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1912

B.S.A. Bicycles

"Perfect in Every Part"

The Birmingham Small Arms Co., Ltd.

Contractors to His Majesty's Government, the War Office, the India Office, the Post Office, and Colonial and Foreign Governments

Registered Offices Small Heath, Birmingham Works . Small Heath, Sparkbrook, Redditch and Coventry Telegrams: "Smallarms. Birmingham" Telephone: 6440 Central (6 lines)



HIS Transfer is attached to all Bicycles manufactured throughout at the B.S.A. Works.

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Introduction

THE reputation for quality and reliability, which the factory-built B.S.A. Bicycle secured on its introduction, is fully maintained in the 1912 models.

The B.S.A. Bicycle is manufactured in the best equipped cycle factory in the world, of the finest materials, and every part is guaranteed to be strictly interchangeable; so that in case of necessity replacement of any lost or damaged part can be readily obtained.

Both B.S.A. enamelling and plating are unrivalled for their hard wearing qualities. All frames before being enamelled, undergo a process of hand polishing and chain burnishing, which effectively prevents rusting between the enamel and the metal. Each frame receives four coats of brilliant enamel; being thoroughly rubbed down between each operation, and hand polished after the final stoving. B.S.A. Plating is carried out in the most up-to-date scientific way. Every article is machine mopped before being placed in the vat, where it receives an exceptionally heavy deposit of pure nickel on a perfectly clean surface. By this process the chance of rusting is practically eliminated, and the plating becomes a permanent casing which will stand

severe wear without peeling or scaling. This quality of plating is not confined to the principal parts, but even the smallest nut and clip are treated in the same manner.

The prices of the different models vary according to the equipment, but the B.S.A. quality is to be found in every machine. Each rider who purchases a B.S.A. Bicycle can do so with every confidence of obtaining a cycle which represents the highest possible value.

On the previous page will be found the distinctive transfer which is affixed to the head of every B.S.A. Bicycle manufactured throughout at the B.S.A. factories. In addition, the B.S.A. Trade Marks—the three piled rifles and the letters B.S.A.—are stamped on all important parts.

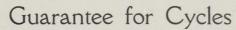
The colour illustrations of the B.S.A. Modèle de Luxe (Lady's and Gent's) on pages 19 and 21 show the actual appearance of these high-grade bicycles. Finished in a rich shade of green, beautifully lined in 22-carat English leaf gold, and with Tyres, Saddle, etc., of the highest quality, the B.S.A. Modèle de Luxe bicycles are undoubtedly the best value ever offered to the public.

Any of the Roadster and Road Racing models can be fitted with B.S.A. or Eadie Specialities, as desired. Particulars of these popular cycle fitments will be found on pages 37 and 38, and a fully descriptive booklet dealing with these specialities will be forwarded post free on request.

Every machine manufactured throughout in the B.S.A. Factories, and bearing the special B.S.A. transfer, carries a guarantee which will be honoured for twelve months from date of purchase. This guarantee, however, does not apply to tyres, saddles, and specialities not of our manufacture. These are separately warranted by the various makers.

The BIRMINGHAM SMALL ARMS COMPANY, Ltd., Birmingham.

SPECIAL NOTE.—We think it necessary to point out that all prices in this Catalogue are strictly net, for cash payment, and no allowance whatever can be made.





E give the following Guarantee with our machines instead of the guarantee implied by statute, or otherwise, as to the quality or fitness for the purpose of cycling, of goods supplied by us; any such implied guarantee being in all cases excluded. In the case of machines which have been used for "hiring out" purposes, or in respect of which our Trade Mark or manufacturing number has been removed, no guarantee of any kind is given or is to be implied.

WE GUARANTEE, subject to the conditions mentioned below, that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship; but this guarantee is to extend and be in force for one year only from the date of purchase, and the damages for which we make ourselves responsible under this guarantee are limited to the cost of repairs to the cycle.

WE UNDERTAKE, subject to the conditions mentioned below, to make good at any time within a year any defects in these respects in our cycles. This Guarantee does not apply to defects caused by wear and tear, misuse or neglect. Any cycle sent to us to be plated, enamelled, or repaired, will be repaired upon the same conditions as if it were a new cycle, i.e., we guarantee that all precautions which are usual and reasonable have been taken by us to secure excellence of material and workmanship, such guarantee to extend and be in force for one year only from the time such work shall have been executed, and this guarantee is in lieu and in exclusion of any common law or statute warranty, and the damages recoverable are limited to the cost of any further work which may be necessary to amend and make good the work found to be defective.

CONDITIONS OF GUARANTEE

If a defective part should be found in any of our machines, it must be sent to us, carriage paid, and accompanied by an intimation from the sender that he desires to have it repaired free of charge under our guarantee, and he must also furnish us at same time with the number of the machine, the name of the agent from whom he purchased, and the date of the purchase.

Failing compliance with the above, no notice will be taken of anything which may arrive, but such articles will lie here at the risk of the senders; and this guarantee, and any implied guarantee, shall not be enforceable.

We guarantee only those machines which are bought from one of our authorised agents, and under no other conditions.

We do not guarantee the specialities of other firms, such as tyres, saddles, etc., supplied with our cycles or otherwise. We endeavour to secure the highest quality of these articles, and the makers whose names usually appear thereon are in nearly every case willing to replace any defective part, and we will at all times furnish the makers' name as a proof of the quality.

THE TERM "AGENT"

is used in a complimentary sense only, and those firms whom we style our agents are not authorised to advertise, incur any debts, or transact any business whatsoever on our account, other than the sale of goods which they may purchase from us; nor are they authorised to give any warranty or make any representations on our behalf other than those contained in the above guarantee.

The BIRMINGHAM SMALL ARMS COMPANY, Limited.

B.S.A. CONSTRUCTIONAL REFINEMENTS

B.S.A. CHAIN WHEEL

ONE of the most distinctive features in connection with B.S.A. Cycle Fittings is the Chain Wheel embody.

Chain Wheel embodying the Trade Mark letters
B.S.A. The design is such
that the rigidity of the chain
wheel is materially enhanced
without increased weight,
while the letters so conform
to the general outline that its
appearance is in no way
detracted from. The wheel
is made in ½-in. pitch, for
chains of either the inwidth, and with 42, 44, 46,
48, 52, 56, 60, and 64 teeth.



B.S.A. PEDALS

WITH the B.S.A.
Rate-Trap Pedal
maximum rigidity is
provided by a patent cross
stay, which effectively prevents the bending of the
side plates, while in both
rubber and rate-trap pedals the
centre barrel and ball races
are in one piece with
socketed end plates pressed
on the coned ends of the
centre barrel.



B.S.A. HUBS

B.S.A. HUBS are made from steel forgings which have proved to be far superior to castings or bar steel for the making of a really first-class hub. Dust-proof and oil retaining, they are also unsurpassed for sweetness of running and for lasting wear.

ADJUSTMENTS.

To adjust the B.S.A. Rear Hub loosen the spindle-nut or foot-step (as the case may be) on the left side of the machine, then insert the large end of the thin spanner on the flats of the cone between the hub and



the cam, screwing up sufficiently to take up the wear and yet allowing the wheel to run freely.

Number of balls fitted: nine each side, size 1/2 in.

With the Front Hub, the spindle-nut on the left side of the machine must be loosened—then adjust for wear, and tighten up as in the case of the Back Hub. Number of balls fitted: ten each side, the in.

NOTE.—It is absolutely necessary that the adjusting or loose cone, which has two flats to receive the spanner, should be on the left side of the machine, i.e., the side opposite the chain.

