Dec. 15, 1925. 1,565,263

C. W. DENNY ET AL

RADIO PHONE PLUG

Filed Aug. 4, 1922

Fig. 1.

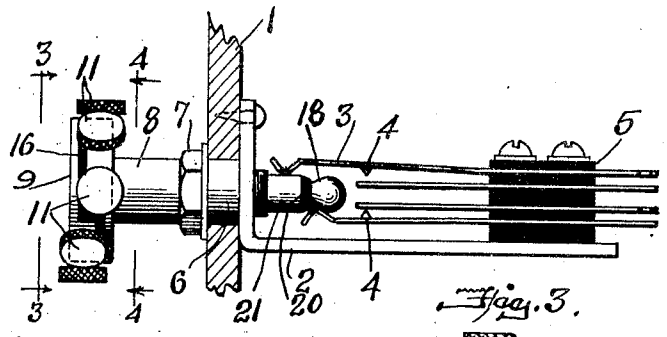


Fig. 2.

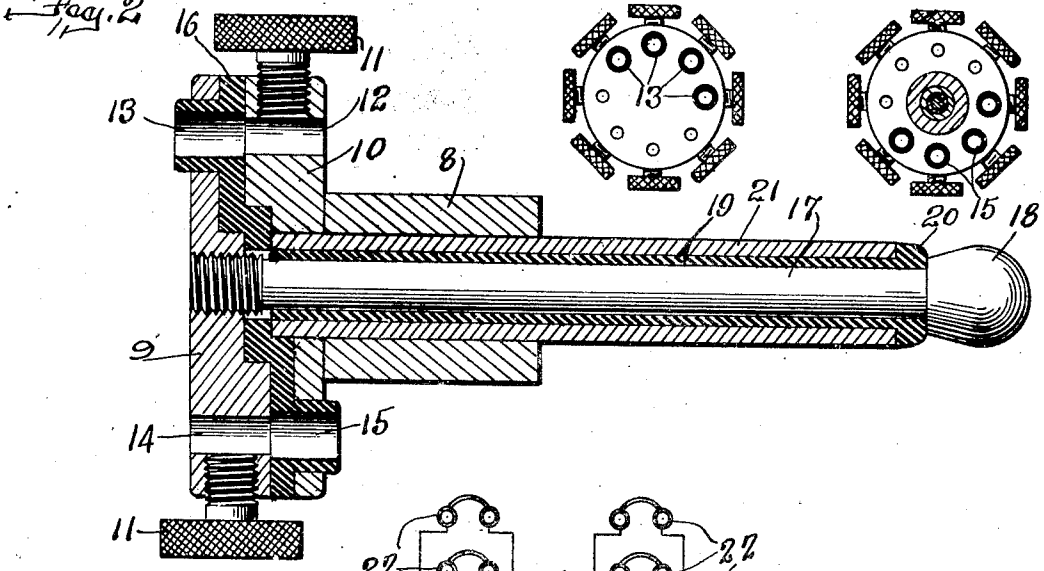
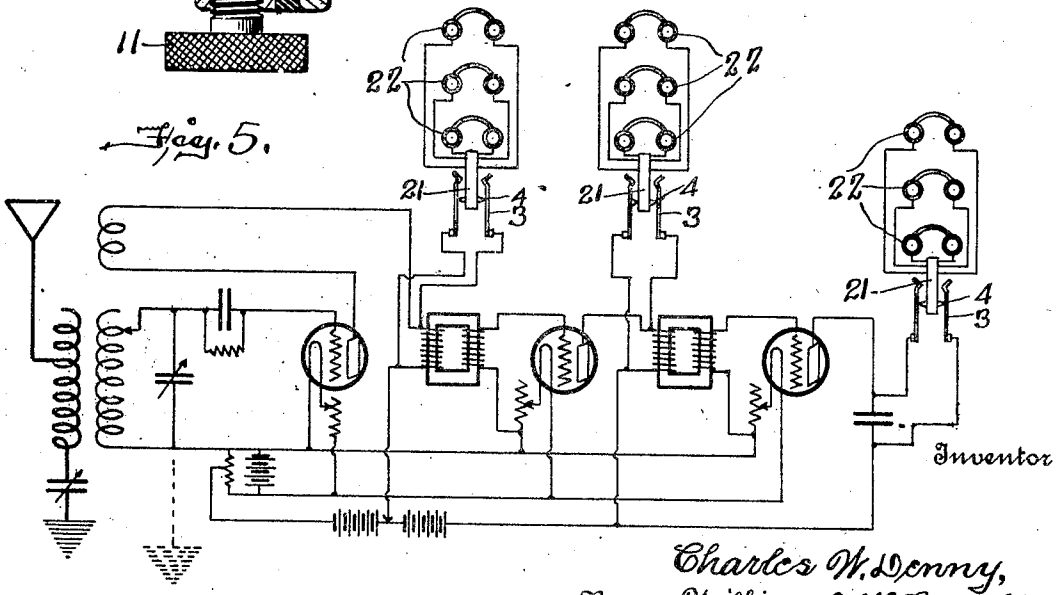


Fig. 3.

