Nov. 24, 1925. 1,562,994

A. B. STEWART

ADJUSTABLE CONNECTED ELECTRIC LAMP AND LAMP SUPPORT

Filed Sept. 15, 1921

Fig. 1.

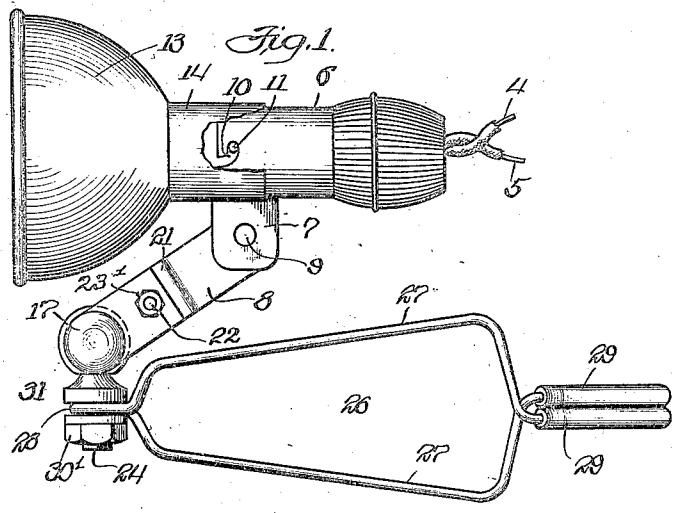
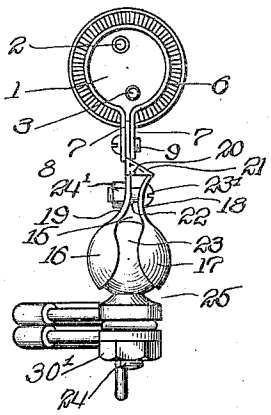


Fig. 2.



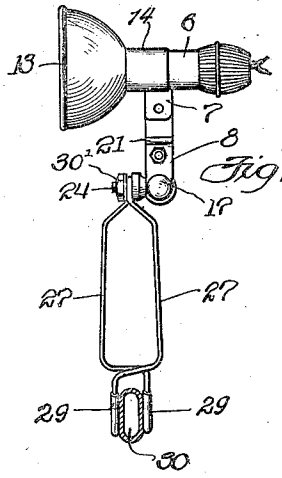


Fig. 3.

Fig. 4.

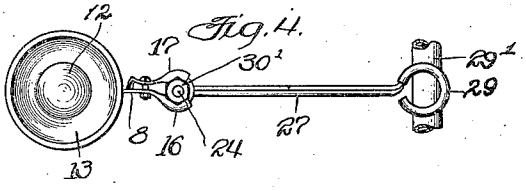


Fig. 5.

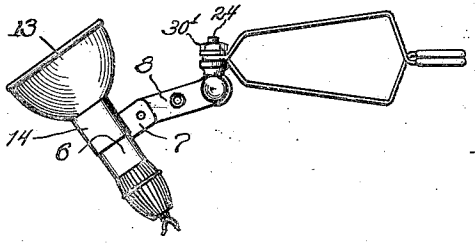
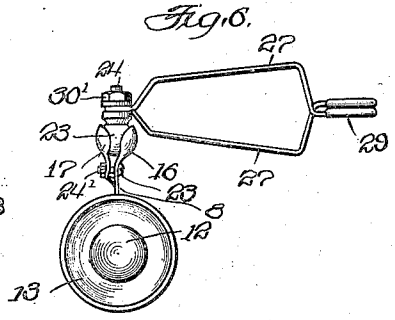


Fig. 6.



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UNITED STATES PATENT OFFICE.

ANDREW B. STEWART, OF CHICAGO, ILLINOIS.

ADJUSTABLE CONNECTED ELECTRIC LAMP AND LAMP SUPPORT.

Application filed September 15, 1921. Serial No. 500,721.

To all whom it may concern:

Be it known that I, ANDREW B. STEWART, a citizen of Great Britain, residing in Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Adjustable Connected Electric Lamps and Lamp Supports, of which the following is a specification.

This invention relates to that class of adjustable electric lamps and lamp-supports comprising a lamp socket or body provided with adjustably connected supporting means adapted to support the lamp body in different adjusted positions with respect to the attached adjustable supporting means.

