

PASSENGER MOTOR CYCLES.

THE MOTOR CYCLE

4 1/2^D

Largest Circulation.

Founded 1903.

COVERS EVERY PHASE OF THE MOVEMENT AND CIRCULATES THROUGHOUT THE WORLD

No. 924. Vol. 25.

Thursday, December 9th, 1920.

Price 4 1/2d.

Published Weekly.

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After the "Show" - Wauchope's

If you've decided on your machine—you can get early delivery of it from us.

If you haven't decided, come round and see us and we'll advise you which machine is best suited to your needs.

In any case we hope to see you.

We've always got the mount the motor cyclist wants. Our policy has always been Customers First.

Easiest possible payments are arranged to suit your own convenience—and second-hand machines taken as part payment for New Models of all the best makes. Good prices allowed.

That's the real service Wauchope's renders—why not take advantage of it NOW?

Call round to-morrow or write us right away.

WAUCHOPE'S, 9, Shoe Lane, Fleet Street,

Telegrams: "Opifcor, Fleet, London." **LONDON, E.C.4.** Phone: Holborn, 5777.

NEW "PERFECT DEPENDABILITY" IMPERIAL

Our MOTTO Your SAFEGUARD

NEW IMPERIAL CYCLES LTD. BIRMINGHAM

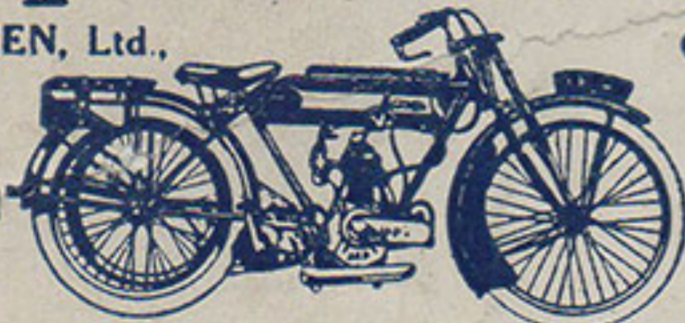


THE SPHINX BRAND OF LTD. BIRMINGHAM.

OMEGA

W. J. GREEN, Ltd.,

COVENTRY.



Take Advantage Of **TIME and EXPERIENCE** and get **YOUR SIDECAR**

at

W. MONTGOMERY & Co.
THE PIONEER FIRM

Sidecar Model No. 1	- -	£30 10
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W. MONTGOMERY & CO
COVENTRY ENGLAND



Douglas ON BUSINESS

MOTOR CYCLE MANUFACTURERS



By Appointment To H.M. THE KING.

BAKERY TRADE.

Houghton-on-the-Hill.

Dear Sirs,

The 4 h.p. combination has given us great satisfaction. It has been used often for business purposes on very rough roads. It is still running finely and has not given the slightest trouble.

(Signed)

E. H. GARFOOT.

Douglas Motors Ltd.

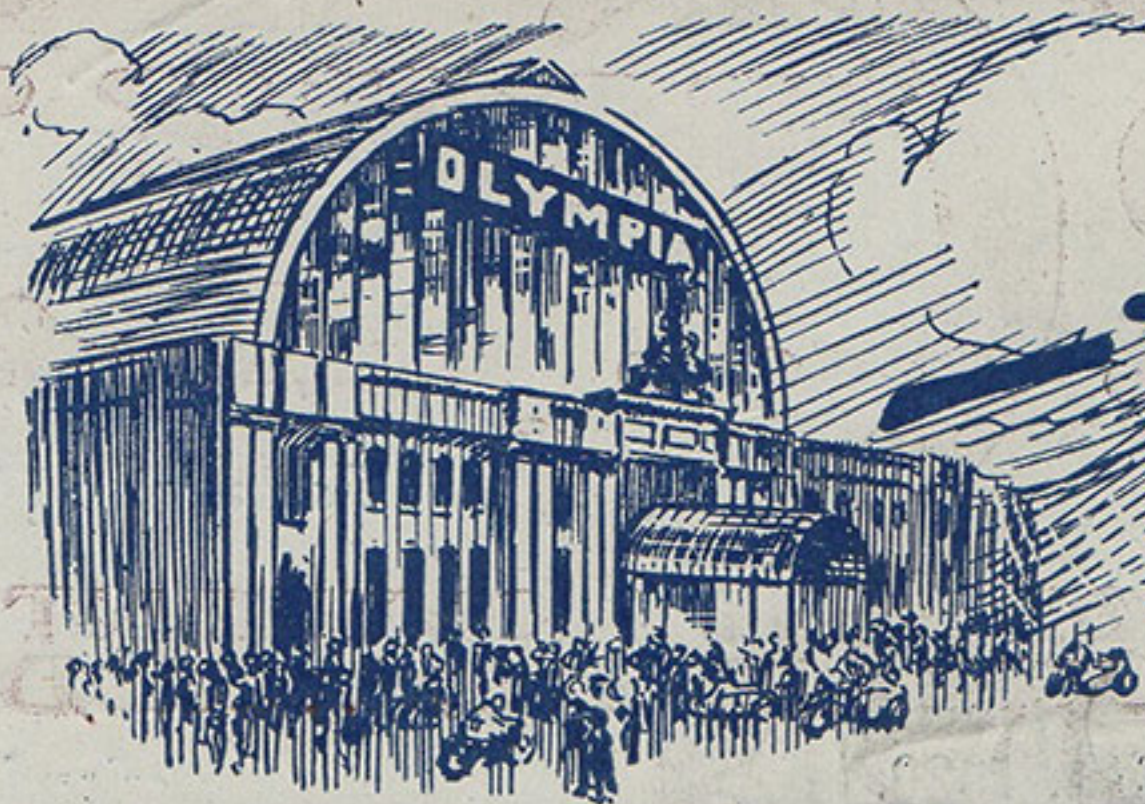
KINGSWOOD BRISTOL



Dunhills Limited

TRIANGULAR FRAME SIDECAR CHASSIS STRONGEST YET LIGHTEST

359-361, Euston Road, London, N.W.1.



—and after?

MAKE IT A MATCHLESS.

Show week! Thousands of people—millions of catalogues. You can get a show model to-day, without wading through type and reams of catalogue covers—ask your agent to show you a Matchless. It is built of the finest material—by motor cycle engineers who are also motor cyclists, backed by a name that has been linked with the trade from the beginning.

You may have your choice of J.A.P. or Matchless M.A.G. Engine; Single or Two-seater Sidecar; Acetylene or Electric Lighting, Electric or Bulb Horn.

Price £205

FOR THE PRESENT.

Ask your Agent about it.

Matchless
THE PERFECT PASSENGER MOTORCYCLE

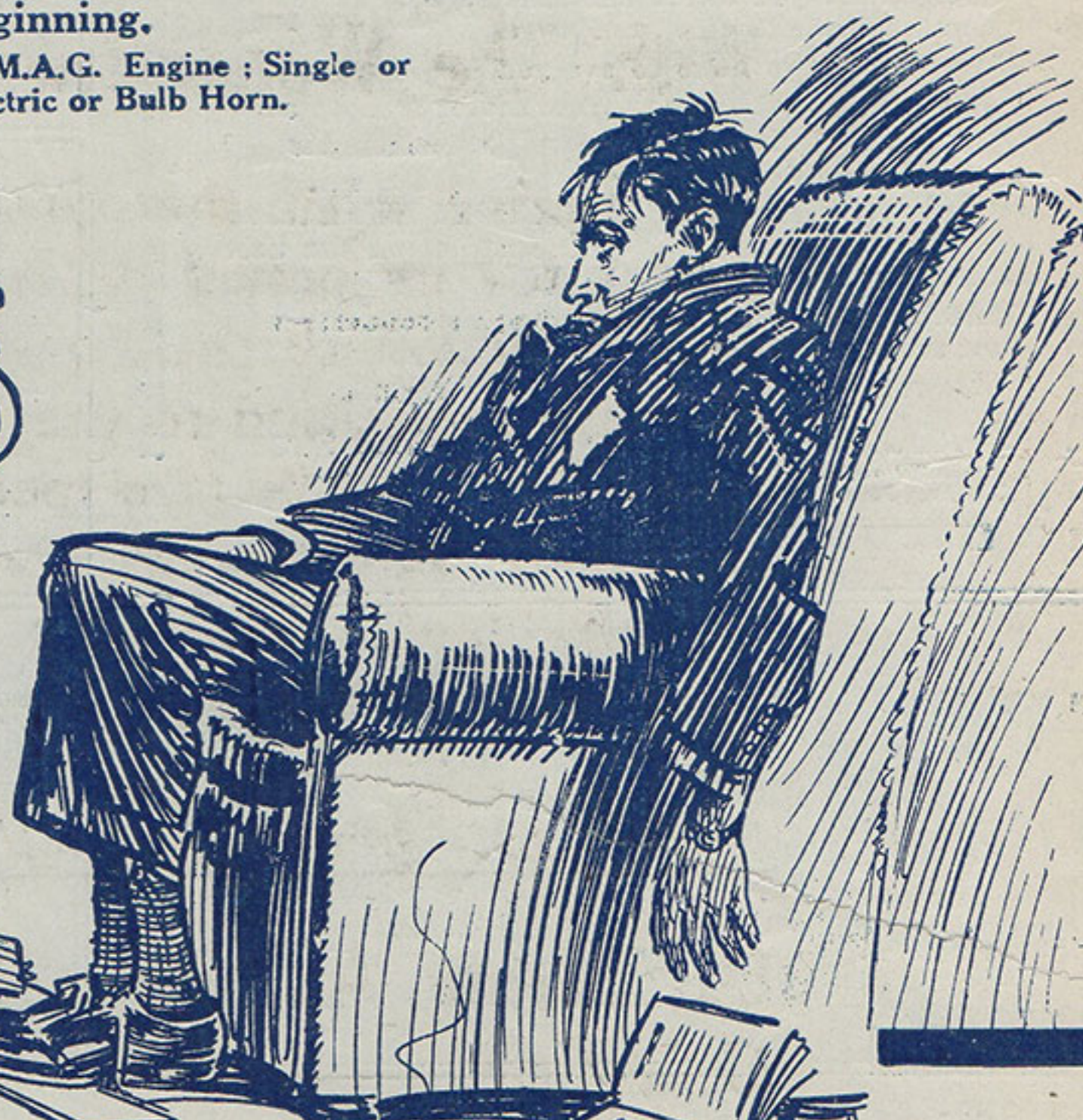
H. Collier & Sons, Ltd.,

44-45, Plumstead Road, Plumstead,
LONDON, S.E.18.

Works: Burrage Grove & Maxey Road,
Plumstead.

Telephones:
Woolwich 17 and 18.

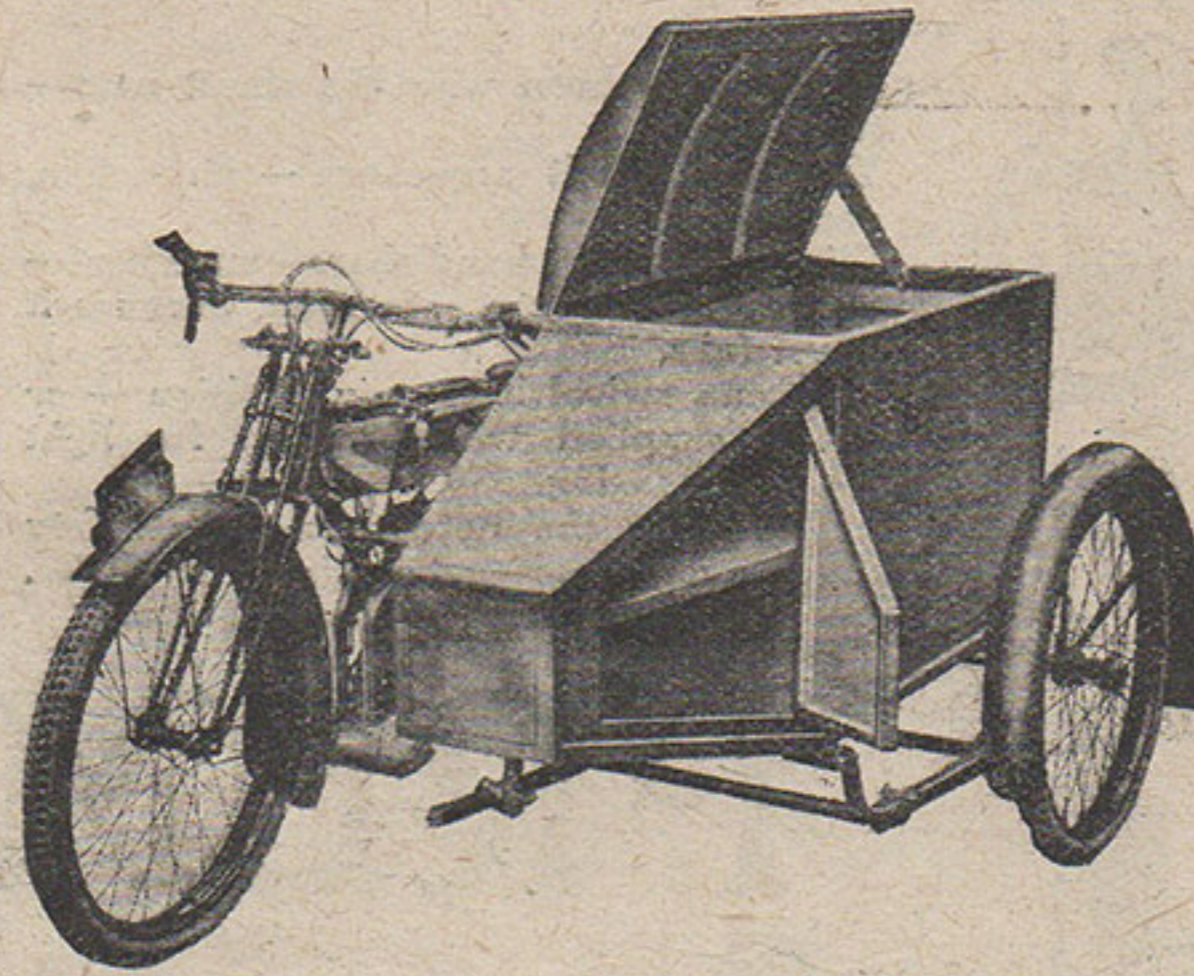
Telegrams:
"Matchless, Woolwich."



IMPERIUM



In answering this advertisement it is desirable to mention "The Motor Cycle."



The P. and S. Tradesman's Van Fitted With The Wonderful "DALM" Engine.

The engine with the most reliable record and power for its petrol consumption. Capacity 318 c.c. Fitted with the famous self-cooling piston. Power transmitted to the wheel through the reputed BURMAN two-speed clutch kick-starter gear box. Aluminium non-slip footboards, large capacity tank, Brampton Front Spring Forks. First-class finish throughout and fully guaranteed.

"The cost per mile will make you smile."

On Show At Our Showrooms **NOW.**
Complete _____ **£105.**

PEARSON & SOPWITH, LTD.,
89, Long Acre, W.C.2, and Norfolk Engineering
Works, Worthing.

Phones : Gerrard 4865.

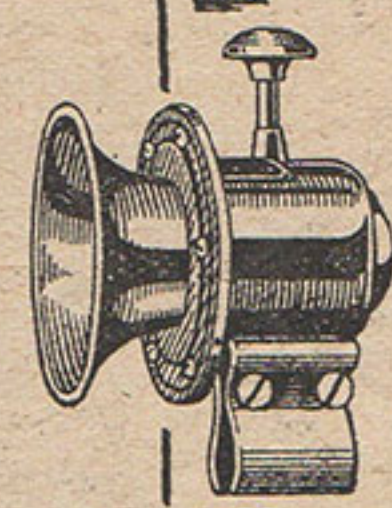
Worthing 294,

Strike a New Note!

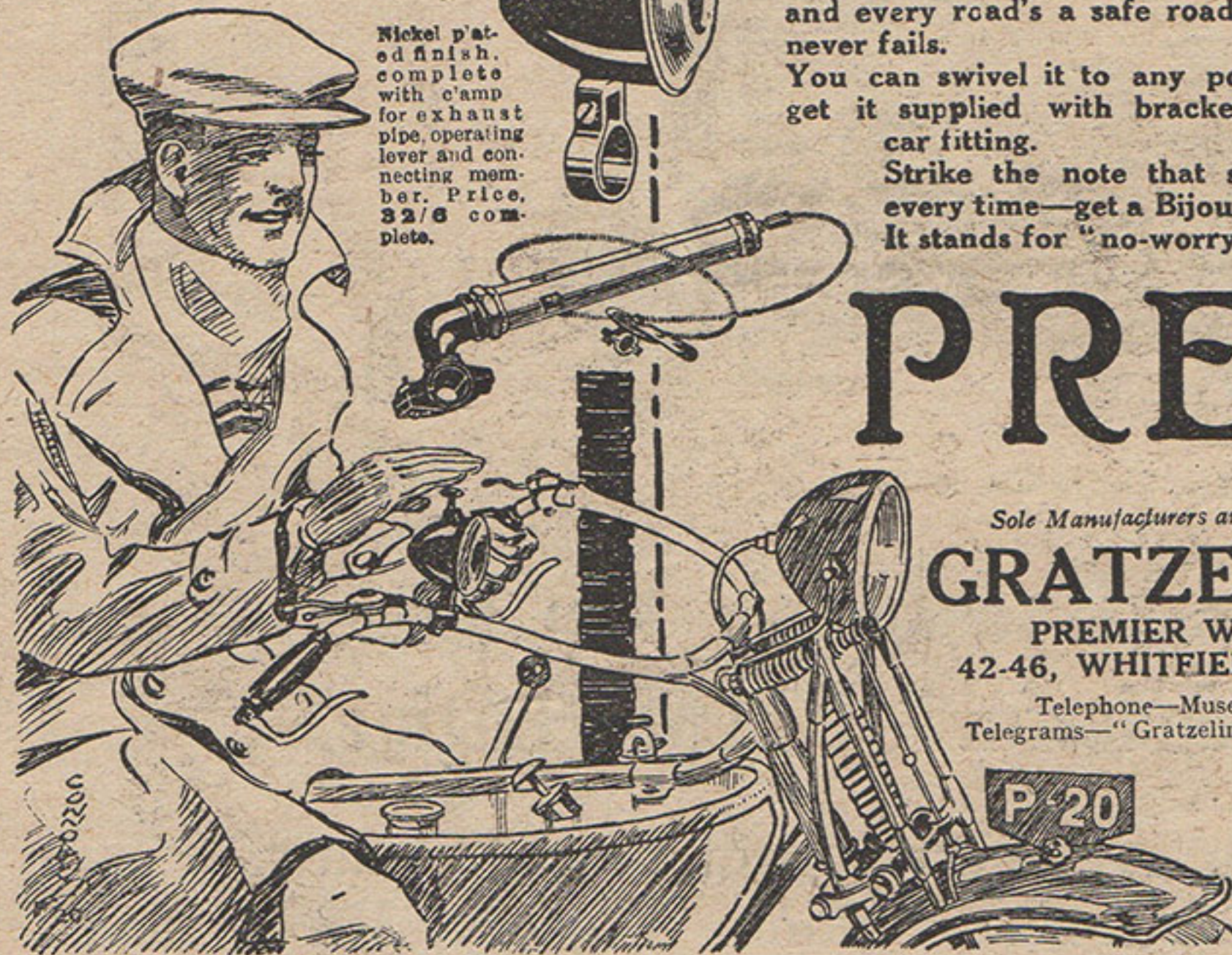
The Bijou horn, patented and registered design, in polished aluminium, black, or black and nickel finish. Price - 16/6

Nickel plated finish, complete with clamp for exhaust pipe, operating lever and connecting member. Price, 32/6 complete.

The newest horn with the finest note—the Bijou.
 You can tell it anywhere—distinctive, compelling.
 Clip it to your handlebars—anywhere—and every road's a safe road, because it never fails.
 You can swivel it to any position—or get it supplied with brackets for light car fitting.
 Strike the note that spells safety every time—get a Bijou horn NOW.
 It stands for "no-worry" rides.

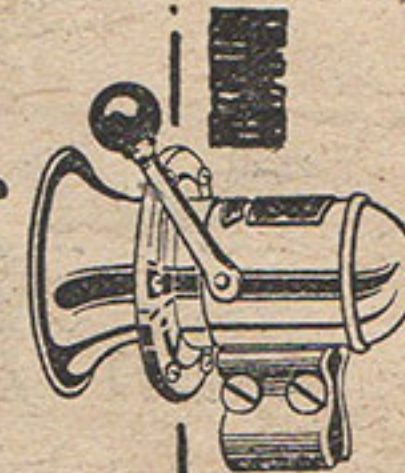


Model 'M.O. Press.'
 All black finish 29/6.
 Polished aluminium or Nickel Bell, 6d. extra.



PREMIER

Sole Manufacturers and Patentees:
GRATZE LTD.
 PREMIER WORKS,
 42-46, WHITFIELD St., W.1.
 Telephone—Museum 4863.
 Telegrams—"Gratzelim, Ox, London."



Model 'M.O. Lever.'
 All black or with Nickel Bell, 37/6,
 Aluminium or Nickel Plated 3/6 extra.

L.S.D. CYCLE CAR.

Patent Nos. 7038/15; 27366/19; 27491/19.

PRICE £245, including hood, screen, horn, pump, and tools.

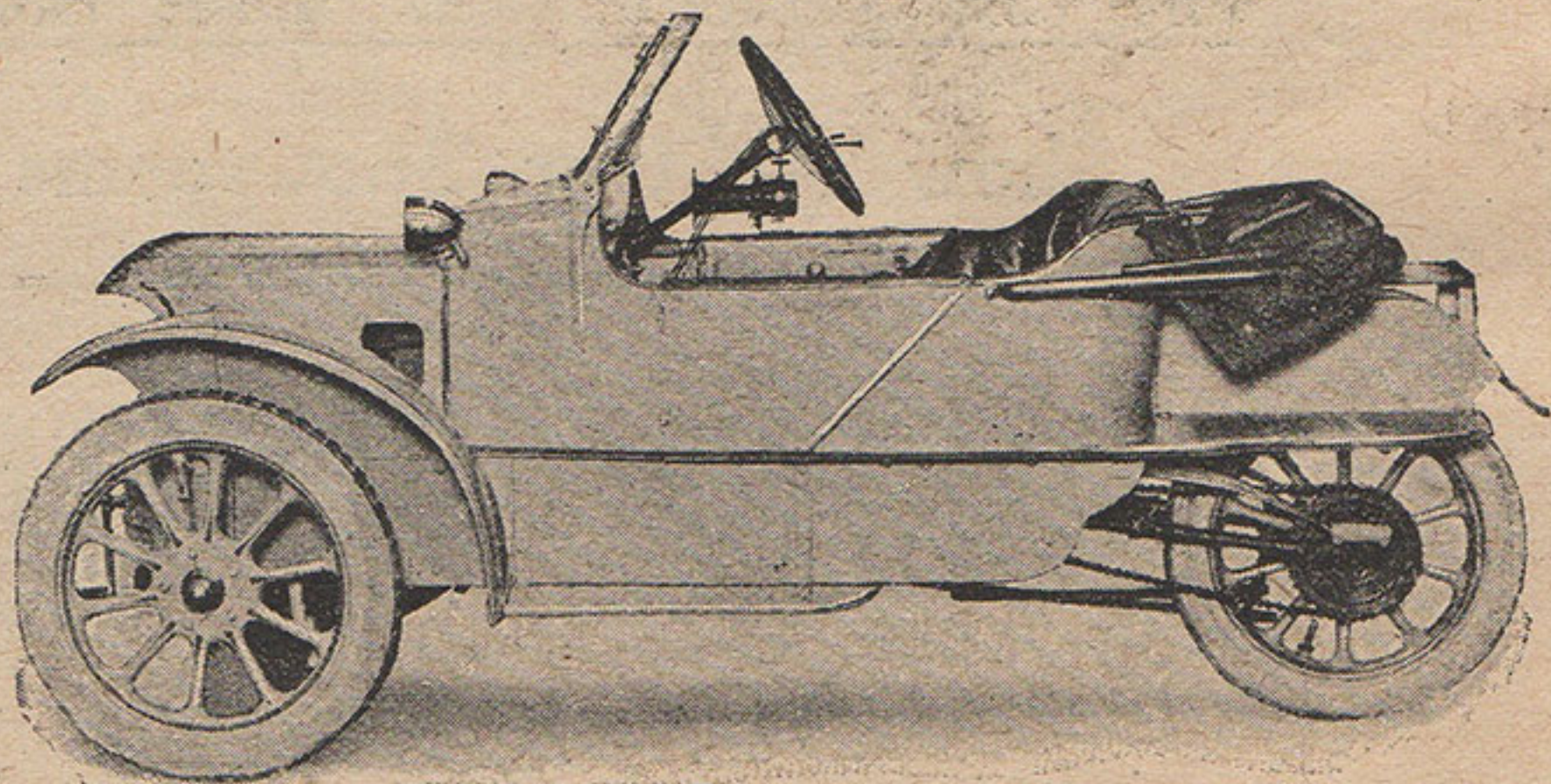
The Three-wheeler that is Light, Safe, and Durable.

Excellence of Springing ensures comfort, together with Tyre economy.

AGENCIES OPEN.

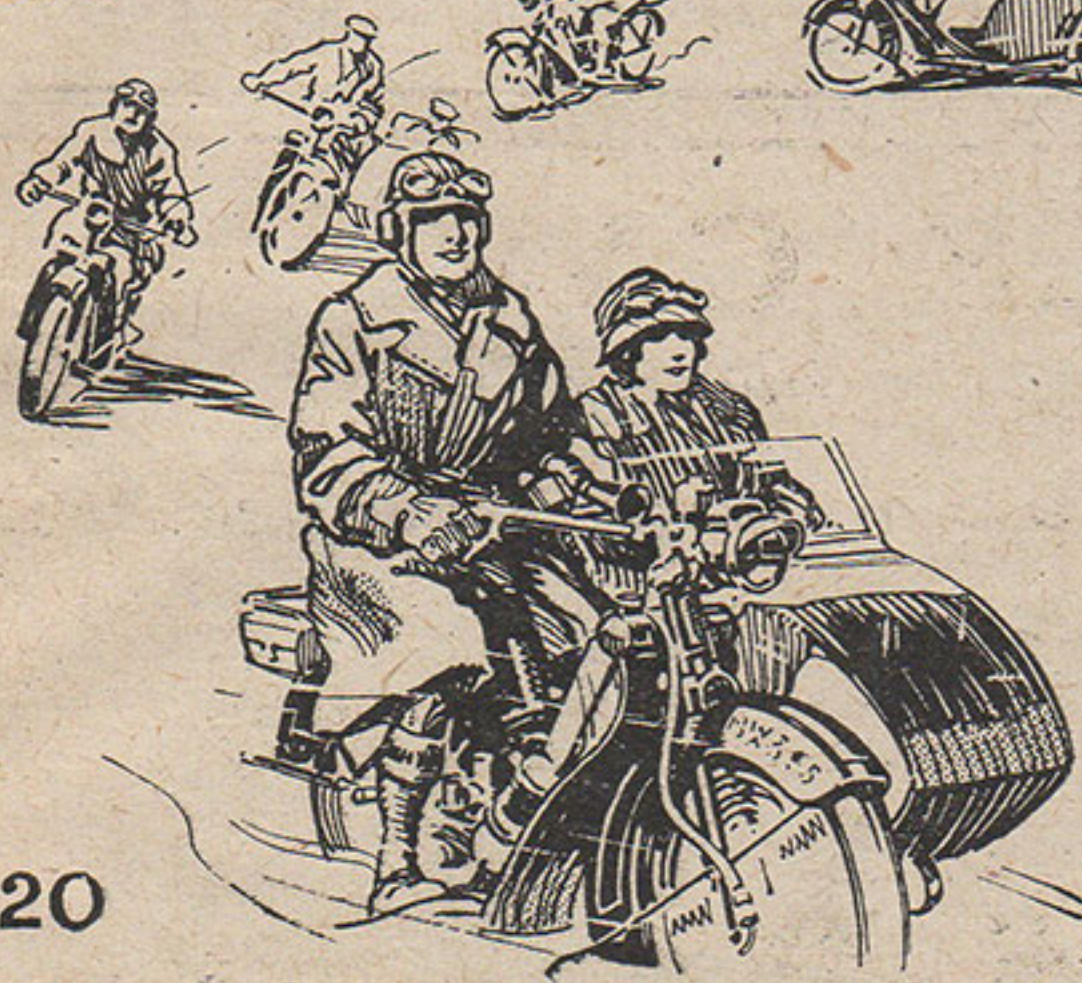
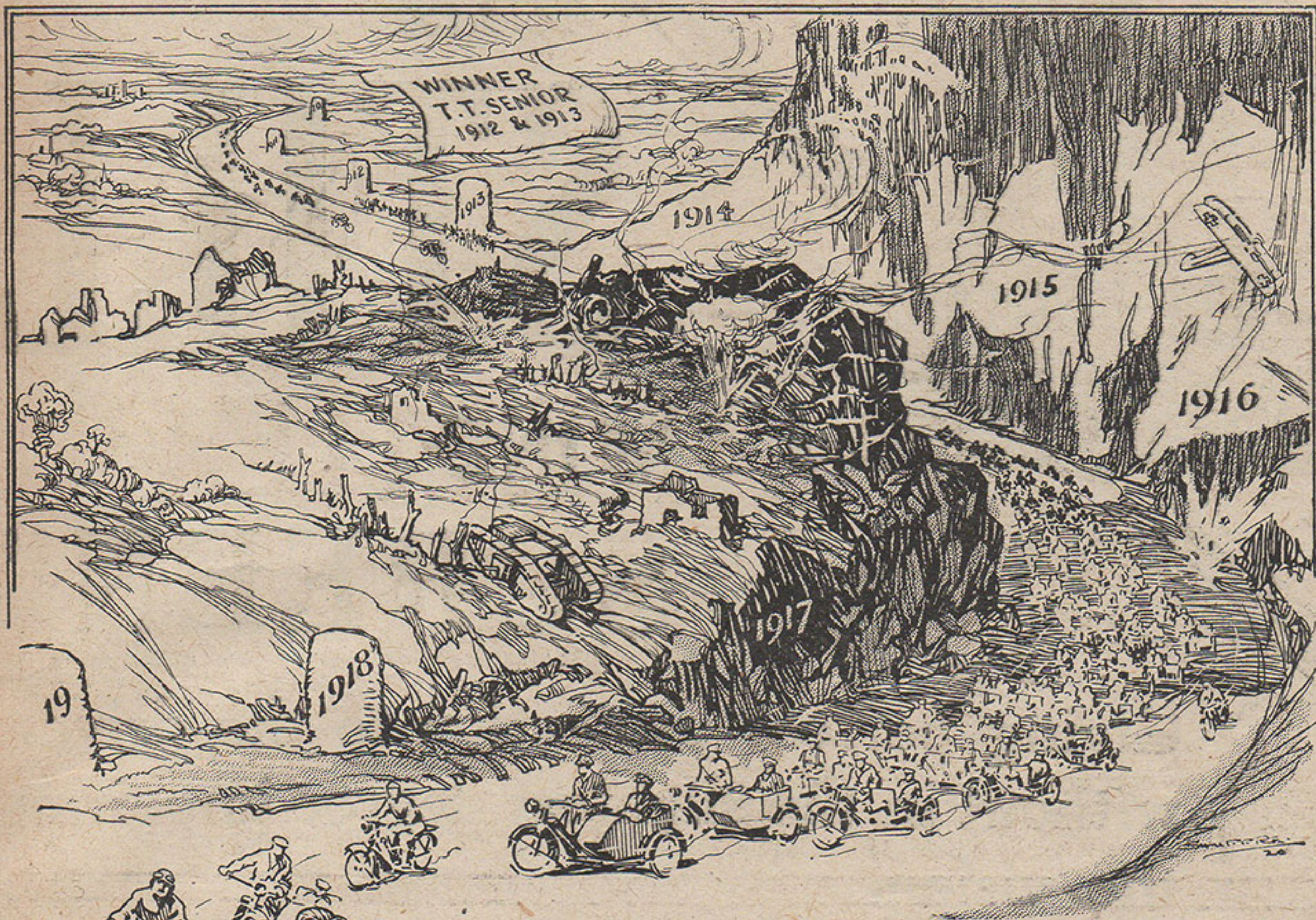
Extract:—

"Along here, in the face of the staggering wind, the L.S.D. with three up maintained a steady 20 m.p.h. on top gear, and over a surface that would have broken the heart of a Lanchester."—"Light Car and Cycle Car." 3/1/20



Sole Makers:—

SYKES & SUGDEN, Ltd., LINTHWAITE, HUDDERSFIELD.

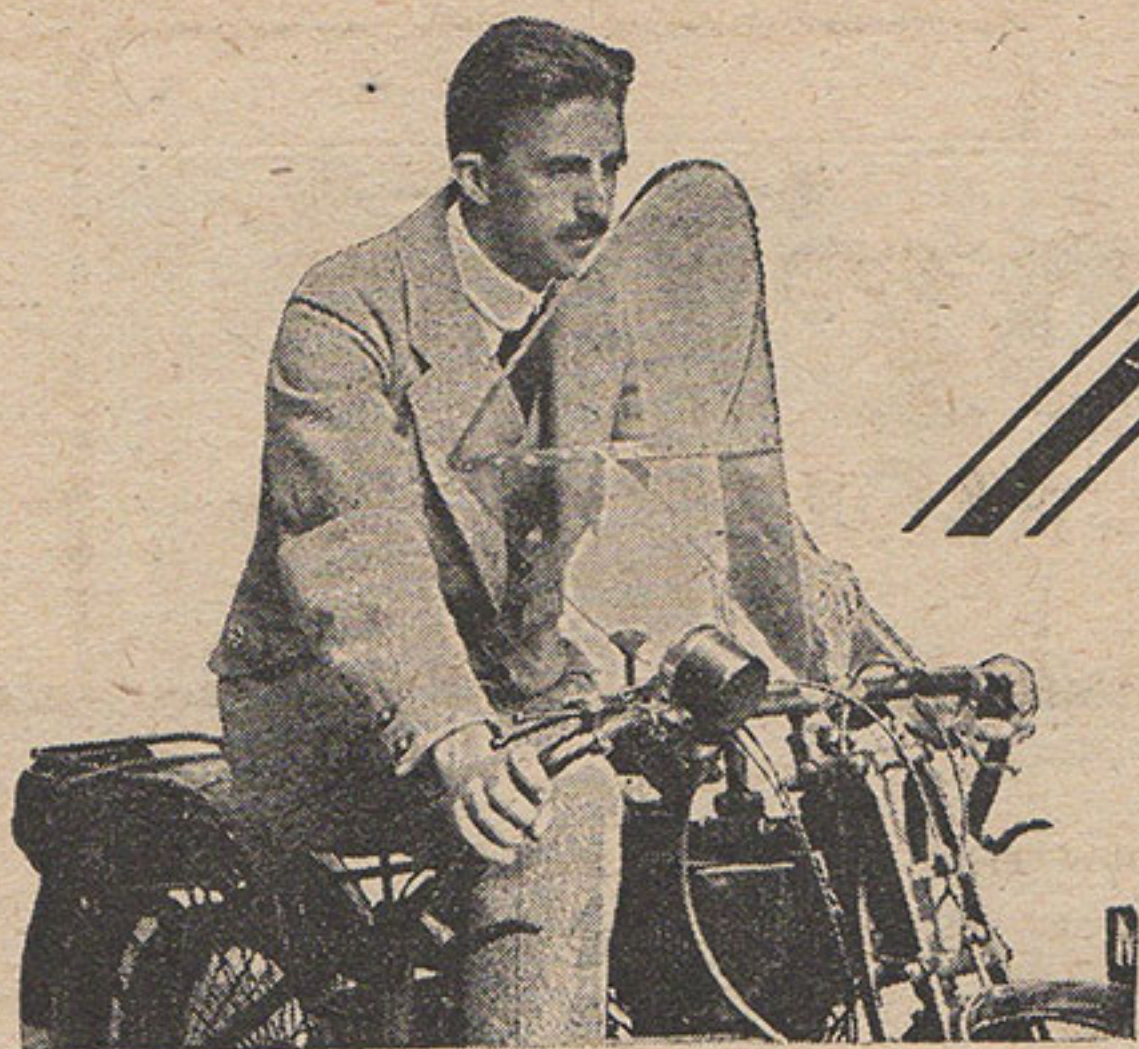


The Road.
RESEARCH—
ACHIEVEMENT—
IMPROVEMENT—
SUCCESS.

‘Scott’

The Scott Motor Cycle Co. Ltd.

SALTAIRE,
 YORKSHIRE.



Three-quarter Front View.

The
**“STILL
 WIND
 SCREEN”**

Giving perfect protection to the driver,
 without in the slightest degree impairing
 the vision.

NOTE THE UNIQUE SHAPE, SCIENTI-
 FICALLY DESIGNED, GIVING PERFECT
 ACCESSIBILITY TO ALL CONTROLS,
 AND PROTECTION TO THE DRIVER.

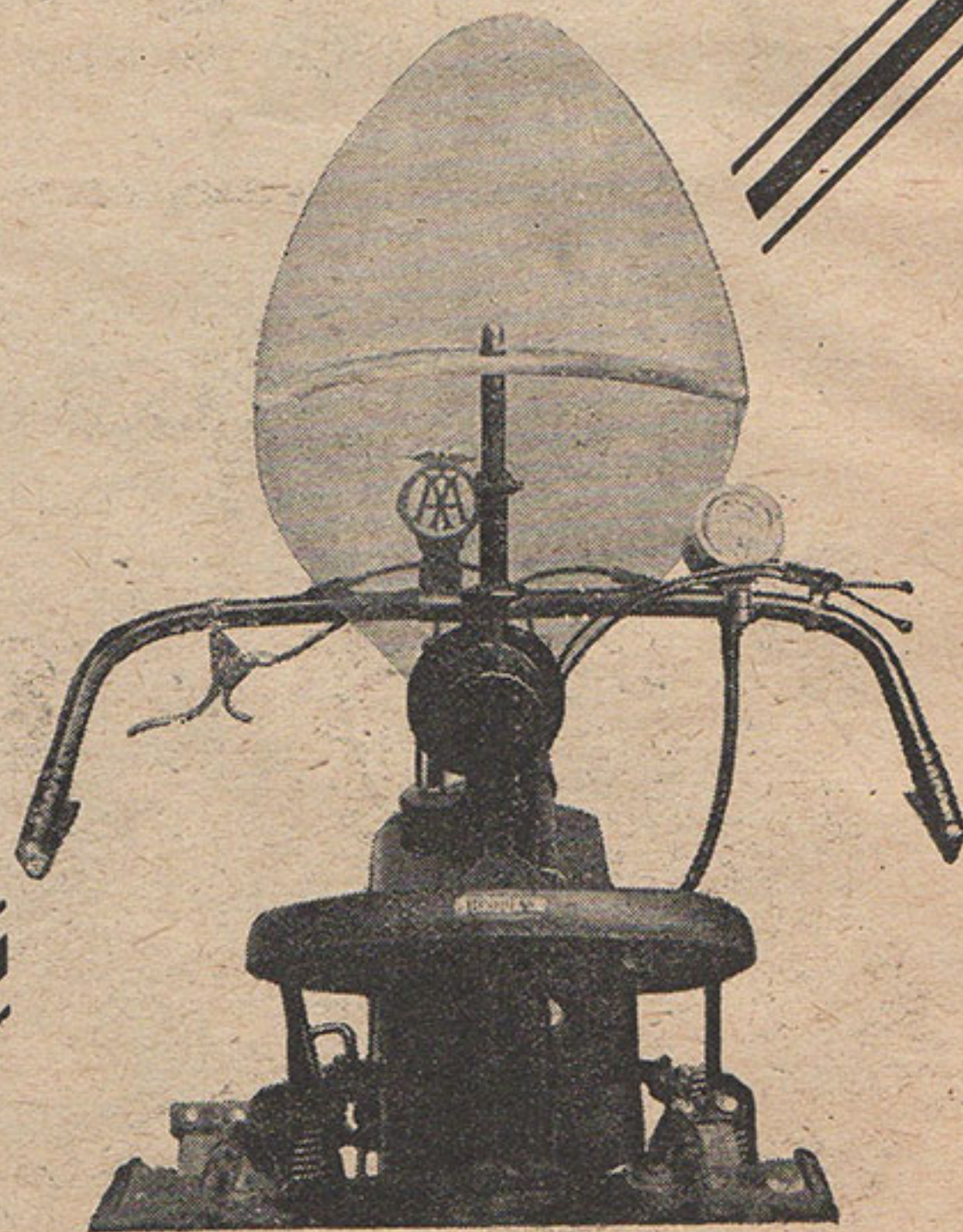
NO WIND RESISTANCE

CAN BE RAISED AND
 LOWERED TO SUIT
 ALL RIDERS.

Fixed on to the cross bar in a
 few minutes

All enquiries to:

W. M. STILL & SONS, LTD.,
 29-31, Charles Street,
 Hatton Garden,
 LONDON:



View from the rear of machine.

“Excelsior”

1921 SEASON PROGRAMME



As exhibited at Olympia, Stand 67, the “EXCELSIOR” range of machines completely covers the wants of both soloist and sidecarist.

It comprises :

EXCELSIOR 6 or 8 h.p. Modele de Luxe Combination

Complete, including Electric Lighting, Spare wheel, Quickly Detachable Leg-Guards, Luggage Grid, Hood and Screen, Spring Footboard, etc.

Price £248 7s. net. Combination only. . . . £195 net

EXCELSIOR 4½ h.p. Big Single Combination.

Price of Combination, £160 net. Motor Cycle £125 net

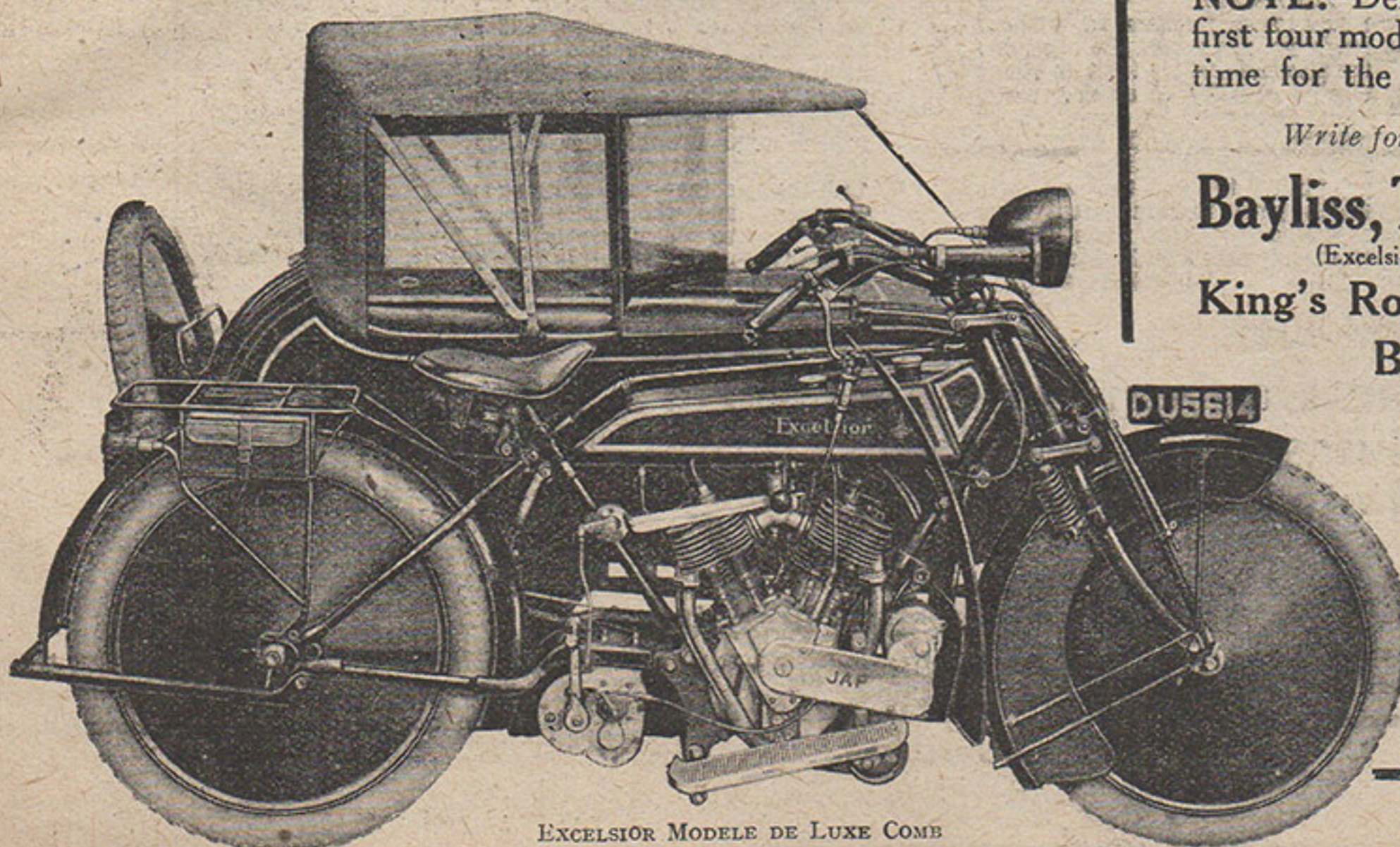
EXCELSIOR 2¾ h.p., (c.c.) ‘Blackburne,’ 2-speed Gear,
with Clutch and Kick-starter £96 net

EXCELSIOR 2½ h.p. (c.c.) ‘Villiers,’ 2-stroke, 2-speed .. £67 net
With Clutch and Kick-starter £73 7 6 net

EXCELSIOR Open Frame Model.

With Single Gear £49 10 0 net

With Sturmey-Archer 2-speed and Clutch .. £66 net



EXCELSIOR MODELE DE LUXE COMB

NOTE.--Deliveries at once for the first four models, and in six weeks' time for the open frame model.

Write for Art Catalogue:

Bayliss, Thomas & Co.
(Excelsior Motor Co. L'd.)
King's Road, TYSELEY,
BIRMINGHAM.

'Phone : 125 Acock's Green.
Grams : " Monarch,
Haymills."

London Agents:
H. TAYLOR & Co., Ltd.,
52, Sussex Place,
South Kensington, S.W.

In answering this advertisement it is desirable to mention "The Motor Cycle."

Unimpeachable Testimony!!
 From Men who Know!!!

COULSON-B

Read what these famous Riders
 and Experts say about the
 Coulson Spring Frame. . . .



Capt. Breese writes—
 3/9/20. "With regard to my three hours
 ride at Brooklands yesterday, when I put
 up Records in Class F, I really must say
 how impressed I was by the manner in
 which my machine stood up to the strain.
 The track was, of course, very wet, and
 quite nasty in parts, and yet I believe I
 experienced no back wheel slip at all. This
 I attribute to the spring frame. Con-
 sidering the very bad conditions, my ride
 was a comfortable one. I must say that I
 consider that your spring frame is ideal
 for speed work. It is the most comfortable
 machine I have ridden in all my ex-
 perience." (Sgd.) M.C. Breese (Capt.)



R. B. Clark's Opinion—
 "Having ridden a Coulson-B motor cycle over 4,000
 miles this season, including many severe trials over
 the worst roads to be found in the British Isles, I
 feel I must write you a line in appreciation of the
 excellent springing of the machine. I find I can
 ride fast over the worst surfaces without feeling
 that the machine is being shaken to pieces. Also
 luggage remains on the carrier, and tools do not
 chafe through the tool roll and wreck the tool bag
 as is usual in unsprung machines. The absence
 of fatigue after a long run is very marked, and
 owing to its simplicity, the springing gives no
 trouble whatever. The tyres wear remarkably
 well, due, no doubt, to the absence of bouncing
 and wheel spin." (Sgd.) R. B. Clark.



Mr. Rex Mundy says—
 "Having now completed several thousand
 miles on a Coulson-B motor cycle, I have
 great pleasure in testifying to the re-
 markably good results obtained from the
 suspension of the frame. I have recently
 covered 200 miles in the day, and even
 after this distance, found that I was very
 much less fatigued than has been the case
 in the past after a run of only half this
 distance on a rigid frame. In addition to
 this excellent quality, more especially on
 the present day roads, the machine was
 exceedingly steady at all speeds, but
 particularly so on corners when riding
 fast." (Sgd.) Rex G. Mundy



From Mr. Kaye Don.
 "It may interest you to know that
 I have recently ridden one of your
 machines, and should like to express
 the pleasure and joy I felt in riding
 what I consider a machine with
 ideal springing. I have ridden
 machines with rigid frames for
 some considerable time, but was
 astonished to find the ease with
 which your machine went over
 exceptionally bad roads—almost
 like riding over a billiard table."
 (Sgd.) Kaye Don.

Dr. Low's Opinion—
 "I am very much obliged to you
 for the Coulson-B machine, and I
 am hoping I may be able to try
 another before long. I will not
 worry you with a detailed report,
 except on any particular items you
 require data. I would merely like
 to say that I was thoroughly pleased
 with the machine—the springing is
 excellent, and the whole motor
 cycle is so comfortably and
 efficiently designed that it is quite a
 pleasure to ride." (Sgd.) A. M. Low.



The Coulson-B holds 9 world's Records,
 and has gained 15 Gold and Silver Medals,
 and other awards in 1920.

F. Aslett-Coulson Engineering Co.,

(Proprietors: Flightcraft, Limited),
 168, Regent Street, London, W.1.
 (Gerrard 356.)



The Latest Testimonial can be seen at the Works.



The "BINKS" LAUGHS at all COMPETITION

THIS SHOULD BENEFIT YOU!

BORHAM, October 22nd, 1920.

DEAR SIR,

I may as well tell you what I think about you and your products.

Firstly, your Plugs. They are honestly the only ones that can stand up to hard work. I have tried all sorts and burnt the blessed lot out. However, one day in London, my two Waterproof Plugs costing 8/6 each, suddenly took it into their heads to give up the ghost, which they did with bad reports. I took the bike to the nearest Garage and found that they possessed a manufacturing fault. They had only done a bare 1,000 miles. My previous set did the same thing. Well, to cut a long story short, I told the Garage man to give me the cheapest Plugs in the shop which he did, and I found myself in possession of a couple of Binks' Plugs. I must say I eyed these rather sceptically, reasoning of course that if 8/6 fizzled out in 1,000 miles, 3/6 worth will just about get me home. These Plugs have already done 7,000 miles, and have not given me the slightest bit of anxiety, and I can assure you I will in future only buy your Binks' Plugs. It is rather interesting that, whereas before I always carried a couple of spare Plugs, but with your Plugs I never dream of such a thing.

Having tried your Plugs and got down my Plug bill, I was faced with a Carburettor that only did 50 m.p.g., and this on a 2½ h.p. "Douglas," so I bought one of your Carburettors last June, and to give it a jolly good test I took it for a 1,100 mile run on a business trip up the East Coast, and found to my surprise that the M.P.G. had risen from 50 to over 125. Of course, she is a lot more flexible, and has increased her speed by a good 8 m.p.h. People are always saying to me, "What an extraordinary Douglas you've got!" Or, after I have licked 'em in a speed stunt, "Well, yours isn't a normal Duggie," and all seem mildly surprised when I put it down to the Binks. By the way, on my ride back from the East Coast trip, I left King's Lynn at 5, and was in London by 8.50, and this including a three-quarter-of-an-hour stop for grub.

In conclusion, your Carburettor is a blessed wonder, and has been absolutely no trouble in any way. Never once have the Jets choked, and never once have I had to foot slog up any hill. I've seen some of these stunt Carb. which advertise all sorts of rot about no Jets, no Springs, etc., but you never saw such a lot of contraptions in all your life. There are not one of them which can approach yours for speed, flexibility, and above all, reliability.

If by any chance this is of any advertising use to you, use it by all means, but keep my name—and as far as possible—my address out of it.

Yours faithfully,
B. J. CORNE.

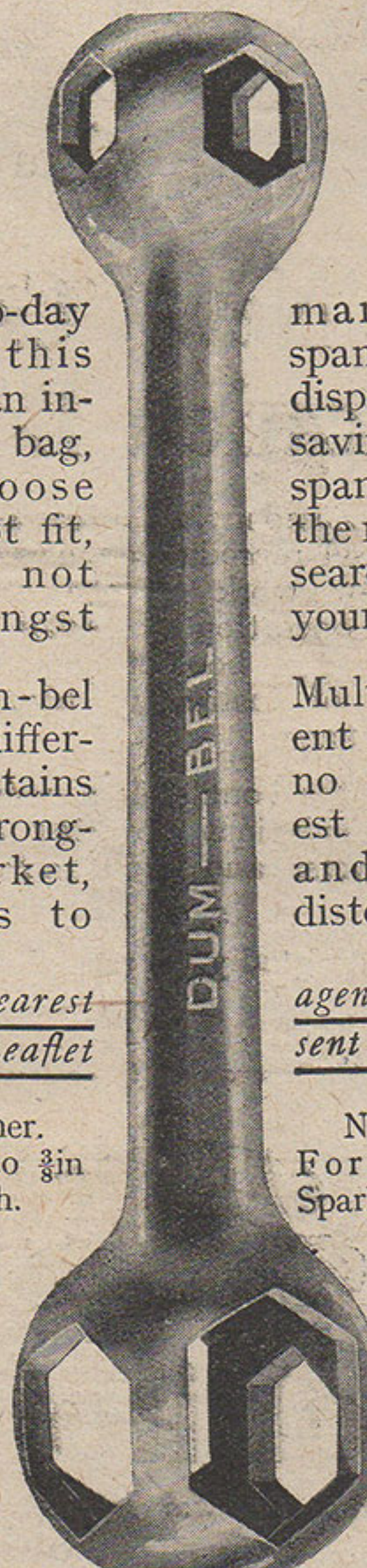
TREATISE ON CARBURATION FREE.
PLEASE SEND FOR LISTS AND TESTIMONIAL BOOK.

C. BINKS (1920) Ltd., ECCLES.

DUM-BEL SPANNERS

BRITISH PATENT No. 138,543.

ALSO PATENTED ABROAD.



There are to-day users of this upon it as an in-of their tool bag, a load of loose size does not fit, you need not again amongst

many delighted spanner, who look dispensable item saving, as it does, spanners. If one the next will, and search again and your tools.

The "Dum-bel will fit 10 differ-and yet contains It is the strong-on the market, open jaws to

Multi" Spanner ent sizes of nuts no loose parts. est spanner put and it has no distort.

Ask your nearest samples. Leaflet

agent to show you sent on application

No. 1 Spanner. For nuts up to ¾in Whitworth.

No 2. Spanner. For nuts up to Sparking Plug Size.

Weight: 5½ oz.

Weight: 10 oz.

TRADE ONLY SUPPLIED.

Price of No. 1 size	.. .. .	3/- net
Price of No. 2 size	.. .. .	4/- net

E. H. DRUCE & CO., LTD.,
HOLYHEAD ROAD,
COVENTRY.

Sole Distributors of the Dum-Bel Spanner.

Have you had your copy?

The New Correct Lubrication Booklet

THE accompanying illustration is a reduced reproduction of the cover of a new work on the efficient and economical operation of motor cycles and cycle cars. The booklet contains twenty-four pages of instructive text written in simple language.

Included in the booklet is a complete Chart of Recommendations covering all models of motor cycles and cycle cars from 1916 to 1920.

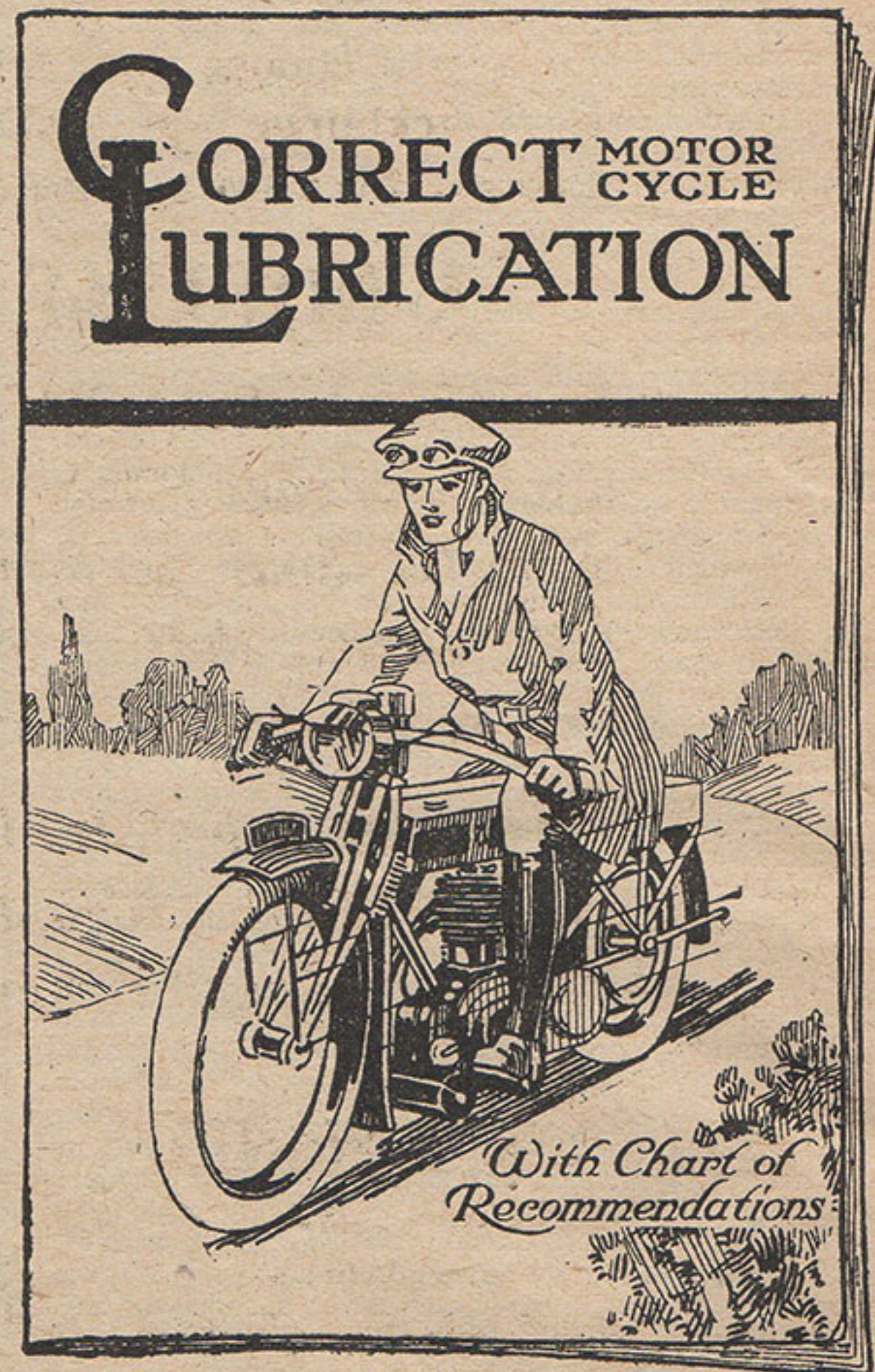
A copy will gladly be posted to you free on request.

Gargoyle Mobiloils are sold by dealers everywhere



Mobiloils

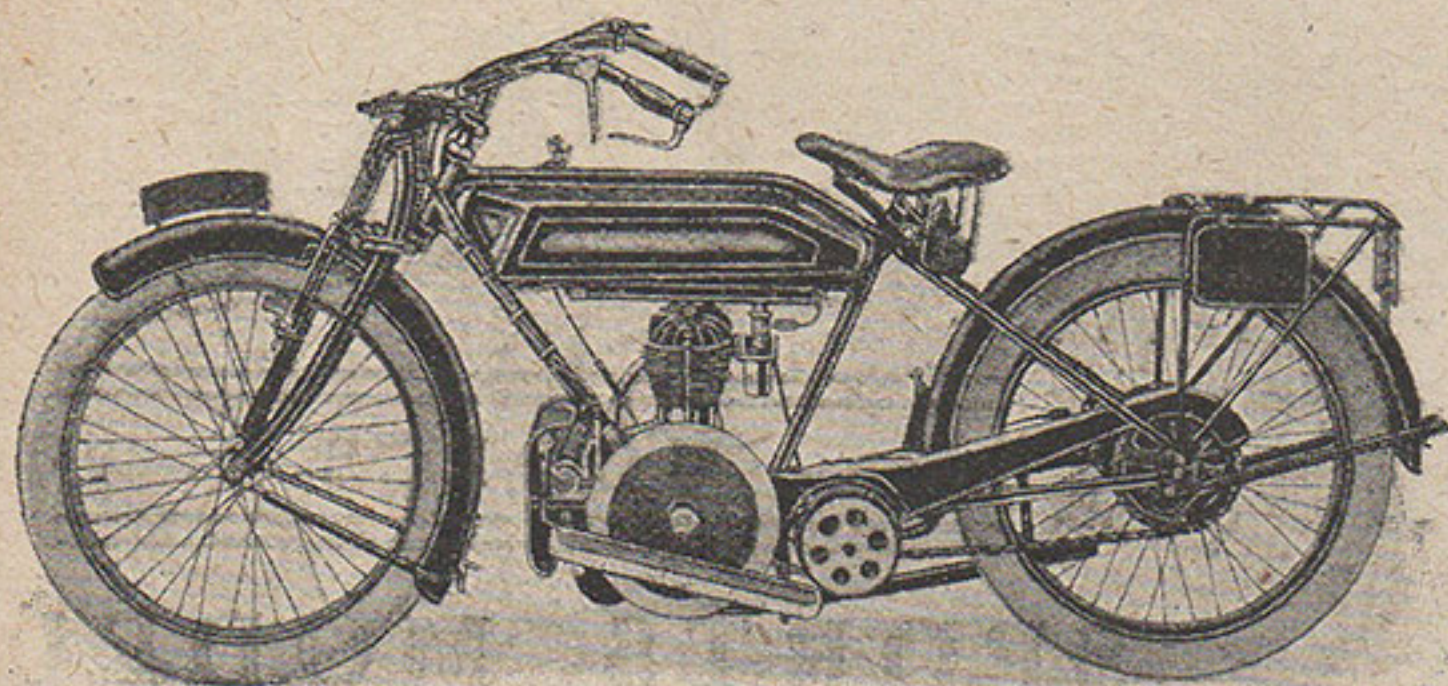
A grade for each type of motor



VACUUM OIL COMPANY, LIMITED,
Caxton House, Westminster, London, S.W.1.

Telegrams: "Vacuum 'Phone. London."

Telephone: Victoria 6620 (6 lines).



4 H.P. SOLO.

When you choose your 1921 Motor Cycle, buy the best—the Blackburne; or insist on your machine being fitted with a Blackburne Engine.

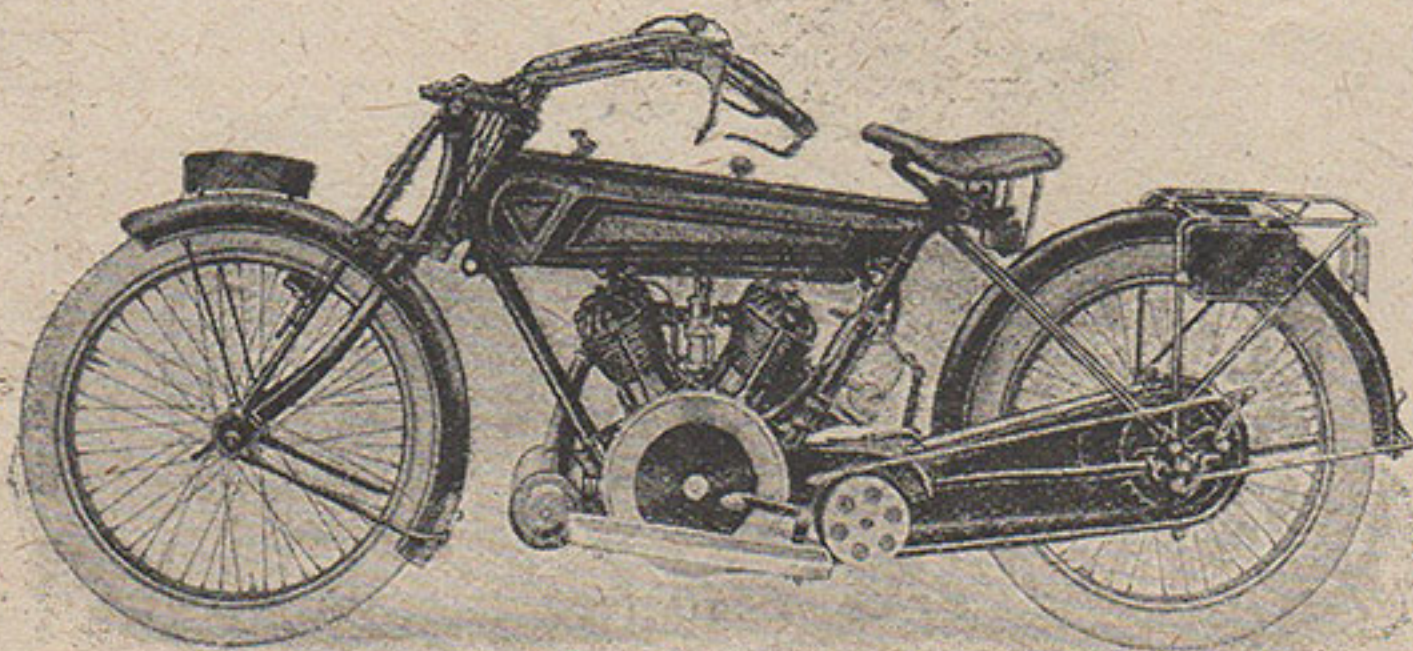
A NOTABLE ACHIEVEMENT.

Brooklands, Sept. 20, a 2 $\frac{3}{4}$ h.p. Blackburne Motor Cycle averaged over fifty miles an hour during a twelve-hour performance, covering 602 miles, 658 yards, thus setting up 31 Class Records and 6 World's Records.

*First 100 Miles (Junior) Brooklands—BLACKBURNE
Second Junior Trophy, Isle of Man—BLACKBURNE
Third Junior Trophy, Isle of Man—BLACKBURNE*

BLACKBURNE POINTS.

1. Large outside flywheel.
2. Detachable cylinder head.
3. Three-speed countershaft gear box.
4. Chain transmission throughout.
5. 28in. × 3in. Wheels and Tyres.
6. The strongest Motor Cycle frame made.



8 H.P. SOLO.

BURNEY & BLACKBURNE, Ltd., 38, Conduit Street, LONDON, W.1.

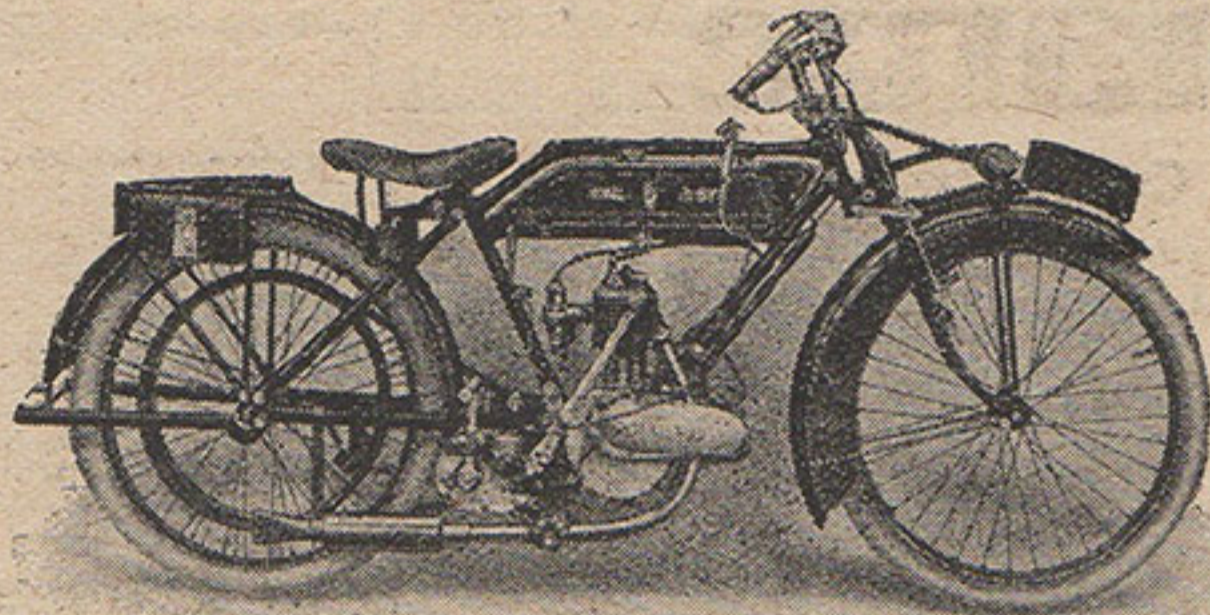
TELEPHONE: MAYFAIR 637.

ROYAL RUBY

LATEST

1921

MODELS



Price, 85 Gns. Net.

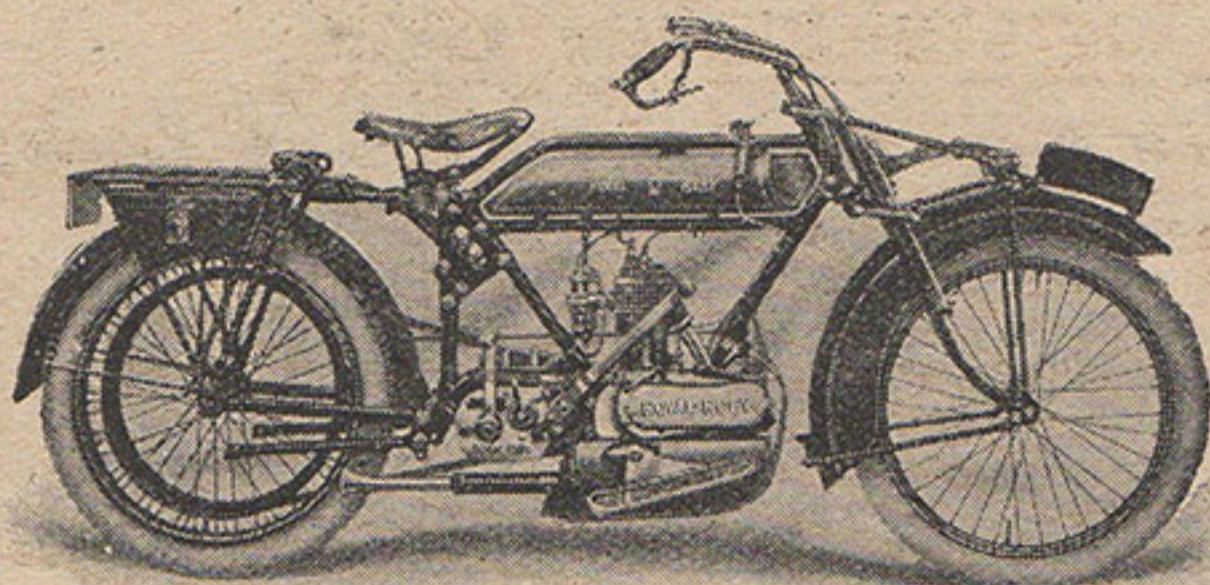
SPORTS MODEL

2 $\frac{3}{4}$ h.p. ENGINE, 2-SPEED GEAR, KICK-STARTER.

Hand-controlled clutch, patent laminated spring fork.

Made throughout at the ROYAL RUBY WORKS.

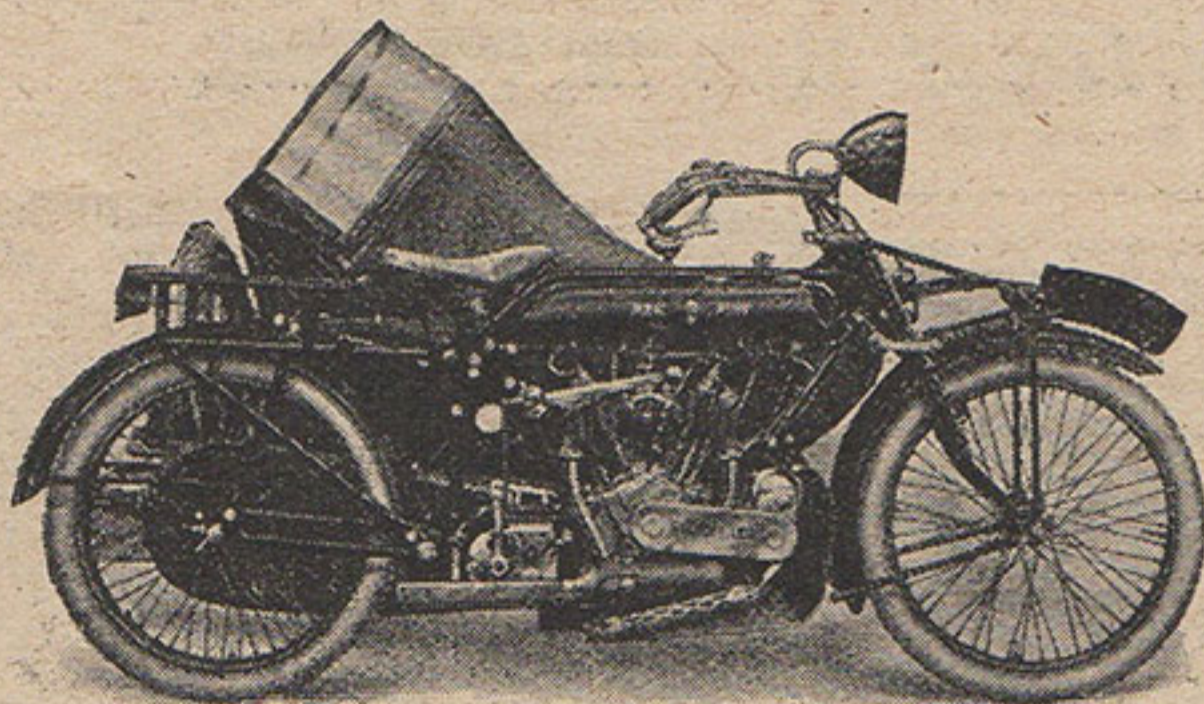
WEIGHT	TAX	CONSUMPTION
185 LB.	30/-	120 MILES PER GALLON.



Price, £120 Net.

PATENT SPRING FRAME MODEL

Fitted with Royal Ruby patent spring suspension fore and aft, eliminating all vibration. Royal Ruby 3 h.p. engine, gear box, kick-starter and hand-controlled clutch, patent adjustable footboards, patent mudshield, 6in. mudguard, 2 $\frac{1}{2}$ in. Dunlop tyres, Brooks saddle, etc., beautifully finished THE BEST OF EVERYTHING with the Maximum of Comfort.



Price, £250 Net.

THE ROYAL RUBY DE LUXE COMBINATION

Patent spring frame and spring sidecar wheel, 8 h.p. V twin engine, 3-speed gear box, kick-starter, hand-controlled clutch, 28 x 3 wheel, detachable and interchangeable 8 $\frac{1}{2}$ in. mudguard over all wheels, special mud undershield, spare wheel with 3in. tyre. Patent luggage and petrol tin carrier, spare wheel carrier which does not interfere with carrying an additional passenger on pillion seat. Luxurious sidecar body with screen. A magnificent passenger outfit, more comfortable than a car costing double the price to buy and nearly treble the expense to maintain.

Write for Illustrated Leaflet to-day.

THE RUBY CYCLE CO., LTD.,

Manufacturers and Patentees of Royal Ruby Motor Cycles, Cycles, Sidecars, Etc.

ROYAL RUBY WORKS, ALTRINCHAM.

Telephone : Altrincham 655 (4 lines)

Telegrams : "Machines, Altrincham."

— A first-class —
Christmas Gift for the Motor Cyclist.

If nobody will buy it for you, buy it for yourself.

The
**Amateur
 Mechanic**

Compiled by Craftsmen in
 non-technical language with
 "How to do it" Pictures and
 Diagrams.

TEACHES YOU HOW

To Clean, Overhaul and Repair
 Motors, Motor Cycles and Bicycles.

To fit up your Motor Cycle with Electric Light.

To build Garages, Sheds, etc. To cure Smoky Chimneys, Leaky
 Roofs and Damp Walls.

To make furniture—To do the home plumbing—To paint and paper a room—To sole and heel and patch shoes—To make hand-sewn boots—To restore brown shoes—To make shelves—To re-seat chairs—To upholster sofas, etc.—To install a speaking tube—To clean a Primus or other stove—To repair bicycles—To work in metal—To make a garden frame—To repair water taps—To varnish a violin—To repair a piano—To make a padded chair from an old cask—To make a mail cart and perambulator or hood—To stuff animals—To dress furs—To stuff and mount birds—To do wood inlaying—To cure a smoky chimney—To prepare working drawings and how to read working drawings—To renovate a grandfather's clock—To make garden arbours, arches, seats, summer-houses, tables, etc.—To use tools—To renovate mirrors—To upholster furniture in leather cloth—To mend broken china, To do fretwork—To build a boat, a canoe, etc.—Gold-plating and silver plating—To clean and mend watches and clocks—To distemper ceilings—To frame pictures—Curtain fittings—To make tracing-paper, waterproof paper, fireproof-paper, etc.—To fit up a motor workshop—To clean boilers, etc.

SO EASY TO UNDERSTAND.

Mr. MAXWELL, Hett Mill, Croxdale, Durham, writes:—
 "I cannot but let you know how valuable I have found the books, not only as a great saving in cash, but they are interesting and instructive. . . . The work is so easy to understand. Everything comes to me to be done now; I sometimes say, "Look what *The Amateur Mechanic* has let me in for."

Book buying is the only Christmas buying we do not regret after Christmas is over, especially when the books we buy are helpful as money savers.

IT SHOWS YOU HOW TO BEGIN.

Mr. P. OGLESBY, Silks Farm, Wye, Kent, says: "I am pretty handy at doing most jobs, but my difficulty has always been in not knowing what tools to use and how to commence any job; that is where the books are so excellent, a child should be able to understand the instructions, and the best of all are the illustrations. One could almost learn to do any job without any letterpress."

**SEND FOR
 THE FREE DESCRIPTIVE BOOKLET.**

"The Motor Cycle" says:

"In 'The Amateur Mechanic' we come across special articles which should interest our readers, such as those on Filing, Screw-cutting, whether by lathe or by hand. How to use Spanners, Metal Turning, Metal Spinning, an article on the Overhauling of the Motor Car, another on the Motor Cycle, Taper Turning, Home-made Drilling Machines, Emery Discs, Bobs, and Wheels, Hardening—and one on Fitting up a Workshop for Motor Repairs. . . . The Motorist and Cyclist will find much to learn from this well-written and copiously illustrated work. . . . We have had a copy of 'The Amateur Mechanic' in our possession for some years, and many useful hints and tips have been gathered from it. . . . It should find a place in the library of every practical motor cyclist."

No Charge and no obligation to order.
To the Waverley Book Co., Ltd. (M.C. 3)
 96, FARRINGTON STREET, LONDON, E.C.4.

Please send me, without charge or obligation to order, your Free Illustrated Booklet, containing all particulars as to contents, etc., of "The Amateur Mechanic," also information as to your offer to send the complete work at once for a merely nominal first payment, the balance to be paid by a few monthly payments, beginning after the holiday season is well over.

Name.....
 (Send this form or a postcard.)

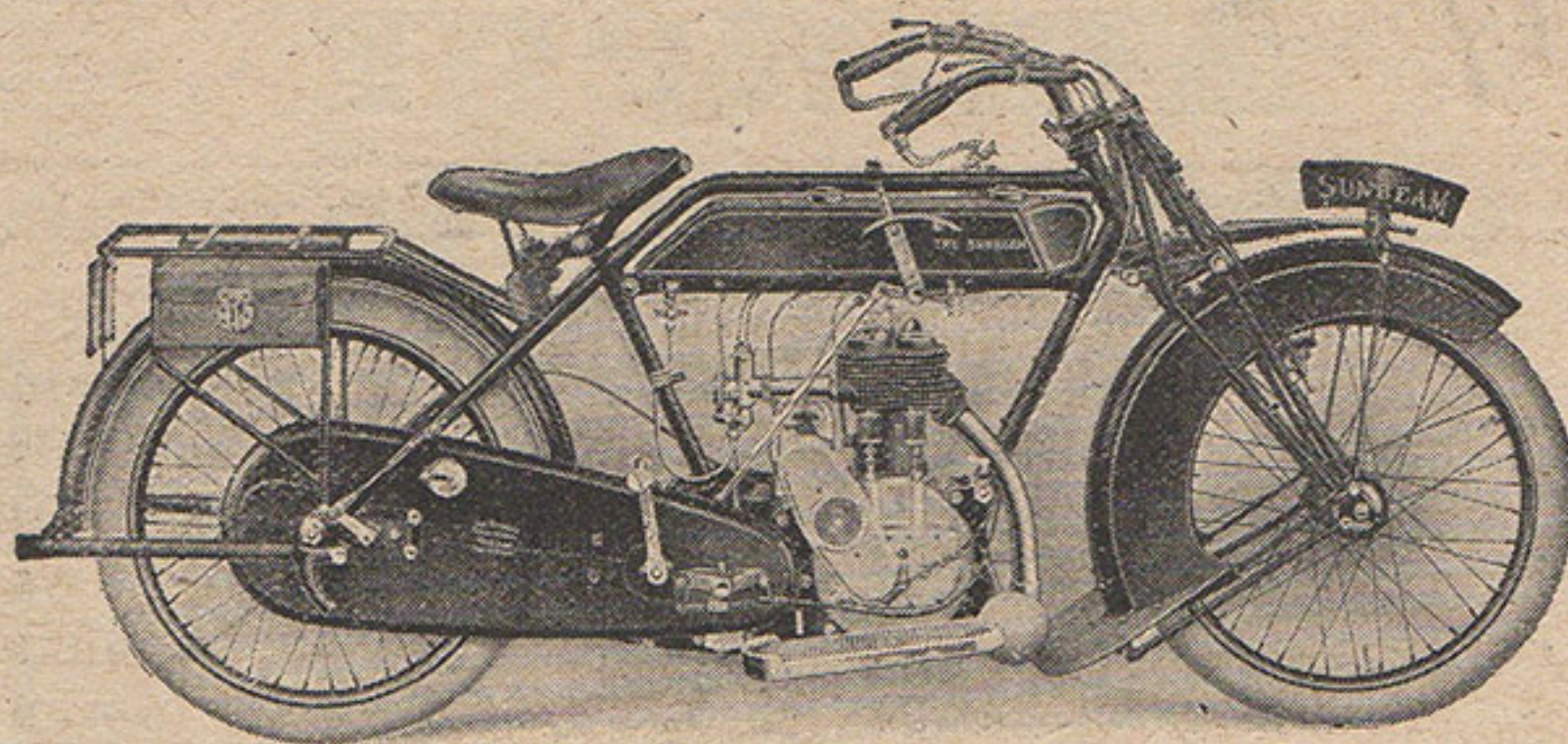
Address

M.C. 3, 1920.

In answering this advertisement it is desirable to mention "The Motor Cycle."

SUNBEAMS

THE 1920 T.T. WINNERS



"Were undoubtedly the best value in Motor Cycles shown at Olympia."

Write for Illustrated Leaflet to :

JOHN MARSTON, Ltd., 11, Sunbeamland, Wolverhampton
 London Showrooms: 57, Holborn Viaduct, E.C.1, & 157, Sloane Street, S.W.1

A.J.S

THE SUPER PASSENGER COMBINATION

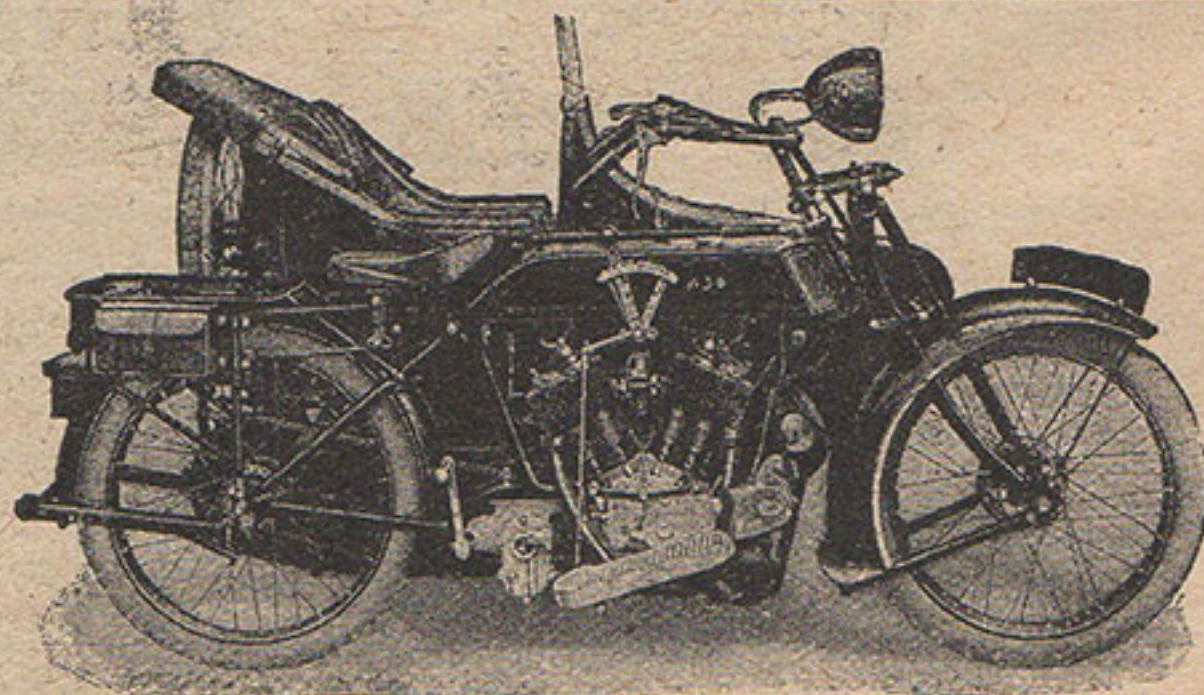
The 1921 A.J.S. 7 h.p. Combination embodies many important and interesting improvements, and inspection will quickly prove to the discriminating motor cyclist that it again represents **THE MOST ADVANCED FORM OF MOTOR CYCLE DESIGN.**

Its superiority is clearly pronounced both in **APPEARANCE** and **DESIGN**—clean, straightforward lines and simple construction being again, as hitherto, outstanding features.

The 1921 A.J.S. model, in these respects, is even more prominent than ever, and we invite your application for Advanced List giving full information.

A. J. STEVENS & CO. (1914), LIMITED
Graiseley House, WOLVERHAMPTON.

London Agents: H. Taylor & Co. Ltd., 52 and 53, Sussex Place, South Kensington, S.W.1.



1921 A.J.S. 7 h.p. Passenger Combination, fitted with Lucas Electric Lighting Set, and Hood.

In answering these advertisements it is desirable to mention "The Motor Cycle."

THE
Humber
 4½ h.p.

COVENTRY'S Finest Production in the way of Motor Cycles is undoubtedly the Humber Flat Twin 4½ h.p., the machine of proved reliability and superiority, whose "splendid record in all the big events of the season" (and particularly its outstanding performance in the A.C.U. Six Days Trial) was recently emphasised in the "Daily Mail." It is a "general purposes" machine—light and handy for easy solo work—powerful enough to take a sidecar anywhere, and remarkable for its silence and other special features:—

Kick Starter Mechanism, Chain Drive Throughout. Special Lubricating System, Shock Absorber to Rear Wheel, Detachable Valve Pockets, Detachable Rear Wheel, Large Outsize Flywheel, Tank holding 2½ Gallons, Single Lever Control.

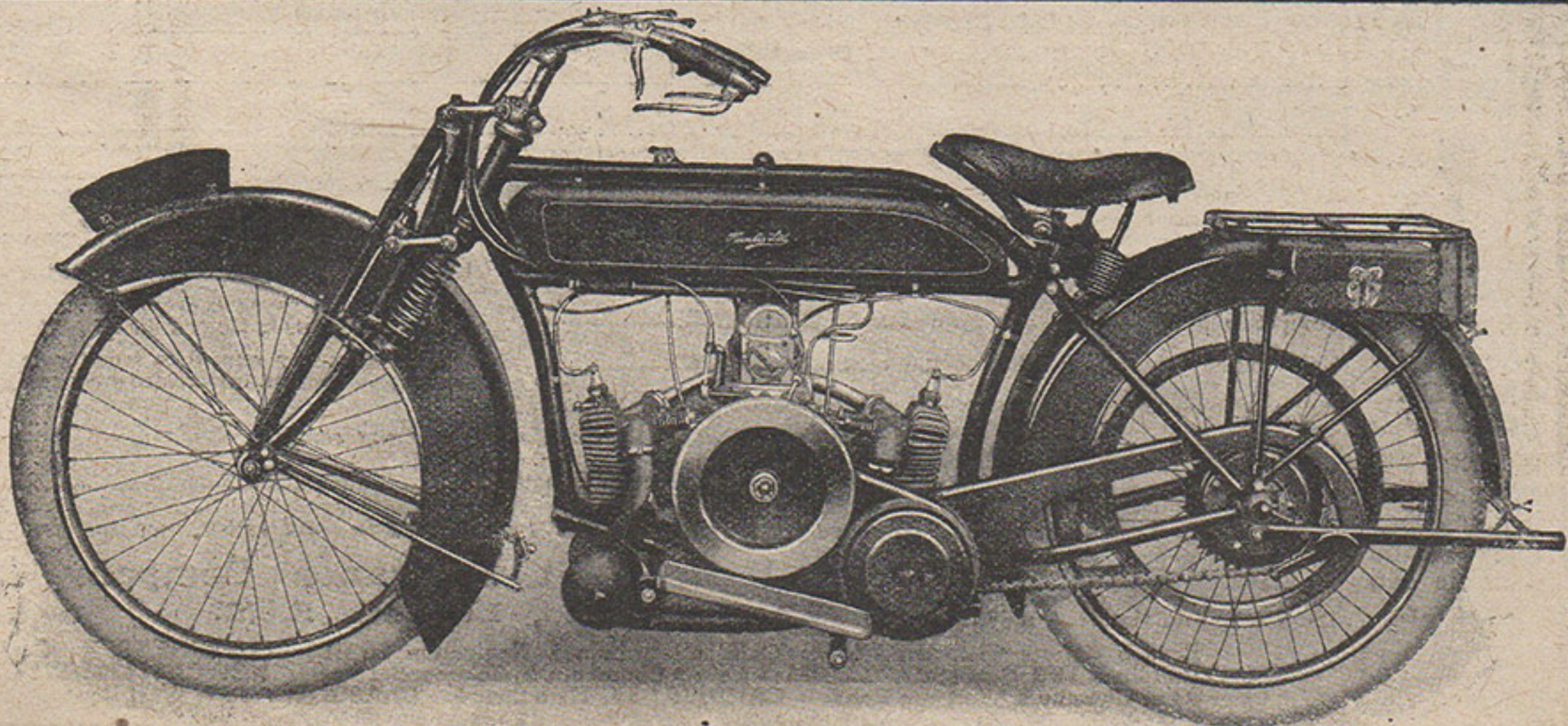
SUCSESSES IN 1920.

London to Land's End, April 5th.	Gold Medal.
London to Edinboro', May 21st.	4 Gold Medals.
Manville Trophy, June 5th,	First in class with
W. Brandish.	special prize.
A.C.U. Six Days Trial,	4 Humber's competed,
Aug. 23-28.	4 Gold Medals.
Liverpool M.C.C., Sept. 18th.	2 Gold Medals.
Solo, £140.	Combination Model, £173 12s. 6d.

Write to-day for full specifications

HUMBER LIMITED
 HEAD OFFICE AND WORKS .. COVENTRY.

London 32, Holborn Viaduct, E.C.1.
 Repair Works Canterbury Road, Kilburn, N.W.6.
 Southampton 25-27, London Road.



In answering this advertisement it is desirable to mention "The Motor Cycle."



THE MOTOR CYCLE Insurance Policy

Issued by The Autocar Fire and Accident Insurance Company, Ltd.
(Incorporating "The Autocar" Insurance Dept. Established 1904).

COVERING MOTOR CYCLES or CYCLES and SIDECARS - USED FOR PRIVATE PURPOSES.

Complete Comprehensive Cover ^{Free of} Vexatious Restrictions.

SCHEDULE OF PREMIUMS.		
Not exceeding.	A	B
	Full Policy. All Sections 1 to 6.	Third Party, Fire, and Theft. 1, 3, 4, and 6 only.
3 h.p.	£3 13 4	£1 16 8
4 h.p.	£4 0 0	£2 0 0
5 h.p.	£4 13 4	£2 3 4
6 h.p.	£5 13 4	£2 6 8
8 h.p.	£6 0 0	£2 10 0

Occasional Business Journeys.....25% extra
Professional Purposes.....40% extra
Trade Purposes.....75% extra

1. THIRD PARTY.
To indemnify Insured up to an **unlimited amount** against all legal liability. All law costs paid in addition. Defence of any police summons for driving to the danger of the public when an accident as insured is concerned, free of legal costs

2. ACCIDENTAL DAMAGE
up to full value, including side slip. Reasonable repairs up to £5 may be put in hand at once.

3. FIRE
up to full value, including tyres and accessories.

4. THEFT
up to full value, including tyres and accessories when machine is stolen. Damage by attempted theft included

5. TRANSIT.
Damage during transit by road, rail, or inland waterway.

6. BONUS.
10% reduction off renewal premium if no claim.

EXTRAS.
If present total value exceeds £100, an extra premium of 10/- is payable, exceeding £200 20/-.

Cycle used solo to carry passenger on pillion seat or luggage carrier—50% extra. If machine driven by named extra rider—5/- extra, or if any licensed person—10/- extra.

ACCIDENTS TO OWNER.
Benefits: Death £250. Loss of two limbs or sight of both eyes, £250. Loss of one limb or sight of one eye, £150.

Total disablement, limited to 26 weeks each accident, £3 per week. Premium 25/- cycles, 20/- cycles with sidecars.

Half Benefits—Half Premium.
PASSENGERS IN SIDECARS.
Benefits as for Owner: If passenger specified by name. Premium 15/-. Any passenger of not less than 16 or more than 55 years of age Premium 20/-.

REDUCTIONS.
To be taken off premiums (A) only.
15% if Insured bears first £1 of all claim.
25% if Insured bears first £2 of all claim.
33% if Insured bears first £5 of all claim.
50% if insured bears first £10 of all claim.

Fill up and Post this Form To-day.

PROPOSAL FORM. Particulars of Motor Cycles

SPECIAL Privilege

Make.	H.P.	Date of Make.	If with Sidecar.	Value (including Accessories).		Registered Letter and Number.
				NEW Cost.	Present Value.	
				£	£	

A free weekly copy of "THE MOTOR CYCLE" is sent to every policy holder when the premium paid is £5 or over.

Owner's Name (in full)
Address
Occupation (if any).....
Have you any physical defect or infirmity?..... Age.....
Will cycle to be insured be used solely for private pleasure purposes?.....

If not, please give full particulars.....
Will cycle be solely driven by owner?.....
Have you ever had your licence endorsed or suspended?.....
Are you now, or have you ever been, } insured in respect of a Motor Vehicle? }
Has any Company refused to renew your } insurance or required an increased premium? }

I declare that the above statements are true and complete.

Date..... Owner's Signature.....

Immediate protection can be obtained by forwarding this Form, filled in, and remittance for first premium to

The Autocar Fire and Accident Insurance Company Limited

Telegrams—"Autoinsure, Cent, London." **77, Cheapside, London, E.C.2.** Telephone—City 9831.

Branch Offices—BIRMINGHAM: Guildhall Buildings, Navigation Street. MANCHESTER: Century Buildings, 199, Deansgate. LEEDS: Calverts Chambers, 8, Commercial Street. NEWCASTLE-ON-TYNE: Atlas Chambers, Westgate Road. CARDIFF: 15, High Street. GLASGOW: 137, West Regent Street.

"Built for Service."

NEW HUDSON

Powerful Lightweight.



Some Distinctive Details.

ENGINE: NEW HUDSON 2-stroke, "De Luxe."
IGNITION: C.A.V. Magneto Lodge Plugs. New Hudson patent plug cooler.
GEARS: New Hudson. 5-1; 9-1.
TRANSMISSION: Dunlop Belt, Renolds Chain in casing.
CARBURETTER: B & B special spray.
LUBRICATION: Enots Automatic.
FORKS: New Hudson Girder Pattern.
TYRES: Dunlop Studded 24 x 2in.
TANK: Capacity, 1½ gallons petrol; 3 pints oil.
 Consumption has shown 140 m.p.g.

The Choice of Experts

THE manufacture and construction of the **New Hudson** Motor Cycle is carried out by skilled engineers, and reflects thoroughness and superiority in every detail.

