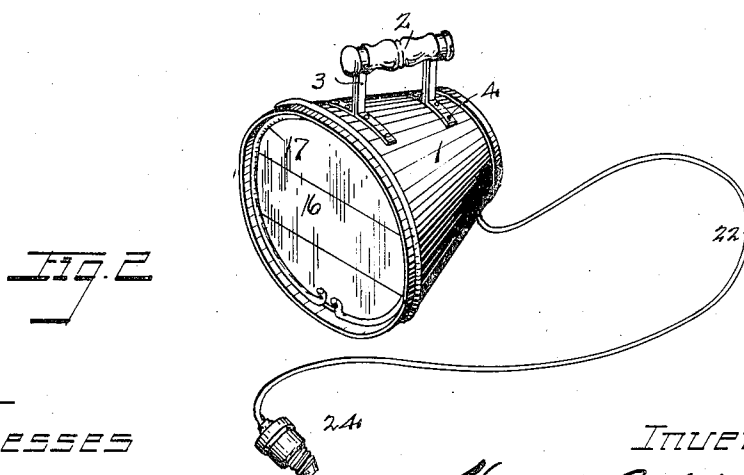
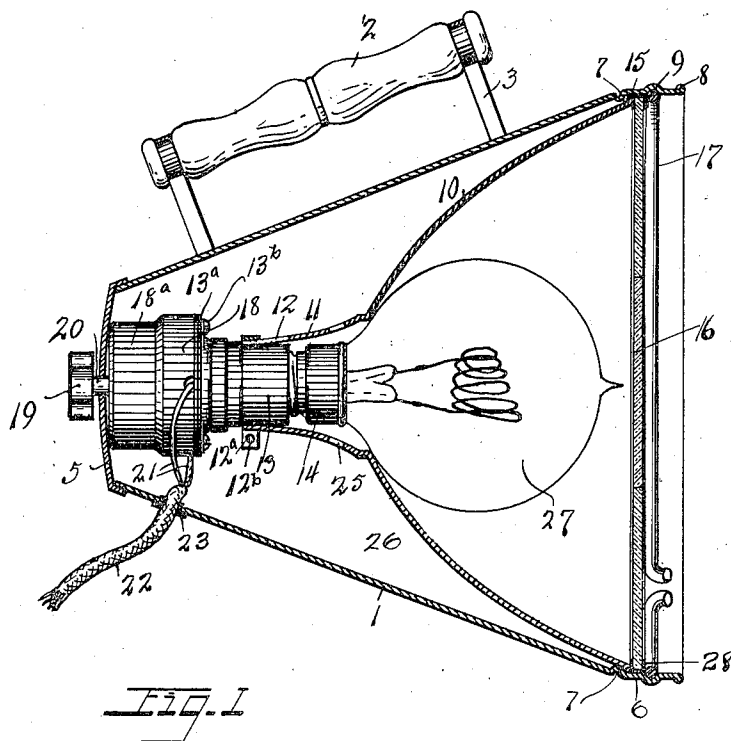


H. B. KENYON.
 PORTABLE SEARCH LIGHT.
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1,016,887.

Patented Feb. 6, 1912.



Witnesses

Oliver M. Kappler.
 G. K. Smith.

Inventor

Harrie B. Kenyon
 By J. B. Hull.
 Attorney

UNITED STATES PATENT OFFICE.

HARRIE B. KENYON, OF BEDFORD, OHIO.

PORTABLE SEARCH-LIGHT.

1,016,887.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HARRIE B. KENYON, a citizen of the United States, residing at Bedford, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Portable Search-Lights, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

This invention relates to portable electric lamps, and has for its object the provision of a powerful light source, housed in a weather proof casing and provided with means whereby it may be expeditiously attached to any convenient source of electric energy.

Another object of this invention is to provide a casing which shall consist of the smallest possible number of parts and in which the light source shall be easily and securely carried and at the same time be free from danger of breakage, overheating, or short circuiting.

A further object is to provide an electric lamp which shall be efficient for use by steam boats, fire departments, and in other situations where a portable, weather proof lamp is required.

One embodiment of my invention is illustrated in the following drawings in which—

Figure 1 is a longitudinal cross sectional view of the device, the lamp and socket being shown in elevation; and Fig. 2 is a perspective view of the complete device drawn to a smaller scale.

