

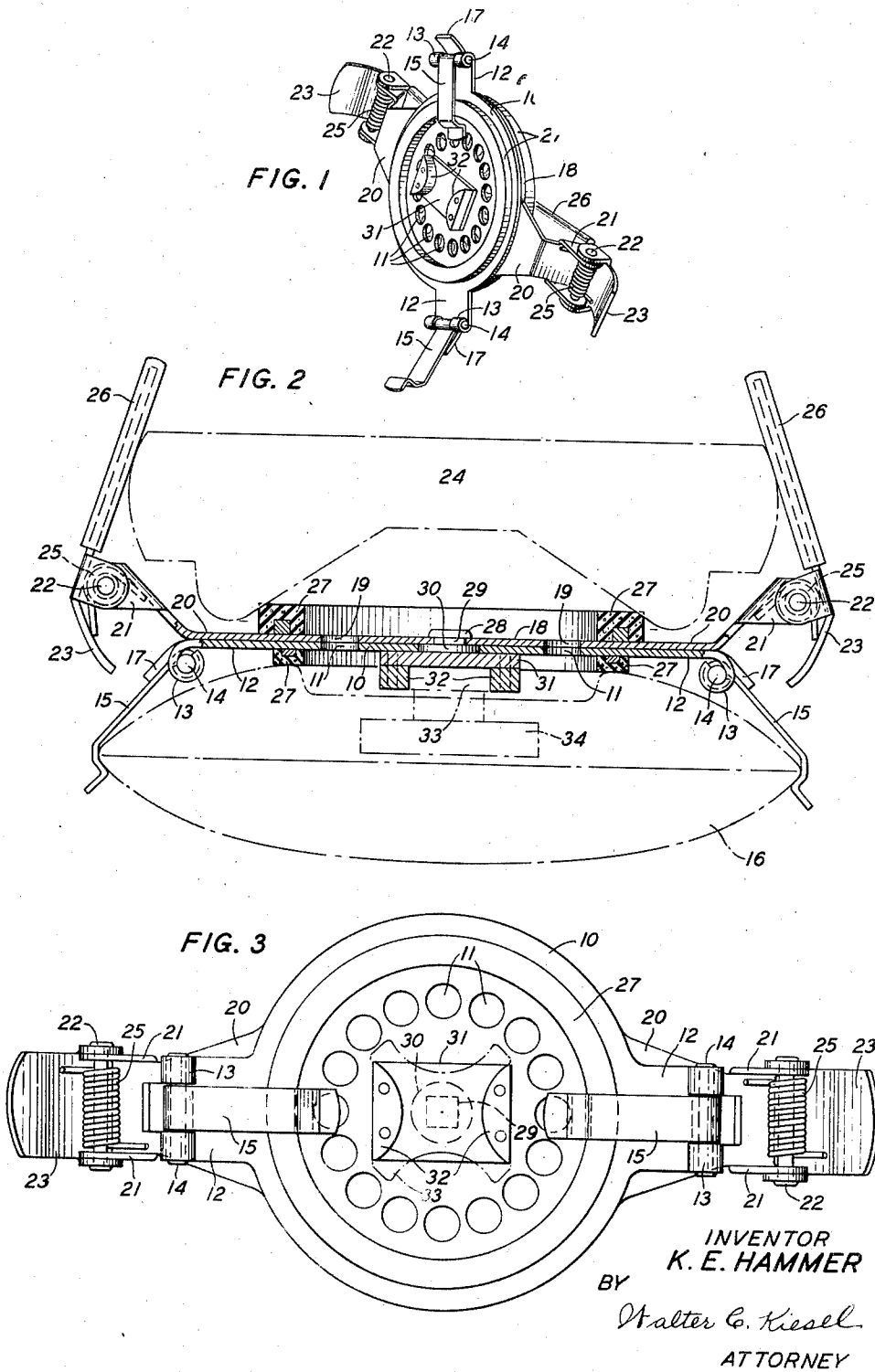
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MOUNTING ATTACHMENT FOR TELEPHONE INSTRUMENTS

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MOUNTING ATTACHMENT FOR TELEPHONE INSTRUMENTS

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This invention relates to attachments for telephone instruments and more particularly to such attachments for mounting an audiphone transmitter in cooperative association with a telephone receiver.

Telephone apparatus used by those whose hearing is impaired usually includes a telephone transmitter, commonly referred to as an audiphone transmitter, for translating sound waves into electrical impulses which are amplified and retranslated into sound waves by a suitable acoustic device. In order that the volume and intensity of the sound produced by the acoustic device may be controlled to suit the requirements of the individual using the apparatus, the transmitter may be provided with a device, such as a rheostat, for varying the output of the transmitter.

In using such apparatus in connection with a telephone conversation, the one whose hearing is impaired places the audiphone transmitter in cooperative relation with the telephone receiver and holds it in such relation. This, of course, occupies one hand of the user and his or her other hand may be occupied in holding the telephone receiver or hand telephone, as the case may be, and not only may cause inconvenience to the user but also may necessitate temporary interruption of the telephone conversation if such user desires to make notes of the conversation. Furthermore, if the user desires to vary the intensity or volume of the sound he receives, it is necessary to interrupt the telephone conversation and make the necessary adjustments of the control device, such as the rheostat, in the audiphone transmitter.

One object of this invention is to facilitate the association of an audiphone transmitter with a telephone receiver whereby the user of the audiphone apparatus may have at least one hand free and unoccupied during the course of a telephone conversation.

Another object of this invention is to facilitate control of the output of an audiphone transmitter when utilized in cooperation with a telephone receiver.

