

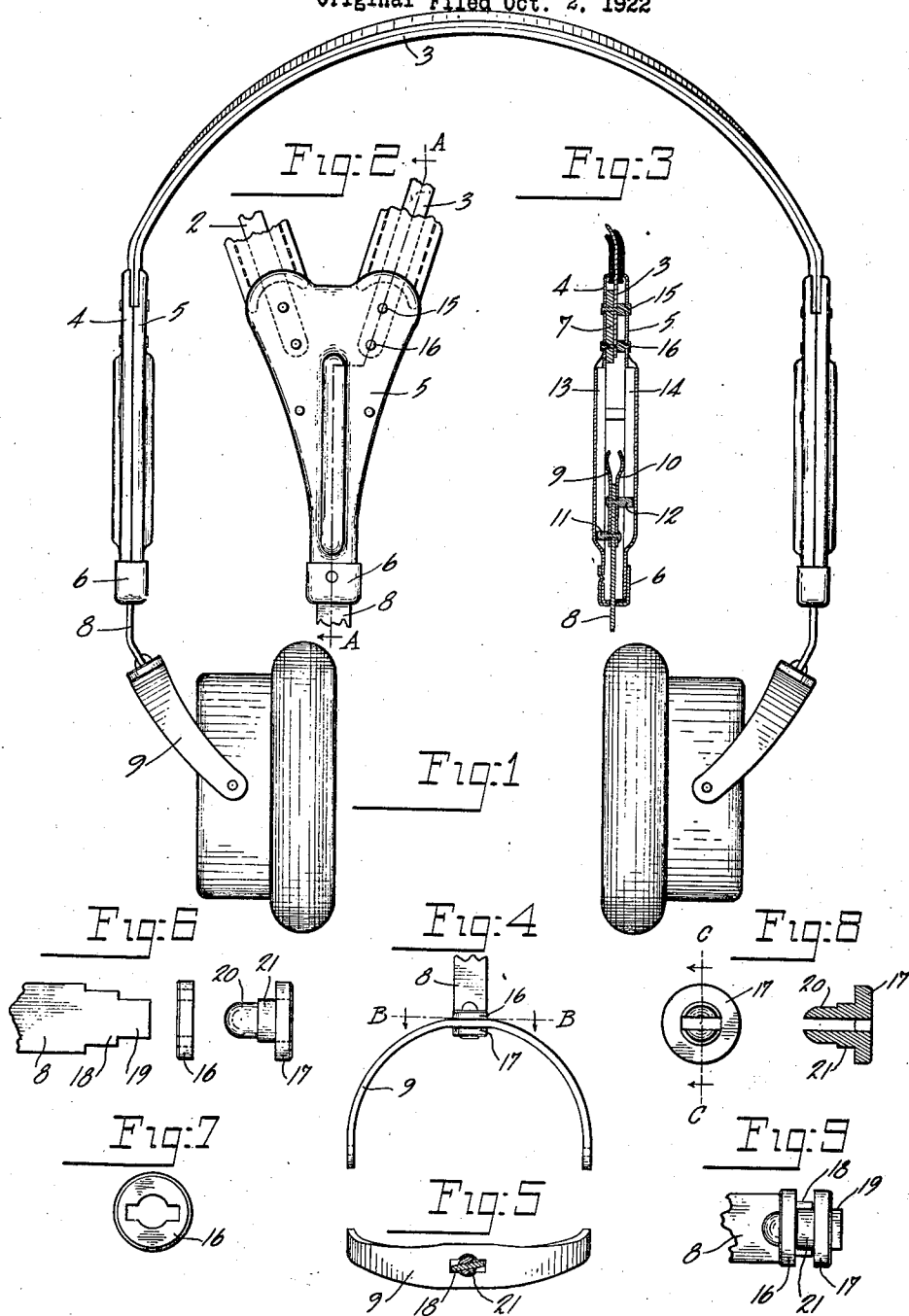
Dec. 6, 1927.

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1,651,623

RECEIVER HEADBAND

Original Filed Oct. 2, 1922



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RECEIVER HEADBAND.

