

Aug. 17, 1926.

1,596,673

W. E. McLAUGHLIN

DETACHABLE PHONE TIP

Filed Nov. 24, 1924

FIG. 1

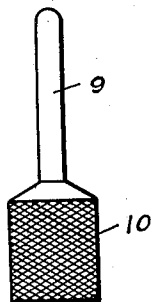


FIG. 2

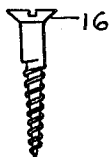


FIG. 3

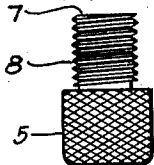


FIG. 4

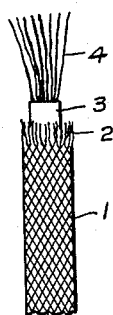


FIG. 5

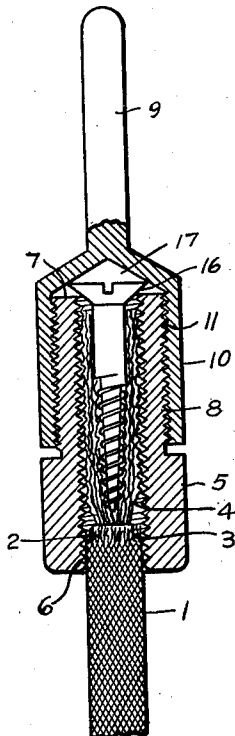


FIG. 6

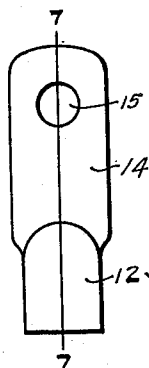
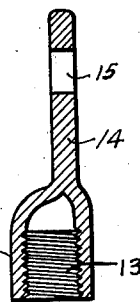


FIG. 7



INVENTOR.
WILLIAM E. McLAUGHLIN
BY *Paulmier Paulmier*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM E. McLAUGHLIN, OF MIDDLETOWN, OHIO, ASSIGNOR TO THE BARKELEW ELECTRIC MANUFACTURING COMPANY, OF MIDDLETOWN, OHIO, A CORPORATION OF OHIO.

DETACHABLE PHONE TIP.

Application filed November 24, 1924. Serial No. 751,838.

My invention relates to phone tips and in particular to detachable phone tips.

It is my object to provide a detachable and easily assembled or disassembled member for mounting a conductor wire which may serve as a base for a phone tip or for any form of terminal connector.

It is a further object of my invention to provide a universal base which may carry a plurality of different forms of connectors.

It is still an additional object of my invention to provide means of readily mounting the base upon an insulated wire so that the threads of the wire and threads of the insulation will be taken in positively and completely, leaving no ragged ends of the wire or the insulation.

It is well known that it is very difficult to get the frayed ends of a cable into a connector. It has been customary heretofore to employ various means such as solder to effect these connections, but as a solder connection is both difficult to make and is a permanent connection, it is not satisfactory for the purpose for which these connectors are intended as a rule.

This is particularly true in radio apparatus where the individual owner is the constructor frequently of the apparatus; to him soldering is difficult.

It is the object of my invention to provide a readily mounted connector which may be detachable and which may carry a plurality of different types of terminals.

With these and other objects in mind, the drawings illustrating my invention are as follows:—

Figure 1 is a phone tip;

Figure 2 is the binding screw;

Figure 3 is a side elevation of the universal base;

Figure 4 is a view of a typical frayed end of a cable and its insulation;

Figure 5 is a section through the assembled phone tip showing the method of mounting upon the cable;

Figure 6 is a plan view of another form of connector to be mounted upon the universal base; and

Figure 7 is a section on the line 7—7 of Figure 6.

Referring to the drawings, 1 is the braided insulation of the cable, while 2 indicates the frayed ends thereof. 3 is the rubber coat-

ing customarily found on the braided copper wires 4 which constitute the electrical conducting means in the cable. 5 designates the throat which is knurled on the exterior of the universal base. This universal base is threaded as at 6 on the interior thereof so that when threaded upon the cable the internal thread 6 will draw the frayed ends 3 and 4 within the universal base into the position shown in Figure 5, thus eliminating the difficulty of inserting frayed ends into a small aperture.

The upper end of the universal base is formed into a sleeve of smaller diameter marked 7 having external threads 8. It is upon this sleeve that various forms of connectors are mounted such as the phone tip 9. This tip is fitted with an enlarged sleeve 10 which is internally threaded as at 11 for mounting upon the universal base sleeve 7.

Other forms of such connectors may be used. For instance, in Figures 6 and 7 there is shown a connector with an enlarged sleeve 12 internally threaded as at 13 having its upper end formed into a plate 14 with an eye 15 to receive a binding screw.

In order to retain in a detachable fashion the cable within the universal base, I provide a locking member such as a wood screw 16. There is sufficient space within the base of the connector such as a space 17 for accommodating the upper end of the screw or the screw may be flush with the upper end of the universal base.

It will be apparent that my invention has a wide range of application and that I do not desire to confine myself to the details but desire to comprehend within my invention such modifications as may be necessary.

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

1. In combination, an internally threaded universal base, a knurled portion on the exterior thereof, and a threaded sleeve portion on the exterior thereof, a connector internally threaded having a connecting portion adapted to be mounted thereon, and a screw adapted to be mounted within said universal base to engage the wires of a cable threaded within said base, the head of said screw being sealed by the enclosing base of the connector.

2. In combination, an internally threaded

universal base, a knurled portion on the exterior thereof and a threaded sleeve portion on the exterior thereof, a connector internally threaded having a connecting portion adapted to be mounted thereon, and a screw adapted to be mounted within said universal base to engage the wires of a cable threaded within said base, the head of said screw being sealed by the enclosing base of the connector, said connector consisting of a phone tip.

3. In combination, a universal base internally and externally threaded, a cable having a plurality of wires, a portion of which are exposed from within the cable threaded within said universal base, and a screw mounted within said wires within the universal base to engage them between the threads of the screw and the internal threads of the universal base.

4. In combination, a universal base internally and externally threaded, a cable having a plurality of wires, a portion of which are exposed from within the cable

threaded within said universal base, and a screw mounted within said wires within the universal base to engage them between the threads of the screw and the internal threads of the universal base, said screw being of appreciably smaller diameter than the interior dimension of the universal base so that the screw will be spaced from the internal thread of the universal base.

5. In combination, a universal base internally and externally threaded, a cable having a plurality of wires, a portion of which are exposed from within the cable threaded within said universal base, a screw mounted within said wires within the universal base to engage them between the threads of the screw and the internal threads of the universal base, and a connector member threaded on the external threads of the universal base adapted to enclose the ends of the wire and the end of the screw.

In testimony whereof, I affix my signature.

WILLIAM E. McLAUGHLIN.