This illustration from the late nineteenth century shows a group of bicycle riders on an outing. Both men and women rode bicycles in unprecedented numbers in the 1890s, a decade that is sometimes known as the golden age of the bicycle.

PHOTO: FALKENSTEINFOTO/ALAMY STOCK PHOTO

THE GOLDEN Bicycle in

ELISE WARNER

BICYCLES are such a familiar part of American culture that it is difficult to imagine life without them. It took several decades after the bicycle's invention for these elegant machines to be widely adopted in America, but by the 1890s, Americans were in love with them, and they began turning many aspects of life in the United States upside down. Bicycle riding became a nationwide craze, and the freedom and mobility provided by these iron steeds changed American industry and society forever.

AGE OF THE America

The first ancestor of the bicycle, the draisine, was invented in the early nineteenth century by Prussian inventor Baron Karl von Drais and was propelled by the rider pushing their feet against the ground.

PHOTO: COURTESY OF THE BICYCLE MUSEUM OF AMERICA, NEW BREMEN, OHIO

Early Development and the First Modern Bicycle

In 1816, Karl von Drais, a Prussian baron and inventor, created a device consisting of two wooden wheels mounted one in front of the other on a wooden frame with a seat placed between them. He called the device a draisine, and the rider propelled it forward by pushing it with their feet and steered it by using a handle to turn the front wheel. Drais's invention is generally considered to be the first precursor to the modern bicycle. The next major step in the bicycle's evolution occurred in France around 1863, when pedals were attached to the front wheel, creating a machine called a velocipede. Because of its unforgiving ride, the vehicle became known as the "boneshaker." The term *bicycle* also came into use at this time, although it did not become the most frequently used word for the vehicle until the late 1870s.

Bicycles first arrived in the United States in 1866, when carriage maker Pierre Lallement brought a French-built velocipede to Connecticut and filed for a US patent on the design, which was granted in 1867. Around this time, bicycle designers on both sides of the Atlantic greatly increased the size of the front wheels of the machines they built in an effort to make them faster. This resulted in the style of bicycle known as the ordinary or the penny-farthing. The more colorful name, *penny-farthing*, came from the two unequal-sized wheels' resemblance to the two most common English coins in circulation (the penny was much

PHOTO: CHRONICLE/ALAMY STOCK PHOTO

Albert Augustus Pope was an American Civil War colonel who manufactured bicycles in the United States under the Columbia label starting in 1878.

larger than the farthing). Unfortunately, the unequal wheels made for an unbalanced bicycle, and the very high seat made falls more dangerous. In the 1870s, bicycle designers pioneered several improvements, including the use of solid rubber tires to create a smoother ride, spoked wheels to make the machines lighter, and ball bearings to allow the wheels to turn more easily.

Bicycle manufacturing in the United States took a large step forward in the 1870s thanks to American Civil War veteran Albert A. Pope, who was inspired to go into the bicycle business after seeing English penny-farthing bicycles at the Philadelphia Centennial Exposition in 1876. To begin with, he imported and sold several machines from England. In 1877, he founded the Pope Manufacturing Company, and in 1878, he ordered a batch of fifty bicycles to be constructed under the Columbia brand at a sewing machine factory in Hartford, Connecticut. He also secured the rights to all existing patents for bicycles in the United States and licensed them to several other manufacturers.

Shortly after Pope began manufacturing bicycles, several important innovations helped create a bicycle that had true mass appeal. In 1879, a rear-wheel, chain-driven bicycle was patented in England by Henry J. Lawson. Other English manufacturers realized that this mechanism, which multiplied the effect of the rider's feet on the pedals, allowed for the wheels to be returned to equal size. The result was that the bicycle's stability was greatly increased while no speed was lost. The Rover Safety Bicycle, which was introduced in England in 1885, featured two nearly equal-sized wheels and a chain drive and is generally credited as the first bicycle to feature the same basic configuration of wheels, seat, handlebars, and pedals as a modern bicycle. Two years later, pneumatic tires were invented, and at about the same time, step-through frames were created that allowed women wearing skirts to ride bicycles. The basic form of the bicycle has not changed since that time. Though pioneered in England, these improvements in design quickly crossed the Atlantic and were adopted by American manufacturers.

Charles Pratt, who was the attorney who helped Albert Pope secure the rights to existing US bicycle patents, was an influential figure in his own right. He realized that for bicycles to ever truly have mass appeal, the country would need better roads than the often muddy, rutted, and sometimes nearly impassible ones that existed in the early 1880s. This was something that could only be accomplished with the help of the government. He also realized that the bicycle industry would need to engage the public. This led him in 1880 to found and become the first president of the League of American Wheelmen, a national organization for bicycle riders. The league, in turn, founded the Good Roads Movement, which was a political movement to encourage cities and states to improve roads. The Good Roads Movement came to be an important political player in many regions by providing consistent support to politicians who devoted resources to improving roads.

