

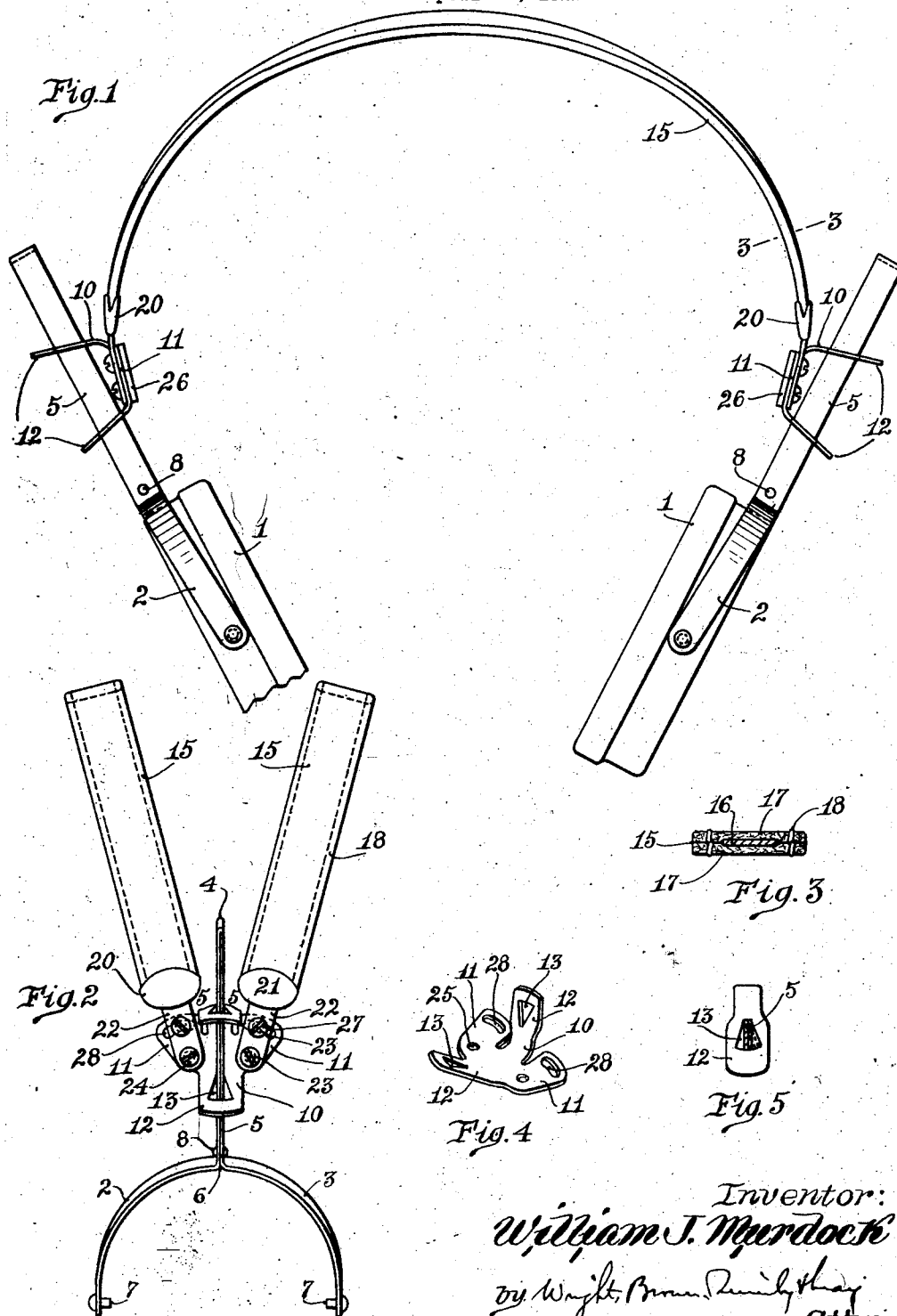
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W. J. MURDOCK

TELEPHONE HEAD SET

Filed April 18, 1922



UNITED STATES PATENT OFFICE.

