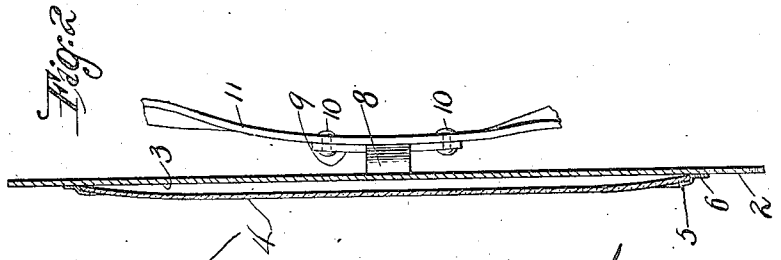
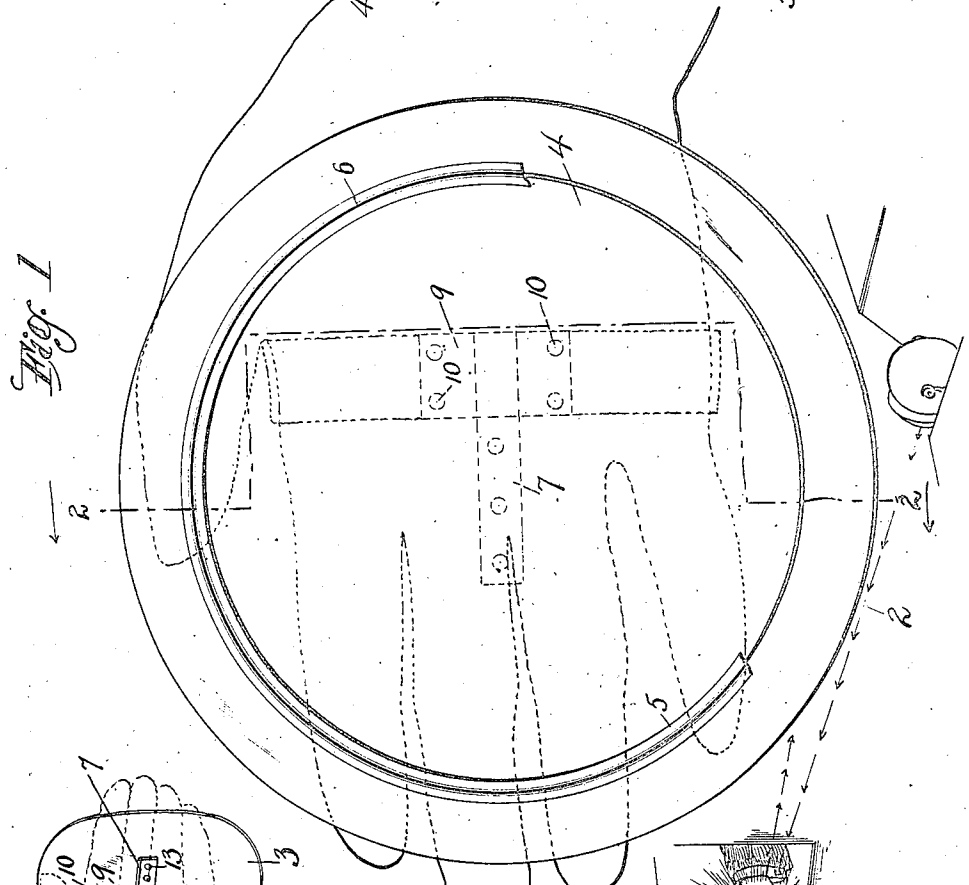
P. R. SHAILER.

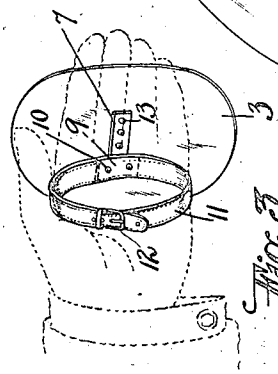
HAND CARRIED FLUORESCENT INDICATOR OR SIGNAL.

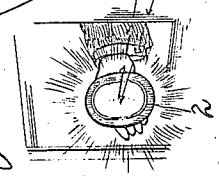
APPLICATION FILED MAY 6, 1920.

1,402,382. Patented Jan. 3, 1922.









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UNITED STATES PATENT OFFICE.

PAUL R. SHAILER, OF WASHINGTON, DISTRICT OF COLUMBIA.

HAND-CARRIED FLUORESCENT INDICATOR OR SIGNAL.

1,402,382. Specification of Letters Patent. Patented Jan. 3, 1922.

