(No Model.)

F. B. COOK.

TELEPHONE SWITCH PLUG.

No. 596,850. Patented Jan. 4, 1898.

Fig. 2.

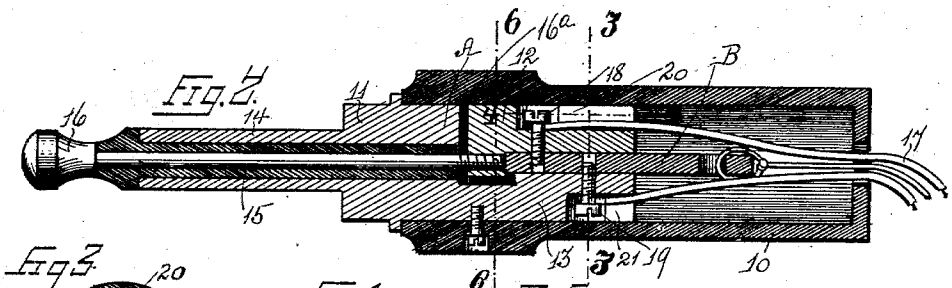


Fig 3.

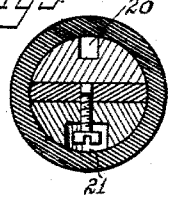


Fig 4



Fig 5

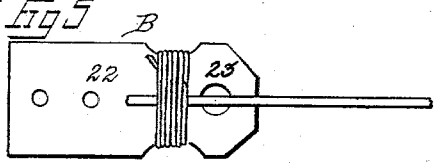


Fig 1

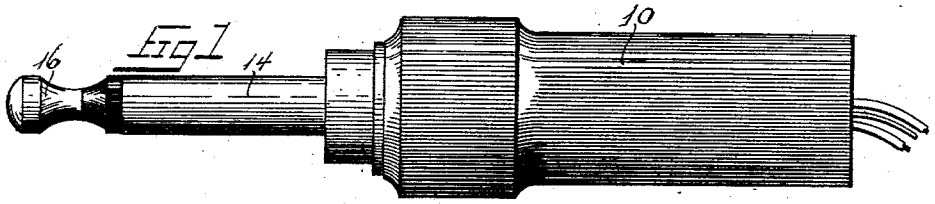


Fig 6

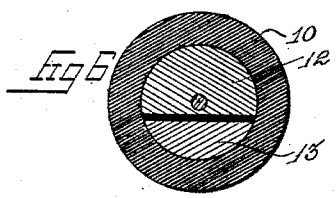
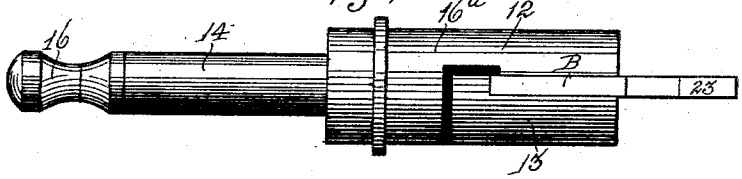


Fig. 7.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRANK B. COOK, OF CHICAGO, ILLINOIS.

TELEPHONE SWITCH-PLUG.

SPECIFICATION forming part of Letters Patent No. 596,850, dated January 4, 1898.

Application filed January 4, 1896. Serial No. 574,386. (No model.)

To all whom it may concern:

Be it known that I, FRANK B. COOK, 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 Plugs and Spring-Jacks for Telephone-Circuits, of which the following is a specification.

My invention relates to certain improvements in the construction and arrangement of the various parts of a switchboard-plug used in conjunction with the lines of a complete metallic circuit.

My invention has for its object the provision of means whereby the various parts are simplified and cheapened in construction, by which more complete and perfect insulation of certain of the parts is obtained, and by which, as an incidental object, the means of securing the ends of the conductors and coverings are improved.

