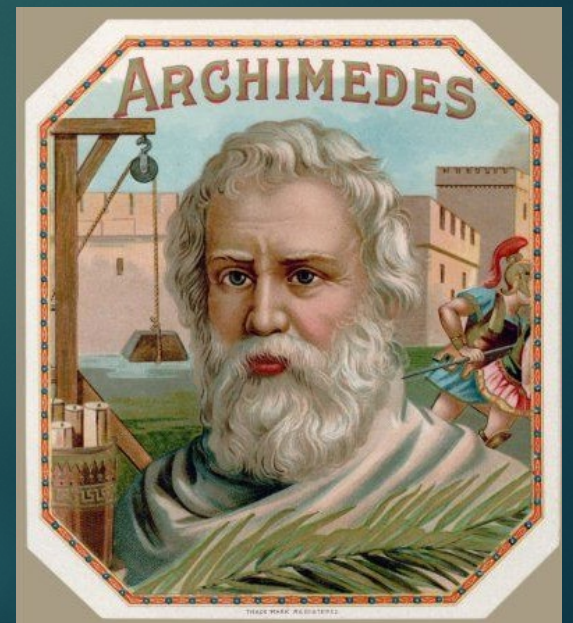
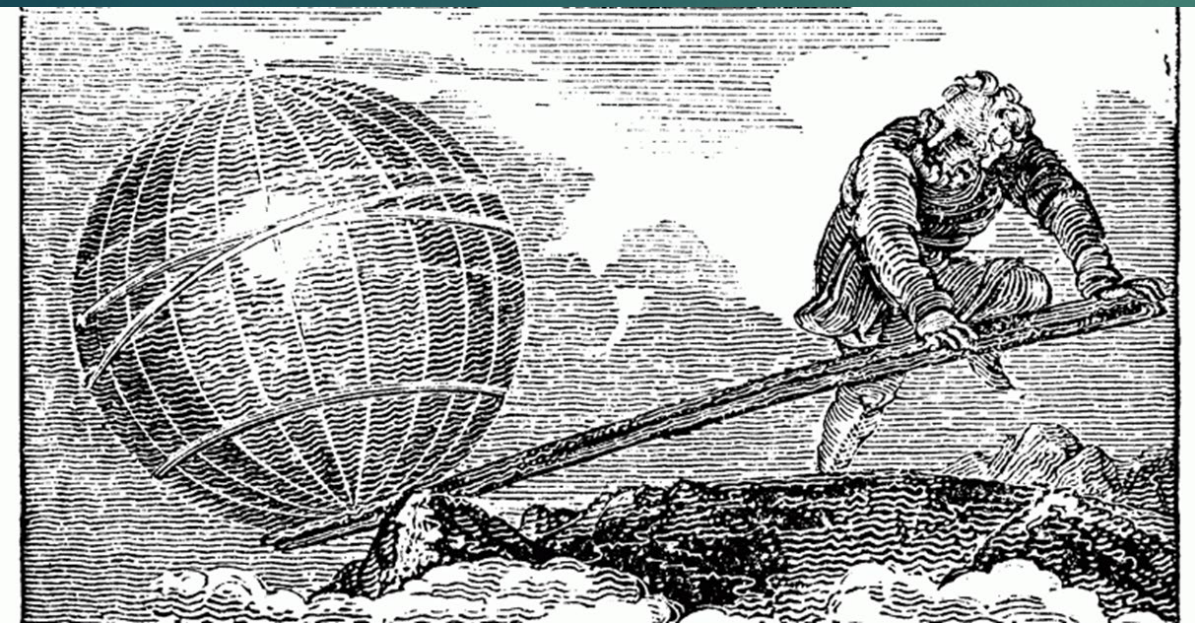


Ancient Greek Science

ENGINEERING:
ARCHIMEDES OF
SYRACUSE



Statue of Archimedes in Siracusa by Pietro Marchese (2016)



Magna Graecia

Ancient Syracuse

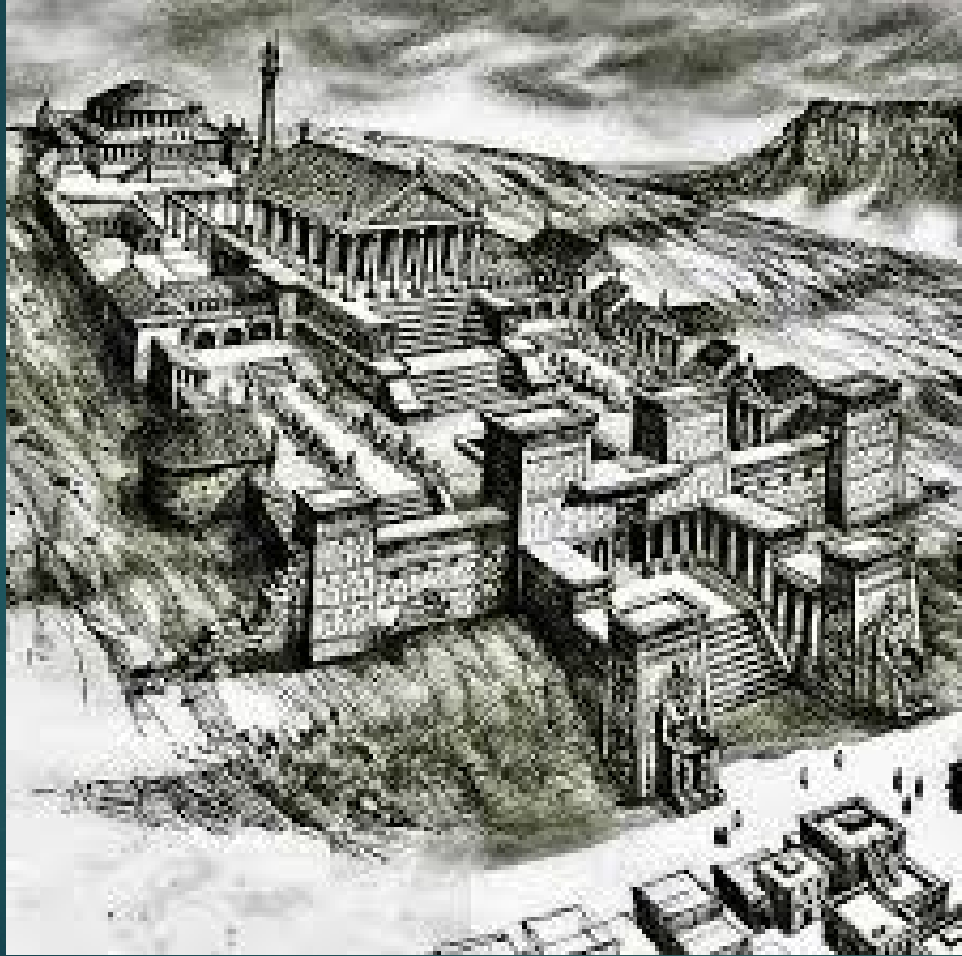


Hiero II

Syracuse Theatre



Library of Alexandria Reconstructions



Death of Archimedes from Giovanni Maria Mazzuchelli, *Notizie Istoriche di Archimede Siracusano*, 1737.



