

**5-hour
ENERGY™**

- ✓ Hours of energy now*
- ✓ No crash later
- ✓ Sugar free
- ✓ 0 net carbs

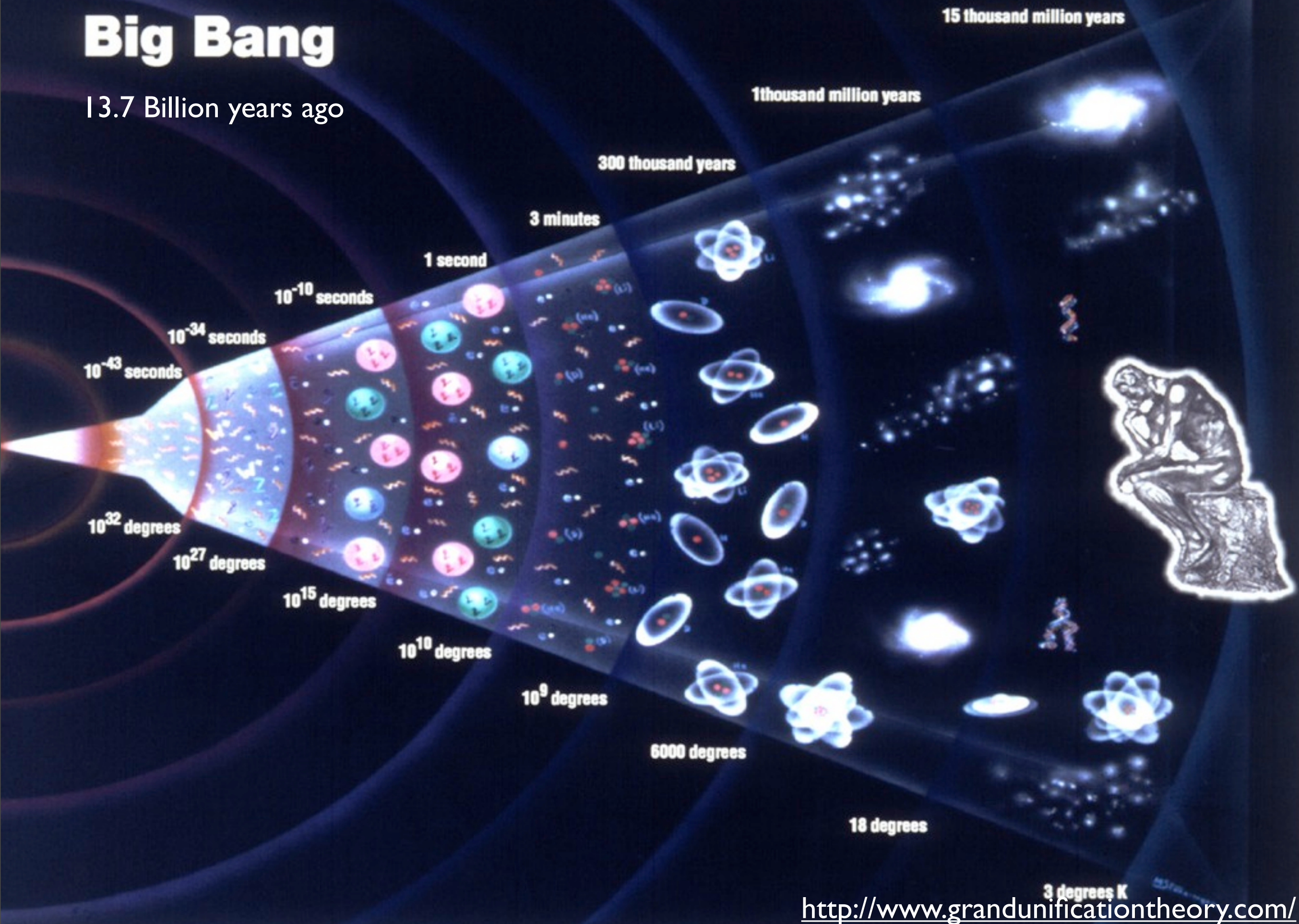
Feel it in minutes • Lasts for hours

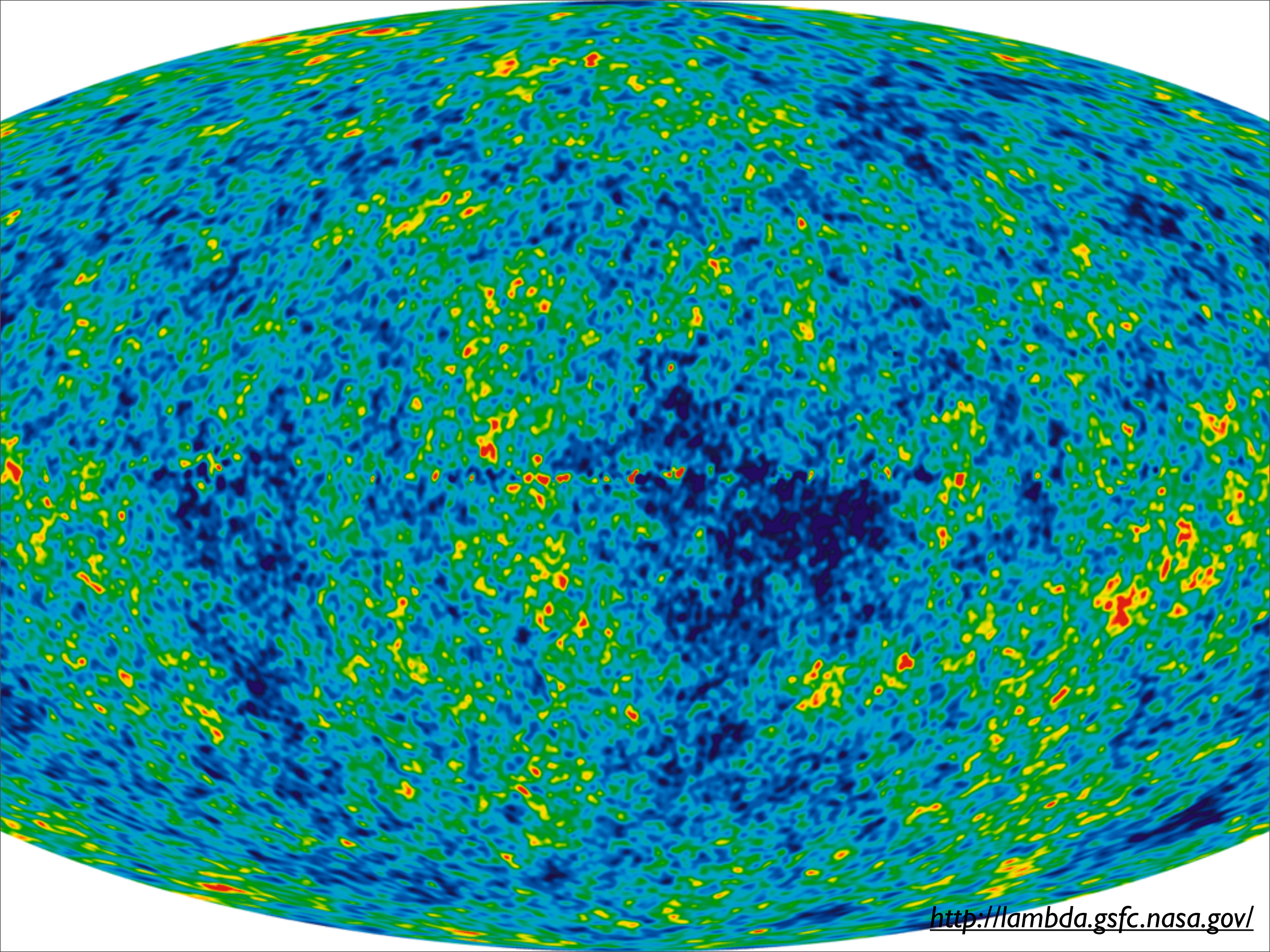
