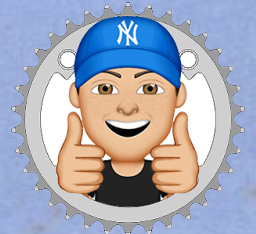


RALEIGH

THE ALL-STEEL BICYCLE



THE GREATEST NAME IN CYCLING



A PRODUCT OF RALEIGH INDUSTRIES LTD. NOTTINGHAM

INTRODUCING THE NEW POST-WAR RANGE OF

Covering 27½ acres of ground, the Raleigh Factory, the largest and best equipped of its type in the world, gives employment to 6,000 employees, whose welfare and working conditions are the constant thought of the Management of the Company.



ALL-STEEL BICYCLES

by

RALEIGH

W

HEN in 1887 The Raleigh Cycle Co. was founded, the Directors decided that the guiding principle of the business should be 'Quality', and it is on this foundation that the Raleigh leadership has been established and maintained.

Throughout their long history of 60 years, Raleigh have sponsored practically every development and improvement in cycle design, always searching for better methods and better materials. They have directed all their energies to the production of a bicycle of such outstanding supremacy that it is today recognised and accepted as the Hall-mark of Quality.

Only by producing practically every part of the bicycle within its own factory can Raleigh ensure the maintenance of such a high standard. Furthermore, a vast enterprise has been built up on the lines that a satisfied customer is the best advertisement, the proof of this policy being reflected in the world-wide demand for Raleigh products today.

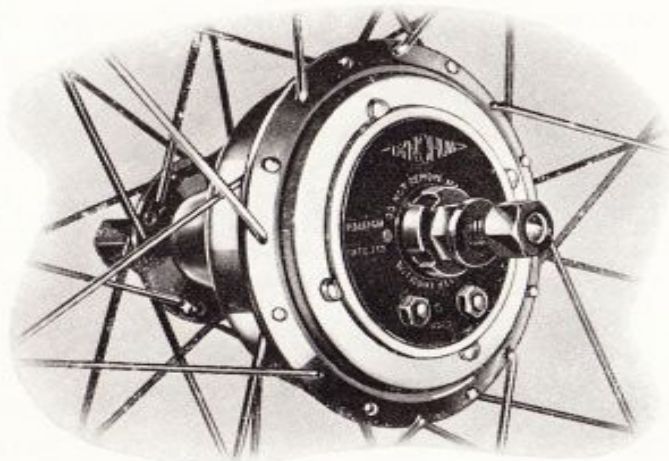
These are a few brief reasons why the Raleigh All-Steel Bicycle is the first favourite with the cycling public at Home and Abroad.

A glance through the pages of this Catalogue will leave no doubt in the reader's mind as to the ultimate choice of a mount.

Raleigh Dealers are the finest and best-equipped throughout the country, and they will be only too delighted to show and demonstrate to you the Company's products.

RALEIGH

Refinements



THE STURMEY-ARCHER (FW) WIDE RATIO 4-SPEED GEAR

This new and wonderful gear is built into the same shell as the well-known Sturmey-Archer 3-speed Hub and provides all its advantages with the addition of an intermediate low gear.

Since their introduction Sturmey-Archer Gears have made cycling easy. The FW Gear makes cycling easier still, it can be fitted to all models (except Superbe) illustrated in this Catalogue, at an extra charge.

6-VOLT DYNOHUB (FRONT)

In this new version of the patent Dynohub the electrical output has been increased from $1\frac{1}{4}$ watts to 2 watts ; at the same time the weight has been reduced by $4\frac{1}{2}$ ozs. Better protection against the ingress of road dirt has been provided and the outer cover plate has been redesigned to resist damage from blows. Terminals are spaced to give better accessibility, also to avoid the possibility of being short-circuited. This new terminal arrangement also gives greater clearance for the fork blades. By the removal of one nut and four screws the entire dynamo unit can be removed from hub to give access to the wheel bearings when they require attention. All the original features of the Dynohub have been retained—such as absence of drag, silent running, no wearing parts, no brushes, etc.

DYNOTHREE

(COMBINED DYNAMO AND WIDE RATIO STURMEY-ARCHER 3-SPEED)

In this new hub the 6-volt dynamo unit as fitted to the Dynohub is combined with a wide ratio 3-speed Gear giving an increase of $33\frac{1}{3}$ per cent, direct drive and a reduction of 25 per cent. Although both units are in the same shell they are entirely separate from each other, all the features of the Dynohub being retained, plus the advantages of a Sturmey-Archer Hub Gear. The combination gives a saving of approximately 10 ounces over a separate hub gear and Dynohub.



CHAINGUARD

The new pattern Chainguard—now being fitted to all Adult models except Sports and those fitted with Oilbath Gearcase—is unique in design. It is stronger, more rigid and gives greater protection than previously.

RALEIGH THE GREATEST NAME IN CYCLING

STEERING HEAD

The unique design incorporates a special oil-retaining cup and cone bearing with $\frac{1}{8}$ " balls and is a particular feature of Raleigh construction.

FORK CROWN

The famous Raleigh tubular fork crown is an excellent example of cycle design. Manufactured from high carbon steel with integral lugs which penetrate down the inside of the fork blades, reinforcing them at the most critical point where they have to withstand intense vibration. The finished appearance of the fork crown is extremely neat and pleasing.

FRONT FORK END

The Raleigh method of embodying the fork end integral with the taper tube which forms the blade and is reinforced where the change of section takes place, obviates a possible weakness at the critical point.

BRAZED-UP BACKSTAYS

The standardising of brazed-up backstays to the Dawn Models shows the trend of modern design. Brazed-up backstays have long been a feature of racing and sports cycles, where rigidity with strength and lightness is essential. The cycle frame with lateral rigidity ensures that no energy is absorbed by it, the rider's effort being applied 100 per cent to the rear wheel; consequently the rider will be able to cycle longer distances at an increased speed and without undue fatigue.

