

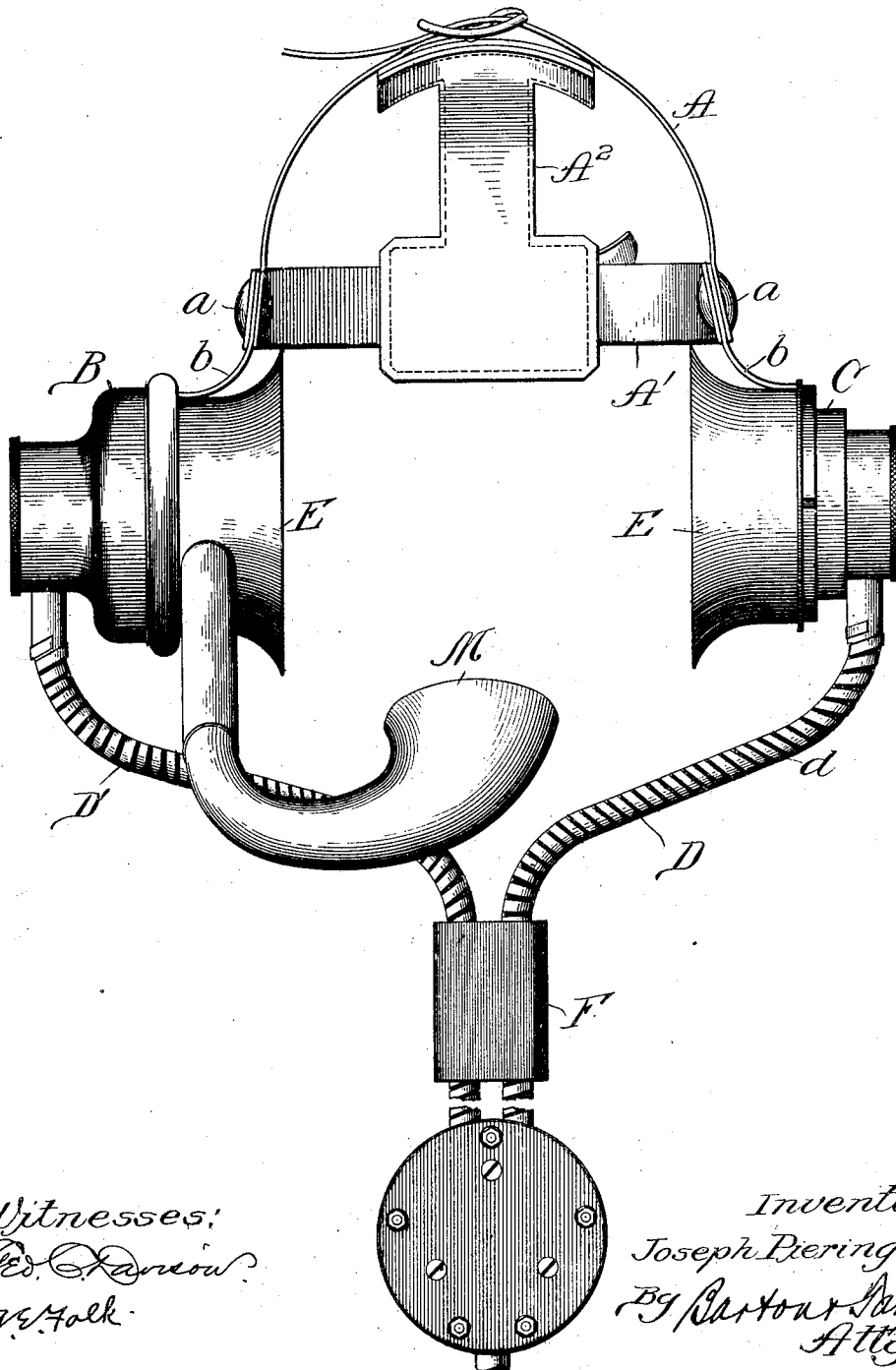
No. 835,865.

PATENTED NOV. 13, 1906.

J. PIERINGER.
HEAD TELEPHONE SET.
APPLICATION FILED DEC. 1, 1905.

2 SHEETS—SHEET 1.

Fig 1.



