PENDULUM CLOCK

Katarina Miscikova, Pavlina Bakosova
Gymnazium L.Stura Trencin, II.F

History

- The pendulum clock was invented in 1656 by Dutch scientist Christiaan Huygens, and patented the following year. Huygens was inspired by investigations of pendulums by Galileo Galilei beginning around 1602. Galileo discovered the key property that makes pendulums useful timekeepers: isochronism, which means that the period of swing of a pendulum is approximately the same for different sized swings. Galileo had the idea for a pendulum clock in 1637, partly constructed by his son in 1649, but neither lived to finish it. The introduction of the pendulum, the first harmonic oscillator used in timekeeping, increased the accuracy of clocks enormously, from about 15 minutes per day to 15 seconds per day leading to their rapid spread as existing 'verge and foliot' clocks were retrofitted with pendulums.

Christiaan Huygens

- 14 April 1629 – 8 July 1695
- Christian was a prominent Dutch mathematician, astronomer, physicist, horologist, and writer of early science fiction. His work included early telescopic studies elucidating the nature of the rings of Saturn and the discovery of its moon Titan, the invention of the pendulum clock and other investigations in timekeeping, and studies of both optics and the centrifugal force.

Types of pendulum clocks

- Banjo clock – (in the picture)
- Bracket clock
- Cartel clock
- Comtoise or Morbier clock
- Crystal regulator
- Cuckoo clock
- Longcase clock(commonly known as a grandfather clock)
- Lantern clock
- Mantel clock
- Ogee clock
- Pillar clock
- Schoolhouse regulator
- Act of Parliament clock
- Turret clock
- Vienna regulator
- Zaandam clock