Jan. 5, 1926. 1,568,721

J. H. BUTCHER ET AL

TELEPHONE HEAD SET

Filed Dec. 11, 1923

Fig. 1

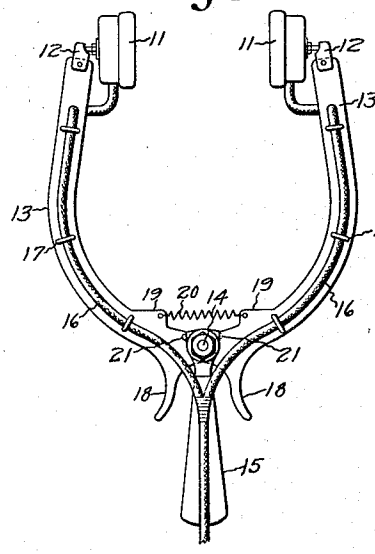
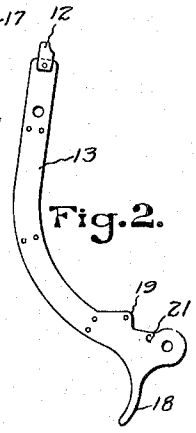


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN HENRY BUTCHER, OF RUGBY, AND ARTHUR PRIMROSE YOUNG, OF KENILWORTH, ENGLAND, ASSIGNORS TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

TELEPHONE HEAD SET.

Application filed December 11, 1923. Serial No. 679,973.

To all whom it may concern:

Be it known that we, JOHN HENRY BUTCHER and ARTHUR PRIMROSE YOUNG, subjects of the King of Great Britain, residing, respectively, at Rugby and at Kenilworth, in the county of Warwick, England, have invented certain new and useful Improvements in Telephone Head Sets, of which the following is a specification.

Our present invention relates to telephone head sets and has for its object means whereby a cheap and efficient head attachment may be constructed having ear-pieces which are easily and naturally adjustable to fit comfortably over the ears for use in the reception of telegraphy or telephony whether wireless or ordinary. A further object of this invention is the construction of a head set which is specially adapted for use by ladies so as to interfere as little as possible with their coiffure, the yoke of the ear-piece supports passing beneath their chins.

Our invention broadly consists in the construction of head sets so that relative movement between the ear-pieces as controlled by levers or their equivalent formed integrally with or attached to the ear-piece supports, the ear-pieces being normally held a predetermined minimum distance apart by resilient means.

Our invention further consists in providing the ear-piece supports with levers or an equivalent mechanism arranged in such a way that the hand of a person picking up the head set can at the same time actuate these levers in a natural manner to move the ear-piece apart against the action of resilient means.

It should be understood that the ear-pieces must be mounted upon their supports in a substantially rigid manner; that is to say, if a mounting giving universal movement is employed, means must be provided for limiting this movement to a predetermined amount in order to prevent the ear-pieces from falling into a position which would hinder the head set from being placed over the user's ears.

The novel features which we believe to be characteristic of our invention are set forth with particularity in the appended claims. Our invention itself, however, both as to its organization and method of operation will best be understood by reference to the following description taken in connection with the accompanying drawing in which Fig. 1 illustrates a preferred form of our invention and Fig. 2 is a view of the supporting member of Fig. 1.

Referring now to Fig. 1, the ear-pieces 11 are mounted through any suitable connection providing limited universal movement, such as a ball and socket joint 12, upon supporting members 13, these latter being pivoted upon a bolt 14 carried upon the handle 15. The conducting leads 16 may conveniently be brought along the ear-piece supports, being held in position by hooks 17 and being united in the neighborhood of the handle. At the ends of the supports away from the ear-pieces there are formed trigger-shaped levers 18 and projecting portions 19, between which latter is arranged a spring 20 adapted to draw the ear-pieces towards one another. Stops 21 provided upon the supports are arranged to limit the distance that the ear-pieces can travel towards one another by bearing against the upper end of the handle 15. The supporting members, together with the trigger-shaped portions, form a pair of uncrossed tongs, and it will be seen that the levers 18 are so shaped and positioned, with respect to the handle 15, that, when a person proposes to use the head set, his forefinger and thumb will naturally grasp the said levers; and upon applying pressure the ear-pieces will be moved apart to enable the head set to be placed over the user's ears. Upon his withdrawing pressure from the levers 18, the spring 20 draws the ear-pieces towards one another until they rest comfortably upon the user's ears, whereupon the set is ready for the reception of telephony, etc.

What we claim as new and desire to secure by Letters Patent of the United States, is,—

1. In a telephone head set, a handle, a pair of levers pivotally mounted on said handle and normally biased toward each other, a pair of ear pieces mounted on said levers, and means secured to said levers

whereby said ear pieces may be moved away from each other.

2. In a telephone head set, a handle, a bolt attached thereto, a pair of levers pivotally mounted on said bolt and normally biased toward each other, a pair of ear pieces mounted on said levers, and means secured to said levers adjacent said handle whereby said ear pieces may be moved away from each other.

In witness whereof, we have hereunto set our hands this nineteenth day of November, 1923.

JOHN HENRY BUTCHER.
ARTHUR PRIMROSE YOUNG.