In one illustrative embodiment of this invention, the attachment comprises a pair of support or mounting members one of which is adapted to be affixed to the ear-piece, cap or housing of a telephone receiver and the other of which is adapted to accommodate and hold an audiphone transmitter.

In accordance with a feature of this invention, the two support or mounting members are made rotatable relative to each other and the member

adapted to be affixed to the telephone receiver is provided with means cooperating with the control member of the device on the transmitter for varying the output thereof, whereby rotation of the other support or mounting member with respect to the first results in variations in the output of the transmitter.

The invention and the foregoing and other features thereof will be understood more clearly and fully from the following detailed description with reference to the accompanying drawing in which:

Fig. 1 is a perspective view of an attachment illustrative of one embodiment of this invention;

Fig. 2 is an enlarged side view, partly in section, of the attachment shown in Fig. 1 illustrating the association thereof with a telephone receiver and an audiphone transmitter, the receiver and transmitter being shown in phantom; and

Fig. 3 is an enlarged front view of the attachment shown in Fig. 1.

Referring now to the drawing, the attachment comprises a front support or mounting member 10, which may be circular or of other form, having therein a plurality of apertures 11 and having also a pair of diametrically opposite extensions 12 each of which is provided with socket portions 13. The socket portions 13 accommodate pins or shafts 14 fitted therein, on each of which a finger 15 is pivotally mounted, the fingers 15 being bent adjacent their free ends to conform to and engage the periphery of an audiphone transmitter 16, as shown clearly in Fig. 2. Preferably, the extensions 12 are provided with inclined end portions 17 which serve as stops to limit outward movement of the fingers 15.

Secured to the front support member 10 is a second support member 18 having therein a plurality of apertures 19 spaced in the same relation as the apertures 11 and having also a pair of diametrically opposite extensions 20. The extensions 20 have flanges 21 into which pins or shafts 22 are fitted, the pins or shafts 22 having pivotally mounted thereon fingers 23 for engaging the ear-piece or cap 24 of a telephone receiver. Coiled springs 25, biased to urge the fingers 23 into firm engagement with the ear-piece or cap 24, encompass the pins or shafts 22. Preferably, the fingers are provided with soft, pliant coverings 26, such as soft rubber sleeves, to assure a high friction engagement with the ear-piece or cap 24 whereby undesired relative movement of

the attachment with respect to the ear-piece or cap is prevented.

Preferably also the support or mounting members 10 and 18 have affixed thereto resilient annuli 27, for example of soft rubber, which form acoustic seals between the support or mounting members and the audiphone transmitter 16 and ear-piece or cap 24 so that sound waves emanating from the receiver will be communicated to the diaphragm of the transmitter without substantial diminution.

The support or mounting members 10 and 18 are joined at their centers by a stud 28 having a polygonal, e. g., square, portion 29 fitted in an aperture of the same shape in the member 18, a circular portion 30 extending through the member 11, and an enlarged head 31 having thereon raised segments 32. Because of the form of the portion 31 fitted in the central aperture in the mounting or support member 18, it will be noted that the stud 28 is fixed with respect to this member while the support or plate member 10 is rotatable with respect to the member 18 about the stud.

The raised segments 32 engage a knob 33, which may be generally cross-shaped as shown in Fig. 3, extending from the face of the transmitter 16. The knob 33 is rotatable with respect to the transmitter and operable to vary the resistance of a rheostat 34 in the transmitter, which controls the output of the transmitter.

When the mounting attachment is used, the audiphone transmitter 16 is securely held in place on the ear-piece or cap 24 of the telephone receiver by the fingers 23 and the output of the transmitter may be varied to suit the desires of the user by rotating the transmitter whereby the resistance of the rheostat is varied. Thus the use of an audiphone transmitter in conjunction with a telephone receiver or hand telephone is greatly facilitated with little inconvenience to the user during the course of a telephone conversation.

Although a specific embodiment of this invention has been illustrated and described, it will be understood that it is 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. An attachment for a telephone instrument having a control member, the attachment comprising a support portion, a second support portion having means for receiving and holding the

telephone instrument, said second support portion being rotatable with respect to said first portion, and means fixed to said first portion for engaging said control member whereby said member may be actuated by rotation of one of said portions with respect to the other.

2. An attachment for a telephone instrument having a rheostat controlling element extending therefrom, the attachment comprising a pair of support members having juxtaposed apertured plate portions, said members being rotatable with respect to one another, one of said members having thereon means for supporting the telephone instrument with its face opposite said plate portions, and means fixedly mounted upon the other of said members for engaging said rheostat controlling element whereby said element may be actuated by rotation of said one member with respect to the other.

3. An attachment in accordance with claim 2 comprising an annular resilient member carried by said one support member on the plate portion thereof and surrounding the apertures therein, said resilient member being engageable by the face of said instrument to form an acoustic seal therebetween and said one support member.

4. An attachment for mounting an audiphone transmitter upon a telephone receiver, the transmitter having a volume controlling element and a rotatable member for actuating said element, the attachment comprising a support member having a central apertured plate portion, fingers mounted on said support for supporting the transmitter with its face opposite said apertured plate portion, a second support member having an apertured portion opposite said plate portion and having also means for securing the mounting upon the telephone receiver with said second apertured portion opposite the face of said receiver, means securing said first support member in rotatable relation upon said second support member, and means mounted in fixed position upon said second support member for engaging said rotatable actuating member, whereby said actuating member is operable by rotation of one of said support members relative to the other.

5. An attachment in accordance with claim 4 comprising resilient annuli on said support members and encompassing said apertured portions, said annuli being engageable by the faces of the receiver and transmitter to form acoustic seals therebetween and said apertured portions.

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