Witnesses:
Ed. Carson
gr. Falk

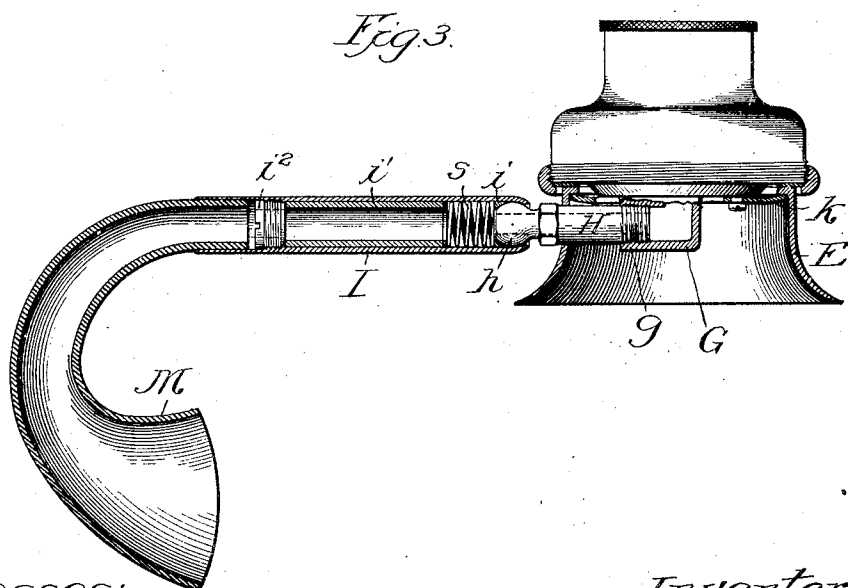
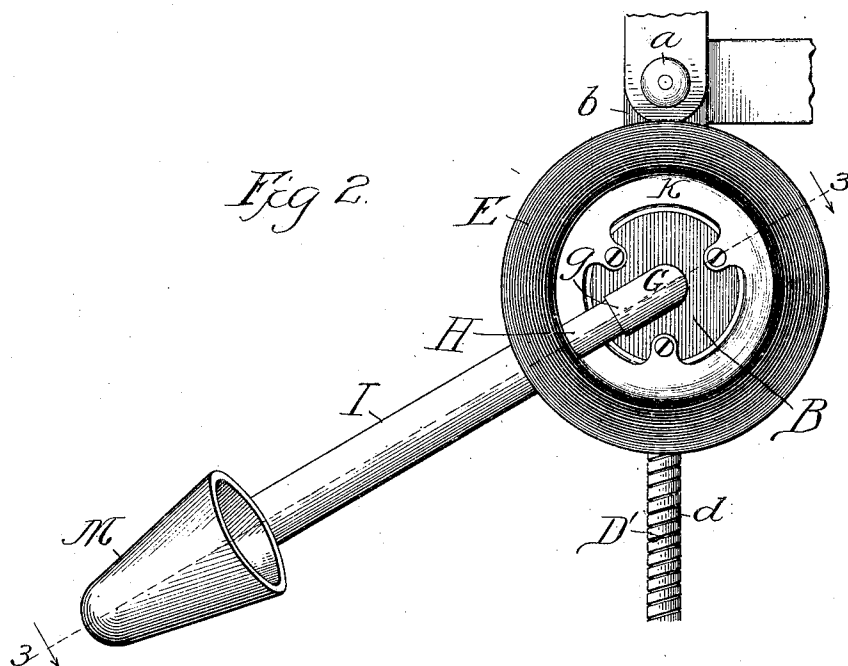
Inventor:
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By Barton Tanner
Attys.

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2 SHEETS—SHEET 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOSEPH PIERINGER, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO
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HEAD TELEPHONE SET.

No. 835,865.

Specification of Letters Patent.

Patented Nov. 13, 1906.

Application filed December 1, 1905. Serial No. 289,728.

To all whom it may concern:

Be it known that I, JOSEPH PIERINGER, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented a certain new and useful Improvement in Head Telephone Sets, of which the following is a full, clear, concise, and exact description.

My invention relates to a head telephone set, and has for its object an arrangement of the transmitter and receiver on a harness adapted to fit over the head of the user in such manner that the weight of the transmitter and receiver will balance each other and the various parts will be conveniently assembled for use.