BSA DISC ADJUSTING BRACKET

THE careful designing of the B.S.A. Disc Adjusting Bracket is responsible for its strength and lightness, combined with the remarkably easy method of adjustment. The oil retaining and dust-proof bearings are constructed on the "two point" system, and are absolutely true and free running.

ADJUSTMENTS.—Loosen the locking ring. "C" and after correct adjustment has been

obtained by the screwing inward or outward of the Left Cup, tighten the Ring against the face of the Bracket.

The Cup "A" on the chain side is screwed

and has a solid collar which locks up to the face of the Bracket.

The Cup "B" on the left side is screwed RIGHT-HAND thread,

and projects beyond the Bracket Face sufficient to allow for the Locking Ring "C."





B.S.A. CONSTRUCTIONAL REFINEMENTS—continued

B.S.A. FORK ENDS



NE of the most popular B. S. A., constructional refinements is the B. S. A. Chain Adjustment, which is constructed on the cam principle. It is extremely simple to manipulate, and when once set it is impossible for the wheel to be thrown out of truth. In addition, chain adjustment can be made to a minute fraction of an inch.

The following instructions will be sufficient to enable even the novice to adjust the chain. Loosen the footstep, or the nut on the hub spindle on the left side of the machine; then the nut on the right side. Apply the square hole in the thin spanner (handle upwards) to the square end of the hub spindle, then turn towards the front of the machine until the chain is tight. Slightly turn the reverse way to slacken the chain sufficiently to ensure free running. Hold the spanner firmly in this position, keeping the cams and blocks in close contact, then with the other spanner tighten the left-hand nut or footstep, as the case may be, remove the thin spanner and tighten up the right-hand spindle nut.

THE B.S.A. "OUICK RELEASE" FORK ENDS

THE B.S.A. Road Racer and Path Racer Bicycles (15s in. chain line) are fitted with the B.S.A.



"Quick Release" back fork end and cam chain adjustments. The special advantage of this pattern fork end is the facility with which the back wheel can be removed and replaced without having to unbolt the chain, thus obviating the re-adjustment of chain each time the wheel is removed.

B.S.A. MUDGUARD ATTACHMENTS

THE B.S.A. Mudguard attach ments are remarkably neat in appearance, and have no awkward projections. When tightening up the spindle nuts, full range is allowed for the spanner, and the attachment engaging in the diete of the

in the slots of the front and back fork ends prevents any movement or strain on the stays. There is no possibility of the rider's foot

fouling the mudguard stay when mounting from the footstep, and in adjusting the chain the relation of the mudguard to the wheel is always constant.

B.S.A. DRESSGUARD ATTACHMENT

THE B.S.A. Dressguard Quadrant is an exclusive B.S.A. feature which appeals very strongly to all lady cyclists, as it enables the dressguard to be quickly removed for tyre repairs and cleaning operations, without disturbing the axle

nuts. The cords are threaded through a series of loops which are attached by two springs to a flat pear shaped arm. This is held in place by a small stud fitted into a hole on the stirrup round the seat lug, and secured by the bolt that locks the stay.

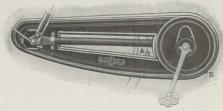


B.S.A. DETACHABLE OIL BATH GEAR CASE

THE B.S.A. Detachable Oil Bath Gear Case not only excludes all dust and grit, but provides for continuous

I lubrication of both chain and gear wheels. To secure the most satisfactory results, B.S.A. Special Chain Lubricant for Oil Bath Gear Cases should be used. When placing oil in gear case the following instructions should be noted. After removing cap from outlet "B" pour oil through lubricator "A" until there is a sign of drip from outlet "B" which will indicate that sufficient oil has been applied. Replace cap "B" when the bicycle will be ready for riding.

NOTE.—This Gear Case can only be fitted to Gent's machines having 48 teeth wheels, and Ladies' machines having 44 teeth wheels.



B.S.A. CONSTRUCTIONAL REFINEMENTS—continued

THE B.S.A. BACK PEDALLING RIM BRAKE Fitted with Detachable Shoes



VITH this Brake fitted the rider of a bicycle equipped with a B.S.A. Three-Speed Hub has the equivalent of a Three-Speed Coaster; without the complicated mechanism of the latter. It is the most powerful brake on the market, and instantly responds to the backward pressure of the pedals. The patent clutch release action allows

the bicycle to be wheeled backwards, and a forward movement automatically restores the action of the brake. It is specially recommended for use with bicycles fitted with Free Wheel, Two-Speed, or Three-Speed Hub.

B.S.A. CHAINS





Side View

Plan View

Popart of a bicycle is subject to such severe strain as the chain, and none requires more careful treatment in regard to its manufacture. The special conditions under which B.S.A. Chains are made guarantee both smooth running and safety. Every B.S.A. Chain is tested to a tensile strain of 2,000-lbs. before being passed for fitment. Absolute accuracy of width and pitch is ensured by the rigid system of gauging used at every stage of manufacture.

A new chain does not run smoothly on a hub wheel that is worn to any extent. The pitch of the chain does not conform to that of the teeth of the hub cog, and in such case a new wheel should be fitted.

TOOL BAG AND CONTENTS



ATTACHED to B.S.A. Bicycles is a Tool Bag containing two B.S.A. Spanners, Oil Can, and the Guarantee which accompanies every B.S.A. machine. The Bag itself is of excellent quality, of improved shape, and is fitted with patent ring fastener.

INFLATOR

A RELIABLE Celluloid Inflator and superior nickelplated clips, also form part of the equipment of each B.S.A. Bicycle.

Handlebars and Saddles

HANDI FBARS

ANY of the handlebars illustrated below can be substituted for those included in the various specifications. They are supplied (with the exception of the "M" pattern) with standard forward lug as shown, or, if desired, with special adjustable clip. The latter, however, is only recommended when front brakework is not required. Handlebars A, B and H can be fitted with rolling lever brakework.

SADDLES

IN compiling the various specifications of Bicycles we have made a selection of the Saddles most suitable for the particular type of machine. It is, however, open for purchasers to substitute any of the High-grade Saddles illustrated on this page at the difference in price as shown on page 36.

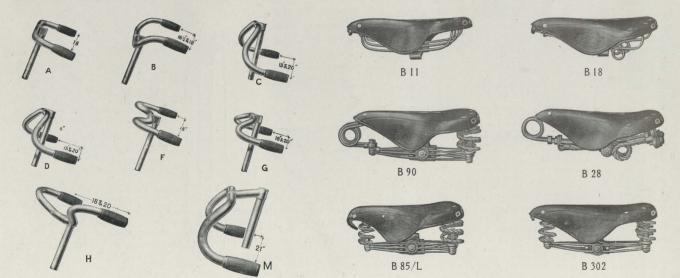




Illustration shows how easily the detachable shoes of B.S.A. Brakes are removed.



B.S.A. FRONT RIM BRAKE

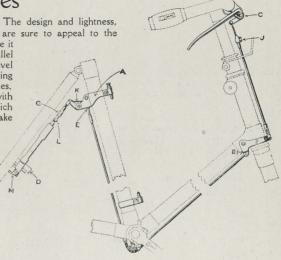
with rolling lever, fitted with patent detachable shoes, to suit handlebars A, B, & H.

