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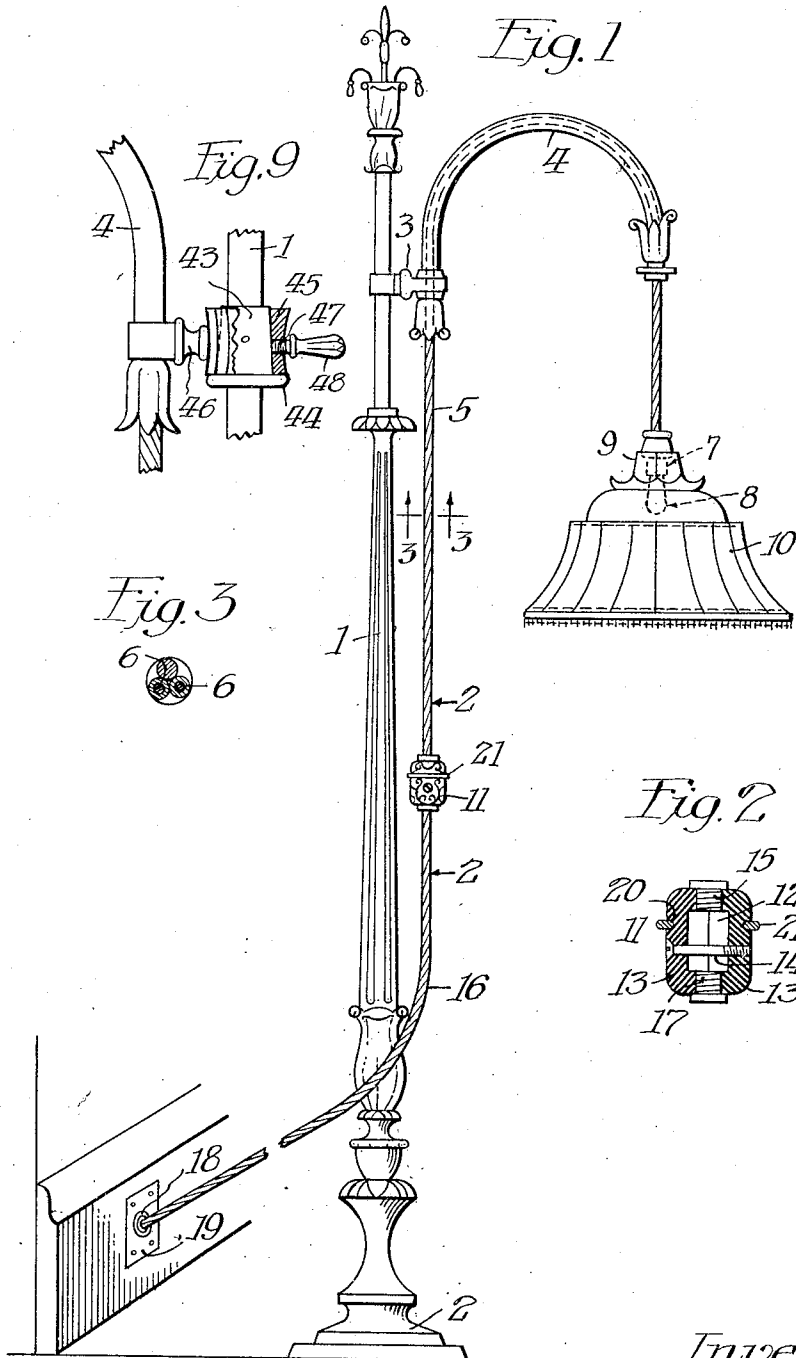
T. J. NELSON

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LIGHTING FIXTURE

Original Filed April 12, 1927

2 Sheets-Sheet 1



Inventor:
Theodore J. Nelson,
by Fisher, Toul, Clapp & Sons,
Attys.