BERRY FLAVOR • 2 FL OZ (60ML)

VITAMIN C

Big Bang

13.7 Billion years ago







4.2 billion kg of matter to energy per second

$$E=mc^2$$

so

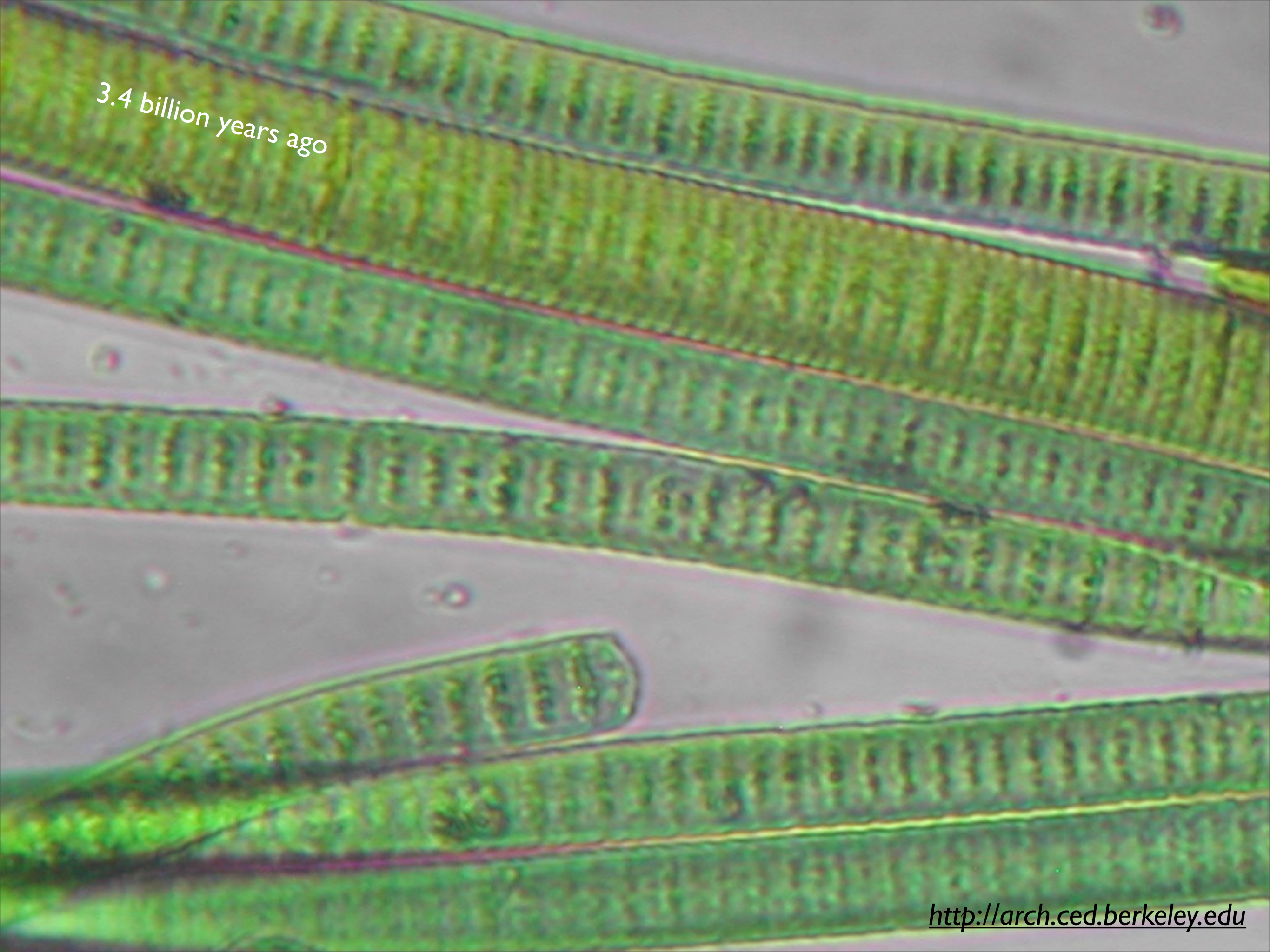
$$3.7 \times 10^{26} \text{ joules / second} =$$

