Jan. 2, 1934. M. PROPP 1,941,489

ELECTRICAL ATTACHMENT FITTING

Original Filed July 28, 1925

Fig. 1.

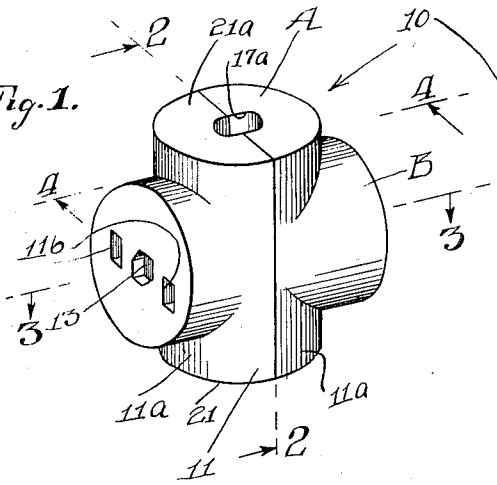


Fig. 2.

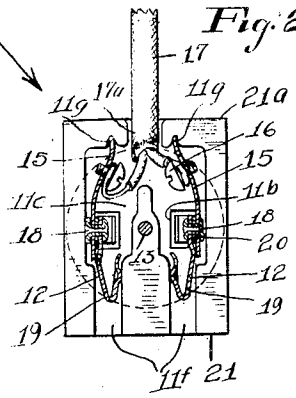


Fig. 3.

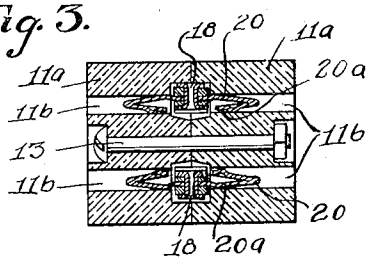


Fig. 4.

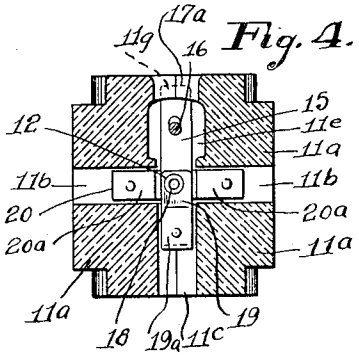
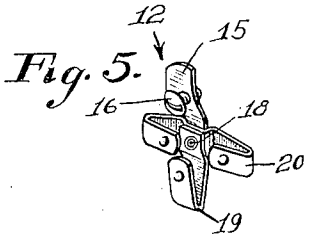


Fig. 5.



INVENTOR.
Morris Propp.

BY
Morris Propp
ATTORNEY.

Patented Jan. 2, 1934 1,941,489

UNITED STATES PATENT OFFICE

1,941,489

ELECTRICAL ATTACHMENT FITTING

Morris Propp, Far Rockaway, N. Y., assignor to The M. Propp Co. Inc., New York, N. Y., a corporation of New York

Original application July 28, 1925, Serial No. 46,557. Divided and this application March 13, 1926. Serial No. 94,413

6 Claims. (Cl. 173—334)

This invention relates to attachment fittings and more particularly is directed to an improved fitting adapted to provide quick detachable, circuit-tapping means for receiving a plurality of portable conductors.

Certain features of novelty as shown and described in this application are shown, described, and claimed in my co-pending application Serial No. 46,557, filed July 28th, 1925, of which this application is a division, and which therefore are not claimed herein.

The object of the invention is to generally improve this type of fitting and to provide a device of the character described having few and simple parts, which is cheap to manufacture, neat in appearance, compactly and conveniently constructed, and practical and efficient to a high degree for the purposes described.

Other objects of the invention will in part be obvious and in part hereinafter pointed out.

The invention accordingly consists in the features of construction, combinations of elements and arrangement of parts which will be exemplified in the construction hereinafter described and of which the scope of application will be indicated in the following claims.

In the accompanying drawing, in which is shown one of the various possible illustrative embodiments of this invention,

Fig. 1 is a perspective view of a fitting embodying the invention;

Figs. 2, 3 and 4 are cross-sectional views taken on lines 2—2, 3—3 and 4—4 respectively in Fig. 1; and

Fig. 5 is a perspective view of a current carrying portion of the fitting.

Referring in detail to the drawing, 10 denotes a fitting embodying the invention and is seen to comprise a body portion 11 formed of insulating material such as porcelain, phenol condensate products, or other like suitable material, and metallic current carrying portions 12. For simplicity and cheapness the body portion is preferably made of two similar parts or halves 11*a* which are secured together by any suitable means such as screw bolt 13, and which are adapted to hold between them the current carrying portions 12 as shown in Figs. 2 and 3. The body portion when assembled may be made to resemble two intersecting cylinders A and B, the cylinder A being split longitudinally in a plane extending through the diameter of its circular end faces 21, 21*a* and normal to the longitudinal axis of the cylinder B to form said halves 11*a* as shown in Fig. 1.

The screw bolt 13 extends axially through the cylinder B. Spaced to extend on each side of said bolt are through passage openings, or socket portions 11*b*. Similar socket portions 11*c* may be provided in cylinder A to extend through the face 21 in the body portion 11 and to intersect with the said passage openings 11*b*. There is also provided a passage opening 11*d* extending through the face 21*a* into a chamber 11*e* in said body portion, said chamber communicating with the socket portion 11*b* and 11*c* as shown in Fig. 2. The passage openings 11*c*, 11*d* and chamber 11*e* are seen in Fig. 2 to form symmetrically disposed grooves or recesses 11*f* in the contiguous abutting side of the halves 11*a*.

