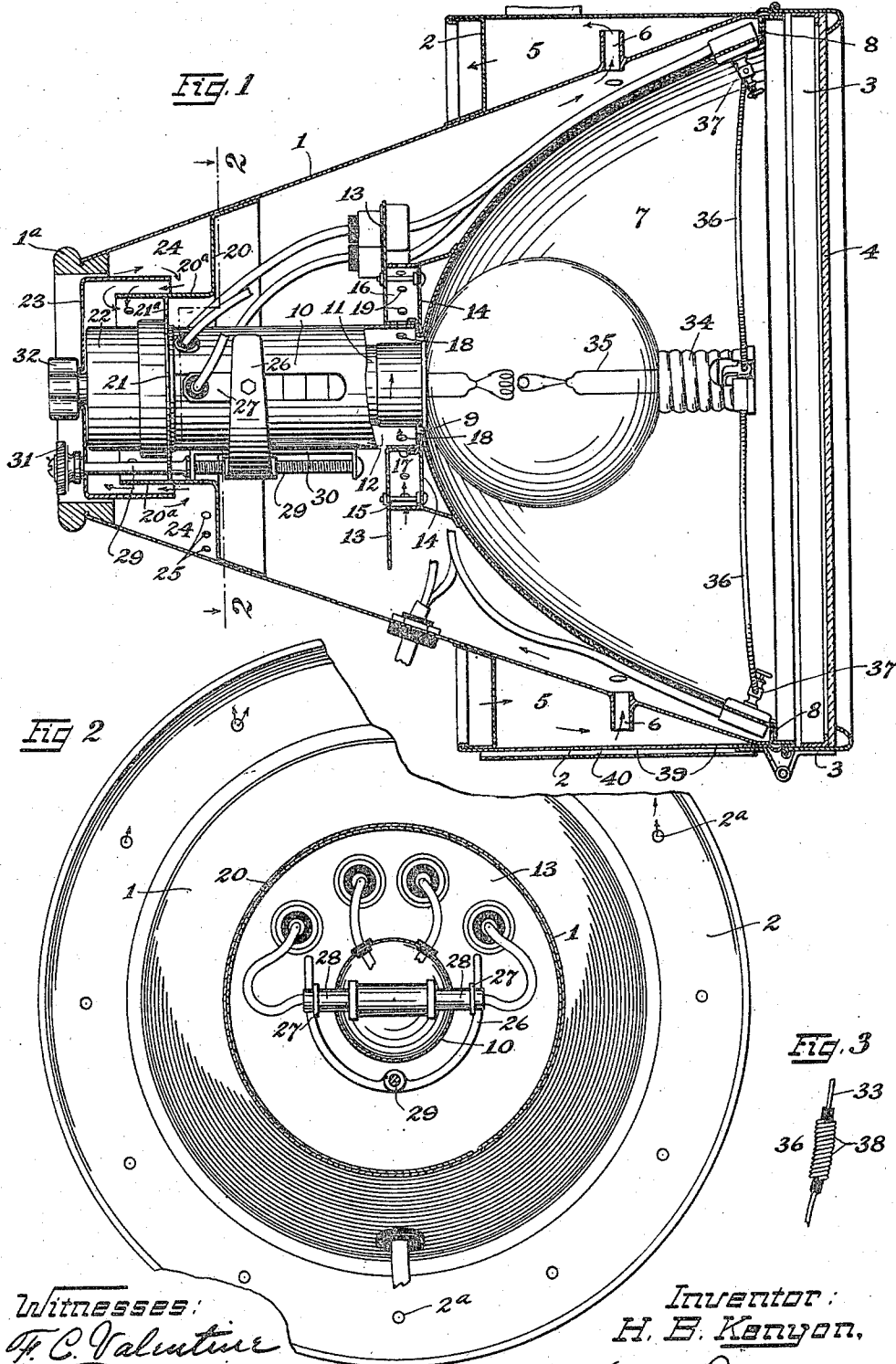


H. B. KENYON.
SEARCH LAMP.
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1,058,442.

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Witnesses:
H. C. Valentine
E. P. Schlosser.

Inventor:
H. B. Kenyon.
by Obed H. Williams
Attorney.

UNITED STATES PATENT OFFICE.

HARRIE B. KENYON, OF BEDFORD, OHIO, ASSIGNOR TO THE KENYON SEARCHLIGHT COMPANY, OF BEDFORD, OHIO, A CORPORATION OF OHIO.

SEARCH-LAMP.

1,058,442.

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 certain new and useful Improvements in Search-Lamps, of which the following is a specification.

