June 30, 1953 E. ZAKOS 2,644,043

SHOULDER MOUNTED SUPPORT FOR TELEPHONE TRANSMITTER-RECEIVERS

Filed July 28, 1949

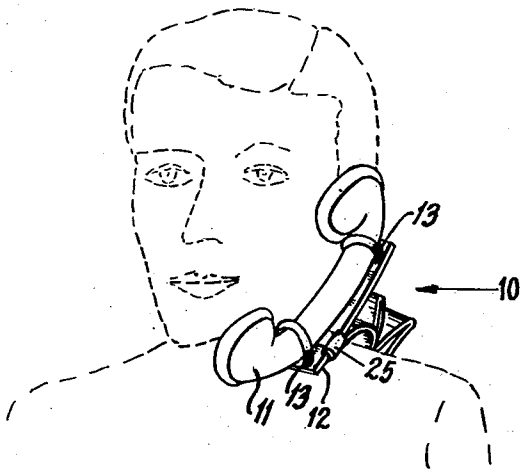

FIG.1

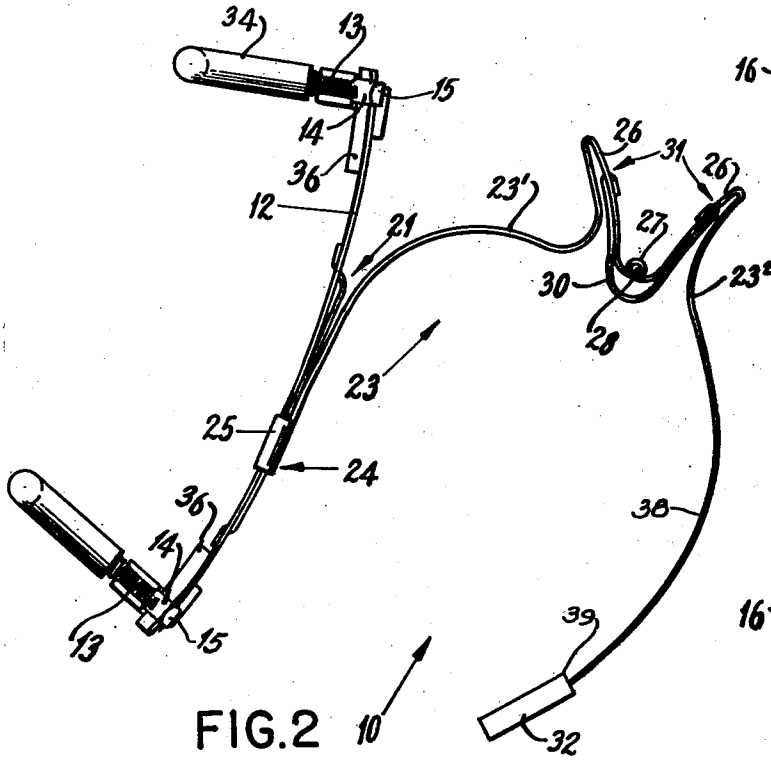

FIG.2

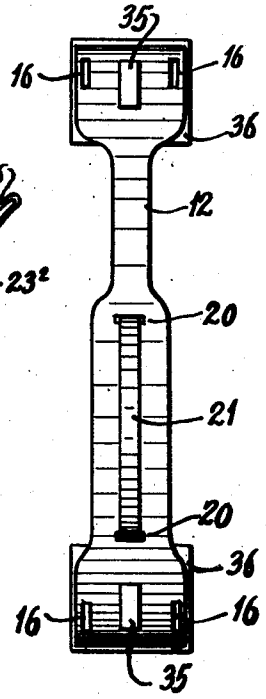

FIG.3

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Patented June 30, 1953 2,644,043

UNITED STATES PATENT OFFICE

2,644,043

SHOULDER MOUNTED SUPPORT FOR TELEPHONE TRANSMITTER-RECEIVERS

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Application July 28, 1949, Serial No. 107,171

2 Claims. (Cl. 179—157)

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This invention relates to telephones and particularly to a supporting device for the transmitter-receiver of telephones.

An object of this invention is to provide a device which will hold the transmitter-receiver in position relative to the mouth and ear of the user whereby both hands of the user are free for other necessary operations.

Another object of this invention is to provide a supporting device which will grip the transmitter-receiver at two points along its length and which has an automatically adjustable clamp designed to grip the shoulder of the user irrespective of the size of the shoulder.

Another object of this invention is to provide a supporting device for a telephone transmitter-receiver comprising an elongated arm having means for encircling and gripping the receiver at two points spaced-apart along its length, and having an inverted substantially U-shaped shoulder clamp slidable up or down along the arm and being resiliently retained in adjusted position on the arm.

With the above and other objects in view, the invention will be hereinafter more particularly described, and the combination and arrangement of parts will be shown in the accompanying drawings and pointed out in the claims which form part of this specification.

Reference will now be had to the drawings, wherein like numerals of reference designate corresponding parts throughout the several views, in which:

Figure 1 is a perspective view showing the supporting device in operative position on a person.

Figure 2 is a front elevation of the supporting device in inoperative position.

Figure 3 is a plan view of the receiver gripping arm shown in Figure 2.

In the illustrated embodiment of the invention, the numeral 10 indicates a supporting device for the transmitter-receiver 11 of a desk type telephone.

As best shown in Figure 2, the supporting device 10 comprises an elongated arm 12 at each end of which is secured a coil spring 13 which is suitably held secured to the arm 12 in circular form by tubular clamps 14 secured respectively at each end of the springs 13. The tubular clamps 14 have hooked ends 15 which engage two slots 16 at each end of the arm 12.