PATENT FRONT FORK LOCK

A patented thief-proof locking device positively securing the steering of the bicycle in any one of three positions, operated by a "Union" key. By turning the key a locking bolt is made to engage from the fork crown into a locking plate attached to the bottom head lug of the frame, thereby preventing movement of the handlebar and making the bicycle unrideable. Withdrawal of key positively locks the mechanism in the "steering fixed" or "steering free" positions; consequently when the cycle is being ridden the locking bolt cannot operate inadvertently. It is essential that the cycle is **not** ridden with the key in the lock.

BOTTOM BRACKET SHELL

A masterpiece of modern presswork—might well be described as the heart of the bicycle, for it is from here that the driving force is transmitted. For this reason, care in construction was never more necessary. Made from a single piece of cold rolled sheet steel, and formed under powerful presses into the finished shape without a join or weld of any kind, the result is a bracket light in weight and of uniform strength throughout.

STAINLESS STEEL SPOKES

Manufactured from high tensile stainless steel, retaining their brightness and lustre throughout their life; only require an occasional cleaning with soap and water. These spokes are unaffected by weather and cannot corrode and fracture like the ordinary steel spokes in general use.



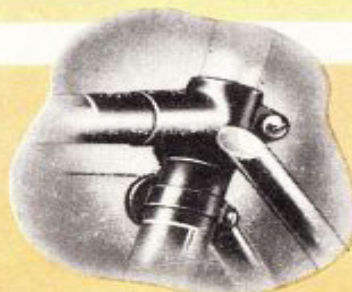
Fork Crown

Bottom Bracket



Raleigh One-piece Fork End

Brazed-up Backstays



Stainless Steel Spokes

A PRODUCT OF RALEIGH



INDUSTRIES LIMITED

Cycle to Health and Fitness



The famous Raleigh Heron's Head is a recognized symbol of supreme quality in cycle production, being the identifying trademark of the All-Steel Bicycle.

THE RALEIGH CYCLE CO. LIMITED

HEAD OFFICES & WORKS - NOTTINGHAM ENGLAND

Telephone 75154

JUNIOR

*Model 31 Boys
" 31 Girls*

SPECIFICATION. FRAME : 17", 22" x 1 $\frac{3}{8}$ " wheels, 19" (Boy's only), 24" x 1 $\frac{3}{8}$ " wheels. WHEELS: Westwood rims. Rustless spokes. TYRES : Dunlop. PEDALS : Rubber. HANDLEBAR : Upturned on 17" frame. North Road Raised on 19" frame. BRAKES : Front and rear Rim. SADDLE : Brooks' J.5 best Butt Leather, finest quality. FINISH : Black enamel on Sprabonderised rust-proof surface. Red lining. Usual bright parts Raleigh-Chrome plated. FITTINGS : Tools, toolbag, inflator, reflector.

EXTRA. Sturmey-Archer 3-speed Gear (as illustrated).



For the growing boy or girl, the Raleigh Junior surely provides the healthiest form of exercise and recreation there is. Sturdy and beautifully finished, they are machines which any youngster would be proud to own.

For Cash Prices, Additional Equipment and details of Gradual Payment Plan see page 23.



POPULAR

*Model 1 Gents
" " Ladies*



SPECIFICATION. FRAME : Gent's 24", 26". Lady's 22". WHEELS : 28" \times 1 $\frac{1}{2}$ ". Westwood rims. **Stainless Steel Spokes.** TYRES : Dunlop. PEDALS : Rubber. HANDLEBAR : North Road Raised. BRAKES : Front and rear Rim. CHAINGUARD : Raleigh improved design. SADDLE : Brooks' B.73 best Butt Leather, finest quality, or Terry's finest quality Spring Seat. FINISH : Black enamel on Spra-bonderised rust-proof surface. Gold and red lining. Usual bright parts Raleigh-Chrome plated. FITTINGS : Tools, toolbag, inflator, reflector.

EXTRA. Sturmey-Archer 3-speed Gear (as illustrated).

TOURIST

*Model 2 Gents
" 21 Ladies*



SPECIFICATION. FRAME : Gent's 24", 26". Lady's 22".
WHEELS : 28" x 1 1/2". Westwood rims. **Stainless Steel Spokes.** TYRES : Dunlop. GEAR : Sturmey-Archer 3-speed (AW), Trigger "Flick" control. PEDALS : Rubber. HANDLEBAR : North Road Raised. BRAKES : Front and rear Rim. GEARCASE : Raleigh Oilbath. SADDLE : Brooks' B.73 best Butt Leather, finest quality, or Terry's finest quality Spring Seat. FINISH : Black enamel on Sprabonderised rust-proof surface. Gold and red lining. Usual bright parts Raleigh-Chrome plated. FITTINGS : Tools, toolbag, inflator, reflector.

For Cash Prices, Additional Equipment and details of Gradual Payment Plan see page 23.

