

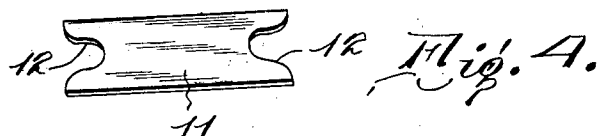
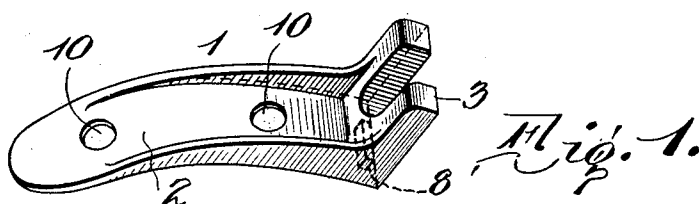
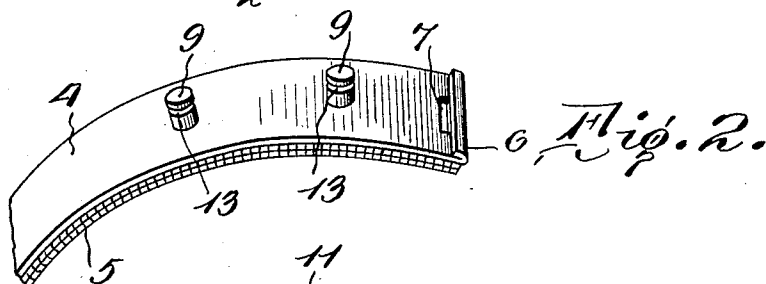
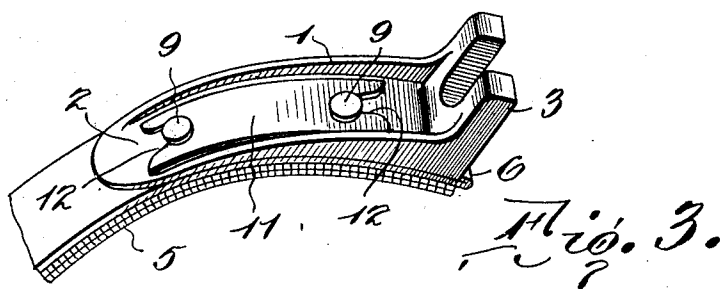
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TRANSMISSION BAND

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UNITED STATES PATENT OFFICE

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TRANSMISSION BAND

Application filed June 20, 1923. Serial No. 646,615.

My invention relates to transmission bands, say of the type used in the transmissions of Ford cars. It has for its objects to provide a simplified and efficient construction permitting an ear of the band to be readily removed, and provided with a fastening readily applied for securing the ear in position and readily released when the ear is to be removed. To the accomplishment of the foregoing and such other objects as may hereinafter appear the invention consists in the features hereinafter particularly described and then sought to be clearly defined, reference being had to the accompanying drawing forming a part hereof, and in which

Figure 1 is a perspective of the removable ear;

Figure 2 is a perspective of a portion of the resilient band and its lining;

Figure 3 is a perspective of the ear applied to the band and secured by the fastener;

Figure 4 a plan view of the fastener, in this instance flat;

Figure 5 a plan of the fastener, curved or arched.

In the drawing the numeral 1 designates an ear of the transmission band, in the instance illustrated being the removable ear and comprising the base or foot 2 and upright slotted end 3 designed to receive the shaft (not shown) through which the band is contracted so as to frictionally grip the drum to which the band is applied, say in the manner customary in the Ford type of transmission.

