

BICYCLE

(The Vehicle of Choice Before the Automobile)

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The bicycle was born in Europe, but American know-how helped to reduce its cost and make it affordable to many people, many years before the first automobile made its appearance. It provided people with an inexpensive means of travel to work and play and some manufacturers advertised their bicycles at unheard speeds of 20 miles an hour. This, a remarkable revolution of those times, gave people the freedom to roam a little from their home surroundings.

American industry took a very strong interest in this relatively new means of travel and made major contribution to its development of the popular and versatile bicycles of today. They promoted cycling clubs and riding schools offering free riding lessons to promote the public interest in bicycles and the enjoyment they could bring to their owners

Bicycle Developments over the Years

Through the centuries, several inventors and innovators contributed to the development of the bicycle. Its earliest known forebears were called *velocipedes*, and included many types of bicycle and human-powered vehicles. New innovations in the 1890s made riding more comfortable with the invention of pneumatic tires, hand operated brakes, and freewheeling drive to coast without the pedals turning. Bicycling clubs flourished all over America before the automobile era.

The Walking Machine

In 1817 Baron von Drais invented a walking machine that would help him get around the royal gardens faster: two same-size in-line wheels, the front one steerable, mounted in a frame which was straddled. The device was propelled by pushing your feet against the ground, thus rolling yourself and the device forward in a sort of gliding walk. The machine became known as the Draisienne or hobbyhorse.

First Mechanical Bicycle

Kirkpatrick MacMillan of Courhill, Scotland built the world's first mechanical bicycle in 1839. His motive for building the bicycle was so he could visit his sister in Glasgow 40 miles away.

The Velocipede or Boneshaker

The next appearance of a two-wheeled riding machine was in 1865, when pedals were applied directly to the front wheel. This machine was known as the velocipede ("fast foot"), was popularly known as the boneshaker, because of the rough ride over the cobblestone roads of the period.

The High Wheel Bicycle

In 1870 the first all metal machine, with the pedals attached directly to the front wheel and no freewheeling mechanism, appeared on the scene. Solid rubber tires and the long spokes of the large front wheel provided a much smoother ride than its predecessor. The front wheels became larger and larger as makers realized that the larger the wheel, the farther you could travel with one rotation of the pedals.

The High Wheel Tricycle

While men were risking their necks on the high wheels, ladies, confined to their long skirts and corsets, could take a spin around the park on an adult tricycle. Many mechanical innovations such as: rack and pinion steering, the differential, and band brakes, were originally invented for tricycles.

The High Wheel Safety

Improvements to the design began to be seen, many with the small wheel in the front to eliminate the tipping-forward problem. One model was promoted by its manufacturer by being ridden down the front steps of the capitol building in Washington, DC. These designs became known as high-wheel safety bicycles.

The Hard-Tired Safety

The further improvement of metallurgy sparked the next innovation with metal now strong enough to make a fine chain and sprocket small and light enough for a human being to power. The next design was a return to the original configuration of two same-size wheels. Instead of just one wheel circumference for every pedal turn, you could, through the gear ratios, have a speed the same as the huge high-wheel.

The Pneumatic-Tired Safety

An Irish veterinarian, named Dunlop, who was trying to give his young son a more comfortable ride on his tricycle, first used the pneumatic tire on a bicycle. Now comfort and safety could be had in the same package, and that package was getting cheaper as manufacturing methods improved, everyone clamored to ride the bicycle. This 1898 Yale used a shaft drive to dispense with the dirty chain.

The Kid's Bike

Introduced just after the First World War by several manufacturers, such as Mead, Sears Roebuck, and Montgomery Ward, to revitalize the bike industry (Schwinn made its big splash slightly later), these designs, now called "classic", featured automobile and motorcycle elements to appeal to kids.

The Current Scene

Pedaling History has on display the recent history of the bicycle in America that most people are familiar with. The English 3-speed of the '50s through the '70s, the 10-speed derailleur bikes that were popular in the '70s (the derailleur, invented before the turn of the century, had been in more-or-less common use in Europe since), and the mountain bike of today.