Feb. 9, 1937. E. CRISWELL 2,070,472

COMBINATION FLASHLIGHT AND EMERGENCY TRAFFIC SIGNAL

Filed March 30, 1936

Fig. 1.

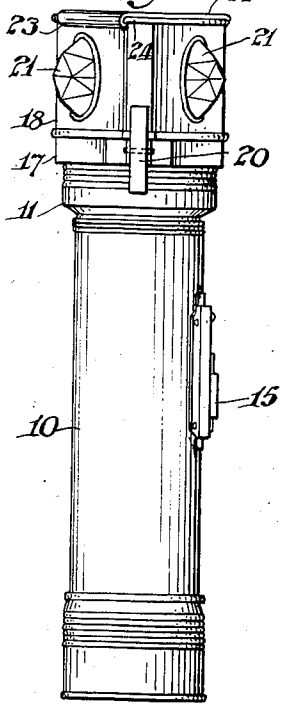


Fig. 2.

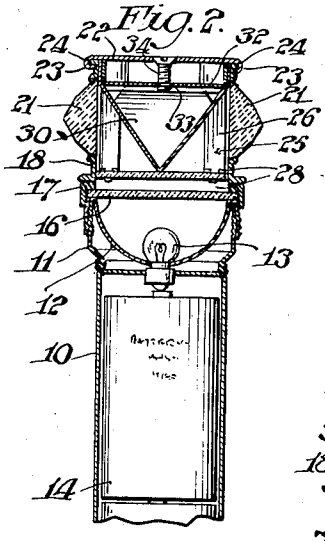


Fig. 3.

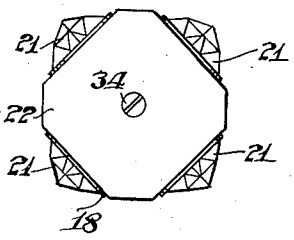


Fig. 4

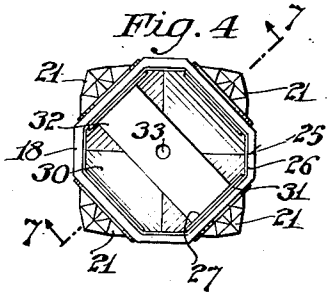


Fig. 6.

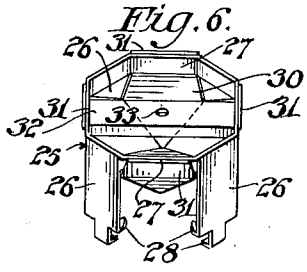


Fig. 7

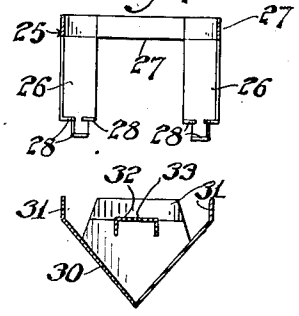


Fig. 8.

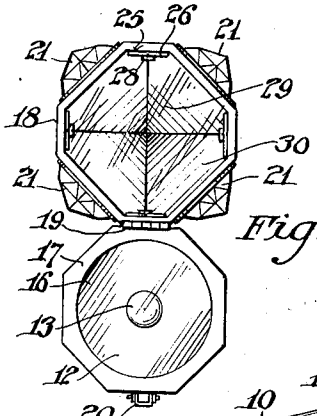
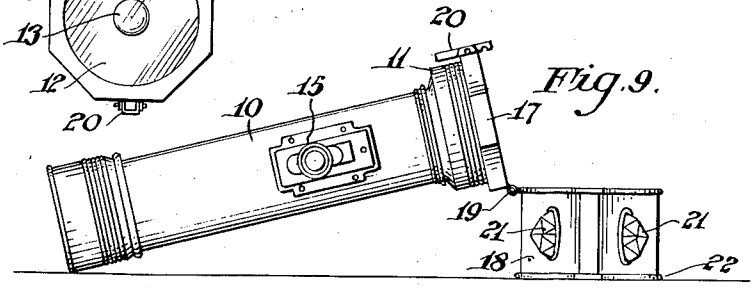


Fig. 5.

Fig. 9.



Inventor.
Elmer Criswell,
By W. W. Williamson
Attorney.