B.S.A. Brakes

B.S.A. Brake work deserves special attention. The design and lightness, combined with great strength, are features which are sure to appeal to the most critical cyclist. In examining a B.S.A. bicycle it will be seen that brake rods in all cases are parallel with the tubes and lie closely. The amount of travel on the bell crank levers being sufficient for braking purposes without carrying the rods out at ugly angles. One of the most important features in connection with B.S.A. Brakes is the Patent Detachable Shoe, which provides for the instantaneous removal of the brake shoes by a slight compression of the stirrup.

Instructions for Adjusting the B.S.A. Back Stay Rim Brake:

The important points to be noted are: The position of Fulcrum Clip "A," Bell Crank "B," Lever Stop "C," Brake Block "D." With regard to the clip "A," care must be taken to see that the square shoulder of rod joint "E" is not less than $\frac{1}{8}$ -in. below the edge of clip as shown in sketch, and that the back part of bell crank "B1" is set just clear of the underside of the bottom lug so as to allow the full movement of the bell crank "B"—any adjustment between the points "B1" and "E



B.S.A. BACK STAY RIM BRAKE

adjustment between the points "BI" and "E" can be obtained by screwing or unscrewing adjusting joint "E."

After seeing that all the rods and joints are in proper tension, the lever stop "C" should bed tightly against the Handlebar; any adjustment necessary to effect this must be made by means of adjusting clip "J."

All adjustment of brake blocks "D" to the rim must be made by screwing or unscrewing coupling "G," which is provided with a right and left-hand thread for that purpose, and also with a lock nut "L."

After the necessary adjustment has been completed it is essential that the lock nut "L" be securely tightened. If brake has been fitted correctly, the "take off" spring "K" should instantly bring the brake out of action. It is necessary to occasionally lubricate all joints, and between the hanger plate "M." Any adjustment of clips for the length of pump must be made by the lower pump clip.

B.S.A. Gent's Roadster Bicycle

SPECIFICATION

- FRAME—Built with best selected butted steel tubing, D section back forks and stays: made in the following heights:—21-in., 23-in., 24-in., 25-in., 26-in., and 27-in.
- FRONT FORK—Special taper gauge steel blades, D to round section, fitted with solid steel machine-slotted ends, which allow of the front wheel being removed without straining the fork.
- WHEELS—28-in. equal, constructed with best double-butted steel spokes, Westwood or Wedgwood rims, highly polished and heavily nickel-plated, edges and centres enamelled and lined.
- TYRES—Dunlop, Palmer, or Clipper Ideal 1½-in., with wired or beaded edges.
- FITTINGS—B.S.A. throughout, light roadster pattern, with 7-in. cranks.
- BACK HUB-Fadie Coaster
- CHAIN-B.S.A. 1-in. pitch, tested to a strain of 2,000-lbs.
- GEAR-74, or to order.

- PEDALS-B.S.A. rat-trap or rubber; size to order.
- HANDLEBAR—B.S.A. standard upturned or flat pattern, $\frac{7}{8} \times 18$ -in., fitted with celluloid grips of a special design.
- BRAKE—B.S.A. front rim brake, with rolling lever specially curved to suit the design of the handlebar. Solid brazed clips and B.S.A. patent detachable shoes.
- MUDGUARDS—B.S.A. steel with forward extension and plated stays with patent detachable ends.
- SADDLE—Brooks' latest design B 18 saddle, with plated springs.
- FINISH—Four coats of brilliant best black enamel on one coat of rust-proof preparation; neatly lined out with green. The usual bright parts are heavily plated, and the finish is of the well-known B.S.A. high standard of quality.

Equipped with 15-in. celluloid inflator, plated clips, complete with tool bag, oiler, and the necessary B.S.A. spanners, to fit all nuts, cones, and cups.

NET CASH PRICES

MODEL No. 3	As per specification	£8	15	0	MODEL No. 3C	As per specification, but with Eadie Two- speed coaster and B.S.A. front rim brake with rolling lever			
MODEL No. 3A	As per specification, but with free wheel and two B.S.A. rolling lever brakes	8	15	0					
MODEL No. 3B	As per specification, but with Eadie Two- speed hub and two B.S.A. rolling lever brakes	9	7	6	MODEL No. 3D	As per specification, but with B.S.A. Three-speed hub and two B.S.A. rolling lever brakes	9	17	6
	If fitted with	Alum	ninium	Rims	11/6	extra, net.			
		Dout	ole To	p Tube	11/6				



B.S.A. Lady's Roadster Bicycle

SPECIFICATION

- FRAME—Built with best selected butted steel tubing, D section back forks and stays; made in the following heights:—21-in., 22-in., 23-in., and 25-in.
- FRONT FORK—Special taper gauge steel blades, D to round section, fitted with solid steel machined-slotted ends, which allow of the front wheel being removed without straining the fork.
- WHEELS—28-in. equal, constructed with best double-butted steel spokes, Westwood or Wedgwood rims, highly polished and heavily nickel-plated, edges and centres enamelled and lined.
- TYRES—Dunlop, Palmer, or Clipper Ideal 1½-in., with wired or beaded edges.
- FITTINGS—B.S.A. throughout, light roadster pattern, with $6\frac{1}{2}$ -in. cranks, or to order.

BACK HUB-Eadie Coaster.

CHAIN-B.S.A. 1-in. pitch, tested to a strain of 2,000-lbs.

GEAR-65, or to order.

PEDALS-B.S.A. rubber; 31-in. or to order.

- HANDLEBAR—B.S.A. standard upturned pattern, $\frac{7}{8} \times 16\frac{1}{2}$ -in:, fitted with celluloid grips of a special design.
- BRAKE—B.S.A. front rim brake, with rolling lever, curved to suit the design of the handlebar. Solid brazed clips and B.S.A. patent detachable shoes.

SADDLE—Brooks' latest design B 18 saddle, with plated springs.

GEAR CASE-Metal, detachable, with plated disc.

- MUDGUARDS—B.S.A. steel with forward extension, and plated stays with patent detachable ends.
- DRESSGUARD—Best quality, with detachable quadrants. Registered design.
- FINISH—Four coats of brilliant best black enamel on one coat of rust-proof preparation; neatly lined out with green. The usual bright parts are heavily plated, and the finish is of the well-known B.S.A. high standard of quality.

Equipped with 15-in. celluloid inflator, plated clips, complete with tool bag, oiler, and the necessary B.S.A. spanners, to fit all nuts, cones, and cups.

NET CASH PRICES

MODEL No. 4 As per specification	£9	0	0	MODEL No. 4C	As per specification, but with Eadie Two-			
MODEL No. 4A As per specification, but with free wheel and two B.S.A. rolling lever brakes	9	0	0		speed coaster and B.S.A. front rim brake with rolling lever			
MODEL No. 4B As per specification, but with Eadie Two- speed hub and two B.S.A. rolling lever brakes.				MODEL No. 4D	As per specification, but with B.S.A. Three-speed hub and two B.S.A. rolling lever brakes.	10	2	6

If fitted with Aluminium Rims, 11/6 extra, net.



B.S.A. Road Racer Bicycle

SPECIFICATION

- FRAME—Built with best selected butted steel tubing, D section back forks and stays; fitted with the new B.S.A. Quick Release back fork ends and made in the following heights:—21-in., 23-in., 24-in., 25-in., 26-in., and 27-in.
- FRONT FORK—Special taper gauge steel blades, D to round section, fitted with solid steel machined-slotted ends, which allow of the front wheel being removed without straining the fork.
- WHEELS—26-in. equal, constructed with best double-butted steel spokes, Westwood or Wedgwood rims, highly polished and heavily nickel-plated, edges and centres enamelled and lined.
- TYRES—Dunlop, Palmer, or Clipper Ideal 1½-in. or 1½-in., with wired or beaded edges.
- FITTINGS—B.S.A. throughout, light road racing pattern, with 7-in. cranks.
- BACK HUB-Eadie Coaster, 15 in. chain line.

