

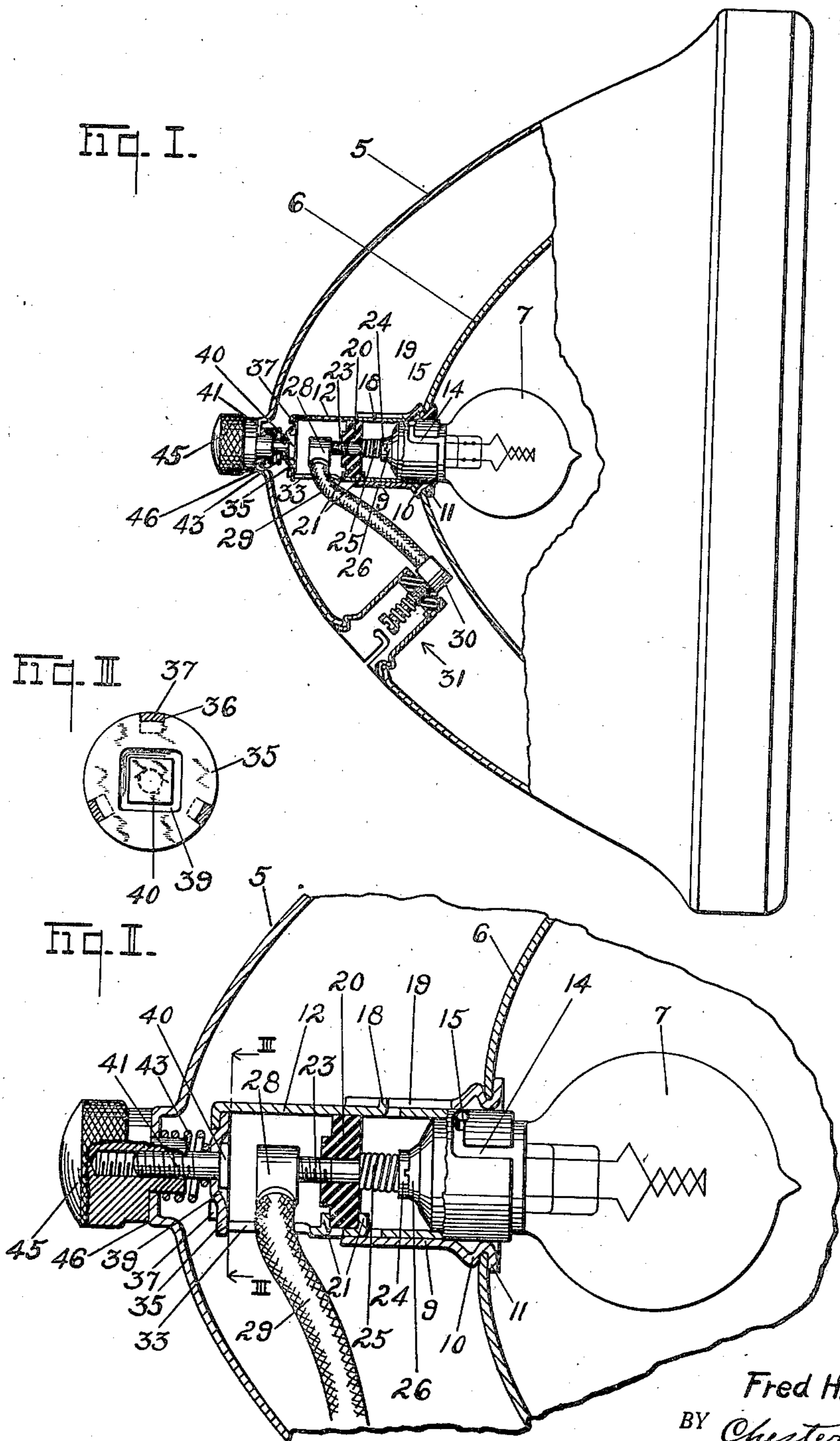
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FOCUSING LAMP SOCKET

Filed Aug. 27, 1920



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UNITED STATES PATENT OFFICE.

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FOCUSING-LAMP SOCKET.

