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L. L. PATTERSON
EXTENSIBLE CORD LAMP

2,507,541

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Fig. 2.

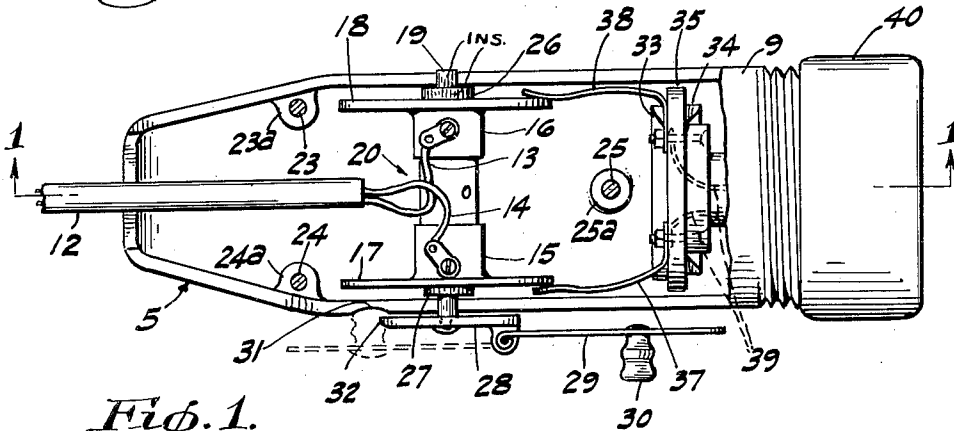


Fig. 1.

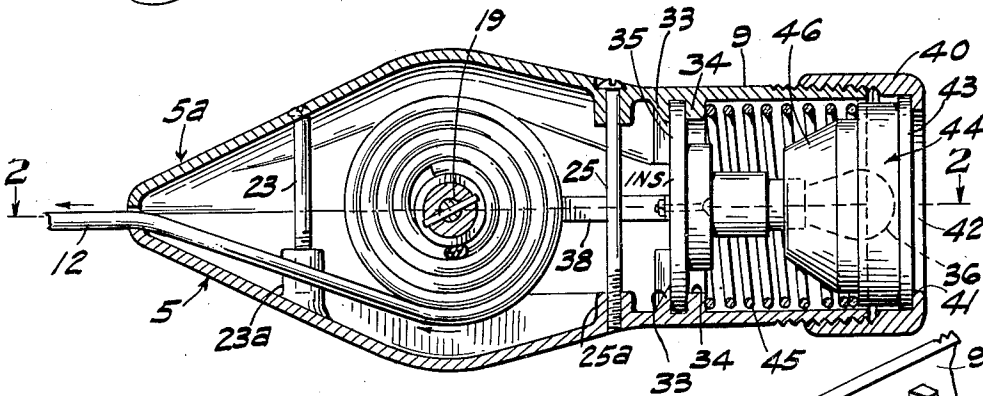


Fig. 4.

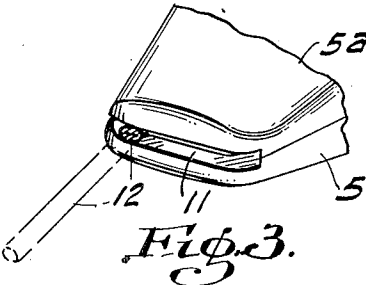
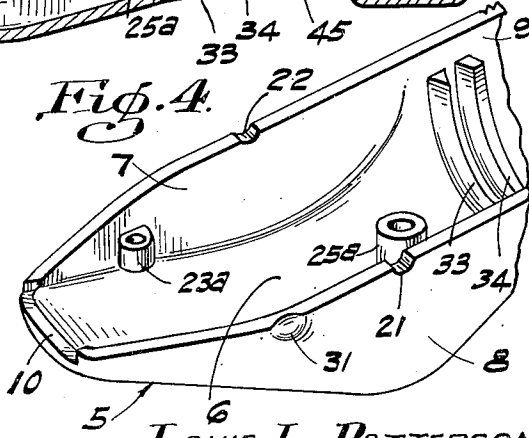


Fig. 3.

