March 25, 1924. 1,487,699

A. W. ALBRECHT

ATTACHMENT PLUG

Filed March 25, 1920

Fig. 1.

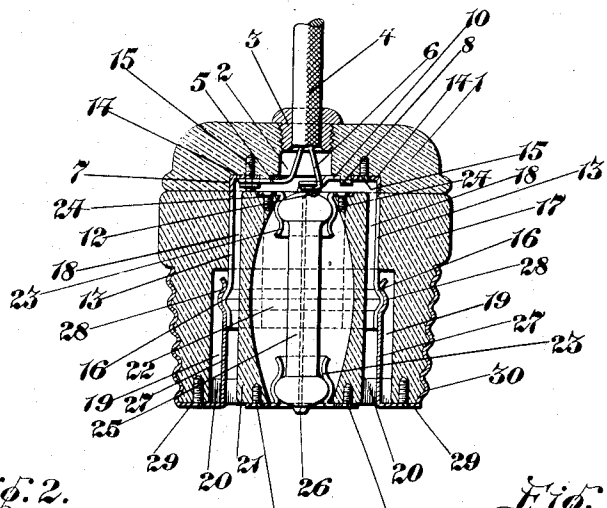


Fig. 2.

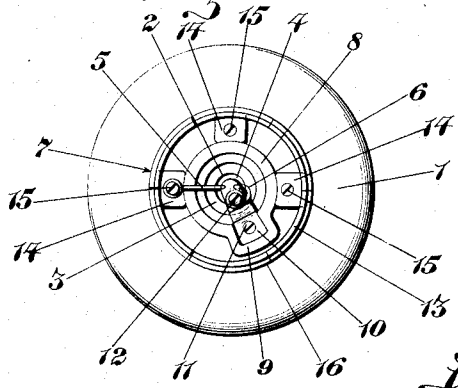


Fig. 3.

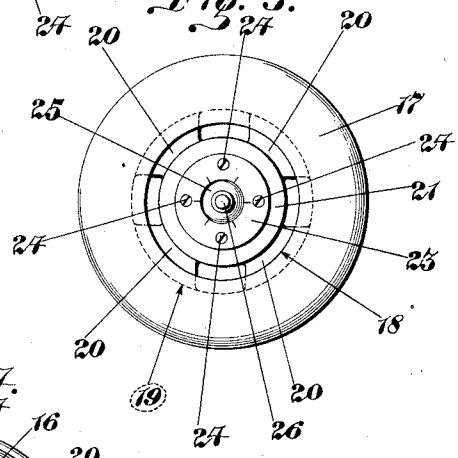
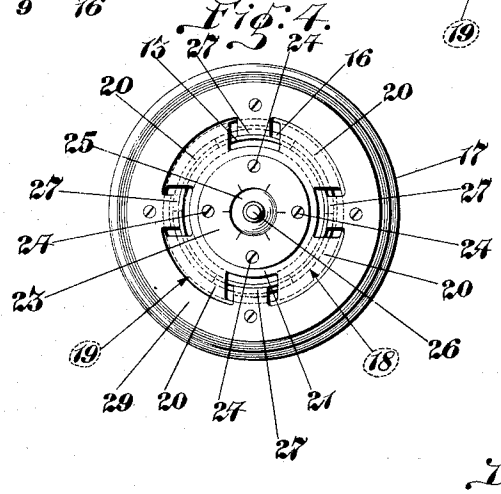


Fig. 4.



Attest.

Charles A. Becker

Inventor:
Albert W. Albrecht
by Kipley Mangelsdorf
His Attorneys.

Patented Mar. 25, 1924.

1,487,699

UNITED STATES PATENT OFFICE.

ALBERT W. ALBRECHT, OF ST. LOUIS, MISSOURI.

ATTACHMENT PLUG.

Application filed March 25, 1920. Serial No. 368,536.

To all whom it may concern:

Be it known that I, ALBERT W. ALBRECHT, a citizen of the United States, residing at the city of St. Louis and State of Missouri, have invented a new and useful Attachment Plug, of which the following is a specification.

This invention relates to improvements in attachment plugs, and consists in the novel construction hereinafter disclosed.

An object of the invention is to provide a separable or pull-apart attachment plug for extension cords which has swivel movement and is also equipped with an individual blow out fuse.

Another object of the invention is to provide an attachment plug which may be economically constructed and which will be efficient in use.

Further objects of the invention will be apparent from the following detailed description thereof taken in connection with the accompanying drawing, in which—

Fig. 1 is a vertical section through the construction.

Fig. 2 is a bottom plan view of the base plug, with a removable plug body removed.

Fig. 3 is a top plan view of the removable plug body.

Fig. 4 is a bottom plan view of the attachment plug assembled.

