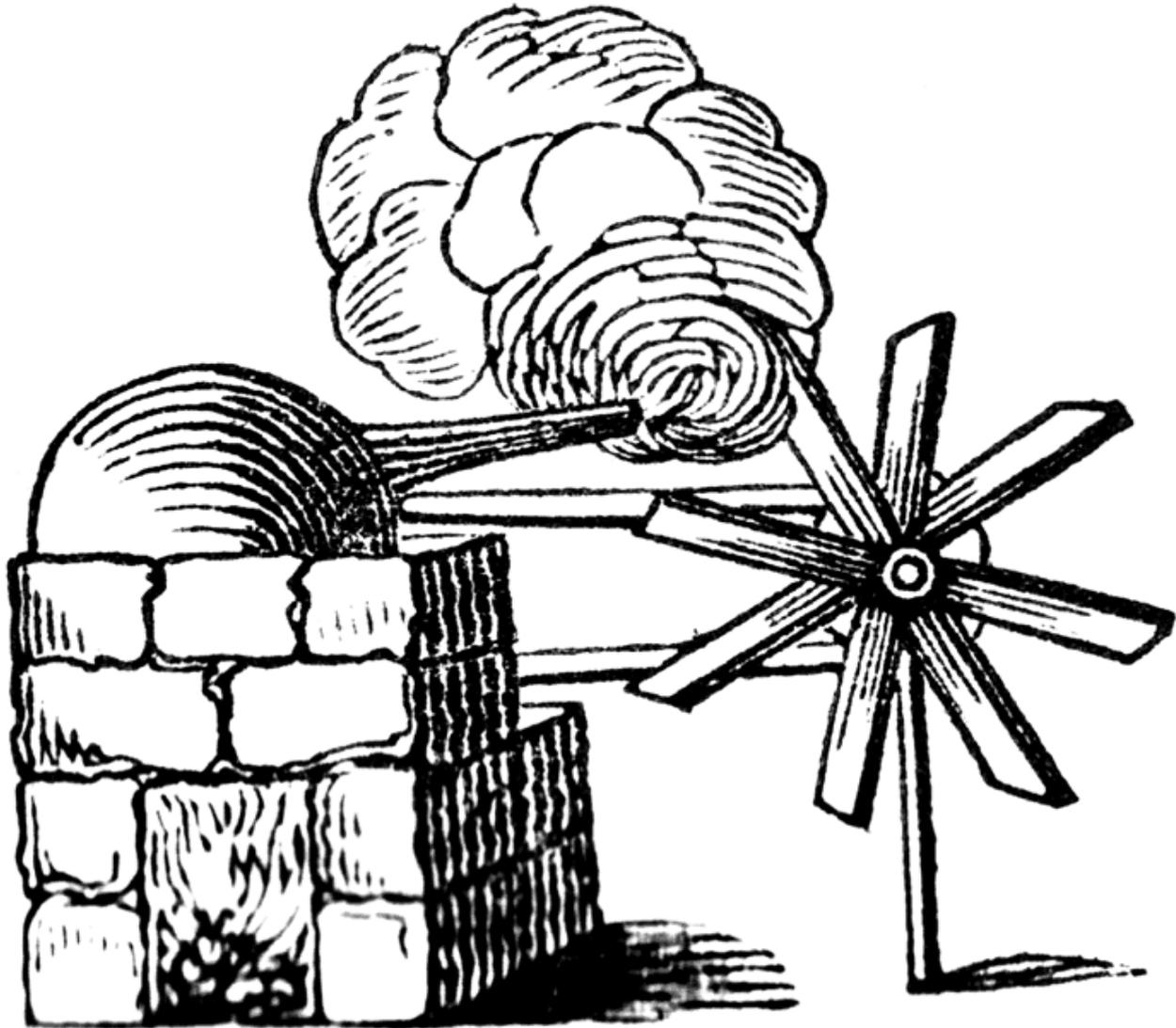
