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MULTICOLORED MANUAL SIGNAL LIGHT

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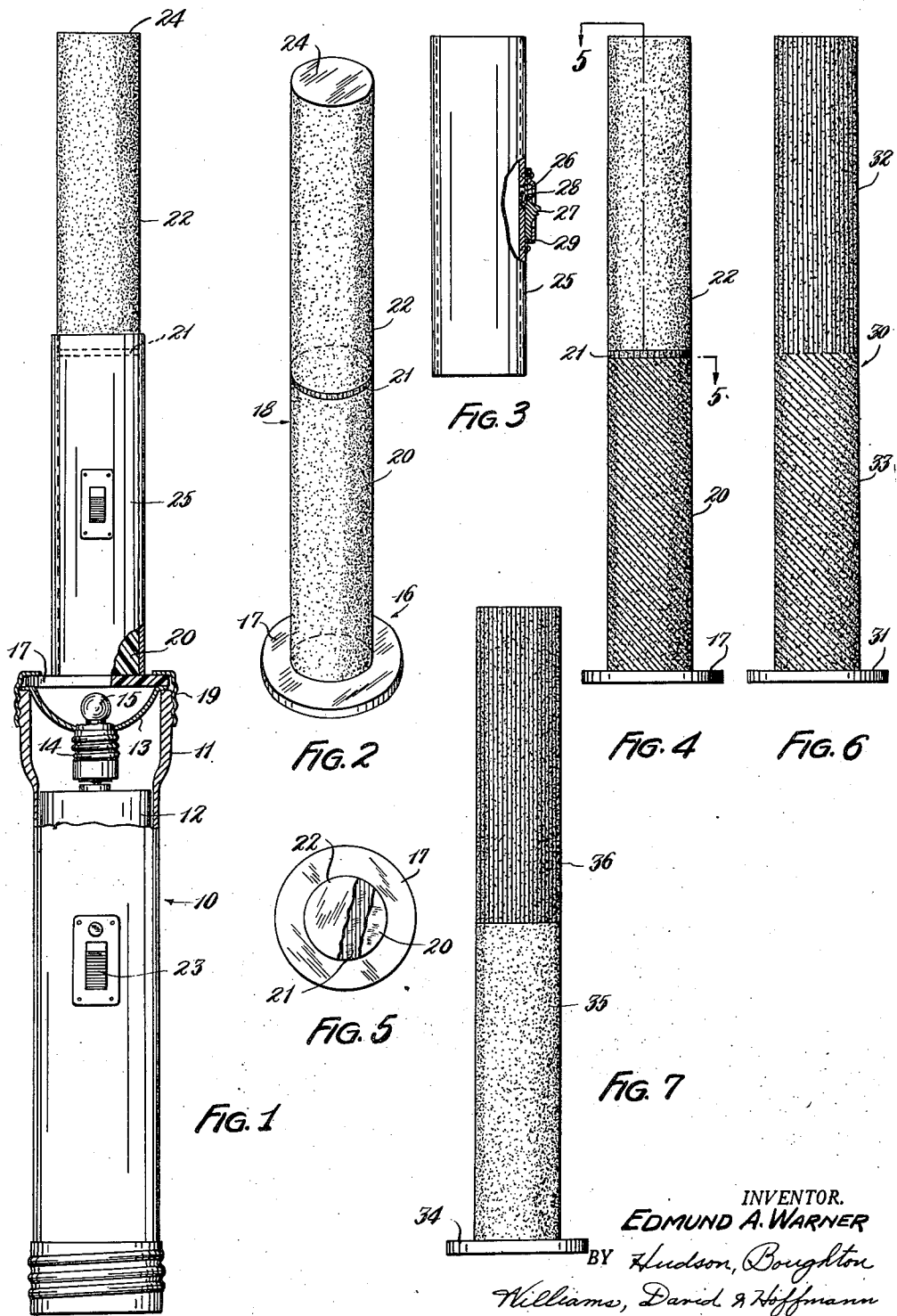


FIG. 1

FIG. 2

FIG. 3

FIG. 4

FIG. 6

FIG. 5

FIG. 7

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MULTICOLORED MANUAL SIGNAL LIGHT

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13 Claims. (Cl. 177—329)

1

This invention relates to a signal device and, more particularly, to a device providing illumination in different colors from a single source of white light for signalling or for directing vehicular traffic.

