July 29, 1930. E. MILLER 1,771,805

ELECTRICAL TERMINAL

Filed Dec. 24, 1924

Fig. 1.

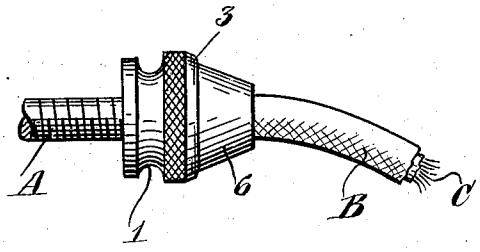


Fig. 2.

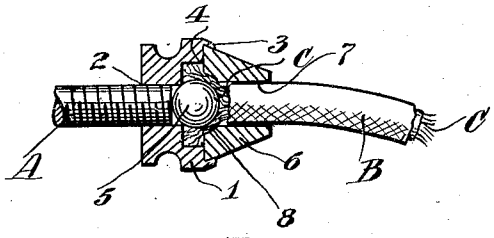
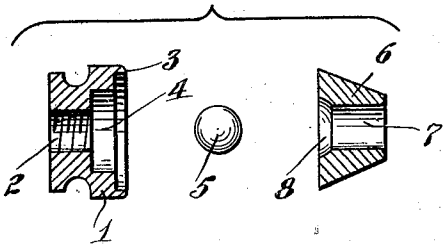


Fig. 3.



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Patented July 29, 1930 1,771,805

UNITED STATES PATENT OFFICE

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ELECTRICAL TERMINAL

Application filed December 24, 1924. Serial No. 757,791.

This invention relates to electric terminals.

The object of the invention is to provide a terminal by the use of which the ordinary screw-threaded charged member of an electrical apparatus may be brought into electrical contact with the inserted wires of an electrical conductor.

A further more specific object of the invention is to provide a construction in which there is an independent movable member forming the contact between the end of the screw-threaded charged member and the ends of the wires of the conductor, so that the ends of the wires are spread.

A further more specific object is to provide a construction in which the separate movable contact member acts as a means for gripping the exposed wires of the electrical conductor, thereby increasing the area of contact and therefore increasing the conductivity of the apparatus to which the invention is applied.

In the accompanying drawings, forming a part hereof, is illustrated a form of embodiment of the invention in which similar reference characters designate corresponding parts and in which:

Figure 1 is an elevation showing the application of the invention to a screw-threaded member of ordinary construction;

Figure 2 is a vertical section showing the same application; and

Figure 3 is a vertical section showing the parts separated but in their relative positions as regards one to the other;

Referring to the drawings A designates an ordinary or common form of screw-threaded member, one end of which is connected to a suitable source of electricity, such as a battery, etc. The insulated body B containing the conducting wires C is of common or ordinary construction and the object of the invention is to connect the wires C electrically with the charged member A.

A circular base member 1 is provided with a screw-threaded bore 2 so that it may be screw-threaded on the member A.

The member 1 is provided with an annular flange 3 and a recess 4, into the latter of which is adapted to be placed a separate contact member 5, which for the purposes of illustration is shown as a spherical metallic member, peferably soft enough to be distorted. The recess 4, being of greater diameter than the diameter of the member 5, naturally the ball 5 does not occupy a central position at all times when the base member 1 is screwed onto the screw-threaded member A. Being slightly off-center, necessarily the wires C of the conducting member B are spread and are firmly gripped between the ball 5 and the under surface of the member 6 which is disposed within the annular flange 3 which may readily be spun over to retain the member 6 in position. To accentuate this action by the ball 5 the member 6 is provided with a bore 7 approximately of the diameter of the outside of the conducting member B and this bore 7 terminates in an enlarged chamber or recess 8, best shown in Figure 3.

In the application of the invention the members 1 and 6 are secured together, the movable contact member 5 being first inserted. To apply the invention to a screw-threaded member such as A, it is necessary only to screw-thread the base member 1 thereon and as the screw-threaded member A forces the movable contact member 5 upward it spreads the wires C and forms a permanent and perfect electrical joint.

Having thus described the invention what is claimed as new and desired to be secured by Letters Patent is:

1. An electrical terminal comprising a unitary permanent containing element having a bore throughout one end of which is interiorly screw threaded, a compressing member disposed in the containing element and a screw threaded member disposed in the screw threaded portion of the bore and ar-

ranged to bear on the compressing member.

2. An electrical terminal comprising a unitary permanent containing element having a bore throughout, one end of which is interiorly screw threaded, a compressing member capable of being distorted disposed in the containing element and a member disposed in one end of the containing element and arranged to bear on the compressible compressing member.

Signed at New York, in the county of New York and State of New York, this 18th day of December, A. D. 1924.

EDWARD MILLER.