W. C. TREGONING.

ATTACHMENT PLUG.

APPLICATION FILED OCT. 2, 1914.

1,238,459.

Patented Aug. 28, 1917.

Fig. 1

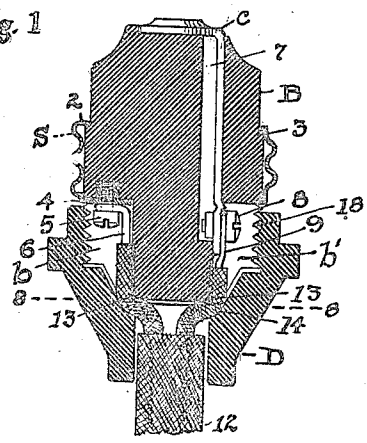


Fig. 2

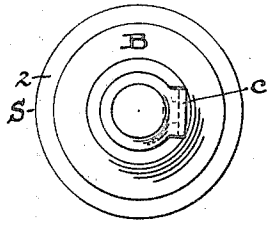


Fig. 3

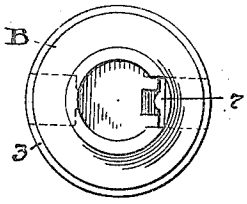


Fig. 4

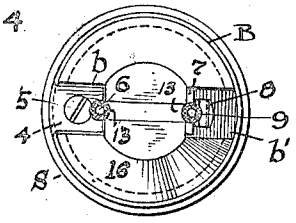


Fig. 5

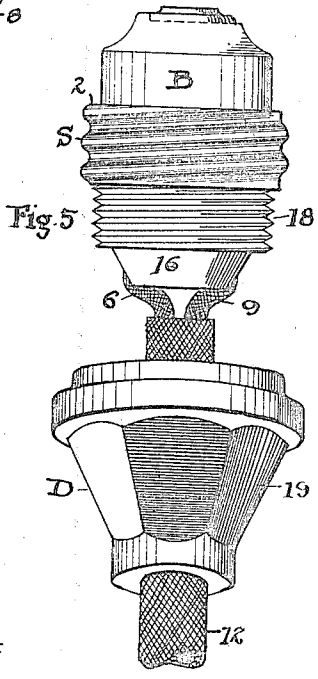


Fig. 6

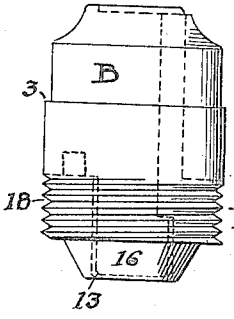


Fig. 7

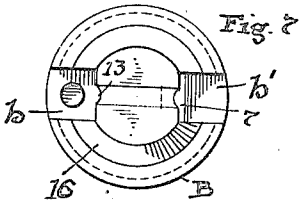


Fig. 8

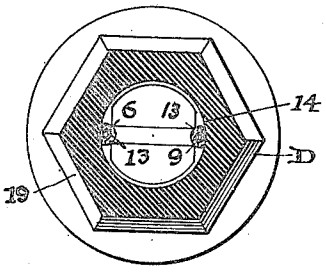


Fig. 9

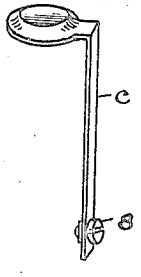
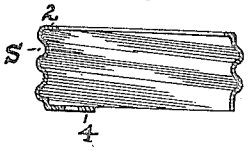


Fig. 10



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UNITED STATES PATENT OFFICE.

WILLIAM C. TREGONING, OF CLEVELAND, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO BENJAMIN ELECTRIC MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

ATTACHMENT-PLUG.

1,238,459. Specification of Letters Patent. Patented Aug. 28, 1917.

Application filed October 2, 1914. Serial No. 864,616.

To all whom it may concern:

Be it known that I, WILLIAM C. TREGONING, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Attachment-Plugs, of which the following is a specification.