The arm 12 has two apertures 20 through which a leaf spring 21 is secured by having its ends pass through the apertures 20 and terminate in reverse relation against the arm and so as to

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cause the body of the leaf spring 21 to be in slightly spaced-apart relation from the arm. In this position, when the spring 21 is pressed against the arm, it rebounds to its normal spaced-apart relation.

Slidably mounted on the arm 12 is an inverted U-shaped shoulder clamp 23, one end 24 of which is bent at opposite sides to form outwardly turned beads 25 which are mounted in slidable relation with the sides of the arm 12. The lower portion 24 of the clamp 23 is thus in resilient contacting relation with the arm 12 and may be adjusted up or down thereon and be frictionally retained on the arm 12 due to the resilient engagement of the beaded portion of the end portion 24 of the arm 12 with the spring 21.

The shoulder clamp 23 is preferably made of two parts 23′, 23^2, each having a reversely folded portion 26 terminating in loops 27. A pivot pin 28 passes through the loops of both clamp members 23′ and 23^2 and maintains the two members in unitary hinge forming relation.

An elongated leaf spring 30 is threaded through slots 31 in the folded portions 26 and maintains the said members in resilient unitary relation so that when a force is applied tending to bring one of the members away from the other member the leaf spring 30 automatically returns the two hinge members to their normal close relation.

It will thus be seen that it is possible to raise or lower the U-shaped shoulder clamp 23 in relation to the arm 12 so that the shoulder clamp may be placed on the shoulder of the user and the receiving end portion of the instrument vertically adjusted and brought directly in contact with an ear of the user. In this position, the user may receive messages through the upper portion of the receiver and the lower portion of the instrument is spaced away from his mouth near enough so that he can talk into the instrument while the instrument is supported on his shoulder and both his hands are free for any operation he desires. It is to be noted that the normal upright position of the head of the user is not disturbed.

It is to be noted that a tubular rubber sheath grip 32 is placed at the lower end of the member 23^2 to assist in maintaining the grip of the clamp 23 on the shoulder of the user.

As shown in Figure 2, it will be noted that the rear member 23^2 is considerably curved at 38 to cause the sheath grip 32 to forcibly engage the back of the user; also that the sheath grip 32 terminates at its upper surface in an inwardly extending projection 39. These serve to provide positive inter-engagement with the shoul-

der of the user for preventing disengagement of the supporting device from the shoulder.

It is also to be noted that rubber plates **36** are suitably mounted on the arm **12** to provide a more positive grip on the receiver. Also that rubber tubing **34** is placed over the springs **13** to further provide a more positive grip on the receiver.

It will thus be seen that this supporting device can be installed without the use of tools for the adjustment of bolts and nuts, etc. It will also be seen that this supporting device for telephone receivers has three points of support, the lowest points of the arms **23'**, **23²** and the lower surface of the leaf spring **30**. The three point support has been found to function in unitary relation in the act of gripping the shoulder.

The arm **12** has rectangular apertures **35** which serve to receive rubber plates **36** against which the receiver **11** is supported.

It is to be noted that the telephone transmitter receiver herein disclosed remains resiliently attached to the shoulder of the user whether he is in a sitting position or in a standing position.

It is also to be noted that the pivot **28** and the spring **30** are positioned directly on top of the shoulder of the user and that the clamp parts **23'** and **23²** are reversely folded upwardly to permit their spreading apart to fit shoulders of all sizes. The pivot **28** is directly at the topmost part of the shoulder.

It is also to be noted that the transmitter receiver **11** may be easily turned around in the rubber tubing **34** without disconnecting the parts, for use with the right ear or with the left ear.

In accordance with the patent statutes I have described and illustrated the preferred embodiment of my invention, but it will be understood that various changes and modifications can be made therein without departing from the spirit of the invention as defined by the appended claims:

I claim:

1. A shoulder mounted supporting device for a telephone transmitter-receiver frictionally slidably adjustable for use by many persons to bring the receiving end portion of said transmitter-receiver directly in contact with an ear of the user, comprising an elongated arm having means for encircling and gripping said receiver at two points spaced-apart along its length, an inverted substantially U-shaped shoulder clamp slidable along said arm and being resiliently retained in vertically adjusted position on said arm to suit the distance between an ear and a shoulder of the user, said shoulder clamp comprising front and rear pivoted members, whereby said shoulder clamp is automatically adjustable to overlay the front and rear sides of the shoulder of the user and to grip the shoulder irrespective of the size thereof, a tubular rubber sheath grip engaging the lower end portion of said rear member and having an inwardly extending projection, said rear member being considerably curved to cause said sheath grip to forcibly engage the back of the user, said supporting device remaining resiliently attached to the shoulder of the user both in sitting or in standing positions.

2. A shoulder mounted supporting device for a telephone transmitter-receiver frictionally slidably adjustable for use by many persons to bring the receiving end portion of said transmitter-receiver directly in contact with an ear of the user, comprising an elongated arm having means for encircling and gripping said receiver at two points spaced-apart along its length, an inverted substantially U-shaped shoulder clamp slidable along said arm and being resiliently retained in vertically adjusted position on said arm to suit the distance between an ear and a shoulder of the user, said shoulder clamp comprising front and rear relatively movable hinged members which are resiliently supported for movement to and from each other, a tubular rubber sheath grip engaging the lower end portion of said rear member and having an inwardly extending projection, said rear member being considerably curved to cause said sheath grip to forcibly engage the back of the user, said shoulder clamp being designed to overlay the front and rear sides of the shoulder of the user and said sheath grip to engage the back of the user irrespective of the size of said shoulder, said supporting device remaining resiliently attached to the shoulder of the user both in sitting or in standing position.

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