The Death of Archimedes, by Thomas Degeorge, 1815



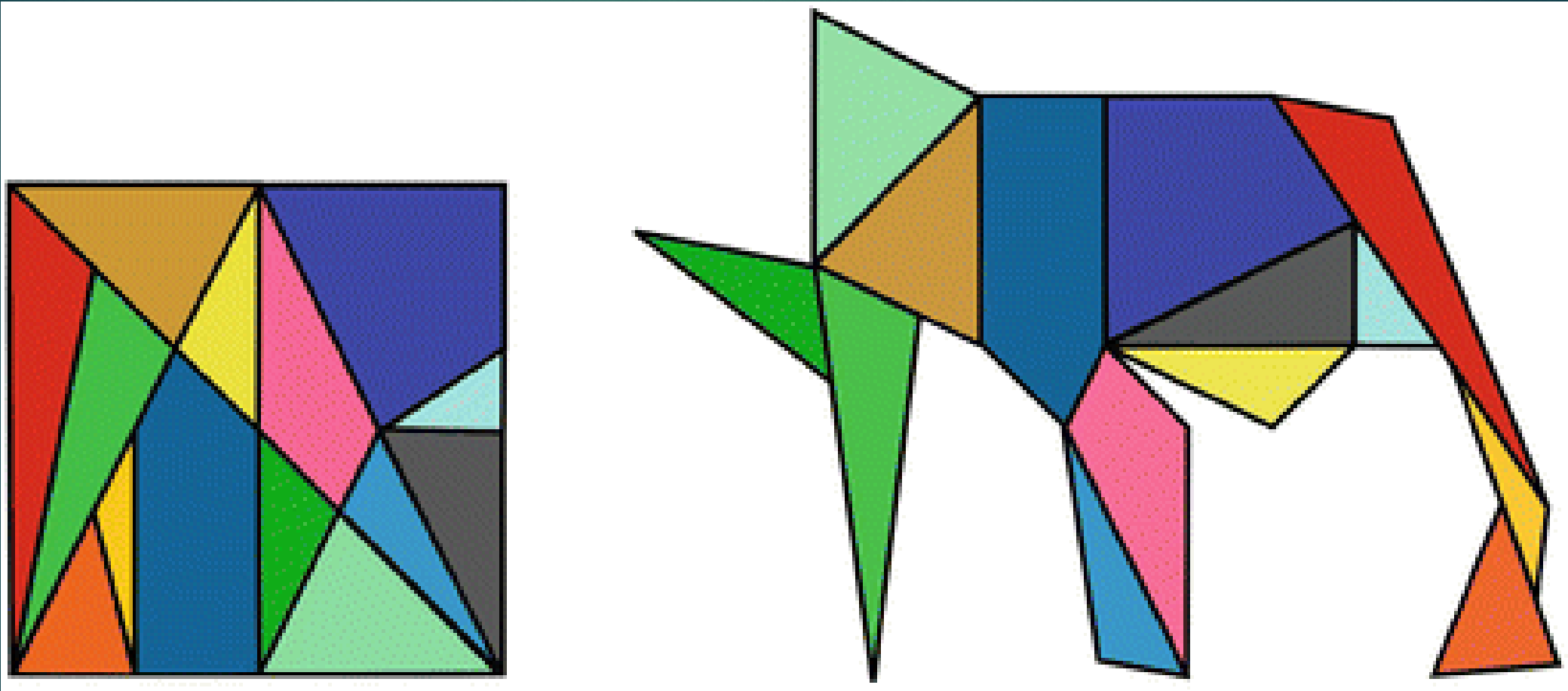
*Cicero
discovering the
Tomb of
Archimedes, by
Thomas
Christian Wink
(1781)*