An object of the invention is to provide an improved signal device comprising a source of light and an elongated transparent member associated therewith in a manner such that the light is transmitted longitudinally of the member with a part of the light emanating from the side wall of the member, the elongated member being so constructed and arranged that the said light emerging from one part of the side wall thereof is of a different color from that emanating from another part of the side wall, thereby providing a clearly visible, attention-arresting, luminous signal of appreciable length.

Another object of the invention is to provide an improved signal device of the type defined in the preceding object and in which a means is provided for selectively obscuring the light emanating from one portion of the side wall of the elongated member whereby a single light source provides different colored illuminations which may be rendered selectively visible for facilitating signalling or the direction of vehicular traffic especially at night.

A further object of the invention is to provide a novel attachment for a flashlight, or other light source, which comprises a transparent portion adapted to be secured to the flashlight, or other light source, in a manner such that light is transmitted therethrough, and an elongated transparent portion united with the first-mentioned portion, the elongated portion having a translucent side wall and the material of said elongated portion being such that light is transmitted axially thereof with a part of the light emanating from the side wall throughout the length of the latter, the said elongated portion being so constructed and arranged that the light emanating from one part of said side wall has a color different from that of the light simultaneously emanating from another portion of said side wall.

An additional object of the invention is to provide a novel attachment of the type defined in the preceding object and further comprising an opaque means selectively positionable on said elongated portion to selectively obscure light of one color emanating from one part of said side wall while permitting visibility of light of a different color emanating from a different part of said side wall.

A more specific object of the invention is to provide an improved attachment for a flashlight which comprises a transparent disk-like portion

2

adapted to replace the lens of the flashlight and an elongated portion secured to one face of the disk-like portion, the elongated portion including two solid cylindrical members formed of a transparent plastic and secured together in an end-to-end relationship, the said cylindrical members having their side walls translucent so that the light from the flashlight is transmitted longitudinally therethrough with a part of that light emanating from the side walls of the cylindrical members throughout their lengths, the light from the side wall of one cylindrical member having a different color from the light emanating from the side wall of the other cylindrical member.

A still more specific object of the invention is to provide an improved attachment for a flashlight which comprises a transparent disk portion adapted to replace the lens of the flashlight and an elongated portion secured to one face of the disk portion and extending outwardly therefrom, the said elongated portion comprising two solid cylindrical members formed of a clear transparent plastic and a colored transparent disk-like member intermediate the adjacent ends of said cylindrical members and secured thereto in light transmitting relationship, the side walls of said cylindrical members being translucent, whereby light from the flashlight is emitted from the side walls of said cylindrical members throughout their lengths with the light emanating from the side wall of the outer of said cylindrical members being colored in accordance with the color of said colored disk while the light emanating from the side wall of the other cylindrical member is colored in accordance with the color of the side wall of the latter cylindrical member.

The invention also has as an object the provision of a novel attachment as defined in either of the two immediately preceding objects and further provided with an opaque sleeve longitudinally movable on the elongated portion of the attachment to selectively obscure the light emanating from the side wall of one or the other of said cylindrical members.

The invention further resides in certain novel features of construction and combination and arrangements of parts, and further objects and advantages thereof will be apparent to those skilled in the art to which it pertains from the following description of the present preferred embodiment, and certain modifications thereof, described with respect to the accompanying drawing in which similar reference characters represent corresponding parts in the several views and in which:

Fig. 1 is a side elevational view, with parts

3

broken away and portions of other parts shown in section, illustrating the present preferred embodiment of the invention utilizing a conventional flashlight as the source of light;

Fig. 2 is a perspective view of the novel light transmitting unit per se of the embodiment of the invention illustrated in Fig. 1;

Fig. 3 is a side elevational view of the slidable sleeve illustrated in Fig. 1, a portion of the sleeve being broken away and other parts shown in section to more clearly illustrate a means for retaining the sleeve in an adjusted position;

Fig. 4 is a side elevational view of a modified form of light transmitting unit, the diagonal surface lines on the lower cylindrical portion of the figure representing color;

Fig. 5 is a top view of the unit shown in Fig. 4 with portions broken away substantially along the line 5—5 of Fig. 4, the vertical lining on the segment of the intermediate disk representing color thereof;

Fig. 6 is a side elevational view of another embodiment of the light transmitting unit, the surface lining on the upper and lower portions of the cylindrical member indicating different colors; and

Fig. 7 is another embodiment of the light transmitting unit, the vertical surface lines on the upper cylindrical portion indicating color thereof.

