C. ADAMS-RANDALL.

HEAD SUPPORT FOR TELEPHONE RECEIVERS.

APPLICATION FILED MAR. 24, 1914.

1,167,368.

Patented Jan. 4, 1916.

2 SHEETS—SHEET 1.

Fig. 1.

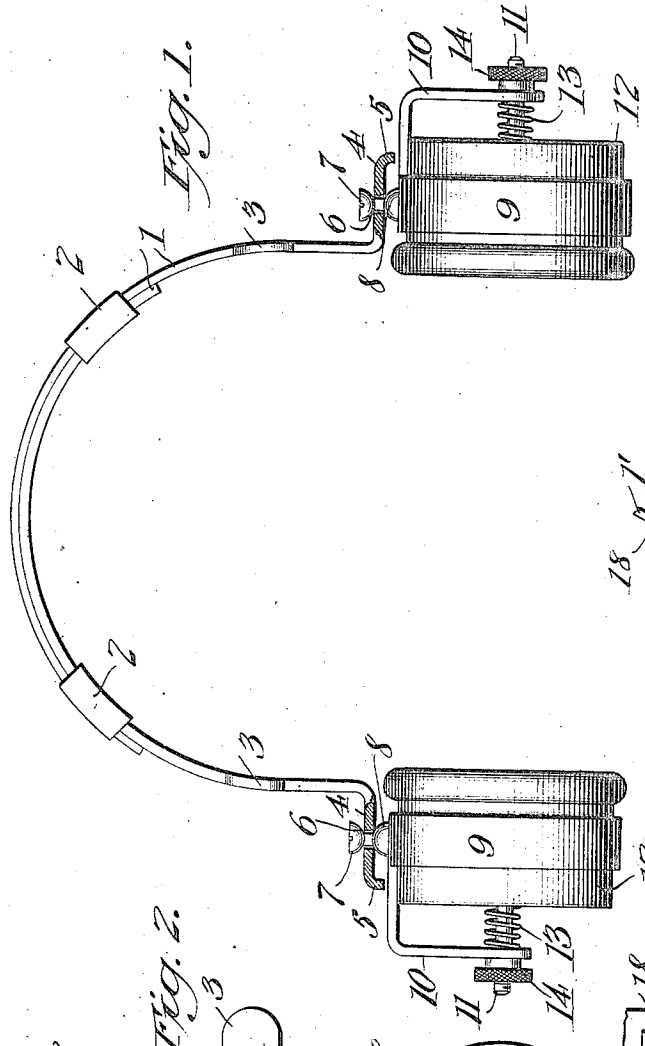


Fig. 3.

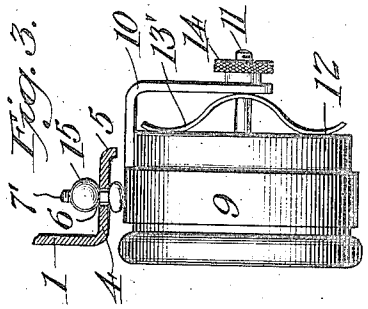


Fig. 4.

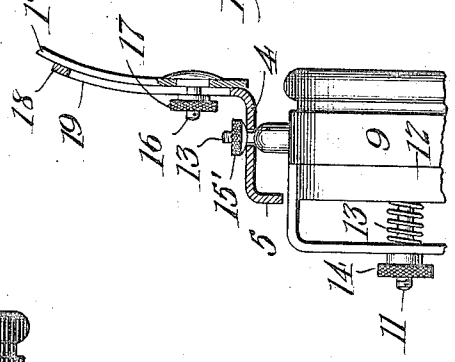


Fig. 2.

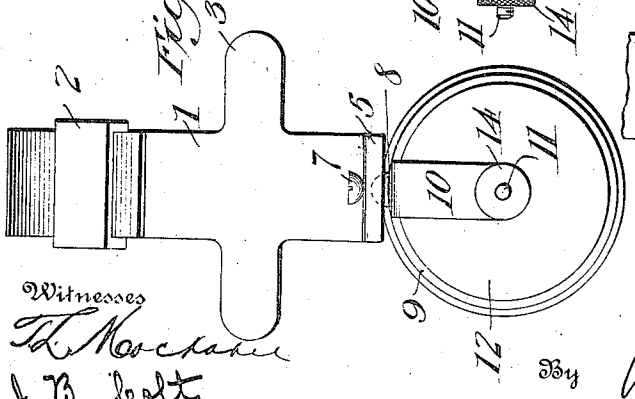
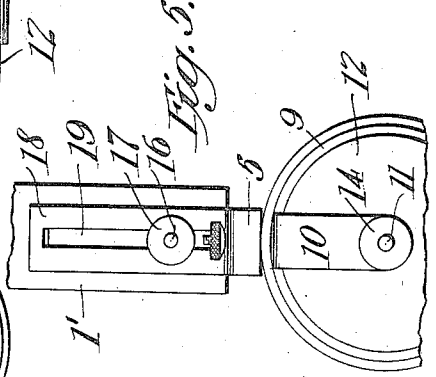