The principal object of the invention is to provide a simple, economical and efficient adjustable electric lamp and lamp support; and more particularly, to provide an improved adjustable electric lamp and connected lamp support so constructed and adjustably connected as to enable the main bracket or supporting means to be detachably mounted upon any suitable support, and permit the lamp body or socket and bulb to be readily adjusted to any desired angle so as to throw the light in any desired direction with the bracket or support in any position, either horizontal, vertical or inclined, in which it may happen to be placed.

Other and further objects of the invention will appear from the following description and claim, and from an inspection of the accompanying drawings, which are made a part hereof.

The invention consists in the features, combinations, details of construction, and arrangement of parts herein described and claimed.

In the accompanying drawings—

Figure 1 is a view in side elevation of an improved adjustable electric lamp and connected lamp-support constructed in accordance with my invention;

Fig. 2, is a view in front elevation of the lamp and supporting means shown in Fig. 1, with the lamp bulb removed, and without the reflector;

Fig. 3, is a view in side elevation of the device shown in Figs. 1 and 2, with the flexible arms of the main supporting bracket in upright position and in clamping engagement with a support;

Fig. 4, is a view in side elevation of the device shown in Figs. 1 to 3 inclusive, showing the flexible clamping arms of the main bracket member in horizontal position and in clamping engagement with a support extending therebetween;

Fig. 5, is a view in side elevation of the device shown in Figs. 1 to 4 inclusive, but showing the opposite side of the device, and showing the lamp socket or lamp body and reflector at a different angle with respect to the attached adjustable supporting means; and

Fig. 6, is a view in elevation of the device shown in Figs. 1 to 5, inclusive, and showing the adjustably connected lamp-supporting members in another adjusted position with respect to each other and with respect to the lamp socket or lamp body, bulb, and reflector.

In constructing an improved adjustable electric lamp and connected lamp-support in accordance with my invention, I provide a lamp socket or lamp body member 1, in which terminals 2 and 3 of flexible insulated electric light wires 4 and 5, are mounted or supported in the usual or in any desired ordinary and well known manner. The electric wires 4 and 5 are of suitable length to enable the lamp and its supporting means to be readily moved to different locations or positions in which it is to be used, and are, of course, connected in any ordinary suitable manner with a source of electric supply. A cylindrical metallic split sleeve 6 encircles the cylindrical main body portion of the socket or lamp body 1, and has a pair of laterally projecting flanges, or bosses 7 each formed in one integral piece with the corresponding margin or edge of the split sleeve 6, and both projecting laterally beyond the periphery of the sleeve in approximately parallel relation and adjacent to each other. These flanges or bosses 7 are spaced apart; and a metallic bracket arm or link member 8 extends between and is pivotally connected at one end with said flanges or bosses 7, and with the sleeve 6, by means of a pivot or bolt 9 which extends through suitable openings in the flanges or bosses 7 and through an opening in the pivoted end of the arm or link 8. The pivot 9 shown in the drawings is in the form of a headed screw extending through the flanges 7 and perforated end of the arm 8 and in threaded engagement with a threaded perforated portion of one of the flanges. The screw thus serves to pivotally connect the

pivoted arm 8 with the flanges 7, and with the sleeve 6, and also serves to secure the sleeve 6 in tight clamping engagement with the socket member 1 encircled by said sleeve or socket member 6.

The sleeve member 6 of the lamp socket mechanism, is provided with an angular or bayonet slot 10 in each side thereof, and into these slots extend radial pins 11 which are on and project laterally from opposite sides of the neck of an electric light bulb 12. The bulb is thus supported in operative position by the sleeve 6; and a reflector 13, which surrounds the bulb, has a cylindrical neck 14 which is slidably and detachably mounted upon and encircles the sleeve 6. The sleeve 6 thus supports the reflector as well as the bulb, and also serves as the means for connecting the arm 8 with the main body or socket member 1 to be supported in adjustable relation to said arm 8.