Referring first to Figs. 1 through 3 of the drawing, the invention is illustrated in its present preferred form as embodied in a hand signal device which is especially useful for directing vehicular traffic at night. As shown in Fig. 1, the device comprises a conventional flashlight, generally designated 10, having the usual housing or case 11 in which dry cells 12 are contained. The upper end of the case is provided with the reflector 13 and socket 14 for the light bulb 15. The conventional lens normally provided at the upper end of the case 11 has, however, been removed and in place thereof is substituted a novel light transmitting unit, generally designated 16. This unit includes a transparent base portion 17 and an elongated transparent portion, generally designated 18, united with and extending outwardly at substantially right angles from one face of the base 17. The light transmitting unit 16 is secured to the flashlight case 11 with the base portion 17 replacing the usual lens and is held in place by the conventional threaded mounting ring 19.

The light transmitting unit of the present preferred embodiment of the device has the base 17 thereof disk shaped and of substantially the same thickness and diameter as the usual lens for the flashlight. The elongated portion 18 comprises a first solid cylindrical portion formed of transparent material, preferably having polished ends, with its lower end united to a face of the base or disk portion 17. United with the outer end of the cylindrical member 20 is a transparent colored disk 21 and secured to the outer face of the disk 21 is a second cylindrical member 22 formed of a transparent material and preferably having polished ends. In the illustrated embodiment, the disk 21 and the cylindrical members 20 and 22 are preferably formed of a transparent material having an index of refraction such that light applied to one end is transmitted therethrough by internal reflection and a part only of this light is emitted from the side walls substantially uniformly throughout the entire length thereof. One material suitable for this purpose is that sold under the trade

4

name "Lucite" and which is a polymerized derivative of methacrylic acid. It will be understood, however, that the invention is not limited to use of this particular material but that other acrylic resins, or other materials having similar properties, may be utilized.

In order to secure the desired degree of light emission from the side walls of the cylindrical members 20 and 22 the said side walls are preferably rendered translucent, as indicated by the stippling in the drawing, this being readily effected by roughening the surface or by applying a suitable coating thereto. For convenience in assembly, the base or disk portion 17 and the disk 21 are formed of the same material as that of the cylindrical portions 20, 22, thus facilitating the uniting of the parts together by means of a suitable adhesive or solvent for the material employed. For example, when a resin is used as the material of the light transmitting unit, a solvent therefor may be applied to the adjacent portions of the several parts of the unit so that the parts are bonded together substantially as one integral part. It will be apparent that instead of forming the base 17 separate from the member 20, both parts may be initially formed in one piece. Also, while it is convenient to employ the same material for the disks 17 and 21 as is used for the cylindrical members 20 and 22, it will be apparent that in place thereof these disk portions may be formed of glass or other transparent material.

As mentioned heretofore, in this embodiment of the device the disk portion 21 is colored. The cylindrical portions 20 and 22 and the base 17 are, however, formed of a substantially clear material. Hence the light from the flashlight, when the bulb 15 thereof is energized by operation of the usual switch 23, shines longitudinally through the light transmitting unit 16, the portion of the light emanating from the side wall of the lower cylindrical member 20 causing that part of the elongated portion 18 to glow with a white light while the side wall of the upper cylindrical part or member 22 has a colored glow, the color of which is dependent upon the color of the disk portion 21. In the illustrated embodiment, the surface lining on the edge of the disk 21 indicates that this member is red and hence the upper cylindrical member 22 glows bright red throughout its entire length. It will be readily understood that in place of a red disk 21, a green disk or disk of other color might be employed and the side walls of the cylindrical member 22 would then glow with a color corresponding with that of the color of the disk 21. In addition to the different colored glows from the side walls of the two cylindrical members 20 and 22, an intense spot of light is emitted from the outer polished end 24 of the upper cylinder 22, the color of this spot of light being the same as that of the disk 21.

