Aug. 19, 1952 S. BERKOWITZ 2,607,883

FLASHLIGHT FOR USE IN A COMBINED FLASHLIGHT, CIGARETTE LIGHTER, AND WRITING IMPLEMENT

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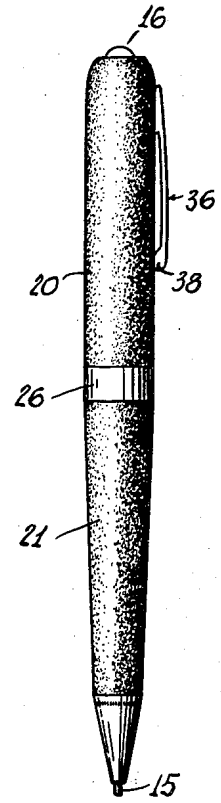

Fig. 1.

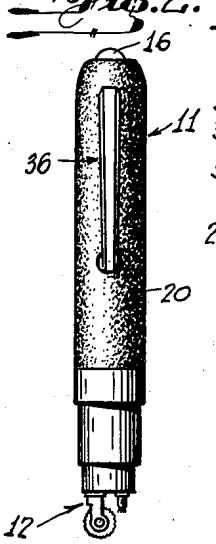

Fig. 2.

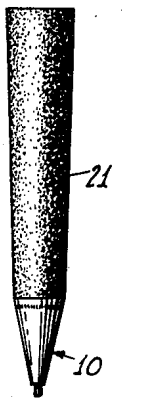

Fig. 3.

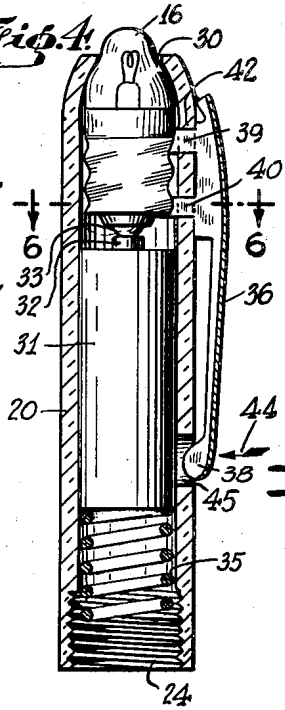

Fig. 4.

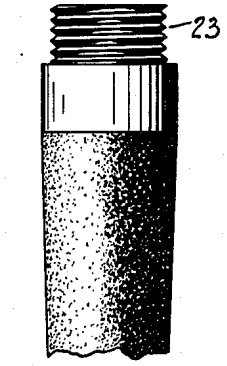

Fig. 5.

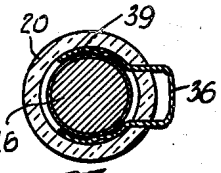

Fig. 6.

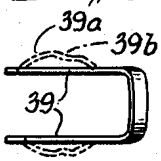

Fig. 8.

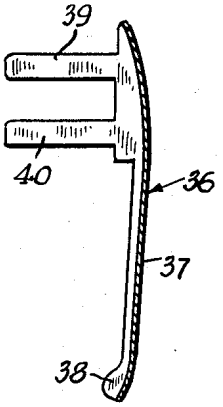

Fig. 7.

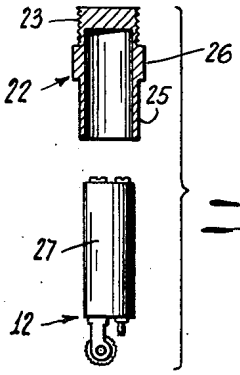

Fig. 9.

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FLASHLIGHT FOR USE IN A COMBINED FLASHLIGHT, CIGARETTE LIGHTER, AND WRITING IMPLEMENT

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1 Claim. (Cl. 240—6.46)

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This invention relates to a combination writing implement, flashlight, and cigarette lighter.

The principal object of this invention is the provision, in a handy and compact form, of a writing implement such as a ball point pen, a flashlight commonly identified as a pencil light, and a cigarette lighter. In the preferred form of this invention, these three devices, when properly assembled, collectively appear to constitute a conventional ball point pen or pencil or the like. These three assembled units, in their ball point pen-appearing form, are provided with a clip, similar to fountain pen clips, whereby the assembled product may be secured in conventional manner to a garment pocket. Each of the three devices is readily available for use. The writing implement is immediately available in precisely the same sense as conventional writing implements such as ball point pens and mechanical pencils are available for use. The flashlight is also immediately available to be used in conventional manner, since the electric light bulb thereof is exposed at the top of the combined unit and the switch mechanism is the clip itself, which is also always accessible for actuation. The cigarette lighting unit is mounted internally of the combination unit and all that need be done to expose it for use is to unscrew the top of the combined unit from the bottom. The cigarette lighter is thereby completely exposed, and it may be employed in conventional fashion.