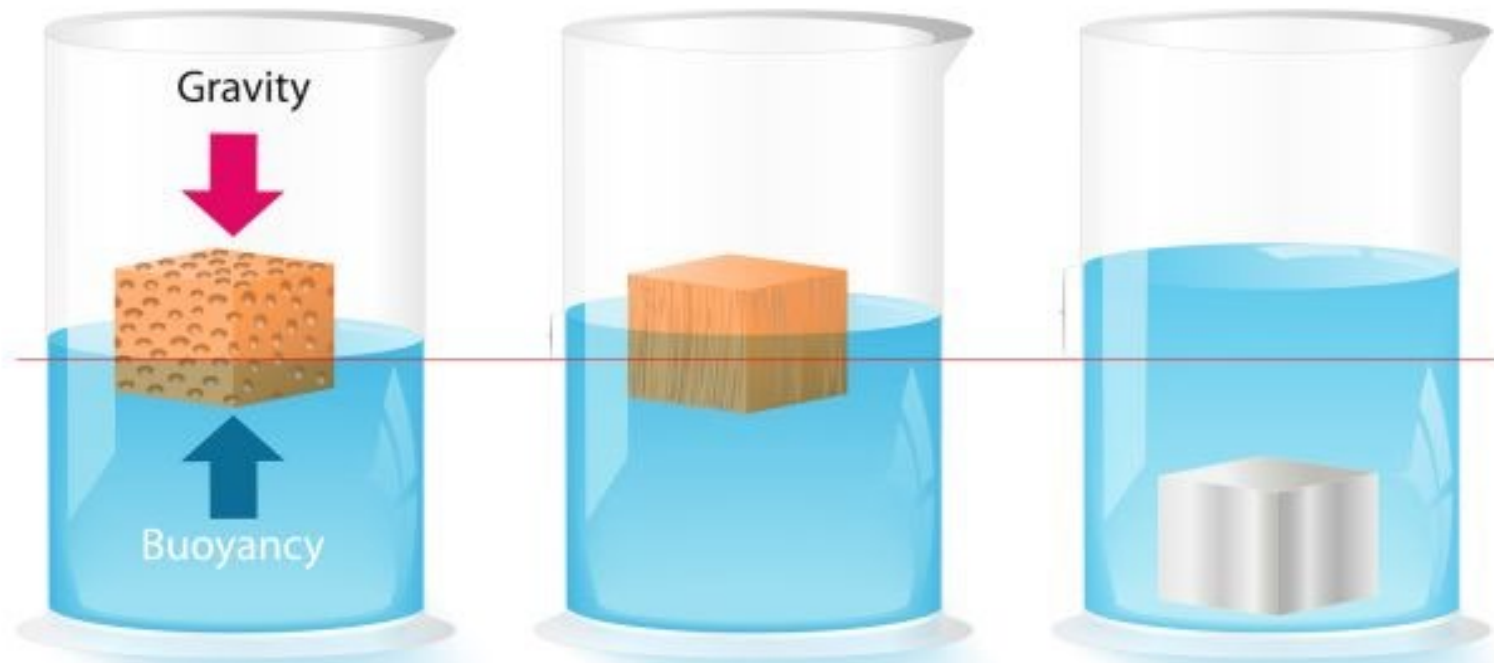
Archimedes Palimpsest



Ostomachion ('Bone-Battle') or Stomachion



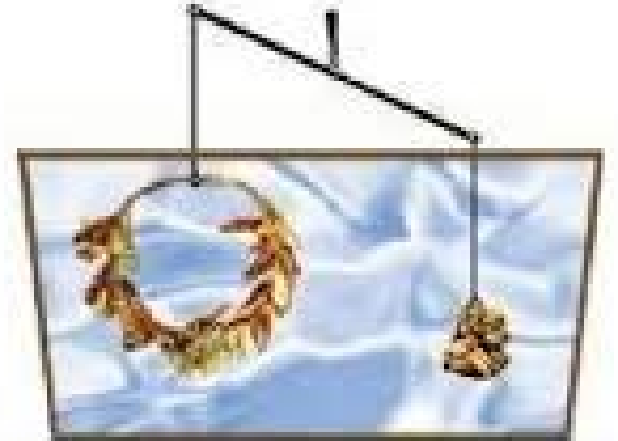
ARCHIMEDES PRINCIPLE



-Eureka!



The crown and the gold
have equal weight.

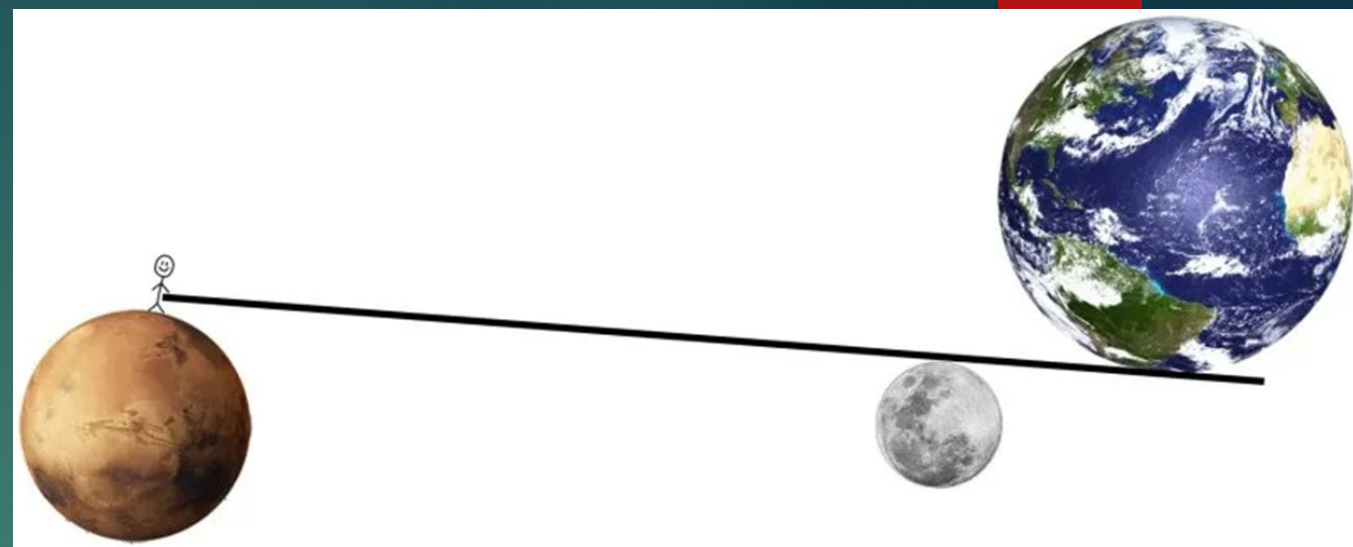


The crown displaced more
water than the gold.

