

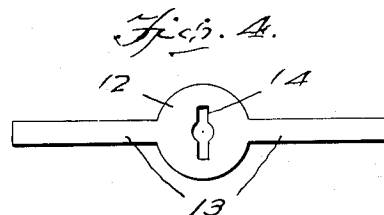
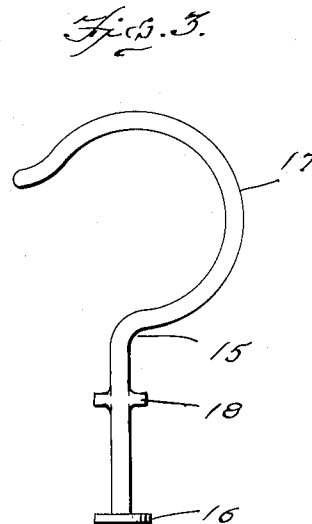
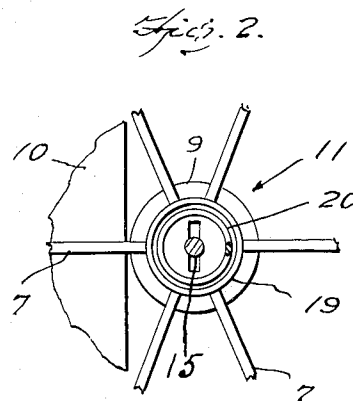
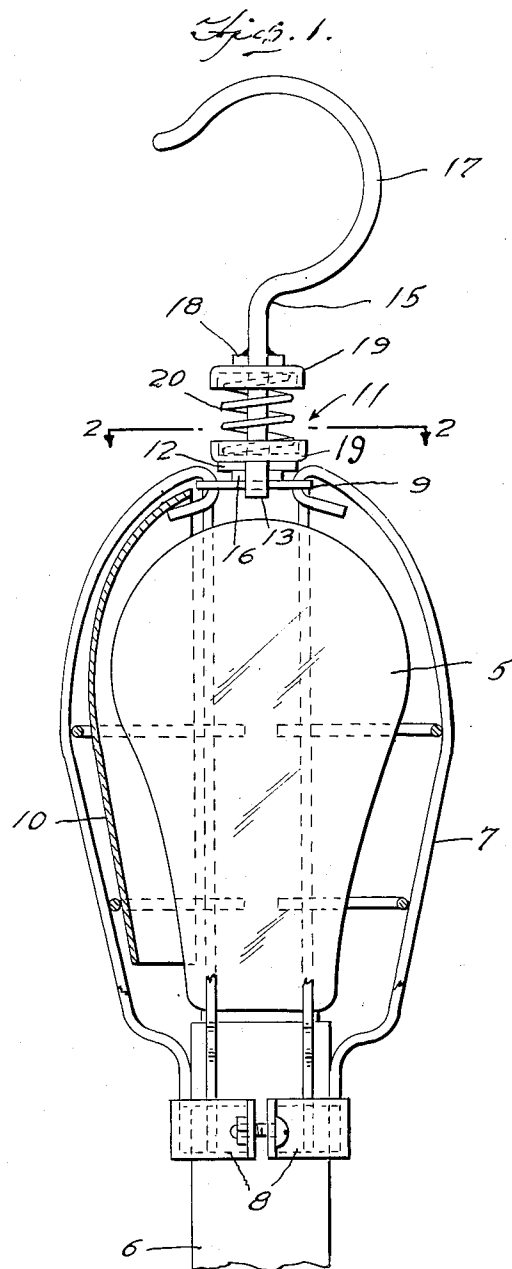
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ROTATABLE SUSPENSION HOOK FOR TROUBLE LAMP

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ROTATABLE SUSPENSION HOOK FOR TROUBLE LAMP

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2 Claims. (Cl. 240—54)

This invention is a trouble lamp with rotatable suspension hook and has for an object to provide a hook of simple construction which may be quickly attached to the cage of standard trouble lamps and permits freedom of movement of the lamp and its cage with the hook or independently of the hook, at the option of the user.

Efforts have been made in this art over a long period of time to produce a simple inexpensive trouble lamp which would be capable of engagement with an object in close proximity to the work yet allowing freedom of movement of the lamp. Illustrative of attempts made to accomplish these objectives are the patent to Jenkins, No. 1,405,221 and the patent to Kollath, No. 1,777,003, both of which employ universal connections between the object engaging means and the lamp. In the present invention a simple inexpensive tensioned swivel connection is used which permits the lamp to be freely rotated yet positively retained in a predetermined position in addition to which the lamp and its support engaging means may be bodily moved, frequently while still engaged with its support.