- CHAIN-B.S.A. 1-in. pitch, tested to a strain of 2,000-lbs.
- GEAR-75, or to order.
- PEDALS-B.S.A. rat trap or rubber; size to order.
- HANDLEBAR—B.S.A., "G" pattern as illustrated, fitted with celluloid grips of a special design.
- SADDLE—Brooks' latest design B 18 saddle, with plated springs.
- FINISH—Four coats of brilliant best black enamel on one coat of rustproof preparation; neatly lined out with green. The usual bright parts are heavily plated, and the finish is of the well-known B.S.A. high standard of quality.
 - Equipped with 15-in. celluloid inflator, plated clips, complete with tool bag, oiler, and the necessary B.S.A. spanners, to fit all nuts, cones, and cups.

NET CASH PRICES

MODEL No. 5	As per specification	83	10	0	MODEL No. 5C	As per specification, but with Eadie Two-speed coaster	£9	7	6
MODEL No. 5A	As per specification, but with free wheel and B.S.A. front rim brake with inverted or short pull-up lever	8	10	0	MODEL No. 5D	As per specification, but with B.S.A. Three-speed hub and B.S.A. front rim brake with inverted or short pull-up lever			
MODEL No. 5B	As per specification, but with Eadie Two-speed hub and B.S.A. front rim brake with inverted or short pull-up lever	9	2	6	NOTE.—	Models 5C and 5D can only be supplied in 12-in. ch			



B.S.A. Path Racer Bicycle

SPECIFICATION

FRAME—Built with best selected butted steel tubing, D section back forks and stays; fitted with the new B.S.A. Quick Release back fork ends, and made in the following heights:—21-in., 22-in., 23-in., 24-in., and 25-in.

FRONT FORK—Special taper gauge steel blades, D to round (or oval section), fitted with solid steel machined-slotted ends, which allow of the front wheel being removed without straining the fork.

WHEELS—26-in. equal, constructed with best double-butted steel spokes and wood rims.

TYRES—Dunlop Sprint Path Racing Tubular Tyres. 1-in. or 1\frac{1}{8}-in.

FITTINGS—B.S.A. throughout, light racing pattern, with $6\frac{1}{2}$ /in. or 7-in. cranks.

BACK HUB-B.S.A., with fixed cog.

CHAIN-B.S.A. 1-in. pitch, tested to a strain of 2,000-lbs.

GEAR-75, or to order.

PEDALS-B.S.A. rat-trap; size to order.

HANDLEBAR—B.S.A. "D" dropped pattern as illustrated, fitted with celluloid grips of a special design.

SADDLE-Brooks' latest design B 11 saddle, with plated springs.

FINISH—Four coats of brilliant best black enamel on one coat of rust-proof preparation. The usual bright parts are heavily plated, and the finish is of the well-known B.S.A. high standard of quality.

Equipped with 15-in. celluloid inflator, plated clips, complete with tool bag, oiler, and the necessary B.S.A. spanners to fit all nuts, cones, and cups.

NET CASH PRICES

MODEL	No. 6 As per specification		£8	5	0	As per specification, but with Eadie Two speed hub having fixed or free wheel on bot	th		
MODEL	No. 6A As per specification, but with lop road racing tyres on plated	Palmer or Dun- steel rims	8	5	0	gears, and B.S.A. front rim brake with inverte or short pull-up lever	. £8	17	6

If fitted with Detachable Tyres and Wood Rims, 7/- extra, net.
... Constrictor No. 1 Tubular Tyres, 3/6 ,,



B.S.A. Modèle de Luxe Gent's Bicycle

SPECIFICATION

- FRAME—Built with best selected butted steel tubing, D section back forks and stays; made in the following heights:—21-in., 23-in., 24-in., 25-in., 26-in., and 27-in.
- FRONT FORK—Special taper gauge steel blades, D to round section, fitted with solid steel machined-slotted ends, which allow of the front wheel being removed without straining the fork.
- WHEELS—28-in. equal, constructed with best double-butted steel spokes, Aluminium rims, edges and centres enamelled and lined.
- TYRES—Dunlop, Palmer or Clipper Ideal 1½-in., with wired or beaded edges.
- FITTINGS—B.S.A. throughout, light roadster pattern, with 7-in. cranks.
- BACK HUB—Eadie Two-speed coaster, with handlebar or top tube control.
- CHAIN-B.S.A. 12-in. pitch, tested to a strain of 2,000-lbs.
- GEAR—Designed for 48 teeth on bottom bracket wheel, and 16 or 18 teeth on hub wheel.

PEDALS-B.S.A. rubber or rat trap; size to order.

- <code>HANDLEBAR</code>—B.S.A. Standard upturned or flat pattern, $\frac{7}{8} \times 18$ -in., fitted with best celluloid grips.
- BRAKE—B.S.A. front rim brake, with rolling lever, curved to suit the design of the handlebar. Solid brazed clips and B.S.A. patent detachable shoes.
- SADDLE—Brooks' latest B 90/1 saddle, with plated springs.
- GEAR CASE—B.S.A. special oil bath, detachable gear case.
- MUDGUARDS—B.S.A. steel with forward extension and plated stays with patent detachable ends.
- FINISH—Enamelled with four coats of a rich shade of green on one coat of rust-proof preparation; neatly lined out with 22-ct. leaf gold. The usual bright parts are heavily plated, and the finish is of the well known B.S.A. high standard of quality.

Equipped with best grade $16 \times \frac{7}{8}$ -in. celluloid inflator, plated clips, complete with superior tool bag, oiler and the necessary B.S.A. spanners, to fit all nuts, cones, and cups.

NET CASH PRICES

MODEL No. 1	As per specification .										 4.5	£13	13	0
MODEL No. 1A	As per specification, but	t with B.S	A. Thr	ee-speed	hub and	two B.	S.A.	rolling	lever	brakes	 	13	13	0
			(For o	the extr	as see pa	ge 36.)								



B.S.A. Modèle de Luxe Lady's Bicycle

SPECIFICATION

- FRAME—Built with best selected butted steel tubing, D section back forks and stays; made in the following heights:—21-in., 23-in., and 25-in.
- FRONT FORK—Special taper gauge steel blades, D to round section, fitted with solid steel machined-slotted ends, which allow of the front wheel being removed without straining the fork.
- WHEELS—28-in. equal, constructed with best double-butted steel spokes, aluminium rims, edges and centres enamelled and lined.
- TYRES—Dunlop, Palmer, or Clipper Ideal 1½-in., with wired or beaded edges.
- FITTINGS—B.S.A. throughout, light roadster pattern, with $6\frac{1}{2}$ -in.
- BACK HUB-Eadie Two-speed coaster, with handlebar control.
- CHAIN-B.S.A. 1-in. pitch, tested to a strain of 2,000-lbs.
- GEAR—Designed for 44 teeth on bottom bracket wheel, and 16 or 18 teeth on hub wheel.
- PEDALS—B.S.A. rubber; 31-in. or to order.

