A. C. RUNKEL.

ELECTRIC LAMP SUPPORT.

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1,350,423. **Patented Aug. 24, 1920.**

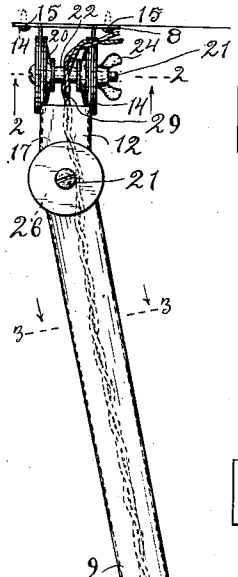


Fig. 1.

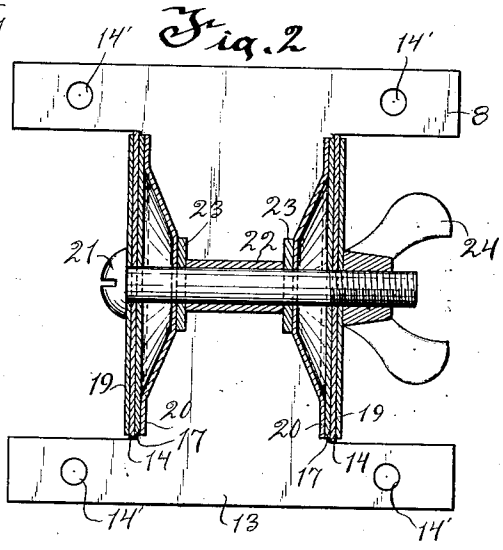


Fig. 2.

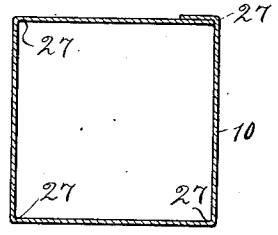


Fig. 3.



Fig. 4.

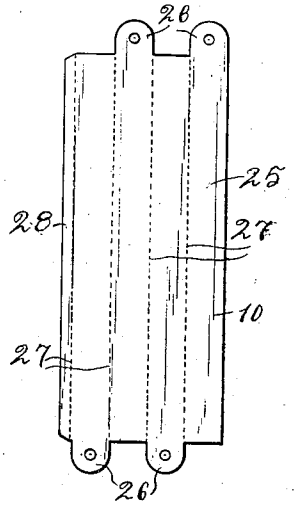


Fig. 5.

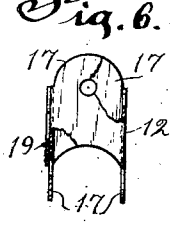


Fig. 6.

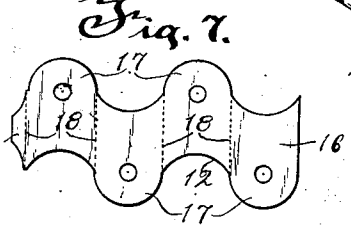


Fig. 7.

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ELECTRIC-LAMP SUPPORT.

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To all whom it may concern:

Be it known that I, ALBERT C. RUNKEL, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Electric-Lamp Supports, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

This invention relates to improvements in electric lamp supports.

It is one of the objects of the present invention to provide an electric lamp support which may be easily attached to a support and which is adapted to receive and hold the socket of an incandescent electric lamp.

A further object of the invention is to provide an electric lamp support formed of a plurality of articulated members and universal joints which permit the supported lamp to be swung to any angle desired.

A futher object of the invention is to provide an electric lamp support in which the articulated arms and the major portions of the universal joints are formed of sheet metal.

A further object of the invention is to provide an electric lamp support in which the parts are of rectangular tubular shape in cross section, the tubular sections and universal joint portions adapted to be connected together to form an articulated connection therebetween.

A further object of the invention is to provide an electric lamp support in which the parts are of very simple construction, are strong and durable and are well adapted for the purpose described.

With the above and other objects in view the invention consists of the improved electric lamp support and its parts and combinations as set forth in the claims, and all equivalents thereof.

In the accompanying drawing in which the same reference characters indicate the same parts in all of the views:

Figure 1 is a side view of the improved electric lamp support, a portion of the supported lamp being shown;

Fig. 2 is a transverse sectional view, on a larger scale, taken on line 2—2 of Fig. 1;

Fig. 3 is a similar view taken on line 3—3 of Fig. 1;

Fig. 4 is a side view, partly in section, of one of the articulated arms of the support;

Fig. 5 is a plan view of the blank of sheet metal from which the arm is formed;

Fig. 6 is a detail view partly in section of one portion of the universal joint; and

Fig. 7 is a plan view of the blank of sheet metal from which the universal joint part shown in Fig. 6 is formed.