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TELEPHONE HEAD SET.

Application filed April 18, 1922. Serial No. 554,957.

To all whom it may concern:

Be it known that I, WILLIAM J. MURDOCK, a citizen of the United States, residing at Chelsea, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Telephone Head Sets, of which the following is a specification.

This invention relates to telephone head sets and provides a simple and inexpensive construction by which a pair of telephone receivers may be supported over the ears of the wearer and which is adjustable to conform to the wearer's head.

For a more complete understanding of this invention reference may be had to the accompanying drawings in which

Figure 1 is a front elevation of the set, a portion of one of the telephone receivers being broken away.

Figure 2 is an end elevation, the receivers being removed.

Figure 3 is a section on line 3—3 of Figure 1.

Figure 4 is a perspective of a clamping connection plate.

Figure 5 is a detail section on line 5—5 of Figure 2.

Referring first to Figure 1, at 1 are indicated a pair of telephone receivers of any suitable or usual construction. Each receiver is pivoted between a pair of arms 2 and 3 (see Figures 1 and 2) formed from a strip which is bent or folded back on itself in contacting relation centrally as at 4, as shown in Figure 2, to form a flat comparatively thin shank or stern portion 5, the ends of the strip being then separated at a point 6 and outwardly curved to form the arms 2 and 3. At the ends of these arms are fixed inwardly extending pivot pins 7 which may be engaged in suitable pivotal openings in the receivers 1 to permit the receivers to rock on these pivots.

The side portions of each shank 5 may be fastened together by means such as a rivet 8 passed therethrough adjacent the point 6. These shanks 5 of the receiver supports are adjustably mounted in clamping plates 10, one of these plates being shown detached in Figure 4. Each plate 10 has a pair of op-

positely disposed laterally extending ears 11 and between these ears, spring portions as 12, are bent from the plane of the plate toward parallelism with each other. Each portion 12 is provided with an opening 13 to receive the shank 5 which is passed through both openings 13 of one of the plates 10. The outer ends of the portions 12 tend to spring away from parallelism with each other, so that the edges of the openings or perforations 13 clamp against the shank, tending to prevent endwise movement thereof relative to the plate. By pressing the outer ends of the spring portions 12 together, the shank may be released so that it may be adjusted lengthwise relative to the plate.

It is desirable to permit a slight rocking motion of each support 5 and for this purpose the perforations or openings 13 may be found segmental in shape so that the inner edge of the shank 5 bears at the apex of the segmental portion and the outer edge bears at some point along the circumference of the segment, this being shown more clearly in Figure 5 in which the shank is shown in full lines in a central position in the opening 13 and in dotted lines as rocked over to one side thereof about the inner edge as a pivot. This rocking motion may take place quite freely even though the ends of the spring portion 12 are in normal position tending to prevent longitudinal movement of the shank.

The clamping plates 10 also furnish means for attachment of the head bands 15 by which the receivers are sprung toward each other so as to hold in place against the ears of the wearer, the bands 15 extending over the top of the wearer's head. As shown each band comprises a curved flat spring element 16 provided with a cloth cover comprising sections 17 extending on either side of the spring band and stitched together near their margins as at 18. They may, however, be formed in any suitable way without departing from this invention.

For the purpose of attaching the bands to the plates each end of each band has fixed thereto an attaching clip 20 having a socket portion 21 crimped or otherwise fastened

over the end of the band and a flat portion 22 overlapping one side of the plate 10 and provided with spaced perforations 23. The perforation 23 at the end of this portion has passed therethrough a screw 24, or other pivotal connection as may be desired, which also passes through a perforation 25 in one of the ears 11 and into a backing or clamping piece 26 positioned against the opposite face of the plate 10. The other opening 23 has passed therethrough a screw 27 which passes through an arcuate slot 28 in the ear 11, this slot being struck about the center of the opening 25 as a center. The screw 27 also is threaded into the piece 26. By this means each fastening member 21 has a pivotal connection with the plate 10 and its pivotal movement is limited by the extent of the slot 28 while frictional resistance to its movement may be adjusted by adjusting the screws 24 and 27. Thus the central portions of the head bands 15 may be moved to approach or recede from each other as may be desired by the wearer.

