March 9, 1943. F. M. NEW 2,313,356

FLASHLIGHT ATTACHMENT

Filed Dec. 20, 1941

Fig. 1.

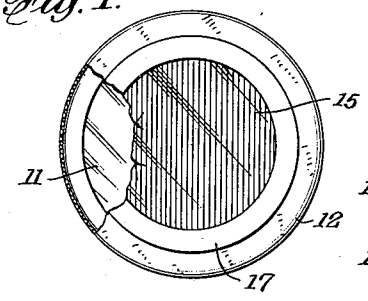


Fig. 2.

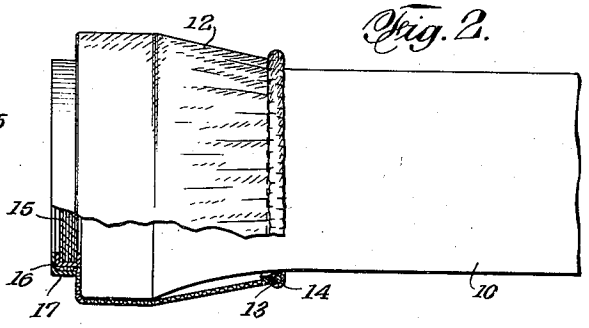


Fig. 3.

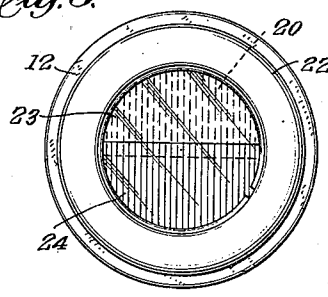


Fig. 4.

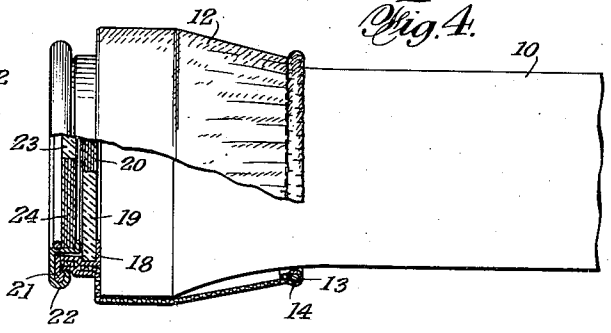


Fig. 5.

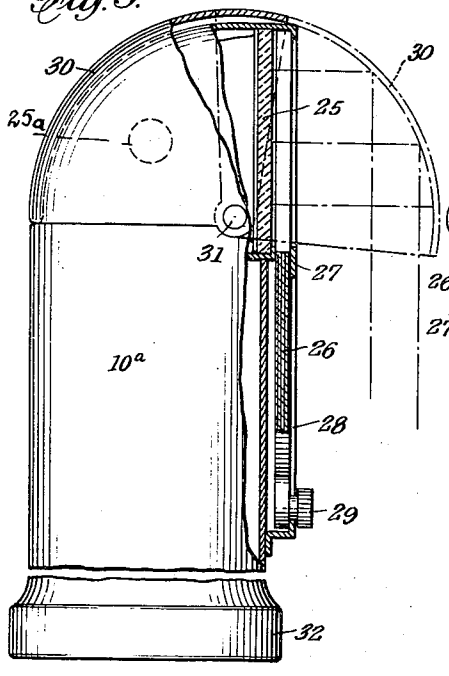


Fig. 6.

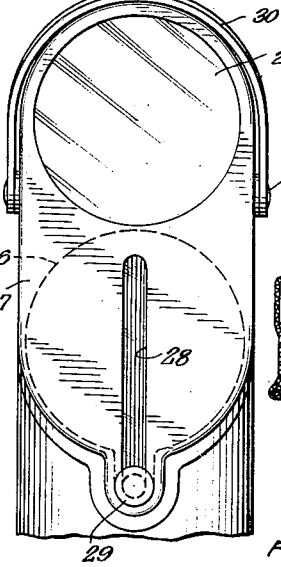
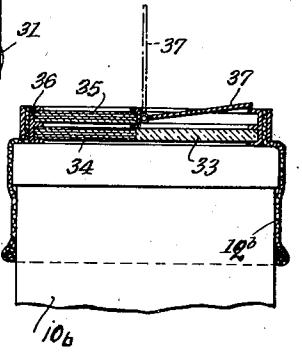


Fig. 7.



INVENTOR
FRED M. NEW
BY Leon M. Stuart

Patented Mar. 9, 1943

2,313,356

UNITED STATES PATENT OFFICE

2,313,356

FLASHLIGHT ATTACHMENT

Fred M. New, New York, N. Y.

