

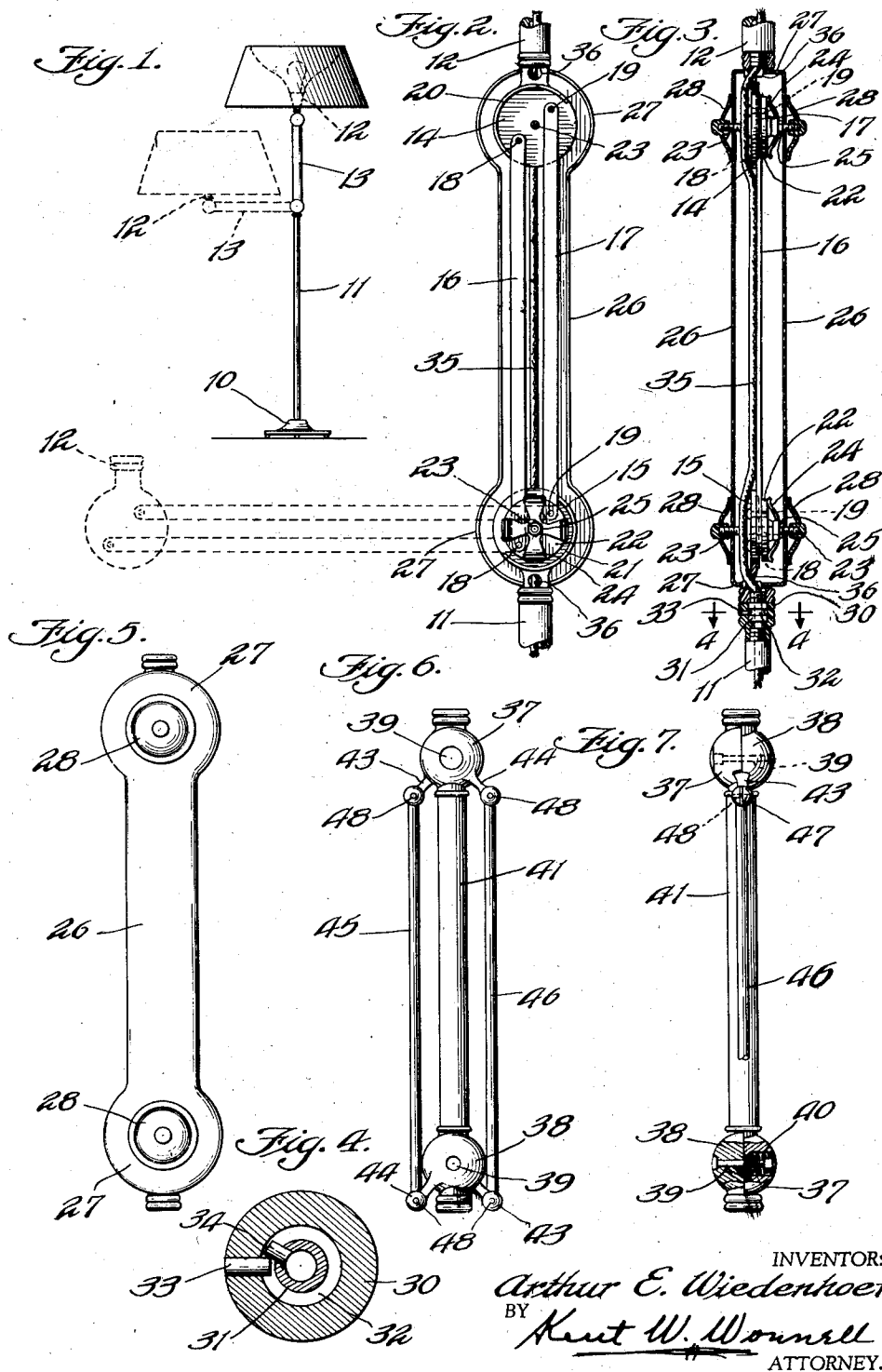
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ELECTRIC FIXTURE

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ELECTRIC FIXTURE

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This invention relates in general to an electric fixture and is more particularly described as applied to a combined floor lamp and bridge lamp.

An important object of the invention is in the provision of a movable stem section for a floor lamp by means of which the lamp support is kept in upright position but the elevation thereof is varied by means of a hinged arm or stem section which is movable to adjust the height of the lamp support by offsetting it angularly from the supporting stem.

A further object of the invention is in the combination of a floor lamp and a bridge lamp in a single structure having also means for limited rotation in the stem so that when the lamp support is reduced in height, it may be rotated less than one rotation relative to the stem.

