F. G. DAVISON.

HEAD SUPPORT FOR OPERATORS' INSTRUMENTS.

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1,182,896. Patented May 16, 1916.

Fig. 1.

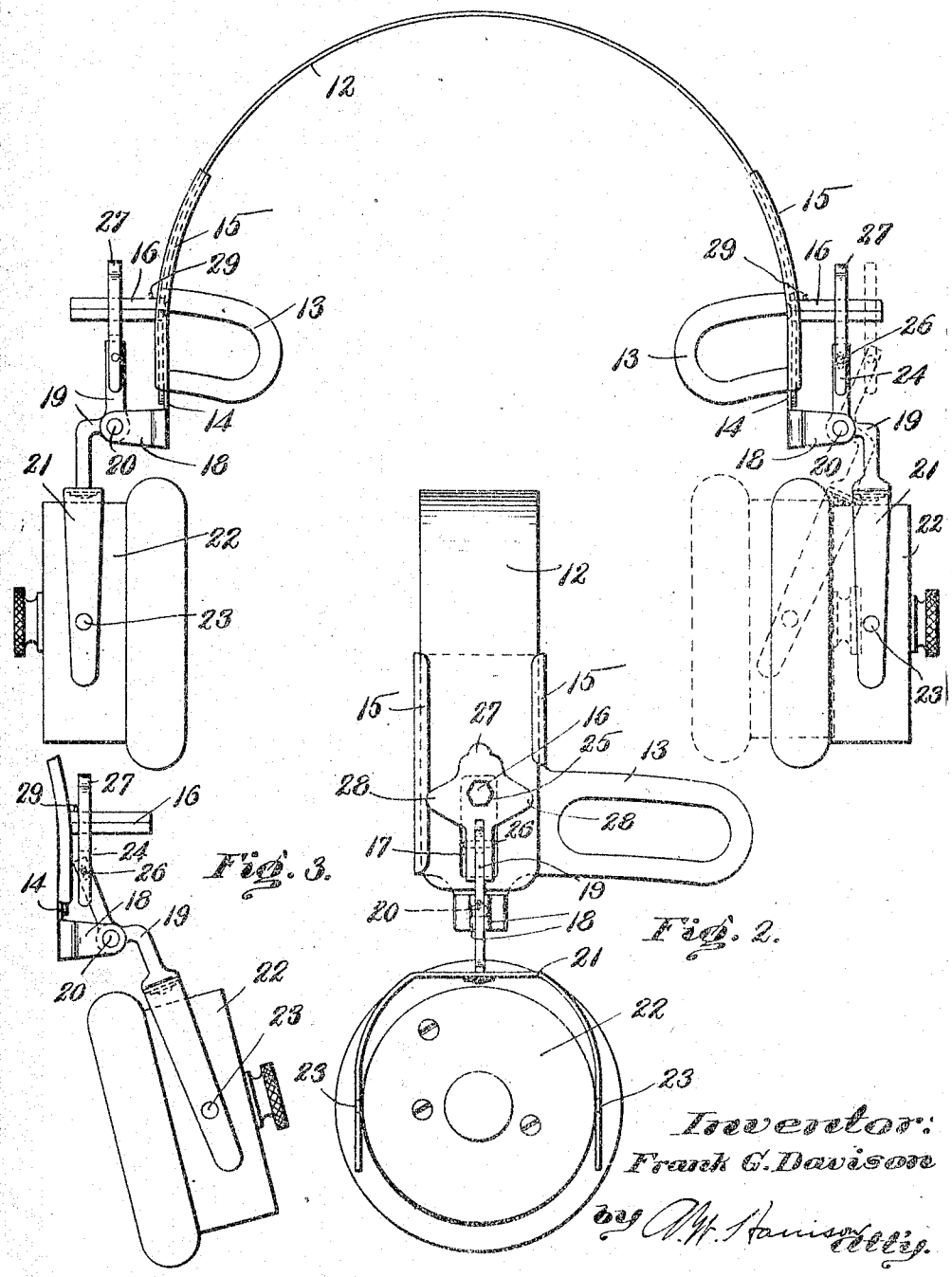


Fig. 3.

Fig. 2.

Inventor:
Frank G. Davison
by A. W. Harrison Atty.

UNITED STATES PATENT OFFICE.

FRANK G. DAVISON, OF BOSTON, MASSACHUSETTS.

HEAD-SUPPORT FOR OPERATORS' INSTRUMENTS.

1,182,896. Specification of Letters Patent. Patented May 16, 1916.

Application filed April 27, 1915. Serial No. 24,336.

To all whom it may concern:

Be it known that I, FRANK G. DAVISON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Head-Supports for Operators' Instruments, of which the following is a specification.

This invention relates to means for supporting telephone receivers or the receivers of wireless apparatus, upon the head of the operator, and refers particularly to means whereby the ear piece or pieces, or the receivers, may be adjusted more or less closely to the ears of the operator or swung away therefrom without having to remove the head piece. Devices of this character are illustrated and described in Patents 1,087,704 and 1,133,833 granted to Adams-Randall.