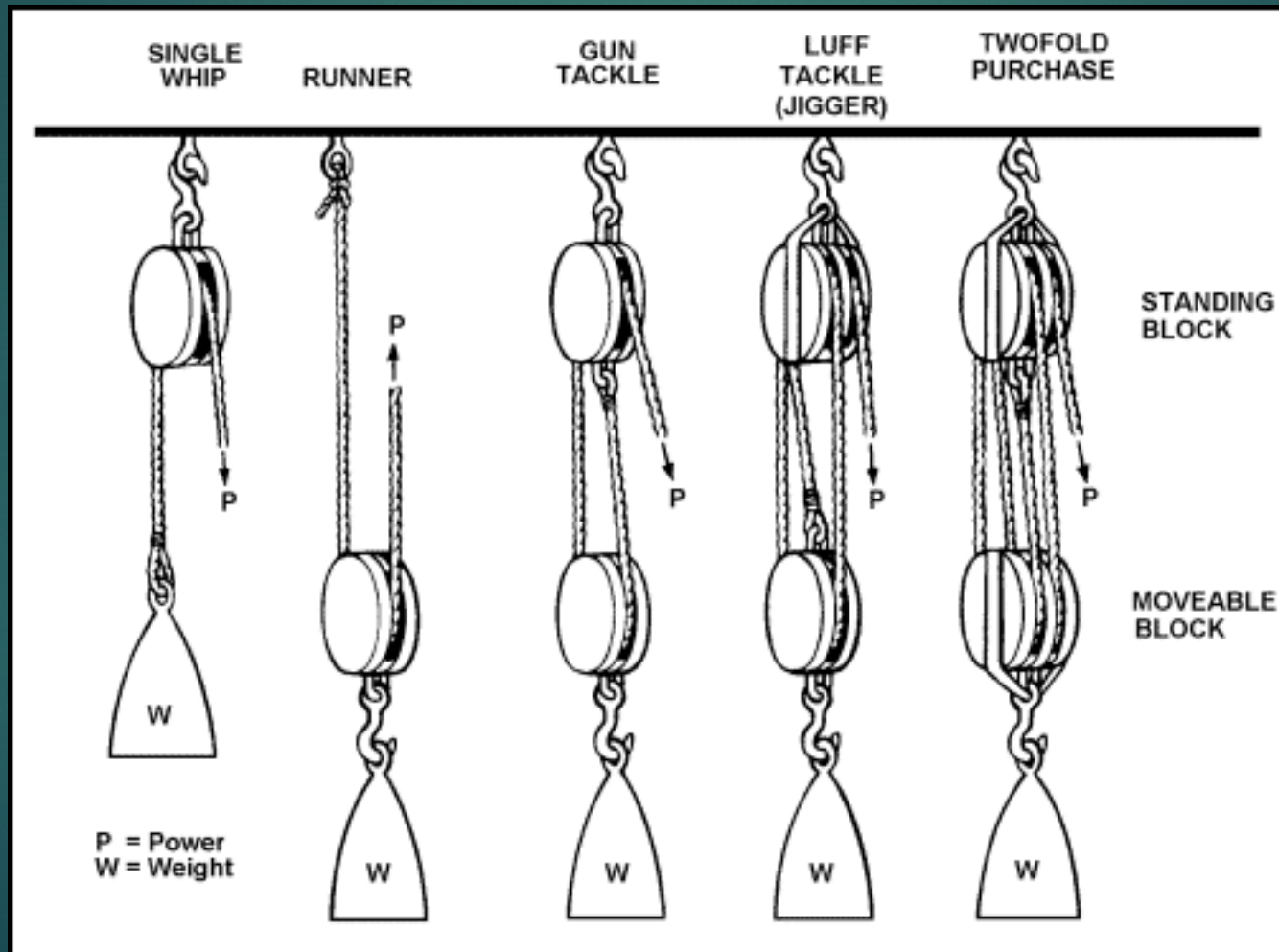
A statue of Archimedes in a bathtub at Madatech, Israel's National Museum of Science, Technology and Space in Haifa.



Lever



Block and Tackle Pulleys



SCREW

Egyptian terracotta model of Archimedes' screw.
200BC-30BC, Nile Delta (British Museum)

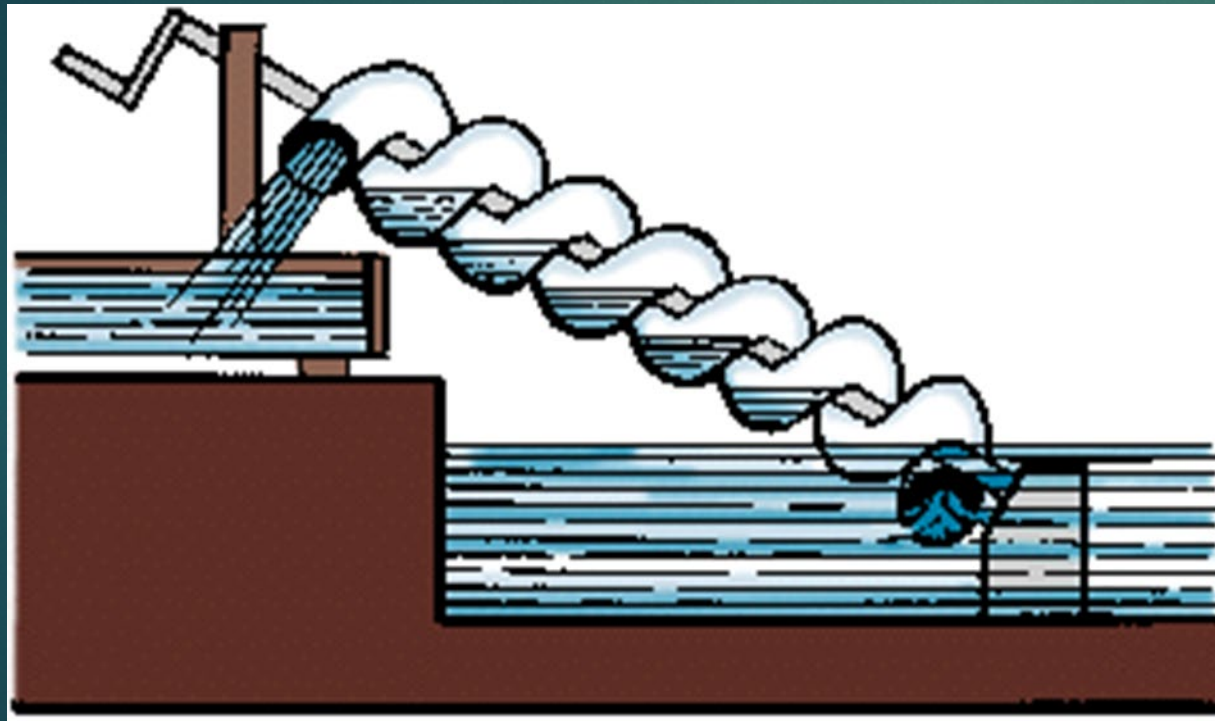
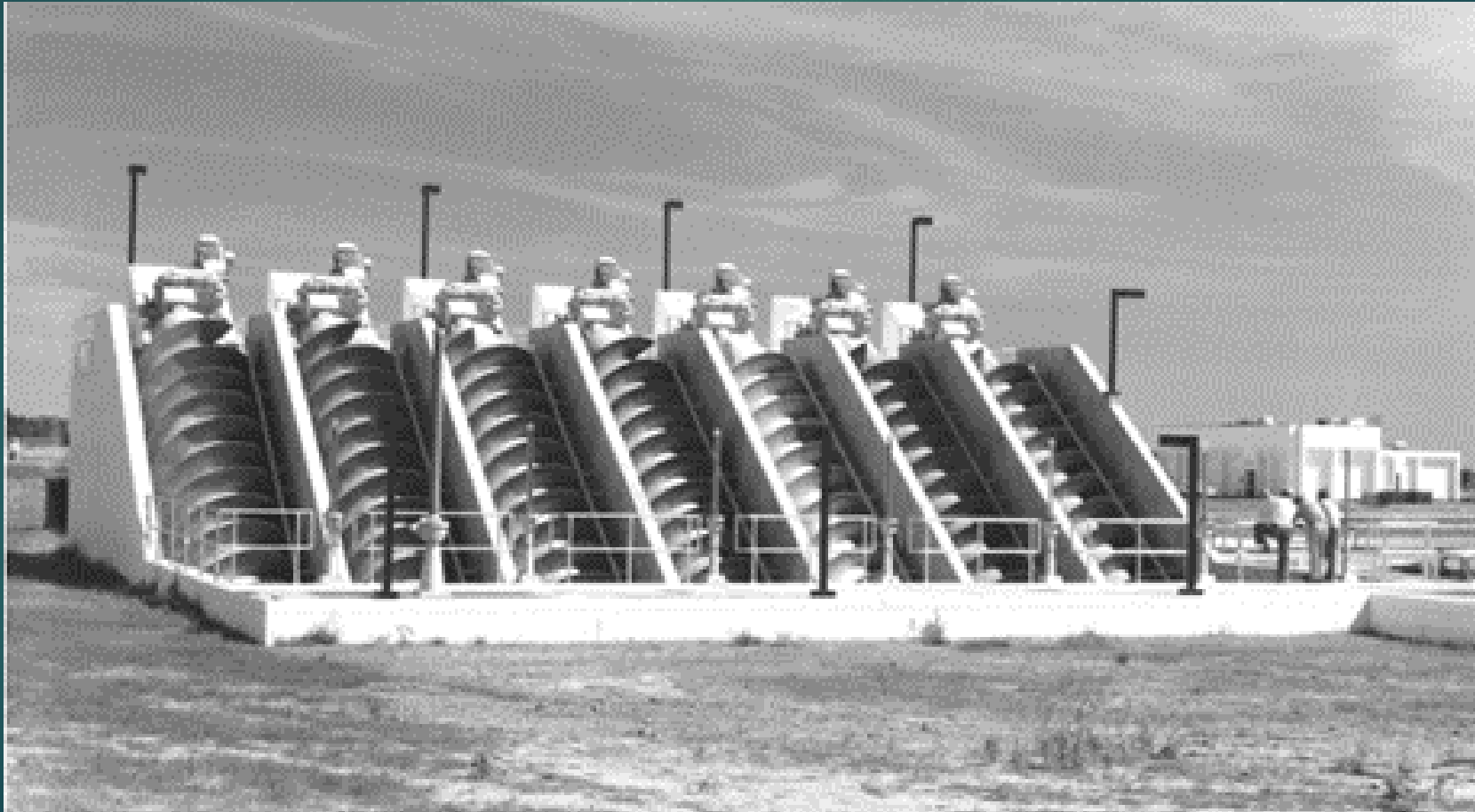




