Nov. 6, 1945. E. W. ESDAILE 2,388,476

ADJUSTABLE SUPPORT FOR A LENS AND LAMP USED IN CONNECTION WITH COMPASSES AND THE LIKE

Filed Aug. 3, 1944

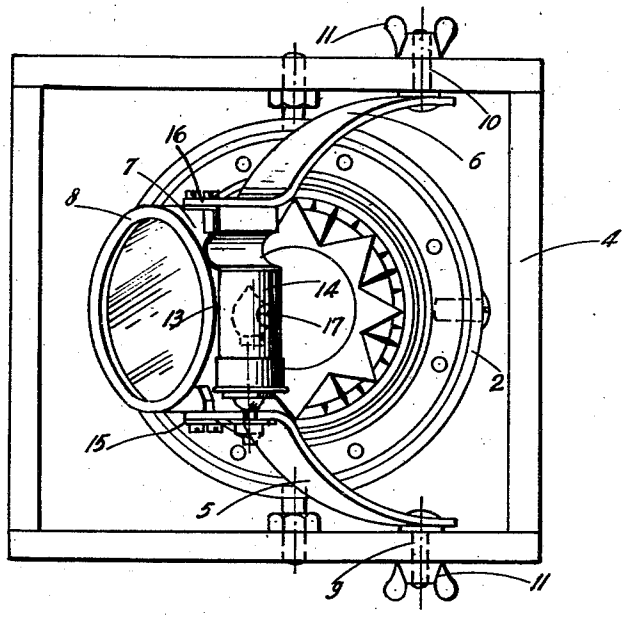


FIG-1-

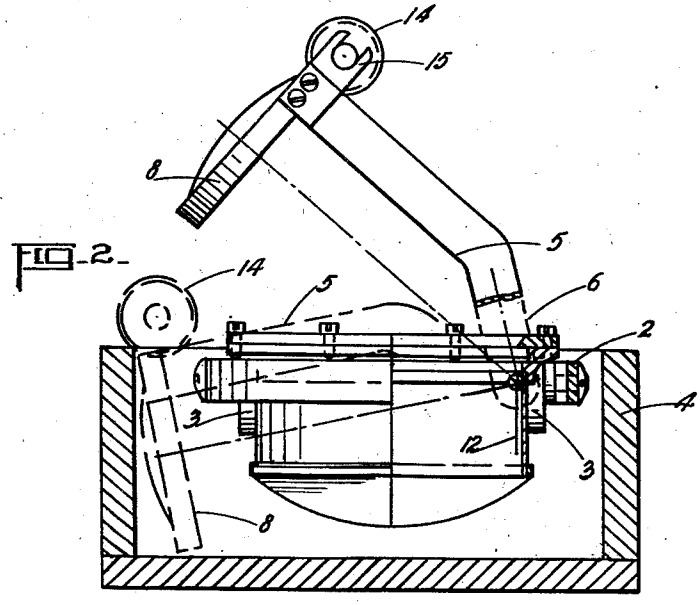


FIG-2-

Inventor
Edward Willson Esdaile
By his attorney
H. H. Raywards

Patented Nov. 6, 1945 2,388,476

UNITED STATES PATENT OFFICE

2,388,476

ADJUSTABLE SUPPORT FOR LENSES AND LAMPS USED IN CONNECTION WITH COMPASSES AND THE LIKE

Edward William Esdaile, Sydney, New South Wales, Australia

Application August 3, 1944, Serial No. 547,884
In Australia May 24, 1944

2 Claims. (Cl. 88—39)

My invention relates to means whereby a magnifying lens is used in connection with a magnetic compass and has for its object the provision of carrying means whereby the position of the lens may be quickly adjusted to suit the stature of the helmsman without disturbance of the focus of the lens relative to the compass card, and also maintaining the alignment of the lens which ensures the best vision.

An essential feature of my invention consists of a lens support in the nature of a frame having two arms which are pivoted upon the compass housing the pivoted centres of the arms being so disposed that an assumed line connecting them would be tangential to the circumference of the compass card and would coincide both horizontally and vertically with the usual lubber line upon the circumference of the card.

The support carries an incandescent lamp bulb by which the compass dial may be illuminated.

The invention may be employed upon binnacles of circular rectangular or other cross section.

An embodiment of the invention is illustrated in the accompanying drawing wherein:

Fig. 1 is a side elevation one half in section and Fig. 2 a corresponding plan.

The compass housing 1 is carried by gimbal rings 2—3, in a housing 4.

A frame is comprised of two arms 5 and 6 connected by a yoke 7 to which is fixed the frame of the lens 8.

The ends of the arms are respectively pivoted upon pivot pins 9 and 10 passing through the walls of the housing and having thumb nuts 11 screwed upon them by which the arms may be clamped in position to which they have been adjusted.

The pivoted points are located so that an assumed line connecting them would pass tangentially over the circumference of the compass card in coincidence with the lubber line 12.

It will be obvious that instead of the frame having two arms it may have only one arm its pivotal point being located in the position it would occupy if it were one of two arms.

An electric light bulb 13 is located in a tubular socket 14 carried between brackets 15—16 fixed to the yoke 7.

The tubular socket has an opening 17 and is turnable to direct the rays from the lamp at the desired angle upon the surface of the compass card.

I claim:

1. In an arrangement of the character described the combination with an open topped casing and a magnetic compass arranged therein and provided with a lubber line, of a frame pivotally connected to the sides of the casing for swinging movement above the casing, a magnifying lens carried medially of the frame, the axis of the pivot of the frame being so placed that it passes approximately through the periphery of the compass adjacent the lubber line, and the lens being so arranged on the frame that the axis of the lens also passes approximately through the said axis of the pivot and said lubber line.

2. An arrangement as claimed in claim 1 in which an electric lamp is carried with the frame at the side of the lens so as to direct light rays on the desired point on the compass.

EDWARD WILLIAM ESDAILE.