

April 17, 1928.

H. OLANETA

1,666,264

FLASH LIGHT

Filed May 23, 1927

FIG. 1.

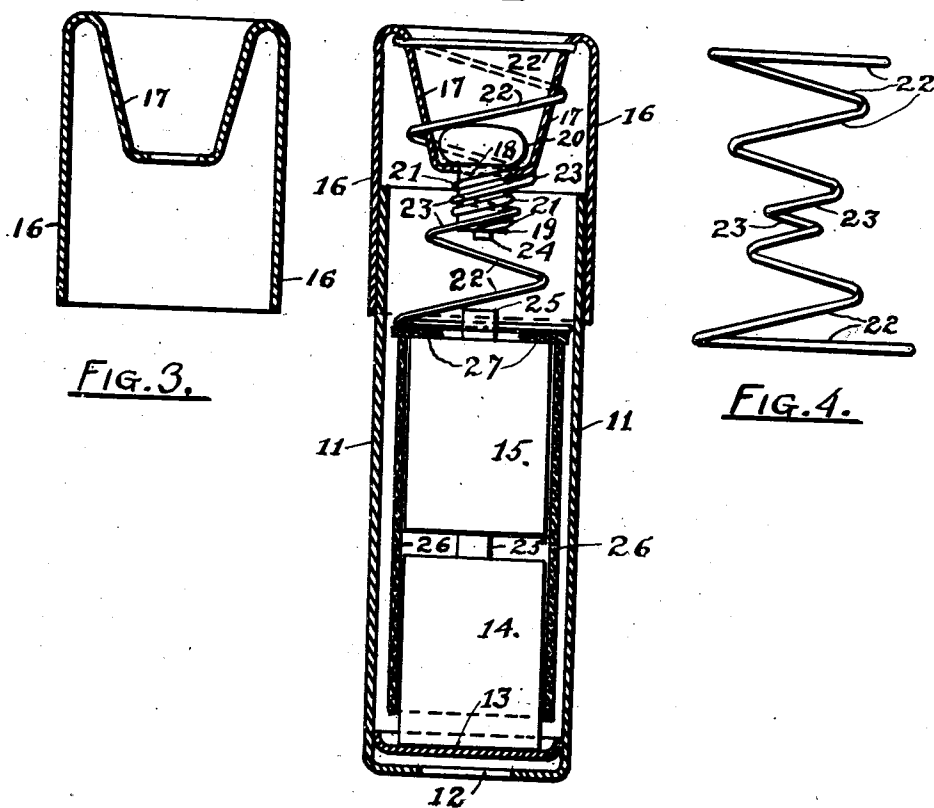


FIG. 3.

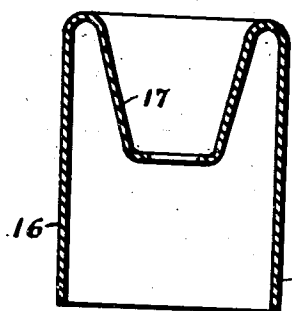


FIG. 4.

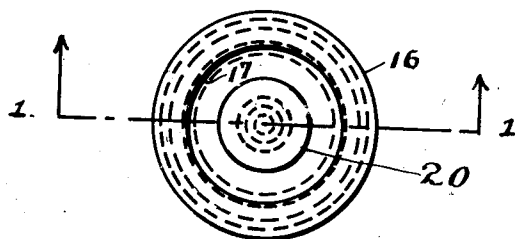
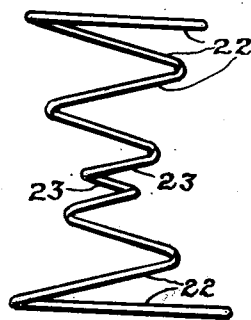


FIG. 2.

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UNITED STATES PATENT OFFICE.

HAROLD OLANETA, OF BROOKLYN, NEW YORK.

FLASH LIGHT.

Application filed May 23, 1927. Serial No. 193,547.

My invention relates to flashlights, containing batteries enclosed in a casing, and it consists in the novel features, which are hereinafter more fully described.

5 One of the objects of my improvement is—to reduce the number of parts of the flashlight, thereby reducing the cost of the same.

Another object of my improvement is—to eliminate from the sides of flashlights the shifting devices, which are employed for making and breaking the circuit of the flashlight.

15 A further object of my improvement is—to prevent the accidental closing of the circuit in flashlights.

Another object of my improvement is—to eliminate from the flashlight the lamp socket with the internal thread in it.

20 Another object of my invention is—to provide a flashlight with a spring, which has a part on it, which is so constructed as to engage a screw-thread on the stem of a suitable lamp of said flashlight and to replace a socket with an internal thread therein.

25 Another object of my invention is to make the reflector of the flashlight integral with the upper part of the casing.

30 A further object of my improvement is—to have my flashlight simple, durable, reliable and inexpensive.

Other objects and advantages will hereinafter appear.