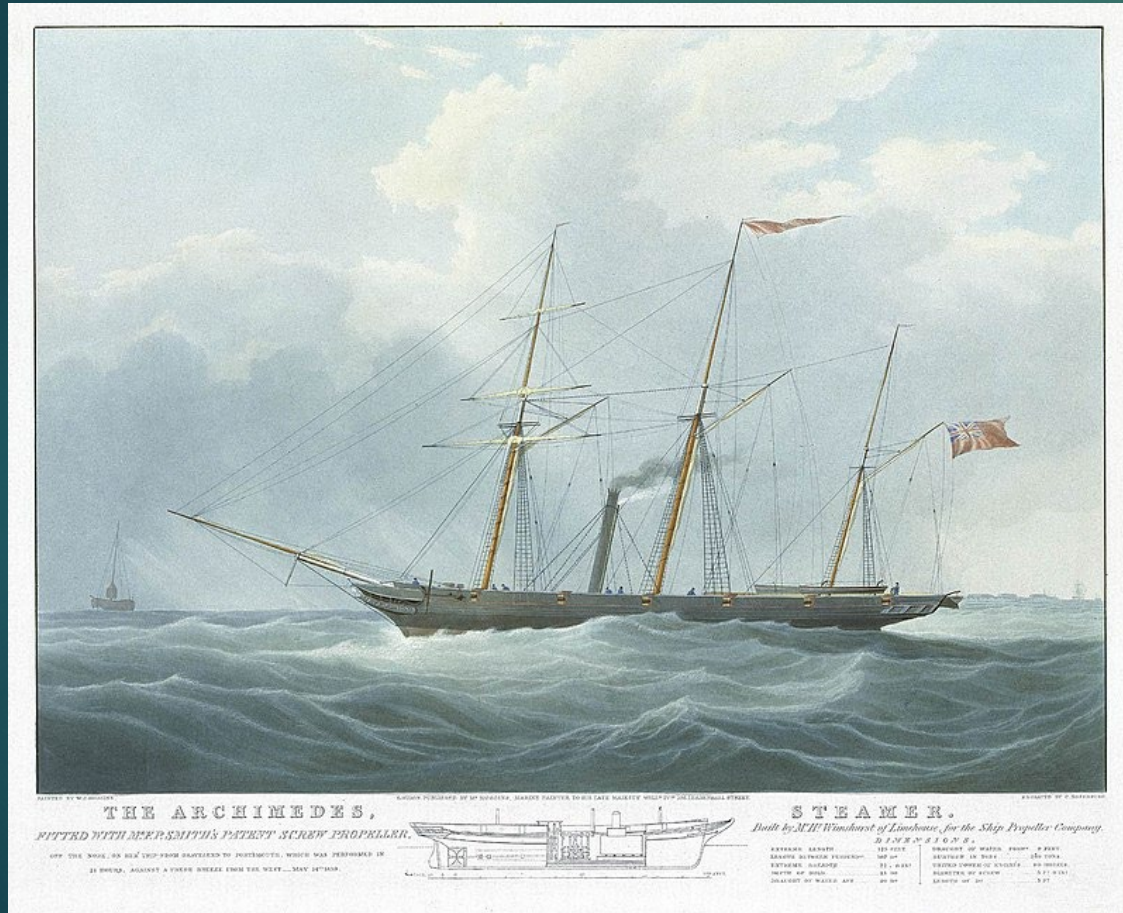
FIG. 3. Two-Bladed Archimedes Screw in Use in Modern Times in Egypt to Irrigate Fields

Seven 96-Inch-Diameter, Screw Pumps That Lift Wastewater from Pretreatment Section to Balance of Treatment Plant in Memphis, Tennessee.

