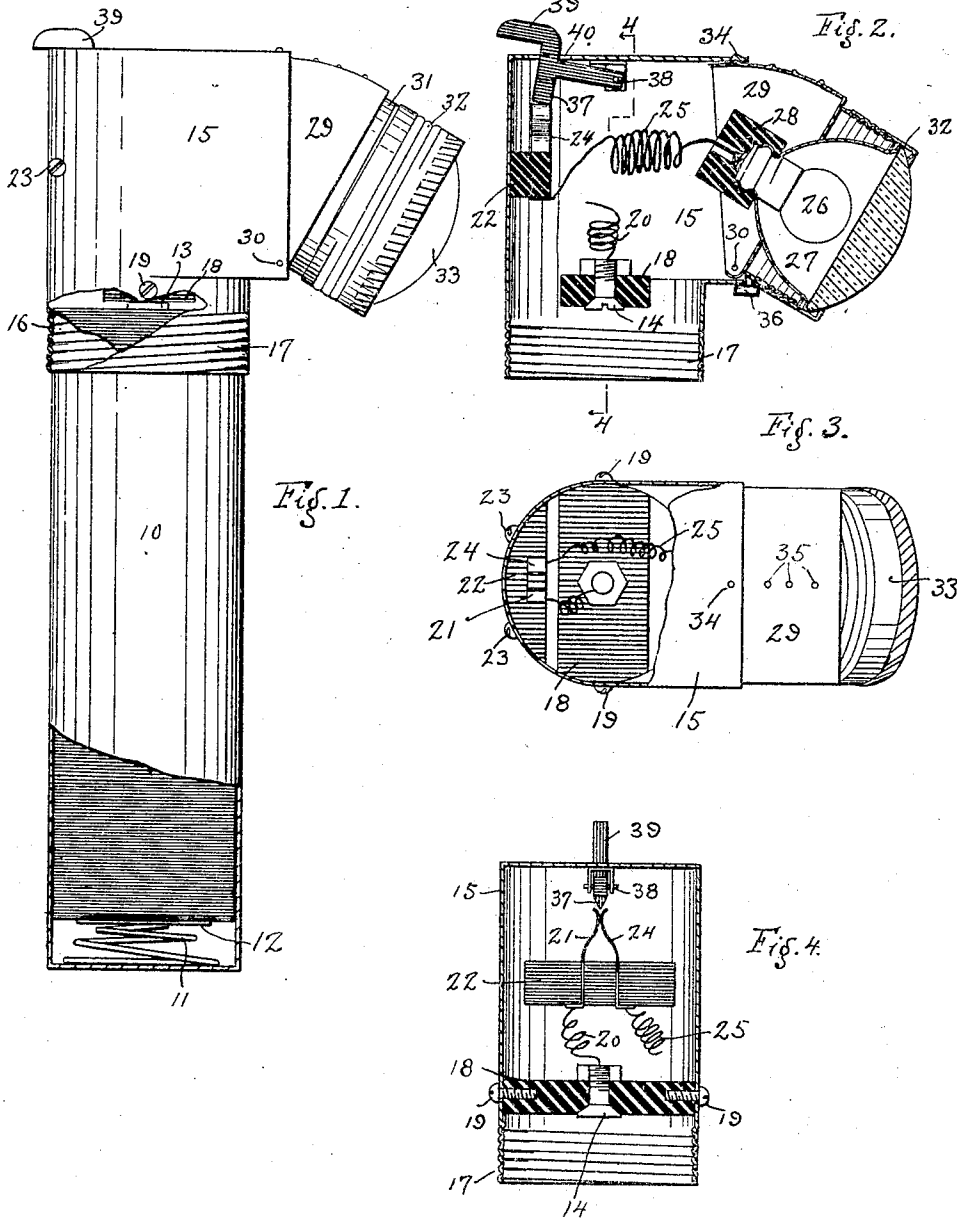


J. G. SWALLOW.
ELECTRIC POCKET LAMP.
APPLICATION FILED MAY 10, 1913.

1,119,663.