$$3.7 \times 10^{26} \text{ watts}$$

4.6 billion years ago



3.4 billion years ago





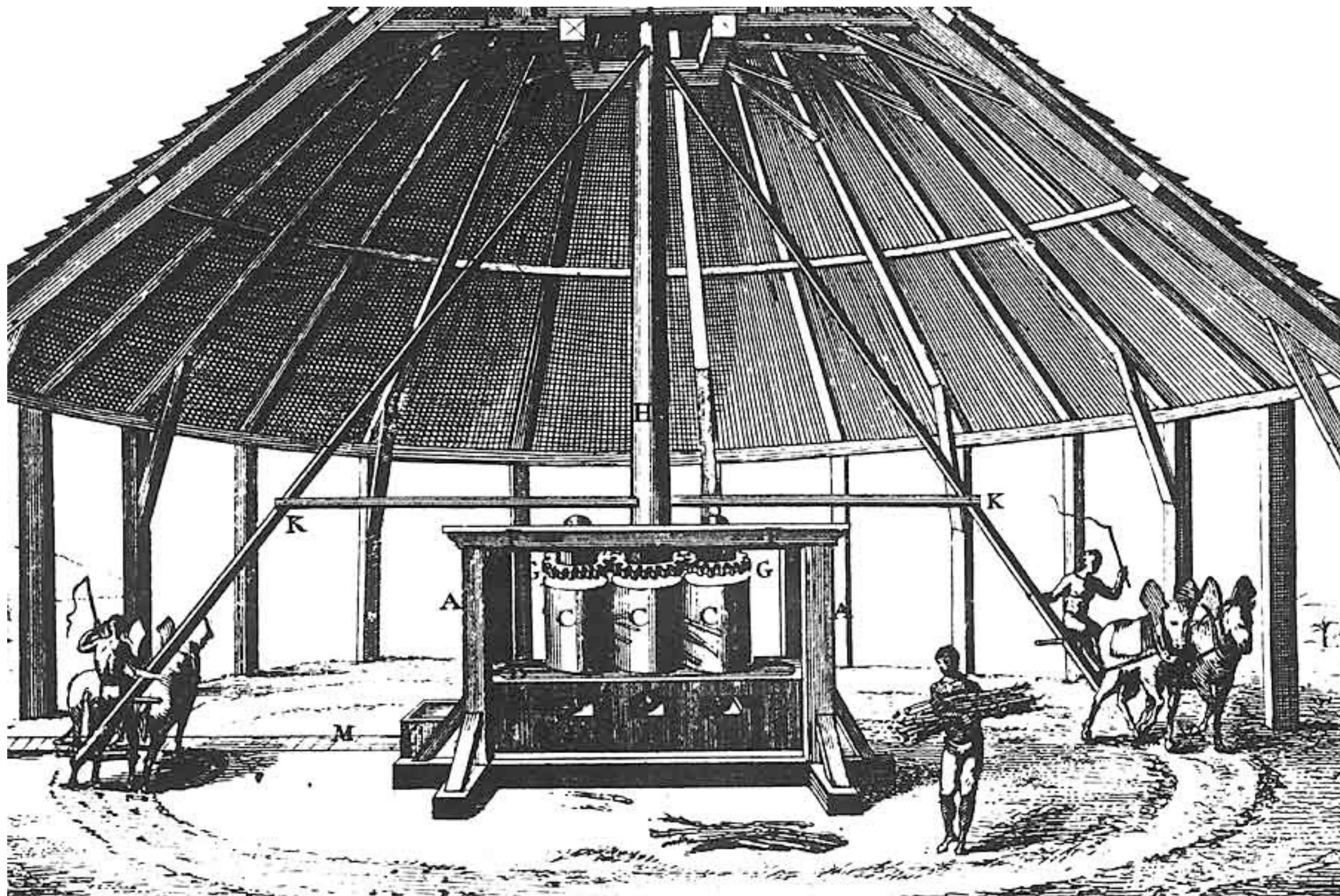


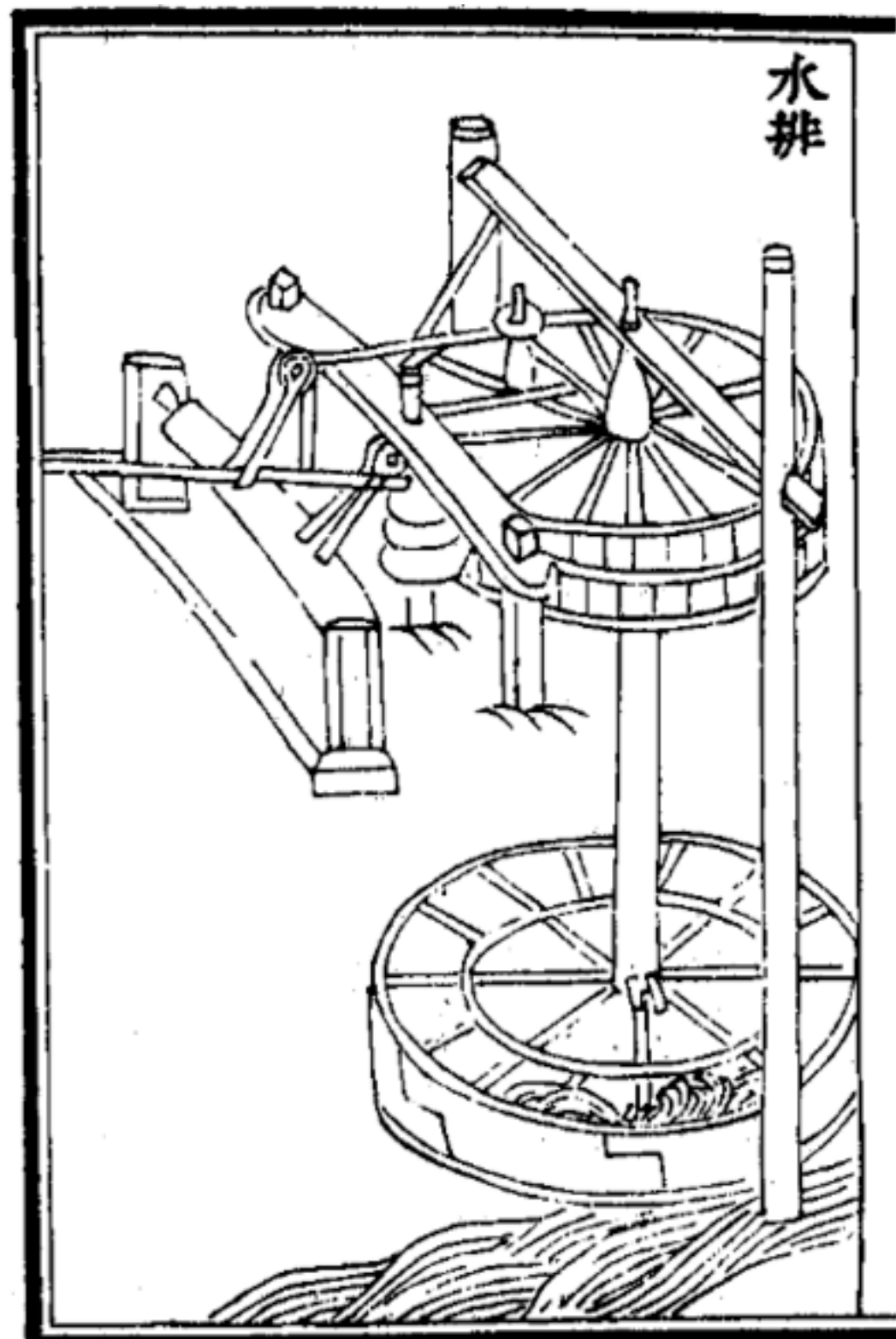






