Dec. 6, 1955 T. M. WATERMAN 2,726,323

SAFETY HEAT GUARD EXTENSION LIGHT SHIELD

Filed June 2, 1953

Fig. 1.

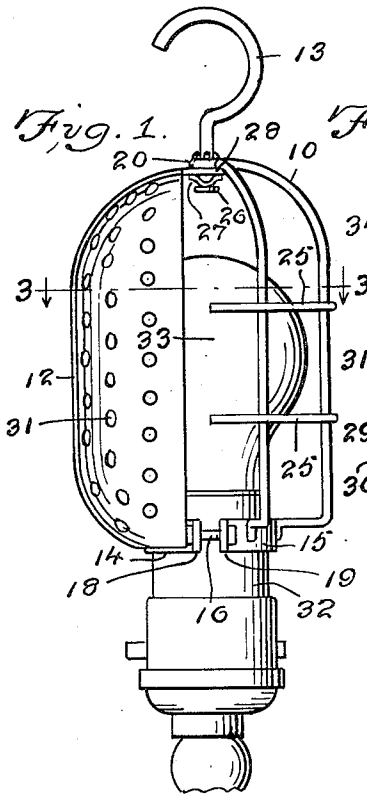


Fig. 2.

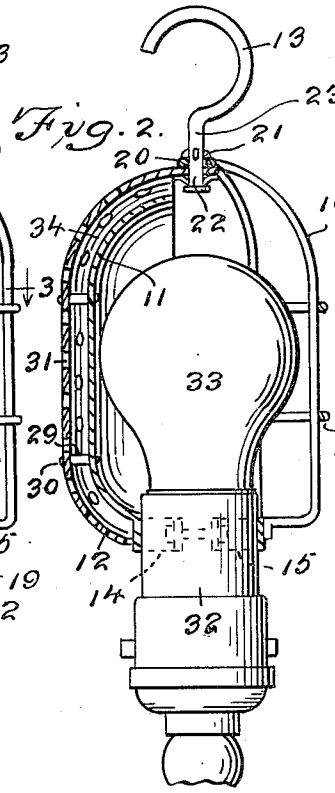


Fig. 3.

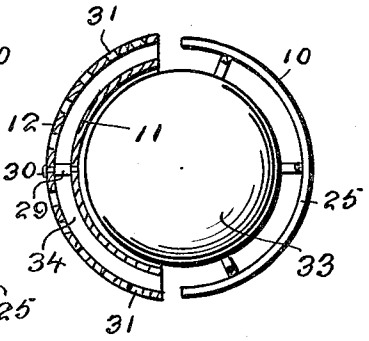


Fig. 4.

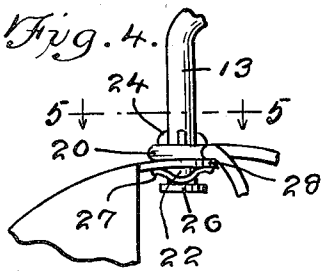


Fig. 5.

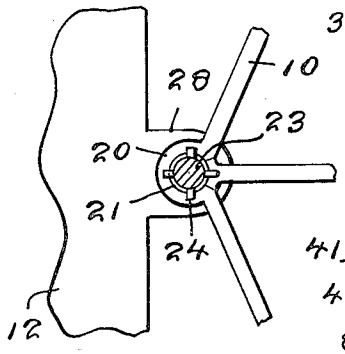


Fig. 6.

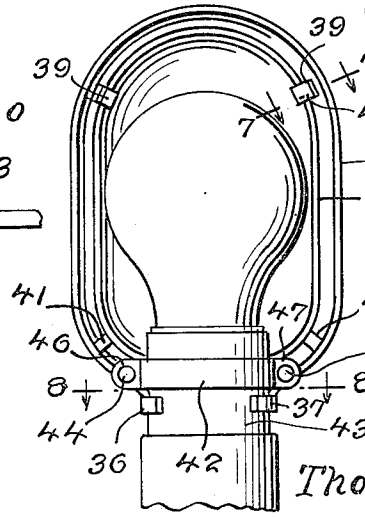


Fig. 7.

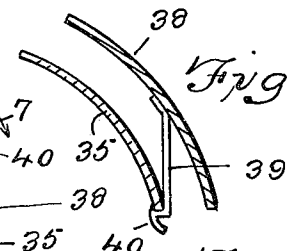
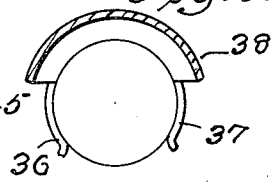


Fig. 8.



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SAFETY HEAT GUARD EXTENSION LIGHT SHIELD

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2 Claims. (Cl. 240—54)

This invention relates to guards or shields used on extension or trouble lights of the type provided on the ends of extension cords and particularly of the type having hooks whereby the light may be suspended in convenient positions, and in particular an extension light having a conventional wire cage or guard provided on one side of the light bulb with a double wall shield having a perforated outer shield spaced from an inner shield on the opposite side and with the shields and cage clamped on the base of a light socket whereby the light may be used without danger of the operator being burned by the light.

The purpose of this invention is to provide a protective shield to prevent annoying burns to the person using, or working with, the trouble or extension light, such as in the case of body contact of the face, hands and arms, to the conventional hot light shield or reflector when accidentally touched.

With the conventional light provided at the ends of extension cords and particularly where the light bulbs are provided with protecting wire cages with hooks on the ends the hands and clothing of an operator are often burned by heat from the lights. With this thought in mind this invention contemplates a protecting double wall shield positioned around one side of a trouble light whereby with the light rays projecting through a wire cage on one side of the trouble light the operator is protected from the heat of the light.