RALEIGH SUPERBE DAWN TOURIST

Fitted with the new (Patent)



SPECIFICATION. FRAME : 21", 23",
rims. **Stainless Steel Spokes.** TYRES :
PEDALS : Rubber. HANDLEBAR : Norm
Oilbath. SADDLE : Brooks' B.66 best
finest quality Spring Seat. LIGHTING :
3 locking positions. MUDFLAP : Best q
surface. Gold lining. Usual bright parts
SPECIAL NOTE : Dyno-Luxe Unit an

THE PATENT
FRONT FORK LOCK

FULLEST POSSIBLE MAINTENANCE
INSTRUCTIONS ARE ATTACHED
TO EVERY BICYCLE

Current drawn fr
which is charged v
powerful light at
halted. No

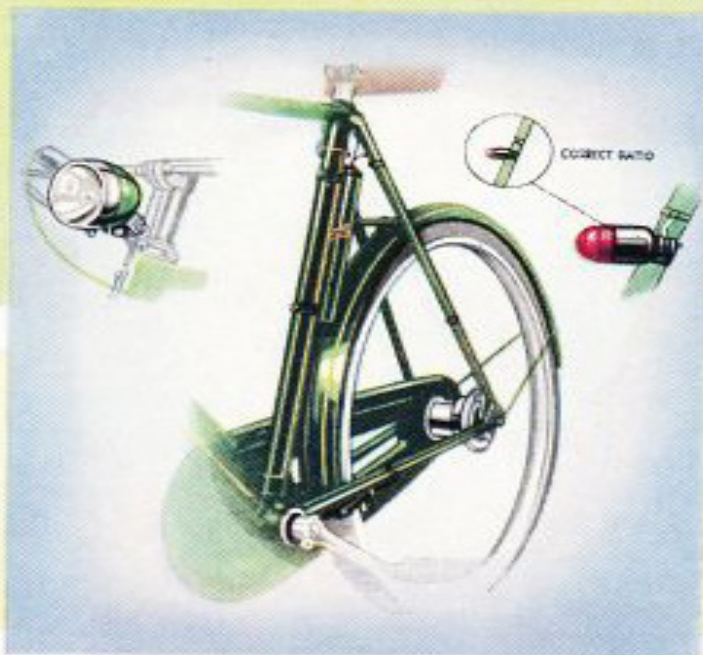
For Cash Prices, Additional Equipment and
details of Gradual Payment Plan see page 23.

Part 1) Dyno-Luxe Equipment.

Entirely brazed-up. WHEELS : 26" x 1 3/4". Raleigh Patent Dual Purpose Dunlop. GEAR : Sturmey-Archer 3-speed (AG), Trigger "Flick" control. Chain Road Raised. BRAKES : Front and rear Rim. GEARCASE : Raleigh Butt Leather, finest quality, Chrome-plated underframe, or Terry's Dyno-Luxe. PATENT FRONT FORK LOCK : In fork crown, giving stability. FINISH : Raleigh green enamel on Spru-bonderised rust-proof Raleigh-Chrome plated. FITTINGS : Tools, kitbag, inflator, reflector. Patent Front Fork Lock at present available on Superbe models only.



THE DYNO-LUXE ACCUMULATOR UNIT



om dry accumulator
whilst riding. Gives a
all speeds and when
running costs.



THE DYNO-LUXE ACCUMULATOR UNIT

This new device gives car-type lighting on a bicycle. It takes the form of a neat cylindrical case attached to the seat tube, containing a rectifier and three special dry accumulators. The rectifier converts the A.C. current from the Dynohub to D.C. suitable for charging the accumulators and at the same time obviates the need for a complicated "cut-out" mechanism. The light is brilliant and steady when at a standstill or whilst riding at any speed.

The three accumulators are of a special "dry" form and have no free acid which can spill, even if the bicycle be upside-down.

This wonderful equipment will give long and trouble-free service provided the following fundamental instructions are carried out, as is the case with any vehicle in which accumulators are used:

1. All contacts including terminals and bases of accumulators must be kept scrupulously clean and vaselined.
2. Earth connection on the tail lamp clip must always be a good connection.
3. Accumulators should be topped up with a teaspoonful of distilled water (obtainable from any Dealer or Garage) at least once a month. After topping up, surplus water must be drained off and accumulator carefully dried.
4. If your accumulators are at all run down, through more night than day riding, take them to your Dealer for checking and a boost charge.
5. Even without accumulators the lamps will still operate from the dynamo whilst the cycle is being ridden.



SUPERBE SPORTS TOURIST

*Model 24 Gents
24 Ladies*



SPECIFICATION. FRAME : 21", 23". Entirely brazed-up. WHEELS : 26" x 1 $\frac{3}{8}$ ". Raleigh Patent Dual Purpose rims. **Stainless Steel Spokes.** TYRES : Dunlop. GEAR : Sturmey-Archer 3-speed (AG), Trigger "Flick" control. PEDALS : Rubber. HANDLEBAR : North Road Raised, adjustable stem. BRAKES : Raleigh front and rear Caliper. GEARCASE : Raleigh Oilbath. SADDLE : Brooks' B.66 best Butt Leather, finest quality, Chrome-plated underframe, or Terry's finest quality Spring Seat. LIGHTING : Dyno-Luxe. PATENT FRONT FORK LOCK : In fork crown, giving 3 locking positions. MUDFLAP : Best quality. FINISH : Raleigh green enamel on Spra-bonderised rust-proof surface. Gold lining. Usual bright parts Raleigh-Chrome plated. FITTINGS : Tools, kitbag, inflator, reflector.

SPECIAL NOTE. Dyno-Luxe Unit and Patent Front Fork Lock at present available on Superbe models only.

SPORTS LIGHT ROADSTER

*Model 22 Gents
- 22i Ladies*



SPECIFICATION. FRAME : 21", 23". Entirely brazed-up. WHEELS : 26" x 1 1/8". Raleigh Patent Dual Purpose rims. **Stainless Steel Spokes.** TYRES : Dunlop. PEDALS : Rubber. HANDLEBAR : North Road Raised, adjustable stem. BRAKES : Raleigh front and rear Caliper. CHAINGUARD : Raleigh improved design. SADDLE : Brooks' B.66 best Butt Leather, finest quality, or Terry's finest quality Spring Seat. FINISH : Black enamel on Spra-bonderised rust-proof surface. Usual bright parts Raleigh-Chrome plated. FITTINGS : Tools, kitbag, inflator, reflector.

EXTRA. Sturmey-Archer 3-speed Gear (as illustrated).