The device as just described may be utilized without further expedients for the purpose of signalling or for directing traffic, or the like, since it affords an attention-arresting signal, clearly visible for long distances at night, due to the intensity of the glow from the side walls of the elongated portion 18 and the coloring of the different portions thereof. Moreover, this glow or light is of appreciable length as a lantern would be, but much brighter than the latter, while it avoids the intense glare such as is experienced by direct viewing of the lens of the usual flashlight. Consequently, the device provides a more

convenient and efficient signalling device for directing traffic at night than is afforded by either the conventional flashlight or lantern, the device being clearly visible from the side thereof without sacrificing the intense beam of light from the end, so that this beam is readily available for use if desired.

While the device may be utilized as just described without further expedients, the invention further contemplates that the signal device include a means for selectively obscuring the light of one color emanating from one part of the side wall of the elongated portion 18 while permitting light of different color to be visible from the side wall of another part of the elongated portion 18. For this purpose an opaque means is provided which is selectively positionable upon the elongated portion 18 to obscure the light issuing from the side wall of the part of the elongated portion opposite which the means is placed. In the present preferred form of the invention, this obscuring means comprises an opaque sleeve 25 which is slidably supported upon the elongated portion 18 and has a length at least equal to the length of one of the cylindrical members 20, 22 thereof. Preferably as shown, the length of the sleeve 25 is slightly greater than the length of one of the cylindrical members 20, 22 so that the sleeve is capable of obscuring both one of said cylindrical members and also the intermediate disk 21.

In utilizing the signal device provided with a sleeve as shown in Fig. 1, illumination of the bulb 15 produces a colored glow from the sides of the upper or outer cylindrical member 22, the color of this glow being the same as that of the colored disk 21 as previously described. The glow of light from the lower cylindrical member 20 is, however, obscured at this time due to the position of the sleeve 25. Hence the device is useful as a red signal to stop traffic or perform other signalling functions and, in addition, an intense beam of light is emitted from the outer end 24 of the device which is available for use in the same manner as a conventional flashlight.

When it is desired to employ the device in a manner to exhibit a different colored light from that emanating from the side wall of the outer cylindrical member 22, the sleeve 25 is simply moved upwardly as viewed in Fig. 1 so as to cover the cylindrical member 22 and uncover the cylindrical member 20. Hence, the light now visible has a color corresponding with the color of the side wall of the member 20 which, for example, may be white. This positioning of the sleeve 25 does not in any way interfere with the intense beam of light emitted from the outer end 24 of the device and which has the same color as that of the disk 21. Therefore the device may be used to exhibit a white or other colored signal by holding the flashlight sideways with respect to vehicular traffic or the like, a different colored signal being exhibited either by moving the sleeve 25 back to obscure the member 20 or by simply turning the flashlight, without moving the sleeve, so that the beam therefrom is visible to the traffic.

A means is preferably provided for retaining the sleeve 25 in a selected position longitudinally of the elongated portion 18 of the device. This means may take a variety of forms but in the present embodiment has been illustrated as comprising a resilient member or portion 26 secured adjacent one edge of an opening in the side wall of the sleeve 25 and having an intumed end adapted to lie substantially flush with the inner

surface of the sleeve or extend outwardly slightly therefrom. Cooperating with the resilient member 26 is a slide 27 which has an inclined cam portion 28 adjacent an inclined surface of the member 26, the slide 27 being slidable relative to the sleeve 25 and being held from displacement outwardly thereof by a suitable slide housing 29. It will be apparent that this construction, which is similar to the conventional slide switch 23 provided on the flashlight proper, is such that, when the slide 27 is in the position shown in Fig. 3, the sleeve 25 may be freely moved longitudinally of the elongated portion 18. When the sleeve 25 has been disposed at a desired position, the slide member 27 is then moved upwardly, as viewed in Fig. 3, so that the cam surface 28 thereof forces the resilient member 26 into engagement with the adjacent surface of the elongated portion 18, thereby frictionally holding the member 25 in position. If desired, the elongated portion 18 may be provided with suitable recesses, grooves, or the like, at longitudinally spaced positions for cooperation with the end of the resilient member 26 to facilitate retention of the sleeve in an adjusted position. Moreover, instead of the particular means shown, a spring pressed detent without an outside manually operable button or slide may be employed, or other suitable expedient utilized to retain the sleeve in an adjusted position while permitting ready adjustment thereof.