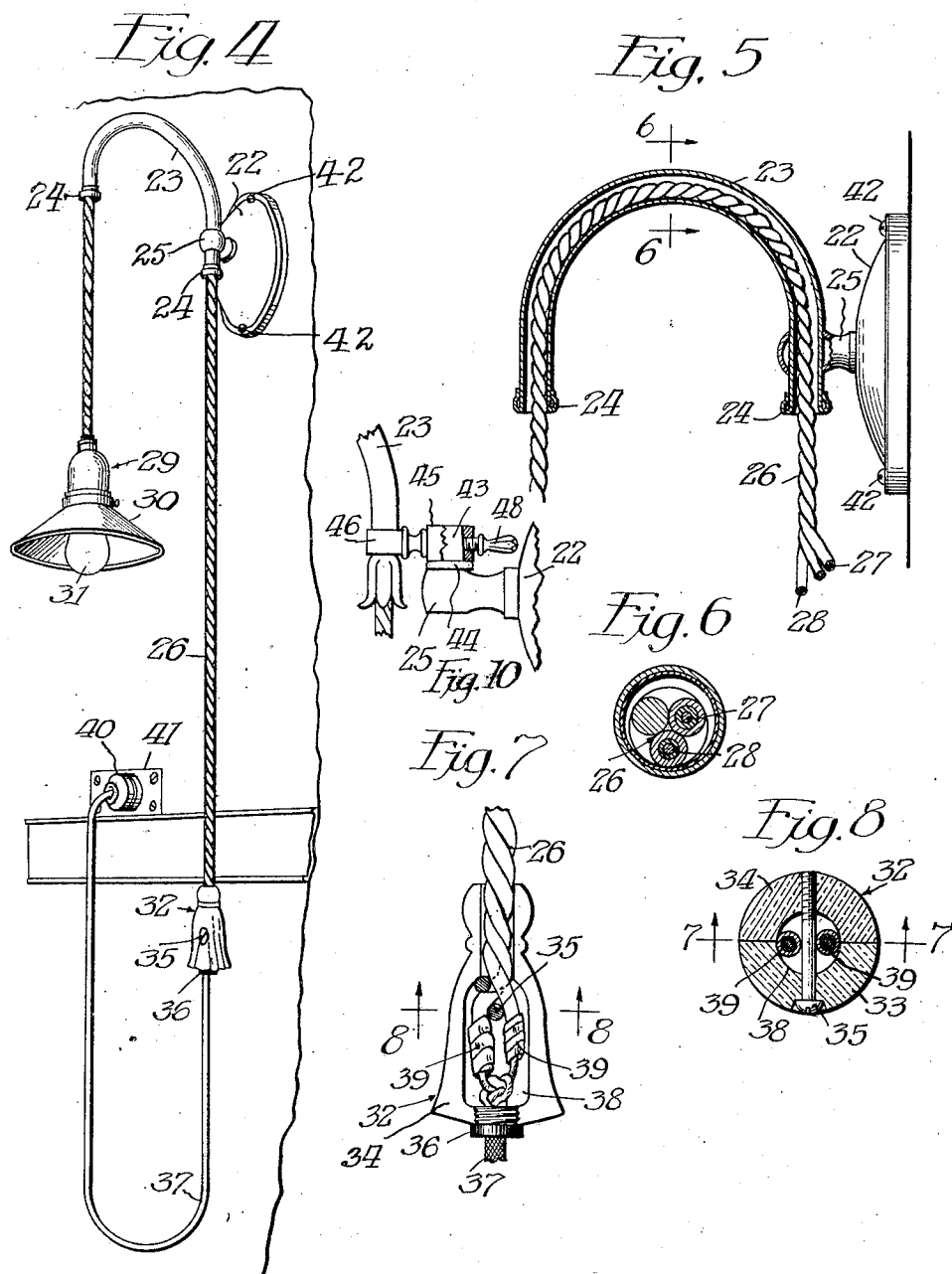
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UNITED STATES PATENT OFFICE

THEODORE J. NELSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO COLONIAL LAMP & FIXTURE WORKS, INC., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS

LIGHTING FIXTURE

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My invention has reference more particularly to a lighting fixture such as a floor or table lamp wherein the illuminating element is counterbalanced so that it is capable of elevational adjustment, and is based on my prior applications Serial No. 612,651, filed January 15, 1923, and allowed July 7, 1925, and Serial No. 621,123, filed February 26, 1923.

The principal objects of my invention are to provide an improved adjustable floor or table lamp; to suspend the illuminating element in a laterally offset position on a flexible counterweighted hanger, so that the illuminating element may be adjusted vertically and held in the adjusted positions without the necessity of employing clamps or fastener; and to construct the fixture so that it may be conveniently connected to a wall or floor plug at a distance therefrom without interfering with the freedom of adjustment.

The invention also has reference to a lighting fixture comprising a bracket arm having the lamp suspended therefrom by means of a flexible, counterbalanced hanger so as to be adjustable vertically.

Other objects of my invention are to provide an improved adjustable lighting fixture; to support a lamp on a bracket arm by means of a flexible counterbalanced hanger so that the lamp may be readily adjusted at various elevations; to construct the fixture so that the feed wires may be connected to a receptacle remote from the point at which the fixture is mounted; and in general to provide a fixture of this character which is simple and inexpensive, attractive in appearance and designed to permit optional mounting of the fixture in any desired location without the necessity of having an electrical outlet at the place where the fixture is mounted.

