

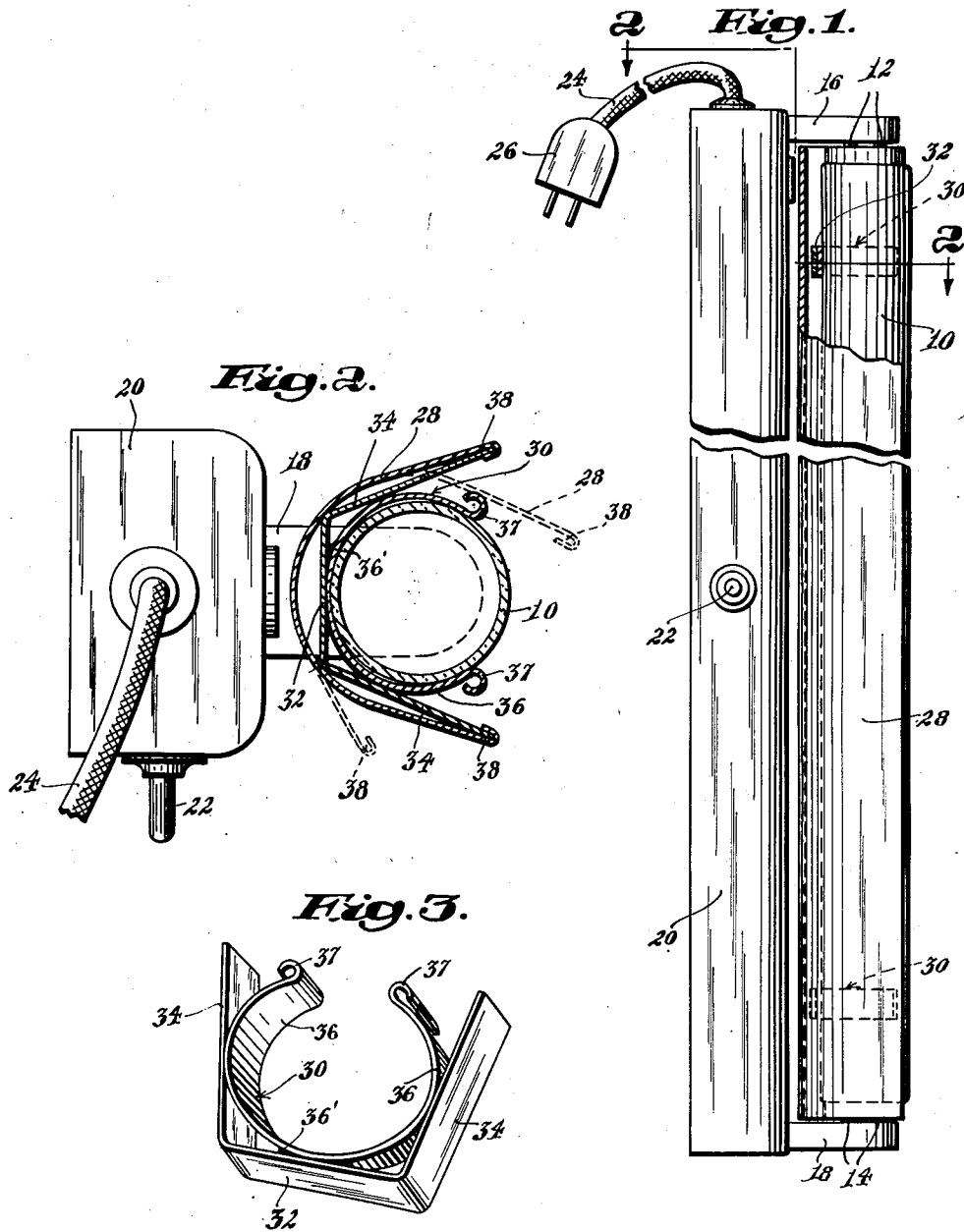
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LAMP SHADE ADJUSTABLE ON LAMP AXIS

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LAMP SHADE ADJUSTABLE ON LAMP AXIS

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This invention relates to improvements in lamp shades and more particularly to adjustable reflecting shades for lamps of the tubular variety. The invention is herein illustrated as it may be associated with a conventional type of tubular sun lamp, for directing the rays of the lamp in any of a variety of general directions; but it is equally applicable to fluorescent tubular lamps, and the like.

It is among the objects of the invention to provide a lamp shade for tubular lamps having means for frictionally gripping the lamp for supporting the shade on the lamp in a manner whereby the shade is readily rotatable about the axis of the lamp to direct light rays from the lamp in any of various general directions.

Another object is to provide a shade for tubular lamps which may be produced economically on principles of mass production, and which is quickly and easily mountable on a tubular lamp with friction maintaining the shade in any of various positions of rotational adjustment about the axis of the lamp.