Application filed October 2, 1922, Serial No. 591,819. Renewed August 8, 1925.

This invention relates in general to receiver headbands, but more particularly to double headbands of the adjustable type such as are commonly used for radio receivers; and the object of the invention is to devise an improved article of the class referred to having certain features of novelty, rendering it cheap to manufacture and at the same time more convenient and practicable in use than other headbands now available.

The various features of improvement are illustrated in the accompanying drawings, in which:—

15 Figure 1 is a front view of the complete headband with two receivers attached;

Figure 2 is a side view of the left-hand frame member as seen from the inside of the headband;

20 Figure 3 is a cross section of the same frame member on line A—A in Fig. 2;

Figure 4 is another view of one of the clevises shown in Fig. 1;

25 Figure 5 is a cross section on line B—B in Fig. 4; and

Figures 6 to 9, inclusive, are details of the joint by means of which one of the clevises is attached to the adjustable extension of the associated frame member.

30 In general, the headband comprises two flexible leather covered steel bands, curved to fit the head; two substantially vertical frame members by means of which the bands are held together at opposite ends; two adjustable extensions, one for each of the frame members; and two clevises, one of which is attached to each extension by means of a joint so constructed as to permit of a limited rotary movement.

40 Considering the frame member shown in detail in Figs. 2 and 3, it comprises two concave metal stampings 4 and 5, adapted when assembled to form a hollow fan-shaped structure capable of securing the headbands proper at its upper end and forming a slide or raceway for the adjustable extension which projects from the lower end. The two side pieces 4 and 5 are alike, and are

secured together at the upper end by means of six rivets and by means of a ferrule 60 at the lower end. Four of the rivets which hold the side pieces together are also instrumental in retaining the steel bands in place, as is shown most clearly in Fig. 3. Considering the method of attaching the bands 55 to the frame members more in detail, the frame members are cut away slightly at the upper corners as shown in Figs. 1 and 2 to admit the leather covered bands, sufficient material being left, however, to grip the ends of the leather covering when the whole is assembled. This is clearly illustrated in Fig. 3, which also shows the means by which the steel band 3, for example, is positioned 65 in the center of the frame structure. This comprises a fiber strip 7 inserted between the left-hand frame member 4 and the steel band 3 and rivets 15 and 16, each of which has an enlarged shank occupying the space between the band 3 and the frame member 5. 70 It will be seen that the construction illustrated in Fig. 3 affords a simple and effective means for positioning the steel band in the center of the frame and for retaining it rigidly connected thereto, while at the same time the leather covering of the band is held also and is prevented from working back away from the frame to leave the band exposed.

The frame members 4 and 5 are recessed 80 slightly at the bottom to form a slot coinciding with a slot in ferrule 6, through which the extension 8 projects as shown in Fig. 3. This extension is a flat strip of hard elastic material preferably German silver, and at its upper end is provided with means which permit the extension to be adjusted with respect to the distance which it projects out of the frame member and which serves to retain the extension in any adjusted position. The means referred to comprises two 90 steel springs 9 and 10, Fig. 3, which are secured on opposite sides of the extension 8 by rivets 11 and 12. The rivets 11 and 12 are provided with enlarged heads which lie in the longitudinal depressions or troughs 13 95

and 14. The head of rivet 11 obviously limits the degree to which the extension may be adjusted outwardly by engaging the end of the depression 13, while in a similar manner the head of rivet 12 by engaging the end of depression 14, limits the adjustment in the opposite direction. The springs 9 and 10, it should be stated, are wide enough to engage the frame members 4 and 5, respectively, on opposite sides of the depressions 13 and 14, and are stiff enough to hold the extension 8 in adjusted position, while at the same time permitting an easy change of adjustment when desired.

