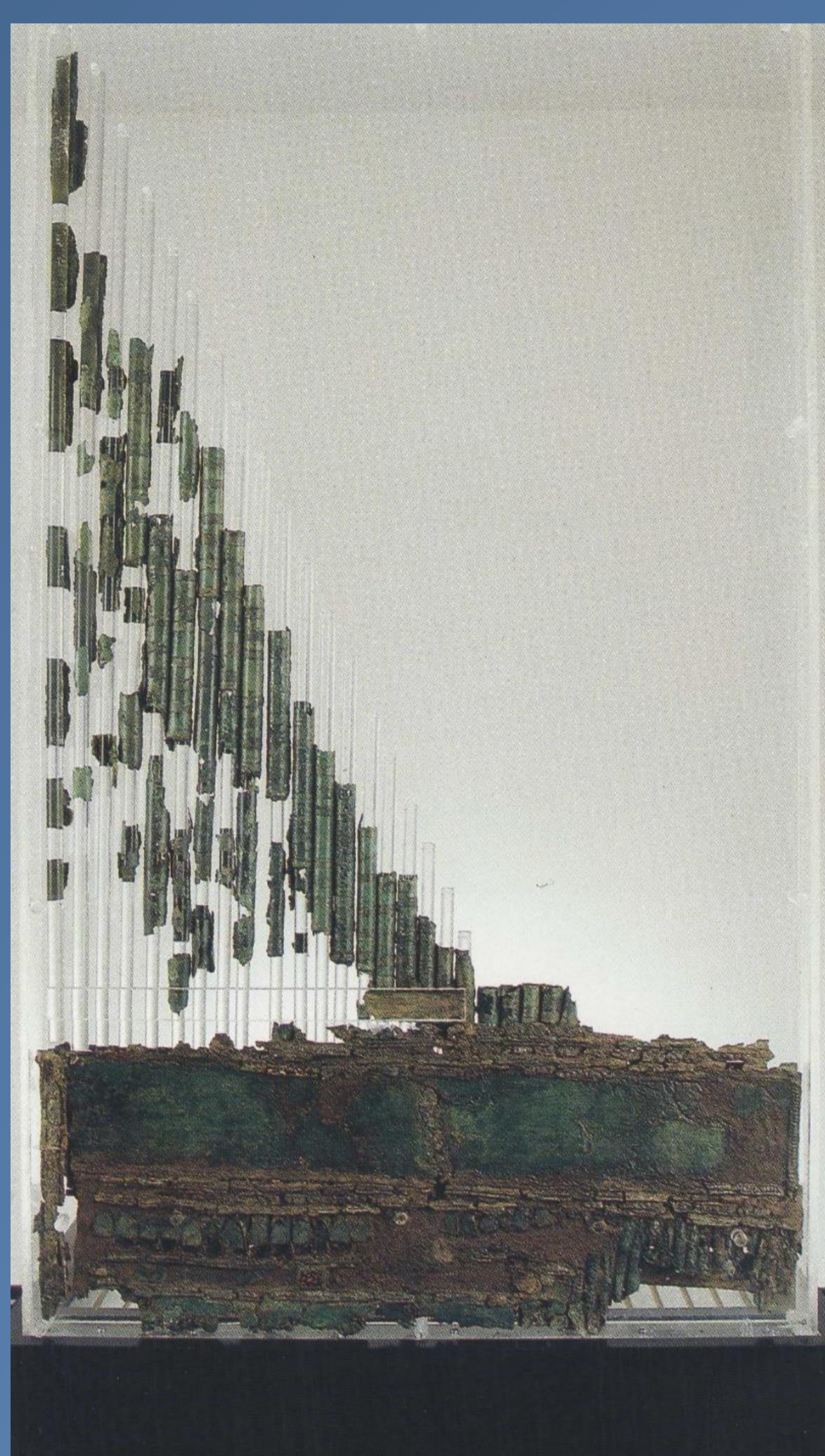




# CTESIBIUS



1. Ancient hydraulis found in Dion

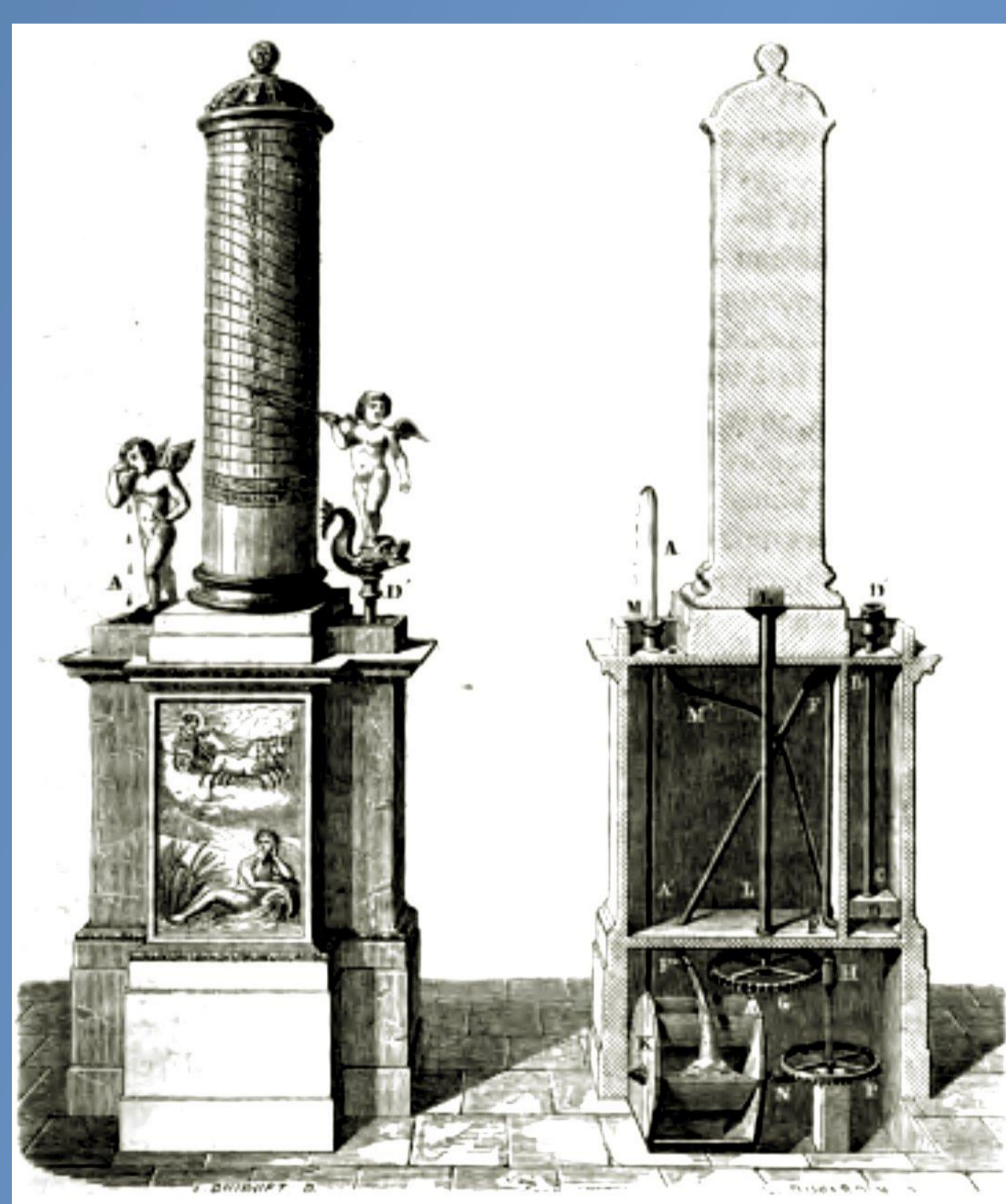
Ctesibius (285-222b.C.) was an ancient Greek inventor and mathematician, born in Alexandria. He was the head of the Musaeum ("Institution of the Muses") of Alexandria. His constructions were based on the science of compressed air, its elasticity and its uses in pumps. He is credited with a number of inventions, including a water pump, a water organ, a more precise water clock, and bronze spring and pneumatic catapults, several automatic machines, etc. His work is chronicled by many later inventors, e.g. Philo of Byzantion, Vitruvius, Athenaeus, etc., who repeatedly mentioned him.



2. Reconstruction of hydraulis in the the Traveling Exhibition of Kotsanas Museum of Ancient Greek Technology

## Hydraulis

1,2. One of his greatest inventions is the hydraulis, an early type of pipe organ. It operated by converting the dynamic energy of water into air pressure to produce sound.



