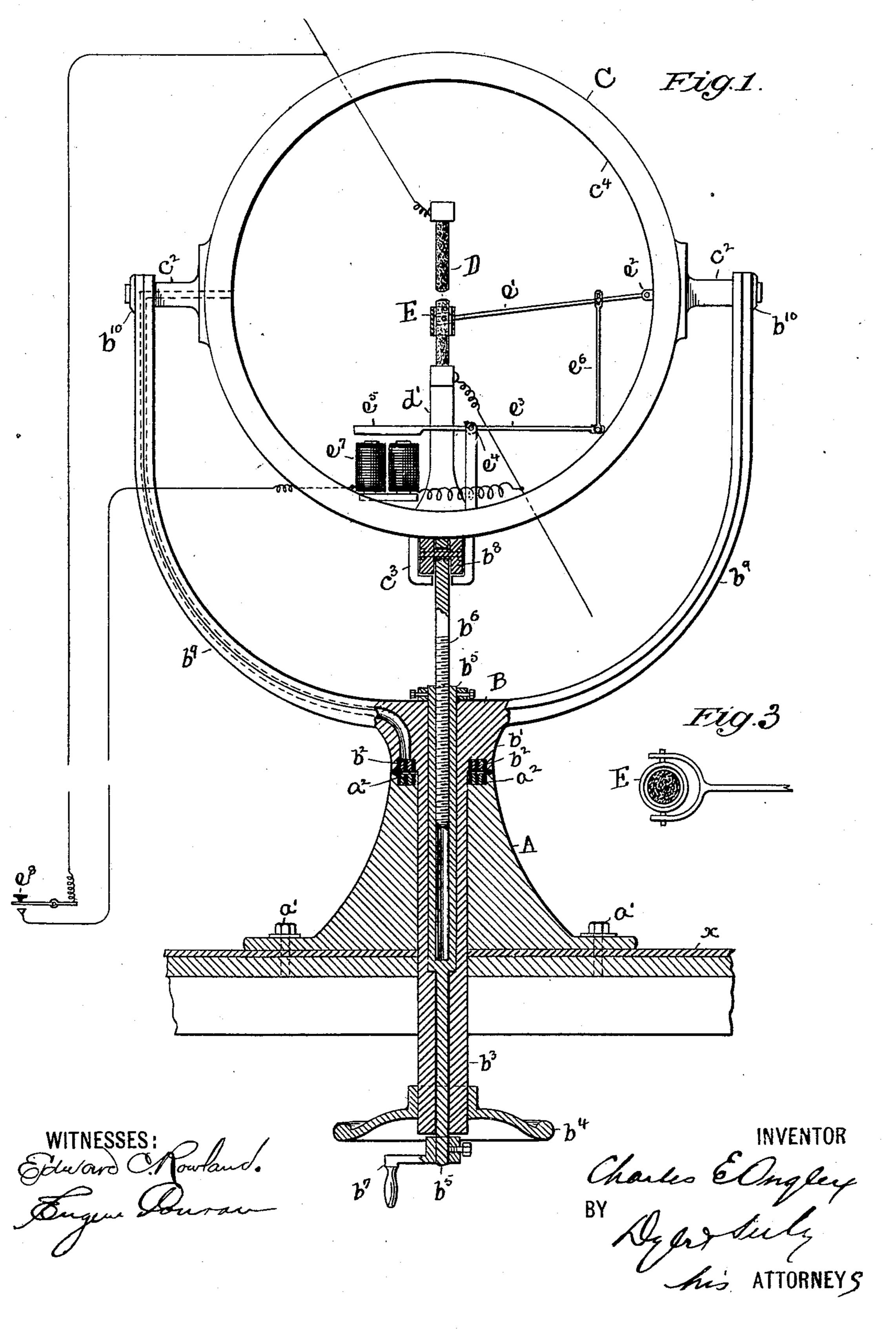
C. E. ONGLEY. ELECTRIC SEARCH LIGHT.

No. 513,052.

Patented Jan. 16, 1894.



