

Dec. 28, 1943.

R. E. WIRSCHING

2,337,953

TELEPHONE HEADSET

Filed Jan. 28, 1942

2 Sheets-Sheet 1

FIG. 1

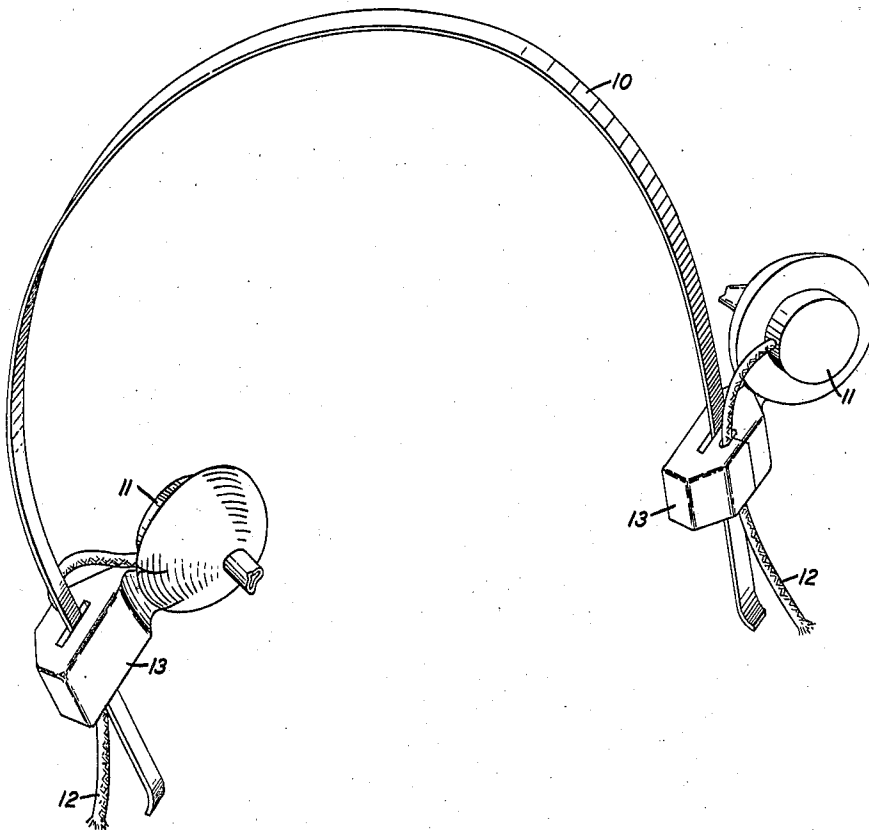
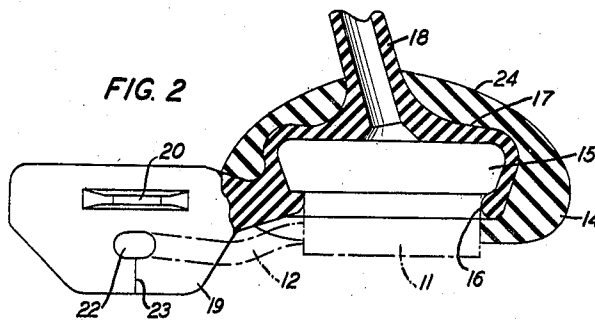


FIG. 2



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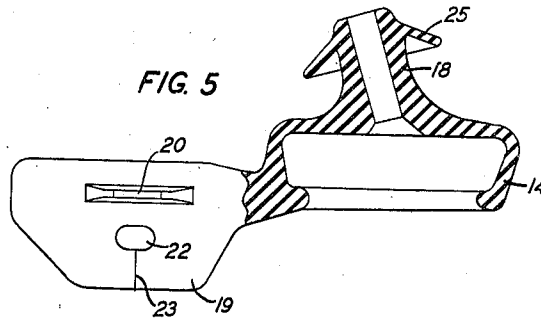
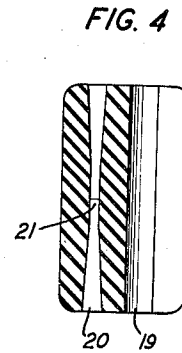
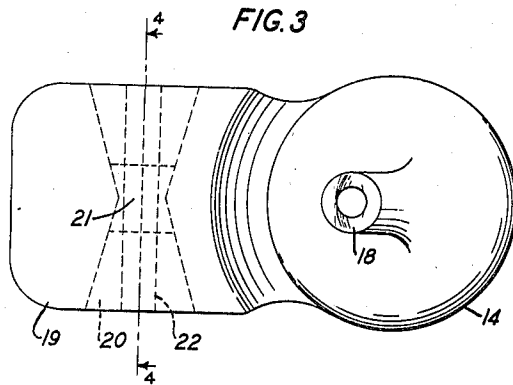
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2 Sheets-Sheet 2



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TELEPHONE HEADSET

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Application January 28, 1942, Serial No. 428,494

5 Claims. (Cl. 179—156)

This invention relates to telephone headsets and more particularly to support members for mounting receivers upon the head-band in such sets.

Telephone headsets comprise, in general, a head-band adapted to fit about a portion of the head of the user of the headset, one or more telephone receivers, and a linkage or supporting system for mounting the receivers on the head-band. Frequently, this linkage or supporting system is made adjustable to accommodate the head-band to the head of the user in the most comfortable manner and also to enable use of headsets of essentially the same construction by a variety of people. Such linkage or supporting systems heretofore used have been of relatively complex construction and have required considerable manipulation to adjust the headset to the head of the user. In addition, such systems used heretofore have suffered from limitations in the degrees of freedom obtainable in adjustment thereof.