On the drawings:—

Fig. 1 is a side view of the fixture embodying my improvements.

Fig. 2 is a vertical sectional view of the counterweight, taken on the line 2—2 of Fig. 1.

Fig. 3 is a sectional view of the supporting cable on the line 3—3 of Fig. 1.

Fig. 4 is a perspective view of a fixture

constructed in accordance with my invention and mounted in position for use.

Fig. 5 is an enlarged side view of the fixture bracket showing the bracket arm in section.

Fig. 6 is an enlarged sectional view on the line 6—6 of Fig. 5.

Fig. 7 is an enlarged view of one-half of the counterweight showing the connection of the fixture cable with the lamp cord, said view being taken on the line 7—7 of Fig. 8.

Fig. 8 is a sectional view of the counterweight on line 8—8 of Fig. 7, and

Figs. 9 and 10 are detail views showing slightly modified constructions.

The invention as shown in Figures 1, 2, and 3 is illustrated as including a portable support in the form of a floor lamp and comprises a standard 1 having a wide base 2, whereby it is held in an upright position. Near the top of the standard is a laterally extending bracket 3, which may be pivotally supported on the standard, to which is secured, and preferably pivotally mounted to swing therein laterally in a horizontal plane, the inner end of a tubular arm 4, which constitutes a guide through which a flexible hanger is endwise movable. The hanger 5 is illustrated in the form of a flexible cable having two of the strands 6 consisting of electrical conductors, although any form of flexible hanger may be used. The other end of the hanger 5 has an electric connection, as for instance, an electric light socket 7, in which the electric lamp or bulb 8 is secured, the ends of the conductors 6 being connected with the contacts of the socket 7 in the usual manner to supply current to the lamp 8. The socket is preferably enclosed in a combined socket shell and shade holder 9, which supports the shade 10.

In view of the lateral projection of the arm 4 from the standard, the lamp 8 and shade 10 are supported at a sufficient distance from the standard to afford ample clearance between the shade and the standard. The inner end of the hanger 5, however, is supported close to the standard 1 and is provided at its lower end with a counterweight 11 for counterbalancing the parts 7, 8, 9, and 10 at

the outer end of the cable so that the lamp socket and lamp and parts connected therewith may be readily adjusted by sliding the cable 5 through the tube 4, and are held in the positions of adjustment by the counterbalancing of the socket and lamp and other parts by the counterweight 11. This counterweight 11 is formed in any suitable manner, with a chamber 12 therein, for example, it may be composed of the half-sections 13 secured together by a threaded member 14. The end of the hanger 5 is introduced into the interior of the counterweight, preferably through an entrance opening which is provided with an insulating bushing 15, and an extension cord 16 is led into the lower end of the counterweight through a similar entrance opening which is provided with an insulating bushing 17 in accordance with the approved practice. The conductors 6—6 of the cable 5 are connected in the cavity 12 to the two conductors of the extension cord 16, and the latter at its outer end is connected to the attachment plug 18, so that it can be detachably connected to any socket or receptacle in the vicinity of the lamp, as for example, the base receptacle 19 as shown.

The counterweight 11 is preferably formed with an annular groove 20 containing a bumper ring 21 of rubber or other suitable material so that the standard 1 will not become marred in case of accidental contact of the counterweight with the standard.

With this construction the device may be located in practically any desired position, and the extension cord 16 is connected to a source of electrical current at any distance from the position of the lamp, and the lamp 9 and socket 7 and parts connected therewith may be readily adjusted to any desired elevation. Also, it is unnecessary to provide an opening through the standard 1 for circuit wires as in the present floor and table lamps and the construction of such members is thus simplified.

As shown in Figures 4 to 8 inclusive, the invention includes a support which is shown herein as a wall plate 22 which may be of any suitable form, and has a guide thereon in the form of a tubular bracket arm 23 mounted thereon and bent in a semi-circular form so that the ends open downwardly with one end close to the wall plate and the other remote therefrom. The end edges of the tube 23 are rounded in any suitable manner, for example as indicated at 24, and the interior of the tube is provided with a smooth surface so that a cable may be readily slid through the tube without injury. This bracket arm 2 is secured, preferably pivotally mounted to swing horizontally and laterally adjacent one, preferably its inner, end to the plate 22 by means of a connector 25, in which it may be pivoted and which holds the bracket arm a slight distance away from the face of the plate 22

and consequently a suitable distance from the wall on which the bracket plate is mounted. A hanger in the form of an endwise movable cable 26 is passed through the tubular bracket arm 23 and is preferably in the form of a somewhat heavy ornamental rope with two of the strands as indicated at 27 and 28, comprising electrical conductors. The outer length of the cable 26 has an electric connection, as for instance, a lamp socket secured to the end and preferably enclosed in a socket shell and shade holder 29 to which any suitable shade 30 is attached, and the conductors 27 and 28 are connected with the socket in the usual manner to supply current to the lamp 31 which is mounted in the socket.