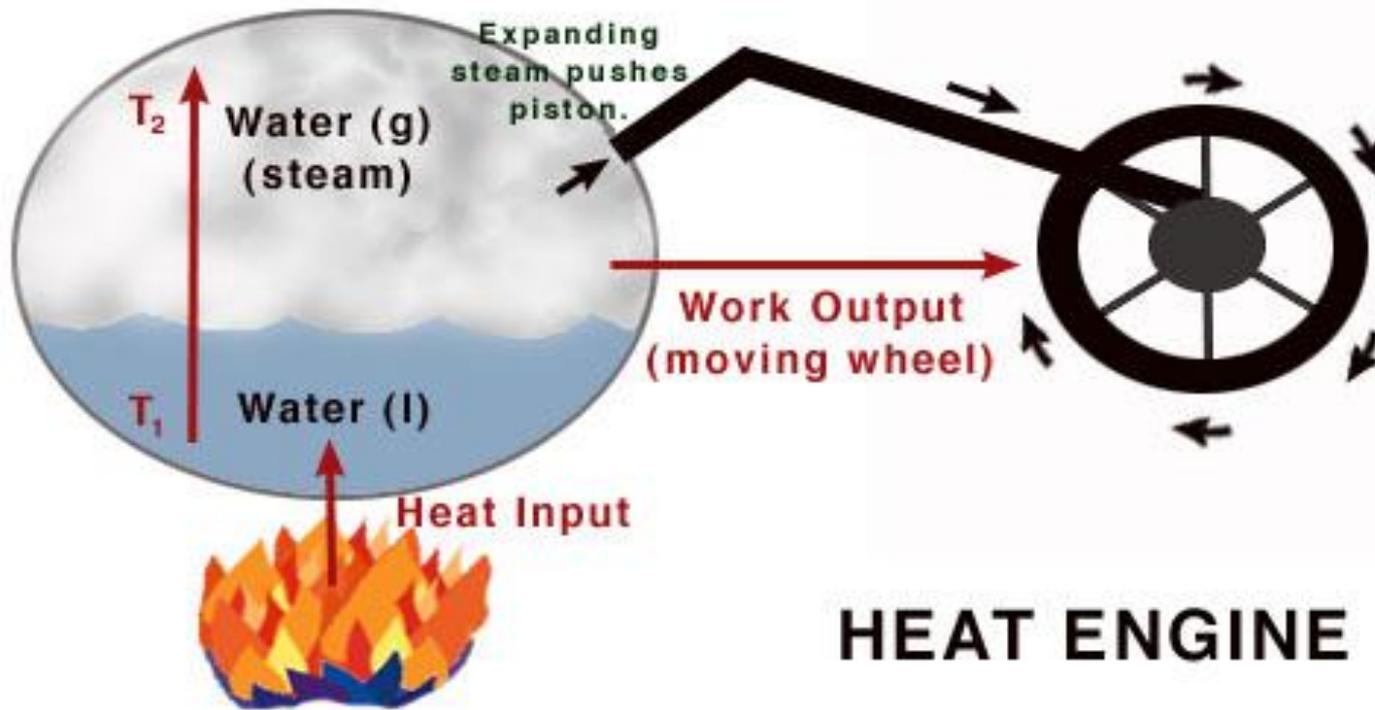