The numeral 4 designates the resilient metal-strip portion of the band having the lining 5 on its inner face. The metal strip of the band is formed at one end with a folded or bent portion 6 forming an abutment against which the end of the ear will bear when the ear is applied to the band and is also formed with a slot 7 which will receive a stud 8 projecting from the under face of the ear when the ear is positioned on the band. The metal-strip of the band is provided with projecting studs 9, preferably two in number, which are designed to enter openings or holes 10 formed in the base or foot portion of the ear, which studs and openings may be of any desired configuration in outline although illustrated as circular in form. The openings or holes 10 are sufficiently larger in circumference than the diameter of the studs to permit the studs to easily enter the holes when one is brought into register with the other and preferably without permitting substantial lateral play, or necessitating sliding movement of one relatively to the other in the direction of the longitudinal axis of either for positioning one on the other. This makes possible the easy and quick positioning of the ear on the band and its detachment or removal therefrom by a movement in one direction only, that is in the direction of the line of projection of the studs without a subsequent sliding movement of one part relatively to the other to bring the ear into its operative position on the band. The ear is secured to the band by a fastening member 11 which preferably is a plate of spring or resilient material having notched or forked ends 12 designed to straddle and have an interlocking engagement with the studs so as to secure the ear in its position on the band. This fastening member 11 is preferably of a length that will span the space between the two lugs and have its notched ends 12 straddle the lugs and engage with recesses or grooves 13 formed in the studs so that the fastening member will not accidentally disengage from the studs and thus a secure locking of the ear to the band is effected. The fastening member may be practically of flat form as illustrated in Figure 4 or of an arched or curved form as illustrated in Figure 5, and being of spring or resilient metal or material when placed in position and depressed it will spread and effect a locking engagement with the studs. In applying the fastening member 11, if of the flat type shown in Figure 4 it is flexed into an arched shape and placed between the studs 9 and its arch depressed so as to spread the member to bring its forked ends into the notches of the studs and into contact with the removable ear on which the fastening member exerts a downward spring pressure, the shoulders formed by the grooves in the studs holding the fastening member under spring tension and thus holds the detachable ear to the transmission band under spring tension.

In use of the normally arched fastening member, shown in Figure 5, downward pressure on the arch causes the member to spread with its forked ends lying in the grooves and with the ends bearing against the detachable ear and under tension of the spring fastening member, the shoulders of the grooves in the studs holding the member under the tension given to it when depressed and spread into locking position. When the ear is to be removed from the band it is simply necessary to place the end of a suitable tool under the edge of the fastening member and pry it from engagement with the studs and then by a suitable tool depress the abutment end of the metal-band strip so as to disengage the stud 8 from the slot 7 and lift the ear from off the band. It will thus appear that the ear is readily and easily attached to and detached from the band, and when attached it is securely held to the band by the fastening member and the interlocking studs of the band.

Ordinarily a transmission band is provided with a stationary ear and with a removable ear, and this invention is described as used for the removable ear because if the other ear is stationary it does not need the features which are embodied in the removable ear but it is obvious that if desired both the ears may be formed with the features described for the removable ear, even though it be necessary to remove only one ear in applying and removing the band from the transmission.

I have illustrated and described with particularity the preferred details of the different parts but changes may be made therein and essential features of the invention retained.

Having described my invention and set forth its merits what I claim is:

1. A transmission band, comprising a band-member of resilient material and a detachable ear-member, one member provided with a stud and the other with an opening to receive the stud, and a locking-member for securing the ear-member to the band-member, said locking-member having engagement with the stud and exerting a downward tension on the ear to hold it to the band-member.

2. A transmission band, comprising a band-member of resilient material and a non-slidable detachable ear-member, one member provided with a stud and the other with an opening to receive the stud, and a tension locking-member connected to the stud and exerting a downward tension on the ear to hold it to the band-member.

3. A transmission band comprising a band provided with studs projecting from one face and formed with a reduced diameter, an ear separable from the band and formed with openings to receive the studs of the band, and a spring fastening member in interlocking engagement with the reduced diameter of the studs and securing the ear to the band.

4. A transmission band comprising a band provided with studs projecting from one face, an ear separable from the band and formed with openings to receive the studs of the band, the studs and openings being of such relative dimensions that the ear and band are substantially non-slidable one relatively to the other, and an elastic fastening member in interlocking engagement with the studs to secure the ear in position.

5. A transmission band comprising a band provided with studs projecting from one face, an ear separable from the band and formed with openings to receive the studs of the band, and a fastening member to span the space between the studs and having notched ends in engagement with the studs to secure the ear in position on the band.

6. A transmission band comprising a band provided with a stud projecting from one face and formed with a reduced diameter, an ear separable from the band formed with an opening to receive the stud of the band, and a fastening member interlocking with the reduced diameter of the stud to secure the ear to the band, the band and the ear adjacent to one end being formed one with a stud and the other with an opening to receive the stud.

7. A transmission band having lengthwise spaced studs, a lug having openings for receiving the studs, and spring means engaging the ends of the studs for holding the lug against displacement.

8. A transmission band having lengthwise spaced studs, a lug having stud receiving openings, said studs provided with notches, and a leaf spring having its ends engageable in the notches for holding the lug to the band.

In testimony whereof I affix my signature.

GLENN R. HOFFMAN.