Another principal object of this invention is the provision of a flashlight of the pencil light type which is mounted in a holder for a writing implement and which may be operated by means of the very clip by which said holder for the writing implement is secured to a garment pocket. This clip possesses many important features. In the first place, it is a clip for securing the holder in place in a garment pocket. In the second place, it constitutes the means whereby the electric light bulb is held in proper position in said holder. In the third place, it constitutes the switch whereby an electric circuit may be opened or closed between said electric light bulb and a dry cell battery. In the fourth place, it constitutes a safety device which prevents the circuit from closing when the holder is carried in a garment pocket.

A correlary object of the present invention is the provision of a flashlight which has the outward appearance of a writing implement, such as a ball point pen, and which may be carried in a garment pocket in precisely the same manner as a writing implement, such flashlight being provided with a clip for securing it to a pocket and with a switch mechanism of which said clip is the principal, and indeed only, component part.

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A preferred form of this invention is shown in the accompanying drawing, in which:

Fig. 1 is a side view of a combination writing implement, flashlight, and cigarette lighter made in accordance with the present invention.

Fig. 2 is a front view of the upper part of said combination device, exposing the cigarette lighter element thereof.

Fig. 3 is a similar view of the lower part of said combination device, showing the writing implement element thereof.

Fig. 4 is an enlarged view in longitudinal section of the upper part of the combination device, showing the flashlight element thereof, but not showing the cigarette lighter.

Fig. 5 is an enlarged fragmentary view of the lower part of said combination device, showing how the cigarette lighter may be mounted therein.

Fig. 6 is a transverse section through the flashlight element, taken on the line 6—6 of Fig. 4.

Fig. 7 is a vertical section through the clip.

Fig. 8 is a top view of the clip.

Fig. 9 is an exploded view of the cigarette lighter and its holder.

The combination writing implement, flashlight, and cigarette lighter, which is shown in the drawing, comprises a writing implement 10 preferably a ball point pen, a flashlight 11 of the pencil light type, and a cigarette lighter 12. When these three component parts are assembled, they appear to constitute a conventional writing implement such as a ball point pen, as Fig. 1 clearly shows. This assembled device need not be disassembled in order to make use of the writing implement and of the flashlight. As Fig. 1 clearly shows, both the writing implement, and more specifically the stylus 15 thereof, and the flashlight, and more specifically its electric light bulb 16, are fully exposed for free and unhampered use. The stylus is situated at the lower end of the combined unit and the electric light bulb is situated at its upper end. The cigarette lighter is situated intermediate the upper and lower ends of the device. It is normally attached to the upper end as Fig. 2 clearly shows, but it may also be mounted in the lower end as Fig. 5 shows. Before the cigarette lighter can be used, the upper

and lower ends of the device must be detached from each other to expose the cigarette lighter.

More specifically, the combined device shown in the drawing includes an upper barrel 20 and a lower barrel 21. The writing implement is mounted in the lower barrel and the flashlight elements are mounted in the upper barrel. An intermediate cylindrical member 22 is mounted between the upper and lower barrels and it constitutes the means by which said upper and lower barrels may be fastened to each other. The upper end of tubular member 22 is closed, and it is provided with external screw threads 23. The lower end of barrel 20 is provided with internal screw threads 24 and said tubular member 22 may be joined to barrel 20 by simply screwing it to said barrel. The lower end 25 of tubular member 22 is open and it may be press-fitted into the upper end of lower barrel 21. This is shown in Fig. 5. Intermediate the upper and lower ends of tubular member 22 is an enlarged ring-shaped portion 26 which is the only portion thereof that remains exposed when all of the component parts of the present device are assembled. See Fig. 1.

It will be noted in Fig. 9 that tubular member 22 is adapted to receive the cigarette lighter 12 and more particularly its fluid tank or reservoir 27. In other words, tubular member 22 constitutes a holder for the cigarette lighter in much the same sense that barrel 21 constitutes a holder for the writing implement and barrel 20 constitutes a holder for the flashlight. The cigarette lighter may be removed from tubular member 22 in order to fill its reservoir with lighting fluid. It will be observed from the foregoing that when the upper end of tubular member 22 is in screw-threaded engagement with upper barrel 20, it is said upper barrel which carries the cigarette lighter, and when said tubular member 22 is press-fitted into engagement with lower barrel 21, said lower barrel constitutes the holder therefor. When both the upper and lower ends of tubular member 22 are in engagement with the upper and lower barrels of the device, said upper and lower barrels not only carry the cigarette lighter, but they also conceal it from view.

The flashlight possesses many advantageous features, both from the point of view of the manufacturer and from the point of view of the user. The flashlight comprises five elements of which two have already been mentioned. The first element is barrel 20 which serves as the holder of the operating parts of the flashlight. The second element is electric light bulb 16 which is more commonly known as a self-focusing and light-intensifying flashlight bulb. This flashlight bulb is mounted in barrel 20, and its light-emitting portion projects outwardly from said barrel through an opening 30 formed in the top end thereof. The third element is a dry cell battery 31 which is also mounted within barrel 20. The central terminal 32 of the battery is maintained in electrical contact with central terminal 33 of the flashlight bulb, by means of the fourth element, to wit, compression spring 35. Said spring is similarly mounted in barrel 20 and its lower end bears against the upper end of tubular member 22. The upper end of the spring bears against the dry cell battery and maintains it in tensioned engagement with the bulb.