The object of this invention is, therefore, to provide means for incorporating a protecting shield in the conventional wire guard or cage of a trouble or extension light.

Another object of the invention is to provide an improved protecting guard or cage for an extension or trouble light in which the device is adapted to be clamped on a conventional light socket without changing parts of the socket.

A further object of the invention is to provide a trouble or extension light guard having a heat protecting shield incorporated therein in which the guard is of a simple and economical construction.

With these and other objects and advantages in view the invention embodies a guard for an extension or trouble light having a substantially semi-circular wire section and a complementary section formed with spaced shields and with the outer shield being perforated.

Other features and advantages of the invention will appear from the following description taken in connection with the drawing, wherein:

Figure 1 is a side elevational view showing the light guard with the wire section of the cage positioned on one side of the light bulb and with the perforated shield on the opposite side.

Figure 2 is a vertical section through the improved light guard with the parts as shown in Fig. 1 and with the light bulb and mounting socket shown in elevation.

Figure 3 is a sectional plan through the light guard taken on line 3—3 of Fig. 1.

Figure 4 is a detail illustrating the mounting of a hook at the extended end of the guard in the wire guard and shield, the parts being shown on an enlarged scale.

Figure 5 is a sectional plan taken on line 5—5 of Fig. 4 also showing the mounting of the hook stem in the upper end of the guard.

Figure 6 is a sectional view through the shield portion of the guard with the wire guard and hook mounting element omitted illustrating a modification whereby the shield may be used independent of the wire section of the guard.

Figure 7 is a detail showing a section taken on line 7—7 of Fig. 6 illustrating a snap connection for temporarily mounting the outer shield on the inner shield of the guard.

Figure 8 is a detail taken on line 8—8 of Fig. 6 illustrating the spring fingers which are positioned to snap around the light socket for retaining the guard in position on the socket.

Referring now to the drawing wherein like reference characters denote corresponding parts the improved light guard of this invention includes a wire cage or guard 10, a substantially semi-circular inner shield 11 positioned on the side of the light bulb opposite to that on which the wire section 10 is positioned, a perforated shield 12 spaced from the shield 11, a hook 13 mounted in the extended end of the guard and a clamp including semi-circular sections 14 and 15 with bolts 16 extended through flanges 18 on the section 14 and 19 on the section 15.

The cage 10 is formed with a plurality of radially disposed longitudinally positioned wires, the lower ends of which are secured, preferably by welding to the section 15 of the clamp and the upper ends of which are merged into a hub 20 that is provided with an opening 21 through which a lower section 22 of a stem 23 of the hook 13 extends and the stem is provided with lugs 24 that rest on the hub. The cage section 10 is also provided with spaced laterally extended wires 25.

The lower end of the stem 23 of the hook is provided with a collar 26 against which a spring washer 27 is positioned and, as illustrated in Fig. 4 the spring washer urges an extension 28 of the outer shield 12 against the under surface of the hub 20 of the wire cage section, and this spring washer makes it possible to rotate or turn the device on the stem of the hook to adjust the position of the guard.

The outer shield 12 is spaced from the inner shield 11 with tubular spacing elements 29 through which rivets or bolts 30 extend, as shown in Fig. 2. The lower edges of the shields are secured to the section 14 of the clamp by suitable means, such as by welding. The outer shield 12 is provided with perforations, as indicated by the numeral 31.

With the parts formed in this manner the combination wire guard and shield may readily be clamped over a socket 32 of a light bulb mounting and with the parts in position rays of the light bulb, which is indicated by the numeral 33 may pass through the wire cage with the inner shield 11 functioning as a reflector, and with the air space 34 between the inner shield 11 and outer shield 12, the heat from the light bulb is arrested with the outer shield 12 remaining comparatively cool.

In the design illustrated in Figs. 6, 7 and 8 an inner conventional shield 35 is mounted on a light socket 43 by means of clamps 42, that are similar in structure to clamps 14 and 15. The clamps 42 are provided with flanges 46 and 47 to receive bolts 44 and 45 whereby the clamps 42 are retained on the light socket 43 in fixed relation thereto, as shown in Fig. 6.

An outer shield 38, similar to the shield 12 is provided at its lower end with spring fingers 36 and 37 which engage the light socket 43, as shown in Fig. 8. The outer shield 38 is also provided with spring fingers 39 having

clips 40 on the ends thereof that snap over the edge of the inner shield 35, as shown in Fig. 7. The spring fingers 36, 37 and 39 retain the outer shield 38 in circumjacent spaced relation to the inner shield 35 and spacing elements 41 may also be provided between the inner and outer shields adjacent the lower ends thereof, as shown in Fig. 6.

The shield shown in Figs. 6, 7 and 8 is substantially the same as that shown in Figs. 1 and 2 except that the hook and wire guard may be omitted as in numerous instances the wire guard and hook may not be required.

It will be understood that other modifications, within the scope of the appended claims, may be made in the design and arrangement of the parts without departing from the spirit of the invention.

What is claimed is:

1. A guard for extension lights comprising an inner shield substantially semi-circular in cross section, an outer perforated shield also substantially semi-circular in cross section, spring fingers on said outer shield having clips on the outer ends thereof engaging the edge of the inner

shield for mounting the outer shield on the inner shield with the outer shield spaced from the inner shield, and clamping means on the inner shield for mounting the inner shield on the base of an electric light fixture.

2. A guard as in claim 1, wherein spacing elements are positioned between the inner and outer shields to retain the shields in spaced relation to each other.

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