Patented Dec. 1, 1914.



Witnesses:
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ELECTRIC POCKET-LAMP.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH G. SWALLOW, a citizen of the United States of America, and residing in the city, county, and State of New York, have invented a certain new and Improved Electric Pocket-Lamp, of which the following is a specification.

My invention relates to electric pocket lamps and the object of my invention is to provide a device of this character which is simple, economical and efficient in construction and by which a novel control of the direction of the light and of the lamp circuit is secured.

In the accompanying drawings, Figure 1 is a broken side elevation of a pocket lamp of one type in which my invention is embodied; Fig. 2 is a vertical section through the upper portion of the casing; Fig. 3 is a broken plan thereof; and Fig. 4 is a section on the line 4—4, Fig. 2.

Pocket lamps of this general character are usually provided with a casing in which a dry battery is inclosed, one end of the casing having a bull's eye electric lamp electrically connected through a switch to the battery terminals. The lamp and its reflector are generally arranged to project the light only in the direction of the long axis of the casing. For many purposes this is not convenient. Furthermore, the location of the switch is often such as to make its use inconvenient and troublesome, with the result that the battery strength is wasted simply because it is too much bother to turn the switch off temporarily during an intermittent use of the lamp.

The present construction is designed to render the direction of the light from the switch adjustable and to provide a conveniently arranged and easily operated switch mechanism.

The invention is here shown applied to a battery casing 10 of the cylindrical type, with a spring 11 at one end which not only forms a conductor between the battery terminal 12 and the casing, but also serves to press the battery upward so that a close contact is secured between the other battery terminal 13 and the contact 14 carried by the

removable end casing or hood 15. The cylindrical casing is of ordinary construction, as is likewise the casing contact spring and battery. My invention resides primarily in the end casing or hood 15 and its related parts.

The upper end of the cylindrical casing 10 is provided as usual with a threaded ferrule 16 or the like, and the lower portion of the hood 15 is correspondingly threaded at 17 so that the screwing down of the hood on the casing serves to mechanically secure the parts together as well as to bring the battery terminal 13 into electrical connection with the contact 14. The latter is insulated in any suitable manner from the hood 15, the shell of which is here shown constructed throughout of metal. As a simple expedient, I have mounted it in a cross bar 18 of insulating material such as fiber which is held in position by screws 19 passing through the casing. A wire 20 connects the contact 14 with the spring switch terminal 21 carried by the block of insulation 22 likewise secured to the hood casing by screws 23. A second spring switch terminal 24 is mounted on the insulation 22 and is so arranged with relation to the terminal 21 that their free ends are normally in contact so that the circuit therethrough is completed. A conductor 25 leads from the terminal 24 to the center contact of the lamp 26, the shell contact of the latter being constantly made through the metal of the battery and hood casings to the metal reflector 27 in the base of which the shell of the lamp is soldered. A thimble 28 of insulation may be secured around the shell contact end of the lamp to prevent accidental contact between the latter and the center contact conductor 25.

The lamp and reflector are mounted in a segmental carrier 29 pivoted at 30 in the hood and provided with a cylindrical threaded boss 31 over which the edge of the reflector lies and against which it is clamped by the screw ring 32 which holds the bull's eye lens 33 in position. Any suitable means such as a pin prick 34 in the hood and a series of small indentations 35 in the top

of the segmental carrier 29 may be provided to keep the latter in adjusted position. A stop 26 may also be provided to limit the downward swing of the carrier on its pivot 30.

5 The switch terminals 21 and 24 are normally in contact so that the battery circuit is closed through the lamp. To open the circuit I provide a wedge 37 of insulating material such as fiber and operated in any
10 suitable manner. Here it is pivoted at 38 within the hood and has an operating finger piece 39 which extends out through the slot 40. To open the battery circuit, it is only necessary to depress the finger piece 39
15 which serves to separate the switch contacts through the action of the wedge 37. The upward movement of the wedge of course permits the switch terminals to resume their normal position in contact with the circuit
20 completed through the lamp.

