Aug. 13, 1957 M. W. LAMBERT 2,802,932

PORTABLE LAMP AND REEL

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Fig. 1

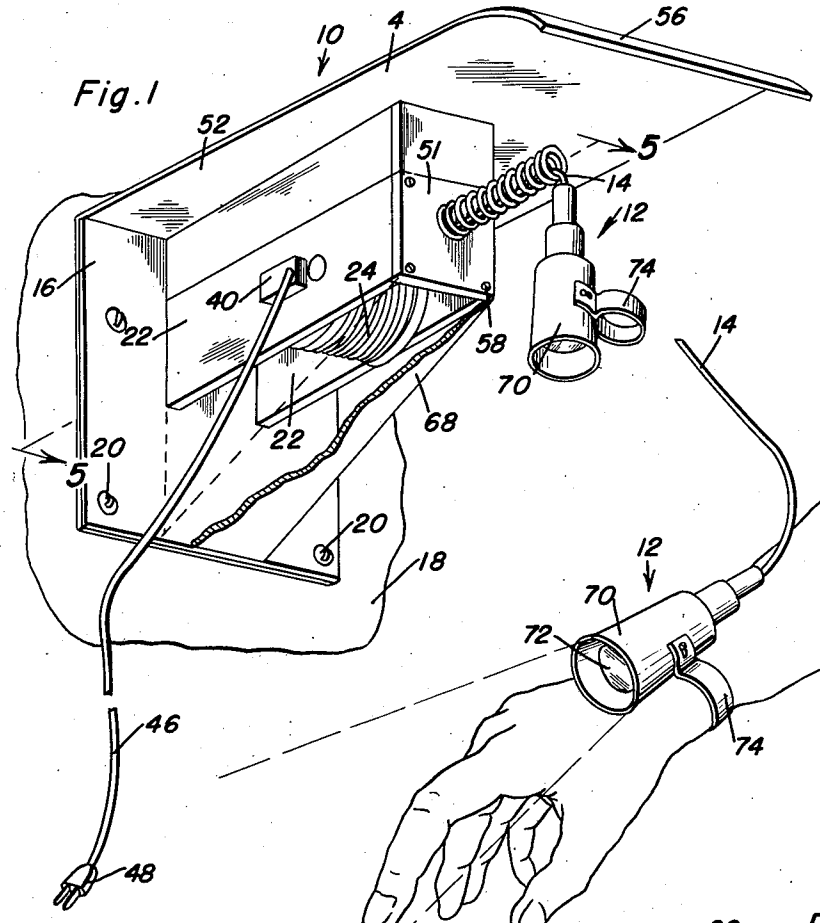


Fig. 2

Fig. 4

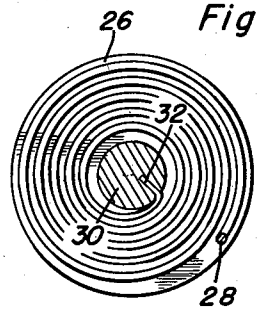
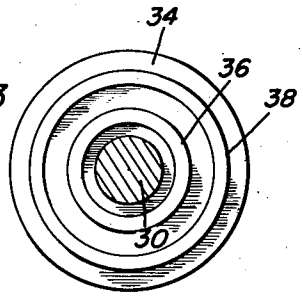


Fig. 3



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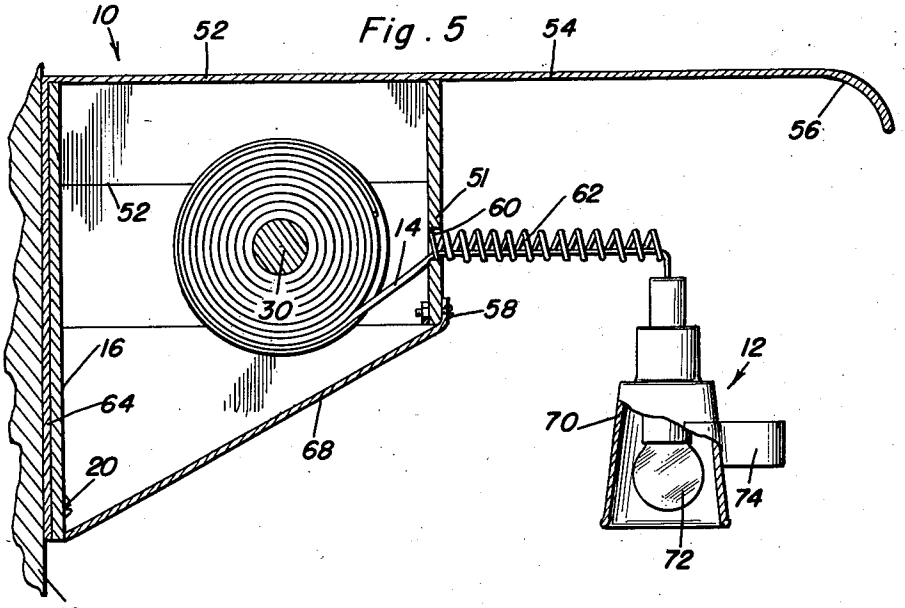
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Fig. 5