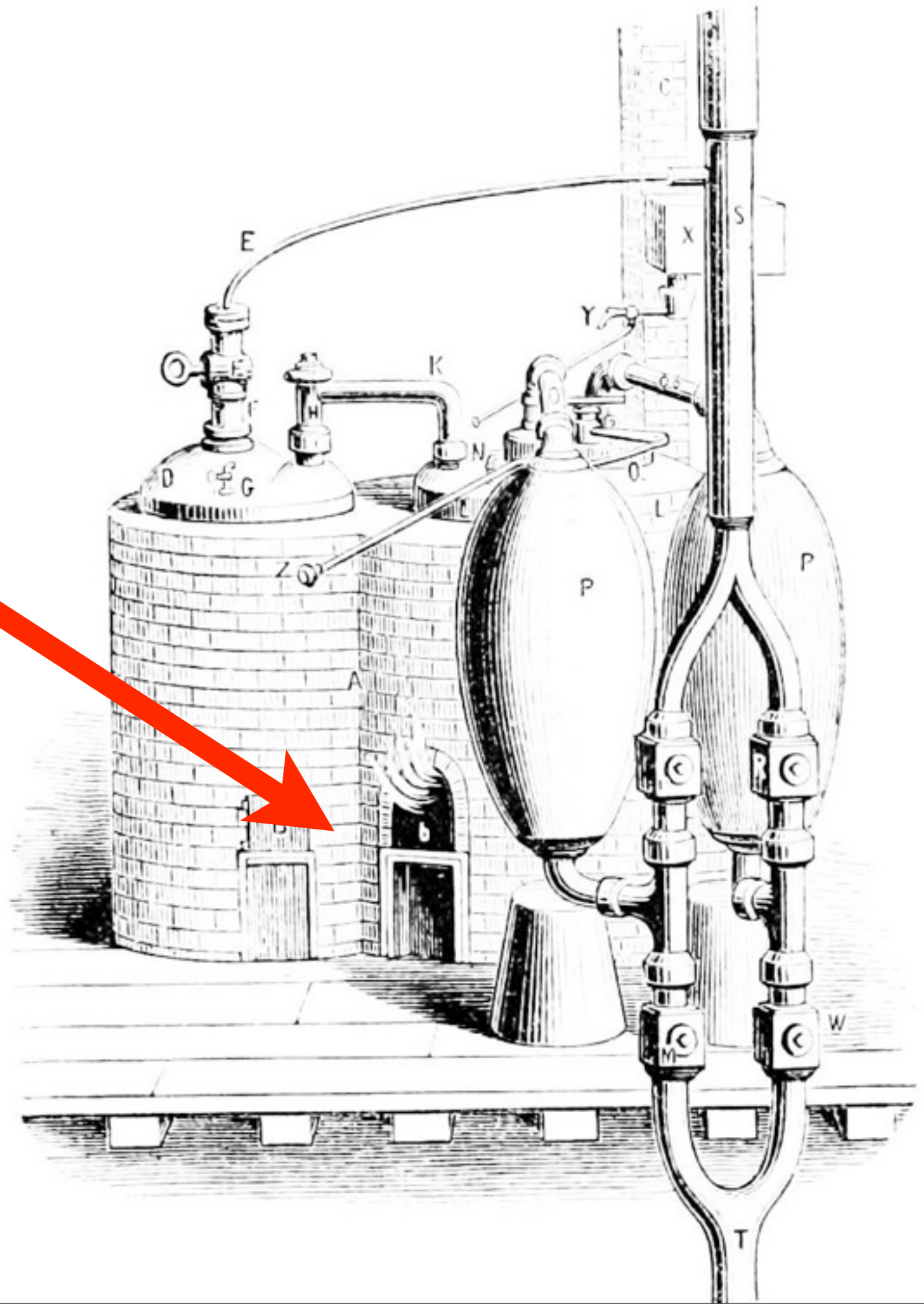




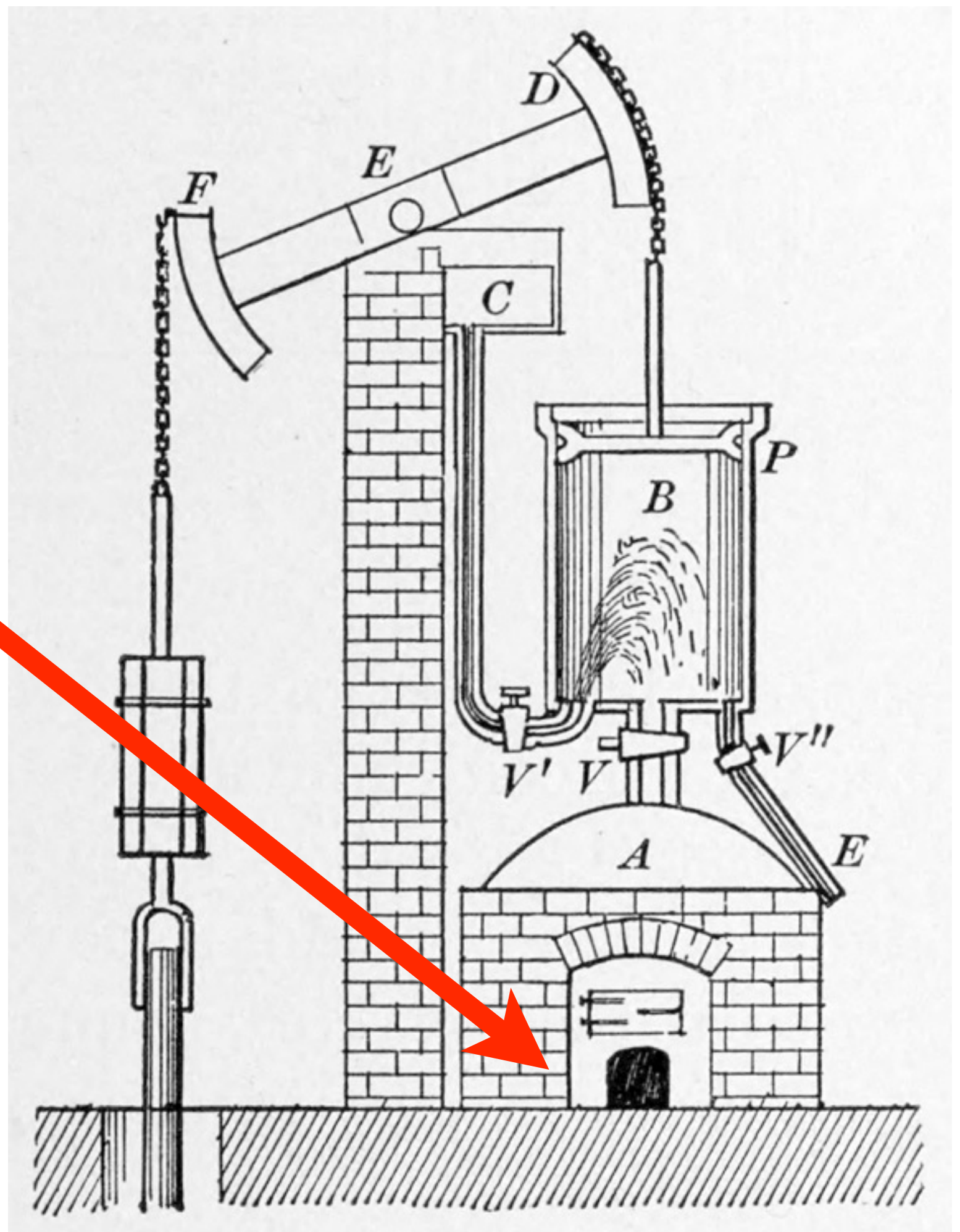




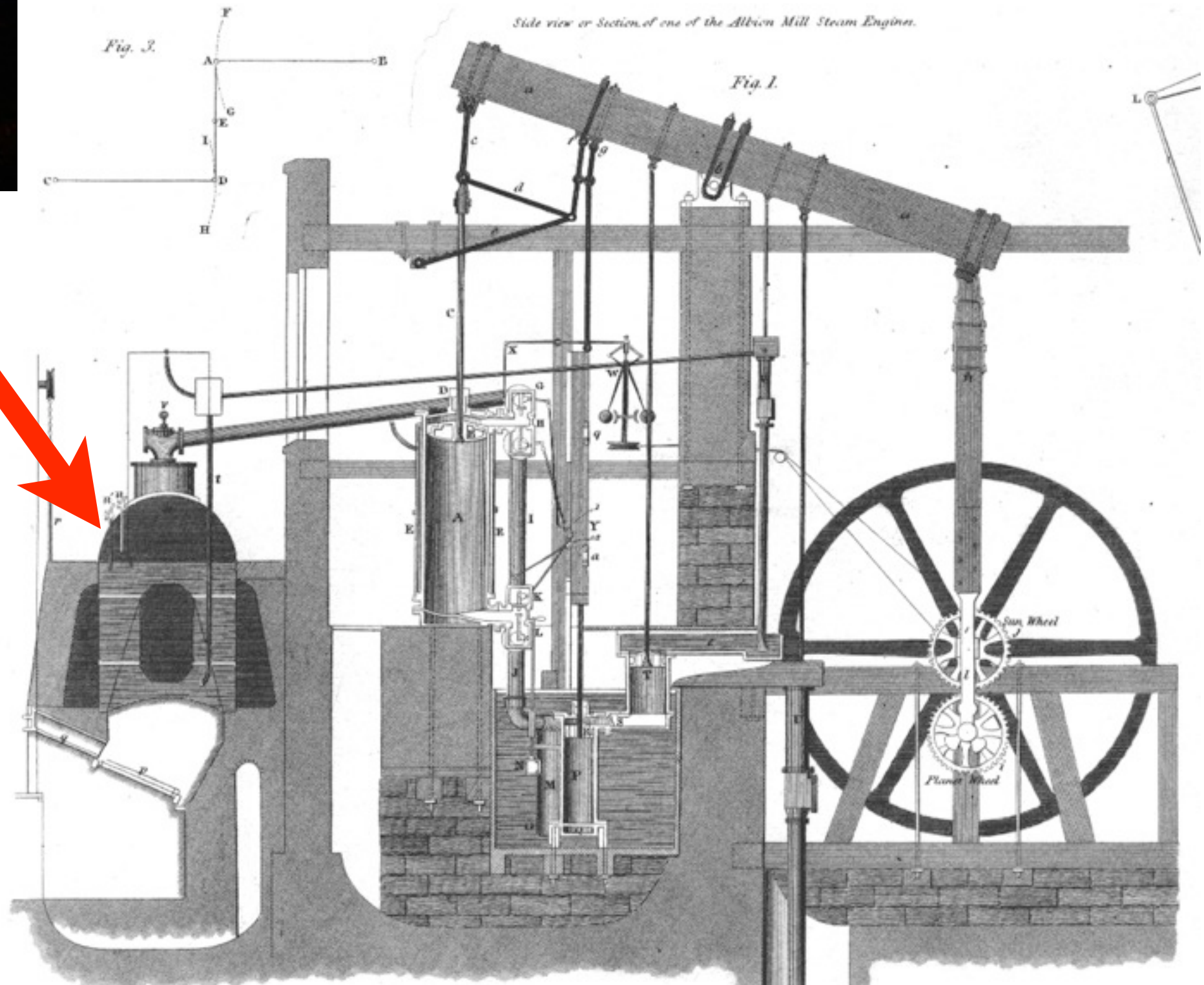