- <code>HANDLEBAR</code>—Standard upturned pattern, $\frac{7}{8}$ -in. \times 16 $\frac{1}{2}$ -in., fitted with best celluloid grips.
- BRAKE—B.S.A. front rim brake, with rolling lever, curved to suit the design of the handlebar. Solid brazed clips and B.S.A. patent detachable shoes.
- SADDLE—Brooks' latest B 85 saddle, with plated springs.
- GEAR CASE—B.S.A. special oil bath, detachable gear case.
- MUDGUARDS—B.S.A. steel, with forward extension and plated stays with patent detachable ends.
- DRESSGUARD—Best quality, with detachable quadrants. Registered design.
- FINISH—Enamelled with four coats of a rich shade of green on one coat of rust-proof preparation; neatly lined out with 22-ct. leaf gold. The usual bright parts are heavily plated, and the finish is of the well-known B.S.A. high standard of quality.

Equipped with best grade $16 \cdot \text{in.} \times \frac{7}{8} \cdot \text{in.}$ celluloid inflator, plated clips, complete with superior tool bag, oiler, and the necessary B.S.A. spanners, to fit all nuts, cones, and cups.

NET CASH PRICES

(For other extras see page 36).



B.S.A. Gent's Light Roadster Bicycle

SPECIFICATION

- FRAME—Built with best selected butted steel tubing, D section back forks and stays; made in the following heights:—21-in., 23-in., 24-in., 25-in., 26-in., and 27-in.
- FRONT FORK—Special taper gauge steel blades, D to round section, fitted with solid steel machined-slotted ends, which allow of the front wheel being removed without straining the fork.
- WHEELS—26-in. equal, constructed with best double-butted steel spokes and wood rims.
- TYRES—Dunlop Open-sided, or Palmer Light Roadster, 13/8-in. or 13/1-in., with wired edges.
- FITTINGS—B.S.A. throughout, light roadster pattern, with 7-in. cranks.
- BACK HUB-Eadie coaster, 12-in. chain line.
- CHAIN-B.S.A. 3-in. pitch, tested to a strain of 2,000-lbs.
- GEAR-74, or to order.
- PEDALS—B.S.A. rat-trap or rubber; size to order.

- <code>HANDLEBAR</code>—B.S.A. standard H pattern, $\frac{7}{8} \times 18$ -in. or to order, fitted with celluloid grips of a special design.
- BRAKE—B.S.A. front rim Brake, with rolling (or pull up) lever, curved to suit the design of the handlebar. Solid brazed clips, and B.S.A. patent detachable shoes.
- MUDGUARDS—B.S.A. steel, with forward extension and plated stays with patent detachable ends.
- SADDLE—Brooks' latest design B 18 saddle, with plated springs.
- FINISH—Four coats of brilliant best black enamel on one coat of rust-proof preparation; neatly lined out with green. The usual bright parts are heavily plated, and the finish is of the well-known B.S.A. high standard of quality.

Equipped with 15-in. celluloid inflator, plated clips, complete with tool bag, oiler, and the necessary B.S.A. spanners, to fit all nuts, cones, and cups.

NET CASH PRICES

	As per specification				MODEL No. 10C	As per specification, but with Eadie Two- speed coaster and B.S.A. front rim brake with rolling lever	£9	17	6
	As per specification, but with free wheel and two B.S.A. rolling lever brakes	9	0	0					
MODEL No. 10B	As per specification, but with Eadie Two- speed hub and two B.S.A. rolling lever brakes	9	12	6	MODEL No. 10D	As per specification, but with B.S.A. Three-speed hub and two B.S.A. rolling lever brakes	10	2	6

If fitted with Aluminium Rims, 7/6 extra, net. Steel Rims can be fitted in place of Wood Rims, if desired.

If tyres with beaded edges are required, wood rims with aluminium lining will be necessary, price 4/- extra.



B.S.A. Gent's Tourist Bicycle

SPECIFICATION

- FRAME—Built with best selected butted steel tubing, D section back forks and stays; made in the following heights:—21-in., 23-in., 24-in., 25-in., 26-in., and 27-in.
- FRONT FORK—Special taper gauge steel blades, D to round section, fitted with solid steel machined-slotted ends, which allow of the front wheel being removed without straining the fork.
- WHEELS—28-in. equal, constructed with best double-butted steel spokes, Westwood or Wedgwood rims, highly polished and heavily nickel-plated, edges and centres enamelled and lined.
- TYRES—Dunlop, Palmer, or Clipper Ideal 1½-in., with wired or beaded edges.
- FITTINGS—B.S.A. throughout, light roadster pattern, with 7-in. cranks.
- BACK HUB—B.S.A. THREE-SPEED, with top tube or handlebar control.
- CHAIN—B.S.A. 1/2-in. pitch, tested to a strain of 2,000-lbs.
- GEAR—Designed for 48 teeth on bottom bracket wheel, and 16 or 18 teeth on bub wheel.

- PEDALS—B.S.A. rat-trap or rubber; size to order.
- HANDLEBAR—B.S.A. standard upturned or flat pattern, $\frac{7}{8} \times 18$ -in., fitted with celluloid grips of a special design.
- BRAKES—B.S.A., with rolling levers, curved to suit the design of the handlebar. Solid brazed clips and B.S.A. patent detachable shoes.
- MUDGUARDS—B.S.A. steel, with forward extension and plated stays with patent detachable ends.
- SADDLE—Brooks' latest design B 90/1 saddle, with plated springs.
- GEAR CASE—B.S. A. special Oil Bath, detachable.
- FINISH—Four coats of brilliant best black enamel on one coat of rust-proof preparation; neatly lined out with green. The usual bright parts are heavily plated, and the finish is of the well-known B.S.A. high standard of quality.

Equipped with 15-in. celluloid inflator, plated clips, complete with tool bag, oiler, and the necessary B.S.A. spanners, to fit all nuts, cones, and cups.

NET CASH PRICES

MODEL No. 12 As above specification, including B.S.A. Three-speed Hub and Oil Bath Gear Case . . . £11 11 0

If fitted with Aluminium Rims 11/6 extra, net.

Double Top Tube 11/6 ...



B.S.A. All Black Model

SPECIFICATION

- FRAME—Built with best selected butted steel tubing, D section back forks and stays; made in the following heights:—21-in., 23-in., 24-in., 25-in., 26-in., and 27-in.
- FRONT FORK—Special taper gauge steel blades, D to round section, fitted with solid steel machined-slotted ends, which allow of the front wheel being removed without straining the fork.
- WHEELS—28-in. equal, constructed with best double-butted steel spokes, Westwood or Wedgwood rims, enamelled and lined.
- TYRES—Dunlop, Palmer, or Clipper Ideal 1½-in., with wired or beaded edges.
- FITTINGS—B.S.A. throughout, roadster pattern, with 7-in. cranks.

BACK HUB-Eadie coaster.

CHAIN—B.S.A. 1-in. pitch, tested to a strain of 2,000-lbs.

GEAR-74, or to order.

PEDALS—B.S.A. rat-trap or rubber; size to order.

- HANDLEBAR—B.S.A. standard upturned or flat pattern, $\frac{7}{8} \times 18$ -in., fitted with celluloid grips of a special design.
- BRAKE—B.S.A. front rim brake, with rolling lever, curved to suit the design of the handlebar. Solid brazed clips, and B.S.A. patent detachable shoes.
- MUDGUARDS—B.S.A. steel with forward extension, and stays fitted with patent detachable ends.
- SADDLE—Brooks' latest design B 18 saddle, fitted with enamelled springs.
- GEAR CASE—Sec extras shown below.
- FINISH—Frame, forks, mudguards, and the usual bright parts are finished with four coats of brilliant best black enamel on one coat of rust-proof preparation; neatly lined out with bronze.

