

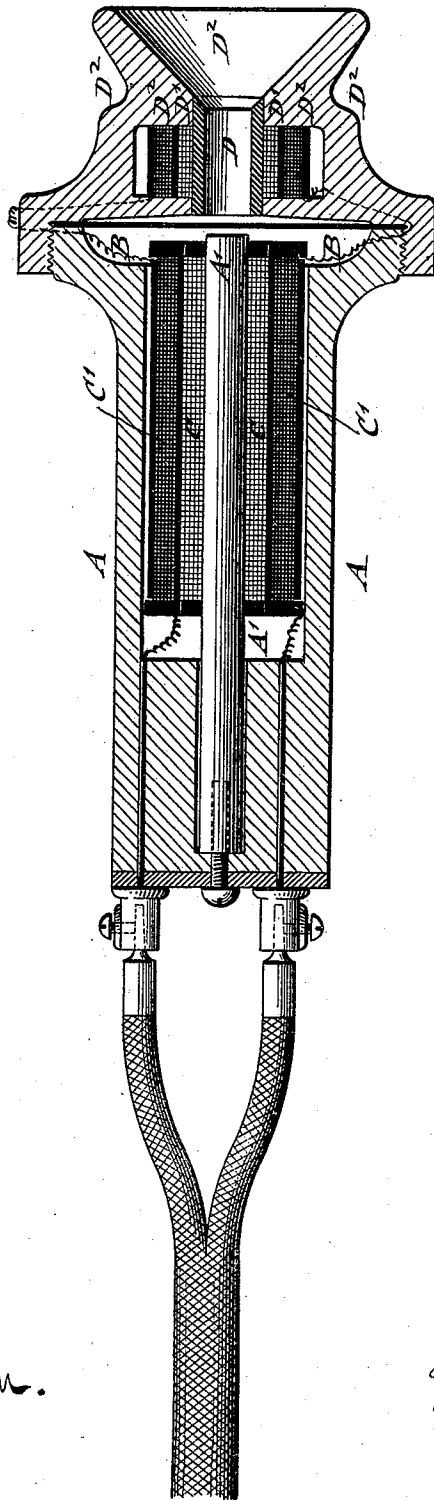
(No Model.)

H. A. SCHNEEKLOTH.

TELEPHONE RECEIVER.

No. 355,032.

Patented Dec. 28, 1886.



WITNESSES:

F. U. N. Rosenbaum.
Martin Petry.

INVENTOR

Hans A. Schneekloth

BY

Gordon Regeuer

ATTORNEYS.

UNITED STATES PATENT OFFICE.

HANS A. SCHNEEKLOTH, OF NEW YORK, N. Y.

TELEPHONE-RECEIVER.

SPECIFICATION forming part of Letters Patent No. 355,032, dated December 28, 1886.

Application filed February 26, 1886. Serial No. 193,267. (No model.)

To all whom it may concern:

Be it known that I, HANS A. SCHNEEKLOTH, of the city, county, and State of New York, have invented certain new and useful Improvements in Telephone-Receivers, of which the following is a specification.

This invention relates to an improved telephone-receiver, by which the sounds transmitted are produced in a clearer and more distinct manner; and the invention consists of a telephone-receiver which has a permanent magnet arranged in the handle at one side of the diaphragm and a tubular core at the other side of the diaphragm axially in line with the permanent magnet, said tubular core being provided with a trumpet-shaped end piece. The permanent magnet and the tubular core are arranged with exterior primary and interior secondary coils, whereby the effective action of the receiver is greatly increased.

In the accompanying drawing the figure represents a vertical longitudinal section of my improved telephone-receiver.

A in the drawing represents the hollow handle of my improved telephone-receiver, which handle carries at its center a permanent magnet, A', that extends longitudinally through the handle at a point near the center of a sheet-metal plate or diaphragm, B, that is supported in the customary manner in the enlarged end of the handle, and retained in position by means of a detachable cap, A², screwed to the enlarged end. At the opposite side of the diaphragm B, and axially in line with the permanent magnet A', is arranged a tubular soft-iron core, D, which is surrounded by an induction-coil, as hereinafter described. To the tubular core D is attached a trumpet-shaped end piece, D², through which the sounds are conveyed to the ear. When the receiver is

at rest the end of the permanent magnet A' attracts the diaphragm and imparts a slightly-curved shape to the same. When a current is passed through the coils the diaphragm is attracted by the magnetized tubular core D and drawn away from the magnet B, so as to be vibrated by the alternating actions of the magnet A' and core D to a greater extent than in the ordinary Bell receiver. The sounds transmitted are consequently reproduced clearly and distinctly, as the diaphragm responds more perfectly to the action of the transmitter. The cores A' and D are provided with exterior primary coils, C' and D², as shown, which are connected with the line-wires, while the interior secondary coils, C and D', are connected with each other to form a closed secondary circuit. The induction-currents generated in the secondary coils vibrate the diaphragm in a very effective manner and reproduce the transmitted sounds in a more distinct manner than the simpler forms of receiver now on the market.

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

A telephone-receiver consisting of a diaphragm, a permanent magnet supported at one side of the diaphragm, a tubular core at the other side of the diaphragm and in line with said permanent magnet, and primary and secondary coils on said magnet and core for increasing the sound, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

HANS A. SCHNEEKLOTH.

Witnesses:

SIDNEY MANN,
MARTIN PETRY.