Interesting Examples from Thermodynamics

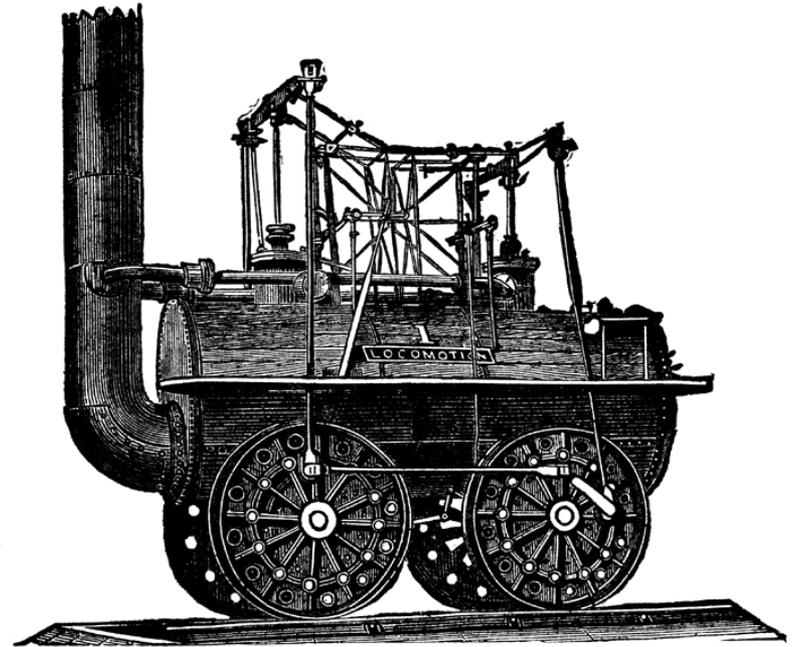
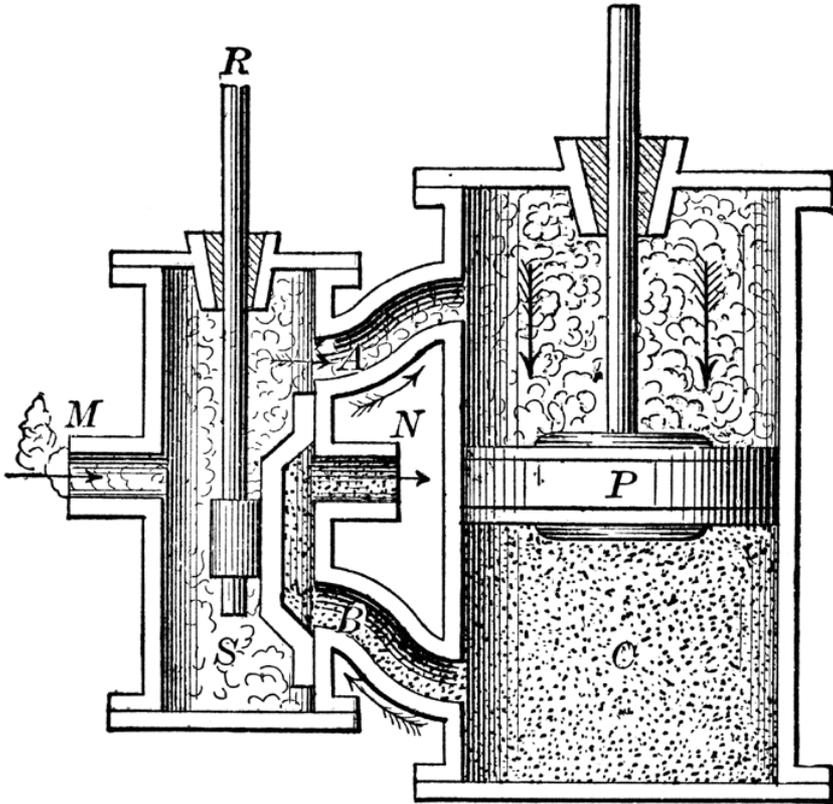
Branca's Engine (1629 Giovanni Branca)





In a heat engine, an input of heat causes an increase in the temperature of the working substance, allowing the working substance to perform work. In this schematic diagram, the working substance is water. At high temperature, gaseous water (steam) pushes a piston, which causes a wheel to turn. This is the essential mechanism by which steam-powered trains operate.

Steam Engine



[First Locomotive, George Stephenson's](#)

“The steam engine is a powerful device for utilizing the energy involved in the elasticity and expansive force of steam as a motive power. It is a real heat-engine, transforming heat into mechanical...”

Steam Boat