It will be observed that the hood elements are self-contained in the sense that the hood has only to be screwed down on the shell of the usual cylindrical pocket lamp casing
25 to establish the electrical connections. The hood may thus be sold as a separate attachment for pocket lamps, already on the market, a feature of considerable value.

The device has a varied utility, but it will
30 be particularly valuable to meter readers, etc., who have not only to note the reading of a meter (usually in a dark cellar), but must make a memorandum of the reading at once. For the latter purpose both hands
35 must be free. The present lamp may be conveniently dropped into the outside breast pocket of a man's coat after a reading has been made, and in this position the light will be thrown down upon the book carried in the
40 user's left hand, leaving the right hand free to make the entry.

Various modifications of detail will readily suggest themselves.

I claim as my invention:—

45 1. An electric pocket lamp comprising a battery casing and an end closure therefor having electrical conductors automatically brought into the battery circuit upon the adjustment of the closure, a lamp pivotally
50 mounted on said end closure, a switch carried by the latter and an electrical connection through said switch to the lamp, for the purpose described.

2. An electric pocket lamp comprising a
55 battery casing, an end closure therefor, a lamp pivotally mounted on the latter and arranged to direct its light at an angle to the axis of the battery casing, a switch in the lamp circuit and an operating member there-
60 for projecting through the end of the closure member.

3. An electric pocket lamp comprising a battery casing, an end closure therefor, a lamp carried by the latter and adapted to

be swung through an angle cutting the axis 65 of the battery casing, and a switch to control the circuit through the lamp, said switch being operative to complete the lamp circuit when the lamp is at an angle to the axis of the battery casing. 70

4. An electric pocket lamp comprising a battery casing, an end closure therefor, a contact carried by the latter and adapted to en-
75 gage a battery terminal in the adjusted position of the parts, a lamp and a switch carried by the end closure and a connection through said switch to the lamp from said contact, said switch being operative to com-
80 plete the lamp circuit when the lamp is at an angle to the axis of the battery casing, substantially as described.

5. An electric pocket lamp comprising a battery casing, an end closure therefor, a contact carried by the latter and adapted to en-
85 gage a battery terminal in the adjusted position of the parts, a lamp pivoted on said closure, a switch carried by the latter and a connection through said switch to the lamp from said contact.

6. An electric pocket lamp comprising a 90 battery casing and an end closure therefor having electrical conductors automatically brought into the battery circuit upon the adjustment of the closure, a lamp pivotally
95 mounted on said end closure, a switch carried by the latter and an electrical connection through said switch to the lamp, together with means for holding said lamp in predetermined angular position.

7. An electric pocket lamp comprising a 100 battery casing, an end closure therefor comprising a lamp, switch terminals on said closure normally in closed condition and a switch plunger for separating said terminals to open the circuit, substantially as de- 105 scribed.

8. An electric pocket lamp comprising a battery casing open and threaded at one end, a threaded hood adapted to be screwed on said casing, a sector pivoted on said hood, 110 a lamp and bull's eye carried by said sector, a switch carried by the hood and electrical connections through said switch to the lamp.

9. In an electric pocket lamp, a casing and a hood detachably connected to said casing, 115 a sector pivoted on said hood, a lamp carried by said sector, a switch mounted on the hood and electrical connections through said switch to the lamp.

10. In an electric pocket lamp, a cylin- 120 drical casing open at one end, a battery within and making electrical contact at one terminal with said casing, a hood detachably mounted on and in electrical contact with said casing, a conductor making electrical 125 contact with the other battery terminal in the adjusted position of said hood, a switch carried by the hood, a lamp pivotally mount-

ed on the hood and electrical connections to one terminal of said lamp through said switch, the other lamp terminal being electrically connected to the battery through the hood and battery casing, substantially as described.

In testimony whereof I have signed my

name to this specification, in the presence of two subscribing witnesses.

JOSEPH G. SWALLOW.

Witnesses:

JOHN C. CARROLL,
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