

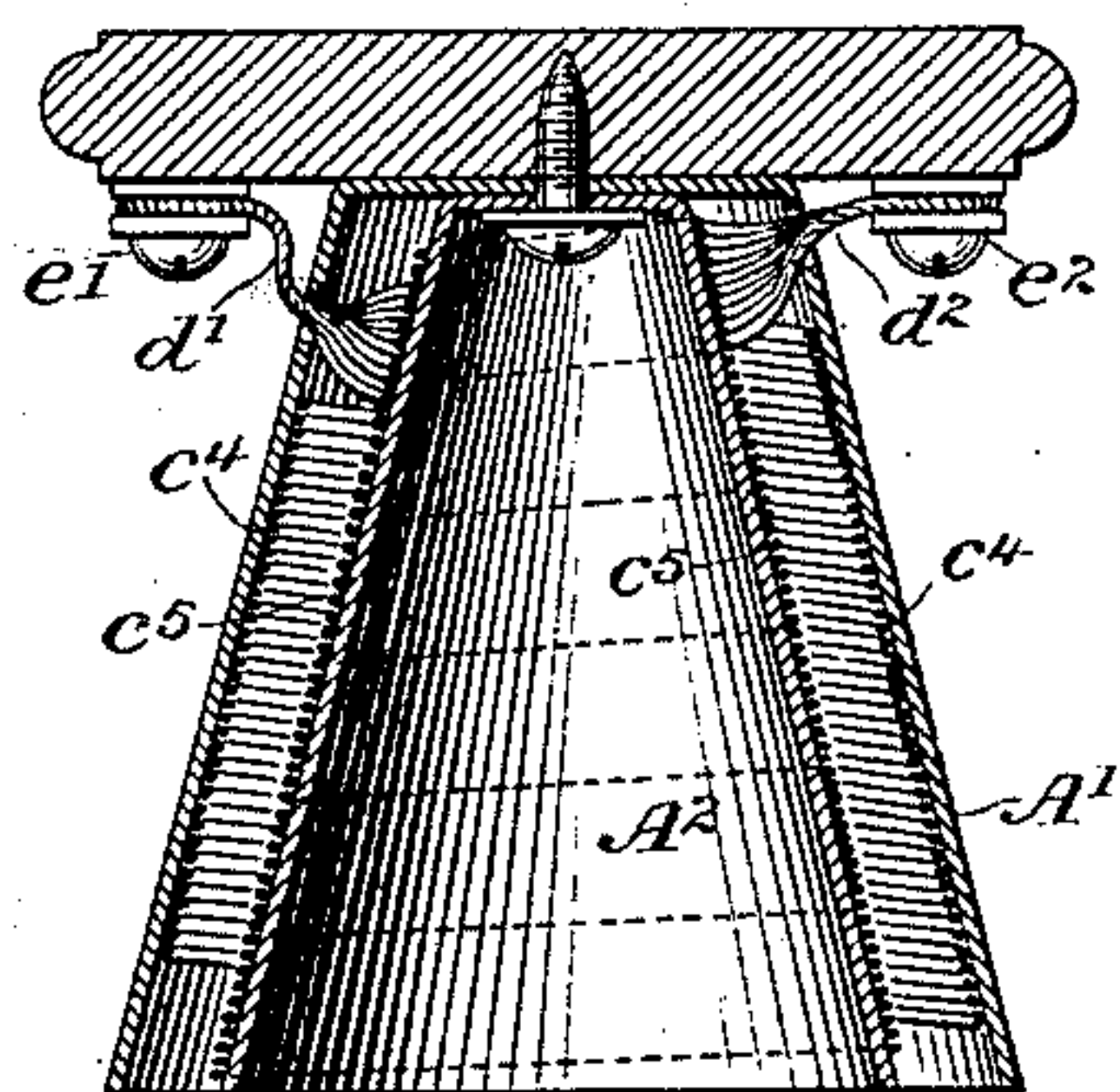
(No Model.)

