F. DIETRICH
HEADBAND FOR TELEPHONE HEADSETS
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FIG. 1
FIG. 2
FIG. 3
FIG. 4
FIG. 5
FIG. 6
FIG. 7
FIG. 8
FIG. 9
FIG. 10

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HEADBAND FOR TELEPHONE HEAD SETS.


To all whom it may concern:

Be it known that I, FREDERICK DIETRICH, a citizen of the United States, residing at Flushing, in the county of Queens and State of New York, have invented a certain new and useful Improvement in Headbands for Telephone Head Sets, of which the following is a specification.

My invention relates broadly to telephone headsets, and more particularly to a construction of headband for telephone headsets.

One of the objects of my invention is to provide a headband laterally flexible throughout its length and constructed to readily conform to any shape of head.

Another object of my invention is to provide a headband for telephone headsets in which the bands comprise seamless fabric webbing, the webbing being pivotally mounted longitudinally upon its center in such manner that different sections thereof may assume different positions conforming with the crown of the head or the irregular contour offered by the hair of the wearer whereby the band may snugly and comfortably fit upon the head of the wearer.

A still further object of the invention is to provide a seamless fabric webbing headband which will be inexpensive in construction and simple in manufacture on a quantity production basis.

My invention will be more clearly understood by reference to the following specification and the accompanying drawings, in which: Figure 1 is a perspective view of my improved headband for telephone headsets; Fig. 2 is a plan view of one section of the headband illustrated in Fig. 1; Fig. 3 is a side elevation of the headband member illustrated in Fig. 2 showing the seamless fabric webbing partially in cross section; and Figs. 4 to 10 are cross sectional views illustrating different forms in which the sections of my headband may assume in comfortably securing the telephone headset on the crown of the wearer.

Prior to my invention of the present type of headband it has been customary to use flat metallic bands for supporting a telephone headset upon the crown of the wearer. These bands have sometimes been covered with an insulating compound, such as hard rubber, or a cloth covering has been provided over the metal band. In these constructions the band has been exceedingly uncomfortable when the telephone headset is worn for any extended period of time and the cost of manufacture has been relatively high with many inherent difficulties in production on a quantity basis. It has also been proposed to sew strips of cloth or leather on either side of a band forming a support for head telephones. In these constructions it is difficult to sew the material on either side of the band, and there is a relatively large space left free between the band and the material by reason of the fact that it is not possible for a needle carrying the thread to be passed uniformly close to the band on either side thereof. The sewing of bands of this type is not only expensive but the thread has a tendency to rot and break at different points during the use of the head band, thereby causing the two parts of the band to rip open with the ultimate destruction of the headband. Perpiration and oil from the hair of the wearer often cause rotting of the stitches and destruction of headband of this character.

Prior types of headbands have been relatively stiff throughout their length and therefore become uncomfortable after a few hours' use. In irregular shapes of crowns these headbands are practically tangential at some points whereas at other points they form no support whatever, and by reason of their inherent stiffness will not comfortably conform with the crown and particularly with irregular shapes often imposed by the arrangement of the hair dress of the user, especially the wave formation in a woman's hair.

My improvement consists in providing a seamless fabric webbing for headbands which webbing is substantially flat in cross section with a longitudinal bore running along the central axis thereof through which I pass a round wire headband support. The seamless fabric webbing material is pivotally mounted on the longitudinal rod in such manner that it may turn readily to conform to various shapes which conditions may require. The webbing is substantially flexible throughout its length so that different portions of the band may assume different positions.