My invention is especially adapted for use on man-of-war vessels, in which case it is necessary or at least desirable to have the receiver held constantly to the ear of the user. In my invention the transmitter and receiver are supported by a head-harness in such positions that the receiver is held over one ear and the transmitter over the other, thus producing an almost perfect balance of weight. The mouthpiece is adjustably mounted with reference to the transmitter. Ear-caps may be secured to both the receiver and transmitter, thus providing for the comfort of the user, as well as excluding outside noises. Means are also provided for securely holding the apparatus in proper position.

My invention may be readily understood from the accompanying drawings, in which—
Figure 1 is a front elevation of the apparatus constituting my invention. Fig. 2 is a detail view of the transmitter. Fig. 3 is a section on the line 3 3 of Fig. 2.

The harness preferably consists of two straps A A', adapted to fit over the top and back, respectively, of the head, and a stiff band A², serving to hold said straps properly spaced apart. The ends of the straps A A' are connected to each other by rivets a. The harness is made adjustable in size by buckles, as shown in the drawings.

The transmitter B and the receiver C have each a lug b extending from its shell or casing. An opening is provided in each lug for the reception of a rivet a, by which means the two instruments are secured to the harness on opposite sides thereof. Binding-posts, to which the terminals of the cords D D' are attached,

are placed within the shells of the transmitter and receiver in the usual manner. Ear-caps E E, preferably of soft rubber, extend from each instrument and are adapted to completely surround the ears of the user, so as to exclude outside noises and also to prevent said instruments from uncomfortably bearing against the head of the user. These ear-caps may be secured to the two instruments in any suitable way.

I have shown in Figs. 2 and 3 a convenient means for attaching the cap to the transmitter, in which an annular plate k, secured by screws to the base of the transmitter, serves to clamp the cap E between said plate and base.

A slip-block F passes over cords D and D', by which means the cords may be drawn close under the chin. The cords D D' are made stiff by a metallic winding d or in any other suitable manner, so that when the cords are drawn under the chin the instruments are pressed directly toward the ears and the throat is left free. This is a distinct advantage, since a cord not so stiffened would when drawn under the chin bear against the throat in such manner as to be uncomfortable to the user and would also interfere with his articulation.

The mouthpiece M of the transmitter is made adjustable with reference to the shell or casing, so as to be readily placed in any desired position by the user. This is most clearly shown in Fig. 3. The inner wall of the casing of the transmitter has an opening through an elbow G provided with a screw-threaded outlet g. Threaded in this outlet is a hollow tube H, which extends through the ear-cap E and has a spherical head h, whereby a ball-and-socket connection is provided between the tube H and a tube I. A washer i fits over the end of the head h, and one end of a coiled spring s bears against said washer, the other end of said spring bearing against the inner end of a wooden tube i', inclosed within the tube I. A nut i², threaded in the tube I a short distance from its outer end, serves to hold the tube i' in position against the tension of the spring s. The mouthpiece M is secured in the end of the tube I above the nut i².

By the construction above described it is apparent that the mouthpiece of the trans-

mitter is readily adjustable with reference to the transmitter and that the tension of the spring s produces sufficient frictional engagement in the ball-and-socket joint of the tube
5 H and I to hold the mouthpiece in its adjusted position.

I claim—

1. The combination with harness for a head telephone set, of a receiver and a transmitter mounted on opposite sides of said harness and adapted to fit over the ears of the user, a tubular member having one end secured to the communicating orifice of said transmitter and provided at its other end
15 with a spherical head, a second tubular member provided with a mouthpiece and inclosing said head to form a ball-and-socket joint therewith, whereby said members are adjustable, and means for holding said members in
20 their adjusted positions, substantially as described.

2. The combination with harness for a head telephone set, of a receiver and a trans-

mitter mounted on opposite sides of said harness and adapted to fit over the ears of the user, a tubular member having one end secured to the communicating orifice of said transmitter and provided at its other end with a spherical head, of a second tubular member inclosing said head and forming a ball-and-socket joint therewith, a wooden tube inclosed in said second tubular member, a nut for holding the wooden tube in position, a coiled spring bearing against said wooden tube and said spherical head, where-
30 by said ball and socket are held in their adjusted positions, and a mouthpiece carried by said second tubular member, substantially as described.

In witness whereof I hereunto subscribe my name this 8th day of September, A. D. 1905.

JOSEPH PIERINGER.

Witnesses:

A. W. OSBORN,
GEORGE F. ATWOOD.