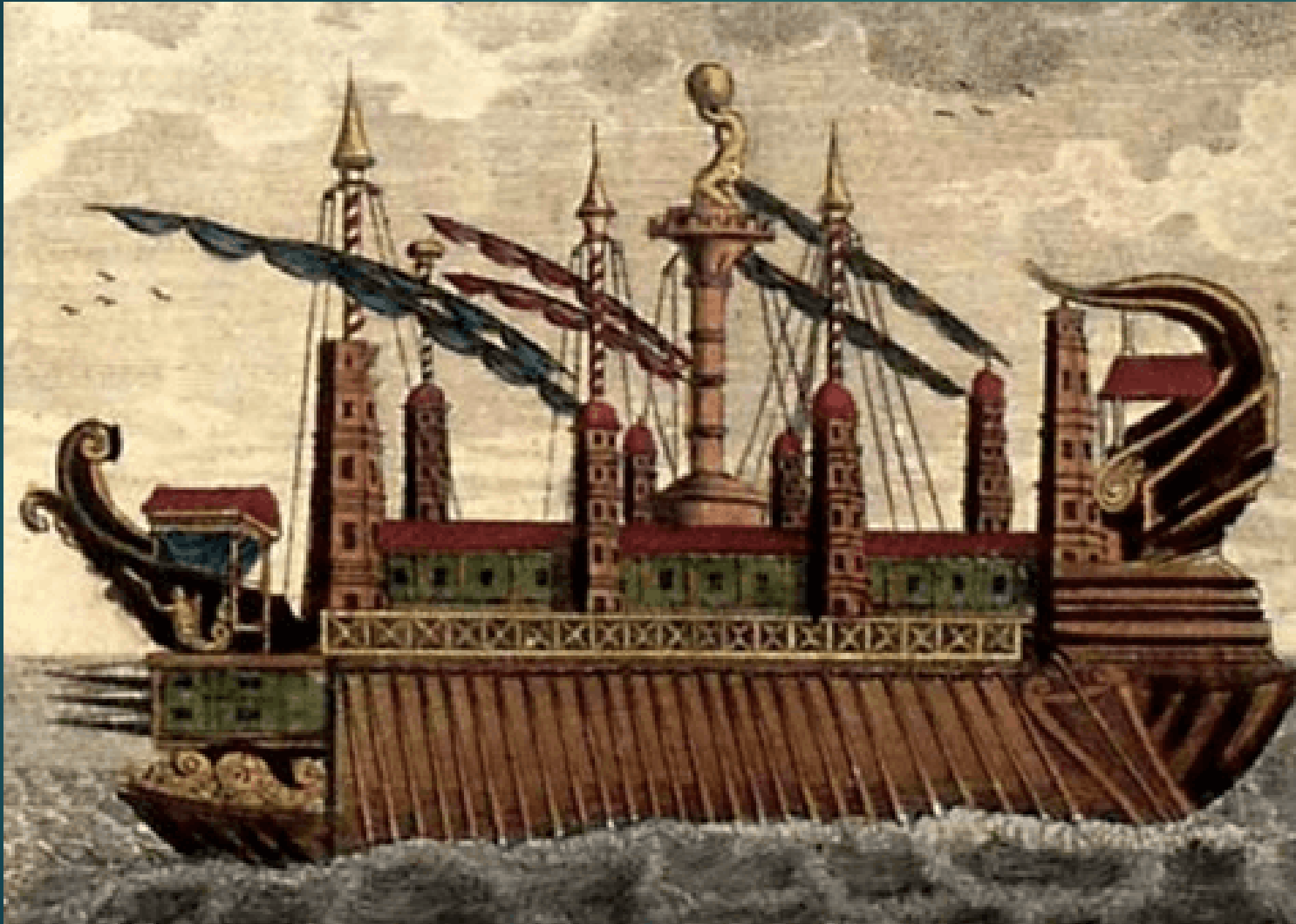


SS Archimedes

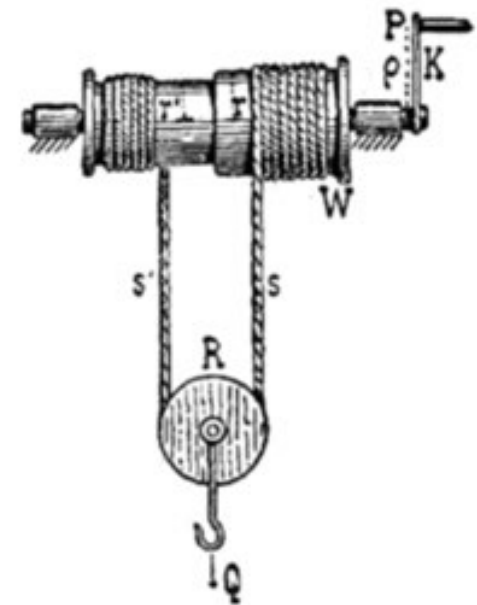
SS Great Britain



SYRACUSIA

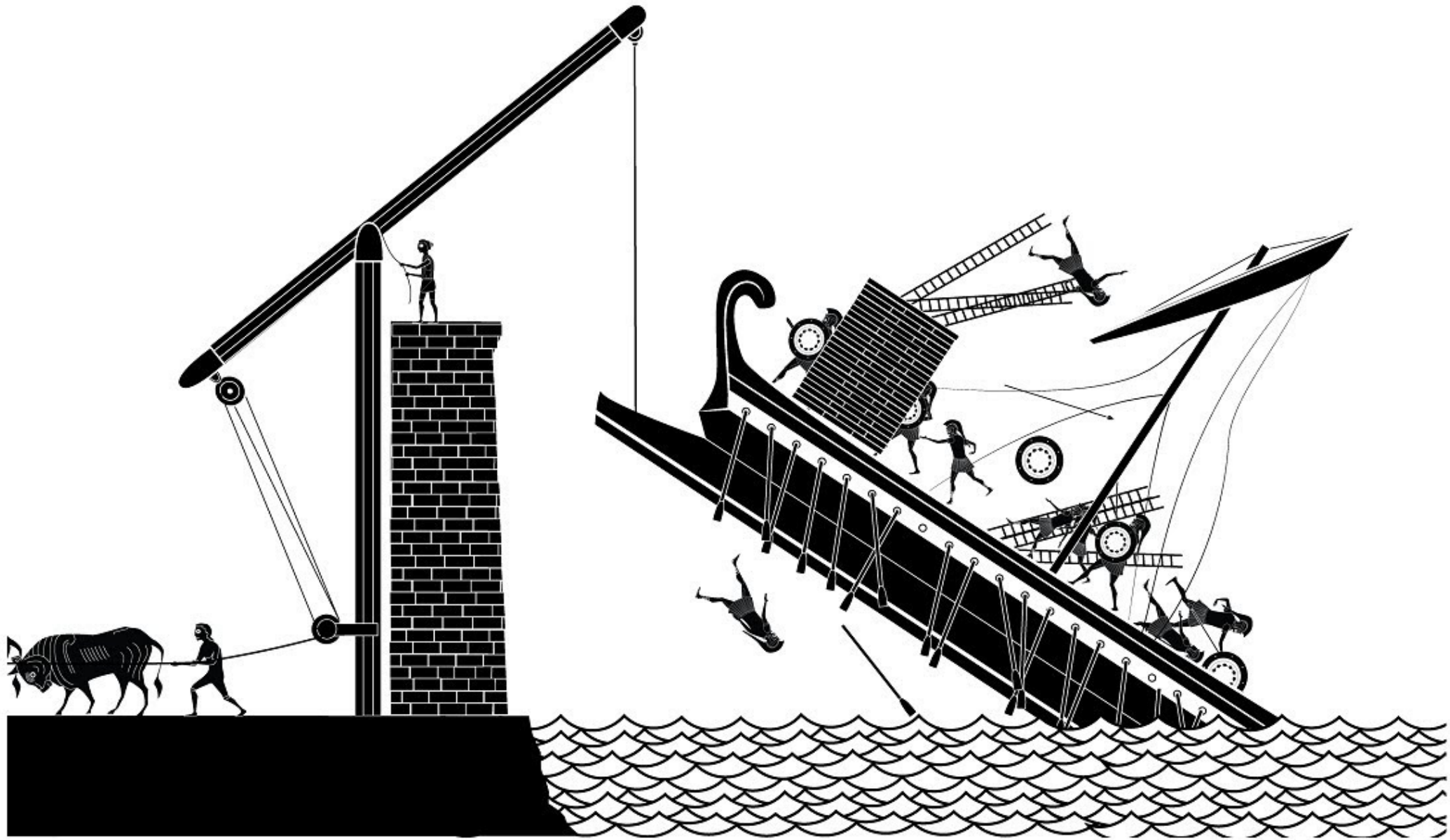


windlass



A painting of the Claw of Archimedes by Giulio Parigi, taking the name "iron hand" literally