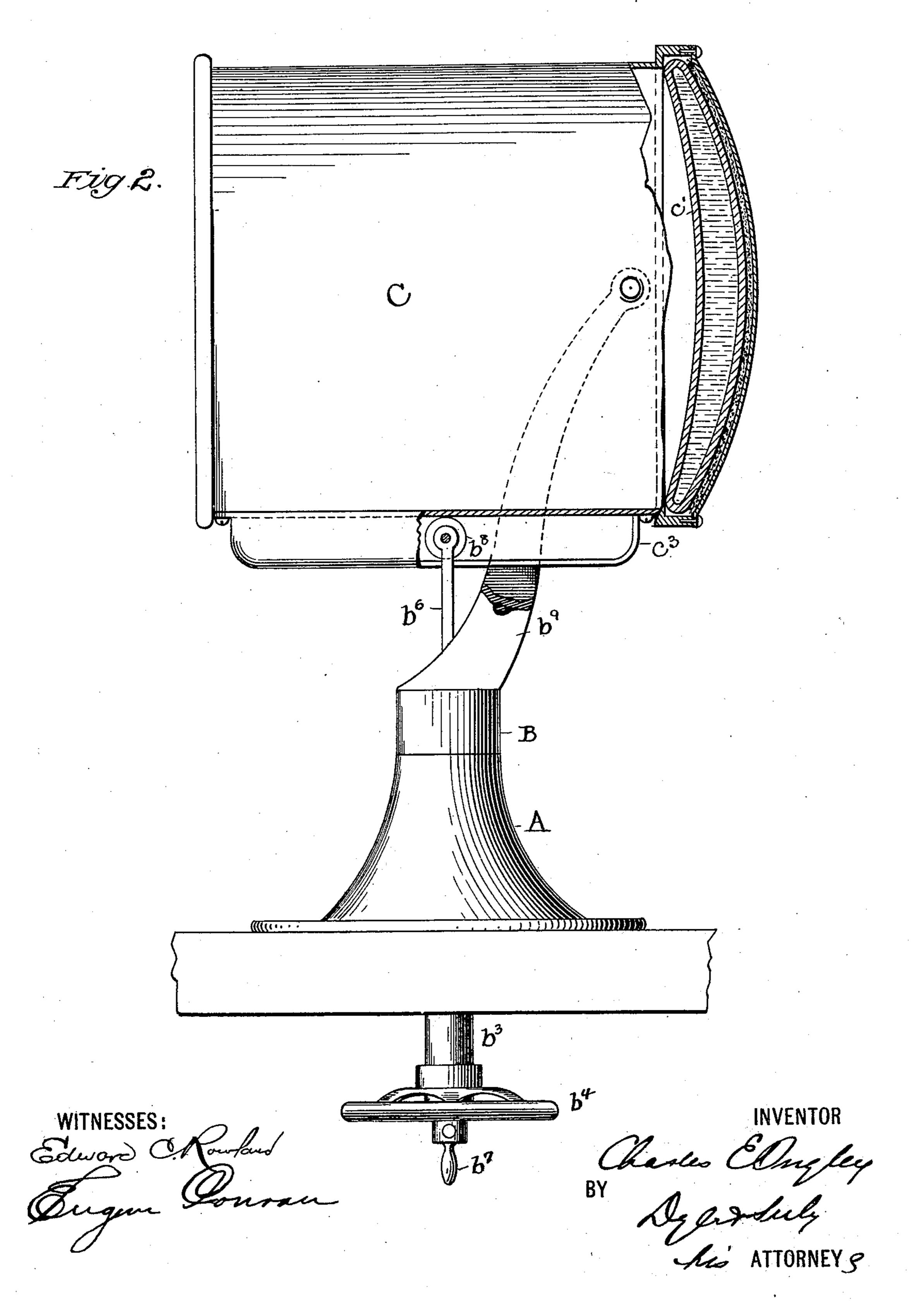
(No Model.)

2 Sheets-Sheet 2.

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United States Patent Office.

CHARLES EDWARD ONGLEY, OF NEW YORK, N. Y., ASSIGNOR TO GEORGE J. SCHOEFFEL, OF SAME PLACE.

ELECTRIC SEARCH-LIGHT.

SPECIFICATION forming part of Letters Patent No. 513,052, dated January 16, 1894.

Application filed August 22, 1893. Serial No. 483,756. (No model.)

To all whom it may concern:

Be it known that I, CHARLES EDWARD ONG-LEY, a citizen of the United States, residing at New York city, in the county and State of New 5 York, have invented a certain new and useful Improvement in Search-Lights, of which the following is a specification.

My invention relates to improvements in search lights and particularly a means for exto posing and concealing the light, in a way to make a flash light for signaling purposes, together with means for holding and adjusting the lamp to throw the light in any desired direction. The same is illustrated in the ac-15 companying drawings, in which like letters refer to like parts.

Figure 1 is mainly a vertical section of the lamp, taken through the center of the base. Fig. 2 is a side perspective view of the lamp, 20 with portions broken away in section. Fig. 3 is a horizontal section of the carbon point | and screen or sleeve.

The base A is cored through the center and provided preferably with ball or other anti-25 friction bearing $a^2 a^2$. B is a bracket having a base b', arranged to be seated on the base A and provided with like bearings b^2 and b^2 . The shaft b^3 is fixed to the base b' and passes freely through the core of the base A. It is 30 provided with the hand wheel b^4 . The shaft b^3 is also cored through the center to receive the sleeve and rod b^5 . The rod is provided with the crank arm b^7 and the sleeve is internally threaded to receive the screw b^6 , which 35 is provided with the friction wheel b^8 . Extending out of the bracket base b' are the forked arms b^9 and b^9 , having journal bearings at the ends thereof b^{10} and b^{10} ; these arms are preferably made hollow to carry the elec-40 tric wires to the lamp, and are bent out of the vertical plane as illustrated in Fig. 2.