A still further object of the invention is in the provision of an adjustable support or an attachment for a lighting fixture in which a shiftable arm is connected at its ends to different fixture parts and the arm is movable relatively to both of the parts to which it is connected but the parts are maintained in parallel relation except that they are more or less offset and changed in spacing with respect to each other.

Other and further objects of the invention will appear hereinafter and from the drawing, in which:

Fig. 1 is a view in elevation showing a combined floor and bridge lamp in accordance with this invention;

Fig. 2 is an enlarged elevation of the offsetting means for shifting a lamp support relative to the stem;

Fig. 3 is a sectional view of the offsetting means shown in Fig. 2;

Fig. 4 is a detail of the limited rotary connection;

Fig. 5 is an outside elevation of the offsetting means of Fig. 2 with an enclosing cover;

Fig. 6 is an elevation of a modification; and

Fig. 7 is a side view partly in section of the form shown in Fig. 6.

This invention relates to a lighting fixture of the floor lamp type which is provided with a sectional stem or off-setting arm by means of which the lamp support and the shade usually carried thereby may be offset at an angle or swung downwardly with the supporting arm at right angles to change the position of the lamp support but keeping it level and upright at all times so that the lamp is adapted for use as a bridge lamp with the lamp support offset from the stem so that the lamp and shade may project over the edge of a

table or laterally from the stem as desired, depending upon the length and position of the offsetting arm. It is apparent that this same idea may also be applied to other lighting fixtures between a support corresponding to the stem and a lamp or shade support so that the latter may be offset or adjusted in height with respect to the fixed support, maintaining the lamp and shade support in parallel relationship at all times.

Referring now more particularly to the drawing, a floor lamp is illustrated in Fig. 1 having a supporting base 10 with a stem 11 extending therefrom with a lamp and shade support 12 at the upper end connected to the upper end by a stem section 13 having a hinged connection with a lamp support at one end and a hinged connection with the upper end of the stem at the other end so that the lamp support may be swung downwardly and offset from the supporting stem the full length of the section 13, or to any intermediate angular position between the vertical and horizontal position of the section 13.

Various means may be provided for swinging and offsetting the lamp support with respect to the supporting stem but still keeping it in parallel relation thereto. A simple construction of this kind is shown in Figs. 2 and 3 and comprises a fixture plate 14 threaded or otherwise secured to the fixture support 12 and a similar plate 15 connected to the upper end of the stem 11. Between these two plates 14 and 15 are connected parallel links 16 and 17 of equal length having pivot pins 18 and 19 extending through the discs 14 and 15 and located at an angle to each other or longitudinally offset so that when the upper plate 14 carrying the lamp support is moved upon the pivoted links the entire stem section may be swung at an angle about the lower plate until the lamp support is offset the full length of this section, the connection being such that the lamp support is maintained in upright position or parallel to the supporting stem 11 in all angularly positions thereof.

In order to limit the movement of the stem section approximately to a right angle, the plates 14 and 15 are provided with flanges 20 and 21 oppositely disposed at the two ends for engaging the links 16 and 17, depending upon the position thereof.

Engaging the supporting links at each end is a washer 22 which is mounted upon a central threaded stem 23 extending through the plate at that end and having a spring 24 also mounted on the stem and variably tensioned by a nut 25 to press the washer against the ends of the links.

With this construction the tension may be applied and varied to maintain the stem section 13 frictionally in either raised, lowered or any intermediate position, requiring only manual adjustment thereof to seat the lamp support in any other position.

While the above structure is complete in itself it is often preferred to enclose it with a sheet metal or other ornamental casing preferably consisting of two similar half sections 26 with rounded portions 27 at the ends to extend around the plates 14 and 15 and having perforations at the centers of these rounded portions through which the threaded stems 23 extend so that ornamental fastening nuts or rosettes 28 may be attached to the opposite ends of the stems, engaging the outer faces of the casings 26 and releasably holding them in place. The outer surfaces of these casings are commonly ornamented or provided in any suitable design, preferably conforming to the design of the lamp.

While the stem section can be offset in one direction only with respect to the stem a limited rotation of the lamp is provided between the stem sections by the construction shown more clearly in Figs. 3 and 4. The upper end of the stem has a recess 30 in which a fitting 31 is rotatable, the fitting having an annular groove 32 and the stem having a pin 33 extending into the groove with a projection 34 in the fitting adapted to engage the pin 33 and thus to hold the fitting in place and also to limit the relative rotation of the fitting in the recess 30 to less than one complete rotation. More than one complete rotation of fixture parts is prohibited to prevent conductor wires from becoming twisted and causing a short-circuit. In this fixture a conductor wire or wires 35 extend from the lamp support through suitable openings 36 in the end plates and around the centers of the plates and along or between the links 16 and 17 where they are covered and enclosed by the casing sections 26 without any danger of abrading the wire coverings or short-circuiting the wires therein.

