RALEIGH MUSEUM
OF 1820-1950 CYCLES AND TRICYCLES
This museum traces the development of self-propelled transport through the ages. In the early days, inventors, carpenters, blacksmiths and engineers throughout Europe applied their skills to the creation of a machine which was destined to change the way of life for the individual. Opened officially to the public in June 1973 all the original models on display were donated from the private collection of Raleigh Industries Limited, of Nottingham, England – the world’s largest cycle and cycle components manufacturer. The bicycles and tricycles on view trace the pattern of development from the original concept and as new techniques and materials became available. This unique collection will remain as a permanent monument to the skills and ingenuity of our forefathers.

The exhibits are available for study by appointment, through the museum curator.
hobbyhorse

Manufactured in France by Draisienne in 1825. This model has a wooden frame and wheels with metal fork and fittings. Propelled by pushing with the feet in contact with the ground and it was capable of being steered.

<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
<th>Date</th>
<th>Make</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hobby Horse</td>
<td>1825</td>
<td>Draisienne</td>
</tr>
<tr>
<td>4</td>
<td>Velocipede</td>
<td>1867</td>
<td>English</td>
</tr>
<tr>
<td>5</td>
<td>English Boneshaker</td>
<td>1869</td>
<td>Hedges</td>
</tr>
<tr>
<td>6</td>
<td>French Boneshaker</td>
<td>1869</td>
<td>Michaux</td>
</tr>
<tr>
<td>7</td>
<td>Ordinary</td>
<td>1879</td>
<td>Bayliss Thomas</td>
</tr>
<tr>
<td>7</td>
<td>Rotary Tricycle</td>
<td>1880</td>
<td>Coventry</td>
</tr>
<tr>
<td>8</td>
<td>Ladies Tricycle</td>
<td>1888</td>
<td>Singer</td>
</tr>
<tr>
<td>9</td>
<td>Geared Facile</td>
<td>1888</td>
<td>Crypto</td>
</tr>
<tr>
<td>10</td>
<td>Safety Bicycle</td>
<td>1885</td>
<td>Rudge</td>
</tr>
<tr>
<td>11</td>
<td>Three Wheeler</td>
<td>1882</td>
<td>BSA</td>
</tr>
<tr>
<td>11</td>
<td>Kangaroo Ordinary</td>
<td>1884</td>
<td>Hillman Herbert &amp; Coventry</td>
</tr>
<tr>
<td>12</td>
<td>Otto</td>
<td>1881</td>
<td>E.C.F. Otto</td>
</tr>
<tr>
<td>13</td>
<td>Tandem</td>
<td>1889</td>
<td>Ivel</td>
</tr>
<tr>
<td>14</td>
<td>Ladies Tricycle</td>
<td>1899</td>
<td>Humber</td>
</tr>
<tr>
<td>15</td>
<td>Bantam</td>
<td>1893</td>
<td>Crypto</td>
</tr>
<tr>
<td>16</td>
<td>Tandem</td>
<td>1899</td>
<td>Humber</td>
</tr>
<tr>
<td>16</td>
<td>Ladies Roadster</td>
<td>1897</td>
<td>Humber</td>
</tr>
<tr>
<td>17</td>
<td>Gents Cross Frame</td>
<td>1913</td>
<td>Raleigh</td>
</tr>
<tr>
<td>18</td>
<td>Dursley Pedersen</td>
<td>1902</td>
<td>Humber</td>
</tr>
<tr>
<td>19</td>
<td>Raleightte</td>
<td>1904</td>
<td>Raleigh</td>
</tr>
<tr>
<td>20</td>
<td>Record Ace</td>
<td>1950</td>
<td>Raleigh</td>
</tr>
</tbody>
</table>
The origins of the bicycle have been lost in the mists of time, although an illustration of an early form of bicycle is depicted in a stained glass window at Stoke Poges Church. This indicates the possibilities, if not the actual use, as far back as 1642.

The first recorded instance of a bicycle being used in public was in London in 1769. This was a primitive and cumbersome, wooden construction, being propelled by the rider pushing his feet along the ground. Pedals – as a means of propulsion – were not used until the early part of the 19th century, and were invented by a Scottish blacksmith, Kirkpatrick MacMillan. His machine was an entirely new concept, but did not gain much popularity.

It was the French who made the next important breakthrough, with a front wheel drive pedal-operated bicycle. One of the French enthusiasts, a M. Lallemand, moved to America, and there in 1866 took out the first bicycle patent in the U.S.A. Throughout the latter half of the 19th century, many inventors, engineers and craftsmen all over Europe were awakened to the possibilities of personalised transport. The bicycle was here to stay and it appeared in an unbelievable variety of shapes and sizes – quite frequently acquiring additional wheels for stability, comfort and safety. During this transitional period however, not every inventor considered the necessity for brakes.

It was during this exciting period of the cycle’s history that many of the great names in today’s cycle industry first made their appearance, along with the early ‘safety’ bicycles.