Equipped with 15-in. celluloid inflator, clips, complete with tool bag, oiler, and the necessary B.S.A. spanners to fit all nuts, cones, and cups.

NET CASH PRICES

MODEL No. 13A	As per specification	8	15	0	MODEL No. 13C As per specification, but with Eadie Two- speed coaster and B.S.A. front rim brake with rolling lever		
	If fitted with Aluminium Rims, $11/6$ extra, net, ,, ,, Double Top Tube, $11/6$,, ,,				If fitted with Ordinary Metal Gear Case 10/- extra, net. " Oil Eath Detachable Gear Case as illustrated		



B.S.A. Gent's Heavy Roadster Bicycle WITH DOUBLE TOP TUBE

SPECIFICATION

- FRAME—Built with best selected butted steel tubing, D section back forks and stays; made in the following heights:—25-in., 26-in., 27-in., and 28-in.
- FRONT FORK—Special taper gauge steel blades, D to round section, fitted with solid steel machined-slotted ends, which allow of the front wheel being removed without straining the fork.
- WHEELS—28-in. equal, constructed with best steel spokes, Westwood or Wedgwood rims, highly polished and heavily nickelplated, edges and centres enamelled and lined.
- TYRES—Dunlop, Palmer, or Clipper Ideal 13-in., with wired or beaded edges.
- FITTINGS—B.S.A. throughout, full roadster pattern, with 7-in. cranks.
- BACK HUB-Eadie coaster, 13-in, chain line.
- CHAIN-B.S.A. I-in. pitch, tested to a strain of 2,000-lbs.
- GEAR-74, or to order.

- PEDALS—B.S.A. rupper or rat-trap; size to order.
- HANDLEBAR—B.S.A. standard flat or upturned pattern, 1 × 18-in., fitted with celluloid grips of a special design.
- BRAKE—B.S.A. front rim brake, with rolling lever, curved to suit the design of the handlebar. Solid brazed clips and B.S.A. patent detachable shoes.
- SADDLE Brooks' latest design B 90/2 saddle with enamelled springs.
- MUDGUARDS—B.S.A. steel, with forward extension and plated stays with patent detachable ends.
- FINISH—Four coats of brilliant best black enamel on one coat of rust-proof preparation; neatly lined out with green. The usual bright parts are heavily plated, and the finish is of the well-known B.S.A. high standard of quality.
 - Equipped with 15-in. celluloid inflator, plated clips, complete with tool bag, oiler, and the necessary B.S.A. spanners to fit all nuts, cones, and cups.

NET CASH PRICES

	As per specification					As per specification, but with Eadie Two-	040		
MODEL No. 7A	As per specification, but with free wheel and two B.S.A. rolling lever brakes	9	15	0		speed coaster hub and B.S.A. front rim brake with rolling lever			
MODEL NI 70	As per specification, but with Eadie Two- speed hub and two B.S.A. rolling lever brakes				MODEL NI 7D	As per specification, but with B.S.A. Three- speed hub and two B.S.A. rolling lever brakes	10	17	6

If fitted with Aluminium Rims, 11/6 extra, net. (For other extras see page 36.)



B.S.A. Constabulary Bicycle

SPECIFICATION

- FRAME—Built with best selected butted steel tubing. D section back forks and stays; made in the following heights: -23-in., 24-in., 25-in., 26-in., and 27-in.
- FRONT FORK—Special taper gauge steel blades, D to round section, fitted with solid steel machined-slotted ends, which allow of the front wheel being removed without straining the fork.
- WHFFI S-28-in, equal, constructed with best steel spokes. Westwood or Wedgwood rims, highly polished and heavily nickelplated, edges and centres enamelled and lined.
- TYRES-Dunlop Special or Palmer Heavy Roadster 13-in., with wired or beaded edges.
- FITTINGS-B.S.A. throughout, full roadster pattern, with 7-in. cranks.
- BACK HUB-Eadie coaster, 13-in, chain line.
- CHAIN-B.S.A. 1-in. pitch, tested to a strain of 2,000-lbs.
- GFAR-75, or to order.

- PEDALS—B.S.A. rubber or rat-trap; size to order.
- HANDLEBAR—B.S.A. standard flat or upturned pattern, 1×18-in. fitted with celluloid grips of a special design.
- BRAKE—B.S.A. front rim brake, with rolling lever, curved to suit the design of the handlebar, solid brazed clips, and with B.S.A. patent detachable shoes.
- SADDLE-Brooks' latest design B 90/3 saddle, with enamelled springs.
- MUDGUARDS-B.S.A. steel, with forward extension and plated stays with patent detachable ends.
- FINISH—Four coats of brilliant best black enamel on one coat of rustproof preparation: neatly lined out with green. The usual bright parts are heavily plated, and the finish is of the well-known B.S.A. high standard of quality.
 - Equipped with 15-in, celluloid inflator, plated clips, complete with tool bag, oiler, and the necessary B.S.A. spanners to fit all nuts, cones, and cups.

This machine is designed and built specially to suit heavy riders.

NFT CASH PRICES

	As per specification	£9	15	0	MODEL No. 8C	As per specification, but with Eadie Two-speed			
MODEL No. 8A	As per specification, but with free wheel and two B.S.A. rolling lever brakes	9	15	0 .		coaster and B.S.A. front rim brake with rolling lever	£10	12	6
MODEL No. 8B	As per specification, but with Eadie Two- speed hub and two B.S.A. rolling lever brakes	10	7	6	MODEL No. 8D	As per specification, but with B.S.A. Three-speed hub and two B.S.A. rolling lever brakes	10	17	6

If fitted with Aluminium Rims 11/6 extra, net. Double Top Tube, 11/6



B.S.A. Territorial Bicycle

SPECIFICATION

- FRAME—Built with best selected butted steel tubing, D section back forks and stays; made in the following heights:—23-in., 24-in., 25-in., 26-in., and 27-in.
- FRONT FORK—Special taper gauge steel blades, D to round section, fitted with solid steel machined-slotted ends, which allow of the front wheel being removed without straining the fork.
- WHEELS—28-in. equal, constructed with best double-butted steel spokes, Westwood or Wedgwood rims, highly polished and heavily nickel-plated, edges and centres enamelled and lined.
- TYRES—Dunlop, Palmer, or Clipper Ideal 1½-in., with wired or beaded edges.
- FITTINGS—B.S.A. throughout, light roadster pattern, with 7-in. cranks.
- BACK HUB-Eadie coaster.
- CHAIN—B.S.A. ½-in. pitch, tested to a strain of 2,000-lbs.
- GEAR-74, or to order.
- PEDALS-B.S.A. rat-trap or rubber; size to order.

- <code>HANDLEBAR—B S.A.</code> flat or upturned pattern, $\frac{7}{8} \times 18$ -in., fitted with celluloid grips of a special design.
- BRAKE—B.S.A. front rim brake, with rolling lever, curved to suit the design of the handlebar. Solid brazed clips and B.S.A. patent detachable shoes.
- SADDLE-Brooks' B 90/1, with enamelled springs.
- MUDGUARDS—B.S.A. steel, with forward extension and plated stays with patent detachable ends.
- RIFLE CLIPS—Brooks' best quality, as illustrated.
- BACK CARRIER—Strong serviceable carrier, specially suitable for Territorial purposes.
- FINISH—Four coats of brilliant best black or khaki enamel on one coat of rust-proof preparation. The usual bright parts are heavily plated, and the finish is of the well-known B.S.A. high standard of quality.
 - Equipped with 15-in. celluloid inflator, plated clips, complete with tool bag, oiler, and the necessary B.S.A. spanners to fit all nuts, cones, and cups.

