

# Falling Water

**WATER POWER – HYDROPOWER – IS ALMOST MAGICAL! IMAGINE, POWER CREATED FROM THE ENERGY OF FALLING WATER.**

When the energy from large amounts of falling water is captured,<sup>6</sup> it can be used for many practical purposes.

From as early as the 6th century BCE, the ancient Egyptians used the power of falling water to create a system to water their fields and gardens easily. This is a process called irrigation.

Other ancient civilizations in China and Persia also developed complex irrigation systems, made up of wells,<sup>7</sup> dams, and canals. These irrigation systems made use of the natural power of **gravity** to move the water from higher to lower land and to send water into places to keep it for later use.

<sup>6</sup>**capture:** catch or collect something so you can use it later

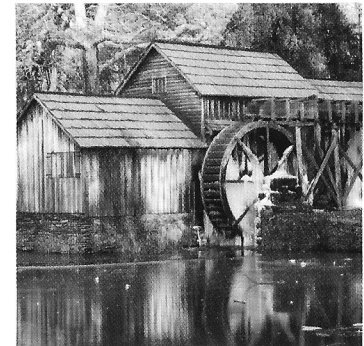
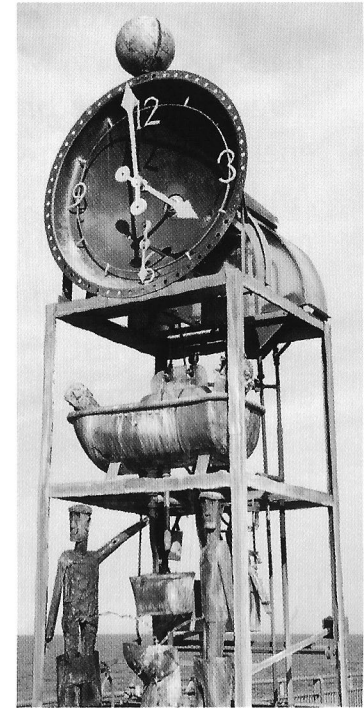
<sup>7</sup>**well:** a deep hole in the ground from which you can get water, oil, or gas

Water power was also used as a way to tell time, by measuring how much water flowed into or out of a vessel.<sup>8</sup> Water clocks were first used in ancient Egypt and Babylon around the 14th century BCE. Over the centuries, water clocks became increasingly complex machines.

The water wheel was invented by the Ancient Greeks around the 1st century BCE. The water wheel used the energy of flowing or falling water to power other machinery, and it had many important uses. For example, water wheels were used in mills to turn wheat into flour and to press wood into pulp for making paper. This hard work didn't have to be done by animals or people anymore.

Centuries later, the water wheel was still in use in sawmills to cut wood and in factories to make cloth. It wasn't until the invention of **steam**-powered machinery and electricity that the water wheel was replaced by more efficient machines.

<sup>8</sup>**vessel:** a container, such as a bottle or jar



A mill