The length of cable 26 nearest to the bracket plate 22 has a counterweight 32 on the end which may be in the form of a tassel as indicated. This counterweight, in the construction shown, consists of two half sections 33 and 34 which are secured together by the bolt 35 and each has a semi-circular groove at one end which in the assembled counterweight forms an entrance opening through which the end of the cable 26 is inserted and clamped by means of the connecting bolt 35, and in the lower end of the counterweight is another similarly formed entrance opening with an insulating bushing 36, through which the end of a lamp cord 37 is passed. The interior of the counterweight between these apertures is suitably chambered as at 38 to accommodate the connections 39, whereby the two conductors of the lamp cord 37 and the two conductors 27 and 28 respectively of the cable 26 are joined together. The outer end of the lamp cord 37 is preferably provided with an attachment plug 40 which may be connected with a wall or base plug 41 which may be located at a distance from the place where the bracket is mounted.

The bracket may be secured in place on the wall in any convenient manner, as for example, by nails or screws 42 which are inserted through apertures in the plate 1 and engaged in the wall.

With fixtures which have heretofore been mounted on walls, it has been customary to provide an outlet at the point where the fixture is to be located and this, therefore, determines the location of the fixture. With my invention, however, it is not necessary to provide an electrical outlet where the fixture is to be mounted, but the fixture may be located at any desired point and the connection made with an electrical outlet anywhere in the vicinity of the fixture, thereby permitting the user to change the location of the fixture when desired and avoiding the necessity of always having the fixture located in a definite place.

Furthermore, this construction permits elevational adjustment of the lamp so as it may be conveniently positioned to give the

best illumination for a desired purpose, for example, if it is to be used as a reading lamp, it may be drawn down to the position to give the proper light for one sitting near thereto.

It will also be noted that the inner length of the supporting cable is held away from the wall so that the counterweight moves freely without coming into contact with the wall and at the same time is sufficiently close so that it is entirely out of the way.

In Figures 9 and 10 of the drawings slight modifications are shown in which, in order to mount the tubular guides or arms 4 and 23, the upright, post, or standard 1 or the bracket 25 is provided with a circular or slightly upwardly tapered enlargement or vertical bearing portion 43, preferably slightly enlarged downwardly and formed with an annular enlargement or shoulder 44 at the bottom to support the sleeve or collar 45 of the bracket 46. The sleeve fits over the portion 43 and has a screw-threaded opening 47 in one side to take a clamping nut 48 which engages the bearing portion 43 and by which the arms 4 and 23 may be held secured in a horizontal plane. The brackets 46 are, of course rigid with the tubular or sleeve portions 45 and receive the tubular guide arms 4 and 23 in the ends thereof.

While I have shown and described my invention in a preferred form, I am aware that various changes and modifications may be made without departing from the principles of my invention, the scope of which is to be determined by the appended claims.

I claim as my invention:

1. An electric fixture comprising a support, a guide on the support, a flexible hanger carried by and movable endwise on the guide with its end portions depending therefrom, an electric fixture on one end of the hanger, a chambered counterweight on the other end of the hanger, and an electric conductor extending through the hanger with one end in co-operative relation with the electric fixture and its opposite end within the chamber of the counterweight, said counterweight having an entrance opening leading into the chamber to give access to the end of the electric conductor within said chamber.

2. An electric fixture comprising a support, a guide on the support, a flexible hanger carried by and movable endwise on the guide with its end portions depending therefrom, an electric fixture on one end of the hanger, a chambered counterweight on the other end of the hanger, said counterweight having oppositely disposed entrance openings leading to the chamber thereof and divided through the entrance openings and the chamber, means for detachably securing the counterweight sections upon the hanger, and an electric conductor extending through the hanger with one end in co-operative relation with the electric fixture and its opposite end within

the chamber of the counterweight and accessible through one of the entrance openings.

3. The combination with an electric outlet, of a portable support independent of the outlet, a guide on the support, a flexible hanger carried by and movable endwise on the guide with its end portions depending therefrom, an electric fixture on one end of the hanger, a counterweight on the other end of the hanger, an electric conductor extending through the hanger with one end in co-operative relation with the electric fixture and its opposite end within the counterweight, and an extension cord extending from the said outlet to the counterweight and detachably connected to the conductor within the counterweight.