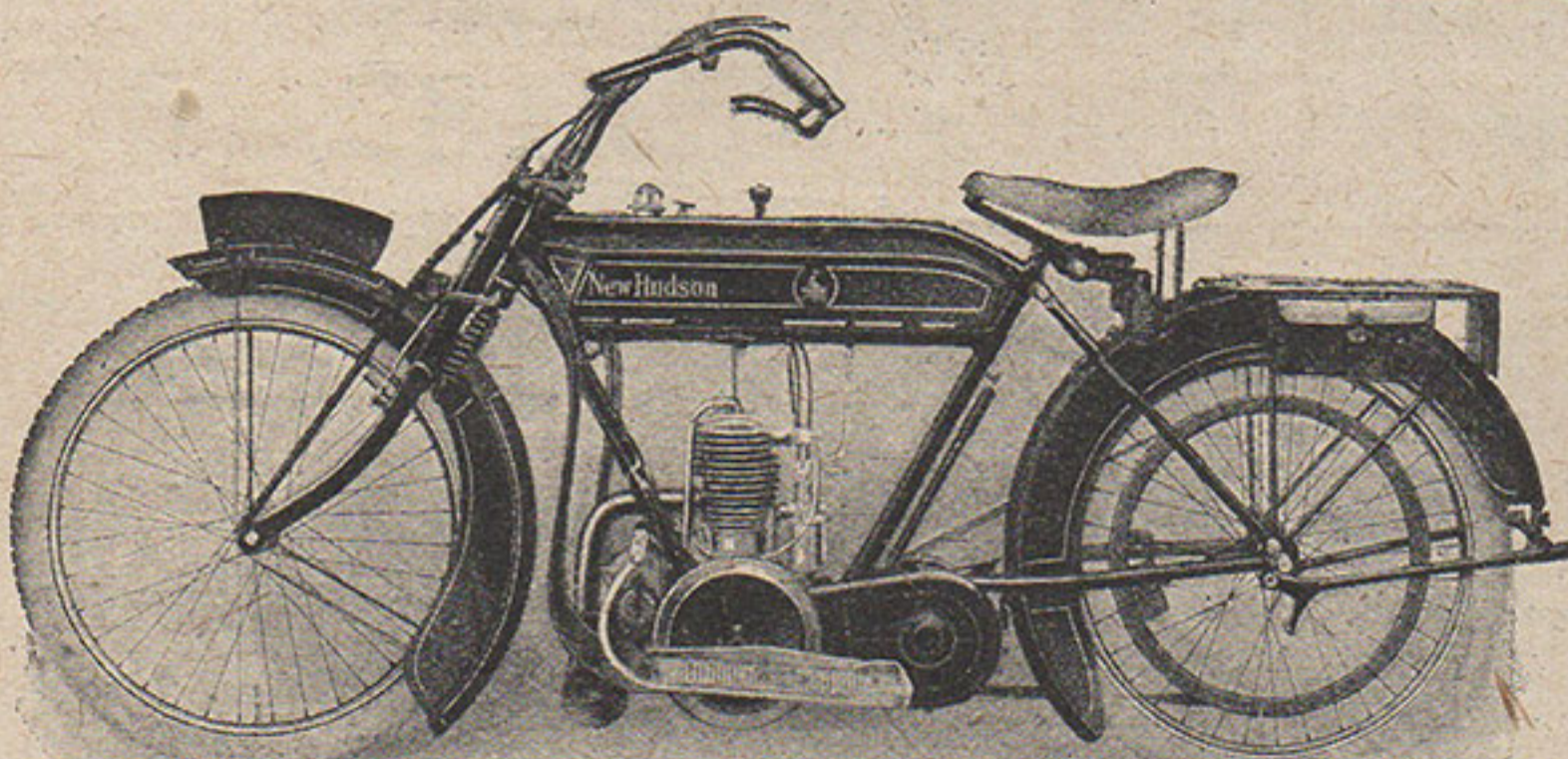
Produced entirely—including **Engine and Gears**—in the extensive **NEW HUDSON** Factories, and equipped with the finest accessories money can buy: Dunlop, C.A.V., Lucas, Lodge, Enots, Renolds.

Always the Best.

RELIABILITY PROVED BEYOND QUESTION

In the Milan 200 Kilometre Trial the New Hudson Lightweight gained 2nd and 3rd places, also Special Prize for **BEST PERFORMANCE** against all comers.

200 Kilometres—3 hrs. 52 mins. 4 secs.



£75

Write for latest illustrated literature of all 1921 Models.

**NEW HUDSON LTD.,
 St. George's Works,
 BIRMINGHAM**

::



Prices Reduced !

**The 2 $\frac{1}{4}$ h.p. Royal Enfield
Two-stroke Lightweight (Model No. 200) £65**

**The 8h.p. Royal Enfield
Sidecar Combination (Model No. 180) £160**

**Ditto, fitted with Magdyno
Lighting Set (Model No. 190) £182**

**THE ENFIELD CYCLE CO., LTD., REDDITCH.
London Office and Showrooms: 48, Holborn Viaduct, E.C.1**

SURPLUS CLEARANCE.

Excess Government Stocks, Manufacturers' Stocks, and Soiled Goods to be cleared regardless of cost. All subject to being unsold—First cash receives—Cash returned if not satisfied.

CARRIAGE EXTRA— which must be sent with order.

	Clearance Price.	Usual Price.
500 Brooks B170	42/-	63/-
SADDLES.		
Pedley, Dunlop, and Silvertown.		
2 in., for Douglas 2 1/2 h.p.	10/6	20/-
2 in. x 7ft. 6in.	10/-	30/-
2 in. x 8ft.	10/6	32/-
2 in. x 8ft. 6in.	11/-	34/-
2 in. x 9ft.	11/6	36/-
BELTS.		
WINDSCREENS FOR SIDECARS.		
5 (only) Eastings	65/-	90/-
20 Cameo, with valance	45/-	60/-
5 (only) Bluemels	50/-	88/-
LAMPS.		
10 Hunts' Electric Daylite	48/-	70/-
60 Ruby Gas Rear Lamps	2/6	4/6
300 P. & H. No. 120 Gas Sets	36/6	44/-
700 Emergency Lamps, burn petrol, and clip on ordinary burner	2/6	3/9
50 Bobjohn Gas Head Lamp Sets	30/-	44/-
50 Westwood Sidecar Lamps	3/9	7/-
20 T.W.R. Head Gas Lamps	8/6	11/6
80 Westwood Torpedo Rear Gas Lamps	3/9	6/6
GAS LAMP GENERATORS.		
100 Small, for rear lamps	5/6	8/6
50 Large, Motorlite	13/-	15/6
PILLION SEATS.		
8 (only) Tan-Sads	35/-	43/-
27 Terry's	32/-	55/-
150 Talbert Spring Seats	7/6	21/-
PUMPS (TYRE).		
300 Dover Celluloid, with folding foot	5/-	10/6
80 Bluemels 15 x 3/4 Sterling	3/3	5/6
CARBURETTORS.		
*2 A.M.A.C., Douglas	45/-	69/6
*6 A.M.A.C., for 3 1/2 to 8 h.p.	45/-	72/-
*2 B. & B., lightweights	45/-	67/-
5 B.S.A., soiled, but perfect and complete	50/-	65/-
*These Carburettors have been used for tests, but not run more than 150 miles.		
SPEEDOMETERS.		
4 (only) Stewart's	84/-	105/-
2 (only) Cowey's	95/-	120/-
2 (only) Cowey's, with trip	100/-	140/-
50 (only) Rock	60/-	100/-
1 (only) Jones, for car	20/-	140/-
ACCUMULATORS.		
Guaranteed.		
10 amps. 4 volts.	10/6	15/-
20 " 4 "	11/6	16/6
40 " 4 "	16/6	22/6
60 " 4 "	24/-	28/6
80 " 4 "	30/-	35/-
VULCANISERS.		
Shaler's	9/3	12/6
Shaler's Patch Outfits	6/-	7/-
MOTOR CYCLES.		
Clyno Combinations, 8 h.p.	} No reasonable offer refused.	
Douglas Combinations, 4 h.p.		
B.S.A. Model K. Combinations, 4 1/2 h.p.		
B.S.A. Model H. Combinations, 4 1/2 h.p.		
B.S.A. Mod. A. twin Combinations, 6-7 h.p.		
Douglas, 2 1/2 h.p., solo		
New Imperial, 2 1/2 h.p., solo		
Levis Baby, solo		
O.K.-Junior, solo		
Triumph, 4 h.p., solo		
SPECIAL SNIP MOTOR CYCLES.		
6-7 h.p. James Combination, 1920	£135	£190
GOOGLES.		
6 dozen genuine La Svelte Goggles	2/6	4/6
30 dozen collapsible size Goggles	2/3	3/6
15 dozen collapsible size, pear-shape	3/-	5/6
KNEE-GRIPS.		
100 pairs of genuine "A.K." make	9/6	12/6
100 pairs of "Brooklands" make	4/6	6/6
DRIP-FEED LUBRICATORS.		
Best & Lloyd's, complete	14/-	23/-
SPEED CAPS.		
Black leather, lined sateen	6/6	10/6
Tan leather, lined sateen	8/6	12/6
Tan leather, lined wool	10/6	14/6
Dark green leather, lined fleece	7/6	21/-
Dark green leather, lined fur	12/6	30/-
TOOL BAGS.		
Lycett's Metal Cased, to bolt on side of carrier.		Lock
	fastening.	
7 1/2 x 3 1/4 x 3 1/2 in.	7/6	--
8 x 4 1/2 x 3 1/2 in.	8/-	--
SIDECARS.		
1 (only) Henderson Elite, for Harley	£45	£56
1 (only) Mills-Fulford, for 28in. wheel.	£24	£32
Wicker Sidecar Bodies	42/-	55/-
Coachbuilt Sidecar Bodies, Racer	75/-	95/-
Coachbuilt Sidecar Bodies, step pattern	99/-	7 gns.
Coachbuilt Sidecar Bodies, Spur Harley	£8	10 gns.
Coachbuilt Sidecar Bodies, Spur Indian	8 gns.	11 gns.

Established 1876.
Phones: 7712 Central. 1297 North
3684 City.



OLD JEWRY, CHEAPSIDE, LONDON, E.C.2,

and at 255-257, Holloway Road, N., and at 8, New Eridge Street, E.C.

To save delay, please address all post orders to Old Jewry, E.C.2.

MOTOR CYCLE COVERS.

	Clearance Price.	Usual Price.
24 x 2 to fit 24 x 2in. Rims.		
Avon 3-ribbed	18/-	30/-
Clincher de Luxe Non-skid	21/-	31/-
Dunlop Studded	25/-	32/-
Hutchinson Studded	25/-	38/-
Palmer 3-ribbed	30/-	43/-
24 x 2 1/2 to fit 24 x 2 1/2 in. Rims.		
Avon 3-ribbed	21/-	30/-
Hutchinson Brooklands Studded	25/-	40/-
Dunlop Studded	27/-	35/-
Avon Tricar Heavy Studded	37/-	50/-
24 x 2 1/2 to fit 24 x 2 1/2 in. Rims.		
Avon Tricar Heavy Studded	47/-	66/-
26 x 1 1/2 to fit 26 x 1 1/2 in. Rims.		
Clincher Non-skid	17/-	30/-
26 x 2 to fit 26 x 2in. Rims.		
Dunlop Motorcycle	16/6	30/-
Palmer Cord 3-ribbed	32/-	60/-
Dunlop Heavy Studded	35/-	59/6
26 x 2 1/2 to fit 26 x 2 1/2 in. Rims.		
Avon Non-skid	21/-	32/-
Dunlop Light Studded	28/-	44/-
Palmer Cord	35/-	63/6
Clincher Extra Heavy de Luxe	34/-	70/-
Dunlop Heavy Studded	36/-	56/9
Avon Combination, a very strong and heavy cover	39/-	75/-
26 x 2 1/2 to fit 26 x 2 1/2 in. Rims.		
Kempshall Anti-skid	30/-	50/-
Wood-Milne Extra Heavy	30/-	50/-
Hutchinson T.T.	30/-	50/-
Palmer Heavy Cord 3-ribbed	35/-	79/4
Bates Special Heavy	32/6	76/-
Dunlop Heavy Studded	36/-	60/-
Clincher Extra Heavy Studded	38/-	64/3
Dunlop Combination	60/-	100/-
26 x 2 1/2 to fit 26 x 2 1/2 in. Rims.		
Hutchinson T.T.	35/-	60/-
26 x 2 1/2 to fit 26 x 2 1/2 in. Rims.		
Kempshall Anti-skid	30/-	50/-
Palmer Sidecar	30/-	50/-
Dunlop Heavy Studded	36/6	62/6
Clincher Extra Heavy de Luxe	30/-	67/-
Palmer Cord	50/-	70/-
R.O.M. Combination	48/-	90/-
Dunlop Combination	60/-	100/-
28 x 3 to fit 28 x 3in. Rims.		
Moseley Heavyweight	22/6	60/-
Wood-Milne Extra Heavy Key-grip	30/-	66/-
Kempshall Anti-skid	30/-	66/-
Palmer Cord 3-ribbed	36/6	113/-
Dunlop Extra Heavy Studded	38/6	92/-
650 x 65 to fit 650 x 65 mm. Rims.		
Extra Heavy 4-ply French Cover	30/-	70/-
Gaulois Heavy 3-ribbed	35/-	--
Palmer Cord 3-ribbed	50/-	75/-
Palmer Heavy Cord 3-ribbed	55/-	84/-
Dunlop Combination 3-ribbed	80/-	100/-
700 x 80 to fit 650 x 65 mm. Rims.		
Hutchinson Small Car 3-ribbed	60/-	96/-
Palmer Heavy Cord	68/-	104/-
Dunlop Grooved	70/-	99/6

	Clearance Price.	Usual Price.
BRAKES.		
50 Bowden Front Rim	12/-	15/6
SPARKING PLUGS.		
200 Lodge, waterproof	5/-	7/6
50 Lodge, ordinary	3/-	5/-
50 Lodge, Ford model	3/2	5/-
50 Lodge, racing	5/-	8/6
CHAINS.		
Perry, 5/8 x 1/2 in., per ft.	4/-	7/6
Perry, 5/8 x 3/4 in., per ft.	4/6	8/6
HORNS.		
150 Serpentine, bulb pattern	13/6	17/6
250 Triumph pattern, bulb	9/-	12/6
190 Post, bulb, Howes & Burley make	15/-	25/-
350 Mechanical, small size	7/9	12/6
800 Mechanical, large size "Auocrat"	10/6	27/9
40 Klaxon	25/-	36/6
HANDLE-GRIPS.		
300 pairs, 3/4 in., Dover make	1/6	2/6
200 pairs, 3/4 in., Dover make, knob ends	2/-	3/6
400 pairs, 1 in., Dover make, knob ends	2/-	3/6
HANDLE-BARS.		
T.T. Douglas, B.S.A. Roadster and Racing Patterns, best plated	12/9	26/6
MAGNETO CONTROLS.		
Bowden Handle-bar Control, complete	10/6	16/-
FUNNELS.		
6in. Non-spill, for petrol	-/11	1/3
3 x 2 in., for petrol	-/6	-/9
Large, for 2-gallon can	3/6	5/-
DISCS.		
For 24, 26, or 28 inch wheels, enamelled black	12/-	15/-
For 24, 26, or 28 in. wheels, aluminium	15/-	21/-
DECOMPRESSORS.		
Endrick	9/-	10/6
BELT FASTENERS.		
The "Lion" Hook Fastener	-/8	-/11
The "Stanley" Hook Fastener	-/10	1/2
The "C.Q.R." Hook Fastener, adjustable	-/6	2/6
CHAIN RIVET REMOVERS.		
For 1/2 in. or 3/4 in. chains	4/-	6/6
MUD SHIELDS.		
The "Sterling" Metal, enamelled	30/-	50/-
Aluminium	13/6	35/-
College	12/6	20/-
TOOL ROLLS.		
Containing 10 useful tools (solo)	9/6	18/-
Containing 12 useful tools (combination)	16/9	25/-
LEGGINGS.		
Fawn waterproof Leggings, strap to brace buttons	7/9	10/6
Fawn waterproof Seatless Trousers	25/-	35/-
Fawn waterproof Seatless Trousers, heavy	30/-	45/-

INNER TUBES.

	GROSE'S.		DUNLOP.	
in.	End-less.	Butt-ended.	End-less.	Butt-ended.
24 x 2	5/9	7/9	9/6	15/6
24 x 2 1/2	6/9	8/9	10/-	15/9
24 x 2 3/4	7/6	9/6	—	—
26 x 1 1/2	5/9	7/9	—	—
26 x 2	6/-	8/-	10/-	15/9
26 x 2 1/2	6/9	8/9	10/3	16/3
26 x 2 3/4	7/9	9/9	11/3	17/3
26 x 2 1/2 x 2 1/2	7/9	9/9	11/9	17/9
26 x 2 1/2	7/9	9/9	11/6	17/6
26 x 3	8/9	10/9	12/3	18/-
28 x 2	6/6	8/6	—	—
28 x 2 1/2	7/6	9/6	—	—
28 x 2 3/4	8/6	10/6	11/9	17/9
28 x 3	9/6	11/6	13/3	19/3
650 x 65 mm.	8/-	10/-	12/6	18/6
700 x 80 mm.	9/6	11/6	13/3	19/3

Special Purchase of INNER TUBES

Made by the biggest English tyre firm. Each tube has one vulcanised patch. Each tube has been re-tested. They are as good as tubes without patch. 24 x 2in., 24 x 2 1/2 in., 26 x 2in., 26 x 2 1/2 in., 26 x 2 3/4 in., 26 x 2 1/2 for 2 1/2 in., 26 x 3 in., 650 x 65 mm.

4/- each

Complete with valve.

HANDLE-BAR MUFFS.

Waterproof back, fur-lined throughout 5/6 .. 25/-

In answering this advertisement it is desirable to mention "The Motor Cycle."

MANUFACTURERS

The **M-B.**
UNITS

GET INTO TOUCH
WITH US

The perfected Two-stroke &
2 & 3 Speed Gear Boxes

Factory:
Windsor
Bucks

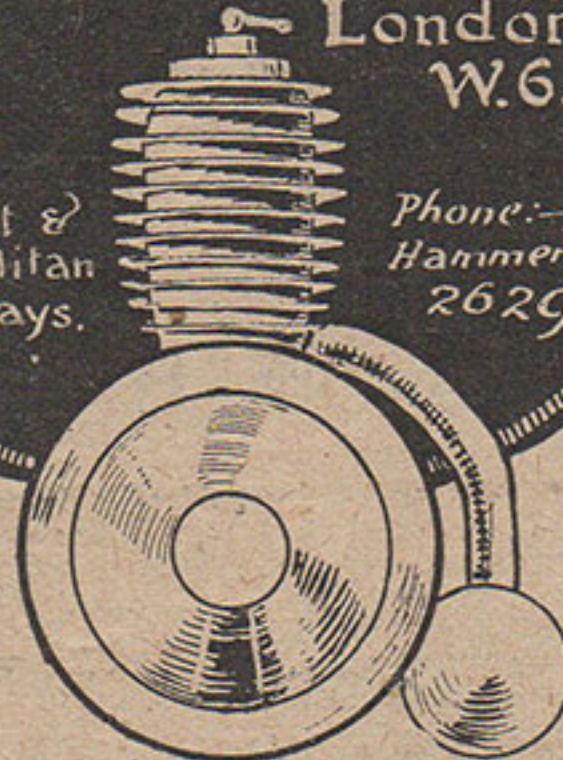
BURT'S

245, Hammersmith Rd
London.
W.6.

Showrooms:
895, Fulham
Road, S.W.

Close to
District &
Metropolitan
Railways.

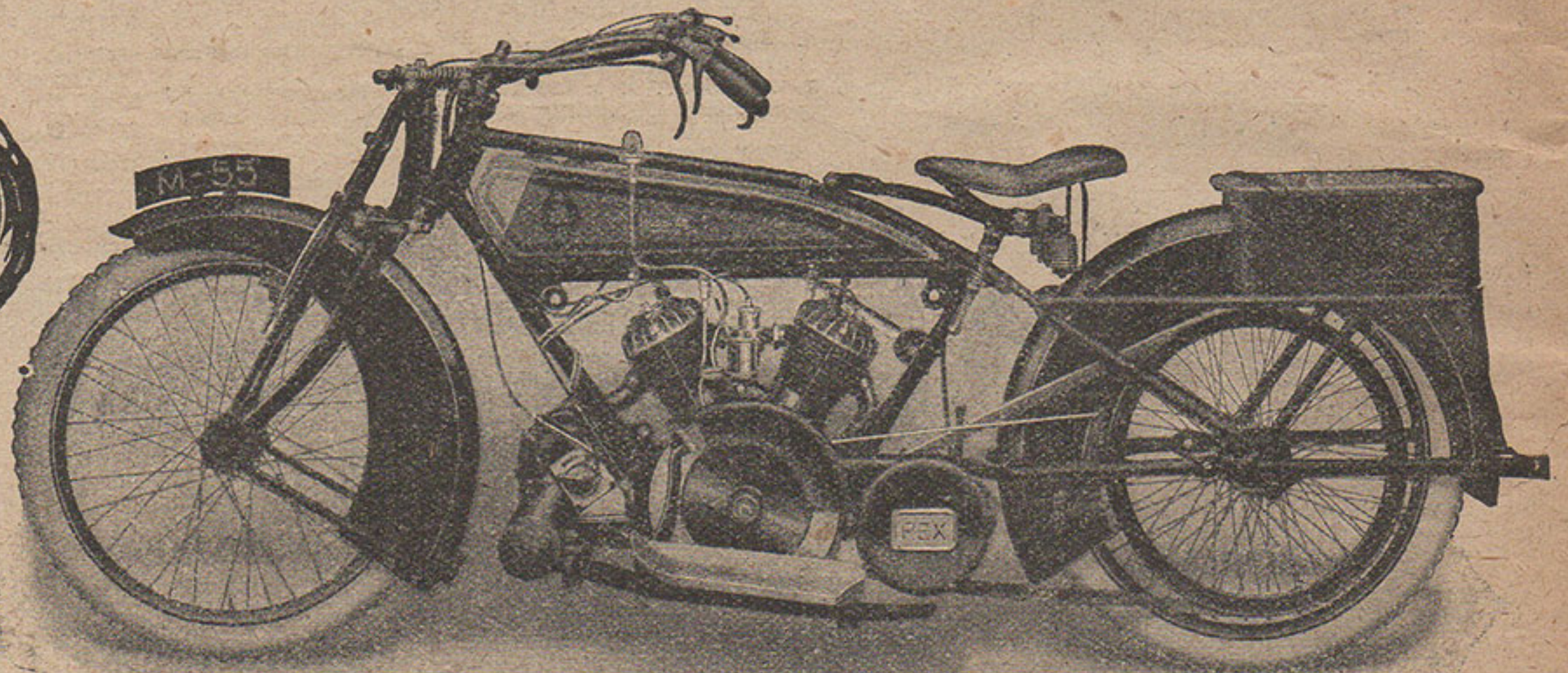
Phone:
Hammersmith
2629.



WE CAN SUPPLY
YOU

ON THE BEST
TERMS

Still Further Appreciation—A Joy to Ride



The 8 h.p. "Rex," Model 55, Twin-cylinder Motor Cycle (An ideal Sidecar Touring Machine).

Following the previous testimonials, we have received the following:

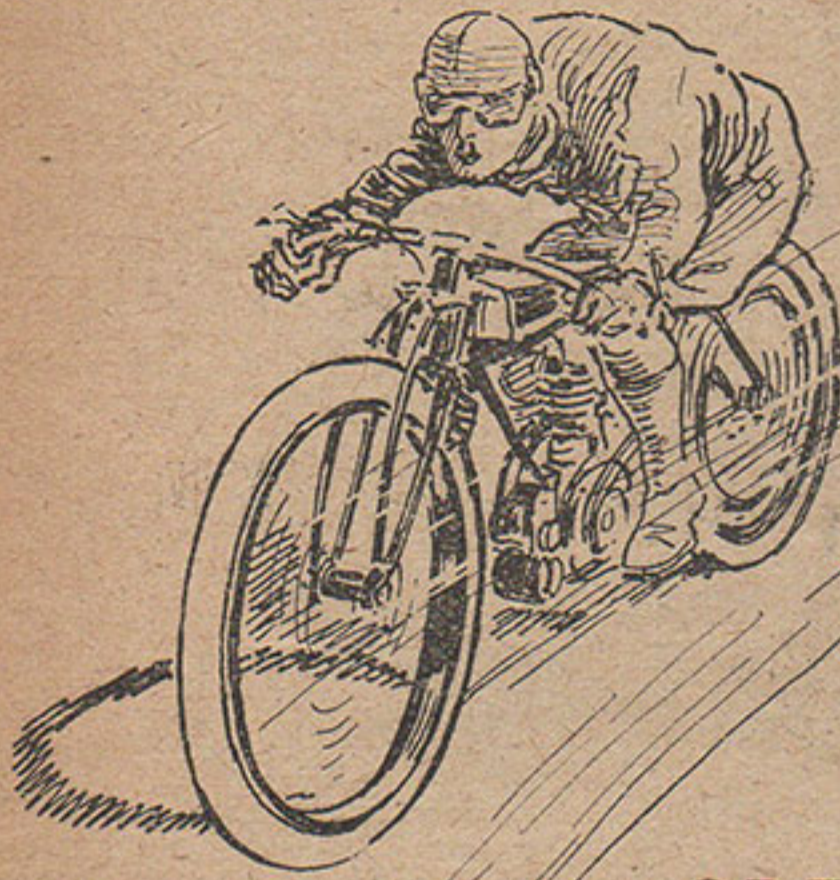
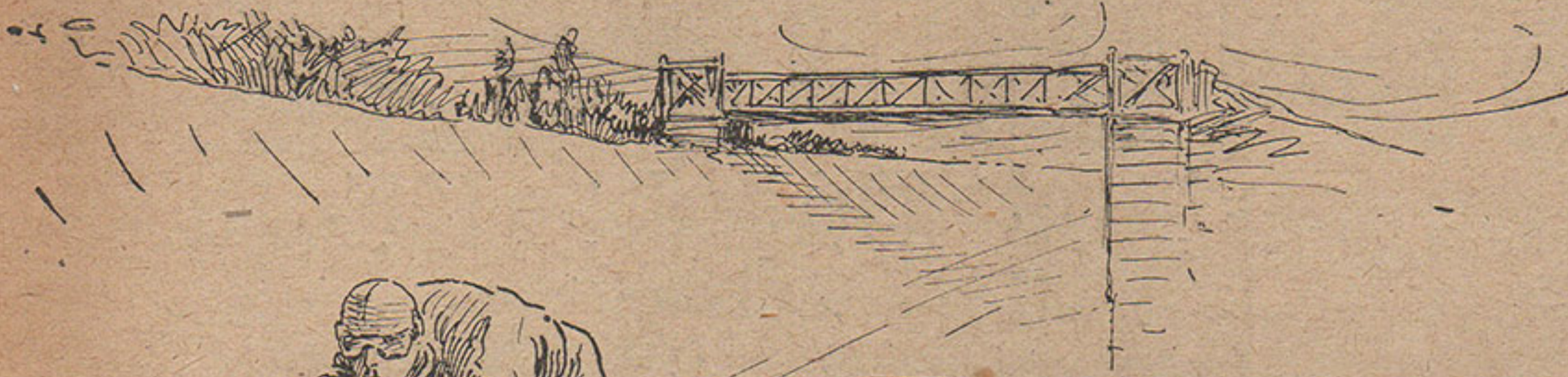
"Oct. 29th, 1920. The Rex Motor Manufacturing Co., Ltd., Coventry. Gentlemen,—I note with interest the letters of appreciation which are appearing in your advertisements of the 8 h.p. Rex, Model 55. As a satisfied user, I can endorse everything said about this excellent machine, I have only touched the machine with a tool once since it was delivered to me, and I have now covered 3,000 miles. I have ample reserve of power, and I am obtaining 60 m.p.g. with your de luxe Touring sidecar (Dickey seat model). The machine itself is A JOY TO RIDE, and can easily be steered for miles on end with one finger, there is none of that wobble of the front wheel when the hands are taken from the handle-bar. In fact I cannot speak too highly of the Rex, Model 55, which is the most comfortable machine I have ridden in fifteen years' experience, while my passengers assert that no sidecar passenger knows real sidecar comfort until he or she has tried the Rex Cantilever springing. Yours faithfully"

WE CANNOT SAY MORE—WRITE FOR LIST.

THE REX MOTOR MANUFACTURING CO., LTD., COVENTRY.

In answering these advertisements it is desirable to mention "The Motor Cycle."

1, 2, 3, 4, 5 & 6 HOURS RECORDS BROKEN!



DIAMOND MOTOR-CYCLE

CREATES INTERNATIONAL RECORDS.

BROOKLANDS :

100 miles, 1 hr. 50 min. 39 $\frac{2}{5}$ secs. = 55.22 m.p.h.	Class A and A1
150 miles, 3 hrs. 0 mins. 48 $\frac{3}{5}$ secs. = 49.75 m.p.h.	Class A and A1
200 miles, 4 hrs. 18 mins. 35 secs. = 46.46 m.p.h.	
250 miles, 5 hrs. 18 mins. 58 secs. = 47.02 m.p.h.	
2 hours, 107 miles 144.2 yds. = 53.91 m.p.h.	
3 hours, 149 miles 474 yds. = 47.95 m.p.h.	
4 hours, 188 miles 263 yds. = 47.03 m.p.h.	
5 hours, 234 miles 617 yds. = 46.87 m.p.h.	
6 hours, 283 miles 782 yds. = 47.24 m.p.h.	

BROOKLANDS, NOVEMBER 23rd, 25th, and 29th, 1920,

Vivian Prestwich, on a DIAMOND MOTOR CYCLE, fitted with 250 c.c. Standard Side-by-Side Valve 2 $\frac{3}{4}$ h.p. J.A.P. Engine,

BROKE 27 BRITISH RECORDS, 2 INTERNATIONAL RECORDS.

VIVIAN PRESTWICH, on a Diamond motor cycle fitted with a 250 c.c. J.A.P. engine. *British Record, November 23, 1920.*

Flying Kilo. Class A. 63.91 m.p.h.

Flying Mile. Class A. 63.60 m.p.h.

International Mean Speed Record, November 25, 1920:

5 miles. Class A. 59.4 m.p.h.

50 miles. Class A and A1. 55.81 m.p.h.

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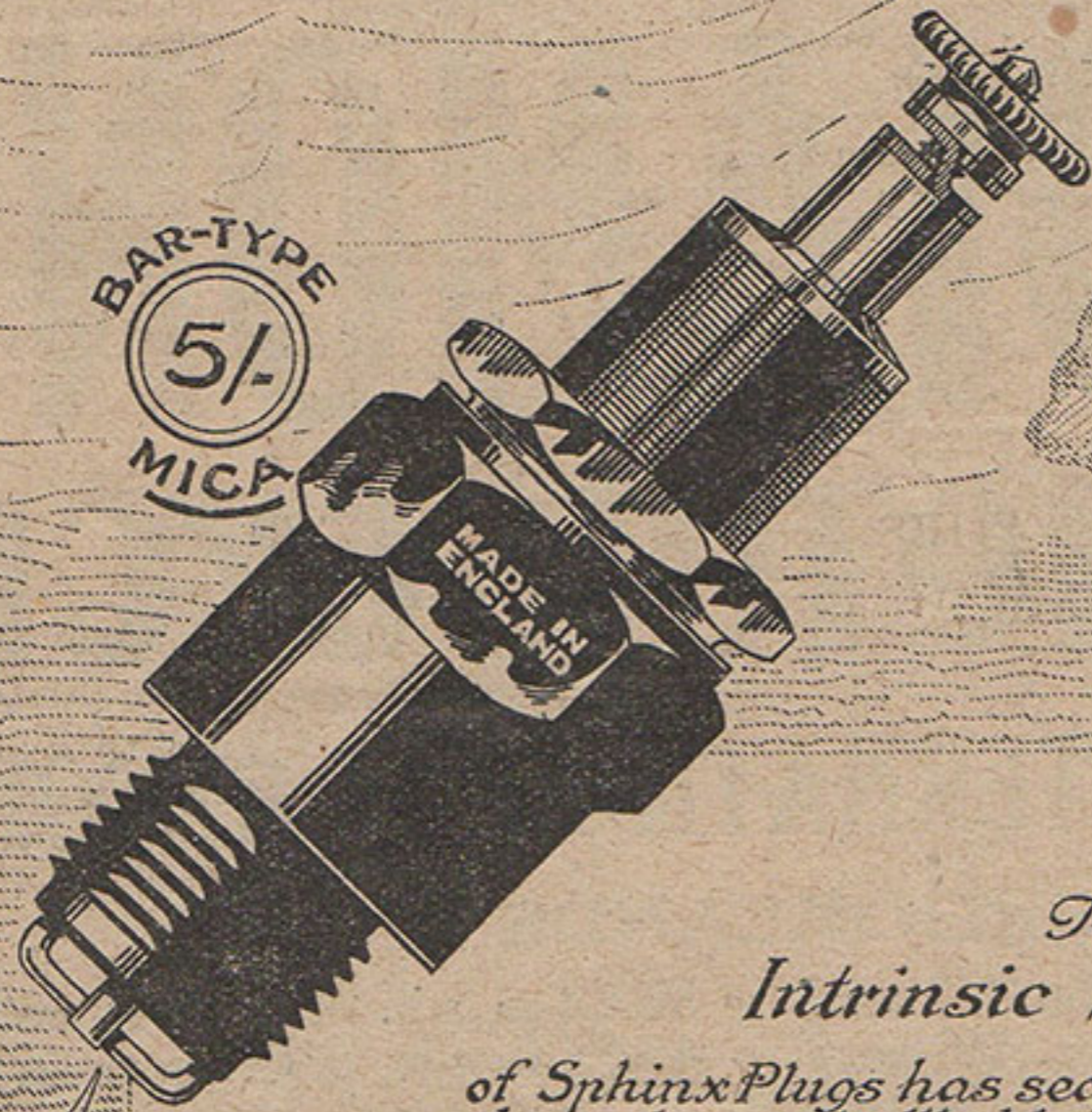
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In answering this advertisement it is desirable to mention "The Motor Cycle."

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Note the Bar.

THE SPHINX MANUFACTURING CO., LTD., BIRMINGHAM, ENGLAND.



THE MOTORCYCLE

ESTABLISHED IN 1903

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Licences in 1921.

ELSEWHERE in this issue we are able to give further particulars of the new licensing regulations, which come into force with the New Year. The Roads Bill to authorise the revised system was only introduced in the House of Commons on November 26th, and, as everything has to be in full working order by January 1st, county and county borough councils may find the time all too short.

Further, since the regulations concerning the licence card holders are available only three weeks before they have to be used, and also as owners of motor vehicles have to provide these themselves, it seems a little unreasonable to expect private enterprise to produce a quarter of a million of these holders in the short time available. Thus it will be seen that even if the local councils are ready in time, a situation may arise which will compel the authorities to grant a certain amount of grace.

The delay in bringing the matter before Parliament is not due to the Ministry of Transport, but rather to the many more urgent matters which have occupied the attention of the House since the passing of the Finance Bill, and any inconvenience caused by the delay must be borne with patience as being part of the difficult period through which we are now passing.

As regards the regulations themselves, unwelcome as they are to the majority of motor cyclists, they are not entirely without advantages. For example, in future it will be impossible for the age or history of a second-hand machine to be misrepresented, as the logbook, which will be issued to each owner, will give the history of the vehicle in a manner similar to the deeds connected with real estate. Again, the disposal of stolen machines will be rendered difficult.

No doubt the licence card, in full view on the near side of the machine, will offend many who have an artistic eye. Each year the colour will be changed—for 1921 the cards are to be blue.

Passenger Motor Cycles.

THIS week's issue of *The Motor Cycle* deals chiefly with passenger attachments and three-wheeled runabouts. The interest in these types is immense, and without doubt they are the cheapest possible form of long distance locomotion. Added to this, the motor cycle and sidecar provides a greater seating capacity than any vehicle short of a five-seated car, yet its upkeep is less than half. There has been a steady improvement in passenger machines throughout the past year, and there is a serious effort on foot to produce a sidecar outfit at a price to suit the purse of the man of very moderate means. Such efforts are to be highly commended, and it is to be hoped that they will meet with the success they deserve.

Lightweight Records.

SHOW week and the week preceding it are usually times of great activity at Brooklands, and 1920 has been no exception to the rule. Records have been broken all along the line by engines of 250 c.c., 350 c.c., and 1,000 c.c. Particular interest attaches to the performances of the miniature class, for there are still many who fail to realise that these tiny engines are a serious proposition, and are capable not only of high speeds over short distances, but also of long distance endurance records. Six hours at an average speed of 47.24 m.p.h., accomplished recently by a small four-stroke, calls for a high degree of accuracy in manufacture, as well as good design.

Once again the two-stroke has distinguished itself: this time the flying kilometre was covered at the rate of practically 67 m.p.h. by a 250 c.c. engine. Such a performance is wonderful for any type of engine of such small capacity, though we fancy it will be improved upon before long.

Earlier in the year we were able to chronicle a series of long distance records which were the first to fall to the simpler type.



Another "Clean" Overall.

THE College Leather Co., of Northampton, has brought out yet another leg overall which does not soil the trousers during removal. A "half sole" protects the boot in conjunction with the usual integral spat, whilst the calf and thigh are covered by an ultra-wide waterproof puttee, wound spirally round the leg in two turns, and clipped at the top of the thigh. This overall should be considered in selecting one of the "clean" pattern.

An Awkward Question.

THE persistent heckler suspected that the new 'bus at the Show had never smelt the road, and was trying to nail the salesman down to a confession of the fact. At last the latter had a brain-wave. "Never been on the road, my dear sir! But this is simply absurd. She came up to the Show by road yesterday afternoon!" The salesman wiped his brow as the heckler departed. Then he caught my eye and grinned foolishly. Had I not helped him to unload the 'bus from a motor lorry?

The Best Machine in the Show.

KNUTS forward, please? Not at all. I met a rider who is something of a judge; and the average clubman might not guess his choice in fifty attempts. He was falling off the deep end about the Reynolds Runabout (did you miss it, gentle reader?) Not because it could win the Team Prize in the Six Days. But because when the motor cycle follows the push-bicycle and becomes frankly utilitarian, he thinks the machine of the day will closely follow the Reynolds lines.

Weights.

I TOOK a great interest in the weights of 1921 machines at the Show, an interest shared only by those manufacturers who had managed to get inside the 200 lb. taxation line: the remainder seldom knew or cared what their machines weighed. If my researches were complete, the 4 h.p. Coulson showed the minimum figure (196 lb.) in the 500 c.c. class, with the solo Sunbeam (236 lb.) second. I asked the Coulson works manager in which parts he had effected his saving. He instanced the front fork (20 lb.), the gear box platform (12 lb.), and the saddle unit (3 lb.).

Chivalry Up to Date.

IN the old days the gallant male got himself well and truly perforated in the jousts because another male had commented adversely on the shape of his fair lady's nose. To-day the gallant male bores into a hailstorm on Dartmoor exposed like a weathercock on a church spire, whilst his lady love snuggles down into a capacious sidecar, fortified by an all-weather top, which prohibits alike any exchange of conversation or passing of chocolates.

In the Grill Room.

A CERTAIN machine is notorious amongst owners for its unusual oil thirst—a thirst which is stoutly denied by the designer, who ascribes his customers' lamentable consumption to foolish handling. Some of the riders were trying to pull the designer's leg. Said one: "This talk of heavy oil consumption is all guff. I never got less than 1,000 m.p.g." Another went one better with 1,200 m.p.g. A third stretched the facts very taut by claiming 1,500 m.p.g. Finally a fourth clinched the controversy. "My engine positively *dislikes* oil. I find it prefers a thin smear of vaseline on the outside of the crank case!"

Those Trade Riders.

HOW I envy the dexterity and aplomb of certain factory testers. Myself, I am a clumsy driver, and you can guarantee that a combination of tramlines and grease will unsaddle me seven times out of ten with a thunderous wop! So I dare not have ridden two or three machines at the Show which have their carburettors protruding far outwards to act as buffers in the event of a fall towards the left. Years ago I drove an American cycle car, which shivered its inlet pipe into flinders. I was able to get home by dint of some tin. rubber hose-pipe and copper wire; but a concerted carburettor would defy even my ingenuity in improvised repairs.

Overheard at the Scott Stand.

SHOW Visitor (with a grudge against the Scott demonstrator): "Hello! Same old 'bus? Looks as well and goes as badly as ever, I suppose?"
Scott Demonstrator (who had almost sold a Squirrel to a sporting rustic): "—!! —!! —!!!"

Show Visitor (incautiously): "Why do you call your new 'bus a 'squirrel,' anyhow?"

Scott Demonstrator (triumphantly ticking off the points on his fingers): "First, she can climb trees; secondly, she's the 'bus for the (k)nuts; thirdly, she never sheds a nut."

(Exit Show Visitor, somewhat quelled.)

Overheard at the X—Stand.

EMINENT technician is seen haughtily approaching a machine of novel design at the Press View. Its designer, an earnest, unknown, but promising engineer, temporarily disguised in dirt and overalls, recognises the eminent technician, and steals furtively up behind his coat tails, hoping to overhear a few laudatory comments. Eminent technician inspects the machine closely, with disguised designer breathlessly stooping at his left rear. After ten minutes eminent technician straightens himself and remarks wearily to his friend:

"Any more tripe around?"

(Earnest and promising engineer swoons in the arms of the stand charwoman.)

"Our Saloonette."

SUB-TITLE, "Two minds with but a single thought." The scene was a sidecar stand at the Show. The salesman had got a husband and wife seriously interested in his latest limousine model. It was the fifth day of the Show, and he was talking automatically like a parrot, or a guide to one of our cathedrals. Finally he reached his peroration—"I am sure if madam will kindly get inside and try the seating . . ." He bit his lip. He had caught madam's eye. Madam was eyeing the narrow door rather severely. The salesman's eye travelled from madam's eye to madam's waist. He broke off resolutely, "Now, immediately behind you, madam, is our heavy touring model . . ." Anyway, there were sidecars for all sizes at the Show.

Other Times, Other Manners.

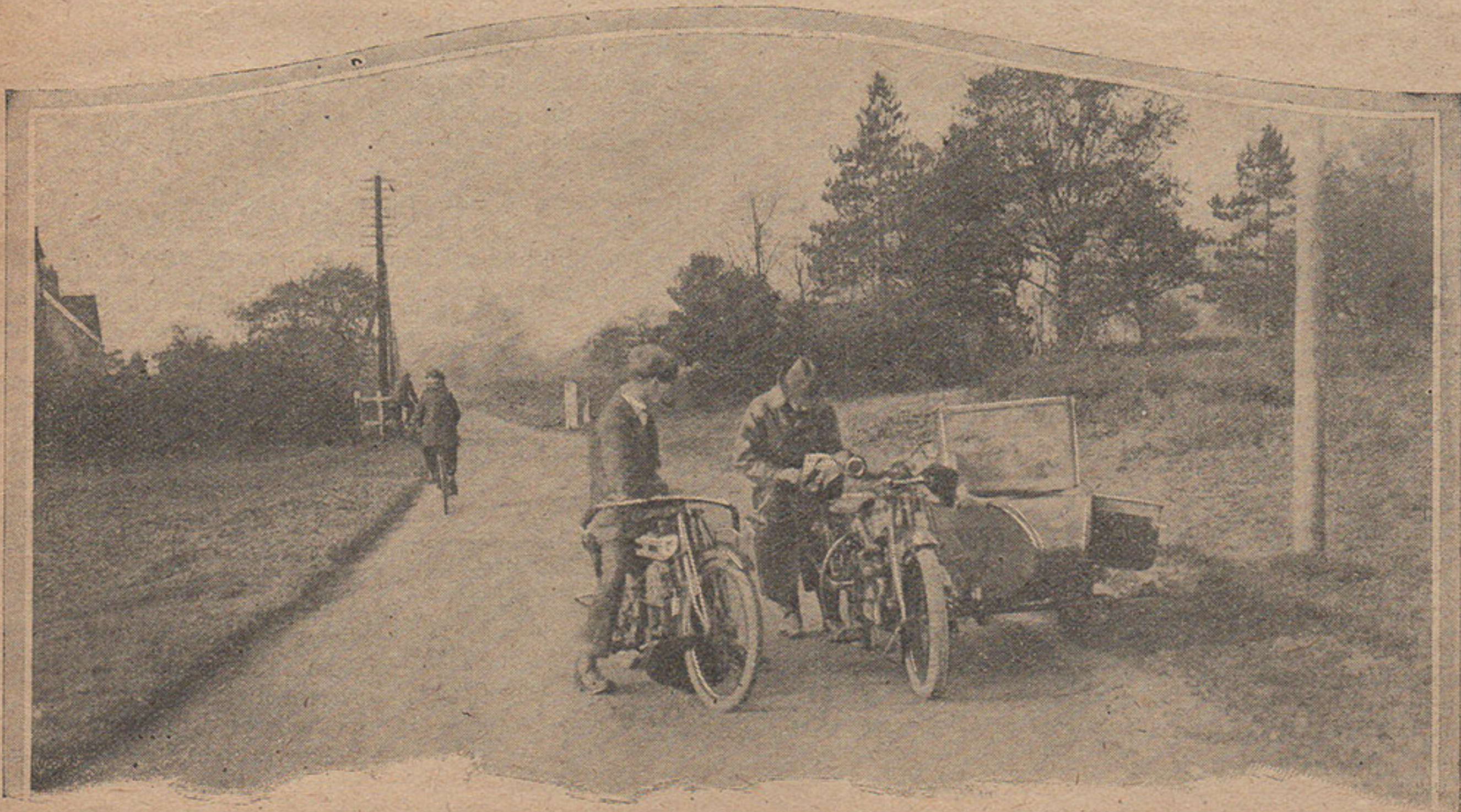
ON Show Sunday I read Lord Rothermere's weekly effervescence against squandermania with a novel respect. Somebody really ought to bring home to Mr. Austen Chamberlain the parlous state to which he is reducing the finances of the country. In the halcyon pre-war days if I met a managing director at the Show he usually shouted: "Hello, 'Ixion'; what's yours?" I never ordered bubbly in response to such invitations; in fact, I am a semi-Pussyfoot; but it was comforting to know one had a wide and costly choice. This year when I bumped into any trade magnate I could see his eye flickering. He was asking himself: "Let's see, have I stood this fellow a drink to-day or not?" Then, having answered his own question in the negative, he would remark cautiously: "Come and have a small beer with me, old man!" Cheerless times, my masters, eh, what?

No More Studs?

IN the golden days of yore the super-knut was wont to keep so many motor cycles that impertinent and envious friends used to accuse him of trying to breed them. You cross a Morgan Runabout with a W.D. Triumph, and get a Baby Levis free gratis, or something of that sort. At any rate we used to send our staff panoramic camera down to some moated grange, and come back with a view of the machines owned by J. Dorée, Esq., of Ch. Ch., Oxford—the resultant block would stretch across a double page of *The Motor Cycle*. Never again. These new licences, which you pass on when you sell a machine, have stopped all that. One of our staff, who mingles motor cycles with small car work, calculates that his 1920 mounts would have cost him about £75 in licences at the 1921 rate.

Taxable Weights.

AT the opening of the Show the question of weight was not quite so much to the front as the facts would have justified. The general public are as yet hardly awake to the facts. They have not realised that whether a bicycle weighs 200 lb. or 201 lb. makes a difference of 30s. to its 1921 tax; nor yet that a three-wheeler or sidecar weighing 894 lb. pays £4 tax, whereas one scaling 896 lb. pays the h.p. tax, which may amount to a cool tenner. Nevertheless, those salesmen whose machines were near either of the border lines had fully tumbled to the situation, and it looked as though a lot of new show cards might be rushed out during the week. Most of the light and mediumweights had been on the scales just before this Show. I am not sure that they were not afraid to weigh some of the bulkier passenger machines.



ARE YOU ALL RIGHT? It is safe to say that every motor cyclist who, some time or another, has stopped to effect a repair or adjustment, has heard this familiar question from a fellow rider. It is a courtesy which has done much to build up the great brotherhood of the highway.

LESSONS FROM OLYMPIA.

Tendencies of Modern Motor Cycle Design as exemplified at this Year's Show.

A FEATURE of the 1920 Olympia Show was the fact that almost every machine exhibited has either had a thorough trying out, or else is constructed on such sound and orthodox lines that mistakes are hardly possible. There were, it is true, certain striking innovations, but amongst motor cycles proper these were rarities and could generally show excellent reasons for their departure from standard practice.

Naturally, the engineer is first attracted to novelties in engine design,

and it is noticeable that almost every new or redesigned engine is fitted with mechanical lubrication; the 8 h.p. Enfield, 3½ h.p. Martinsyde, 3½ h.p. and 2¾ h.p. Douglas, 4¼ h.p. Ariel, Superb Four, Corona, and Bradshaw may be mentioned as sufficient examples which may be added to last year's list, while many other manufacturers are contemplating the use of some proprietary pump.

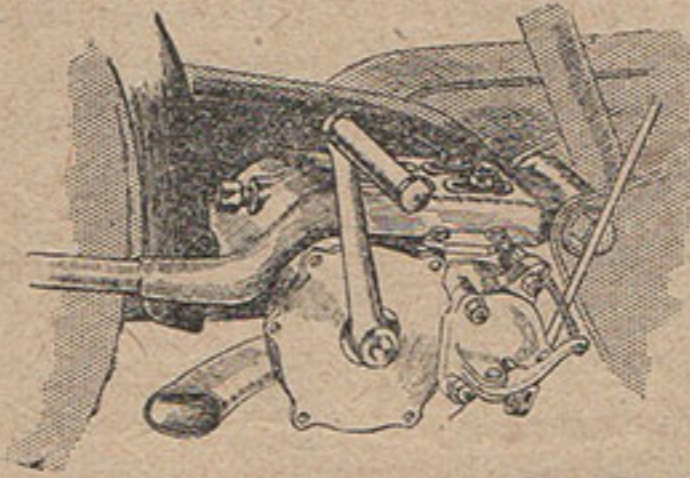
Lubrication.

Amongst those systems which may be classed as mechanical, though they do not actually employ a pump, is the very interesting scheme carried out on the little two-stroke J.E.S. In this case oil is fed to the main crank bearing by gravity, and passes to the big end bearing through drilled oilways. The connecting rod and gudgeon pin are also drilled, and at the point of maximum piston speed, *i.e.*, about half-way down the stroke, all these oilways are in communication,

An advantage of the Best mechanical pump is that it is designed to work in conjunction with existing semi-automatic drip feeds

so that oil is flung by centrifugal force up the connecting rod, into the hollow gudgeon pin and on to the cylinder walls.

Undoubtedly, one of the features which attracted most attention was the new Bradshaw flat twin. Here lubrication is carried to such an extent that it intentionally forms the most important part of the cooling system.



On the big Excelsior chain adjustment is carried out by a simple bolt which slides the gear box along its platform.

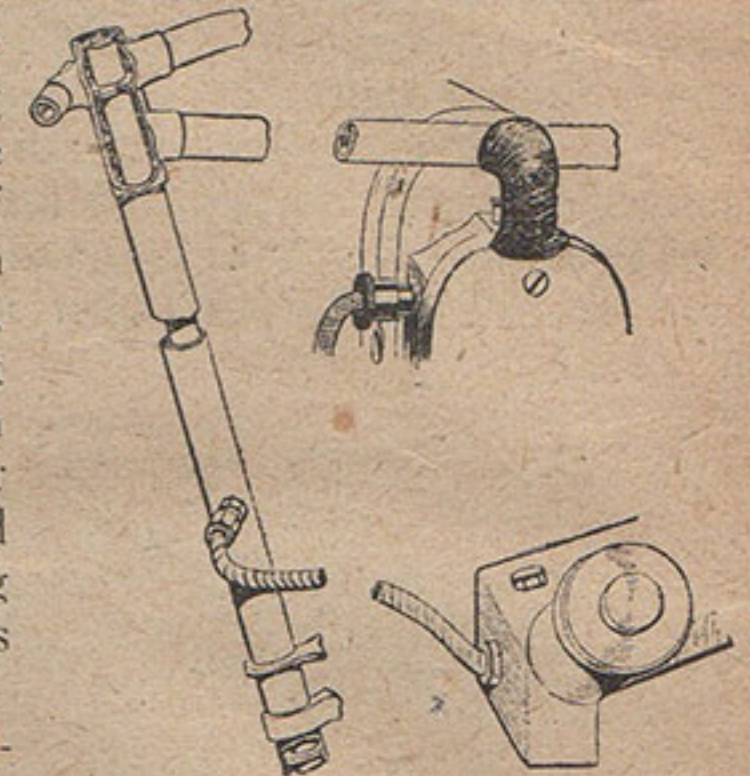
War-time research on aircraft engines demonstrated the fact that nearly fifty per cent. of the heat dissipated by a so-called air-cooled engine took place through the crank case and oil, and this without any special precautions for crank case cooling. It is, therefore, fairly obvious that if the design is specially laid out for the purpose, better cooling can be obtained.

Oil Cooling.

For this reason the cylinders are sunk into a special crank case, and are

liberally lubricated by surplus oil forced to the big ends. Special precautions are taken in order to distribute this oil over the whole of the crank case and timing gear so as to make the best possible use of the large aluminium radiating surfaces, and finally the hot oil is withdrawn from the base by another pump and returned to the tank, being cooled in the process of circulation.

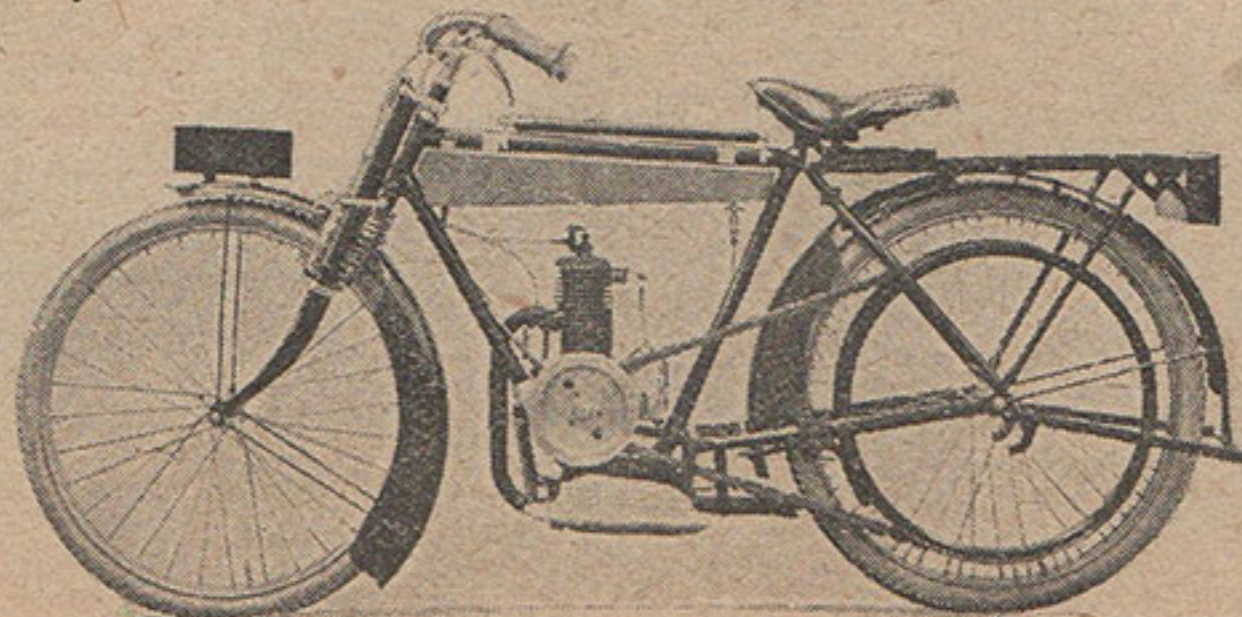
Several other lubrication systems of considerable interest were exhibited. Amongst these the Best pump deserves special credit, since, though it cannot be classed as a pressure lubricator, it relieves the rider of responsibility, and is applicable to most present-day



The Wooler lubrication system. The oil contained in the air release from the timing case is forced against a baffle at the top of the saddle tube, and, falling to the lower end of the tube, rises to the level of a pipe which returns it to the sump.

motor cycles. The Cykelaid attachment also comprises an interesting mechanical lubrication system.

Two-stroke lubrication shows a tendency to depart from the simple petrol system in favour of various methods of drip feed. The Velocette remains the sole example of mechanical pump lubrication in this class, but the Levis



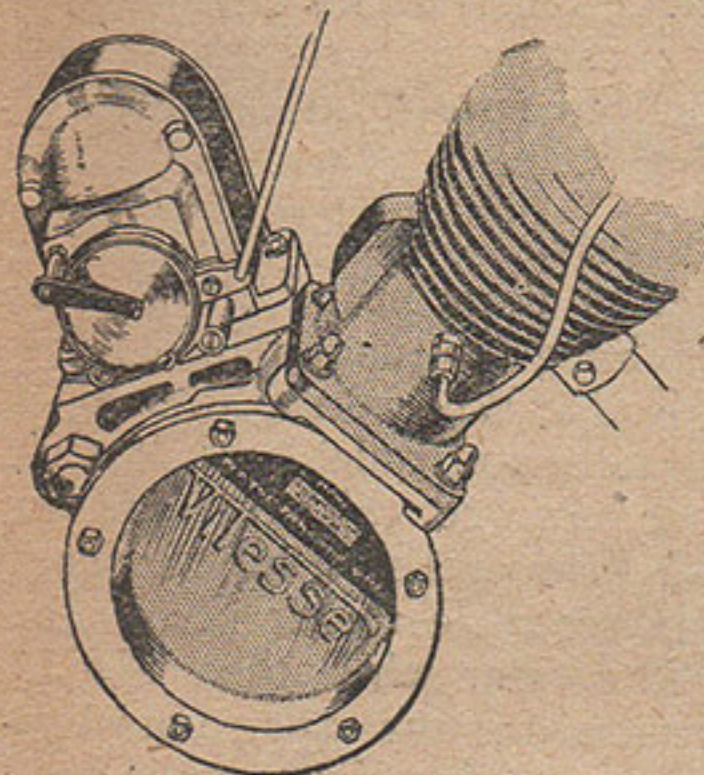
A genuine lightweight. The two-stroke J.E.S. is the 1921 development of the motorised bicycle.

Lessons from Olympia.—

naturally retain its well-known system of separate leads to each vital point. An ingenious system, utilising the exhaust gas as an injector, proportions oil feed to engine load on the Sheffield-Henderson.

Cooling.

We are often told that existing cooling methods are adequate for present-day engines. Be this as it may,



Possessing only one main crankshaft bearing, the Sun has a large detachable cover to the off side crank case.

our manufacturers have apparently discovered that, as detail improvements raise the power output and efficiency of their engines, better cooling arrangements become necessary. There is ample evidence of larger cooling areas and redistributed surfaces, and these evidences are likely to increase in the future, since better cooling permits of greater power output, and greater power output

requires better cooling. There is no doubt that the limit of cooling and power output is not yet in sight, though the Bradshaw engine opens up a new and very promising field.

A most interesting engine, the Superb Four, employs a *monobloc* aluminium casting with steel liners. This method should be excellent, provided distortion does not make its unwelcome presence felt.

With the exception of the little Whippet scooter, the Superb is the only example of aluminium construction, though there are one or two instances of detachable aluminium fins. Speaking broadly, the use of aluminium pistons does not appear to have caught on, possibly because they have in many cases been designed for weight reduction rather than for cooling purposes.

The ultra-light aluminium piston is apt to demand big clearances, and thus produces an objectionable "slap" until it warms up, and until it is more generally realised that a certain amount of metal is necessary to distribute the heat, no very great progress in this direction is likely.

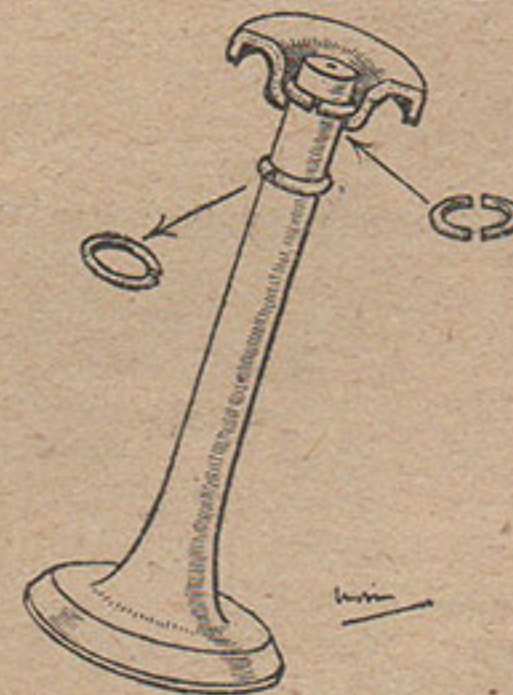
One or two firms who specialise in sporting engines offer a choice of aluminium or cast iron, and several other large concerns are making serious experiments with pistons constructed of the lighter metal.

Two-strokes.

Two-strokes are undoubtedly advancing steadily, and the wonderful speed record of 66.97 m.p.h. over the flying kilometre, established during Show week by a 250 c.c. Velocette, will do much to encourage two-stroke designers. Certainly the average two-stroke is a far superior article to its pre-war prototype, though there is still comparatively little reliable data to help the two-stroke designer. Rotary inlet valves, such as are employed on the Scott Sociable, are likely to gain ground, since, by their use, it is possible to diminish losses in the crank case charge, and thus increase power and improve consumption.

Lubrication and cooling are both capable of improvement from the public's point of view, though both have definitely progressed during the past year. Deflector shapes and piston cooling have made advances, and will continue to do so, though at the present moment there are no two deflectors alike.

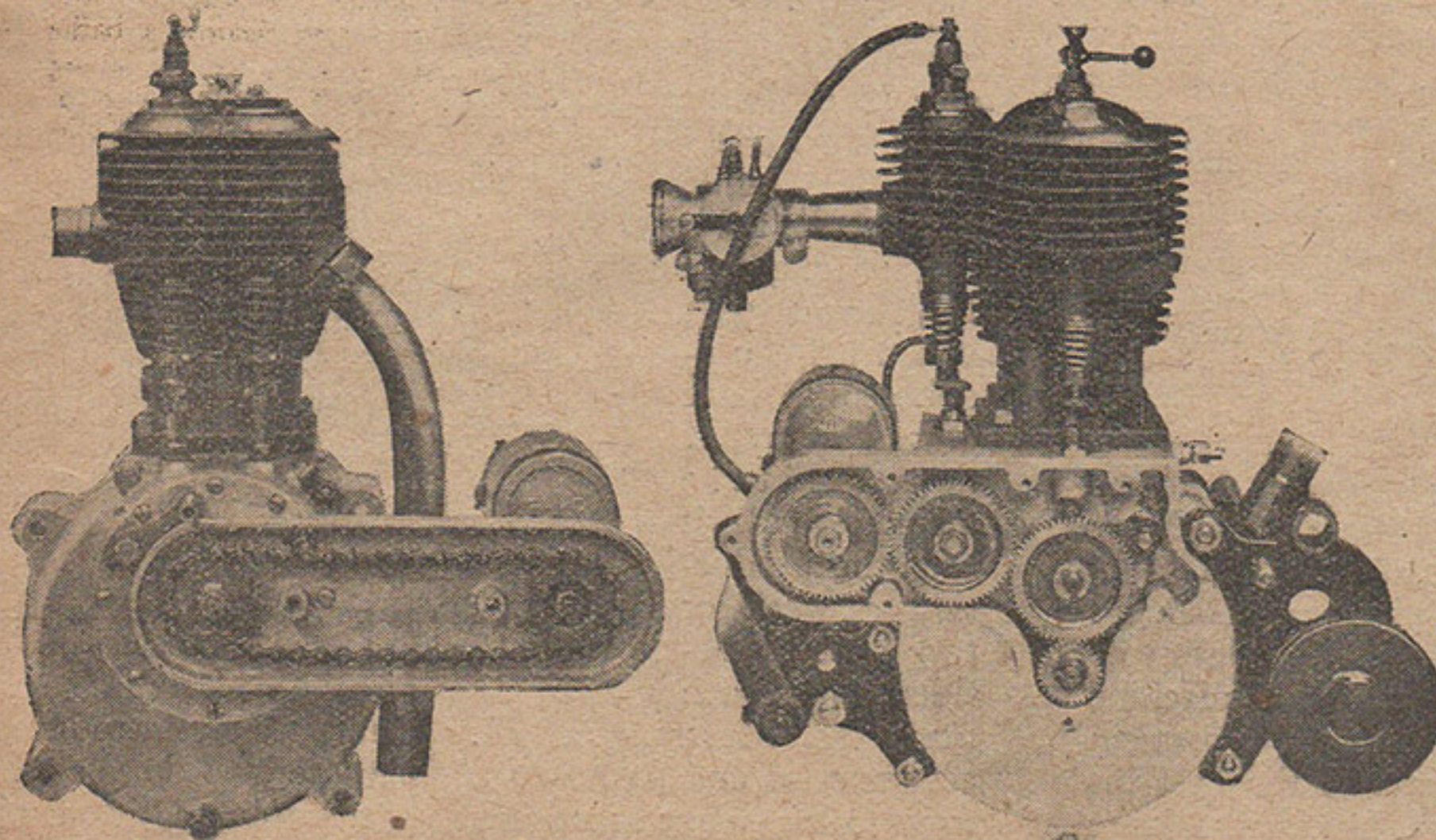
The new and enlarged edition of the Cedos is a fascinating little engine, and with its machined ports should standardise performance to a considerable degree.



One of the valves of the Superb Four engine showing the split ring at the top for keeping the valve spring cup in position, and the subsidiary split ring below, for preventing the valve falling into the cylinder should a breakage occur.

Another feature which requires attention is the ignition range provided on the average two-stroke. By reason of its inherent features, the two-stroke requires a very large ignition range if the best results are to be obtained; yet, since the magneto is driven at engine speed instead of half-speed, the normal range is decreased to just half that of the four-stroke.

The Villiers flywheel magneto is a distinct step in the right direction, and the popularity of this unit amongst motor cycle assemblers is sufficient proof of its all-round merit. The Villiers Co. have had such an enormous experience with the small two-strokes that they have naturally developed many little points which might well be studied.



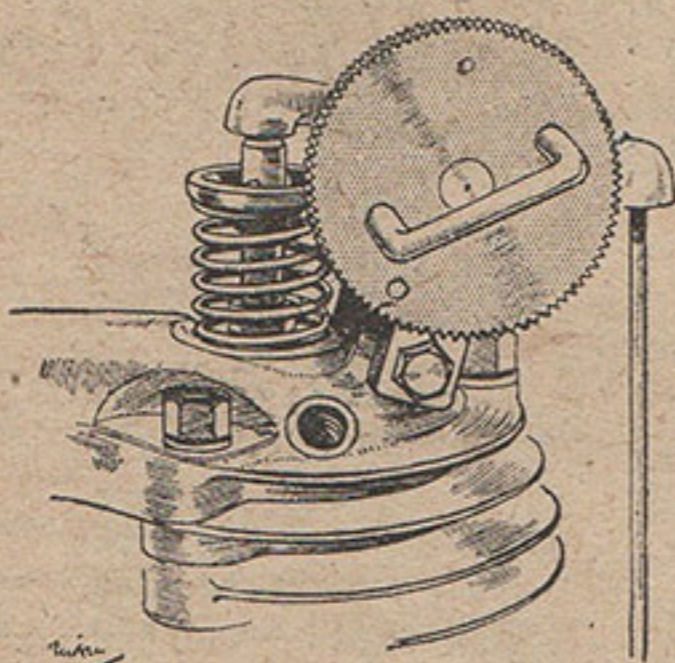
Two examples of magneto drive on single cylinder engines at Olympia. (Left) On the B.S.A., where a chain is used. (Right) The gear transmission (embodying timing gear) of the Quadrant

Lessons from Olympia.

It is impossible to leave the subject of two-strokes without mention of the 500 c.c. Dunell. This engine utilises a double diameter piston so as to increase the crank case charge, and its wonderful performance in the A.C.U. Six Days Trials is proof of its capabilities.

Transmission.

There has been so little change in transmission that the subject may be dismissed in a few words. Messrs.



Instantaneous adjustment device for overhead valve rocker on the Rudge.

Rudge - Whitworth provide two of the only novelties, one a solidly constructed countershaft gear fitted to the biggest twin - cylinder machine entirely produced by any one British firm, and secondly, an all-metal belt, which is said to be "slip-proof" even in water. If this belt proves to be a success, it will add considerably to the

popularity of belt-driven machines, and the results of its tests will be watched with some interest. A new gear box is shown on the 5 h.p. Lea-Francis, the Jukes four-speed gear is fitted to the Olympic, and the Comery three-speed proprietary gear is likely to make a splash, since it is very neat and beautifully made, and will be turned out in considerable numbers in the near future.

Worm drive on the Unibus is a novelty in two-wheeler construction, and the Superb Four and new Wooler chain-driven models are newcomers to unit engine and gear box systems.

Frames.

Few novelties in frame construction made their appearance. The Cotton is already a well-trying proposition, and the only real advance in construction is the general use of steel lugs. New spring frames are few and far between, but the number of auxiliary suspensions is legion: in fact, it is clear that, for the immediate future, manufacturers as a whole are content to look after the comfort of the rider rather than the well-being of the machine. Certain difficulties crop up in designing a satisfactory spring frame, and it would appear that these are being evaded, for the present at any rate. There is, however, a laudable tendency to fit larger tyres, which will help both rider and machine to some extent.

Weight.

Amongst manufacturers of the smaller class of machine, many are prepared to certify the weight of their products at under 200 lb. This is as it should be, but there are still too few of the 3½ h.p. class who have managed to turn out a fully equipped machine at under the 30s. taxation limit. The 3½ h.p. twin Dot-Jap is a good example, but perhaps the best instance in the Show was the 4 h.p. Coulson. Here we find a machine fitted with a standard 4 h.p. Blackburne engine, Sturmey-Archer three-speed gear and spring frame, weighing only 196 lb., and yet the weight

reduction has not affected the strength of any vital part. An examination of this machine proved most interesting, and close inspection was required in order to discover the ingenious methods by which unnecessary poundage had been avoided.

On the other hand, at least one 3½ h.p. single-gear machine tips the beam at over 200 lb., though there is no apparent reason for this discrepancy in weight. Unsatisfactory as the new taxation appears, from the motor cyclists' point of view, it may at least have the advantage of inducing manufacturers to discard excess weight, and once improvement is started in the smaller classes it is bound to spread to the heavier types.

Gadgets.

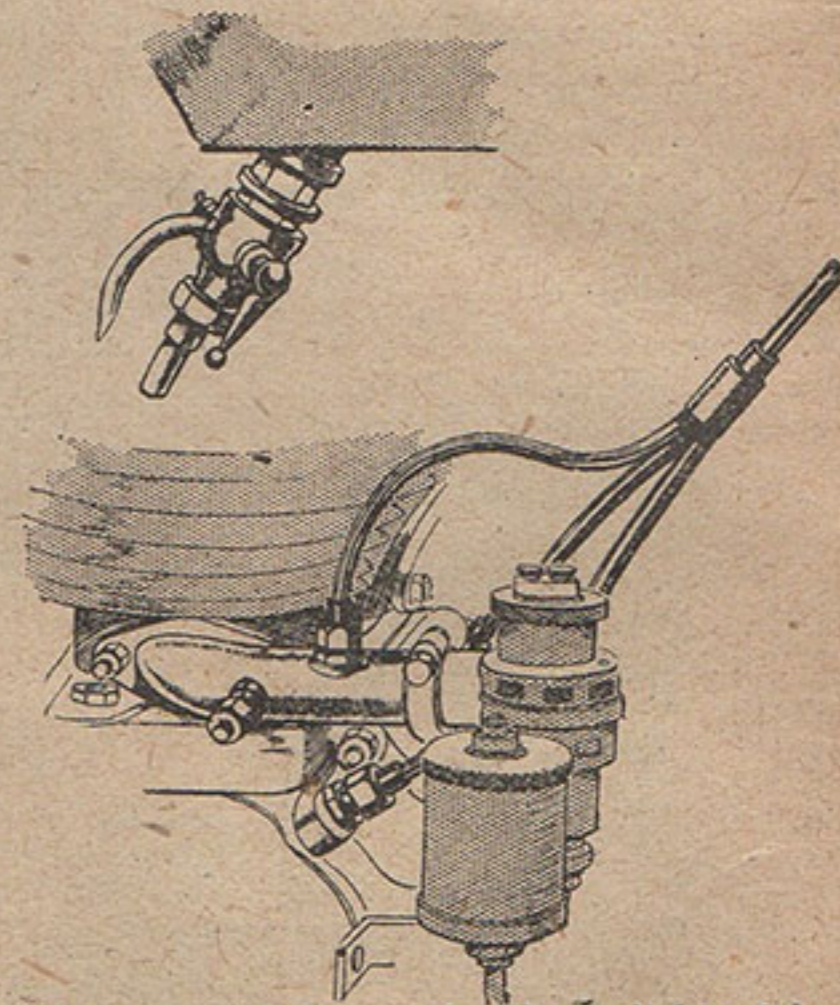
There are perhaps fewer of those neat little fittings to assist the rider in maintaining the tune of his engine than usual, but Messrs. Rudge-Whitworth, who have already introduced the neatest and quickest belt tensioning device in existence, showed this year an instantaneous adjustment for their overhead inlet rocker. Briefly, this consists of an eccentric rocker pivot pin, which can be rotated by the rider while the machine is in motion, thus compensating for any expansion when the cylinder warms up. A very fine adjustment is provided, and the device locks itself by means of serrations which engage with a deeply milled wheel on the end of the rocker pin.

Another very handy device is the arrangement by which the carburetter of the Bradshaw engine may be moved laterally to correct uneven distribution. This also may be done whilst the machine is in motion; in fact, I am informed that J. L. Emerson has performed the operation at speeds in excess of a mile a minute on Brooklands.

Lighting.

No observer, however casual, can have failed to notice the extraordinary increase in electric lighting for motor cycles.

Following on the success of the Lucas Mag-dyno, the M-L Maglita has got a firm hold on the less luxurious machines, while the new B.T.H. lighting set for two-strokes would undoubtedly have graced many of these little mounts had it been in production a week or two earlier. Besides this, such

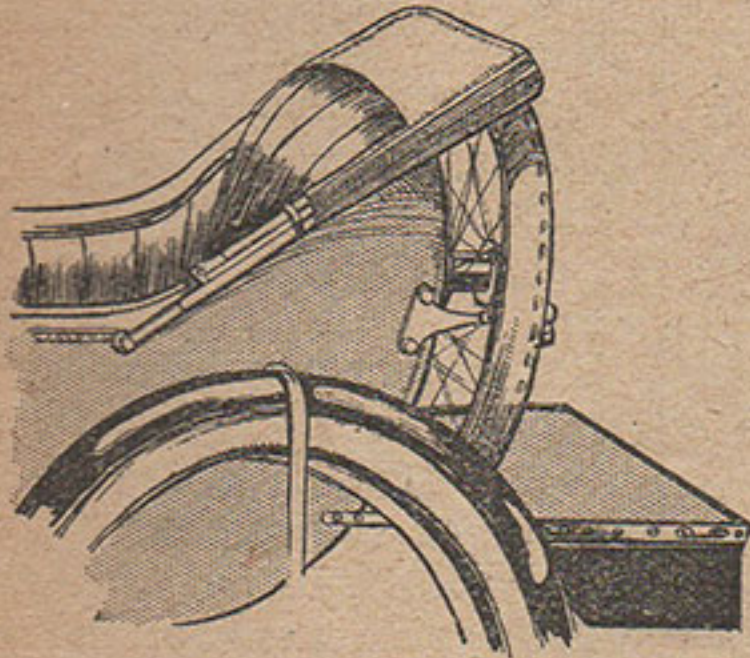


Three-way oil pipe on the Vindec lightweight. (Inset) Combined petrol and drain pipe.

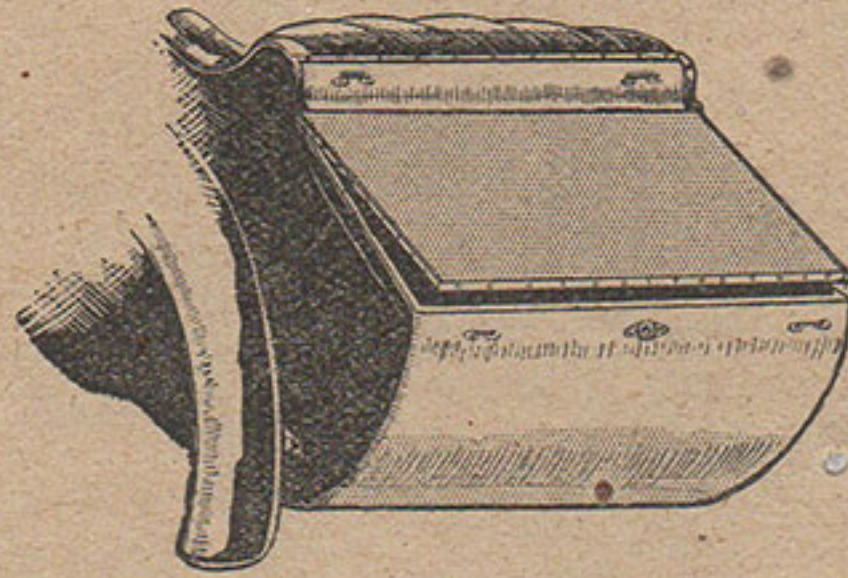
firms as Messrs. A. H. Hunt have introduced accumulator and battery sets for those who do not care to go to the extent of utilising a generator. Other first-class systems were to be found in the Gallery, notably the Rotax; and most American machines are supplied with self-contained lighting plants. **UBIQUE.**

COMFORT AND CONVENIENCE.

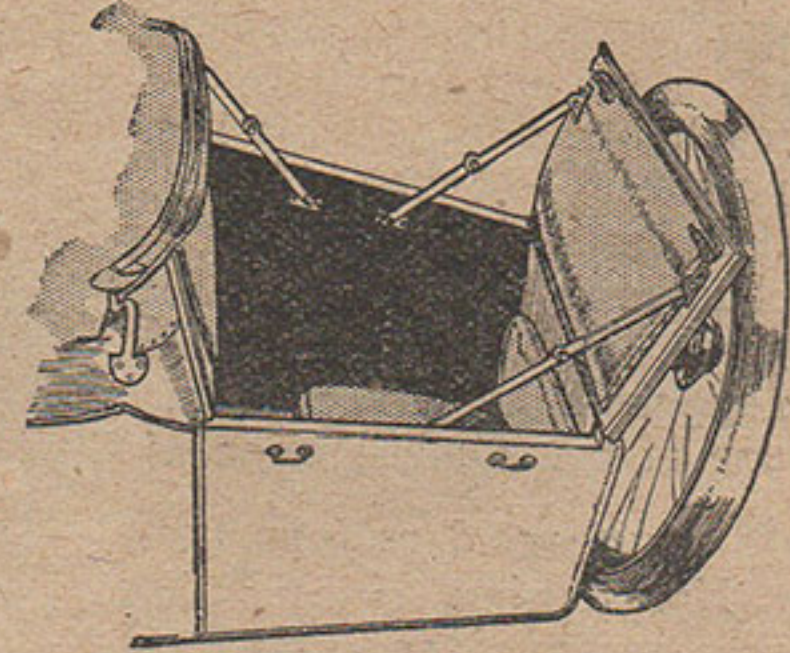
1921 Sidecars from the Passenger's Point of View.



A convenient place for a tool locker is under the luggage platform, as on the A.J.S.



A locker that takes the place of a luggage grid is a feature of the new Ariel sidecars.



The Rex dicky is contained in a boot, after the fashion of the car.

AT last week's Exhibition it was not only the mechanics of a motor cycle which interested prospective purchasers of sidecar outfits. It was apparent that motor cyclists have learned to consider their passengers' comfort.

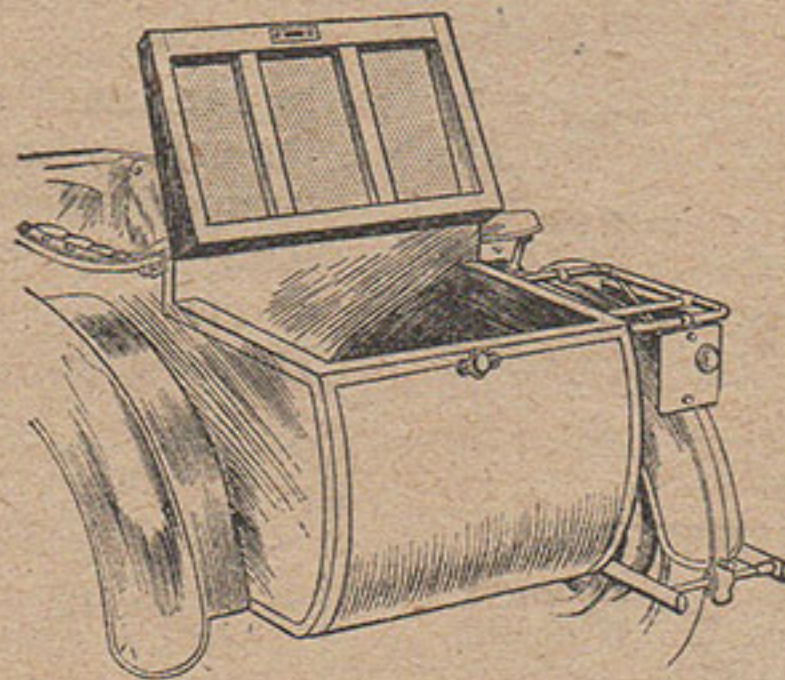
Among the visitors there were buyers who were accompanied by their wives or *fiancées*, and many were passengers of experience. This fact was obvious by the questions they asked, and the points they examined for themselves.

This interest in the sidecar portion of an outfit on the part of the passenger no doubt resulted in many a debate until a compromise was found to satisfy both mechanical driver and meticulous passenger. At the present moment probably there are men who have dreamed during the summer of a light sporting outfit, who are reconciling themselves to a larger machine in order that the demands of their passengers are fully met.

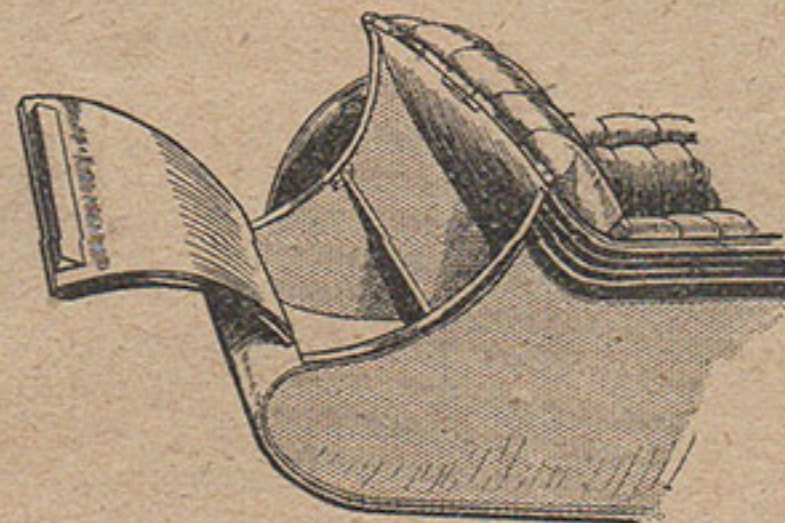
Many Improvements.

"Much" almost invariably "wants more"—it is a perfectly natural sequence in most things. No one wants to take a retrograde step, and there are few who motored this year who cannot suggest some little improvement for 1921.

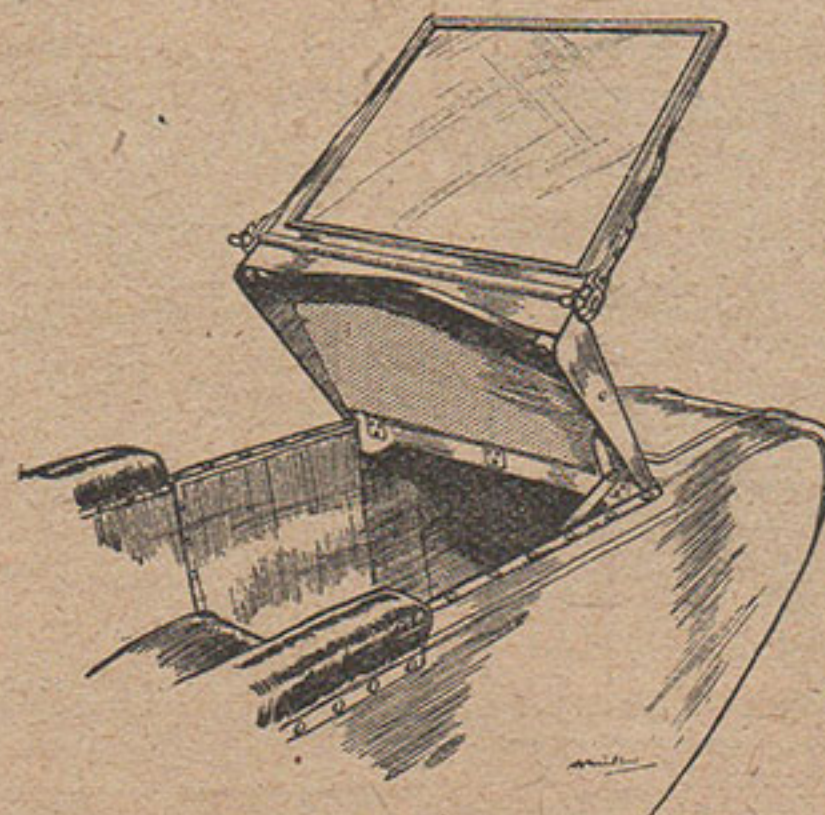
A visit to Olympia made at least one thing certain. There are many improvements in sidecars to give their occupants greater comfort. That many designers now ride in their productions is obvious to all who are passengers, just as it is clear that some of the sidecars have not been produced with full consideration of the passengers' convenience.



Some idea of the large luggage capacity on the B.S.A. sidecar may be gathered from this drawing of the opened locker.



In the Sandum touring model, the rear locker has partitions, conveniently dividing the space.



On the 1921 Matchless, the combined windscreen and dash hinges forward when the passenger desires to enter or leave the sidecar. This hinged flap eliminates the necessity for the passenger's apron.

We refer to the several comparatively high-sided bodies without doors which were not equipped with a step. One wonders what would happen if our laws were as they are in China, where a lady was recently imprisoned for revealing her ankles. Even with fashions and the standards of decorum as they are to-day in this country, it is difficult to imagine a member of the fair sex entering or leaving such a sidecar gracefully.

That it is quite easy to give the passenger the convenience of a step in this type of sidecar is well illustrated by the Sheffield Henderson and several others. Even on a touring sidecar with a door a step is a convenience still overlooked by a large number of makers, although the number so fitted have considerably increased.

The Seat Locker.

An outstanding feature of the new sidecars is the amount of locker space available in the touring models, and some of the small sporting attachments have commodious lockers in the rear part of the body. The sporting models of the Montgomery and Grindlay are good examples of the latter type.

That abomination of most passengers, the seat locker, is still almost general practice, and while one must agree that such lockers utilise space that otherwise would be wasted, in use they cause a great deal of inconvenience through lack of consideration on the part of the driver who sometimes stores therein many things he should carry in his tool bag.

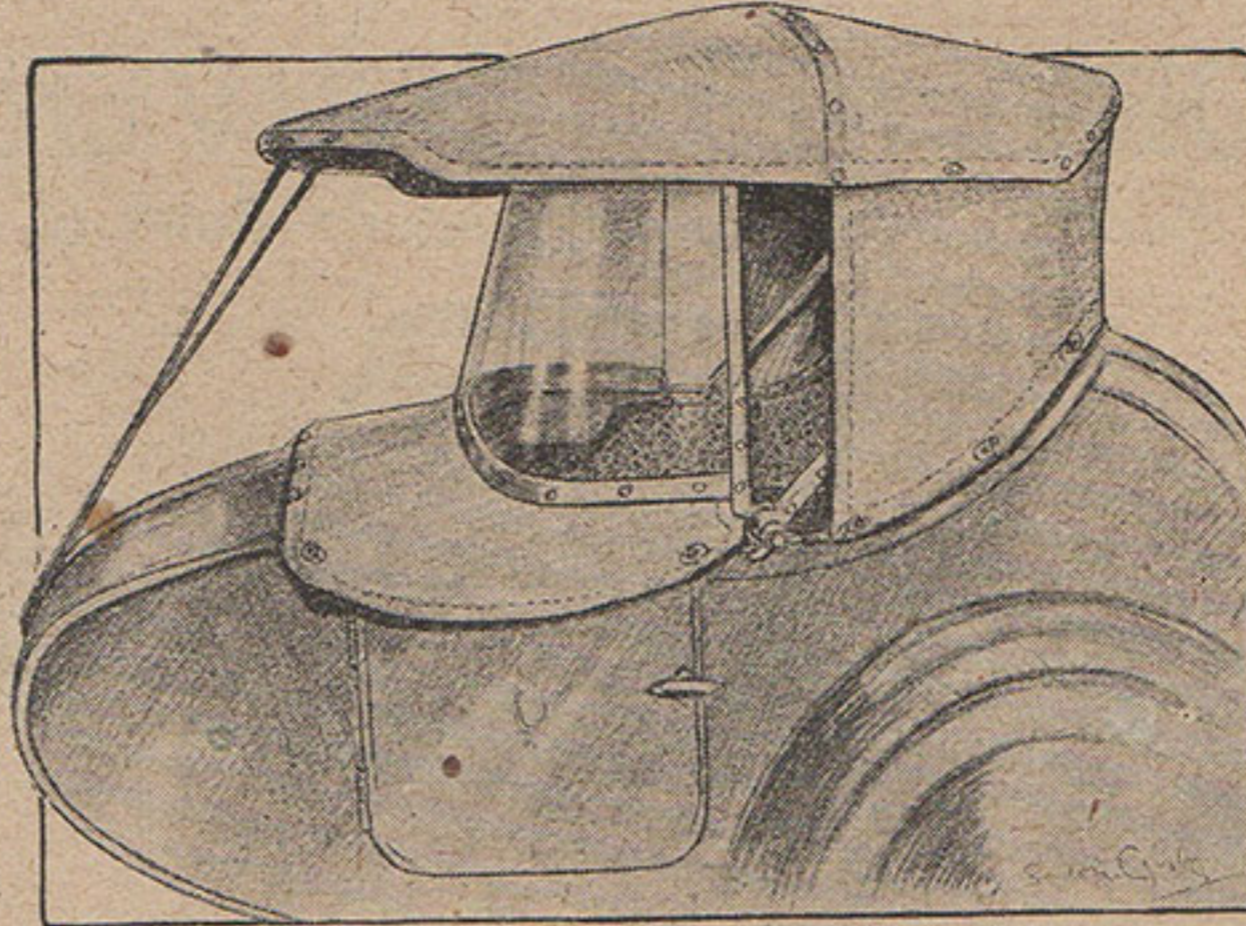
Seat lockers should only be used for such things as accumulators, and items which should not have to be disturbed in the course of a run.

Comfort and Convenience.—

Glove lockers in the after end of the nose panel are a convenience when they are not so far forward under an apron as to be rendered almost unreachable. The increasing popularity of the hinged dash may bring about a change in position of the glove locker, which has happened in the case of one of the Dunhill models.

Luggage Lockers.

No touring sidecar is now regarded as complete unless it has a rear locker. At Olympia rear lockers varied in size and shape from those sufficient for a few spares and a kit of tools to others so large that the need for a luggage grid is eliminated. The latter type represents one of the chief improvements in 1921 sidecars, of which the Ariel and B.S.A. outfits are splendid new examples.