Referring to the drawing the numeral 8 indicates the base portion, 9 and 10 the articulated arms, 11 the lamp holder or socket, and 12 the universal joints connecting the respective parts together, all of said parts being of tubular form. The base portion 8 is formed of a sheet metal plate 13 having eyed ears 14 cut and bent at right angles thereto to form a connection with one of the universal joints. The plate 13 is formed with screw openings 14′ to receive screws 15 for fastening the base to a support. Each universal joint member 12 is formed of a sheet metal blank 16 having eyed ears 17 formed on opposite edge portions of the blank in staggered relation so that when the blank is folded on the dotted lines 18 into a rectangular shape the ears will be arranged in pairs on opposite ends of the members and in staggered relation as shown in Fig. 6. The blank is also provided with an extension 19 which is bent to overlap the body portion and is soldered thereto to form a rigid structure. The rectangular universal joint member is of a size to have one of its pairs of ears snugly fit between the ears 14 of the base portion 8. Washers 19 and 20 positioned on opposite sides of the overlapping ears are held in position by a bolt 21 which passes through all of the eyed ears and the washers and also through a spacing tube 22 interposed between the inner washers 20. Said washers 20 are of dished formation to provide greater strength, and smaller washers 23 are interposed between the opposite ends of the spacing tube and the dished washers to reinforce the inner portions of the dished washers and the tube ends. A thumb nut 24 threaded on the bolt 21 and bearing against one of the outer washers 19 provides for clamping the overlapping ears 14 and 17 together with sufficient pressure as to frictionally maintain the universal joint member in its position of adjustment.

The arm 10 is also formed of sheet metal from an elongated blank 25 having eyed ears 26 projecting endwise therefrom in pairs in staggered relation. The blanks are

folded on the dotted lines 27 in rectangular form shown in Fig. 3 and the extension flap 28 is folded over the body portion and soldered thereto to form a firm structure. When folded the pairs of ears of the opposite ends of the arm will extend at right angles to each other. The arm 9 is formed in the same manner as the arm 10 with the exception that the pairs of eyed ears 26 on the opposite ends of the arms are parallel to each other instead of being at right angles as in the arm 10.

The eyed ears 26 at the upper end of the arm 9 overlap the downwardly extending eyed ears 17 of the upper universal joint member and are fastened thereto in the same manner as said joint is connected to the base member.

The eyed ears 26 of the adjacent ends of the arms 9 and 10 also overlap the medial universal joint member 12 interposed therebetween and are pivotally connected thereto by the bolts 21 and other parts in the same manner as the base member is connected to the arm 9 to form a universal joint connection therebetween.

The lamp holder 11 is of U-shape and is connected to the arm 10 by one of the universal joint members 12 in the same manner as before described to form a universal joint connection therebetween. The socket portion 11′ of the lamp holder 11 is fastened firmly to the said holder and is adapted to receive and hold the incandescent electric lamp in the ordinary manner. The electric wires 29 extend through the tubular portions of the arms and the universal joints and also through the socket member to the lamp.

The universal jointed connections between the respective parts provide for the arms and the socket being articulated in any direction and the thumb nut and bolt and washer and spacing tube connections provide sufficient friction between the parts to maintain the parts in any position to which they are moved without the necessity of adjusting the thumb nut after each adjustment.

From the foregoing description it will be seen that the support is formed almost entirely from sheet metal bent to the desired shapes and that the resultant fixture is of very simple construction and is inexpensive to manufacture.

What I claim as my invention is:

1. An electric lamp support, comprising a base member having eyed ears, a tubular universal joint member having eyed ears on its opposite ends some of which are in engagement with the eyed ears of the base member, a tubular arm having eyed ears at its opposite ends, the ears at one end being in engagement with some of the ears of the joint member, another tubular arm having eyed ears at its opposite ends, the ears on one end being adjacent the ears at the outer end of the other arm, a tubular universal joint member interposed between the adjacent ends of the two arms and having eyed ears which are in engagement with the adjacent ears of the arms, a tubular lamp socket member positioned adjacent the outer end of the second mentioned arm and provided with eyed ears, a tubular universal joint member interposed between the socket member and the outer end of the second mentioned arm and having eyed ears which engage adjacent eyed ears of the arm and the socket member, bolts connecting the respective parts together, and nuts mounted on the bolts for adjusting the frictional contact of the respective parts.

