Mar. 13, 1923. 1,448,345.

H. L. HAWKINS.

LAMP GUARD.

FILED AUG. 28, 1920. 2 SHEETS—SHEET 1.

Fig. 1.

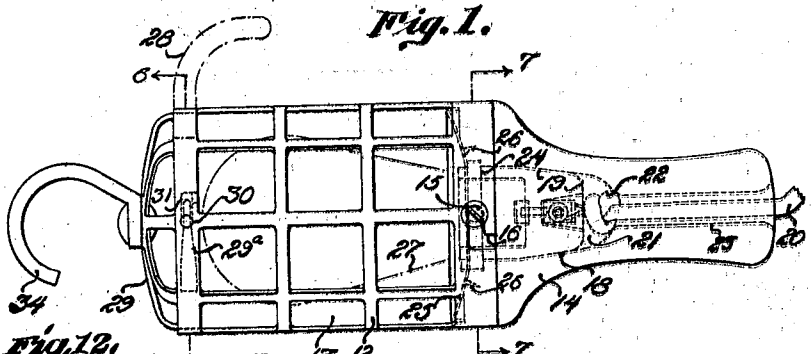


Fig. 12.

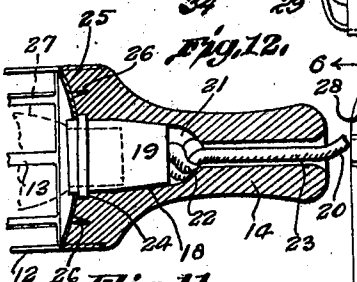


Fig. 11.

Fig. 8.

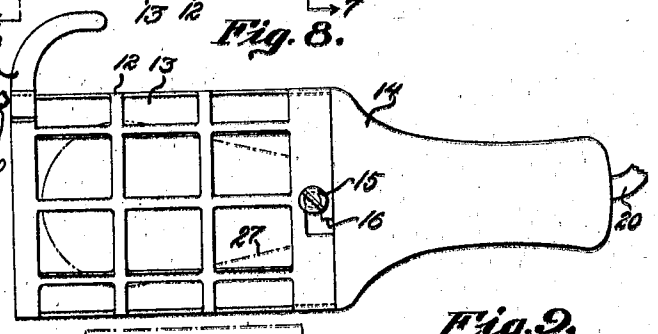
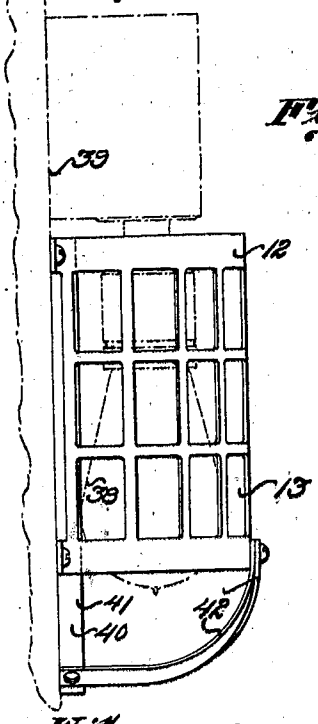
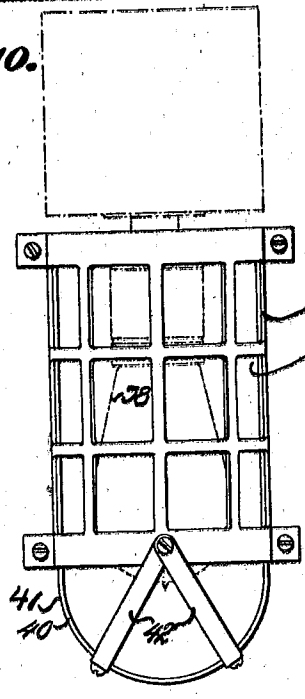
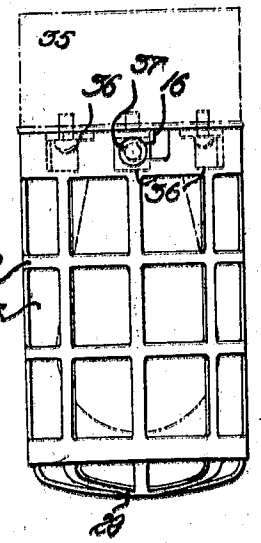


Fig. 9.

Fig. 10.







Witnesses
Geo. A. Gruss
Augustus B. Copper

Inventor
Harry L. Hawkins
By Joshua R. H. Potts
his Attorney

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H. L. HAWKINS.

LAMP GUARD.

FILED AUG. 28, 1920. 2 SHEETS—SHEET 2.