The preferred embodiment of the device has been described with reference to a construction in which both the cylindrical members 20, 22 are formed of a clear transparent material with their side walls roughened or otherwise treated to render them translucent. In such an embodiment the cylindrical portion 22 emits a glow corresponding to the color of the disk 21, while the cylindrical member 20 emits a glow of white light, it being understood that the base or disk member 17 is clear. As a modification of such construction, the light transmitting unit 16 may have the side wall of the cylindrical portion 20 dyed, coated, or otherwise treated so as to have a color other than white with the light emitted therefrom correspondingly colored. The light transmitting unit is otherwise constructed the same as in the embodiment described with respect to Figs. 1 and 2 and hence the illustration of this modification, as shown in Fig. 4 of the drawing, bears the same reference numerals as do the corresponding parts in Figs. 1 and 2.

Referring to Fig. 4, the lower cylindrical member 20 may be provided with a dye or coating colored green, as indicated by the diagonal surface lining, while the disk 21 may be red. Hence, the light emitted from the lower portion or cylindrical member 20 will be green, while that emitted from the upper portion or member 22 is red. In place of this color combination, it will be apparent that the disk 21 may be green and the coloring applied to the side wall of the member 20 may be red, or other suitable color combinations may be employed. In addition to applying a dye or other coloring means upon the side wall of the lower cylindrical member 20, the side wall of the upper cylindrical member 22 may also be provided with a colored dye or coating. This last-mentioned dye or coating should, however, be the same color as that of the disk 21. This coloring of the side wall of the member 22 with the same color as that of the disk 21 obviously does not alter the color of the light transmitted therefrom but simply provides a color of more intense hue. The light transmitting unit shown in Fig.

4 is utilized in the same manner as that shown in Fig. 1 and may be utilized with or without the sleeve 25 depending upon whether or not it is desired to selectively obscure one of the colored parts of the illuminated elongated portion.

Fig. 6 illustrates another form of light transmitting unit for use as an attachment for a flashlight, or other source of light, or as an integral part thereof in a somewhat similar manner to that previously described for the light transmitting units shown in Figs. 1, 2 and Fig. 4. In this form of the light transmitting unit, there is provided an elongated portion, generally designated 30, which is preferably cylindrical. This elongated portion may be formed as a single, unitary, solid, clear piece of transparent material such as an acrylic resin or the like, and the lower end thereof is united with a transparent disk-like portion or base 31 similar to the previously described base 17. In this form of the light transmitting unit the side wall of the elongated member or portion 30 is rendered translucent and one part as, for example, the upper half of the elongated member 32 is provided with a dye, coating, or other surface coloration, for example, red, while the lower portion 33 of the elongated member is provided with a dye, coating, or the like, having a color different from that of the upper portion 32, for example, green. Obviously, the colors of the upper and lower portions may be interchanged or other colors may be utilized thereon.

A device thus constructed will provide an illuminated signal when employed with a flashlight or other light source in the manner shown in Fig. 1 with the light emanating from the two cylindrical portions 32 and 33 having different colors, either of which may be selectively obscured, if desired, by the use of a slidable sleeve such as that designated 25. It will also be evident that the dye, coating, or the like may be omitted from either the upper or the lower portions 32 or 33 of the elongated member or portion 30 so that the light emitted from the side wall of one portion thereof is white while the other portion thereof emits light of another color.

A still further modified form of light transmitting unit adapted to be employed as an attachment for a flashlight, or other light source, or for incorporation therein as an integral part thereof, is illustrated in Fig. 7. In this form, the light transmitting unit comprises a transparent plate or disk-like member 34 similar to that designated 17 in Figs. 1, 2 and 4 and 31 in Fig. 6. Secured to and extending outwardly from the disk member or base 34, at substantially right angles thereto, is a first elongated portion 35 formed of transparent material such as an acrylic resin or the like. The member or portion 35 is preferably cylindrical and is substantially clear with polished ends. The side wall thereof is rendered translucent by roughening or by the use of a suitable coating as previously described with respect to the other embodiments of the light transmitting unit. United with the outer end of the elongated member or portion 35 is a second elongated member or portion 36 which is preferably cylindrical and is formed from a colored transparent material such as an acrylic resin or the like. In the form shown in Fig. 7, the outer member or portion 36 is illustrated with surface lining to indicate that the material is colored red. It will be apparent, however, that any other suitable color may be employed. The ends of the outer member or portion 36 are pref-

erably polished and the side wall thereof is preferably rendered translucent. The side wall of the lower or first elongated portion 35 may be either left as simply a translucent surface of a clear material so as to emit white light or may be provided with a dye, paint, coating, or other covering of a desired color. The light transmitting unit of Fig. 7 is utilized in the same manner as described with respect to the other embodiments of the invention and hence the uses need not be delineated in detail.