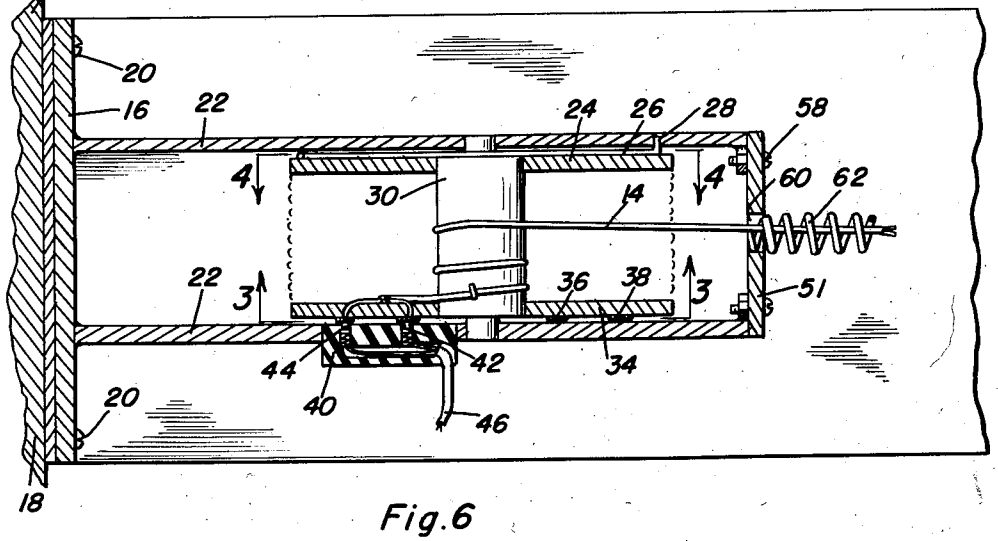


Fig. 6

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PORTABLE LAMP AND REEL

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Application July 2, 1954, Serial No. 440,931

2 Claims. (Cl. 240—73)

This invention comprises novel and useful improvements in a portable lamp and reel and more specifically pertains to a trouble light which is adapted to be clamped upon the wrist of a person in order that he may conveniently dispose the light in any desired position, the light being connected to a resilient retracting reel mounted in a stationary installation.

The primary object of this invention is to provide a portable electric light, useful either indoors or outdoors, which may be mounted in a convenient, out-of-the-way but protected location, and which may be easily positioned wherever desired.

A further object of the invention is to provide a portable lamp in accordance with the preceding object which shall be especially adapted to be clamped upon the wrist of a person to facilitate its movement into otherwise inaccessible places.

A further object of the invention is to provide a portable trouble light which is especially adapted for use around garages and the like which may be readily positioned to illuminate any desired object or place, and which will free the hands of the user for other purposes.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view, parts being broken away, of an embodiment of a portable extension light in accordance with this invention, parts being broken away to show the interior construction of the same;

Figure 2 is a perspective view showing the manner in which the portable light is clamped to the frist of a user;

Figure 3 is a vertical transverse sectional view taken substantially upon the plane indicated by the section line 3—3 of Figure 6 and showing the rotary distributor or commutator mounted upon the reel for establishing an electric circuit with the portable light;

Figure 4 is a vertical transverse sectional view taken substantially upon the plane indicated by the section line 4—4 of Figure 6 and illustrates the resilient winding means for the reel;

Figure 5 is a vertical longitudinal sectional view taken substantially upon the plane indicated by the section line 5—5 of Figure 1; and

Figure 6 is a horizontal sectional view through the assembly of Figures 1 and 5.

The portable trouble light in accordance with this invention consists of a mounting or supporting unit including a housing or casing indicated generally by the numeral **10**, a trouble light indicated by the numeral **12**, and an electric cable **14** connected to the light and forming part of an electric circuit as set forth hereinafter.