NET CASH PRICES

MODEL No. 11	As per specification, including rifle clips and strong back carrier	£10	0	0	MODEL No. 11C	As per specification, but with Eadle Two-			
MODEL No. 11A	As per specification, but with free wheel and two B.S.A. rolling lever brakes	10	0	0		speed coaster and B.S.A. front rim brake with rolling lever			
	As per specification, but with Eadie Two-				MODEL No. 11D	As per specification, but with B.S.A. Three-speed hub and two B.S.A. rolling lever brakes	11	2	6

If fitted with Aluminium Rims 11/6 extra. net.



B.S.A. Tradesman's Bicycle

SPECIFICATION

- FRAME—Built with best selected butted steel tubing, D section back forks and stays; made in the following heights:—23-in. and 24-in.
- FRONT FORK Special taper gauge steel blades, oval section, fitted with machined slotted ends, which allow of the front wheel being removed without straining the fork.
- WHEELS—26-in. equal, constructed with best double-butted steel spokes, Westwood or Wedgwood rims, enamelled.
- TYRES—Dunlop, Palmer, or Clipper Ideal 13-in., with wired or beaded edges.
- FITTINGS—B.S.A. throughout, roadster pattern, with 7-in. cranks.
- CARRIER—B.S.A. improved tubular design, which is securely brazed to the frame.
- BACK HUB-Eadie coaster.
- CHAIN—B.S.A. 1-in. pitch, tested to a strain of 2,000-lbs.

- GEAR-68, or to order.
- PEDALS—B.S.A. rat-trap or rubber; size to order.
- HANDLEBAR—B.S.A. standard flat or upturned pattern, $\frac{7}{8} \times 18$ -in., fitted with celluloid grips of a special design.
- BRAKE—B.S.A, front rim brake, with rolling lever, curved to suit the design of the handlebar. Solid brazed clips, and B.S.A. patent detachable shoes.
- SADDLE—Brooks' latest design B 18 saddle, with plated springs.
- MUDGUARDS—B.S.A. steel, with forward extension and plated stays with patent detachable ends.
- FINISH—Four coats of brilliant best black or red enamel on one coat of rust-proof preparation. The usual bright parts are heavily plated, and the finish is of the well-known B.S.A. high standard of quality.
 - Equipped with 15-in. celluloid inflator, plated clips, complete with tool bag, oiler, and the necessary B.S.A. spanners, to fit all nuts, cones, and cups.

NET CASH PRICES

MODEL No. 9	As per specification, including B.S.A. Carrier of improved design, square basket, and name plate		£9	15	0
MODEL No 9A	As per specification, including B.S.A. Carrier of improved design, square basket and name plate, but free wheel and two B.S.A. rolling lever brakes	with	9	15	0
	If fitted with Aluminium Rims				



The Prices shown in this List are subject to the following Extras:

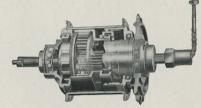
MODÈLE DE LUXE

Dunlop special tyres	of hand-applied	back rim brake					11/6 21/- 2/6 1/6 2/-	
Enamelling in special colours Lining in 22-ct. leaf gold Dunlop special tyres Ordinary metal gearcase—Gent's Detachable oil bath metal gearcase—Gent's Lady's B.S.A. back pedalling brake in lieu of hand-apprim brake Front rim brake on Racer Models		6/6 4/- 1/6 11/- 0/- 0/- 5/- 2/6 7/-	Mudguards on Wood rims of Aluminium lin Aluminium rin 7½-in. cranks 8-in. cranks Handlebars w	n Road Race ing to wood ns ith forward e ,, adjustable	rims extension clips	 		3/6 3/6 4/- 11/6 1/6 3/6 2/- 2/- 5/- 1/-
B 28/2 5/6 B 85 4/6	B 90/1	S, Enamelled if	3 90/2 7/-	B ster Models.			B 302 .	

MOSELEY ROADSTER TYRES can be fitted to Standard Models without extra charge.

B.S.A. Specialities





Sectional View

THE B.S.A. THREE-SPEED HUB

THE reputation of the B.S.A. Co. guarantees the B.S.A. Three-Speed Hub as a first-class gear—efficient and reliable at all times. The setting-out, designing, and accurate work are all done by a specially-trained staff, working with the most up-to-date machinery.

Every part of the B.S.A. Three-Speed Hub is made strictly interchangeable, so that replacements can be obtained without delay.

So much has to be done in the small space allowed in the back hub of a bicycle that the variation of one-thousandth part of an inch would be certain to cause trouble, and would be considered a defect in the construction of the B.S.A. Three-Speed Hub.

The B.S.A. Three-Speed Hub gives a free wheel on all speeds, and the gears, being always in mesh, can be changed with smoothness and regularity. It drives solid on the normal gear, and provides an increase of 31.24% from normal to high. From normal to low a decrease of 23.8% is obtained.

All roadster models, whether B.S.A. or other standard makes, can be fitted with the B.S.A. Three-Speed Hub. For Gent's machines either handlebar or top tube controls may be fitted, but Lady's models are supplied with handlebar control only.

Fully illustrated and descriptive Booklets on above Specialities sent post free on request.



THE B.S.A. MARK I

IN every detail of the Mark I Free Wheel the B.S.A. standard of quality is apparent, and absolute efficiency under all conditions is ensured. This Free Wheel is made on the most approved ratchet principle. A special process of fixing the back plate to the centre prevents the possibility of disturbance to the relative positions of the two ball races.

RADIE COASTER

THE EADIE

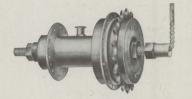
EVERY year an increasing number of cyclists acquire a more intimate knowledge of the advantages obtained from the use of the Eadie Coaster Hub. The combination of perfect brake control and frictionless free wheel makes it an ideal fitment for those who prefer a pedal actuated brake. The Eadie Coaster creates confidence because it links security with simplicity. The direct action gives the rider complete control over his bicycle, either down the steepest hill, or in traffic, for the slightest backward pressure on the pedal is all that is necessary to bring the brake into operation.

Eadie Specialities



THE EADIE
TWO-SPEED COASTER HUB

THE Eadie Two-Speed Coaster Hub is the only successful combination of a perfect two-speed gear, a pedal actuated brake, and frictionless free wheel. It is known all over the world as "The Hub of Many Merits," and is a fitment of outstanding value to the cyclist who desires that control which its brake affords, and at the same time the benefits derived from a variable gear. Its superiority over any other similar device on the market lies in the simplicity of its brake, small number of working parts, light weight, and great efficiency under all conditions.



THE EADIE
TWO-SPEED HUB

SIMPLICITY of design, and the consequent fewness of its working parts, make the Eadie Two-Speed Hub the most satisfactory Two-Speed on the market. This hub gives a high gear for the level road and downward spin, and a low gear for the hill climb and a free wheel on both gears. Two models are now made—one with the high gear as normal, the other with the low gear as normal. The gears can be changed either when pedalling or free-wheeling, or when the machine is stationary. For road racing purposes the Eadie Two-Speed Hub can be supplied with a fixed wheel on both gears.

Fully illustrated and descriptive Booklets on above Specialities sent post free on request.



B. S. A. Special Lubricating Oil

A perfect lubricant for Cycles, Cycle Hubs, Coasters, Free Wheels, Variable Gears, &c.

