July 28, 1936. J. T. ATKINSON 2,048,988

LAMP HARP

Filed Dec. 13, 1934

Fig. 1.

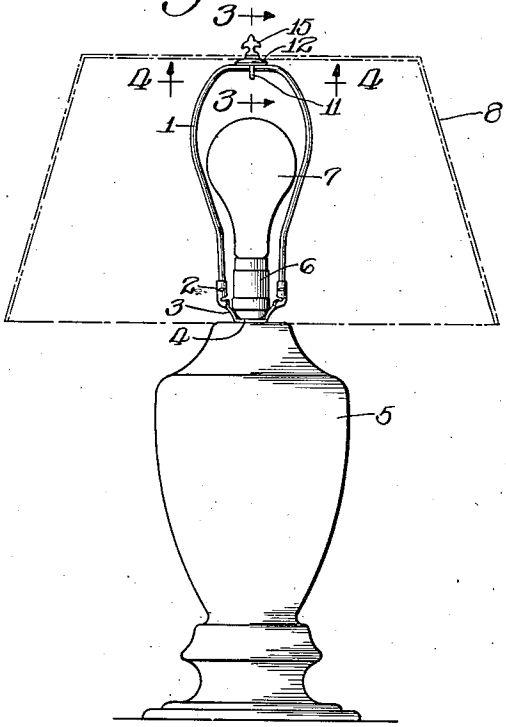


Fig. 2

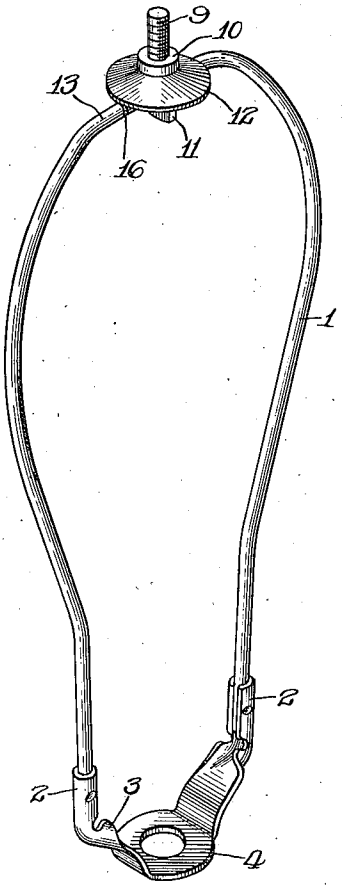


Fig. 3.

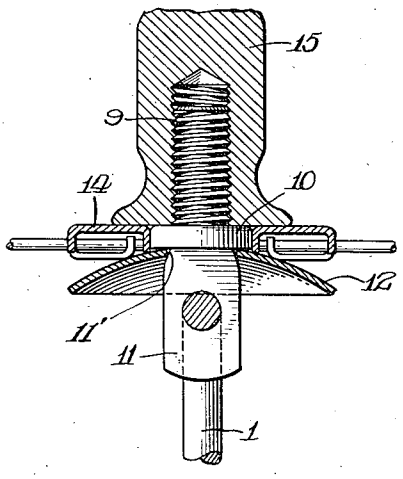
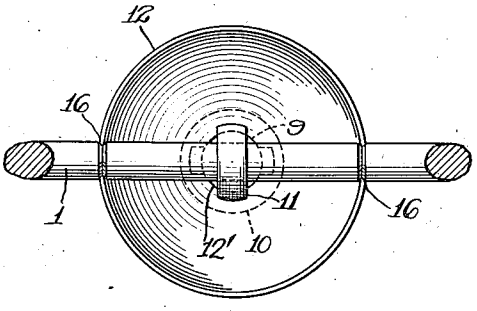


Fig. 4.



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UNITED STATES PATENT OFFICE

2,048,988

LAMP HARP

Jerome T. Atkinson, Winnetka, Ill.

Application December 13, 1934, Serial No. 757,280

1 Claim. (Cl. 240—148)

This invention relates to improvements in shade supporting fixtures for usage in connection with portable and other types of electric lamps, commonly characterized in the pertinent art as a harp.

It is an object of the invention to provide a desirable, simple, and uncostly shade receiving and attaching element for a lamp harp, which when operatively connected thereto, will provide the shade with a pivotally adjustable mounting whereby such shade may be optionally moved to any one of a great number of relatively angular or tilted positions with respect to the lamp light source and firmly though releasably retained in said adjusted position to effect a desired reflection of light rays.

