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Mechanical Clock

One of the greatest inventions of the medieval world was the mechanical clock, developed in China. Yi Xing, a Buddhist monk and mathematician, made the first model of a mechanical clock in A.D. 725. This clock—really an astronomical instrument that served as a clock—operated by dripping water that powered a wheel that made one full revolution in 24 hours. An iron and bronze system of wheels, shafts, hooks, pins, locks, and interconnected rods made the clock work. This system caused the automatic chiming of a bell on the hour and the beating of a drum every quarter hour. Yi Xing's first clock was called the "Water-driven Spherical Birds'-Eye-View Map of the Heavens." Three centuries later, the inventor Su Song made an even more sophisticated mechanical, or astronomical, clock. This clock, called the Cosmic Empire, included several floors housed in a tower over 35 feet high. It was also made of bronze and powered by water. On top was a platform with a sphere that kept time with the motion of the planets. Su Song developed his clock in 1092, two centuries before the mechanical clock was developed in Europe.