Patented Feb. 9, 1937 2,070,472

UNITED STATES PATENT OFFICE

2,070,472

COMBINATION FLASHLIGHT AND EMERGENCY TRAFFIC SIGNAL

Elmer Criswell, Philadelphia, Pa.

Application March 30, 1936, Serial No. 71,614

6 Claims. (Cl. 177—329)

My invention relates to a new and useful combination flash light and emergency traffic signal and has for one of its objects to provide an attachment for a flash light so that the assembly may be used for the ordinary purposes of a flash light or for directing traffic in an emergency. When used for the latter purpose, a person can direct traffic either at or between the intersections by turning the device a one-quarter revolution in the hand.

Another object of the invention is to produce a device of the kind mentioned including a casing of octagon shape in plan, hinged to a collar detachably connected to the head of a flash light, said casing carrying a pair of oppositely disposed red lenses and a pair of oppositely disposed green lenses, one pair being at right angles to the other pair, an inverted pyramidal reflector within the casing to reflect light rays from the flash light bulb below the reflector to all of the lenses, said reflector being protected by a glass at the lower end of the casing, and said casing being held in a closed position by a suitable catch.

A further object of the invention is to provide a unique arrangement for holding the protective glass and reflector within the casing.

With the above and other objects in view this invention consists of the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same I will describe its construction in detail, referring by numerals to the accompanying drawing forming a part of this application in which:—

Fig. 1 is a side elevation of a combination flash light and emergency traffic signal constructed in accordance with my invention.

Fig. 2 is a fragmentary longitudinal sectional view thereof.

Fig. 3 is an upper end view of the same.

Fig. 4 is also an upper end view with the cover removed.

Fig. 5 is a view with the signal casing open or swung back.

Fig. 6 is an isometric view of the reflector and glass holder together.

Fig. 7 is a section of the glass holder on the line 7—7 of Fig. 4.

Fig. 8 is a section of the reflector on the same line of Fig. 4 as is Fig. 7.

Fig. 9 is a view on a reduced scale illustrating how the flash light may be supported in an oblique position by the traffic signal casing.

In carrying out my invention as herein embodied 10 represents the usual body of a flash light having a threaded head 11 within which is mounted the ordinary reflector 12 and bulb 13. The bulb is supplied with electrical energy from batteries 14 and the current is controlled by a switching mechanism, the manually operable part of which is shown at 15.

Across the top or outer end of the flash light head 11 is disposed a glass 16 which is substituted for the usual flash light lens and held in place by a collar 17 removably mounted on the flash light head.

An octagon shaped casing 18, preferably having four large sides and four smaller sides, is hinged at its lower or inner end to the collar 17 by means of a hinge 19 and said casing is held in a closed position, as in Figs. 1 and 2, by a catch 20 of the spring actuated type carried by the collar 17 and engaging a lip on the lower or inner end of said casing.

In the larger walls of the casing are fixed lenses 21, one pair of which are red and the other pair green and those of the same color are positioned directly opposite each other and each pair are at right angles to the other pair.

The casing is made open from end to end but the upper end or top is normally closed by a cover 22 having guideways 23 to slidably mount it on outwardly projecting flanges 24.

A glass holder 25 includes four legs 26 joined by connecting strips 27 which in plan form an octagon to fit in the casing 18 and from the lower or inner ends of the legs are produced a number of toes 28 in different horizontal planes so as to hold a sheet 29 of plain glass.

An inverted pyramidal reflector 30 has its inclined walls separated at their upper ends and from said upper ends project vertical extensions 31 which engage the outside faces of the connecting strips 27 of the glass holder 25 and between the legs 26. The reflector 30 has a bridge 32 across the upper portion below the extensions which engages the underneath edges of two of the connecting strips 27 of the glass holder 25 and thereby suspends the latter. This bridge has a threaded hole 33 to receive a screw 34 projected through a hole in the cover 22 after said cover has been put in place and the head of said screw is preferably countersunk. As the glass holder and reflector snugly fit inside of the casing the cover 22 is held against accidental displacement and the single screw is the final thing that holds the reflector, the glass holder with its glass within the casing and the cover on said casing.