Fig. 3.

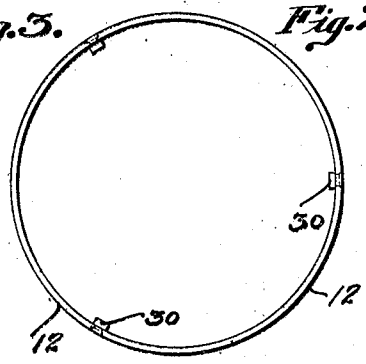


Fig. 2.

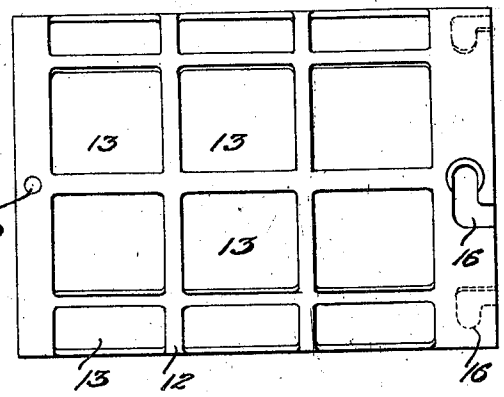


Fig. 5.

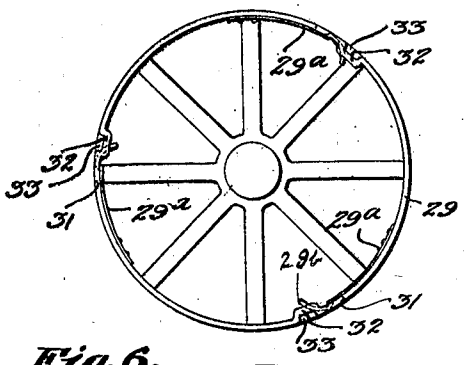


Fig. 4.

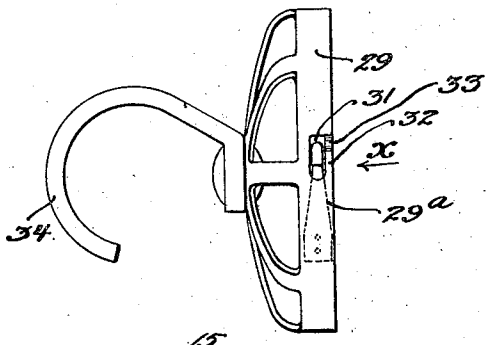


Fig. 6.

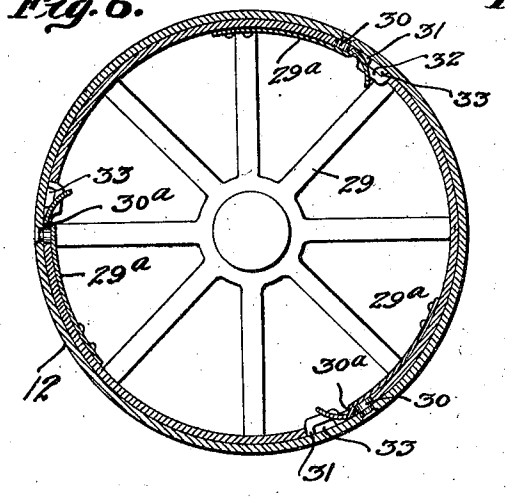
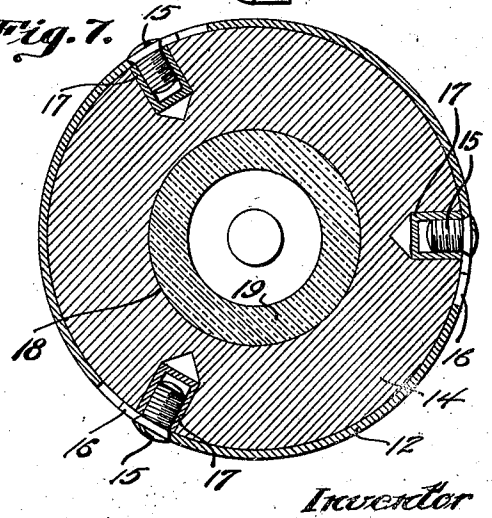


Fig. 7.



Witnesses

Geo. A. Gruel

Augustus B. Coppes

Inventor

Harry L. Hawkins

By Joshua R. H. Potts

his Attorneys

Patented Mar. 13, 1923. 1,448,345

UNITED STATES PATENT OFFICE.

HARRY L. HAWKINS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO WALTER S. MAYER, OF PHILADELPHIA, PENNSYLVANIA.

LAMP GUARD.