T. F. TAYLOR.  
TELEPHONE RECEIVER.

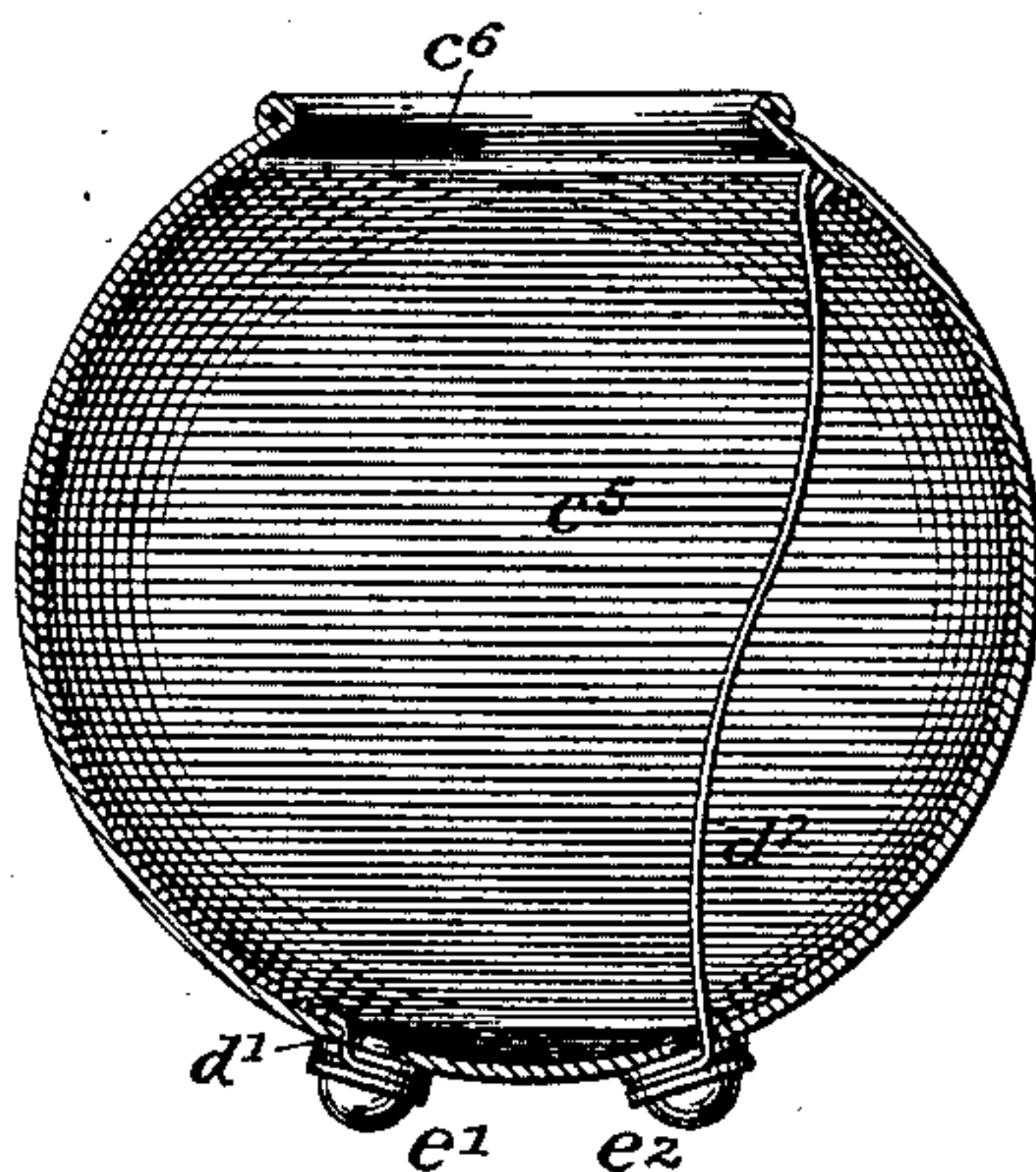
No. 305,980.

Patented Sept. 30, 1884.