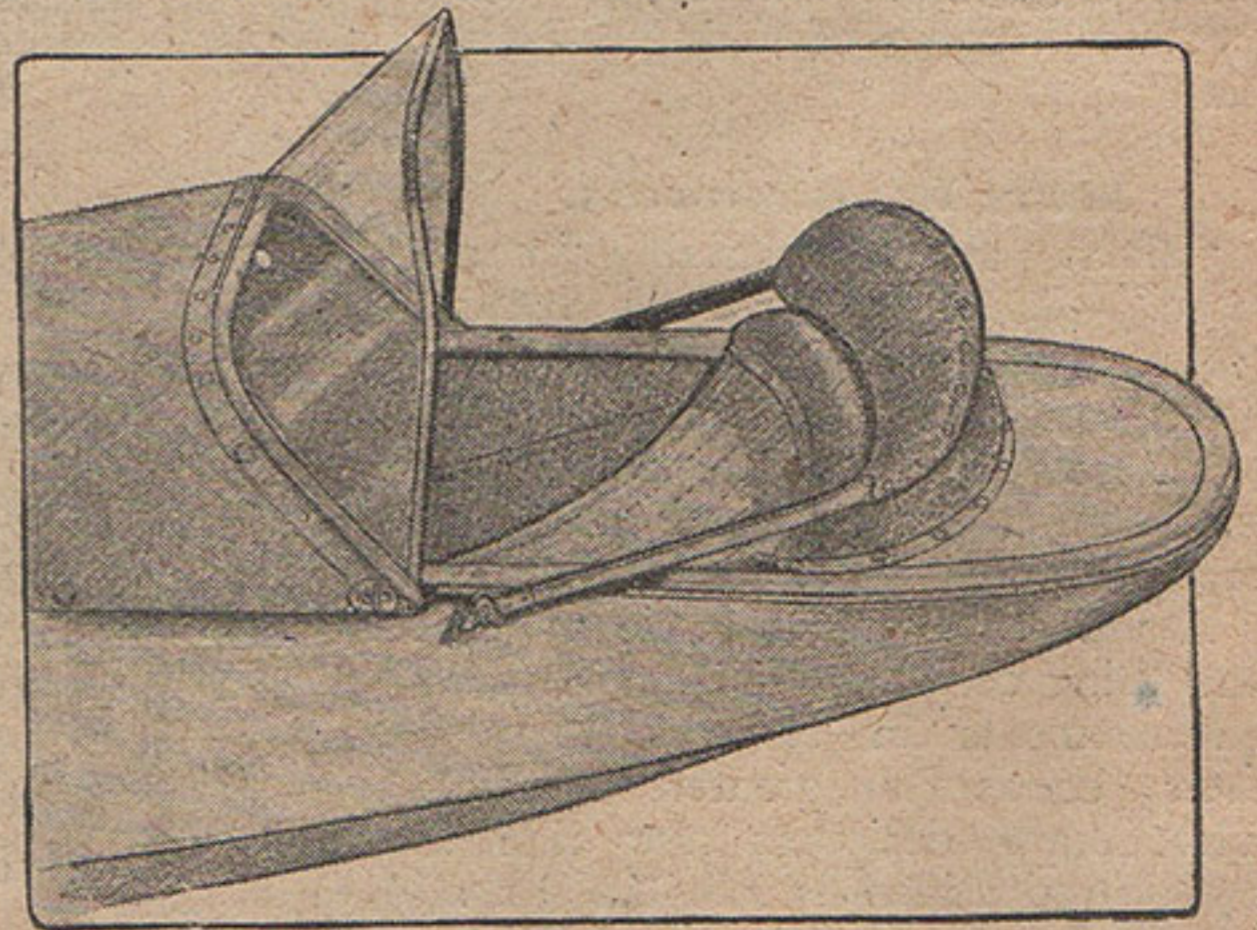
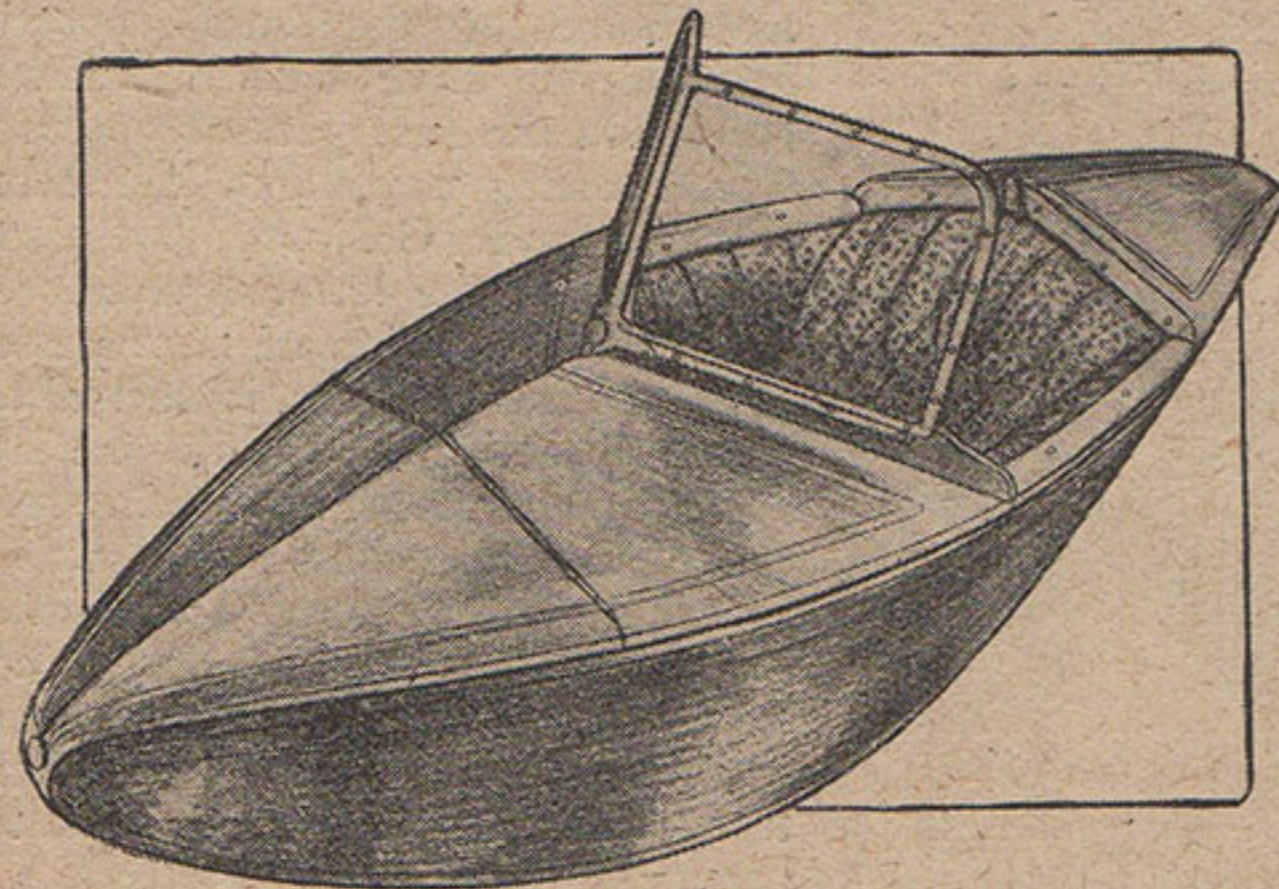
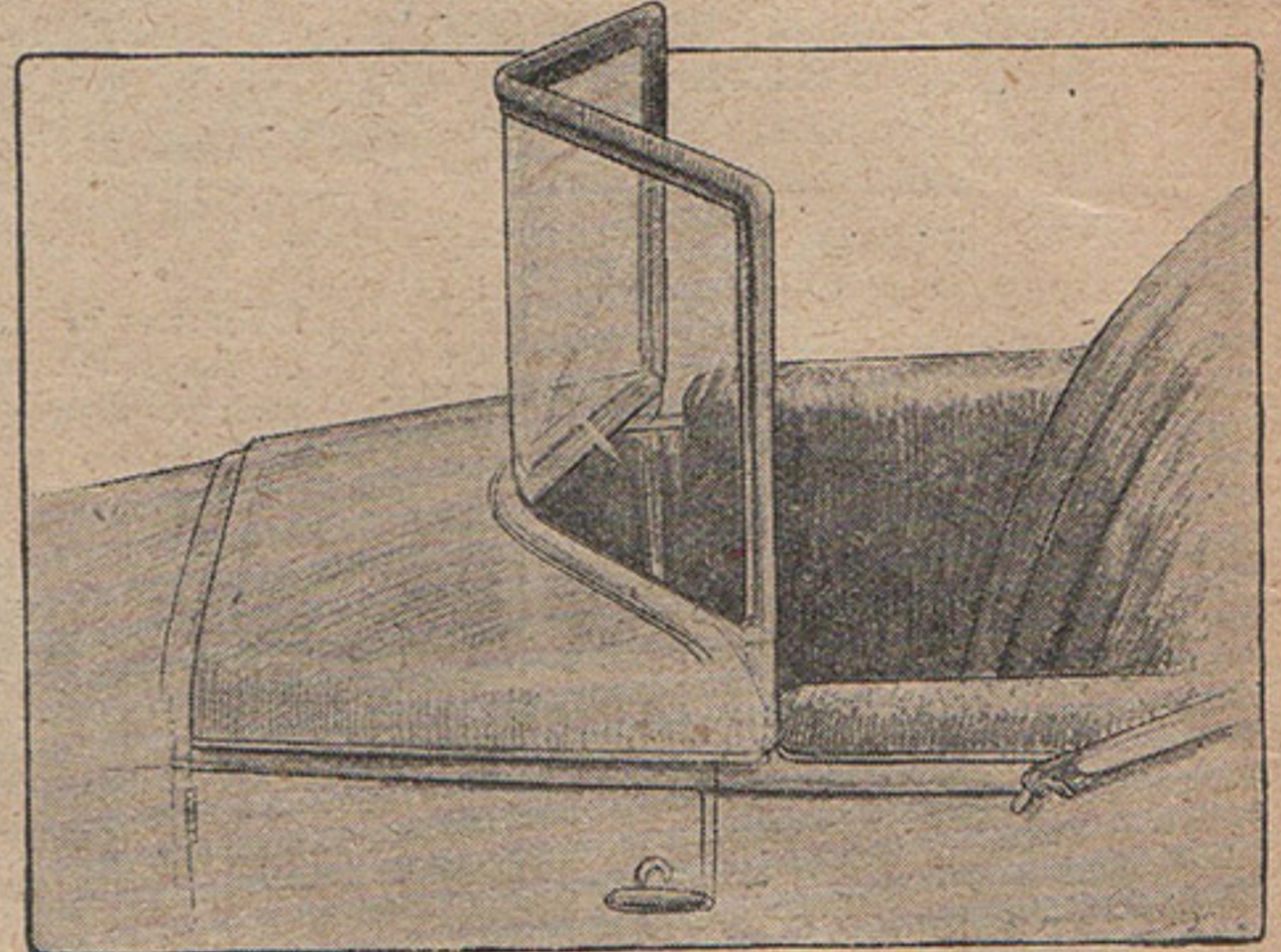
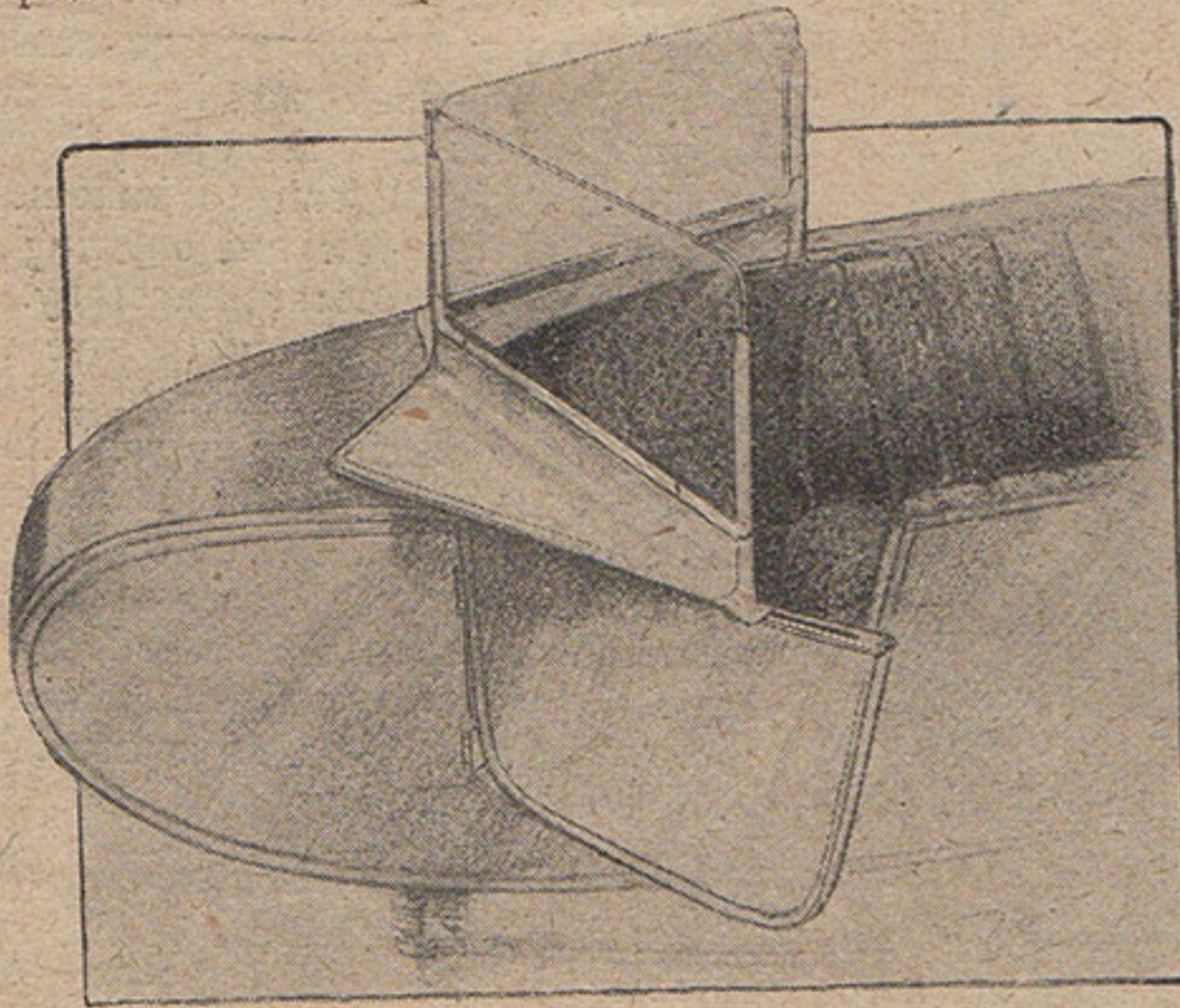


A Millford hood and screen.

Probably half the sidecars offered for 1921 have what is erroneously termed the bulbous back. These models have curved backs and provide space for large lockers which, in the Matchless and several others, have been subdivided to take petrol can, tool kit, etc. In one of the Rideezi models, the locker lid may be utilised to serve as a picnic table.

One could write much more of the various types and positions of lockers than space permits, but to those interested in this subject, attention is drawn

to the small tool box (which might easily be a little larger) on the luggage platform of the A.J.S.; the compartment between the mudguard and body of the Enfield and the capacious lockers in the rear panels of the Rudge, Norton, Millford, Watsonian, Sheffield-Henderson, and B.S.A. sidecars.

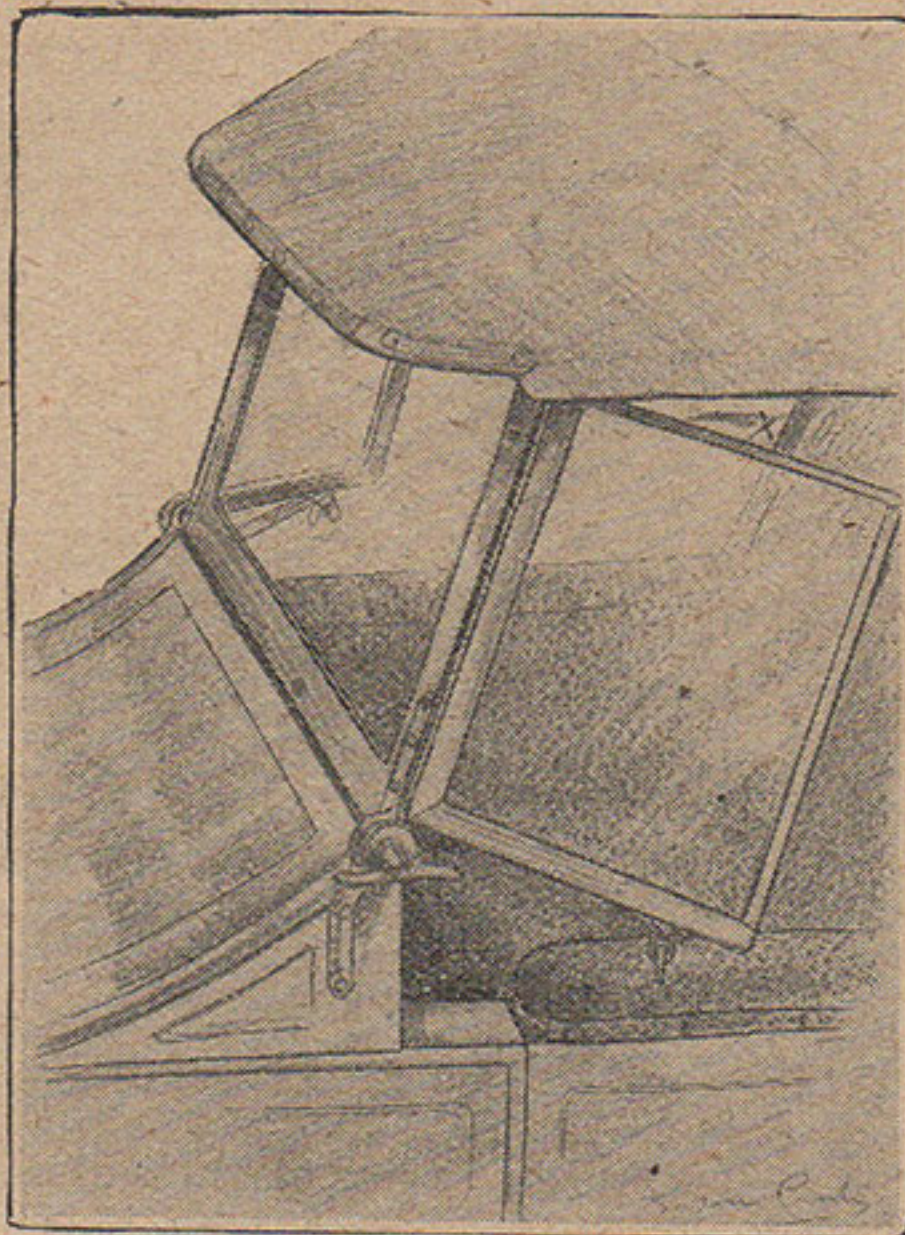


1921 FASHIONS IN WINDSCREENS. Top (left): Watsonian folding V screen opening automatically with the door. (Right) The Excelsior V screen. Bottom (left): The C. and M., which has a hinged dash and V screen. (Right) The Canoelet with hinged back rest.

Comfort and Convenience.—

In the case of the Canoelet and Grindlay, the rear locker is fitted up with a juvenile's dickey seat—another feature of this year's Olympia sidecars. The interest of the family man in such sidecars was very evident, and the *Rex de luxe* outfit came in for quite a lot of attention in this respect. (We are not now referring to the two-seater taxi sidecar exhibited by this firm, but to the special long chassis model with car type dickey seat inside the boot.)

The demand for extra accommodation for the youngster of eight to twelve years of age is now well recognised, and several makers, including the Excelsior and the Millford, staged machines with tandem bodies suitable for an adult and a child, while an A.J.S. was shown with a special additional seat made to take the place of the luggage grid.



Side screens are a feature on the Clyno.

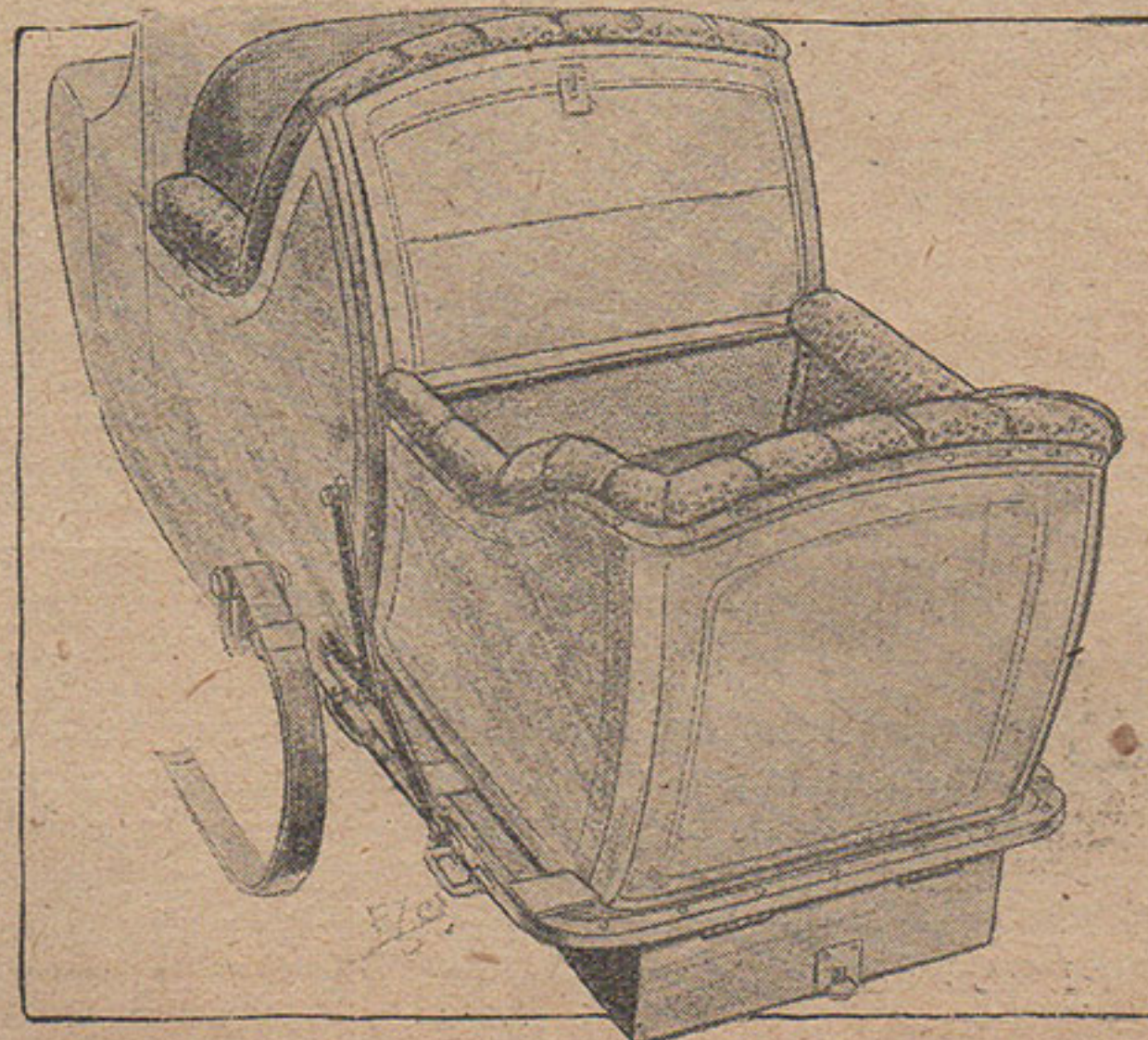
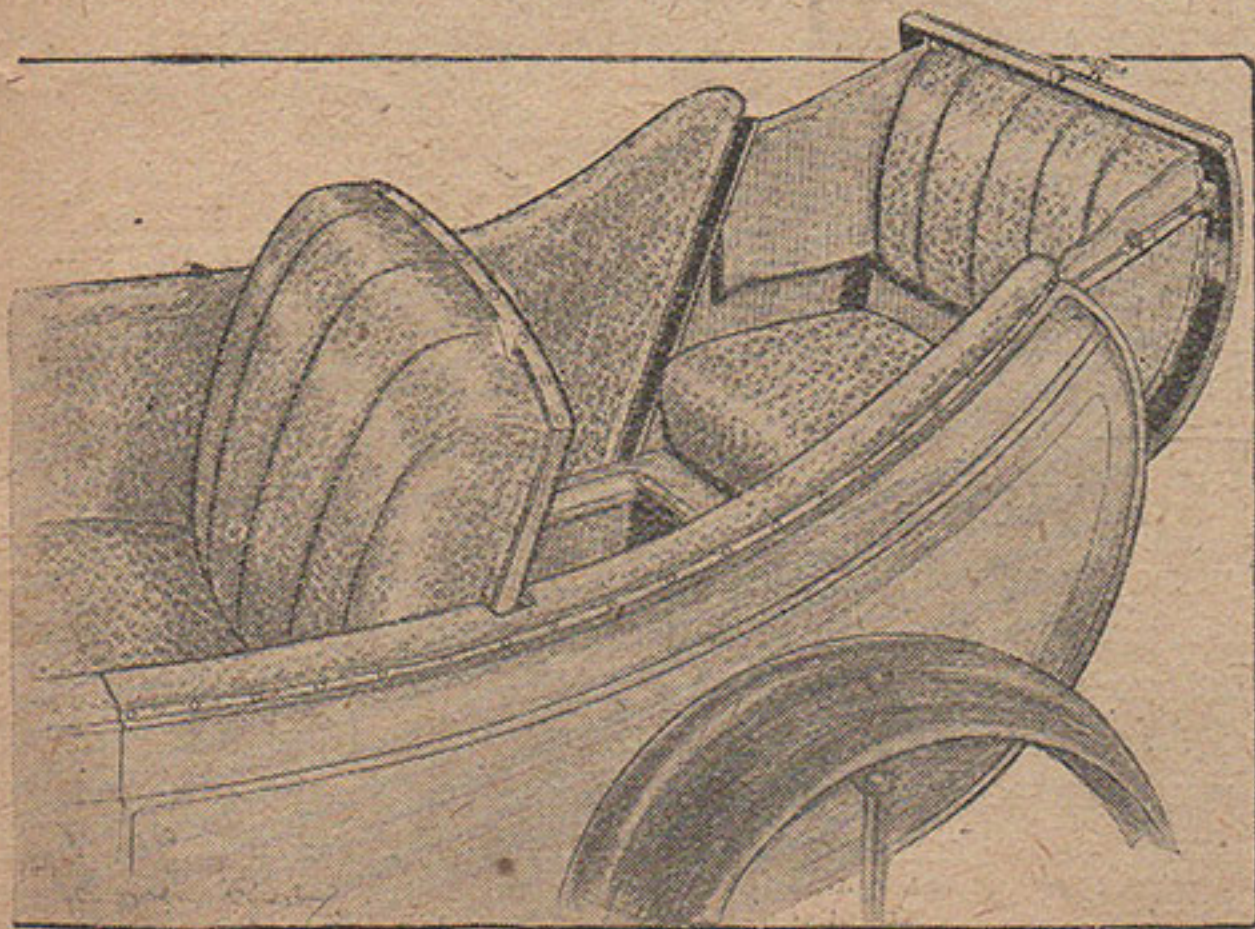
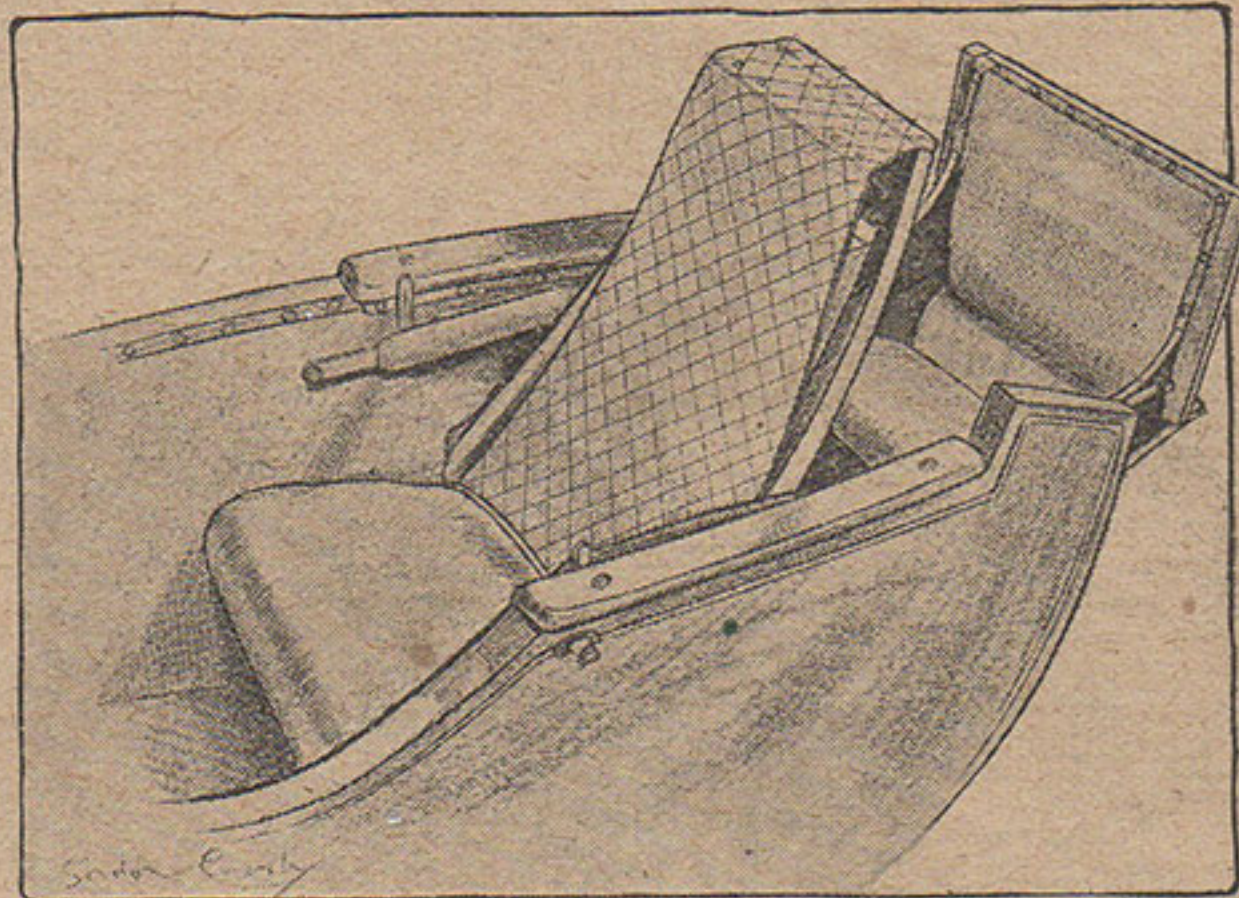
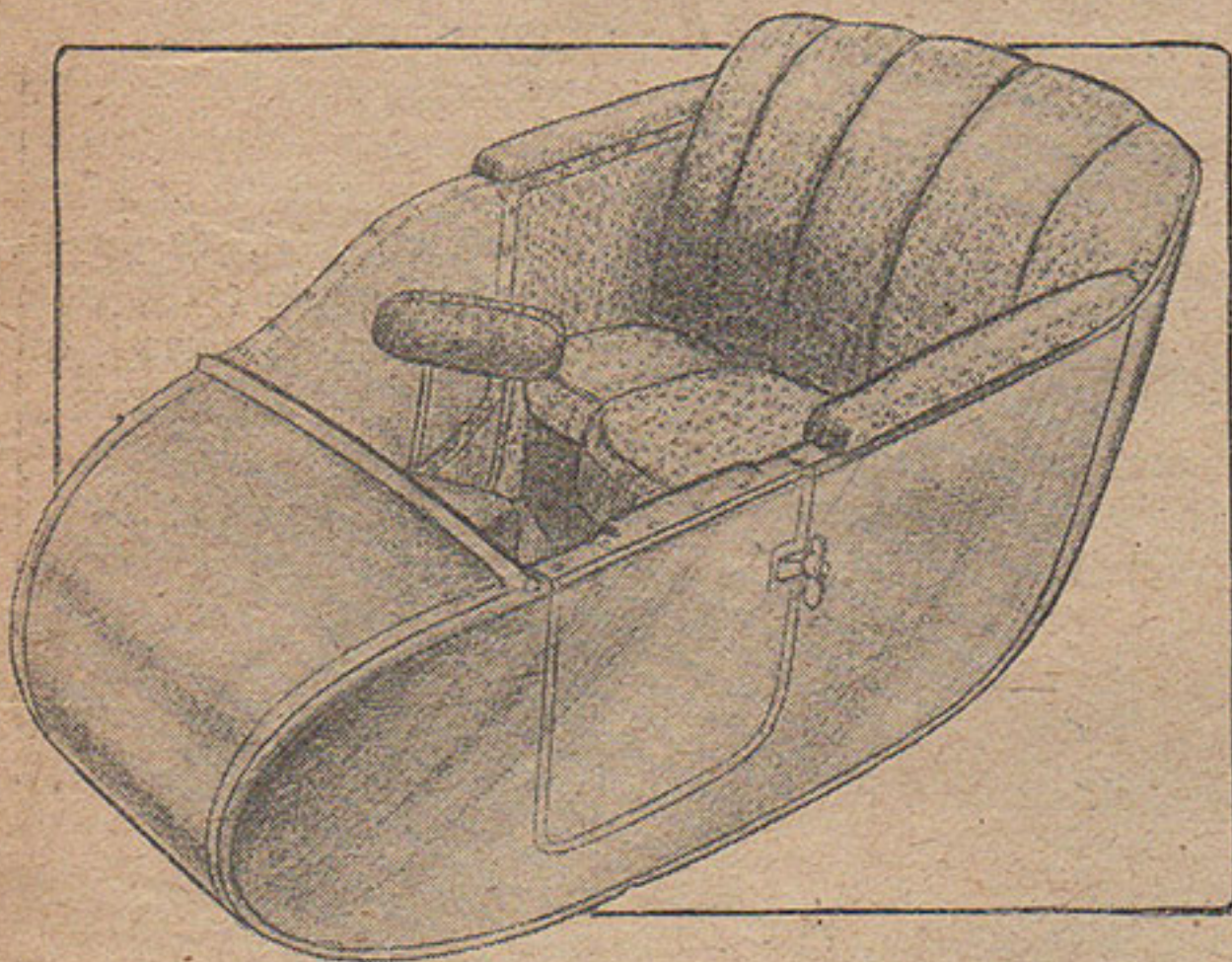
Not every maker has attempted to improve his hoods, which suggests that they have yet to undertake a journey under one of them on a rainy day. Many designs still show those gaps which set up such unpleasant draughts when the hood is used. There are exceptions, of course—several of them in fact, and in this direction the Watsonian models are of interest.

In one of these, there is a combined dash, screen, side windows, and hood, which is hinged at the rear to allow ingress of passenger. In fine weather the hood portion may be removed.

Screens.

Screens are much improved. Very few are now offered fitted forward of the door, in which position they set up a decided draught unless a long and high side screen is fitted. On the new A.J.S. the hinged dash and screen is raised

EXTRA SEATING ACCOMMODATION.



(Top) Dunhill and Plus-one models. (Bottom) Sandum "Convertible" and A.J.S. "dickey."

Comfort and Convenience.—

several inches, an improvement from the passengers' point of view, but one which motor cyclists may not consider an improvement to the appearance of the machine. In addition, one of the A.J.S. machines had a high side screen of talc which most passengers will appreciate.

On one of the Montgomery models also the screen is mounted well back and high, but in lieu of the hinges the dash has an apron serving the same purpose.

Those who appreciate the comfort of the Easting screen will be interested to know that in future it will provide a convenience not available with the older types. We refer to the new model which is mounted on long arms pivoted at a point forward of the door. Quite a large number of motor cycle makers, including the Royal Ruby and B.S.A., are standardising these screens.

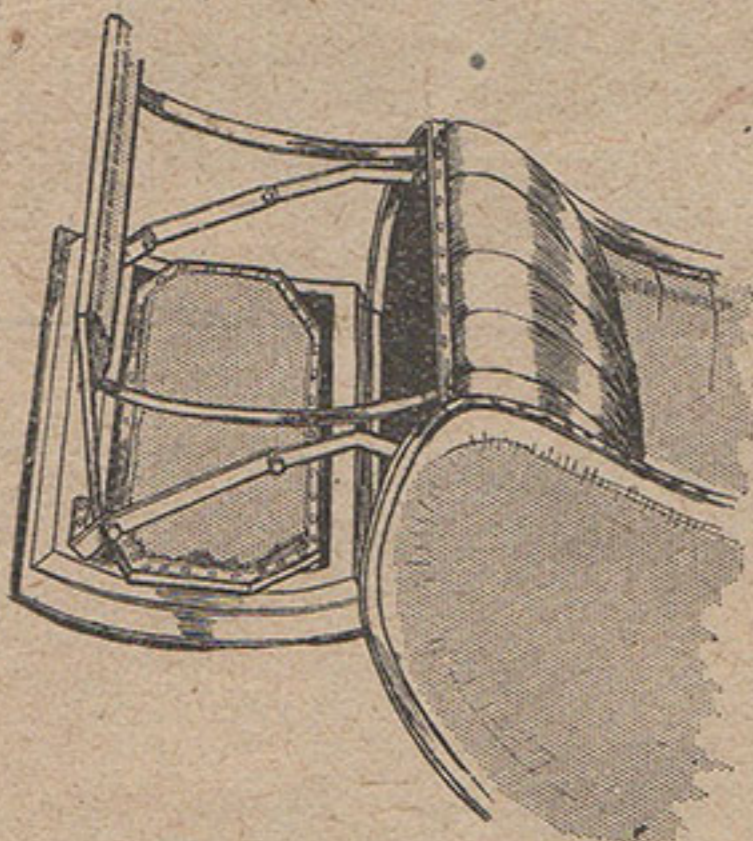
Upholstery.

The "padding" and upholstery generally is much better than it was a few years ago, but on the whole the quality of 1920 has not been improved vastly.

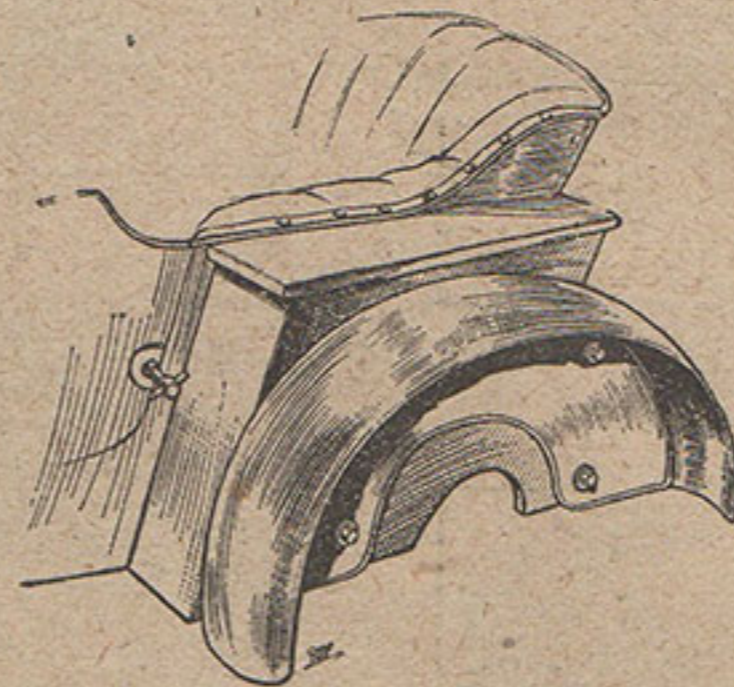
Spring seats and backs are now almost general, but some back cushions—squabs they are usually termed—appear to be somewhat hard. Most makers retain ribbed back cushions, and unless these are well sprung, they are not nearly so comfortable as the flat surface; in addition to which, they collect the dust and are less easy to clean.

Width of Body.

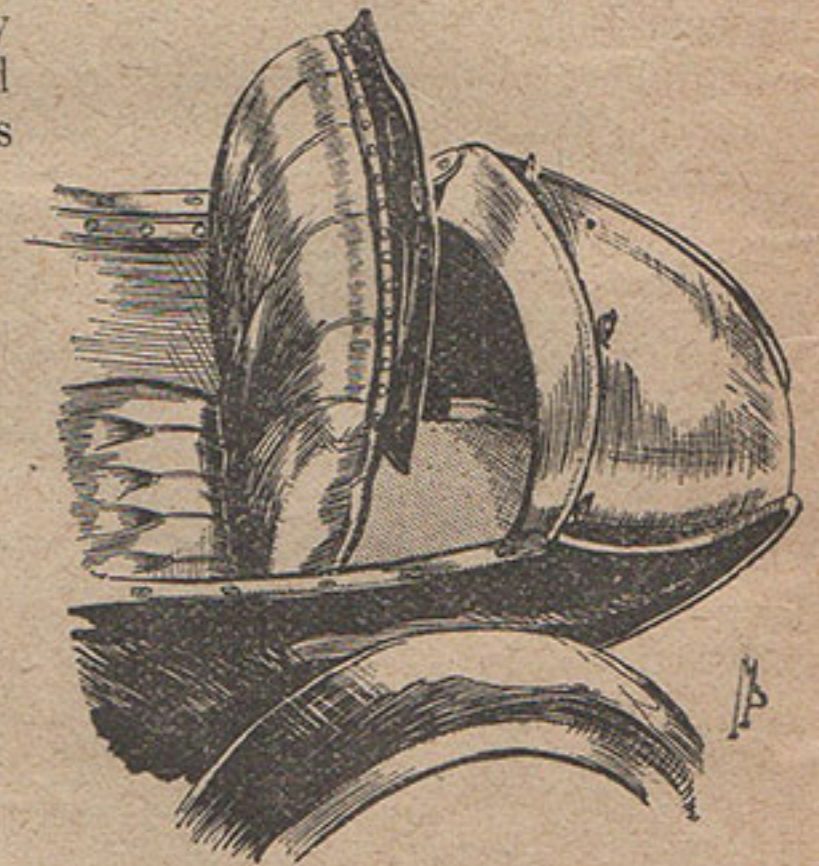
All makers have not yet appreciated the extra comfort provided by a body which is a little wider than the average. The B.S.A. sidecar is excellent in this



Several 1921 models have a juvenile's dickey seat in the rear panel; the Grindlay shown above is one of them.



The Enfield locker that utilises otherwise waste space between the mudguard and the body.



Even on the smallest sidecars there is generally good locker space at the rear of the body. This is the Sporting Montgomery.

respect, but quite a number are still so narrow that it is impossible for a person of average build to sit in them with both elbows inside the body. Some of the largest looking sidecars lack this extra inch or so. Also there are many passengers who may consider that the seats are a little too high to obtain full benefit of the screen. This latter point, of course, hinges upon that of width, as, with a narrow body, the passenger would be uncomfortable on a low seat if the arms still had to rest on the sidepads.

In these connections, it would be well if makers forgot the hackneyed phrase "as comfortable as an arm-chair," as sidecar passengers require more than a chair to sit *on*. Far better is it to provide them with a body to sit *in*.

One other criticism may be levelled at the makers of 1921 sidecars by those who used their machines throughout the past wet summer. Few makers have taken measures to prevent water draining on to the passenger's knees through the joint of the hinged dash. The hinged dashes are the worst offenders in this respect, but some makers fitted a double apron at the front end of the well, one fastening on the top and the other underneath.

To summarise, one may say that quite a number of sidecar designers would obtain valuable first hand information regarding the comfort and convenience of their productions if they acted as passengers in a wet London-Exeter run; but taking them all round, in the 1921 attachments the passengers' comfort and convenience has been carefully studied and, as in the machines that propel them, there is ample evidence of real progress. Springing has certainly advanced, and real comfort may now be expected from most sidecars offered.

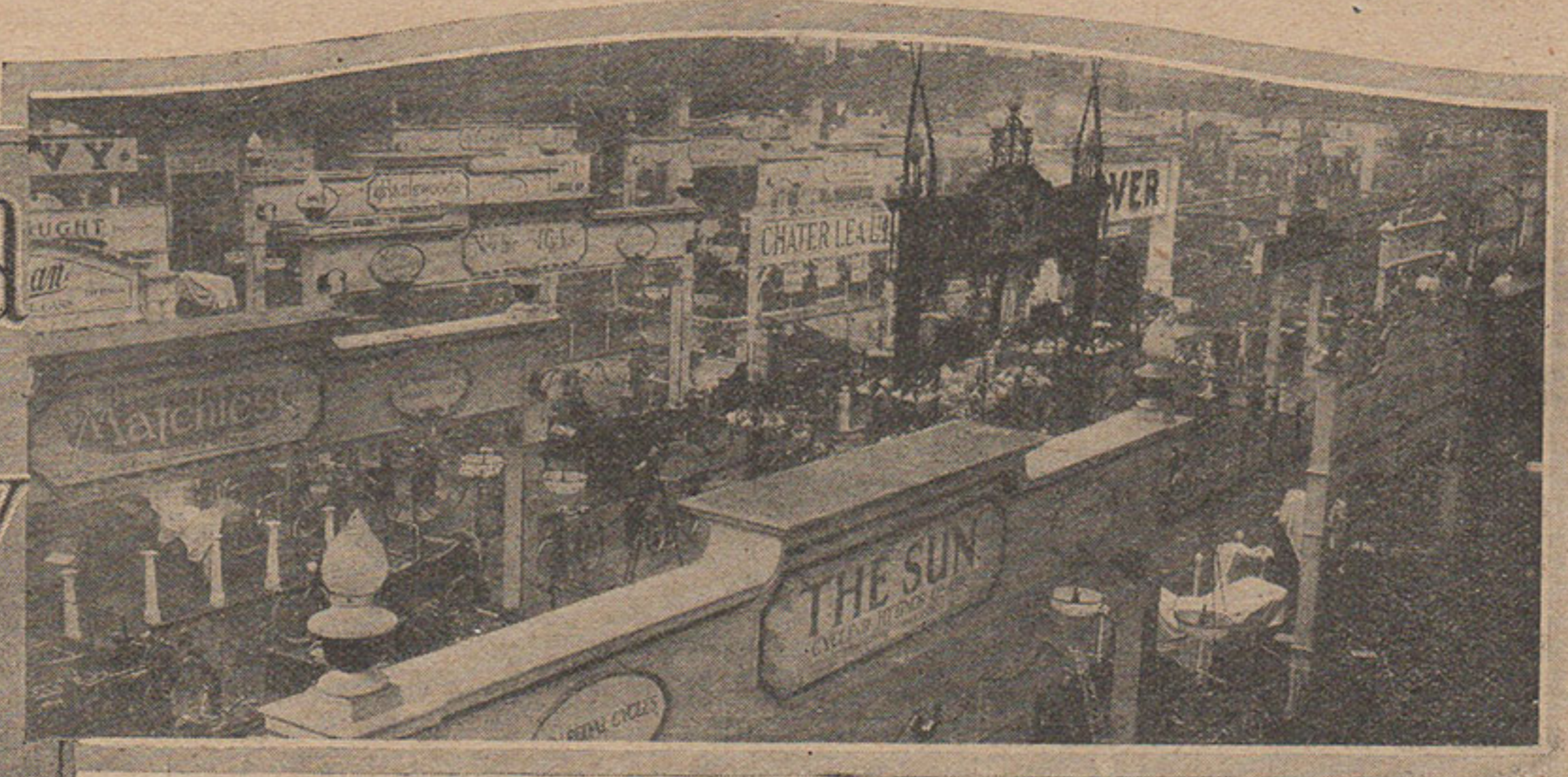
THE VALUE OF SERVICE.

EVERY day our mail bag brings us appreciative eulogies from our readers regarding the excellent treatment meted out to them by various manufacturers and dealers. Only a small percentage can be published, but the expressions form rather a striking but none the less pleasing contrast to the state of affairs existing a year or two ago. The letters

vary greatly in stating the character of the treatment accorded, and these differences could not be fairly indicated in a *précis*.

We therefore suggest that satisfied owners should not fail to express satisfaction to those enterprising firms who are ready to extend "service" to their clients.

Round
the
SHOW
by
Ixion



Impressions of the 1921 Models exhibited at Last Week's Show.

I REALLY do not know why the press forecasts suggested that the emphasis of the Show was going to be "safe" rather than Winston Churchill—which term I interpret to mean a foundation of great soundness, illumined by occasional flashes of brilliance and spasmodic lapses into excitement. There has never been any show which housed so many stolid and reliable machines, capable of giving a duffer 364 days' hard service in the year; and their staunch British respectability was pleasantly diversified by a few outrageous freaks and by a few audacious newcomers, which may or may not settle down into humdrum sobriety later on.

Far too much plating everywhere, if I except the all-black Humber and the Superb Four. One veteran with a tear-stained face led me into Addison Road and showed me a £250 outfit with a colour scheme reminiscent of an Orangeman's beanfeast. "How long have I had her?" he demanded. I scanned the rust observantly and hazarded "Three years?" "One month!" he blubbered. "It's their blanky plating and this blinking climate that does it!"

Gears, Lights, and Brakes.

Honest efforts are discernible to make gear changing easier on the Comery, Rudge, and other new gear boxes. Electric lighting is boosting busily; the Magdyno, Maglita, and B.T.H. outfits sound the knell of gas. The front stirrup brake is moribund, though a front wheel brake which cannot possibly rattle is still a rarity. We want a brake

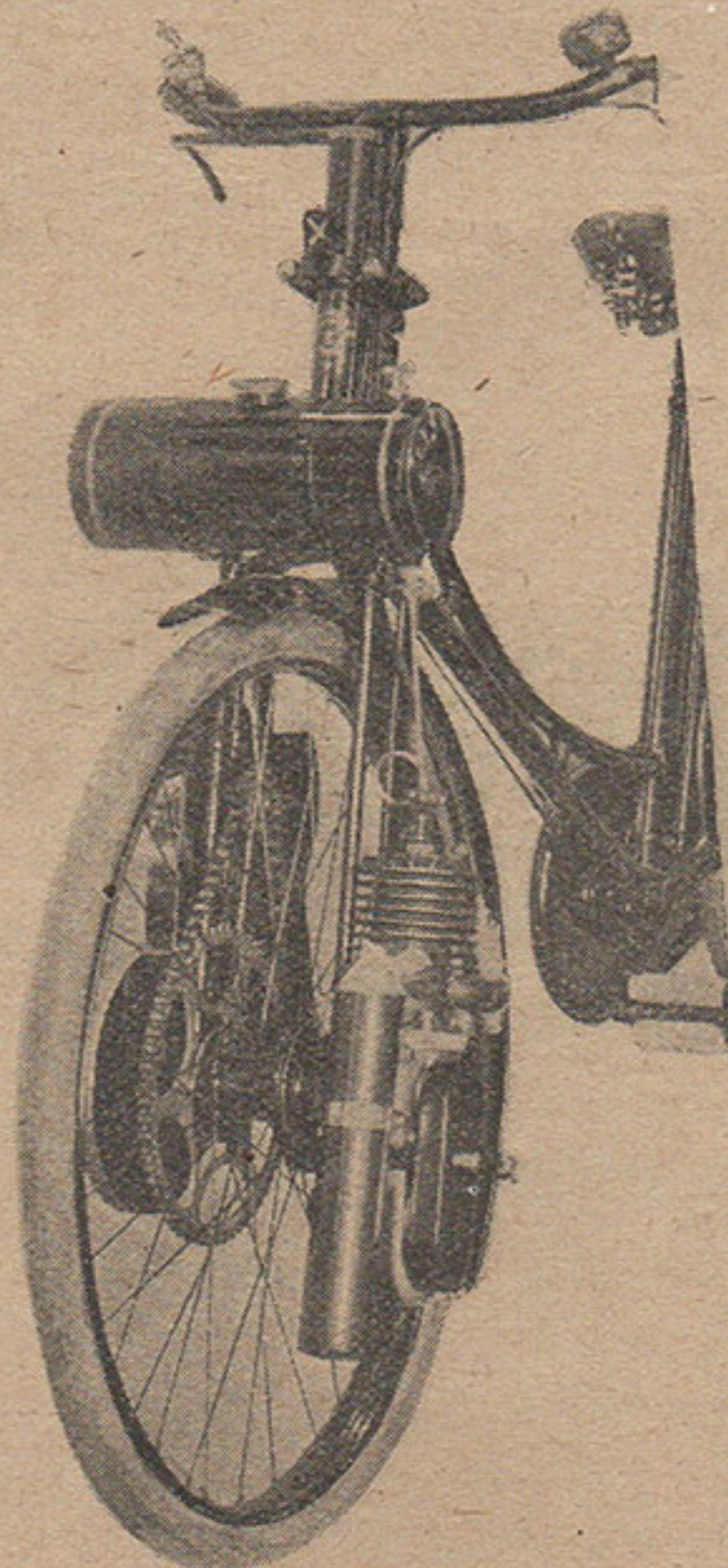
which, like the internal expanding pattern, is held positively "off" as well as positively "on." Dozens of machines are unnecessarily heavy, as the 4 h.p. Coulson with three-speed gear and spring frame at 196 lb. clearly indicates. But if those three minor accusations are written off, there is no comprehensive criticism to be made; and it must be admitted that

lots of riders adore plating, prefer gas lamps, do not see red when they are given a stirrup brake, and make standard machines far heavier than they are designed to be by adding uncountable gadgets and an extra passenger.

The bulk of next year's touring and medal-winning will, as usual, be done by the staid familiar buses which we all know so well, and which are a little better than they ever were. We all know that, but, like the Athenians, we are fond of gassing about the new stuff at Show time.

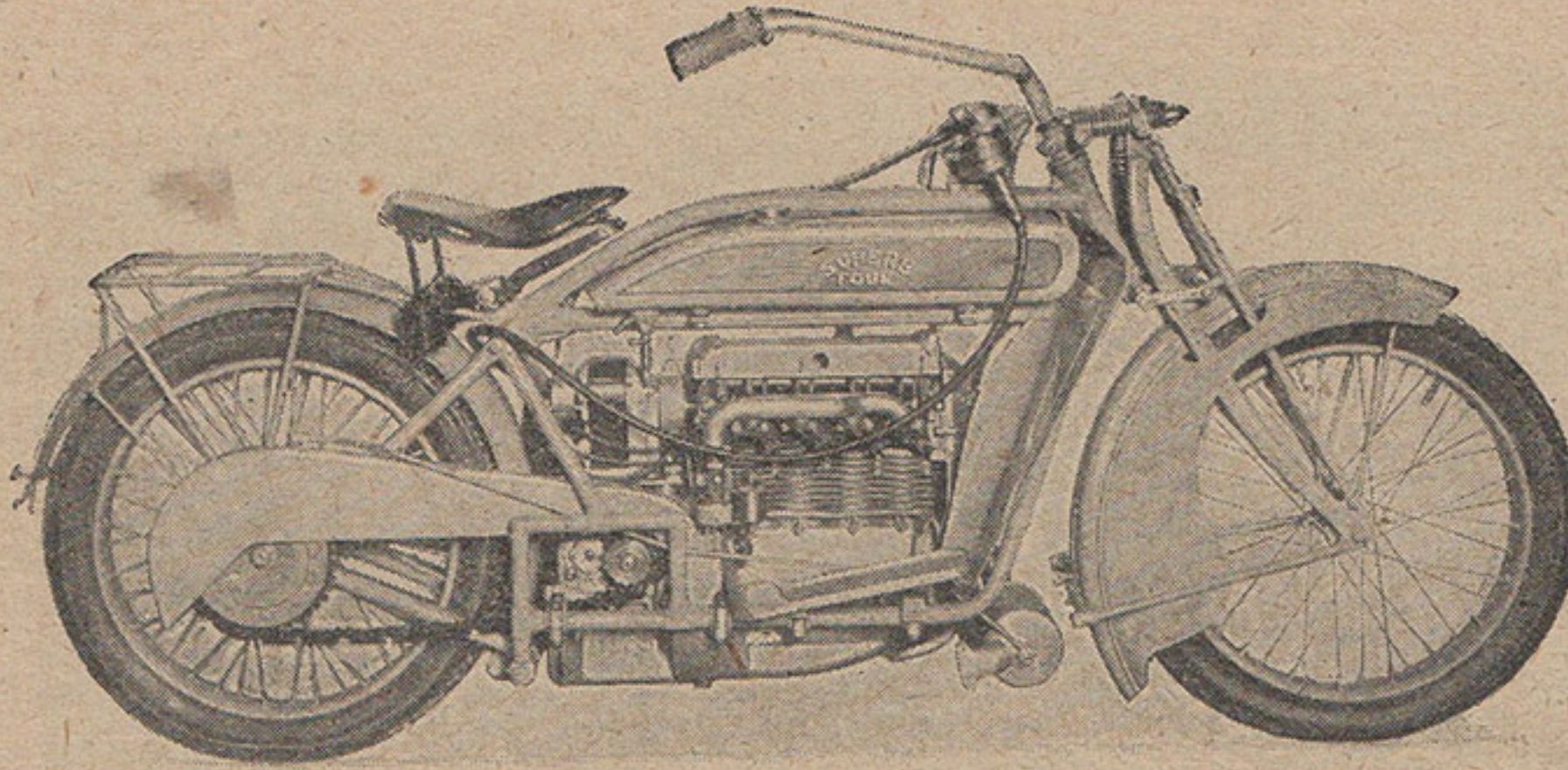
The Chain-belt.

The Rudge belt? Opinions differ. It is either a desperate or a brilliant endeavour to prevent the decease of belt drive on heavy touring machines. It is twice as heavy as a rubber belt; it is twice as dear (10s. a foot); it looks as if it might be noisy; it conjures up visions of steel gaiters in my neurotic mind. On the other hand, if its working life is 5,000 miles, the all-weather rider need not despair of that most lovable of all gears—the variable pulley. Should it prove all it is said to be, it will see a great future on cars for driving dynamos and fans.



Cykelaïd front wheel driven motorised bicycle.

Found the Show.—



Britain's challenge to American and Belgian designers of four-cylinder motor cycles—the Superb Four.

Bradshaw's new engine? This obviously cannot be judged in connection with the hasty installation which had been rigged up against time for the Show. Move its oil tank—the heart of the design—to a less vulnerable position. Shield its carburetter from mud. Improve access to the tappets. Let it do a London-Exeter, or do a Brooklands record or two, and we shall all be falling over ourselves to get hold of one.

The new sports Douglas? Here at least, there is nothing experimental. A light hog 'bus, with "light" and "hog" heavily underlined. Just what so many of us have been wanting. An obvious flier, on sound lines, with one of the biggest motor cycling names on the earth behind it.

The big Rudge twin? Will somebody please pen a motor cycling parody of the song "Sailor, beware!" substituting the words "Injun" and "Harley" for "sailor" in verses one and two? Sung by Harry Dearth at an M.C.C. dinner, this number would bring the house down, and put W. H. Wells into his most defiant mood.

A British Four.

The Superb Four? Sceptical to the core, I cannot accept Mr. Hooper's estimate of 250 lb. for its weight: why, that is only 14 lb. more than the solo Sunbeam. Still, weight doesn't matter so very much for sidecar work. I deplore the magneto position. £220 is a *de luxe* price for a *de luxe* machine. But the technical design is just what anybody who is keen on aero engines had hoped to see. There are plenty of men ready to pay for the best; let this dazzling specification once make good on the road, and a large *clientèle* awaits it. In the meantime hearty plaudits to Mr. Hooper (and no less to Mr. Bradshaw) for offering us a motor cycle lubrication which is as automatic as the action of the liver, *i.e.*, you never need think of it until it clogs. Let us commend to other designers Mr. Hooper's notion of a motor cycle instrument board—a little fan-shaped aluminium plate just beneath or behind the steering head:

B16

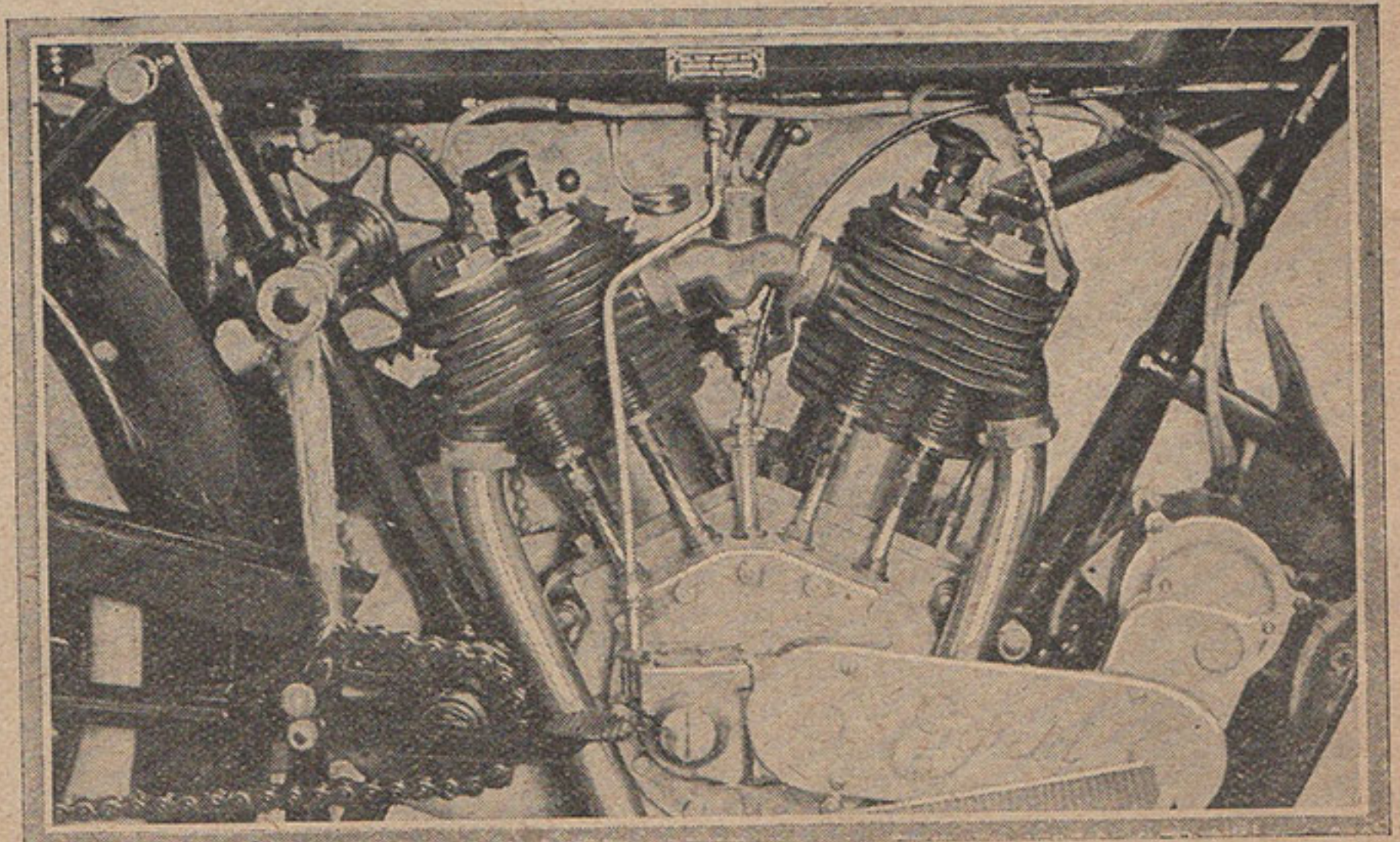
it is a million times neater than the usual cross tube between the handle-bars, on which the gadgets are hung out like the week's wash.

The New Hudson was the sole genuine *débutante* in three-wheelers, and it got enough attention to turn its chassis a bright Indian red. I saw and heard many a leading engineer utter his verdict on it; and very few of them could find a "crab." One or two challenged the shape of the inlet manifold (which I guess to have been deliberately designed for "distribution" purposes). Otherwise the general judgment was "A sound job: but how on earth can they do it at the price?"

There was great joy among the fair sex: for are not all the baby two-strokes coming out with clutches and kick-starters? A girl may wear breeches without relishing the jump mount. The New Hudson "Ace," with its 50 m.p.h., is going to remove the reproach of "pottering" from this class; but there will be much trouble with the police if no silencer is fitted. Are the makers not aware that the two-stroke enthusiast who arrives home at 2 a.m. is already classed by his neighbours in the same category as hawkers and barrel organs? Two-strokes want more silencing, not less, the Scott alone excepted.

Genuine Sports Mounts.

New sports models are plentiful. The Brough hadn't materialised at the time of my visit, but the knuts were already feverishly oscillating between the Zenith, N.U.T., Rover, Douglas, and Norton stands. One sportsman was heard to remark that if only the Brough sports model had been 7 h.p. instead of 3½ h.p.—! The Dunelt people seemed to be doing good business, for the average two-stroke enthusiast wants more power, and this 500 c.c. single offers power at a rock-bottom price. Alternatively, the Velocette and Levis people propose to extend the road



"Made like a gun"—the Vickers engine in the 1921 Royal Enfield.

Round the Shows.—

range of their smaller engines by fitting three-speed gears. The Velocette was a regular cynosure for hard-riding light-weight men, and the delay in producing the three-speed Levis was a bitter disappointment to many visitors—I can assure the makers that it is eagerly awaited.

I understand that the new works consecrated to the production of the big Raleigh flat twin are almost ready. Flat twins are now almost as numerous as bureaucrats, but a special welcome is ready for this excellently designed and beautifully made machine. I marked it down last year as one of the very best machines in the Show, and when deliveries begin, I prophesy that it will take a very high place among the elect.

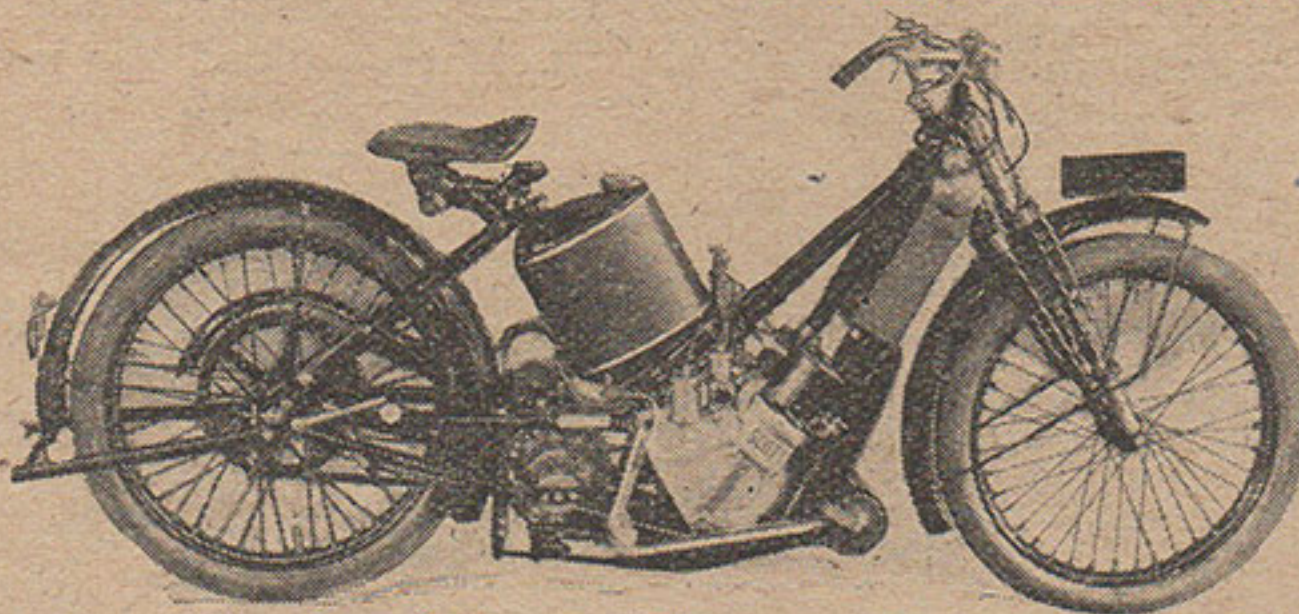
The sidecar taxicabs excited equal interest and derision. Few of us can afford to patronise the four-wheeled pirates of the streets at all lavishly, and these machines ought to do well. Design is not yet stabilised. One of them had no accommodation for luggage, for example, and any ordinarily stout matron would unquestionably jam in its narrow slit of a

doorway. Near by stood another which could certainly take two average passengers, plus 2 cwt. of luggage on the tailboard. I have not the least wish to earn my bread as a sidecar taxi-driver during a British winter; but such a machine will form a happy mean between the motor omnibus and the taxicab when it gets on the streets. Many manufacturers are dreaming of a lucrative and steady trade in these new models.

The innovation of large fleets of sidecar taxis will do a world of good to the trade—your big commercial user is dead nuts on running costs, reliability, and ease of repair: he would ginger up design faster than hundreds of private users could ever do.

I feel rather like a married man does when he returns to the bosom of his

family after an evening at a variety show, and reflects that he winked twice at the prettiest chorus girl. For have I not devoted nearly the whole of my limited space to new machines, which we may or may not see again: and ungratefully neglected those well-tried companions who have made our lives run more smoothly for many a year past. Still, a couple of winks don't matter very much, do they?



3½ h.p. Scott Squirrel—a T.T. type of solo mount.

CIRCUIT DE PARIS TRIAL.

A Successful Continental Event near the French Capital.

A RING around Paris at an average speed of eighteen miles an hour for a distance of 108 miles, with a couple of test hills thrown in so as to determine the best of the clean score men, constituted the Circuit de Paris motor cycle and cycle car trials. This event, which was run for the first time last year, and will be made annual, brings the competitors in contact with all kinds of roads from almost impossible *pavé* to perfect macadam, and, although not of international importance, it attracts a lot of local attention.

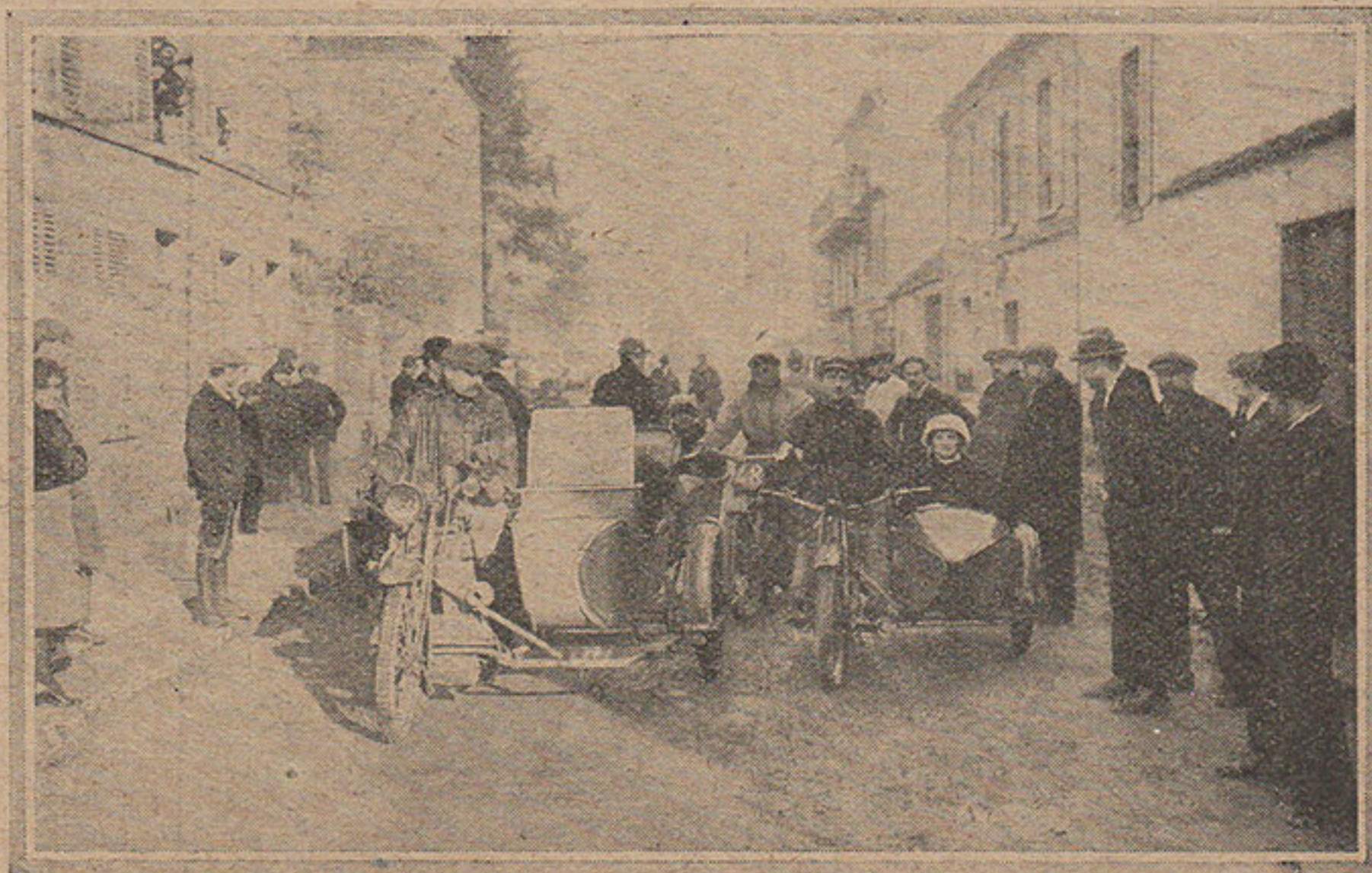
Of the forty-two entrants, thirty-two faced the starter, and twenty-seven finished within the time limits and took part in the two speed tests on the Flins and Marly hills. Included in the above were two miniatures, which went through the trials without a hitch, and were not the slowest on the hills. The machines were a Skootamota ridden by Antony (an amateur who seems to divide his time between this little machine and a 90 h.p. racing Fiat) and a C.D.R. Motopatinette ridden by Dieudonné.

The machine to head the list, irrespective of classes, was an Indian ridden by Coquildi, with Cletch on a Motosolo in second place, and Rabot on a Harley-Davidson third. These times, however, were not of very great importance, for they only served to give a merit list after the essential part of the programme had been fulfilled.

Only English machines, or rather machines of English design, took part

in the cycle car section. They were three Morgans and six G.N.'s. Both these makes are now manufactured in France, the G.N. having been taken up by the Salmson Co., a firm which specialised in aviation engines during the war. Fastest time on the hills was made by Darmont

on a J.A.P.-engined Morgan, with his team mate, Franquebalme, second on a similar machine. The M.A.G. Morgan was fifth in this class, and the G.N.'s took third, fourth, sixth, seventh, eighth, and ninth places. Speed contests are a feature of most Continental trials.



Sidecars re-starting after the luncheon stop in the Circuit de Paris Trial.

FURTHER DETAILS OF THE NEW LICENCES.

The Form and Position of Licence Card to be Displayed. Three-wheelers over 8 cwt. to Pay Car Taxes.

IN *The Motor Cycle* of November 25th we were enabled accurately to forecast the new taxation scheme, and now, thanks to the Ministry of Transport, we are able to give our readers some further details concerning the new licences, which come into force on January 1st next. The whole scheme was explained to members of the press by two experts of the Ministry of Transport one day last week, and those attending were invited to ask questions. It was interesting to observe that the majority of those present were quite incapable of asking for intelligent information concerning the new taxes, as they were clearly not practical motorists.

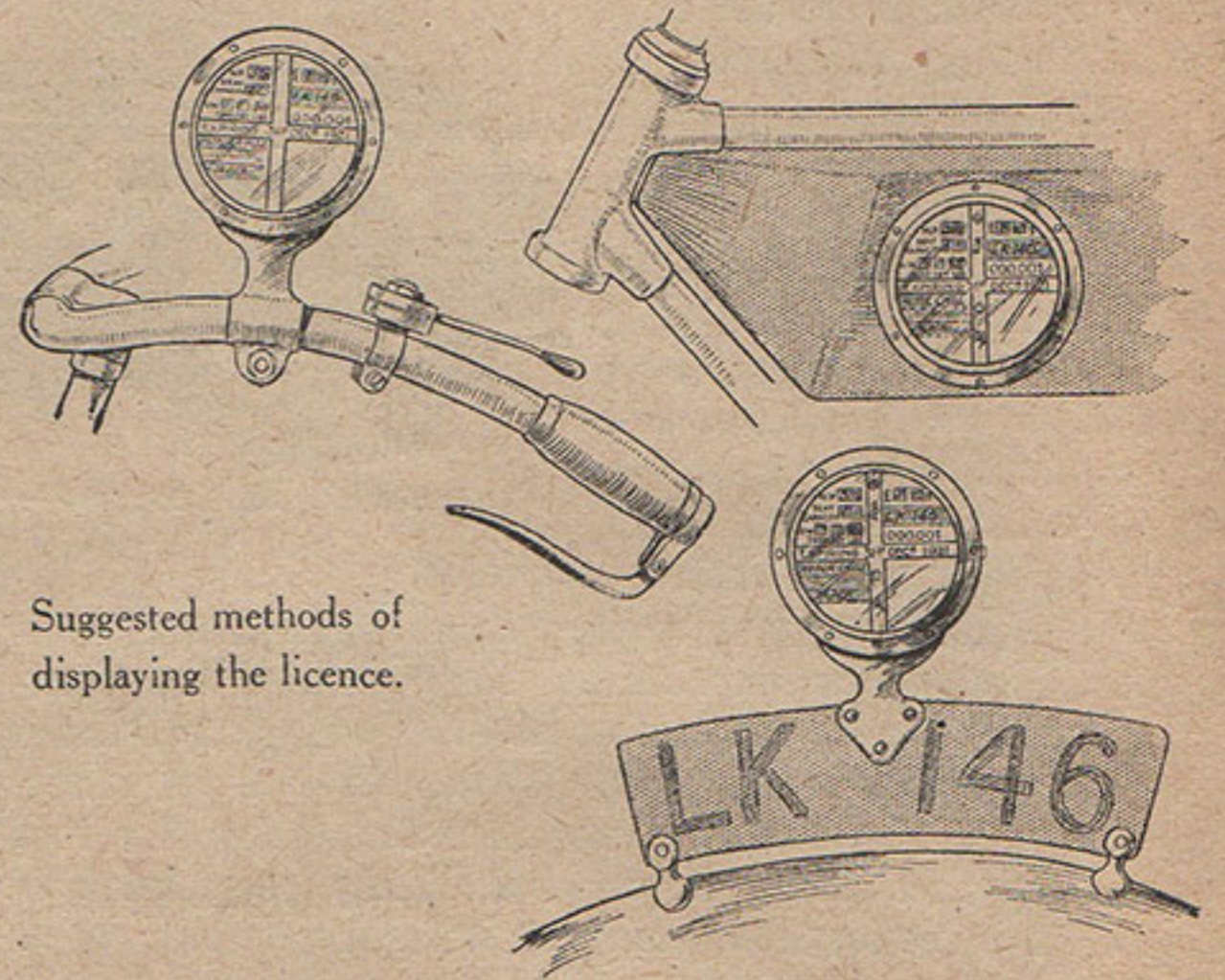
Every possible facility was given to the press, and questions were answered as clearly as possible, but naturally in a somewhat indefinite manner, as nearly all Government regulations are somewhat indefinite, the attitude being that the Government makes the law, but it is not its business to interpret it.

What is Unladen Weight?

We first naturally asked for information concerning the weights of motor cycles. Would machines have to be weighed before being registered? Would a maker's certificate be accepted, or would the owner's word be taken? The official then courteously explained that a maker's statement would be accepted, and in most cases the owner's word. The officials would have a fair idea of what certain machines weighed, but in the case of any doubt the applicant for the licence would be asked to prove his statement.

We next interrogated the official on the question of accessories. Were they or were they not included? The answer was, as forecasted in the issue of

November 25th, that the weights will be less fuel and oil and loose accessories, such as horns, lamps, dynamos, speedometers, watches, clocks, badges, and tools. It was also stated that the exact definition of "weight unladen" has not yet been decided.



Suggested methods of displaying the licence.

Regarding the position of the licence card and holder, a reply was given to the effect that it might be placed conspicuously anywhere on the machine where it would be clearly visible from the near side.

It would appear that the following positions on the motor bicycle would have the approval of the authorities: (a) Carried like an A.C.U. or other badge on the handle-bars (near side); (b) like a club badge over the front number plate; (c) the case might be fitted to the front portion of the near side of the petrol tank by the manufacturer.

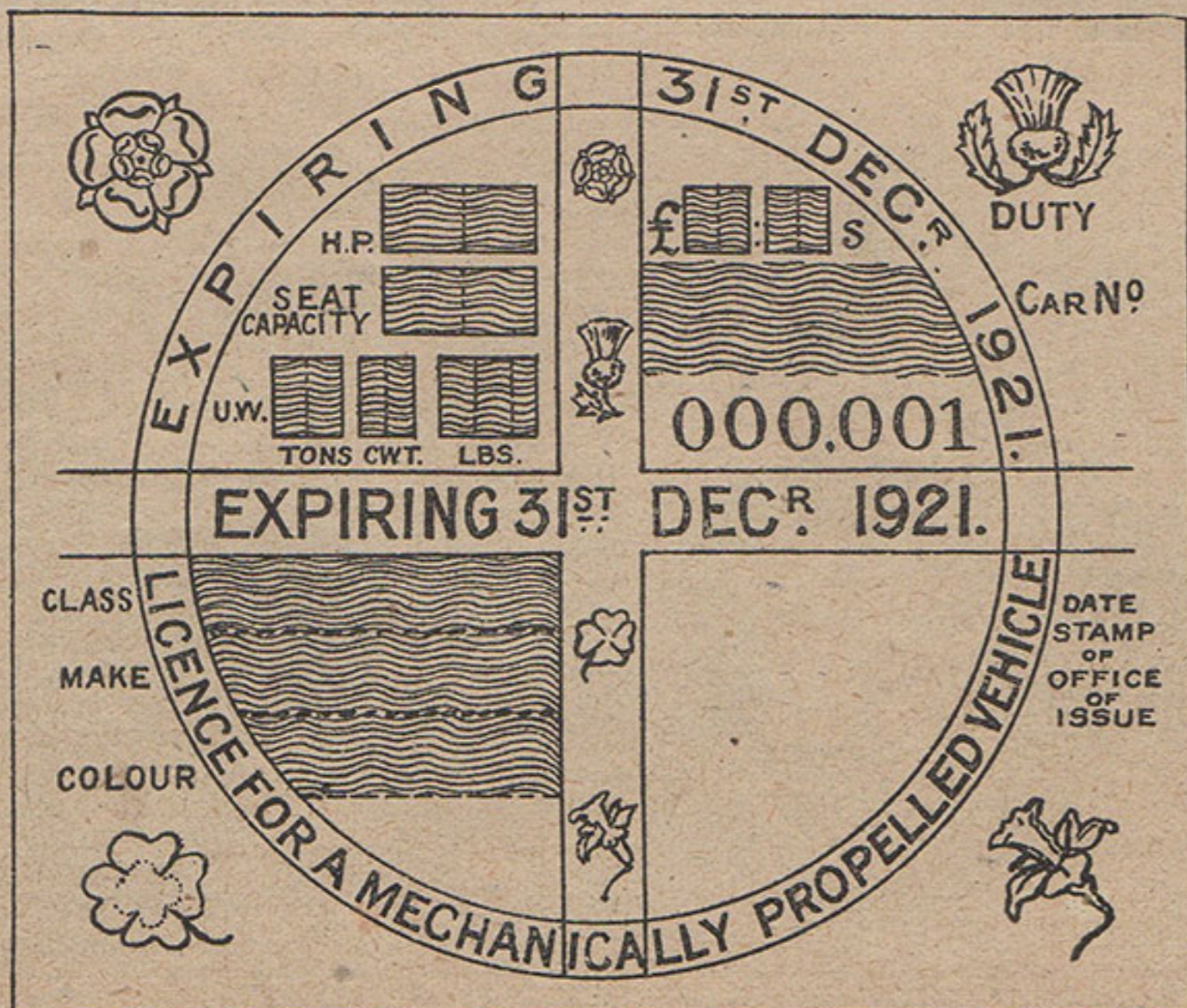
In the case of sidecars a good position would be: Screwed on to the bodywork forward of the door.

The first part of the meeting was devoted to the explanation of the Bill, and most of this explanation is covered by our previous article on the subject.

How to obtain the New Licences.

As is now the case with the local taxation licence, the new licences (which, of course, include the registration) will be obtainable at any Post Office issuing money orders, and the declaration form will ask for all particulars necessary for registration. The first time a licence is supplied, however, though the forms may be issued by the Post Office and the money paid there, the forms must be sent on to the local licensing authority. When a renewal is required after a year's use the procedure will be much more simple, and the whole business may then be transacted by a Post Office.

After the forms have been filled up two documents are issued, which are the licence



A reproduction of the new licence card.

Further Details of the New Licences.—

card and the licence registration book. This latter is to be kept at home, and contains a history of the vehicle from January 1st, 1921, and onwards. It was especially emphasised at the meeting that, whereas the present local taxation licence entitled a man to keep one motor vehicle and is of the same nature as a dog licence, not being transferable, the new licence belongs to the vehicle and goes with it. Change of ownership and particulars of sale must be entered in the log book and sent to the local authority.

Definition of Taxes on Weight Basis.

In this book, which is devoted to motor cycles (including scooters and cycles with auto-wheel or other motor attachments), it is mentioned that motor cycles exceeding 8 cwt. in weight unladen are chargeable with duty as cars. The taxes are thus defined:

Weight unladen not exceeding 200 lb., £1 10s.

Weight unladen not exceeding 200 lb., with right to draw trailer or sidecar, £2 10s.

Weight unladen exceeding 200 lb., but not exceeding 8 cwt., £3.

Weight unladen exceeding 200 lb., but not exceeding 8 cwt., with right to draw trailer or sidecar, £4.

Tricycles not exceeding 8 cwt., weight unladen £4.

Part year licences of one-half the full rates are granted in respect of motor bicycles and tricycles first used on or after October 1st of any year.

If the motor cycle is already registered a second part of the form must be filled in, on which must be stated the registered number, the nature of the vehicle,

if used for a sidecar, the manufacturer's name, type or model of vehicle, manufacturers' horse-power, and the weight unladen.

Now, as regards the licence-holder and licence card; these are issued in two patterns—rectangular, intended chiefly for industrial vehicles, and a circular pattern for touring vehicles, such as motor cars and motor cycles, the size to be the same in both cases. The card when supplied is rectangular in shape, but may be cut round the outer of the two circular lines so as to fit neatly into a sheet metal tray of suitable thickness, having a turned-up edge of sufficient depth to hold the card and a stout cover glass. There will also be an outer cover consisting of a ring of sheet metal shaped to fit closely on to the tray, and adapted for fixing by screws, bolts, or otherwise in a position in which it may be clearly seen from the near side of the vehicle. A rubber packing ring should be arranged to fit between the ring cover and the cover glass and tray so as to render the whole carrier waterproof. The aperture within the ring cover should clearly exhibit the whole of the licence card, lying within the inner circle of the licence card, and should have a diameter of $2\frac{11}{16}$ in. The actual dimensions of the card issued in its rectangular shape are $3\frac{9}{16} \times 3\frac{7}{16}$ in.

In the course of the proceedings it was mentioned that the money collected from the duties, together with the existing horse carriage licences, would be collected by county councils, county boroughs, or borough councils under the supervision of the Ministry of Transport, and will be devoted to the maintenance and improvement of the roads. Licences need only be taken out in respect of vehicles which are actually in use.

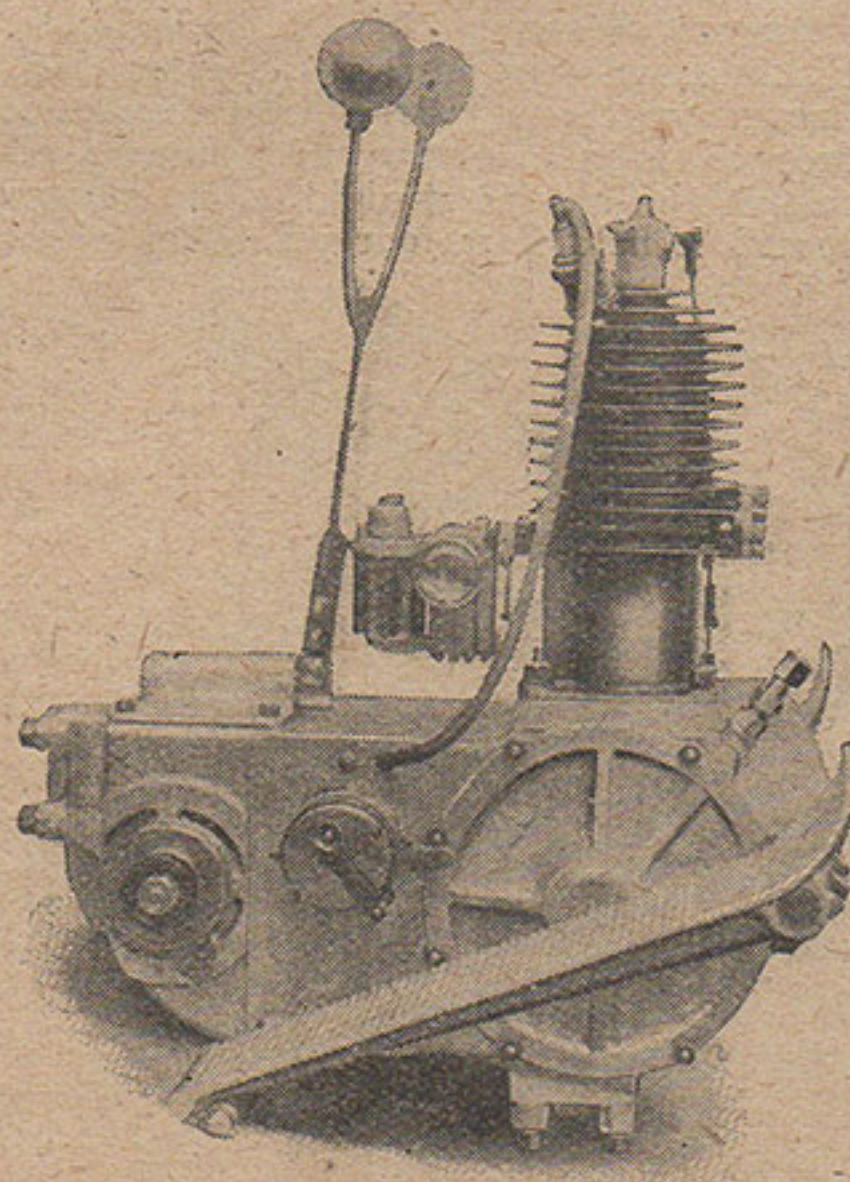
French Engine Design.

A Two-stroke Engine Unit with no Exposed Working Parts.

A VERY neat type of unit constructed engine and gear box for motor cycle use has been produced by the Ballot Cie., of Paris. This firm has specialised for a number of years in engines for car use, and supplies these for a large number of manufacturers both in France and abroad. The adoption of a power plant for motor cycles is, however, of recent date. It is understood that the whole of the present production has been secured by one of the leading French firms for their new types of machines; other firms, however, will adopt the Ballot engine as soon as production increases.

The engine is a single-cylinder air-cooled two-stroke, mounted on an aluminium crank case. A valve is mounted in the cylinder head, but this is only used to relieve the compression, and allows the machine to be ridden without interfering with the carburetter and ignition controls. Crank case compression is employed, and the aluminium piston is fitted with a deflector. Ball bearings are fitted for both the crankshaft and the connecting rod big end. The crankshaft is of the built-up type, consisting of two full discs united by the crank pin, which has conical ends fitting into the discs.

One of the features of this engine is the enclosed magneto, only the distributor



The Ballot two-stroke engine and gear unit, embodying an enclosed magneto. The gear change is effected by the knees of the rider by means of a double lever.

of which is outside. Magneto drive is by means of a roller chain, naturally enclosed. A metal disc clutch, working in oil, is used, and there are two speeds operated by lever with forked arms, so as to encircle the tank and horizontal tube of the machine. With the exception of the pulley or sprocket for the final drive, there is not a single exposed working part on the Ballot engine. Even the kick starter is enclosed, and is operated by means of the right-hand footboard.

This engine was exhibited at the 1919 Paris Salon in an earlier form. Since then, however, it has undergone detail modifications only. It is interesting to note that the majority of French motor cycles are fitted with engine and gears constructed on the unit system, and the Ballot product adds another example to the list. The Blériot and Louis Clément machines may be cited as excellent examples of unit construction, especially the latter, in which case a clutch and three-speed gear box are combined with an original design of twin-cylinder V type engine, having shaft operated overhead valve gear. Many capable engineers consider that unit construction will be adopted eventually in this country, though at the present moment British examples could easily be counted on the fingers of one hand.



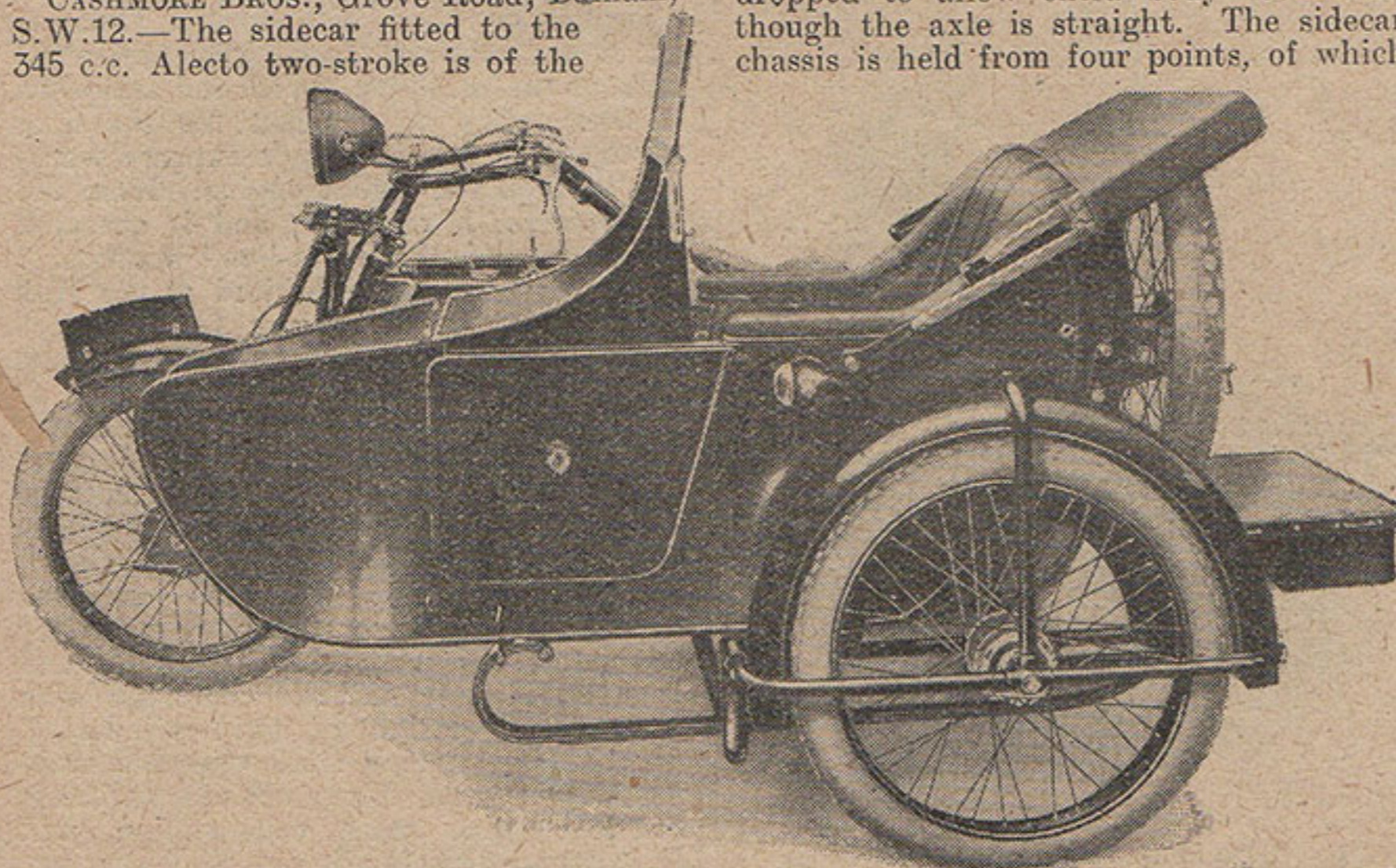
A Review of Sidecars for 1921, compiled from our Stand-to-stand Inspection at the Olympia Show.

A.J.S.

A. J. STEVENS AND Co., (1914), LTD., Graisle House, Penn Road, Wolverhampton.—A new design of chassis has been under consideration by the makers of the A.J.S. combination, but the testing of it is not yet completed, so that it has not been shown. Consequently, there is little alteration in the chassis of the present A.J.S. The chassis is of very simple type, sprung on luxurious C springs and having support on both sides of the sidecar wheel. The body also has been found too satisfactory to need any extensive alteration, but one or two detail improvements have been made. The windscreen has been raised two inches, although the glass itself is less deep; the increase in height has been obtained by adding a considerable lift to the scuttle. This at the same time enables the makers to allow more knee room, so that a child can easily be carried as well as an adult. The hinged joint between the windscreen and body has been made completely watertight, and care has been taken to adopt a hood to which the front edge comes well over the windscreen, so as to make a raintight joint there also. A large luggage grid and tool box are fitted, on the top of which a dickey seat can be added.

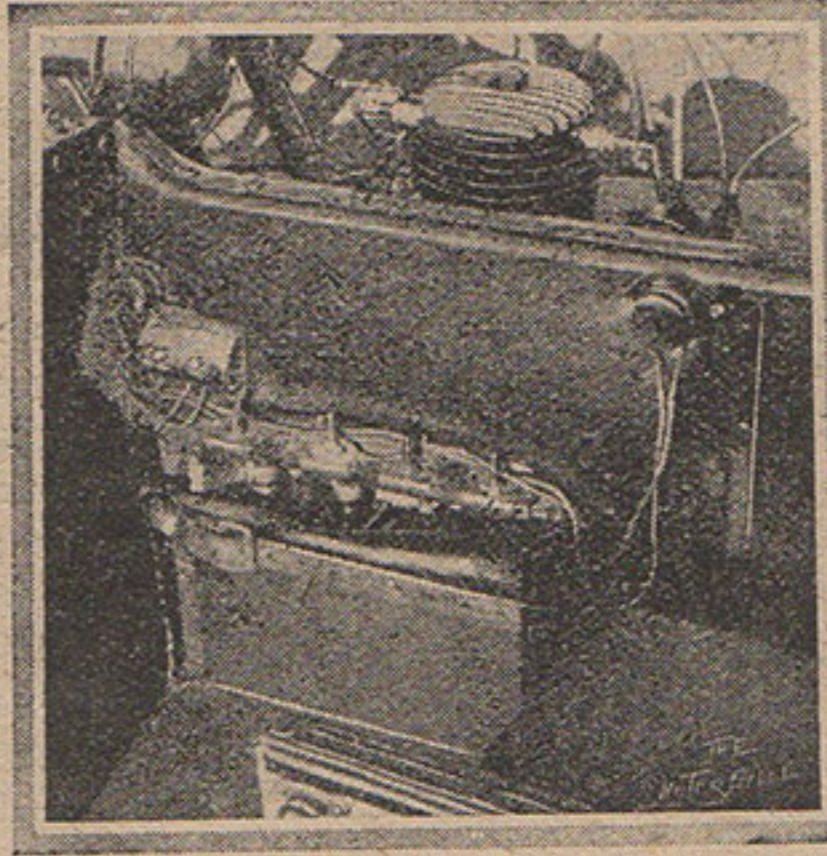
ALECTO.

CASHMORE BROS., Grove Road, Balham, S.W.12.—The sidecar fitted to the 345 c.c. Alecto two-stroke is of the



Complete with spare wheel, grid, screen, and hood, the A.J.S. was one of the most attractive sidecars at Olympia.

light coachbuilt variety, aluminium panels being used for the sake of lightness. It is mounted upon a conventional type of underslung chassis, with double-ended C springs.



Switches and accumulator in an Alecto sidecar.

ARIEL.

ARIEL WORKS, LTD., Bournbrook, Birmingham.—As in several other well known machines the Ariel frame is dropped to allow extra body room: although the axle is straight. The sidecar chassis is held from four points, of which

two are at the steering head. Extra care has been taken to provide those luxuries which add so enormously not only to the comfort, but also to the convenience of the sidecar as a vehicle, and the rear locker is large enough to take a good-sized suit case; the mudguard is of the car type and fixed to the body; the springing is soft and luxurious; and a large and well placed step is provided; there are also map pockets arranged in the upholstery on each side of the body, and other little conveniences.

ARMIS.

ARMIS CYCLE Co., 290-291, Heneage Street, Birmingham.—Surprising roominess with light weight is the most prominent characteristic of the lightweight sidecar fitted to the Armis-Precision 350 c.c. two-stroke. Although the lightweight outfit has undoubtedly come to stay, it cannot be denied that in certain cases the body used is hardly adequate for a full-sized passenger; however, this certainly does not apply to this model. Another point is that the back squab of the seat is high enough to give proper support to the back—a matter of more importance than is usually realised. C springing is used, and the connections are of the three-point variety.

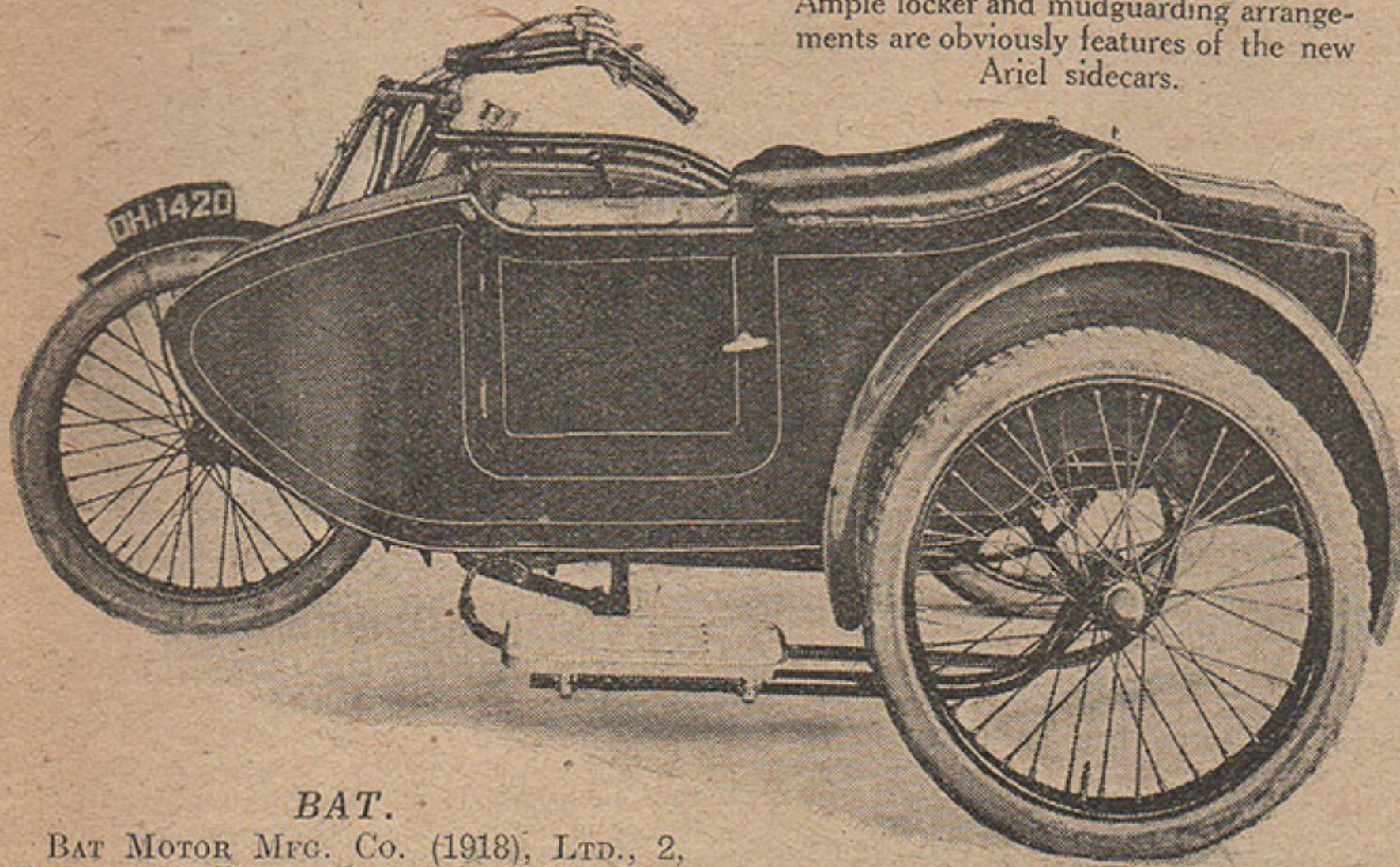
In the heavier model, which is fitted to a 5-6 h.p. J.A.P.-engined machine, four-point suspension is used, the fourth support being taken from a point about halfway down the saddle tube. The body is supported by long links from the C springs, which insulate it from shocks, and is of the normal mediumweight type, most excellently upholstered and very roomy.