100 BC - Herona



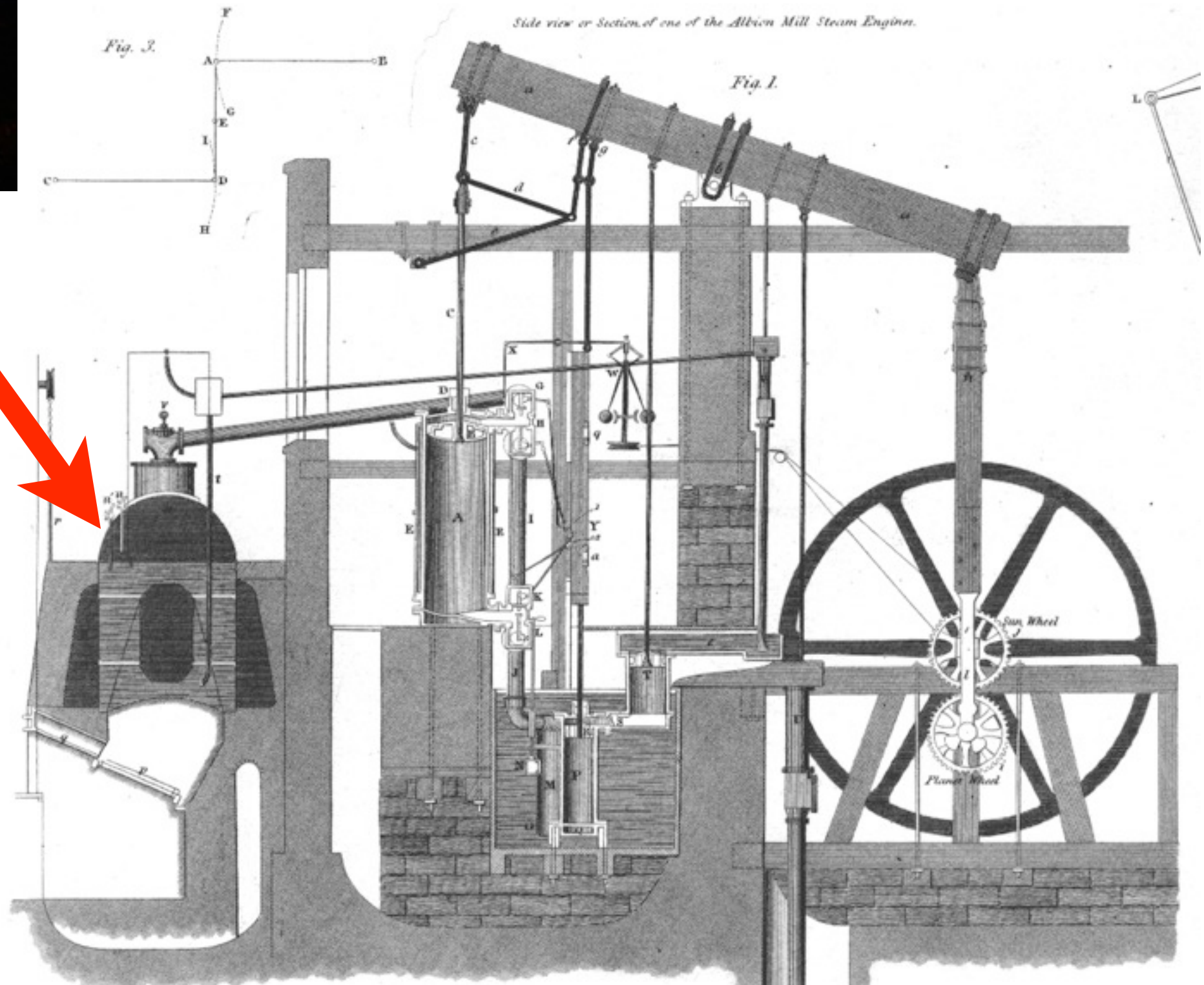
1699 - Savery



