

No. 786,458.

PATENTED APR. 4, 1905.

A. W. NICHOLLS.
CONVERSATION TUBE.
APPLICATION FILED AUG. 1, 1904.

Fig. 1.

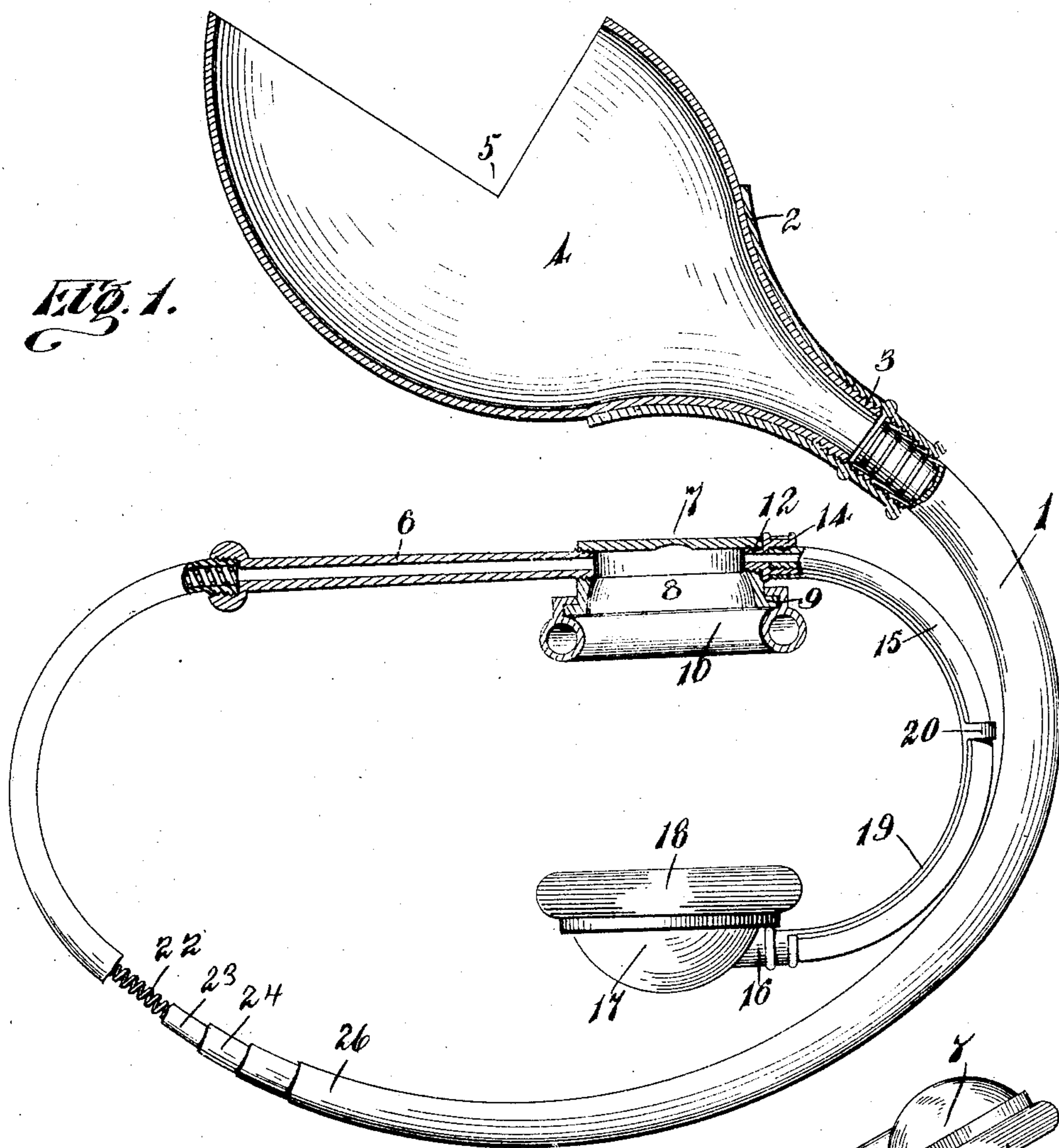


Fig. 2.

