BICYCLES

BICYCLE HISTORY

- Celerifere or Hobby Horse
- Draisienne
- First Pedal Operated
- Velocipede
- First Chain Operated
- Ordinary
- Safety

CELERIFERE

- Celerite Means Speed
- Also Called, By Mistake,
  ◆ Hobby Or Dandy Horse
  ◆ Draisienne
- Dates Back to Late 17th Century
- No Steering
- Horizontal Wooden Bar With Two Equal Sized Wheels
- Propulsion By Running

DRAISIENNE

- Baron Karl Drais von Sauerbron
- Also Called
  ◆ Hobby Horse
  ◆ Dandy Horse
- First Steerable Bicycle (1817 or 1818)
- Propulsion By Running
- Wooden Frame, Padded Seat & Arm Rest
- 23 Miles, 2.5 Hours, 9.5 MPH

FIRST PEDAL-OPERATED CYCLE

- Kirkpatrick Macmillan
- Blacksmith
- Invented 1839
- Curved Wooden Backbone For Saddle & Rider
- Iron tire Wooden Wheels & Brass Bearings
- Pedal Operated Classical Four-Bar Linkage

VELOCIPDE

- Pierre Michaux
- Parisian Locksmith
- Conceived 1855
- Boneshaker (1861)
  ◆ No Springs
  ◆ Steel Rims
- 400 Per Year (1865)
- Production, England (1870)
- Pedals On Hub
- Kickstand / Prop
- Cable Brake
Chain Bicycle

- Designed By Andre Guilmet (1869)
- Built By Meyer (1869)
- Separate Pedals & Crank From Hub

Ordinary Bicycle

- Also Called
  - Penny-Farthing
  - Grand-Bi
  - Ariel
- Steel Spokes
  - Front Wheel Was Enlarged
  - Increased Speed
- Saddle Adapted
  - Moved Above Wheel
  - More Force Applied
- Problems
  - Mounting & Dismounting
  - Stability

Safety Bicycle

- Forerunner & Prototype
- Equal Sized Front & Rear Wheels
- Rear Wheel Driven By Chain & Sprocket

Bicycles - Mechanical Development

- Steel Ball Bearings
  - Jules Suriray (1869)
- Paris Cycle Show (1869)
  - Tubular Frames
  - Wire Spoked Wheels & Solid Rubber tires
  - Mudguards
  - Freewheels & Change-Speed Gears
- Triangular Tubular Frame (1890s)
- Pneumatic Tires
  - Conceived By Thompson (1845)
  - Reinvented By J.B. Dunlop (1893)