A cutter type sidecar—the Alldays Allon

Sidecar Progress.—

Ample locker and mudguarding arrangements are obviously features of the new Ariel sidecars.



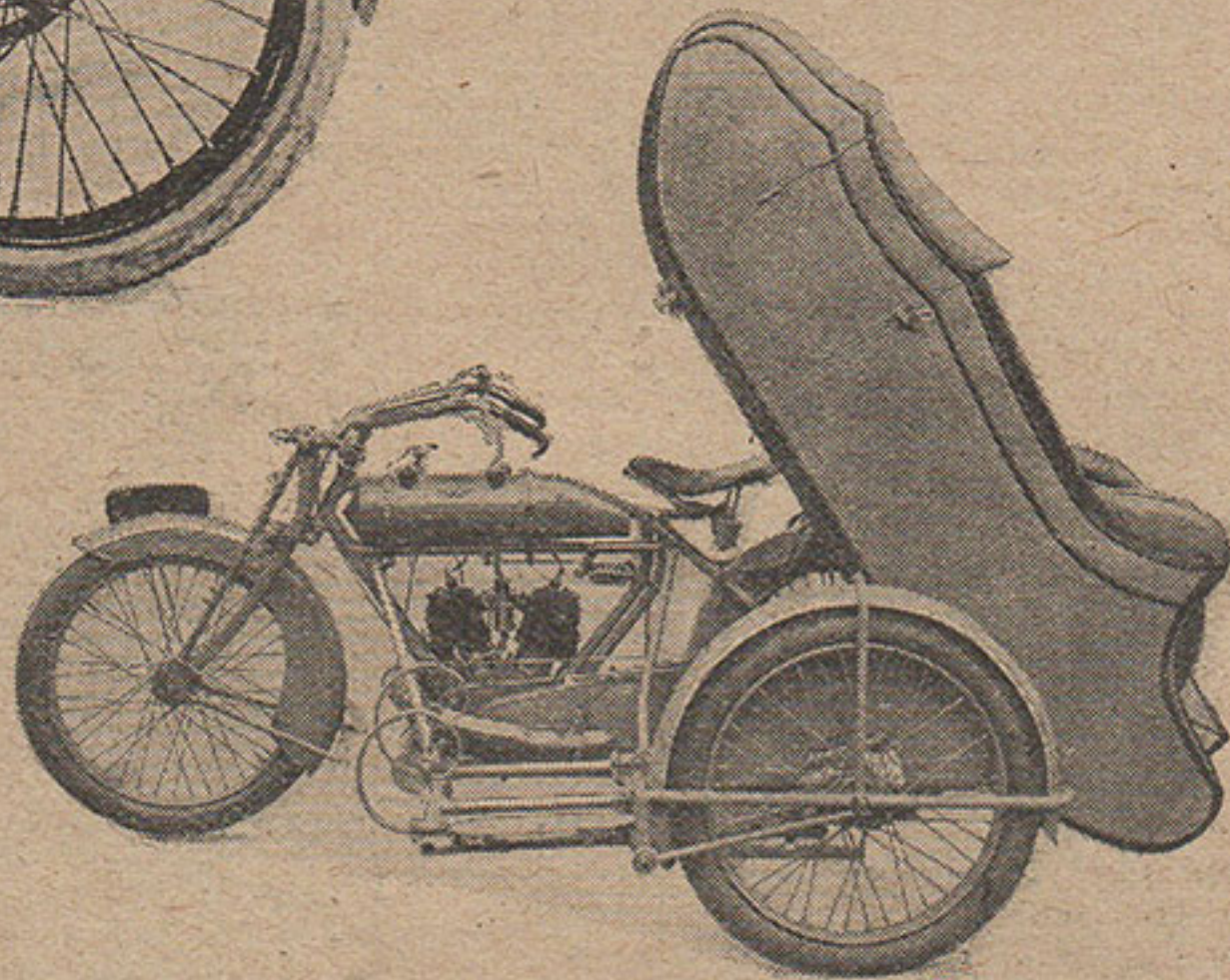
cycle by a short but flexible leaf spring, and the rear of the body is suspended from this sprung axle. There is no direct connection from the front of the chassis to the head of the motor cycle, but a diagonal stay from the junction of saddle tube support and the chassis is carried up to the head, and joined about two-thirds along its length by the front chassis support. The body, while following standard practice, is larger and more comfortable than the majority of those fitted to lightweight chassis.

BLACKBURNE.

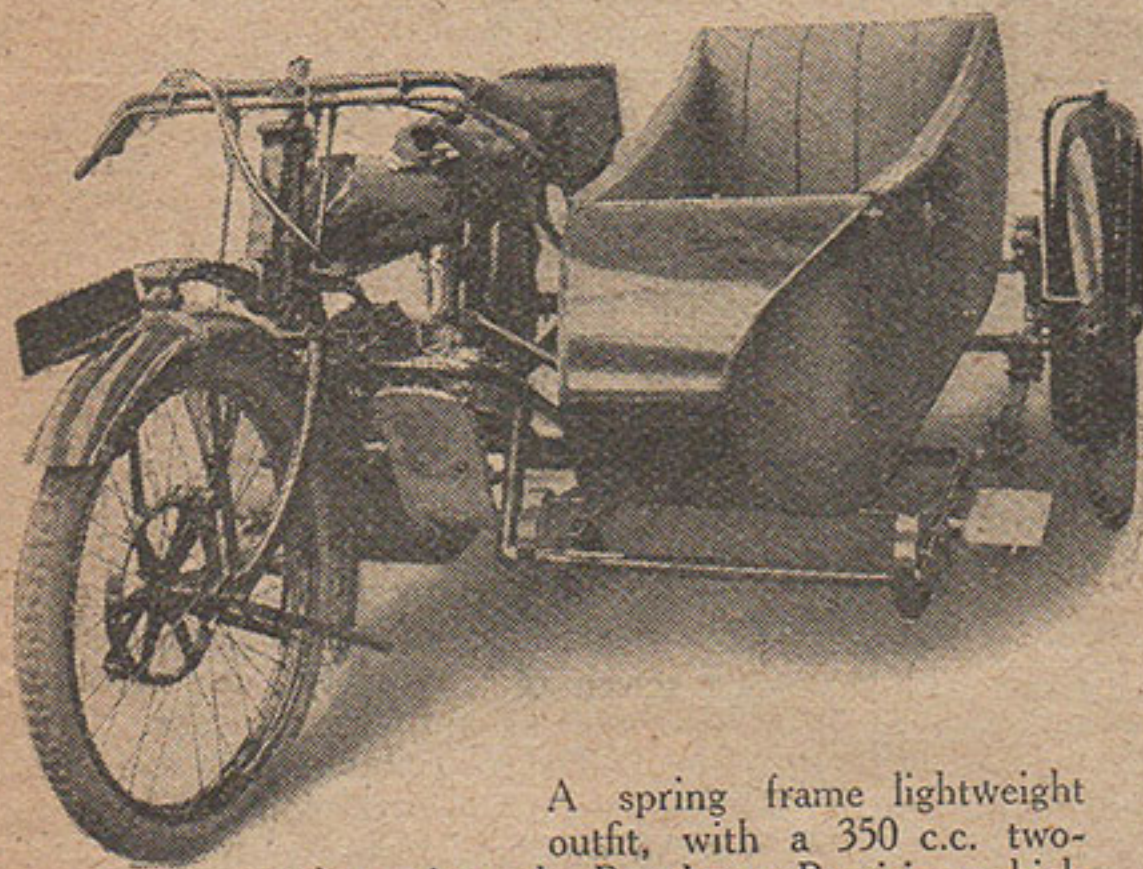
BURNEY AND BLACKBURNE, LTD., 28, Conduit Street, W:1.—As an example of robust construction, the U.A.C. sidecar

BAT.

BAT MOTOR MFG. Co. (1918), LTD., 2, Kingswood Road, Penge, S.E.20.—Perhaps the best sprung sidecar in the Show is that fitted to the 8 h.p. Bat machines.



Showing how the body may be swung out of the way when adjustments are necessary on the Bat motor cycle.



A spring frame lightweight outfit, with a 350 c.c. two-stroke engine—the Beardmore-Precision, which has a sprung sidecar axle.

The front of the body is slung on C springs of the usual type, but the rear is supported on two independent quarter-elliptic springs of great length, and the clearances are designed so as to allow for a spring deflection of six or seven inches. Not content with this, the makers use a spring-supported sidecar wheel. The wheel spindle (it is not a stub axle) is suspended in forks which pivot freely about their connection to the sidecar chassis, and are held by two large helical springs. The result of this system is that one sinks into the sidecar seat as one does into a well-built armchair.

Provision is made for carrying a spare wheel on the right-hand side of the body, and in both the two models shown there is accommodation for a large amount of luggage, either on a car type luggage grid at the rear or in an extra large boot.

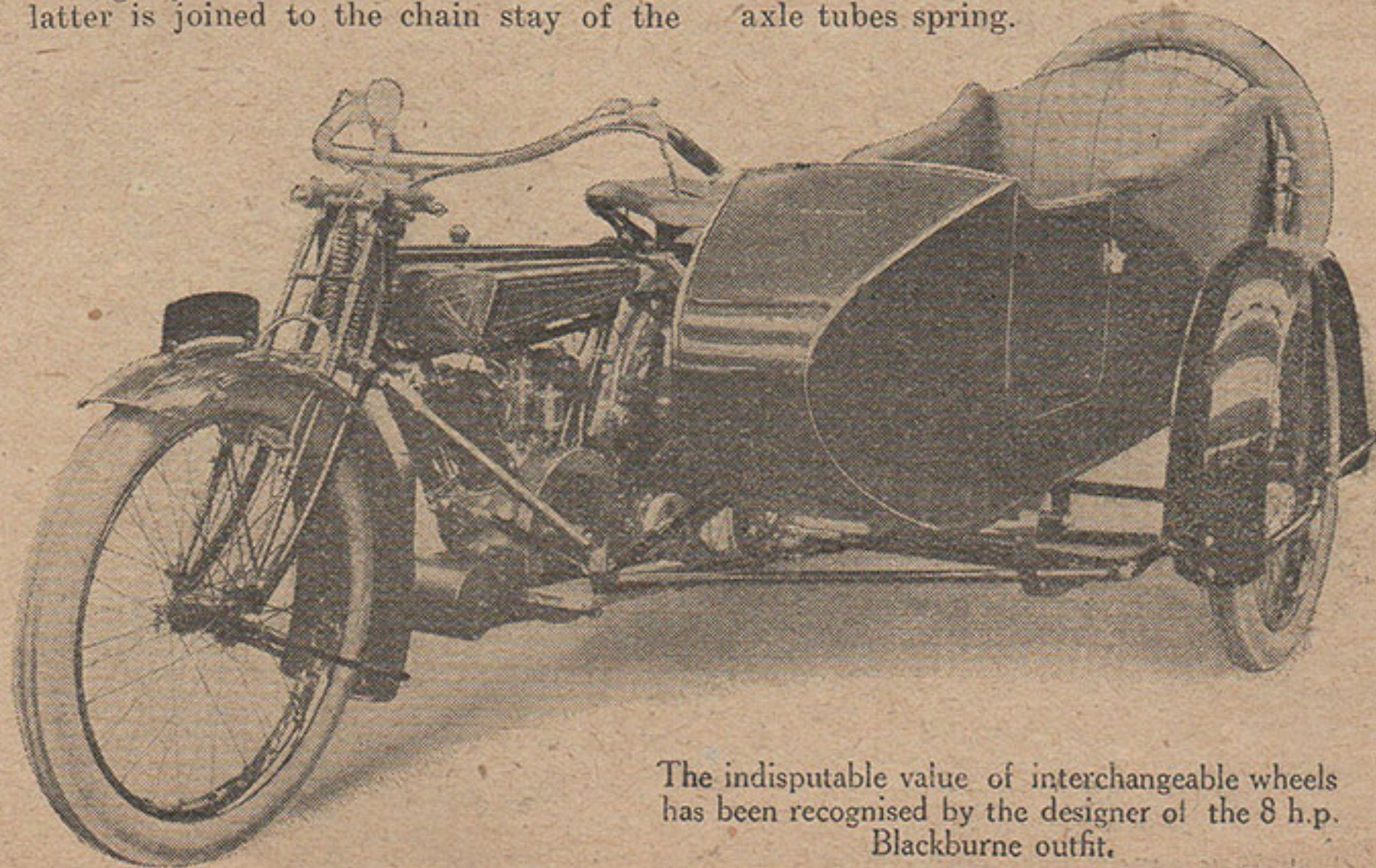
BEARDMORE-PRECISION.

F. E. BAKER, LTD., King's Norton, Birmingham.—In designing a lightweight sidecar to be attached to the Beardmore-Precision spring frame two-stroke machine, several interesting problems had to be surmounted. It was essential

that the advantage of the sprung motor cycle frame should not be lost, and at the same time it was necessary to keep down the weight to a minimum.

The main frame of the chassis is rectangular, and of quite short length, and is not rigidly connected to the rear axle. This latter is joined to the chain stay of the

fitted to the 8 h.p. Blackburne is fully worthy of the machine to which it is attached. All the tubes by which it is fixed to the motor cycle are attached to a long triangulated girder member which forms the backbone of the chassis construction. The hinder end of this member is made up of two open steel pressings, from which the two axle tubes spring.



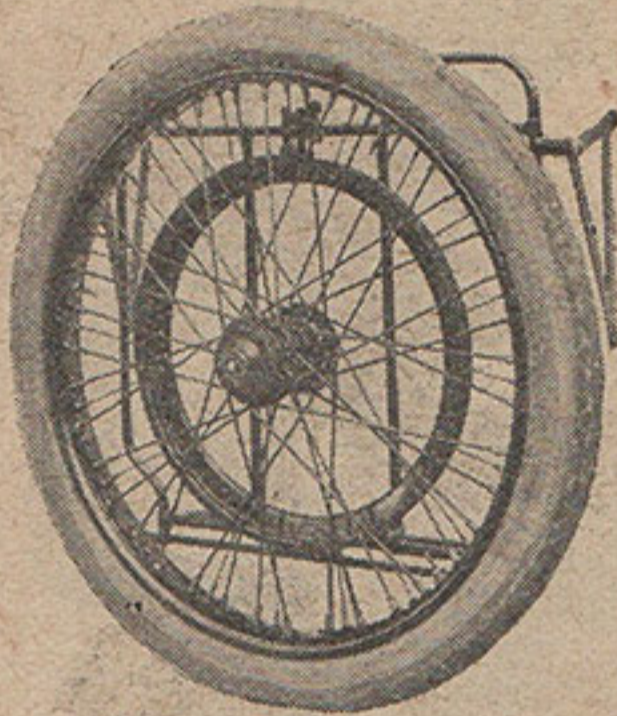
The indisputable value of interchangeable wheels has been recognised by the designer of the 8 h.p. Blackburne outfit.

Sidecar Progress.—

The sidecar wheel is supported from both sides by two loop tubes, which also form two extremely rigid mudguard supports integral with the chassis. The body itself is roomy and is provided with a fair sized boot for luggage: the spare wheel is supported under a grid, which allows of additional luggage accommodation. The body is supported on C springs and an increased clearance has been provided.

B.S.A.

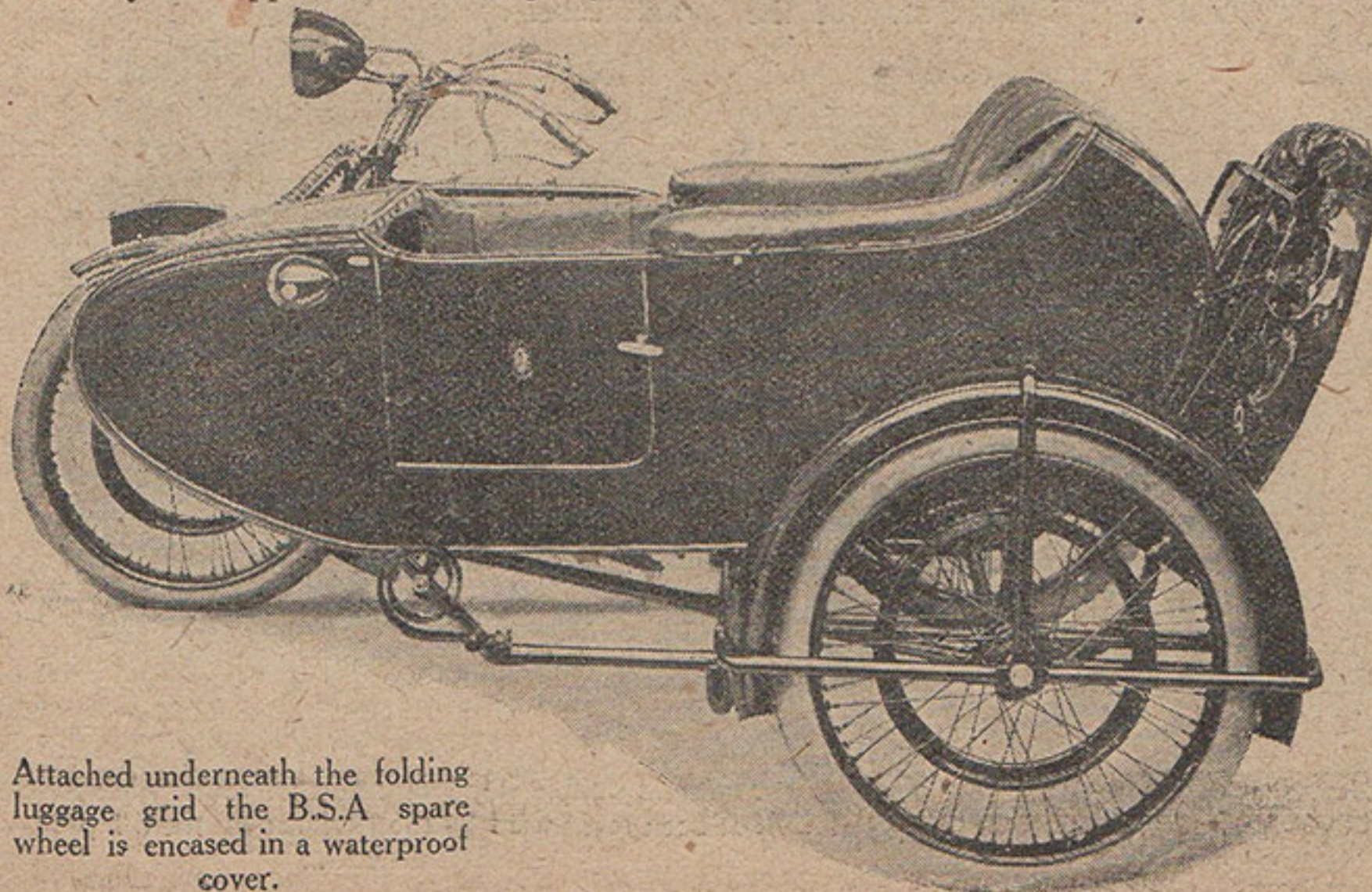
B.S.A. CYCLES, LTD., Small Heath, Birmingham.—A new design of sidecar fitted to the 4½ h.p. B.S.A. has a most interesting type of chassis, in which weight and complication are reduced to a minimum. The main frame consists of an open triangle, of which the rear member is a double tube. At the front the two points of attachment on the machine are connected by tubes to the apex of a triangle, so that only six



The hinged luggage grid on the B.S.A. sidecar provides a safe and unobtrusive anchorage for the spare wheel.

tubes in all are used for the chassis, including the stay from the saddle.

The body is suspended at the rear on a single transverse inverted semi-elliptic spring, and it is noteworthy that this spring, following the latest car practice, has been enclosed in a gaiter. In front the body is supported at a single point



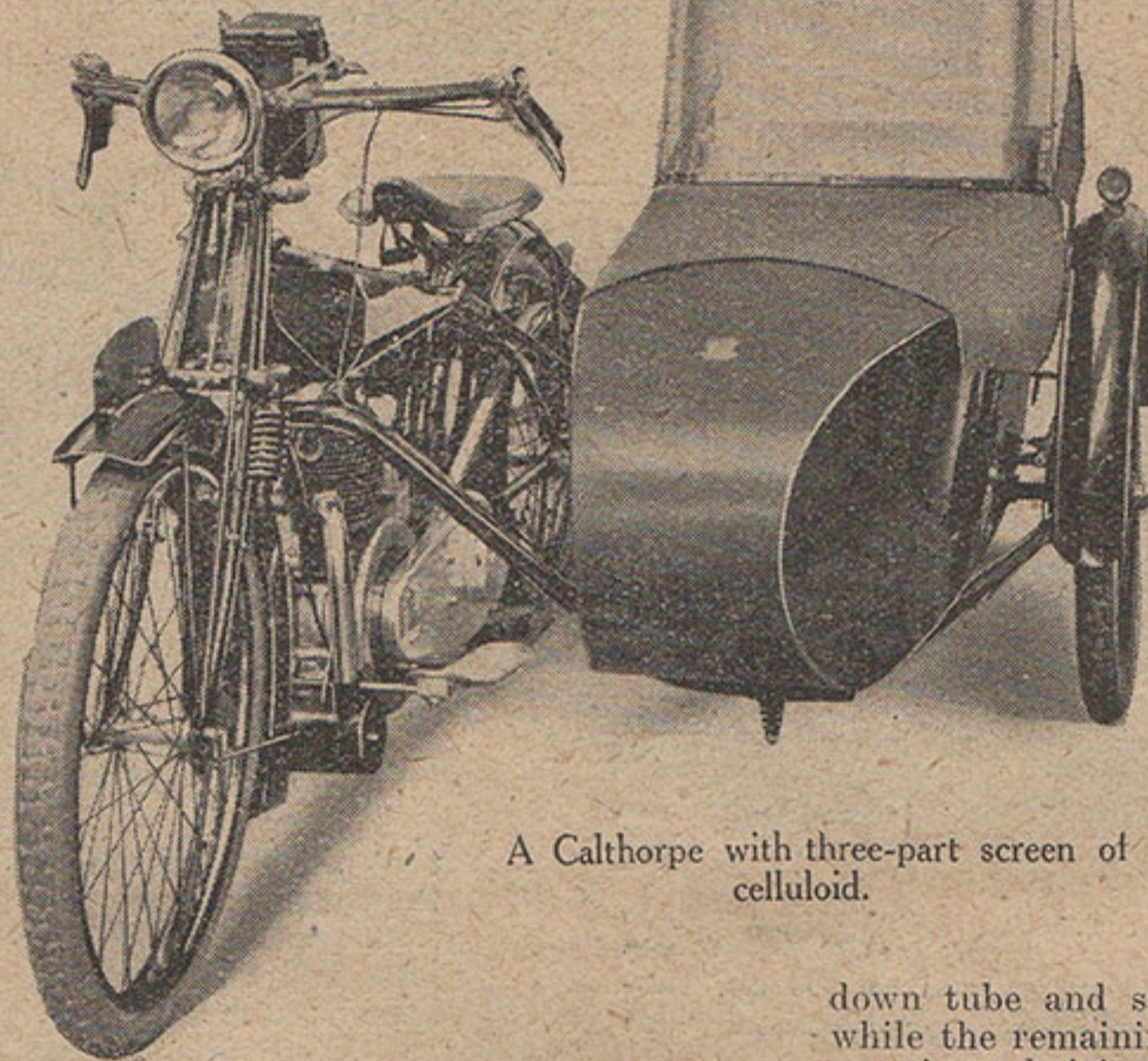
Attached underneath the folding luggage grid the B.S.A. spare wheel is encased in a waterproof cover.

by a coil spring, thus giving the coachwork a true three-point suspension, while the mudguard is fixed on the body and not to the wheel axle.

On the twin B.S.A. the sidecar is of a more conventional type, with a frame all round the wheel instead of a stub axle, and a spare wheel attached to the luggage grid.

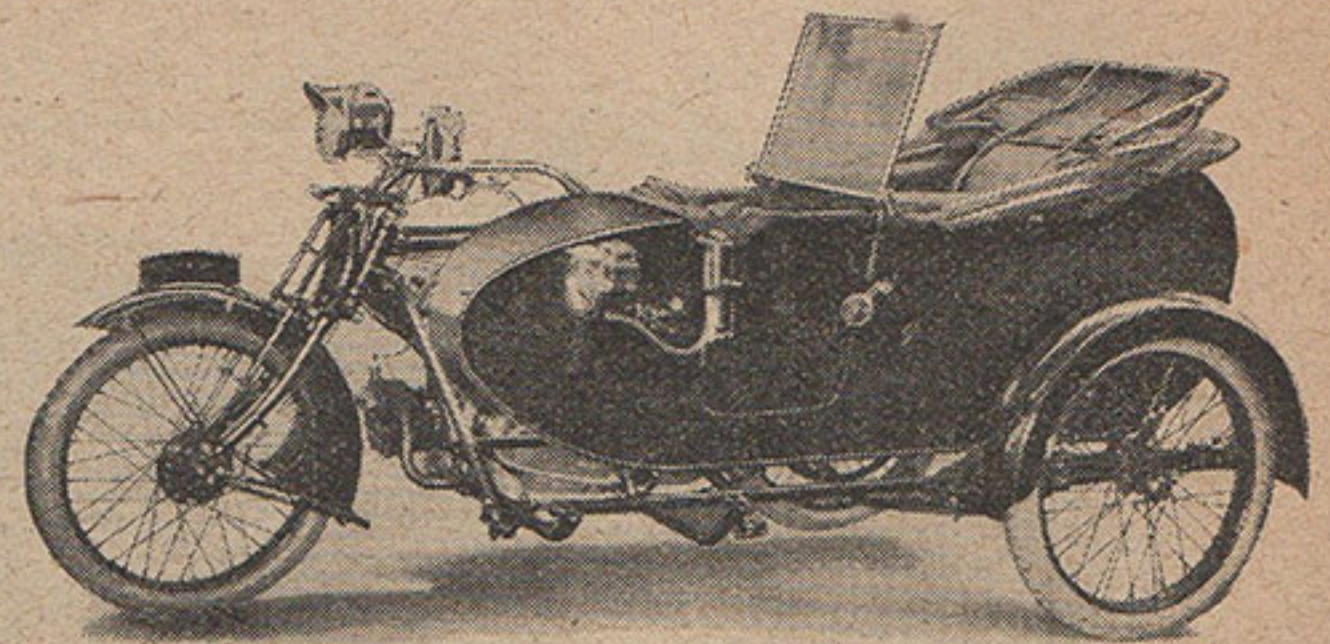
CALTHORPE.

CALTHORPE MOTOR CYCLE Co., Barn Street, Birmingham.—Being designed as a complete lightweight proposition, the sidecar fitted to the 350 c.c. two-stroke Calthorpe has been kept extremely simple. The main



A Calthorpe with three-part screen of celluloid.

frame of the chassis is simply a triangle with rounded front end. Four attachment tubes are carried to the usual points on the motor cycle frame. It is note-



On the Brough the lamp and generator for the sidecar is fitted to the body.

worthy that suspension by cantilever springs, has been adopted at the rear, while the front of the body is held on a single coil spring at the apex, thus providing a three-point suspension.

A large locker and a long and comfortable seat of extra width are points which it is unusual to find in a sidecar of such extremely light weight.

CAMPION.

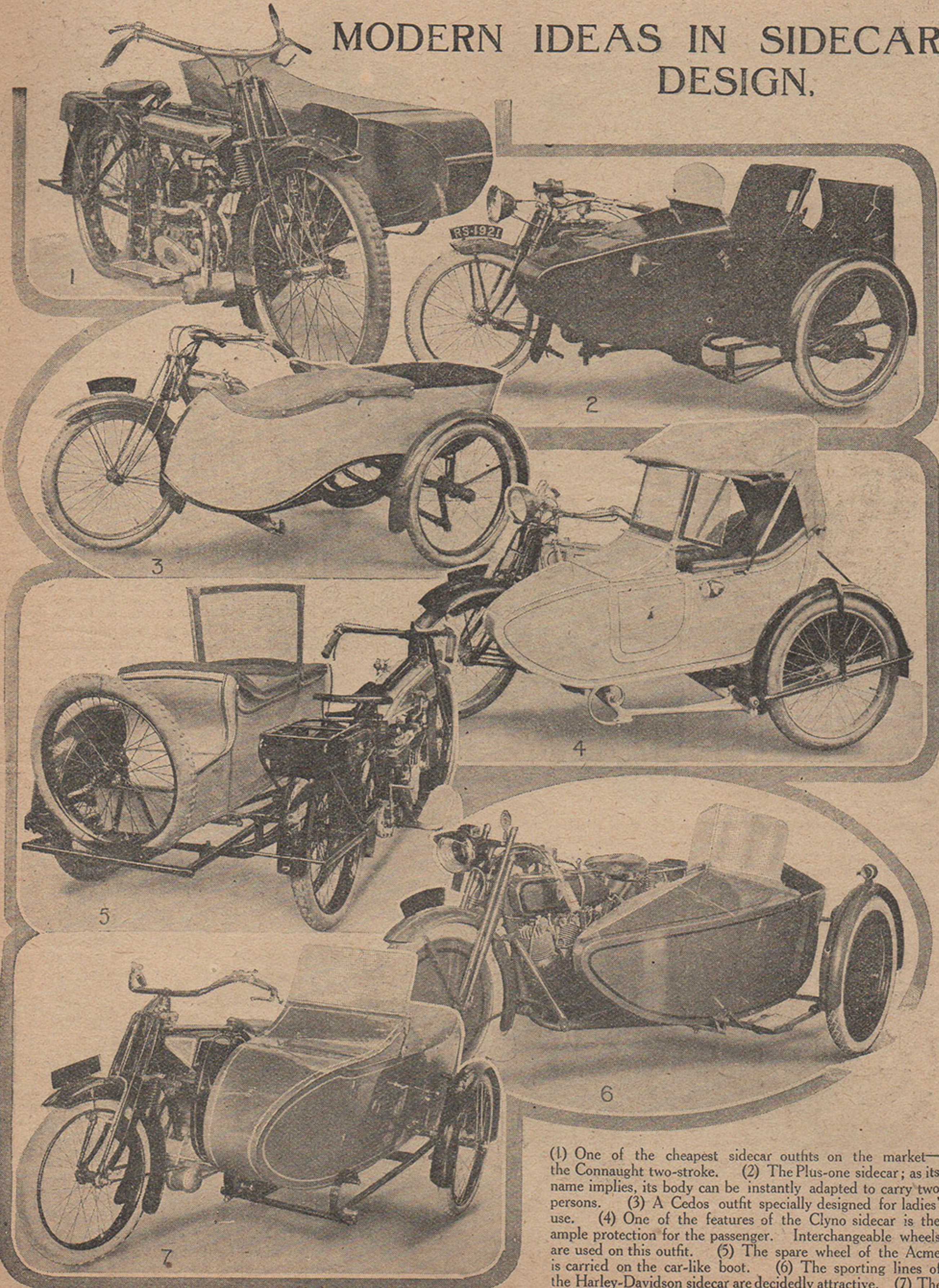
CAMPION CYCLE Co., LTD., Robin Hood Street, Nottingham.—With this firm rests the honour of producing the first sidecar taxicab outfit to be licensed to ply for public hire. The chassis, which is attached to an 8 h.p. Champion machine, is of the underslung variety on straightforward lines. Five attachments are used, two each to the front

down tube and saddle tube respectively, while the remaining one is in the form of a universal joint attached to the chain stay near the fork end. The large double-seated cabriolet body is mounted upon a pressed steel sub-frame, which is insulated from the chassis by means of two underslung half-elliptic springs fixed at the front, pivoted at the axle, and shackled at the rear. Two upturned quarter-elliptics with scroll ends carry the front of the sub-frame. This method of carrying a large body is claimed to be ideal, since it eliminates most of the stresses from the bottom boards. A standard Champion single-seated touring sidecar is also made with an underslung chassis.

CANOULET.

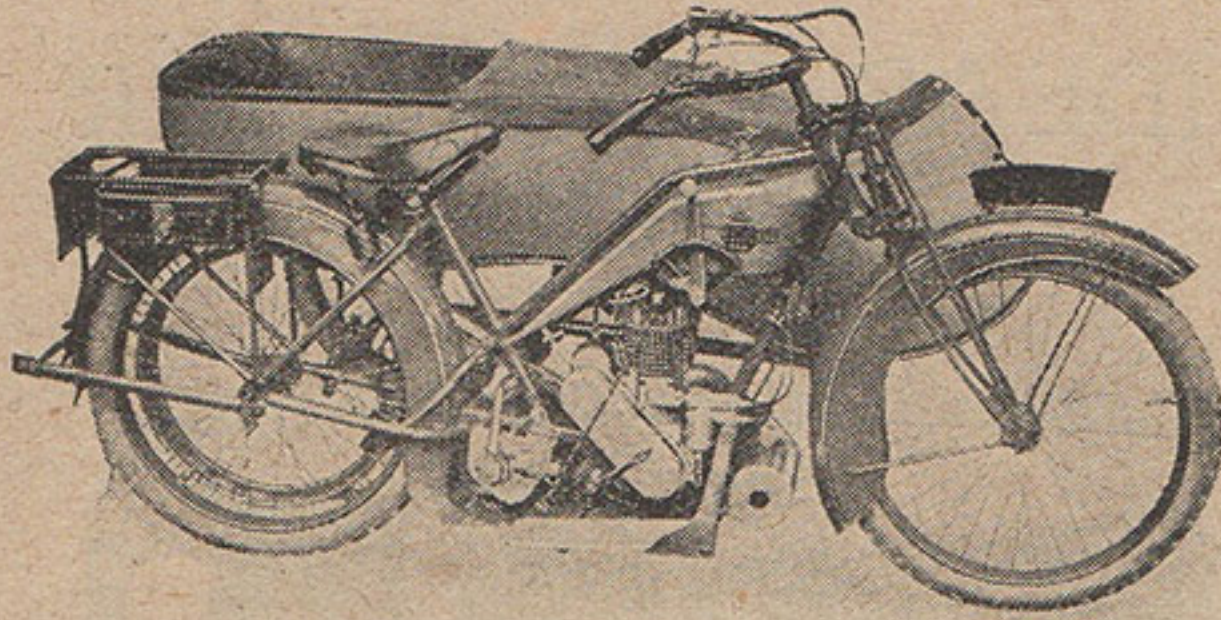
MEAD AND DEAKIN, Birmingham.—Probably the Canoelet models best known to the general public—by reason of their very distinctive lines—are the Minor and Sporting types, which have become justly famous for use in connection with light machines, or even with heavy mounts, where a light attachment of the racing type was required. An innovation just introduced is the model T4. The chassis of this has a very slightly dropped axle, and is simply constructed of three main tubes converging towards the front, where they run parallel for some few

MODERN IDEAS IN SIDECAR DESIGN.

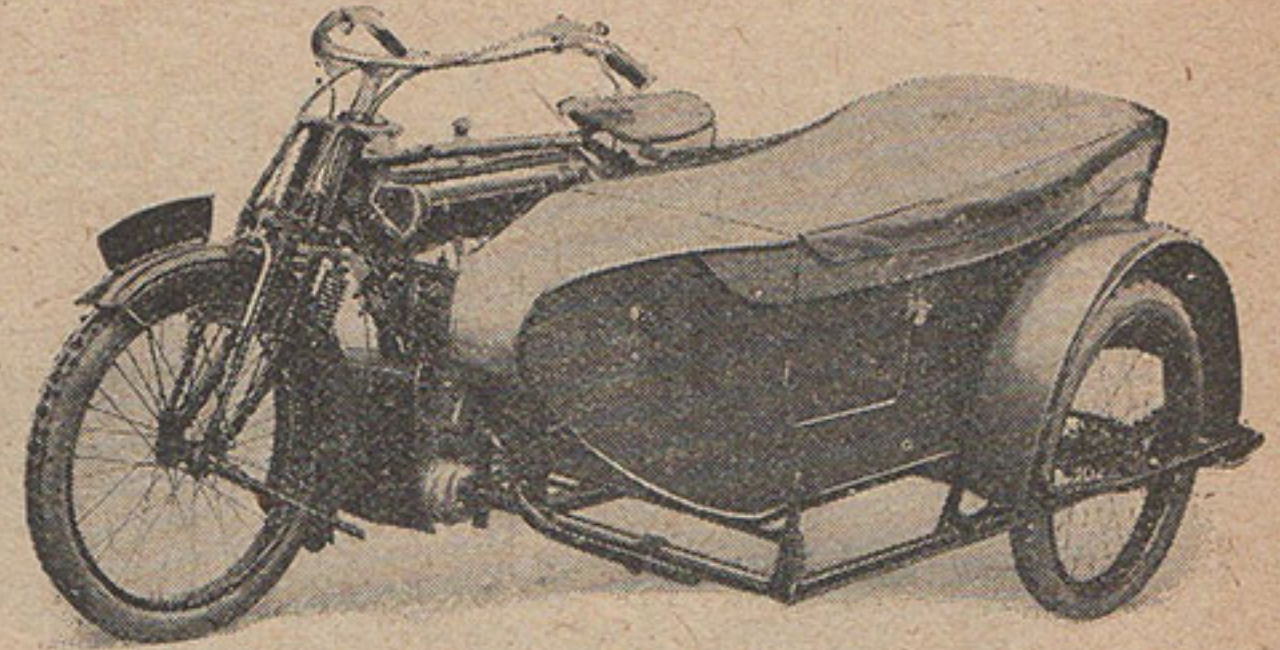


(1) One of the cheapest sidecar outfits on the market—the Connaught two-stroke. (2) The Plus-one sidecar; as its name implies, its body can be instantly adapted to carry two persons. (3) A Cedros outfit specially designed for ladies' use. (4) One of the features of the Clyno sidecar is the ample protection for the passenger. Interchangeable wheels are used on this outfit. (5) The spare wheel of the Acme is carried on the car-like boot. (6) The sporting lines of the Harley-Davidson sidecar are decidedly attractive. (7) The 8 h.p. British Excelsior outfit sells at a moderate figure.

Sidecar Progress.—



To the lady sidecarist this little Cedos lightweight outfit will make a special appeal.



A Grinlley sidecar is used as standard on the 6 h.p. Bradbury

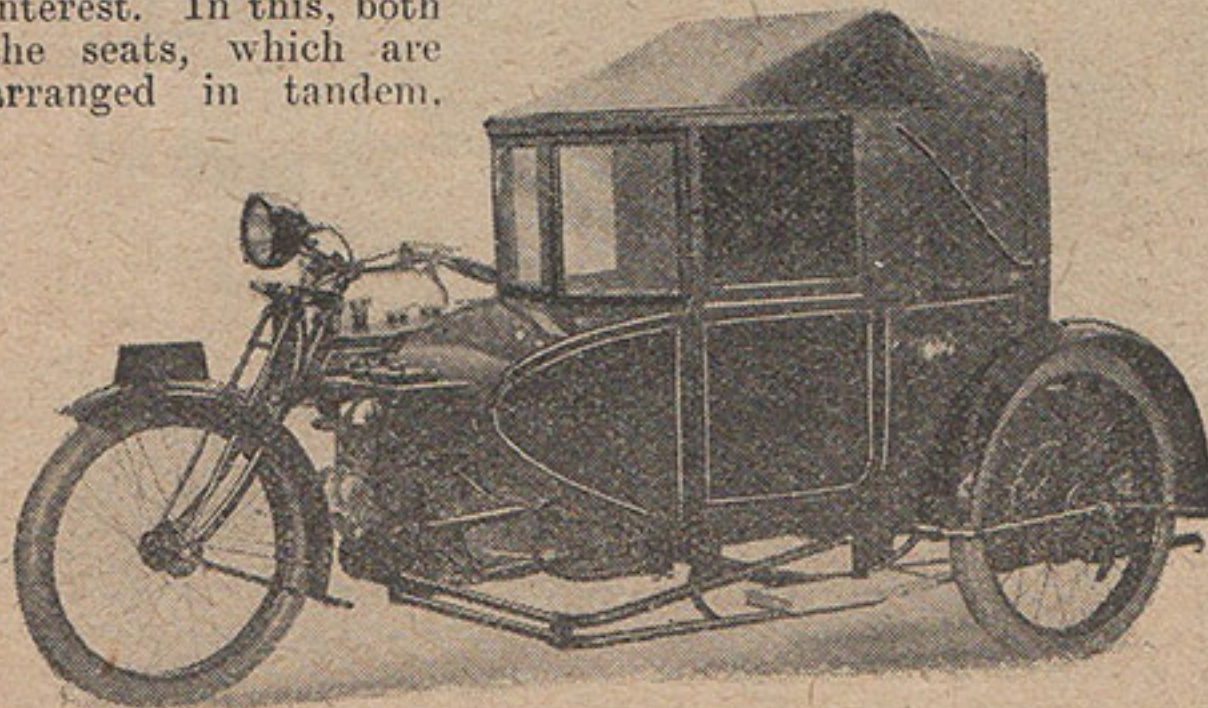
inches, forming a platform on which the front quarter-elliptic springs and the front attachments are clipped. The body, which is carried at the back on C springs, is of very graceful shape, and provides ample room for the passenger.

A special feature is the celluloid windscreen, which is curved to follow the circular opening of the dash. The near side end of the screen is carried on a swivelling vertical rod attached to the door, so that the screen opens with the latter, and is thus out of the way when the passenger is entering, or alighting from, the car. Four-point attachments are used; the mud-guard is carried on the side of the body, and a large bulbous locker is provided.

The other touring Canoelet sidecars remain as they were, no alterations being found necessary. It should be borne in mind that this firm probably did more to popularise the coachbuilt sidecar than any other in the earlier days of motor cycling. The Canoelet taxicab is a new departure, which will be dealt with in the near future.

CHATER-LEA.

CHATER-LEA, LTD., 74, Banner Street, London, E.C.1. — In chassis design, the Chater-Lea sidecar (as fitted to their 8 h.p. machine) follows the generally accepted practice for heavy sidecars of using triangulated longitudinal members. They offer, however, a two-seater body of considerable interest. In this, both the seats, which are arranged in tandem,



A taxi-sidecar which does not look cumbersome—the handsome Champion vehicle with taximeter mechanism on the front of the body.

are of full size and suitable for adults. In order to afford extra leg room in the front seat, there is a well in the extreme toe of the chassis which can be dropped, or if desired can be clipped up flush with

back and seat of the front seat can be shifted to an alternative position further back, giving an extremely large, roomy, and luxurious body for one. The spare wheel is carried on the front of the body.

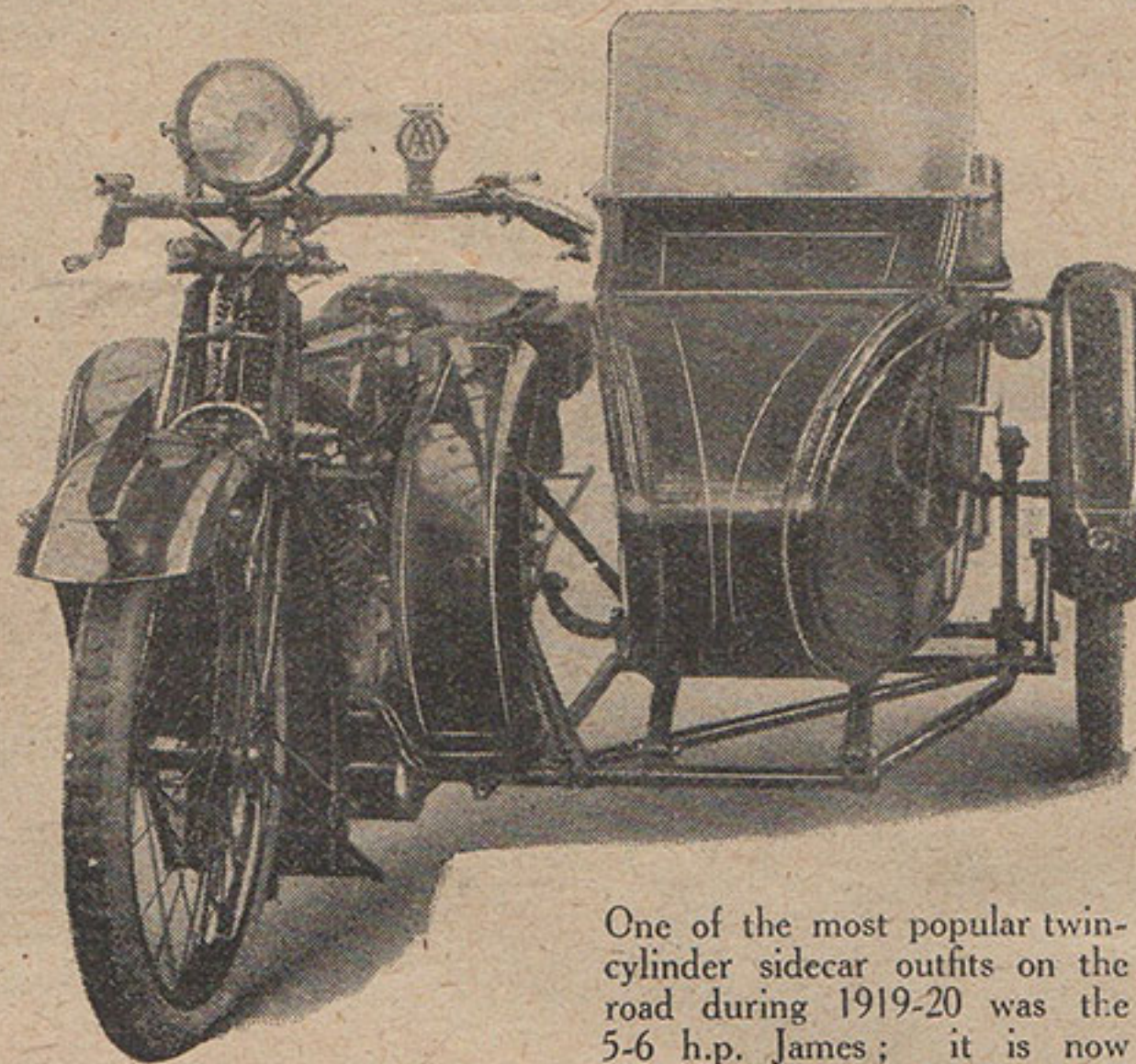
CLYNO.

CLYNO ENGINEERING CO., LTD., Pelham Street, Wolverhampton.

—As usual with sidecars for sprung frames, the Clyno chassis is cut off short at its rear end, the hindmost attachment being a double connection running to the saddle pin and to a point near the bottom of the saddle-pillar. The upper of these two tubes is carried right across to form a triangular rear cross member, on the outside end of which is the spring box, which holds the outer body C spring, and also the leaf spring, which insulates the chassis from the wheel.

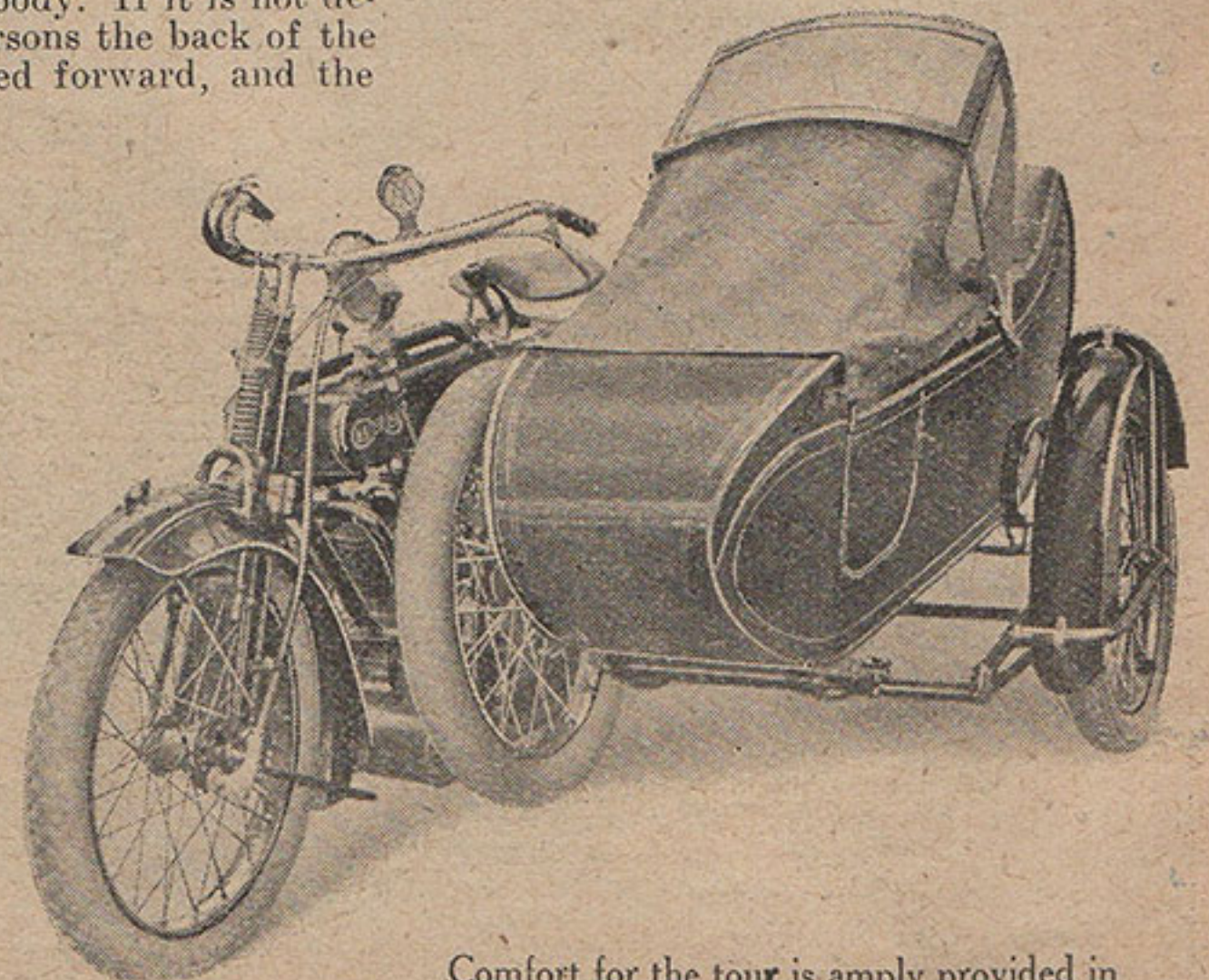
The forward end of the chassis is attached to the front down tube of the cycle, and another connection goes right to the top frame tube. The design of the spring wheel is particularly good, as also is the construction throughout.

The glass windscreen with celluloid side lights, the excellent hood, and the luggage carrier faced with aluminium matting, combine to give great luxury.



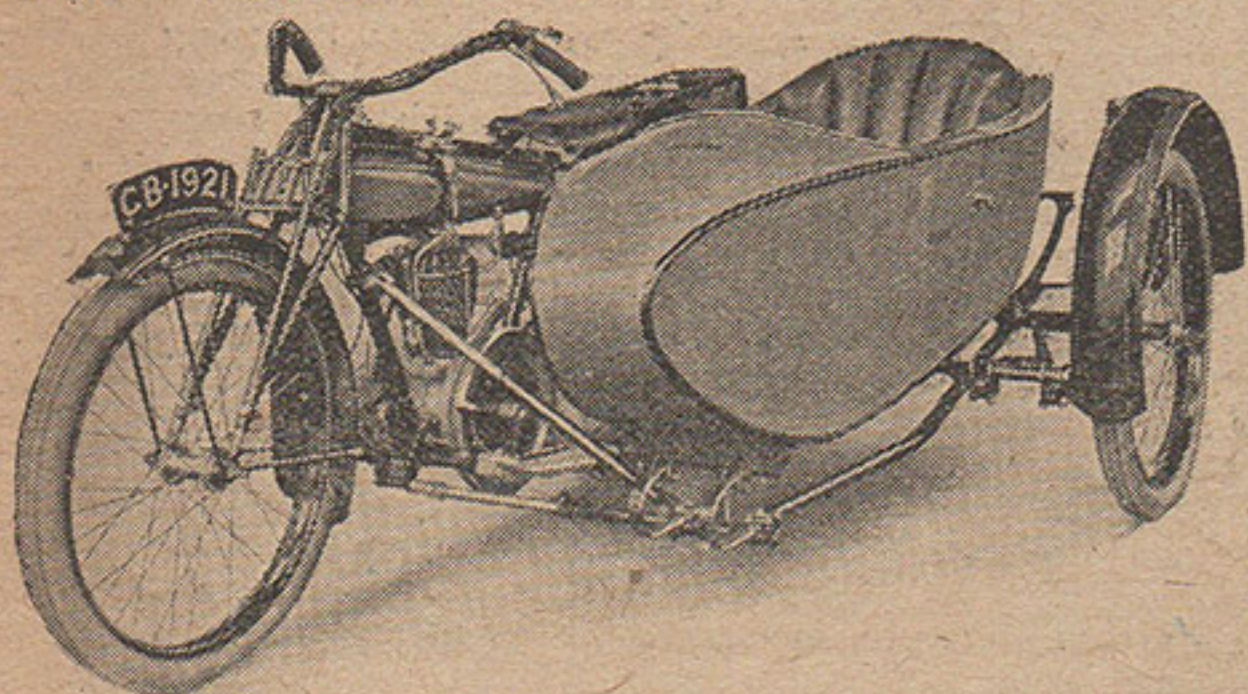
One of the most popular twin-cylinder sidecar outfits on the road during 1919-20 was the 5-6 h.p. James; it is now equipped with a 7 h.p. engine and should meet with increased success.

the remainder of the body. If it is not desired to carry two persons the back of the rear seat can be folded forward, and the



Comfort for the tour is amply provided in the 8 h.p. Chater-Lea outfit.

Sidecar Progress.—



The Coulson sidecar has a spring wheel utilising quarter-elliptic springs, as on the machine itself.

COPPEN ALLAN.

COPPEN ALLAN AND Co., 89, Great Portland Street, W.1.—Remarkable ingenuity is shown in the design of the Plus One sidecar. While the chassis is of more or less normal design, the body is very novel. When in use in the ordinary way, the passenger sits in what is practically an extra luxurious deck chair, with a padded front edge to the seat and an elastic back, the whole being adjustable. If no passenger be carried the seat may be swung down into the body, and the whole protected by the apron. When accommodation for two is required the dickey seat is opened, and this gives ample room for a full-sized passenger.

For the carrying of luggage or parcels alone, both seats may be removed completely, thus giving the luggage capacity of a trades' delivery car. The sidecar as sold is complete with apron, lamp bracket, and aluminium step, and altogether seems to represent a real advance in design.

COULSON-B.

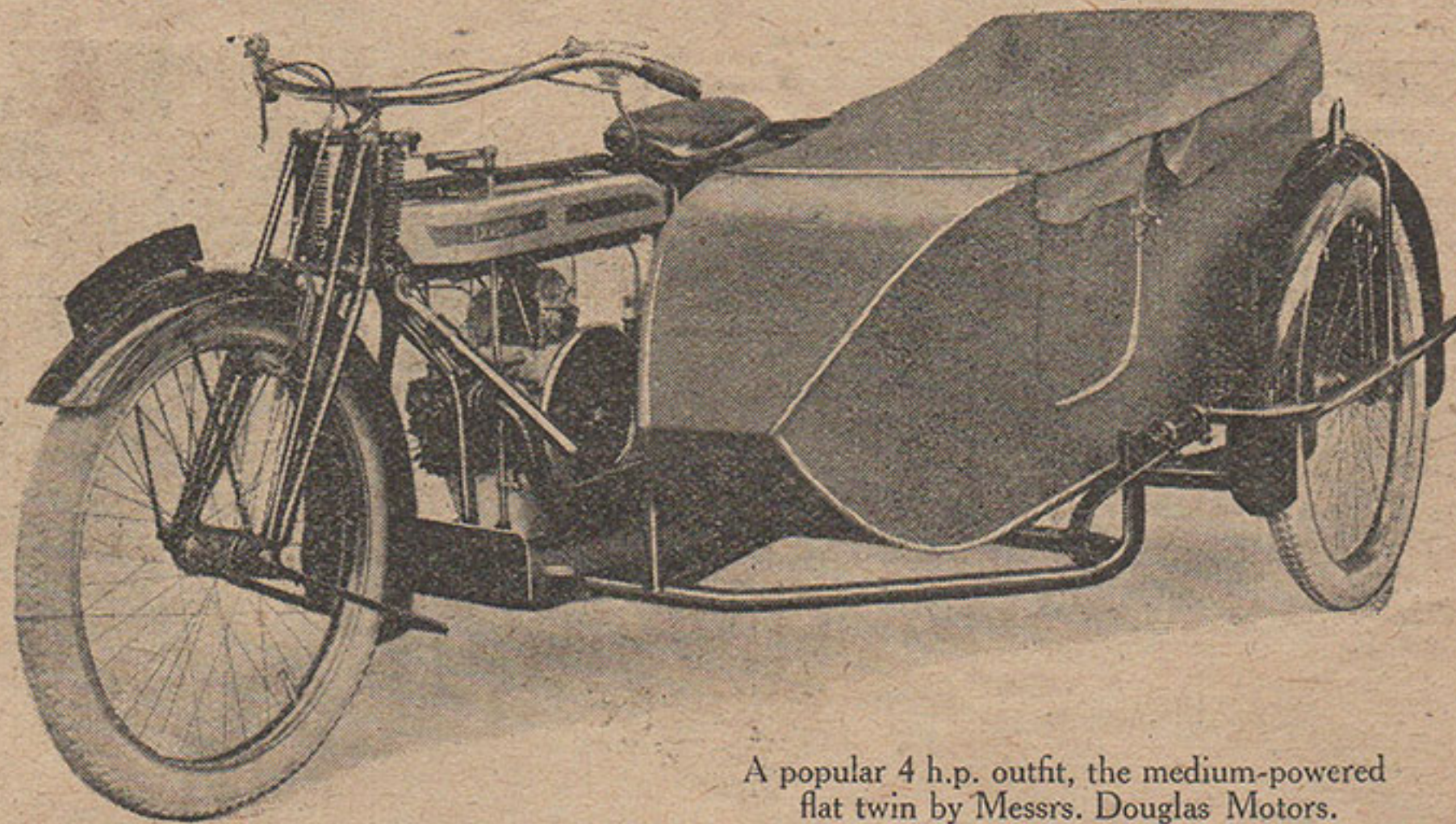
F. ASLETT COULSON ENG. Co., Albion Street, London, N.1. — Spring frame machines, such as the Coulson-B, necessarily demand that sidecars attached to them shall also have spring wheels if the overall comfort of the outfit is to be assured. In this respect the Coulson sidecar has been very effectively designed with a form of spring axle support very

similar to that employed on the motor cycle rear wheel. All the five connections are made to rigid parts of the frame, and the body is carried on quarter-elliptic springs at the rear and a central C spring in front, the latter being secured to the apex formed by the converging tubes of the chassis. Rearwardly, these tubes are extended so that they may be used as a luggage grid. A very attractive body is used, having a pointed

tail, in which is a convenient locker covered with a lid held by a spring catch.

DALTON.

DALTON MOTOR Co., LTD., 17, John Dalton Street, Manchester. — Springing has obviously received special attention

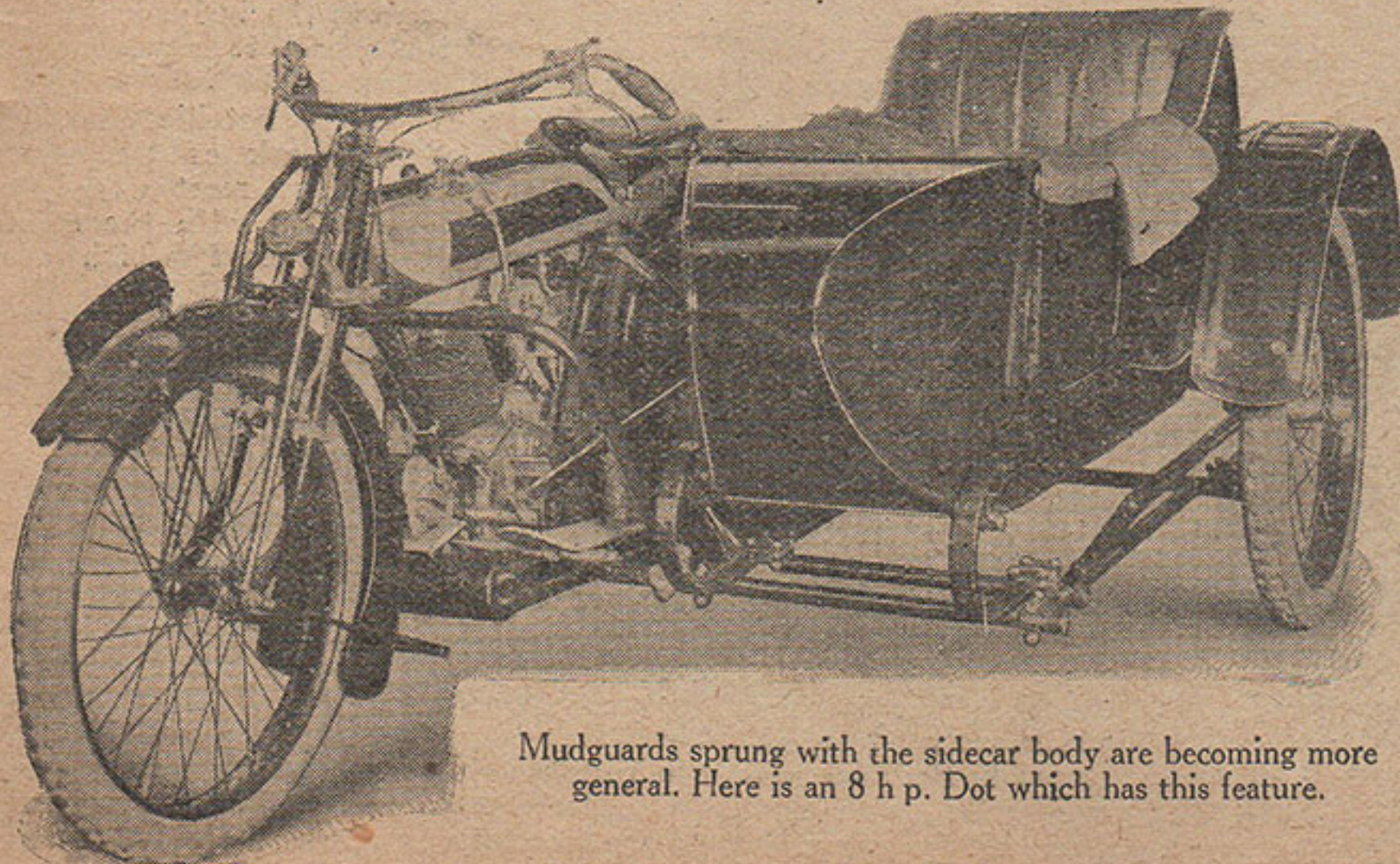


in the sidecar fitted to the 5-7 h.p. flat twin Dalton. The main frame of the chassis is roughly triangular in plan, but has two cross members at the rear. These cross members support the two ends of a

pair of inverted semi-elliptic springs of car type, spiral spring shock absorbers intervening between the two. The centre trunnions of these semi-elliptic springs support the sidecar body. The result is an extremely flexible suspension, resembling that of an expensive car. The stress is distributed from the chain stay support and the sidecar wheel stub axle by a pair of very solid steel stampings, which spread the load. Another good point is that the chain stay tube has a universally jointed attachment, which is only locked up when the sidecar is actually aligned. The sidecar body is long and very roomy, having a large locker at the back and ample leg room in front.

DOT.

DOT MOTORS, Ellesmere Street, Hulme, Manchester.—On the 8 h.p. Dot-Jap, the sidecar has a new type of chassis of considerable interest, mainly for the fact that it is designed to be readily fitted either on the right or left of the machine. For this purpose, the main rectangular frame of the chassis is entirely symmetrical, and the chain stay connection to the



Mudguards sprung with the sidecar body are becoming more general. Here is an 8 h p. Dot which has this feature.

A popular 4 h.p. outfit, the medium-powered flat twin by Messrs. Douglas Motors.

cycle frame can be interchanged with the stub axle carrying the sidecar wheel. The front cross member of this frame is not brazed to the remainder, but clipped in lugs, and the two attachment tubes can be fitted to either end of it. Similarly, the saddle pin connection can be affixed at its lower end to either side of the sidecar chassis.

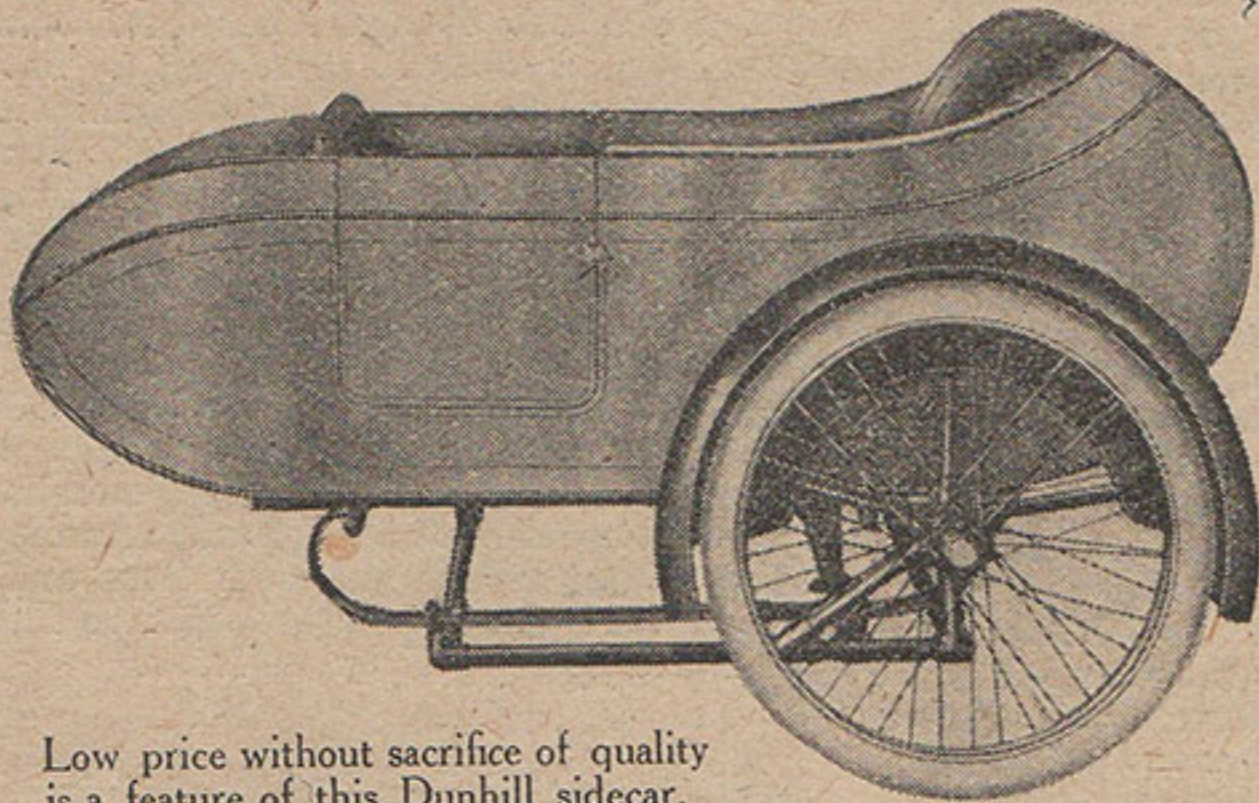
In addition to the convenience of being able to use the sidecar, either as right or left-hand, the sliding front tube makes it exceedingly easy to obtain correct alignment. The mudguard over the sidecar wheel is very wide—in fact it is of car shape, and is suspended from the body instead of the axle, which is by far the most satisfactory arrangement.

The body, while not showing any deviation from standard practice, is well designed for comfort, and is most luxuriously upholstered.

DOUGLAS.

DOUGLAS MOTORS, LTD., Kingswood, Bristol.—Very few changes have been made in the chassis of the Douglas sidecar: it remains as it was—a fine example of robust yet light construction. Its main point of divergence from the usual is in the square girder-built

Sidecar Progress.—



Low price without sacrifice of quality is a feature of this Dunhill sidecar.

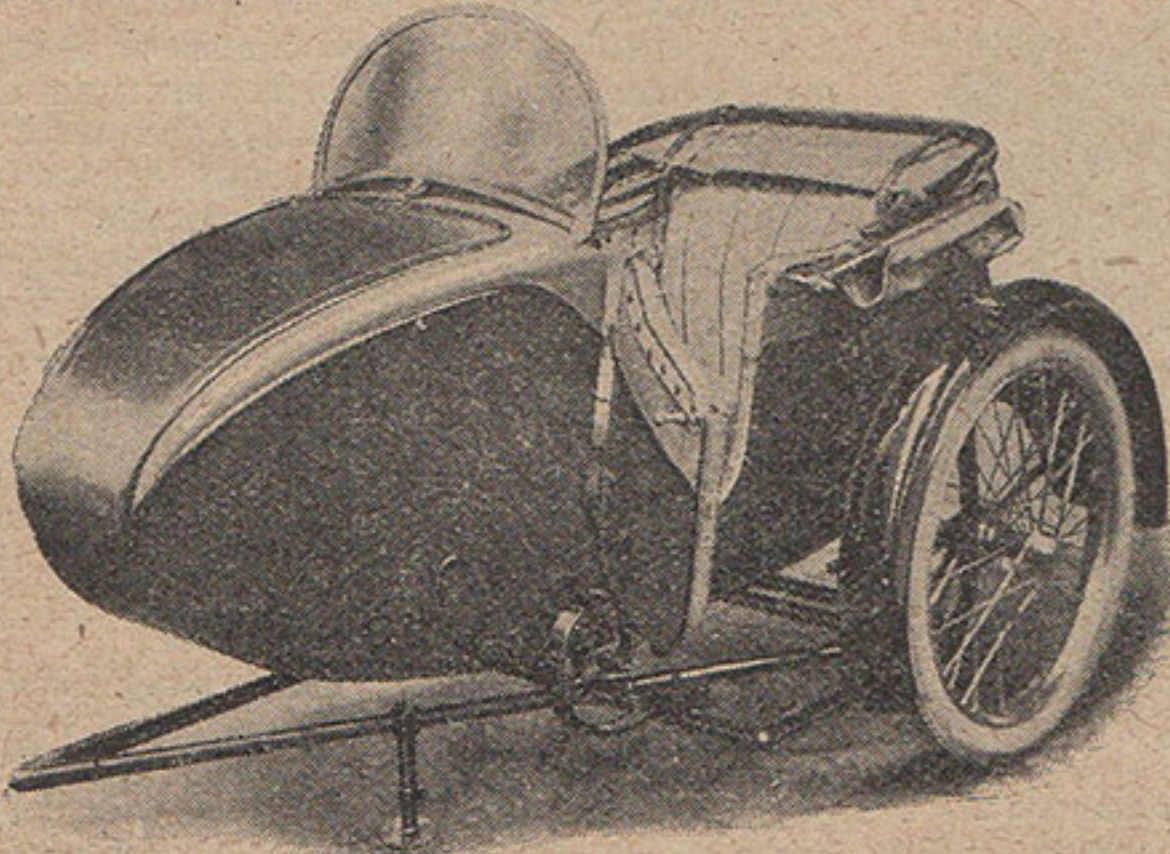
longitudinal member on the cycle side of the chassis. This has a triangulated attachment to the chain stay, and also two tubes running to the head and the saddle-pillar. The fourth attachment (to the footrest) is by a tube which forms the front cross member of the frame. Both this and the rear cross member are dropped to allow body room, and the body itself is suspended on the rear member by a transverse semi-elliptic spring. The frame extends all round the sidecar wheel, which is on an ordinary spindle instead of a stub axle; the surrounding frame also gives a very rigid support to the mudguard.

DUNELT.

DUNFORD AND ELLIOTT (SHEFFIELD), LTD., 95-99, Bath Street, Birmingham.—For this machine (the 500 c.c. two-stroke, which we have already described in these columns) the Watsonian Company has built a specially designed sidecar. This is chiefly notable for the very low dropped frame, which allows room for an exceptionally deep and roomy body. This frame is carried right round the sidecar wheel, for which it forms the spindle support (the sidecar wheel is interchangeable with the others). Three bent members which cross round the wheel also support the mudguard, giving great rigidity.

The body is sprung on C springs at the rear and coil springs in front. Behind the seat is fitted a large luggage locker and the spare wheel.

Convenient map or glove pockets are fitted in the sides of the body.



An extremely attractive model is the Sporting Dunhill sidecar. Observe the triangulated front members of the chassis.

DUNHILL.

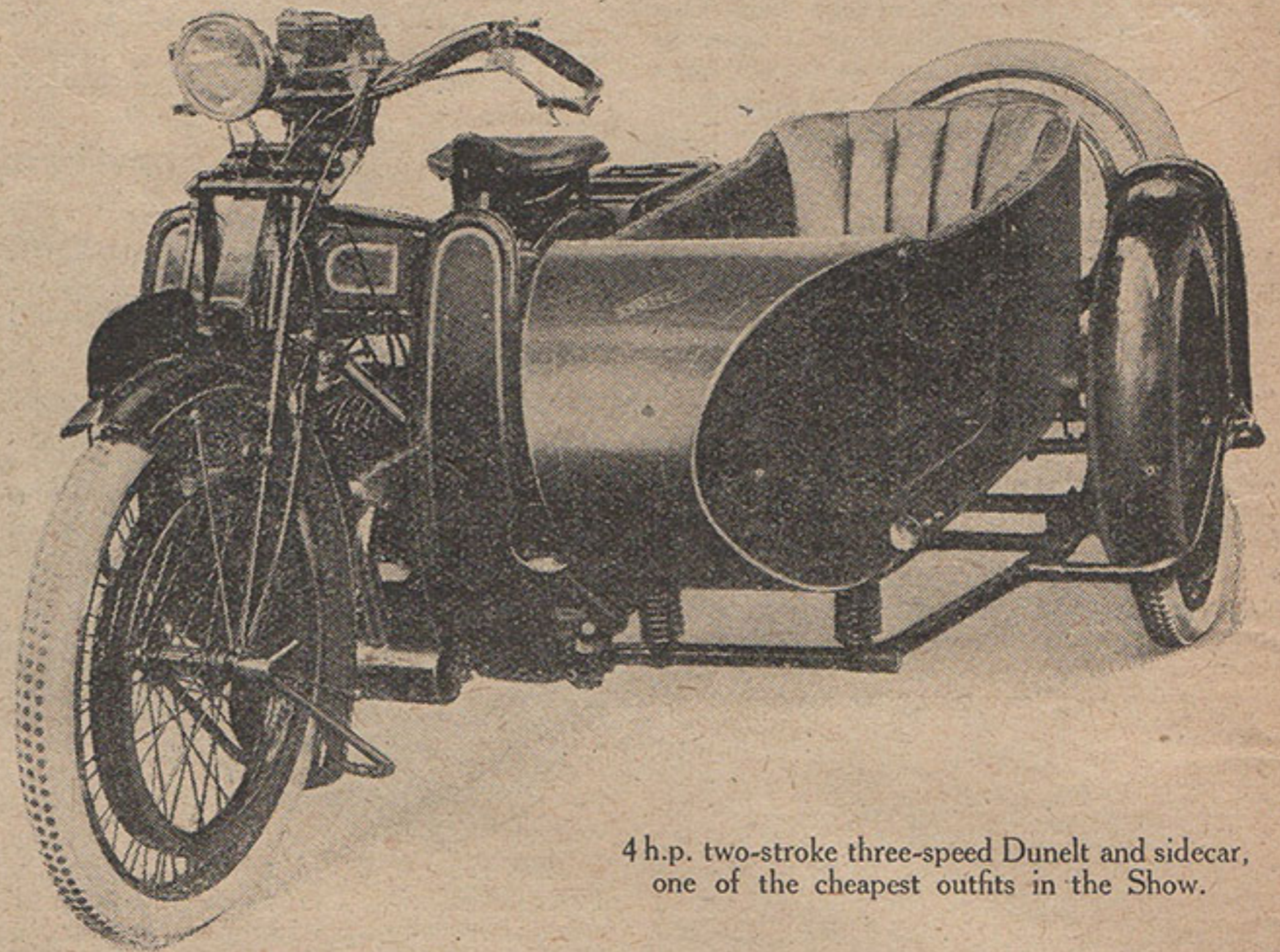
DUNHILLS, LTD., 359-361, Euston Road, N.W.—In the type of chassis which follows in plan view the lines of a right-angle triangle, the above firm may be regarded as pioneers, since they have made this method of construction their own. It is used with various modifications in the majority of their sidecars, and permits a strong structure to be made without sacrifice of lightness. They are varied

by extra cross bracing members, but the general plan remains the same. Particularly luxurious bodywork is one of Dunhills specialities, and various types of

all the panels. For those who require a sidecar of the family variety, a specially wide model, tapering to the front, is provided. This has slightly staggered seats which will accommodate an adult and child, sitting side by side. In preference to mounting a luggage grid on the back of the body, the firm evidently favours a separately sprung arrangement secured by means of long quarter-elliptic springs to the back of the chassis.

F.N.

F.N. (ENGLAND), LTD., Kimberley Road, Willesden Lane, N.W.6.—Bevel-driven machines do not lend themselves very easily to the attachment of an ordinary sidecar, but the special chassis designed by F.N. gets over all difficulties. The backbone of the frame is a long double member attached to the chain stay just clear of the bevel casing. It also has a triangulated tube fixed to the saddle-pillar, and the two members joined at the front just before reaching the



4 h.p. two-stroke three-speed Dunelt and sidecar, one of the cheapest outfits in the Show.

body are shown, including a special two-seater model, which is convertible to a single-seater by a slight alteration, as required. The springing of all the bodies is on conventional lines by means of

separate C springs at the front and rear. On the Limousette model a very neat V fronted celluloid windscreen is carried on a high hinged dash, while on another model a bevelled mirror is inserted beneath the dash. This is a point which should appeal particularly to lady passengers. A new model of the cabriolet type, known as the Jasmine, is also introduced. This is most luxuriously upholstered in Bedford cord and fitted with Triplex safety glass in

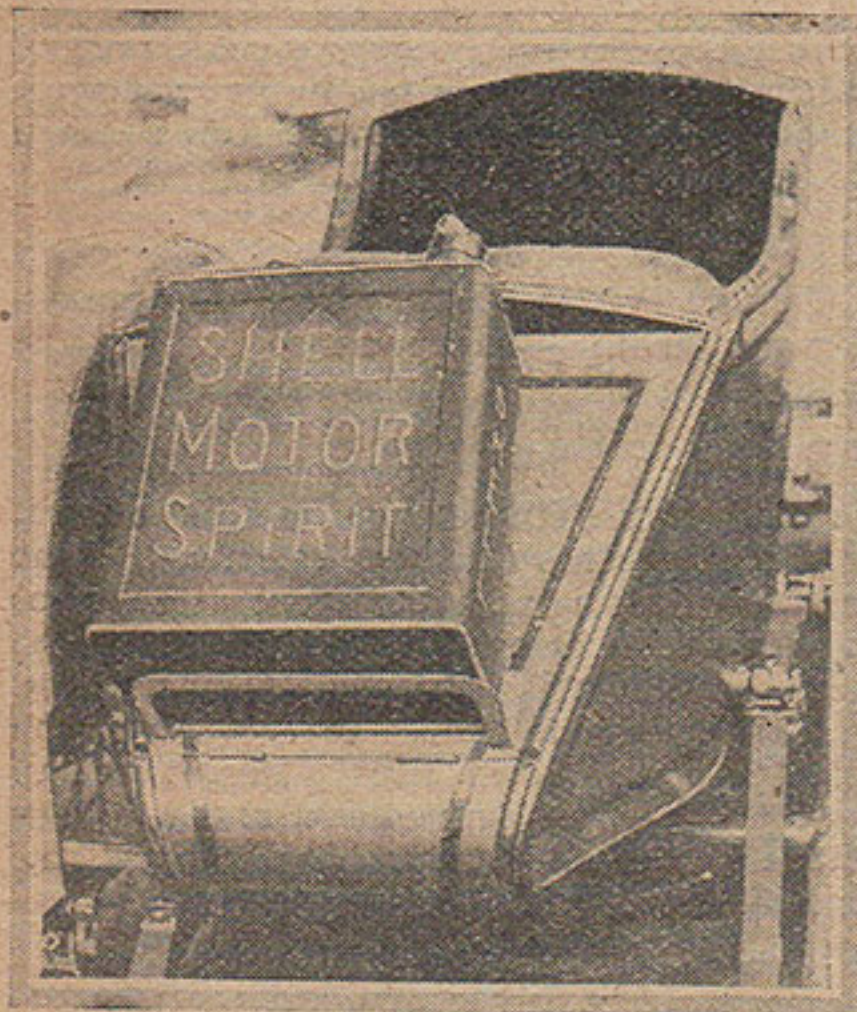
steering head. From this girder construction is built out the rectangular frame which supports the body, and also passes round the wheel to support the latter on both sides.

The body is chiefly notable for the great depth of the back of the seat, which affords the rider most excellent protection in conjunction with the solid windscreen and Cape hood which are fitted.

GRINDLAY.

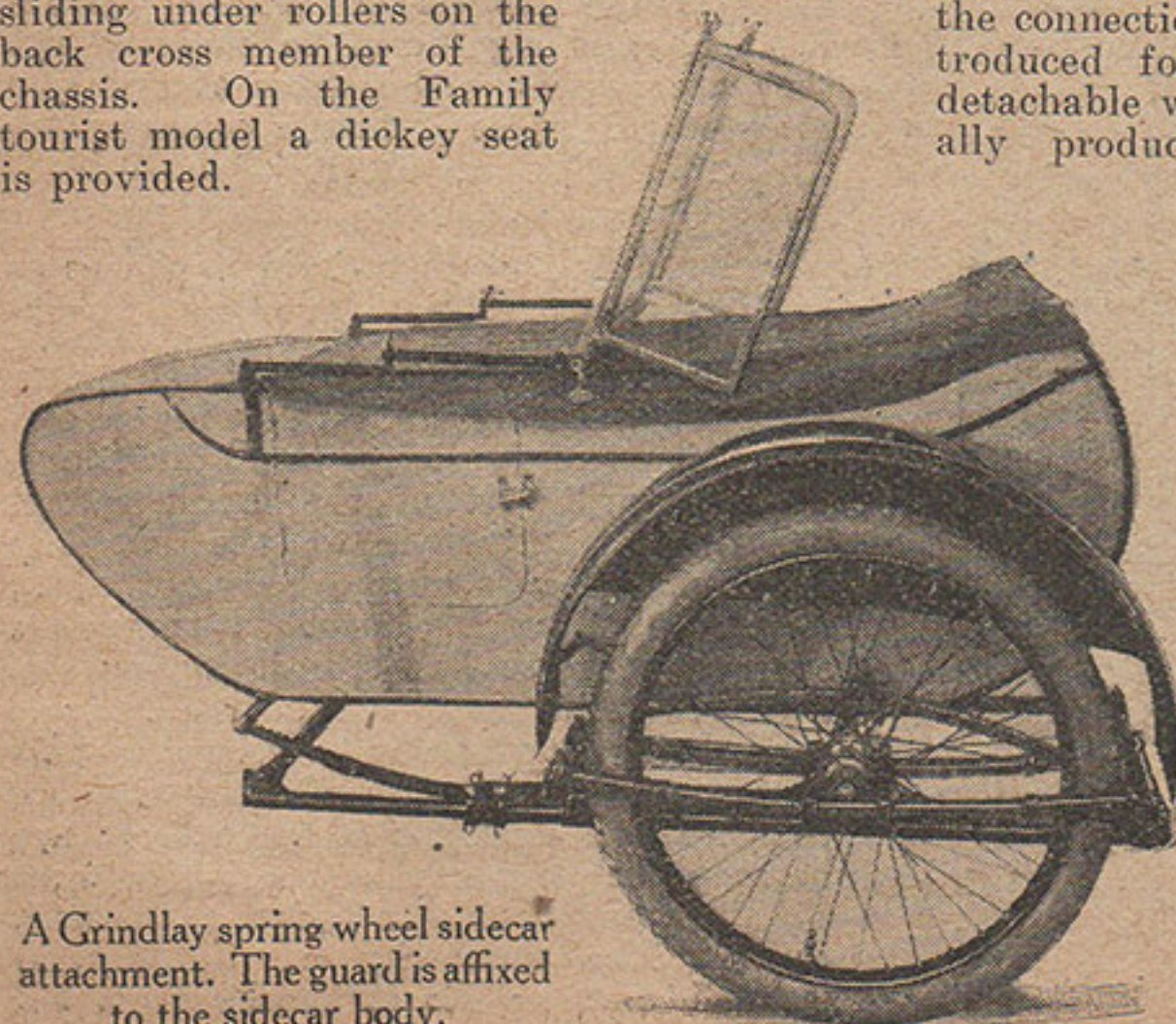
GRINDLAY (COVENTRY), LTD., Melbourne Works, Coventry.—A slight improvement has been effected in the suspension of the body on the well-known Grindlay spring wheel chassis; this lies in the substitution of quarter-elliptic springs for the coil springs which formerly supported the front portion. The main part of the spring wheel system, however, remains unaltered, since it has been found to be perfectly satisfactory in practice. The mudguards also, which are attached to the bodies, are now of domed section in place of the flat wings

Sidecar Progress.—



The spare tin of petrol almost holds itself on the sloping tail of the Club model Grindlay sidecar.

which have hitherto been used. Various styles of coachwork are obtainable, and adequate provision is made for luggage carrying on the touring bodies. A new sporting type, known as the Club, is now introduced, and, having no door, access to the interior is facilitated by means of a cast aluminium step bolted to the side of the body. A neat curved celluloid windscreen is secured in front of the seat, which is very low and allows a comfortable reclining position for the passenger. In addition to the spring wheel models, there are also two types mounted upon fixed wheel chassis. One of these is the Popular, which is suitable for general touring work when attached to machines of medium power; while the sporting type is of particularly light construction, and follows the general lines of similar attachments, the seat being of the hammock variety. The body springing of this particular model is especially interesting; the front is supported on two upturned quarter-elliptics, while the rear is also carried on two other quarter-elliptic springs, the free ends of these sliding under rollers on the back cross member of the chassis. On the Family tourist model a dickey seat is provided.



A Grindlay spring wheel sidecar attachment. The guard is affixed to the sidecar body.

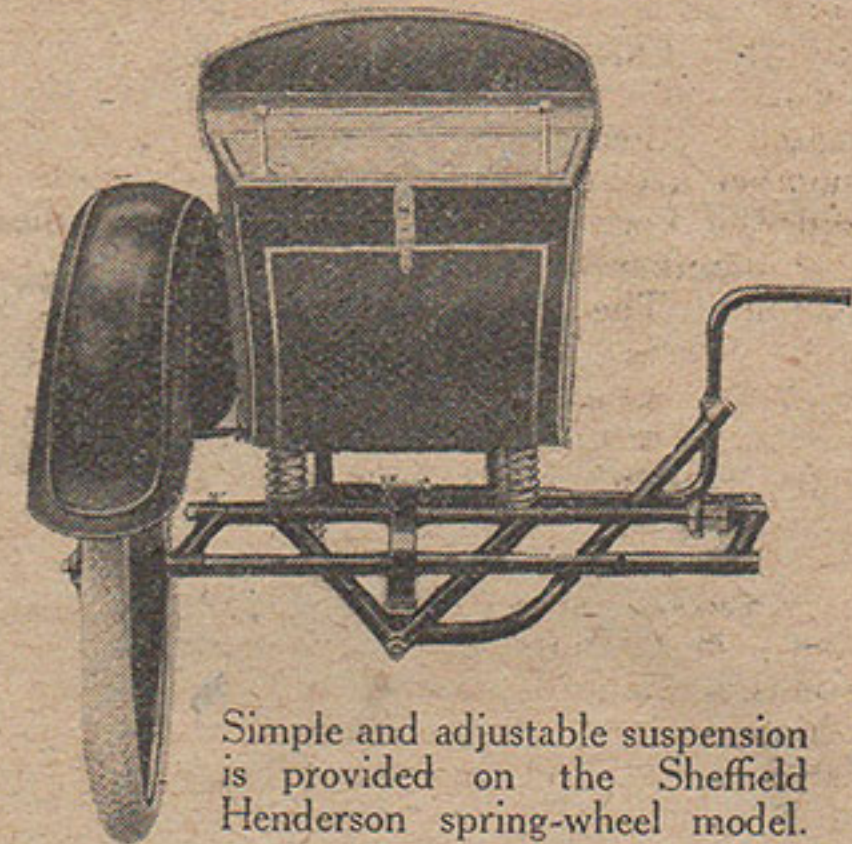
HARLEY-DAVIDSON.

HARLEY-DAVIDSON MOTOR Co., LTD., 74, Newman Street, London, W.1.—The great power of the Harley-Davidson big twin lends itself naturally to the fitting of luxurious sidecars, and full advantage has been taken of this fact by the makers. In fact, their standard sidecar body would be listed by many makers as a *de luxe* type. The chassis is interesting, being of a fully triangulated girder type. It is supported not only by the chain stays themselves, but also by the back stays, thus getting double strength at this important point; and it is noteworthy that, instead of being built up on brazed lugs, the joints between the tubes are all acetylene welded. The chassis is lined up with great care at the works, and no adjustment is provided for this, as it is considered that the work cannot be done sufficiently accurately without the makers' special facilities. The body has an integral windscreen and hood, map lockers in the doors, a glove locker in the scuttle, and two large cupboards behind the seat. For sporting purposes a much lighter sidecar of the canoe type is shown, which shows the same interesting points in design as the heavier type. There is also a trade delivery sidecar of extremely high cubic capacity, on a chassis of slightly different design.

HENDERSON.

HENDERSON SIDECARS, Aero Works, Fitzwilliam Street, Sheffield.—The designer of the Henderson sidecars has made very serious efforts to eliminate all doubtful materials or methods of construction from his productions, and the tubes and other metal parts used in the chassis are all selected with regard to their suitability for the particular part in which they are used. Thus the connections from the chassis to the frame of the machine are of a special kind of steel tubing, which has a higher elastic limit than the tubing used in the chassis itself, while the axles and connections are of high tensile steel, which is heat-treated. Any bolts which would be liable to rust into the connections in which they are used are made of rustless steel. The actual frame connections are of the taper socket variety, and are provided with a special form of self-withdrawing joint, so that the unscrewing of the nut separates the connection itself. A new model introduced for 1921 is the Elite with detachable wheel. This has been specially produced in order to suit the various high-powered machines now on the market, which are fitted with detachable and interchangeable wheels, and it is sold without a wheel, so that it can be arranged to take any maker's standard wheel. Provision for carrying the spare wheel is made at the back. The springing system of this sidecar is particularly good, consisting, as it does, of a combination of semi-elliptic laminated springs working in conjunction with coil spring shock absorbers. The semi-

elliptic springs are pivoted at their centres, the rearmost ends carrying the bearer bar for the body, while the forward ends are anchored to the chassis by the coil tension-spring adjustable shock absorbers. Special features of these sidecars are the ample luggage-carrying capacity and the flat lid to the locker, which forms an additional platform on which petrol cans or suitcases may be carried. For very light machines there is a special Featherweight model, which weighs but 65 lb. complete, while there is also a spring wheel sidecar, which has a wonderfully efficient system of insulation, by means of a single laminated C spring, the only unsprung weight being the wheel and the floating axle. In this case, the front of the body is carried on C springs, while the rear is supported on two large diameter coil springs in compression. In all cases, the mudguards on the Henderson sidecars are securely attached to the body, a method long standardised by this firm.



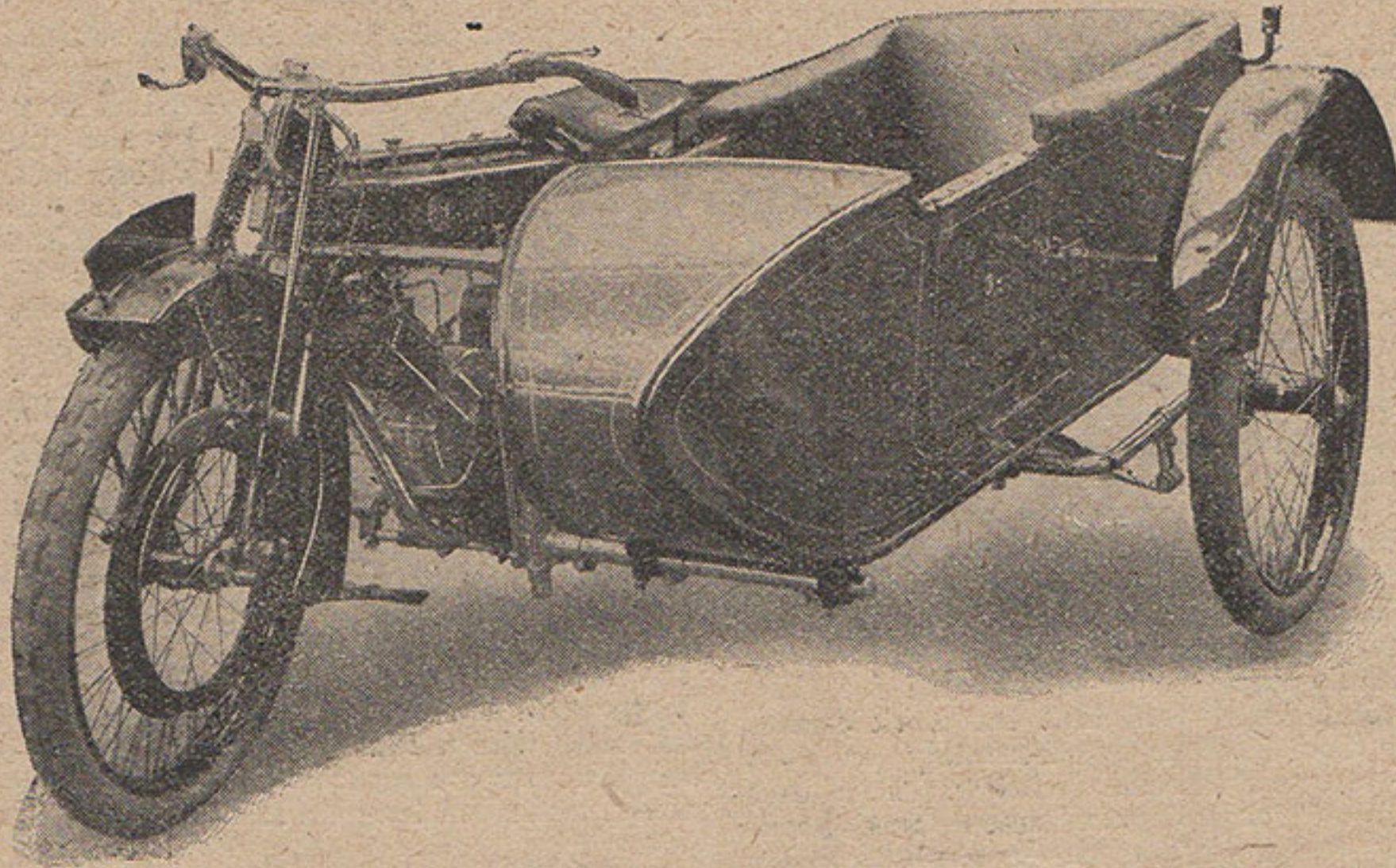
Simple and adjustable suspension is provided on the Sheffield Henderson spring-wheel model.

INDIAN.