*Fig. 1.*



*Fig. 2.*



WITNESSES

*Wm A. Link*  
*Geo W. Breck*

INVENTOR

*Theodore F. Taylor.*

By *his* Attorneys

*Pope Edgecomb & Rutley*



# UNITED STATES PATENT OFFICE.

THEODORE F. TAYLOR, OF BROOKLYN, NEW YORK.

## TELEPHONE-RECEIVER.

SPECIFICATION forming part of Letters Patent No. 305,980, dated September 30, 1884.

Application filed January 29, 1884. (No model.) Patented in England February 5, 1884, No. 2,708; in France February 5, 1884, No. 160,135; in Germany February 6, 1884; in Belgium February 15, 1884, No. 64,050, and in Canada June 16, 1884, No. 19,581.

*To all whom it may concern:*

Be it known that I, THEODORE F. TAYLOR, a citizen of the United States, residing in Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Telephone-Receivers, of which the following is a specification.

My invention relates to that class of instruments employed for translating into air-vibrations or sound-waves the variations in the strength of an electric current which have been established through the agency of vocal or other sounds.

The object of the invention is to so organize an electric conductor or series of electric conductors that electric currents of the character produced by the ordinary forms of telephonic transmitting apparatus may traverse the same in a manner well adapted to cause an action on the part of the conductors capable of producing sound-waves correlatively with or corresponding to the sound-waves by means of which the transmitting apparatus is actuated.

The invention consists, generally, in supporting two or more electric conductors which are included in an electric circuit in multiple arc in such a manner that electric currents will be caused to traverse the same simultaneously and in proximity to each other. This end may be accomplished in several different manners—for example, two or more conductors may be wound in directions parallel with each other upon one or more insulated cones, spheres, or other suitable supports.

In the accompanying drawings, Figure 1 is a sectional elevation of a telephone-receiver embodying the principle of the invention. Fig. 2 illustrates a certain modification thereof.

I have found that when conductors thus arranged are traversed by electric currents of the character transmitted by the well-known forms of transmitting-instruments they will act to give forth sounds corresponding to those by means of which the transmitter is actuated.

Referring to the figures, A' represents a conical or cylindrical metallic box, preferably formed of sheet-iron, and at A<sup>2</sup> is shown another and similar cone or box, which is smaller than and placed inside of the cone A', so that the axes of both are coincident.

The conductors c<sup>1</sup> upon the cone A' are

preferably wound upon the exterior of the same, and the conductors c<sup>2</sup> on the cone A<sup>2</sup> upon the interior surface thereof. The respective terminals of the series are connected with the incoming and with the outgoing main line by being united at the incoming and outgoing binding-posts e' and e<sup>2</sup>.

In Fig. 2 a modification is illustrated, in which the series of electric conductors c<sup>3</sup> are supported in a spherical form by being secured to the interior of a sphere, a<sup>6</sup>. The conductors c<sup>3</sup> are connected in multiple arc in this organization in precisely the same manner as in those already described. It is evident, however, that the forms of support illustrated are applicable to instruments constructed with single electric conductors, and I propose to employ such supports in connection with such single conductors.

Having on the 3d and 7th days of January, 1884, filed certain other applications (Serial numbers 116,381, 116,624, and 116,625, respectively) for Letters Patent for certain improvements in telephone-receivers, and having in those applications described certain features involved in this application, I do not herein claim any improvements shown, described, and claimed in either of these applications and not specifically claimed herein.

I claim as my invention—

1. A telephone-receiver consisting of the combination, substantially as hereinbefore set forth, of a hollow soft-iron inclosing-case, one or more insulated electric conductors covering the interior surface of the same, and means, substantially such as described, for including said conductor or conductors in an electric circuit.

2. A telephone-receiver consisting of the combination, substantially as hereinbefore set forth, of a hollow soft-iron inclosing-case, a series of approximately parallel insulated electric conductors lining the inner walls of said case, and means, substantially such as described, for placing said conductors in an electric circuit.

In testimony whereof I have hereunto subscribed my name this 28th day of January, A. D. 1884.

THEO. F. TAYLOR.

Witnesses:

DANL. W. EDGECOMB,  
CHARLES A. TERRY.