Fig. 5.



Witnesses

T. L. Mockabee

J. B. Colt

Inventor

Charles Adams-Randall

By W. N. Roach, Jr.

Attorney

C. ADAMS-RANDALL.

HEAD SUPPORT FOR TELEPHONE RECEIVERS.

APPLICATION FILED MAR. 24, 1914.

1,167,368.

Patented Jan. 4, 1916.

2 SHEETS—SHEET 2.

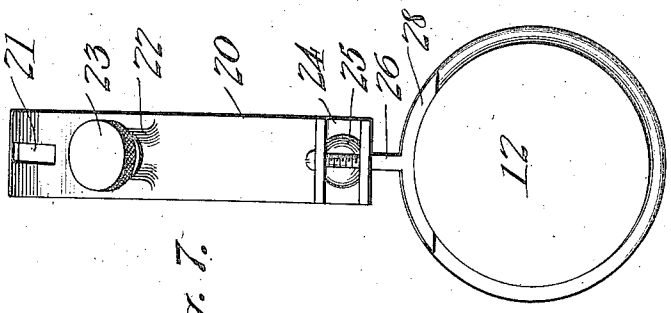


Fig. 7.

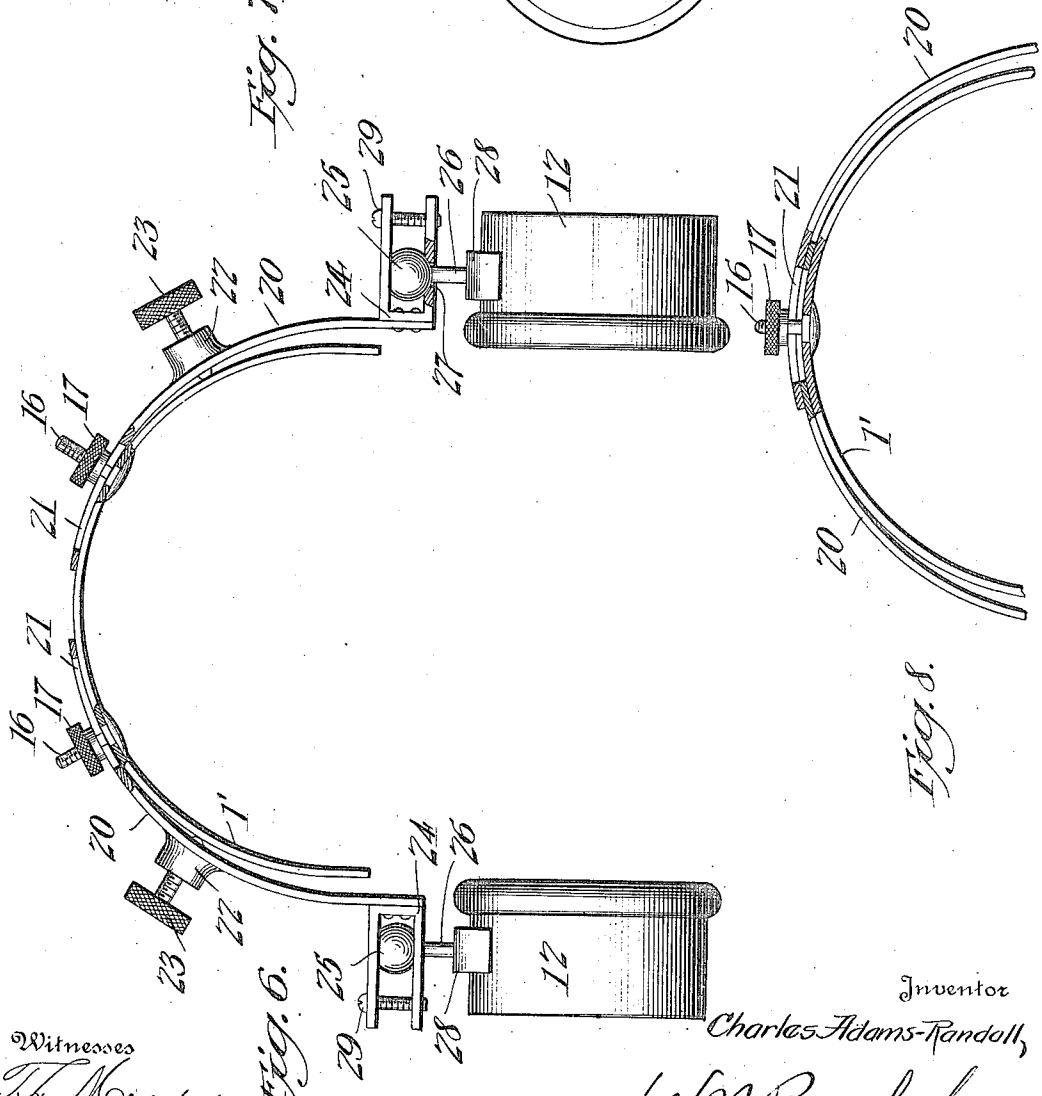


Fig. 8.

Fig. 6.

Witnesses

T. W. Mockabee

J. B. Lodge

Inventor

Charles Adams-Randall,

By W. M. Roach, Jr.

Attorney

UNITED STATES PATENT OFFICE.

CHARLES ADAMS-RANDALL, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO FRANK G. DAVISON, OF BOSTON, MASSACHUSETTS.

HEAD-SUPPORT FOR TELEPHONE-RECEIVERS.

1,167,368. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed March 24, 1914. Serial No. 826,946.

To all whom it may concern:

Be it known that I, CHARLES ADAMS-RANDALL, a citizen of the United States of America, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Head-Supports for Telephone-Receivers, of which the following is a specification.

This invention relates to head supports for telephone receivers such as are customarily used by operatives, receiving such a number of messages as to need the receiver or receivers near the ear, at all times.

The present invention constitutes a further development of the idea contained in Patent Number 1,087,704, issued to me on February 17, 1914, and in my pending application, Serial Number 813,165, filed January 20, 1914; both for head supports for telephone receivers.

The objects of the invention are to provide a support of simple and cheap construction, having a small number of separate parts so as to facilitate the assembling of the device. To provide a support in which the receiver will be verti ly adjustable so as to contact the ear of different users; in which the receiver will have a swivel adjustment so as to conform to the contour of the ear; and in which the receiver will have a resiliently retained horizontal adjustment to permit the same to approach or recede from the ear, as the volume and character of the transmitted sound may require.