Yet another object is to provide a shade for tubular lamps wherein the shade has an open end for reception of one or more resilient clamps which may be selectively located along the shade for frictionally gripping a tubular lamp in a manner to support the shade on the lamp with the clamps frictionally maintaining the shade in selective positions of rotational adjustment about the axis of the lamp.

It is, moreover, my purpose and object generally to improve the structure of lamp shades and especially shades for adjustably reflecting the light rays from tubular lamps in any of various general directions.

In the accompanying drawing:

Fig. 1 is a side elevation of a sun lamp fixture having a conventional tubular sun lamp mounted therein and having a shade embodying features of the invention mounted on the lamp; a central portion of the assembly being broken away and an end portion of the shade being broken away;

Fig. 2 is an end elevation of the fixture of Fig. 1, on a larger scale, with a portion in cross-section approximately on line 2—2 of Fig. 1; and

Fig. 3 is a perspective view of one of the shade clamps.

Referring to the drawing, the tubular lamp 10 may be of conventional sun lamp design and construction, having the terminals 12, 14 at its opposite ends adapted for reception in a usual type of contact brackets 16, 18 which project

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from a base 20. Ordinarily, the base 20 is formed of sheet metal to provide a housing for electrical connections leading to the contact brackets 16, 18, and to a switch 22 which may be mounted at any convenient location on base 20. A conductor cord 24 extends into the housing to the said electrical connections and has a plug 26 at its outer end for plug-in connection of the lamp at any convenient wall outlet.

According to the invention a reflector shade 28 is adjustably mounted on the tubular lamp 10, the shade having one or more resilient clamps 30 frictionally gripping the lamp and adapted to frictionally hold the shade in any of various positions of adjustment about the axis of lamp 10.

The shade 28 conveniently and economically may be made of suitably rigid sheet metal stock formed into a generally open-ended trough shape for fitting around a substantial portion of the periphery of the lamp, in spaced relation thereto. The shade 28 preferably will have longitudinal extent only slightly less than the distance between the brackets 16, 18 so that, when it is mounted on lamp 10, it can have no appreciable longitudinal movement relative to the lamp, the brackets constituting stops preventing such movement. However, the resilient clamp or clamps 30, two being herein shown, engage the lamp circumferentially whereby the shade may be rotated about the lamp axis, with the frictional grip at the clamps adapted to maintain the shade in any selected position of rotational adjustment.

As best seen in Figs. 2 and 3, each of the clamps 30 comprises a strip of relatively rigid metal sharply bent at two spaced locations therealong to provide a base portion 32 from the opposite ends of which project the two arms 34, 34; the extent of each of which is at an angle to the base portion 32 a little greater than a right angle, whereby the arms incline a little away from each other. A resilient curved strip 36 is spot welded or otherwise secured at 36' to the base portion 32 of the rigid strip, centrally between its ends, so that oppositely disposed arms of the resilient curved strip 36 are adapted to resiliently engage circumferentially around the lamp 10 with the lamp resting against the secured central region of the curved strip 36. The end portions of the oppositely disposed resilient arms of strip 36 preferably are bent on a small radius outward to provide rounded end portions 37 which resiliently tend to move toward each other to positions wherein the space

between them is substantially less than the diameter of the lamp 10. Hence, when the lamp 10 is being pressed between the resilient arms of the strip 36, the ends 37 of the arms are cammed apart enough to permit passage of the lamp between them into engagement with the secured central portion of strip 36, the end portions 37 resiliently embracing and frictionally gripping the lamp in a manner to maintain the base portion 32 of each clamp 30 in frictional engagement with the lamp.

A feature resides in the structure of the clamps 30 whereby they may be produced economically and may be easily and quickly mounted within the shade 28 at any desired locations along the extent of the shade. For this purpose, the shade stock at each side edge of the trough-shaped shade is turned inward to provide a groove 38 along each side edge extending from end to end of the shade. The grooves 38 are adapted to receive the ends of the relatively rigid arms 34 of the clamp as the clamp is inserted in an open end of shade 28, with the bends at the opposite ends of the base portion 32 of the relatively rigid strip frictionally engaging the interior surface of the shade. Preferably, the arms 34 will have length and inclination such that the grooved side edges of the shade are spread a little when the clamp is mounted, whereby their resilient tendency to move toward each other maintains the clamp in relatively tight association with the shade 28, although the clamp may be forced along the shade, by a reasonable amount of applied pressure, to position it at any desired position between the ends of the shade. When two clamps 30 are employed, as shown in Fig. 1, they may be located a little inward from the opposite ends of the shade.

