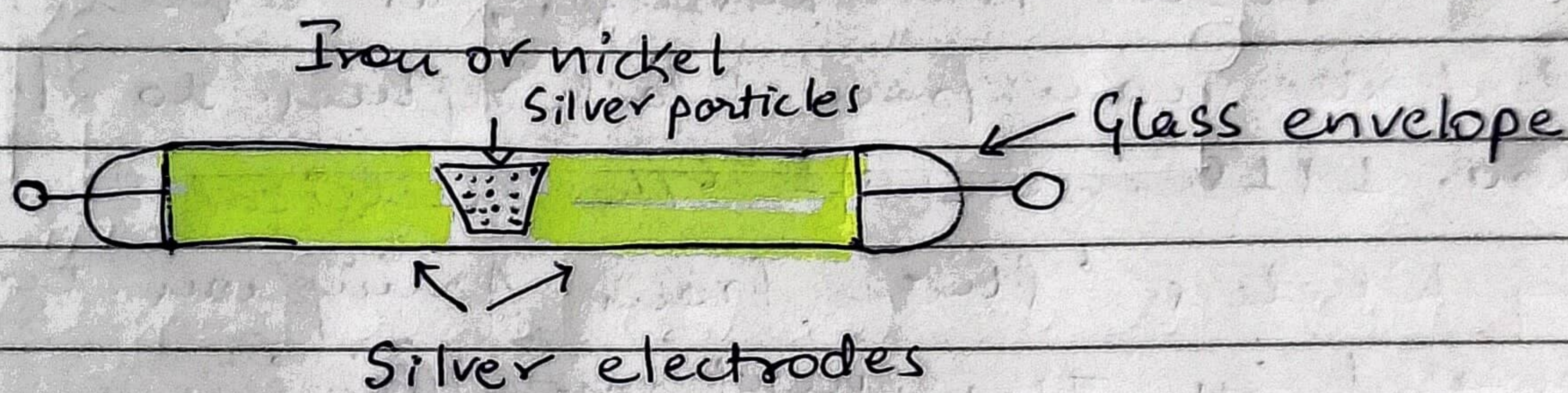


1. Cohereer - radio wave detector

Source: Modern Communications receiver Design & Technology - Corwell Drentea

→ first device for detecting Hertzian waves. It is a tube containing metal filings loosely packed between metal plugs.

The radio receiver appeared as a consequence of an invention called the coherer. Edouard Branly, of France, discovered that a glass tube with two silver electrodes, filled with loose iron particles, will conduct DC electricity better in the presence of so-called Hertzian waves generated with conventional spark generators.



2. First radio receiver — ~~Decohereer receivers~~

A Russian scientist Alexander Popov in 1895 claimed to have created a storm receiver, which rang a bell every time an electrical storm would approach within several miles. This receiver had no antenna and was of limited range.

In 1895, Marconi discovered that by adding two wires with large metal plates at the ends to his receiver and/or transmitter, the range could be increased considerably. He called these wires "catch wires" and soon buried one of these wires in the ground, while ^{elevating} elevating the other, thus discovering the HF antenna system. ~~Research~~ Later Marconi perfected the machine. He noticed that once conducting, the coherer would stay in that state. Thus, he invented the decoherer.