

Willard Sawyer

Inventor and maker of Velocipedes

(1808-1892)

Lorraine Sencicle B.A. (econ) hons

Back in 2006 I was asked by the then Dover Town Council for a list of deceased locals whom I felt should receive some sort of recognition – a plaque or similar. I presented my list but, possibly due to a change of regime, it was not acted upon. One of those that featured was Willard Sawyer, who lived and had a factory in St James Street, Dover, in the middle of the nineteenth century. He is generally recognised as the 'first truly professional maker of man-powered vehicles' – the velocipede cycling machine. Further, by inventing new techniques, he opened the world's first factory for mass-producing cycles – here in Dover, England!



*Willard Sawyer
Dover Library*

In the evolution of the bicycle, the first human-propelled machine was invented by Baron Karl Drais (1785-1851) in Mannheim, Germany in 1817 and patented in France in February 1818. Called a Laufmaschine, in Britain a dandyhorse or Hobby Horse, it consisted of a horizontal bar supported by two wheels of equal height, which the cyclist stood astride, propelling the machine by his feet. Enthusiastic amateurs or craftsmen made these on a one-off basis.

Willard, born in Romney about 1808, is first recorded living in Dover in the Dover

town directory of 1838. In the 1841 census, he is listed as living in Chapel Street, in St Mary's Parish. There he worked as a carpenter but, five years later, he opened the Dover Velocipede Works at 20 St James Street.

Reflecting his carpenter background, Willard's velocipede or 'manumotive carriage' as he called them, were built partly of wood, had four wheels, like a stagecoach, and were propelled by treadles below the rear wheel axles, with tiller-style steering. An advert of 1850 states that Willard was producing four different types of velocipede: First class, costing between £15 and £25, second class £10 to £14, third



*Laufmaschine invented by Baron Karl Drais. From the original patent papers 1817
Scottord Lawrence*

class £5 to £9 and a velocipede for two costing between £15 and £35. Even the cheapest third class machine was very expensive in those days.

Nonetheless, there were enough wealthy folk around to ensure that Willard's machine was a success. Indeed, he produced one of three velocipedes that were on show at the Great Exhibition, Crystal Palace, in 1851. Apparently, he rode the machine to London and back for the occasion! At the exhibition, Willard 'was received with a very flattering distinction'. Then in 1858, Edward, Prince of Wales, on a visit to Dover, called at the factory and 'inquired minutely as to the capacity, price, and speed of a machine'. Afterwards Willard built a special carriage for the Prince costing £30 and capable of going 8 mph.

Willard's velocipedes were assured of widespread acclaim and orders came in from mainland Europe, India, Australia and California. Besides the Prince of Wales, Willard counted the Emperor of Russia, Prince Imperial of France and

Crown Prince of Hanover, amongst his customers. The Hon. J.C Skeffington wrote, 'I cannot speak in terms too highly of the convenience and comfort of such a mode of travelling, when one can run off 60 miles in a day, and feel as little fatigued as if one had gone on foot a dozen'. It is recorded that this gentleman travelled 526 miles in twenty days on one of Willard's velocipedes.

Another, equally, enthusiastic customer, having condemned the poor state of the roads, did add that, 'The rattling and shaking of such slight machines is dreadful at the speed of anything over seven or eight miles an hour, and if driven constantly at this rate cannot last long.'

Unfortunately, the attitude in Dover was far from positive such that in 1856, Willard applied to the council to cancel his lease. He wrote that 'his living depended on the hire and sale of velocipedes, but since a decision of the (Magistrates) Bench had declared them a nuisance, he was unable to obtain a livelihood.' He added that he wished to move to some locality where they were not regarded as nuisances.

It would appear that Willard had a change of heart for in 1860 he produced a pamphlet describing the different type of machines he was producing in Dover. These included the Sociable, which has seats for six people including two drivers. In his range there was the Racer, the Tourist and Traveller, the



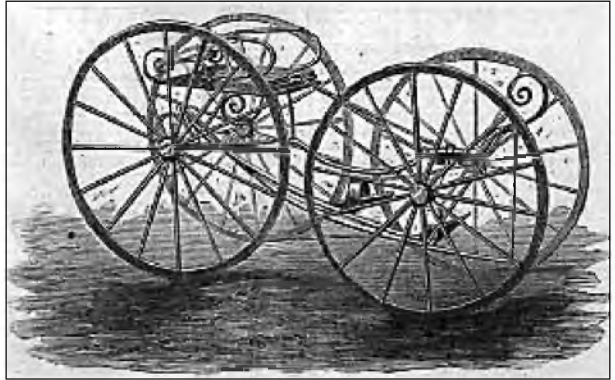
*St James Street circa 1840 drawn by George Shepherd
courtesy of Dover Library*

Promenade, the Visiting Carriage, the Ladies' Carriage and small machines for youths and children. The prices varied between £3 and £40.

Railway companies saw the potential of velocipedes for use in track inspections and they became known as 'Rail Bikes'. In use from around 1860 until the 1950's they worked, as one would expect, like a bicycle but with extra power from 'rowing' the central drum. National railway velocipede rallies are still held.

Albeit, it seems that Willard ceased production in Dover about 1865 and by 1871 he was living at Kent Terrace, Deal. Ten years later, he was living with his son, a photographer, on the Strand, Walmer. By this time, the sleeker boneshaker, introduced from France in 1868, had superseded the four-wheeled velocipede and by 1887, Willard's factory had closed. An advert for an auction following the closure includes 50 velocipedes.

Willard died in 1892 and was buried at St Mary's Church, Walmer. His workshop in Deal is now the Maritime and Local History Museum. On 19th September 1899, Dover's Mayor, Sir William Crundall (1847-1934), organised Dover's first motorcar exhibition at the Crabble Athletic Ground. Members of the Automobile Association drove down from London for the event and 25 or 26 vehicles of various types took part in a grand parade round



Velocipede presented to Edward, Prince of Wales



Velocipede, Severn Valley Railway

the cycle track. The assorted vehicles included a velocipede - a modern day quadracycle - that was probably made by Dover's Willard Sawyer!

That is not the end of the story, for in 1937 the Science Museum acquired a four-wheel velocipede c 1860. At the time of the purchase, the Times stated that Willard Sawyer was 'the best-known English maker of velocipedes.' The caption at the Science Museum, when I saw the Velocipede, read, 'made by pioneering cycle maker Willard Sawyer of Dover!'