My invention has certain other objects in view; and it consists in certain features to be particularly described, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of the plug. Fig. 2 is a central longitudinal section. Fig. 3 is a cross-section on the line 3 3 of Fig. 2. Fig. 4 is a detail view in section showing the binding-screws. Fig. 5 is a detail view of the insulating-partition. Fig. 6 is a cross-section on the line 6 6 of Fig. 2. Fig. 7 is a view of the plug with the covering-sleeve removed.

The plug of my invention comprises in its construction the ordinary covering-sleeve 10, which incloses a body part A, consisting of the head 11 and the two conductor-holding members or sections 12 and 13, a metallic conducting-sleeve 14 being projected forward from the head 11, through which the conductor-stem 15 passes, connected at one end to the conductor-holding member 12, and carrying at the other end the contact-head 16, the stem and head 16 being insulated from the sleeve 14 and body-head 11 by the insulation 16^a.

The wires or leads 17 of the circuit are connected to and held by the binding-screws 18 and 19, respectively, on the wire-holding members 12 and 13, the ends of the wires, a portion of their lengths and the screws being housed within the recesses 20 and 21, and the difficulties occasioned by securing of the wires upon the outer surface of the body portion A thereby avoided.

Interposed between the two wire-holding members 12 and 13 is the insulating-partition B, consisting of the body 22 and the tail-piece or extension 23, the wires 17 being disposed on either side of the same and led to the binding-screws, the body of the insulating-partition and its tail-piece thus completely separating and isolating the two wires for a comparatively considerable portion of their length and preventing any possible short-circuiting between them.

As another feature of my invention the wires 17 may be bound securely and firmly to the tail-piece 23 of the insulating-partition B and then led to and secured at their extremities to the binding-screws 18 19, as shown in Fig. 5, thereby affording a connection in which the strain of any pull of the wires is brought upon the point of connection at the tail-piece and not upon the connection at the binding-screw.

The two wire-holding members are isolated from each other and the member 12 from the head 11 by means of the insulating-partition B and by the insulating-strips 16^a.

By this construction and disposition of the parts I provide safeguards against short-circuiting and also simplify and improve the construction.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. A plug for complete metallic circuits consisting of a main body portion, comprising a head and conductor-holding members, or sections insulated from each other, an insulating-partition for insulating the sections, binding-screws in each of said sections located on each side of said partition and conductors led and secured to said screws whereby the partition isolates the conductors to prevent short-circuiting, together with a conducting-sleeve connected with the head aforesaid, and a conducting-stem connected with one of the conductor-holding sections aforesaid.

2. A plug for complete metallic circuits consisting of a main body portion, comprising a head and conductor-holding members, or sec-

tions insulated from each other, an insulating-partition for insulating the sections, binding-screws in each of said sections located on each side of said partition, recesses within which the binding-screws are depressed and conductors led and secured to said screws whereby the partition isolates the conductors to prevent short-circuiting, together with a conducting-sleeve connected with the head aforesaid, and a conducting-stem connected with one of the conductor-holding sections aforesaid.

3. A plug for complete metallic circuits consisting of a main body portion, comprising a head and conductor-holding members, or sections insulated from each other, an insulating-partition for insulating the sections, binding-screws in each of said sections located on each side of said partition and conductors led and secured to said screws whereby the partition isolates the conductors to prevent short-circuiting, together with a conducting-sleeve connected with the head aforesaid, and a conducting-stem connected with one of the wire-holding sections aforesaid and insulating-strips between the head and one of the conductor-holding sections.

4. A plug for complete metallic circuits consisting of a main body portion, comprising a head and conductor-holding members, or sections insulated from each other, an insulating-partition for insulating the sections, a tail-piece on said partition to which the conductors are secured, binding-screws in each of said sections located on each side of said partition and conductors led and secured to said screws whereby the partition isolates the conductors to prevent short-circuiting, together with a conducting-sleeve connected with the head aforesaid, and a conducting-stem connected with one of the conductor-holding sections aforesaid.

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

FRANK B. COOK.

Witnesses:

J. A. TOMPKINS,

C. C. BULKLEY.