May 16, 1933. L. LUDWIG 1,909,412

ELECTRIC OUTLET WITH WIRE TAP

Filed Aug. 20, 1929

Fig 1

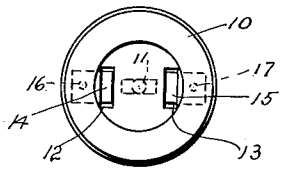
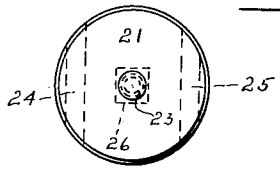


Fig 3



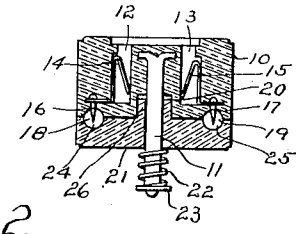


Fig 2

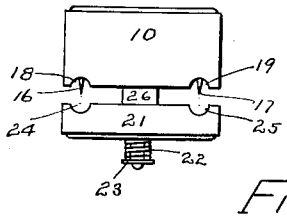


Fig 4

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UNITED STATES PATENT OFFICE

LOUIS LUDWIG, OF BROOKLYN, NEW YORK

ELECTRIC OUTLET WITH WIRE TAP

Application filed August 20, 1929. Serial No. 387,132.

My invention relates to electric outlets and has for its main objects to provide an outlet which may readily be attached to or detached from the wires in any circuit and with the use of which it is not necessary to remove the insulation from the wires to which it is attached. A further object is to provide an outlet of simple, inexpensive construction which can be attached or detached without the use of any tools.

These and other objects and advantages will be readily understood from the following description and from the accompanying drawing of a preferred embodiment, but it will be noted that some modifications may be made without departing from the scope of the invention. In the drawing

Fig. 1 is a top view of the invention,

Fig. 2 a cross-sectional side view,

Fig. 3 a bottom view, and

Fig. 4 a plain side view.

Referring now to all the views, the device consists of a body member 10 made of insulating material and having a rod 11 molded in its center. The end of this rod extends outside the body member. Two rectangular sockets 12 and 13 are molded in the body and in these are contained the free ends of two springs 14 and 15. The other ends of these springs are securely embedded in the material of the body and provided with pointed pins 16 and 17 which project some distance into two semicircular wire seats or grooves 18 and 19 which are also molded in the body. A square recess 20 is formed in the body, concentric with the rod 11.

A clamping disc 21 is slideably mounted on the end of the rod 11 and held in engagement with the body by a compression spring 22 which abuts against a washer 23 secured on the end of the rod. This disc is also provided with semicircular seats 24 and 25 which are correctly aligned with the seats in the body member by means of a square stud 26 which fits in the recess 20.

In attaching the outlet to a circuit it is only necessary to lift the clamping disc 21 as shown in Fig. 4 and insert the wires in the seats. The compression spring causes the pins 16 and 17 to pierce the insulations of the wires and thus establish electric contact.

Having described my invention, what I claim as new and wish to protect by Letters Patent is;

1. An electric outlet of the class described having a cylindrical body member containing two prong-contacts engageable through one of the faces of the body member, a rod secured axially in and extending outside said body member, two semi-circular wire holding seats formed on the other face of the body member, pointed metal pins secured to said contacts and projecting into said seats, said contacts and said pointed pins permanently molded in the body member, a clamping member slidingly mounted on the end of said rod and having semi-circular wire holding seats coacting with the seats on the body member, a washer secured on the end of the rod, and a compression spring secured between said washer and the clamping member and having sufficient strength to cause the pointed pins to pierce the insulation on electric wires when inserted in said seats.

2. An electric outlet of the class described having a cylindrical body member containing two prong contacts engageable through one of the faces of the body member, a rod secured axially in and extending outside said body member, two semi-circular wire holding seats formed on the other face of the body member, pointed metal pins secured to said contacts and projecting into said seats, said contacts and said pointed pins permanently molded in the body member, a clamping member slidingly mounted on the end of said rod and having semi-circular wire holding seats coacting with the seats on the body member, a washer secured on the end of the rod, a compression spring secured between said washer and the clamping member and having sufficient strength to cause the pointed pins to pierce the insulation on electric wires when inserted in said seats, and means for properly aligning the seats in the clamping member with the seats in the body member.

LOUIS LUDWIG.