The arm 8 is thus pivotally connected at one end with the flanged sleeve 6 and its flanges 7. The arm 8 is provided at its opposite end with a socket 15 formed between opposed concave or hollowed out socket-forming portions or members 16 and 17, one or both of which may be formed in one integral piece with the main body portion of the arm 8 which has forked arms 18 and 19 at its socket-forming end. The forked arm 18 is flexible and is formed in one integral piece with the socket portion 17. And in the form of the device shown in Fig. 2, the arm 18 is also formed in one integral piece with the main body portion of the sheet metal arm 8, being integrally connected with the latter by means of an integral web portion 20. One side margin of the metallic web portion 20 is integral with an inclined end portion or flange 21 of the flexible arm 18. And this end portion or flange 21 abuts against the side face of the main body of the arm 8, and serves to hold the flexible arm 18 away from or in spaced-apart relation to the forked arm 19, which may also be flexible. The forked arms 18 and 19, whether made in one integral piece or not, are thus spaced apart at their outer ends or extremities and their outer enlarged concave socket-forming end portions 16 and 17 are thus supported in relatively adjustable position, or in flexibly connected relation to each other. The arms 18 and 19 are perforated; and through the perforated portions thereof extends an adjusting or clamping screw 22 having a head 23^1 in engagement with the outside of one of the forked arms, for instance, the arm 18, and having a nut 24^1 in threaded engagement with the opposite threaded end of said screw and in abutting engagement with the outer side of the other one of said arms 18 and 19. The arms 18 and 19 and the socket-forming portions 16 and 17 at the outer extremities thereof, are thus provided with means for holding them in clamping engagement with a spherical head or ball 23 mounted between and in rotative adjustable relation to the inner concave faces of the hollow or parti-spherical socket-forming members 16 and 17.

The ball or head 23 is upon and formed in one integral piece with the body of a pin or bolt 24 having a neck 25 adjacent to the ball member or head 23 adapted to extend between the socket-forming members 16 and 17, so as to permit the latter to be rotated in any desired direction upon or around the ball member 23, or enable the ball to be rotated in the socket in any direction, or the ball may, if desired, be made in a separate piece and fixed to the body of the bolt or bar 24 in any desired or suitable manner. The bolt or bar 24, with its head or ball member 23 thus forms what may be termed the ball member of a ball and socket joint. A main bracket member 26 comprising, by preference, integral resilient or flexible spring arms 27 which are connected at one end by means of an integral loop 28, and having opposed clamping jaws 29 at the opposite ends of said spring arms and adapted to clamp therebetween any suitable support 29^1, or 30 which may happen to be convenient for use as a support for the device, is provided and adjustably connected with the bolt 24 which extends through the loop 28, said bolt being provided with a threaded nut 30^1, in threaded engagement with the threaded end of the bolt, and adapted to clamp the loop portion 28 of the spring bracket arm 26 between said nut and an annular shoulder 31 on the bolt.

The main bracket arm 26, which comprises spring arms 27, 27, is thus adapted to be detachably mounted upon and secured to any suitable support which may be convenient for use. And as such supports may be of various shapes, and may make it necessary that the bracket arm shall extend either horizontally, vertically, or at any angle or inclination, according to varying conditions, it is plainly very desirable that the lamp body or socket, with the bulb and reflector fixed thereto or supported thereby, should be adjustable with respect to the main bracket member or lamp support, to as many different positions and angles as possible, so as to enable the operator to cause the light to be thrown in any desired direction, and the lamp to be supported in any desired horizontal, vertical, or inclined position, with the main bracket member in any position in which it may happen to be placed. And it is plain, from the foregoing description, that the socket arm 8 may be rotated around the ball member to any desired extent and to any desired direction, and that the lamp may likewise be rotated to and supported

in any desired position with the arm 8, and with respect to the adjustably connected bracket members and ball and socket members.

I claim:

In a support for electric lamps, the combination of a lamp-engaging member, a bracket arm connected with said lamp-engaging member, a socket on said bracket arm, a resilient bracket arm member having a loop portion at one extremity thereof and having resilient arm portions extending from said loop and adapted to be detachably secured to a support, and an intermediate bolt member mounted on and extending through said loop portion of said resilient bracket arm, said bolt having a head extending into and secured in adjustable relation to and clamped between opposed clamping surfaces of said socket on said pivoted bracket arm.

Signed at Chicago, in the county of Cook and State of Illinois, this 12th day of September, 1821.

ANDREW B. STEWART.