4. In a lighting fixture, the combination of a vertical support, a horizontal connector carried thereby and extending outwardly therefrom, said connector having a sleeve portion, a bent arm having depending ends on one side only of the support, one of which is mounted in the sleeve portion, a flexible hanger carried by and adjustable lengthwise through the arm and including a pair of conductors and a cord intertwined therewith, an electric lamp carried by the free end of the hanger beneath the outer end of the arm and having connection with said conductors, the inner portion of the hanger extending downwardly from the inner end of the arm in close proximity to but spaced from a vertical support to which the plate is secured for mounting the fixture, a counterweight mounted on the lower end of the hanger beneath the inner end of the arm and having the end of the cord anchored thereto and the ends of the conductor extending thereinto, and an extension cord having conductors extending into the counterweight from beneath and connected to the conductors first mentioned, said extension cord having an attachment plug at its free end.

5. A lighting fixture comprising an upright support, a horizontal connector carried by and extending from the plate, said connector having a sleeve at its free end, a tubular inverted bent bracket arm having its inner end mounted in the sleeve, a flexible ornamental hanger extending through the tubular arm and composed of a plurality of strands twisted together to form a cord frictionally held in an adjusted position in the arm and wherein two of the strands contain electrical conductors, an electric lamp connected to the conductors and mounted at the free end of the hanger beneath the outer end of the arm, the inner portion of the hanger extending down from the inner end of the arm, a sectional counterweight in the form of a tassel attached to the inner end of the hanger and having co-acting concavities receiving the hanger, the cord being anchored in the counterweight at its end, and a flexi-

ble twin conductor having an attachment plug at one end and the other end extending through co-acting concavities in the counterweight and connected to the conductors of the hanger.

5 6. A lighting fixture of the bridge-lamp type, comprising a base, an upright mounted thereon, a horizontal bracket arm fixed to the upright near its upper end and projecting horizontally therefrom, a tubular guide having its inner end mounted vertically in the bracket, a flexible cord in the tubular arm movable endwise therethrough, said cord embodying conductors concealed therein, and an electric lighting fixture supported by the end of the cord at the outer end of the guide and having connection with the conductors, the inner portion of the cord extending along and closely adjacent to the upright, a counterweight on the lower end of the inner portion of the cord and into which the conductors lead for connection with an extension cord, said cord and counterweight being loose and free of connection with the stand-
25 ard.

7. A lighting fixture of the bridge lamp type, comprising a base, an upright mounted thereon, a bracket fixed to the upright near its upper end and projecting horizontally therefrom, a tubular guide arm having its inner end mounted in the bracket, a flexible cord in the tubular arm and movable endwise therethrough, said cord embodying conductors, and an electric lighting fixture supported by the end of the cord at the outer end of the arm and having connection with the conductors, the inner portion of the cord extending loosely along and closely adjacent to the upright, a counterweight on the lower end of the inner portion of the cord and into which the conductors lead, said counterweight being adapted to move along and within the confines of the upright and co-operating with the friction between the cord and the tubular guide to hold the fixture in adjusted position when raised or lowered, and an extension cord having electric conductors detachably connected to the conductors in the counterweight and having an attachment
50 at its free end for insertion in a wall socket.

8. An electric fixture comprising a portable upright support, a guide on the support, a flexible hanger carried by and movable endwise on the guide with its end portions depending therefrom, an electric fixture on one end of the hanger, a chambered counterweight on the other end of the hanger, and an electric conductor extending through the hanger with one end in co-operative relation with the electric fixture and its opposite end within the chamber of the counterweight, said counterweight having an entrance opening leading onto the chamber to give access to the end of the electric conductor within
65 said chamber.

9. An electric fixture comprising a portable support including a base and an upright standard rising therefrom, a guide carried by an upper portion of the standard and offset laterally therefrom at one side only, a flexible hanger carried by and movable endwise on the guide with its end portions depending therefrom, an electric fixture on one end of the hanger, a counterweight on the other end of the hanger, an electric conductor extending through the hanger with one end in co-operative relation with the electric fixture and its opposite end within the counterweight, said counterweight being chambered and having opposite entrance openings leading to the chamber and divided into sections through the entrance openings, one end of the hanger extending through one of the entrance openings and into the chamber, the opposite entrance opening giving access to the end of the conductor within the chamber, and means for detachably securing the counterweight sections on the hanger.

THEODORE J. NELSON.