The novel device of this invention has been described and illustrated primarily with reference to incorporation in, or as an attachment for, a flashlight and hence the base or disk-like portions such as 17, 31 and 34 of the light transmitting units have been illustrated as disk-like members or portions. It will be apparent, however, that the light source might be other than a flashlight and the reflector might therefore not have a circular outer opening. In such a case it will be obvious that the base portions 17, 31 or 34 would have a shape corresponding with that of the opening through which the light is emitted. Moreover, it is not necessary that the transparent base portion of the light transmitting unit replace the lens of a flashlight or other light source since the usual lens may be left in place with the unit mounted thereover and secured in place by any suitable means. Also, while the elongated portions of the light transmitting units have been shown as cylindrical, it will be readily apparent that the shape of these elongated portions is not critical and they may be made as rectangular in cross section, elliptical, or in any other desired configuration so long as the light transmitting and emitting properties described above are not destroyed. When the elongated portion of the light transmitting unit is not cylindrical the sleeve 25 will, of course, be correspondingly altered in shape.

Further, it will be noted that reference has been made in the description and illustrations of the members such as 17, 31 and 34 as being transparent throughout their entire areas. It will be obvious, however, that it is not necessary that these base members be transparent in the regions exterior of the sides of the elongated portions such as 18, 20, etc., but may be rendered opaque, translucent or the like in these outer areas, if desired. It should be further noted that, while reference has been made to the ends of the elongated portions or cylindrical members as being polished, this was meant to include not only surfaces which have been rendered smooth and transparent by a surface polishing operation but also those surfaces which initially are smooth and transparent as originally formed, as, for example, by casting against smooth plates or the like. It is further desired to point out that the term "color" as used hereinbefore and in the subjoined claims includes white, as in the usual connotation.

While a number of embodiments of the invention have been illustrated and described, it will be apparent that these are not exhaustive of the possible embodiments of the invention and that modifications and adaptations will no doubt occur to those skilled in the art after having had the advantage of this disclosure. Consequently, the detailed description and illustrations are to be considered as representative only of the practical embodiments of the device and not as limitations of the invention.

Having thus described the invention, I claim:

1. An attachment for a light producing device having an opening through which light is emitted, the said attachment comprising a transparent plate-like portion adapted to be mounted in light transmitting relationship with said opening, an elongated portion formed of transparent material united with one side face of said plate-like portion and extending outwardly therefrom at substantially right angles thereto, the material of said elongated portion having an index of refraction such that when the attachment is applied to a light producing device the light therefrom is transmitted axially through said elongated portion with a portion of that light emanating through the side wall of said elongated portion throughout its length, and means imparting different colors to the portions of the light simultaneously emitted from different longitudinal parts of the side wall of said elongated portion.

2. An attachment for a light producing device having an opening through which light is emitted, the said attachment comprising a transparent plate-like member adapted to be mounted in light transmitting relationship with said opening, a first elongated member formed of clear transparent material united at one end with one side face of said plate-like member and a second elongated member formed of colored transparent material with one end connected in light transmitting relationship with the other end of the first elongated member, the side walls of said elongated members being translucent and the material thereof having an index of refraction such that when the attachment is applied to a light producing device the light therefrom is transmitted axially through said elongated members with a portion of that light emanating through the side walls of said elongated members, whereby the light emitted from the side wall of the second elongated member is colored differently from the light emitted from the side wall of the first elongated member.

3. An attachment as defined in claim 2 and wherein the side wall of said first elongated member is provided with coloring matter of a color different from the color of said second elongated member.