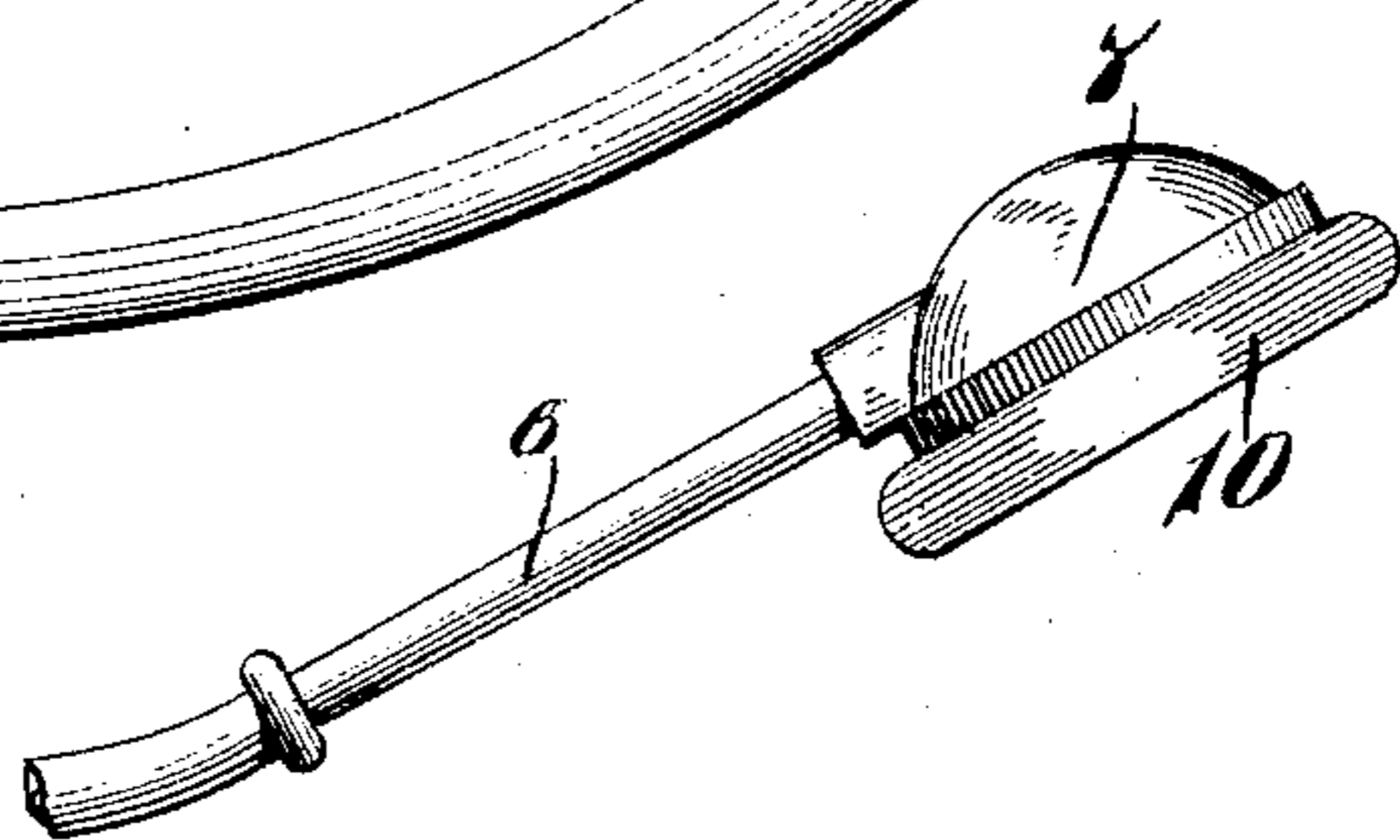