Each current-carrying portion 12 may comprise a suitable terminal binding means, as for example a metallic strip 15 having a screw 16 threaded adjacent the outer end thereof to form a binding post for connecting with an end of a portable conductor wire 17. The inner ends of the strip 15 may be connected to an end of a longitudinally extending spring member 19 and to a middle portion of a transverse spring contacting member 20. Said spring members may be of any suitable construction and are adapted to fit into the socket portions 11*b* and 11*c* provided in said body portion. It is to be understood that the said strip 15 and spring members 19, 19*a* may be formed of one or more pieces and as shown in Fig. 5, the strip 15 consists of a separate piece firmly secured to said spring member by an eyelet rivet 18 or other suitable fastening means to form a unitary structure.

The contact member 19 may preferably be formed with looped portions 19*a* at each end and member 20 may be provided with a loop 20*a* at its free end so as to present smooth, springy receiving contact surfaces for terminal blades on other quick detachable fittings (not shown) which are adapted to be inserted in the openings 11*b* and 11*c*.

The contact members 19 and 20 extend only partially into their respective socket openings eliminating possible short circuit or injury to persons handling the device.

In using the invention a knot 17*a* is tied in the portable conductor wires 17 adjacent the ends thereof and said ends are secured in the usual manner to the screw binding posts 16. The two halves 11*a* are then fitted together to embrace the current carrying portions 12 as shown in Figs. 3 and 4, the chamber 11*e* being adapted to accommodate the knot 17*a* of the conductor wires 17 and serving as a strain relief for the

binding post connections (see Fig. 2). The screw 13 is next inserted through said halves 11*a* for securing the parts together. The device 10, assembled as above described, provides a plurality of receptacles or outlets at each of the openings 11*b* and 11*c* for detachably connecting into the circuit with the conductor wire 17 portable circuits having a blade type of attachment plug of the well known construction.

If desired, grooves or pockets 11*g* may be provided in each of the halves 11*a* for receiving the free ends of the strips 15. The current-carrying portions are thus held within the body portion 11 so that the said ends of the strips abut the walls of the pocket 11*g* when a pull is exerted on the conductor wires 17 and thereby serve as a means for relieving the strain from the transverse spring contact members 20 of the current-carrying portions 12.

It will thus be seen that there is provided a device in which the several objects of this invention are achieved and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiment above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawing is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention I claim as new and desire to secure by Letters Patent:—

1. A fitting of the character described providing an insulating body made of two similarly formed parts secured in abutting relation, each of said parts having grooves formed in the abutting sides of said parts and grooves transverse to said sides and cooperating to form socket openings, a passage, and a chamber when said parts are assembled, current carrying members including terminal binding strips each secured at one end to a plurality of spring contact members extending into said socket openings, conductor wires extending thru said passage connected to said strips within said chamber, said chamber being formed with recesses receiving the free ends of said strips to provide strain relief means for said current carrying parts, said conductor wires having a knotted portion for coaction with said chamber walls to provide additional strain relief means.

2. A fitting of the character described comprising an insulating body made of two similarly formed parts secured in abutting relation, each of said parts having grooves formed in the abutting sides of said parts and grooves transverse to said sides and co-operating to form pockets when said parts are assembled, current carrying portions providing a plurality of pairs of spring contact members housed in said pockets, said current carrying portions including terminal binding strips each having a free end, the walls of said pockets being formed to provide an abutment for said strip ends.

3. In a fitting comprising a body portion made up of two similarly shaped members secured in abutting relation, a plurality of passages extending through each of said members, depressions formed in the abutting surfaces of said members, said depressions co-operating to form passages and a chamber, a current carrying member housed in said passages and chamber, a notch in said chamber wall receiving an end of said current carrying member, conductor wires for said fitting housed in said chamber, and means on said end for securing said wires to said member.

4. A fitting of the character described providing an insulating body made of two similarly formed parts secured in abutting relation, each of said parts having grooves formed in the abutting sides of said parts and grooves transverse to said sides and cooperating to form socket openings, a passage, and a chamber when said parts are assembled, current carrying members including terminal binding strips each secured at one end to a plurality of spring contact members extending into said socket openings, conductor wires extending thru said passage connected to said strips within said chamber, said chamber being formed with recesses receiving the free ends of said strips to provide strain relief means for said current carrying parts.

5. A multiple socket comprising two blocks of insulating material having flat engaging faces and means for securing the blocks together to form a socket body, the blocks having in their engaging faces generally longitudinal channels each of which communicates at one end with a half socket formation extending to an end of the block and also communicates with a full socket formation extending transversely through the block, and at its other end communicates with a half terminal recess, said channel, half-socket and recess formations cooperating when the blocks are secured together to form a spaced pair of complete connector channels, each of which terminates at one end in a complete longitudinal socket and at the other end in a complete terminal recess, connector strips of sheet metal located and retained in said channels, each having one end located in said terminal recess and the other end located within the combined inward ends of a plurality of the socket formations, and spring contact members of thin sheet metal secured to the last named ends of the connector strips, one contact member extending into each of the socket formations and designed to cooperate with a plug prong inserted in the open end thereof, and binding screws on the terminal ends of said connector strips, the block shaving co-operating recess formations to accommodate ends of the binding screws.

6. A multiple socket comprising two blocks of insulating material having meeting faces, and means for securing the blocks together to form a socket body having split end faces, the blocks having in their meeting faces, recessed portions extending to said end faces, each block having a pair of parallel through openings communicating with said recessed portions, and disposed transversely to said meeting faces, and a pair of current carrying members within said socket, each having a terminal portion extending within said recessed portions toward one end face, and provided with a screw at the end thereof for attachment to a wire extending into said socket, a pair of transverse contact members each extending within one of the parallel through openings of each block, respectively, and a contact member extending within said recessed portions toward the opposite end face.

MORRIS PROPP.