Application filed August 28, 1920. Serial No. 406,701.

To all whom it may concern:

Be it known that I, HARRY L. HAWKINS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Lamp Guards, of which the following is a specification.

Lamp guards are frequently made of wire mesh or ribs; thereby necessitating the making of individual parts and weaving, welding or otherwise uniting them. In addition to this, in order to suit different requirements in the way of removing and replacing the lamp bulb or adapting the guard to either portable or stationary use, the design or character of the ribbing or mesh has to be varied or altered.

One object of my present invention is to provide a perforated guard which is preferably made of metal and particularly adapted for the protection of electric incandescent bulb lamps; the structure being such that it can be readily applied to a stationary conduit box or other fitting as well as to a handle construction for portable use. Furthermore my improved perforated guard also is adapted for semi-enveloping a lamp bulb placed adjacent to and substantially parallel with a wall. This latter purpose can be carried out by simply making a semi-circular perforated screen guard in accordance with my invention.

Also the construction and arrangement of my improved guard in association with the lamp socket in general permits of the ready attachment of a reflector, preferably parabolic in shape, so that the latter can be used and at the same time will serve to hold the socket in the handle portion; thus preventing the socket from either turning or coming out.

Another object is to make the device of a simple, strong and durable construction.

These objects, and other advantageous ends which will be described hereinafter, may be attained in the following manner, reference being had to the accompanying drawings in which—

Figure 1 is a longitudinal elevation showing my improved guard arranged for portable use,

Figure 2 is a detail view of the perforated guard cage or shell shown in Figure 1,

Figure 3 is an end view of Figure 2,

Figure 4 is a side elevation of a perforated cap such as shown in Figure 1, which can be fastened to the cage or shell by spring locked bayonet joints,

Figure 5 is an end view of the cap looking in the direction of the arrow x in Figure 4,

Figure 6 is an enlarged section taken on the line 6—6 of Figure 1,

Figure 7 is a section taken on the line 7—7 of Figure 1 and drawn on the same scale as Figure 6,

Figure 8 shows an elevation of the device without the cap or its attaching means,

Figure 9 is a front elevation showing my invention used in connection with a conduit box,

Figure 10 is a front elevation showing my invention arranged for semi-enveloping a lamp bulb placed adjacent to and substantially parallel with a wall,

Figure 11 is a side elevation of Figure 10, and Figure 12 is a fragmentary longitudinal view partly in section of a portion of the structure shown in Figure 1.

Referring to the drawings and particularly to Figures 1 to 7 inclusive, 12 represents a perforated shell arranged in tubular form and preferably made of metal. This shell can, if desired, be readily made of sheet metal in which the perforations 13 can be punched out so that all portions between the perforations are integral.

The perforated shell 12 is removably fitted around and detachably attached to the enlarged front end or base portion of a handle 14 by screws 15 which pass through bayonet slots or notches 16 formed in one end of the perforated shell. These screws 15 enter screw threaded metal inserts 17 in the handle 14, said handle being preferably made of wood or other insulating material. These inserts are preferably driven into said handle so as to be firmly embedded therein so that the screws 15 can be removed or inserted without wearing away the wood of the handle, as would happen if the screws were inserted directly in the wood. The handle 14 is counter-bored as shown at 18 for the reception of a socket 19 which may have suitable contacts and terminals for the attachment of electric conduit, or cables, and wires such as shown at 20, and to permit a lamp bulb to be screwed in the socket. The

counter-bore 18 is somewhat deeper than actually required for the socket 19 as shown in Figure 1 and a space 21 is thus provided to permit the electrical cable or cord 20 to be tied in a knot as shown at 22 so as to prevent any pull on the wire 20 from detaching the wire from the connections in the socket; it being noted that the knot 22 is larger than the passageway 23 in the handle 14 through which the wire 20 enters.

The socket 19 has a shoulder 24 which prevents the socket from going too deeply into the counter-bore and thus insures the arrangement above specified. A reflector plate 25 surrounds and extends in front of the outer end of the socket, and may be secured to the forward end of the handle 14 by screws 26. This reflector plate serves as a means for retaining the socket within the counter-bore, though if the reflector is not desired for use, the socket can be secured within the counter-bore of the handle by screws or other suitable means. The reflector plate 25 is preferably made parabolic and not only serves to hold the socket but also reflects or projects light from the lamp bulb 27 as is obvious from the construction illustrated. A hook 28 which is shown in dot-and-dash lines in Figure 1 and in full lines in Figure 8 may be arranged to extend laterally from the shell adjacent the outer end, and may be employed for hooking and suspending the structure when desired.

