



Bulletin #21

by Carl Wiedman with helpful
critique and guidance by
Derek Roberts
Prepared June 1977
Revised January 1994

☛ Riding ☛ Collecting ☛ Restoring ☛ Research ☛ History ☛

The Evolution of the Bicycle - Significant Events

Date	Person	Country	Event
1817	von Drais	Germany	Introduced device having two wheels connected by beam. Rider straddled beam and propelled with feet on ground. Front wheel steerable. Machine called 'Draisine' and later 'Hobbyhorse'.
1819		England	Cartoonist drew figure of Prince Regent lying on Hobbyhorse, using hands to turn cranks attached to front wheel. Early conception of cranks.
1839-40	Macmillan	Scotland	Built machine with cranks on rear wheel, propelled by pedals attached to cranks by long arms.
1845	Thomson	England	Patent for a type of pneumatic tire which received some use on carriages.
1861	Heilmann	Germany	First use of steel spokes.
1866	Lallement & Carroll	America	First patent for a rotary action crankdriven velocipede. Invention of velocipede or 'boneshaker'. Two-wheeled device with steerable front wheel and cranks with pedals attached to front wheel.
1868	Henlon Bros.	America	Slotted cranks for adjustable crank length.
1868	Edwards, Bradford	America	Introduction of solid rubber tires in America.
1868	Meunier	France	Freewheel and two speeds.
1868	Pickering	America	Brought machine from Paris which provided model for machines he and Davis manufactured in U.S.
1868	Wood Bros.	America	Manufactured expensive machines noted for their quality and beauty.
1868	Buell	America	First use of springs in frame to reduce vibration.
1869	Magee	France	First tubular frame.

1869	Stassen	England	Bicycle patent with first use of term 'bicycle'.
1869		France	Publication of <i>Le Velocipede Illustre</i> . First journal devoted to velocipeding.
1869	Reynolds & Mays	England	Produced Phantom, first radical departure from velocipede—wire spokes and suspension.
1869	Suriray	France	Patent for ball bearings.
1869	Goddard	America	First U.S. book on cycling.
1870		England	Metal wheel rims with cushion rubber tires.
1870	Witty	America	Bought Lallement & Carroll patent, and licensed many manufacturers.
1871	Smith, Starley & Co.	England	Developed and produced Ariel—first practical 'Ordinary' bike.
1874	Starley	England	First tangent spokes.
1876		England	First manufacture of adult tricycles.
1876		America	'Ordinary' bicycle first shown in U.S. Philadelphia Exposition.
1876	Lawson	England	Patent for 'safety' bicycle—lever driven machine with first emphasis on safety concept.
1877	Hughes	England	Adjustable ball bearings. Later became Bown's Aeolus ball bearings.
1878	Pope	America	Bought Lallement and Witty patent rights, began producing Columbia bikes.
1878	Beale	England	Invented Facile, and with Straw began its production. Safety concept.
1878	Singer	England	Invented and produced the Xtraordinary Challenge. Further trend towards safety.
1879	Lawson	England	Production of Bicyclette, first commercial chain-driven machine.
1881	Smith	America	Began commercial production of American Star, originally invented by Pressey. Bike with safety features by having small wheel in front, ratchet and strap drive.
1883	Hillman	England	Patented the Kangaroo, and with Herbert & Cooper began its production. Wheel size reduced by lowered cranks and use of chains and sprockets.
1884	Stevens	America	Began trip around world on Ordinary.

1884		England	First appearance of more conventional safeties having rear drive, chain and sprockets.
1885	Starley (J.K.)	England	Production of Rover—bicycle form substantially as it remains today.
1885		America	Production of Springfield Roadster—safety features.
1886		America	Production of Eagle—small wheel in front and regular pedal action.
1886	Albone	England	Developed first ladies drop-frame safety.
1887	Bowden	England	Took over the firm of Woodhead, Angnois & Co., and renamed it the Raleigh Cycle Co.
1887	Morris	England	Production of first diamond frame bicycle.
1888	Dunlop	Ireland	First practical pneumatic tire.
1899		America	312 factories produced over one million bicycles.