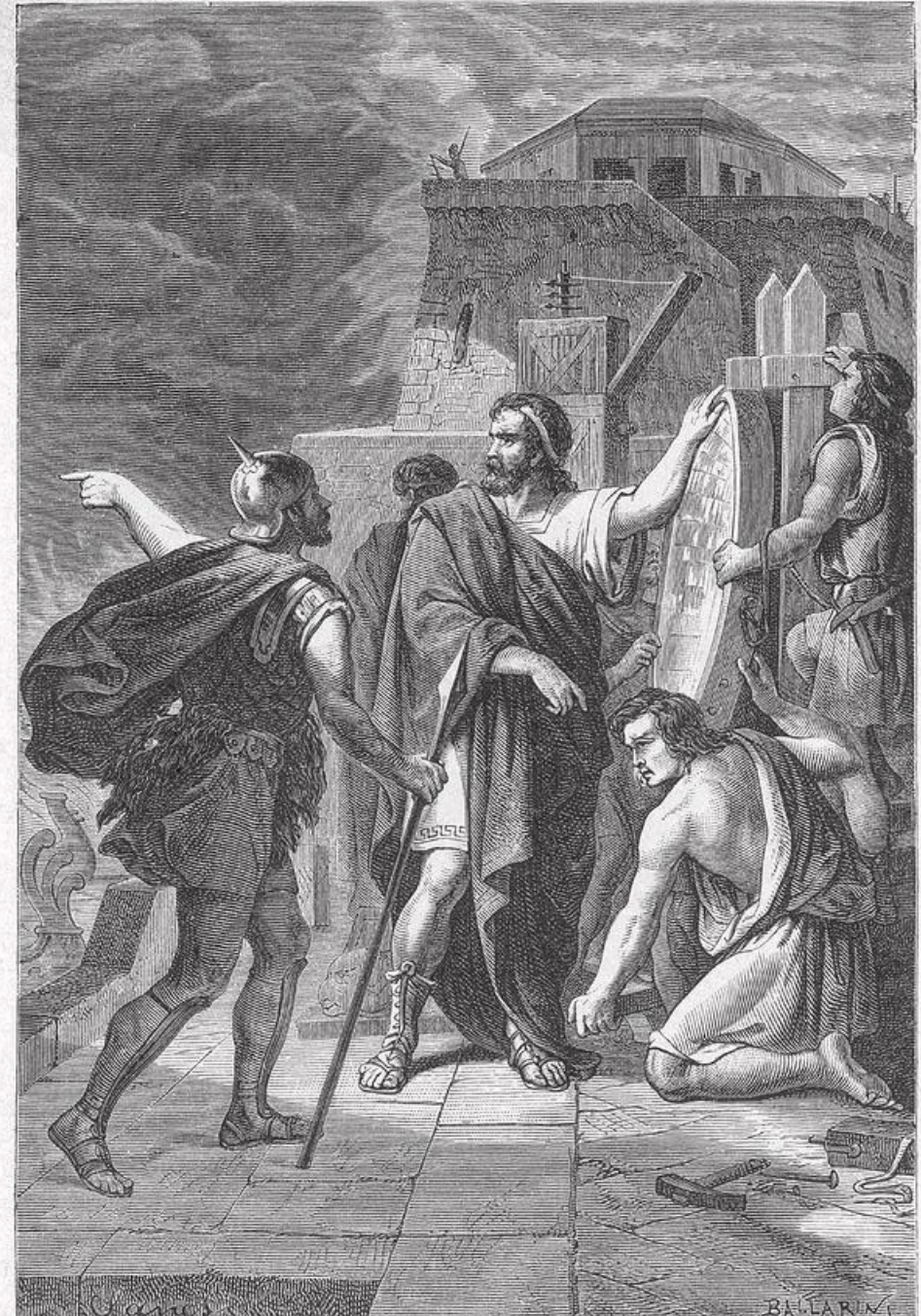




Artistic interpretation of Archimedes' mirror used to burn Roman ships by Giulio Parigi, c. 1599, Mural from Uffizi Gallery, Stanzino delle Matematiche, Florence



