G. C. KNAUFF.

ELECTRIC FITTING.

APPLICATION FILED DEC. 9, 1915.

Patented May 7, 1918.

1,265,455.

Fig. 1.

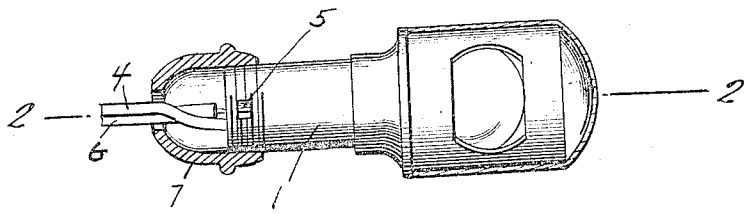


Fig. 4.

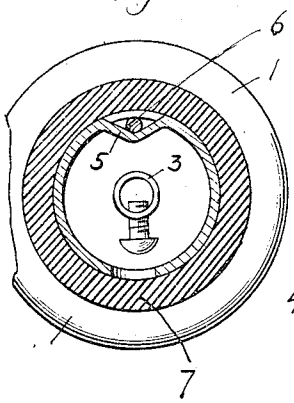


Fig. 2.

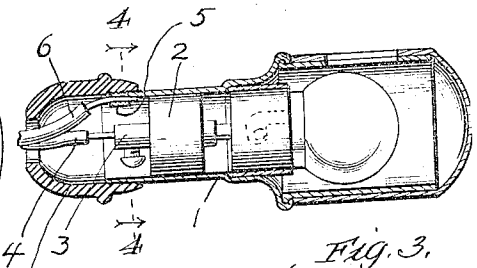


Fig. 3.

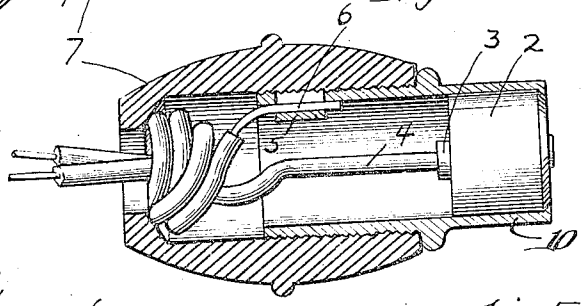


Fig. 6.

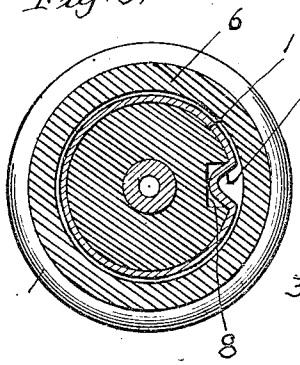
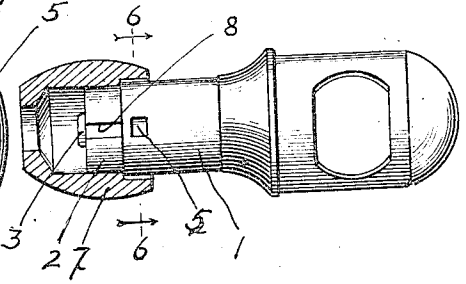


Fig. 5.



Witness:

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UNITED STATES PATENT OFFICE.

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ELECTRIC FITTING.

1,265,455. Specification of Letters Patent. Patented May 7, 1918.

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To all whom it may concern:

Be it known that I, GEORGE C. KNAUFF, 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 Electric Fittings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to electric fittings, its general objects being to provide an unusually simple, cheap and effective construction for the rear ends of lamp sockets, connector plugs, lantern-sockets (or so-called "trouble lamps") and the like. More particularly, my invention aims to provide an electric fitting in which one of the wire terminals may be easily and cheaply connected to a conducting shell portion, and in which the juncture of the wire with the shell portion may readily be concealed. Further objects will appear from the following specification and from the accompanying drawings, in which—

Figure 1 is an elevation of a "trouble-lamp" embodying my invention, part of the rear end bushing being broken away.

Fig. 2 is a longitudinal section through Fig. 1 along the line 2—2.

Fig. 3 is a longitudinal section through an attachment plug embodying my invention.

Fig. 4 is an enlarged transverse section through Fig. 2 along the line 4—4.

Fig. 5 is a fragmentary elevation of a lamp socket or "trouble lamp" showing another embodiment of my invention.

Fig. 6 is an enlarged transverse section through Fig. 5 along the line 6—6.

While my invention may be employed with substantially equal advantages in various types and sizes of electric fittings, it is particularly suited for use with the class of fittings used in connection with low voltage lamps in and about automobiles on single wire circuits; that is to say, on circuits for which the return is made through the grounding of metal parts of the various fittings to each other. On such low voltage circuits, it is permissible even to ground the metal parts handled by the user, but the wire connection must be made to some one of the metal parts as well as to another terminal insulated therefrom. For the former connection, it has heretofore been customary to provide a binding post or clamping screw, and one object of my invention is to provide a substitute for this.

I accomplish this partly by indenting a part of the metal shell to which the wire is to be attached, thereby providing a metal strip arched inwardly from the shell and cooperating with adjacent parts of the shell to afford a socket into which an end of the wire may be slid. Thus, Figs. 1, 2 and 4 show the rear end shell 1 of a trouble lamp as extending rearwardly beyond the insulating body 2 which carries the central wire terminal 3 to which one wire 4 is connected. This rearwardly projecting shell portion has a strip 5 punched inwardly from the same, thus permitting the tip of the other wire 6 to be slid between this strip 5 and the portions of the shell to the front and rear of the strip, after which a drop of solder is sufficient to afford a satisfactory electrical connection between this wire tip and the metal parts affording such a slip socket for the same.

To cover the usually unfinished appearance of such a soldered connection, I preferably conceal the latter by a bushing 7 which may be of insulating material and which preferably is contracted at its rear end so as to engage the knotted insulated wires 4 and 6, thus relieving the connections to the latter of any mechanical strains in case of a rearward pull on the wires. Such a bushing may be threaded upon the rear end of the shell 1 as in Figs. 1 and 2, in which case the insulating body 2 may be quite short. Or, the latter may be extended beyond the end of the metal shell 1, as in Fig. 5, in which case the insulating body preferably has on one side a longitudinal groove 8 entered by the said indented strip or depressed portion 5, and in which groove the wire leading to this strip may be seated. With this last named construction, the bushing 7 may be threaded upon the projecting end of the insulating body 2, as shown in Fig. 5.

However, my invention need not be limited to embodiments in which the indented portion of the metal shell is contiguous to the insulating body carrying the other wire terminal. For example, Fig. 3 shows a connector plug having an insulating body 2

occupying only one end of the shell 10 and having a relatively long bushing 7 threaded upon the shell and not only concealing the connection to the wire 6 but also forming a suitable handle for manipulating the plug. Neither do I wish to be limited to other details herein disclosed, it being obvious that both the construction and the purposes for which the invention is embodied might be varied in many ways without departing from the spirit of the appended claim.

I claim as my invention:

An electric fitting comprising as one element an insulating body having a groove longitudinally disposed thereon and as another element a metal shell housing at least a portion of said body and having an indentation integral with said shell entering said groove, a contact member carried by said body, and a pair of wires connected respectively to the contact member and the indented portion of the shell, the walls of the said groove being adapted to engage the said indentation to prevent rotational movement of the insulating body within the shell.

GEORGE C. KNAUFF.