Passing now to the joint by means of which the clevis 9 is attached to the extension 8, it should be stated that this joint is designed especially to afford a strong and permanent connection, of the non-rigid type, which will permit a certain limited movement of the clevis 9 without appreciable wear of the parts from continued use. In addition to the extension 8 and the clevis 9, the joint comprises only two parts, a washer 16, and a slotted rivet shaped member 17. The washer 16 is illustrated in Figs. 6 and 7, while the member 17 is illustrated in Figs. 6 and 8. The member 8 is cut away at 18 to a width just sufficient to fit tightly within the slot in washer 16, and at 19 to a width just sufficient to fit within the slot in member 17. The latter member has a shank 20 of the same diameter as the central hole in washer 16, the shank having an enlarged portion 21 of the same diameter as the central hole in the clevis 9. To assemble the joint, the washer 16 is placed on the member 8 with the portion 18 thereof fitting within the slot in the washer, and the washer lying up against the last shoulder. The clevis 9 is then placed in position next to the washer 16, after which member 17 is passed through the hole in the clevis and the hole in washer 16, the extension 8 at the same time passing through the slot in member 17. When assembled in this manner, the portion 19 of extension 8 will project a short distance through the slot in member 17 and is suitably upset by riveting to hold the parts firmly in place. Figure 4 shows the complete joint assembled. It will be seen that the combination of the washer 16 and the rivet shaped member 17 form a miniature spool, Fig. 9, having two semi-cylindrical portions such as 21 which form a bearing for the clevis 9. As seen in Fig. 9, and also in Fig. 5, the portion 18 of the extension 8 is of greater width than the diameter of the slotted shank comprising the semi-cylindrical members 21, and, therefore, projects from the slot on each side to form two wings which lie in the slot which is cut in the clevis 9. The slot in clevis 9 is of a greater width than the thickness of extension 8, thus permitting the clevis 9 to be rotated a certain

amount about the shank of member 17 as a pivot.

It will be understood that the righthand frame member, extension, and clevis are constructed in exactly the same way as the one which has been described.

Having thus described my invention, what I consider to be new and desire to have protected by Letters Patent will be pointed out in the appended claims:

1. In a receiver headband, two frames, a flexible band connecting said frames to form an inverted U-shaped structure, a non-rotatable extension projecting downwardly from each frame, means permitting longitudinal adjustment of each extension with respect to its associated frame, two clevises, and joints connecting said clevises to said extensions, each joint being so constructed that a wedge-shaped portion of said extension passes through a rectangular opening in said clevis which is wider than said extension so as to permit a limited rotation of the associated clevis.

2. In a receiver headband, two fan-shaped hollow frames, two flexible bands connecting said frames at the wide ends thereof to form an inverted U-shaped structure, a non-rotatable extension projecting downward from the narrow end of each frame, each extension having its upper portion wholly concealed within the associated frame, and a clevis connected to the outside end of each extension by a joint which permits only a limited rotary movement.

3. In a receiver headband, two concave metal stampings assembled with the up-turned edges together to form a hollow frame, a metal band entering a slot formed by recessing the corresponding edges of said stampings, rivets passing through said stampings and band to hold the said parts together, said rivets having enlarged shanks for spacing said band from one of said stampings, a washer spacing said band from the other of said stampings, and a covering for said band gripped between the sides of the slot through which the band enters the frame.

4. In a receiver headband, two concave metal stampings assembled with the up-turned edges together to form a hollow frame, an adjustable extension entering the lower end of said frame through a slot formed by recessing corresponding edges of said stampings, two springs lying on opposite sides of said extension and pressing outwardly against the sides of the frame to retain the extension in place, two rivets securing said springs to said extension, and enlarged heads or projections on said rivets lying in longitudinal depressions in said stampings and serving to limit the adjustment of said extensions.

5. In a receiver headband, the combina-

tion, with a flat metal extension member, of a slotted washer and a slotted rivet shaped member passed over the end of said metal extension and forming a spool, the width of
5 said extension being greater than the diameter of the spool body so as to form two wings, and a clevis pivoted on said spool and having a slot for receiving said wings, the slot being wider than the thickness of
10 the wings to permit a limited rotation of the clevis.

