2.3 ANATOMY OF THE SAFETY BICYCLE - pneumatic tyres

Other manufacturers soon began making pneumatic tyres, including Pirelli in 1891 and Edouard Michelin in 1891.



Cartoonist O'Galup's Michelin Man first appeared end 1898. 1920 BLP Letter card sold at discount; proceeds to war wounded



2.3 ANATOMY OF THE SAFETY BICYCLE - pneumatic tyres

Despite rude comments about air filled tyres at first, pneumatic tyres have survived the test of time.

Pirelli tyres, in production for over 100 years.





Gutta Percha one of North American Cos making tyres.







Canadian advertising p.c by Guita Percha Rubber Limited. Inset - Perfin Guita Percha -back of Canada KGV red stamp c 1920.





2.3 ANATOMY OF THE SAFETY BICYCLE - the saddle

All cyclists need to give careful attention to shape, position and height of saddle to avoid uncomfortable ride.





(Itility bikes (above) and mountain bikes usually have coil springs (left) to act as cushion on rough roads and tracks.









Saddles narrower

Saddles on



BETUSH TO SIMS SADDLE CO., CANTON, N. Y.



are wider y. Canderman. Hornelle ville. than men's as women have wider not as wide

for racing cyclists.

bikes built for women pelvic bones (But saddlesas in 1898!)

2.3 ANATOMY OF THE SAFETY BICYCLE - Its steering, the handlebars.

Generally, utility bicycles have straight handlebars and touring/racing bicycles have dropped handlebarsbars.



Above Tri-athletes use extended bars.

Below Pursuit riders use upturned 'bars.







Racing cyclists have dropped handle bars; (no brakes on track)

Below Straight handlebars of a typical utility bicycle.

Above and right Dropped handle bars on a touring bicycle. N.B. misplaced perfs.

Below: Postman of 1910 with straight handle bars.







2.3 ANATOMY OF THE SAFETY BICYCLE - ball bearings and gears.

The introduction of ball bearings in 1877 allowed the bicycle to free wheel; the derailleur gear used from 1895.



Right IMPERF PAIR Few known



The rider moves the lever on the down tube to select the best gear.

Below

Bottom

bracket

assembly &

derailleur

gear





The cranks, attached to the bottom bracket must withstand beavy downward force



A freewheel allows the descent of hills, with



2.3 ANATOMY OF THE SAFETY BICYCLE - Its accessories - Lighting

At night a bicycle needs to be equipped with good lighting so that the rider can see the way and he seen by others



Herm. Riemann, Chemnitz-Gablenz Grösste Spezialfabrik

für Fahrrad- und Automobil-Laternen Zubehörteile für Fahrräder und Automobile. Gerrändet 1866. Über 800 Arbeiter und Beamte.

Dojtkarte.

Hore Wederlandsche Handel-



19th and start 20th century NB Left "HR" Perfin



INDUSTRIES - KARACHI



Above

Pakistan booklet 9.55 Modern ligh ing by batter lamp - can work loose & fail suddenly

100 JAHRE EIDGENOSSISCHE POST CENTENAIRE DES POSTES FÉDÉRALES CENTENARIO DELLE POSTE FEDERALI 1849 1949

POSTKARTE - CARTE POSTALE - CARTOLINA POSTALE



by friction on front wheel but light goes out when rider stops. This can be dangerous.

Above

Dynamo works

2.3 ANATOMY OF THE SAFETY BICYCLE - Its accessories luggage carriers.

Most bicycles used for utility purposes have fitments at the front or rear to carry luggage.



Baskets may rest on supports and be held to the rear of the bicycle by strong straps







Above Error imperf end stamps and selvedge.

Above panniers for post and below for touring



2.3 ANATOMY OF THE SAFETY BICYCLE - Its accessories Pumps, tool kits and water bottles.

Punctures occur at the most unlikely times; cyclists need to carry a repair outfit and pump plus a tool kit.



Cycle tyres need to be kept fully inflated. Pumps are fixed on the down tube, usually, Below, spanner essential to tool kit.









Above, Error, in Olympic Rings, on left IMPIADA instead of OLIMPIADA.

Tourists and racing cyclists need to avoid dehydration and carry water bottles on handlebars, above right, or down tubes, below



3 USE OF THE BICYCLE FOR LEISURE PURSUITS

3.1 ENJOYMENT OF THE BICYCLE STARTS FROM AN EARLY AGE - First steps.

Having introduced manufacturers, described parts of the bicycle, let's look at users, starting with young children.



Children usually start on two wheels with a scooter

A child's first two wheeler is

usually fitted with stabilisers.



First taste of cycling is often a chair seat, behind Mum or Dad.



The tricycle is soon mastered, under the eyes of grandparents





The Park, a safe place for children to learn to ride.



Children are proud of their first bicycle, with gears





3.1 ENJOYMENT OF THE BICYCLE STARTS FROM AN EARLY AGE - Parents encourage children.

Some parents enjoy cycling with their children, helping them to gain road skills and to enjoy the countryside



Above In Sweden 80% of the population live in towns. Families use bicycles, to escape to the countryside together



Both parents and children now ride mountain bikes, especially in the country



Above: Baby sits behind parent and the older child can ride own bicycle.



Left and below Families enjoy cycling together in the country

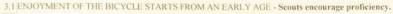


Above. First latent image stamp. If viewed at an angle, Olympic symbol can be seen.



Bicycles with straight handlebars less popular but are still purchased





Boy Scout movement arose out of Baden Powell's organisation of cadets delivering mail in Mafeking siege 1900



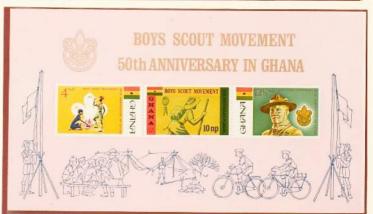


Cycle proficiency badge



(Below) Scouts provide a Christmas Charity Mail Service.





3.1 ENJOYMENT OF THE BICYCLE STARTS FROM AN EARLY AGE - Continues into School & College.

The bicycle is a major means of transport in the English University Towns of Oxford and Cambridge





19th century college-stamps of Hertford College and Keble College Oxford. Mail may have been delivered by cycle.

Right. A gowned cyclist is a familiar figure in City of Oxford.







Children love to show off their cycling skills when out of school

Below Children rushing from school?



3.1 ENJOYMENT OF THE BICYCLE STARTS FROM AN EARLY AGE - But should obey Basic Rules.

Children should take basic precautions when cycling and ALL road users should be aware of Road Safety.







Should not ride "no hands", or ride "2 up", except if adapted



Monochrome proof, on thin cardboard ex printer's archive.



Dangerous to carry a friend on the handlebars.



Care needed when taking one hand off the handlebars.

It is especially important that children do not hold onto moving vehicles (Radfahrer! nicht anhangen an fahrzeuge!)



3.2 IMPORTANCE OF ROAD SAFETY - Bicycles should be roadworthy - and cyclists should take advice.

Cyclists should be seen and heard - need a warning bell and a reflector plus clear lights, at night.





especially in heavy traffic





Cyclists should take notice of policemen

Left Should use cycle lanes, when provided

and cyclists should never forget that they can cause accidents too!



3.2 IMPORTANCE OF ROAD SAFETY -Road signs and signals.

Like all road users, cyclists should be familiar with all road signs and obey traffic signals.



Above graphic symbols to explain need to "give way"

Below Cartoon characters effective in teaching young









Below. Man explaining to boy that cycling not allowed in the street.

