

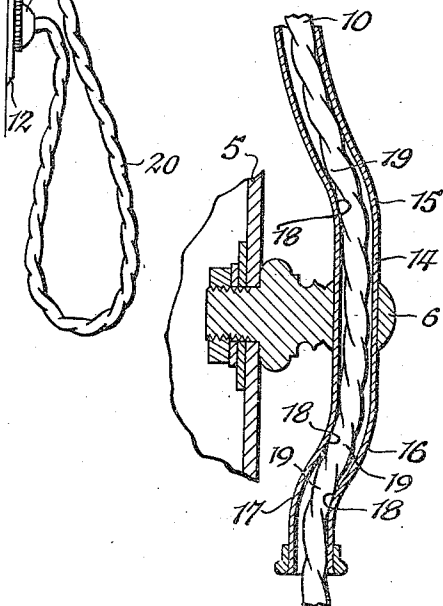
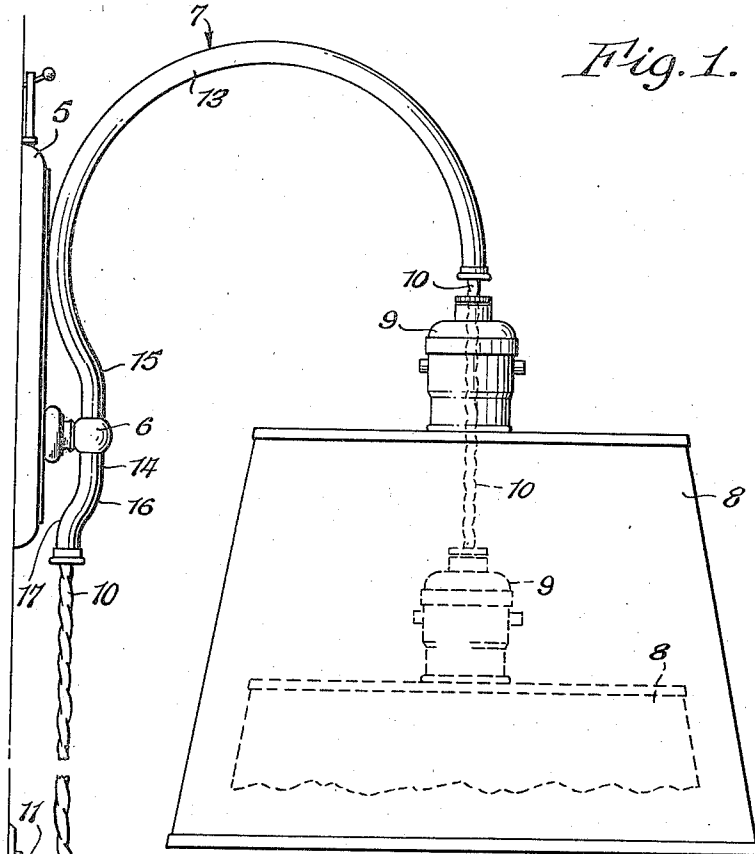
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ELECTRIC LIGHTING FIXTURE

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ELECTRIC LIGHTING FIXTURE

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5 Claims. (Cl. 240—73)

This invention relates to improvements in electric lighting fixtures of the kind wherein the lamp is suspended from an electric cord, the latter being supported by an arm which, while permitting adjustment of the cord, at will, to vary the elevation of the light source, is adapted to engage the cord in such a manner as to hold the lamp in any position to which it may be adjusted.

One object of the invention is to provide a fixture of the type generally described which is so designed that the required adjustments may be made as frequently as desired without likelihood of the cord becoming caught in the supporting arm and without reducing, or otherwise impairing, the resistance which the cord offers to such adjustments and which is availed of to hold the lamp at the desired elevation.

A further object is to provide a fixture which is simple in design and pleasing and attractive in appearance.

The invention is illustrated in the accompanying drawing in which:

Figure 1 is a side elevational view of an electric lighting fixture embodying the features of the invention.

Figure 2 is an enlarged fragmentary section thereof.

The fixture, as illustrated, is of the wall-bracket type. It includes an ornamental shield 5 which is adapted to be mounted in conventional manner upon a wall or other support. A post 6 which is bolted or otherwise secured to the shield carries a tubular arm 7, the latter being in the shape of a gooseneck and occupying a plane substantially normal to the plane of the shield. The lamp and the shade 8 therefor are carried by a socket 9, a cord 10 which is connected at one end to the socket passing through the arm 7 and being connected at its opposite end to a plug 11 which is adapted to be connected to a conveniently located outlet 12. Preferably the arm 7 has a uniform internal diameter which throughout its extent is sufficiently larger than the diameter of the cord to provide a certain measure of lateral freedom of the cord in the arm.

In accordance with the invention the arm 7 is designed to permit the cord to be drawn through it to adjust the lamp and shade unit to the desired elevation but to offer a resistance to the passage of the cord through it which will be adequate, without the aid of counterweights or clamping devices, to hold the lamp and shade unit at the desired elevation. To this end the said arm includes a body 13 and a shank 14, the former be-

ing arcuate and having a relatively large radius which is predetermined to hold the lamp and shade unit the desired distance outwardly from the shield 5. The body of the arm is connected by a recurved portion 15 to the shank and the latter terminates in connecting curved and recurved portions 16 and 17, respectively, it being noted in this connection that the radii of the said curved and recurved portions and recurved portion 15 are relatively short as compared to the radius of the body of the arm.