With these and such other objects in view as may hereinafter more fully appear, my invention consists in the novel arrangement and construction of parts set forth in the following specification, more particularly pointed out in the claims and which are shown in the accompanying drawings, wherein:—

Figure 1 is a front elevation of a head support embodying the present invention. Fig. 2 is a side elevation thereof. Fig. 3 is a side elevation of a receiver showing in detail a modified form of resilient retaining means, and swivel connection. Fig. 4 is a broken side elevation of a receiver showing in detail a modification of the vertical adjusting means. Fig. 5 is a rear elevation thereof. Fig. 6 is a front elevation of a modified form of the head support. Fig. 7 is a side elevation thereof. Fig. 8 is a front elevation of a head support showing a further modification of the support shown in Fig. 6.

Referring to said drawings by numerals:—A suitably curved head-band is composed of two similar arc shaped sections 1, adapted to overlap for a portion of their length and to be retained by sleeves 2 which embrace said sections at their overlapped portion and in which said sections have a close sliding fit.

The head-band sections 1 are provided, at a suitable point, with the integral, laterally extending ears, or wings 3, curved to conform to the side of the head and positioned to engage the head above the ears. The purpose of said ears, or wings 3 being to retain the band more firmly in place and at the same time relieve the pressure of the band upon the head by distributing the same over a greater area.

The free ends of sections 1 are turned outwardly at practically right angles, to form receiver supporting members 4, the said members 4 being provided with angularly disposed ends 5, for the purpose of limiting the swivel movement of the receivers as hereinafter more fully set forth.

