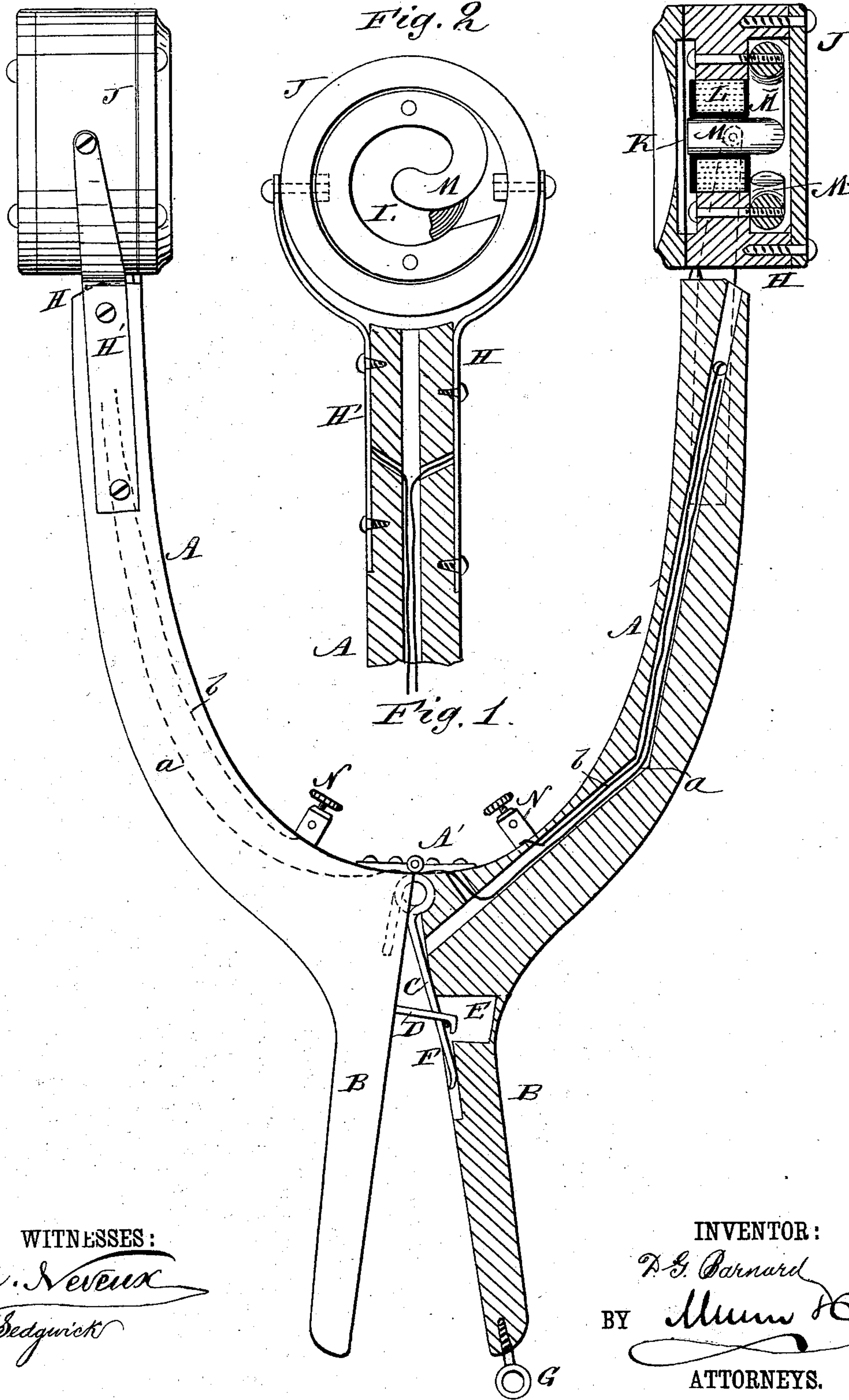


(No Model.)