This invention relates to an electrical attachment plug and the invention consists in the construction and combination of parts substantially as shown and described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical central sectional elevation of the plug with two electrical wires secured to the terminals therein. Fig. 2 is an end view of the plug body and its end contact and screw shell; Fig. 3 is a similar view of the plug body with the end contact and shell removed; Fig. 4 is a bottom view of the plug with the wire gripping member removed. Fig. 5 is a side view of the plug secured to the electrical cord and showing the gripping member as detached therefrom and sleeved on the cord. Fig. 6 is a side view of the body of the plug, and Fig. 7 is a bottom view thereof. Fig. 8 is a cross section of the gripping member on line 8—8, Fig. 1. Fig. 9 is a perspective view of the terminal connection comprising the end contact for the plug. Fig. 10 is a sectional elevation of the screw shell.

The attachment plug as thus shown comprises a limited number of elements which have certain original features of construction and together constitute a new and useful article of manufacture for making an electrical connection. Thus the body or core of the plug is a single unitary piece B made of porcelain, hard rubber or any other insulating material or composition which will provide a good screwthread therein. This body B is provided with an annular enlargement at its middle which provides a shoulder 3 adapted to be engaged by the inturned flange 2 of a screw shell S. In addition said shell has an inwardly-projected lip 4 at its bottom edge with a hole through the same for the binding screw 5 which secures the conducting wire 6 in engagement with said lip. This screw and lip further fix the said shell rigidly with and upon the body B, so the said shell can not be easily removed nor rotate independently of the body B. In other words, the screw shell and body become as one piece for all practical purposes. The screw shell is relatively short in length and is fixed midway of body B so that it completely covers the annular enlargement of said body, and the opposite ends of the body extend considerably beyond the same. The upper or outer end is reduced or tapered and provided with a round recess and flat end seat, and a slot or opening 7 extends through body B to receive the stirrup-shaped terminal member or conductor *c* which is provided with a binding screw 8 for the second conducting wire 9. Wires 6 and 9 are part of the insulated cable 12, and the said wires are separately pinched and locked against end pull by means of the right-angled shoulder 13 at the lower or inner end portion of the body B and by the inner inclined or conical wedging surface 14 of the gripping member D which is adapted to be screwed to the lower threaded end of body B. Member D serves as a hand-hold to rotate the plug as a whole and it incloses and conceals the binding screws and wires. However, the main function of member D is to grip said wires to relieve the binding screws of all strain. The screw-shell is held in place independently of gripping member D and is sleeved over body B from the front end when it is placed in position originally, and flange 3 prevents displacement or removal of the shell over the lower inner end of the body B.

Body B further has opposite recesses *b* and *b'* in the sides thereof at its lower or inner end as seen in Figs. 1 and 7 particularly, and the wires 6 and 9 extend into these recesses to the binding screws 5 and 8. The extremity 16 of body B is shaped like a truncated cone to correspond with the conical wedging surface 14 of member D, and an internal thread in the enlarged end of member D is adapted to engage the external thread 18 on the body B to draw the cone-shaped surface 14 of member D in gripping engagement with the wires. Member D has a central opening for the cable 12, and the flat faces 19 on the tapering portion of said member D afford finger-gripping surfaces and also produce a pleasing ornamental effect. The upper end of termi-

nal C is rounded and raised and bent at right angles to the main stem and said end fits snugly in the upper end of body B and prevents displacement thereof when contact is made and the plug is screwed home in a socket.

What I claim is:

1. An attachment plug comprising an insulating base having a cylindrical body portion, an externally screw threaded portion, said threaded portion having two recesses therein, two binding terminals, one in each recess, an abutment portion having a pair of shoulders, said threaded portion being located between said abutment portion and said body portion, a threaded shell contact surrounding said body portion electrically connected with one of said terminals, a center contact supported by said body portion electrically connected with the other terminal and a cord gripping member having an internally threaded portion for engaging said externally threaded portion, and having an abutment portion for forcing the conductors against said shoulders.

2. An electrical attachment plug, comprising a cylindrical body having an annular shoulder between its ends and provided with a screw-threaded inner end having side recesses and having a longitudinal opening extending from one of said recesses to the outer end of said body, a screw shell having a flange to engage said shoulder and provided with a terminal extending into one of said side recesses, an end contact having a terminal extending through said longitudinal opening into the other side recess, binding screws for said terminals, and a wire-gripping member having an internal screw-threaded portion to engage and inclose the screw-threaded and recessed inner end of said body and provided with a conical wire-gripping surface to grip conducting wires leading to said binding screws.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM C. TREGONING.

Witnesses:

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E. M. FISHER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."