In the form of the invention shown by Figs. 6 and 7 the casing is omitted and the two end supports comprise ball fittings having similar parts 37 and 38 connected by a friction stem 39 and a spring 40 at each end, the corresponding portions 37 being joined by a hollow tube 41 and the other sections 38 affording connection with the lamp support and supporting stem respectively. Each of the ball sections 37 and 38 has a projecting arm 43 and 44 respectively connected with the arm 43 and 44 at the other end of the section by bars 45 and 46 respectively. Each bar is connected at its end to projection 43 or 44 by inserting the extremity of the bar in a slot 47 of the projection and inserting a pivot pin 48 transversely therethrough.

The movement and operation of this stem section is similar to that shown in Figs. 2 and 3 and if desired one or the other of the connectors 45 or 46 may be omitted as the tubular connection 41 constitutes the equivalent with the remaining bar 45 or 46 of the two links 16 and 17 as shown in Fig. 2. Likewise if both bars 45 and 46 are used the tube 41 may be dispensed with. However the stem provides an enclosure for the electrical conductors and the two bars 45 and 46 provide a symmetrical construction which is usually more desirable than any one of the bars which makes the structure look unbalanced. It is obvious that other constructions, combinations and arrangements may be

provided for accomplishing any similar result. For simplicity, links 16 and 17 may be hollow with conductors 35 extending therethrough.

With these forms it is apparent that a floor lamp type of structure may be readily converted to a bridge lamp type in which the lamp and shade holder is disposed at a lower elevation than that of the bridge lamp, the lamp and shade being offset relatively to the stem, depending upon the angular position of the movable stem section with respect to the supporting stem; that the lamp support will always maintain an upright position, or a position parallel to its original position if it is incorporated in a fixture other than an upright lamp; and that although the sectional arm may be swung only in one position, the advantage of swinging it in any position is obtained by rotatably connecting the offsetting section with the supporting section of the stem.

I claim:

1. In a lighting fixture having a lamp support and a supporting stem, means for mounting the support to offset and lower it relative to the stem, keeping the support parallel, said means comprising a plate connected to the support and another plate connected to the stem, and two links each pivoted at its ends to the said plates with the axis of the rotatable plate between the connections of the links thereto, the links being parallel and of the same length and connected to the plates at the same relative angle for maintaining the stem and support parallel, one of the plates being provided with a flange engaged by the links for limiting the movement thereof relative to the flanged plate in both directions.

2. In a lighting fixture having a lamp support and a supporting stem, means for mounting the support to offset and lower it relative to the stem, keeping the support parallel, said means comprising a plate connected to the support and another plate connected to the stem, and two links each pivoted at its ends to the said plates with the axis of the rotatable plate between the connections of the links thereto, the links being parallel and of the same length and connected to the plates at the same relative angle for maintaining the stem and support parallel, and resilient means for frictionally holding the links in any adjusted position, pressing the links resiliently against the plates and tending to hold them in that position.

3. In a lighting fixture having a lamp support and a supporting stem, means for mounting the support to offset and lower it relative to the stem, keeping the support parallel, said means comprising a plate connected to the support and another plate connected to the stem, and two links each pivoted at its ends to the said plates with the axis of the rotatable plate between the connections of the links thereto, the links being parallel and of the same length and connected to the plates at the same relative angle for maintaining the stem and support parallel, the plates being provided with flanges for engaging the links and limiting their movement in both directions, and an enclosing casing extending around the plates and the links and having openings at the edges through which the links extend up to the positions where they engage the limiting flanges.

4. In a lighting fixture having a lamp support and a supporting stem, means for mounting the support to offset and lower it relative to the stem, keeping the support parallel, said means

comprising a plate connected to the support and another plate connected to the stem, and two links each pivoted at its ends to the said plates with the axis of the rotatable plate between the connections of the links thereto, the links being 5 parallel and of the same length and connected to the plates at the same relative angle for maintaining the stem and support parallel, the plates being provided with threaded openings and

threaded stems therein, spring-pressed friction washers around the stems engaging the links, means limiting the offsetting movement of the links, and casing sections enclosing the plates and links through which the stems extend with fastening means on the stems outside of the sections for holding them in place thereon.

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