A. C. RECKER.

FLASHLIGHT.

APPLICATION FILED FEB. 28, 1921.

1,398,799.

Patented Nov. 29, 1921.

Fig. 1.

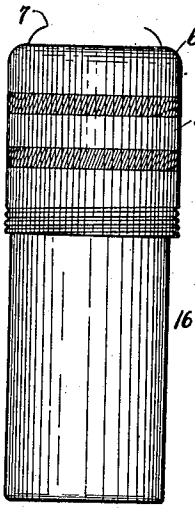


Fig. 2.

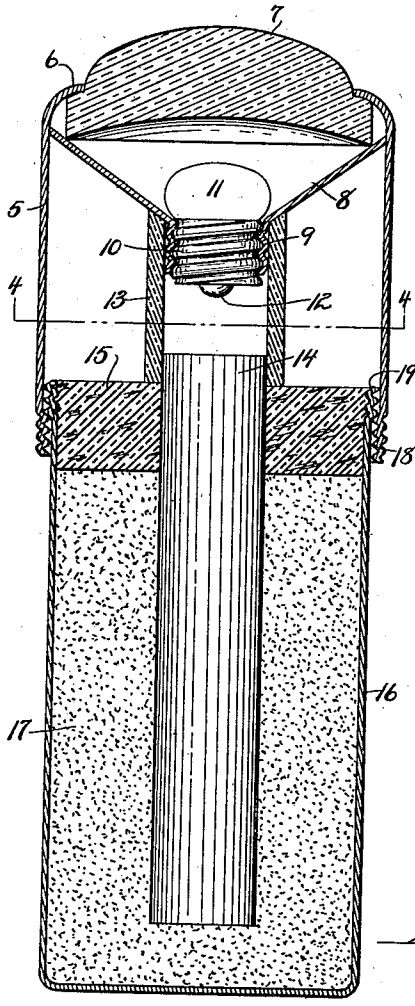


Fig. 3.

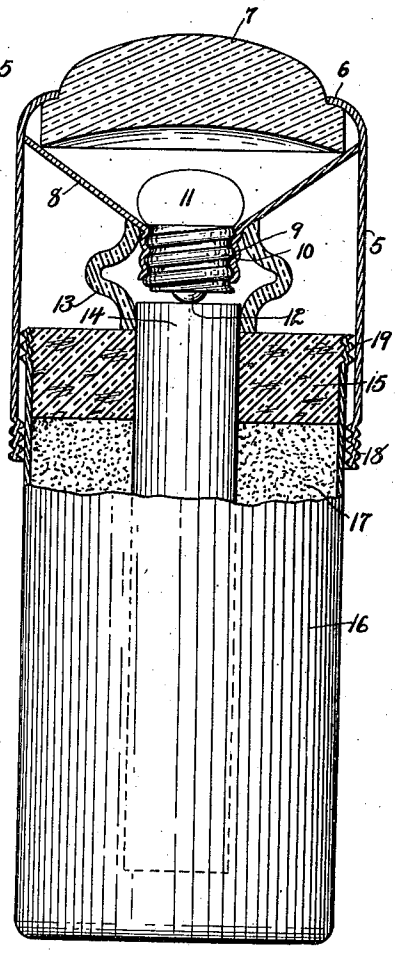
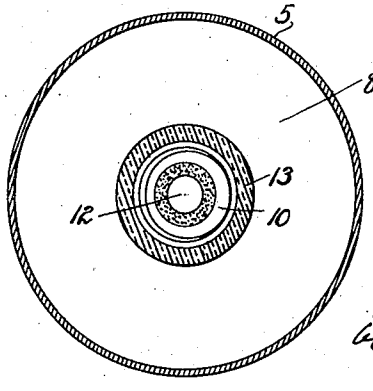


Fig. 4.



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UNITED STATES PATENT OFFICE.

ADOLPH C. RECKER, OF OAKVILLE, CONNECTICUT, ASSIGNOR TO THE CHASE COMPANIES INC., OF WATERBURY, CONNECTICUT, A CORPORATION.

FLASHLIGHT.

1,398,799. Specification of Letters Patent. Patented Nov. 29, 1921.

Application filed February 28, 1921. Serial No. 448,692.

To all whom it may concern:

Be it known that I, ADOLPH C. RECKER, a citizen of the United States, residing at Oakville, in the county of Litchfield and State of Connecticut, have invented a new and useful Improvement in Flashlights; and I do hereby declare the following, when taken in connection with the accompanying drawings and the characters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this application, and represent, in—

Figure 1, a view in side elevation of a flashlight constructed in accordance with my invention.

