Aug. 18, 1925. 1,550,306

B. K. DUSTIN

ATTACHMENT PLUG

Filed March 12, 1923

Fig. 1.

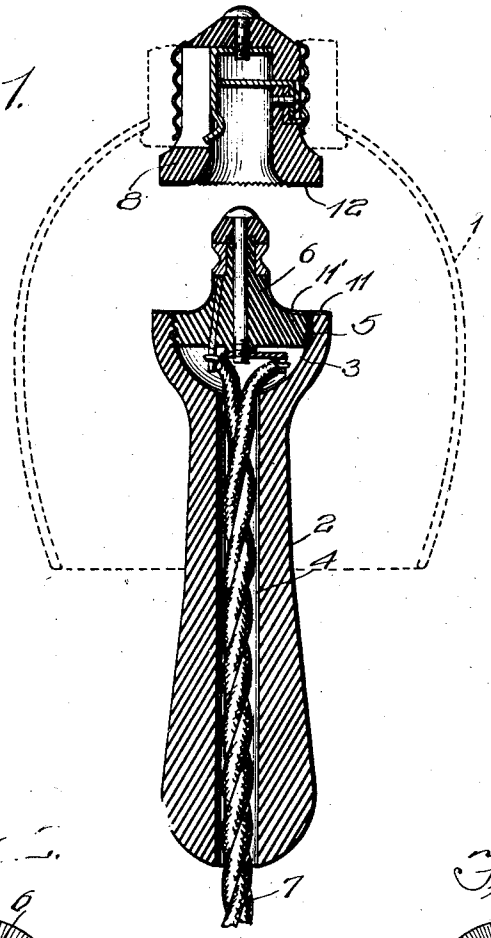


Fig. 2.

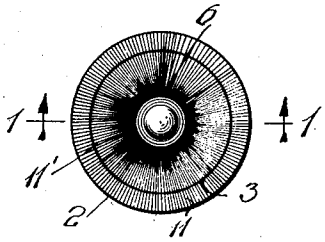


Fig. 4.

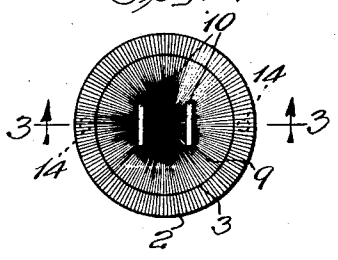
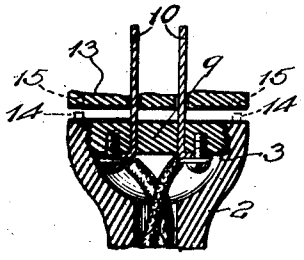


Fig. 3.



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UNITED STATES PATENT OFFICE.

BLANCHE K. DUSTIN, OF CHICAGO, ILLINOIS.

ATTACHMENT PLUG.

Application filed March 12, 1923. Serial No. 624,404.

To all whom it may concern:

Be it known that I, BLANCHE K. DUSTIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Attachment Plugs, of which the following is a description.

My invention relates to improvements in attachment plugs and is particularly intended to facilitate the insertion of the attachment plugs into sockets that are so located that they are not easily reached or having long narrow shades or globes thereon.

My invention has among its other objects the production of a device of the kind described, which is neat and attractive in appearance, economical of construction, simple, convenient, compact, durable, reliable, efficient and satisfactory for use wherever found applicable.

Many other objects and advantages of the construction herein shown and described will be obvious to those skilled in the art from the disclosures herein given.

To this end my invention consists in the novel construction, arrangement and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts:—

Fig. 1 is a longitudinal section through my device;

Fig. 2 is an end view thereof with one member of the attachment plug removed;

Fig. 3 is a fragmentary section showing the extension handle for use with a different form of plug; and

Fig. 4 is an end view of the modification shown in Fig. 3.

In the drawings, wherein I have illustrated the preferred embodiment of my invention, 1 indicates a lamp-shade of any shape or size often used surrounding an electric socket or fixture and carried therefrom. If the socket is higher than a person can normally reach, it is quite difficult to plug into it, as for instance for connecting a toaster, an iron or other electrical device thereto.

In case the shade 1 is long and narrow, the socket is quite hard to get at with the ordinary attachment plugs without removing the shade.

The device consists of a rigid handle portion 2, preferably made of some suitable insulating material, the handle 2 having an enlarged socket or chambered portion 3 at one end and provided with a longitudinal bore 4 centrally through the handle and communicating with the enlarged chamber or socket 3. The handle itself is made of a shape to be easily grasped and manipulated, and in the form shown is tapered down rearwardly of both its ends, and the same may be corded or roughened if desired.