6. In a receiver head-band, two fan-shaped hollow frames, two flexible bands connecting said frame at the wide ends
15 thereof to form an inverted U-shaped structure, an extension projecting downward from the narrow end of each frame, said extension having its upper portion wholly concealed within the associated frame.

7. In a receiver head-band, two fan-shaped hollow frames, two flexible bands connecting said frames at the wide ends
20 thereof to form an inverted U-shaped structure, an extension projecting downward from the narrow end of each frame, said extension having its upper portion wholly concealed within the associated frame, and a clevis connected to the outside end of each
25 extension by a joint which permits only a limited rotary movement.

8. In a receiver headband, two concave metal stampings assembled with upturned edges together to form a hollow frame, a
30 metal band entering a slot formed by recessing the corresponding edges of said stamping, rivets passing through said stampings and band to hold the said parts together, a washer spacing said band from
35 one of said stampings, and a covering for said band gripped between the sides of the slot through which the band enters the frame.

9. In a receiver headband, two concave metal stampings assembled with the upturned edges together to form a hollow
40 frame, an adjustable extension entering the lower end of said frame through a slot formed by recessing corresponding edges of said stampings, two springs for retaining
45 said extension in place, and two rivets securing said springs to said extension.

10. In a receiver headband, two concave metal stampings assembled with the upturned edges together to form a hollow
50 frame, an adjustable extension entering the lower end of said frame through a slot formed by recessing corresponding edges of said stampings, two springs for retaining
55 said extension in place, two rivets securing said springs to said extension and serving to limit the adjustment of said extension.

11. In a receiver head-band, the combination, with a flat metal extension member, of
60 a slotted washer and a slotted rivet shaped member passed over the end of said metal

extension and forming a spool, the width of said extension being greater than the diameter of the spool body so as to form two wings, and a clevis pivoted on said spool
70 and having a slot for receiving said wings.

12. In a receiver head-band, two concave metal stampings assembled with upturned edges together to form a hollow frame, an
75 adjustable extension entering the lower end of said frame through a slot formed by recessing corresponding edges of said stampings, two springs secured to the upper portion of said extension and lying on opposite
80 sides of said extension and pressing outwardly against the sides of the frame with sufficient tension to retain the extension in place, and said upper portion of the extension and said springs wholly concealed within
85 the associated frame.

13. A telephone head set comprising a receiver and a head band, a connection between
90 the receiver and head band having the power of extension by tubular joints sliding one within the other, one of said joints being provided with two members for limiting the movements of said joints, and with means
95 for holding said joints in desired position relative to each other.

14. A telephone head set comprising a receiver and a head band, a connection between
100 the receiver and head band having the power of extension by tubular joints sliding one within the other, one of said joints being provided with two stop members and two springs projecting into said other joint and
105 cooperating therewith for limiting the movement of said joints and for holding said joints in desired position relative to each other.

15. A telephone head set comprising a receiver and a head band, a connection between
110 the receiver and head band consisting of tubular joints sliding one within the other, one of said joints being rectangular in cross section, and provided with members for limiting the movements of said joints
115 and for holding said joints in desired position relative to one another.

16. A telephone head set comprising a receiver and a head band, a connection between
120 the receiver and head band consisting of an outer joint and an inner joint, said inner joint being rectangular in cross section and sliding longitudinally within said outer joint, and projections provided on said inner joint
125 for limiting the movements of said joints and for holding said joints in position relative to each other.

17. In a telephone head set comprising a receiver and a head band, an adjustable
130 tubular joint between the receiver and head band consisting of a hollow frame, a rectangular extension slidable longitudinally within said frame, and means provided in said frame and on that extension and coop-

erating with each other for holding said extension in a desired position relative to said frame and for limiting the movement thereof.

18. In a telephone head set comprising a receiver and a head band, an adjustable joint between the receiver and head band consisting of a hollow frame, a rectangular extension slidable longitudinally within said

frame, two springs for retaining said extension in place, and two rivets securing said springs to said extension and serving to limit the adjustment thereof.

In witness whereof, I hereunto subscribe my name this 30th day of September, A. D., 1922.

HERBERT F. OBERGFELL.