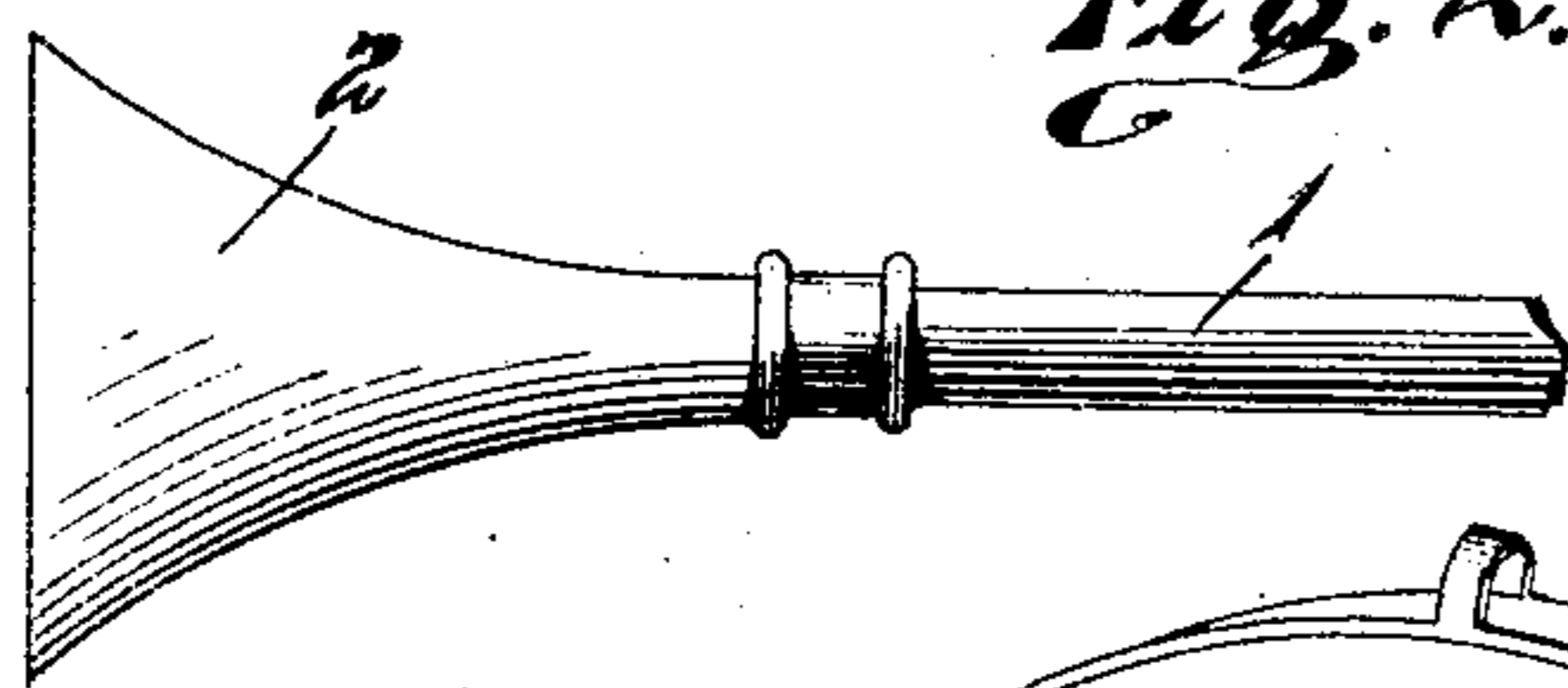


