made deep so that it can be slid up and down and still retain its place and thus make up for the unevenness or difference in length of the poles of different batteries.

In case the positive or center pole is slightly out of center, the difference is made up by leaving the small brass nut that comes with the battery on this terminal, as it has

sufficient surface to make up for the pole being out of center. This brass nut can be screwed up or down to meet the lamp base, as required.

I have also devised a modified form of my electric cap light, illustrated in Figs. 2 and 3, having an arched metal cap AA, and a reflector portion EE, formed integrally with cap AA and positioned so as to reflect light in a horizontal or lateral direction relative to the battery. In other respects this form of my invention is the same in construction and operation as the form first described.

What I claim is:

1. An electric cap light consisting of a metal cap slidingly engageable over the top of a dry battery, said cap having an arcuate side and top portion, a reversely arcuate reflector portion integrally formed therewith, said reflector portion having its axis or median line horizontal, and a flanged portion integrally formed with the aforesaid cap, and an incandescent lamp mountable in the aforesaid socket, substantially as set forth.

2. An electric cap light consisting of a metal cap having an interior peripheral groove, a slightly flaring peripheral flange adapted to engage over the top of a dry battery, a reflector, and a lamp socket in the reflector portion, all integrally formed, in combination with an incandescent lamp mountable in the aforesaid socket.

In witness whereof I hereunto affix my signature in the presence of two witnesses.

ABNER R. NEFF.

Witnesses:

O. E. KELLUM,

CHAS. LARZELERE.