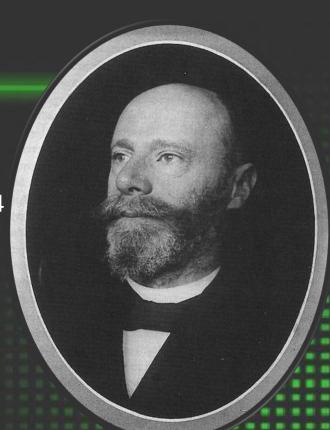
## Electrocardiogram Willem Einthoven

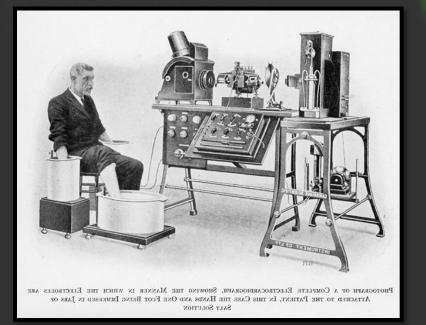
## Willem Einthoven

- Born: May 21, 1860 Semarang, Java
- Died: September 29, 1927 Leiden, Netherlands after long suffering
- Nationality: Netherlands
- Fields: Physiology
- Institutions: University of Leiden Alma mater
  University of Utrecht
- Known for: electrocardiogram
- Notable awards: Nobel Prize in Medicine in 1924
- Married: Frédérique Jeanne Louise de Vogel (1886)



## Electrocardiogram

- Before Einthoven's time, it was known that the beating of the heart produced electrical currents, but the instruments of the time could not accurately measure this phenomenon without placing electrodes directly on the heart.
- In 1901, Einthoven completed a series of prototypes of a string galvanometer. (instrument capable of detecting and recording the very



small electrical currents produced by the human heart).

 The original machine required water cooling for the powerful electromagnets, required 5 people to operate it and weighed some 600 lb.