Referring more particularly to the drawings, 1 represents a frusto conical metallic shell having a handle 2 at one side thereof suitably attached to said shell as by brackets 3 and rivets 4, and having its smaller end closed by a plate 5 rigidly attached thereto as by riveting, brazing or screwing. The larger end of the shell 1 preferably terminates in a cylindrical extension separated from the conical portion of the casing by an inwardly projecting annular ledge or rib 7 and stiffened at its outer end by a rolled rim. At a point between said ledge and rim the cylindrical extension is formed with an internal groove 9, said groove, as well as said ledge and said rim, being preferably formed by rolling or spinning the thin metal of which the shell is made. Axially mounted within said shell is a reflector comprising a parabolic body 10 and a tapering neck 11, said neck being

split at its smaller end, as indicated at 12, and adapted to be clamped over the neck 13 of an incandescent lamp socket 14 by means of the tangential clamping bolt 12^a carried by radial ears 12^b. The outer and larger end of this reflector is provided with an out-turned flange 15, which is seated against the ledge 7 on the one side and is contacted on the other side by the wind-glass 16, which is, in turn, held in place by the wire lock 17 sprung into the groove 9. At the other and smaller end of the shell is supported a porcelain base switch 18 of approved type, having the usual metallic cover 18^a and button 19, whose shank 20 accurately fits a hole in the center of the plate 5 and having on the opposite side from said button and axial therewith the aforementioned lamp socket 14, conveniently attached thereto by a flange 13^a and screws or bolts 13^b. Lead wires 21 are attached to the switch 18 in a well known manner and are connected to a cord 22 passing through an insulating bushing 23 set in the side wall of the casing, said cord being provided at its outer end with a screw plug 24 or other appropriate connecting device. The neck 11 of the reflector is perforated, as shown at 25, to give access to the chamber 26 for the circulation of air to prevent overheating, which would otherwise be troublesome, since there is no metallic connection between the neck and the shell by which the heat could be conducted away. A lamp bulb 27, preferably a "stereopticon" light, is screwed into the socket 14 in such manner that in adjusted position the bulb just contacts with the edge of the reflector and the filament is brought into exact focus.

The method of assembling the device is thought to be obvious. The cord 22 is first passed through the bushing 23 and the lead wires 21 attached to the switch. The reflector is next adjusted upon the outside of the socket neck and the whole introduced into the casing, the switch button being removed to allow the seating of the switch. The lamp is next screwed into the socket, the wind-glass put in place, and the wire loop 17 sprung into its groove, which locks all the parts together. In this construction it will be observed that all the working parts are supported by the reflector through its locking engagement with the ledge 7 and spring ring 17, thus rendering assembling a very simple matter, and keeping the light source always in focus.

The wind-glass 16 is made in sections in a well known manner and is preferably surrounded by a thin metal rim 28 so that when disassembled it can be handled as a whole.

It will be noted that applicant has evolved a simple and efficient device which can largely be built up of standard, improved fittings, easily obtained in the open market and so not only cheaply and expeditiously manufactured, but capable of use with much higher voltages than prior devices, and not subject to criticism by insurance underwriters.

Having thus described my invention, what I claim is:—

1. A portable search light comprising in combination a tapered casing having an apertured plate closing its smaller end and a transparent member closing its larger end, an incandescent light socket axially supported in said casing, an electric light bulb seated therein and facing the larger end of the casing, a tapering supporting neck attached to said socket at its smaller end and approaching closely the flaring wall of the bulb at its larger end, and a concave reflecting surface extending outwardly and forwardly from the larger end of said neck and contacting with the inner surface of said casing at its larger end.

2. A portable search light comprising in combination a tapered casing having an apertured plate closing its smaller end and a transparent member closing its larger end,

an incandescent light socket axially supported in said casing, an electric light bulb seated therein and facing the larger end of the casing, a tapering supporting neck attached to said socket at its smaller end and approaching closely the flaring wall of the bulb at its larger end, and a concave reflecting surface extending outwardly and forwardly from the larger end of said neck and contacting with the inner surface of said casing at its larger end, said neck portion being provided with air-circulation passages.

3. A portable search light comprising in combination a frusto-conical shell having an apertured plate closing its smaller end and a transparent member closing its larger end, a lamp switch and socket axially supported in said casing, a reflector comprising a concave reflecting surface and a tapering supporting neck, said neck being clamped to said socket and the larger end of the reflector contacting with both said casing and said transparent member, a chamber formed between said reflector and said casing, and air-circulation apertures through said neck into said chamber.

In testimony whereof, I hereunto affix my signature in the presence of two witnesses.

HARRIE B. KENYON.

Witnesses:

J. B. HULL,
H. E. SMITH.