Referring particularly to Figures 1, 5 and 6 it will be seen that the casing **10** consists of a flat plate or base **16** which is adapted to be secured to a supporting surface

such as a vertical wall **18** or the like, by means of screws **20**. Extending laterally from the plate **16** adjacent the top edge thereof are a pair of parallel perpendicularly extending plates **22** constituting arms which, if desired, may be integral with the plate. Rotatably journaled between these arms is a reel or spool **24** upon which is adapted to be wound and unwound the electric cable **14**. A spiral spring **26**, as shown in Figure 6, has one of its opposite ends secured to one of the arms **22** as at **28**, and has its other end secured to the arbor **30** of the reel as at **32**, as shown in Figure 4. This spring yieldingly urges the reel to rotate in a direction which will wind the cable **14** thereon.

Upon the other plate or disk indicated by the numeral **34** of the reel there are mounted a pair of concentric electrically conductive rings **36** and **38**, it being observed that the disk **34** is of dielectric material or has a dielectric member interposed between itself and the rings. The end of the cable has its two conductors connected to these rings as shown in Figure 6.

A dielectric plate **40** is mounted in a recess in one of the arms **22** and is provided with spring contacts **42** and **44** which respectively register at all times with the rings **36** and **38**. An electric cable **46** is connected to these spring contacts and is provided with a plug **48** whereby the same may be connected to any suitable source of electric current.

As so far described, it will be apparent that a continuous electric circuit is maintained from the cable **46** to the light **12** despite rotation of the reel.

A bridge **51** is mounted upon the outer ends of the arms **22**, and supports a horizontal top plate **52** which rests upon the top surface of the arms and extends beyond the sides and front of the latter to overhang the same having at its forward end a hood portion **54** with a downturned end **56**. The bridge is secured to the ends of the arms as by screws **58** and is provided with an aperture or opening **60** and a resilient spiral coil or spring **62** constituting a resilient support is secured in any suitable manner to the bridge **56** and in alignment with the opening **60**, projecting laterally outwardly from the supporting assembly. The cable **14** is slidably passed through the opening **60** in the spiral support **62** and may be withdrawn from the reel in order to position the light at a remote location, and will be automatically rewound upon the reel when the light is released by the user.

A weather-proof casing surrounds the supporting framework and houses the reel. This casing consists of a vertical wall **64** which is positioned between the base **16** and the vertical supporting surface **18**, being retained therebetween by the above-mentioned screws **20**. The member **64** extends upwardly and is preferably integrally joined to the roof or top **52**.

A sloping or inclined bottom pan or closure plate **68** is welded or otherwise suitably attached to the bottom edge of the base **16**, and to the lower inclined edges of the arm **22** and extends upwardly and along the same and is provided with an upturned flange which is secured to the lower portion of the outside surface of the bridge **51** as by the lower set of screws **58**. Thus, the reel and its electrical connection is housed in a completely weather-tight manner and disposed in an unobtrusive out-of-the-way location. As will be noted a portion of the bottom wall **68** and of the arm **22** are broken away in Figure 1 to show the internal constructions.

The lamp **12** consists of a reflector casing **70** of suitable shape in which is mounted an electric light bulb **72** connected to the cable in a conventional manner. The casing **70** is provided with a fastener whereby the same may be detachably secured to the wrist of a person. This fastener may be of various types, but conveniently consists of a resilient metallic band **74** or a band of any other

flexible or elastic material which is adapted to resiliently engage the wrist of the user as shown in Figure 2. By this means, the user may direct the light from the portable extension lamp to the place desired and still have his hands free for other purposes.

An especially important feature of this invention is the complete enclosure of the reel and of the rotary electric connector assembly in a weatherproof housing of the supporting assembly; and the protection hood which completely shields the light and its resilient support from the rain when the device is not in use thereby especially adapting the device for outdoor installation and use.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

What is claimed as new is as follows:

1. A portable extension light comprising a weatherproof casing adapted for mounting upon a supporting surface and receiving a reel therein together with an electric lamp connected to an electric cable wound upon said reel and adapted for attachment to the wrist of a person, said casing including vertical side and end walls defining a chamber therebetween, said reel being mounted in said chamber, means for connecting said reel to a source of current, said end wall having an opening therein for passage of said electric cable therethrough, a resilient spiral spring having one end received in said opening and projecting horizontally from the end wall and surrounding said cable and providing a resilient support therefrom, said casing including a top wall covering the top edges of said side and end walls and overlying the latter and said resilient support whereby to shelter said lamp when the cable is wound upon said reel.

2. The combination of claim 1 wherein said reel has its sides disposed in close parallel relation to said side walls, said connecting means including relatively stationary and movable contact members carried by one of said side walls and by a side of said reel respectively.

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