PRICE: SIXPENCE per Tin

> From all un-to-date Cycle Agents.

B.S.A.

Specially-prepared Lubricating Oils

THE B.S.A. LUBRICATING OIL is the result of exhaustive experiments, and is particularly suitable for Bicycles, Three-Speeds, Two-Speeds, Coasters, Two-Speed Coasters, and Free Wheels.

The great skill and accuracy which is needful in producing the high-grade bicycle of to-day, with its several types of gears, brakes, etc., necessitates that a suitable high-class oil should be used if the sweet running of the bicycle and the perfect working of its fitments are to be insured.

B.S.A. Lubricating Oil is economical. A very little will serve to lubricate bearings, etc., for a considerable time, and there is no danger of the oil tnickening or clogging. It can be used for the most delicate mechanism, and the specially designed air-tight tin always keeps the oil in perfect condition.

For Chain Lubrication in Oil Bath Gear Cases, there is nothing to equal the B.S.A. CHAIN LUBRICANT. It is a specially prepared pure hydrocarbon oil, and will remain in the gearcase without thickening. Its use is strongly recommended to all riders who desire perfect lubrication and a silk-like running of the chain.



B. S. A.

Special Chain Lubricant

> For Oil Bath Gear Cases

PRICE: ONE SHILLING per Tin

> From all up-to-fate Cycle Agents

B.S.A. Three-Speed Hub Gear Tables

РІТСН	NO OF TEETH ON BOTTOM BRACKET CHAIN WHEEL	GEARS	26" WHEELS NO. OF TEETH ON HUB CHAIN WHEEL				28" WHEELS NO. OF TEETH ON HUB CHAIN WHEEL				PITCH	NO. OF TEETH ON BOTTOM BRACKET CHAIN	GEARS	26" WHEELS NO. OF TEETH ON HUB CHAIN WHEEL				28" WHEELS NO. OF TEETH ON HUB CHAIN WHEEL			
			16	18	20	22	16	18	20	22		WHEEL		16	18	20	22	16	18	20	22
	42	LOW	52	46.2	41.6		56	49.7	44 - 8	40.7	12"	52	LOW	64 - 4	57.2	51.5	46.8	69.3	61-6	55.5	50 · 4
		NORMAL	68.2	60.6	54.6	Di	73.5	65.3	58.8	53 · 4			NORMAL	84.5	75-1	67.6	61.4	91	80.9	72.8	66.2
		HIGH	89.5	79.5	71.7		96.5	85.7	77-2	70 - 1											
	44	LOW	54.5	48 • 4	43.6	39.6	58.7	52.1	46.9	42.6			HIGH	110.9	98.6	88 - 7	80 · 6	119.4	106 - 2	95.5	86.9
1 "		NORMAL	71.5	63.5	57 · 2	52	77	68 - 4	61-6	56		56	LOW	69.3	61.6	55 - 4	50 · 4	74.7	66.4	59.7	54.3
		HIGH	93.8	83.3	75 · 1	68 · 2	101-1	89.8	80.8	73.5			NORMAL	91	80 · 8	72.8	66.2	98	07.1	78.4	71.2
	46	LOW	56.9	50.6	45 · 6	41.3	61.3	54.5	49 - 1	44.6				· ·	00 0	72 0	00.2	70	07.1	70.4	71.3
		NORMAL	74.7	66 · 4	59.8	54.3	80.5	71.5	64 - 4	58.5			HIGH	119-4	106	95 · 5	86.9	128.6	114.3	102.9	93.6
		HIGH	98	87 · 1	78 · 5	71.3	105.6	93.8	84 · 5	76.8			LOW	74.3	66	59.4	54		71.1	64	58 · 1
	48	LOW	59.4	52.8	47.5	43 · 2	64	56-8	51-2	46.4			NORMAL	07.5	0/ 7	70					
		NORMAL	78	69.3	62 · 4	56.7	84	74.6	67 - 2	61			NORMAL	97.5	86.7	78	70.9		93.3	84	76.3
		HIGH	102.4	90.9	81.9	74.4.	110.2	97.9	88 • 2	80 · 1			нісн	128	113-8	102 · 4	93		122 · 4	110.2	99.2

For ordinary Gearing use the Normal Gear from above table.

Gear Tables

PADIE TWO SPEED HUB & TWO SPEED COASTER HUB.												EADIE TWO-SPEED HUB-GEARING UP MO EL										
РІТСН.	NO. OF TEETH ON BOTTOM BRACKET CHAIN WHEEL	GEARS	2	6* W	HEE	LS	28" WHEELS					NO. OF		26" WHEELS				28" WHZELS				
			NO. OF TEETH ON HUB CHAIN WHEEL				NO. OF TEETH ON HUB CHAIN WHEEL				РІТСН.	BOTTOM	GEARS	NO. OF TEETH ON HUB CHAIN WHESL				NO. OF TEETH ON HUB WHAIN WHEEL				
			16	18	20	22	16	18	20	22	E shake	CHAIN		16	18	20	22	16	18	20	22	
ă.	42	NORMAL	68 - 2	60.6	54.6		73.5	65 - 3	58 · 8	53 · 4		42	HIGH	93.9	83-3	75	68	101	89-7	80.8	73.4	
		LOW	52	46 · 2	41.6		56	49.7	44-8	40.7			NORMAL	68-2	60-6	54.6	49.5	73-5	65-3	58-8	53-4	
	44	NORMAL	71-5	63 · 5	57 - 2	52	77	68 · 4	61.6	56		44	HIGH	98-3	87 - 3	78-6	71-5	105-8	94	84-7	77	
		LOW	54-5	48 - 4	43.6	39.6	58 - 7	52 1	46.9	42.6			NORMAL	71.5	63 - 5	57 - 2	52	77	68-4	60-6	56	
	46	NORMAL	74:7	66 - 4	59-8	54.3	80-5	71.5	64 - 4	58-5		46	HIGH	102.7	91-3	82-2	74:6	110-6	98-3	88 - 5	80 4	
		LOW	56.9	50 - 6	45-6	41.3	61.3	54.5	49-1	44 6			NORMAL	74.7	66.4	59-8	54-3	80.5		64-4	58.5	
	48	NORMAL	78	69 3	62:4	56:7	84	74.6	67 - 2	61		48	HIGH	107.2	95.2	85.8	77.9		102.5	92.4	83.8	
		LOW	59 4	52.8	47 - 5	43.2	64	56-8	51-2	46-4			NORMAL	78	69-3	62-4	56.7	84	74.6	67 - 2	61 .	
	52	NORMAL	84.5	75.1	67 - 6	61-4	91	80-9	72.8	66.2		52	HIGH	116-1	103-2	92.9	84-4		111-2	100 -1	91	
	56	LOW	64-4	57 · 2	51.5	46.8	69 3	61-6	55.5	50 - 4		56	NORMAL	84 - 5	75 - 1	67 6	61-4		80.9	72.8	66.2	
		NORMAL	91	80 - 8	72.8	66 - 2	98	87-1	78-4	71-3			нісн		111-1	100 - 1	90.7			107-8	97-7	
		LOW	69.3	61.6	55 · 4	50-4	74.7	66:4	59.7	54.3			NORMAL		80.8	72 8	66			78 4	71-1	
	60	NORMAL	97-5	86.7	78	70.9	105	93-3	84	76.3		60	HIGH			107-2	97-4			115.5	104.9	
		LOW	74.3	66	59-4	54	80	71	64	58-1			NORMAL			78	70-9			84	76-3	