While bicycles built by the Pope Manufacturing Company and other companies grew in popularity, they continued to be quite expensive. In 1889, a Columbia safety bicycle cost $135, which is the equivalent of about $3,900 in today's dollars.

The Golden Age Begins

By 1890, the bicycle manufacturing business in the United States was a small but healthy one, in which twenty-seven factories produced a total of forty thousand machines. But the bicycle's best days were just ahead.

Safety bicycles, like this 1884 Gormully and Jeffery American Rambler, were introduced in the mid-1880s. They featured more equally sized wheels and a chain drive and were the first bicycles to closely resemble modern bicycles.

PHOTO: COURTESY OF THE BICYCLE MUSEUM OF AMERICA, NEW BREMEN, OHIO

Six-Day Bicycle Races

BICYCLES HAVE BEEN USED in formal races since 1868, when a race involving a type of early bicycle called a velocipede was held in Paris. The most successful bicycle-racing format during the 1890s was the six-day race, which was introduced in England and held for the first time in the United States in 1879. The format gained a popular following in 1891 when a six-day race was held in New York City's Madison Square Garden. The idea of the race was simple—riders competed to complete the greatest number of laps around an indoor bicycle track over a six-day period.

The format was created with the intent that riders would take a break to rest every night, but competitors soon discovered that they gained more distance by cycling twenty-four hours a day. Riders hired coaches to keep them awake and riding, particularly during the second half of the race. During the latter stages of the race, many riders experienced hallucinations, crashed their vehicles, or simply collapsed, unable to continue. Even the winners were utterly devastated by the end.

Alarmed by the physical and mental toll this grueling contest took on its participants, the states of New York and Illinois passed legislation in 1898 limiting riders to competing twelve out of every twenty-four hours. Rather than limit the races, the organizers of the six-day races changed the rules. From then on, two-person teams shared the riding, and each racer rode for half of the time.

Six-day races were among the most popular spectator sports events in America, and the top racers became international stars. Races were held in twenty-four different American cities and were attended by famous actors and other celebrities. The sport's popularity began to decline in the 1930s, and the last six-day race in the United States was held in New York in 1961. The sport continues to exist overseas, with regular races run in Europe and Australia.

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Beginning in 1890, bicycle sales grew at an astounding pace. A *Washington Morning Times* special report on bicycles published in 1896 noted that bicycle sales in the city had grown from one thousand in 1890 to sixteen thousand in 1895, and sales continued to increase. Nationwide, sales reached one million bicycles in 1895, and Isaac Potter of the League of American Wheelmen estimated that there were about 2.5 million bicycle riders in the United States in 1896.

Bicycle riders of the 1890s found that the bicycle allowed them to travel more economically and more freely than they had been able to before. Bicycles were cheaper than horses (an average riding horse cost between $150 and $200 at the time). This was especially true in urban areas, where stable space and fodder added a hefty upkeep cost to a horse's initial price. Railroads had made long-distance travel faster and more affordable than anyone could have imagined mere decades earlier, but a person on a bicycle could go where they wanted, when they wanted, without being bound by the railroad's timetables and fixed stations.

Following the introduction of bicycles with step-through frames, more and more women joined men on the roads, and women's fashion changed to better suit the demands of riding the new vehicle. While bicycles could now accommodate a woman wearing a skirt, many women found it more convenient to wear bloomers, a kind of baggy pants, when they cycled. The new fashion was widely adopted despite the protests of clergymen and other public figures against what some of them described as immodest and overly masculine dress.

While the freedom of movement provided by bicycles was important to many people, it was especially meaningful to the women who took to cycling. At a time when women were generally expected to remain at home, a practical means of transportation greatly expanded their world. Advocates of women's rights were exuberant about

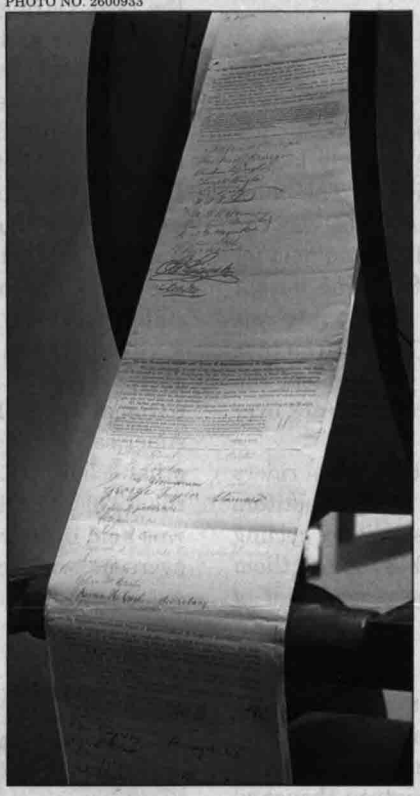
PHOTO: COURTESY OF THE NATIONAL ARCHIVES, PHOTO NO. 30-N-49-1766