By the turn of the century, bicycles began to take on the appearance of the machines we know today. Refinements came with each new model – pneumatic tyres, mudguards, gears and more efficient braking systems.

Now the cycle industry was born. Manufacturing began in earnest and designers utilised every technological development that the industrial revolution created. However, the outward appearance of the bicycle remained substantially the same until about 1925 when new, lighter weight materials again revolutionised designers’ thinking.

Two major design innovations by Raleigh Industries of England created a fashion market in cycling. The RSW 16 ‘unisex’ cycle, with small wheels was launched in 1965, and proved to be an immediate success as a family cycle. In 1970 a junior cycle based on an entirely new frame structure known as the ‘Chopper’ was conceived and this soon became a household word.

Although many new and more sophisticated means of transport have been introduced since the birth of the bicycle, demand has continued to grow. Today, throughout the world there are well over 200 million bicycles in everyday use – not only for personalised transport – but also for the benefits of fun, health and exercise.
This example is a child's bicycle of English origin, circa 1867. It is a front wheel drive machine with a solid wrought iron frame. The wooden wheels are fitted with iron tyres but there are no brakes. The seat is a flat piece of shaped wood.
english boneshaker

Made by Hedges in 1869. This model has an iron frame mounted on wooden wheels with iron band tyres. Pedal cranks are fitted direct to the front wheel axle. The rear wheel brake is operated by twisting the handgrips which are linked by cord to the friction brake on the tyre.

rotary tricycle

A ‘Coventry’ model dated 1880, this unique machine was the dream child of James Starley. The solid iron frame links the twin steering wheels to the main drive wheel with the seat mounted on the cross member. Propelled by crank and chain drive to the 50” diameter wheel, on the hub of which is fitted a band brake.
ladies tricycle

Made by Singer in 1888 this tricycle is propelled by chain drive to the rear wheels and differential gear, with a band brake operated by lever mounted on the handlebar. All wheels fitted with small section solid tyres.
geared facile

A ‘Crypto’ model circa 1888. The drive is achieved by link motion and treadle action through sun and planet gears on front wheel. A spoon brake operates on the front tyre by means of a lever on the handlebar. Both wheels are fitted with small section solid tyres.

Kangaroo ordinary

Made by Hillman Herbert and Cooper Coventry, this Kangaroo is dated 1884. A unique feature is the drive by a chain from each pedal to either side of the front wheel as the pedal cranks are positioned some distance below the wheel hub. A spoon brake is applied to the front tyre.
safety bicycle

Manufactured by Rudge in England in 1885. Chain driven via the rear, larger wheel, this machine is designed with remote steering to the front wheel. No braking was incorporated on this model. Small section rubber tyres are fitted to both wheels.

three-wheeler

An early BSA three wheel model manufactured around 1882. Propulsion is by double chain one to each main wheel with a simple ratchet arrangement to override on turning corners. Steering is achieved via a rod link to the trailing wheel.
three-wheeler

An early BSA three wheel model manufactured around 1882. Propulsion is by double chain drive, one to each main wheel with a simple ratchet arrangement to override on turning corners. Steering is achieved via a rod link to the trailing wheel.

Kangaroo ordinary

Made by Hillman Herbert and Cooper Coventry, this Kangaroo is dated 1884. A unique feature is the drive by a chain from each pedal to either side of the front wheel as the pedal cranks are positioned some distance below the wheel hub. A spoon brake is applied to the front tyre.
Designed by E.C.F. Otto and built by BSA in 1881. The two large wheels run freely on a straight axle which supports the saddle and entire frame. A novel feature is the bar which extends down to a small castor wheel, to prevent the rider swinging too far back. When the machine is in motion the roller is normally well clear of the ground. Drive is by double throw crank shaft and at each outer end is a pulley with metal band drive to another pulley on each drive wheel. Steering is achieved by slackening either drive band until the wheel runs free and braking by use of steering handle on the axle pulleys.
tandem

An 'Ivel' model built in 1889, this gents safety tandem has an iron frame. Wheels are fitted with small section solid rubber tyres. A chain driven machine with dual steering also by chain, to the front wheel. There are no brakes on this model.
ladies tricycle

A Humber model made in Beeston in 1899, this tricycle has a fully enclosed chain drive to the rear axle, on which is attached a band braking system. The frame is constructed with fittings for a removable top tube which converts the machine into a ladies model.
bantam

Designed and manufactured by the Crypto Cycle Company around 1893 this model makes use of gearing in the front wheel for increased speed although no brakes were fitted.
tandem

Produced by Humber in 1899 this unusual looking tandem bicycle is constructed with tubular frame. Link motion steering is controlled by handlebars fixed to the front seat column. A cable brake to rear wheel and pneumatic tyres are features of this machine.

