Aug. 28, 1928.

1,682,335

W. F. HENDRY

ATTACHMENT PLUG

Filed April 6, 1925

Fig. 1.

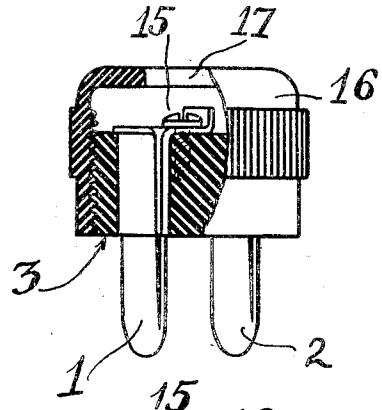


Fig. 2.

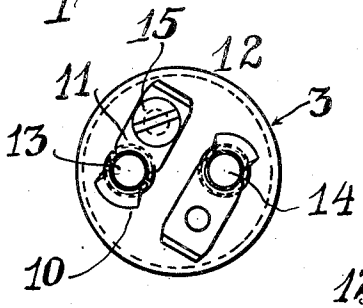
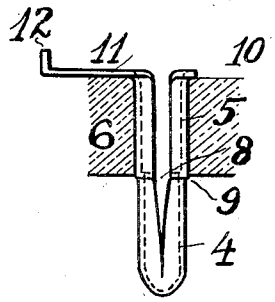


Fig. 4.



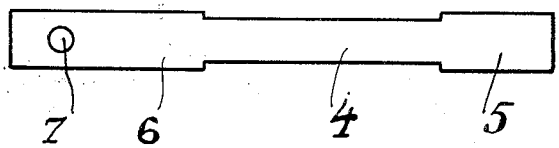


Fig. 3.

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Patented Aug. 28, 1928. 1,682,335

UNITED STATES PATENT OFFICE.

WILLIAM F. HENDRY, OF OSSINING, NEW YORK, ASSIGNOR TO MANHATTAN ELECTRICAL SUPPLY COMPANY, INCORPORATED, OF NEW YORK, N. Y., A CORPORATION OF MASSACHUSETTS.

ATTACHMENT PLUG.

Application filed April 6, 1925. Serial No. 21,049.

This invention relates to improvements in attachment plugs and particularly to a novel electrical contact-making member of light, inexpensive and yet durable construction.

In accordance with the present invention a tubular contact-making member is formed of sheet metal. The member thus formed bas a split shank and a rounded point with a continuous, smooth tip. The contact member is held in an insulating block by its resiliency and by integral projections engaging the upper and lower surfaces of the mounting block. Preferably, one of these projections is constituted by a shoulder or ring formed into the shank and forced against the lower surface of the block.

This and other features of the invention will be more clearly understood from the drawings and the following detailed description of a preferred embodiment thereof.

Fig. 1 is a side elevation with parts broken away; Fig. 2 is a plan view; Fig. 3 illustrates a strip of sheet metal before it is formed into a contact member; and Fig. 4 illustrates a contact member ready for insertion into an insulating block.

The plug is provided with two contact members 1 and 2 which pass through holes of a block 3 of insulating material. The members 1 and 2 cooperate with the usual jack (not shown) for the purpose of establishing electrical connections.

The contact members 1 and 2 are formed of strips of brass or other suitable resilient material which are stamped out into the shape illustrated in Fig. 3. The middle section of each strip is narrow as shown at 4. The relatively wide end section 6 is longer than the equally wide end section 5 and is perforated at 7. The strip of brass is bent double at the center of the narrow section 4 and the two halves are curved towards each other to form a tube slit open as indicated at 8 (Fig. 4). A shoulder 9 is formed in the strip where the end sections 5 and 6 and the narrow section 4 meet. The lower part of this tube ends in a rounded point, the tip of which has a continuous or unbroken surface, the upper tubular part, formed by sections 5 and 6, is of slightly larger diameter than the lower part. The free end of section 5 is bent back to form a rim 10 and the end of section 6 is bent back to form a leg 11 with an upstanding ridge 12.

The two contact members thus constructed are pushed through the openings 13 and 14 of block 3. The upper cylindrical part is so proportioned that when rim 10 and leg 11 lie against the upper surface of block 3, the shoulder 9 projects slightly beyond the lower surface of the block. While the upper projections of the contact member are firmly held against the block 3 by means of a suitable tool, the shoulder 9 is forced against the lower surface of the block and forms a thin ring surrounding the hole through which the contact member projects.

The contact member is now firmly held in the block 3, the projections 10, 11 and the ring formed of shoulder 9 preventing its vertical displacement. The secure positioning of the member is further insured by a screw 15 which serves as a binding or terminal post and passes through perforation 7 into the block 3. The resiliency of the two halves of the contact members guards against their lateral displacement in the block and guarantees good contact with the cooperating contact element.

The binding posts are guarded against contact by means of a housing 16. The housing screws on the block 3 and is provided with an aperture 17 through which pass the wires leading to binding posts 15.

What I claim is:

1. In an attachment plug, a block of insulating material having two holes, contact-making members of resilient material projecting through said holes, each of said members having a split tubular portion projecting beyond the lower surface of said block and having a rounded point with a continuous tip, a relatively large split tubular portion within said block, a shoulder separating said tubular portions forced against the block around the hole, a rim and a leg projecting from the last mentioned tubular portion and lying flat against the upper surface of said block, and a terminal screw passing through said leg and into said block.

2. The method of making an attachment plug which comprises inserting a split-tube contact prong having a shoulder intermediate its ends into an opening in a mounting block with the shoulder protruding slightly from the lower surface of the block, securely holding the ends of the tube against the up-

per surface of the block, and forcing the protruding shoulder against the lower surface of the block to provide an additional contacting surface and to prevent movement of said prong relative to said block.

3. The method of making an attachment plug which comprises forming a flat strip of metal having a reduced central portion into a trough-like shape in the direction of its length, bending said formed strip intermediate its ends to produce a split tube having a shoulder portion corresponding to the non-reduced portion of the strip, bending the ends of the tube at substantially right angles to the body of the tube to provide supporting and connecting lugs, inserting the body of said tube into an opening in a mounting block with the shoulder protruding slightly from the lower surface of said block, and forcing said shouldered portion against the said lower surface to provide means for preventing longitudinal displacement of said prong relative to said block.

In testimony whereof, I have signed my name to this specification, this 27th day of March, 1925.

WILLIAM F. HENDRY.