D. G. BARNARD.  
ADJUSTABLE DOUBLE TELEPHONE RECEIVER.

No. 280,116.

Patented June 26, 1883.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

DANIEL G. BARNARD, OF WINSLOW, NEW JERSEY.

## ADJUSTABLE DOUBLE TELEPHONE-RECEIVER.

SPECIFICATION forming part of Letters Patent No. 280,116, dated June 26, 1883.

Application filed February 13, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL G. BARNARD, of Winslow, in the county of Camden and State of New Jersey, have invented a new and Improved Adjustable Double Telephone-Receiver, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved telephone-receiver which can be applied to both ears simultaneously, and in which the diaphragm-cups fit closely against the ears of heads of all sizes.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a longitudinal elevation of my improved adjustable double telephone-receiver, half being shown in section. Fig. 2 is a rear view of the diaphragm-cup, showing the back plate removed, and the end of the curved lever being shown in section.

Two curved rods or levers, A, provided with handle-pieces B, are hinged to each other at the upper ends of the handle-pieces by a hinge, A', whereby, when the handle-pieces are pressed together, the upper ends of the levers or rods will be separated. A spring, C, is attached to one handle-piece B, and rests against the other handle-piece, and presses the handle-pieces from each other. A hook, D, projects from the inner surface of one handle-piece B into a recess, E, in the inner surface of the other handle-piece, which recess contains a cross-rod, F, on which the hook D is adapted to catch to prevent the handle-pieces from being separated too far. One handle-piece B is provided with a loop or ring, G, for hanging the instrument. A fork, H, formed of two insulated metal bands, H', is attached to the upper end of each lever A, and in each fork H a cup, J, is pivoted in such a manner that the diaphragms K in the cups face each other. The cups each contain a coil, L, surrounding a magnet, M. One end of the wire of the coil L is connected with one strip H', and the other end of the coil wire is connected with the other strip H'. One strip H' is connected by means of a wire, a, with the corresponding half of the hinge A', and the other strip is connected by means of a wire, b, with a binding-screw, N, on the lever or rod A. The line-wires are secured to the binding-posts N. The wires a b pass through channels in the levers A. The hinged levers

A form a fork which is adjustable in width between the prongs, between which prongs the head can be passed.

The instrument is used as follows: The handle-pieces B are pressed together to separate the cups J, and the head is passed between the levers A, and the handle-pieces are slightly released, whereupon the spring C presses the cups J closely against the ears. The current will then run from one binding-post N, through the corresponding wire, b, to the coil L, back through the corresponding wire, a, the hinge A', the other wire a, the other coil L, the other wire b, and to the other binding-post N. The instrument will fit heads of all sizes, as the spring C always separates the handle-pieces until the cups rest against the ears.

The instrument can be applied and removed very rapidly, and enables a person to hear the sounds transmitted much more distinctly than when only a single receiving-instrument is used.

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

1. The combination, with two levers hinged to each other to form a fork, of diaphragm-cups attached to the upper ends of the levers, and of a spring for pressing the levers together, substantially as herein shown and described, and for the purpose set forth.

2. The combination, with the levers A, hinged to each other, and provided with handle-pieces B, of the spring C, for pressing the upper ends of the levers toward each other, and of the diaphragm-cups J on the upper ends of the levers A, substantially as herein shown and described, and for the purpose set forth.

3. The combination, with the levers A, hinged to each other, and provided with handle-pieces B, the diaphragm-cups J on the upper ends of the levers, the spring C, the hook D, projecting from one handle-piece B, and the rod F in a recess, E, in the other handle-piece, substantially as herein shown and described, and for the purpose set forth.

4. The combination, with the levers A, hinged to each other, and of the diaphragm-cups J, pivoted in forks on the ends of the said levers, substantially as herein shown and described, and for the purpose set forth.

DANIEL G. BARNARD.

Witnesses:

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