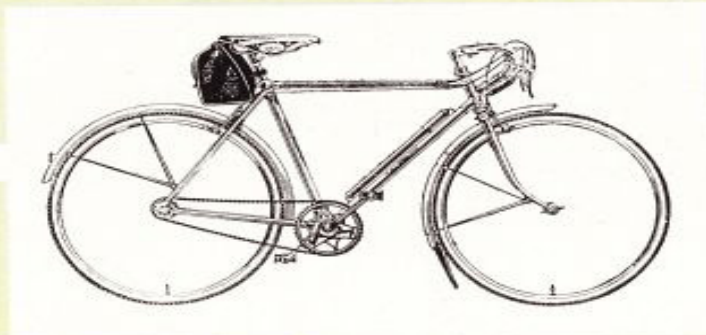
For Cash Prices, Additional Equipment and details of Gradual Payment Plan see page 23

LENTON CLUBMAN

Model 25

SPECIFICATION. FRAME : 22", 71° head and seat angles. "531" tubing. Brazed mudguard and pump fittings. WHEELS: 26" High Pressure. **Stainless Steel Spokes.** TYRES: Dunlop High Pressure. GEAR : 66.4" free. 74.7" fixed. CHAIN-WHEEL : 3-pin detachable, 46T. Flanged racing type. CRANKS : 6½" fluted. PEDALS : Racing type. HANDLE-BAR : Special Raleigh design, 15" centres × 5¼" drop. Adjustable stem, 2" forward extension, head-clip fixing. Special rubber grips. BRAKES : Raleigh front and rear Caliper. MUDGUARDS : Detachable white celluloid with mudflap. SADDLE : Brooks' B.17N best Butt Leather, finest quality. FINISH : Polychromatic green on Spra-bonderised rust-proof surface, with attractive transfers. All usual parts Raleigh-Chrome plated. FITTINGS : Tools, best quality kitbag, inflator, reflector, lamp brackets on head and left-hand fork blade.

EXTRA. Sturmey-Archer 3-speed Gear (as illustrated).



RALEIGH THE GREATEST NAME IN CYCLING . . .

The New **RALEIGH RECORD ACE**

(R.R.A. Model 26)

INDIVIDUALLY PRODUCED AND ASSEMBLED. A product embodying the combined experience and advice of Club and Track Men, in collaboration with the "quality-conscious" Technicians of the Raleigh Organisation, whose unequalled skill and craftsmanship have produced a mount incorporating all the needs of the most critical Rider. It will be obvious from an examination of the specification that the requirements of every keen Clubman have been appreciated and embodied. Apart from the Frame, the angles of which are the result of exhaustive research and experiment, each machine is made to individual taste in respect of components and finish. Although the price is high, it should be realised that no expense has been spared in fitting all the very latest components made from the most expensive light alloys available today. We are satisfied that in the R.R.A. we are offering a Speedman's mount which is without equal in the industry.



SPECIFICATION. FRAME: 20½", 21½", 22½", 23½". 73° head, 71° seat angles, 41⁹/₁₆" wheel-base maximum, "531" butted frame tubes, backstays and chainstays. Silver soldered mud-guard fittings and pump pegs. Supplied with or without any or all of the following silver soldered fittings :—Cable clips, bag support studs, rearlight clip, chainguard clip and pulley boss for gear control wire. **FORK :** "531" fork blades, round to round section, "D" to round optional, solid ends, lamp bracket peg on each blade. "531" butted steering stem. Silver soldered mudguard fittings. **WHEELS :** Sturmey-Archer Gear or choice of Airlite, Harden, Coventry Ultralite, Solite, Airlite Continental. Steel wing nuts to Sturmey-Archer Hubs. Aluminium alloy wing nuts supplied on all others. Stainless steel double butted spokes. 26" or 27" High Pressure or 26"×1¼" or 26"×1⅜" steel rims optional. 26"×1¼" W.O. Conloy, 26" or 27" Conloy Sprints at extra charge. **TYRES:** High Pressure Road Racing or Sprite. Tubular or other types to order at extra charge. **GEAR:** To order. **CHAINWHEEL AND CRANKS:** Special ultra-lightweight design, fluted section nickel-chrome steel racing cranks, right-hand crank with two arms solid forged. Positive drive direct from the crank. 44T, 46T, 48T or 50T detachable chainwheel with bolt and nut fixing. Bottom bracket axle made from nickel steel. **PEDALS:** Ultra-lightweight design, using aluminium alloy and steel in combination. Spindles of nickel-chrome steel. Alternatively 4" rubber pedals are available with aluminium alloy components. **HANDLEBAR BEND:** Sylvere Maes standard, Pellissier, Bailey, Binda, Continental, North Road Raised, North Road Flat, etc., in alloy or steel to order. Coloured tape with plugs, or grips to order. **HANDLEBAR STEM:** Special design 1", 2½" or 3½" extension, with "531" steel tubing, Continental pattern, or Reynolds' Hiduminium 1", 2" or 3" extension, other types to order. All stems head-clip fixing. An expander can be fitted in addition if desired. **BRAKES:** Alloy with hooded levers, Raleigh Calipers or alloy with Raleigh Levers, to order. **MUDGUARDS:** Bluemel's "Noweight" with Raleigh aluminium alloy detaching fitments, separate spearpoint extension. Moulded reflector in rear guard. Mudflap. **SADDLE :** Brooks' B.17N or to order. **FITTINGS :** Tools, oil gun, pressure lubrication to head races, bottom bracket races and racing pedals, inflator, Brooks' leather kitbag, quickly detachable kitbag support. Trigger "Flick" control (for hub gears only), fork lamp bracket, Elite chain, alloy seat pillar. **FINISH :** Raleigh-Chrome plated chainstay, backstay and front fork ends. Frame and fork finished in lustre, polychromatic, pastel shades, black enamel or Raleigh green enamel to order, on Spra-bonderised rust-proof surface. Decorative lining or panelling as required. All usual fittings Raleigh-Chrome plated or polished aluminium alloy.

