C. CAMPBELL.

LAMP.

APPLICATION FILED FEB. 1, 1917.

1,289,113. Patented Dec. 31, 1918.

Fig: 1.

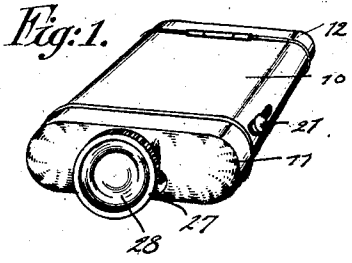


Fig: 2.

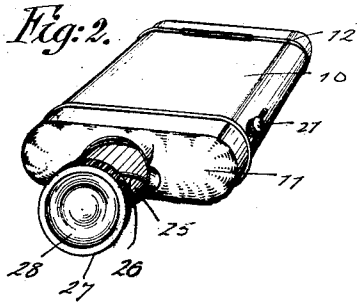


Fig: 3.

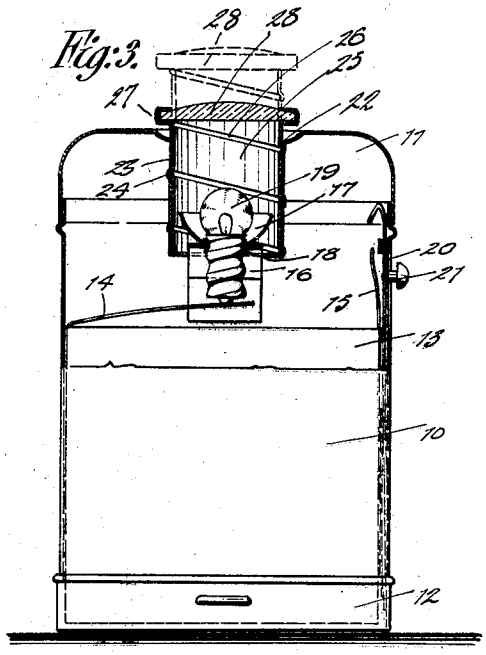


Fig: 4.

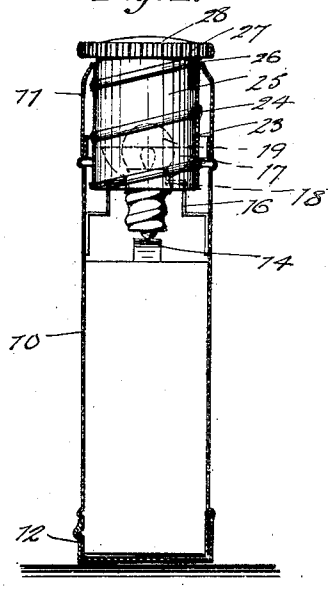


Fig: 5.

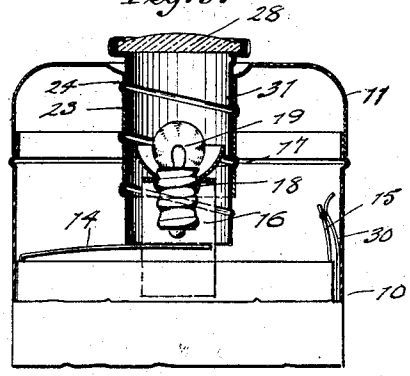
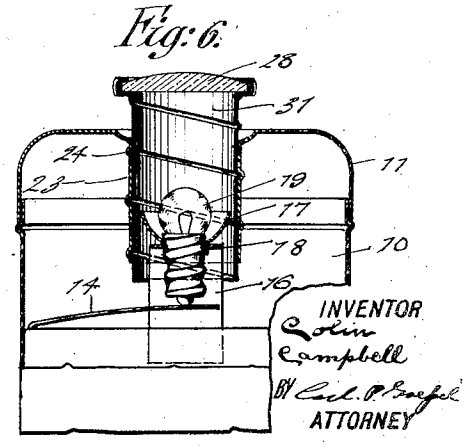


Fig: 6.



UNITED STATES PATENT OFFICE.

COLIN CAMPBELL, OF NEW YORK, N. Y.

LAMP.

1,289,113. Specification of Letters Patent. Patented Dec. 31, 1918.

Application filed February 1, 1917. Serial No. 145,862.