Archimedes' mirror



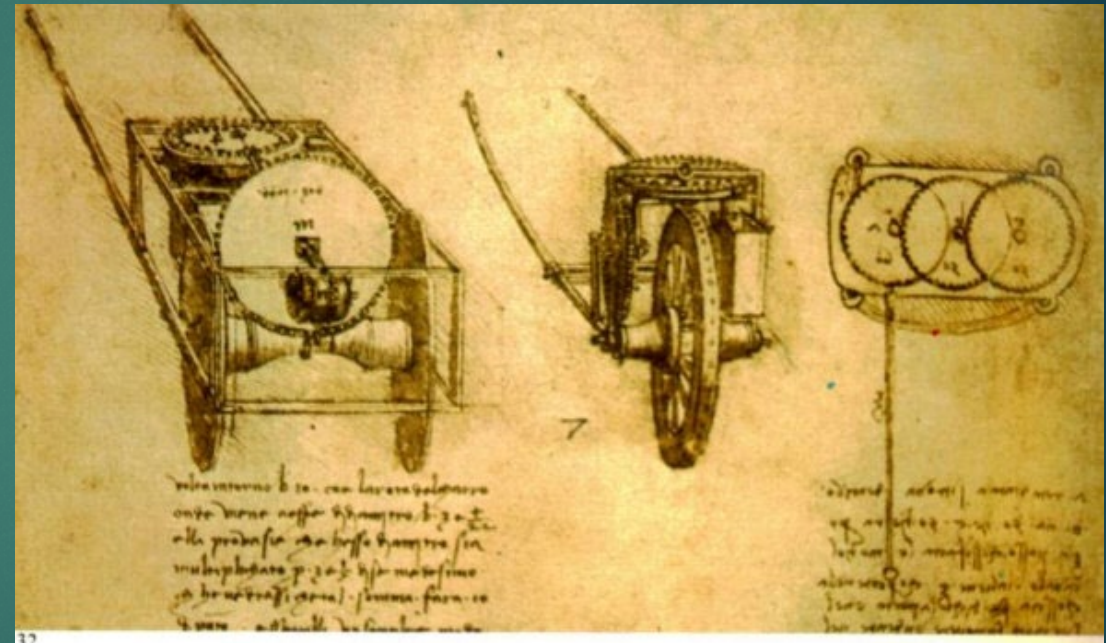
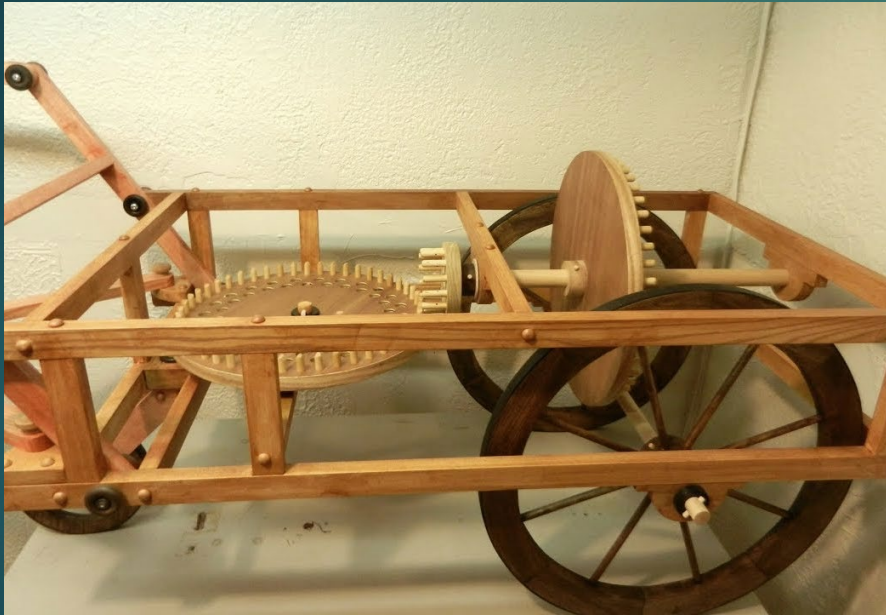
Concave Parabolic mirrors can concentrate sun's heat, as at Solar II in California



Archimedes Museum, Ancient Olympia



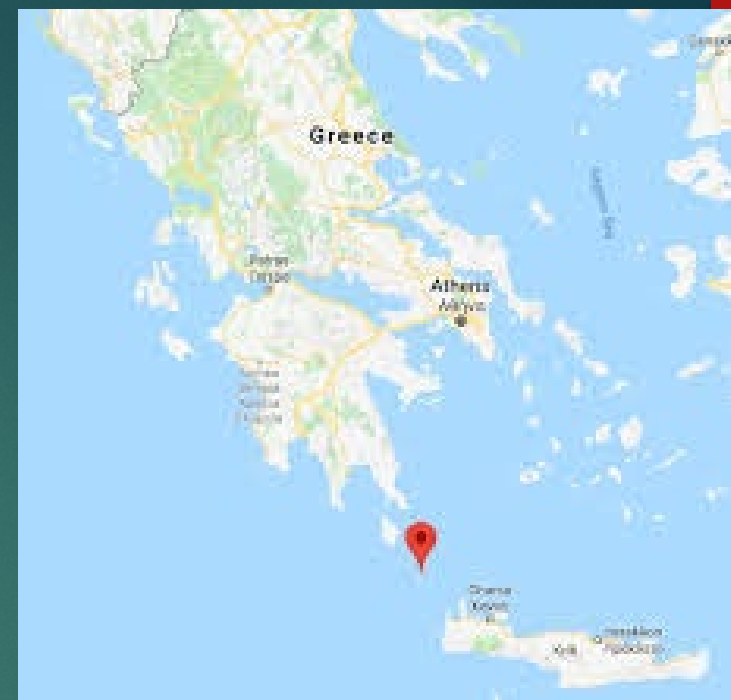
Archimedes' Odometer



Archimedes' Hydraulic Clock described in Medieval Arabic *Book of Archimedes on the Construction of Water-Clocks* (Kitāb Arshimīdas fī al-binkāmāt).



Antikythera Mechanism



Archimedes was constantly calculating

Coin of his Foe and
Admirer,
Marcellus

