

# The History of Bicycles

MD 2012



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## The history of bicycles



Many of us have a bicycle at home. Some of us have several bicycles that belong to different members of our family. Have you ever wondered who invented the first bicycle? What did bicycles look like in the past? How are they different to ours?



## The Running Machine - 1817

In 1817 Baron von Drais invented a machine to help him get around the royal gardens faster. He called it a Laufsmaschine. In English that means **Running Machine**.

It was made of wood with a wooden frame and wooden wheels but there were no pedals and no brakes. There was a handle fixed to the front wheel which was used to steer.

It wasn't very good on bumpy ground and it was very hard work to make it move because it had to be moved by using your legs as though you were running. To make it stop you had to use your feet.

It wasn't easy to ride. A lot of people laughed at it and thought it was a very silly idea.



## The Hobby Horse - 1818

In France, Baron von Drais' running machine was called a velocipede. In England it was called the **Hobby Horse**. It also became known as the **Dandy Horse**.

In 1818, an Englishman called Denis Johnson made his own version of Baron von Drais' bicycle. Then he opened a riding school in London so that young gentlemen (dandies) could learn how to ride the new bicycle.



## Kirkpatrick Macmillan - pedals

The earliest bicycles had no pedals but all that was to change when in 1839, a Scottish blacksmith called Kirkpatrick Macmillan, invented the first bicycle pedals.



Macmillan had the clever idea of putting pedals on the front wheel so that instead of the rider having to push the bike along with their feet, the rider could pedal it along. The pedals didn't go round like ours do, they went forwards and backwards.

The wheels were still made of wood but to stop them wearing out Macmillan put a metal strip round the wheels to protect them. The roads were very rough and bumpy in those days. Sometimes there was only a muddy track with lots of pot holes. This meant that it was **very** uncomfortable to ride on, especially over cobblestone roads.

## The Velocipede or Boneshaker - 1865

In 1865 another 'two wheeled riding machine' was invented by two gentlemen. They were called Pierre and Ernest Michaux. In France their machine was called the velocipede which in English means 'fast foot'.



In England it was known as the **Bone Shaker**. Can you guess why?

Boneshakers were very uncomfortable to ride on, especially over cobblestone roads. They shook your bones and that was why they were called bone shakers. Not only was it uncomfortable to ride over rough ground, it was also difficult to pedal.

The pedals moved round and round like pedals on a modern bike but, because the pedals were attached to the same wheel that steered the bike, it was difficult to pedal and steer at the same time.

## The Penny Farthing - 1870

In 1870 the first all metal machine appeared.

The pedals were attached to the front wheel but it had solid rubber tyres that made it much more comfortable to ride than the boneshaker. The rider had to sit on top of the big wheel; it was very high up. There was a little step above the back wheel to help the rider get on.



This machine was called the **Penny Farthing** because the front wheel was like an old penny and the back wheel was like an old farthing. It was very popular with rich young men but was too expensive for ordinary people to buy.



It was much faster but was very dangerous. If the rider went over a bump in the road or had to stop quickly, they would be thrown over the handlebars so there were lots of accidents.

## The Safety Bike - 1885

In 1885, John K Starley invented the first modern bike. It became known as the **Safety Bike**. It was much safer to ride than the earlier penny farthings. At first, safety bikes had solid rubber tyres which made the ride uncomfortable as riders were jolted along rough roads.

The new Safety Bicycle had pedals that attached to a sprocket and there was a chain that attached to the rear wheel like modern bikes today.



Everyone was excited about the new safety bicycles!

## Pneumatic Tyres - 1887

In 1887 something important happened that was to make cycling even more popular. John Boyd Dunlop invented a new kind of tyre that was filled with air and which made riding much more comfortable. The tyre was called the pneumatic tyre.

It wasn't long before manufacturers of bicycles realised that Dunlop's idea was a very good one and hard rubber tyres were replaced with air filled tyres. At last, people could make faster, smoother, safer journeys.

People liked to cycle into the countryside on their days off and it meant that they could travel further. The safety bike changed many people's lives.



## John Boyd Dunlop and his bicycle with pneumatic tyres.

John Boyd Dunlop wasn't actually the first person to invent pneumatic (inflatable) tyres. Another Scottish inventor called Robert Thompson had invented an inflatable tyre in 1845, 40 years earlier, but no one had been interested so he had forgotten all about it until ....



John Boyd Dunlop **reinvented** it and suddenly everyone wanted the new tyres! It wasn't long before carriages and then cars started using Dunlop's tyres and .....



..... Dunlop tyres are still made and have the word **DUNLOP** printed on them.

Long ago, the first bicycles were so expensive that only rich men could afford them. When women first wanted to ride a bicycle there were a lot of men who objected and said that ladies should not be allowed to ride but, ideas change and as new inventions come along. Bikes have changed a lot over the last hundred years, not only in how they look but also the materials that are used to make them.

## What does your bike look like?



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