plug to be inserted full length into the device with which the plug is to be used, for example a socket of the cut-out box illustrated in the prior patent before referred to, 5 so that the shoulders at the base of the head portion will abut against the end of the socket and the terminal members of the conductors, 5, 6, the screws, 13, 14 and other parts associated with the body of the plug will be 10 entirely inclosed when the plug is in use.

The contacts 9, 10, are strips of metal secured to the edges of the body of the plug. The contact 9 is in two parts, one, indicated by 19, being bent to conform to the con-15 tracted portion of the body and secured thereto by a screw 20 entering from the opposite edge. The other part of contact 9 is a spring strip 21, secured to the lower portion of the part 19 by a short screw 22, 20 and a bolt 23, the nut of which latter is let into the plug from the opposite edge as shown. The part 21 is pressed outward by a coil spring 24 in an opening in the body, and to limit the outward movement of the 25 part its lower end 25 is bent over the end of the plug and is provided with a slot 26 through which extends a stop-screw 27. The other contact 10, is secured on the plug by screws 28, 29, extending from apertures in 30 the opposite edges, and a screw 30 extending from an aperture in the bottom of the opening which holds the spring 24. Each of the apertures for the screws 28, 29, 30, and for transmitting the stress to the connections of 95 the nut of bolt 23, is, after its screw or bolt 35 is inserted, filled with insulating material, preferably in the nature of a cement, capable of hardening. The fastening devices 28, 29, 30 of the contact 10 are thus effectively concealed and are inaccessible, making the con-40 tact practically a permanent part of the body. The fastening devices of the spring portion of the other contact, however, are readily removable, thus permitting replacement of the contact and also the spring 24 if 45 these parts should be damaged.

Instead of using the binding plate method of clamping the cable in its socket, I may use the construction shown in Fig. 3. In this construction the head or top portion 2ª 50 is split longitudinally, as shown at 31. The cable having been inserted, the two parts of the head are brought firmly against the cable by means of screws, one on each side of the cable. One of these screws is shown in dotted lines at 32. In this construction the head of the plug must of course be made of material sufficiently flexible to prevent breakage under the strain produced by the binding screws.

As before stated, the plugs herein specifically described are merely the preferred embodiments of the invention, which may

be embodied in various other specific forms without departure from its proper scope as defined by the following claims.

What I claim is:

1. A plug switch comprising a head and a body portion, the former having a socket to receive a conductor cable and having passages branching from the bottom of said 70 socket to receive the conductors composing the cable; contacts on opposite sides of the body portion and extending adjacent to the said branch passages; means for connecting conductors in said passages to the contacts; 75 a binding plate extending across one side of the socket and adapted to engage the side of the cable therein to secure the same in the socket; said binding plate enabling the plug to be withdrawn from its receptacle 80 by pulling on the cable without transmitting the stress to the connections of the conductors and contacts.

2. In a plug switch, a body having in its end a socket to receive an insulated cable, 85 said socket having an open side, a releasable binding plate extending across said open side of the socket to engage the insulated end of the cable and bind the same firmly in the socket, and contacts mounted on said 90 body, for electrical connection with the conductors composing the cable; whereby the plug switch may be withdrawn from its receptacle by pulling on the cable without

the conductors and contacts.

3. In a plug switch, a body portion, a contact on one side of the same, fastening devices extending through the body from the opposite side and engaging the said contact 100 to secure the same rigidly in position, a flexible contact mounted on said opposite side and concealing the said fastening devices, detachable fastening devices rigidly securing one end of the flexible contact to the 105 body portion, and a spring mounted in the body portion and engaging said flexible contact at the free end thereof to hold the same yieldingly outward from the body portion.

4. In a plug switch, a body portion, and 110 a head portion, the latter having a conductor socket and branch passages leading therefrom and opening adjacent the body portion, removable contacts on opposite sides of said body portion, terminals resting on 115 the contacts and located adjacent the openings of said passages, and fastening devices projected through the terminals and contacts and engaging the body portion to secure the same in position thereon. JOHN H. KLIEGL.

Witnesses:

S. S. DUNHAM, A. E. MAHAN.