

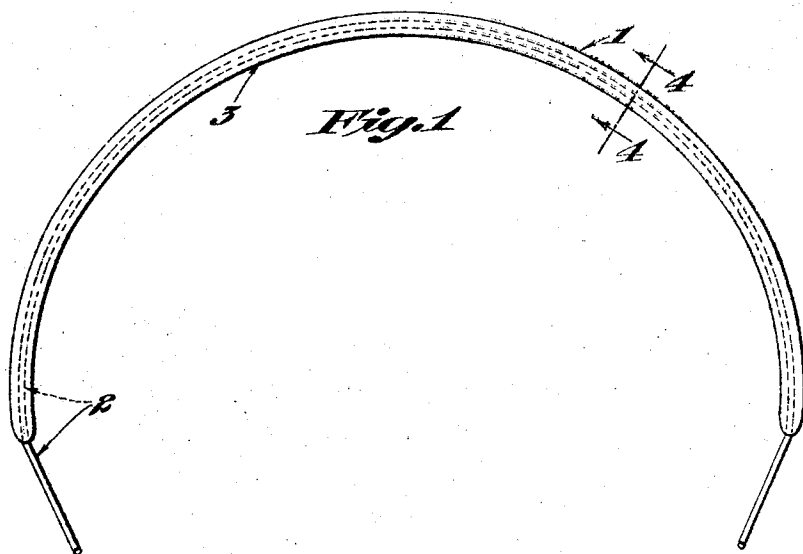
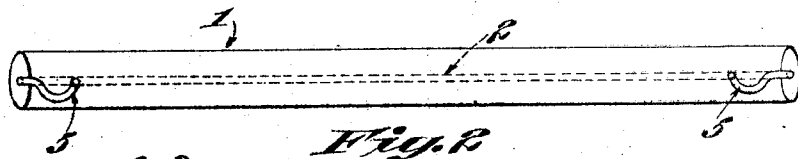
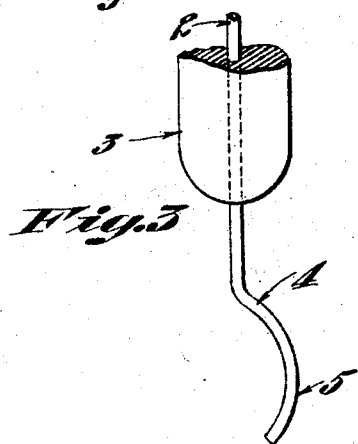
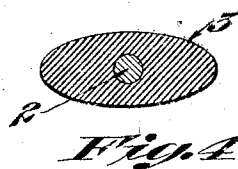
April 28, 1925.

1,535,299

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HEADBAND FOR TELEPHONE SETS

Filed March 5, 1923



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UNITED STATES PATENT OFFICE.

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HEADBAND FOR TELEPHONE SETS.

Application filed March 5, 1923. Serial No. 622,730.

To all whom it may concern:

Be it known that I, VERNON DURBIN, a citizen of the United States, residing at Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Headbands for Telephone Sets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to an improvement in head bands for telephone head sets.

Heretofore head guards have been made of nickel-plated flat steel springs; they have also been made of springs covered with braided textile material. These head bands have been objectionable for one reason or another, and the object of the present invention is to produce an improved form of head band which is simple in construction and durable in use and pleasing in appearance. To these ends the invention consists in the head band hereinafter described and particularly defined in the claim.

In the accompanying drawings illustrating the preferred form of head band, Fig. 1 is a front elevation of the band; Fig. 2 is a bottom plan of the band; Fig. 3 is a side elevation of one end of the band; and Fig. 4 is a cross-section of the band.

The illustrated embodiment of the head band is described as follows: The head band 1 consists of a wire stiffener 2 provided with a rubber covering 3. The stiffener is made of round steel wire and is normally curved throughout the body portion of the band. At its ends it is provided with fastener portions 4 which project beyond the end of the band proper by which it is attached to the receiver carriers. The wire 2 occupies a hole in the central part of the covering 3. The curvilinear form of the wire is of shorter radius of curvature than that of the head of the wearer, so that when it is sprung apart it will cause pressure to be exerted upon the receivers to hold them against the ears. The rubber covering is of flattened cross-section. It is normally straight, but is compelled by the stiffener to assume the curved position. Being normally straight and supported upon the curved stiffener, it tends to hold itself with one of its flat sides on the inside of the curve of the band by

reason of its resistance to deformation. The attempt to turn the covering from this position to one in which it lies in the plane of the curve of the stiffener results in compressing one edge of the flattened covering and in stretching the other edge, as a result of which deformation of the covering sets up strains in it which tend to cause it to return to its original position with a flat side toward the inside of the curve of the stiffener. The resistance of the covering material to deformation holds it in its usual position.

The material of which the covering is made is ordinarily rubber compound such, for example, as that which is used in making rubber heels for boots and shoes, called heel stock. It is soft and flexible, contact of this covering material with the hands or with the parts of the head is not objectionable, and it does not catch on the hair or cause painful indentations in the scalp.

The method of making this head band is as follows: The rubber stock is worked up in the mill in the usual manner and then it is tubed, that is to say, it is squirted out of a receptacle in the form of a tube of which the hole is small and centrally located. A piece of this tube stock of the proper length is cut off and a length of straight steel wire is threaded through the hole in the tube stock. This wire may be of such size as will be suitable for subsequent bending to form the stiffener wire but it is preferred to use, in this forming operation, a separate piece of straight wire of slightly larger diameter than that of the stiffener. A number of such assembled pieces of tube stock with the inserted lengths of straight wire are laid in cavities of a vulcanizing mold each having a cross-section corresponding to that which it is desired the finished handband shall have, as is illustrated in Fig. 4. The mold is then subjected to heat and pressure for the requisite length of time to vulcanize the rubber compound. At the end of the vulcanizing process, the head band pieces are removed from the mold. The wire may then be bent into its desired form, as indicated in the drawings, but it is preferably to remove this wire and thereafter slide the covering over a preformed stiffener wire having a diameter slightly smaller than that of the hole in the head band. The preformed stiffener wire is of

the general shape illustrated in Figs. 1 and 2 and in the illustrated embodiment of the invention the wire is bent inwardly at the end of the covering to an angle of approximately 20 degrees with the tangent to the curve at the head band at the end of the covering. These end pieces are further bent with a curved portion 5 which is received in a clamp to which the receivers are attached. Having thus described the invention, what is claimed is:

A head band for telephone head sets consisting of a normally curved wire stiffener

and a normally straight rubber covering having a central longitudinal hole to receive the stiffener, the covering being unattached otherwise to the stiffener, the tendency of the stiffener to maintain its shape affording head gripping power to the band and the greater resistance of the covering to deformation by bending edgewise than by bending flatwise holding it with one of its flat sides on the inside of the curve imparted by the stiffener.

VERNON DURBIN.