A suitable opening 6 is formed in supporting members 4 for the reception of a screw 7, which fits loosely in said opening, and is provided with a head of substantially hemispherical form, the curved surface of said head forming the bearing surface thereof. Screw 7 is adapted to engage a convex projection 8, which is drilled and tapped for that purpose, formed on a receiver holding ring or band 9. Band 9 has an L shaped arm 10 projecting from the edge thereof, said arm being provided in its downwardly projecting leg with an aperture adapted to receive a threaded stud 11 carried by the back of the receiver case 12. Receiver case 12 is slidably mounted in ring or band 9 and has, interposed between the back thereof and the downwardly projecting leg of member 10, a resilient member, by preference the spiral spring 13, surrounding the aforesaid stud 11. A knurled thumb nut 14 is adapted to engage the stud 11 for the purpose of sliding the receiver back and forth through the ring or band 9 against the action of spring 13 by screwing said nut 14 on or off, thereby causing

the receiver to approach or be withdrawn from the ear of the operative.

Referring more particularly to Fig. 3, it will be seen that, in place of the screw 7, a threaded pin or stud 7′ may be carried by the band 9 and a nut, such as the globular nut 15, here shown, provided to engage the stud 7′ for the purpose of swiveling the receiver in place. In this figure is also shown a modification of the resilient member; the curved spring 13′ being here substituted for the spiral spring 13.

In Figs. 4 and 5 is shown a further modification wherein the usual one piece head-band 1′ is used, having adjustably secured to the ends thereof, through bolts 16 and nuts 17, the extension members 18 provided with a longitudinal slot 19 for the purpose of allowing vertical adjustment. The ends of said members 18 are angularly disposed to form receiver supporting members 4 the form of which and connections to which are the same as heretofore described.

A further modification of the device is shown in Figs. 6, 7 and 8, wherein the one piece head-band 1′ has adjustably secured thereto, by means of the bolts 16 and nuts 17, the resilient straps or bands 20, provided with longitudinal slots 21 for the purpose of permitting vertical adjustment thereof. Lugs 22 are provided on straps or bands 20, said lugs being centrally bored and tapped to receive the thumb-screws 23. As will be readily understood, the ends of thumb-screws 23 impinging upon head-band 1′ causes straps or bands 20 to approach or recede from head-band 1′ thereby causing a horizontal adjustment of the receivers. Suitably secured to the free ends of bands or straps 20 are outwardly projecting, bifurcated members 24, between the prongs of which are placed spherical members 25. Said prongs being counter sunk on their inner faces to form a socket for said spherical members. Suitably secured to spherical members 25 is a pin or stud 26, passing through an opening 27 formed in one prong of bifurcated members 24, and having its lower end secured, in any suitable and convenient manner, to a foot piece 28 carried by the receiver casing 12. The prongs of bifurcated members 24 are drilled and tapped to receive the adjusting screws 29, by means of which the tension on spherical member 25 may be regulated.

The modification shown in Fig. 8 is in all respects similar to that just described with the exception, that the slotted portion of straps or bands 20 are adapted to overlap and be retained by the one bolt 16 and nut 17.

When using my invention the band is placed in position over the head and the receivers brought into position to contact the ears by sliding the band sections 1 back and forth through sleeves 2, or when using a modification, by loosening nut 17 and sliding the receiver carrying member up or down until the desired position is obtained. This gives the vertical adjustment which is so necessary in devices of this character.

Because of the swivel connection between the receiver and head-band the receiver will conform to the contour of the ear, but will be limited in its outward swing by the down turned ends 5 coming in contact with the arm 10.

When adjustment toward or away from the ear is required; that is, horizontal adjustment of the receivers; a turn of the knurled thumb-nut 14, or the thumb-screw 23, as the case may be, will effect the desired result in a rapid and efficient manner.

Having described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a head support for telephone receivers, a head band, receivers swiveled to said head band, means carried by said head band for vertically adjusting said receivers, and resiliently retained, screw operated means for causing said receivers to approach or recede from the ears.

2. In a head support for telephone receivers, a head band, receivers secured to said head band, and screws which adjust said receivers horizontally.

3. In a head support for telephone receivers, a head band, receivers secured to said head band, and screws which adjust said receivers toward and away from the ears.

4. In a head support for telephone receivers, a head band, resilient members adjustably secured to said head band, receivers carried by said members, and screws, carried by said members and engaging said band, which adjust the receivers toward and away from the head.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

CHARLES ADAMS-RANDALL.

Witnesses:

CHAS. C. DASEY,

JASPER A. LANE.