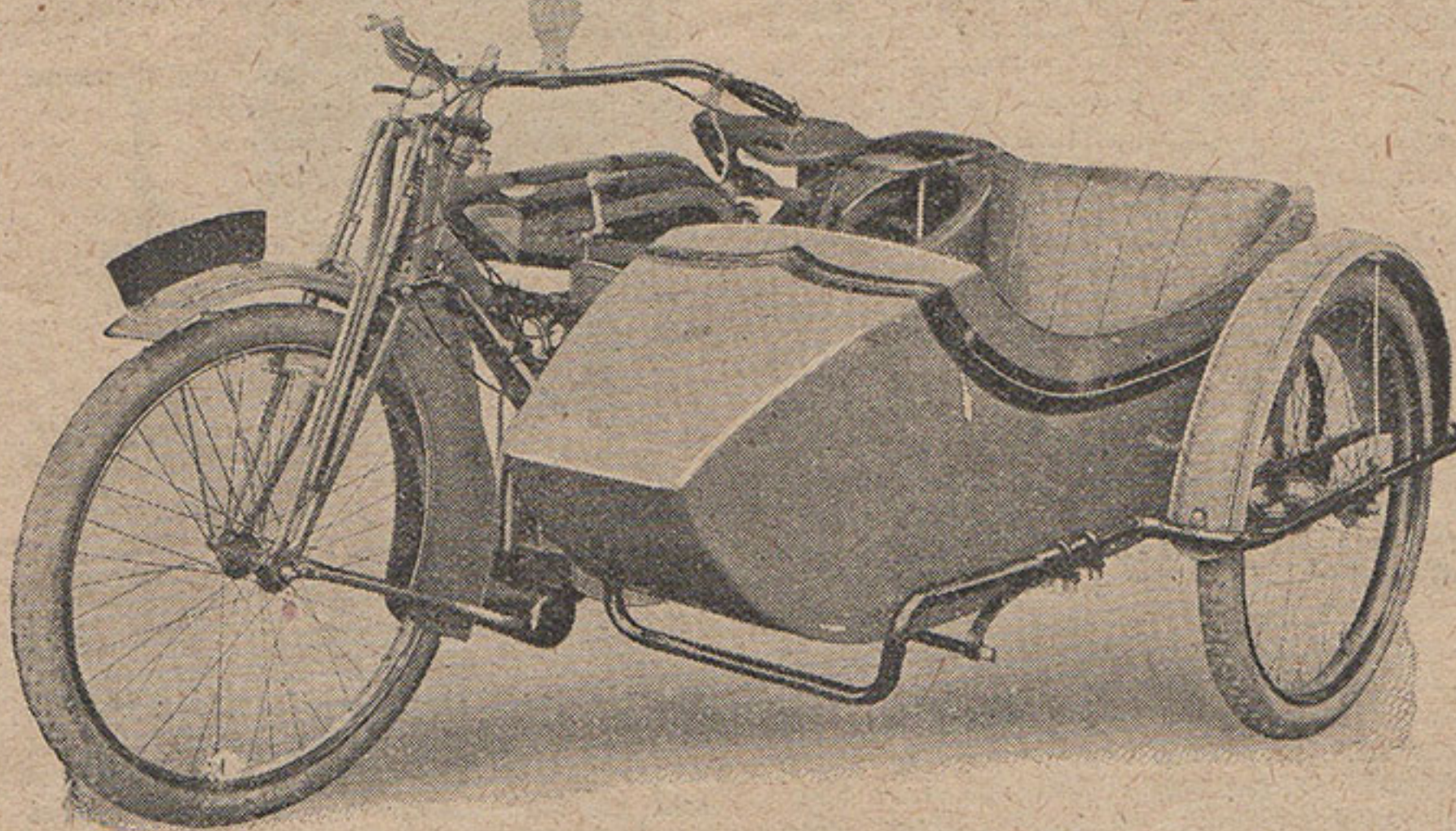
HENDEE MANUFACTURING Co., 366, Euston Road, N.W.1.—Sidecars for use with the Indian machines must, of course, be specially designed to be capable of attachment to the spring frame which is used on this machine. With the object in view, the main frame of the sidecar is kept very short from front to rear, and the hindermost attachments take the form of two struts which are fixed respectively just behind the saddle pin and just above the gear box. Since there is such ample power available, the sidecar is of extraordinarily robust construction, and the body is large and luxurious, with ample lockers for carrying a considerable amount of personal luggage.

IVY.

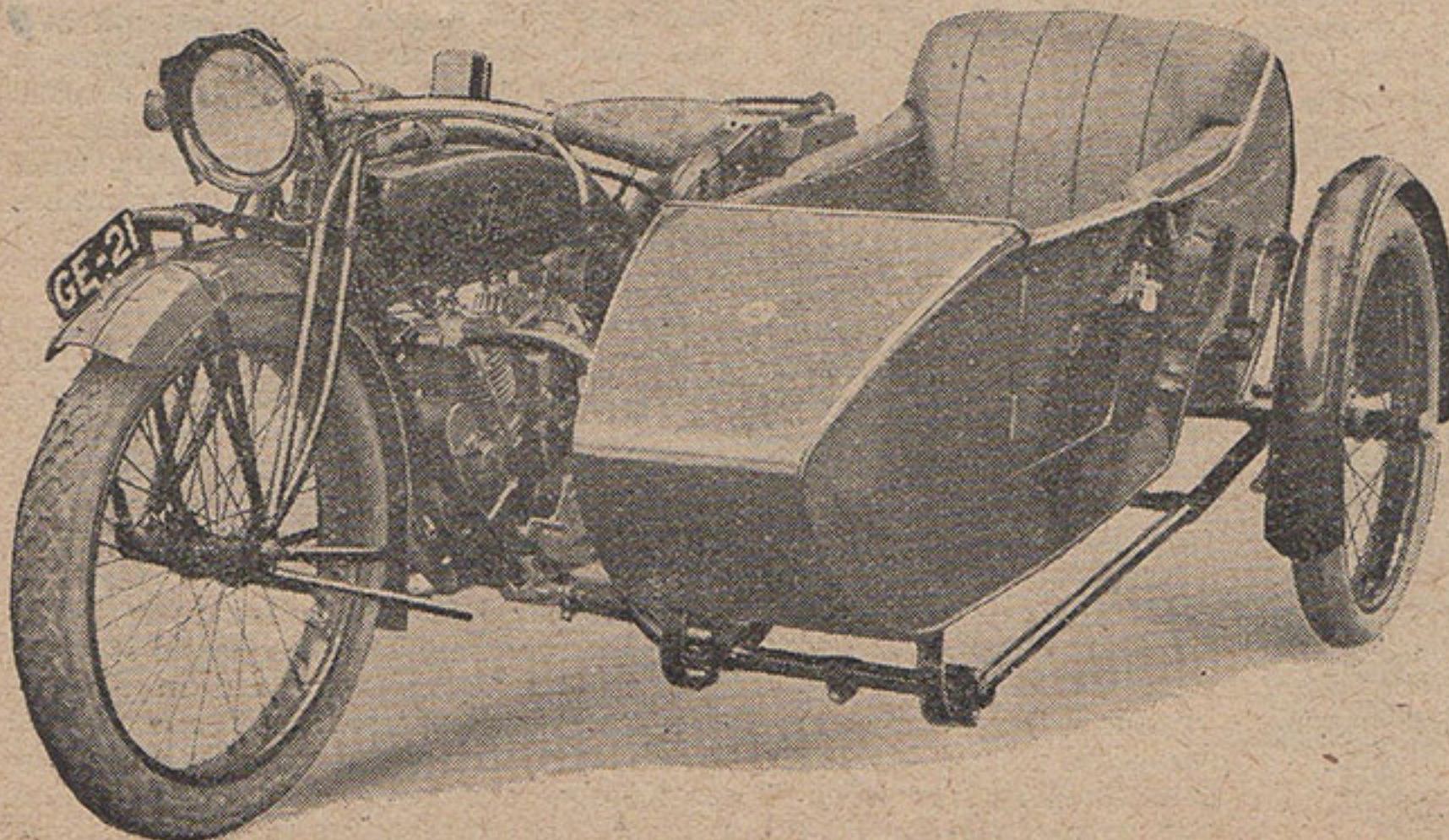
S. A. NEWMAN, LTD., Lichfield Road, Birmingham.—After the recent performance of an Ivy in climbing the Wyche cutting (1 in 2.9) fifteen consecutive times with a passenger, and several times with two passengers, one expected to find that the sidecar used was of the featherweight type; but this is far from being the case, for although the chassis is very light it is exceptionally solid in its design and construction. For one thing, the chassis takes the form of a rectangle completely enclosing the body. For another, the suspension is of the four-point type; and for a third the wheel is mounted in an all-round fork and not on



This Millford Rock "chassisless" sidecar attached to a P. and M. has many special points of interest in its design.



The graceful little sidecar attached to the Ivy two-stroke helps to render this lightweight outfit a very attractive proposition.



Roomy sidecars of practical design are attached to the Indian machines.

a stub axle; in fact, the general design of the sidecar is of the type usually associated with heavyweight outfits. Although the body is not bulky, yet room has been found to provide for a large locker for luggage.

IXION.

IXION MOTOR MFG. Co., Ladywood, Birmingham. — Experience gained in pioneering the miniature sidecar outfit is reflected in the light chassis attached to the Ixion 2½ h.p. two-stroke. Lightness is not only retained by simple design, but strength is in no way sacrificed. The chief feature is that the front attachment tube has its origin at the rear axle and runs parallel with the cycle frame, rising slightly, until it curves to the connection on the front down tube. For its small size the body is convenient, and the grey finish to match the machine is excellent.

MATCHLESS.

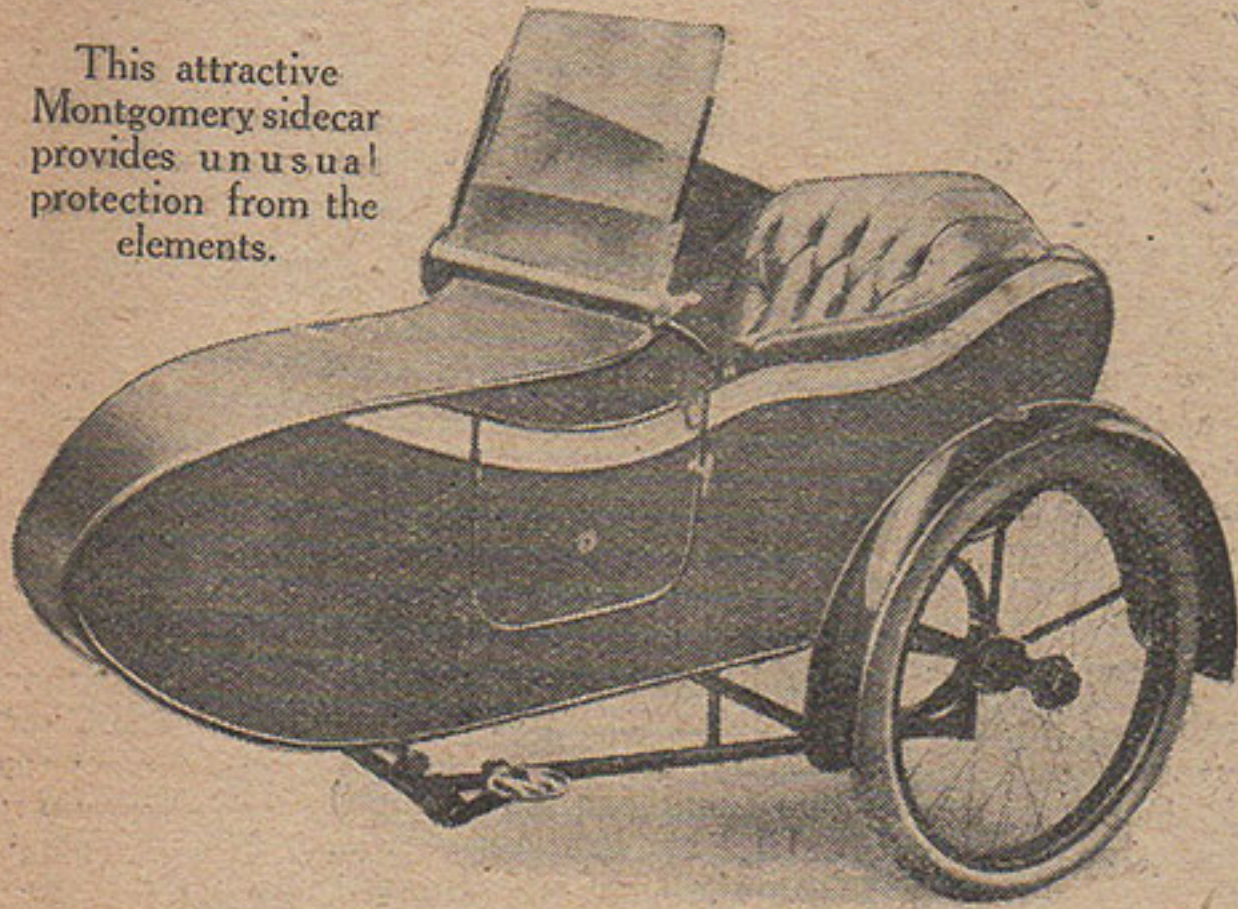
H. COLLIER AND SONS, LTD., 44, Plumstead Road, Plumstead, S.E.18.—In designing a sidecar for the Matchless machine, the makers were confronted with the necessity of specially arranging the rear springing to get the fullest advantage from the sprung rear wheel of the motor cycle. They have successfully done this by arranging an axle which carries the sidecar wheel, and is attached at two points to the unsprung portion of the motor cycle rear wheel fork. The rear suspension for the chassis itself is through helical springs from the sidecar wheel end of this unsprung axle and from the sprung part of the motor cycle frame. Here also the sidecar is attached to the cycle at two points. As there is also a two-point suspension at the front of the chassis, the total connections are no fewer than six, giving enormous strength. In addition to the rear coil springing, the front of the sidecar body is sprung on quarter-elliptic springs. There is a large boot, also a luggage grid on which the spare wheel is suspended. A windscreen is a standard part of the sidecar.

MILLFORD.

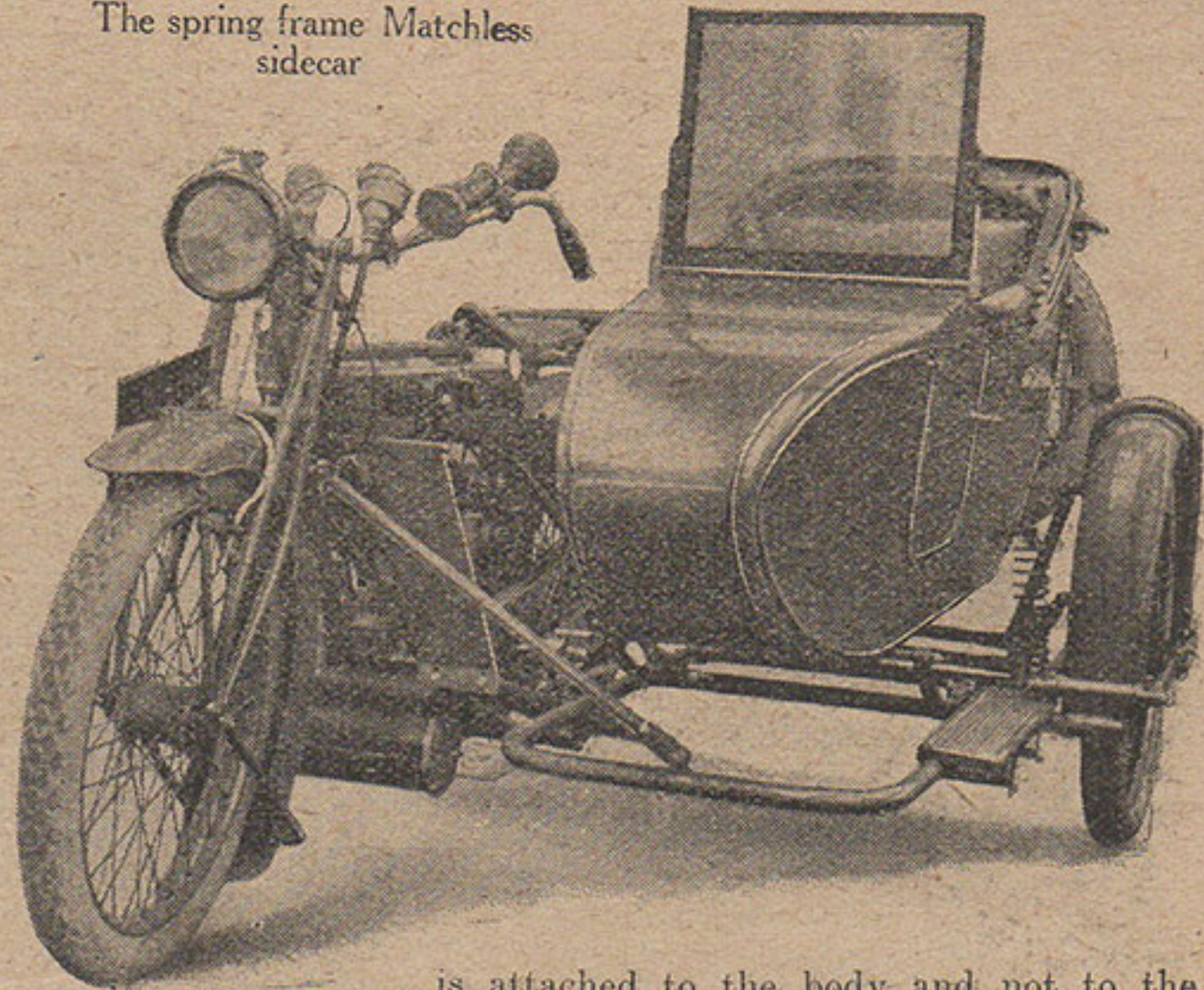
MILLS-FULFORD, LTD., Crown Works, Coventry.—In view of the fact that the members of this firm may be counted amongst the pioneers of sidecar manufacture, it is significant to observe that they are now departing from all hitherto accepted principles of chassis construction. This refers, of course, to the Millford-Rock chassisless sidecar, which was one of the attractions of the Show. Briefly, the method of construction of this sidecar is as follows: a double cranked axle is secured to the back fork of the motor cycle by a spring joint, allowing a certain amount of flexibility in all directions. The forward part of the crank swings in bearings attached to the specially strong floorboards of the body, to which it is also adjustably attached through a single transverse half-elliptic spring and shackles. The fore part of the body is carried on a swivelling crossbar, capable of vertical movement and controlled by enclosed coil springs; it will, therefore, be seen that the only connection between the front and back attachment is the body itself. The flexibility of the sidecar is such that no direct shocks from the

Sidecar Progress.—

This attractive Montgomery sidecar provides unusual protection from the elements.



The spring frame Matchless sidecar



side wheel are transmitted to the frame of the motor cycle. Almost any type of body can be fitted to this chassis, provided that the bottom boards are of suitable strength. The standard Millford models remain unchanged, and the very simple chassis construction, which permits the use of a low body without the necessity of undersliding the axle, is retained. On the De Luxe sidecar, a heavy chassis with duplex side members and axle tubes (the latter being slightly underslung) is used. In addition to the normal single-seater bodies, there are two specially large ones; the Family, which is slightly longer than normal, with provision in the front part for a small additional seat, and the double-seater, which will accommodate two full grown passengers without overcrowding. The latter is specially suitable for high-powered machines. During the Show substantial reductions in price were made to all Millford models.

MONTGOMERY.

W. MONTGOMERY AND Co., Leicester Causeway, Coventry.—Montgomery sidecars reflect nineteen years' experience in sidecar construction, and great simplification of the chassis has been attained. In all patterns, whether light or heavy, the same type of framework is used, and the plan of the chassis takes the form of a truncated triangle. The axles are straight, thus avoiding weakness or the necessity of using exceptionally heavy fittings, as must be done when underslung construction is employed. The bodies, which vary from the light sporting type to the fully-equipped two-seater tandem,

are specially well finished, and even in the lightest form the comfort of the passenger has not been neglected. Springing is by means of C springs at the rear and adjustable coil springs at the front. The sporting model will appeal particularly to those riders who prefer an outfit which generally follows graceful lines, and, if desired, as an extra, it may be fitted with a very handsome, curved celluloid windscreen, which affords very complete protection for the passenger—a point which is sometimes omitted on attachments of an ultra-sporting nature.

NEW IMPERIAL.

NEW IMPERIAL CYCLES, LTD., Princip Street, Birmingham.—There are two neat points of constructional design on the New Imperial sidecar. The first of these is the rear axle, which is made of comparatively light tubing, but is provided with a king-post tension truss which relieves it of much of its load, thus getting great strength with a reduction in weight. There is also a heavy tie-tube between the chain stay attachment and the saddle pin. The body is sprung on C springs at the rear and quarter-elliptic leaf springs in front, and clearances are allowed for a large deflection, thus making the body most comfortable on the bad roads of the present day. It is interesting to note that the makers are following a practice now being extensively adopted, and are using steel pressings to form the chain stay connections and also the housing for the stub axle. The mudguard

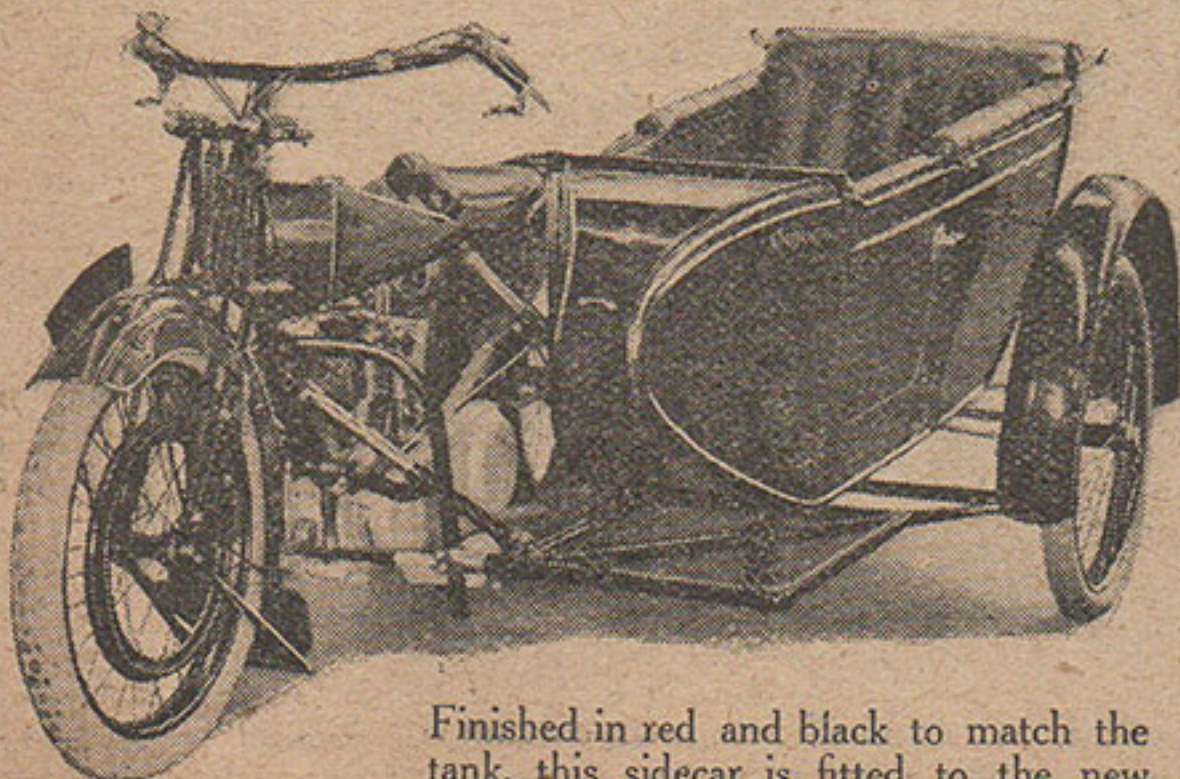
is attached to the body and not to the wheel, and is therefore relieved of vibrational stresses.

NORTON.

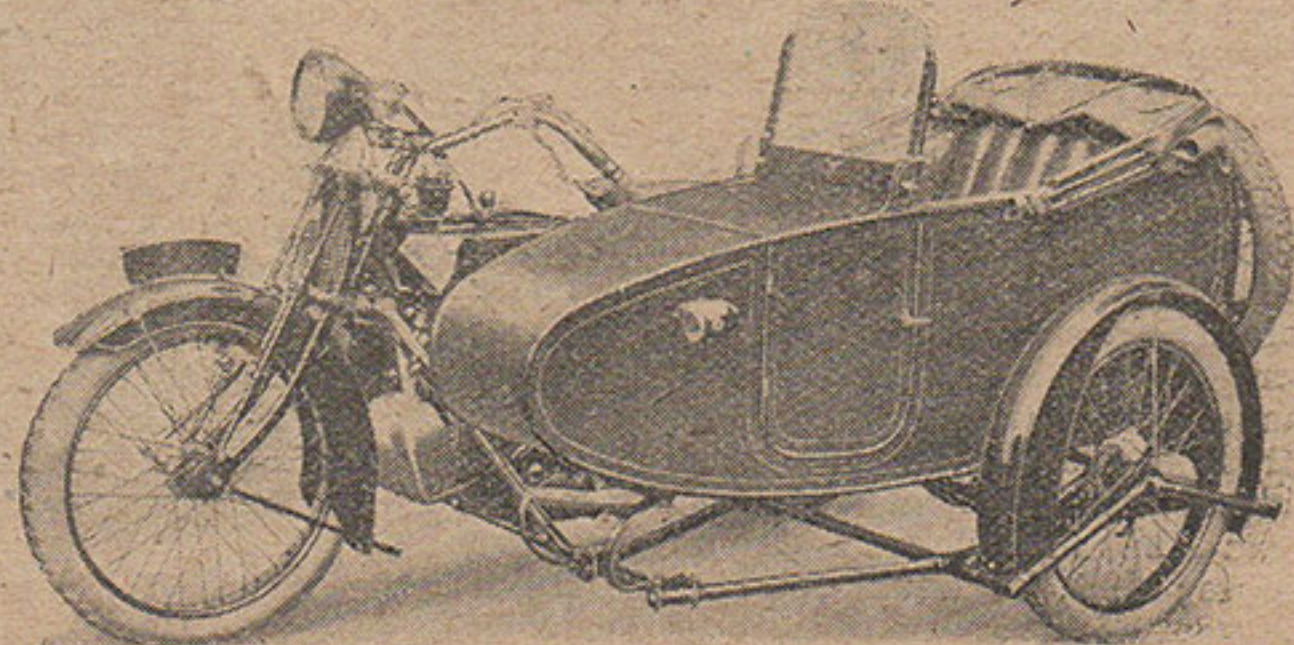
NORTON MOTORS, LTD., Bracebridge Street, Birmingham.—All the Norton sidecars, including the sporting or racing type, are mounted on similar chassis. This chassis has a trapezoidal rear portion, to which the chain stay and saddle tubes are attached, and a triangular front, which takes the two front fixings. A windscreen is fitted as standard to the body, which latter also carries the mudguard. Two types are shown, in one of which there is a large rear luggage compartment, while the rear portion of the other opens to form a small dickey seat suitable for a child. The racing model has, of course, no luggage accommodation, and is cut down to the minimum weight and head resistance, so as to cause a minimum loss of speed.

P. and M.

PHELON AND MOORE, LTD., 4, Berners Street, W.1.—During the war about one-half of the P. and M. machines supplied to the R.F.C. were fitted with sidecars, and the experience gained has been very useful in making possible a reduction of weight without loss of strength. The chassis of the sidecar at present fitted is suspended from four points, having a double support from the steering head. The rear axle has a deep truss, to which the saddle support is taken. The body is supported on C springs, which are very flexible and easy, and good clearance is



Finished in red and black to match the tank, this sidecar is fitted to the new 5-6 h.p. Omega.



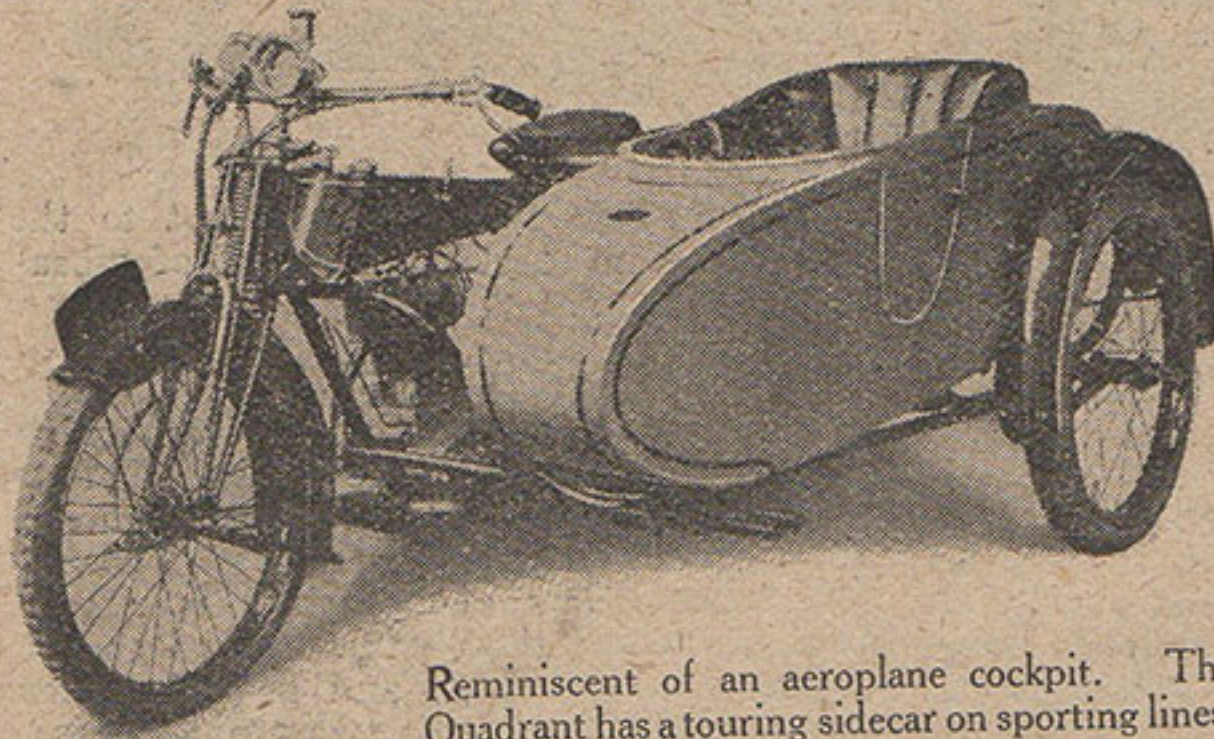
The Martinsyde de luxe model.

Sidecar Progress.—

provided to take up heavy road shocks without any possibility of bumping. The upholstery and bodywork generally, although not provided with any fancy fittings, are extremely comfortable and of very high quality.

QUADRANT.

QUADRANT MOTOR CYCLES, Lawley Street, Birmingham.—Quadrant machines are in many cases provided with sidecars of proprietary makes, but the Quadrant makers themselves also provide a sidecar of moderate price. The chassis is devoid of any startling innovations, but is a very sound piece of work. Extra care has been taken in the support for the mudguard, the longitudinal member of the sidecar chassis being extended behind the axle and bent up to reach the mud-



Reminiscent of an aeroplane cockpit. The Quadrant has a touring sidecar on sporting lines.

guard, to which it is solidly fixed. Another short tube is taken directly from the chassis frame and supports the front of the guard; the usual stays from the axle are also provided. The body itself, while not being extremely luxurious, is comfortable; and it is notable for the height of the back, which affords splendid support for the shoulders of the passenger.

RALEIGH.

RALEIGH CYCLE Co., LTD., Lenton, Nottingham.—Another example of a sidecar chassis specially designed to fit a spring frame machine, the Raleigh, had to face the additional difficulty that the machine to which it was to be fitted is exceedingly fast and powerful. The two main members of the frame are inclined towards one another at the front, in the form of a truncated triangle; the support from the saddle pillar is inclined backwards, and runs right through to the wheel axle. Four points of suspension are to the saddle-pillar, the bottom bracket, the footrest, and the steering head. It is satisfactory to note that extra width has been provided in the seat itself, a matter which should receive more attention than is often the case.

REX.

REX MOTOR MANUFACTURING Co., LTD., Earlsdon, Coventry.—The Rex exhibit is chiefly notable for the large two-seater saloon sidecar. The chassis of this is very interesting, being almost entirely made from steel pressings, more on motor car lines than after the usual style of sidecar construction. It is suspended from the motor cycle frame at four points; but, as double struts are taken to two of these points, it is really a six-point suspension. The body itself

has a fixed top with detachable celluloid windows, and the seats are arranged in staggered form, so as to allow ample seating width for two adults without making the body unduly wide.

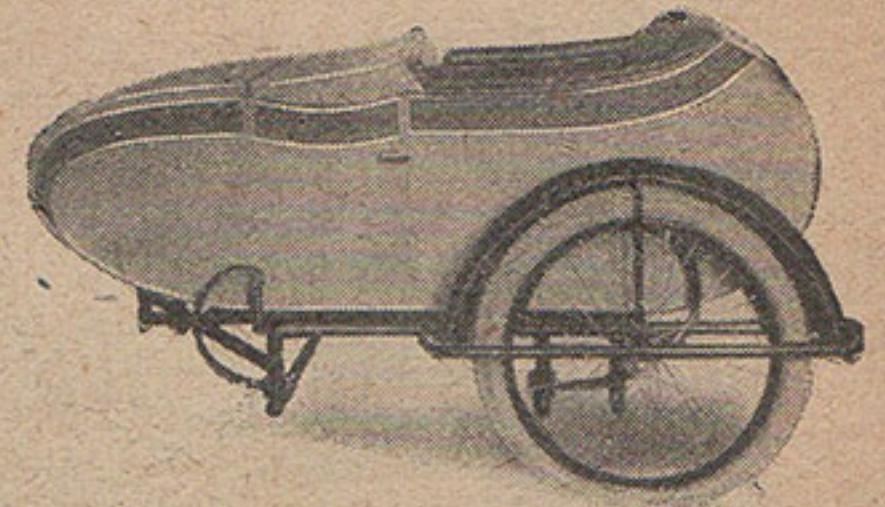
There are certain points common both to this sidecar and to the other ones exhibited, especially as regards the springing. In all cases the body is sprung on two coil springs at the front and on two long cantilever springs at the rear. Also in every case a heavy strut is taken from the chain stay attachment along the motor cycle frame to the steering head point.

RIDEEZI.

THE SIDECAR BODY Co., 25, Upper Clapton Road, E.5.—A number of highly-finished bodies to suit all tastes and requirements are produced. One of the most attractive is a

double-seated sidecar, which, despite its provision for two passengers, is not cumbersome in appearance. This effect is achieved by extending the body backwards behind the front seat in the form of a long bulbous compartment, the lid of which, when raised, forms the back of the additional seat. The chassis on which this body is carried is of particularly robust construction, having duplex longitudinal members on the side nearest the machine. The wheel axle is supported at both ends, being surrounded by a continuous tubular framework. In addition to this particular model, there are several varieties of standard touring mediumweight and light machines. Another very interesting development in sidecar construction is the Roy body, which is manufactured by Messrs. Roy, Tripp, Strawford, and Co., of Bristol, and for whom the Sidecar Body Co. act as sole concessionaires. The special feature of this sidecar is the method of providing weather protection for the passenger by means of a sheet metal hood, which follows the lines of the body itself. This hood, with its side shields, is

constructed, having duplex longitudinal members on the side nearest the machine. The wheel axle is supported at both ends, being surrounded by a continuous tubular framework. In addition to this particular model, there are several varieties of standard touring mediumweight and light machines. Another very interesting development in sidecar construction is the Roy body, which is manufactured by Messrs. Roy, Tripp, Strawford, and Co., of Bristol, and for whom the Sidecar Body Co. act as sole concessionaires. The special feature of this sidecar is the method of providing weather protection for the passenger by means of a sheet metal hood, which follows the lines of the body itself. This hood, with its side shields, is

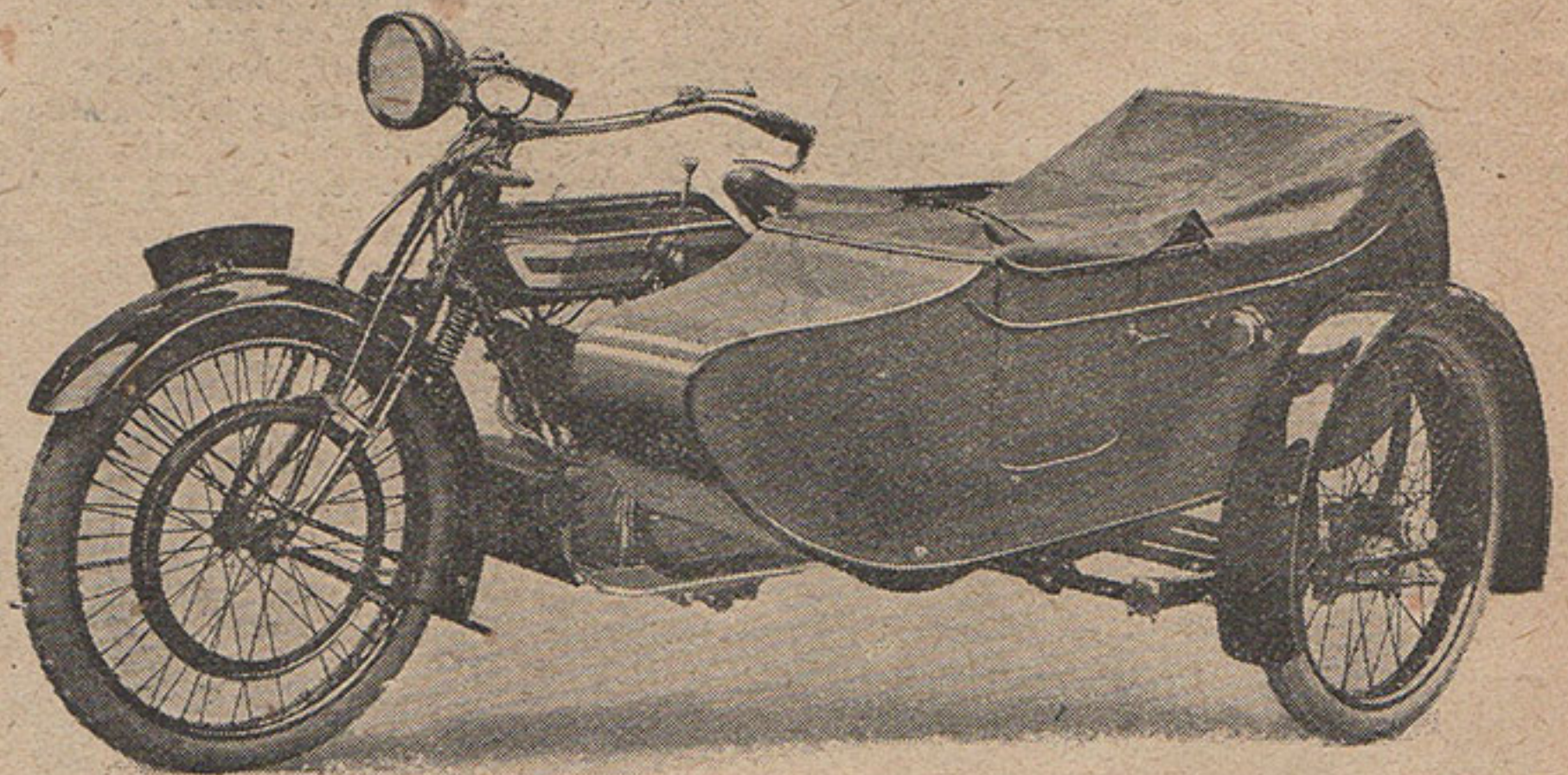


A production of the Sidecar Body Co., notable for its clean lines.

pivoted at a point a little distance behind the hinged dash, and when it is out of use it is unnoticeable, since its shape is exactly the same as that of the body. The hood can be raised by the passenger until, at the top, it meets the upper frame of the windscreen, to which it is clipped. This converts the body into one of the completely enclosed variety on much the same lines as a *coupe*. Special provision is made for eliminating rattle in the metal hood by means of small rubber rollers mounted on its edge, which bear against the side panels of the body itself. This prevents any objectionable vibrations. The finish is decidedly handsome, being carried out in rich purple with black edgings and white lining.

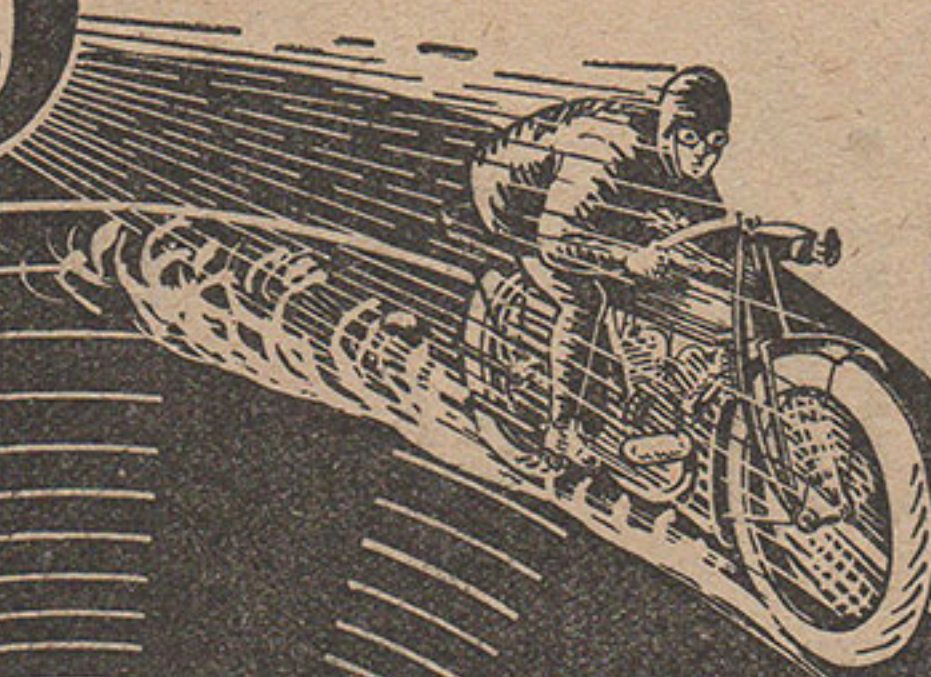
ROVER.

NEW ROVER CYCLE Co., LTD., Coventry.—Only minor improvements have been made in the Rover sidecar. Already well known, and having stood the test of many years' work, practically the only alteration is the dropping of the frame to allow for a larger body. As before, the main rear cross piece, supported from the chain stay, has a distinct slant backwards towards the outer end, and all that portion which forms part of the main sidecar chassis is made of a double tube. Three-point suspension has been retained, and is found completely satisfactory. The body itself is alike longer, wider, and deeper, and has at the rear sufficient locker room for a tin of petrol as well as other stores. The C springs for front and rear, on each side, are in one piece. Mudguarding is on very efficient lines without detracting from the handsome appearance of the complete outfit.



Ample bearings for the sidecar wheel and efficient mudguarding are noticeable features of the Rover sidecar.

SPEED



at Brooklands

On the 17th Nov., Tudor Thompson, riding the new $2\frac{3}{4}$ h.p. (350 c.c.) Douglas Sports Model, broke the World's Record for 1 hour (class B), by covering 63.39 miles in the hour.

On 24th Nov., riding $2\frac{3}{4}$ h.p. Douglas with sidecar (class F), he broke six World's Records: 50—100—150 miles, and 1—2 and 3 hours at speeds to 49.17 m.p.h.

In both cases the makers and rider relied upon

E.I.C

MAGNETOS

Misant



The doom of the Sidecar.

THE SIDECAR, with its lack of protection and comfort, its instability and general makeshift construction, is doomed.

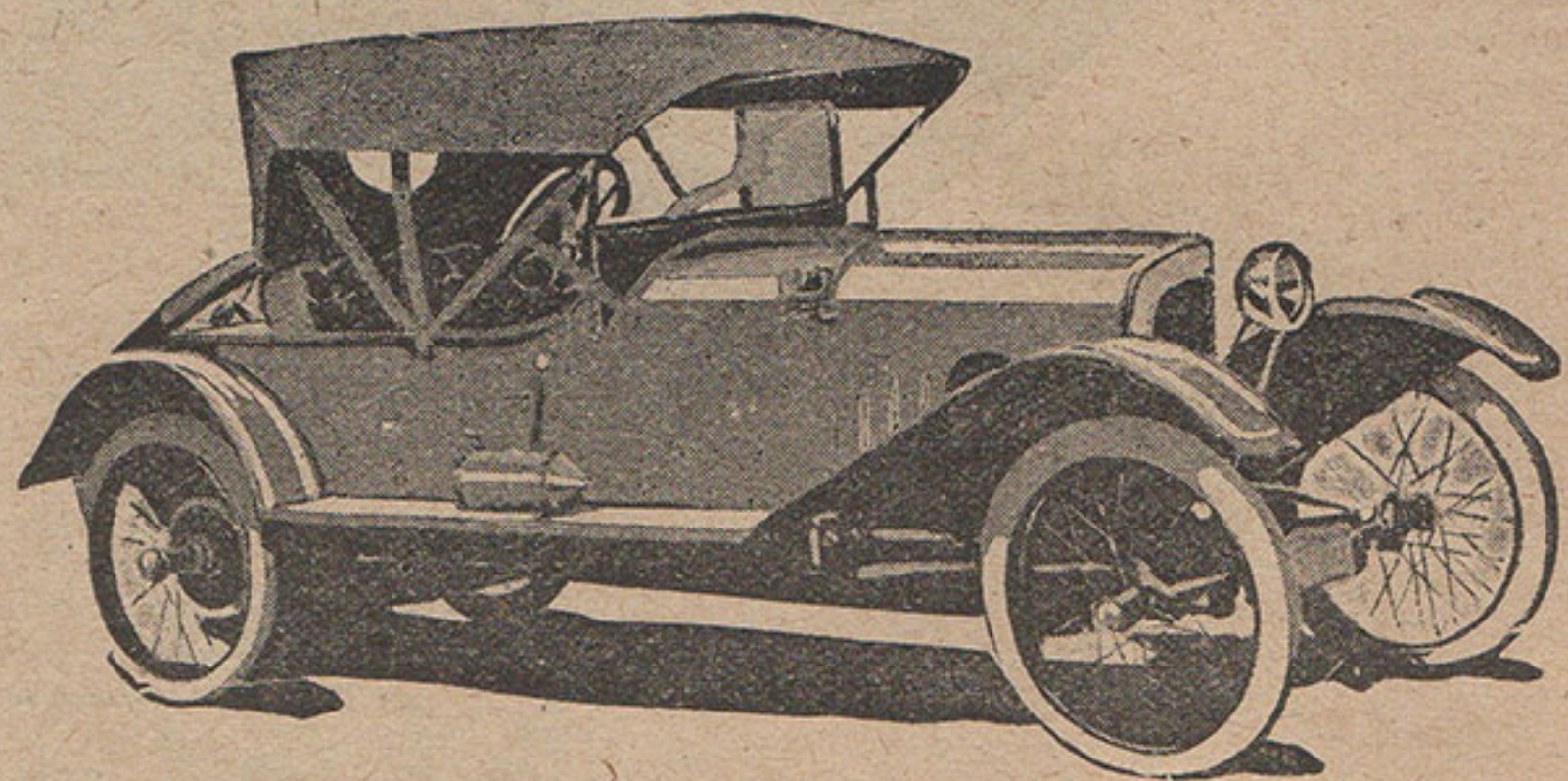
ITS ONE-TIME advantages—economy and value for money—are more than equalled by the G.N., which does everything that the motor cycle and sidecar can do in the way of speed and economy, and in addition
 ∴ *provides the comfort and protection of the small car.* ∴

THE G.N.—with its vibrationless air-cooled twin engine, designed and built specially for the car—is generously equipped. The standard equipment includes an adjustable single screen, special hood, spare wheel and tyre, bulb horn, speedometer, pump, tool roll, jack, and number plates. The price not being inflated, has not been—will not be—and *cannot be* reduced, it remains at £241 17 6, equipped as above; electric lighting £33 15 0 extra.

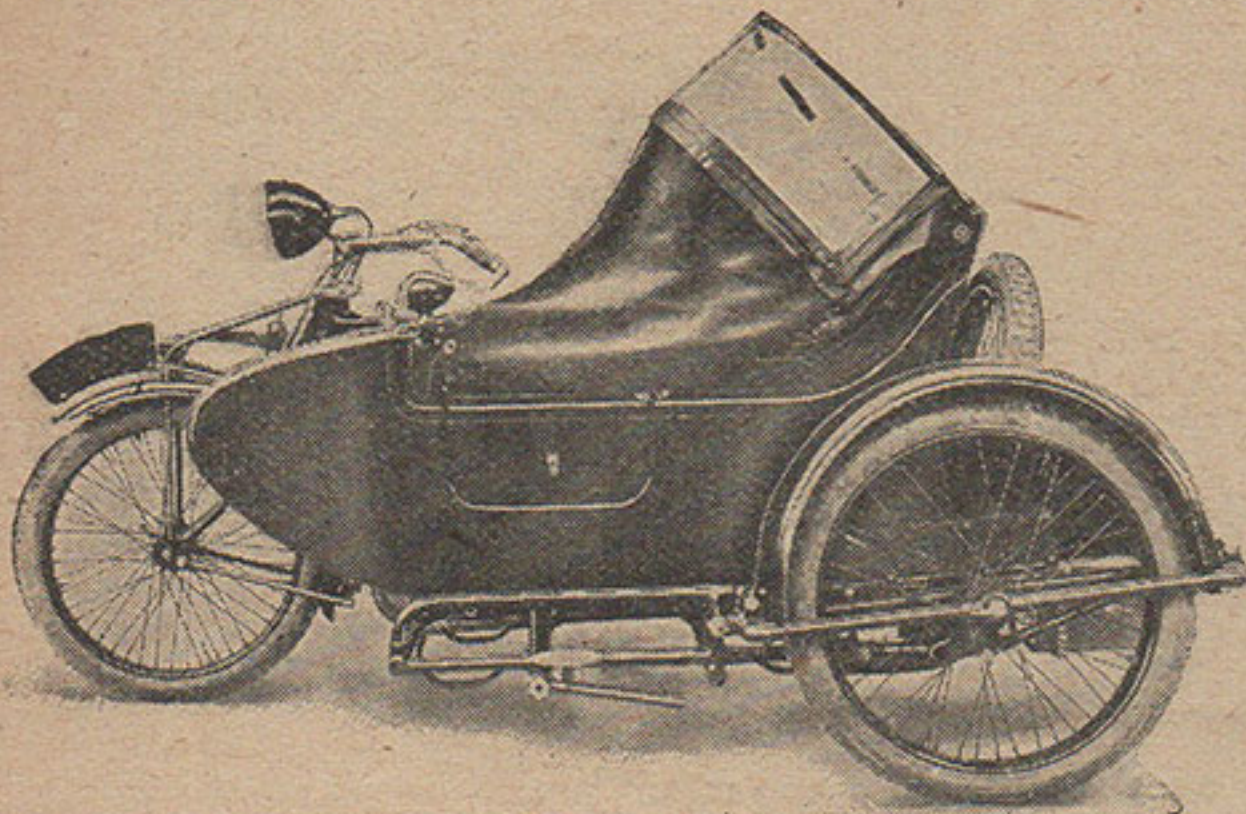
A consumption of 75 miles to the gallon has been obtained by many private owners, and a minimum of 50 is guaranteed.

AN ILLUSTRATED BROCHURE WILL GLADLY BE SENT ON APPLICATION TO
 G.N. LIMITED, EAST HILL, WANDSWORTH, LONDON, S.W.18.

*G.N. PRICES, not being inflated,
 HAVE NOT BEEN,
 WILL NOT BE,
 CANNOT BE REDUCED.*



Sidecar Progress.—



An Easting windscreen and sidecar stand are two refinements on this elaborate Royal Ruby sidecar.

ROYAL ENFIELD.

ENFIELD CYCLE Co., LTD., Redditch.—Although the Enfield outfit is offered at such an extremely moderate price, the chassis and body follow the Enfield company's standard practice as to quality and comfort. The chassis, which is specially built to suit the Enfield motor cycle frame, is of a very light and simple type, but it is notable for the heavy tie-bar which is taken from the chain stay attachment right along the motor cycle to the steering head sidecar support. The sidecar wheel mudguard is fixed on the body, and between it and the body itself a handy locker is provided. A well-designed folding luggage grid is fitted, and the body is extremely comfortable. It might, however, be made rather larger with advantage. A two-seater body may be obtained at small extra cost.

ROYAL LEICESTER.

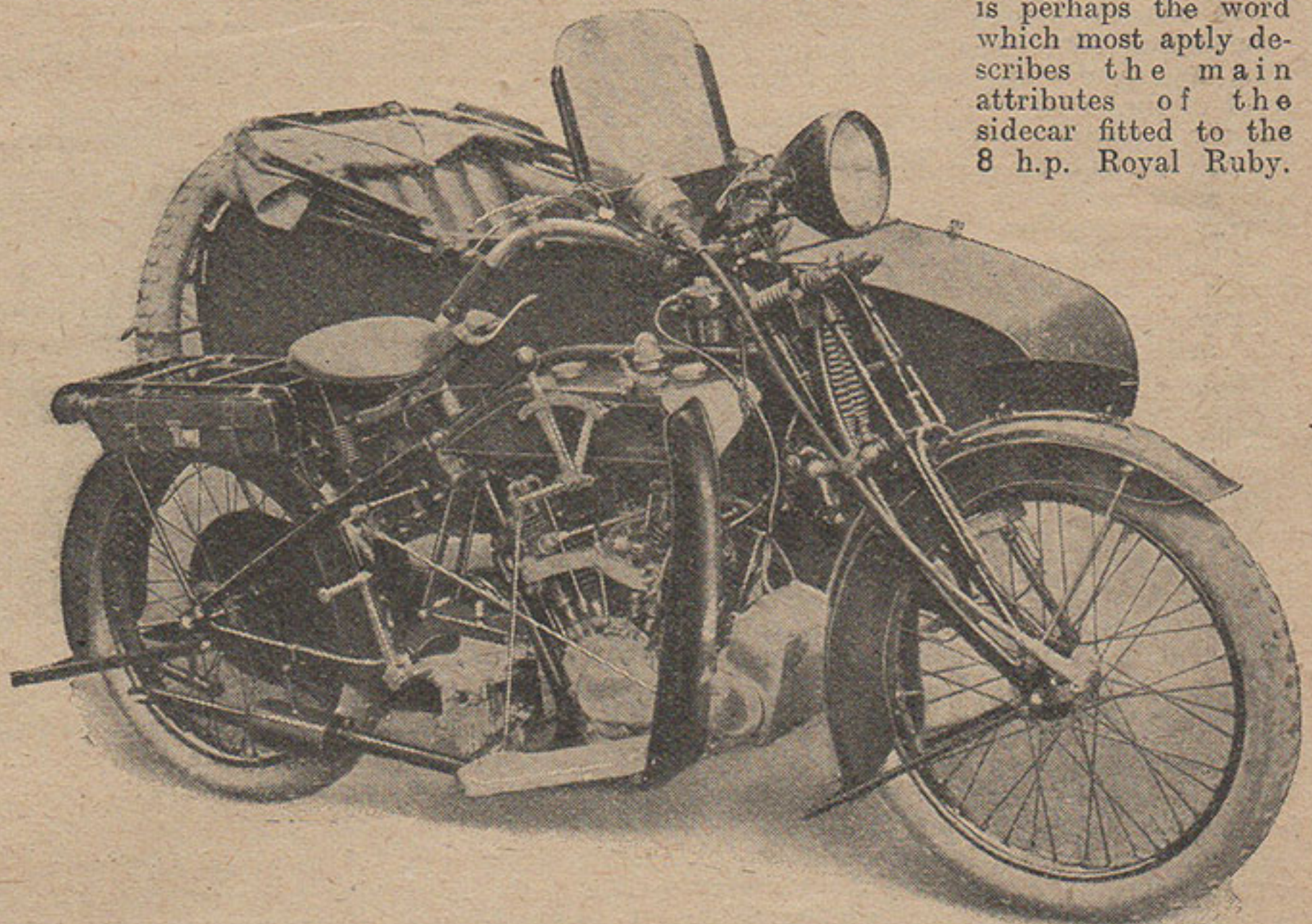
THE WILLOWBROOK Co., Leicester.—Six varieties of Royal Leicester sidecars are being manufactured, and these cover a full range, from the light sporting models to the fully equipped touring machine. Dealing with the former, the racer may be specially mentioned for its neat lines. It is constructed of polished aluminium, with beadings of the same material, and the front portion tapers sharply to a

point. It may be had with or without side door, and a small locker is provided behind the high back-rest. The chassis of this model is of conventional pattern, with a straight back axle, only the front cross member being underslung. As opposed to this, we may turn to the full touring model. The chassis is fully underslung, and the body is carried on laminated C springs. It is specially noticeable for the high back—a feature often in great demand, and sometimes neglected. The construction is not unduly heavy, and the body itself is

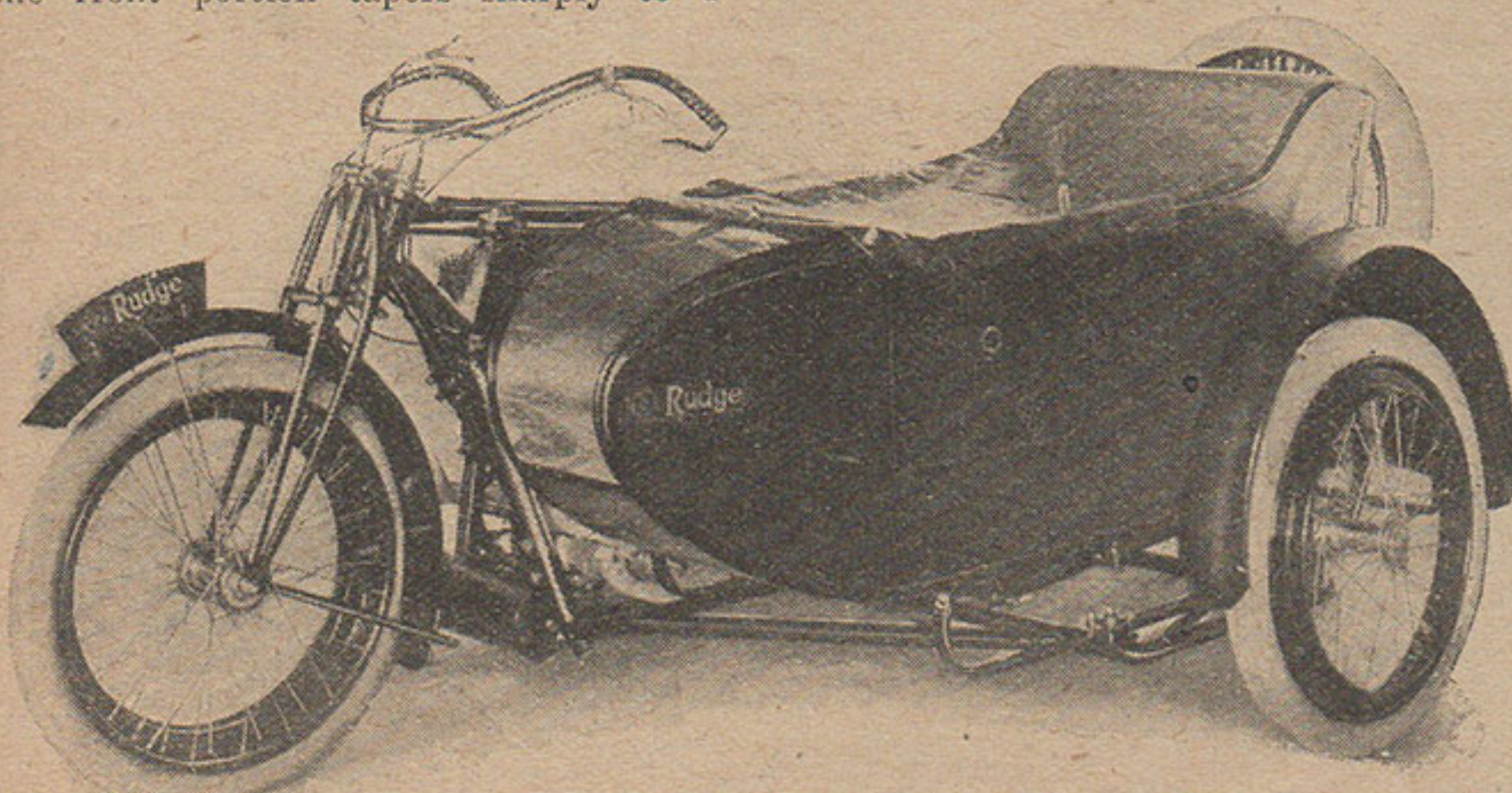
sufficiently roomy without being exceptional in size. It is fully equipped with hood, a side curtain, and a windscreen mounted on the hinged dash. Midway between these models is a light coachbuilt sidecar with underslung axle. The body is carried at the rear on C springs, with two coil springs at the front. It is a model well suited for use with medium-powered machines. A new model introduced for 1921 has coil springing for the body, which is supported on a system of cantilevers, the controlling springs being enclosed in telescopic sheaths. The front cross bearer bar is suspended upon two coil springs, which are also enclosed in telescopic sheaths. All the springs are adjustable. The mudguard is carried on the body, and an aluminium step is attached to the side member of the chassis.

ROYAL RUBY.

THE ROYAL RUBY CYCLE Co., LTD., Royal Ruby Works, Altrincham.—Solidity is perhaps the word which most aptly describes the main attributes of the sidecar fitted to the 8 h.p. Royal Ruby.



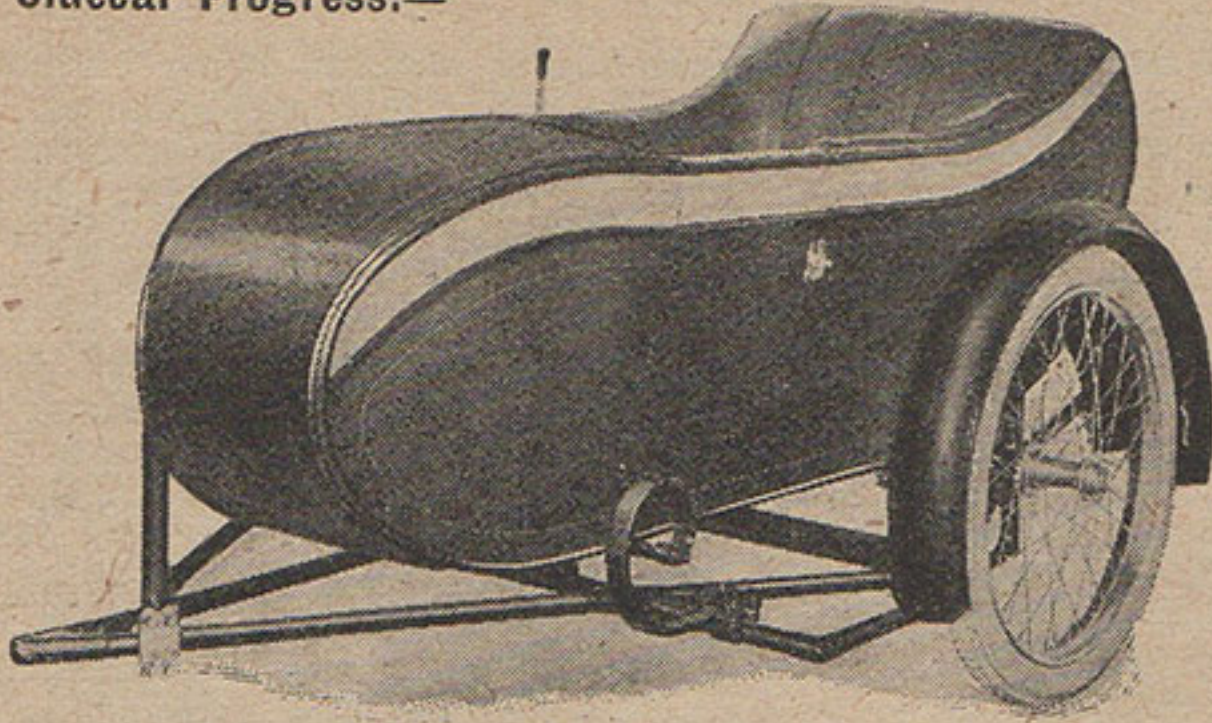
With a moderate selling price, the Martinsyde outfit is unusually distinctive and refined.



In keeping with the imposing build of the machine is the sidecar of the new counter-shaft Rudge. Features are the mudguard mounted on the body, and an aluminium panel on the nose.

The wheel is sprung on a short leaf spring more or less similar to those used for springing the cycle frame. The chassis to which the wheel is attached through this spring is of very robust construction; practically all the members are duplicated. The luggage grid, which also carries a spare petrol tin, is built of the same heavy tubes, and is not an afterthought, but is built integral with the chassis itself. The spare wheel is carried behind the body. The sidecar as a whole is supported from four points of the bicycle, but one of these supports is double, making five supports in all. A pivoted fork carries the wheel axle, and the shackle at the end of the spring is secured to an extension of the axle. Side roll of the wheel is prevented by guiding the shackle in a special housing at the rear extremity of the chassis. The body is large and exceedingly wide, and by means of a simple arrangement it can be removed from the chassis by the withdrawal of four accessible nuts.

Sidecar Progress.—



A light touring body on the Dunhill triangulated chassis.

RUDGE.

RUDGE-WHITWORTH, LTD., Coventry.—Two types of sidecar are now offered by the makers of the Rudge. The smaller one is chiefly remarkable for the extreme lightness and simplicity of the chassis, which consists simply of a rear axle, a longitudinal member on the motor cycle side, and a diagonal member from the front of the latter to the stub axle carrying the sidecar wheel. The attachments are at the chain stay, saddle-pillar, steering head, and also on the end of a specially strengthened footrest.

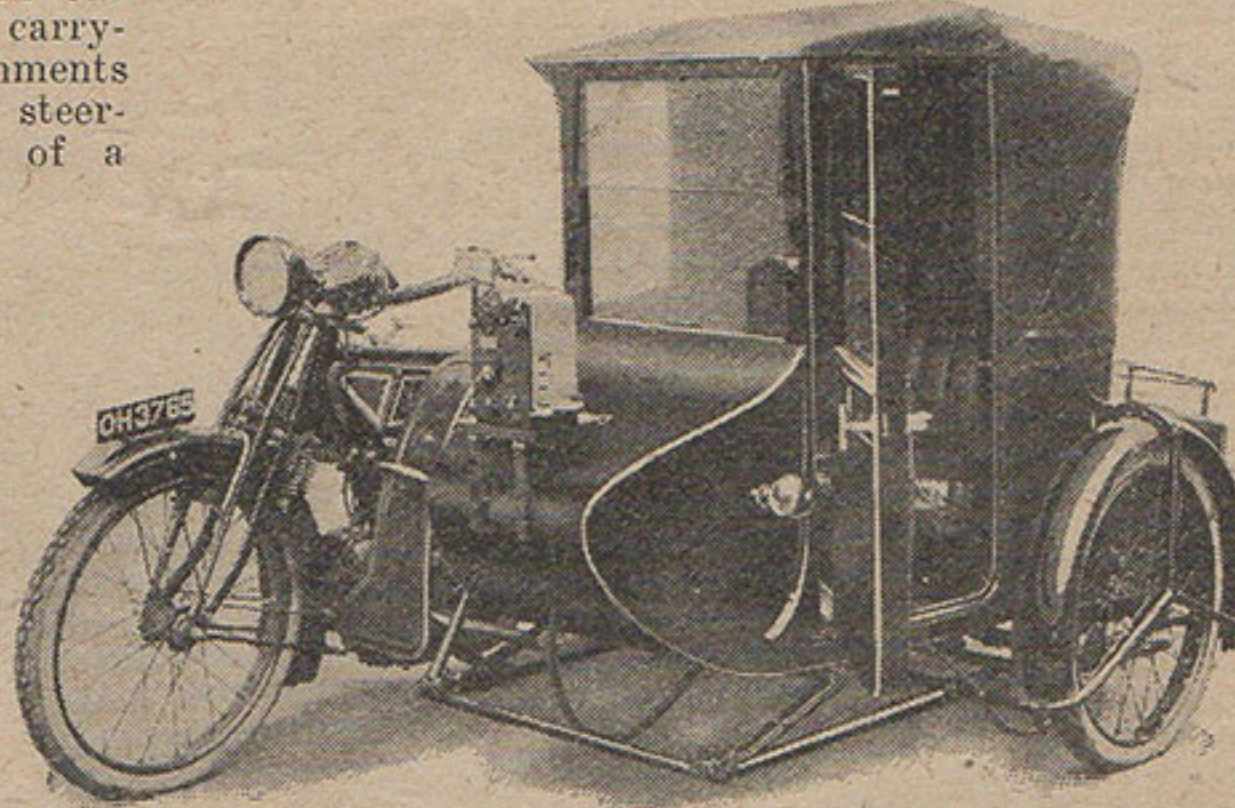
In the heavier type, the chassis takes the form of a rectangle with an extended side and a diagonal member forming a triangle in front of the main chassis.

A large luggage grid has been provided, and the excellent expedient has been retained of suspending it from long angle-iron runners, which are attached to the body and not to the chassis, so that the luggage grid itself is sprung.

SANDUM.

SANDHAM ENGINEERING CO., LTD., 336, Gray's Inn Road, W.C.1.—Although the Sandham Engineering Co. produce all their own chassis, luxurious bodywork is their speciality, and the models they are offering are specially commendable from this point of view. The fact also that the firm make bodies for many of the leading sidecar manufacturers is a sufficient comment-

ary on their quality. Probably the most luxurious sidecar they manufacture is the full touring model, which is designed on very graceful lines. The chassis is under-slung and the wheel is encircled by a tubular member, so that the axle is supported at both ends. This is a form of construction which the makers very

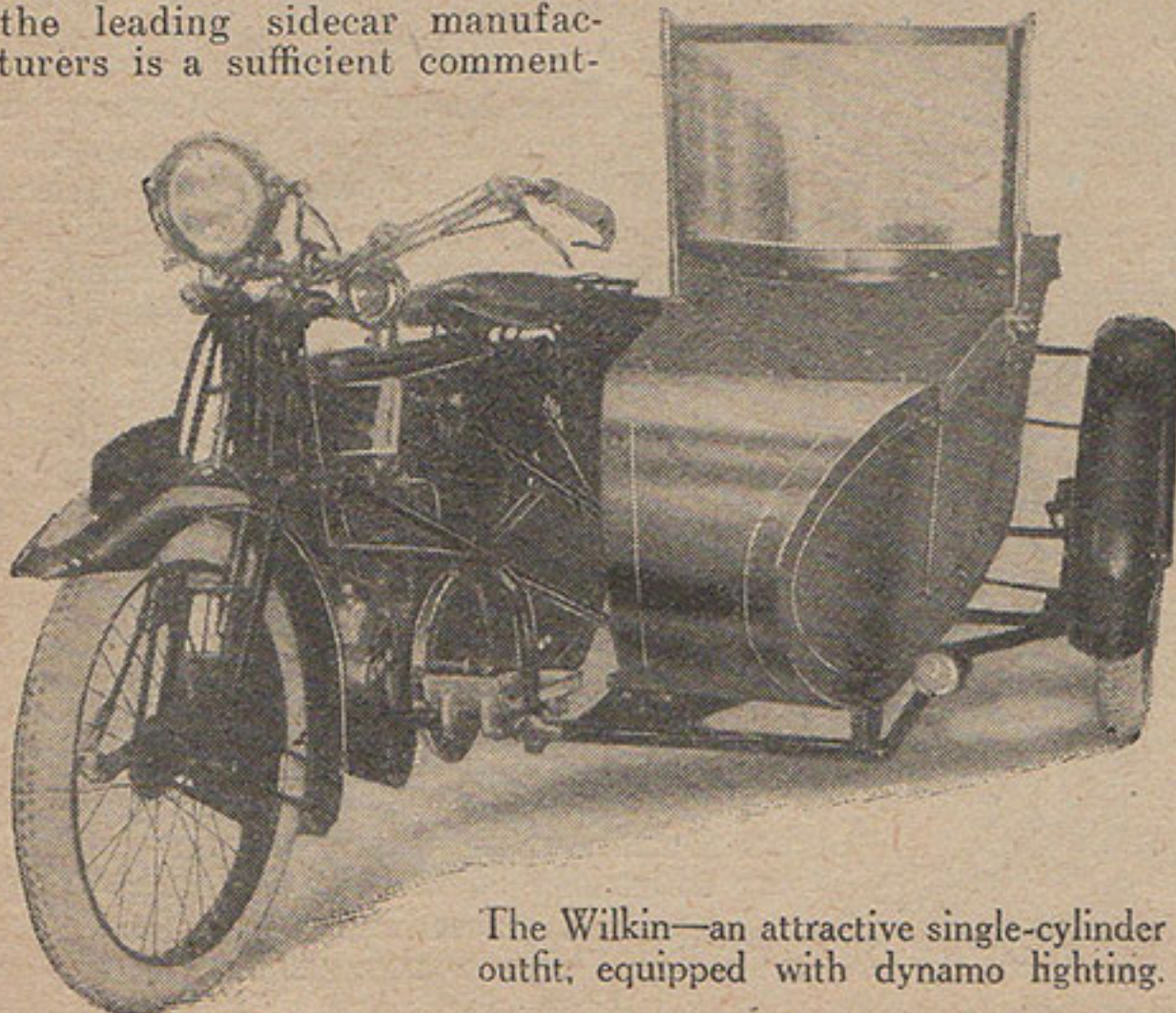


One of the greatest attractions of the Olympia Show was the number of taxi sidecars exhibited. Here is a Watsonian with the taximeter mounted on the nose of the body.

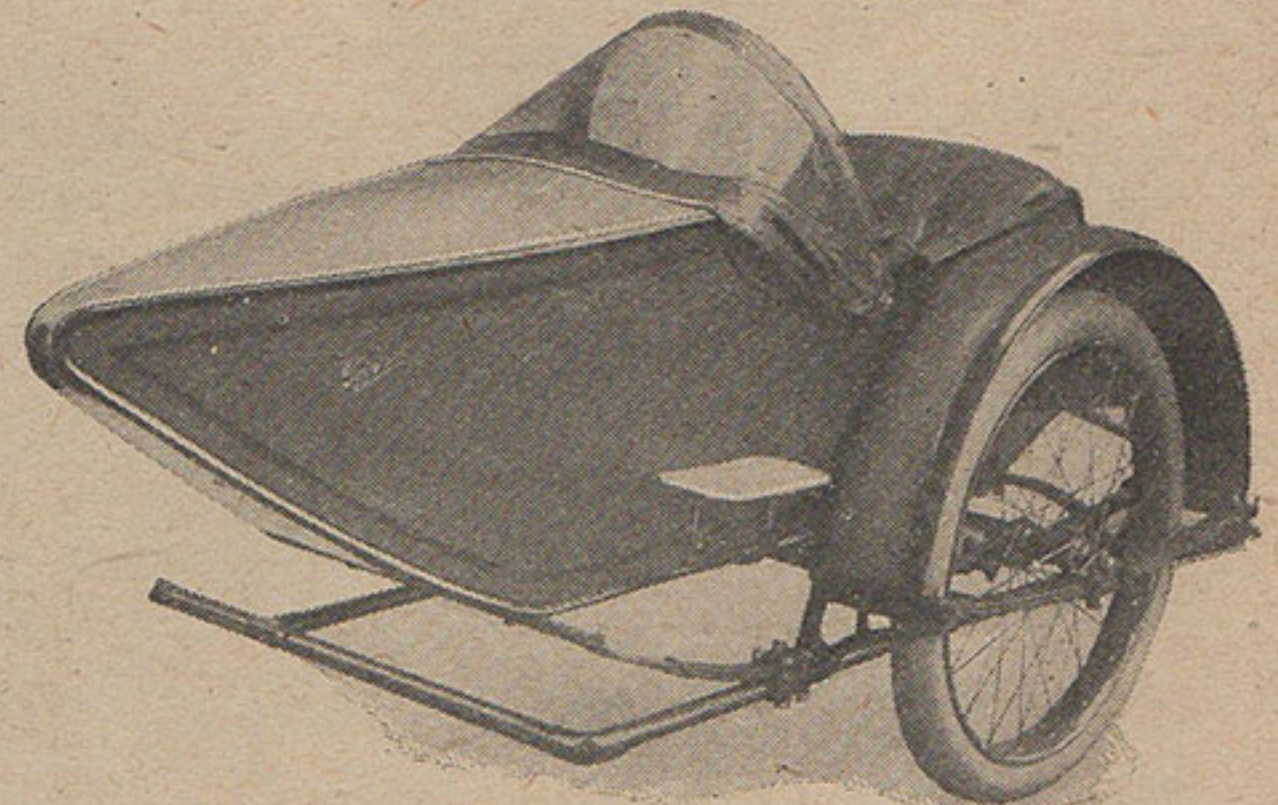
strongly recommend to all sidecar users. The body is carried upon double-ended C springs, and is remarkable for its exceptionally fine upholstery. A hinged dash extends backwards over the door,

A roomy Sandum taxi sidecar attached to a Harley-Davidson machine.

and a large locker is provided behind the seat. On the top of this is a steel luggage grid. Other bodies which call for special attention are the Dual-purpose sidecar and the Sports model; the former is readily convertible from a single to a two-seater, this being done by moving the back rest of the seat forward and dropping the back of the body to some extent so as to give room for an additional adult passenger at the back. In order to provide sufficient leg room, there is a well in the centre of the body immediately behind the position of the front seats, and also a drop-down compartment in the floorboards at the front of the sidecar. Two normal adult passengers can be accommodated in this sidecar without difficulty. The second sidecar mentioned (the Sports model) is somewhat different from the class of machine usually so named, in so far that it provides much more comfortable seating capacity, while the back rest is brought up to a high position to support the shoulders of the passenger. Generally the lines of this body are very graceful, and it



The Wilkin—an attractive single-cylinder outfit, equipped with dynamo lighting.



Sporting model sidecars are showing no sign of waning popularity, and the faults of the earlier models are being eliminated. Comfort is now provided, without sacrifice of speedy appearance, as exemplified in this particular Grindlay model.

27 NEW RECORDS

THE

Indian

closes its Racing Season with this wonderful list of records

SOLO RECORDS.

Flying mile	95.24 m.p.h.
„ kilo	94.79 „
„ five miles	84.82 „
Standing ten miles	81.67 „
„ fifty	75.85 „
„ 100 „	72.17 „
„ 150 „	73.48 „
„ 200 „	72.69 „
„ one hour	73 miles 1,229 yards
„ two hours	146 „ 1,514 „
„ three „	218 „ 697 „

SIDECAR RECORDS.

Flying kilo	77.14 m.p.h.
„ mile	74.38 „
„ five miles	70.69 „
Standing ten miles	67.87 „
„ 100 „	61.98 „
„ 150 „	62.58 „
„ 200 „	62.15 „
„ 250 „	61.88 „
„ 300 „	62.45 „
„ 350 „	60.30 „
„ one hour	66 miles 471 yards
„ two hours	125 „ 1,669 „
„ three „	185 „ 146 „
„ four „	247 „ 928 „
„ five „	308 „ 1,433 „
„ six „	363 „ 688 „

High speed may not appeal to everyone, but speed records prove the efficiency, reliability and stamina of the INDIAN, and the everyday user benefits by the knowledge we gain from these severe tests.

1921 LIST NOW READY

HENDEE MANUFACTURING CO.,
"Indian House,"

366-368, Euston Road, London, N.W.

Telephone—Museum 1643.

Telegrams—"Hendian, Eusroad, London."

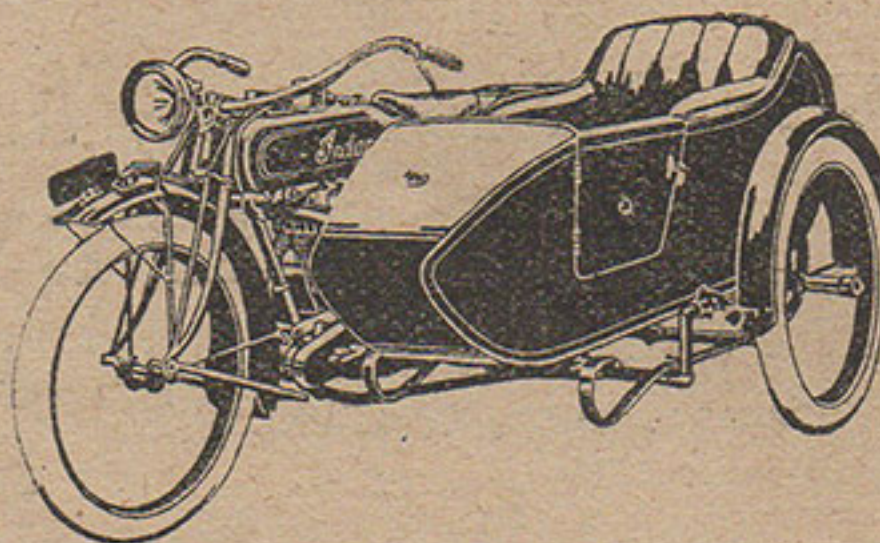
AUSTRALIA—109-113, Russell St., Melbourne.

AFRICA—"Indian House," 127-9, Commissioner

St., Johannesburg. "Indian House," 579,

West Street, Durban. "Indian House," South

Street, Port Elizabeth.



In answering this advertisement it is desirable to mention "The Motor Cycle."

Henderson

SIDECARS

"THE FINEST DISPLAY AT THE SHOW"

Everybody's Verdict after seeing our Stand. After our success we must urge upon all intending purchasers the necessity of

ORDERING NOW

or otherwise deliveries may become again exceptionally prolonged.

The amazement caused by our

SPRING FRAME MODEL

was only what we anticipated. It is a wonderful engineering proposition.

Write without delay for our fully illustrated Art Catalogue to

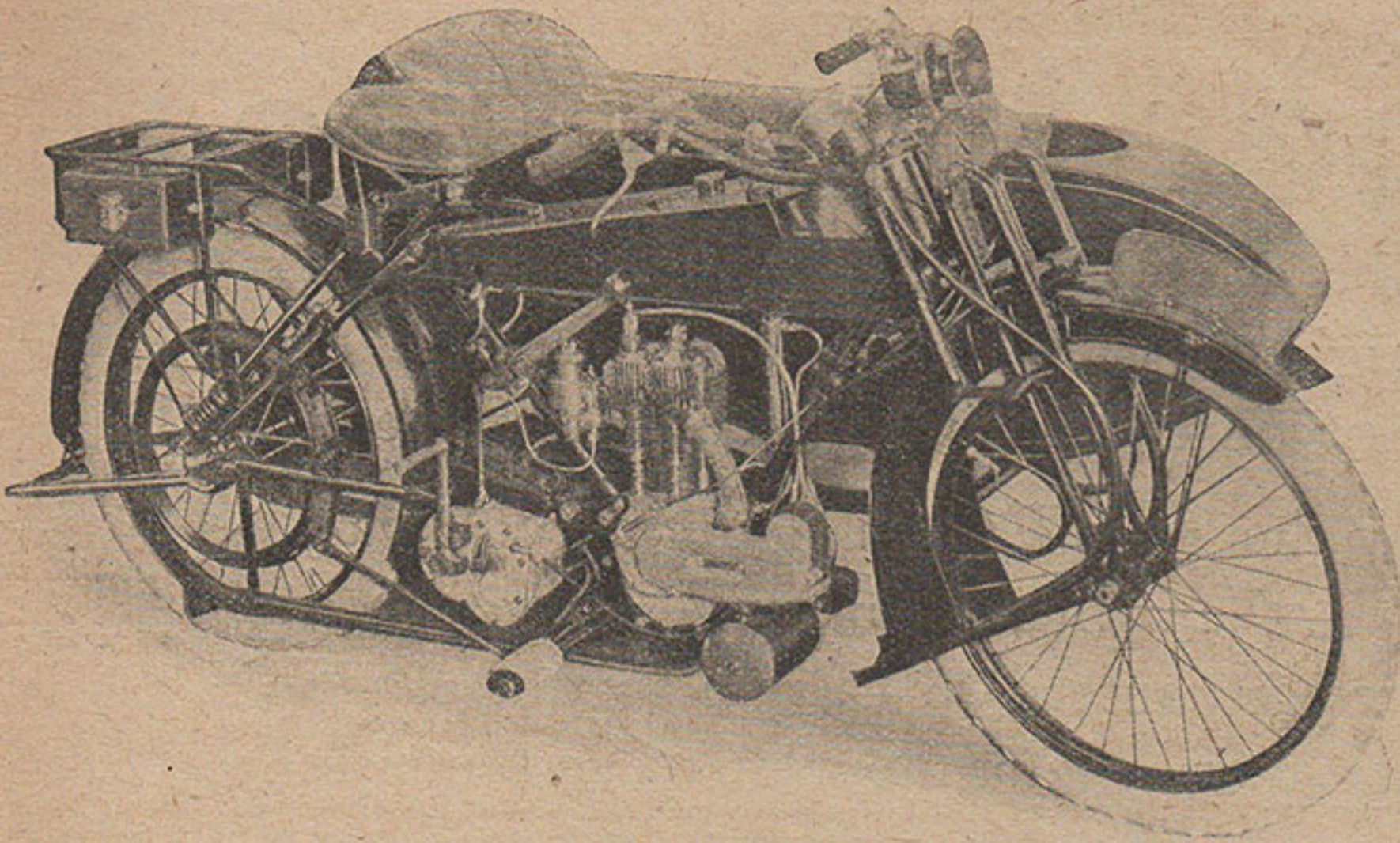
HENDERSON SIDECARS,

AERO WORKS,

FITZWILLIAM STREET, SHEFFIELD.

'Grams: "Aero, Sheffield."

'Phone: 3119 Central.



Something Infinitely Better.

ADVANCED SPECIFICATION.

- 4 h.p. *Blackburne* Engine.
Sturmey-Archer 3-speed Gear Box (Hand Clutch and Kick Starter)
Runbaken Magneto (new type), adjustable ignition. Hand control
AMAC Carburetter.
Dunlop Heavy Tyres (36 x 2½).
Brookes Saddle and Tool Bags.
 All Chain Drive.
 Patent Spring Frame.
 Special Type of Front and Rear Forks.
 Spring Carrier.
 BRAKES.—Powerful Brakes, operating on rear wheel.
 Steering Head, specially constructed for Sidecar work.
 Handlebars, firmly bolted direct to Forks.
 Special Patent Oiling System (Vacuum Pump).
 Finish.—Special rust-proof, with minimum number of plated parts.
 Sidecar.—Henderson Bulbous Back, with large Locker accommodation.

PRICE **£150** COMPLETE.

4 h.p. Combination.

One of the outstanding features of Olympia was the Sheffield-Henderson 4 h.p. Combination. It is the mount both for the beginner at the pastime, for the business man who looks for a return for his money, and the old rider who is seeking a machine that looks good—who wants an engineering job and not a “messed production” machine. Write for full particulars and name of nearest agent NOW to-day.

TO AGENTS.

There is money to be made by “selling” the Sheffield-Henderson—and an advertising campaign will help you. Sheffield-Henderson is next season’s “best seller.”

HENDERSON MOTORS, LIMITED,

Fitzwilliam Street, Sheffield.

Grams: “Aero, Sheffield.”

Phone: 3119 Central.

an inner tube-free

BERGOUGNAN MOTOR CYCLE TYRES are known throughout the length and breadth of France. Every motor cyclist in France knows them.

They are made by the same firm that, during the war, equipped almost all the Allied guns with Bergougnan Solid Rubber Tyres guaranteed to carry a weight of 40 tons. Even the huge 9.4 in. guns mounted on enormously heavy railway trucks were transported by road on Bergougnan Solid Tyres.

The same rubber that went to the making of these solid tyres is now used in Bergougnan Motor Cycle

Tyres. In order to make Bergougnan Motor Cycle Tyres as well known to British as they are to French Motor Cyclists we have decided on the following plan:

Up to December 31st we will give to all private buyers of Bergougnan Motor Cycle Tyres an inner tube free. Motor Cyclists may buy as many Bergougnan Motor Cycle Tyres as they like; with every cover they will receive an inner tube free. Any Agent will supply them.

But this offer only holds good until December 31st. So you must buy now before the offer closes.
Immediate Delivery.



BC
BERGOUGNAN
TYRES

BERGOUGNAN
TYRE CO.,
31 & 32 Warwick St.
Regent St., W.1.

Telephone:
Regent 2056 and 4844.

Telegraphic Address:
"Bergolois, Reg, London."

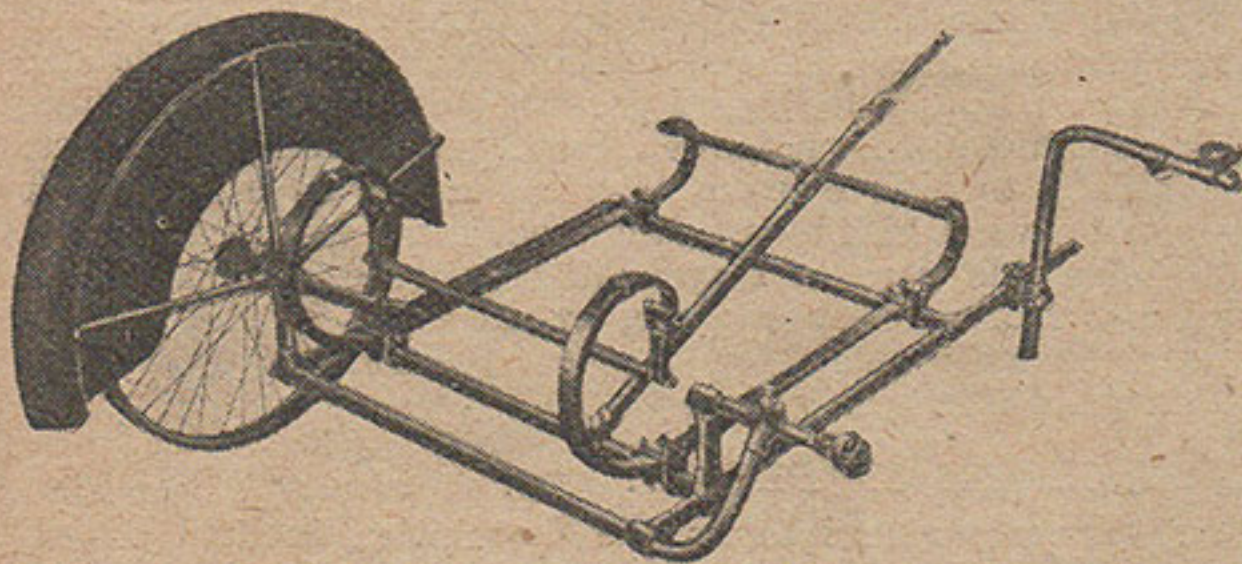
Sole London Factors:
ABINGDON RUBBER Co., Ltd.
100, Charing Cross Road, W.2.

Sidecar Progress.—

tapers to a point at the rear. The portion behind the seat is utilised as a locker, which is covered by a hinged lid having a spring catch which prevents rattle. In addition to these standard models, there is also the Imperial, which has a fully sprung wheel. The bodywork of this is very similar to that already described on the touring model, but the wheel is carried between two half-elliptic springs, rigidly secured in front and attached to shackles at the rear. In order to preserve the wheel in a truly vertical plane when cornering, another shackle is provided between the side member of the chassis and a vertical fork which springs from the axle lugs.

SCOTT.

SCOTT MOTOR CYCLE Co., LTD., Shipley, Yorks.—No change has been made in the Scott sidecar chassis, which is essentially a continuation of the frame of the machine to which it is fitted, since the triangulation is not only complete in itself, but also in its relation to the cycle frame members. The bodywork and



A Dunhill chassis offered as a substitute for the more expensive triangulated pattern.

springing are also unchanged, but the springs are now made in the Scott works in order to ensure absolute uniformity of material and temper.

SCOUT.

R. WEATHERELL, South Green, Billericay, Essex.—One of the R.W. Scout two-stroke lightweights (of 318 c.c.) is provided with a very nicely finished lightweight sidecar specially made for the firm. The body is finished in polished aluminium, and is placed on a chassis which is triangular in front, with a rectangular frame at the rear. As in the case of many of the lightweight outfits, a three-point attachment has been found amply sufficient, but special care has been taken to strengthen up the chain stay support. Since it is likely that a lightweight machine of this kind will often be used for solo riding, it is important that the sidecar should be made easily detachable, which has accordingly been done in this case. The body is deeper than is usual for this class of sidecar, and is very comfortable to sit in.

SUNBEAM.

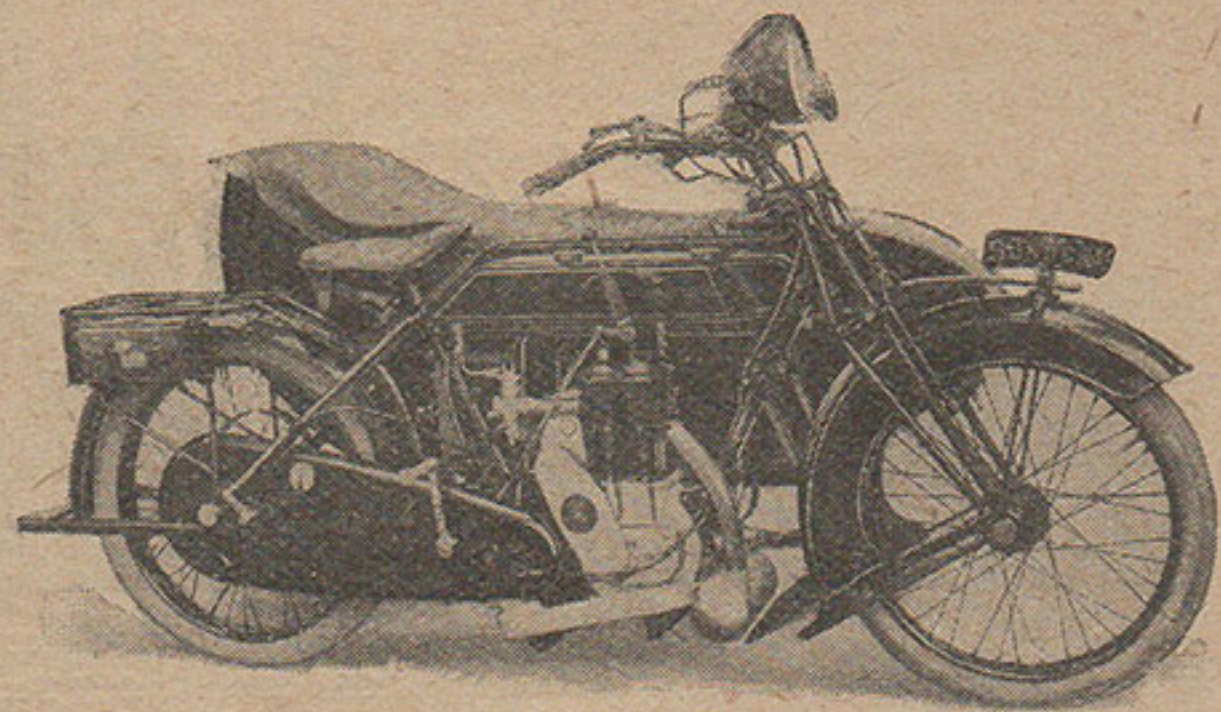
JOHN MARSTON, LTD., Sunbeamland, Wolverhampton.—Sunbeam sidecars are chiefly remarkable for the particular excellence of the workmanship employed in their construction and for the durability of the materials, not only those used for the chassis, but also the upholstery. They are particularly firmly attached at

the front end, having a double tube to the steering head as well as an attachment to a specially strengthened footrest. The wheel has a tube all round it, and runs on a spindle instead of a stub axle. In all the types of bodies offered, a particularly long and comfortable seat is fitted with a well squabbed back. In one case this back is extraordinarily deep, so that the whole body of the passenger is under protection: in another type the top of the sidecar is cut flush, giving a very sporting appearance but not quite so much protection.

TRIUMPH.

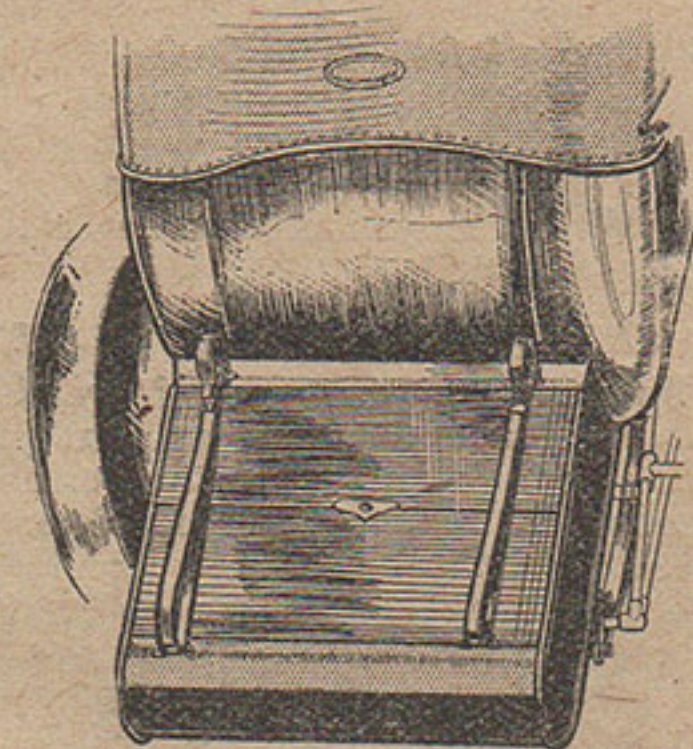
TRIUMPH CYCLE Co., LTD., Coventry.—In the Gloria sidecar, as fitted to Triumph machines, an effort has been made to provide the comfort usually associated with heavyweight sidecars with the lightness necessary for use with a 4 h.p. machine. Perhaps the most noticeable point on first inspection is the way in which all the cross members of the frame are sunk three or four inches to allow for an extra deep, and, therefore, extra comfortable, body.