My invention relates to improvements in search-lamps, the primary object of the invention being to provide a generally improved portable lamp of this character, particularly designed and adapted for use on boats by life saving crews and by municipal fire departments for the use of firemen.

A further object of the invention is to provide a ventilated lamp casing adapted for use in connection with an incandescent lamp of high power, and which is adapted to provide for a circulation of air in any position, and also having the parts so arranged and disposed relative to each other as to prevent the injury or inoperativeness of the parts by water in any position by the provision of self-draining features and openings combined with the ventilating features of the lamp casing.

A still further object of the invention is to provide a longitudinally adjustable double ended lamp together with improved means for mounting and carrying the front and rear ends of the same within the lamp body or casing and relative to the reflector.

With the above mentioned objects in view, the invention consists in the novel construction, arrangement, and combination of parts, hereinafter described, illustrated in one of its embodiments in the accompanying drawings, and particularly pointed out in the appended claims.

Referring to the drawings, forming a part of this specification, Figure 1, is a longitudinal vertical sectional view of the improved lamp, the ventilated socket casing being shown partly in section and partly in side elevation for the purpose of clearer illustration of the parts. Fig. 2, a cross sectional view taken on line 2—2 of Fig. 1. Fig. 3, an enlarged detail view of a portion of one of the flexible supports leading to and supporting the front end of the improved longitudinally adjustable double ended lamp.

Similar numerals of reference designate like parts throughout all the figures of the drawings.

The improved search-lamp comprises a ventilated casing 1, preferably of conical shape as shown, and provided at its front with a ventilated hood 2, and a hinged front 3, provided with the usual glass cover 4.

The rear wall of the ventilated hood is provided with a series of vent openings 2^a, and forms an annular air circulating chamber or passage 5, said chamber communicating with the interior of the lamp casing 1, by means of a plurality of tubular openings 6, at the top and bottom of the casing when the latter is in its normal position as shown in the drawings.

When the lamp is in operation in the position shown in the drawings fresh air will be permitted to enter the lower vent openings 2^a, into the circulating passage 5, and pass upwardly through the lower tubular openings 6, and over and about the improved ventilated socket casing as herein-after described, and it is heated and passed upwardly and out through the upper tubular openings as indicated by the arrows in Fig. 1, of the drawings.

The improved parabolic reflector 7, is detachably mounted and secured within the front of the casing 1, by means of a plurality of brackets 8, said reflector being provided at its center with a lamp socket receiving opening 9, communicating with a ventilated tubular socket-casing 10, extending rearwardly from the socket receiving opening 9, and adapted to receive and contain a lamp socket 11, of an improved double ended incandescent lamp mounted and constructed as hereinafter described.

The socket-casing 10, provides an annular air circulating passage 12, about the lamp-socket 11, and is provided at its front with a supporting member or disk plate 13, said disk plate being secured to a flanged rim member 14, at the rear of the reflector by means of a plurality of securing bolts 15, a rim 16, being interposed between the plate 13, and rim member 14, and providing an annular air circulating passage or chamber 17, at the front of the socket-casing 10, and at the rear of the reflector 7, said air circulating passage or chamber 17, communicating with the air circulating passage or chamber 12, about the socket 11, through the medium of a plurality of vent openings 18, the rim 16, being likewise provided with a plurality of openings 19, whereby a cir-

ulation of air is provided as indicated by the arrows in Fig. 1, of the drawings.

As a means for supporting the ventilated socket-casing 10, at the rear of the lamp-casing a flanged supporting member 20, is provided, said member being provided with a centrally located supporting sleeve 20^a, adapted to receive and contain a supporting disk plate 21, at the rear of the socket-casing 10. The supporting plate or member 21, is adapted to carry the switch and its connections, a switch casing or cover 22, being provided, and as a means for providing for the inlet or circulation of air at the rear or reduced portion of the lamp-casing as well as preventing water at this point from reaching the switch and its connections a protecting cup-shaped cover 23, is provided, the rim portion of said cover being slightly spaced from the reduced rim portion 1^a, of the lamp-casing and also extending over and spaced from the supporting sleeve 20^a, of the supporting member 20, so as to provide annular air circulating passages for the inlet of air as indicated by the arrows in Fig. 1, of the drawings. The supporting disk plate 21, is provided with vent openings 21^a, for the inlet of air to the interior of the lamp casing and should any water find its way into the rear portion of the lamp-casing it will be observed that it will be caught in the annular chamber 24, formed intermediate the supporting member 20, and the adjacent lamp-casing 1, and will be drained therefrom through the openings 25, formed in the casing 1, near the attached portion of the supporting member 20.