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To all whom it may concern:

Be it known that I, FRED H. WETZEL, a citizen of the United States, residing at Toledo, county of Lucas, and State of Ohio, have invented certain new and useful Improvements in Focusing-Lamp Sockets, of which I declare the following to be a full, clear, and exact description.

This invention relates to headlights, spot-lights, projecting lights and the like and has reference particularly to means for holding and focusing the lamp carried by such.

An object of the invention is to provide improved means for holding a lamp such as an electric globe and for conveniently focusing the same, which shall be strong, durable, efficient both electrically and mechanically and adapted for quantity production at a minimum cost.

Further objects of this invention relate to economies of manufacture and details of construction as will hereinafter appear from the detailed description to follow. I accomplish the objects of my invention in one instance by the devices and means described in the following specification. A structure constituting one embodiment of my invention, which may be the preferred, is illustrated in the accompanying drawings forming a part hereof, in which:

Figure I is an elevation partly in section of a headlight illustrating my invention.

Fig. II is a sectional view similar to that of Fig. I but to a larger scale and

Fig. III is a sectional view taken in the line III—III of Fig. II.

In the drawings the same reference numerals refer to similar parts throughout the several views and the sectional views are taken looking in the direction of the arrows at the ends of the section lines.

Referring to the drawing, where I have chosen to illustrate my invention as applied to an automobile headlamp, an external casing 5 encloses a reflector 6 in which is located a source of light, such as an electric lamp 7. The central portion of the reflector is provided with an aperture in which is fitted a sleeve 9 whose front end portion is suitably expanded as at 10 and 11 to cause it to firmly clamp the reflector. Slidably mounted within the sleeve member 9 is a second sleeve or tubular member 12 whose forward end is adapted to receive the plug portion of the lamp 7 and which is provided

with a bayonet slot 14 for receiving the pin 15 of the lamp plug in the usual manner. To prevent the sleeve 12 from turning in the sleeve 9 it is provided with an integral lug 18 which is stamped up from the wall of the sleeve and engages in a longitudinal slot 19 in the outer sleeve. Intermediate the ends of the sleeve 12 is a disk 20 of insulating material which fits snugly within the sleeve and is further securely held from longitudinal movement by two integral lugs 21 stamped up from the walls of the sleeve and engaging opposite sides of the disk 20. A screw 23 slides freely through the middle of the disk 20 and has its head 24 normally pressed forward by a coil spring 25 to yieldingly engage the center terminal 26 of the lamp plug. The rear or threaded portion of the screw 23 is threaded in the terminal plug 28 to which is attached one end of the flexible conductor 29. The opposite end of this conductor connects with a second terminal block 30 forming a part of a socket member 31 secured to the outer casing 5 and by means of which the lamp is connected to the external circuit. A suitable opening 33 is provided in the sleeve 12 for the passage there-through of the flexible conductor 29. In order to slide the inner tube longitudinally to adjust the position of the lamp for proper focus the rear end of the sleeve 12 is provided with an end plate 35 having in this particular instance three notches 36 in which lie three lugs 37 integral with the sleeve 12 and which are bent over to engage the outer face of the plate 35. The central portion of the plate 35 is provided with a square depression 39 for the reception of the square head 40 of the screw 41 which may be rigidly secured to the plate 35 by solder, if such is found desirable. Between the outer face of the plate 35 and the casing 5 is a coil spring 43 to normally urge the sleeve 12 forward and a thumb nut 45 is threaded on the outer end of the bolt 41 and bears against the outer flattened portion 46 of the casing. It will be readily seen from the description above that by turning this thumb nut the sleeve 12 carrying the lamp may be moved forward or backward to vary the position and focus the lamp without disturbing the lamp mounting or the circuit.

It is, of course, apparent that the devices and means as described relative to this invention may be varied widely without de-

parting from the scope of the invention as pointed out in the appended claim.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

In a lamp having a casing and a reflector therein, a sleeve secured to said reflector, a tubular member slidable in said sleeve, said parts having co-operating elements to prevent relative rotation, a plate at the end of

said tubular member, lugs in said member engaging the outer face of said plate, a bolt rigidly secured to said plate, a spring between said casing and said plate and a nut on the outer side of said casing threaded on said bolt.

In testimony whereof, I affix my signature.

FRED H. WETZEL.