Referring more particularly to the drawings, reference characters 1 and 2 indicate the central circular supporting members.
which are looped at adjacent ends and curved to conform to grooves in pairs of washers 3 and 4 and 5 and 6 forming seats for the opposite ends of the supporting cores. The washers 3 and 4 and 5 and 6 may also support a suitable chuck 7 and 8 by which the telephone headset is supported by the bands. The central core members 1 and 2 define approximately two semi-circles which if joined by a theoretical line between the extremities of the members 1 and 2 would form substantially a lune or spherical wedge shaped, theoretical solid or a figure bounded by two arcs of circles. On the central circular members 1 and 2 I locate the seamless fabric webbing material 9 and 10. The seamless fabric webbing comprises a substantially flat solid but flexible woven body having a longitudinal bore 12 extending along the central axis thereof. This bore 12 is of sufficient diameter to enable the central circular members to be inserted therethrough in such manner that the seamless fabric webbing pivots about the central circular member throughout the length thereof. The woven body extends on each side of the central circular member for a distance substantially greater than the diameter of the central member with the surfaces of the webbing lying wholly in parallel planes on opposite sides of the central member. At opposite ends of the seamless fabric webbing material I provide metallic U shaped clamp members 14, 15, 16, and 17 each arcuate in cross section in such manner that each may be clamped over the ends of the fabric insuring a permanently flat cross section adjacent each end of the band but freely allowing various changes in the cross section of the band and independent flexure of the webbing intermediate the ends. In Figs. 2 and 3 the seamless fabric webbing has been moved longitudinally along the central circular member to more clearly bring out the construction.

In Figs. 4 to 10 I have shown the various contours which my seamless fabric webbing headband may assume to comfortably position the bands on the crown. In Fig. 4 the band is flat. This will always be the case at portions immediately adjacent the ends of the band by reason of the fact that rigid members 14 and 15 are secured at these points. If by reason of some obstruction or irregular shape of the hair forces are brought into play at some particular point in the headband, the webbing may assume the arcuate cross section represented in Fig. 5 with a radius from below. Some other force in a different portion of the headband might require the seamless fabric webbing to assume the contours illustrated in Fig. 6 or 7. At all times the webbing may rotate bodily about the central circular member 1 as represented in Figs. 8 and 9. Still other forces may exist along the length of the headband which the headband would comfortably accommodate by moving into an arcuate position illustrated in Fig. 10 with a radius above the central circular member 1. The various changes in contour of the band intermediate the ends thereof have been represented in the perspective view in Fig. 1.

It will be observed that my headband is constructed in such manner that there is no tendency to catch or break the hair at the same time that it comfortably supports the telephone headset.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States is:

1. A headband for telephone headsets, comprising in combination a pair of central circular core members substantially arcuate in contour and joined at opposite ends, a strip of seamless fabric webbing material having a substantially solid woven body carried by each of said central circular core members, said core members passing longitudinally through a bore in said seamless fabric webbing, means at opposite ends of said webbing whereby said webbing is maintained substantially flat at said ends, said webbing being free to revolve about said central circular core throughout its length and arranged to assume various contours by independent flexure of the webbing intermediate the ends thereof.

2. A headband for telephone headsets, comprising in combination a pair of central circular core members arranged in arcuate formation and joined at opposite ends thereof, seamless fabric webbing material having a substantially solid woven body pivotedly mounted on each of said central circular core members for lateral movement thereon, a U shaped member on opposite ends of said seamless fabric webbing material, said members being arcuate in cross section and adapted to be secured rigidly upon the ends of said fabric whereby the fabric adjacent said members is maintained substantially flat in cross section while the fabric intermediate the ends of the band may assume various contours by independent flexure of the webbing.

3. A head band for telephone headsets comprising in combination a pair of arcuate wire members substantially-circular in cross section, a woven body of seamless fabric webbing arranged to enclose said wire members, said webbing extending laterally on either side of said wire members for distances substantially greater than the diameter of said wire members and having its surfaces lying in substantially parallel planes on opposite sides of said wire mem.
bers and arranged for independent flexure of the webbing throughout its length, whereby said headband conforms to the crown of the wearer.

4. A head band for telephone headsets comprising in combination a pair of arcuate wire members substantially circular in cross section, a substantially solid woven body of seamless fabric webbing enveloping said wire members, said webbing having substantially flat parallel surfaces extending on opposite sides of said wire members for distances substantially greater than the diameter of said wire members forming a substantially solid woven body extending longitudinally along each side of the wire members and arranged for independent flexure of the webbing throughout the length of the band whereby the webbing snugly conforms to the crown of the wearer.

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