ladies roadster

Another Humber model, this ladies cycle was produced in 1897 with a tubular steel frame of early design. Features include pneumatic tyres, front wheel spoon brake and reinforced chain guard.
gents cross frame

A Raleigh roadster model dated around 1913. This is an early example of the use of a tubular fork crown and the frame construction shows the importance which designers placed on stress and balance. Other features include side action clip-on brakes and head clip fittings for handlebar.
tandem

Produced by Humber in 1899 this unusual looking tandem bicycle is constructed with tubular frame. Link motion steering is controlled by handlebars fixed to the front seat column. A cable brake to rear wheel and pneumatic tyres are features of this machine.

dursley pedersen

Made by Humber in 1902 this unusual looking bicycle was constructed on the cantilever principle. Brakes on both wheels were operated by inverted levers on the handlebar. Chain drive to a hub gear and pneumatic tyres are also features of this model.
raleighette
motorised tricycle

A little known part of the Raleigh Cycle Co's history is their early venture into the field of motorised transport. This model, built in 1904, is in very good condition today and still road worthy. Powered by a single cylinder, four stroke sleeve valve, water cooled engine which drives a countershaft with two chains to the rear wheel, giving two speeds. Band brakes are applied to each front wheel.
raleigh record ace

This special exhibit was specially designed and built for Reg Harris. Between the years of 1949 and 1956, during his professional career with Raleigh Industries Ltd., Reg achieved unparalleled international success.

Designers, craftsmen and engineers working in close co-operation with Reg Harris, paid studied attention to every detail of the bicycle – strengthening, modifying and improving – creating the supreme track racing machine.

FRAME: Built of 531 tubing, 74° parallel with chamfered end chain stays fitted with special horizontal plate liners.
FORK: Raleigh tubular crown, round tapered blades with solid fork end.
HANDLEBAR: Steel, deep Maes special bend. The stem is a special design with internally spigoted forged lugs brazed to stem and extension tubes.
CHAINWHEEL: 24T block – 1° pitch – Williams.
SADDLE: Brooks special B.17N.
RIMS: Mavic Alloy Tubular
TYRES: Dunlop No 0 Silk Tubular
the raleigh collection

1820—1880
HOBBYHORSE
VELOCIPEDE
QUADRICYCLE
BONESHAKER (Hedges)
BONESHAKER (Michaux)
BONESHAKER (Hedges)
BONESHAKER (Michaux)
BONESHAKER
ORDINARY
ORDINARY
ORDINARY
ROTOR TRICYCLE

1881—1900
SINGER TRICYCLE
CRYPTO
RUDGE SAFETY
BSA 3 WHEELER
BSA SAFETY
KANGAROO ORDINARY
ORDINARY
BSA OTTO
BSA OTTO
ORDINARY
IVELE TANDEM
HUMER TRICYCLE
CRYPTO BANTAM
WHITWORTH
HUMER TANDEM
TREADLE BICYCLE
HUMER TRICYCLE
BSA GENTS ROADSTER
HUMER GENTS ROADSTER
RALEIGH GENTS ROADSTER
HUMER LADIES ROADSTER

1901—1910
BSA LADIES ROADSTER
DURSELEY PEDERSEN
RALEIGH TANDEM
DURSELEY PEDERSEN
HUMER GENTS ROADSTER
HUMER TRICYCLE
DURSELEY PEDERSEN
HUMER GENTS ROADSTER
RALEIGH MOTORISED TRICYCLE
RUDGE LADIES ROADSTER
BSA LADIES ROADSTER
BSA GENTS ROADSTER
SUNBEAM GENTS ROADSTER
BSA GENTS ROADSTER
RUDGE GENTS ROADSTER
BSA GENTS ROADSTER
GENTS ROADSTER
SUNBEAM GENTS ROADSTER
BSA GENTS ROADSTER
BSA LADIES ROADSTER
RALEIGH LADIES ROADSTER
SUNBEAM GENTS ROADSTER
RUDGE X FRAME

1911—1950
BSA GENTS ROADSTER
RALEIGH X FRAME
RUDGE GENTS ROADSTER
SUNBEAM GENTS ROADSTER
RALEIGH GENTS ROADSTER
RALEIGH X FRAME
BSA GENTS ROADSTER
BSA GENTS RACER
BSA FOLDING
RALEIGH TANDEM
RALEIGH GENTS ROADSTER
RALEIGH GENTS ROADSTER
BSA LADIES ROADSTER
BSA LADIES ROADSTER
RALEIGH GENTS ROADSTER
RALEIGH X FRAME LADIES
RALEIGH LADIES ROADSTER
RUDGE GENTS ROADSTER
RALEIGH GENTS ROADSTER
BSA GENTS ROADSTER
BSA GENTS ROADSTER
BSA GENTS ROADSTER
RUDGE GENTS ROADSTER

Only a limited number of machines from the Raleigh collection can be shown in the Museum. The display is varied from time to time, as additional models are acquired.