



CYCLING FACT SHEET No. 57

Historical display shows bicycle development

The bicycle has had a great impact on individual independence, social development and popular culture. For instance, the bike was largely responsible for changing women's fashion in the late 1800s, when restrictive corsets and long dresses made way for bloomers and later, trousers.

We now know that cycling is the most energy efficient method of travel ever invented, but surprisingly it took many years to go from an idea to a reality. In 1493, a student of Leonardo da Vinci is thought to have sketched a concept that looks remarkably like the modern bicycle, although some people believe it may be a clever hoax.

Frenchman Pierre Lallemand patented a velocipede in 1866, with a wooden frame and two steel wheels with pedals on the front axle, which quickly became known as the "boneshaker" because of the uncomfortable ride over rough surfaces. An interesting aside is that in a recent UK poll, this invention was voted the best patent ever lodged, ahead of the telephone, radio and penicillin.

Designers realised that the larger the front wheel, the further you could travel with one rotation of the axle pedals and this led to the development of the odd-looking pennyfarthing. Although fast, they could also be dangerous because the rider sat high above the centre of gravity and whenever the front wheel hit a rut, the entire apparatus tipped forward.

The so-called "safety bike" was introduced in the 1890s with a diamond-shaped frame and central pedals driving the rear wheel – which is the same basic design used today.

During this period, the Wright Brothers operated a bicycle shop in Ohio and began making bikes in 1896. Much of what they learnt from this went into their aviation experiments.

Bicycle styling continued to evolve throughout the 20th century, introducing designs such as the 1950s roadster with white sidewall tyres; the dragster of the 1970s featuring its distinctive banana seats; and BMX or mountain bikes from the 1980s, created specifically for off-road riding.

Not every innovation succeeded however – the all-plastic Itera bicycle from Sweden introduced in 1982 was clever but failed to sell.

Many of these vintage and classic models are on display at the recently opened Canberra Bicycle Museum. The museum has over 700 bicycles from all eras and is a must see for anyone visiting the national capital.



Here in Perth, Revolutions Transport Heritage Centre at Whiteman Park (open daily from 10am to 4pm) is gradually building an impressive collection of vintage bicycles, including a very early example of a velocipede.

For people interested in preserving cycles and memorabilia, the WA Historical Cycle Club meets once a month and conducts regular rides. Enquiries can be made to president Peter Wells on 9459 1750.

This fact sheet is one of a series dealing with the use of bicycles for recreation and transport in Western Australia. The series looks at a range of cycling-related topics including ride routes, touring tips, maintenance, safety, road rules, insurance and product reviews. You can find more cycling fact sheets online at www.transport.wa.gov.au/cycling

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