4. An attachment for a light producing device having an opening through which light is emitted, the said attachment comprising a transparent plate-like portion adapted to be mounted in light transmitting relationship with said opening, and an elongated portion united with and extending at substantially right angles from one face of said plate-like portion, the said elongated portion comprising two cylindrical members formed of solid transparent material and an intermediate disk-like member formed of colored transparent material, the ends of said cylindrical members and the faces of the disk-like member being polished and the sides of said cylindrical members being translucent, the material of said cylindrical and disk-like members having an index of refraction such that when the attachment is applied to a light producing device the light therefrom supplied to that face of said disk-like portion opposite said elongated portion is transmitted through said elongated portion with a portion of the said light emanating from the sides of said cylindrical members, whereby the light emanating from the side wall of the outer of said cylindrical members has a color corresponding with that of said colored disk-like member and the light emanating from the side wall of the

other of the cylindrical members has a color corresponding with the color of the side wall thereof.

5. An attachment for a light producing device having an opening through which light is emitted, the said attachment comprising a transparent plate-like portion adapted to provide a closure for said opening, and an elongated portion united with and extending at substantially right angles from one face of said plate-like portion, the said elongated portion comprising two cylindrical members formed of solid transparent plastic material and an intermediate disk-like member formed of colored transparent material, the ends of said cylindrical members and the faces of the disk-like member being transparent and the sides of said cylindrical members being translucent, the said plastic material of said cylindrical members having an index of refraction such that when the attachment is applied to a light producing device the light therefrom supplied to that face of said disk-like portion opposite said elongated portion is transmitted through said elongated portion with a portion of the said light emanating from the sides of said cylindrical members, and coloring matter on the side wall of that cylindrical member intermediate said plate-like portion and said disk-like member, the said coloring matter having a color different from the color of said disk-like member, whereby the light emanating from the side wall of the outer of said cylindrical members has a color corresponding with that of said colored disk-like member, while the light emanating from the side wall of the other of the cylindrical members has a color corresponding with the color of the side wall thereof.

6. An attachment for a flashlight comprising a transparent disk-like portion adapted to be mounted in transmitting relationship with the bulb of a flashlight and an elongated portion united with and extending at right angles from one side face of said disk-like portion, the said elongated portion comprising two cylindrical members formed of solid transparent acrylic resin united in axial alignment with the side walls thereof roughened to render them translucent, whereby when the attachment is applied to a flashlight the light therefrom is transmitted through said elongated portion with a portion of the said light emanating from the sides of the said cylindrical members, the side wall of one of said cylindrical members having a different color from that of the side wall of the other cylindrical member whereby the light emanating from the two cylindrical members is correspondingly of different colors.

7. An attachment for a flashlight comprising a transparent disk-like portion adapted to replace the lens of the flashlight, and an elongated portion united with and extending at right angles from one face of said disk-like portion, the said elongated portion comprising two cylindrical members formed of a clear transparent acrylic resin and an intermediate disk-like portion formed of colored transparent material, the ends of said cylindrical members being transparent and the side walls thereof being roughened to render them translucent, whereby when the attachment is applied to a flashlight the light therefrom is transmitted through said elongated portion with a part of the said light emanating as a colored glow from the side wall of the outer of said cylindrical members with the color thereof corresponding with that of said colored disk-like portion while the side wall of the other of

11

said cylindrical members emits a glow of light having a color corresponding with the color of the side wall thereof.

8. An attachment for a light producing device having an opening through which light is emitted, the said attachment comprising a transparent plate-like member adapted to provide a closure for the said opening, a first elongated member formed of clear transparent material united at one end with one side face of said plate-like member, a second elongated member formed of colored transparent material with one end connected in light transmitting relationship with the other end of the first elongated member, the side walls of said elongated members being translucent and the material of said elongated members having an index of refraction such that when the attachment is applied to a light producing device the light therefrom is transmitted axially through said elongated members with a portion of that light emanating through the side walls of said elongated members throughout their lengths, and opaque means longitudinally movably supported upon said elongated members and adapted to selectively cover either of said elongated members while permitting light to be visible from the side wall of the other of said elongated members.

9. An attachment as defined in claim 8 and wherein said opaque means comprises an opaque sleeve longitudinally slidable upon said elongated members and having a length substantially equal to that of one of said elongated members.

