

J. NOBLE, DEC'D.
C. W. CHAMBERLAIN, ADMINISTRATOR.
TELEPHONE RECEIVER.
APPLICATION FILED JAN. 11, 1908.

953,970.

Patented Apr. 5, 1910.

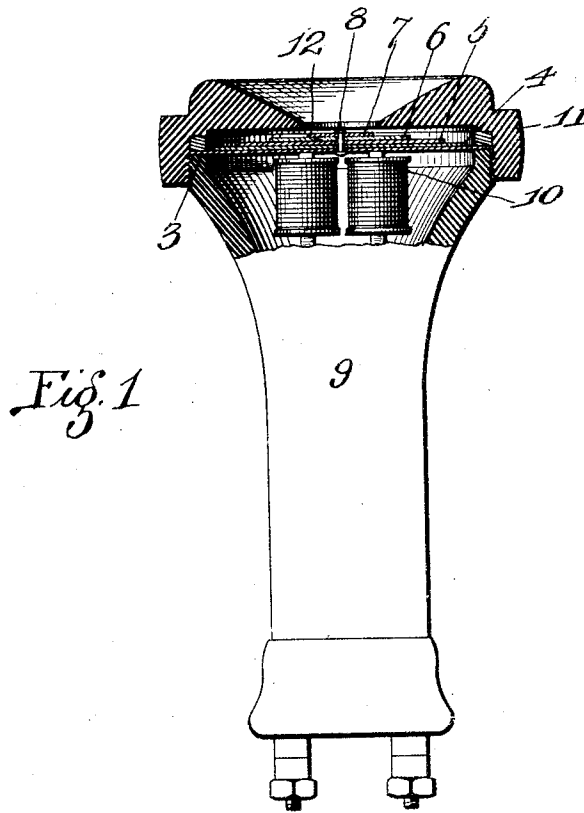


Fig. 1

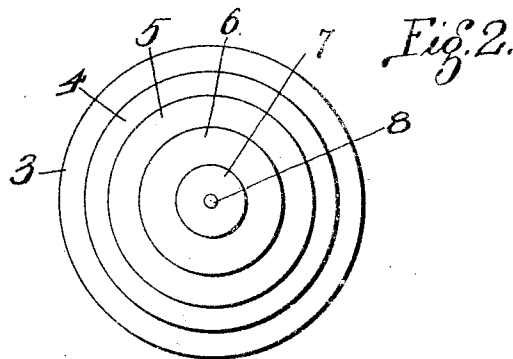


Fig. 2.

Witnesses
H. C. Stein
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Inventor
Jay Noble
by Hopkins & Eichs Attys.

UNITED STATES PATENT OFFICE.

JAY NOBLE, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO CHARLES W. CHAMBERLAIN, OF ST. LOUIS, MISSOURI; CHARLES W. CHAMBERLAIN ADMINISTRATOR OF SAID NOBLE, DECEASED.

TELEPHONE-RECEIVER.

953,970.

Specification of Letters Patent.

Patented Apr. 5, 1910.

Application filed January 11, 1908. Serial No. 410,435.

To all whom it may concern:

Be it known that I, JAY NOBLE, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Telephone-Receivers, of which the following is a specification.

My invention relates to improvements in telephone receivers, and relates to the construction of a diaphragm employed in such receivers.

In the drawings—Figure 1 is a plan view of a telephone receiver having its upper end shown in mid section and the diaphragm shown in diametric mid section. Fig. 2 is a top plan view of the diaphragm of my invention.

As shown in the drawings, the diaphragm of my invention comprises a circular iron disk 3 upon which are superimposed a series of other circular iron disks 4, 5, 6, and 7, respectively; said other disks being of decreasing diameters and being superimposed and mounted upon the first-named disk 3, and upon each other in the order of their decreasing diameter. The said disks are then united together by means of the rivet 8 or other suitable connecting means.

In the form illustrated in Fig. 1, the diaphragm of my invention is shown in place in a receiver 9 containing the electro-magnet commonly used in the art, having the pole-pieces 10, the receiver being provided with the cap 11 having the central perforation 12.

By the construction described and shown I have provided a diaphragm pyramidal in form, presenting to the pole-piece or pole-pieces of the bar-magnet wherewith it co-acts a relatively substantial metallic mass, whose superior efficiency in use I attribute to an enhanced electromotive force caused by the greater excitation of the magnet created by increasing the bulk of metal in the diaphragm. But this theory I advance tentatively. The merit of my improved diaphragm has been shown in practice to reside in the accurate reproduction and transmission of sound both as to pitch, volume and quality.

Having fully described my invention, what I claim as new and desire to have secured to me by the grant of Letters Patent, is:

The improvement in telephone receivers comprising a diaphragm composed of a circular iron disk and one or more other circular iron disks of lesser and decreasing diameters superimposed and mounted upon the first-named disk and upon each other in the order of their decreasing diameters, substantially as described.

In testimony whereof, I have signed my name to this specification, in presence of two subscribing witnesses.

JAY NOBLE.

Witnesses:

CHARLES K. PICKLES,
JAMES L. HOPKINS.