In the embodiment of the invention illustrated in the drawing the base plug 1 is in the form of a substantially circular body of insulating material, having a central opening 2 threaded to receive a screw bushing 3 through which the end of the extension cord 4 passes, the cord being formed of two wires 5 and 6 with the usual insulating covering. The under face of the base plug 1 has a circular recess 7 formed therein, within which is a substantially circular rib 8 having an extension 9 that forms a seat for the end of a contact leaf 10, the leaf 10 being attached to the plug by a screw 11 passing through the leaf near its outer end. The leaf 10 is deflected slightly downwardly, and has a threaded hole near its inner end to receive a binding screw 12 whereby the end of the wire 6 is attached to the leaf 10.

The base plug carries a split metallic contact sleeve 13 that has inturned ears 14 at its upper edge. The sleeve 13 is held in connection with the base plug body by screws 15 that pass through openings in the ears 14 and screwed into threaded openings in the plug body. The end of the wire 5 is connected with the sleeve by binding it into contact with one of the ears 14 by one of the screws 15. The sleeve 13 is formed with a bead 16 adjacent to its lower end which bead constitutes a lock connection with the outer contact sleeve as will be described hereinafter.

A detachable plug body 17 is substantially cylindrical in form and has formed in the upper part thereof an annular recess 18 that embraces the upper part of the inner contact sleeve 13. The lower part of the body 17 has a recess 19 of a diameter somewhat greater than the recess 18. A central core 21 at its outer end has radial spaced webs 20 bearing against the inner wall of the body 17 and supporting the core in the body. The core 21 has a substantially oblong opening 22 in the center thereof. At each end of the opening 22 are spring sockets 23 held in place in the openings by screw connections 24. The sockets 23 are adapted to receive and support a blow-out fuse 25 having enlarged heads 26 that seat in the sockets 23. In mounting the fuse 25 it is slipped endwise through one of the sockets 23 and is held by the spring contact in adjustment by the sockets 23. The upper end of the fuse 25 makes contact with the contact leaf 10, and the lower end of the fuse is arranged to contact with the screw socket of the extension cord leading to the electrical apparatus or device with which the supply lead 4 may be connected.

The inner split contact member 27 has a channel 28 near its upper end that engages with the bead 16 holding said two parts in electrical contact. The lower end of the member 27 has openings through which webs 20 extend to engagement with the body 17. The parts of the member 27 between the webs 20 are integral with the flange 29 that connects with a threaded wall 30 embracing the lower end of the body 17. The threaded wall 30 constitutes a screw connection for the socket of the extension cord of the electrical apparatus or device designed to be connected into the circuit.

Since the socket that is adapted to be attached to the plug is of the usual construction it has not been shown, it being understood that it may be screwed in place over the section 30, the central contact portion of the socket making contact with the outer ends of the fuse 25.

It will be observed, since the two members 13 and 27 are connected and since the threaded wall 30 forms an extension of the member 27, that the electrical circuit will pass through the members 13 and 27 to the wall 30 that is in contact with the screw portion of the attaching socket, the central portion of the socket being in contact with the outer end of the fuse 25, the circuit is completed through the fuse to the wire 6 that is in electrical connection with the contact leaf 10. It will be observed that the plug socket of this construction may be readily connected and disconnected by separating the two plug elements. It will also be observed that the blow out fuse may be readily replaced and that by providing the blow out fuse for each individual socket the main line fuses are protected.

It will further be observed since the two contact sleeves have a swivel connection with one member of the attachment plug, one may revolve with respect to the other so as to avoid twisting of the extension cords. Thus the construction fully accomplishes the purpose and objects hereinbefore set out.

I am aware that the invention may be modified in certain particulars without departing from the spirit and scope of the invention, and I do not limit myself therefore to the exact construction shown and described, but what I claim and desire to secure by Letters Patent, is:—

1. An attachment plug, comprising an insulating base body, a terminal contact plate carried by said body, a contact sleeve carried by said body out of circuit with said plate, a detachable body portion, a contact member carried by said detachable portion and having an exteriorly threaded socket member connected therewith, a support in said detachable body portion open at its outer end, and a fuse plug carried in said support having its inner end contacting with said terminal contact plate, and having its outer end projecting through the open outer end of said support and arranged to contact with an outside circuit member.

2. An attachment plug, comprising a base body, a terminal plate carried by said base body and connecting with one lead of an extension circuit, a split contact sleeve supported by said base section and connected with the other lead of said extension circuit, a detachable body, a contact member in said detachable body arranged for swivel frictional contact with said contact sleeve, an extension of said contact member carried by the outer wall of said second-named body and arranged to receive a socket member, and a fuse supported by said second-named body contacting with said contact plate at one end and having its opposite end extending beyond the detachable body and arranged for contact with a socket to which said extension may be connected.

3. An attachment plug, comprising a base body, a split sleeve supported by said base body having electrical connection with one lead of an extension circuit, a contact plate carried by said base body and connected with the other lead of said extension circuit, a detachable body, a contact member in said detachable body arranged for engagement with said sleeve, a socket connecting member in connection with said contact member, a support in said detachable body, fuse sockets in said support, and a removable fuse plug carried by said fuse sockets having its outer end beyond said detachable body and arranged to complete the electrical circuit from said contact plate to a contact member of a socket arranged for connection with said extension.

ALBERT W. ALBRECHT.