

Henry Ford (1863–1947)

For thousands of years, people traveled on foot, on the backs of animals, or in vehicles pulled by animals. Once trains were developed, they were helpful for moving large groups of people and materials, but still, much travel took place off the tracks—on foot or driven by an animal. The **automobile** (auto = self; mobile = move) changed individual transportation forever.

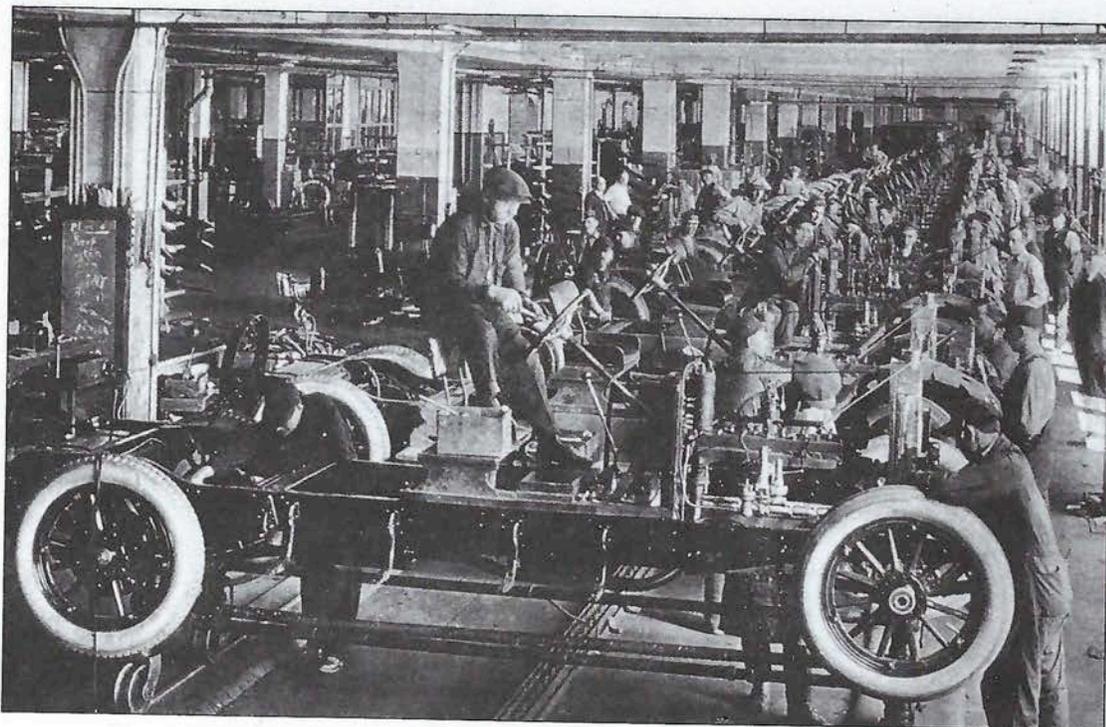
Karl Benz, a German engineer, built the first successful “**horseless carriage**” in 1885. A gasoline-powered automobile with three wheels, it could travel up to nine miles per hour. It had a carburetor (to vaporize fuel), an electric ignition, and a radiator to cool the engine.

Henry Ford grew up on a farm in Michigan and liked tinkering with things. He was thirty years old in 1893 when he built his first **car** after years of trying. He based it on Benz’s model. Unlike Benz, Ford focused on building inexpensive and reliable cars for ordinary people instead of for the wealthy. In 1908, he produced the Model T. It was nicknamed the Tin Lizzie and sold for \$950. This no-frills car came in black only. It had

a rugged construction, which made it good for rural areas. (The United States had many rural areas in Ford’s time.)

His car had an internal combustion engine: Fuel burns (combusts) inside (internal) the engine to produce power; fuel burns inside a cylinder (a tube), and hot gases produced by the burning push the piston down the cylinder, which creates the power to drive the wheels.

Ford built a factory in Michigan. In his factory, he invented the **modern industrial assembly line**, which led to the mass production of cars. He had raw materials going in one end of the factory and cars coming out the other end. His factory was the first to use a conveyor belt in manufacturing. Cars are large and heavy, not easily carried by a worker from one place to another, so the conveyor belt was very useful. It was one-fifth of a mile long and carried the car from worker to worker with just enough time for each worker to do his job before the conveyor belt moved the car to the next worker.



(continued)