One object of this invention is to enable universal adjustment of the receiver or receivers included in telephone headsets and thus to realize not only maximum comfort to the headset user but also ready adaptation of headsets of the same construction to use by a variety of individuals.

Another object of this invention is to simplify the construction of telephone headsets.

In accordance with one feature of this invention, in a headset of the general construction described above, the linkage or supporting system for the receiver comprises a universally flexible member, for example, a molded member of soft rubber, having a body portion provided with a recess into which a receiver unit may be snapped and having also a shank portion provided with a slot or aperture adapted to receive the head-band, the slot or aperture being so constructed that the member is slidably adjustable on the head-band and that this member will be locked frictionally to the head-band in any desired position.

In accordance with another feature of this invention, the universally flexible member is provided with an integral earpiece portion, for example, a portion including a tubular part insertable into the ear canal of the user of the headset.

The invention and the above-noted and other features thereof will be understood more clearly and fully from the following detailed description

with reference to the accompanying drawings in which:

Fig. 1 is a perspective view of a telephone headset illustrative of one embodiment of this invention;

Fig. 2 is an enlarged view, partly in section, illustrating the receiver mounting member included in the headset shown in Fig. 1 and showing also an ear cushion which may be employed therewith;

Fig. 3 is a plan or face view of the receiver mounting member;

Fig. 4 is a view in section along plane 4—4 of Fig. 3; and

Fig. 5 is an enlarged view, partly in section, of a receiver mounting member illustrative of another embodiment of this invention.

Referring now to the drawings, the telephone headset illustrated in Fig. 1 comprises a head-band 10, which may be a formed strip of metal, a pair of telephone receivers 11 having conductor cords 12 extending therefrom, and receiver supporting members, designated generally as 13, for mounting the receivers 11 upon the head-band 10. Each of these members 13 is molded in one piece of soft rubber or the like.

As shown clearly in Figs. 2, 3 and 4, each of the supporting members 13 comprises a body portion 14 having a recess 15 for accommodating a receiver, shown in phantom in Fig. 2, and provided with an annular bead 16 for fitting into an annular groove in the casing of the receiver whereby the receiver may be snapped into the recess and is securely locked in position. Each supporting member 13 includes also an integral earpiece portion 17 having an inclined tapered tubular part 18 insertable into the ear canal, and a shank portion 19 which is provided with an aperture or elongated slot 20 for accommodating the head-band 10. The slot 20, as shown clearly in Figs. 3 and 4, has tapered walls so that there is provided substantially midway between the ends thereof a section of restricted dimensions, indicated at 21, assuring good frictional contact between the material bounding this section and the head-band while allowing sliding of the supporting member along the head-band to a desired position. The shank portion 19 is provided also with a slot 22 for receiving the conductor cord 12, a cut 23 being provided in the shank portion adjacent the slot 22 to facilitate insertion and removal of the cord.

In some instances, particularly those where the headset is worn for considerable periods of time, an ear cushion 24, as of sponge rubber, may be

provided, this cushion, as shown in Fig. 2, having an aperture for accommodating the tubular portion 18 of the earpiece and being adapted to be snapped in place over the earpiece.

In the embodiment of this invention illustrated in Fig. 5, the linkage or supporting member, which is similar to that shown in Figs. 2, 3 and 4 and described hereinabove, comprises, in addition, a flange 25 on the tubular portion 18, integral therewith and of the same material as the supporting member. This flange 25 serves to limit the depth of insertion of the portion 18 into the ear canal and also to provide a close acoustic seal between the portion 18 and the ear.

It will be appreciated that the linkage or supporting members constructed in accordance with this invention are readily manufacturable in quantity. Also it will be appreciated that such members provide ready adjustment of the position of the receivers associated therewith inasmuch as they are easily slidable upon the head-band, lock in position automatically and because of their resilience and consequent universal freedom of movement, automatically locate the receivers in the proper and most comfortable position at the ears of the user of the head-band.

Although specific embodiments of the invention have been shown and described, it will be understood that they are but illustrative and that various modifications may be made therein without departing from the scope and spirit of this invention as defined in the appended claims.

What is claimed is:

1. In a telephone headset including a head-band and a telephone receiver, a one-piece soft rubber member comprising a body portion having a recess for accommodating the receiver and a shank portion extending laterally from said body portion and having extending therethrough a bore for slidably accommodating a portion of the head-band.

2. In a telephone headset including a head-band and a telephone receiver, a unitary resilient

member comprising a body portion having a recess for accommodating the receiver, an integral apertured earpiece portion extending from said body portion, and a shank portion provided with an aperture for slidably accommodating a portion of the head-band.

3. In a telephone headset including a head-band and a telephone receiver, a one-piece soft rubber supporting member comprising a body portion having a recess for accommodating the receiver, an apertured earpiece portion extending from said body portion, and a shank portion extending laterally from said body portion and having extending therethrough an aperture provided with a restricted portion for frictionally receiving a portion of the head-band.

4. In a telephone headset including a head-band and a telephone receiver, a unitary soft rubber supporting member comprising a body portion having a recess for accommodating the receiver and a shank portion having an aperture extending therethrough for accommodating a portion of the head-band, said aperture tapering inwardly from one end thereof to provide a restricted bearing surface for frictionally engaging the head-band.

5. In a telephone headset including a receiver and a headband having a strip portion, a one-piece resilient member comprising a body portion having an annular wall bounding a recess for accommodating said receiver, said wall being adapted to grasp said receiver and thereby hold it in said recess, a tubular earpiece member projecting from said body portion and defining a passageway communicating with said recess, and a shank portion extending laterally from said body portion and having extending therethrough a bore of rectangular section for receiving said strip portion of said headband, said bore being provided intermediate its ends with a restricted portion for frictionally engaging said strip portion.

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