The socket portion 3 is internally threaded as at 5 to permit the insertion of one member 6 of an attachment plug 6—8 thereinto, said attachment member as shown being externally screw-threaded to cooperate with the internal threads 5 of the handle. In order to minimize the wear between the engaging portions of the contact members of the parts of the attachment plug and also to prevent independent rotation between the plug parts and the handle while inserting the plug into or removing it from the socket, the interengaging parts of the plug and handle are formed with cooperating interengaging corrugations, pins, teeth, or the like, the means shown in Figs. 1 and 2 comprising corrugations 11 formed at the end of the handle and adapted to interengage with cooperating corrugations and recesses 12 formed on one end of the plug portion 8. Corrugations 11′ are formed on the part 6 adjacent the corrugations 11 of the handle so as to be continuations thereof.

It is apparent that when screwing the plug into place into the socket, the plug parts will not rotate independently of one another while the handle is pressed thereagainst, but will rotate in unison to firmly screw the plug into place. When removing the plug from the socket, the direction of rotation of the handle is reversed and due to the interengagement of the corrugations of the parts, the entire plug may be rotated in the socket. Obviously the handle and the attached part of the attachment plug may be removed from the other part of the plug by a longitudinal separation of the parts.

The bore 4 permits the insertion of an electric cord 7 therethrough, the free ends of said cord being connected in the usual manner to the contact terminals of the attachment part 6. Any equivalent construction may be employed.

In the form shown in Figs. 1 and 2, the

attachment plug is of the swivel type in which the member 6 may rotate within the cooperating attachment plug member 8, while in the form shown in Figs. 3 and 4 the attachment plug is of the more generally used type and one member of which comprises the part 9 having the standard parallel contact prongs 10 or the equivalent.

The corrugations between the handle and the plug parts may be formed as in the previously described modification, or, if desired, interlocking lugs or pins may be formed between the engaging parts, as shown in dotted lines in Figs. 3 and 4. The pins 14 at the end of the handle 2 are circumferentially spaced apart and engage in recesses 15 in the cooperating attachment plug member 13. These pins may be either in addition to or in lieu of the corrugations between the parts. There will be no strain upon the contact prongs 10 while the plug is being screwed down into the socket or removed therefrom, because all of the rotational movement between the parts will be taken up by the interengaging pins and recesses, or the corrugations, as the case may be, taking all strain off the prongs 10.

It is to be additionally noted that there will be no loosening of the ends of the cord 7 at the contact members because the interlocking of the handle and plug prevents any twisting of the prongs 10.

From the forgoing description, it is obvious that the attachment plug of any type may be screwed into a lamp-socket by axially rotating the extension-handle 2 carrying the plug, seat the plug in place. The handle 2 also serves to minimize the wear upon the cord 7 by preventing engagement with the edges of the shade, these edges being sometimes quite sharp.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention; hence I do not wish to be understood as limiting myself to the exact form, construction, arrangement and combination of parts herein shown and described or uses mentioned.

What I claim as new and desire to secure by Letters Patent is:

1. A device of the kind described comprising a rigid extension handle of insulating material bored longitudinally to receive an electric cord and constructed to carry one member of an attachment plug at one end, and interengaging projections and recesses formed on said handle and the other member of the attachment plug independently of its contact terminals to detachably interlock said parts to rotate in unison.

2. A device of the kind described comprising a rigid extension handle of insulating material bored longitudinally to receive an electric cord therethrough, one end of said bore being enlarged to permit the insertion of one member of separable attachment plug thereinto, the interengaging surfaces of said plug members having interengaging projections and recesses therein, and said handle itself having projections thereon to interengage with the recesses of the other of said plug members to detachably transmit rotational movement therebetween.

3. In an attachment plug for electric light sockets, the combination of a hollow threaded terminal member adapted to be screwed into the socket and a second terminal member telescopically engaged and frictionally held in said hollow member with an elongated rigid extension handle of insulating material bored longitudinally to receive an electric cord therethrough, one end of said handle being enlarged and having an internally threaded concave hollow portion, said second terminal member having a laterally extending external threaded flange adapted to cooperate with the internal threads in said hollow end portion to securely hold the parts in assembled position.

4. An attachment plug for electric light sockets comprising a pair of telescopically engaged terminal members, one of which is adapted to be screwed into the light socket and the other of which is rigidly secured to an elongated handle member of insulating material, said handle member provided with projections adapted to cooperate with the recesses arranged in said terminal member which is screwed into the lamp socket, whereby the contact members are relieved of the torsinal stress when the plug is screwed into a lamp socket.

5. An attachment plug for electric light sockets comprising a pair of telescopically engaged terminal members, one of which is adapted to be screwed into the light socket and the other of which is rigidly secured to an elongated handle member of insulating material, said handle member provided with projections adapted to cooperate with the recesses arranged in said terminal member which is screwed into the lamp socket, said terminal member and said handle being provided with cooperating corrugations which cause said terminal members when telescoped to form together with the handle a rigid structure.

In testimony whereof, I have hereunto signed my name.

BLANCHE K. DUSTIN.