The fifth and last element is clip 36 which performs several functions. The first is the normal function of clips of this particular type, that is to secure the entire device to a garment pocket. The second function is to engage and hold the flashlight bulb in place. The third function is to serve as a switch to control the circuit between said bulb and said battery.

Clip 36 has a longitudinally extending portion 37 terminating at its lower end in a somewhat bulbous and inwardly projecting formation 38. At the upper end it is provided with a pair of spaced upper arms 39 and a second pair of spaced arms 40 situated a short distance below said upper arms. A top view of the clip, see Fig. 8, indicates that it is shaped like a U with the longitudinal portion 37 constituting its yoke and arms 39 and 40 constituting its arms. These arms are straight and parallel to each other before the clip is deformed to accommodate the shell of the flashlight bulb. The dotted lines in Fig. 8 show the manner in which the arms of said clip are bent to fit around the shell of the flashlight bulb in barrel 20. It will be understood that there are four holes 42 formed in barrel 20 to accommodate the four arms of the clip, and that when said arms are inserted through said barrel and then bent to their dotted line shape shown in Fig. 8, the clip will be held immobile with respect to said barrel. Since the arms of the clip encircle the shell of the bulb, said bulb will also be held relatively immobile in the barrel.

The lower end of the clip, and more particularly that portion which extends below its arms 39 and 40, is relatively flexible and resilient, and it may be bent inwardly in the direction of arrow 44 shown in Fig. 4. A hole 45 is formed in said barrel 20 in registration with bulbous end portion 38 of the clip so that when the lower end of the clip is bent inwardly in the direction indicated by arrow 44, it will make contact, through hole 45, with dry cell battery 31. Since the arms of the clip are in tight engagement with the shell of the flashlight bulb, and since the bulb and battery terminals are in engagement with each other, this will close the circuit and light the bulb. When the clip is released, it will spring back to the position which it is shown to occupy in Fig. 4 and contact with the battery will thereby be broken. When the device hereinabove described is held in the pocket of a garment, the material of which the pocket is made will project into the space between the clip and barrel 20 and contact between said clip and the dry cell battery will thereby be prevented.

The entire assembly above described possesses very handy features in addition to those aforementioned. For example, the flashlight bulb and dry cell battery are readily replaceable in barrel 20 and all that need be done to effect a substitution or replacement of these parts is to unscrew said barrel as shown in Fig. 4. Spring 35 will then be free to fall out of the barrel through its open bottom and then dry cell battery 31 will also be free to slip out of the barrel. A slight force will be necessary to press or push the flashlight bulb downwardly and out of engagement with the arms of the clip, but once it clears said arms, it too will fall free out of the barrel. The replacement of these parts is equally simple. First, the flashlight bulb is dropped into the barrel, and then the dry cell battery. Said battery may be used as a pusher or follower with respect to the bulb to push the bulb into operative position. Spring 35 will then follow and the barrel may be screwed to screw threads 23 of the cigarette lighter housing 22.

The cigarette lighter may have its fuel supply replenished by simply pulling its housing 22 out

of lower barrel 21 as is clearly shown in Fig. 2. The cigarette lighter proper 12 may then be pushed out of its housing 22 and fuel may then be introduced therein in conventional manner.

The ball point pen may also have its writing unit replaced in conventional manner by simply pulling it or screwing it out of barrel 21, and then inserting therein a similar unit.

The foregoing is illustrative of a preferred form of this invention, and it will be understood that this form may be modified in many ways and other forms may be provided, all within the broad scope and spirit of this invention.

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

A flashlight structure for use in a combined flashlight, cigarette lighter, and writing implement comprising a substantially cylindrical casing open at both ends and having its walls at one end curved inwardly and at the other end provided with means for coupling said casing to said lighter and writing implement, said casing further having a first and second pair of closely spaced parallel longitudinal slots, said first pair being adjacent said inwardly curved end and said second pair being aligned axially of said casing with said first pair and spaced therefrom toward said other end of the casing, a clip element comprising a narrow elongated resilient member permanently bowed longitudinally and having a laterally extending enlargement at a first end on the concave side thereof and having at the second end a pair of bifurcated members integral with and extending laterally from opposite side edges of said clip element in the same direction as said enlargement, said clip element being connected to said casing with the arms of said bifurcated members nearest said second end of said clip projecting inwardly through said first pair of slots and the other arms of said bifurcated

members projecting inwardly through said second pair of slots, said arms being bowed outwardly within said casing thereby anchoring said clip to said casing and forming a socket for a flashlight bulb, a flashlight bulb having its base in electrical contact and supporting engagement with said socket, a portion of the head of said bulb protruding through said opening in the inwardly curved end of said casing, a dry cell battery positioned longitudinally within said casing, its positive terminal positioned to engage the button contact at the base of said bulb, means for resiliently maintaining said battery in said engaging position, the outer shell of said battery being in contact with the walls of said casing and extending past an opening provided therein, said opening being in registration with said clip enlargement whereby said enlargement may be manually urged through said opening into electrical contact with said battery shell to thereby energize said bulb.

SIDNEY BERKOWITZ.

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