It will be apparent from the foregoing description, in connection with the drawing, that sheet metal stock in long strips may be stamped or otherwise formed to have the generally trough-shaped cross-section of the illustrated shade, with the opposite side edges turned inward to provide the longitudinal grooves at 38. The sheet metal stock preferably will be provided with a light-reflecting surface at that side thereof which will be within the troughs. These formed strips subsequently may be cut to desired shade lengths, some of which may be longer or shorter than others depending upon the length of the tubular lamps which are to be shaded.

Similarly the parts of each clamp 30 economically may be stamped and shaped, or may be otherwise cut and formed, from relatively long strips of suitable material, after which the resilient curved parts 36 quickly may be welded or otherwise secured at 35' to the base portion 32 of the relatively rigid strips. Then the assembled clamps may be inserted in an open end of each shade and be positioned therealong as may be desired, one, two or more of the clamps being thus quickly associated with each shade to make it ready for mounting on a tubular lamp 10.

When one of my improved shades 28 is mounted on a tubular lamp 10, it can be rotated about the axis of the lamp to any of various positions to direct the light rays from the lamp in various directions. In Fig. 2, the shade is shown by full lines in one position and by dotted lines in another position. Obviously, in Fig. 2, the shade may be rotated approximately ninety degrees in either direction from its full line position, and it will be frictionally retained in any

selected position within its range of rotational adjustment.

I claim as my invention:

1. A shade for a tubular lamp, comprising a generally trough-shaped shade body having length approximating the length of the tubular lamp which is to be shaded, said body having each side edge of its trough walls interiorly formed with a longitudinal groove open toward the bottom of the trough and extending from end to end of the shade body, mounting means within the trough of the shade body, comprising a bent strip of relatively stiff sheet metal disposed transversely within said trough with its opposite ends engaged in said side edge grooves of the shade body and having two spaced portions between said ends frictionally engaging curved wall portions of the trough whereby the ends of said bent strip are maintained in said grooves, and a resilient generally arcuate strip secured intermediate of its ends to said relatively stiff bent strip at a location on the latter between said two spaced frictionally engaging portions thereof, said resilient strip having oppositely disposed resilient arcuate portions for resiliently embracing a tubular lamp extending longitudinally within the trough of the shade body, thereby to maintain the shade body in light-reflecting association with the lamp, with the shade body rotatably adjustable around the axis of the lamp.

2. A shade for a tubular lamp, comprising a generally trough-shaped shade body having length approximating the length of the tubular lamp which is to be shaded, said body having each side edge of its trough walls interiorly formed with a longitudinal groove open toward the bottom of the trough and extending from end to end of the shade body, and the opposite ends of the trough and said grooves being open, mounting means within the trough of the shade body, comprising a bent strip of relatively rigid metal disposed transversely within the trough, said bent strip having generally U-shaped extent from end to end, with its opposite ends engaged in said side edge grooves of the shade body and with intermediate portions frictionally engaging the trough walls relatively deep within the trough, whereby the ends of the bent strip are maintained in said grooves, and a resilient arcuate clamping strip secured to said bent strip and having oppositely disposed resilient arms for resiliently embracing a tubular lamp, thereby to mount the shade body in reflecting relation to the lamp with said body frictionally adjustable about the axis of the lamp.

3. A shade for a tubular lamp, comprising sheet material formed into generally open-ended trough shape and having its side edges turned inward to provide interior edge grooves extending from end to end of the trough and open toward the bottom of the trough and open at the opposite ends of the trough, a generally U-shaped strip of relatively rigid metal inserted through an open end of the trough with the opposite ends of the strip slidably engaged in said side edge grooves and with intermediate portions of the strip frictionally engaging interior surface portions of the trough relatively deep down in the trough, said strip being movable to selective positions along the trough and being frictionally maintained in any selected position against unintentional movement, and a resilient arcuate clamp secured to said strip with oppositely disposed resilient and spaced-apart arms for resiliently embracing a tubular lamp disposed longitudinally within the trough, thereby to maintain the trough in light-

reflecting relation to the lamp, with the trough rotatably adjustable about the axis of the lamp.

4. In a tubular lamp fixture having a base with end brackets for receiving end terminals of a tubular lamp and for supporting the lamp in spaced generally parallel relation to said base, a lamp shade extending around a substantial portion of the circular cross-section of the lamp throughout substantially the entire length of the lamp, said shade having generally the shape of a trough with extent in the space between said base and the lamp, a plurality of lamp-embracing resilient clamps disposed laterally within the trough of the shade, each said clamp having oppositely extending relatively stiff projections thereon, and the walls of said trough having portions distributed along the trough for engaging over the end portions of said oppositely extending projections thereby to maintain said projections at selected locations along said trough, and said clamps providing for manual rotational adjustment of the shade about the axis of the lamp

to dispose the open side of said trough-shaped shade in different light-reflecting relations to the general plane of said base.

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