To all whom it may concern:

Be it known that I, COLIN CAMPBELL, a citizen of the United States, and resident of the borough of Manhattan, in the city, county, and State of New York, have invented certain new and useful Improvements in Lamps, of which the following is a specification.

The present invention relates to improvements in lamps, and particularly pocket lamps, an object of the invention being to provide such a lamp having a focusing lens to enable the light to be concentrated or disseminated as desired, and in which such focusing lens will be compact, simple in construction and convenient of manipulation. A further object is to provide such a device in which the focusing lens may be employed as a circuit breaker, so that upon extending the same to any degree, the circuit will be closed and the lamp lighted.

With these and other objects in view, embodiments of my invention are shown in the accompanying drawings, and will be hereinafter more fully described with reference thereto, and the invention will be finally pointed out in the claims.

In the drawings;

Figures 1 and 2 are perspective views showing my improved lamp in the normal position, and in the extended position of the lens, respectively.

Fig. 3 is a longitudinal vertical sectional view thereof, showing in dotted lines, the extended position of the focusing lens.

Fig. 4 is a transverse vertical sectional view, and

Figs. 5 and 6 are sectional views of a modified form in which the focusing lens is employed as a circuit breaker; Fig. 5 showing the circuit breaker in the closed position of the lens, and Fig. 6 showing the circuit closed in the extended position of the lens.

Similar reference characters indicate corresponding parts throughout the several figures of the drawings.

Referring to the drawings, and more particularly to Figs. 1 to 4 thereof, one embodiment of my invention comprises a casing 10 having a removable top 11, a hinged bottom 12, and a removable battery 13 having terminals 14 and 15 is contained in the casing in the usual manner. A lamp support is secured to the sides of the casing, having a reflector 17 thereon, and is provided with a socket opening 18 into which the incandescent lamp 19 is screwed in the usual manner. A switch 20 is provided in the casing, and is movable by means of a button 21, into and out of engagement with the terminal 15, the other terminal 14 constantly engaging the lamp, and the circuit being completed through the switch, casing, and lamp support.

The top 11 is provided with an opening 22 above the lamp, and an inwardly extending sleeve or supporting socket 23 is secured at the edge of the opening and surrounds the lamp and reflector. Threads 24 are embossed upon the said sleeve, and a telescoping tubular member 25 having corresponding threads 26, is mounted therein, and is adapted to be moved inwardly or outwardly by turning. The said tubular member is provided at its upper edge with a milled rim portion 27, and a lens 28 is secured therein. It will thus be seen that by turning the tubular member by means of the milled edge, the lens may be brought either toward or away from the lamp, thereby enlarging or concentrating the rays as indicated in Figs. 1 and 2.

In Figs. 5 and 6 I have illustrated another embodiment of my invention, in which the focusing means is employed as a circuit breaker.

The terminal 15 of the battery is constantly connected with the lamp through a spring member 30 on the casing 10, and the other terminal 14 which is formed of spring metal is moved into and out of engagement with the lamp by means of the tubular lens holder 31 which is formed of an insulating material such for instance as hard rubber, fiber composition or the like. It will be seen that when the lens is turned to its lowermost position, the circuit will be broken by depressing of the terminal 14 away from the lamp, and upon turning the same in the other direction, the circuit is immediately closed and the lamp lighted. It will be understood that the same object may be accomplished in other ways, as for instance by providing a metallic tubular member as in Figs. 1 to 4, and providing a covering of insulating material over the portion of the terminal with which the said member contacts.

It will be understood that my invention may be embodied in other types of lamps,

than that illustrated, and that changes may be made therein within the spirit and scope thereof as defined in the appended claims.

I claim:

1. In a lamp of the character described, an electric lamp, a battery therefor, a lens in front of said lamp, means supporting said lens, and adapted to move said lens toward and away from said lamp, the movement of said supporting member adapted to open and close the lamp circuit.

2. In a lamp of the character described, an electric lamp, a battery therefor, a tubular supporting member having screw threads surrounding said electric lamp, and a tubular lens holder having screw threads engaging said support and adapted to turn in said support toward and away from said electric lamp, movement of said supporting member adapted to open and close the lamp circuit.

In testimony that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

COLIN CAMPBELL.

Witnesses:

D. LEWIS MATTERN,

MOE M. WEINBERG.