The object of the present invention is to provide improvements whereby the ear piece or receiver will be automatically locked in any position to which it is moved or shifted, relatively to the head piece, so that the ear piece or receiver may be held more or less firmly against the ear of the user, without risk of being pushed back from its adjustment and whereby the ear piece or receiver may be locked in outwardly swung position at such times as the operator may desire.

To these ends my invention consists in the improvements which I shall now proceed to describe and claim.

Of the accompanying drawings, Figure 1 is a front elevation of a well-known form of head piece, the same having two ear pieces or receivers connected thereto by my improved locking devices. Fig. 2 is an elevation from the right of Fig. 1. Fig. 3 is a view of a portion of the device, illustrating one of the adjustments.

Similar reference characters indicate similar parts in all of the views.

The head piece illustrated in the drawings includes a well-known form of resilient band 12, having pads 13 to distribute pressure against the sides of the head of the operator. Adjustably connected with each end of the head piece band 12 is a plate 14 having ears 15 engaging the edges of the band 12 so that longitudinal adjustment may be effected to vary the operative length of the band to properly locate the receivers relatively to the ears of the operator. As the devices at each end of the band are the same, and as either one may be entirely omitted, the following description relating to the mechanism at one end of the band is to be supposed to apply to both.

Each plate 14 carries a pin 16 which may be of any shape in cross-section, either round or square or polygonal. The said pin projects through a slot 17 in the band 12, said slot being provided to permit of the longitudinal adjustment hereinbefore mentioned. The plate 14 is formed or provided with ears 18 to which a lever 19 is pivotally connected at 20. Secured to the lower end of the lever 19 is a yoke 21 to which the ear piece or receiver 22 is pivotally connected as at 23.

A plate 24 which coöperates with the pin 16 as a clutch to positively hold the ear piece in set position, as presently described, is provided with a hole 25 (Fig. 2) which is slightly larger than pin 16 which projects through said hole. This clutch plate is pivotally connected at 26 to the upper end of lever 19, one member or the other having a slot for the pivotal pin to permit the ear piece or receiver to be shifted as indicated by comparing the full line position of Figs. 1 and 3 and the dotted line position of Fig. 1. The clutch plate 24 has a top ear 27 and two side ears 28 (Fig. 2). Preferably a small stop pin 29 projects from the pin 16 near the inner end of the latter.

When the head piece is in position upon the head of the operator, if the receiver is not as close to the ear of the user as wanted, an outward pull upon the top ear or finger piece 27 will cause the clutch to shift outwardly along the pin and as soon as this pulling operation ceases, the clutch plate will instantly swing slightly so that the walls of the hole 25 will bind upon the pin, thus automatically and positively locking the clutch plate and consequently locking the lever or support 19 which carries the ear piece or receiver. If it be desired to swing the ear piece or receiver outwardly, the operator simply pushes the clutch plate inwardly along the pin preferably by pressure exerted against the side ears or finger pieces 28. The moment that this pressure ceases, the clutch plate swings and again binds on the pin to positively hold the ear piece in its new position.

It will now be seen that I have provided means whereby the support for the ear piece or receiver may be automatically and posi-

tively locked in adjusted position relatively to the head piece, thus securing the ear piece or receiver in a much more satisfactory manner than when friction is depended upon to hold said device.

I claim:

1. A device of the character described, comprising a head piece, a support for an ear piece or receiver bodily movable laterally relatively to the head piece, and means for positively locking said support in adjusted position relatively to the head piece.

2. A device of the character described comprising a head piece, a support for an ear piece or receiver bodily movable laterally relatively to the head piece, and means for automatically and positively locking said support in adjusted position relatively to the head piece.

3. A device of the character described comprising a head piece, a support for an ear piece or receiver bodily movable laterally relatively to the head piece, and means for automatically and positively locking said support in adjusted position relatively to the head piece, means being provided whereby the holding means may be manually released when the support is to be shifted.

4. A device of the character described comprising a head piece, a support for an ear piece or receiver bodily movable laterally relatively to the head piece, and an automatic clutch for positively locking said support in adjusted position.

5. A device of the character described, comprising a head piece having a rigid pin, a clutch member having an aperture through which said pin passes, an ear piece or receiver, and connections between said ear piece or receiver and the clutch member.

6. A device of the character described comprising a head piece having a rigid pin projecting therefrom, a lever connected to said head piece carrying an ear piece or receiver, and a clutch connected with said lever and having an aperture for said pin.

7. A device of the character described comprising a head piece having a rigid pin projecting therefrom, a lever connected to said head piece carrying an ear piece or receiver, and a clutch connected with said lever and having an aperture for said pin, said clutch having means whereby it may be manually shifted longitudinally of the pin.

In testimony whereof I have affixed my signature.

FRANK G. DAVISON.