Other objects of the invention will be apparent from the following description of the presently preferred form of the invention, wherein:

Fig. 1 is a side elevational view of a standard trouble lamp with cage and reflector illustrating the application of a rotatable suspension hook constructed in accordance with the present invention;

Fig. 2 is a cross sectional view taken on the line 2—2 of Fig. 1 looking in the direction of the arrows;

Fig. 3 is a side elevational view of the suspension hook per se;

Fig. 4 is a top plan view of the base plate forming a part of the swivel unit of the present invention.

In order to illustrate the application of this invention, an electric lamp or bulb 5 of conventional construction is shown which is mounted in a socket 6. The bulb is encased in a wire cage 7 which may be formed in two parts detachably engaged at the bottom by split sleeves 8, the wires at the top of the cage being engaged to a disc 9. The cage is equipped with a light reflector 10 secured to the cage in a manner well known in the art. The device of this invention comprises a unit, generally designated 11, composed of a base plate 12, the central portion of which is substantially circular with portions of the periphery, at diametrically opposite points, extended to provide fingers 13. The circular portion of the body of the plate is provided with a slot 14 for a purpose which will presently appear. The unit further includes a hook 15 which in one embodiment consists of an elongated nail, the head 16 of which is adapted, when in use, to be interposed between the disc 9 of the cage and the central or body portion of the plate 12. The outer terminal of the nail is bent to provide a support engaging hook 17, an intermediate portion of the shank, between the base of the bill of the hook and the nail head 16, is swaged to provide laterally extending lugs 18 which are of a length and width to conveniently pass through the slot 14 of the plate 12 when the unit is being assembled or disassembled. The unit further embodies a pair of cups 19 which are sleeved on the shank of the hook between the lugs 18 and the head 16 of the hook, each of the cups being pro-

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vided with a slot through which the lugs 18 may freely pass. The cups 19 are adapted to confine the terminals of helical spring 20 which is convoluted on the shank of the hook between said cups.

In assembling the unit 11, after the shank of the hook has been passed through the base plate 12 and the fingers of the latter engaged with the disc 9, the inner of the cups 19 is slid over the free end of the hook and passed downwardly into engagement with the central portion of the plate 12. Next the spring 20 is slid over the free end of the hook and passed inwardly into engagement with said inner cup. The outer of the cups 19 is then engaged over the free end of the hook and pressure exerted thereon so as to compress the spring until the lugs are forced outwardly through the slot of the outer cup, following which the hook is turned so as to bring the lugs 18 into engagement with the outer face of said outer cup, preferably at substantially right angles to the cup slot. In this way the spring is held compressed correspondingly tensioning the hook and cage permitting relative rotative movement of the hook and cage only when rotative pressure is applied on either one of these elements. In this way while the lamp, cage or hook may be freely rotated, nevertheless they are normally held in a predetermined adjusted position. By so doing, the light may be thrown by the reflector 10 on the exact part of the work or object which is desired to be illuminated. Furthermore the cage may be laterally moved to some extent while the hook is engaged with a support and frequently bodily movement of the cage and hook is permitted, this depending upon the structure of the support. For instance if the hook is mounted on a circular bar or rod lateral movement of the cage, transversely of the bar, is permitted and also movement of the cage and hook longitudinally of the bar is permitted without removing the hook from the bar.

Various changes may be made in the invention within the scope of the claims hereto appended.

What I claim is:

1. A support-engaging means for a cage-equipped trouble lamp comprising a plate with fingers adapted for engagement with the lamp cage, said plate having an elongated perforation with an intermediate circular portion, an elongated circular shank nail engaged through the circular portion of the perforation, the head of the nail being interposed between the bottom of the plate and the top of the cage, the shank of the nail, beyond said plate, being hooked-shaped for engagement with a support, an intermediate portion of the shank between the base of the hook and said perforate plate being swaged to provide laterally extending lugs of a length and width to conveniently pass through the perforation in said plate when aligned therewith, and spring means mounted on said nail between said lugs and perforate plate for tensioning the hook and cage and permitting relative movement of the hook and cage only when rotative pressure is exerted on either of these members.

2. A support-engaging means as set out in claim 1 wherein the spring means includes a convolute spring coiled about said nail, and spaced cups sleeved on the nail shank for receiving and confining the terminals of said spring, the cups being slotted similarly to the plate perforations to permit passage of said lugs therethrough.

References Cited in the file of this patent

UNITED STATES PATENTS

991,872	Meyer	May 9, 1911
1,735,295	Olley	Nov. 12, 1929
2,172,223	Ribble	Sept. 5, 1939
2,304,547	Cutter	Dec. 8, 1942
2,460,173	Halbing	Jan. 25, 1949
2,694,776	Wittman	Nov. 16, 1954