The above choice of Specification is offered subject to the availability of the special features.

NOTE : The appropriate allowance will be made for Sturmey-Archer Gear if not supplied.

For Cash Prices, Additional Equipment and details of Gradual Payment Plan see page 23.

This illustration shows the R.R.A. equipped as a Tourist model fitted with Sturmey-Archer Gear and other Raleigh refinements embodied in the specification.





LOW GRAVITY CARRIER

Model 41

SPECIFICATION. FRAME : 21". FRONT CARRIER : 20"×14" heavy tubular, detachable, incorporating front stand. Tubular flat tray optional. WHEELS : Rear 26"×1 $\frac{3}{4}$ ". Front 20"×2". **Stainless Steel Spokes.** TYRES : Dunlop. CHAIN : $\frac{3}{16}$ " heavy transport. PEDALS : 4 $\frac{1}{4}$ " All steel. HANDLEBAR : Upturned. BRAKES : Front and rear Rim, heavy duty. SADDLE : Brooks' P.205 best Butt Leather, finest quality. NAMEPLATE : As illustrated. FINISH : Black enamel "All-Weather" on Sprabonderised rust-proof surface. FITTINGS : Tools, toolbag, inflator, reflector.



BUILT FOR HEAVY DUTY

Tremendously strong at the vital parts and built with a low riding position, these Tradesmen's Carriers include everything that could be desired. Translated into terms of goods delivered with unflinching punctuality and freedom from repair bills, it will be readily apparent why you should consider nothing but a Raleigh for your daily rounds.

For Cash Prices, Additional Equipment and details of Gradual Payment Plan see page 23.

Cycling terms briefly explained.



FRAME ANGLES. Head and seat angles refer to the angle at which the head and seat tubes lie in relation to a horizontal plane. Generally speaking, the more upright these tubes are the faster or easier the bicycle is to propel, but is less comfortable and extra light to steer. Hence great care has to be taken to design the frame to suit the purpose for which the cycle is intended.

FRAME SIZE. Bicycle frames are measured from centre of bottom bracket axle to top of seat lug. To decide the most suitable size, take inside leg measurement and deduct 10 ins. to allow for length of crank and saddle.

BRAZED-UP FRAME. All frame joints, including backstays, are brazed, providing increased rigidity.

BRAZED-ON FITTINGS. Include pump pegs, mudguard ears, etc., which are brazed to the frame in the appropriate positions.

BOTTOM BRACKET. Bearing carrying the cranks and pedals. Includes bottom bracket frame lug, bearing cups and crank axle.

LOW BOTTOM BRACKET. Height of bottom bracket from ground determines whether rider shall be able to remain comfortably seated and put one foot on the ground (a useful advantage in traffic). Measurement is taken from centre of bottom bracket axle to ground. $10\frac{1}{2}$ " is the average height for a low bottom bracket bicycle.

CHAIN STAYS. Tubes from bottom bracket to rear fork end.

BACK STAYS. Tubes from seat lug to rear fork end.

"531" TUBING. A special alloy steel tubing of high strength enabling it to be manufactured in lighter gauges than normal.

LUGS. In Raleigh bicycles these are pressed steel joints into which the frame tubes are fitted and then brazed. On Sports machines the expressions "cut-away", "fishtailed", etc., are frequently used. These imply that the lugs have been cut into fancy shapes with a view to improving the appearance of the frame and at the same time saving a certain amount of weight. This cutting away, when carried out scientifically, can give the frame increased strength and resistance to fatigue.

FRONT FORK ENDS. Relate to tips of front fork. Most bicycles have a very neat fork end pressed from the actual fork blade, into which a liner or reinforcing piece is inserted and then brazed. This has the effect of giving a very clean appearance combined with strength. The alternative is a forged steel piece inserted into the end of the fork and then brazed. This type is usually preferred by the Club and Racing enthusiasts, but in our opinion neither has any advantage over the other.

FORK OFFSET. The distance from an imaginary line through the centre of steering head and centre of front wheel. This dimension varies from 2" to $3\frac{1}{2}$ ", depending on design of fork and frame.

CRANKS. Three standard lengths are manufactured— $5\frac{1}{2}$ " for children, $6\frac{1}{2}$ " for riders of short or medium stature and 7" for tall riders. Measurements are from centre of bottom bracket axle to centre of pedal axle.

GEAR. The formula for calculating bicycle gears is as follows:—

$$\frac{\text{No. of teeth on chainwheel} \times \text{Rear wheel diameter in inches}}{\text{No. of teeth on sprocket or freewheel}}$$

For average conditions a normal gear of approximately ten times the crank length will be found satisfactory, for hilly districts slightly lower. The fitting of the Sturmey-Archer 3 or 4-speed Gear is strongly recommended, which is the gear for making cycling easy under all conditions. When using these gears the rider should endeavour to maintain an even rate of pedalling, changing to low gear when conditions tend to reduce pedalling speed and to high gear when conditions are easy.

HUB GEAR. Made in several "Ratios" in 3 and 4-speed types. Normal gear is a direct drive as with a single-speed hub, and the high and low gears are given as a percentage of this gear. Generally for touring and normal riding, wide ratio hubs are to be preferred, whilst for faster riding a medium ratio hub is best. For racing, close ratio gears should be used.

WHEELBASE. Centre distance between front and rear wheel, or in other words, distance between points of contact with the road of front and rear tyres.