Application December 20, 1941, Serial No. 423,775

2 Claims. (Cl. 240—45)

This invention relates to attachments, particularly adapted for flashlights and other lamps having a light projecting end.

It is an object of the present invention to provide an attachment for use in connection with flashlights or other types of lamps for the purpose of dimming or filtering the light rays emitted from the light source.

It is another object of the present invention to provide a device of the above nature which can be easily used and operated, particularly in darkened areas and during black-outs.

Still another object of the present invention resides in the provision of means for selectively dimming and shielding the light emitted from a flashlight or a similar light source.

Yet another object of the present invention is to provide means for dimming the light of flashlights and the like, which means can be readily adapted to a great variety of sizes of flashlights and the like.

Still a further object of the present invention is to provide a flashlight attachment which is especially intended to be used in connection with civilian defense and military purposes and which may be accommodated on the head part of the conventional flashlights, and which is simple and inexpensive in construction and very efficient in operation.

Still another object of the present invention is to provide means for regulating dimness of light according to circumstances and conditions, particularly prevailing during black-outs.

These and other objects and advantages of the invention will appear from the following disclosure thereof together with the attached drawing which illustrates certain forms of embodiments thereof. These forms are shown for the purpose of illustrating the invention since the same has been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized and that the invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

In the drawing:

Fig. 1 is an end view, partly broken, of a flashlight attachment made in accordance with the invention.

Fig. 2 is a fragmentary side view thereof, partly broken.

Fig. 3 is an end view, similar to that shown in Fig. 1 of a modified form of attachment.

Fig. 4 is a fragmentary side view thereof, partly broken.

Fig. 5 is a broken side view, partly in section of a further modified form made in accordance with the invention.

Fig. 6 is a broken front view thereof.

Fig. 7 is a sectional view of still another modification.

Referring to the drawing in greater detail, Figs. 1 and 2 illustrate a preferred form of shield or light-dimming attachment for application as to a flashlight 10, said flashlight, in the usual manner, having a transparent lens 11. The shield, illustrated in this form, comprises an attachment 12 preferably made of light-impervious fabric, leather, rubberized material or the like, and of such size and shape as to be easily slipped over the end of any lamps, such as headlights, flashlights of various sizes. Means are provided to firmly hold the attachment in place, and in the present instance, said means is shown as comprising an elastic puckering band 13 encased in a fold 14 of one end of the hood. Attachment 12 is designed to support a lens 15, said lens being thus held in superimposed relation over the lens 11 of the flashlight 10. The lens 15 is preferably colored whereby it is made translucent so as to intercept the greater portion of the light from the flashlight, as can be well understood. The color at present preferred is blue. The lens 15 is preferably mounted in a ring or frame 16, said frame being securely held to the attachment 12 as by a locking ring 17. It is obvious from this structure that the bright light of the flashlight 10 is intercepted by the dimming shield or lens 15 to dim said light whereby effective use of the device may be made in darkened areas, but rendered practically invisible at some distance.

As shown in Figs. 3 and 4, the device may be modified. In this form, the attachment 12 has affixed to it a frame 18 in which is disposed a lens comprising a clear transparent portion 19 and a colored light-dimming or filter portion 20. The frame 18 may be provided with a flange-like portion 21 upon which is mounted a rotatable ring 22 in which is supported a second lens comprising a transparent portion 23 and a translucent light-dimming portion 24. It is evident that the ring 22, mounted in the manner described, is capable of being rotated with respect to the frame 18 to bring either the translucent portions 20 and 24 in registry or to align the respective transparent and translucent portions 23, 20 and 19, 24 of the device. Thus, as illustrated in Fig. 4, the light emanating from a light source (not shown) of flashlight 10 is intercepted by the translucent portions 20 and 24 to dim said light. Upon 180° rotation of the ring 22, the second described lens 23—24 will be arranged to permit approximately half of the light of the flashlight to pass through the clear transparent portions 19 and 23 of the respective lenses.

In the embodiment of the invention shown in Figs. 5 and 6, the lens 25 of the flashlight is positioned at the light projecting end and in this instance preferably to face laterally with respect to the body 10a of said flashlight. A light-dim-

ming or filter means **26** is provided, said filter means normally being out of registry with the fixed lens **25**, as shown in the drawing, and is adapted to be moved or slid into position to be superimposed in front of said lens **25**. The preferred structure includes a frame housing **27** for the movable filter **26**, said housing being attached (by any known means not shown) to and carried by the body **10***a* and incorporating a slot **28** for movement therealong of a manipulating button **29** fixed to a holder of the filter **26**. It is evident that by means of the button **29** the filter **26** may be raised and lowered into and out of superimposed position with respect to the lens **25** and light source **25***a*.

