Sept. 7. 1926

1,599,095

E. H. McCABE

FLASH LIGHT DEVICE

Filed March 20, 1925

Fig. 1.

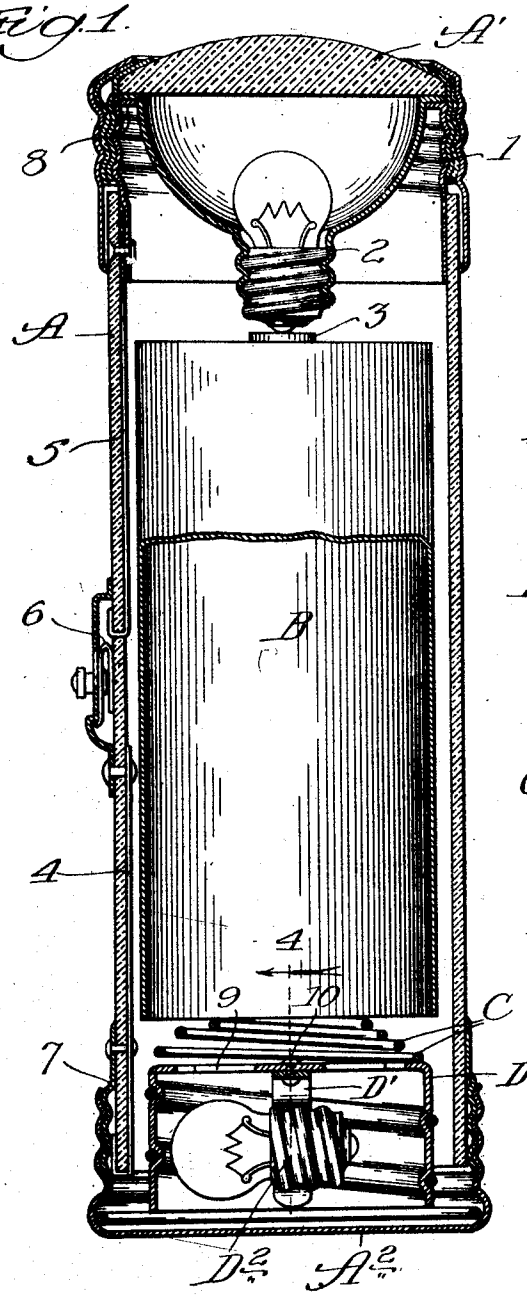


Fig. 2.

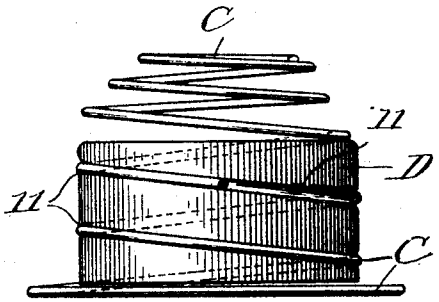


Fig. 3.

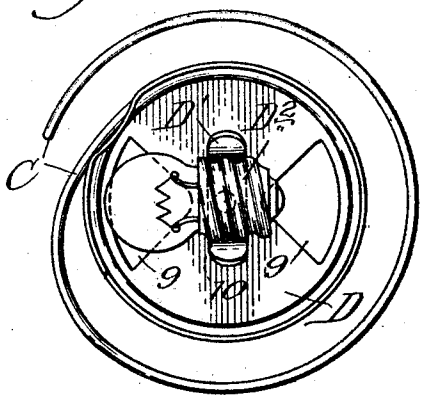
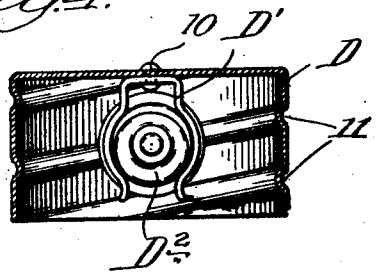


Fig. 4.



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UNITED STATES PATENT OFFICE.

EUGENE H. McCABE, OF MADISON, WISCONSIN, ASSIGNOR TO FRENCH BATTERY COMPANY, OF MADISON, WISCONSIN, A CORPORATION OF WISCONSIN.

FLASH-LIGHT DEVICE.

Application filed March 20, 1925. Serial No. 16,921.

This invention relates particularly to a tubular flashlight device; and the primary object is to provide such a device with means for safely carrying a spare electric light bulb.

The invention is illustrated in its preferred embodiment in the accompanying drawing, in which—

Fig. 1 represents a vertical sectional view of a flashlight equipped with the improvement; Fig. 2, an elevational view of a cell-supporting spring having a bulb-holder mounted therein; Fig. 3, a bottom plan view of the device shown in Fig. 2; and Fig. 4, a vertical sectional view of the bulb-holder taken as indicated at line 4 of Fig. 1.

In the illustration given, A designates a flashlight casing equipped at one end with a lens A′ and at the other end with a removable cap A^2; B designates a dry battery housed in the casing A; C designates a conical coil spring interposed between the battery B and the removable cap A^2; and D designates a bulb-holder provided internally with a clip D′ serving to hold an electric light bulb D^2.

In the illustration given, the flashlight is provided with the usual reflector 1 in which is mounted the electric light bulb 2, whose central terminal contacts with the upper contact 3 of the battery. The lower end of the battery is in electric connection with the lower end cap A^2, through the medium of the coil spring C. The circuit is completed in a known manner through conductor strips 4 and 5 and an interposed switch 6, the lower strip 4 being in electric connection with the lower threaded ferrule 7, and the upper strip 5 being in electric connection through a contact 8 with the reflector 1. The end cap A^2 screws on the ferrule 7, and thus is in electric connection with the strip 4. The base of the supporting spring C has a bearing in the bottom of the cap A^2, and the upper end of the spring bears against the bottom of the zinc cup of the battery.

The device D comprises an inverted sheet metal cup or housing, which preferably has its upper wall provided with perforations 9 so that the extra bulb can be seen when the cap A^2 and the spring C mounted therein are removed. The spring may be withdrawn from the cap, and the bulb D^2 may be removed by withdrawing it from the clip D′. That is, the bulb may be withdrawn through the lowermost ring of the coil C.

The clip D′ comprises a spring metal yoke whose web-portion is secured by a rivet 10 to the top of the cup D. The depending arms of the yoke are suitably curved to embrace the shank of the light bulb and have their lower extremities curved outwardly to enable the light bulb to be readily inserted.

It is preferred to provide the circumferential wall of the cup D with thread-grooves 11 corresponding approximately in pitch with the spiral of the wire C. The construction is such, however, that when the cup D is threaded into position within the spring, the cup will be gripped by the convolutions of the wire. Thus, the cup is itself suspended on the spring, so that there is little danger of the extra light bulb being injured in the event that the flashlight is subjected to shock, as by dropping it upon the floor.

The foregoing description has been given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, but the appended claims should be construed as broadly as permissible, in view of the prior art.

What I regard as new, and desire to secure by Letters Patent, is:—

1. The combination of a flashlight casing, provided with a removable end cap, a dry battery in said casing, a coil spring interposed between said battery and said cap, and a light-bulb holder confined within the convolutions of said spring and comprising an inverted cup and a bulb-supporting clip pending from the upper wall of said cup.

2. The combination of a conical coil spring, a hollow housing confined within said spring and having threaded connection therewith, and a bulb-supporting clip suspended from the upper portion of said housing.

EUGENE H. McCABE.