It is also an object of the invention to provide a shade mounting element for a harp provided with a spring device serving a dual utility, i. e., as a means for rigidifying the relative positioning of said element with respect to the harp, whereby to insure a stable type of support for the lamp shade and to effectually and firmly retain the element in an adjusted position upon the harp against undesired movement, such for example, as pendulous swinging or vibratory motion, hence, retaining the shade in the desired position with relation to the light source.

A further object of the invention resides in the provision of a device of the character stated so constructed that it may be assembled and placed in operative arrangement, if need be, by unskilled labor, and in a minimum amount of time, thus, entailing considerable saving upon part of a manufacturer-user.

Other objects of the invention will be in part obvious and in part pointed out hereinafter.

In order that the invention and its mode of operation may be readily understood by those skilled in the art to which it appertains, I have in the accompanying drawing and in the detailed description based thereupon, set out one possible embodiment of my invention.

In the drawing:

Figure 1 is a side elevation of a lamp equipped with the improved harp, a lamp shade being shown in dotted lines and mounted thereon;

Figure 2 is a detail in perspective of the improved harp;

Figure 3 is an enlarged fragmentary detail in vertical section, taken on the line 3—3 of Figure 1, looking in the direction in which the arrows point, and,

Figure 4 is a similar detail taken on the line 4—4 of Figure 1, looking in the direction in which the arrows point.

Having more particular reference to the drawing, in connection with which like characters of reference will designate corresponding parts throughout, the improved device comprises a supporting bracket or what is generally known in the art as a harp frame 1, consisting of a single length of wire or other suitable material bent into substantially inverted U-shaped formation, having the free ends of the opposite legs or lateral extremities thereof fixedly attached to the appropriately formed ends 2 of a fixture attaching bracket 3, the intermediate portion of which is formed with an apertured and somewhat enlarged flat bearing or lamp standard engaging part 4 adapted to be engaged with the supporting rod, standard, or other appropriate part of a lamp base 5, in the manner illustrated in the Figure 1; an electric incandescent lamp fixture 6 being secured, as is usual, to the lamp standard or base and extended longitudinally of the harp for a portion of its length. An incandescent electric lamp 7, of course, is adapted to be turned into operative engagement with the lamp socket fixture 6 and as is also shown in the Figure 1, this lamp is received within and disposed longitudinally of the upright harp frame 1.

In order that a lamp shade, such as designated by the numeral 8 may be effectually supported from the harp frame 1, I provide the device with a mounting element 9, consisting of a screw-threaded shank provided with an annular shoulder or seat 10 upon its lower portion, and from which lower portion there is longitudinally extended an apertured cross-sectionally rectangularly shaped finger 11, the opening in said finger being of a size such as will permit of snug though movable engagement of the harp frame 1 therethrough. A substantially dished, or concavo-convex washer or disc-like element 12 is slidably engaged over the free and normally lower end of the apertured finger 11 and is moved into bearing engagement with the normally under side of the annular shoulder 10 and thus, is prevented from moving onto or over the screw-threaded shank portion of the mounting element 9. At this point, it is to be noted that the element 12 is formed with a substantially concentrically located, generally circularly shaped opening 12' having two diametrically opposed enlarged portions of a size sufficient to permit snug sliding passage of the apertured finger 11 therethrough; also, that the cross-sectionally rectangularly shaped finger 11 adjacent its point of jointure

with the annular shoulder 10 is reduced in size by inwardly curving the opposite marginal portions thereof, as indicated by the numeral 11', thus forming what may be aptly termed as a seat. When the finger 11 is passed through the opening 12' and its diametrically opposed enlarged portions in the concavo-convex element 12 and said element is in abutting engagement with the adjacent side of the annular shoulder 10, the finger 11 is then axially turned upon itself in the opening 12' to a position at substantially right angles or cross-wise of the diametrically opposed enlarged portions of the opening 12' in said element 12. In this way, it will be understood that the element 12 will be seatingly engaged upon the reduced inner end portion 11' of the finger 11 in abutting engagement with respect to the shoulder 10, as shown in the Figures 3 and 4. Consequently when the outer marginal portions or edges of the concavo-convex element 12 are engaged with adjacent portions of the harp 1, an upward thrust will be imparted to said element, thereby bindingly engaging its upper portion in the seat 11' and with adjacent portions of the underside of the shoulder 10.