2. An electric lamp support, comprising a base member having eyed ears, a tubular universal joint member having eyed ears on its opposite ends some of which are in engagement with the eyed ears of the base member, a tubular arm having eyed ears at its opposite ends, the ears at one end being in engagement with some of the ears of the joint member, another tubular arm having eyed ears at its opposite ends, the ears on one end being adjacent the ears at the outer end of the other arm, a tubular universal joint member interposed between the adjacent ends of the two arms and having eyed ears which are in engagement with the adjacent ears of the arms, a tubular lamp socket member positioned adjacent the outer end of the second mentioned arm and provided with eyed ears, a tubular universal joint member interposed between the socket member and the outer end of the second mentioned arm and having eyed ears which engage adjacent eyed ears of the arm and the socket member, washers mounted on opposite sides of the engaged eyed ears, bolts connecting the respective parts together, and nuts mounted on the bolts for adjusting the frictional contact of the respective parts.

3. An electric lamp support, comprising a base member having eyed ears, a tubular universal joint member having eyed ears on its opposite ends some of which are in engagement with the eyed ears of the base member, a tubular arm having eyed ears at its opposite ends, the ears at one end being in engagement with some of the ears of the joint member, another tubular arm having eyed ears at its opposite ends, the ears on one end being adjacent the ears at the outer end of the other arm, a tubular universal joint member interposed between the adjacent ends of the two arms and having eyed ears which are in engagement with the adjacent ears of the arms, a tubular lamp socket member positioned adjacent the outer end of the second mentioned arm and provided with eyed ears, a tubular universal

joint member interposed between the socket member and the outer end of the second mentioned arm and having eyed ears which engage adjacent eyed ears of the arm and the socket member, washers mounted on opposite sides of the engaged eyed ears, spacing tubes interposed between some of the washers, bolts connecting the respective parts together, and nuts mounted on the bolts for adjusting the frictional contact of the respective parts.

4. An electric lamp support, comprising a base member having eyed ears, a plurality of tubular arms of rectangular form in cross section, said arms having eyed ears at their opposite ends, a tubular lamp socket having eyed ears, tubular universal joint members interposed between the respective parts, said joint members being of rectangular form in cross section and having eyed ears which engage the eyed ears of the other parts, washers mounted on opposite sides of the engaged parts, the innermost washers being of dished formation, spacing tubes interposed between opposite dished washers, bolts extending through the eyed ears and the washers and the spacing tubes, and nuts threaded on the bolts for clamping the parts frictionally together.

5. An electric lamp support, comprising a base member having eyed ears, a plurality of tubular arms of rectangular form in cross section, said arms having eyed ears at their opposite ends, a tubular lamp socket having eyed ears, tubular universal joint members interposed between the respective parts, said joint members being of rectangular form in cross section and having eyed ears which engage the eyed ears of the other parts, washers mounted on opposite sides of the engaged parts, the innermost washers being of dished formation, spacing tubes interposed between opposite dished washers, all of said parts being formed of sheet metal bent to the respective shapes, bolts extending through the eyed ears and the washers and the spacing tubes, and nuts threaded on the bolts for clamping the parts frictionally together.

6. An electric lamp support, comprising a base member having eyed ears, a tubular universal joint member having eyed ears on its opposite ends some of which are in engagement with the eyed ears of the base member, a tubular arm having eyed ears at its opposite ends, the ears at one end being in engagement with some of the ears of the joint member, another tubular arm having eyed ears at its opposite ends, the ears on one end being adjacent the ears at the outer end of the other arm, a tubular universal joint member interposed between the adjacent ends of the two arms and having eyed ears which are in engagement with the adjacent ears of the arms, a tubular lamp socket member positioned adjacent the outer end of the second mentioned arm and provided with eyed ears, a tubular universal joint member interposed between the socket member and the outer end of the second mentioned arm and having eyed ears which engage adjacent eyed ears of the arm and the socket member, all of said parts being formed of sheet metal bent to the respective shapes, bolts connecting the respective parts together, and nuts mounted on the bolts for adjusting the frictional contact of the respective parts.

In testimony whereof, I affix my signature.

ALBERT C. RUNKEL.