Incorporated in the connections from the chain stay to the chassis is a petrol tin carrier, which forms part of the construction, and a large luggage grid, separately sprung, is provided at the rear.



Interchangeable wheels on 3½ h.p. sidecar outfits are a rarity. This smart Sunbeam is so equipped.

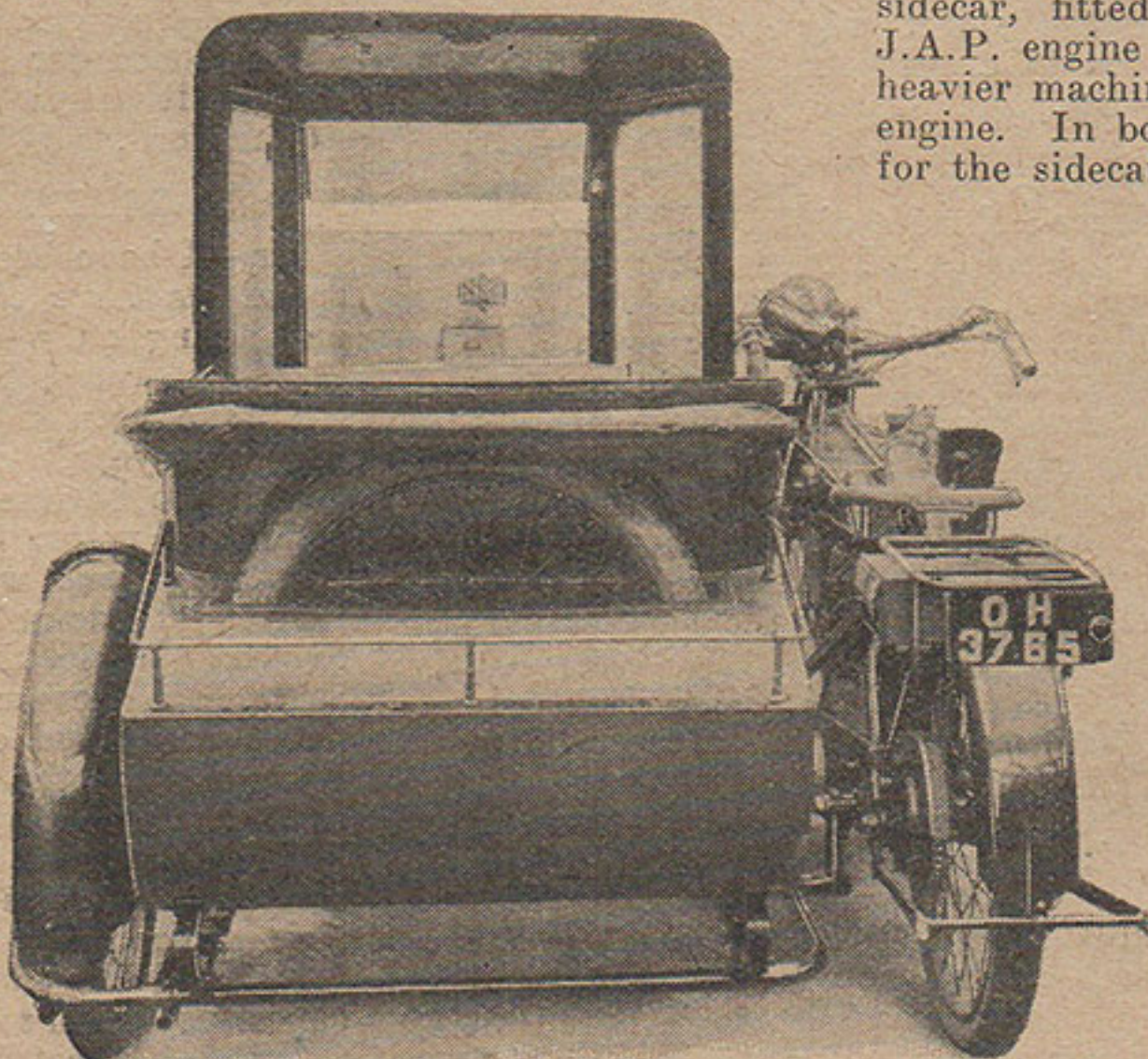
The sprung sidecar wheel is still provided, the stub axle being slung on a swinging bar, while shocks are absorbed by an enclosed coil spring immediately above the hub.



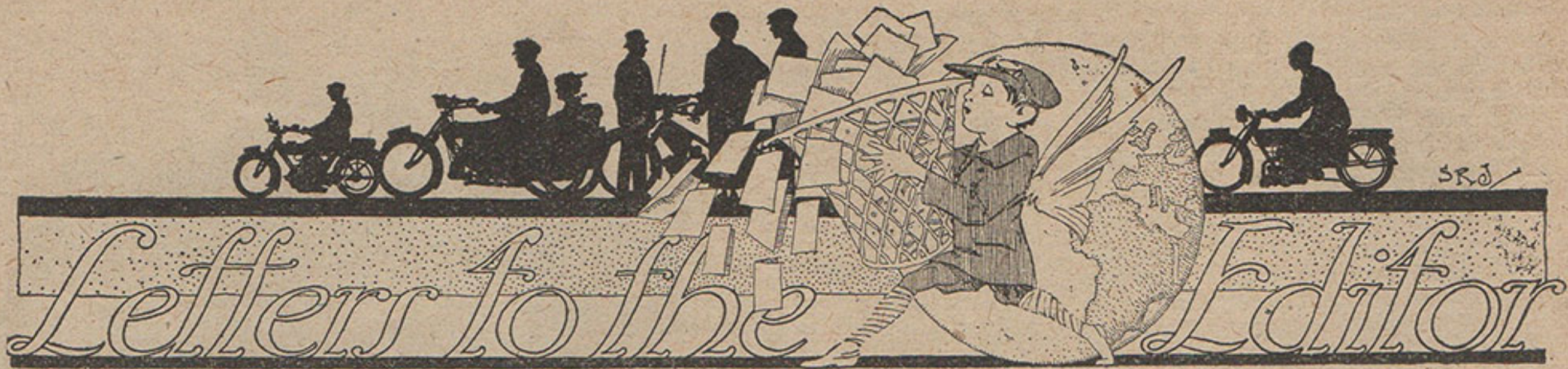
At the rear of the Champion sidecar taxi there is a large locker with an additional luggage platform on top.

VICTORIA.

VICTORIA MOTOR AND CYCLE Co., LTD., Victoria Works, Dennistoun, Glasgow.—On the Victoria stand were two types of sidecar, fitted respectively to a 4 h.p. J.A.P. engine machine and to a rather heavier machine with a Coventry Victor engine. In both cases the prices quoted for the sidecars were extremely low, the former type being £25 and the heavier £35. In each instance also the frame of the chassis takes the form of a large rectangle entirely surrounding the body, and in the heavier type the motor cycle side is made of girder construction to stand the additional load. A good point in both cases is that the bent tube going to the steering head has a cross tie on it. The bodywork is not extremely luxurious, but quite comfortable, and, taken as a whole, both the sidecars are excellent value. Their finish is very serviceable.



Partially concealed, the spare wheel on the Watsonian taxi-sidecar is carried immediately in front of the large locker.



The Editor does not hold himself responsible for the opinions of his correspondents.

All letters must be addressed to the Editor, "The Motor Cycle," Hertford Street, Coventry, and must be accompanied by the writer's name and address.

PLEASURE IN POLISH.

Sir,—Having read the interesting "Open Letter to the Trade," by B. H. Davies, I have come to the conclusion that he, like many others, dislikes cleaning his machine. Re his remarks about the eighteen-year-old "dude," as he terms him, I happen to be nineteen, and, as far as my machine goes, I suppose I am a "dude." I find no greater pleasure than keeping my machine spotlessly clean, the same as my father did with all his own. It may be strange, but I feel positively uncomfortable when out and my machine has become dirty. I feel sure that there are many others who will agree with me when I say that a bicycle worth having is worth keeping clean. Let the manufacturers put on as much plating as they like. I may also add that I am an all-weather rider.

New Barnet.

DUDE.

IS THE LONG EXHAUST A SILENCER?

Sir,—In your issue of November 25th "W.G." makes enquiry concerning long exhaust pipes.

I ride a $3\frac{1}{2}$ h.p. Sports Norton motor cycle. Lately I received a summons for inefficient silencer. The machine is fitted with the Norton standard exhaust pipe, with no silencer box, and only the fish-tail baffle at the end. The pipe itself comes under the heading of an expansion chamber, because its cubic capacity is two and a half times the cubic capacity of the cylinder, and also the fish-tail at the end is larger than the rest of the pipe, upon which it slides.

Probably other readers have been summoned for the same alleged offence. In my case the summons was dismissed as being no case.

C. R. BIRD.

[Although our correspondent has evidently been able to prove that a long exhaust constituted a silencer, other local authorities may hold different views. We therefore warn our readers that the safest way to keep within the law on this point is to ensure that their machines are reasonably silent.—ED.]

OLYMPIA IN FIGURES.

Sir,—As the correspondence columns of *The Motor Cycle* represents the motor cyclists' forum, I take the liberty of criticising certain makers who still produce motor cycles woefully under tyred. The interesting statistics you gave last week show that among the exhibitors at Olympia no fewer than seven makers have lightweights equipped with 26×2 in. tyres, while no fewer than thirty-two used the $26 \times 2\frac{1}{2}$ in. size. With such a large majority in favour of the latter size it must be obvious to the minority of makers that they are out of date. Why do they do it? Is it price? I think not, for some of the machines fitted with the smaller tyre are not among the cheapest.

The same applies to the 24×2 in., and $24 \times 2\frac{1}{2}$ in. size; only four makers favour the former as against seventeen who fit the latter.

It is interesting to see that the once favourite size of $26 \times 2\frac{3}{8}$ in. is practically moribund, and that the 26×3 in. size is coming into favour.

No doubt there is an explanation why some makers prefer 28×3 in. to the 700×80 size, which is a "fatter" tyre, and is no more costly. Probably the former size is favoured on account of the possibility that replacements can be obtained readily overseas.

The analysis of engines used by makers is most interesting. It is, I think, the first time such figures have appeared,

c8

and although thirteen makers use more than two engines, it is shown that no fewer than forty makes use one size of engine only, while thirty-three use two.

Often British manufacturers are criticised for not standardising, and their American contemporaries are cited as examples to be followed. May I remind these critics that both the Harley-Davidson and the Indian factories produce more than one size of engine.

STATISTICIAN.

London.

AN ENTHUSIAST'S MINIATURE.

Sir,—I was much interested in "Mac's" description of this little machine, and would be glad of more particulars, gear ratios, and especially regarding performance on hills, which abound in this neighbourhood. High speeds I detest, but ability to ride everything that comes in one's way I appreciate very much—meaning roads on which any sane motorist would care to travel. I think the little machine, with a two or three-speed gear, would about fill the bill for a great many besides

SAFETY FIRST.

Barrow-in-Furness.

DIFFERENCES OF DESIGN.

Sir,—I read with interest the description in *The Motor Cycle* of the flat twin engine, designed by Mr. Bradshaw, and was particularly struck by the fact he has reverted to cast iron cylinder with aluminium alloy piston.

What do A.B.C. owners think of this? It would be very interesting if Mr. Bradshaw could give us his reasons for the sudden change, as when the A.B.C. machine was first marketed (in its present form), one of the claims for the title of the "World's best motor cycle" was steel cylinders and aluminium pistons.

If the two different designs were the separate idea of engineers of different views, one could understand it better, but coming as they do from the same source, one can easily be pardoned for being puzzled over a point which on the face of it seems absolutely contradictory.

PUZZLED.

Guildford.

FRONT BRAKE POINTERS.

Sir,—I have been wondering if some of your recent correspondents have ever used an efficient front brake such as one acting on a dummy belt rim. I notice this type was fitted to several T.T. machines this year.

I have been using a brake of this type constantly since May this year, and I can assure them that it is a pleasant thought to be able to brake on a hill and yet have the whole retarding power of the rear brake to fall back on in emergency (and which can then be applied without danger). Of course, I do not suggest a front brake designed or adjusted to permit of locking the wheel.

There is another argument for a good front brake (perhaps not a very good one), and that is that, by using the front brake mostly, the rear brake is more likely to be in efficient condition.

The chief need is on a heavy solo on greasy hills where retarding effect is not enough, in which case the argument for two good rear brakes falls rather flat.

I should like to know if any of your readers have had any experience of the effect on belt slip of drilling holes in the pulleys of direct belt-driven machines, particularly variably geared ones. It appears to be done in the case of chain-cum-belt, but not with belt alone. Can anyone tell me why?

Devonport.

W.F.B.

? DID YOU ? CROSS THE ROAD ?

Our part of the Cycle Show at 73, Hammersmith Road (opposite the main entrance), was visited by a very large number of the general public as well as the trade—an interesting proof of the interest taken in our 1921 models.



Were **YOU** at OLYMPIA, and did you cross the road to our **SPECIAL PRIVATE SHOW ?**

We ask the question, because, if you were not there, we will send you a copy of our

NEW ILLUSTRATED CATALOGUE.

A very special attraction was our new
5-6 TWIN COMBINATION
full particulars of which are given in our Catalogue.

**All the
1921**



*One of the
big "hits"
of the Show.*

Coventry-Eagle

Models will be in vogue this season and can now be seen at our London Agents: GODFREYS, LTD., 208, Great Portland Street.

**The COVENTRY-EAGLE CYCLE & MOTOR CO.,
COVENTRY, ENGLAND.**

AUTOGLIDER

TRADE MARK.

The Machine that has pride of place.

After nearly two years of strenuous trial and the strongest possible criticism, we have the pleasure of showing six models of the unbeatable and perfect Autoglider.

The machine of exclusive features and unequalled merit. The Autoglider is supplied in six distinct models, and caters for every class of rider from the passenger machine (Type A) to the sporting model (Type E).

FITTED WITH
THE LATEST
MARK IV.
VILLIERS
MAGNETO
FLYWHEEL
ENGINE 2½ h.p.

AUTOGLIDER
PATENT
SPRING
FRAME.

STEEL DISC
WHEELS AND
THE FINEST
MATERIALS
PROCURABLE

AUTOGLIDER
PALMER
CORD TYRES
16 x 2½



TYPE D
(as illustrated)

55 gns.

Net o/p B'HAM.

IF FITTED
WITH OUR
PATENT
HANDLE-BAR
CONTROLLED
CLUTCH,
5 gns.
EXTRA.

The perfect machine for either sex. The machine that revels in hills, has ample power for all purposes, and is the cleanest and safest machine in the world. We are pleased to announce that all our 1920 Models can be fitted with the patent Autoglider handle-bar controlled clutch at 5 gns.

*Our Agents will be delighted to explain the
unequalled merits of the AUTOGLIDER.*

**AUTOGLIDER, LIMITED, Gt. Charles Street,
Birmingham.**

MANUFACTURERS OF MECHANICALLY-PROPELLED VEHICLES.

EVERYDAY RIDERS' WANTS.

Sir,—As a reader of your valuable paper for seven and a half years, I cannot let "Fed Up and Disgusted's" letter go past without criticising some of his opinions. Probably he owns a cycle made in the year "one," when the tanks were made in proportion to the reliability of the engine, as the latter was not expected to last without breaking down as long as the petrol. He should buy a modern machine that holds two gallons. I should also like to know what he means by freak gears. I have yet to find the British-made motor cycle with a gear box or gears that were not substantial if treated with a little bit of "savvy." Also what better front brake and spring frame does he want than those on a Beardmore-Precision?

It is easily seen that he is not an engineer, as he prefers plain bearings to roller or ball bearings. Commonsense would tell anyone that, from an engineering point of view, ball races and roller bearings are far superior to plain ones. They are less liable to wear, will not seize from lack of lubrication, they are sweeter running, and easier to fit. What engineer would prefer to turn and fit bronze bushes when ball races can be obtained in standard sizes, and will tap on and off as required, if the correct size? Nevertheless, I agree with him regarding agents' stocks of spares.

Glasgow.

EASILY SATISFIED.

"OLD CHALKEY" OR CHALK PIT HILL?

Sir,—Having read Mr. E. M. Wright's letter in your issue of November 18th, in which he runs down the performances of riders on Chalk Pit Hill in the M.C.C. sporting trial, I should like to make the following observations.

I believe I am right in stating that this hill was not Chalk Pit Hill at all, but one known as "Old Chalkey," a disused coach road. One thing is certain, that the sharp right-angle turn which caused Mr. Wright's failure never existed at all on the hill we had to climb. From what I can now recollect, the hill started with a watersplash, then yards of miry ruts, a fairly sharp left and then a stiff climb, the surface consisting of two deep and slimy ruts.

Had the surface been dry, there would have been little excuse for stopping, but with the surface as it was, continual wheel slip was inevitable, and walking without floundering practically impossible.

I think it is a great slur on the modern machines and all those sporting riders who were unlucky enough to stop their road wheels on this hill, for Mr. Wright glibly to infer that he could have climbed it without stopping or putting a foot to the ground on a fixed geared $3\frac{1}{2}$ h.p. machine under the same conditions as we had to climb it.

I should like to see him traverse some of the unmade road sections on the level, or even down hill, without stopping his road wheels.

As to soldiers marching up Old Chalkey at "120 feet r.p.m.," I ask my fellow competitors what they would have looked like that Saturday morning?

Finally, I would advise Mr. Wright that, before he runs down our efforts and those of our machines, he should find the right hill, and tackle it on any fixed gear $3\frac{1}{2}$ h.p. single under similar conditions, and then let us all know of his experiences.

A. C. RHODES.

TESTIMONIALS.

Sir,—I have watched with interest and admiration the advertisement columns of your admirable journal: and should like to give voice to my keen appreciation of the marvels of modern machines and accessories as there recorded. More particularly, the under-mentioned:

- (1.) The enamel that won the T.T. and innumerable other races, trials, etc.
- (2.) The spanner that won, etc.
- (3.) The filler-cap that nearly won, etc. (Perhaps you could complete this list for me, and perhaps it would take too long!)
- (4.) The more-than-two-wheeler that entered for a (speed) hill-climb, and "successfully completed the test!"
- (5.) A passenger conveying apparatus sold complete, "no irritating extras"—but "without tyre!"

(6.) A well-known machine advertised by means of a quotation from a correspondent's letter to you, so arranged as to appear to be an expression of opinion—editorial opinion.

Perhaps I have said enough: I could go on for hours. Might I suggest to the sales managers, etc., concerned that this sort of stuff does not deceive the people whose good opinions are worth having, but merely disgusts them?

In conclusion, sir, may I venture to hope that for 1921 the advertisers' motto will be, "Honest advertisements of honest goods"?

SWALLOW ALL.

Grimsby.

DAZZLING HEAD LIGHTS.

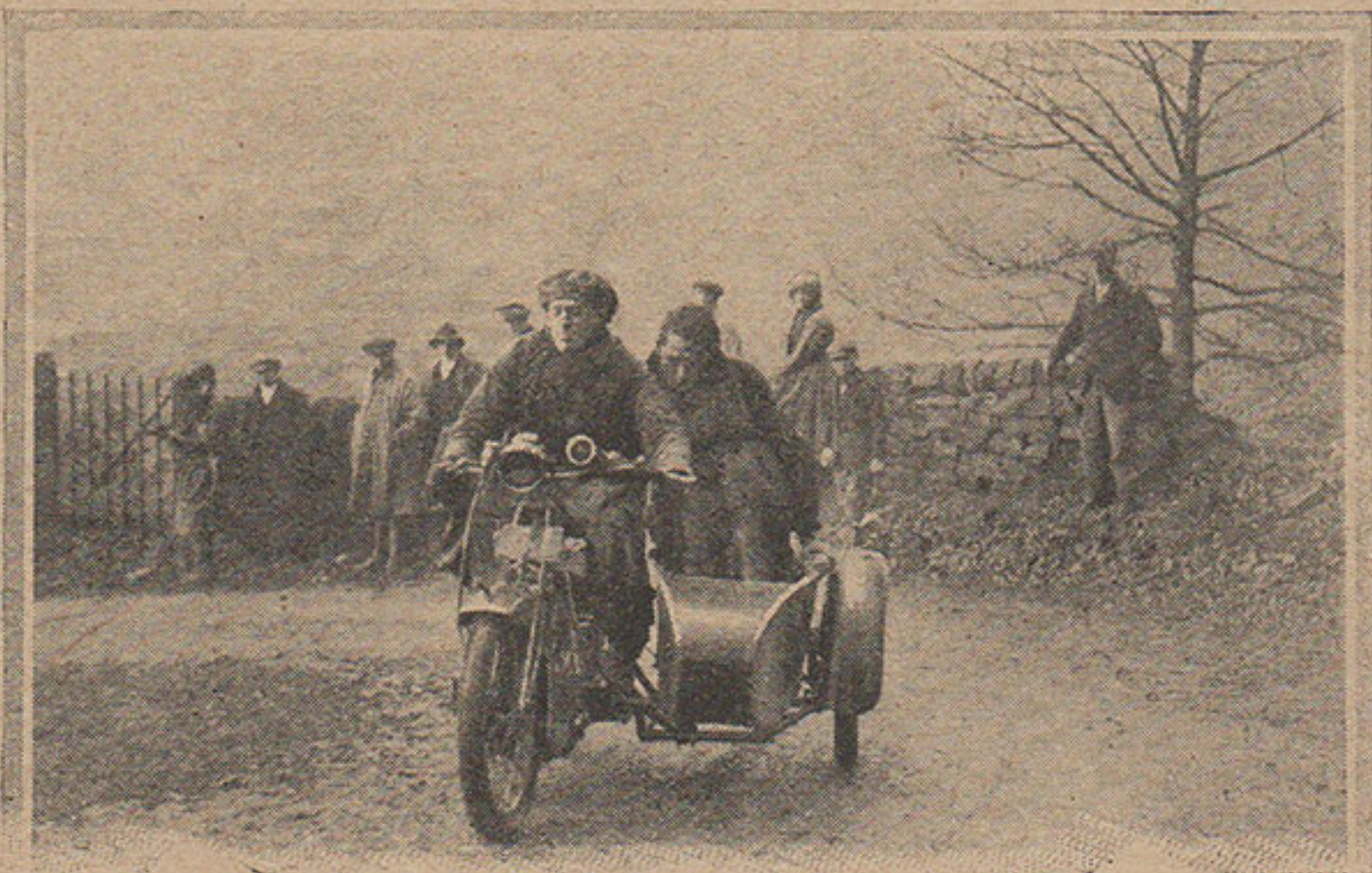
Sir,—I should very much like to have the comments of yourself and your readers on the following experience. The other evening—a clear moonlight night—I was riding solo along a country road when I met a sidecar outfit with an extremely efficient head light. My own head lamp is the middle size of a well-known make, and on ordinary occasions gives me sufficient light for comfortable travelling at night up to the legal limit of speed; but in the glare of the approaching searchlight it was but as a candle in sunshine. Outside the oncoming light I could see absolutely nothing ahead; but, as the sidecar outfit whizzed past my shoulder, there, clearly picked out by my own lamp, was the back of an unwitting pedestrian a few feet right in front of my wheel. I had no time to avoid a collision altogether; but, fortunately, the results were not so serious as they might have been. My fellow-sufferer had not heard my approach owing to the noise of the other machine, nor had he seen the light from my lamp, because, as he stated, of the glare of the other light.

What I should like information about is how to avoid such accidents in future. Should I invest in a new lamp of such high brilliancy as to hold its own with any competitor that may come against it? This might be satisfactory for me, but I have an uneasy feeling that some other less brightly lit motorist I met might have the same experience I had, for which I would reckon myself responsible. Should I, then, stick to my medium-powered lamp, and, on meeting again a travelling searchlight, stop and modestly wait till it has passed me? It hardly seems right that I should simply sound my horn and drive blindly on.

I think it preferable to have questions like these settled by friendly agreement among motorists rather than by outside legislation; but, failing the agreement, I should certainly welcome legislation.

C. R. GIBSON.

[We believe that the question of dazzling head lights is already engaging the attention of the legislative authorities; but whether their findings will give satisfaction to the average motor cyclist is a very moot point. Considerate drivers nowadays usually set their glaring lamps at "dim" when passing other vehicles. But our correspondent appears to have met an acetylene-equipped outfit, in which case this courtesy would not be possible.—Ed.]



ROWSLEY BANK IN NOVEMBER.
A scene during the Sheffield and Hallamshire M.C.C. run for the Club Trophy.
A. May (4 Norton sc.) is seen on the hairpin.

THREE-INCH TYRES ON LIGHTWEIGHTS.

Sir,—I note in your issue for November 18th that "Ixion" asks for experiences of riders who have tried large tyres on lightweights.

Personally, I own two machines—an 8 h.p. New Imperial and a Beardmore-Precision. I found that the big 'bus with its 28in. x 3in. tyres got nearer to the comfort of the spring frame Beardmore than other machine I have ridden, and I have tried most things, from the little 2 h.p. Precision Pup upwards. This led me to wonder if I could improve on the comfort of my small machine; so as I had a couple of 28in. x 3in. covers which had done duty on the back wheel of the New Imperial, but still were good for a good many miles, I fitted them on to the Beardmore. They fitted the 26in. x 2 1/2 in. rims perfectly. I covered about 700 miles in the first week after they had been fitted, and must say that the improvement in comfort was most noticeable. In 1915 I used to run a 2 1/2 Sun-Villiers as a private 'bus when I was despatch riding, and always fitted 26in. x 2 3/4 in. heavy tyres, which made a tremendous improvement in comfort over the 26in. x 2 1/2 in. "light" covers fitted to the machine when I bought it.

Also, with big oversize tyres the puncture fiend is "mafeesh," as they say in Egypt. O.P.C. Holsworthy.

Sir,—Apropos "Ixion's" remarks re 3in. tyres on lightweights, during the early part of this year I was riding a 2 1/2 h.p. Cleveland two-stroke, and would like to testify as to its extreme comfort. There seems to be an absence of that rebound which occurred on several spring-framed machines I have ridden, due to the fact that the rear tyre can be inflated to suit one's weight. The Cleveland engine is beautifully balanced, and runs very sweetly indeed when not four-stroking; but, in my opinion, is marred by having fixed ignition and no compression release.

I am running a 1920 Velocette now, and a more delightful little machine I do not wish to own; being fast, powerful, economical, and the acme of reliability, it compares excellently with the fifteen machines of all weights and powers that I have previously owned.

The makers have wisely chosen 2 1/2 in. tyres instead of 2in., and these, in conjunction with a saddle spring to suit one's weight, make the machine very comfortable indeed.

Bristol. U 5429.

Sir,—It seems "Ixion" has discovered that the Cleveland has 26in. x 3in. tyres, as it has had for over a year. On a sturdy lightweight they are ideal. When I must have a new tyre I will take a 27in. x 3 1/2 in., fitting the same rim.

The Hague, Holland. A. VAN DER MEE.

Sir,—Having read with interest "Ixion's" remarks on this subject, I venture to give my experiences. My first machine was a 4 h.p. single, fitted with 2 3/4 in. tyres. This machine—fast, powerful, and absolutely reliable—was extremely uncomfortable to ride for any length of time, and this, in conjunction with poor mudguarding, was the only fault.

My next mount was a 2 1/2 h.p. two-stroke, which only boasted 2in. tyres. This machine, with a well-sprung saddle and efficient front forks, was fairly comfortable except on roads with large pot-holes where the small diameter of the wheels (24in.) caused a lot of bumping. Considering the rate of wear, more especially of the back cover, the tyres were much too light for the work. I may mention also that one has to exercise considerable caution in the region of tramlines with such small tyres.

My present machine is an American lightweight with 26 x 3in. tyres. It is far more comfortable than the other machines, and the large treads render it very stable in grease. In spite of the fact that I have ridden this cycle a considerable distance, mostly with a pillion passenger, the tyre wear is negligible. These tyres call for far better guarding than do small sizes, and that on my 'bus is useless on a wet day. Considering mechanical efficiency and attention to finish and detail, the English machines are infinitely superior, but the Americans have a better idea of tyre fitting. WALTER B. PENNY.

Sir,—"Ixion," in the issue of November 18th, treads on some corns which have been awaiting his attention a very long time. I mean the size of tyres on a lightweight. I think

it is an absolute scandal for any maker of a motor cycle weighing upwards of a hundredweight to put it out with anything under a 2 1/2 in. tyre, and a heavy one at that.

My personal choice is a two-stroke Enfield; and the first week or two I rode it I was on the point of selling it several times, simply because if the tyres were not pumped up hard enough, they pinched on the rim and cut both cover and tube.

I went to the local Palmer Tyre people and got the 2in. tyres replaced with 2 1/2 in., and from that day to this the machine has been a perfect treasure to ride, and I have not had a single puncture. J. STUART-WHITE.

ELECTRIC LIGHTING FOR SOLO LIGHTWEIGHTS.

Sir,—I have been exceedingly interested in the Correspondence columns of The Motor Cycle dealing with electric lighting for motor cycles; but, after reading all the letters on the subject, I have turned away disappointed, for they deal with electric lighting for a sidecar, and leave the lightweight severely alone. There must be many riders like myself who require an electric lighting outfit which is cheap and efficient. I know there are several sets marketed by well-known firms, but these sets usually top the £6 mark, and make use of dry batteries, which are expensive to replace.

I will try and explain a set which, I think, might appeal to many riders who do not go in for long night rides, but who are often caught ten miles or so from home at lighting up time, have to dismount, and spend perhaps a quarter of an hour lighting and regulating their acetylene lighting outfit.

I have (probably like many other riders with slender purses) formed vague ideas of an ideal, cheap, and efficient electric lighting set, and I will try and give them below. If I name a certain make of lamp or accumulator, it is not because I am interested in it, but because I had it in mind when my ideas were forming.

Head lamp. Hunt's model 870, price 23s. Small, I admit; but, I think, large enough for the purpose.

Accumulator. Four-volt Bipol, giving fourteen to sixteen hours' light. Price 16s. (recharging, 6d.).

I think that the accumulator should be carried in a case attached to the handle-bars in the same position as an acetylene generator. It should be divided into two compartments, so that two accumulators could be carried (one spare).

Bulb. A four-volt half-watt.

Now we come to the rear light. I intend that this shall be entirely separate from the head lamp, thus doing away with yards of wiring.

An electric cycle rear lamp, cost about 10s. 6d., used in conjunction with a Bipol pocket accumulator. Price, about 4s. 9d. (recharging, 3d.); whilst a spare accumulator should always be carried. These accumulators give, I believe, about eight hours' light. The total cost of the outfit is under £4. Hampstead. D.H.D.

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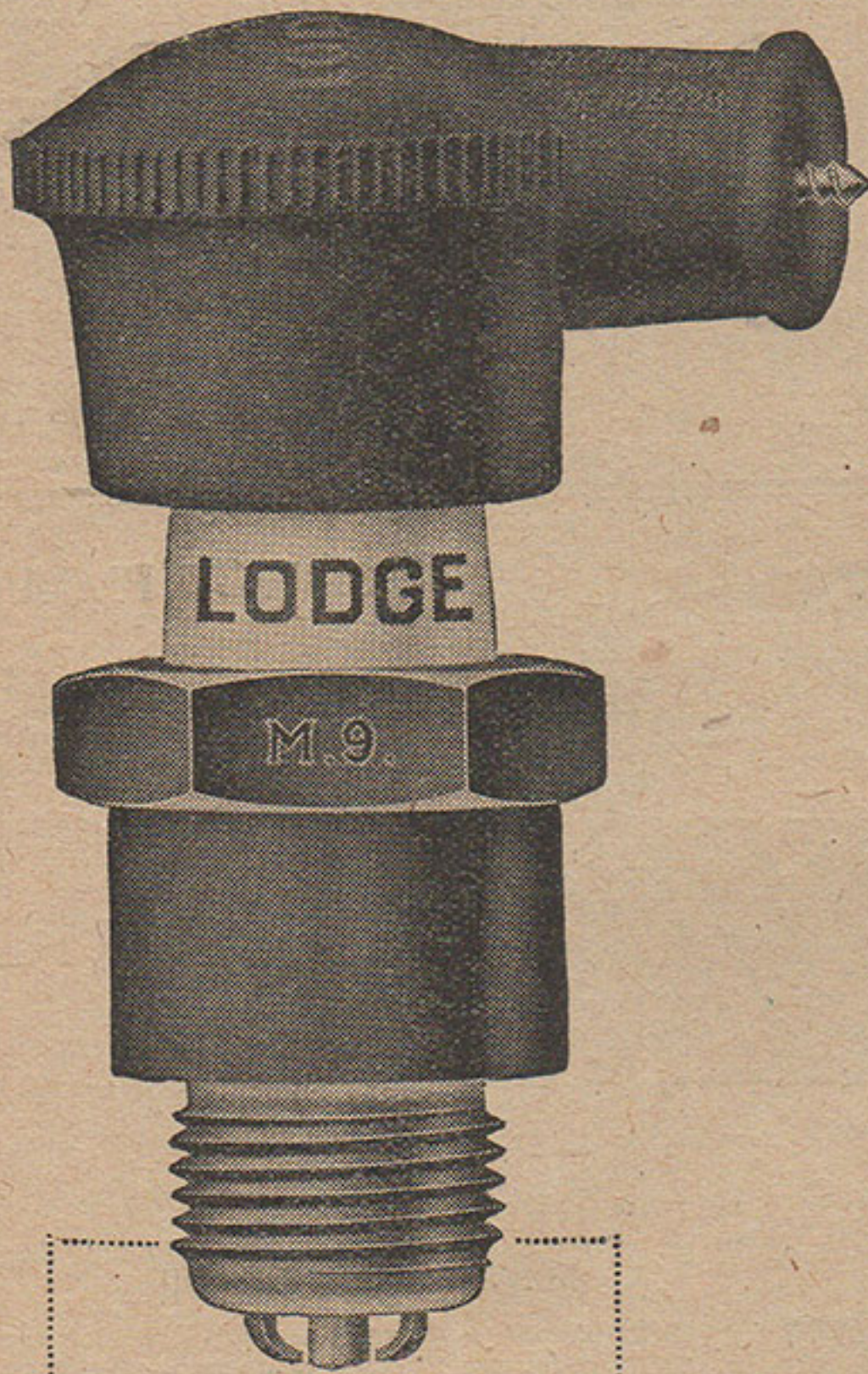
Table listing books and maps for motor cyclists with columns for title, price, and author. Includes titles like 'MOTOR CYCLES AND HOW TO MANAGE THEM', 'HINTS AND TIPS FOR MOTOR CYCLISTS', and 'THE MOTOR CYCLE ROAD MAPS'.

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50 miles.	2 hours
150 "	4 "
200 "	5 "
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Regarding the tyres, Captain Breeze writes as follows:

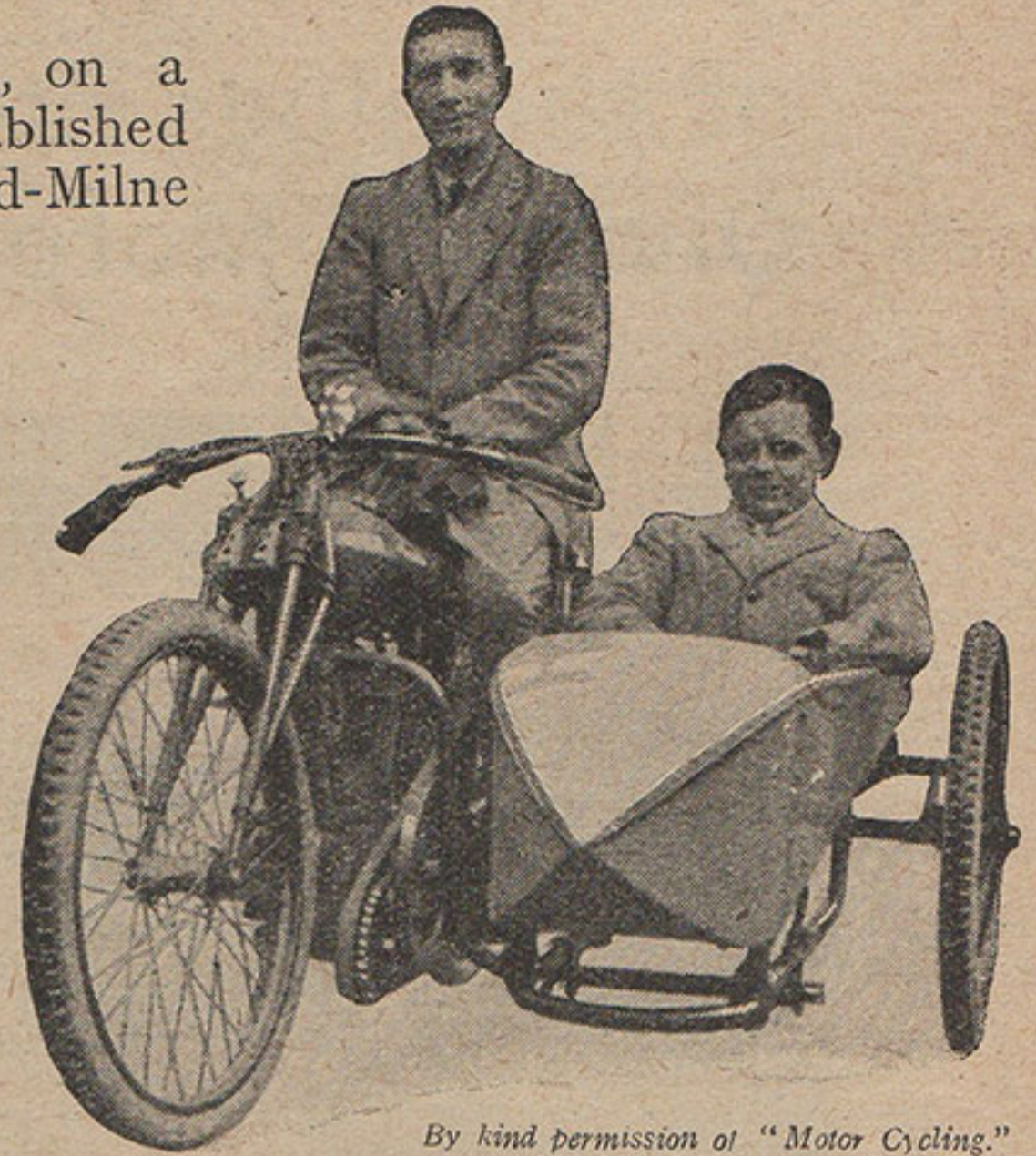
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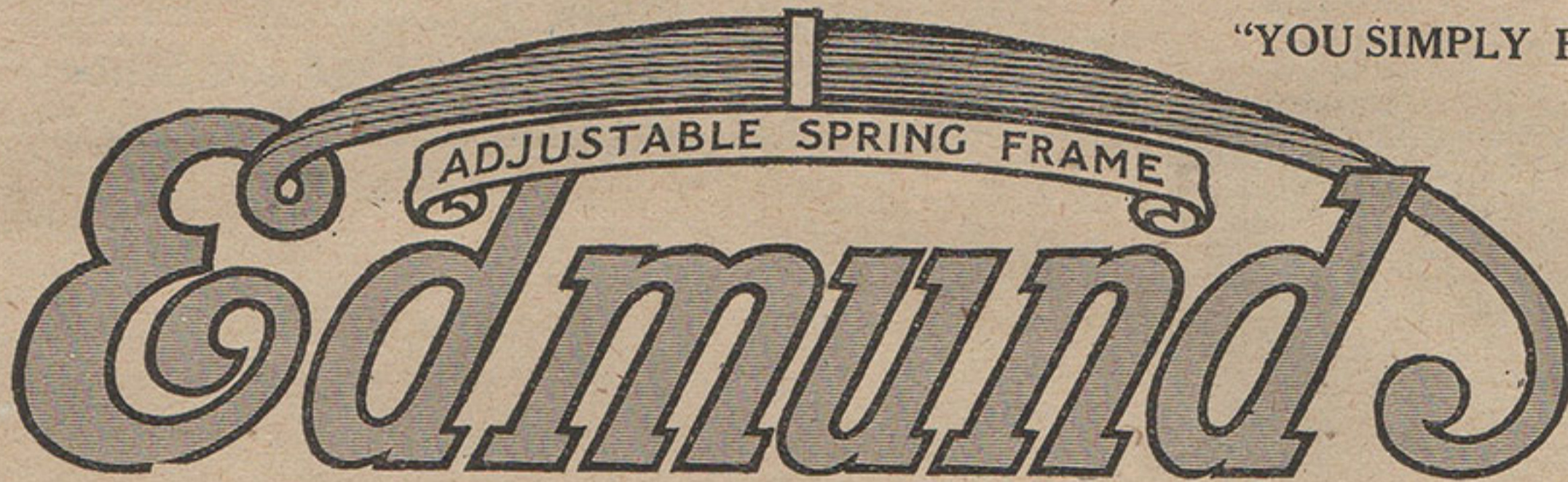
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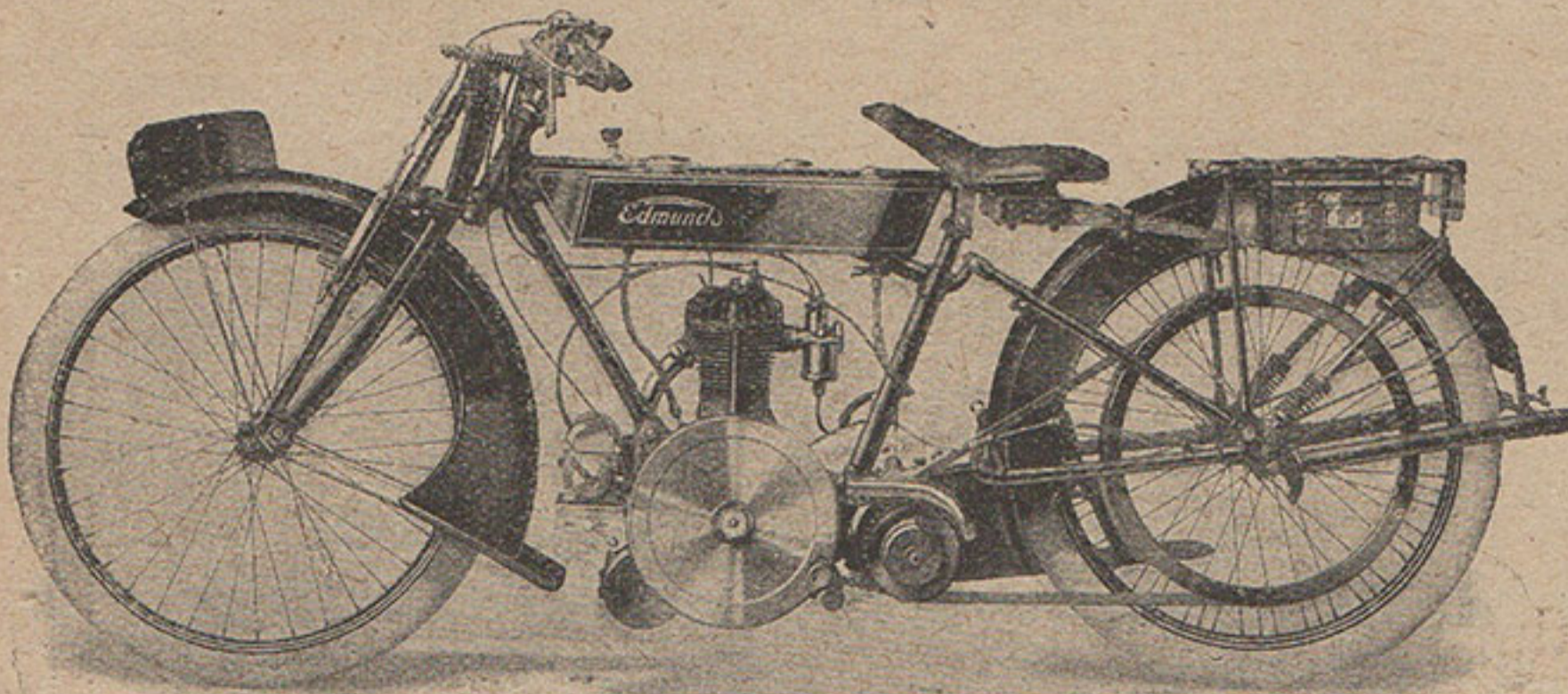
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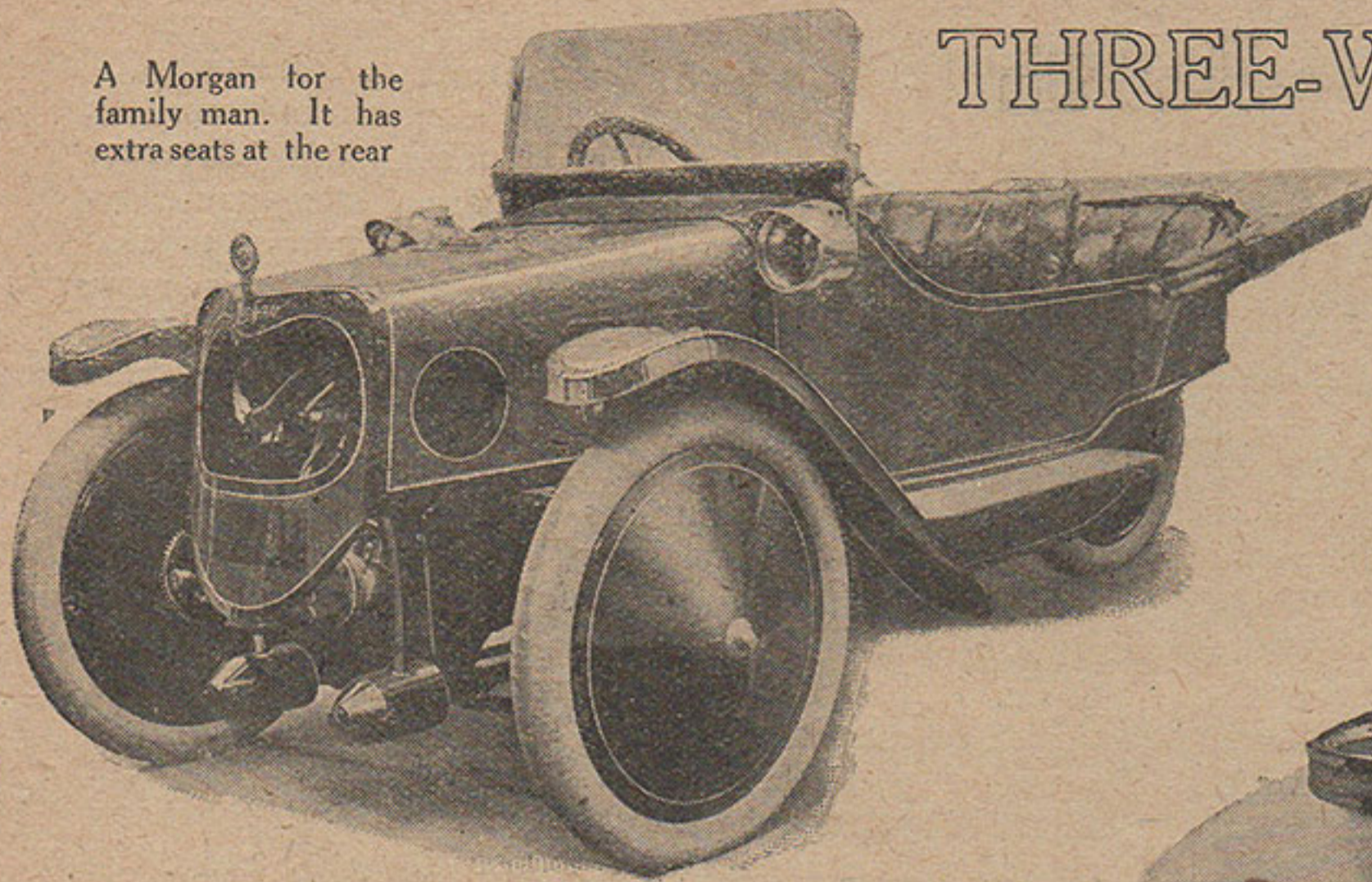
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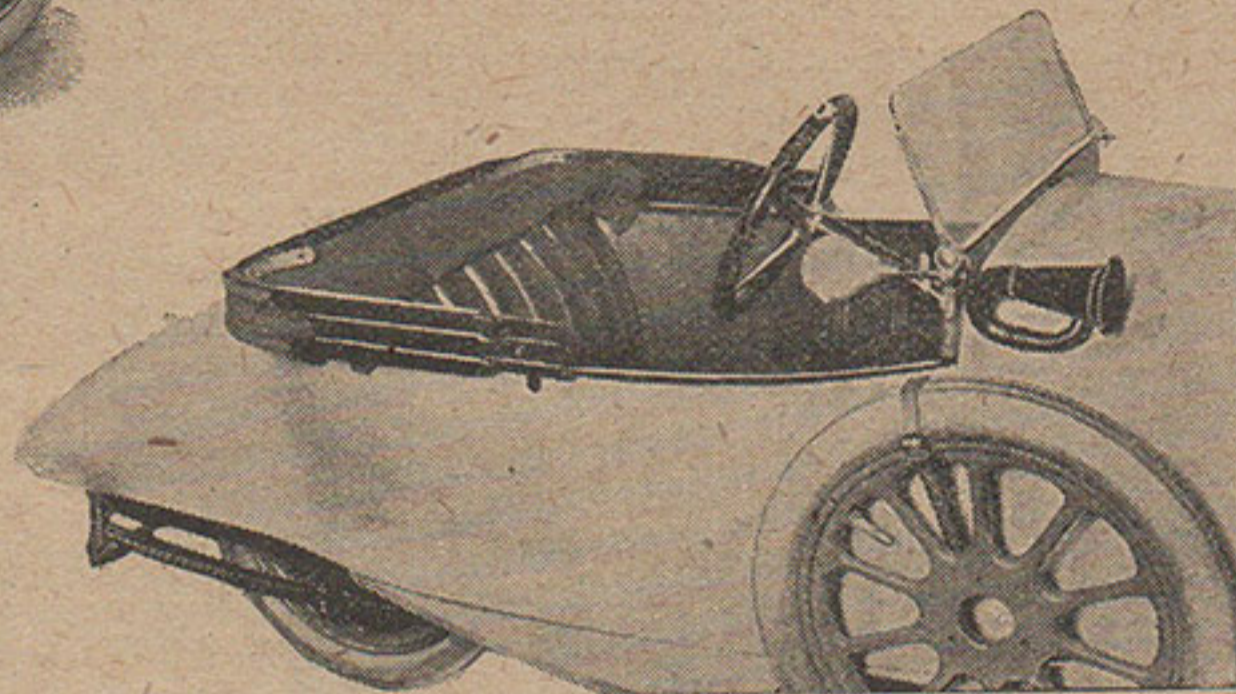
A Morgan for the family man. It has extra seats at the rear



THREE-WHEELERS AT OLYMPIA.

A Review of 1921 Runabouts.

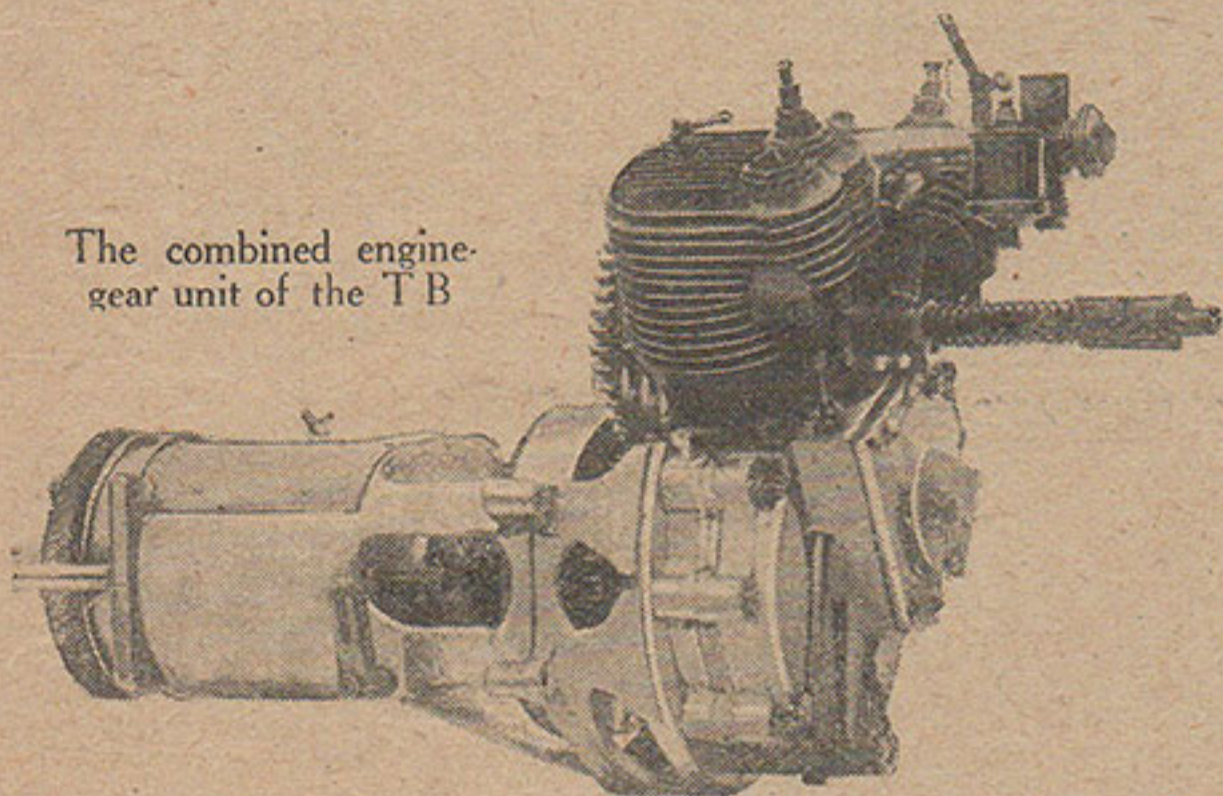
By B. H. DAVIES.



The seating accommodation of the Castle-Three is identical with that of a car.

TWO names leapt to the Editor's mind when he decided to publish a *revue* of the three-wheelers at Olympia. Their scope and future are so keenly debated at the moment that either Mr. A. J. Balfour's philosophic doubt, or Mr. Asquith's attitude of postponed observation would have fitted the job like a glove. Since neither of these gentlemen is seriously interested in economical motoring,

The combined engine-gear unit of the T.B.

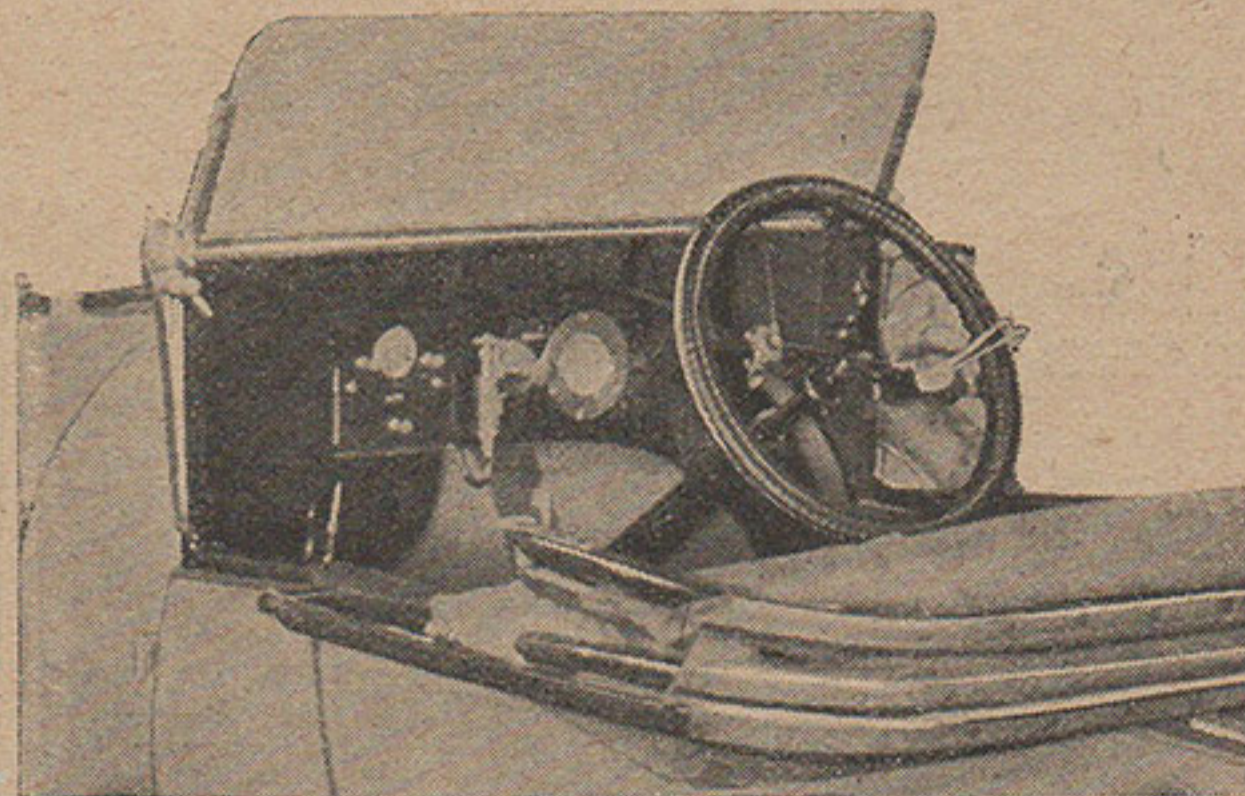


wheelers at the Show—that is, eight firms staking their plant and capital on the future of these vehicles, and some of them are firms whose opinion carries very considerable weight. Let us set them out—Morgan, Scott, New Hudson, Coventry Premier, T.B., Castle Three, L.S.D., and Stanhope. Compared with the best sidecars, they claim great and obvious advantages in sociability, cleanliness, and weather protection. Compared with cheap cars, they show great economy in running costs—a tax of £4 (as against £21 for a Ford): and a fuel consumption of not less than 50 m.p.g. (as compared with the 25 m.p.g., which is a sanguine estimate of the average Ford consumption). They need fear no rivalry from the standard types of British light car, which interfered with the three-wheeler market in 1914, but cost £200 more. So far as sociability goes, would you rather take your best girl out on a pillion, after the

the Editor fell back on me. Some experts hold that the sidecar outfit will gradually be eliminated by the three-wheeled car. Other authorities consider that elaborate three-wheelers listed at £275 or thereabouts will never sell freely against such cheap four-wheelers as the Tin Lizzie and the 8 h.p. Rover. One man asserts that only a light, simple three-wheeler is any good, and that nobody but Morgan can plan such a specification. Then somebody else avers that the more elaborate a three-wheeler is, the better—provided it is decently designed and made. Obviously nobody short of a Balfour or an Asquith could do justice to such a tangled situation. This modest scribe must be content to deal with facts and factors.

Economy Advantages.

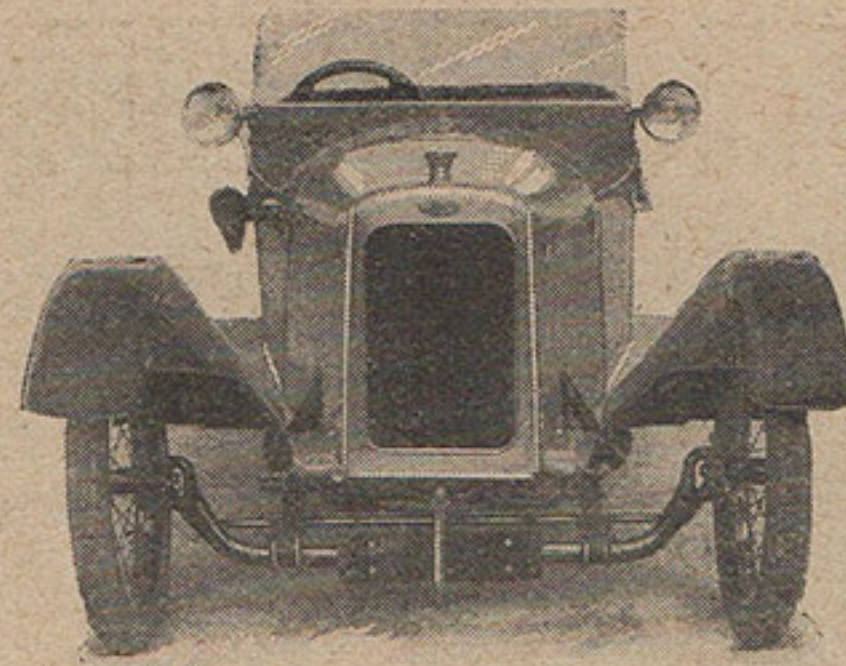
First and foremost, if we omit the Dayton bath chair and the Warrick parcel car (as catering for special markets), there are eight different makes of three-



Viewed from the driver's seat, the T.B. gives one an impression of a fully fledged car

Three Wheelers at Olympia.

fashion of King Arthur's knights, or in a 10 h.p. Singer? So far as weather protection goes, would you rather be a parrot on a perch, or a pet pug in a plush-lined case at a dog show? If you were taking on a delivery job for Harrods in December, would you rather have your parcel car fitted up on a Morgan chassis, or coupled to the best motor cycle ever-made? We are all extravagant in our pleasures, but the exhibits prove that the trade expects a distinct boom in commercial parcel cars, both in sidecar and tricar chassis. In that sphere running costs are decisive. It is surely clear that the three-wheeler has a unique opportunity, which good design and good workmanship can easily exploit.



Another three-wheeler that closely follows car lines when viewed from the front is the Coventry Premier.

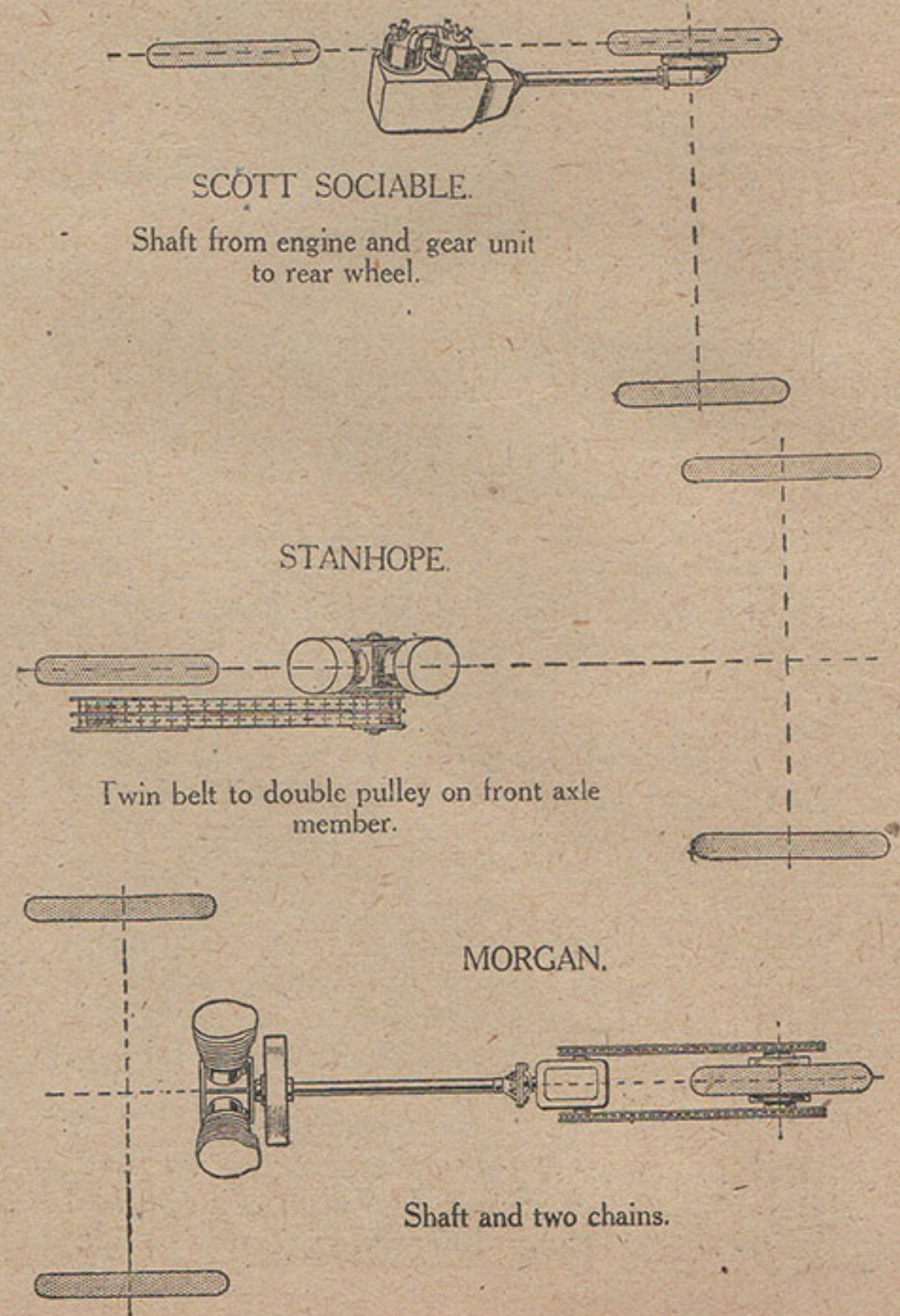
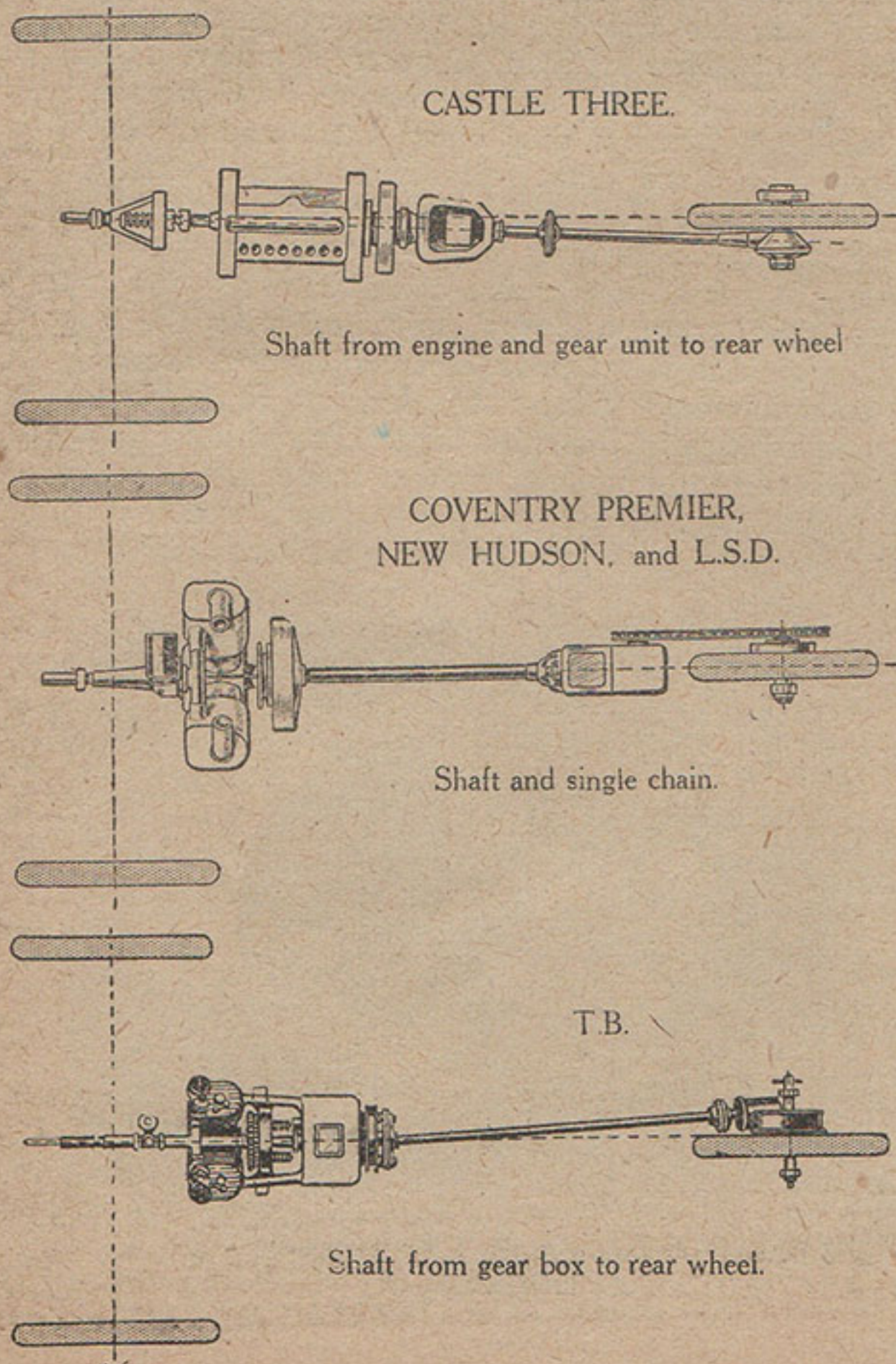
healthy sign. A glance at some of the opposed ideas may be interesting. There are three main types of frame. The simplest is found in the New Hudson and Coventry Premier—a channel steel parallelogram, braced with diagonal tubular struts. A second type is more reminiscent of an aeroplane fuselage—three or more steel tube longerons, braced by pressed steel bulkheads, or by tubular cross struts, as in the Morgan and T.B. The third pattern is the Scott triangulated tubular chassis. All three are obviously workmanlike

productions. The engines are of three types: water-cooled four-cylinder (Castle Three), vertical two-stroke twin (Scott), and air-cooled V (all the rest). The four is the bulkiest, the most expensive, and the most refined. The air-cooled V is cheap, good, and easily kept in order. The Scott is an attempt—as yet not publicly proved—to combine the merits of both its rivals. The divers methods of suspension contain little which has not long since made good on four-wheelers. The various drives are all familiar and sound. The two-chain gear of the Morgan is the lightest and cheapest, thoroughly satisfactory with a light chassis behind it; and in return for these advantages it demands periodic routine attention from

The Search for Ideals.

Taking the continued success of a few elect three-wheelers for granted, we are met by a medley of ideals upon the correct specification. No two designers are agreed upon the best type of engine, suspension, frame, or transmission. Their disagreements don't disturb me in the least. The three-wheeler is still juvenile (barring Grandpa Morgan), we can't expect design to be stereotyped, and variety is a thoroughly

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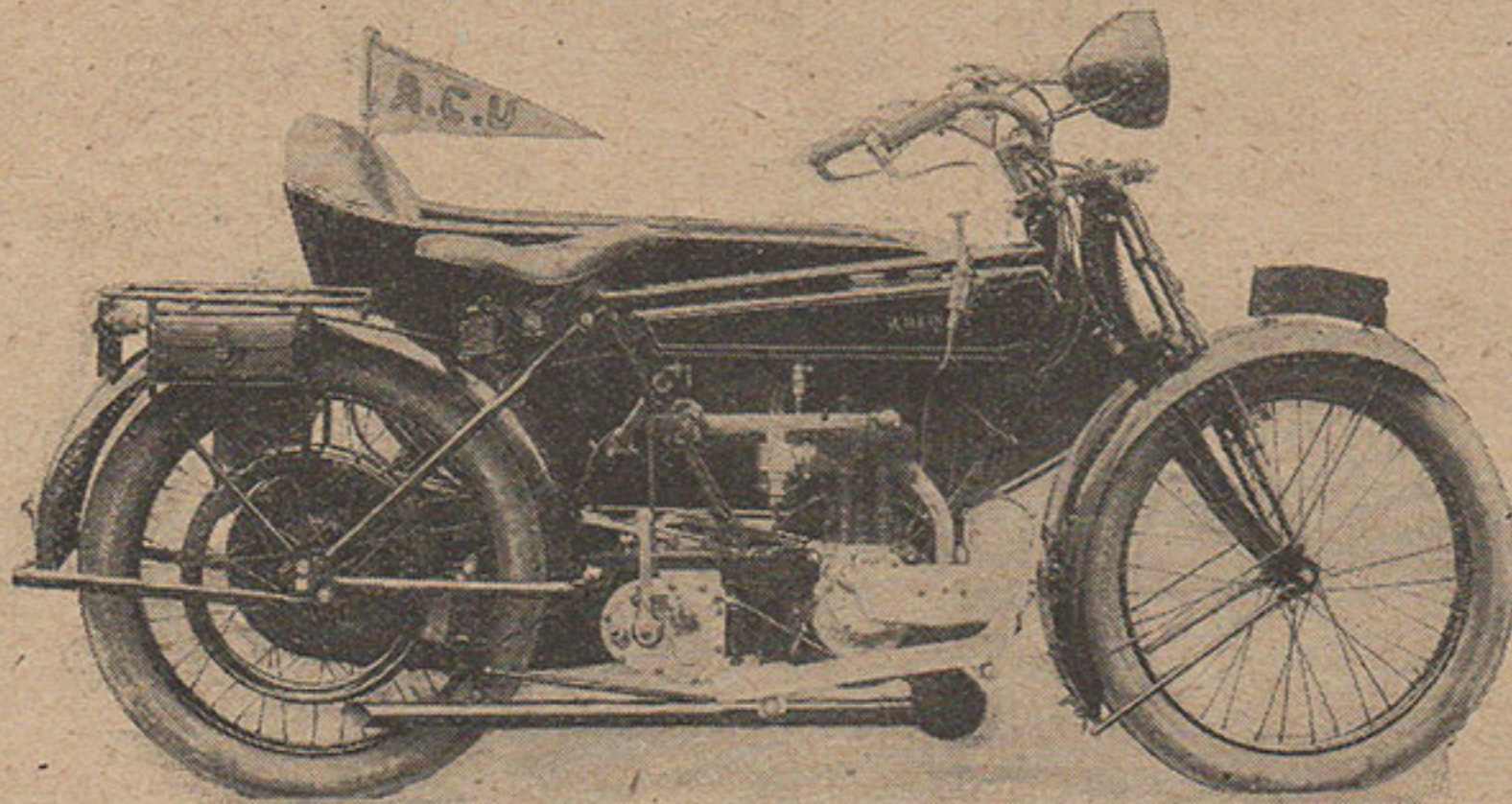
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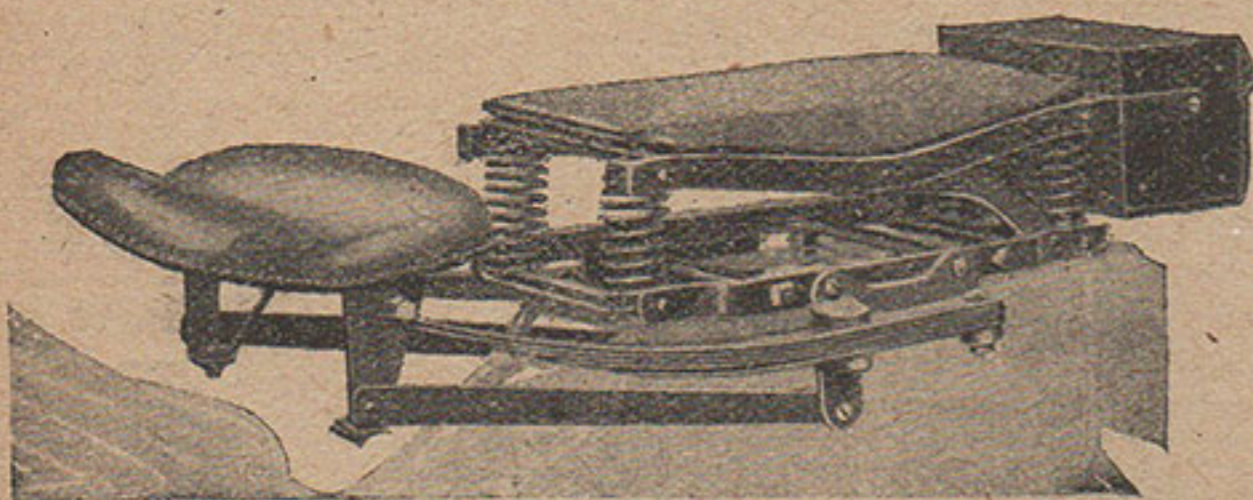
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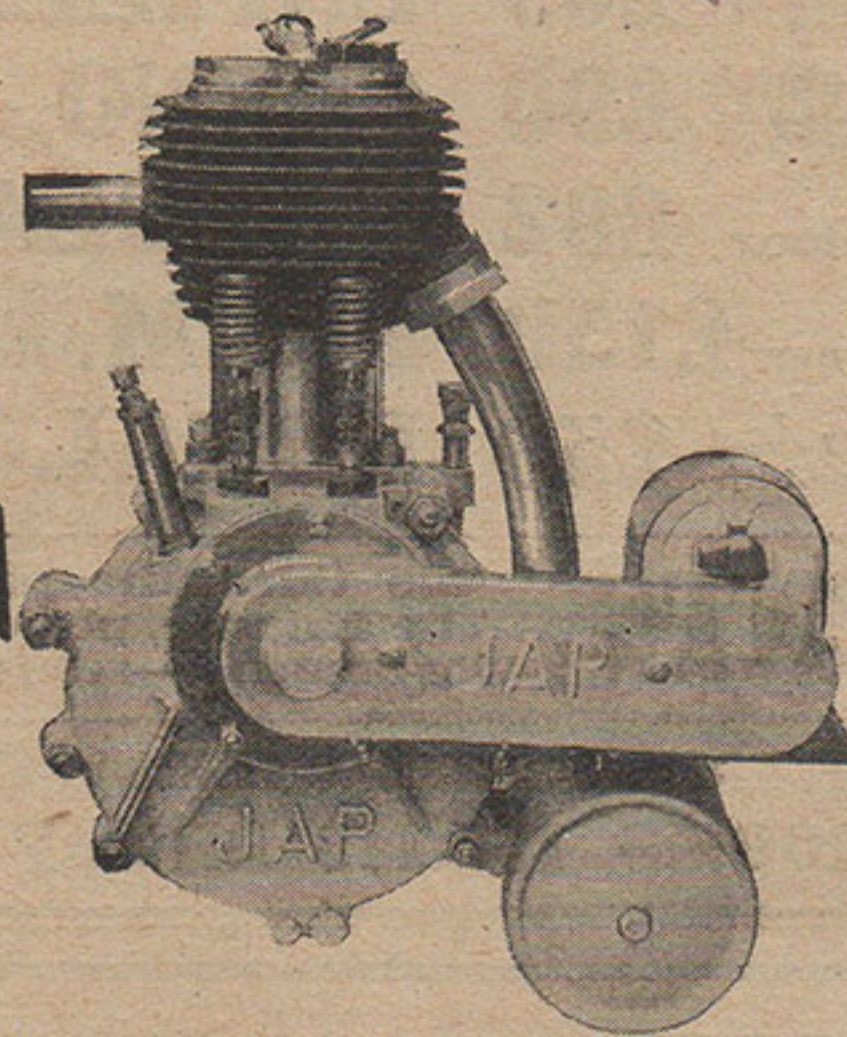
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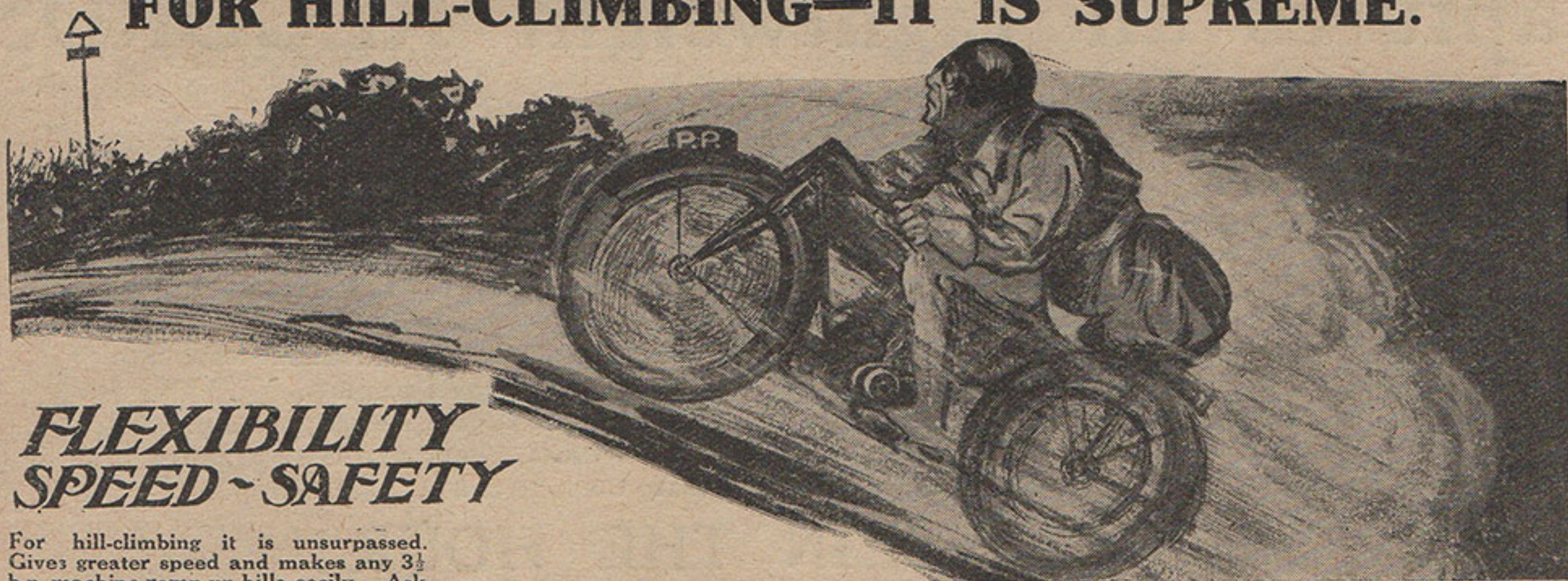
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Extract from "The Motor Cycle," November 25th, 1920.

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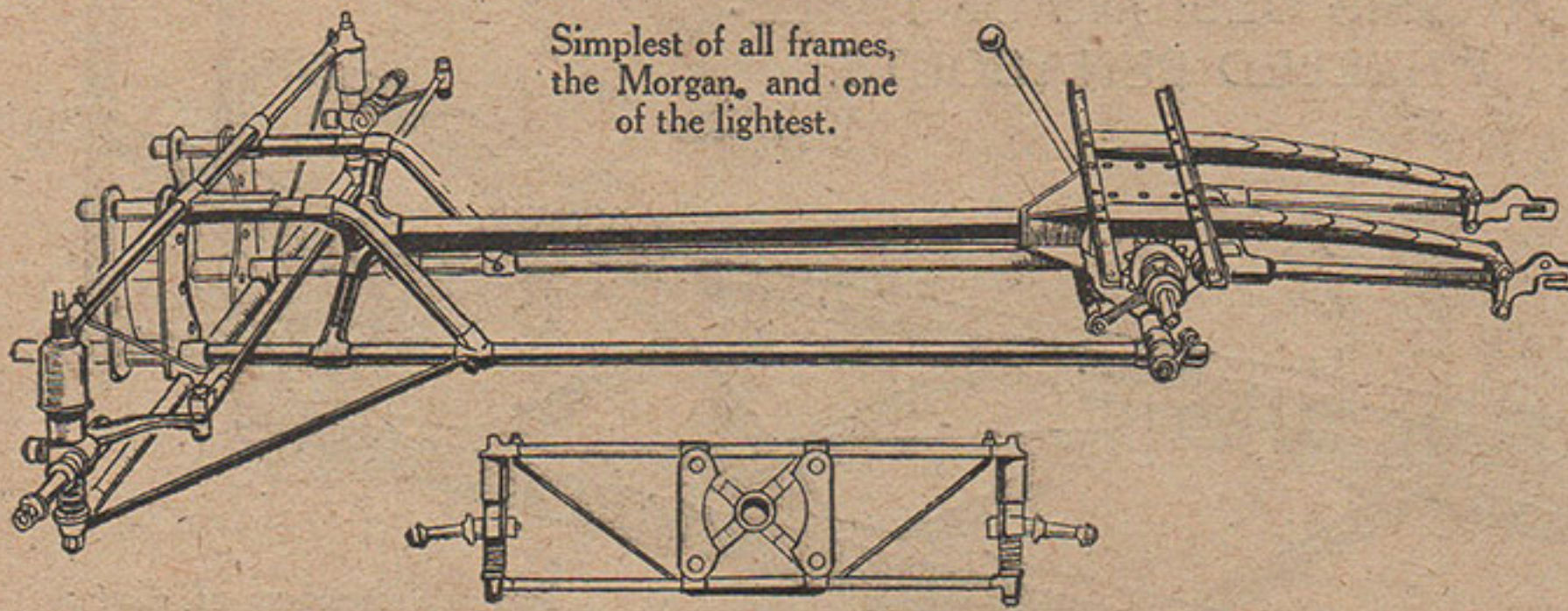
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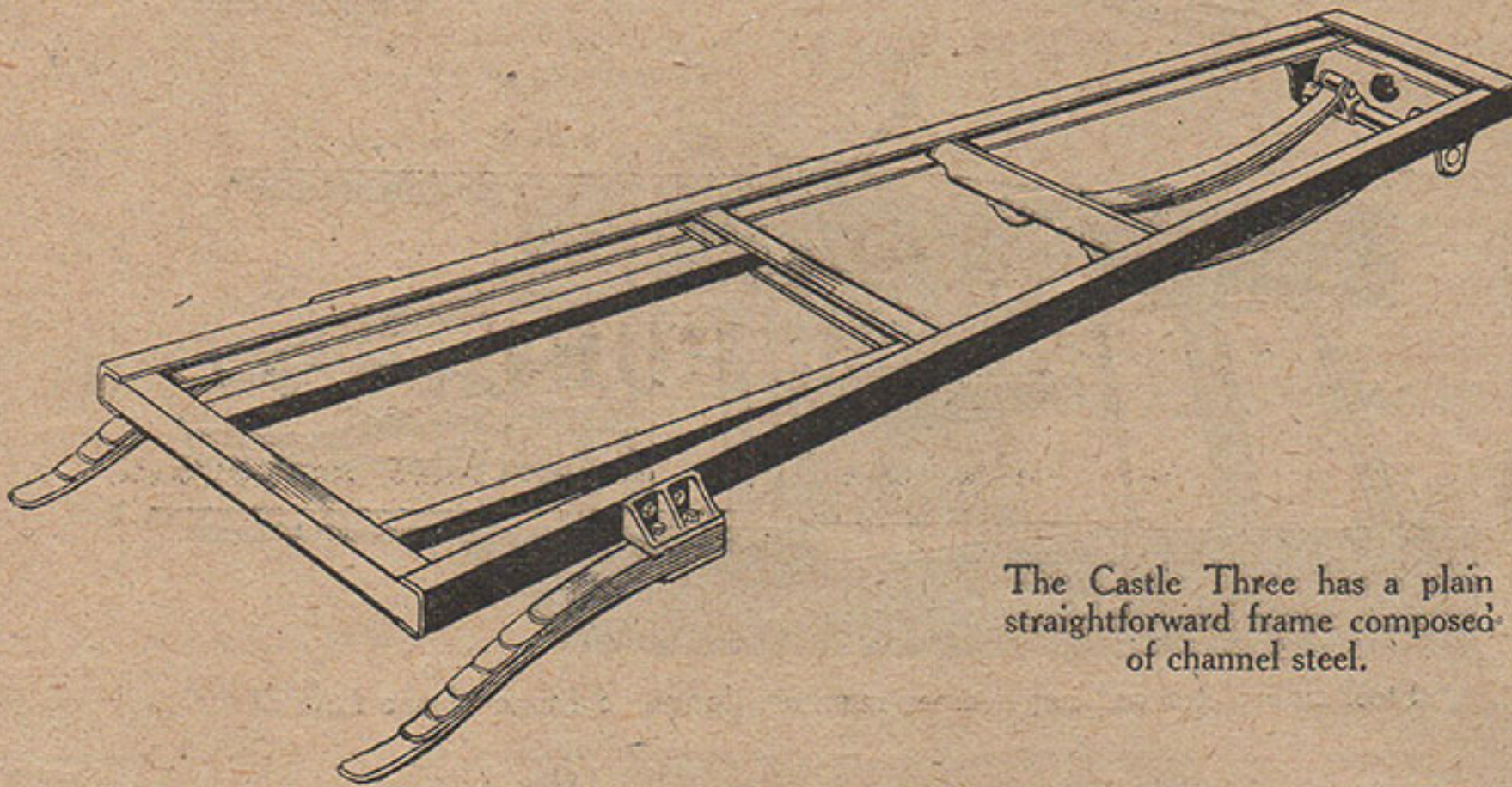
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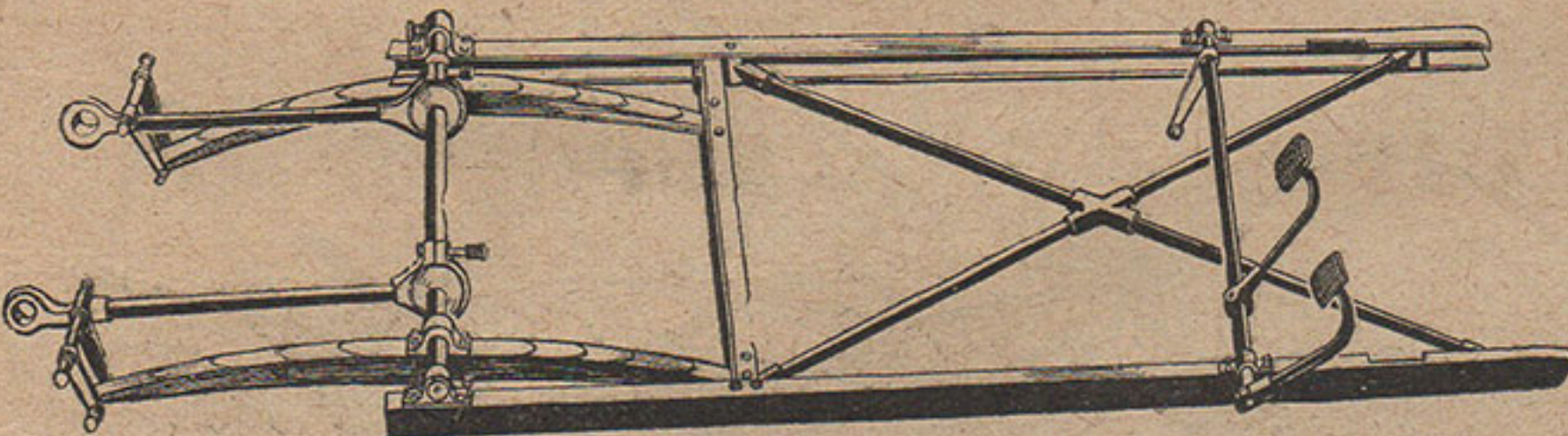
CHASSIS DESIGNS OF THREE-WHEELED RUNABOUTS.



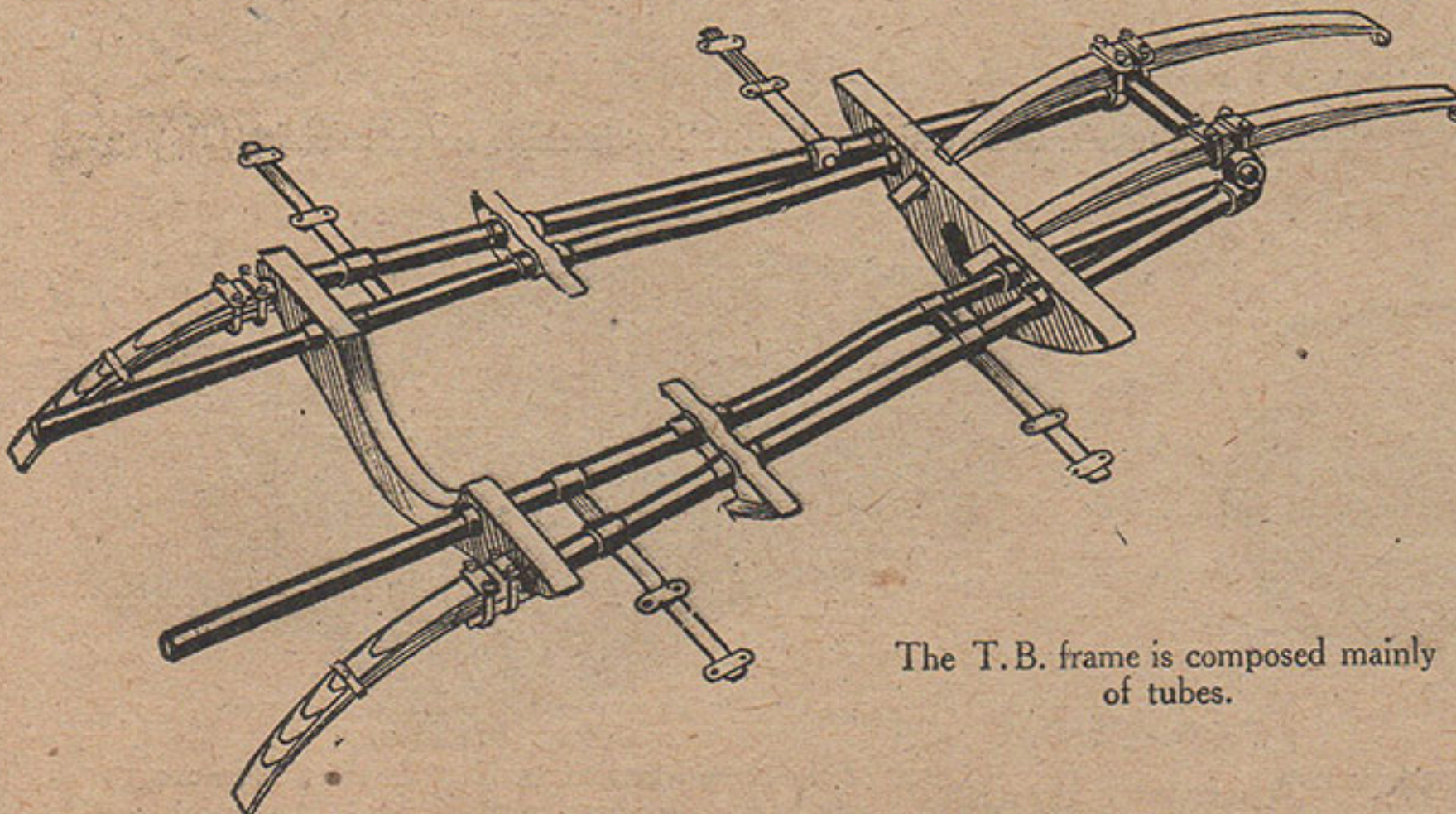
Simplest of all frames, the Morgan, and one of the lightest.



The Castle Three has a plain straightforward frame composed of channel steel.

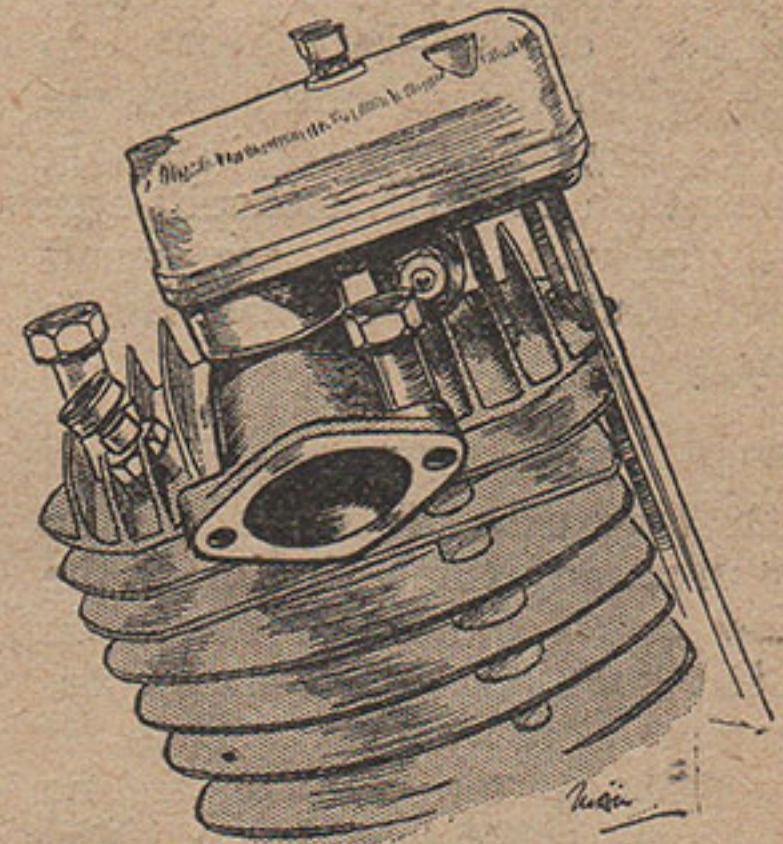


Channel steel and tubes are used in the frame of the New Hudson



The T.B. frame is composed mainly of tubes.

its driver. The three speeds and reverse, shaft, and chain on the New Hudson require less notice from the owner, but will need a professional mechanic's attention every year or so, whilst their weight and cost are higher. The keynote of the leading three-wheeled chassis is variety within a circle of commonsense. They are inspired by different policies, they appeal to different tastes: but they embody nothing which is unsound or even experimental. Their future will be governed rather by sentiment and finance than by any technical considerations. Much will turn upon the results of the 1921 competitions. Until now, the Morgan has enjoyed itself much as Field-Marshal von Mackensen did in the great war. It has had to wrestle with roads



Detachable cylinder head of the New Hudson twin

and climates, but it has never had to tackle a rival of its own class. The newcomers were not ready last year. In 1921 the passenger class in the Six Days may with luck include some two dozen tri-cars, and the Morgans will really have to fight rivals as well as roads. When that trial is over, we shall know whether extra weight is an asset or a defect: and we shall know how faithfully and wisely the detail work of the newcomers has been executed. Their outlines are obviously sound: it is by their details that they will succeed or fail. However, given the detail work, there is no reason why they should not all survive.