WHEELS. Confusion often arises when referring to wheel or rim size. All rims have the size stamped on them and tyres of the corresponding size must be fitted, thus a $26" \times 1\frac{3}{8}"$ tyre can only be fitted to a rim of that size. When fully inflated the diameter of the tyre is 26" or 28" and width is $1\frac{1}{2}"$, $1\frac{3}{8}"$ or $1\frac{1}{2}"$ as the case may be. 26" wheels are favoured for town riding due to the lower riding position and 28" wheels for use on rough roads or by-ways, this size being more resilient. The wider the tyre the greater the comfort, but extra effort is required due to the increased road grip. The expression "Tyres" refers to outer cover, inner tube and rim tape.

CYCLING TERMS—Continued.

RIMS. Four main types of rim are in use at the present time—

(1) **WESTWOOD**—can almost be referred to as the original type of cycle rim and is still fitted to most Roadster machines.

(2) **ENDRICK**—a flat-sided rim introduced many years ago for Sports machines, intended for use only with caliper brakes.

(3) **PATENT SPECIAL SECTION**—a new type of rim permitting the use of either roller lever (pull up) or caliper brakes (side action). Now being fitted to all Light Roadster Models.

(4) **HIGH PRESSURE**—a lighter and narrower form of the Endrick rim, fitted only to Racing and Club machines.

BRAKES. Three types of brake are mentioned in this Catalogue—

(1) **CALIPER**—fitted to Sports machines. Operated by Bowden cable. The blocks grip the side of the rim, facilitating wheel removal.

(2) **ROLLER LEVER**—operated by levers which "roll" in bearings fixed to the handlebars. The levers are connected by rods to the blocks which pull up to the rim.

(3) **HUB BRAKES**—are similar to the brakes fitted on cars, being located in the front and rear hubs. Operated by either roller lever or Bowden cable.

BALL RACES. The hardened steel surfaces in the wheels, bottom bracket, head and pedals, into which steel ball bearings are fitted. Sometimes referred to as ball cups.

CONES. Hardened steel parts which screw on the axles to complete the bearing of the wheels. All ball races and cones must be of hardened steel and manufactured to very fine limits to ensure perfect running of the bearing.

HANDLEBARS. Sports type bicycles are usually fitted with an adjustable handlebar stem, i.e., the bend and the stem are separate units firmly held together by a clip and bolt, which permits the rider to adjust the angle of the grips to suit his personal needs. Riders with long arms may need a forward extension to the stem. Only cable operated brakes can be fitted to machines with adjustable stems.

EXPANDER BOLT AND HEAD CLIP. There are two methods of fastening the handlebars. (1) by expander bolt, which is a long bolt fitted through the handlebar stem which is slotted at the bottom. A cone-shaped nut is screwed to the bottom of the bolt, which when tightened forces the nut into the slotted stem, causing it to expand and grip the fork stem. (2) Head-clip—this method is the reverse of the expander bolt. Fork stem is slotted instead of the handlebar stem. Head-clip when tightened contracts the slotted fork stem, thereby gripping the handlebar.

SADDLES. A comfortable saddle means pleasurable cycling and throughout this Catalogue the reader will find specified Brooks' best Butt Leather Saddle with the option of Terry's Spring Seat. Each of these manufacturers has set out in his own Catalogue the advantages of the one over the other. It is usual to specify narrow saddles for bicycles having dropped handlebars, but wider and more heavily sprung patterns are preferred by riders who adopt a more upright position.

WING NUTS, QUICK RELEASE FORK ENDS, ETC. Demanded by the sporting rider to permit removal of wheels without tools. It is essential that wing nuts are kept tight.

SPRA-BONDERISING. A chemical process ensuring a perfectly rust-proof finish. Also acts as a "bond" between enamel and base metal.

CHAINS. British cycles are fitted with $\frac{1}{2}$ " pitch $\times \frac{1}{8}$ " or $\frac{3}{16}$ " wide chains. The pitch is the distance between each rivet, the width being the measurement between the inner side plates. $\frac{1}{2}$ " chains are suitable for all ordinary purposes, $\frac{3}{16}$ " being fitted mainly to Carrier Cycles. A complete chain link comprises two rollers with inner and outer side plates. A half link comprises two rollers connected by cranked plates. When counting the links in a chain, count the number of $\frac{1}{2}$ links, or in other words, the distance between the rollers in the full length of chain.

CHAINGUARD. Made of light metal protecting the top run of the chain.

GEARCASE. Totally encloses the chain, chainwheel and rear sprocket.

PEDALS. The rat-trap or all-metal type is favoured by the Sportsman due to the saving in weight over rubber, also it is more convenient to fit toeclips or straps which are necessary to the more strenuous rider. The width of a pedal is measured between the end plates.

DYNOHUB. A dynamo consisting of a magnet, which rotates with the wheel hub shell, and an armature which is fixed to the hub spindle. Since the hub bearings are used for the dynamo, no additional friction losses are added with this type of lighting unit. The dynamo is, in some cases, combined with a variable gear in the rear hub.

FOCUSSING LAMP. The headlamp used with the DYNOHUB has a screw in the back of the lamp, which enables the beam to be set either narrow or wide to suit the rider's requirements.

BULB RATING. Refers to the voltage and amperes consumed by the lamp bulbs. With dynamo lighting sets, the makers' recommendations should be adhered to since they govern the efficiency of the lighting set.

DYNO-LUXE LIGHTING. An exclusive innovation consisting of an accumulator unit using a dry accumulator, charged from the DYNOHUB, giving car-type lighting with a constant light at all speeds.

RECTIFIER. Part of the DYNO-LUXE system which converts the alternating current from the DYNOHUB to direct current suitable for charging the dry accumulators.