3. Ctesibius' water clock, as visualized by the 17th-century French architect Claude Perrault

## 3,4. Hydraulic clock

Ctesibius made some modifications to the original clepsydra design, leading to the first accurate hydraulic clock in the world.



4. Reconstruction of the hydraulic clock (Exhibition IDEA in the NOESIS Science Center and Technology Museum, Thessaloniki) (September 2017)

### Members of the working group:

Paraskevi Floru, Konstandinos Karadukas, Alexandros Mironis, Alexandra Papadopulu, Konstandinos Tsakiris

Supervisor teacher: Vassiliki Gratziu

Source of the photos 1-4:  
 1. Παντερμαζής Δ. Δίον: Αρχαίο λογικό όργανο και Μουσείο. Αθήνα 1993. Adam Ed. 84 fig.  
 2. Personal photo from the Traveling Exhibition of Kotsanas Museum of Ancient Greek Technology  
 3. File: François Arago - Extrait de "Astronomie populaire" Tome 1 de François ARAGO sur Wikisource - ARAGO François Astronomie Populaire T1 page 0057 Fig16-17.jpg  
 4. Personal photo from the Exhibition IDEA (Sponsor: Stavros Niarchos Foundation) in the NOESIS Science Center and Technology Museum, Thessaloniki (2017)