In assembling the improved fixture, the apertured finger 11 is slidably engaged over the harp frame 1, prior to the fixing of one or both of the extremities of its leg portions in the ends 2 of the fixture attaching bracket 3; the concavo-convex element 12 having been previously mounted upon the element as above described. The mounting element is now moved to a position adjacent the upper end of the harp frame 1, which portion of said harp frame, if desired, may be formed substantially straight, as designated by the numeral 13. The depth of the concavo-convex element 12 with respect to the length of the apertured finger 11 is such that the free marginal portions of the former will have spring-like binding engagement with the adjacent portions of the lamp harp frame 1. Consequently thereupon, it will be understood that whereas the mounting element 9 will be permitted of pivotal movement with respect to the frame 1, it will be bindingly and firmly secured in its adjusted position or relation with respect to such frame. That is, by reason of the interpositioning of the concavo-convex element 12 with respect to the annular shoulder 10 of the element 9 and the adjacent side of the harp frame 1, a frictional connecting device will be effected between the shade mounting element 9 and the harp frame 1, against the pressure of which pivotal movement of the mounting element 9 must be made.

It will be understood by workers skilled in the art, to mount the lamp shade 8 upon my improved harp, said shade is engaged over the harp in the manner as is shown in Figure 1, whereupon the annular collar or bracket fitting 14 with which the said frame is normally provided, is engaged over the screw-threaded shank portions of the mounting element 9, said collar 14 resting or seating upon the adjacent or outer side of the annular shoulder 10, and thus, finding effectual support. At this time, a finial or other suitable locking device 15 is turned into engagement with said screw-threaded shank of the element 9 and into binding contact with the adjacent portion of the annular collar or bracket 14 of the shade 8.

If desired, that portion of a harp frame 1 with which the mounting element 9 is engaged may be formed with relatively spaced circumferentially extending ways or grooves 16, said grooves being so relatively spaced that the diametrically opposite edges or lower portions of the element 12 engaged therein, as shown in the Figures 2, 3, and 4. Thus, it will be understood that undesirable lateral shifting movement of the mounting element 9 with respect to the harp frame 1 during usage of the device will be prevented, in that the tension under which said concavo-convex element 12 is maintained, by reason of its engagement with the element 9 through the annular shoulder 10, will be sufficient to retain said diametrically opposite or opposed edges of the concavo-convex element 12 in constant engagement with the grooves 16.

In usage of a lamp equipped with my improved harp, should the user desire to tilt or move the shade 8 with respect to the incandescent element lamp 4, he need only grasp a convenient portion of said shade or the finial 15 and exert a pressure thereon sufficient to impart pivotal movement to the mounting element 9. When the shade has been adjusted or tilted to the desired position with respect to the light source, the user releases the same, and it will be understood that by means of the binding-like action or frictional connection provided through the medium of the interpositioning frustro-conoidal element 12, said mounting element 9, together with the shade will be firmly though movably retained in such position.

The concavo-convex element or washer 12 not only serves as a means for effecting a releasable anchoring connection between the mounting element 9 and the harp frame 1, but it also functions as a means for effectually rigidifying the relative positioning of said mounting element 9 with respect to that part of the harp frame 1 carrying it, thus, positively assuring the assembled lamp construction of stable structural characteristics.

Manifestly, the construction shown is capable of considerable modification, and such modification as comes within the scope of my claim, I consider within the spirit of my invention.

I claim:

A shade attaching and supporting device for lamp shade harps, comprising a mounting element, an annular shoulder fixedly carried adjacent the lower end of the mounting element, a cross-sectionally rectangularly shaped apertured finger fixedly connected to the underside of the annular shoulder and co-axially disposed with relation to the mounting element, the opposite edges of said finger, at their points of jointure with the annular shoulder, being inwardly disposed and reducing the adjacent area of said finger, whereby to provide a seat upon the finger adjacent the underside of the annular shoulder, and a concavo-convex washer having an opening formed substantially concentrically thereof through which said finger is substantially snugly passed and is adapted to be axially rotated, whereby to effect its arrangement transversely of said opening and seating engagement of the concentric portion of said washer on the reduced portion of the finger.

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