Application filed May 6, 1920. Serial No. 379,294.

To all whom it may concern:

Be it known that I, PAUL R. SHAILER, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Hand-Carried Fluorescent Indicators or Signals; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a fluorescent indicator, and more especially a signal device which is particularly adapted for use by automobilists.

A further object of the invention is to provide a device of the character specified which is adapted for use on the hand of the operator.

Incidentally, by the use of a fluorescent indicator I dispense with the use of the ordinary electric light bulb, carried on the hand of the operator in circuit with a battery carried upon the body of the operator.

With these objects in view, the invention resides, generally stated, in the combination of a member having a surface suitable for the reception and retention of a material having fluorescent properties, and means connected with said member for securing the same conveniently to the hand of the operator.

The invention is clearly disclosed in an exemplary form in the accompanying drawing, in which like reference characters designate corresponding parts throughout the several views. Briefly described:

Figure 1 is a view in top plan of a device constructed in accordance with my invention in use on the hand of an operator;

Figure 2 is a sectional view on the line 2, 2 of Figure 1;

Figure 3 is a perspective view of the device of my invention looking at the under side thereof, and

Figure 4 is a diagrammatic view illustrating the use of the invention.

Referring now in detail to the drawing:

1 designates a member, in this instance a plate, of any preferred shape, such as a disk as shown in Figure 1, or of elliptical form, as shown in Figures 3 and 4. Said member is of any suitable material having a surface adapted for the reception and retention of a material having fluorescent properties, such as fluorescent paint, radiumized zinc sulfid, or some other radiumized substance or compound. Preferably, said fluorescent material is so disposed on the disk 1 as to leave a border 2 surrounding such fluorescent surface, which border may be colored in any suitable manner, so as to constitute a signal which is adapted to be used during the day as well as at night. The fluorescent surface 3 may be protected, if desired, in any suitable manner, as by means of a disk 4 of appropriate material, such as celluloid, said disk being retained in position beneath a lip 5 carried by a ring 6, secured to the disk 1.

It is a well known law of physics that any article which is visible by external light and which is not reflective is a refracting surface. An object is visible only by reason of certain rays being reflected, but unless the surface is highly polished the reflection is only partial, other rays being refracted. An ordinary surface is, therefore, a refracting surface. The surface 3 of the present device refracts the light which impinges thereon. The refraction is further augmented by the curvature of the transparent member 4. This transparent member 4 is of necessity a reflecting surface. The device, therefore, combines the properties of fluorescence, reflection and refraction.

The invention comprehends suitable means for securing the disk upon the hand of the operator, and in this instance I provide a bracket 7, curved at one end thereof, as shown at 8, said curved portion terminating in a right angled portion 9, suitably secured, as by means of rivets 10, to a strap 11 of flexible material, such as leather, carrying a buckle 12, whereby the strap may be secured around the hand or wrist of the operator. The bracket 7 is secured, as by means of rivets 13, to the disk 1. By means of the curved portion 8 of the bracket, the disk 1 is held spaced from the hand of the operator so that the fingers and hand of the operator will have full play.

Figure 4 illustrates the operation of my device, and such operation is apparent from an inspection of this diagrammatic figure.

I am aware, of course, that it is not new to provide a fluorescent surface upon various objects, such as door knobs, electric switches, push buttons, and upon the chassis of an automobile, etc., but, so far as I am aware,

it is new to provide an indicator adapted to be conveniently disposed upon the hand of the operator, dispensing with the usual patented forms of devices carried by the hand of the operator and involving the use of an electric light bulb, and a battery in circuit therewith. The advantages claimed for my invention over such well-known electric signal devices used upon the hand of the operator, are that my device is more simple to manufacture, can be sold more cheaply and is less liable to become broken. Electric light bulbs are easily broken and batteries wear out and have to be renewed. Thus an electric signalling device is expensive and not generally used.

What I claim to be new is:

1. A signal comprising a disk of sheet material, a hand-attaching means carried upon one side of the disk, fluorescent coating covering the central portion of the disk upon the side opposite the hand-attaching means leaving a non-fluorescent border, the fluorescent and non-fluorescent surfaces being of contrasting colors.

2. A signal comprising a disk of sheet material, a hand-attaching means carried upon one side of the disk, a fluorescent coating covering the central portion of the disk upon the side opposite the hand-attaching means leaving a non-fluorescent border, a flexible transparent sheet covering the fluorescent surface, said fluorescent and non-fluorescent surfaces being of contrasting colors.

In testimony whereof I hereunto affix my signature.

PAUL R. SHAILER.