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EXTENSIBLE CORD LAMP

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3 Claims. (Cl. 240—8.18)

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This invention relates to an extensible reel wound cord and associated lamp.

Portable lamps of this character have a wide range of use, particularly so in the automotive field where they provide convenient spot lights while making repairs on stalled cars on the highways and for other useful purposes well known to those skilled in this art. Present day lamps of the class to which this invention pertains, however, are inefficient in many respects; namely, they are not sturdily built; their mechanism is complicated and will not stand up under hard usage; it is difficult to assemble them and oftentimes repairs are necessary since their conductor cords do not track properly at all times on the reel while being wound up; and the tooling up of the machine work increases the cost beyond a prohibitive amount which retards sales and tend to deny to the public the use of a much needed article.

Objects of this invention are to provide an improved lamp which will in a great measure overcome in an improved way the disadvantages above pointed out.

Additional objects reside in: the provision of an improved two-part shell housing wherein the conductor cord is properly tracked on the winding reel; the provision of an improved shell housing wherein the base of the lamp is detachably mountable in a secure manner; and to provide an improved spring-pressed reflector for varying the focus of the lamp.

A further object of the invention is to provide novel and better means for connecting the terminals of the lamp, the reel and the cord through which electrical energy is supplied to energize the lamp.

Other objects, advantages and features of invention will hereinafter appear.

In the present embodiment of the invention now reduced to practice and selected for illustration in the accompanying drawing,

Fig. 1 is a section taken on line 1—1 of Fig. 2.

Fig. 2 is a longitudinal interior and partly elevational view looking in the direction of the arrows 2—2 in Fig. 1.

Fig. 3 is a fragmentary perspective view of the mouth portion of the housing through which the electrical conductor is extendable.

Fig. 4 is a fragmentary perspective view of one of the moieties of the shell housing.

Referring in detail to the drawing, numeral 5 indicates one of the two matable shell moieties, separately shown in Fig. 4, said shell being somewhat scoop-shaped having a basin-like cavity pro-

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vided with a floor portion 6 and upstanding side walls 7 and 8, said floor and side walls tapering toward each open end of the shell. At the lamp end of the housing or casing said tapering walls and floor join the semi-circular part 9 at a point adjacent where the mounting of the lamp occurs and at the opposite end of the housing said tapering walls and floor converge to form a narrow mouth part 10 the lips of which extend transversely the full width of the casing and which when the shell moieties 5 and 5a are assembled in a mating relation cooperate to form the substantial rectangular mouth opening 11 shown in Fig. 3.

Through the opening 11 plays back and forth widthwise of the casing the flattened lamp cord 12, said cord containing the two electrical conductors 13 and 14 which are shown fastened to the hubs 15 and 16 of the front and back plates 17 and 18, as shown in Fig. 2. Since the two conductors extend in a parallel relation in their conduit covering, the cord as a whole is wider than it is deep. The vertical depth of the opening 11 is such that the flattened cord has a working fit between the upper and lower lips of the mouth opening. Thus fitting the cord into the slot prevents the twisting of the cord and assures the cord's perfect trackage on the reel upon which it is wound.

Upon the spindle 19 is mounted the reel 20, the ends of said spindle being journaled in the matchable semi-circular slots or bearing-forming notches 21 and 22 in each moiety 5 or 5a and three spanner screws 23, 24 and 25 secure the moieties in their operative relation, bosses 23a, 24a and 25a being provided in which to screw the threaded ends of the spanner screws.