Page No.	Model.	Model No.	
		Gent's.	Lady's.
6	Popular	1	1L
7	Tourist	2	2L
11	Superbe Tourist	3	3L
	Police (not illustrated)	4	—
8	Dawn	11	11L & 14L
9	Dawn Tourist	12	12L & 15L
12	Superbe Dawn Tourist	13	13L
10	Sports	21	21L
15	Sports Light Roadster	22	22L
16	Sports Tourist	23	23L
14	Superbe Sports Tourist	24	24L
17	Lenton Clubman	25	—
18	R.R.A.	26	—
10	Super Sports	28	—
5	Junior	31	31L
20	Low Gravity Carrier	41	—
ADDITIONAL EQUIPMENT—EXTRA			
	Sturmey-Archer 3-speed (AW)		
	“ “ 3-speed (AM)		
	“ “ 4-speed (FW)		
	“ “ 4-speed (FW) on 3-speed Tourists		
	“ “ 3-speed Hub Brake (AB)		
	“ “ Front Hub Brake (BF)... ..		
	“ “ Rear Hub Brake (BR)... ..		
	“ “ AB & BF on single gear Models		
	“ “ AB & BF on 3-speed Tourists		
	Dynothree (combined 3-speed gear and Dynohub)		
	Patent 6V. Dynohub in front wheel		
	Colour finish on Sports Machines		
	Oilbath gearcase		
	Stainless Steel Rims on Superbe Models		
ALLOWANCES			
	For Sturmey-Archer 3-speed Gear (AM) if not supplied on R.R.A.		
	For Toolbag (when not supplied)		
	For Kitbag (when not supplied)		

ASK YOUR DEALER FOR FULL DETAILS OF OUR GRADUAL PAYMENT PLAN

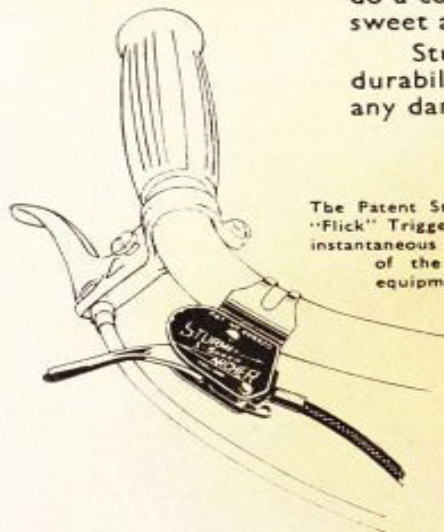


The Hubs that make Cycling Easy. The Brakes that make Cycling Safe.

THE ORIGINAL AND BEST

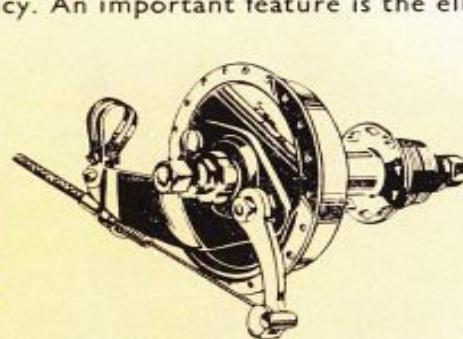
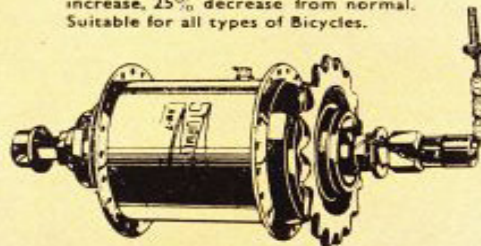
We recommend Sturmey-Archer Hub Gears and Hub Brakes as fittings to our machines, providing as they do a complete range of gears to suit every class of rider. Neat, light, totally enclosed, and oil bathed to ensure sweet and silky running, Sturmey-Archer Gears are renowned for their reliability under all riding conditions.

Sturmey-Archer Expanding Brake Hubs are delightfully smooth in action, and the exceptional strength and durability of the mechanism ensures long life and absolute efficiency. An important feature is the elimination of any damage to the rim surface.

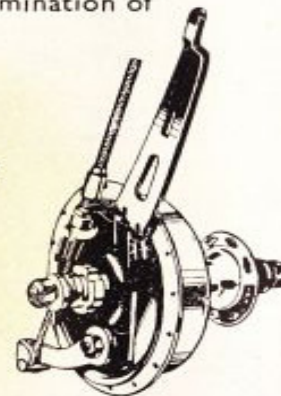


The Patent Sturmey-Archer Handlebar "Flick" Trigger Control provides an instantaneous change of Gear by a flick of the finger. Fitted as standard equipment to all Bicycles equipped with Variable Gears.

AW Three-speed Hub wide ratio with Handlebar "Flick" Trigger Control. 33% increase, 25% decrease from normal. Suitable for all types of Bicycles.

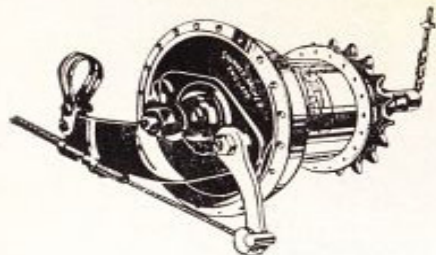
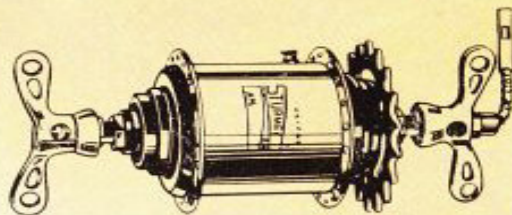


BRC Rear single-speed Hub with hand operated internal expanding brake. Suitable for all types of Bicycles.

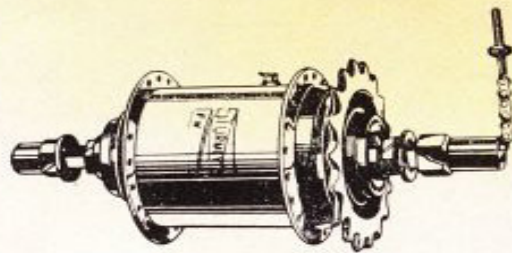


BFC Front Hub with hand operated internal expanding brake. Suitable for all types of Bicycles.