This drawing of bicycle riders in Central Park in New York City, which appeared in *Leslie's Weekly* in April 1895, shows a woman wearing bloomers, which were a kind of baggy pants that became popular among women in the 1890s because they were more comfortable to wear while bicycling than other women's clothing.

the freedom provided by the machine. For example, in 1896, women's rights pioneer Susan B. Anthony told the *New York World* that bicycling had "done more to emancipate women than anything else in the world."

Throughout the 1890s, roads across the country were jam packed with bicycles, particularly on weekends. Wheelmen's clubs formed in various cities and offered their members jaunts, get-togethers, pins, card patches, and special outfits. Popular magazines devoted to cycling were published, including *Good Roads Magazine*, the official magazine of the League of American Wheelmen. The league also published national and regional guides to hotels, focusing on facilities available to traveling cyclists. Newspapers devoted special sections to cycling news and printed columns focusing on bicycle riders' interests.

PHOTO: COURTESY OF THE NATIONAL ARCHIVES, PHOTO NO. 2600933



This petition calling for a federal agency to supervise America's roads was presented to Congress in 1893 and is now on display at the National Archives in Washington, DC. About 150,000 people signed the petition, which is wound around two wooden spools and stands about seven feet high.

Bicycle advocates continued their efforts to improve roads during the 1890s. In 1892, Pope Manufacturing Company founder Albert Pope printed several thousand copies of a petition calling on Congress to create a federal government agency in charge of improving roads. He circulated the petition nationwide with the assistance of the League of American Wheelmen and other organizations and collected the completed petitions on a massive scroll that eventually listed 150,000 names. The petition was wound around two wooden spools, which were reminiscent of bicycle wheels and stood more than seven feet high. Pope delivered the petition to Congress in 1893, and later that year, Congress approved a federal Office of Road Inquiry.

In 1894, the country entered a steep recession, but bicycle sales continued to soar. At the same time, an important industrial innovation led to a decrease in the production cost of bicycles. Sometime between 1893 and 1895, the Western Wheel Company in Chicago began to produce many bicycle parts by stamping them from sheet metal instead of individually machining them, and this quickly spread throughout the industry. The number of bicycle manufacturers grew rapidly—up to more than three hundred by the end of the decade. One of the new manufacturers, Arnold Schwinn and Company, which was founded in Chicago in 1895, would come to dominate the industry in the twentieth century. Another notable bicycle works was founded in 1895 in Dayton, Ohio, by brothers Orville and Wilbur Wright, who used the income to fund their experiments in heavier-than-air flight. By that time, bicycles were even available by mail, with mail-order giants Sears and Roebuck and Montgomery Ward both listing the vehicles in their catalogs by 1895.

The End of the Golden Age

By the late 1890s, bicycle production started to outstrip the demand for new bicycles, leading to a crash in prices. As prices dropped, manufacturers found it impossible to stay in business. In 1897, a group of seventy-five companies, desperate to remain profitable, consolidated under the leadership of Albert Pope and formed the American Bicycle Company. By 1902, the average price of a bicycle had dropped to as low as three dollars, and by 1904, the American Bicycle Company was out of business. The precipitous collapse in bicycle prices was accompanied by a steep decline in production, which fell an estimated 79 percent between 1897 and 1904.

The plummeting sales and production of bicycles coincided with the introduction of a new form of transportation on the streets of America during the 1890s. In 1896, engineer Henry Ford began marketing an invention he called a "quadricycle," which was, in fact, a primitive automobile. By the early 1900s, automobiles were becoming more and more common on America's streets, and an American public that had been taught by the bicycle to value fast travel and the freedom of the open road soon turned to this bigger, faster newcomer. The automobile also captured the lion's share of space on the country's roads, and over time, bicycles came to be regarded less as practical means of transportation and more as children's toys. While they never went away and would return to prominence many decades later, the heyday of the bicycle had ended.

The golden age of the bicycle lasted only a single decade, but the effect this widely accessible vehicle had on American society was profound. Thanks to bicycle owners' advocacy, well-paved streets ran through every American city by the beginning of the twentieth century. More importantly, by providing all Americans, and particularly American women, with more physical mobility than they had ever known before, the bicycle helped encourage the fundamental American love of freedom and independence. ■

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