## TUNED IN

**Ken Taylor**, Museum volunteer and member of Oxford and District Amateur Radio Society (ODARS), explores how objects in the Marconi Collection worked.



## 1901 Transatlantic Receiver



Maker: Collier-Marr Telephone & Electrical Manufacturing Co. Ltd.
Origin: Manchester, England
Date Created: 1901
Provenance: Presented by the Marconi Corporation
Materials: Brass, ebonite, iron
Inv: 96661

A particularly efficient type of telephone receiver invented by Australian A.T. Collier around 1890, this receiver is based around a horse-shoe magnet with two soft iron pole pieces on either side of a large solenoid.



Diaphragms, placed between each end of the coil and the pole pieces, push and pull against each other,

Transatlantic Receiver, 1901 (Inv: 96661) Photograph by Hermeet Gill

thus producing more sound than a more usual single diaphragm earpiece.



Transatlantic Receiver, 1901 (Inv: 96661) Photograph by Hermeet Gill

The version Marconi used for the transatlantic tests has extra coils wrapped around the arms of the magnet, which may have increased its sensitivity further.

## TUNED IN

**Ken Taylor**, Museum volunteer and member of Oxford and District Amateur Radio Society (ODARS), explores how objects in the Marconi Collection worked.



## Collier-Marr Howler

This receiver was made by the Collier-Marr Telephone and Electrical Manufacturing Company of Manchester, which was founded in 1895 to manufacture improved telecommunication equipment.

Although the receiver was more advanced than others on the market at the time it was produced, it was heavy and bulkier, and therefore not popular.

It was utilized by the railways, however; when fitted with a horn, it could be used as a loudspeaker — or "howler"—on special telephone systems.



Collier-Marr howler