Turning to some of these details; the old snag of tyre inaccessibility is being grappled with. All the single wheels are readily detachable, and on several

machines—e.g., the Scott, T.B., and Castle Three—the front and rear wheels are interchangeable. In such cases one spare wheel reduces a puncture to a very trivial matter, and vastly improves the mental comfort of bad weather driving. On those machines where the wheels are not interchangeable, a reserve inner tube will shorten the inevitable tyre stops.

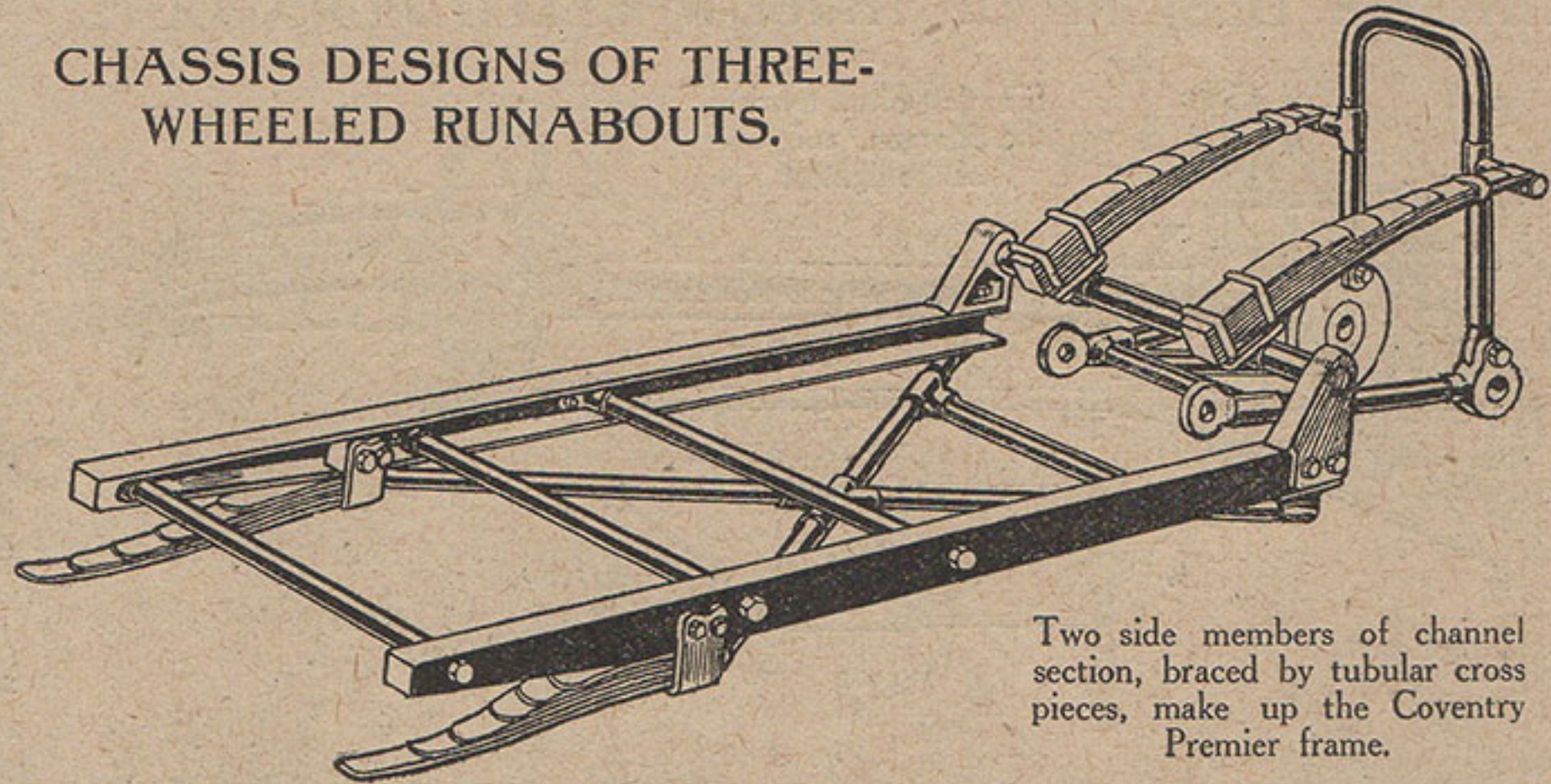
Starting.

Engine starting has been another bugbear of the cheap cycle car. A big V twin is not the pleasantest handle-starting proposition for a weak man or for any woman. The New Hudson has a non-detachable handle connecting with the camshaft; the T.B. has a similar handle operating on the kick-starter principle and geared 2 to 1; the Castle Three has a four-cylinder engine—very easy to start, given decent time; and the Scott engine requires coaxing rather than effort if it should ever turn sulky. These are small points, but they count heavily in sales.

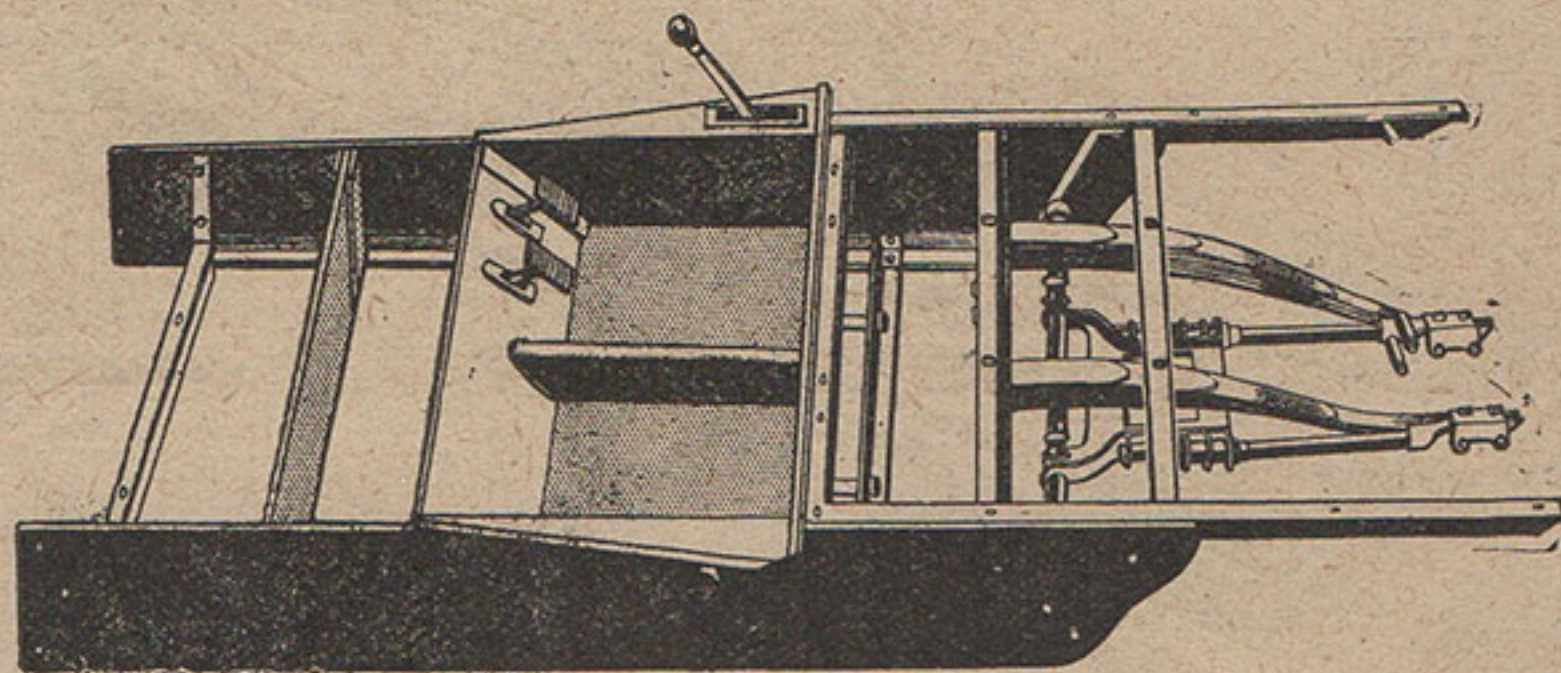
Ease of Entry.

Or take ease of entry. I do not think any three-wheeler at the Show scores quite full marks on this question of convenience. Imagine a rainy day. There is no engine-starter. There are no side doors. The hood is up. You have a traffic stop. The engine chokes. The detachable handle is, maybe, under the seat-cushion. Four taxis and three motor 'buses are using regrettable language just astern of your tail. It is thus that the seeds of divorce suits are sown. But with two side doors and a handle permanently mounted, things are not quite so bad. This, of course, does not apply to the Scott Sociable, which has the starting lever inside the body.

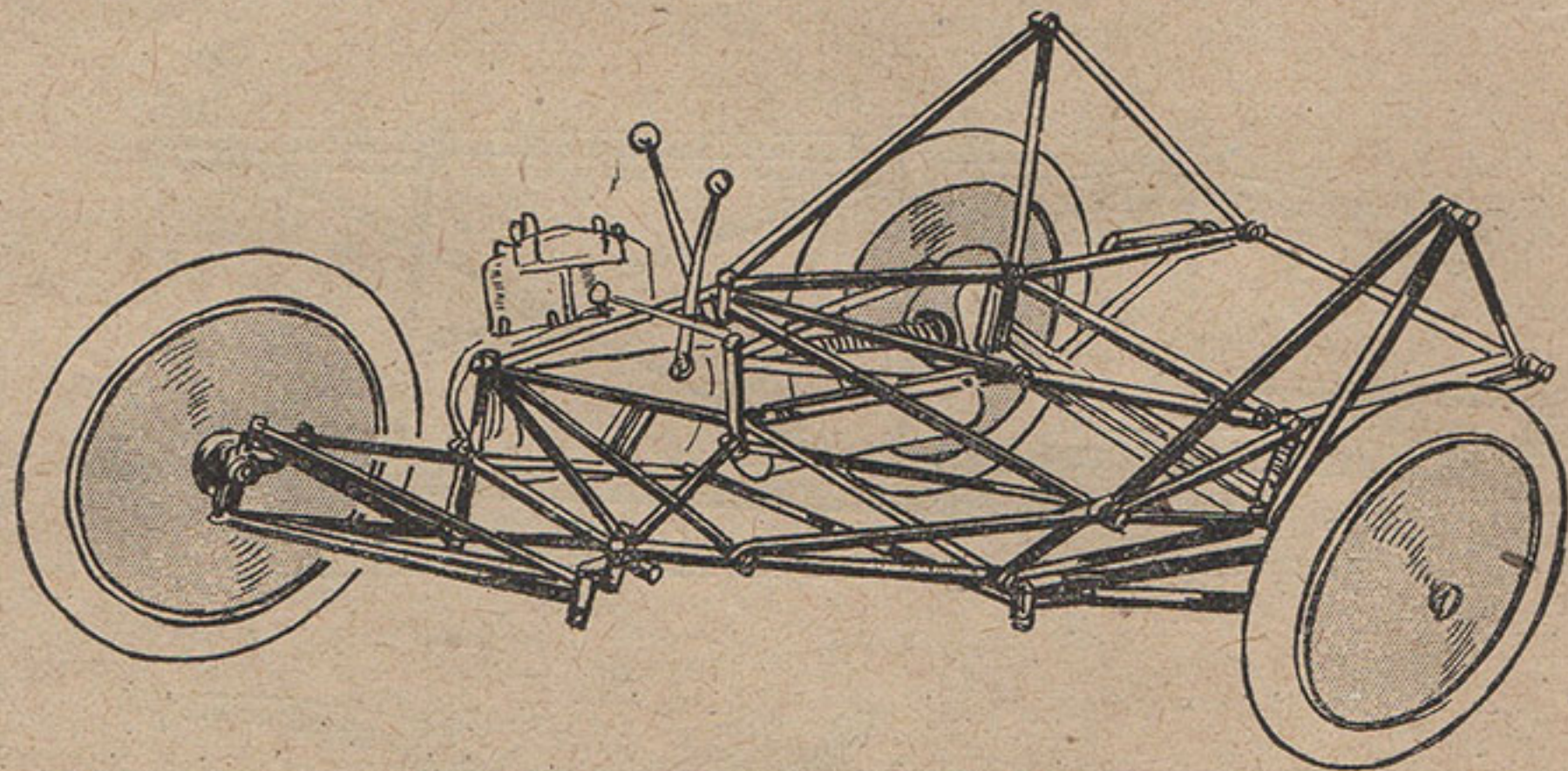
CHASSIS DESIGNS OF THREE-WHEELED RUNABOUTS.



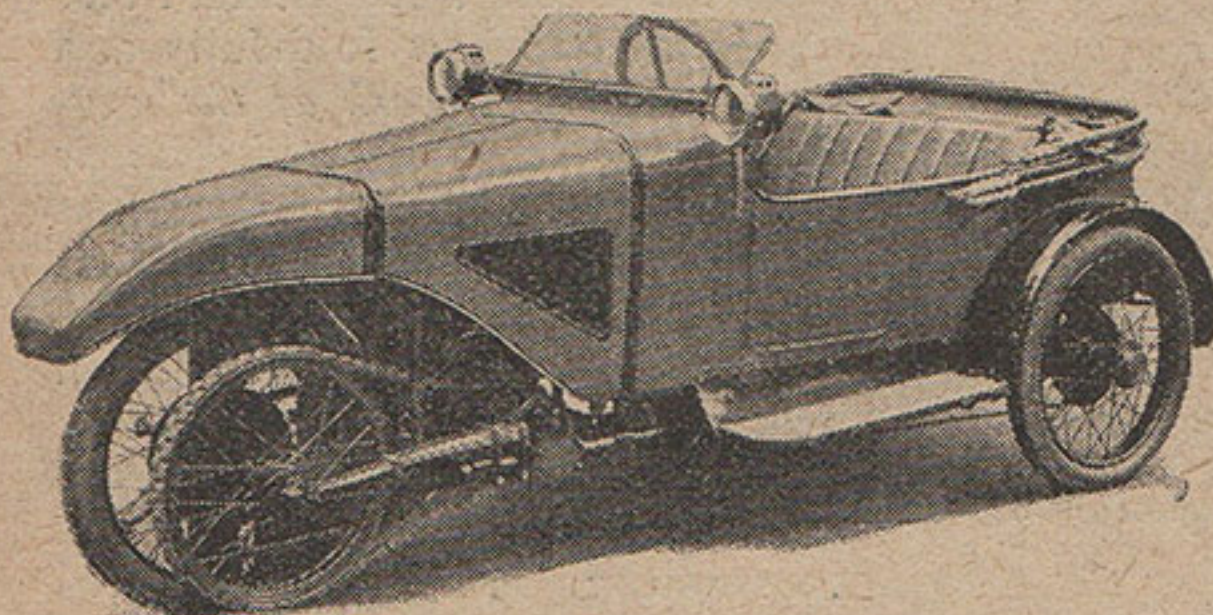
Two side members of channel section, braced by tubular cross pieces, make up the Coventry Premier frame.



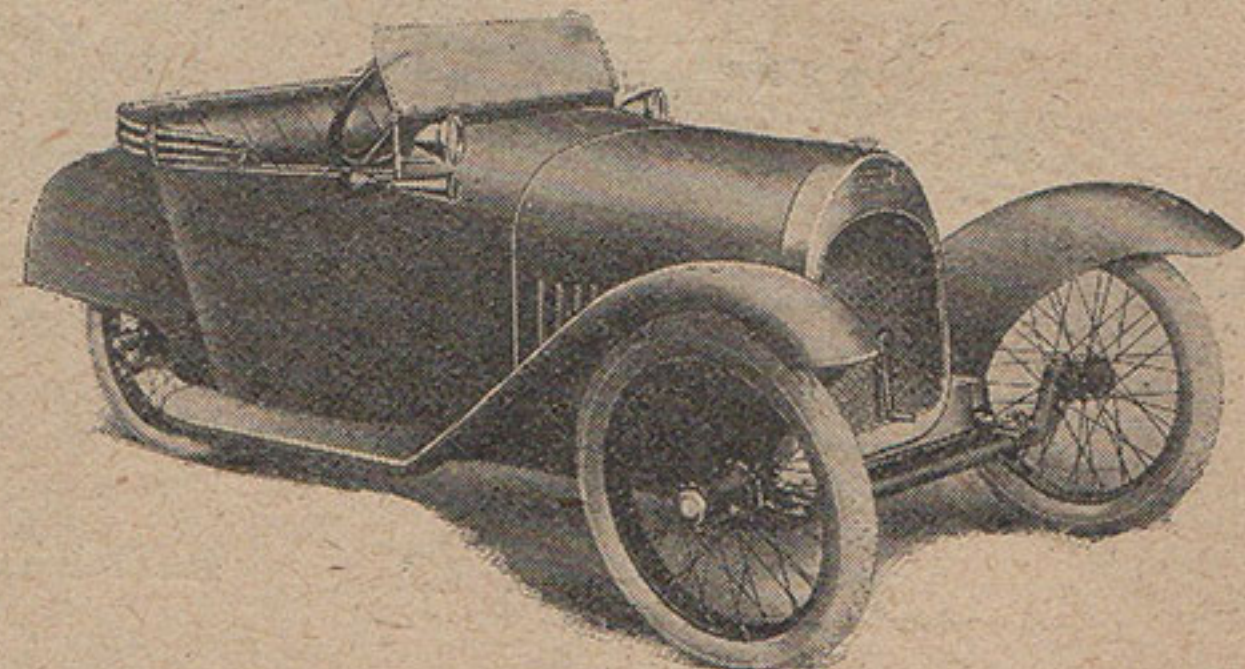
Steel side plates and angle cross members form the frame of the L.S.D.



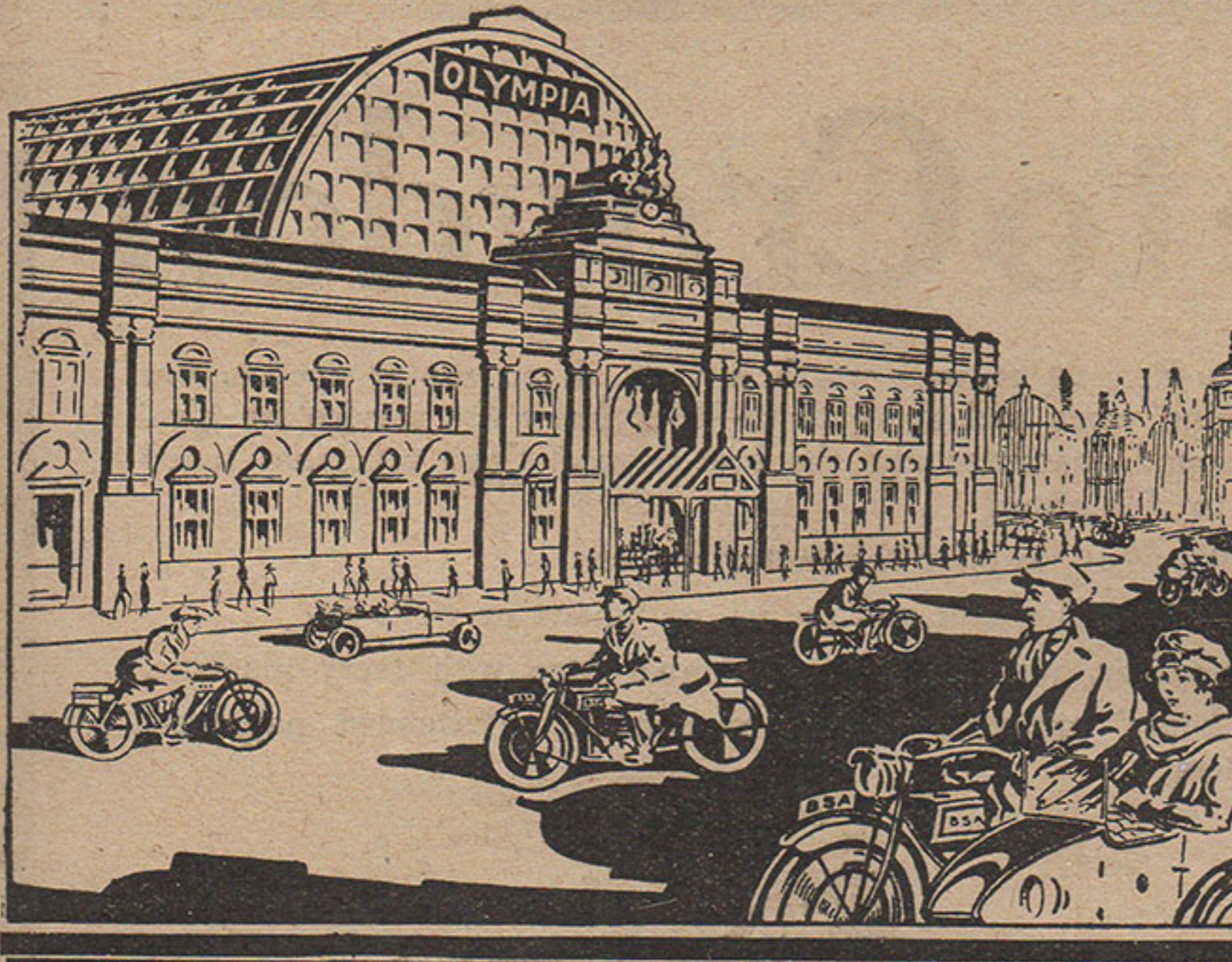
Triangulated tubular construction makes the Scott Sociable appear complicated.



The front wheel-driven Stanhope, a well-built machine now entering the market.



Latest of the three-wheelers, the New Hudson, is in every way up to date.



**B.S.A.
MACHINES**
were undoubtedly
the centre of
attraction at
OLYMPIA.

BSA

New Engine Detail and Sidecar

form the chief alterations on the famous B.S.A. 4½ h.p. Model. The various new features further enhance the efficiency of the famous B.S.A. 4½ h.p. Model, which, it will be remembered, won the Team Prize in the 1919 A.C.U. and 1920 Scottish Six Days, and 5 Gold Medals with 5 entries in the 1920 A.C.U. The new B.S.A. Sidecar is of exceptionally graceful appearance, and affords the maximum of riding comfort and luggage capacity. In every detail the 1921 B.S.A. 4½ h.p. follows out B.S.A. practice with regard to excellence of material and workmanship.

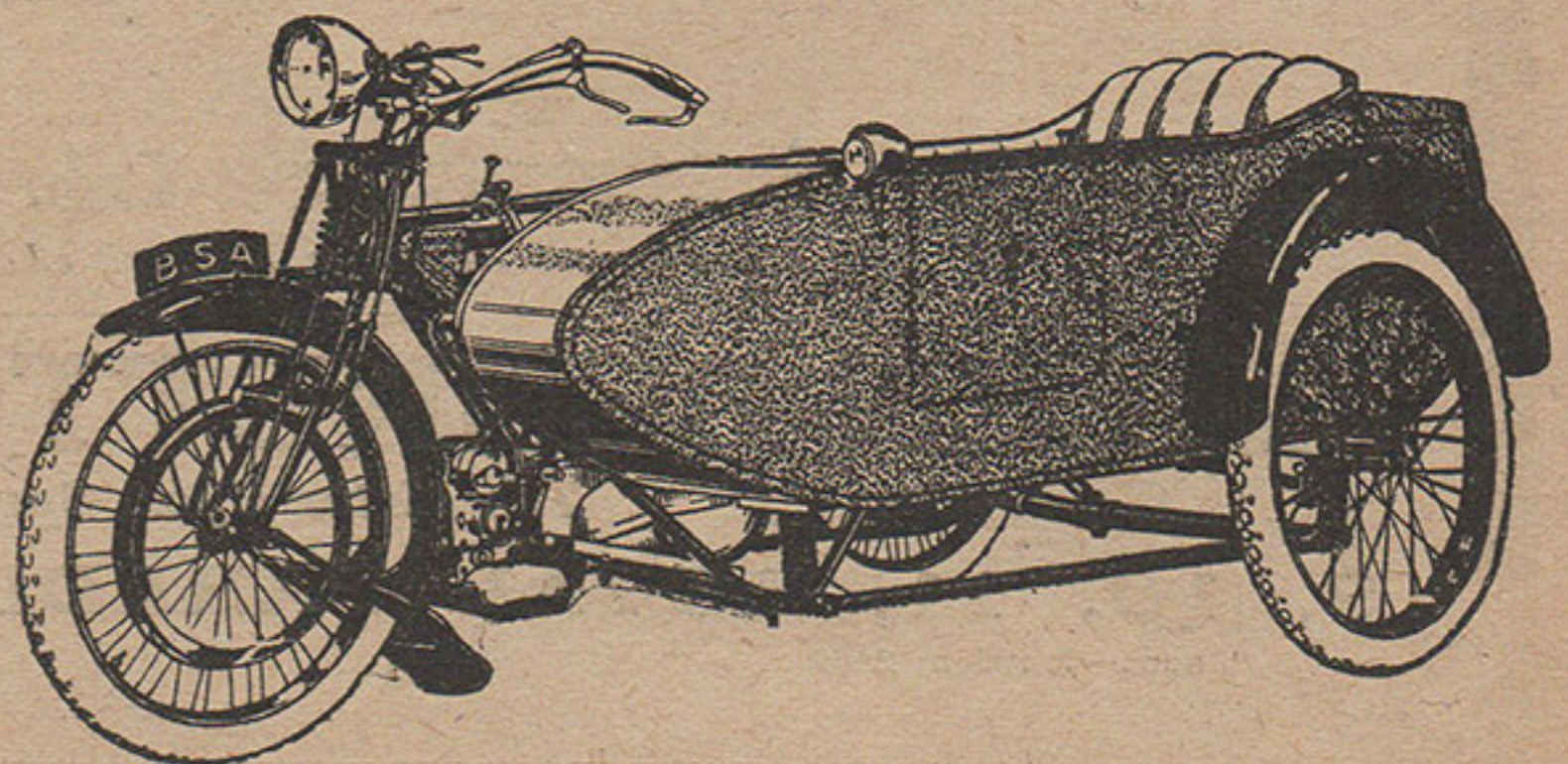
**1921 B.S.A. 4½ h.p. Motor Bicycle
For Solo and Sidecar.**



Write for Catalogues.

**B.S.A. CYCLES, LTD.,
BIRMINGHAM.**

Proprietors: The Birmingham Small Arms Company, Limited.



Come to Croydon

Allen-Bennett is well worth a visit. Keen motor cyclists are coming more and more to us—they know the service we give. A sound guarantee and the best terms. Good machines tuned up to ride away.

That's what we offer the motor cyclist.

Why not call round and see us, or 'phone or write us.

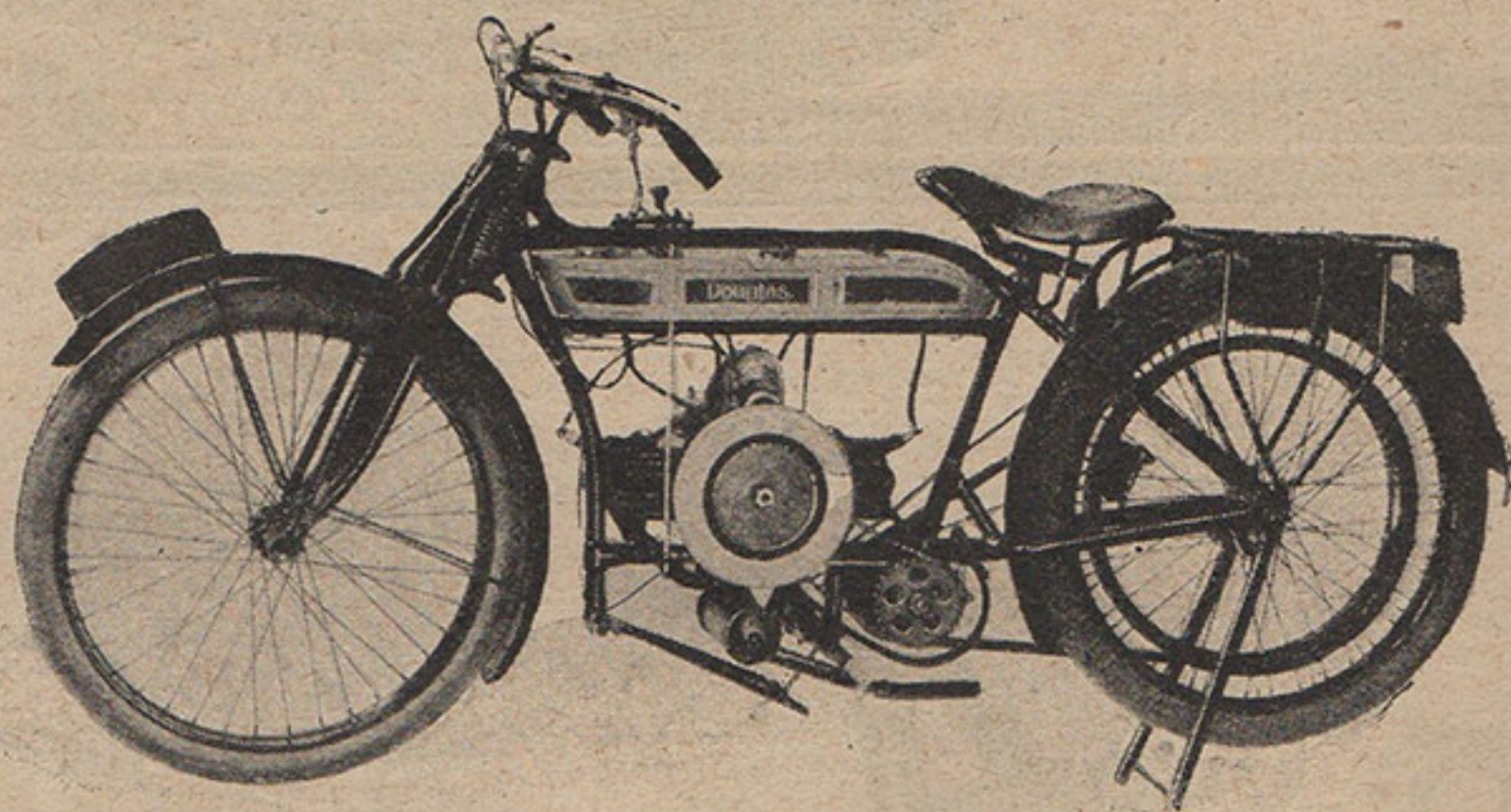
Remember, we give 3 months' guarantee with every machine. 24 hours' approval against remittance. Extended payments system.

DOUGLAS

1916,

2 $\frac{3}{4}$ h.p., 2-speed,

Thoroughly overhauled and repainted makers' colours, and guaranteed for three months from date of purchase.



Ex-Government Machines.

All of which are thoroughly overhauled, re-enamelled, and plated, finished in makers' 1920 colours, and guaranteed for three months from date of purchase.

DOUGLAS 1917-18, 4 h.p. solos, thoroughly overhauled and repainted makers' colours, and guaranteed for three months from date of purchase.

TRIUMPH 4 h.p., 3-speed, countershaft, clutch, and kick-starter.

Trade Supplied.

Entended Payment Orders can only be accepted in England.

Cash. Exchange. Extended Payments.

See Miscellaneous Advs. for New and other Second-hand Machines.

ALLEN-BENNETT MOTOR Co.

The Motor Cycle Specialists,

9, 10, 11, ROYAL PARADE, WEST CROYDON.

'Phone—Croydon 2450.

'Grams—"Track, Croydon."

EASTING WAS ALWAYS FIRST AND IS STILL FIRST

Success always breeds imitation. It brings, sometimes, a certain number of rivals who are willing to use any type of commercial "gas" to kill a thing which is live and growing. During the Motor Cycle Show we understand that certain "interested persons" suggested that they were about to bring an injunction against Easting Windscreens. We have appealed to the Trade, and we now appeal to many thousands of Easting users to assist us in killing this campaign. A rumour has been spread that proceedings are being taken. We will give £1,000 if proof can be brought that proceedings have been instituted up to Thursday, December 2nd. Over twenty thousand satisfied users of the Windscreen know that the Easting is dominant, and where there is any doubt as to which Windscreen to use, there is only one answer—"Easting." Many of you who were at the Show will remember the success at the Easting stand. Our factories are making complete arrangements to meet the demand for 1921, and if you wish to give your passenger full "assurance" from any weather or climate, insist on "Easting." Price £4 10s. Standard, Royal £5 10s. Ask your Agent about it.



EASTING WINDSCREENS LIMITED

132, Steelhouse Lane, BIRMINGHAM,
and at 24, Finsbury Sq., LONDON, E.C.2.

Phone: Clerkenwell, 1904.

STOCKISTS:

AUSTRALIA—J. J. Wilkins & Son, 586, George Street, Sydney. IRELAND—W. Peck, 191, Great Brunswick St., Dublin. SCOTLAND—Alexander & Co., 115, Lothian Rd., Edinburgh; Alexander & Co., 272, Great Western Road, Glasgow; C. Cruikshank, 156, Union Street, Aberdeen. WALES—Tom Norton, Ltd., Llandrindod Wells; Tom Norton, Ltd., 14, Charles Street, Cardiff; and all leading Factors in the country.

All communications outside London area should be addressed to Birmingham.

Victoria 1921 LIGHTWEIGHT MOTORCYCLE

The 2½ h.p. 2-STROKE (Villiers Engine) MODEL 'VICTORIA' MOTOR CYCLE was the undoubted success of Olympia

Admitted on all hands to be Best Value

exhibited. This machine does all you require and will give the fullest satisfaction under all conditions.

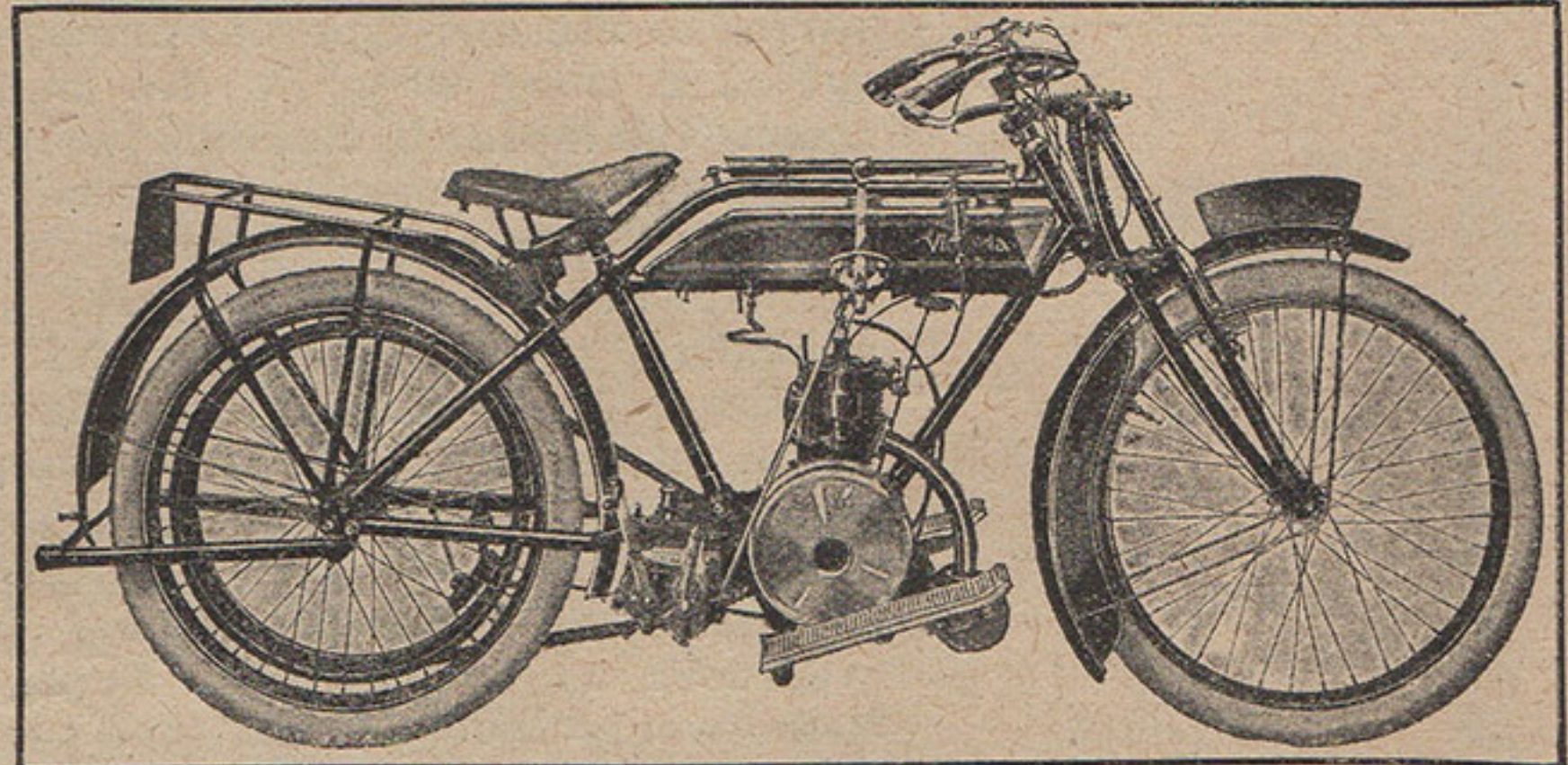
This model is marketed at reasonable prices consistent with exceptional quality, and is made to last.

Fixed Gear Model - £55

2-speed Counter-shaft Gear - £60

2-speed Countershaft Gear with Clutch and kick-starter £65

Send for name of your nearest Agent to



VICTORIA MOTOR & CYCLE CO., LTD.,
Victoria Works, DENNISTOUN, GLASGOW.

'Phone :
514 Bridgeton.

'Grams:
"Bicycle, Glasgow."

THE 1921

QUADRANT

LAWLEY STREET, BIRMINGHAM.

SOLO, £115.

COMBINATION, £145.

A Combination of Power with Economy

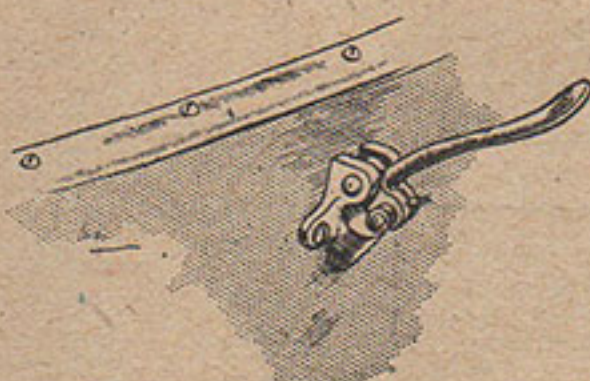
The truth about the "QUADRANT" is easy. 20 years of experience has gained for it the esteem of the many thousand riders.

Economy and comfort, power in abundance, smooth running, and complete efficiency are the reasons for recommending you to select the "QUADRANT."

Visit our Depots and see the big 5 h.p. Combination, £150, which demonstrates our policy—VALUE FOR MONEY.

As shown at Stand 41 Olympia.

Three Wheelers at Olympia—



For convenience of starting, the Morgan has an exhaust valve lifter on the side of the body.

To conclude with a list of interesting, but petty items, reverse gears are provided on the New Hudson, T.B., L.S.D., and Coventry Premier (the Scott has such a small turning circle that it never needs to reverse; it can make rings on a bread trencher). The T.B. steering column is adjustable for height. The Castle Three has Ford type steering gear, and its gear control is also reminiscent of the Ford—*ergo*, almost foolproof. Its back wheel can be withdrawn through the hinged tail, obviating the need for jacking up really high. The Coventry Premier can tackle a day's run without any lubrication anxieties, thanks to its capacious sump. The Morgan will probably feel no anxiety about its speed reputation: fast as some of its rivals claim to be, its light weight should assure its invincibility on hills. It can also claim the only four-seated body in its class. The L.S.D. has a very sturdy frame, and a motor cycle type of rear wheel stand, in lieu of the loose jack needed on other makes.

The Stanhope has a unique transmission and steering. Its twin rear wheels render the chassis specially suitable for heavy commercial loads, quite a big van body can be fitted without fear of rolling, and the height of a front box on a more conventional chassis is limited by the driver's need of vision. The New Hudson is a most attractive layout, with a new engine specially designed for the job, a gear box planned for easy changing, and an external band brake which doesn't rattle or bind. The shaft drive in the T.B. permits one brake to be located amidships, thus simplifying the rear hub; its rear frame has three pivots, each provided with a greaser (some machines have no such provision). The Scott weighs less than 4 cwt. complete, which is probably even lower than the Morgan figure.

I think we are all eager to see these machines fight out a big trial. Those which lay the foundations of a good name will have to fight afresh for supremacy in 1922, when—if rumour can be trusted—there will be further aspirants for fame in this class of passenger machine between the sidecar and the light car.

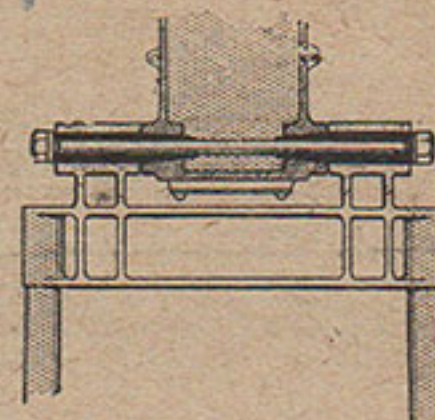


Diagram of the cone mounting of the rear fork hinge in the Morgan gear box.

ECHOES OF THE SHOW.

Disconnected Observations concerning Last Week's Exhibition at Olympia.

DOES your machine weigh under 200 lb.? This simple question did not always produce satisfactory answers, but various devices were employed to render such queries unnecessary. One firm suspended their light-weight model from a spring balance. Another adorned the number plates with the weight of the machine in gold letters. A few produced weighbridge certificates, and at least one firm stated that the heaviest machine in their exhibit was well under the 30s. mark.

The standardisation of catalogue "horse power" is much to be desired. The non-technical public may be forgiven for wondering why engines of approximately 1,000 c.c. should be variously styled 8 h.p., 7-9 h.p., and 8-10 h.p., also why 500 c.c. engines should vary from 3½ to 4½ h.p. in rating, and why the same engine should be rated differently when installed in various makes of frame.

A real lightweight motor cycle at last! The new two-stroke J.E.S. weighs but 80 lb., and is not a pedal cycle with motor attached. Obviously, it would be possible to produce a two-speed model at under 100 lb.

Opinions on the Scott Sociable varied to an enormous extent, as is usually the case with a startlingly new design. It was variously described as the best engineering proposition in the Show, a mass of brains and tubes, and Accles and Pollock's delight. May we add that, in our opinion, the first of these descriptions comes nearest to hitting the nail on the head.

It was good to see Mrs. Knowles looking quite herself again after the accident which befell her at the close of the Six Days Trials. It is understood that, since ladies are debarred from competing in the London-Exeter run, she will undertake the trip as a sidecar passenger.

Sectioned engines always attract attention, and there are many who now realise that the Villiers flywheel magneto still functions with some vim, despite its skeleton-like appearance when the cover is removed.

While most manufacturers are struggling to reduce weight, it is interesting to note that the simple single-gear Levis remains one of the lightest propositions exhibited, and fully acts up to its name.

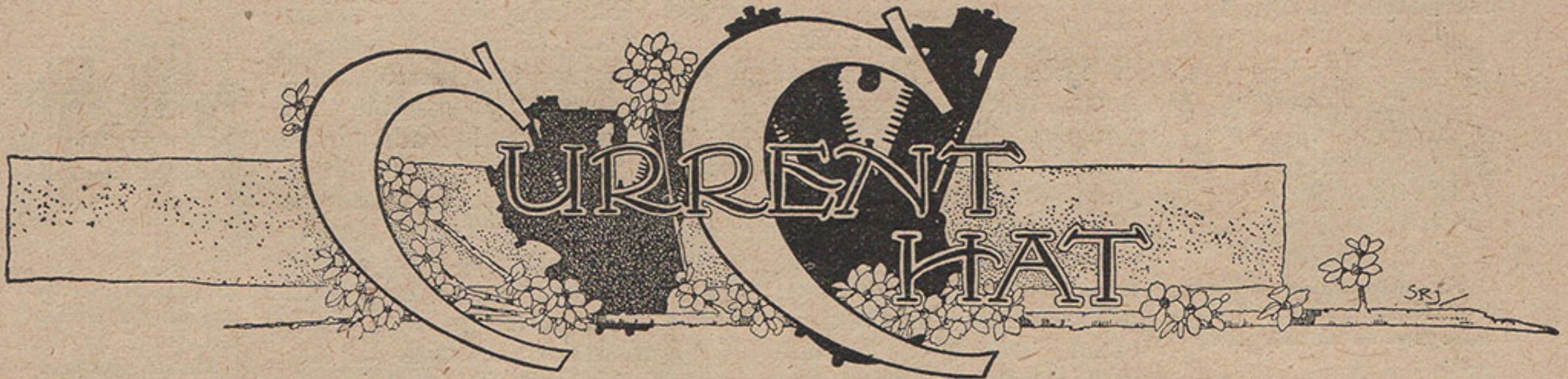
Open-frame models for the use of the fair sex are on the increase, and already there is a wide choice for those who require a light and handy runabout.

On Thursday afternoon last Prince Parachatra of Siam, accompanied by Major Stanley, visited the Motor Cycle Show. He was received by Messrs. Harold Bowden and W.G. Bower, vice-presidents of the Manufacturers' Union, and by Major H. R. Watling, the general manager.

His Royal Highness is a keen motorist, and is particularly interested in light cars. He stayed in the Show for over an hour, and concentrated chiefly on the principal makes of motor cycles and three-wheelers, and at the conclusion of his visit he expressed the opinion that it was a very fine show.

"To buy, or not to buy, that is the question:
Whether 'tis nobler in the mind to suffer
The stony stare of irresponsive 'bus men,
The taxi-driver's scorn, and underground
To shuffle meekly farther down the car,
Or to shell out the sleek and glossy Fishers
And buy a motor bicycle? To mote!
Perchance to skid: ay, there's the rub.
But here I see are tyres that men say
Will go with even keel through mud
and snow,
And road improvements—'tis a consummation
Devoutly to be wished."
—Daily News.

As has been previously mentioned in *The Motor Cycle*, there is a good deal of motor cycling in sunny Spain, but the country does not apparently offer the same facilities for visitors on motor cycles as others in Europe. At the Show we had a few minutes' talk with Mr. Geoffrey Hill, who was one of the competitors in last year's Paris-Nice Trial. He has had to abandon his Scott in Spain pending a discussion with the Customs authorities. He brought the machine from Italy to Spain by sea, and it appears that when any motor vehicle is brought into the country by sea a duty has to be paid, and there is no possibility whatsoever of getting this refunded when leaving the country. Mr. Hill also informed us that the conditions of the roads are appalling, and his advice to those who intend to visit Spain is—Don't!



Times to Light Lamps.

Dec. 9th	...	...	4.20	p.m.
„ 11th	...	...	4.19	„
„ 13th	...	...	4.19	„
„ 15th	...	...	4.19	„

Police Activity in Peterborough.

We hear that there is considerable police activity in Peterborough. Licences particularly are being asked for, and motor cyclists are being summoned for driving to the common danger.

Essex M.C.

The annual dinner has been arranged to take place at the Royal Venetian Room, Holborn Restaurant, W.C., on Saturday, January 8th, 1921, at 7 p.m. Mr. S. G. Cummings will take the chair.

The annual general meeting will take place at the Royal Automobile Club, on Thursday, December 9th, at 7.30 p.m.

Reward for Stolen Machine.

A reward of £10 is offered by the Auto-car Fire and Accident Assurance Co., Ltd., of 77, Cheapside, London, E.C., to the first person who gives information which leads to the recovery of a motor cycle as stated hereunder, and the apprehension of the thief or thieves:

Triumph No. DU 212, engine 48,863, frame 275,896, magneto 8,504, the usual Triumph colours, rear portion of tank covered with a green leather cloth, three-speed countershaft gear, believed 1918 pattern.

The Road Bill.

If all the Ministry of Transport's proposals for the new Road Bill eventually come into force, the lot of the motor cyclist, like that of the policeman, will be

“not a happy one.” For instance, it is proposed that a penalty of £50 may be imposed on the owner of a motor vehicle for allowing his licence card to become obscured. Similarly, a fine of £100 or six months' imprisonment is proposed for licence declarations which are “misleading in any respect,” and the burden of proof of innocence lies with the owner. Since the maximum penalty for any similar offence under the existing Motor Car Act is £10, these estimates appear to be excessive. We have no desire to encourage motor cyclists in attempts to defraud the revenue, but mistakes are bound to occur through misunderstandings of the regulations, and there are comparatively few motor cyclists who could afford to pay such fines.

It is proposed that the bulk of the revenue from the new taxation shall be devoted to road maintenance. This is as it should be, but the Minister of Transport will have power to close any road against any specified class of traffic, so that motorists may have to pay for roads which they are prevented from using.

The Motor Legislation Committee are taking an active part in warning motorists of these and other dangerous features of the Bill.

Overseas Trade.

An advance copy of an interesting booklet issued by the Department of Overseas Trade has reached us. Its contents will be of interest to all exporters, since they deal with the work of the Department and its methods of providing assistance. Copies may be obtained by manufacturers and traders of the United Kingdom on application to the Department of Overseas Trade, 35, Old Queen Street, Westminster, S.W.

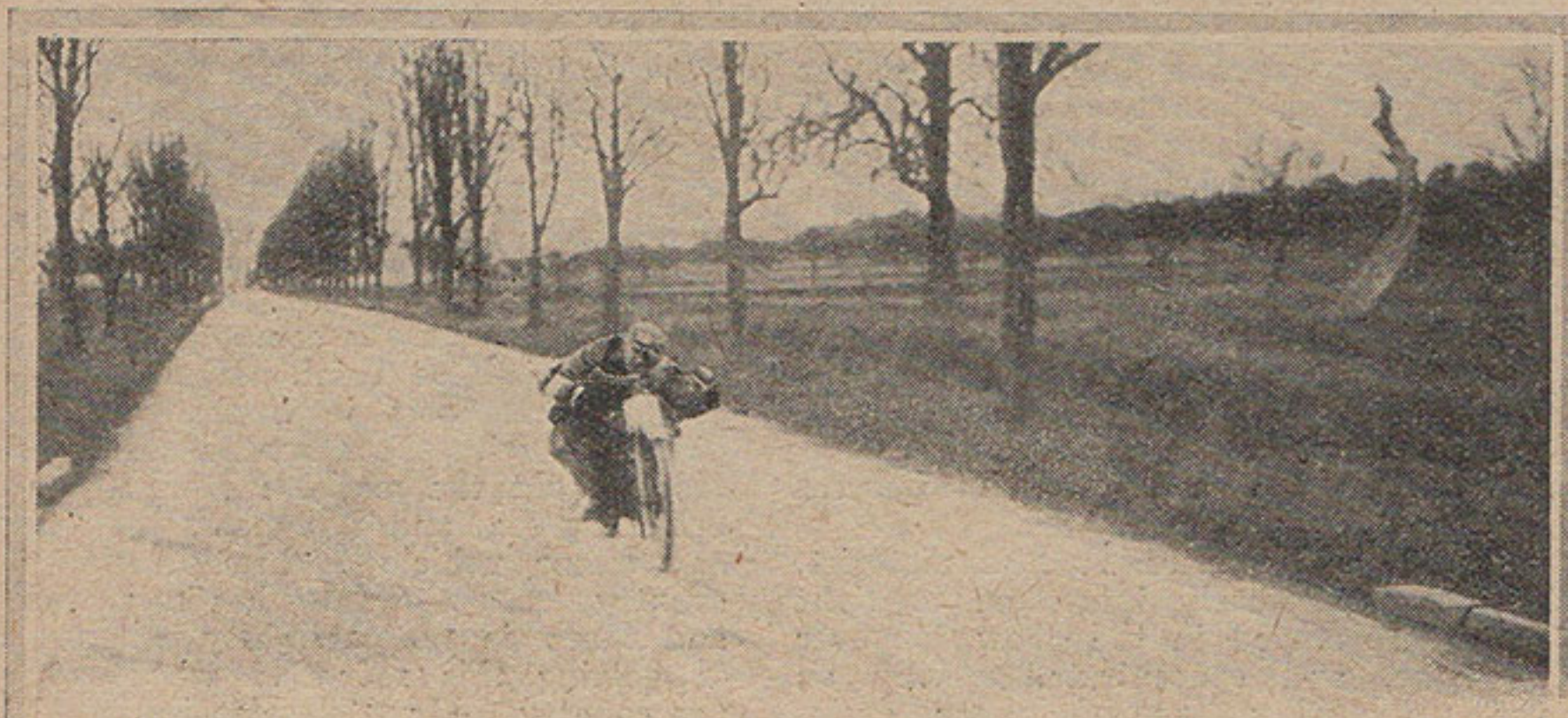
Special Features.

PASSENGER MOTOR CYCLES.
COMFORT AND CONVENIENCE
SIDECAR PROGRESS.

Important Events in 1921.

The dates of next year's open and other classic events have now been tentatively arranged by the A.C.U. in conjunction with clubs concerned. These fixtures are amongst those which will receive the support of the trade. All are open competitions with the exception of those organised by the M.C.C., and there are a few remaining events still to be decided upon and allocated at a later date.

- Feb. 12th.—One Day Winter Trial, A.C.U.
- Feb. 25th.—A.C.U. Silencer Trial, Brooklands.
- March 25th (Good Friday).—Richmond Meet (Yorks.).
- March 26th.—M.C.C. Jarrott Cup Trial.
- March 28th (Bank Holiday).—East Midland Centre A.C.U. Speed Trials.
- April 23rd.—Midland Centre A.C.U. Reliability Trial.
- April 30th.—North-eastern Centre A.C.U. Reliability Trial.
- May 7th.—B.M.C.R.C. Open Meeting.
- May 14th.—M.C.C. London-Edinburgh.
- May 20th-21st.—Western Centre A.C.U. Two Days Reliability Trial.
- May 28th.—East Midland Centre A.C.U. Speed Trials.
- June 14th-16th.—T.T. Races.
- June 25th.—M.C.C. Inter-team Trial for *The Motor Cycle Cup*.
- July 2nd.—North-western Centre A.C.U. Hill-climb.
- July 6th-7th.—Arbuthnot Trophy Trial (provisional).
- July 16th.—Yorkshire Centre A.C.U. Reliability Trial.
- July 30th.—North-eastern Centre A.C.U. Speed Trials.
- Aug. 6th.—B.M.C.R.C. Open Meeting.
- Aug. 8th.—International Six Days Trial, Geneva (provisional).
- Aug. 20th.—Western Centre A.C.U. Speed Trials.
- Aug. 25th.—Welsh Open Speed Championship.
- Aug. 27th-Sept. 3rd.—Six Days Trials.
- Sept. 8th.—Norfolk M.C. and L.C.C. Speed Trials.
- Sept. 10th.—North-western Centre A.C.U. Speed Trials.
- Sept. 17th.—Midland Centre A.C.U. Reliability Trial.
- Sept. 24th.—M.C.C. Sporting Trial.
- Oct. 1st.—Yorkshire Centre A.C.U. Speed Trial or Hill-climb.
- Dec. 26th.—M.C.C. Winter Trial.



No speed limit here! A Griffon rider in last week's Circuit de Paris Reliability Trial going through the speed test on a perfect stretch of road.

HUTCHINSON

"The Tyre with nine lives."

10%

Reduction in the price of Hutchinson Covers

Lead in price reduction again taken by Hutchinson.

A definite saving in Tyre cost of 10 per cent (2/- in the £) combined with a cover 10 per cent better than any other you can fit to your rims is going to cut running costs next year to pre-war standards.

**HUTCHINSON TYRES,
70, Basinghall Street,
LONDON, E.C.2.**

TYRE MANUFACTURERS SINCE 1877.



In answering this advertisement it is desirable to mention "The Motor Cycle."

HOBART

MOTOR BICYCLES WERE FIRST MANUFACTURED IN 1901.

FOR 1921 OUR PROGRAMME INCLUDES:

LIGHTWEIGHT	2 $\frac{3}{4}$ h.p.	Four-stroke,	with	STURMEY-ARCHER	2-speed	Gear
"	2 $\frac{1}{2}$ h.p.	Two-stroke	"	"	"	"
"		SPRING-FRAME	"	"	"	"
"	2 $\frac{1}{2}$ h.p.	Two-stroke,	Single	Speed		

THE HOBART BUSINESS WAS ESTABLISHED IN 1884.

HOBART CYCLE CO^{LD}
HOBART WORKS
COVENTRY. ENG.

GET
A

Grindlay

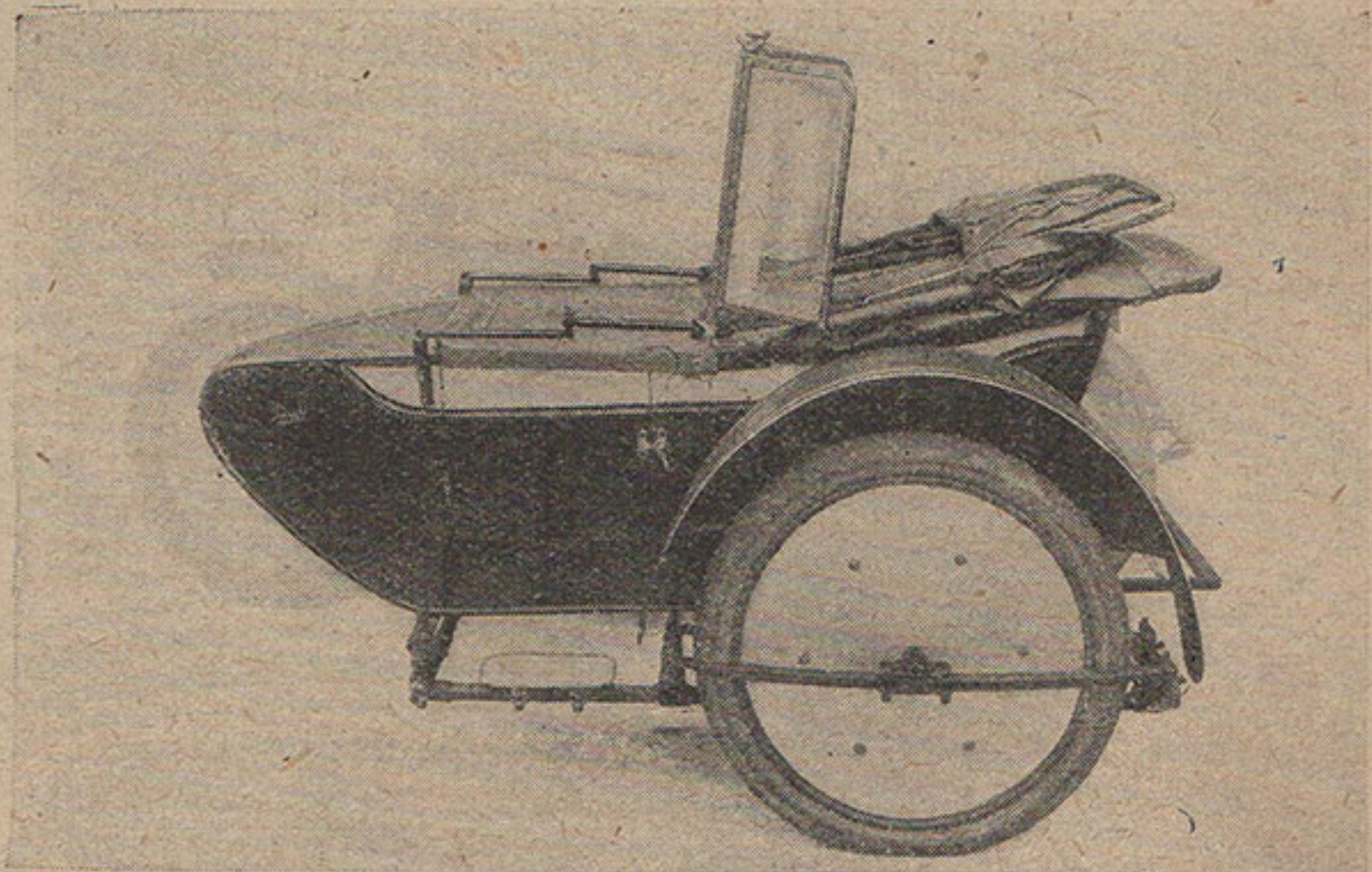
SIDECAR for
COMFORT.

The Sidecar with
Luxurious Car Type
Springing.

Patent Sprung Wheel.

Prompt Deliveries.

Write for Catalogue to-day.



GRINDLAY (Coventry) Ltd., Melbourne Works, Spon End, COVENTRY



Proposed Hertford and District M.C.C.

It is suggested that a motor cycling club be formed in Hertford, Hoddesdon, and Waltham Cross district, and all interested are asked to communicate with Mr. D. C. Archer, "The Hawthorns," Hoddesdon, Herts. If adequate support is forthcoming, a meeting will be arranged to discuss the formation of a club.

Newcastle M.C.

Proving a highly successful gathering, the Bohemian concert of the Newcastle Motor Club was held recently at the Central Exchange Hotel. Mr. Joseph R. Scott, the president, was unable to attend owing to ill-health, and Mr. James Daglish, of Wallsend, took the chair. Mrs. Daglish presented the prizes to the successful competitors during the season.

Mansfield and District M.C. and L.C.C.

The above club has decided to run a speed trial on the well known Clipstone Drive on Boxing Day, December 27th. The following events will be run, on time only, over a distance of half a mile, with a flying start of about 400 yards: 275 c.c., 350 c.c., 500 c.c., 750 c.c., unlimited c.c., and unlimited sidecar, and a special class for Ford cars. The above events are open to any member of the club. Entry forms will be ready in a few days, and may be obtained from the hon. sec., Mr. G. Mills, 16, Hall Street, Mansfield.

Bradford M.C. and L.C.C.

The above club had a very successful social evening on Thursday, November 25th. The entertainment consisted of a set of lantern slides, all photographs of motor cycling events, and, in addition, several films were shown, the cinema apparatus having been kindly lent by Mr. Eric S. Myers, of Bradford. The British Excelsior Co., of Birmingham, kindly forwarded their private film of "Clovelly High Street," and the Scott Motor Cycle Co., Ltd., their films of the 1919 and 1920 Scott trials, whilst several lantern slides were also shown of the club's own event on Rosedale Abbey Bank.

Mr. Felix Scriven, one of the founders of the Bradford Club, gave a very interesting lecture on "Motor Cycles of Years Ago," and Mr. J. N. Longfield (president of the Ilkley Club and also a member of the Bradford Club) spoke in his official capacity of chairman of the Yorkshire Centre A.C.U.

Several members of the Leeds and District Club came over specially, and about twenty more new members were enrolled.

The large room at the Belle Vue Hotel, Bradford, the club's headquarters, was packed to the door.

Proposed Rhyl M.C.C.

An informal meeting of motor cyclists was held recently at Whitaker's Garage, Rhyl, when it was decided to form a club for Rhyl, Prestatyn, and Abergele.

Bristol M.C.C.

The officers for the coming year are as follows: President, Mr. W. Carter; vice-president, Mr. C. T. Pearce; captain, Mr. R. Passey, Cheddar, Som.; vice-captain (competition), Mr. A. V. Tozer, 9, Raymond Road, Victoria Park; vice-captain (social), Mr. A. W. Rankin, Ivanhoe, Wick Road, Brislington; hon. treasurer, Mr. A. G. Mason, 109, Berkeley Road, Bishopston; hon. secretary, Mr. Rex Poweraker, 23, Claremont Road, Bishopston; and assistant hon. secretary, Mr. H. F. Scamp, 49, West View Road, Chessels, Bedminster.

Jersey M.C.C.

Reliability trials are not easy to arrange in a small island, but the above club held a successful autumn trial in the middle of November. Route marking was by whitewash arrows, this being very well carried out by Mr. R. Quenouillere. Results:

1, D. L. Caudey (4 W.D. Triumph), 220 marks;
2, G. de la P. Hacquet (6 A.J.S. sc.), 214 marks;
3, J. Varney (2½ Sun), 196 marks, these riders winning the solo, sidecar, and lightweight classes respectively.

Other finishers were: R. O. Binet (4¼ B.S.A.), E. C. Oldham (4 Triumph sc.), W. Simmons (2¾ Verus), A. Harrison (4 Triumph), J. Rimeur (2¾ Douglas), C. M. Lanelick (2¾ A.J.S.), V. W. Bryant (3½ Brough), and R. P. Simon (4 Triumph).

North London M.C.C.

The first winter event was held at the Orange Tree, Friern Barnet Lane, taking the form of a lantern lecture. A series of slides were exhibited illustrating motor cycling events which have taken place during the year. Mr. Bernard Staley gave a short description of each slide, and read a history of the evolution of the motor cycle from 1885 to the present day. Messrs. H. R. Harveyson and R. H. Baxter were present and supplied many interesting details.

North Eastern Centre A.C.U.

A social gathering of the motor cycling members of the A.C.U. North Eastern Centre will be held at Durham on Sunday, January 16th, 1921. There will be a lunch, to be followed by a meeting, at which the presentation of prizes for competitions run during 1920 will take place. Many prominent motor cyclists are expected to attend, and during the meeting opportunities will be given for expressions of opinion on motor cycling matters in general and competitions for 1921 in particular. Each member is entitled to take a friend, and ladies are especially welcomed.

Tredegar M.C.

Tredegar Motor Club, one of the strongest organisations in South Wales, held its annual dinner at the Castle Hotel on November 24th.

Berwick and District M.C.

The first annual dance of this club was held recently at the Corn Exchange, Berwick. It was very well attended and included representatives of the Newcastle and District and Kelso Motor Clubs.

Barnsley and District M.C.C.

On Thursday, November 25th, this club held its first annual dinner. A most enjoyable evening resulted, during which prizes were presented to members who had won events in the past year.

Portsmouth and District M.C. and L.C.C.

It has been suggested that the above club be formed to arrange sporting and social events in Portsmouth during 1921. Application will be made for affiliation to the A.C.U. Will interested motor cyclists and light car owners please communicate with Mr. M. J. Tanner, Elbury, Milton Road, Portsmouth, who will arrange a meeting if sufficient support be forthcoming.

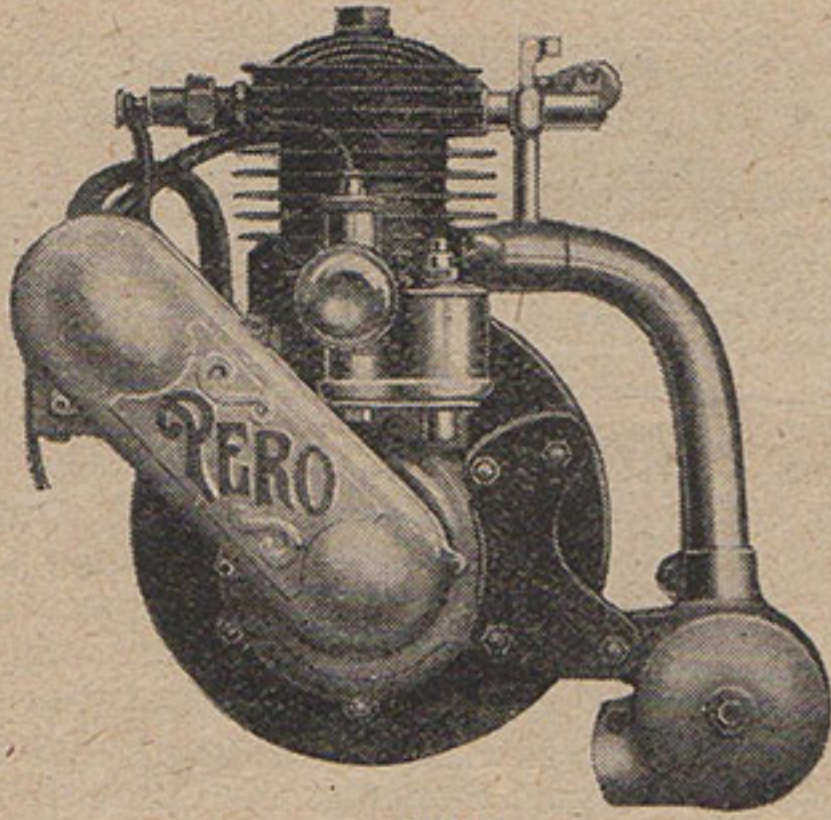
Reigate M.C.C.

It has been suggested that a motor cycling club be formed in the borough of Reigate. A meeting will be held at the Warwick Hotel, Redhill, on Thursday, December 9th, at 7.30, with a view to arranging sporting and other events for the forthcoming year. The large number of motor cyclists in this district would seem to warrant the step, and should ensure its success. Any further information will be gladly furnished by Mr. E. P. Duplock, 15, High Street, Redhill.

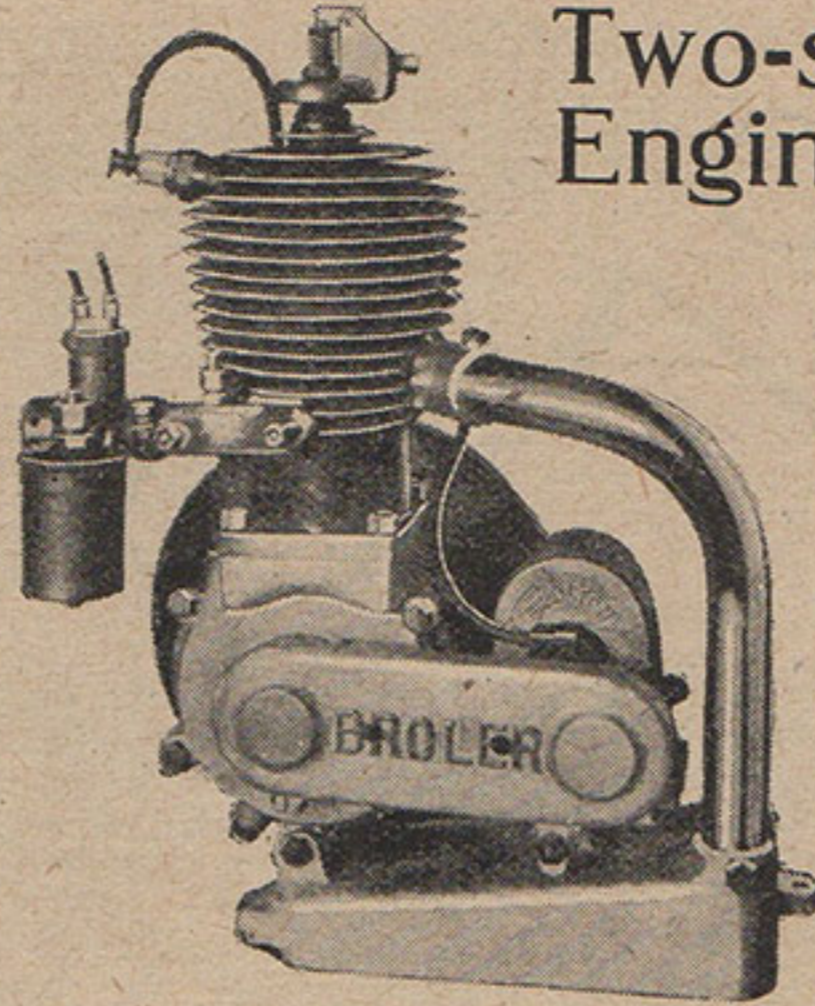
Basingstoke M.C. and L.C.C.

The second annual dinner and prize distribution of the above club took place on Tuesday, November 23rd, at the Station Hotel, Basingstoke. About forty members and friends (including ladies) sat down together. Immediately following the dinner, Mr. H. Julian (late Mayor of Basingstoke), chairman, kindly presented the cup, medals, and other valuable prizes, awarded to members won in recent competitions during the past season, and, in doing so, remarked on the wonderful success of the club, including the magnificent display of prizes, worthy of any club in the country. The concert following was of a very varied nature and thoroughly enjoyed by all. At 10-30 the National Anthem and "Auld Lang Syne" terminated on enjoyable evening by an enthusiastic club.

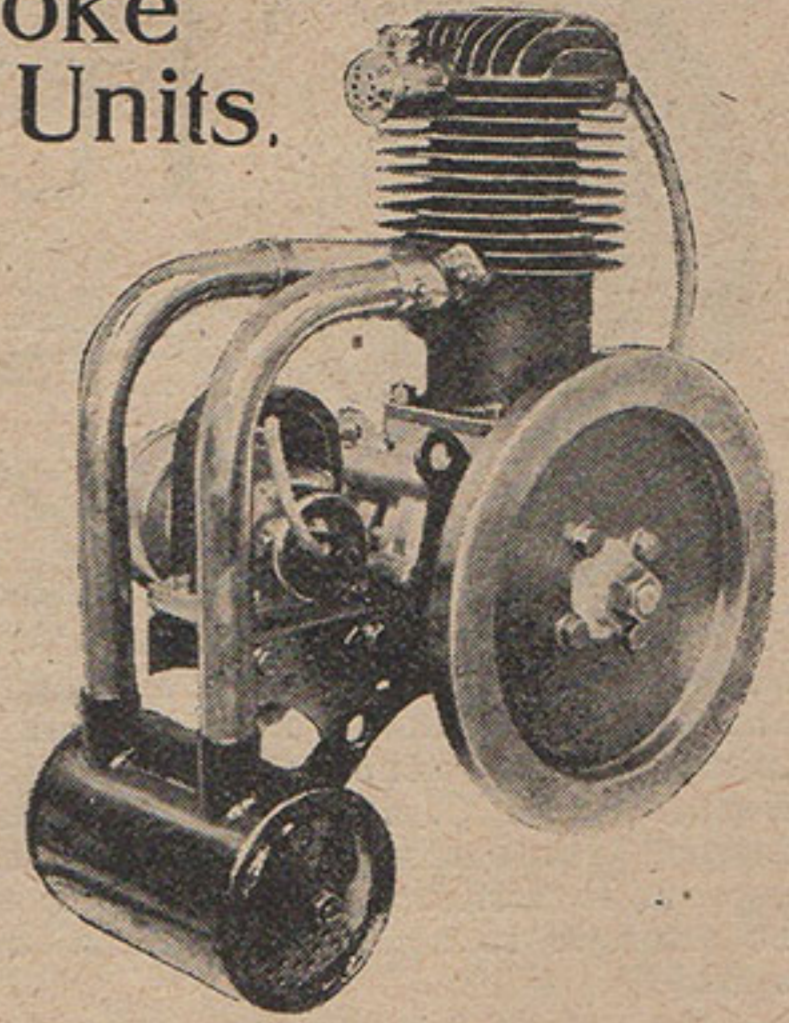
**Two-stroke
Engine Units.**



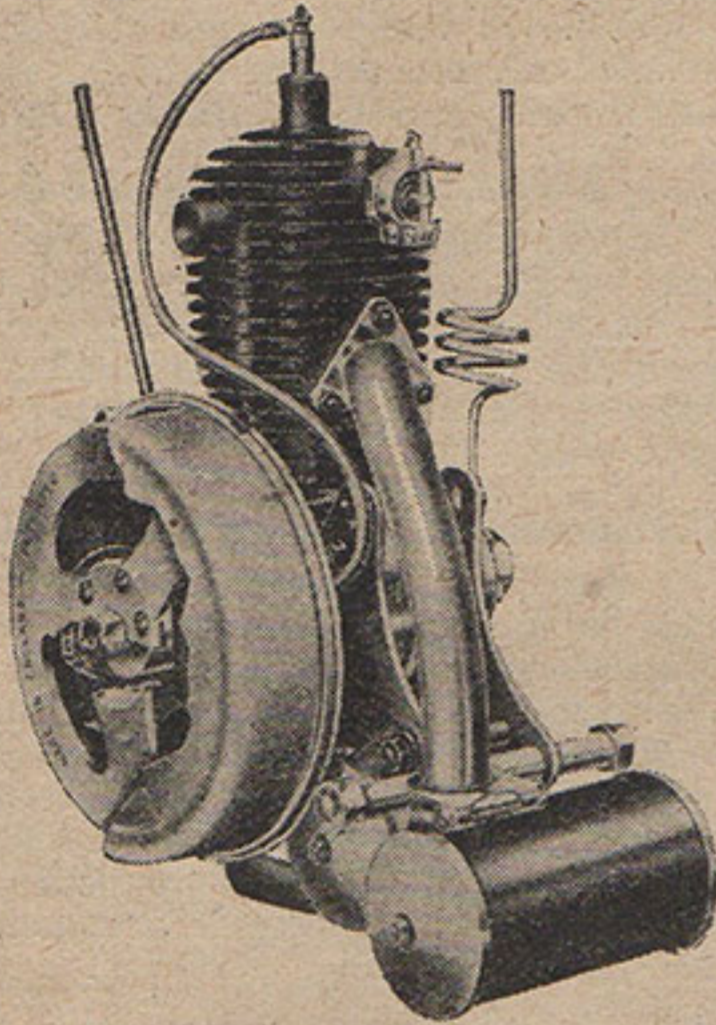
PERO.
70 × 70 mm. (269 c.c.)
Pero Engine Works, Potter Street,
Birmingham.



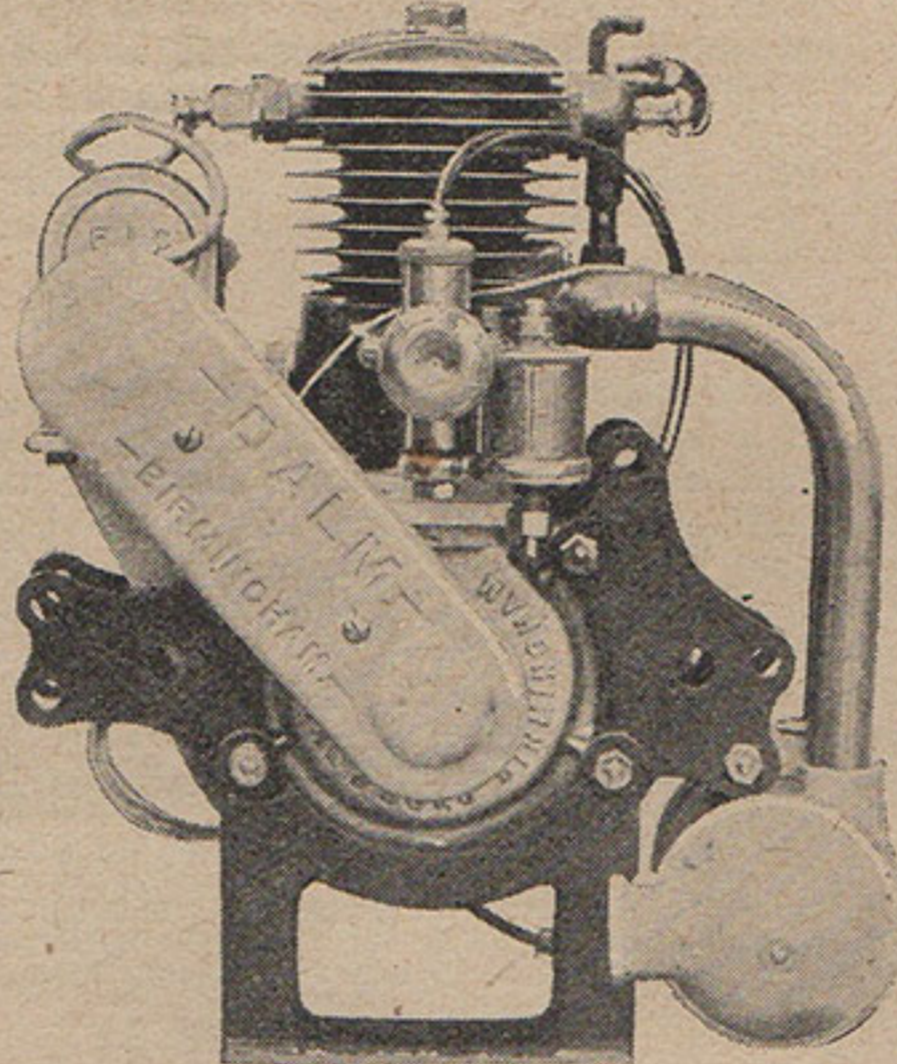
BROLER.
75 × 79 mm. (349 c.c.)
Brooks & Tranter, Narborough, Leicester.



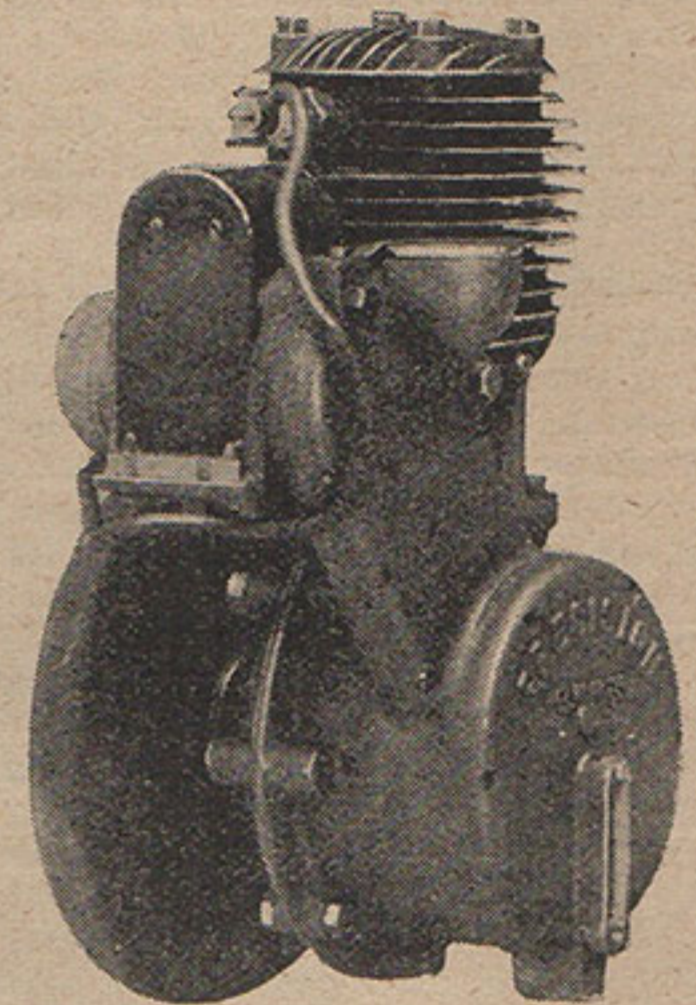
ENDURANCE.
70 × 70 mm. (269 c.c.)
Endurance Cycle Co., Birmingham.



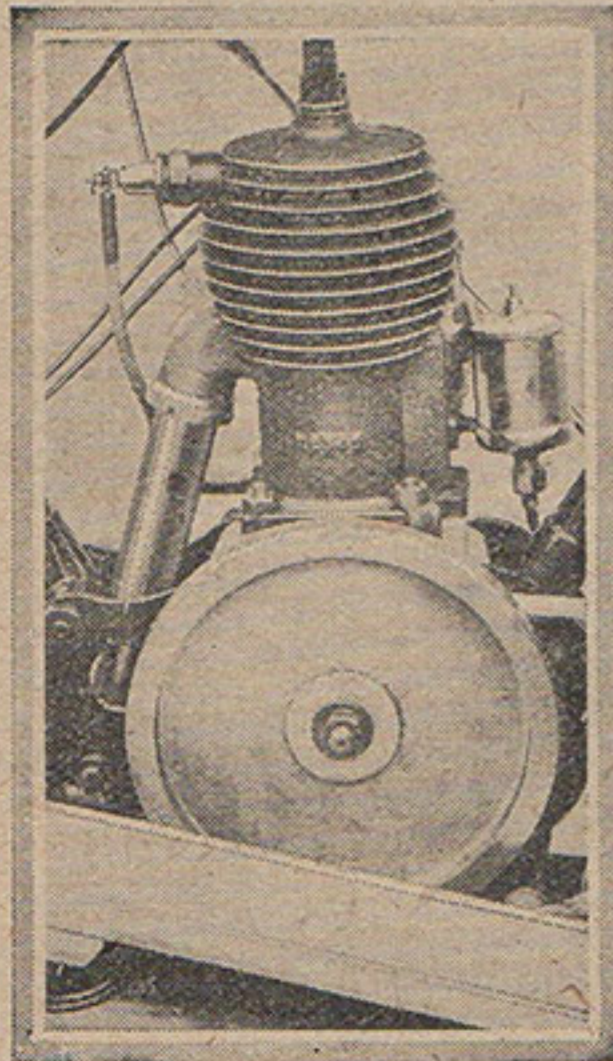
VILLIERS.
70 × 70 mm. (269 c.c.)
Villiers Engineering Co., Blakenhall,
Wolverhampton.



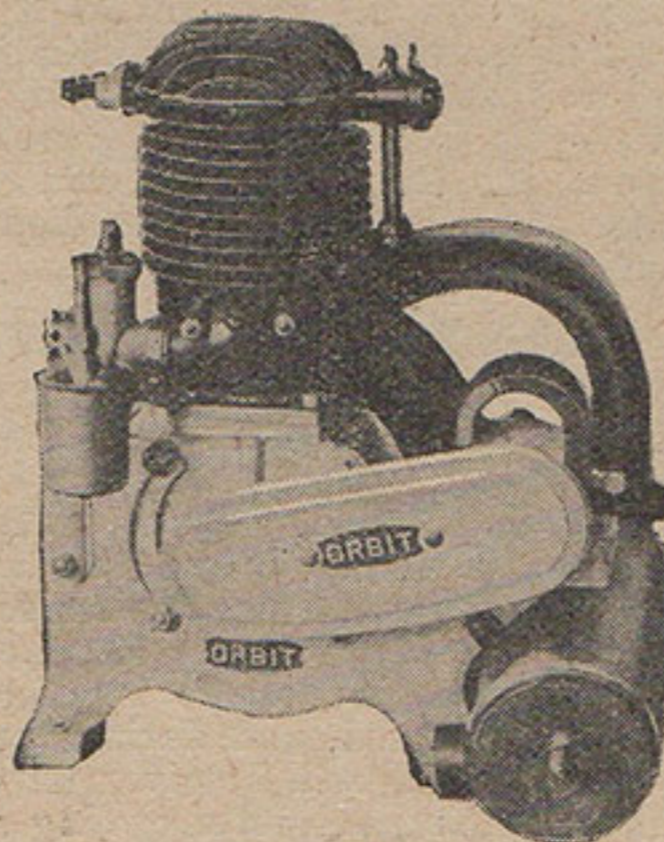
DALM.
73 × 76 mm. (318 c.c.)
Dalman & Sons, Birmingham.



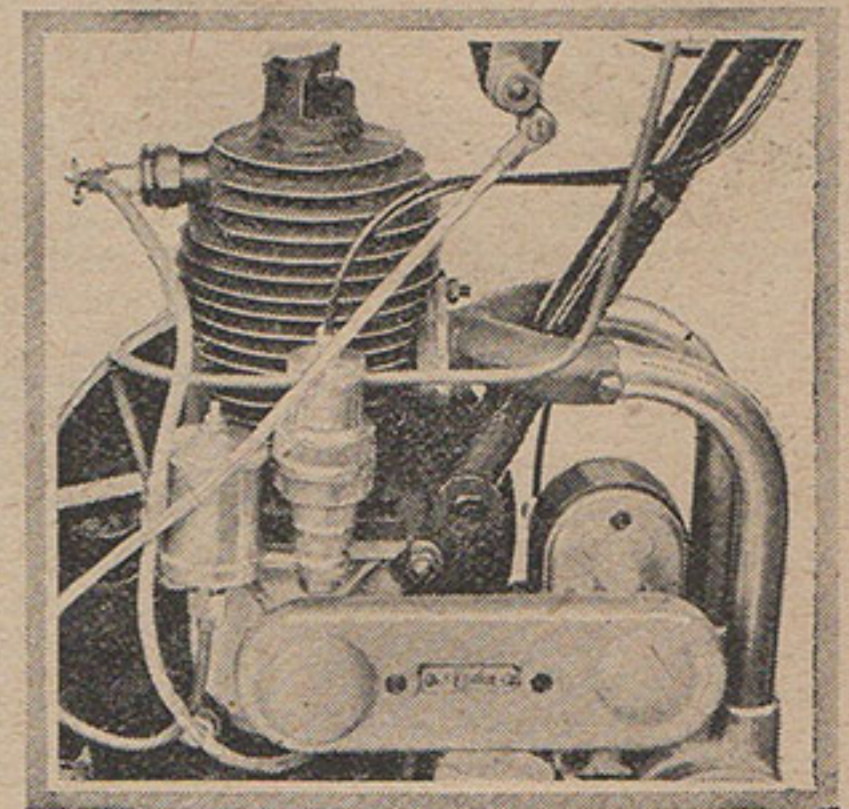
PRECISION.
74 × 81 mm. (348 c.c.)
F. E. Baker, Ltd., King's Norton, near Birmingham



WALL.
70 × 70 mm. (269 c.c.)
A. W. Wall, Ltd., Tyseley, nr. Birmingham.



ORBIT.
68 × 72 mm. (261 c.c.)
Orbit Engine Co., Wolverhampton.



ARDEN.
70 × 70 mm. (269 c.c.)
Arden Engineering Co., Berkswell, nr. Coventry.



NEW HINTS FOR OLD HANDS, Some Conveniences and Gadgets Worth Trying.

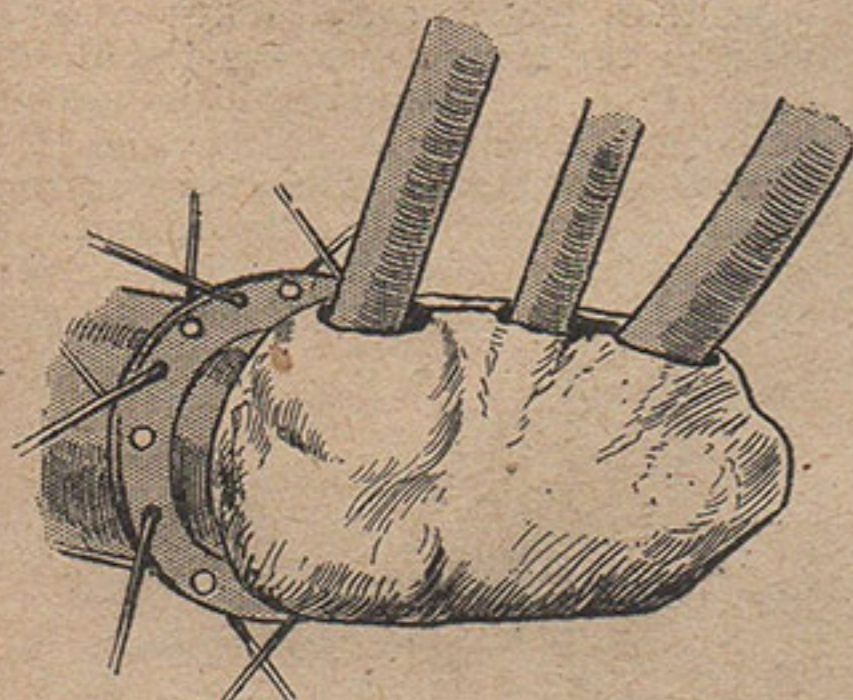
MANY machines do not permit of the use of knee-grips, owing to the fact that the gear lever or some other necessary but unwieldy article of adornment comes in the way. The consequence is that if one wears tarpaulin leggings or any other stiff overalls the enamel is very soon rubbed from the saddle end of the tank, which detracts considerably from the smartness of the machine.

Personally, I gave up knee-grips long ago for anything but the overhead valve type of solo 'bus, and use, instead, a leather jacket which covers the knee-grip end of the tank. The cover is made of good quality black leather, capable of taking a burnish, and really adds very considerably to the aristocratic appearance of the machine.

The illustrations show how the jacket is made, and, if one does not feel equal to the task of making it, almost any local cobbler will undertake the work to measurement.

A Convenient Pocket.

The small pocket is very useful for carrying a baby King Dick spanner or any other small fry in the way of kit, but, in addition to the bag, I have a loop into which fits a celluloid oilcan of the tubular variety having a screw-on safety cap, and thus I have everything instantly accessible for roadside adjustment. I have tried snap clips and various other fastenings for the bag, but find that a blunt brass hook and a stout elastic band serve the purpose better



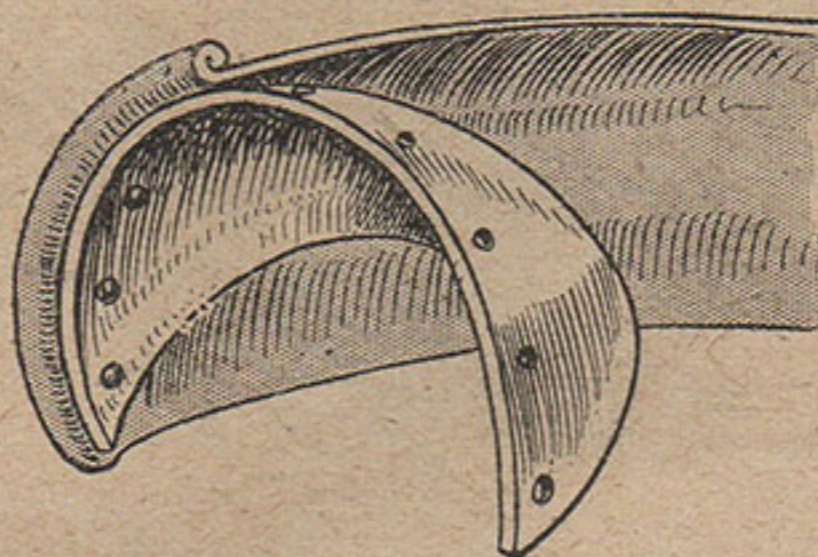
A device for protecting from mud the moving parts of certain spring forks and wheel bearings.

than any of them. This cover is further useful in that it prevents water blowing back along the tank and on to the legs of the rider.

A Mudguarding Hint.

Given a fast machine and a wet road one is fairly sure to experience the nuisance of mud blowing back from the

forward tip of the front mudguard and smothering the fo'c'sle end of the tank, to say nothing of the knees of the rider. This was so bad in the case of the Henderson I am now riding that I devised all manner of shields to intercept the deluge, but finally came across a means to stop the flood at its source. A strip of leather was cut out roughly to the inside curvature of the guard in the shape shown in the sketch, and this strip was then secured inside the guard at the extreme end, so as to form an open pocket, as it were, to the splash rising from the tyre, and so conduct it back. The flap should be made of fairly stiff leather, and it will be found that, when bolted into position with short $\frac{3}{8}$ in. bolts, it will naturally assume the desired shape. The end of the mudguard now keeps perfectly dry, even though the machine be ridden at high speed over torrential roads. The flap should comfortably clear the tyre.



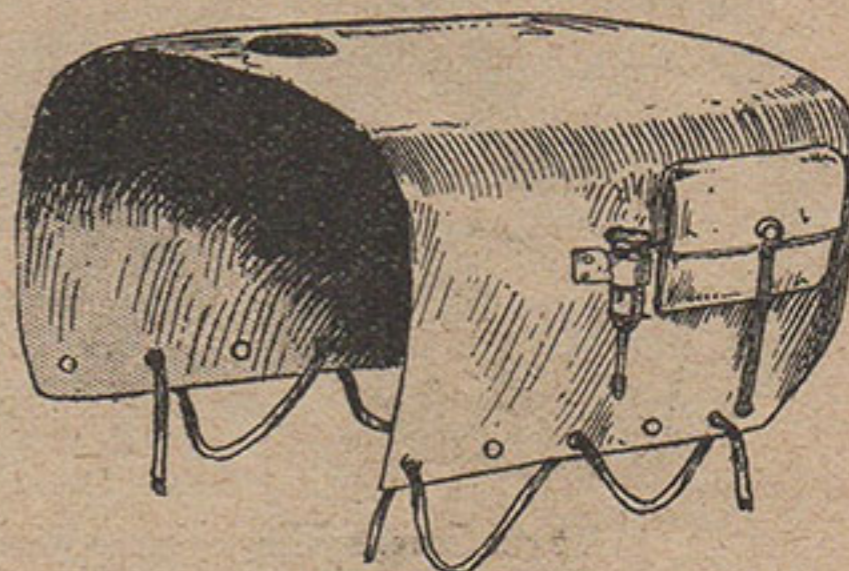
The forward end of a front mudguard in section, showing how the leather flap is inserted.

Enclosing Working Parts.

The following tip may be useful to riders of such machines as the P. and M. and various Americans, the front springing system of which involves the use of moving shackles adjacent to the front wheel spindle. The joints of these shackles should be kept well lubricated or they are apt to wear, with resultant slackness, which does not improve the steering on grease.

It is thoroughly worth while enclosing these parts with a simple leather shield, attached with copper wire, and, if the work is neatly done, it is far less unsightly than the oily mess which inevitably results from trying to keep the bearings properly lubricated. I have enclosed the forks of my

P. and M. as shown in the sketch, and now, since the whole lot is out of sight, I keep everything amply lubricated, and the joints remain perfectly clean under the flap. A single charge of lubricant seems, indeed, to



A useful device for machines on which knee grips cannot be fitted successfully owing to the position of the gear change lever.