When required, a perforated cap 29 is fitted to the outer end of the shell 12 so as to telescope therewith as shown in Figure 1; said cap being illustrated in detail in Figures 4 and 5. As shown, the cap 29 comprises a single piece of sheet metal embossed to a flattened dome form, with substantially cylindrical rim portion connected to the center by radially extending ribs, which are separated by the elongated triangular perforations. When the cap 29 is used the outer end of the shell is provided with pins 30 adapted to be projected through bayonet slots or notches 31 in the cap 29. The cap 29 also has on its rim a number of spring pressed locking fingers 29^a secured at one end to the cap and having opposed free hooked ends 29^b bevelled or tapered in front, and thus adapted to spring into the innermost portions of the bayonet notches 31. The part 32 of the rim of the cap is depressed so as to provide recesses 33 through which the pins 30 can pass when the cap is first moved into connection with the shell 12. By partly rotating the cap relatively to the shell, the pins 30 will bend the locking fingers 29^a due to their engagement with the hooked ends 29^b until the pins move back of beveled shoulders 30^a of said hooked ends as clearly shown in Figure 6. The fingers 29^a will then spring into the position shown in Figure 6 and thereby hold the cap against accidental rotary movement relatively to the shell 12, and the cap will be firmly attached to the shell.

I have illustrated the cap 29 as provided with a hook 34 so that if desired the structure when the cap is present may be attached by means of the hook 34 or the device may be suspended by means of the hook 28 if the cap is not present, as shown, for example, in Figure 8. In all other respects the construction illustrated in said Figure 8 is similar to that above described and I have therefore given corresponding parts similar reference numerals. It will be understood however that if desired the structure shown in Figure 1 may be provided with a hook 28 so that even though the guard is constructed to receive the cap, if the cap is not used the hook 28 will serve to support the structure.

In Figure 9 I have shown my invention as applied to a conduit box. As illustrated the conduit box base structure 35 may be provided with angles or clips 36 having headed pins or screws 37 adapted to engage in the bayonet slots 16. In all other respects the construction of the perforated guard shell may be as above described and I have therefore given corresponding parts similar reference numerals.

In Figures 10 and 11 I have shown my improved perforated guard shell applied as a protector for a lamp 38 which is arranged adjacent to and substantially parallel with a wall 39. In this construction I have shown the shell 12 provided at its bottom with an extension 40 which as illustrated consists of a curved strip 41 adjacent the wall 39 and two overlapped angularly disposed strips 42 which are joined to the strip 41 and to the bottom end of the perforated shell 12.

By making my improved guard in the form of a perforated shell it is rendered practically universal and may be employed with very little change to suit numerous requirements not previously possible in a convenient manner with lamp guards of interwoven wire or the like. Furthermore by having the attachment by means of the bayonet joint such as shown in Figures 1 to 9 inclusive, the perforated guard shell can be quickly and neatly attached to a supporting structure either of a portable or fixed character. The provision of the removable cap with the spring lock bayonet connection provides a protection for the end of the shell and also permits the removal of the lamp bulb if it is not desired to disconnect the shell from its supporting structure.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A device of the character described including a handle having a bore therein; a socket fitting within said bore; a reflector

surrounding said socket; and means for securing said reflector to said handle, said reflector having a portion in front of the outer end of the socket whereby the socket is held in the bore and the removal of the reflector permits the ready removal of the socket from the bore.

2. A perforated lamp guard; a cap for closing an end thereof, said guard and cap jointly providing a bayonet slot and a projection for entering said slot; and a spring locking finger having one end secured and the other end free and provided with a hook having a tapered shoulder and adapted to spring into the inner portion of said slot and resiliently hold said projection therein.

3. A device of the character described including a handle having a bore therein tapering inwardly; a lamp socket fitting within said bore; a reflector surrounding said socket and having a portion in front of a part of the socket; and means for securing said reflector to the handle, said bore being deeper than said socket whereby a space is provided adjacent the inner end of said socket, said handle having a passageway leading from said tapered portion of the space whereby an electric wire can extend therethrough for attachment to the socket and said space serves to permit a knot to be formed in said wire and drawn tight between said socket and the passageway.

4. A device of the character described including a handle having a bore therein; a socket fitting within said bore; a reflector surrounding said socket; means for securing said reflector to the front end of the handle within the confines of its peripheral surface, said reflector having a portion in front of the outer end of the socket whereby the socket is held in the bore and the removal of the reflector permits the ready removal of the socket from the bore; and a perforated shell lamp guard secured around the peripheral surface of said front end of the handle which includes said socket; substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HARRY L. HAWKINS.

Witnesses:

HARRY F. STANTON,

MAE HOPPER.