Fig. 3.

Witnesses

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CONVERSATION-TUBE.

SPECIFICATION forming part of Letters Patent No. 786,458, dated April 4, 1905.

Application filed August 1, 1904. Serial No. 219,120.

To all whom it may concern:

Be it known that I, ALBERT W. NICHOLLS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Conversation-Tubes; and I do 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.

This invention relates to improvements in conversation or speaking tubes.

The object of the invention is to provide a conversation-tube having a hard-rubber section adapted to serve as a handle and means whereby the earpieces may be quickly applied and supported upon the head of the user. These objects are attained by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section, of the tube arranged for use in general conversation or for hearing public speaking. Fig. 2 is a side elevation showing the same arranged for direct conversation, and Fig. 3 is detail perspective view of the spring for holding the ear-cups in place.

Referring more particularly to the drawings, 1 denotes the tube, which is preferably tapering in form, but which, if desired, may be of cylindrical construction. On the outer or large end of the tube 1 is secured a flaring mouthpiece 2, which is provided near its inner end with interior screw-threads 3, with which are adapted to be engaged the inner threaded end of a concert bell attachment 4. Said bell attachment is preferably formed of a hollow elliptical-shaped shell having one-half of the outer end of the same cut away, as shown at 5. Thereby sound may be collected or caught by said shell and conducted into the tube 1 through the mouthpiece 2. On the opposite end of the tube 1 is secured a hard-rubber tube 6, on the outer end of which is formed screw-threads. On said threaded end is adapted to be screwed an earpiece 7. The earpiece 7 consists, preferably, of a circular cup-shaped shell 8, on the outer edge of which is formed an annular flange 9, with which is adapted to be secured the inner flanged edge

of a circular pneumatic cushion 10, by which said earpiece is closely engaged with the ear.

In the upper side of the shell 8 is formed a threaded aperture 12, into which is screwed the inner end of a coupling-nipple 14, with which is adapted to be engaged one end of a flexible tube 15, the opposite end of which is connected with a nipple 16, which is arranged in the coupling of an earpiece 17. The earpiece 17 is similar in construction to the earpiece 7, as hereinbefore described, and is provided with a pneumatic cushion 18.

Secured to the nipples 14 and 16 are the ends of a curved metal head-spring 19, which is arranged on the inner side of the tube 15 and is provided midway between its ends with a retaining-loop 20, through which said tube is adapted to pass. The office of the spring 19 is to hold the pneumatic cushions on said earpiece into engagement with the ears of the user without the necessity of supporting the same by the hands, thus allowing the latter to be used for supporting the concert-bell in any desired position.

When the tube is used in direct conversation between two parties, the tube 15, earpiece 17, and spring 19 may be removed, as also will be the concert-bell 4, this arrangement of the tube being shown in Fig. 2 of the drawings. When the parts are in this form, the earpiece 7 will be held in engagement with the ear by the person using this end of the tube by means of the hard-rubber tube 6, which serves as a handle, while the mouthpiece 2 will be held by the party speaking into the same.

In the construction of the tube 1 a spring-wire coil 22 is employed, said coil being wrapped or covered first by a layer of fabric 23, over which is wrapped a layer of uncured rubber sheeting 24, and over said rubber sheeting is wrapped another layer of fabric, over which is arranged an outer covering 26, of braid or other suitable material. By constructing the tube in this manner the cost of manufacture is greatly reduced, while at the same time a superior construction of tubing is formed. By using the rubber sheeting in an uncured state the same will not deteriorate, as it contains no sulfur or acid, and by apply-

ing the same in strips the cost of manufacture is reduced to a minimum.

From the foregoing description, taken in connection with the accompanying drawings, 5 the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be 10 resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters 15 Patent, is—

A conversation-tube consisting of a tapering flexible tube, a mouthpiece secured to one

end of said tube, a hard-rubber section connected to the opposite end of said tube, an ear- 20 piece attached to said hard-rubber section, a short flexible tube removably secured to said earpiece and provided at its opposite end with another earpiece, and a head-spring connected to said short tube, said hard-rubber section 25 serving as a handle for applying the earpieces to the ears of the user, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALBERT W. NICHOLLS.

Witnesses:

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CORNELL SCHREIBER.