The curved and recurved portions of the arm 7 provide internal arched shoulders 18 (Figure 2) around which the cord 10 is bent and against which the bends 19 formed therein are pressed, the bends 19 acting against the shoulders 18 to resist movement of the cord in either direction to an extent adequate for the purpose in view. When it is desired to lower the lamp and shade unit the socket 9 is grasped and pulled downward. To elevate the said unit it is only necessary to grasp the part of the cord 10 below the shank of the arm and pull it downward, it being noted that slack 20 is provided in the cord between the arm and the outlet 12 to enable the lamp and shade unit to be adjusted in the manner described.

It will be apparent from the foregoing that as the cord 10 is drawn through the arm 7 incidental to the adjustment of the light source, the resistance offered by the body 13 will, owing to its large radius and the difference between the internal diameter of the arm 7 and the diameter of the cord, be substantially negligible. However, in its passage through the shank 14 of the arm the curved and recurved portions thereof cause the cord to be pressed firmly against the shoulders 18. Movement of the cord through the arm is thus resisted, the extent of such resistance depending in a large measure upon the resistance offered by the cord to the deforming action of the shoulders. In other words any movement of the cord through the shank 14 is accompanied by bending and straightening of the engaged cord sections. The curved and recurved portions of the shank are formed so that the force required to pull the cord through the arm is greater than that which would be counterbalanced by the weight of the lamp and shade unit, it being understood that the resistance to the movement of the cord through the shank portion of the arm includes as one factor the resistance provided by the contacting areas of the cord and the shoulders 18 and as a second factor the resistance which the cord offers to the formation and elimination

of the bends 19. In this connection it will be noted that the shaping of the arm so that a curve in one direction is followed by a curve in the opposite direction increases in a substantial degree the effectiveness of the curves. Slight curves will thus provide the proper amount of resistance while avoiding the possibility of the cord becoming caught in the tube as might otherwise be possible if the curves were abrupt.

The construction described has the advantage that the resistance which the cord offers to being drawn through the arm 7 is not reduced substantially even though the surface of the cord is, or should become, smooth. The use of cords having special coverings or the accurate fitting of the arms of the fixtures to such cords is thus avoided. A further advantage obtained is that as the resistance which is availed of to support the light source at the desired elevation is furnished substantially entirely by the shank of the arm 7, wide latitude with respect to the size, shape and ornamental appearance of the body is thus afforded.

It will be appreciated that the features of the invention may be incorporated to equal advantage in various types of fixtures and that the illustration of a fixture of the wall-bracket type is intended to be by way of example only.

I claim as my invention:

1. An electric lighting fixture including a flexible conductor, an illuminating unit suspended from one end of said conductor and an arm formed from a tube for supporting said conductor, said tube having an internal diameter which throughout its length is greater than the diameter of the conductor and being formed with one portion through which the conductor may move relatively freely without substantial frictional resistance being offered by the walls of the tube and with a connecting curved portion of relatively small radius which resists movement of the conductor to such an extent that the illuminating unit will be held in various positions of adjustment.

2. An electric lighting fixture including a flexible conductor, an illuminating unit suspended from one end of said conductor and an arm formed from a tube for supporting said conductor, said tube having an internal diameter which throughout its length is greater than the diameter of the conductor and being formed with a curved body portion of relatively large radius through which the conductor may move

relatively freely without substantial frictional resistance being offered by the walls of the tube and with a connecting curved portion of relatively small radius which resists movement of the conductor to such an extent that the illuminating unit will be held in various positions of adjustment.

3. An electric lighting fixture including a flexible conductor, an illuminating unit suspended from one end of said conductor and an arm formed from a tube for supporting said conductor, said tube having an internal diameter which throughout its length is greater than the diameter of the conductor and being formed with a curved body portion of relatively large radius through which the conductor may move relatively freely without substantial frictional resistance being offered by the walls of the tube and with a connecting recurved portion of relatively small radius which resists movement of the conductor to such an extent that the illuminating unit will be held in various positions of adjustment.

4. An electric lighting fixture including a flexible conductor, an illuminating unit suspended from one end of said conductor and an arm formed from a tube for supporting said conductor, said tube having an internal diameter which throughout its length is greater than the diameter of the conductor and being formed with a body portion through which the conductor may move relatively freely and with connecting curved and recurved portions which resist movement of the conductor to such an extent that the illuminating unit will be held in various positions of adjustment.

5. An electric lighting fixture including a flexible conductor, an illuminating unit suspended from one end of said conductor and an arm formed from a tube for supporting said conductor, said tube having an internal diameter which throughout its length is greater than the diameter of the conductor and being formed with a curved body of relatively large radius through which the conductor may move relatively freely without substantial frictional resistance being offered by the walls of the tube and with a shank, said body being connected to said shank by a recurved portion of relatively small radius which resists movement of the conductor to such an extent that the illuminating unit will be held in various positions of adjustment.

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