35 I attain these objects by the flashlight, which is illustrated in the accompanying drawings, or by any mechanical equivalent or obvious modification of the same.

In the drawings Fig. 1 is a section on the line 1—1 of Fig. 2, but showing the flashlight spring in elevation.

40 Fig. 2 is a plan view of the flashlight as shown in Fig. 1.

Fig. 3 is a detail in elevation of the upper part of the casing and reflector of the flashlight; and

45 Fig. 4 is a detail in elevation of the special flashlight spring, which I provide.

Like numerals refer to like parts throughout the several views.

50 11 designates the lower part of the flashlight casing, which has therein an opening 12 at the lower end thereof, for a purpose, which is hereinafter described.

A disc 13 is shown as enclosed by said part 11 and is positioned at the lower end thereof near said opening 12.

Batteries 14 and 15 are shown as placed in

said part 11, normally resting on said disc 13 and kept in contact therewith by means of a spring 22, which is hereinafter described more in detail.

60 An upper part 16 of the flashlight casing is detachably mounted on said part 11, as shown in Fig. 1 of the drawings, and may be connected thereto by means of a bayonet joint of standard shape and construction, 65 or in any other suitable manner.

The said part 16 is shown as having made integrally therewith a reflector in the form of a reentrant extension 17, which has at the inner end thereof an opening 18 for the stem 70 19 of a flashlight lamp 20, which may be of standard construction.

The stem 19 of said lamp 20 has thereon screw threads 21, which are shown as having a very large pitch, for the sake of clearness, 75 and is kept in position by means of the spring 22, which has thereon at the intermediate part thereof one or more coils 23, to fit the grooves between said threads 21; these coils 23 are also shown as having an 80 extra large pitch.

The other coils of said spring 22 are enlarged towards the ends thereof, as shown in Figs. 1 and 4; the upper end of said spring 22 is encompassing said reflector 17 85 and abutting against the upper end thereof, inside of said part 16, as shown in Fig. 1.

The lower end of said spring 22 is shown as resting on and abutting against the top of said battery 15; a ring 27 of insulating material is shown as interposed between the top end of said battery 15 and the lower end of said spring 22, to prevent a short circuit between said batteries 14 and 15 and said 90 parts 11 and 16.

Said batteries 14 and 15 are also shown as encompassed by a tube or wrapper 26 of insulating material, and they have thereon spurs 25, to be brought into contact with a spur 24 at the lower end of said stem 19 100 when said disc 13 with the batteries 14 and 15 thereon are raised or pushed inwardly by the finger of the operator of the flashlight, extending through said opening 12, against the force of said spring 22, thereby 105 closing the circuit of the flashlight.

When the finger of the operator is removed from the disc 13, the spring 22 moves the batteries 14 and 15 with the disc 12 to their original position, thereby breaking the 110 contact between said spurs 24 and 25 and thereby opening the circuit of the flashlight.

By the above construction I eliminate the cap, which is employed with standard flashlights and the socket with the female thread in it for supporting said stem 19.

- 5 I also eliminate the shifting devices, which are commonly employed on the sides of flashlights for making and breaking the circuit and remove the possibility of accidentally closing the circuit by brushing against said
10 shifting devices.

By the above construction I also provide a resilient connection between the lamp and the reflector of the flashlight, to prevent accidental breaking of the lamp by impact, as
15 when dropping the flashlight.

Many other changes may be made in the design of my flashlight without departing from the main scope of my invention, and parts of my invention may be used without
20 other parts.

I do not, therefore, restrict myself to the details as shown in the drawings; but I intend to include also all mechanical equivalents and obvious modifications of the same
25 within the scope of my invention.

I claim as my invention and desire to secure by Letters Patent:

1. In a flashlight a casing, enclosing batteries and comprising an upper part and a
30 lower part, a lamp, a threaded stem thereon,

an opening in said upper part, for said stem to pass therethrough, and a spring, for separating said batteries from said stem, said spring having thereon one or more coils, to fit between the threads on said stem, thereby keeping said lamp in position. 35

2. In a flashlight a casing, enclosing batteries and comprising a lower part and an upper part, a reflector in the form of a re-entrant extension on said upper part, a
40 lamp, a threaded stem thereon, an opening in said extension, for said stem to pass there- through, a spring, for separating said bat- teries from said stem, said spring having thereon an end in abutment with said upper
45 part, another end in abutment with said bat- teries and an intermediate part, to fit be- tween the threads on said stem, thereby keep- ing said lamp in position.

3. In a flashlight a casing, to enclose bat-
50 teries, an upper part thereon, a reflector, made integral with said part, a lamp, a threaded stem thereon, an opening in said upper part, for said stem to pass there-
55 through, and a spring for separating said batteries from said stem, said spring having thereon one or more coils, to fit between the threads on said stem, thereby keeping said lamp in position.

HAROLD OLANETA.