Fig. 2, an enlarged view thereof in central longitudinal section, with its telescopic cover in its normal or extended position in which the circuit through the lamp is open.

Fig. 3, a corresponding view with the cover and cell telescoped to close the circuit through the lamp.

Fig. 4, a view in transverse section on the line 4—4 of Fig. 2.

My invention relates to an improved flashlight, the object being to mount the lamp-carrying means directly upon the cell itself, and thus produce a simple, light, compact, convenient and effective lamp at the very minimum expense.

With these ends in view, my invention consists in a flashlight having lamp-carrying means telescopically mounted directly upon the cell itself.

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

In carrying out my invention as herein shown, I employ lamp-carrying means consisting of a cylindrical sheet-metal cover 5 having its outer edge turned inwardly to form a retaining-flange 6 confining a lens 7, the inner edge of which rests upon a reflector 8, having a concentric threaded sleeve 9 receiving the threaded stem 10 of an incandescent lamp 11 having a terminal 12. A rubber tube 13 encircling the threaded sleeve of the reflector engages at its outer end with the inner face of the reflector, so as to hold the same in position within the telescopic cover 5, while the inner end of the tube fits snugly over the projecting end of the carbon electrode 14 of the cell and rests upon the seal or closure 15 thereof. The electrode 14 and closure 15 form features of an ordinary dry cell also comprising a zinc cup 16 and an electrolyte 17, which latter surrounds the electrode 14 and is confined within the zinc cup by the closure 15.

At its inner end the telescopic-cover 5 is formed with inwardly projecting circumferential assembly-threads 18, which coact with corresponding but outwardly projecting assembly-threads 19, formed in and slightly offset from the edge of the cup 16. The said threads 18 and 19 provide for mounting the cover 5 upon the cup 16 and retaining it thereupon, while, at the same time, providing for the telescopic movement of the cover and cell with respect to each other. Normally the rubber tube 13 exerts a constant outward pressure against the reflector 8, which in turn pushes outward upon the lens 7, which in turn similarly acts upon the cover 5, to hold the same in its extended position, in which the innermost of the threads 19 in the cup 16 of the cell coact with the outermost of the threads 18 in the cover 5 to form a stop, preventing the cover and cell from separating. To light the lamp the cover 5 is longitudinally compressed with sufficient force to telescope it over the battery-cell 16, and so deform the tube 13 sufficiently, as shown in Fig. 3, to permit the lamp-terminal 12 to be brought into contact with the adjacent end of the electrode 14 and so close the circuit through the lamp. The contact thus established depends upon the maintenance of such compression, so that the moment that compression is removed, the rubber tube 13 reasserts itself and pushes the cover outward into its normal or extended position, in which the contact between the lamp-terminal and the electrode will be broken and the circuit opened and the lamp extinguished. In applying the cover to the cell its threads 18 are screwed over the threads 19 in the cup 16 until they pass each other, after which they are in position to discharge the stop function above described.

I do not limit myself to the particular details shown and described; thus, a spring may be employed in place of a rubber tube for normally maintaining the cell and lamp-carrying means in their extended circuit-

opening positions, my invention being characterized by a flashlight in which lamp-carrying means are telescopically applied directly to a cell.

I claim:

1. A flashlight having its lamp-carrying means adapted to be rotatably applied and thereafter telescopically mounted directly upon the cup of its cell, and normally held in relation thereto to open the circuit through the lamp.

2. A flashlight comprising a cell, a cover telescopically mounted directly thereupon, a lamp located within the cover, and a rubber tube interposed between the lamp and the cell for yieldingly maintaining the cover in its extended position and the lamp out of contact with the cell-terminal.

3. A flashlight comprising a cell having a zinc cup and an electrode, a metal cover telescopically mounted directly upon the said cup, the said cup and cover having assembly-threads which engage with and pass by each other and act as a stop for the cover, a lamp carried by the cover, and means for yieldingly maintaining the cover in its extended position in which the lamp-terminal is held out of contact with the said electrode.

4. A flashlight comprising a cell having a zinc cup and an electrode, a cover telescopically mounted directly upon the cup, the said cup and cover having assembly-threads adapted to pass by each other and to act as a stop for the cover, a lamp and a reflector therefor carried by the cover, and yielding means interposed between the reflector and cell for normally maintaining the cover in its extended position and the lamp and electrode terminals out of contact.

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

ADOLPH C. RECKER.

Witnesses:
JOHN S. NEAGLE,
JOHN W. HARD.