The promise of motor vehicles aroused wide interest in the 1890s. It was a time when inventors, engineers, and mechanics experimented with engines fitted to two-, three-, and four-wheeled creations, all known as "automobiles." To veterans of the bicycle industry, motor bicycles appeared the logical and practical means to economical, universal, self-propelled transportation.

By the beginning of the twentieth century, the ill-handling motor tricycle had disappeared. Automo - bile had come to denote four-wheeled vehicles only. And motorcycle began to displace moto cycle and motor cycle for designating single-track, two-wheeled machines, almost all of which were based on the lines of the diamond-frame safety bicycle. Capitalizing on innovation and development work, manufacturers began to offer motorcycles to the buying public.

Aside from a few experiments with steam engines and battery-powered electric motors, almost all early motorcycles utilized one-cylinder, four-stroke, air-cooled, gasoline-fueled engines. At first, however, these motors were mounted in a variety of locations on the motorcycle—above the front wheel, above the rear wheel, in the seat tube, and in the down tube, as well as various sites within the frame—before the bottom of the larger frame triangle became standardized.

While many builders settled on belt drive for its elasticity and limited isolation of the pulsing engine from the rear driving wheel, a few makers used roller chain drive. Other shops experimented with belt drive to the front wheel from a fork-mounted engine or with a movable roller drive on top of either tire to provide for partial or complete disengagement. Sometimes an idler in a belt transmission served as a clutch. But often there was no way to disconnect the engine from the driven wheel; when the engine ran, the wheel turned. To stop the motorcycle, the engine had to be turned off.

Given only the recent history of the motorcycle industry, one might conclude that the Harley-David- son Motor Company of Milwaukee, Wisconsin, has thrived from the beginning of manufacture as the sole significant producer of American machines. Yet, looking back to the pioneer period of the industry, one finds the records of hundreds of production initiatives, many predating the Harley-Davidson organization in 1903. With a broad industrial base stretching from east of New York City to west of Buffalo, New York State was home to a significant portion of the nation's motorcycle inventors and manufacturers. Among the first firms turning out motorcycles in numbers, for example, was the E. R. Thomas Motor Company of Buffalo in 1901.

From the mid-1890s to the mid-1920s, New York hosted an interesting variety of motorcycle enterprises. To readers of this encyclopedia, some of the earliest proposals described here may seem outlandish. Proj- ects such as an engine fueled by gunpowder likely remained only ideas on paper, while electric motorcycles, even after one hundred years of development, remain impractical [as of the year 2001]. But many early designs were both innovative and useful, resulting in the production of hundreds or thousands of New York–built motorcycles from individual makers.

In the 1900s and early 1910s, the motorcycle achieved a higher level of performance. Two-cylinder machines, such as those offered early on by Glenn H. Curtiss in Hammondsport, delivered more power. The Pierce Cycle Company in Buffalo built the first Amer-
ican four-cylinder, shaft-driven machines. On many different motorcycles, clutches and two-speed transmissions made operation easier. Chain drive better handled increased engine power. Other components, still often based on bicycle antecedents, were made more robust for greater reliability and safety.

Yet the motorcycle never took hold the way its proponents envisioned. In part, the motorcycle required an athleticism of its rider not needed in driving an automobile, catching a train, taking a streetcar, or even walking. Riders of early machines needed to assist their engines by pedaling up grades. Motorcycling on the unimproved roads of the day was risky, with the omnipresent prospect of falling. And motorcyclists, wittingly or not, often discouraged potential recruits to their ranks by appearing as an unsavory group, covered with mud or oil and operating their machines sans mufflers and in a reckless manner.

More importantly, the automobiles many predicted would be much more expensive than motorcycles became more easily attainable. The Ford Model T, especially, in the 1910s offered seats for five riders as well as a roof, doors, and windshield for not much more than the cost of a motorcycle. By the early 1920s, the Ford was selling for less than three hundred dollars, and used cars were even cheaper.

For the 1915 model year, the Ford Motor Company alone turned out over 300,000 cars, while the entire United States motorcycle industry produced about 100,000 machines. And of the motorcycles built, New York’s share by then had fallen far behind major competitors in Massachusetts (Hendee Manufacturing Company, among other builders), Illinois (Excelsior Motor Manufacturing & Supply Company and the Aurora Automatic Machinery Company, among others), and Wisconsin (Harley-Davidson, among others). Now sometimes fitted with sidecars, motorcycles largely became the province of a few police officers and commercial delivery services as well as a larger group of recreational riders.

Many New York factories closed by the mid-1910s (as did plants elsewhere). Other producers turned to lightweight motorcycles and bicycle motors, some powered by two-stroke engines, thought to appeal to riders who were too young to buy or who could not afford to buy automobiles. Some manufacturers developed unconventional and innovative designs, such as the seatless Autoped scooter from New York City or the Neracar (i.e., nearly a car), with automotive-influenced components, from Syracuse. But by the end of the 1920s, the American motorcycle industry numbered only a few builders, none of them in New York.

At the beginning of the twenty-first century, the motorcycle remains largely a seasonal, recreational vehicle. Happily, the exhilaration of piloting a motorcycle, on or off road, now motivates an increasing number of enthusiastic riders. While most machines come from factories in other states and other countries, some original New York–built motorcycles still appear. These latest bikes might be viewed as homemade, as riders build their own machines, or part of a cottage industry, as small shops turn out a handful of motorcycles for sale each year. These new New York–made motorcycles often are created with singularly focused use rather than general road riding in mind. For example, on Grand Island, two entrepreneurs deliver drag-racing motorcycles. In Himrod, a company builds road bikes resembling dirt-track racing machines. And in several places throughout the state, builders deliver custom motorcycles for road riding utilizing modified Harley-Davidson or similar components. Often, these machines are styled as choppers, the customized motorcycles (usually Harley-Davidsons) popular since the late 1960s. Although this encyclopedia identifies several active custom builders, others remain to be documented.