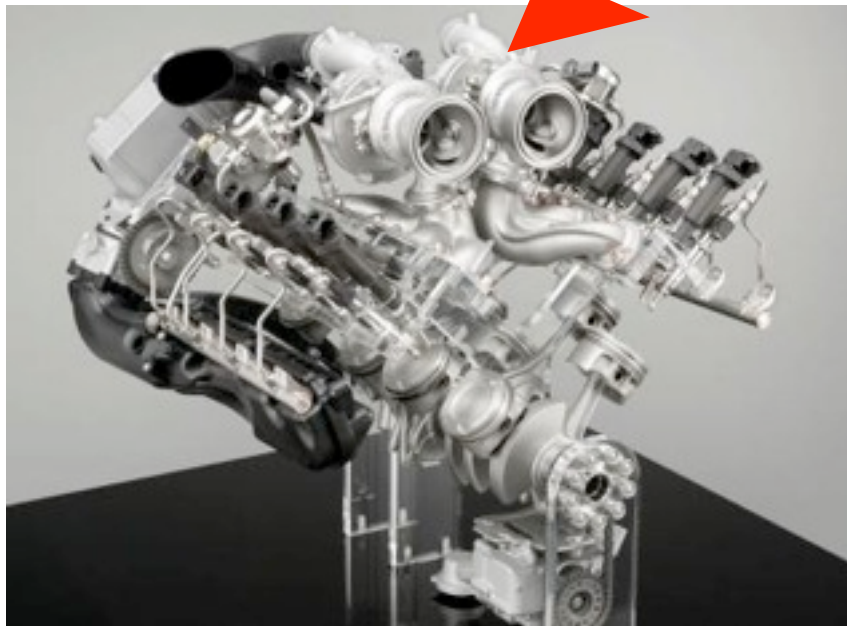
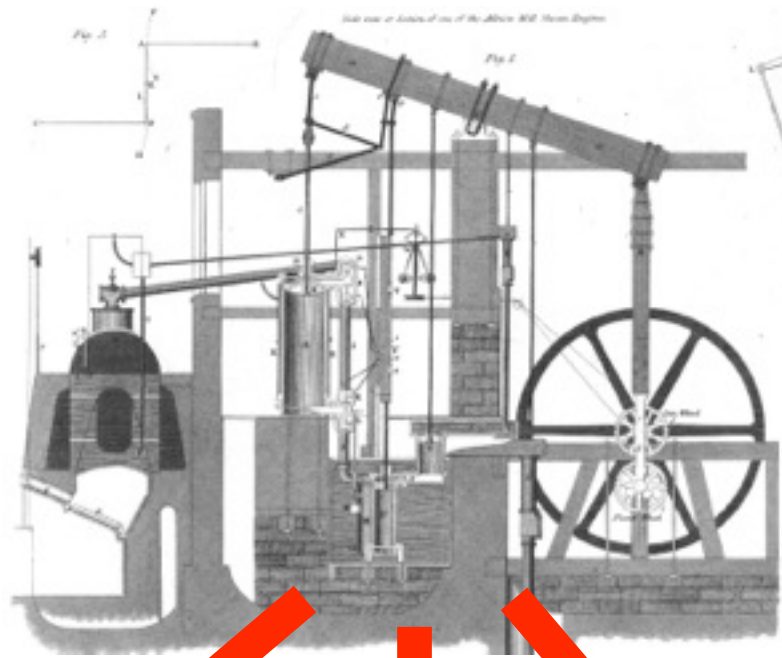
1712 - Newcomen