Fig. 4.

Fig. 5.



Inventor

Charles W. Denny,

By William E. McLaughlin,

Taulmin & Taulmin Attorneys

Patented Dec. 15, 1925. 1,565,263

UNITED STATES PATENT OFFICE.

CHARLES W. DENNY AND WILLIAM E. McLAUGHLIN, OF MIDDLETOWN, OHIO, ASSIGNORS TO THE BARKELEW ELECTRIC MANUFACTURING COMPANY, OF MIDDLETOWN, OHIO, A CORPORATION OF OHIO.

RADIO PHONE PLUG.

Application filed August 4, 1922. Serial No. 579,594.

To all whom it may concern:

Be it known that we, CHARLES W. DENNY and WILLIAM E. McLAUGHLIN, citizens of the United States, residing at Middletown, in the county of Butler and State of Ohio, have invented certain new and useful Improvements in Radio Phone Plugs, of which the following is a specification, reference being had therein to the accompanying drawing.

Our invention relates to telephone apparatus and in particular to such apparatus adaptable for radio equipment.

It is an object of our invention to provide a radio phone plug which will accommodate a plurality of phones on a single plug to enable the attachment of all the phones as a unit to various parts of the radio apparatus in connection with the different jacks.

It is a further object of our invention to provide a thoroughly insulated portable unit which will fit standard equipment.

It is an additional object of our invention to provide a plug which can be readily assembled and cheaply manufactured out of ordinary materials without the necessity of special apparatus or equipment for producing it.

It is a still further object to provide a plug which will insure positively the connection of the phones therewith and which will effect the connection of the phones within a limited area and positively hold the phones in such connection.

Referring to the drawings:

Fig. 1 is a side elevation of our phone plug installed on the board in contact with the jack.

Fig. 2 is a section taken longitudinally through our plug.

Fig. 3 in a front elevation looking in direction of the arrows from the position 3—3 of Fig. 1.

Fig. 4 is a rear elevation of the plug head with the stem in section taken on the lines 4—4 of Fig. 1.

Fig. 5 is a diagram showing the connection of the plug phones and the remainder of the apparatus in various positions.

Referring to the drawings in detail:

1 is a support which carries a jack 2 having the usual contact fingers 3 and 4 supported in the insulating block 5.

The plug itself is inserted in an aperture in 1 which is lined by a collar 6 having a projecting shoulder 7 against which the shoulder 8 of the plug abuts.

Referring to the plug itself, specifically it consists of a forward plate 9 on which a part of the contacts are made on one side of the circuit and a rear plate 10 with which the remainder of the contacts are made on the other half of the circuit. Set screws 11 are provided in each half to firmly engage the phone pins with the respective halves. Apertures 12 and 13 are provided for these pins. 12 is without insulation because the contact is to be made at that point with 10 while 13 is provided with insulation because it is desired to prevent contact of the phone with 9 at that point.

A similar condition exists in connection with a similar construction in 9 where at 14 the contact is to be made and at 15 no contact is to be made.

As desired an insulation plate is interposed between the two halves. This plate may be of a single piece including the insulating liners at 15 or these liners may be separated from the main insulating disc 16.

It will be observed that the internal pin 17 is in contact with 9 and extends outwardly to a contact head 18 which engages with the contact finger 4 of the jack.

Surrounding this member 17 is an insulating sleeve 19 which terminates in an insulating collar 20, which separates 18 from a sleeve 21. This sleeve is in contact with a collar 8. The collar 8 in turn is in contact with 10.

It will be noted that where the pins make contact with a plate that the aperture such as 12 or 14 is smaller than the aperture 13 and 15 to insure the contact with the plate.

The phones are designated 22.

It will be understood that we do not desire to be confined to the details of the particular embodiment which we have shown herein but comprehend within our invention necessary and suitable modifications to adapt it to all varying conditions.

Having thus fully described our invention, which we claim as new and desire to secure by Letters Patent, is:—

1. In a radio phone plug, a front plate having apertures, a rear plate having apertures adapted to register with the apertures

in the front plate, insulating means between said plates adapted to project through a part of the apertures in either plate, whereby when the plates are adjusted an insulated aperture in one plate will always be in register with a non-insulated aperture in the other plate.

2. In a radio phone plug, a front plate having apertures, a rear plate having apertures adapted to register with the apertures in the front plate, insulating means between said plates adapted to project through a part of the apertures in either plate, whereby when the plates are adjusted an insulated aperture in one plate will always be in register with a non-insulated aperture in the other plate and means on the periphery of each plate associated with the non-insulated apertures for engaging phone cord tips.

In testimony whereof, we affix our signatures.

CHARLES W. DENNY.
WILLIAM E. McLAUGHLIN.