As a means for adjustably mounting and longitudinally moving the lamp socket 11, within the tubular socket-casing 10, a supporting yoke or bracket member 26, is provided, the side members of said yoke or bracket, in the present instance, being connected to the lamp socket 11, by means of side members 27, connected to the laterally extending arms 28, of the inlet T member leading to the base of the lamp socket.

As a means for longitudinally moving and adjusting the supporting yoke 26, whereby to carry the lamp socket and lamp longitudinally for adjusting the latter within the lamp-casing and relative to the reflector, an adjusting bolt 29, is provided, said adjusting bolt having a threaded portion mounted in a bracket 30, and extending through a threaded head in the yoke or bracket 26. The bolt 29, extends through the supporting disk portion 21, and the cover member 23, and is provided at its rear with a removably mounted adjusting head 31. By removing the adjusting head 31, and switch button 32, and detaching the reflector 7, from the brackets 8, at the front of the lamp-casing, the reflector to-

gether with the lamp and attached socket-casing 10, may be removed from the casing 1.

As a means for removably supporting the front of the improved double ended lamp within the reflector as well as providing a convenient means for connecting the connecting wires 33, to the second or front socket 34, carrying the front end of the lamp and the second filament 35, flexible supports 36, are provided, said flexible supports extending inwardly from and being carried by binding posts 37, suitably mounted and connected at diametrically opposite points at the front of the reflector 7, said flexible supports being of any suitable and convenient construction, such for example, as coils of wire 38, forming a flexible tube adapted to inclose the connecting wires 33, and insulated from the latter as shown most clearly in Fig. 3, of the drawings.

The base of the ventilated hood 2, when in its normal position as shown in Fig. 1, is preferably provided with a plurality of holes or openings 39, covered with an open ended channel member or strip 40, for the convenient drainage of any water which may find its way into the annular air circulating chamber or passage 5, through the openings 2^a, at the rear of the ventilated hood 2.

From the foregoing description, taken in connection with the accompanying drawings, the operation and advantages of my invention will be readily understood.

Having thus described an embodiment of my invention, what I claim and desire to secure by Letters Patent is,—

1. In a search-lamp, a longitudinally adjustable double ended lamp, and flexible current conductors leading to opposite ends of said lamp.

2. In a search-lamp, a double ended lamp, means for independently supporting and connecting the opposite ends of said lamp, and means for longitudinally moving and adjusting said lamp.

3. In a search-lamp, the combination with a casing provided with a reflector and socket-casing; of a longitudinally adjustable double ended incandescent lamp, and flexible connecting means at the front of said lamp.

4. A search-lamp, comprising a ventilated lamp casing, a reflector provided with a lamp-socket receiving opening, a ventilated socket-casing extending from said opening, and a lamp-socket mounted within and spaced from said socket-casing.

5. In a search-lamp, a lamp and socket-casing, a reflector, an incandescent lamp provided with a socket longitudinally adjustable in said socket-casing, a second socket and filament at the front of said lamp, and flexible members connected to

said second socket and provided with conducting wires in circuit with said filament.

6. A search-lamp, comprising a casing, a reflector provided with a socket-casing, a lamp socket movably disposed within and spaced from the latter, means for supporting said lamp socket independently of said socket-casing, a double ended incandescent lamp carried by said lamp socket within said reflector, means for moving and adjusting said socket and lamp within said socket-casing and reflector, and means for movably supporting the front of said double ended lamp within the front portion of said reflector.

7. A search-lamp, comprising a conical shaped casing, a reflector removably mounted therein, a socket-casing carried by said reflector, a lamp socket arranged within and spaced from said socket-casing, means for supporting said lamp socket, a lamp mounted in said lamp socket and extending into said reflector, adjusting means connected to said lamp socket supporting means whereby said lamp may be moved longitudinally

within said reflector, a second socket and filament at the front of said lamp, and flexible conducting supports leading to said second socket.

8. In a search-lamp, a conical shaped ventilated casing provided at its front with a ventilated hood and at its rear with a ventilated socket casing, a reflector communicating with said socket casing, and a lamp socket mounted within and spaced from said socket casing.

9. In a search-lamp, a ventilated lamp casing provided with annular air circulating passages, a reflector provided with a ventilated socket casing communicating with said annular air circulating passages, and a lamp socket mounted within said ventilated socket casing.

In testimony whereof I have affixed my signature in presence of two witnesses.

HARRIE B. KENYON.

Witnesses:

P. P. RIPNER,
O. C. BILLMAN.