The spindle 19 is constructed of insulating material as are the washers 26 and 27 which space the reel's front and back plates away from the walls 7 and 8. To the end of the spindle at one side of the casing as seen in Fig. 2, the reel 20 is provided with means whereby it may be manually rotated. Said means comprising a crank consisting of two members 28 and 29 hinged between their ends in such a manner that the outer member 29 may be swung over the inner member 28 in the manner of the hand crank of a conventional measuring tape, the end of the operating knob 30 at such time occupying a seated position within the recess 31 and with the contoured face thereof frictionally engaging the rounded nose 32 of the member 28.

Each moiety 5 or 5a is provided with a pair of spaced circumferentially extending ribs 33 and

34 which are opposed to each other in the assembled position and within the limits defined by the walls of said ribs is wedgingly gripped the insulating lamp base 35 to which is secured the lamp 36.

To the face of said lamp base opposite that to which the lamp 36 is secured are fastened a pair of bowed, yieldable contact members 37 and 38 the terminal portions of which embrace in a sliding manner the outer faces of the front and back plates 17 and 18 to bridge the circuit between the lamp and reel to which the conductors 13 and 14 are fastened. To the fastening means of the contact members 37 and 38 are secured the conductors 39 which supply electrical current to the lamp 36.

The end portions of the semi-circular parts 9 are externally threaded whereby to screw onto them the circular cap 40, said cap having an inward-turned circumferential flange 41 surrounding the opening 42 whereagainst to abut the lens 43.

Abutting the lens 43 from the rear is the reflector 44, said reflector being pressed against by the open coil spring 45 to hold the reflector and lens in place. The rear end of the spring 45 seats against the ribs 34. Adjustment is provided by the cooperating external threads of the parts 9 and the internal threads of the cap 40 whereby to compress more or less the spring to vary the relation of the frusto-conical portion 46 of the reflector with respect to the lamp whereby to regulate the focus of the lamp's rays.

To dismantle the device, one simply unscrews the cap 40 and removes the three spanner screws 23, 24 and 25 after which the various parts are separably removable.

What is claimed is:

1. In an extensible cord lamp, two scoop-shaped cooperating moieties, means securing said moieties to each other in a position to form a housing and to provide between them a reel cavity, bearing-forming notches in each of said moieties which cooperate to form opposed journals, a reel including front and back plates, a spindle therefor, said spindle being mounted in said journals, a flattened conductor cord windable upon and unwindable from said reel, said cord having two leads, one of which is in electrical connection with the front face of said reel and the other of which is in electrical connection with the back face thereof, said housing having a circular lamp end and a mouth end including upper and lower lips opposite to said lamp end, the lips of said mouth extending transversely of the housing, said flattened cord extending with a working fit be-

tween the lips of said mouth, said lips engaging the cord with sufficient closeness to prevent twisting of the latter, a pair of internal, parallel semi-circular ribs carried by each of said moieties in said circular lamp end, the paired ribs of one moiety being in an opposed relation to those of the other, a circular lamp base having a portion of its periphery gripped between the opposed pairs of ribs, a lamp carried by said base and means electrically connecting said front and back plates of said reel with said lamp.

2. The subject matter of claim 1, and said means comprising a pair of bowed, yieldable contact arms carried by said lamp base and having a sliding contact with the peripheries of said front and back plates.

3. In an extensible cord lamp, two scoop-shaped cooperating moieties, means securing said moieties to each other in a position to form a housing and to provide between them a reel cavity, bearing-forming notches in each of said moieties which cooperate to form opposed journals, a reel, a spindle therefor, said spindle being mounted in said journals, a conductor cord windable upon and unwindable from said reel, said cord having two leads in electrical connection with said reel, said housing having a circular lamp end and a mouth end including upper and lower lips opposite to said lamp end, the lips of said mouth extending transversely of the housing, said cord extending with a working fit between the lips of said mouth, a pair of internal, parallel semicircular ribs carried by each of said moieties in said circular lamp end, the paired ribs of one moiety being in an opposed relation to those of the other, a circular lamp base having a portion of its periphery gripped between the opposed pairs of ribs, a lamp carried by said base, and means electrically connecting said reel with said lamp.

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