From the foregoing it will be apparent that I have produced a relatively inexpensive combination flash light and emergency traffic signal having many useful purposes. For example, when the casing is in a closed position, as in Fig. 1, the device may be used as an emergency traffic signal for directing vehicular traffic betwen street intersections and also for directing both pedestrian and vehicular traffic at street intersections and when the casing is open, as in Fig. 5, it can be used as an ordinary flash light or the open casing will support the said flash light in an inclined position, as in Fig. 9, to direct the rays of light at an angle toward a location where work is being done as on to an automobile wheel when the tire is being repaired. Further the device with the casing closed may be inverted and set on the roadway to act as a danger signal.

Of course I do not wish to be limited to the exact details of construction herein shown and described as these may be varied within the scope of the appended claims without departing from the spirit of my invention.

Having thus fully described my invention what I claim as new and useful is:—

1. A combination flash light and emergency traffic signal comprising the usual flash light having a head with the usual reflector and bulb therein, a sheet of glass across said head to protect the reflector and bulb and coacting with the reflector to hold it in place, a collar detachably mounted on the head and holding the glass in place, an octagon shaped casing hinged to said collar, a catch mounted on the collar and coacting with the casing to hold the latter in a closed position, a pair of red lenses mounted in opposite walls of the casing, a pair of green lenses mounted in other walls of the casing opposite each other and at right angles to the pair of red lenses, an inverted pyramidal reflector mounted in the casing with a reflector surface facing each lens, means to fasten said pyramidal reflector in the casing, and a glass disposed across the inner end of the casing to protect the pyramidal reflector when the casing is open.

2. The structure in claim 1 wherein the pyramidal reflector is fastened to the outer end of the casing in combination with a glass holder to support the glass in the casing, said holder hanging from the pyramidal reflector.

3. The combination with a flash light having a head with a reflector and bulb therein, a collar removably mounted on the flash light head, a casing octagon shaped in plan and including four wide walls and four narrow walls, a hinge connecting said casing to the collar, a catch on the collar co-acting with the casing to hold the latter in a closed position, lenses of one color mounted in opposite wider walls of the casing, other lenses of another color mounted in opposite wider walls of the casing at right angles to the first mentioned lenses, outwardly projecting flanges on the outer end of said casing, a cover having guideways for slidably mounting said cover on the casing, a glass holder comprising four legs and connecting strips joining the upper ends of said legs, a number of toes in different horizontal planes on the lower ends of said legs, an inverted pyramidal reflector the walls of which are separated from each other at their upper ends, extensions projecting vertically from the upper ends of the reflector walls and overlapping the outer faces of the connecting strips of the glass holder to suspend said glass holder, a bridge connected to the reflector at the bottoms of the extensions, said bridge having a threaded hole therein, a screw projected through the cover and screwed into the hole in the bridge to fasten said pyramidal reflector and glass holder and cover in place with a reflector surface facing each lens, and a glass plate mounted between the toes of said glass holder.

4. In a device of the kind described, a collar for attachment to a flash light, a casing hinged to said collar, a catch on the collar to hold the casing normally in contact with said collar but releasable to permit the casing to be swung back, a cover on the outer end of the casing, an inverted pyramidal reflector, means to attach said reflector to the cover, a glass holder suspended from the reflector and having legs projecting below the reflector, a glass plate disposed across the lower end of the casing below the reflector and supported by the legs of the glass holder, and lenses mounted in side walls of the casing and arranged in pairs of different colors, those of the same color being directly opposite each other and each pair being located at right angles to the other pair and each lens facing a reflecting surface of the pyramidal reflector.

5. In a device of the kind described, a collar for attachment to a lamp body, a casing hinged to said collar, a catch on the collar to hold the casing normally in contact with said collar but releasable to permit the casing to be swung back, a cover on the outer end of the casing, an inverted pyramidal reflector, means to attach said reflector to the cover, and lenses mounted in side walls of the casing and arranged in pairs of different colors, those of the same color being directly opposite each other and each pair being located at right angles to the other pair and each lens facing a reflecting surface of the pyramidal reflector.

6. In combination with an electric lamp, a casing carried by said lamp, the light rays from the latter entering the casing through the bottom of said casing, a pair of red lenses mounted in opposite side walls of the casing, a pair of green lenses mounted in other side walls of said casing opposite each other and at right angles to the pair of red lenses, an inverted pyramidal reflector attached to the top wall of the casing with a reflecting surface facing each lens, a glass holder suspended from the reflector and having portions extending below said reflector, and a glass plate mounted in said portions of the holder which extend below the reflector.

ELMER CRISWELL.