Having thus described an embodiment of this invention it should be evident that many changes and modifications may be made therein without departing from its spirit or scope as defined by the appended claims.

I claim:

1. In a device of the class described, a strip folded back on itself in contacting relation to form a shank portion, the ends of said strip beyond said shank portion being spaced apart to receive and support between them a telephone receiver.

2. In a device of the class described, a strip bent back on itself to form a shank portion, the ends of said strip beyond said shank portion being spaced apart to receive and support between them a telephone receiver, and means for supporting said shank portion for rocking movement on an axis lengthwise of said shank portion at one side of its central axis.

3. In a device of the class described, a support for a telephone receiver having a shank portion formed of rectangular section, and means for supporting said portion with capability of rocking about one edge as an axis.

4. In a device of the class described, a head band, a plate fixed to each end of said band, each plate having a pair of spaced spring portions extending outwardly therefrom, and each portion having a segmental opening therethrough, and a telephone receiver support having a flat shank passed through the openings of each plate, said portions being normally sprung to prevent endwise movement of said shanks, but said segmental openings permitting a limited rocking motion thereof.

5. In a device of the class described, a

head band, a plate fixed to each end of said band, each plate having a pair of spaced spring portions having perforations there-through, and a telephone receiver support having a shank of different cross section from the shape of said perforations passed through the perforations of the spring portions of each plate, said spring portions normally preventing endwise movement of said shank but the shape of said perforations permitting a limited rocking motion thereof.

6. In a device of the class described, a pair of plates, a telephone receiver supported by each of said plates, a pair of head bands each pivoted at opposite ends to said plates, and means independent of said receivers for limiting the pivotal movements of said bands relative to said plates.

7. In a device of the class described, a pair of plates for supporting telephone receivers, a pair of head bands each pivoted at opposite ends to said plates, and pin and slot connections between said bands and plates adjacent their pivotal connections.

8. In a device of the class described, a pair of plates for supporting telephone receivers, a pair of head bands overlapping one side of each of said plates at their ends, a clamping piece positioned on the opposite side of each plate opposite each band, a screw passing through the end of each band, a plate and a clamping piece to furnish a pivotal connection between each band and plate, and a screw passing through each band a slot in a plate and into one of said clamping pieces to limit the pivotal motion of each band, and to impart an adjustable frictional resistance to such motion.

9. In a device of the class described, means for connecting head bands to the shank of a telephone receiver support, which comprises a plate having laterally extending ears to which the ends of the head bands are pivotally attached, and spaced perforated portions between said ears bent toward parallel relation to receive through said perforations the shank of said telephone receiver support.

10. In a device of the class described, means for connecting head bands to the shank of a telephone receiver support which comprises a plate having laterally extending ears to which the ends of the head bands are pivotally attached, and spaced perforated portions between said ears bent toward parallel relation to receive through said perforations the shank of said telephone receiver support, said perforated portions being capable of being sprung further toward parallelism to release said shank and normally being sufficiently out of parallelism to grip said shank against axial movement therethrough.

11. In a device of the class described, means for connecting head bands to the

shank of a telephone receiver support, which means comprises a plate having laterally extending ears, each ear having a perforation to receive a pivot for a head band and a slot
5 for a pin and slot connection to limit the pivotal movement of said band, portions of said plate between said ears being bent toward parallelism with each other, and each portion being perforated to receive the shank of the receiver support therethrough. 10
In testimony whereof I have affixed my signature.

WILLIAM J. MURDOCK.