C is the reflector, and D an arc lamp. I prefer to construct the reflector with the cylindrical hood lined with a non-reflecting 45 Surface c^4 , a reflecting surface c' being placed at one end thereof, and I prefer to construct this reflecting surface of glass, of concave form, hollow and filled with water or other liquid. Secured to the outside of the cylin-50 der C are the single shafts c2, c2 which are

under side of the same are secured the ways c^3 in which travel the friction wheel b^3 . The are lamp is secured within the cylindrical hood on the base d' or in any convenient man- 55 ner, and is suitably connected with an electric circuit, preferably through the hollow arms b^9 and b^9 .

While I have shown an arc lamp, as the light employed, I do not intend to limit my- 60 self to that form of light, but I may use any light with which my device may be employed.

E is a screen in the form of a sleeve of a size to receive the carbons of the arc lamp, and to move freely about them, it is pivoted 65 to an arm e' as shown in horizontal section in Fig. 3, said arm being pivoted to the interior of the cylinder at e^2 . The armature lever e^3 is pivoted to the upright stay e⁴ and provided with the armature e^5 at one end, and the other 70 end is adjustably connected with the arm e'by the rod e^6 . The electromagnet e^7 is in an electric circuit controlled by a key. I have shown the same in a shunt from the main light circuit controlled by the key e^8 . I dis- 75 close this electrical means of operating the screen or sleeve E and I prefer to operate the same in this way, but it may be controlled mechanically by using the armature lever as a key or otherwise. I have also shown the 80 screen in the form of a sleeve, which is a convenient form to use with the arc lamp, but may use other forms and do not limit myself to a sleeve.

The operation of my device is as follows: 85 The making and breaking of the electric circuit by the key e^8 causes the screen or sleeve E to conceal or expose the light as the same may be required, enabling the operator to signal by flashes of light.

In the construction shown, the lamp is arranged to be secured to the roof of the pilot house of a vessel by the bolts a'-a' or otherwise, with the hand wheel b^4 and crank arm b^7 passing through said roof and within reach 95 of the pilot on the under side of said roof. A horizontal movement of the lamp is obtained by turning the hand wheel b^4 , which causes the bracket B to revolve on its bearings. A vertical movement is obtained by turning the 100 crank arm b^7 , which operates the screw arm journaled in the bearings b^{10} and b^{10} , and on the 1 b^6 and causes the friction wheel b^8 to run in

the ways c^3 as the reflector is raised or lowered, the bearing being at an eccentric to the point at which the reflector is pivoted to the bracket arms.

What I claim is—

1. The combination of means for supporting and adjusting a search light, consisting of a base upon which is seated and pivoted to move horizontally a bracket having two arms re between which is pivoted to move vertically a reflector the horizontal movement being controlled by a shaft passing through said base, and the vertical movement by a bar passing through said shaft and bearing on the re-15 flector at an eccentric to its pivotal point,

substantially as described.

2. In a search light, the combination of a light, a screen and means for reciprocating said screen to inclose or expose the light, a so reflector containing the light, and means to support and adjust said reflector consisting of a base upon which is seated a bracket pivoted to move horizontally and having two arms between which is pivoted the reflector to 25 move vertically, a shaft secured to the bracket and passing through the base and a bar passing through said shaft and bearing on the reflector at an eccentric to its pivotal point, substantially as described.

3. In a search light, the combination of a light, a screen and means for reciprocating said screen to inclose or expose the light consisting of an electro magnet in circuit and means to control said circuit, and an arma-

ture for the magnet connected with the screen, 35 a reflector containing the light, and means to support and adjust said reflector consisting of a base upon which is seated a bracket pivoted to move horizontally and having two arms between which is pivoted the reflector 40 to move vertically, a shaft secured to the bracket and passing through the base and a bar passing through said shaft and bearing on the reflector at an eccentric to its pivotal point, substantially as described.

4. In a search light, the combination of a light, a screen and means for reciprocating said screen to inclose or expose the light, consisting of an electro magnet in circuit and means to control said circuit, and an arma- 50 ture for the magnet connected with the screen by the levers and adjustable arm, a reflector containing the light, and means to support and adjust said reflector consisting of a base upon which is seated a bracket pivoted to 55 move horizontally and having two arms between which is pivoted the reflector to move vertically, a shaft secured to the bracket and passing through the base and a bar passing through said shaft and bearing on the re- 60 flector at an eccentric to its pivotal point, substantially as described.

This specification signed and witnessed this

31st day of July, 1893.

CHARLES EDWARD ONGLEY.

Witnesses:

WILLIAM FRANCIS MOODY, ELLA LINCOLN ONGLEY.