

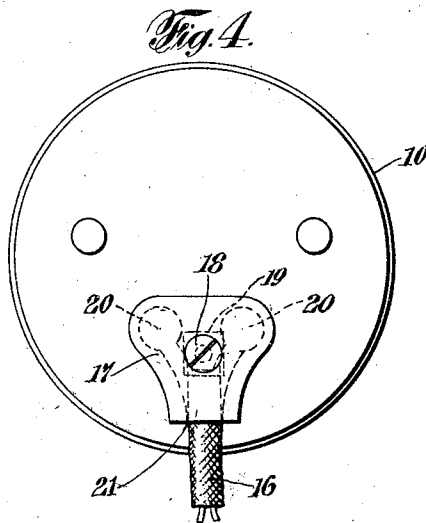
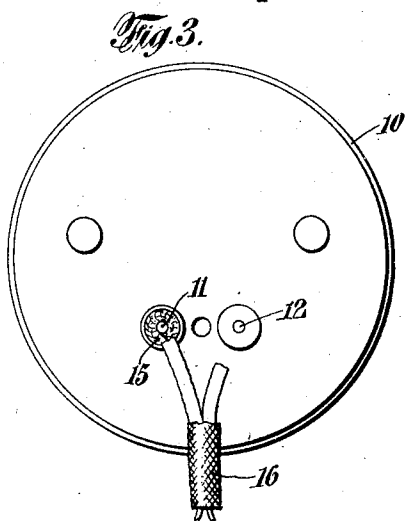
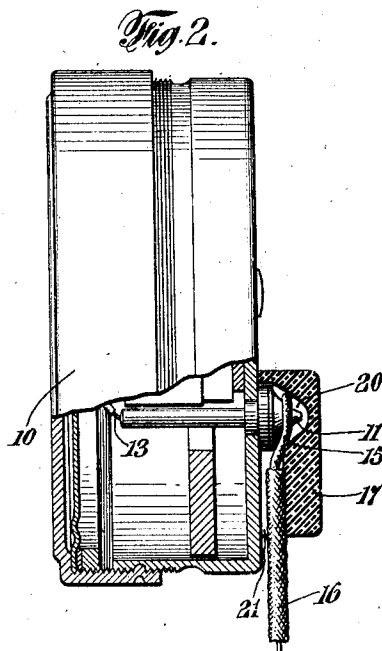
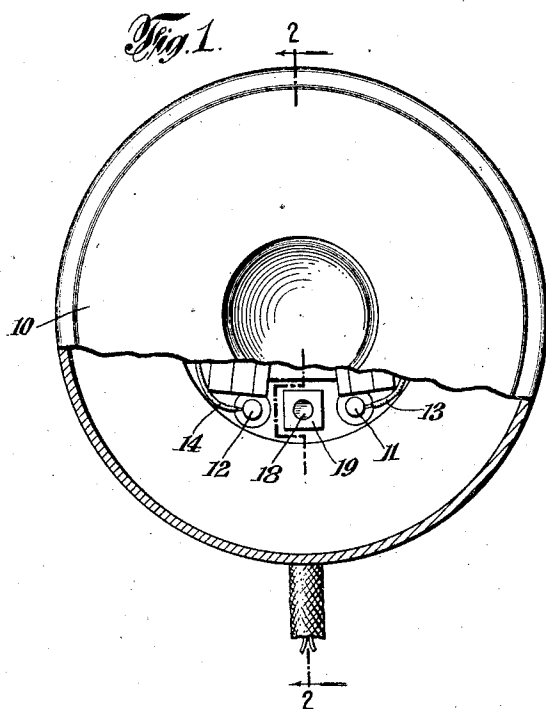
Nov. 20, 1923.

1,474,975

F. P. MANSBENDEL

ELECTRICAL COUPLING

Original Filed June 13, 1917



Inventor  
*Fritz P. Mansbendel*  
By his Attorney  
*W. K. Schuch*

## UNITED STATES PATENT OFFICE.

FRITZ P. MANSBENDEL, OF BROOKLYN, NEW YORK, ASSIGNOR TO ULTRA EARPHONE CO. INC., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## ELECTRICAL COUPLING.

Original application filed June 13, 1917, Serial No. 174,481. Divided and this application filed December 24, 1918. Serial No. 268,201.

*To all whom it may concern:*

Be it known that I, FRITZ P. MANSBENDEL, a citizen of France, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Electrical Couplings, of which the following is a specification.

The invention relates to electrical coupling apparatus, and more particularly to means for connecting flexible conductors to terminals leading to mechanism contained within a suitable casing, for example, that of a telephonic receiver or transmitter.

It has for its object to provide simple and convenient means for securing said conductors to a member, thus retained, in manner to allow of their ready replacement and to afford adequate protection for the said conductor ends and mechanism terminals, as well as to insure a positive contact between same.

The present invention is a division of an application filed by me the 13th day of June, 1917, Serial No. 174,481.

The nature of the invention will be best understood when described in connection with the accompanying drawings, showing the invention adapted to a telephonic receiver or transmitter, and in which drawings—

Fig. 1 is a plan of the instrument with a portion of the cap removed.

Fig. 2 is a partial vertical section thereof, taken on the line 2—2, Fig. 1.

Fig. 3 is a plan of the back of the casing surrounding the mechanism and of its projecting terminals to which the conductors are to be secured.

Fig. 4 is a similar view with the holding and protecting cap for the conductors attached.

Similar characters of reference designate corresponding parts thruout the several views.

Referring to the drawings, 10 designates a suitable casing retaining the desired electrical apparatus which, by way of example,

is shown as that of a telephone transmitter or receiver. Said apparatus has one or more terminals, as the terminals 11 and 12, projecting from the interior of the casing thru the back thereof, and from the inner end of which terminals suitable conductors 13 and 14 lead to the apparatus proper. The terminals 11 and 12 are insulated from each other in passing thru the back of the casing 10, which is substantially sealed. The outer ends of said terminals, projecting beyond the casing, are preferably concaved slightly and are adapted to receive suitable eyes or the like 15 at the ends of a pair of flexible conductors 16, or said ends may be simply bent over, as is well understood. In order to insure a good contact between the terminals and the ends of the respective conductors, as well as to protect the connection against external injury and afford means for convenient replacement of the conductors, a cap 17, of insulating material, is designed to fit over the said eyes and projecting terminals and is attached to the casing wall in any suitable manner, for example by means of a screw 18 which passes thru the said cap and the said casing wall into a nut 19 held against turning within the casing. Cap 17 is provided with recesses 20, conforming to the terminals 11 and 12, to permit its base to fit upon the back of the casing 10, and at the same time to press the eyes over the said terminals to insure thereby a good contact, as well as to serve to seal the connection. The conductors 16 are brought out thru a suitable outlet 21 cut into the underface of the cap 17, the entire attachment thus presenting a smooth and finished appearance and affording a seal for the mechanism and cover for the conductor ends which are firmly clamped upon and spread over the terminals. A positive contact is thereby insured without in any way disturbing the internal circuit; and the said conductors, furthermore, may be readily and conveniently detached from the instrument for replacement etc. by merely removing the screw 18.

## I claim:

The combination with an instrument casing having terminals in the form of a cone and located upon the exterior thereof; of an under-cut cap member adapted to receive and locate the looped ends of conductors fitted over said conical portions of the terminals, cover same and clamp said looped ends thereto, and means to removably attach said cap to the instrument casing. 10

Signed at New York, in the county of New York and State of New York, this 23rd day of December, A. D. 1918.

FRITZ P. MANSBENDEL.