This invention relates in general to flashlights, and, more particularly, to flashlights incorporating a compass for illumination thereof upon operation of the flashlight.

In the various field activities as engaged in by hunters, soldiers, surveyors, boy scouts, timbermen, etc., as well as in the related activities of fishermen, boatmen, and the like, flashlights and compasses are necessary and generally accepted pieces of equipment. However, heretofore the same have been customarily recognized as independent, individual articles, although at night or in periods of low visibility the compass could not be utilized unless light from the flashlight was cast thereon. In order to thus use a compass an individual would be caused to periodically lay down any other equipment so that a flashlight may be operated in one hand and a compass held in the other. Such operation is not accomplished with ease in view of the need to dispose of the other equipment, be it a gun, rod and reel, and the like, in a convenient place of rest under such prevailing conditions. Thus, in view of the trying nature of said operation the examination of a compass is reduced to a minimum, whereas during dark relatively constant checking by compass is requisite for accurate and safe guidance.

Therefore, it is a primary object of the present invention to provide a combination flashlight and compass adapted upon operation of the flashlight to illuminate simultaneously the compass so that only one hand is utilized in the operation thereof.

It is another object of the present invention to provide a combination flashlight and compass wherein the compass is so located with respect to the source of light as to become illuminated upon operation of the flashlight but without in any way detracting from the effectiveness of the flashlight as a general source of illumination.

It is a further object of the present invention to provide a combination flashlight and compass which may be provided in a variety of styles; which may be produced economically; which is reliable and durable in usage; and wherein the compass is protected against damaging impacts.

These and other detailed objects are obtained by the structures illustrated in the accompanying drawings in which—

Figure 1 is a side view of a combination flashlight and compass constructed in accordance with and embodying the present invention.

Figure 2 is a fragmentary top plan view.

Figure 3 is a vertical transverse section taken along the line 3—3 of Figure 2.

Figure 4 is a fragmentary side view, in partial section of another form of the present invention.

Figure 5 is a fragmentary side view, in partial section of a further form of the present invention.

Referring now by reference characters to the drawing which represents practical embodiments of the present invention, A designates a flashlight comprising a barrel 1 serving as a handle as well as a container for the customary batteries (not shown), having a switch 2 mounted in the side wall thereof. One end of said barrel 1 is closed as by an end wall 3 or by the well known threaded end cap. The other end of barrel 1 has mounted thereon a head 4 which may be of general domed-like character and fabricated of translucent material, such as glass or of a suitable thermoplastic resin. Said head 4 is internally threaded, as at 5, for engagement with the external threads of a neck 6 of said barrel 1, for ready detachment therefrom; said head 4 defining a chamber 4′ separated from the barrel interior by the usual light bulb 7 which is conventionally mounted within a bulb reflector 8.

In the outer surface of its side wall, head 4 is provided with a preferably cylindrical recess 9, spaced from the normally forward end of said head in adjacency to neck 6.

Recess 9 is dimensioned or sized for snugly receiving an outer casing or receptacle 10, made also of translucent material, of a compass B; said outer casing 10 being rigidly secured within recess 9 by any effective means such as by friction fit.

Casing 10 carries an inner case 11 likewise of translucent material which has mounted therein the customary magnetic needle 12 with covering crystal 13; said latter may be provided with an indicator dot 14 for cocoon with needle 12 for guide purposes in the manner heretofore well known.

It will thus be seen that upon operation of switch 2 to effect lighting of bulb 6, compass B will become illuminated by passage of the light rays through translucent head 4, casing 10 and inner case 11, so that the position of needle 12 can be readily determined. As the operation of the flashlight A requires but one hand, the user's other hand will be available to handle such other equipment as may be being utilized, such as a gun in the case of a hunter or soldier, a rod and reel in the case of a fisherman, etc. Thus, simultaneously, the flashlight will provide general illumination of the immediate vicinity in its normally intended manner, and permit determination of relative location. Compass B is so located on head 4 that it will not materially adversely affect the illuminating characteristics of flashlight A, and will be readily accessible to the user. Compass B is securely seated within recess 9 so that only the upper covering portion thereof extends beyond the outer surface of head 4 whereby the same is protected against any damaging impacts that might normally be received upon the sides and base of a compass which was not so secured.

Combination flashlight and compass units of the present invention can be economically manufactured, incorporating standard barrels and light emitting structures heretofore used; are effective and durable in use, and add greatly to the safety of the users.

If desired, there may be provided for use with barrel 1 a head 15, as shown in Figure 4, provided with an opening 16 in the side wall thereof extending from the outer surface thereof to the chamber 15′. An outer casing 17 may be suitably set in opening 16 which may be of such design as to have its lower wall substantially flush with the interior surface of head 15 or may be of such depth as to terminate spacedly therefrom. Said casing 17 receives the inner casing 18 of compass B in a manner similar to that described in conjunction with compass B hereinabove.

It will thus be seen that upon energization of the bulb the light rays emitted therefrom will pass directly through the base wall of outer casing 17.

In Figure 5 is shown another form of the invention wherein there is provided a barrel 20 having a threaded neck portion 21 of substantially the same diameter as barrel 20. Mounted upon neck 21 is a head 22 which is internally threaded at its open end for engagement upon said neck 21 and which will extend laterally outwardly beyond the side walls of barrel 20. Said head...
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22 carries a compass B and may receive same in either a recess such as shown in Figure 3 or an aperture as shown in Figure 4.

It should be understood that changes and modifications in the formation, construction, arrangement, and combination of the several parts of the combination flashlight and compass may be made and substituted for these herein shown and described without departing from the nature and principle of my invention.

Having thus described my invention, what I claim and desire to secure by Letters Patent is—

In combination with an electric flashlight having a barrel adapted to receive a source of electrical energy, a light source for external illumination carried at one end of the barrel, a dome-like head, fabricated of translucent material and defining an inner chamber, threaded securely to said barrel in enclosing relation to said light source, said head having in one side portion thereof an outwardly-opening cylindrical recess in perpendicular relation to the axis of the barrel, of a compass provided within said recess and adapted to be illuminated upon energization of said light source simultaneously with the external illumination, said compass comprising an outer cylindrical translucent casing secured within said recess, an inner cylindrical translucent case carried within said outer casing, a magnetic needle mounted within said inner case, and a covering crystal mounted on said inner case.

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