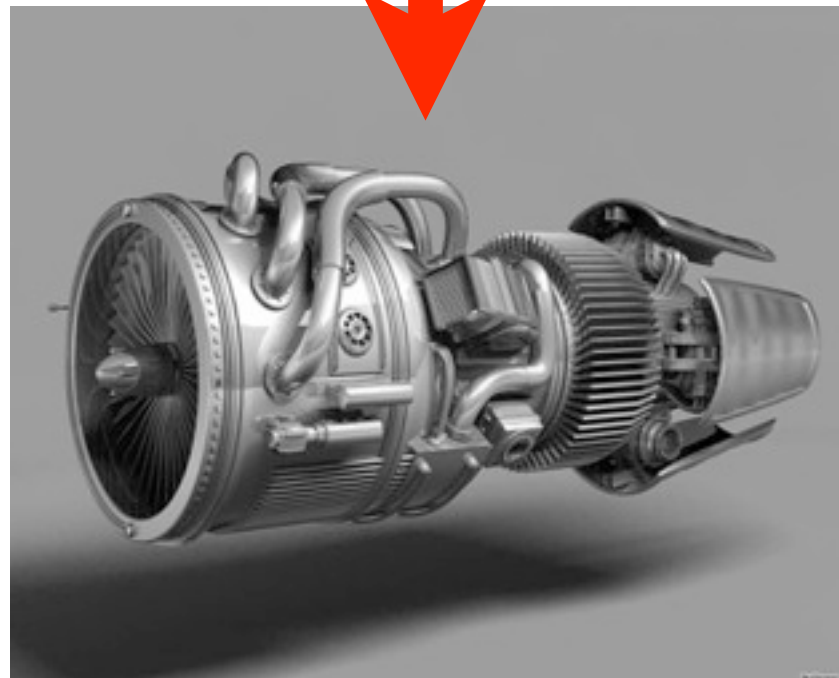
1775 - Watt



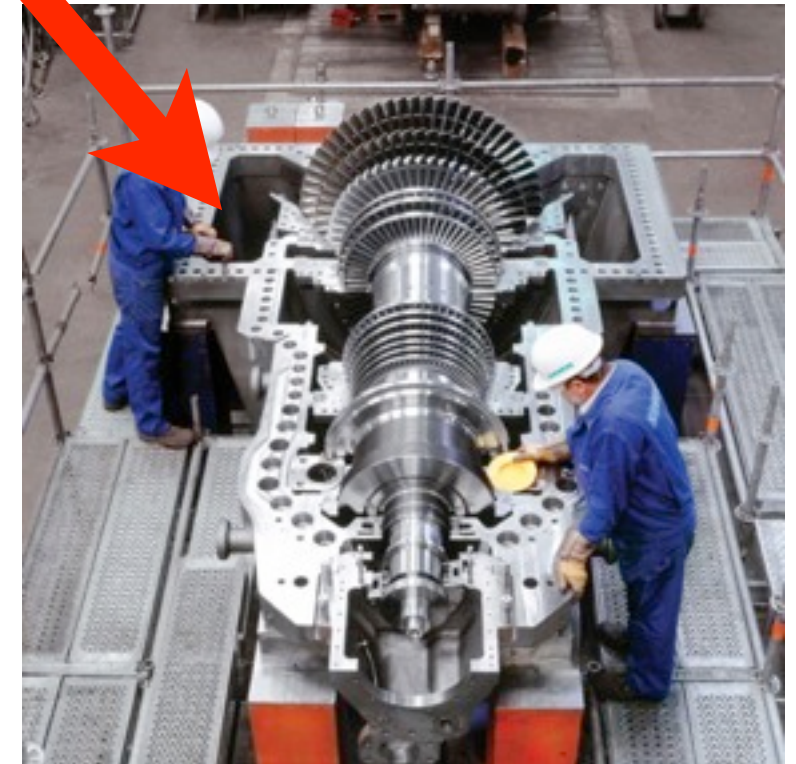
1775 - Watt



I.C.E.

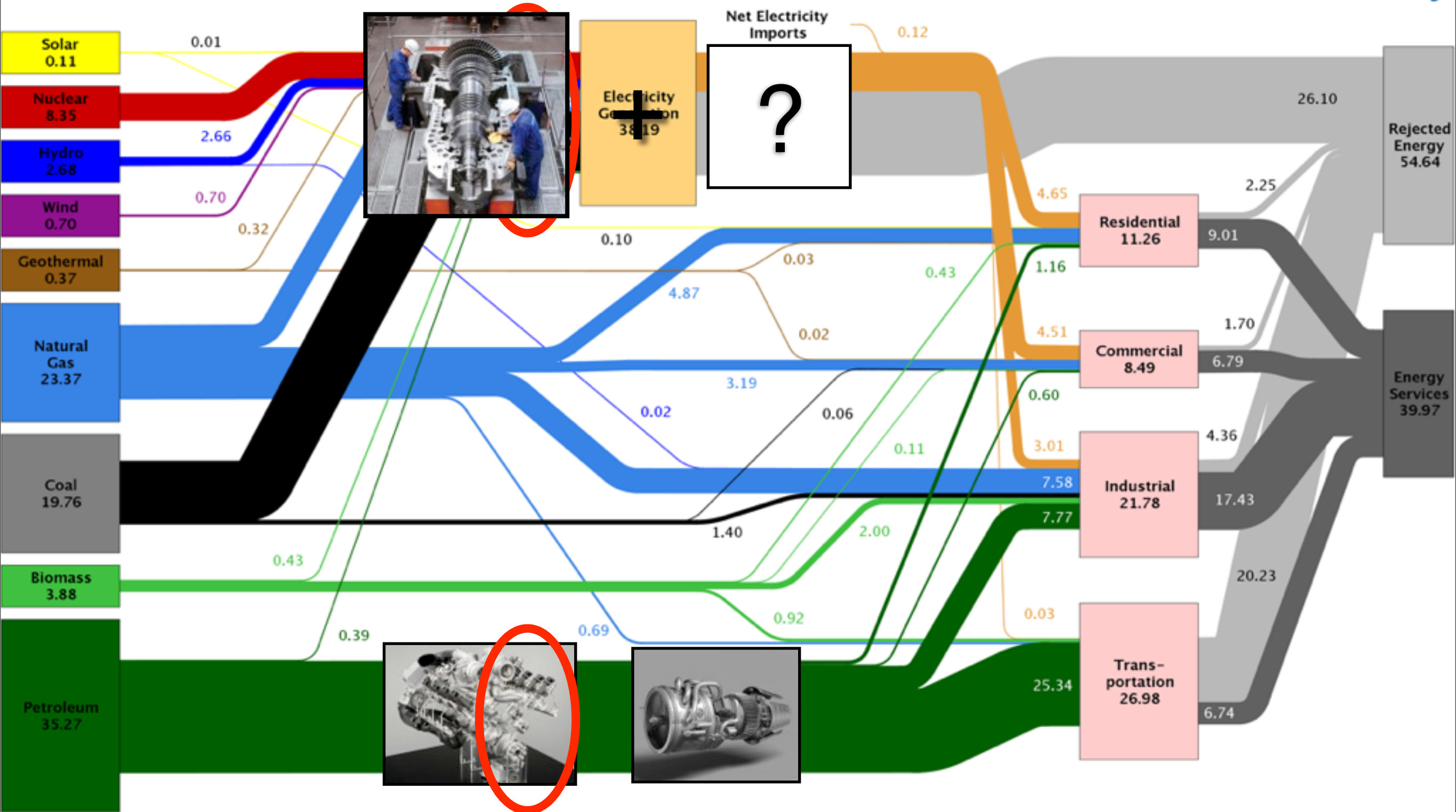


Jet engine



Steam turbine

Estimated U.S. Energy Use in 2009: ~94.6 Quads



Source: LLNL 2010. Data is based on DOE/EIA-0384(2009), August 2010. If this information or a reproduction of it is used, credit must be given to the Lawrence Livermore National Laboratory and the Department of Energy, under whose auspices the work was performed. Distributed electricity represents only retail electricity sales and does not include self-generation. EIA reports flows for non-thermal resources (i.e., hydro, wind and solar) in BTU-equivalent values by assuming a typical fossil fuel plant "heat rate." The efficiency of electricity production is calculated as the total retail electricity delivered divided by the primary energy input into electricity generation. End use efficiency is estimated as 80% for the residential, commercial and industrial sectors, and as 25% for the transportation sector. Totals may not equal sum of components due to independent rounding. LLNL-MI-410527

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$$\mathcal{E} = -N \frac{d\Phi_B}{dt}.$$