In addition to the foregoing, the flashlight as shown in Figs. 5 and 6, may incorporate a hood or shield means such as shown at **30**, said hood being arranged for pivotal engagement as at axis **31** on a support (not shown) which is attached to the body **10***a* whereby the shield means may be positioned to permit uninterrupted passage of the light as emanating from light source **25***a* through the lens **25** or through both the lens and the filter **26**, as conditions require; or said hood or shield may be positioned in front of said light projecting end as shown in the dot-dash lines of Fig. 5 to control said light and to direct the same downwardly, as shown by the ray lines in the drawing. The flashlight thus equipped may be effectively employed for reading maps or making notes in darkened areas by merely setting the same upon its base **32** and utilizing the light which is directed downwardly to the support (not shown) upon which the flashlight is set. It is obvious that this light is rendered substantially invisible, particularly as viewed from above. It will be noted that the movable filter **26** may be employed as a dimmer to regulate the amount of light without necessitating use of the hood **30** and that the movable hood **30** may be used for directing or controlling the light from the light projecting flashlight end without use of the filter **26**. It may be, however, easily realized that hood and sliding filter structure may be operatively connected in such a manner as to cause movement of both said hood and filter in dependency and/or relatively to each other.

Another form of the invention is shown in Fig. 7 wherein an attachment **12***b* is mounted upon a flashlight **10***b* similarly as described with respect to Figs. 1–4, and said attachment supports, as by means of suitable rings and frames, a lens having a transparent portion **33** and a translucent portion **34** such as hereinbefore described. The mentioned frames and rings may also serve to support a translucent semi-circular lens **35**, said lens being carried in such a manner as to be readily rotatable within the frame **36** which carries the first-mentioned lens. Means are provided for rotating the semi-circular lens **35** whereby it may be positioned either in front of the clear lens portion **33** or, as shown, in front of the translucent portion **34**. Such means preferably comprises a combined handle and opaque shield **37** pivotally connected with the lens **35** or to the frame in which it is mounted. The handle may be employed as an opaque shield for the clear lens **33** as shown in full lines, or may be swung upwardly as shown in the dot-dash lines to permit light to pass unobstructedly through said clear portion and to serve as a handle whereby the lens **35** may be rotated 180°.

It is to be noted that the term "lens" hereinabove referred to and used particularly in connection with means for dimming the light is not necessarily to be construed according to its proper technical meaning. The "lens" may assume any shape and cross section to suit the purpose hereinabove disclosed and may have plane and/or curved surfaces.

The "lens" as herein referred to may be made of any suitable material such as Celluloid, acetate, synthetic compositions of any known type, glass, and other relatively rigid substances or flexible materials, such as silk, fabrics, and the like.

The translucent portion of the "lens" may be prepared in any conventional manner; it can be frosted, painted, covered with a layer, or manufactured in any other manner suitable for the purpose intended.

While there has been shown and described and pointed out the fundamental novel features of the invention as applied to the above embodiments, it will be understood that various admissions and substitutions and changes in the form and details of the means illustrated and its operation may be made by those skilled in the art without departing from the spirit of the invention.

Having thus described the invention what is claimed as new and desired to be secured by Letters Patent, is:

1. An attachment for the light projecting end of a lamp housing containing a light source comprising shield means disposed to swing about an axis transverse to said housing for positioning the shield means either in front of said light projecting end or of any portion thereof, filter means adjacent said shield means, and means for moving said filter means toward and away from said light projecting end of said lamp housing to cover any desired portion of said light projecting end, said shield means and said filter means being supported and arranged in relation to each other and to the light projecting end of the lamp housing, so that the filter means may cover any desired portion of the light projecting end and the shield means may cover said light projecting end with the filter means in any adjusted position in front of the light projecting end or entirely away from it.

2. An attachment for the light projecting end of a lamp housing containing a light source comprising shield means disposed to swing about an axis transverse to said housing for positioning said shield means either in front of said light projecting end or of any portion thereof, filter means adjacent said shield means, and means for reciprocably moving said filter means at said light projecting end and parallel to the axis of movement of said shield means, said shield means and said filter means being supported and arranged in relation to each other and to the light projecting end of the lamp housing, so that the light emitted from the light projecting end may be controlled by said shield means and the amount of light may be regulated by said filter means upon adjusted position of said filter means and said shield means relatively to said light projecting end.

FRED M. NEW.