AM Three-speed Hub medium ratio with Handlebar "Flick" Trigger Control. 15.55% increase, 13.46% decrease from normal. Suitable for sports and racing Bicycles.



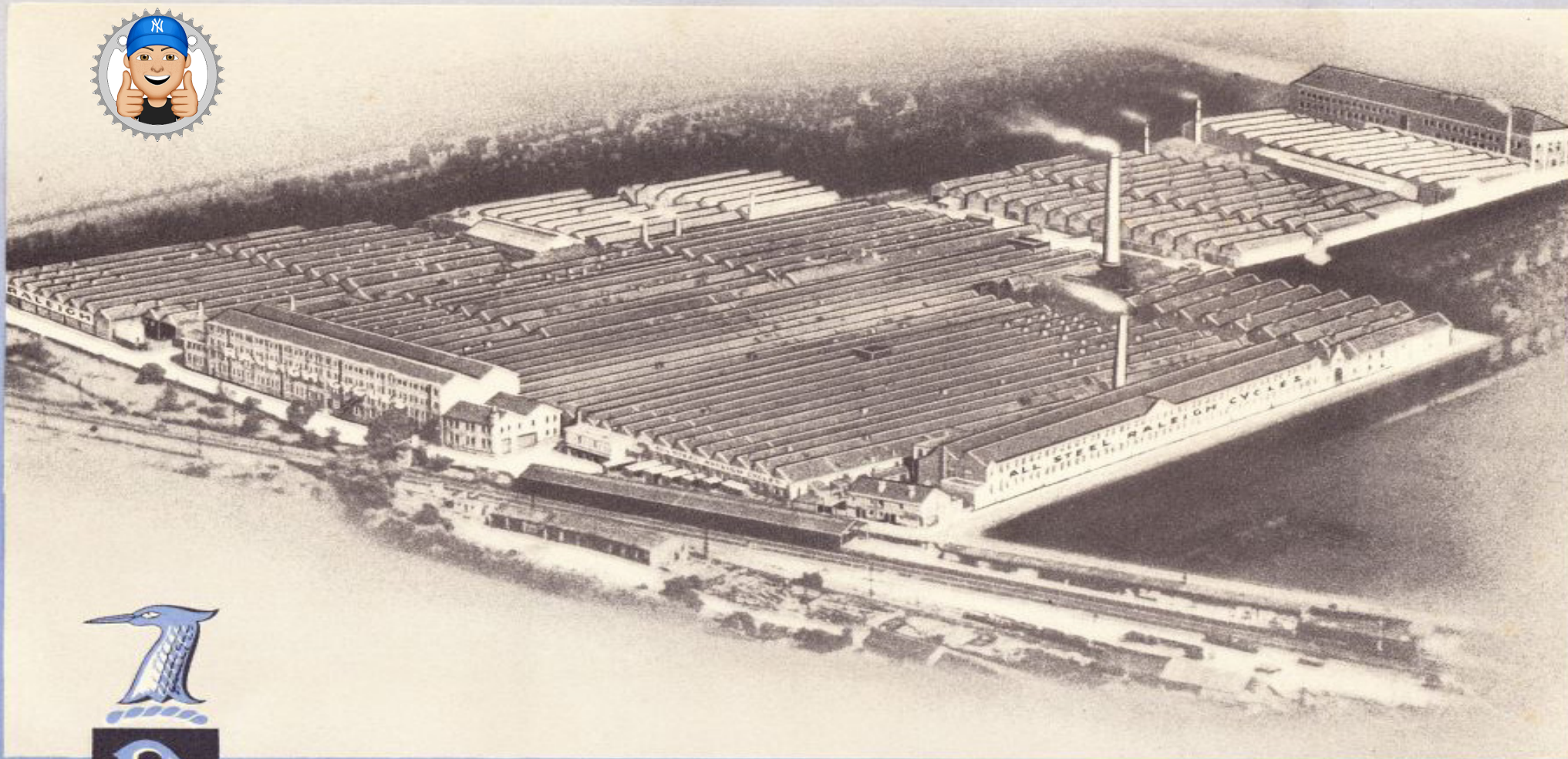
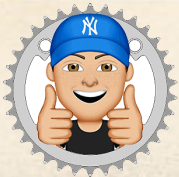
ABC Three-speed Hub wide ratio with Handlebar "Flick" Trigger Control. Incorporates hand operated internal expanding brake. Suitable for all types of Bicycles.



FW Four-speed Hub wide ratio with Handlebar "Flick" Trigger Control. 26.6% increase, 21% and 33% decrease from normal. Suitable for all types of Bicycles.

RECORDS MADE WITH STURMEY-ARCHER GEARS BY FAMOUS RECORD HOLDERS

- S. H. FERRIS :** 1,000 miles—2 days 22 hours 40 minutes—3 hours 7 minutes better than previous record. Including—Land's End to John O'Groats (870 miles)—2 days 6 hours 33 minutes—2 hours 28 minutes better than previous record.
- BERT JAMES :** 100 miles—3 hours 45 minutes 51 seconds, beating previous time by nearly 10 minutes.
- CHARLES HOLLAND :** Land's End to London (287½ miles)—13 hours 44 minutes—beating previous time by 25 minutes. Edinburgh to York (186 miles)—8 hours 36 minutes. 1 minute better than previous record.
- TOMMY GODWIN :** Used a Sturmey-Archer Gear on his World's Mileage Record—100,000 miles in 499 days.



An aerial view of the Raleigh Industries Ltd. Factory at Nottingham

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WHERE THE RALEIGH BICYCLE IS MADE

THE LARGEST CYCLE ORGANISATION IN THE WORLD