10. An attachment for a flashlight comprising a transparent disk-like portion adapted to replace the lens of the flashlight, an elongated portion united with and extending at right angles from one face of said disk-like portion, the said elongated portion comprising two cylindrical members formed of a clear transparent acrylic resin and an intermediate disk-like portion formed of colored acrylic resin, the ends of said cylindrical portions being transparent and the side walls thereof roughened to render them translucent, whereby when the attachment is applied to a flashlight the light therefrom is transmitted through the elongated portion with a part of the said light emanating as a colored glow from the side wall of the outer of said cylindrical members while the side wall of the other of said cylindrical members emits a flow of white light, and an opaque sleeve member longitudinally movable upon said elongated portion and having a length at least equal to that of one of said cylindrical portions whereby the said sleeve member may be selectively positioned over either of said cylindrical members to obscure the light emanating from the side wall thereof.

11. A traffic signal device comprising a light producing device including a housing containing a lamp bulb and means for lighting said bulb, a transparent disk adapted to fit over the end of said housing and close the same, means securing said disk to said housing, an elongated cylindrical member secured to said disk on the side thereof opposite said bulb and extending outwardly therefrom at substantially right angles, a second elongated cylindrical member united in axial alignment with said first cylindrical member, the said cylindrical members being formed of transparent material with polished ends and translucent side walls and having an index of refraction such that light from said bulb is transmitted axially through said cylindrical members

12

emanating through the side walls thereof throughout their lengths, the side wall of one of said cylindrical members having a color different from that of the side wall of the other of said cylindrical members, and an opaque sleeve slidably mounted upon said cylindrical members, the said sleeve having a length substantially equal to the length of one of said cylindrical members, whereby light from said bulb shines through said cylindrical members with the color of the light emitted from the side wall of one of said cylindrical members different from the color emitted from the side wall of the other of said cylindrical members, the said sleeve being selectively positionable longitudinally of said cylindrical members to selectively obscure the light emanating from the side wall of one or the other of said cylindrical members.

12. A traffic signal device comprising a light producing device including a housing containing a lamp bulb and means for lighting said bulb; a transparent disk adapted to fit over the end of said housing and close the same; means securing said disk to said housing; an elongated portion secured to said disk on the side thereof opposite said bulb and extending outwardly therefrom, the said elongated portion comprising a first cylindrical member formed of transparent material and having a translucent side wall, a disk of colored transparent material secured to the outer end of said first cylindrical member, and a second cylindrical member formed of transparent material and having a translucent side wall, the said second cylindrical member having one end secured to said colored disk on the opposite side face thereof from the said first cylindrical member; and a cylindrical opaque sleeve slidably mounted upon said elongated portion, the said sleeve having a length at least equal to the length of one of said cylindrical members; whereby energization of the bulb causes the light therefrom to shine through said elongated portion thereby producing a glow from the side walls of said cylindrical members with the light emanating from the outer of said cylindrical members having a color corresponding with that of said colored disk, the said sleeve being selectively positionable longitudinally of the said elongated portion to selectively obscure the light emanating from the side wall of one or the other of said cylindrical members.

13. A traffic signal device comprising a light producing device including a housing containing a lamp bulb and means for lighting said bulb; a transparent disk adapted to fit over the end of said housing and close the same; means securing said disk to said housing; an elongated portion secured to said disk on the side thereof opposite said bulb and extending outwardly therefrom, said elongated portion comprising a first cylindrical member formed of transparent material and having a translucent side wall, a disk of colored transparent material secured to the outer end of said first cylindrical member, and a second cylindrical member formed of transparent material and having a translucent side wall, the said second cylindrical member having one end secured to said colored disk on the opposite side face thereof from the said first cylindrical member; a cylindrical opaque sleeve slidably mounted upon said elongated portion, the said sleeve having a length at least equal to the length of one of said cylindrical members; and means for retaining said sleeve in an adjusted position along

the length of said elongated portion; whereby energization of the bulb causes the light therefrom to shine through said elongated portion thereby producing a glow from the side walls of said cylindrical members with the light emanating from the outer of said cylindrical members having a color corresponding with that of said colored disk, the said sleeve being selectively positionable longitudinally of the said elongated portion to selectively obscure the light emanating from the side wall of one or the other of said cylindrical members.

EDMUND A. WARNER.

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