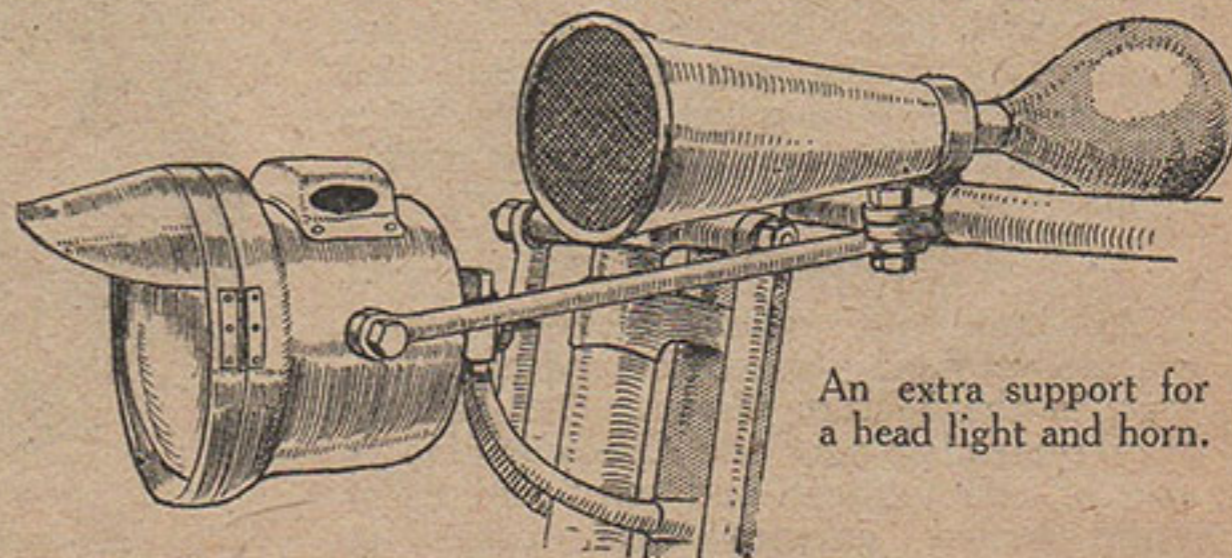
last indefinitely, and relubrication necessitates only lifting the flap. Any old bit of leather will do, but to make the job look really finished, and to render the leather waterproof, it should be given a coat of ordinary black enamel of the kind most motor cyclists keep.

A Stabiliser for Lamp and Horn.

The following tip is, I suppose, more or less obvious, yet very few seem to adopt it. Horns have a way of slipping round the handle-bars during prolonged runs at speed, while head lamps are apt to vibrate, which eventually shakes their lenses loose and causes an eternal rattle—or, worse still, is very apt to cause the bracket to fatigue and finally break. This refers, of course, to machines fitted with steering head brackets really designed to carry a lamp.

Both misfortunes can at once be remedied by getting the village blacksmith to hammer out a rod of the correct length to interconnect the two. The rod will, of course, have eyes at both ends, one looking upwards and the other cross-wise, and, if desired, the work can be nickelled, though black enamel is really good enough. The sketch illustrates the idea at a glance.

CHINOOK.



An extra support for a head light and horn.

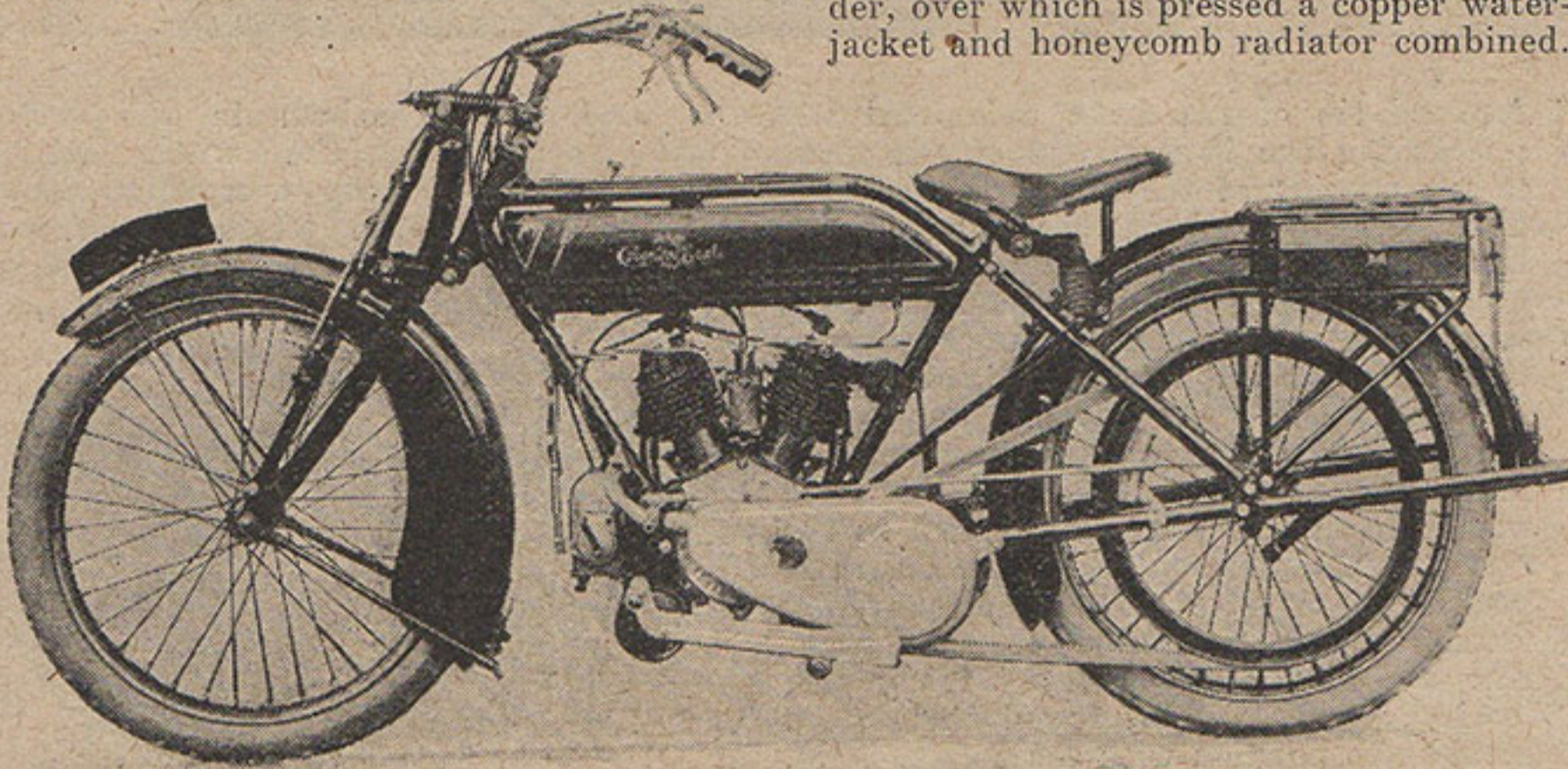
OUTSIDE OLYMPIA.

NEW MACHINES OF INTEREST SEEN OUTSIDE THE SHOW.

OLYMPIA is not sufficiently large to accommodate all those who desired to display their wares in its spacious hall, consequently not a few items of interest were to be seen in the Hammer-

doubtedly possesses many attractions; when it is fitted it is more easy to keep the engine in tune and more easy to maintain full power on full throttle. The Green engine possesses a cast iron cylinder, over which is pressed a copper water-jacket and honeycomb radiator combined.

These excellent features remain unaltered; but, so far as the engine itself is concerned, the chief improvements lie in the fitting of ball and roller bearings to the connecting rod and crankshaft. The piston is of steel, and of the Zephyr pattern. The amount of water carried in the jacket and radiator is not quite sufficient for ordinary purposes, and in the very wide tank a separate brass water compartment, with a capacity of 1½ pint, has been let in, and between it and the oil compartment an air space has been provided. The tank is secured underneath, and the secondary horizontal frame member is in duplicate, and splayed out so as to allow the valves and the cylinder head to be easily reached. The frame has been entirely reconstructed, and is now built to accommodate a Sturmey-Archer three-speed gear box and 7½ in. mudguards. Two external contracting band brakes are fitted to the rear wheel, in which also is incorporated the transmission shock absorber. This machine is shortly to be ready for production, and deliveries will, we understand, begin in March. The makers are the Green Motor Cycle Co., 50, Jermyn Street, London, W.1.



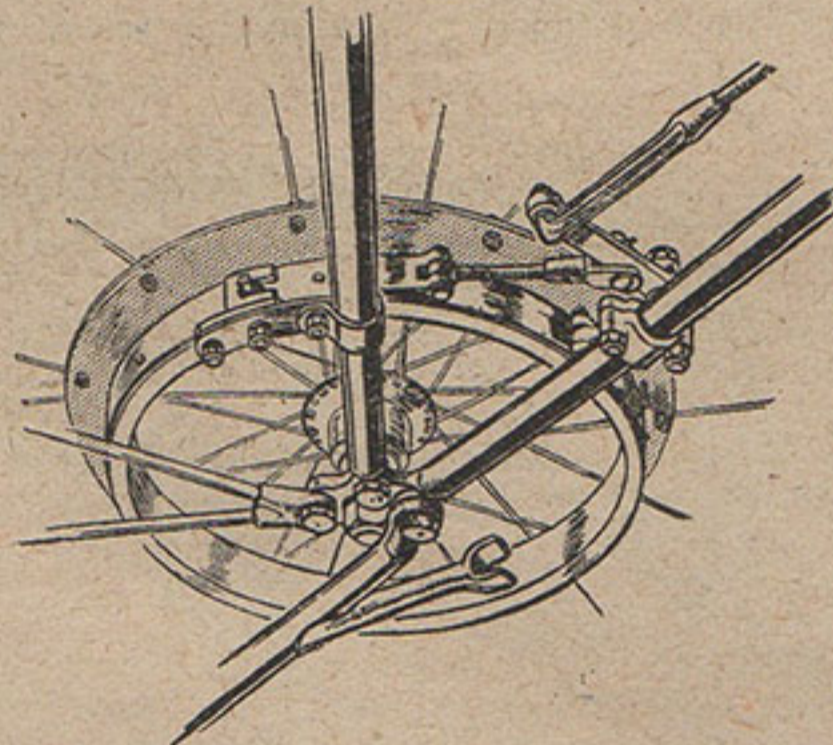
A twin Coventry Eagle, embodying the well-known 5-6 h.p. J.A.P. engine and Sturmey-Archer gear.

smith Road and the surrounding district.

The best known exhibit was that of the Coventry Eagle Motor Co., which was well worth an inspection. A wide range of models was shown. The 5-6 h.p. J.A.P.-engined sidecar outfit, fitted with a Sturmey-Archer gear box and chain-cum-belt drive, is an excellent machine following standard lines throughout, but possessing one or two special features. Both brakes are on the rear wheel, that on the off side being of the external contracting pattern provided with a right and left-hand thread adjustment on the brake rod. The other brake consists of a Fibrax-lined aluminium shoe situated on the near side of the machine, and acting on a dummy belt rim. The handle-bars are covered with Bluemel's celluloid. Aluminium footboards are provided, with rubber rests at their forward ends. Quite an attractive model is the 3½ h.p. Abingdon-engined Sports model, which is provided with a Sturmey-Archer three-speed gear, kick-starter and clutch, Lucas Magdyno, and disc wheels. A similar machine, fitted with the same engine, 85×88 mm. (499 c.c.), is fitted with the new pattern brake, and has a sidecar attached to it. Among the lightweights we noticed a 2¾ h.p. J.A.P.-engined model with a two-speed Sturmey-Archer gear box, a Mark VI. Villiers engine two-stroke with an Albion gear box not incorporating clutch and kick-starter, and a 2¾ h.p. J.A.P.-engined Coventry Eagle fitted with the company's new spring frame.

A Water-cooled Single.

An important motor bicycle, which we are very glad to see revived after the war, is the 3½ h.p. Green. Our readers may remember that the Green engine is one of the lightest and most successful water-cooled engines ever fitted to a motor cycle. Water-cooling un-



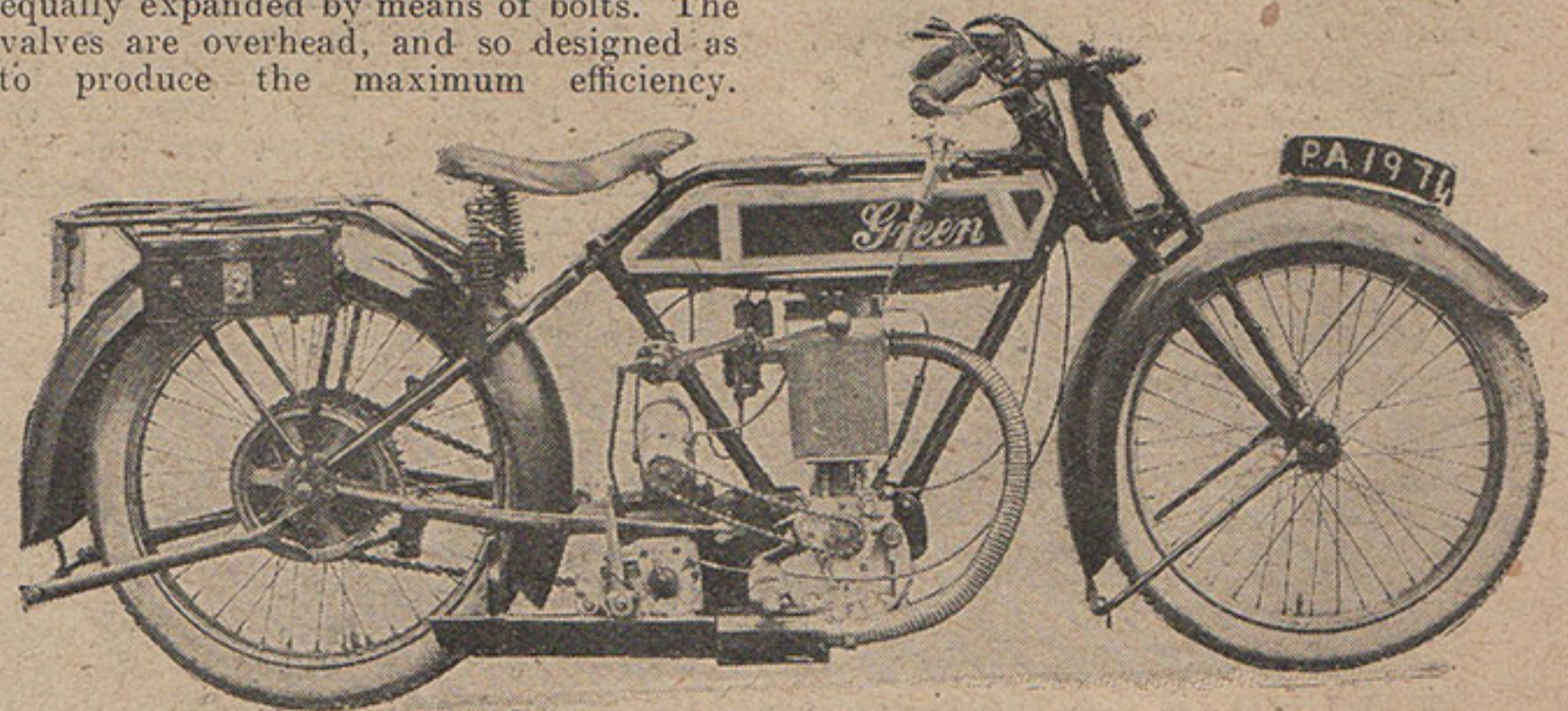
Contracting brake of the Coventry Eagle.

This jacket is secured at the top by means of a castellated ring nut, while at the base of the jacket is Green's patent watertight joint, consisting of a rubber ring between two brass rings equally expanded by means of bolts. The valves are overhead, and so designed as to produce the maximum efficiency.

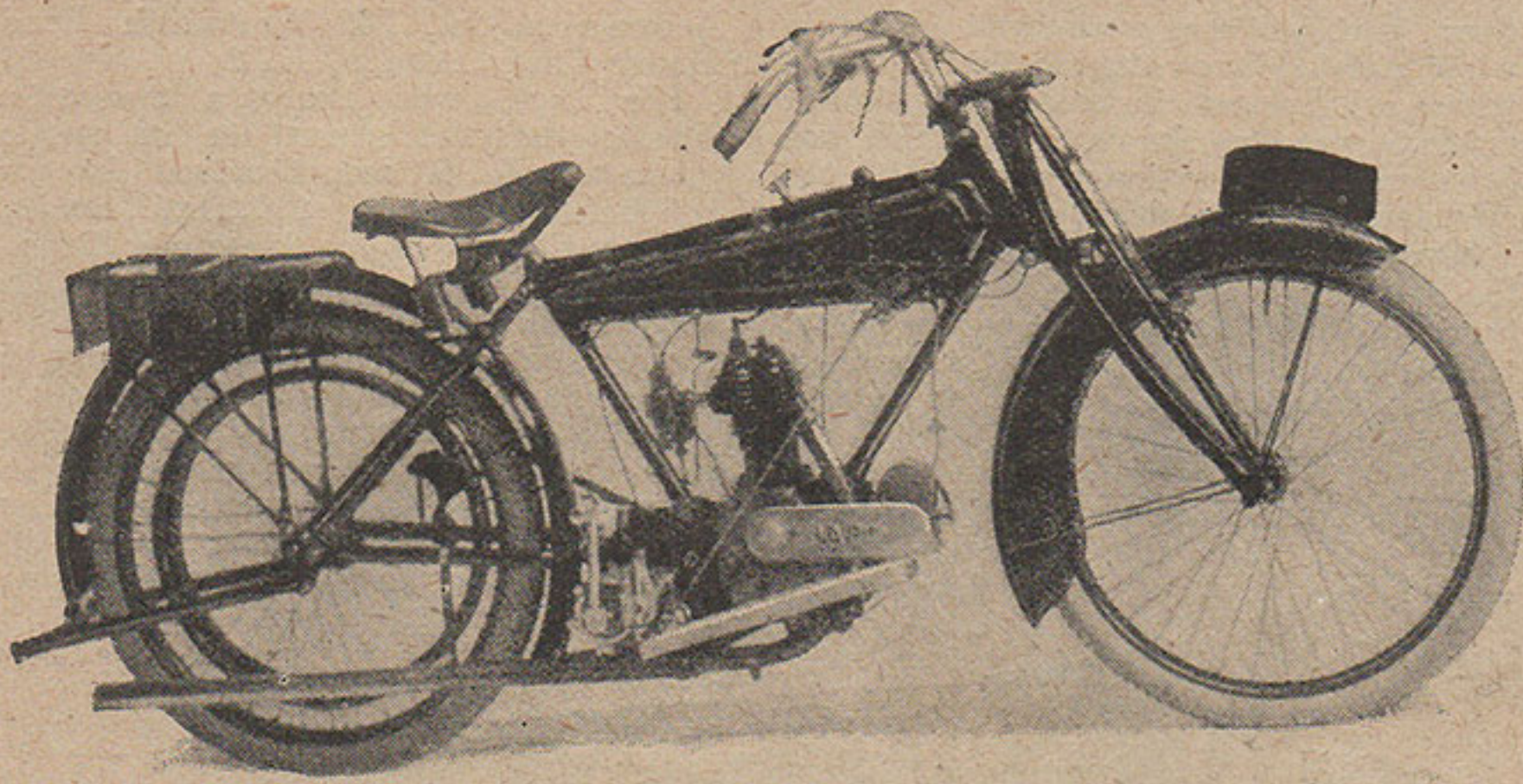
The Pullin Position.

In the same building there was also to be found the interesting Pullin motor cycle, which was dealt with in very full detail in *The Motor Cycle* of March 25th, 1920. Unfortunately, so far as production is concerned, it is no further advanced than it was at that date, but Mr. Pullin informed us that he hoped very shortly to announce that the manufacture of this interesting machine was already in progress. The Pullin motor cycle is handled by the Pullin-Groom Motor Cycle Co., Ltd., 24, Buckingham Gate, London, S.W.1. The new Martin motor cycle is also to be seen here.

Another motor cycle which was on view in the same house was the Ready-Jap. It is an attractive little machine built by Messrs. D. Read and Co., Weston-super-Mare. The frame is composed of straight tubes throughout. It is fitted with a 2¾ h.p. J.A.P. engine and the best components, and its prior



Re-appearance of the water-cooled Green engine. It has a radiator embodied with the cylinder.



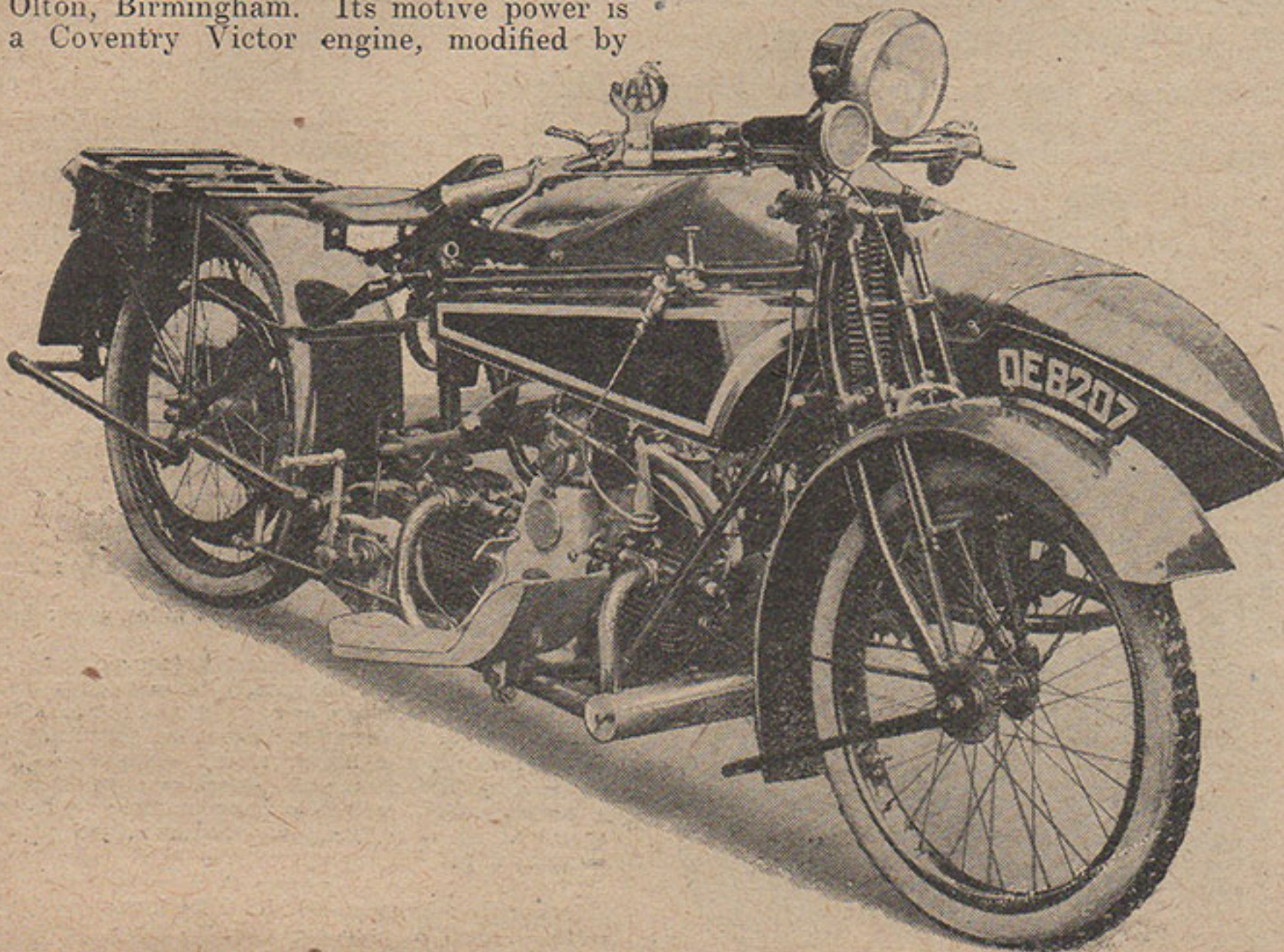
A 2½ h.p. J.A.P.-engined lightweight—the Ready.

cial feature consists of a concealed silencer in the end of the long exhaust pipe. This consists merely of two drilled cones, of which the apex faces forward, connected by means of a rod. It is held in position by a grub screw.

A Miniature Runabout.

Quite the cheapest three-wheeler in the neighbourhood of Olympia was the Cambro, made by the Central Aircraft Company, Ltd., Kilburn. The motive power, which was formerly known as the Johnson motor wheel, and now known as the Economic motor attachment, is situated over the rear wheel. It is single geared, and is fitted with a starting arrangement consisting of a pedal connected to the free wheel on the rear spindle. By actuating this pedal the whole machine is pushed forward, and the engine is started by this means. Both front and rear portions are sprung on rubber shock absorbers, such as are used on aeroplane landing gear.

A machine which is built of standard components, is the Slaney, sold by the Slaney Engineering Co., Kyneton Road, Olton, Birmingham. Its motive power is a Coventry Victor engine, modified by

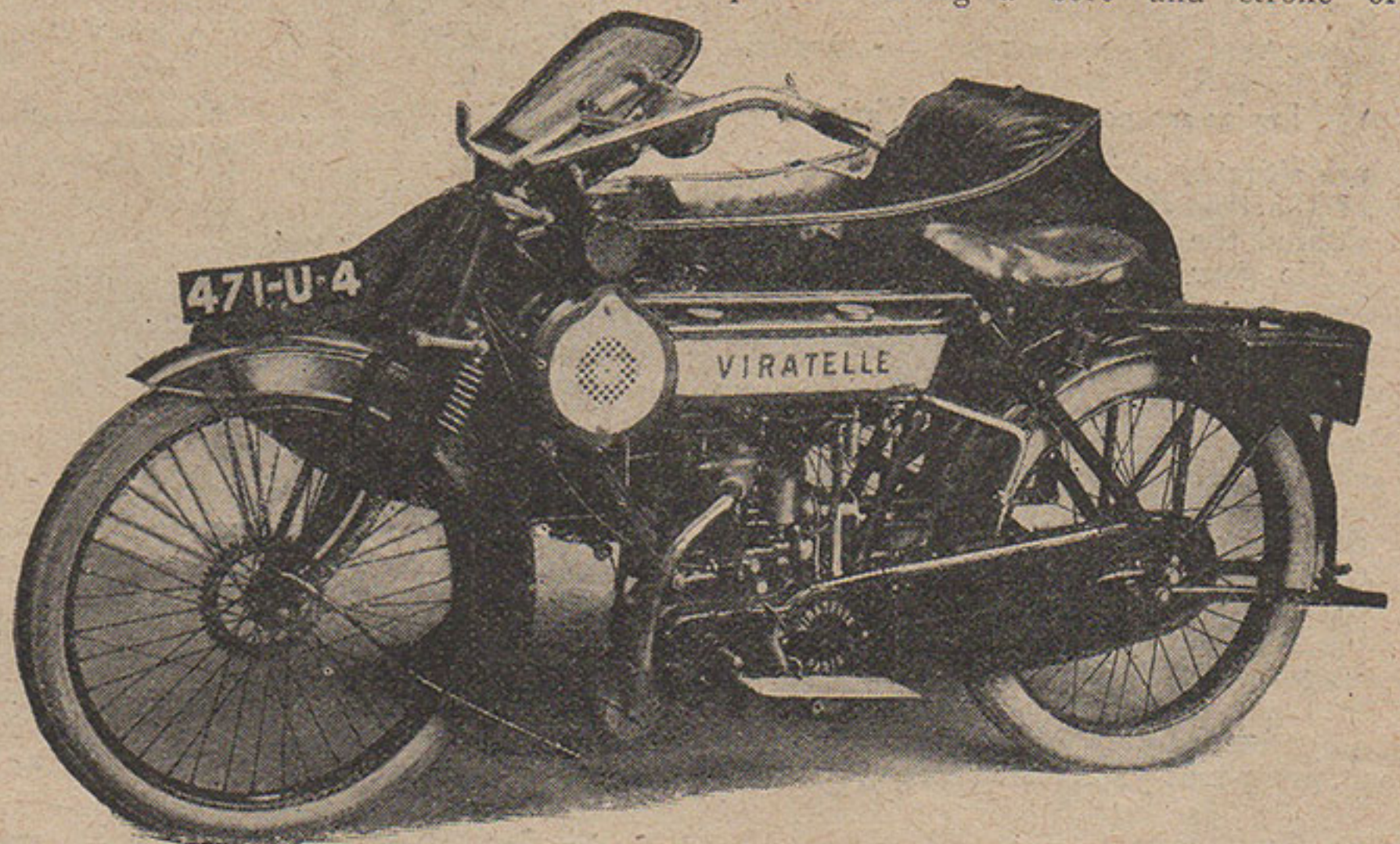


A big flat-twin Slaney, with a Coventry Victor engine.

the company so as to get a better chain clearance by moving the carburetter on to the near side, and placing the exhaust pipes on the off side. The exhaust pipes lead into a long narrow expansion chamber running across the width of the vehicle, and in front of the footboard, from which there is an exit pipe on the near side. Other special features are the finger nut adjustment of the external expanding foot brake on the offside, a very large tank, wide mudguards, and the specially strengthened luggage carrier.

An Engine Unit.

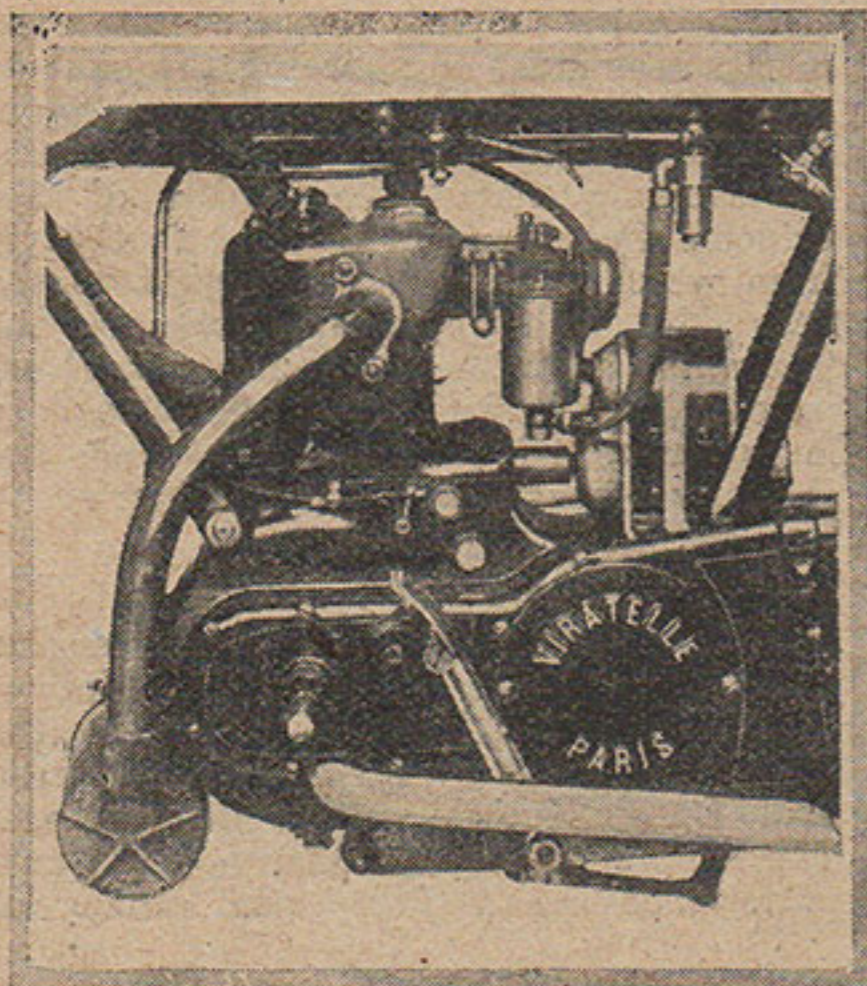
An excellently-made two-stroke engine was to be seen at Messrs. Burts Motors, 245, Hammersmith Road. This is the M. and B., made by Messrs. John Morris, Mill Lane, Knowle, near Birmingham. The engine is the ordinary three-port pattern having a bore and stroke of



French Viratelle water-cooled two-cylinder outfit. Observe the peculiar radiators on the front end of the tank.

67×70 mm., and a c.c. of 246. The cylinder is very carefully bored so as to get even thickness of metal throughout, is then left to season for two months, and then ground. The piston is treated in very much the same way. The main shafts, of high quality steel, are hardened and ground, and run in bushes of large dimensions, composed of chilled cast phosphor bronze. Hoffmann roller bearings are employed in the big ends. The lubrication has been carefully thought out. Oil enters a single union and feeds through a port directly under the exhaust port to a groove round the piston with which it comes into line at the bottom of its stroke. Oil is then directed downward through internal oilways by a positive feed to the main bearings. The gudgeon pin is provided with oilways, and has a central groove cut in it, so that no matter what position the pin, oil has free access to the oilways.

At the same depot several models of the French-made Viratelle were to be seen. No one can accuse this machine of being out of date. It is a machine which has been thoroughly thought out from stem to stern. The single-cylinder has a bore and stroke of 73×82 mm. (350 c.c.). Both valves are enclosed, and



Engine and gear unit of the Viratelle.

are situated at the rear, while the whole of the transmission is entirely protected. Behind the engine is a three-speed epicyclic gear box. The gears are selected by a lever on the handle-bars, while the clutch is engaged either by the pedal provided or by the handle-bar lever. Water-cooling is arranged on the thermo-siphon principle, the radiator being carried behind the front forks. Between each portion of the radiator is a fan driven by means of a flexible shaft from the magneto drive. The forks are not without interest, as they are hinged at the fork crown, and are provided with laminated springs which act both as fork springs and as girders. Knock-out spindles are provided to each of the wheels, and a spring seat-pillar and sprung footrests

form part of the equipment. Control wires pass through the handle-bar tubes, which are finished in black. A similar machine was also shown to us which was fitted with a two-cylinder engine with the cylinders arranged side by side.

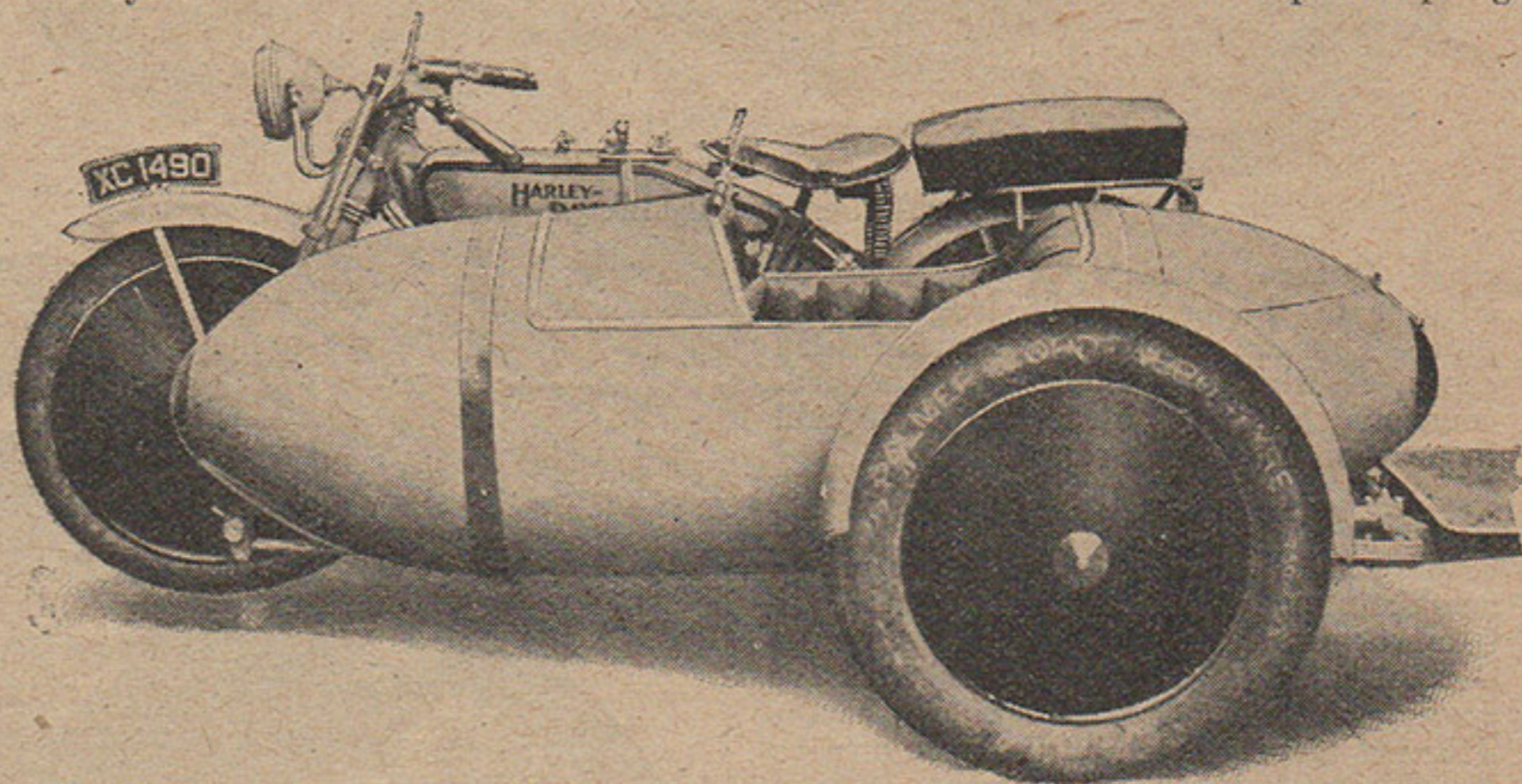
Several sidecars were to be seen outside the building. Among these we may mention the Delta, now known as the Volta, which was described in detail in the issue of June 3rd, 1920.

Car Type Tyres.

One of these machines was shown fitted with a 750×135 mm. oversize Palmer cord tyre. The sidecar is best known

Accessories Co., 23, Westworth Road, Manor Park, London, E.12.

For those who fancy a two-seated sidecar the Art should be of special interest. It is manufactured by the Sandham Engineering Co., Ltd., and is sold by the Art Motor Cycle and Sidecar Co., 18, Walbrook, London, E.C. The body is most roomy, is provided with a comfortable hood and screen, and in future models the former will be designed to fasten down on to the latter, thus doing away with the necessity of straps. The body is hung on three-quarter-elliptical car-type springs, while the sidecar wheel is on half-elliptical springs



Volta torpedo sidecar, previously known as the Delta, fitted to a Harley-Davidson.

for its luxuriously fitted and elaborately equipped projectile-shaped body. Such a tyre as that referred to is practically unwearable, and greatly increases the comfort of the passenger. The Volta sidecar is sold by the Volta Sidecar and

provided with long shackles which are hinged together. Strength for the sidecar axle is obtained by having this composed of three tubes instead of one single one. A load of up to forty stone may be carried.

Lightweight Records Broken.

Two-stroke and Four-stroke Successes. A Two-stroke beats the Flying Kilo. Record.

NO doubt in the effort to secure effective Show advertising, records in the lightweight classes were broken with bewildering rapidity during last week.

First came J. V. Prestwich, who, mounted on a side-by-side valve J.A.P.-engined Diamond, made several alterations to the Class A (250 c.c.) figures on November 23rd. On November 25th the same rider again made an attack, and succeeded in raising all the 250 c.c. and 275 c.c. up to fifty miles another notch, while on the 29th (the opening day of the Show) he made new figures in the same classes for all distances and times up to 250 miles and six hours respectively.

As an instance of the way in which the Diamond-Jap maintained its tune, reference to the tabulated results below will show that the speed during the sixth hour was greater than that attained during the two hours immediately preceding.

Excellent as was the speed over the flying kilometre, the record established on November 23rd was destined to be short-lived, for on December 1st D. R.

O'Donovan, past master of extracting speed from whatever he rides, brought out the hush model 63×80 mm. (249 c.c.)



J. V. Prestwich, who, on a 2½ h.p. Diamond-J.A.P., broke the flying kilo. and flying mile records, and also International records, at Brooklands.

Velocette, and proceeded to add an extra 3 m.p.h. to the flying kilometre speed. The performance is a remarkable one and is really epoch-making, in so far that it is the first two-stroke machine to break a short distance ultra high-speed record, although a machine with this type of engine has already made a successful onslaught on the long distance figures.

November 23rd, 1920.—J. V. PRESTWICH (2½ Diamond-Jap), Class A. (250 c.c.): Flying kilom., 35s. = 63.91 m.p.h.; flying mile, 56.6s. = 63.60 m.p.h. International Mean Record, Class A.—Flying kilom. 60.13 m.p.h.; flying mile, 62.39 m.p.h.

November 25th, 1920.—Class A. (250 c.c.): 5 miles, 5m. 3s. = 59.4 m.p.h.; 10 miles, 10m. 17½s. = 58.3 m.p.h.; 50 miles, 53m. 45s. = 55.81 m.p.h.; 1 hour, 55ml. 961yd. (55.55 m.p.h.).

Class A1 (275 c.c.): 10 miles, 50 miles, and 1 hour as above.

November 29th, 1920.—Classes A. (250 c.c.) and A.1 (275 c.c.): 100 miles, 1h. 50m. 39½s. = 54.22 m.p.h.; 150 miles, 3h. 0m. 48s. = 49.75 m.p.h.; 200 miles, 4h. 18m 35s. = 46.46 m.p.h.; 250 miles, 5h. 18m. 58½s. = 47.02 m.p.h.; 2 hours, 107ml. 1,442yd. = 53.91 m.p.h.; 3 hours, 149ml. 474yd. = 49.75 m.p.h.; 4 hours, 188ml. 263yd. = 47.03 m.p.h.; 5 hours, 234ml. 617yd. = 46.87 m.p.h. 6 hours, 283ml. 782yd. = 47.24 m.p.h.

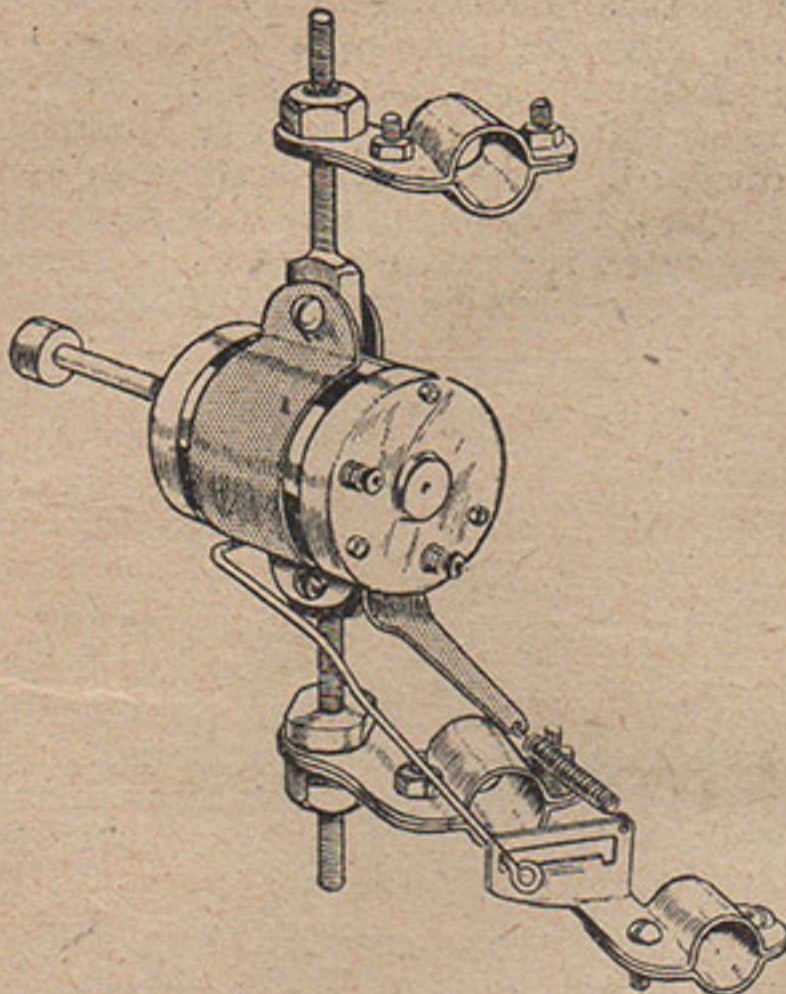
December 1st, 1920.—D. R. O'DONOVAN (2½ Velocette), Classes A. and A.1: Flying kilom., 33.4s. = 66.97 m.p.h.



Illustrated Review of Useful Equipment for Motor Cycles.

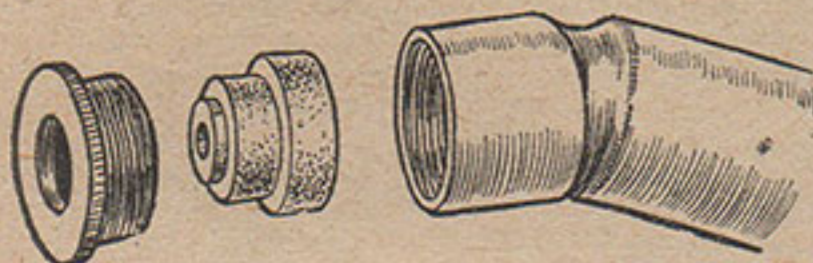
A.C. SPARKING PLUG, LTD., London, S.W.7.—Various patterns of sparking plugs suitable for every type of engine.

ALTRNA CYCLE LIGHT Co., 89, Farringdon Street, London, E.C.4.—In a very small and compact dynamo lighting set produced by this concern, the dynamo itself is of the circular type with six stationary coils and a central rotor. The driving arrangement is by means of a friction wheel working on the tyre of the



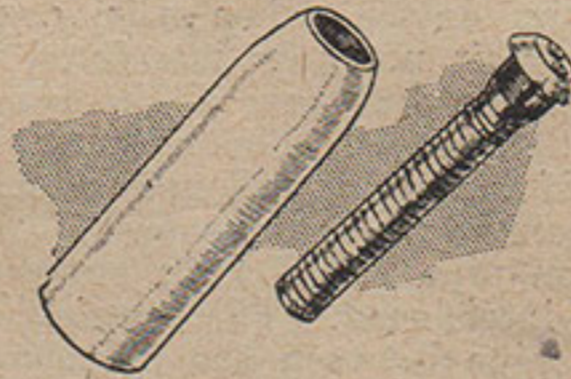
Friction drive from the tyre is employed with the Alterna dynamo for lightweights. The brackets carry it between the top and bottom rear frame stays.

back wheel, the dynamo being carried on a special bridge between the top and bottom back stays. A dry battery is also provided, since the current generated is alternating, and therefore unsuitable for accumulator charging. The head lamp is of rather unusual construction, since the bulb is carried on an arm and faces backwards towards the reflector. This arrangement gives an absolutely non-dazzling beam. While standing a small bulb connected with the dry battery circuit provides sufficient illumina-



Loose connections are eliminated from the Burn Easy-Fix inflator, which pushes directly on to the valve. It was exhibited by Timson Bros.

tion to comply with the law. The Automatic sparking plug is another feature which was shown, its chief claim to

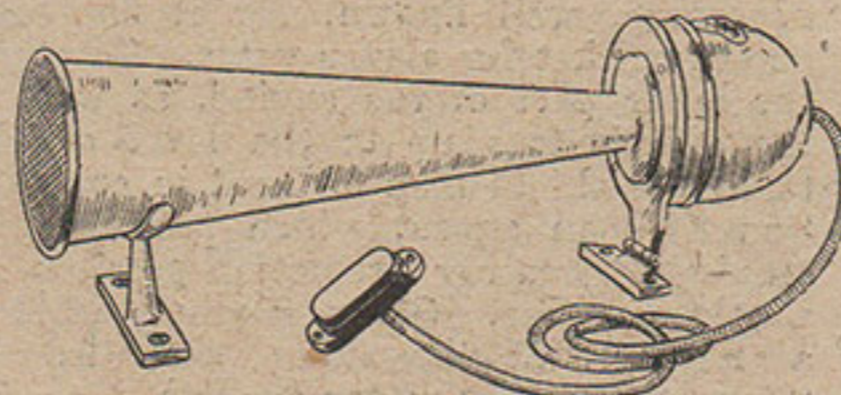


Made from French "75" shells, the Alterna electric heater is here shown dismantled.

notice being the movable points on the central electrode. It is stated that these vary their position at each explosion, and consequently never become affected by excessive carbon deposit. Another device which was shown is not only interesting on account of its utility, but also for the fact that it is a souvenir of other days. It is known as the "75" sidecar heater, and consists of a French 75 mm. shell with an internal resistance which is connected by a bayonet plug to an electric lighting circuit.

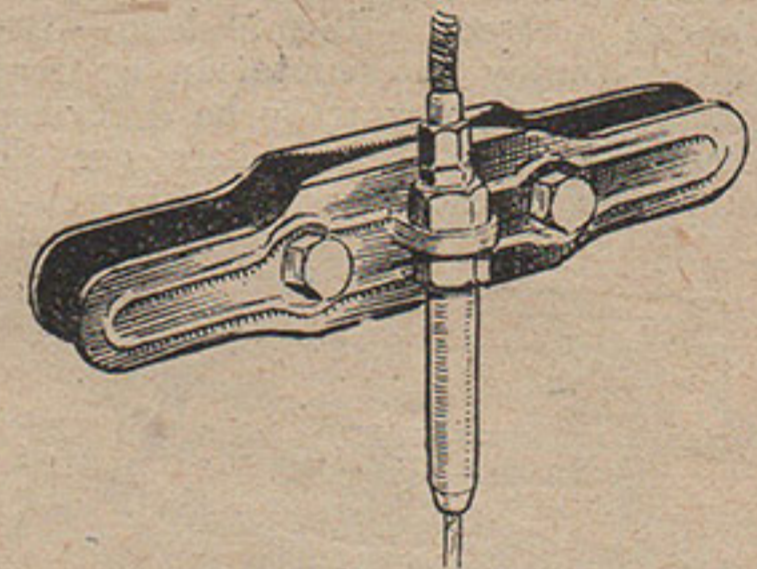
BEST AND LLOYD, LTD., Cambray Works, Handsworth, Birmingham.—The Best semi-automatic drip feed is, of course, so well known that it is scarcely necessary to make any comment regarding it, and it suffices to say that it may be obtained in every possible form for motor cycle and light car lubrication. The Best mechanical oil pump, however, which is driven from the timing gear of the engine, and which works in conjunction with the semi-automatic drip feed, is not quite such a familiar component, although it has had considerable testing over the last twelve months. From actual experience, however, on one or two machines, we can say that it entirely fulfils the requirements desirable in a mechanical lubricator, since the supply of oil which it delivers can be varied as required either separately or in conjunction with the control of the throttle.

BOWDEN BRAKE Co., LTD., Tyseley,



An Apollo horn suitable for the front panel of a sidecar.

Birmingham.—In addition to the already familiar lines connected with motor cycle brakework and control, the Bowden Brake Co. is making a special type of front brake, which is to be known as the Replacement pattern. This is specially suitable for old machines which are not provided with front brakes, and which in many cases must be so fitted to comply with legal requirements. The special feature is that a simple form of crossbridge to carry the adjustable Bowden wire stop is provided, and this is clamped to the front fork girders in any convenient position. A new and very attractive shape of handle-bar with inverted lever controls is also made. It

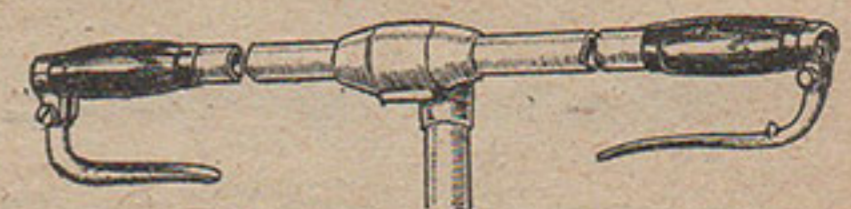


Stop bracket of the new Bowden replacement brake.

is of the straight pattern with slightly inclined and dropped grips.

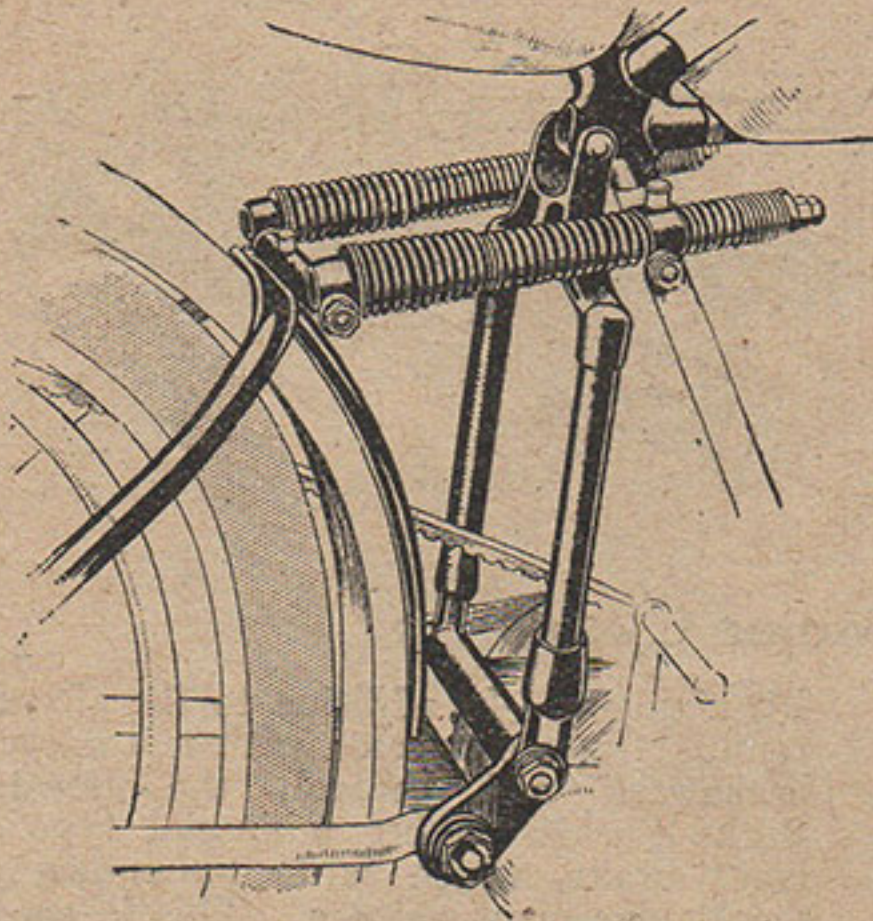
BOWDEN WIRE, LTD., Victoria Road, Willesden, London.—Many novelties are being introduced in the control-operating mechanisms of this concern. Some of these have already been dealt with in *The Motor Cycle*, notably the Master Control, which by very simple means allows for interconnection and independent action of a combined hand and foot operation of clutches or throttles. Several types of front wheel brakes of the belt rim pattern are also being introduced for 1921 machines, and these provide a much more satisfactory method of braking than any of the rim types, but the latter are still produced.

BRAMPTON BROS., LTD., Oliver Street Works, Birmingham.—As well as motor cycle chains and front forks, both of



An improved stem lug with outlet for internal cables is incorporated in the Bowden Brake Co.'s handle-bar.

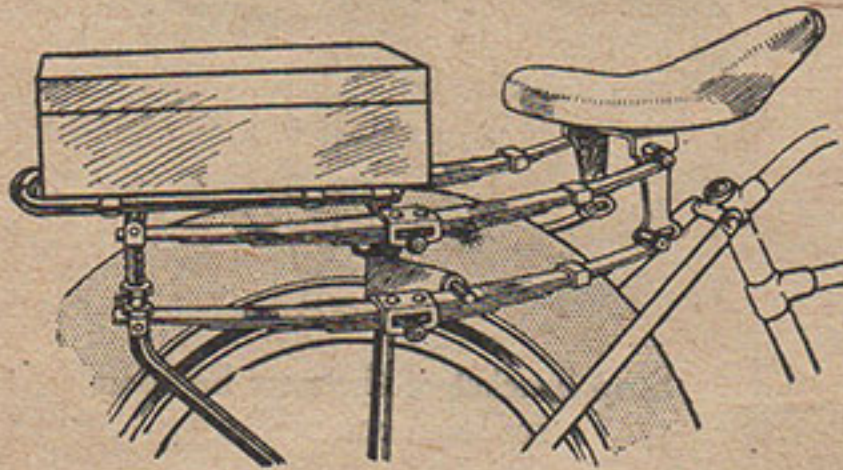
Accessories at Olympia.—



A Brampton spring frame unit for fitting to any standard type of lightweight frame.

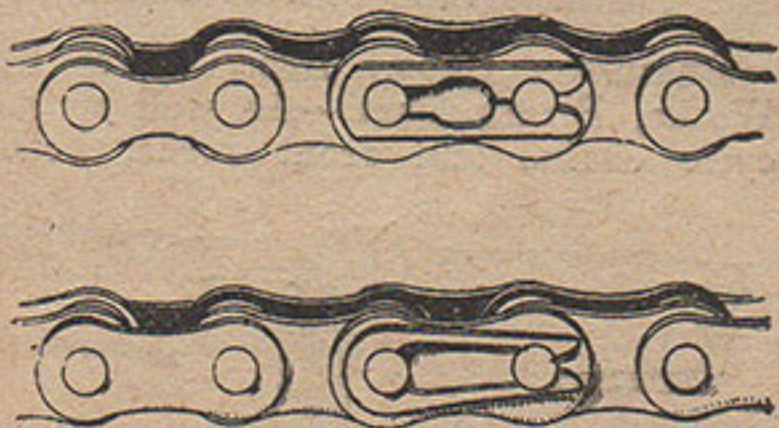
which are equally well known, a new spring frame is being offered. It consists of stays hinged behind the gear box bracket and connected to the rest of the machine through the top stays by a system of coil springs similar to that employed for the top links of the front forks.

J. B. BROOKS AND Co., LTD., Great Charles Street, Birmingham.—Brooks saddles enjoy a reputation as regards quality which may truly be described as unequalled, but the makers are determined not to rest on their laurels, and



Brooks's cantilever saddle and a carrier case by the same makers.

have therefore produced an entirely new type of saddle suspension. This consists of four laminated cantilever springs pivoted at their centres upon the front stay of the standard motor cycle carrier. The forward extremities of the springs (two at each side) carry a pan seat leather topped on two vertical links, while the rearmost ends of the springs are free to slide under a pair of adjustable rollers, by means of which the tension on the springs may be altered to suit the rider's weight. The saddle has practically a vertical motion, and, owing to the length of the springs used, the rider may truly

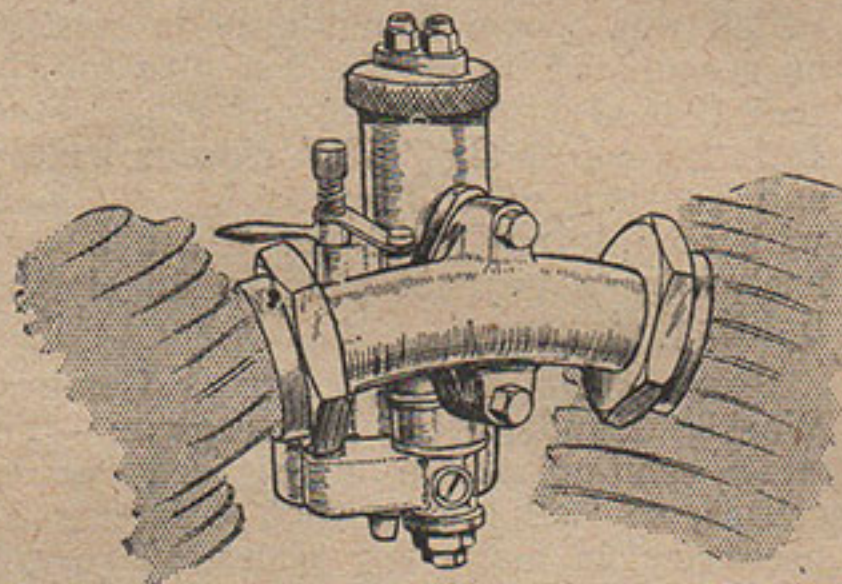


(Above) The old type Renold chain and spring clip link. (Below) The new chain of double strength, with the new clip which cannot be thrown off at any speed.

be said to float when carried on this type of seat. Many machines shown at Olympia were equipped with this new form of Brooks saddle, which is bound further to enhance the high reputation of those responsible for its production.

BROWN AND BARLOW, LTD., Carburet Works, Witton, Birmingham.—Carburettors for all kinds of engines are the standard production of Messrs. Brown and Barlow, Ltd., whose name stands for all that is good in this particular component part. There are very few changes in the standard variable jet and two-stroke types, but a detail improvement has been effected in the method of operating the pilot jet which is of special service for easy starting on V twin engines. On former models, if the driver omitted to cut out the easy starting device when the engine was running, it not only interfered with the carburation but caused the consumption to be excessive. The new arrangement, even if forgotten, will not seriously affect the running. An improved form of induction pipe for V twin engines is also being introduced. This consists of a very short pipe between the cylinders with a flange fixing for the carburetter. By this arrangement the latter is brought into a very unobtrusive position between the cylinders, where it is protected from draughts of cold air and obtains the maximum benefit from conducted heat.

C. L. AND H. BURTON, Bernard Street, Walsall.—Burton sparking plugs have

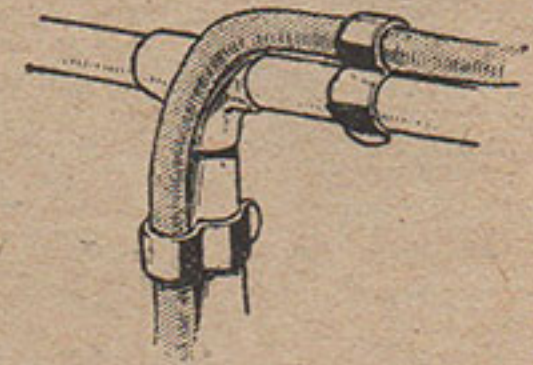
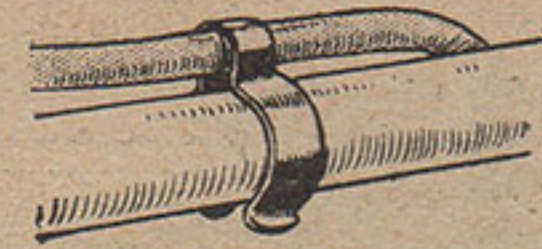


Short induction pipe and flange fixing for B. & B. V-twin carburetter, showing also the new easy starting control.

continually proved their efficiency in all types of engines, and it has not been found necessary to make any alteration to the standard three-point model with detachable steatite insulator. Many variations are made to suit different engines, such as those which necessitate a long reach or have a special thread. A new single-point model is also being produced as a competitive line; this also has a detachable insulator.

COLLEGE LEATHER Co., Castle Street, Northampton.—The College mudshield is, of course, well known, for it has been on the market for eleven years. Covering the lower part of the engine, as well as the rider's legs up to the level of the tank, the shield may be used in conjunction with an apron, which provides the maximum weather protection possible on a solo machine. Other products include a number of becoming soft leather "tams" for lady motor cyclists.

COOPER STEWART ENG. Co., LTD., 11, Broad Street, Bloomsbury, London, W.C.2.—For those who favour the mag-



J.A.R. clips for acetylene tubing; there are two varieties to fit frame tubes and carrier tubes.

netic type of speedometer, which, of course, has decided advantages in many respects, the Stewart instrument may be regarded with interest. One of its special features is the absence of complicated mechanism. In addition to the speedometers, the firm produce a variety of practical mechanical horns.

COWEY ENGINEERING Co., LTD., Kew Gardens, Surrey.—Cowey speedometers are made for all classes of motor cycle, and have been improved in details, a remarkably clean appearance having been attained. The same remark also applies to the Cowey horn, which is certainly in the front rank on account of its weather-proof construction and reliable mechanism.

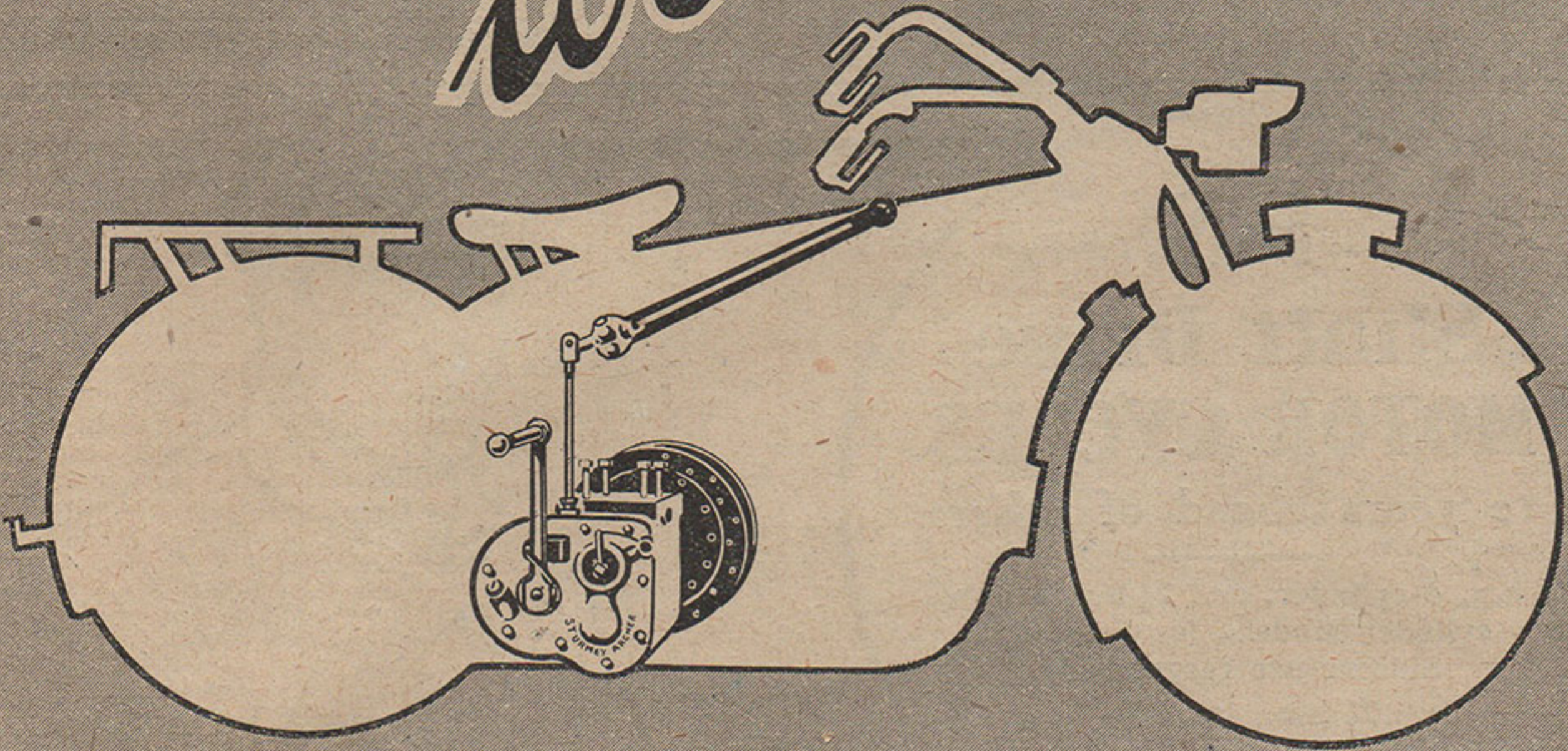
COX CARBURETTERS, LTD., Lower Essex Street, Birmingham.—Automatic carburation is one of those subjects which form a never failing source of discussion amongst motor cyclists, and the Cox-Atmos carburetter, by reason of its simplicity, has created special interest. A new type of float chamber has been designed, and this includes an inner shell having gauze-covered apertures, so that no grit or water can pass through to the jet itself. Top feed has now been adopted.

G. DAVENPORT AND Co., LTD., Clerkenwell Road, London, E.C.1.—A departure from the usual type of speedometer construction was shown on this stand, which has several features of interest. It is known as the Robinson, and carries a guarantee for 10,000 miles, this being made possible by the fact that it is constructed entirely by highly skilled instrument makers. The speed indication is controlled by a centrifugal governor, but



A high-tension terminal and an electrical switch made by the makers of Cooke's plugs.

If it's a Good
Motor Cycle,
look for



STURMEY ARCHER
COUNTERSHAFT GEAR

DUNELT

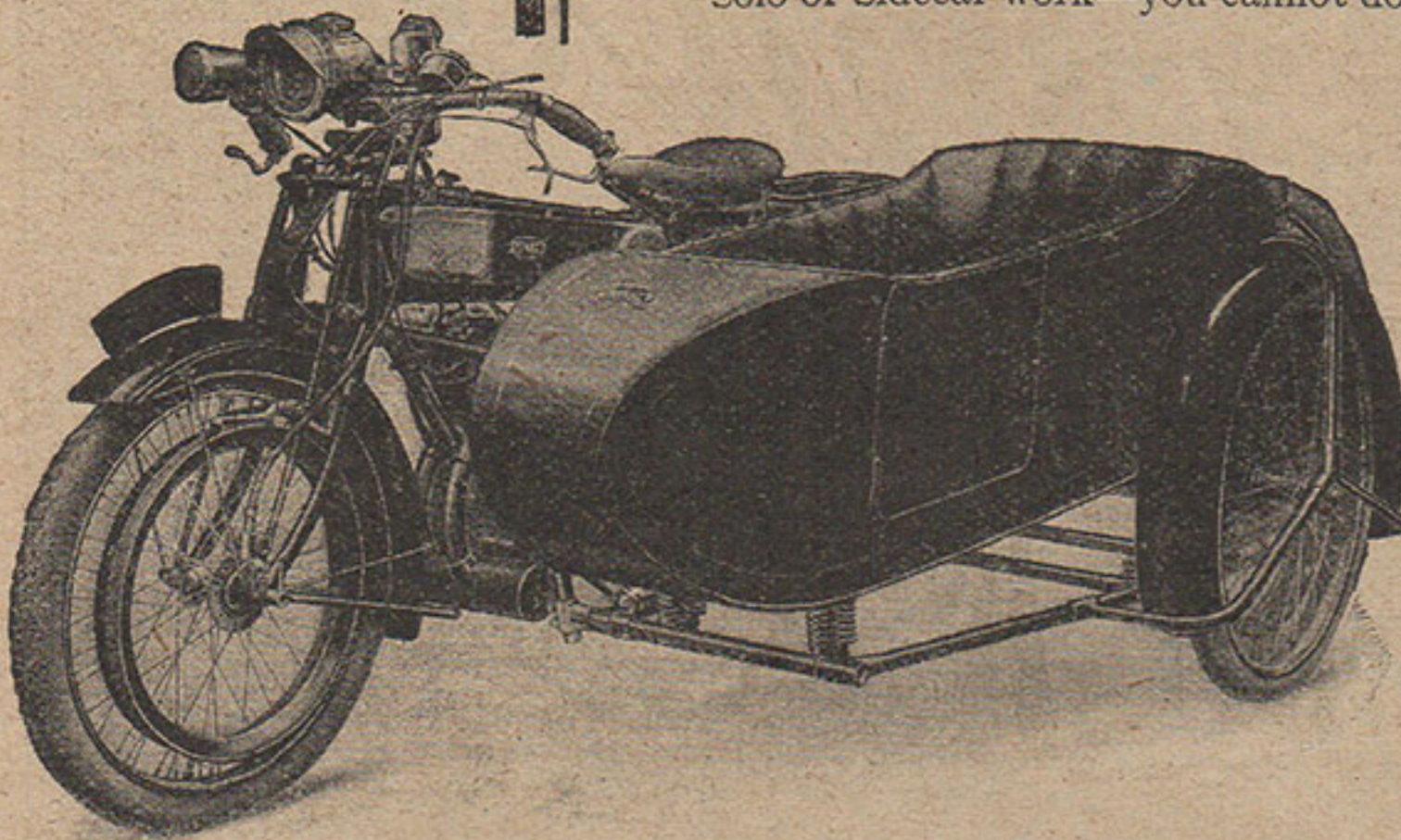
TWO-STROKE

The "DUNELT"
Combination,
Price, complete,
£150.

Solo, £115.

THE mount for Solo or Sidecar work

If you want a double-purpose motor cycle—a mount that is supremely suitable for Solo or Sidecar work—you cannot do better than invest in a "DUNELT."



The "DUNELT" is exceptionally powerful and efficient, and will stand up to the most exacting test—as proved by its great success in the A.C.U. SIX DAYS TRIAL.

It is most flexible, will two-stroke perfectly at all speeds, develops 10 to 12 h.p., and will keep cool under the most trying conditions.

Did you see the "DUNELT" at OLYMPIA? If not, write us for Catalogue and address of nearest agent.

DUNFORD & ELLIOTT (Sheffield) Ltd.

Bath Street, Birmingham.

F. W. Wall.

Immediate **"F.N."** Delivery

Shaft Drive MOTOR CYCLES

are years ahead of others.

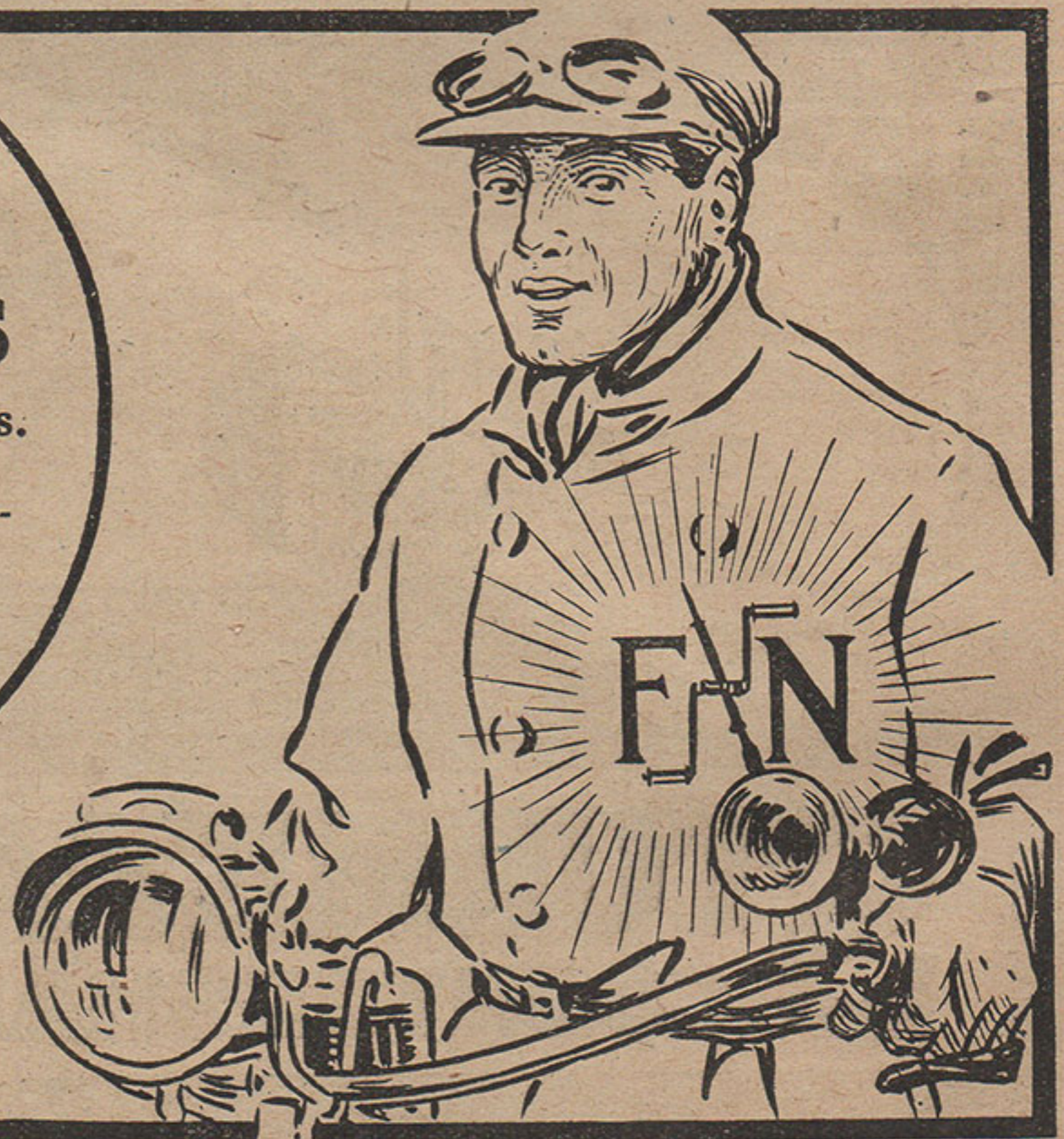
7 h.p. 4-cylinder, and 2½ h.p. Single-cylinder Models, for Solo and Sidecar use respectively.

2½ h.p., tax 30/-

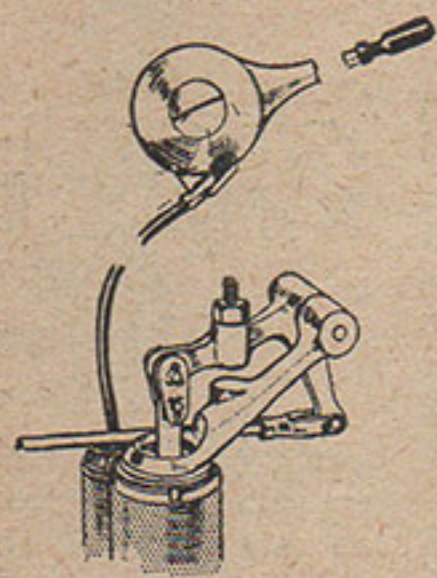
"F.N."

"F.N." (ENGLAND) LTD.,
Efenmo Works, Kimberley Road,
Willesden Lane, LONDON, N.W.6.

'Phone: Willesden 2395. 'Grams: "Efenmo, Brond, London."



Accessories at Olympia.—



A Binks carburettor arranged for twist grip control. An extra air lever is provided.

the trip recorder (and the total mileage recorder under the first 100 miles) is shown on a circular scale by two pointers coloured white and red respectively. The trip is instantly reset by a brass plunger knob in the centre of the dial.

Also shown by this firm was the Pettitts safety filler, which is carried in a

neat leather case, which also accommodates a very useful spanner for all sizes of sparking plugs and petrol can stoppers.

DEGORY NO JET CARBURATOR Co., 93, Moore Park Road, S.W.6.—Amongst one lever automatic carburetters, the Degory No Jet is rapidly coming into a leading position, since it is proving to be exceptionally economical in use. Many of our readers have testified to its excellent qualities in this direction, and almost phenomenal mileages are claimed for it with various types of engines. It is particularly neat in appearance, and has a minimum number of parts, while the method of attaching the float chamber to the throttle barrel allows it to be used in any position.

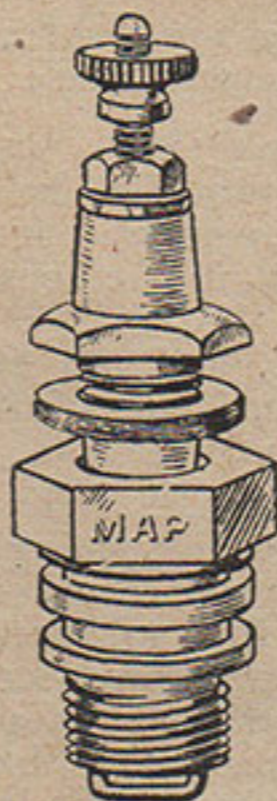
EAST LONDON RUBBER Co., 29-33, Great Eastern Street, E.C.2.—This concern is chiefly devoted to supplying all the demands of the retail trade, but a number of specialist lines are carried. Amongst these may be mentioned the Flexifork, a new type of front fork, which combines a vertical action controlled by coil springs with a radial action limited by a leaf spring; the E.L.I. spring seat-pillar, which is one of the many varieties of auxiliary saddle suspension introduced this year; and the Warner front forks and rear spring frame attachment. The latter is a simple form of spring frame

having subsidiary top stays, which are connected to floating links carrying the wheel spindle, and pivoted at the rear fork-end. This device may be fitted to almost any standard pattern motor cycle frame with very little structural alteration.



Sterling leg-guards exhibited by Brown Bros., Ltd.

Representative Sparking Plugs.



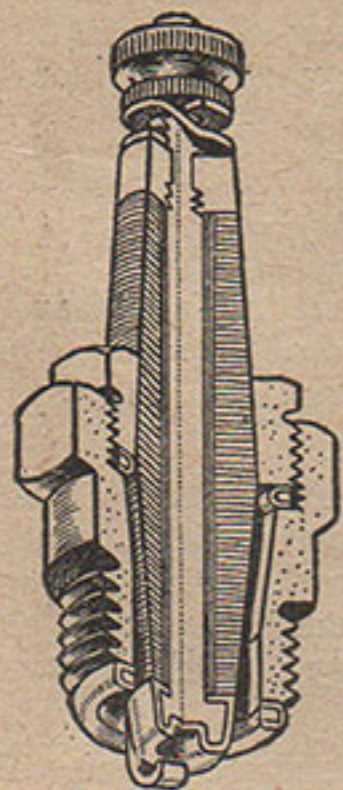
The M.A.P. plug.



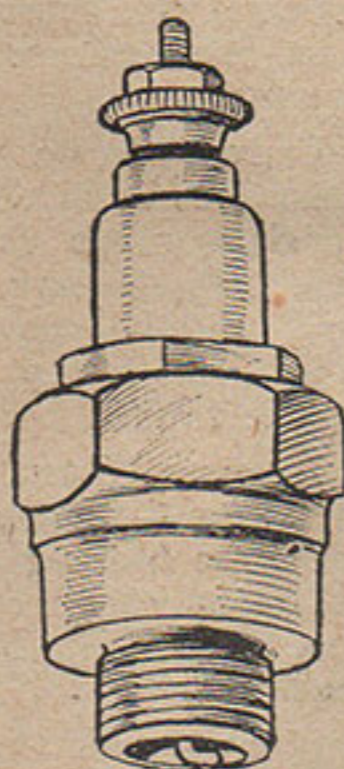
Lodge single point.

E.I.C. MAGNETOS, LTD., Sampson Road North, Birmingham.—As the standard ignition unit on a number of first rank machines, the E.I.C. magneto is unaltered, since the reliability of its design is unquestioned.

FORWARD SPARKING PLUG Co., 35, Summer Row, Birmingham.—A large variety of sparking plugs are manufactured by the Forward Sparking Plug Co., and all of them have proved their worth by long service in the hands of the public. A new model introduced this year is the Aero type, which has air-cooling flanges round the body. There is one central electrode, and the insulation is of the detachable mica variety. A number of other accessories are produced, and amongst these may be mentioned the



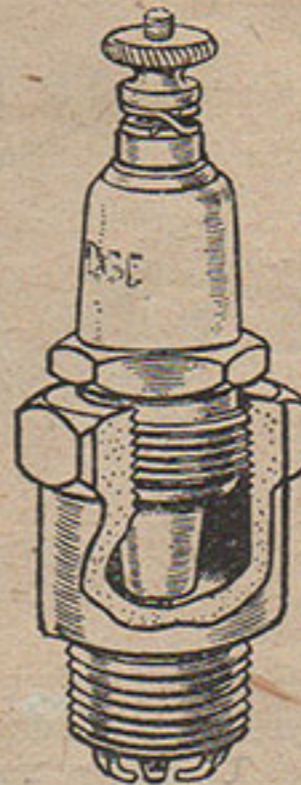
Apollo in section.



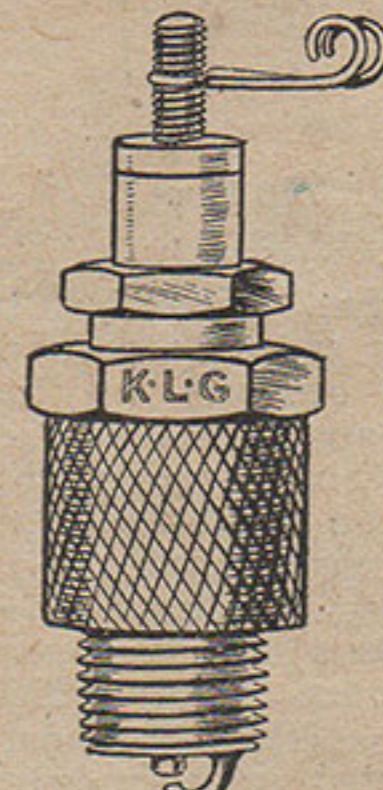
The Vita.



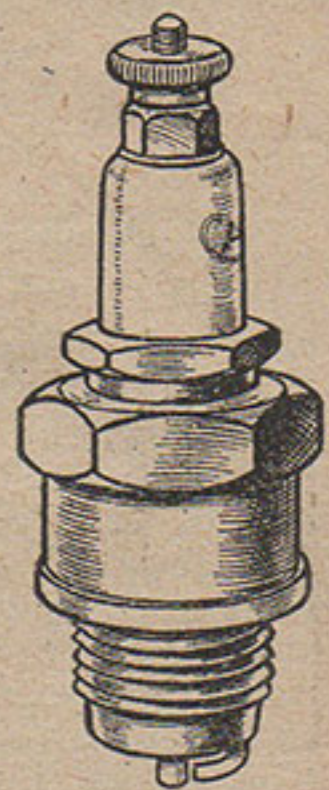
A.C.



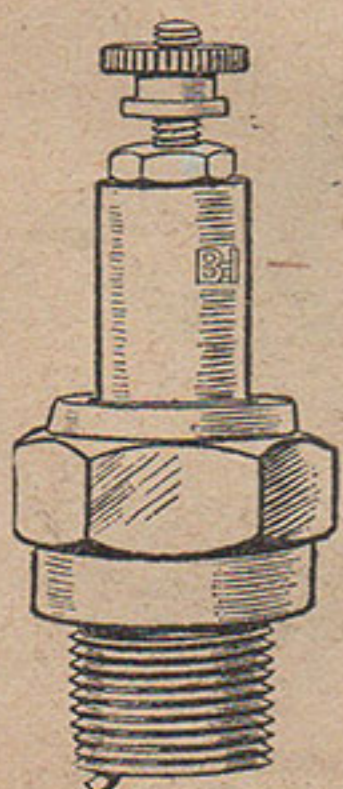
Section of Lodge plug.



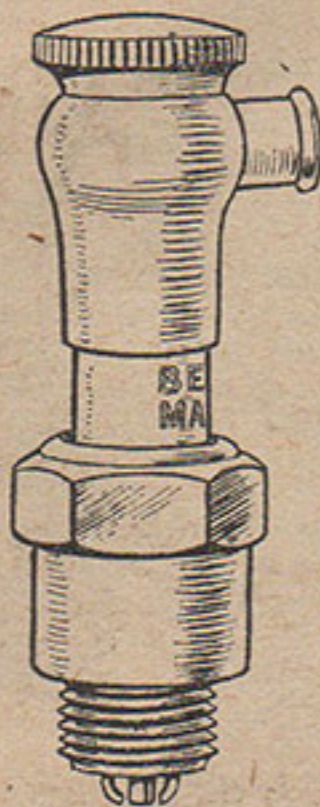
K.L.G.



Single point C.A.V.



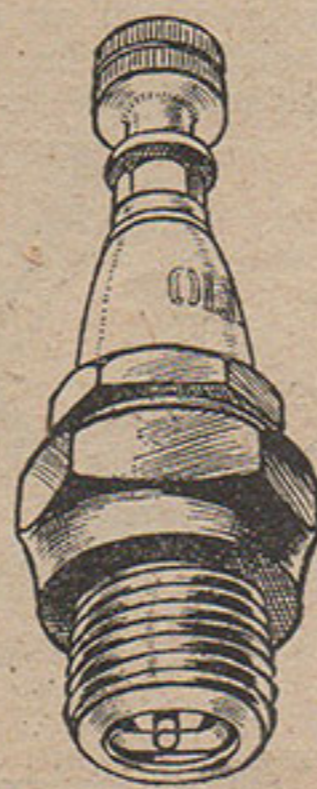
The Binks.



Bluemel Mascot.



The C.A.V.



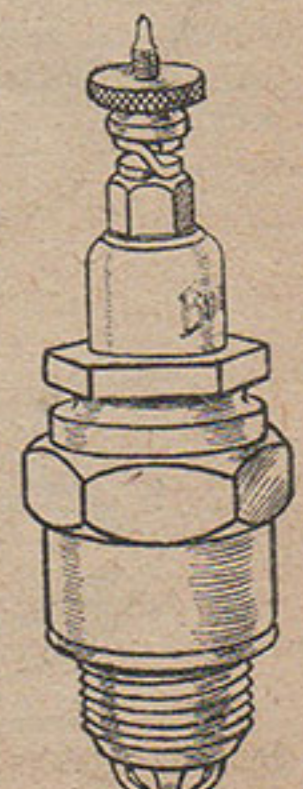
Oleo.



Forward.



The Sphinx

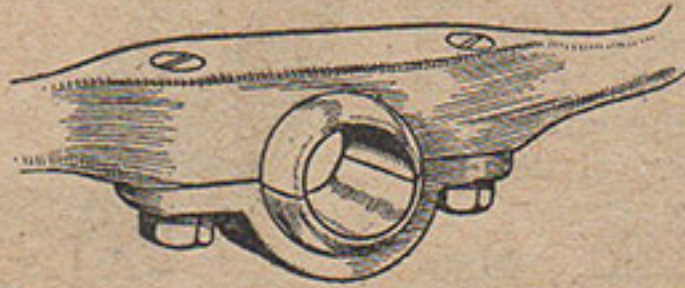


Burton

Accessories at Olympia.—

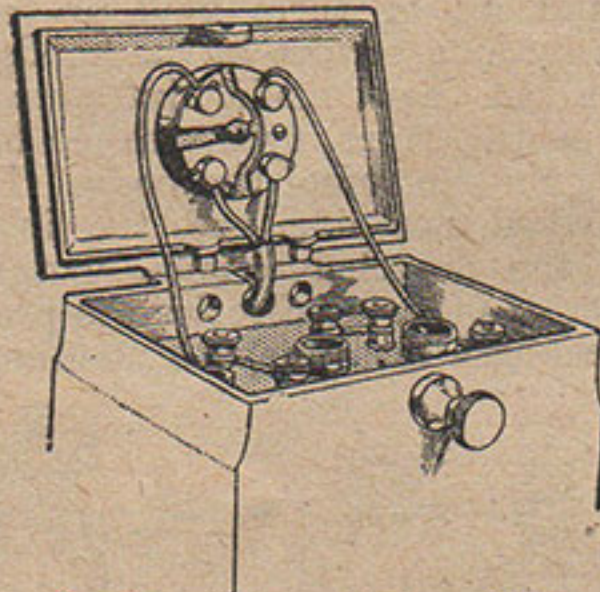
valve stem adjusting cups for engines with non-adjustable tappets, the well-known Forward belt fasteners, and the new type of endless leather link belt, which varies from all other belts of this type in having all the connecting link bearings of metal.

A. H. HUNT, LTD., Tunstall Road, Croydon.—Electric lighting equipment



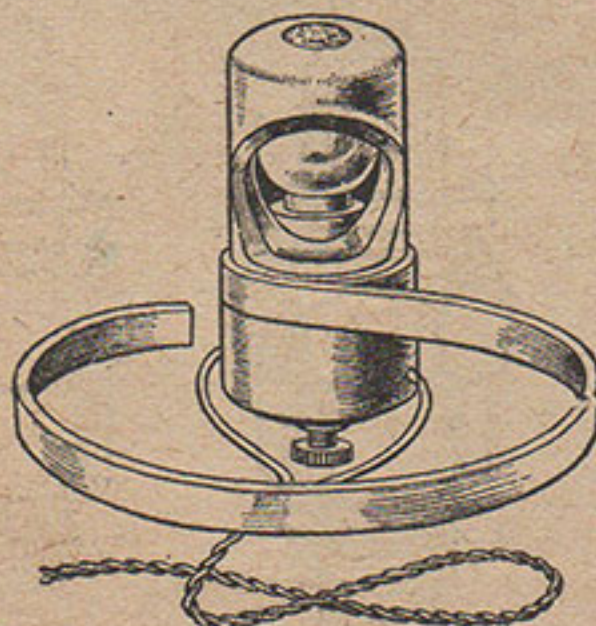
Ball and socket clamp of the Hunt electric head lamp and accumulator bracket.

using dry batteries or accumulators is the speciality of this firm, and amongst their new products may be specially mentioned the new Pleteset. This consists of a very efficient head lamp (carrying a six-volt bulb) mounted on a bracket which also supports a cast aluminium battery box. The bracket is adaptable for fitting to almost any type of handle-bar, since it makes use of a ball and socket clip of



Details of the switch on Hunt battery lighting set.

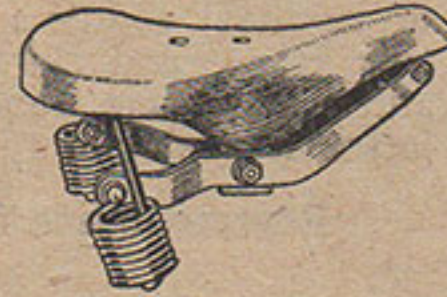
extremely simple design. Included in the top of the battery case is a positive screw switch, which connects up the three-cell block type accumulator as required. The whole fitting is exceedingly well designed, and has a decidedly handsome appearance, and may be secured to any pattern handle-bar. Amongst other items produced by this firm is a neat and simple speedometer lamp, which clips around the body of the instrument. The bulb in this is tinted green, in order to eliminate any glare. In addition to the above-mentioned lamp, cheaper varieties, more suitable for lightweight machines, are produced, while every style of dry battery side and tail lamps is available, in addition to route card



Hunt's speedometer lamp.

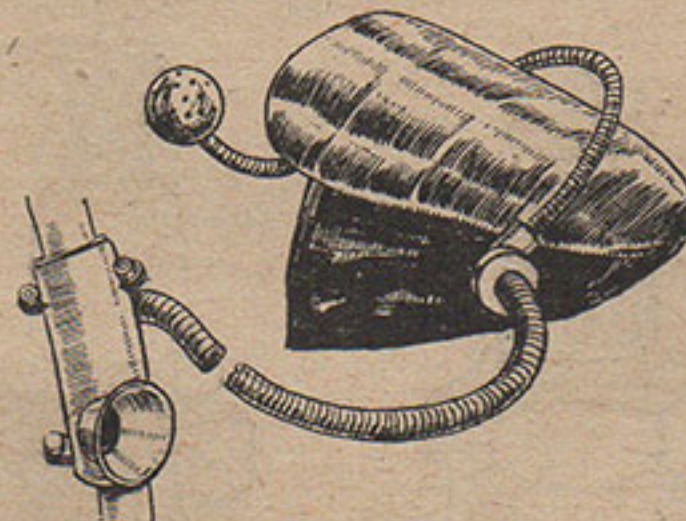
holders, spring lamp brackets, and a neat lock for motor cycles which is combined with two spanners and tyre levers. For use in the garage as an inspection lamp, there is a very convenient arrangement of a Hellesen dry battery with a holder which carries a small bulb in a large diameter reflector.

JELLEY'S SADDLE Co., Coventry.—An unusual type of motor cycle saddle having many claims to notice. Instead of a leather top a moulded flexible seat is used, and this has the property of conforming to the shape most comfortable to the rider. We can speak from experience of the comfort provided by this arrangement. Minor points connected with the saddle are that it has no rivets in the top; moreover, the rubber construction is waterproof, and the saddle does not suffer if the machine is left out in the rain for a length of time.



Jelley's padded flexible waterproof saddle top.

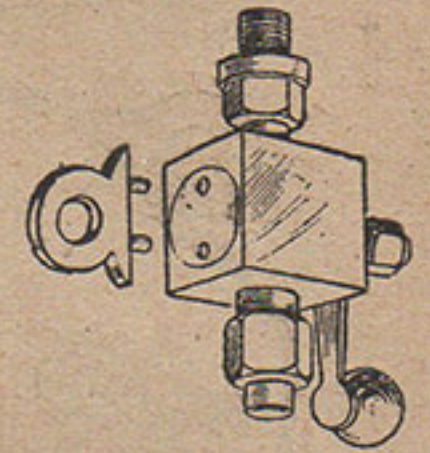
KERSLAKE, LTD., London, S.W.15.—To the motor cyclist the most interesting item amongst this firm's productions is a "sensitive" control for carburettors. This consists of a trigger secured beneath the regular control levers, and the actuation of the former opens the throttle without altering the setting of the latter. The effect is that of a sensitive finger-controlled accelerator.



A Lamplugh sidecar heater and hand warmer.

S. A. LAMPLUGH, LTD., King's Road, Tyseley, Birmingham.—A number of novelties are being introduced by this firm of specialists in motor cycle brass fittings. Probably the one of most seasonal interest is the Lamplugh sidecar heater; this is a very simple arrangement whereby warm air is passed from a box encircling the exhaust pipe and connected by a tube to a muff

in the toe of the sidecar. An extension from the latter terminates in a perforated metal ball which can be used as a hand warmer. It will be noted that no exhaust gas is passed into the warmer, and the connecting tube may be detached in a moment if the heat is not required. In view of the fact that thefts of motor cycles are now very prevalent, the Ace petrol tap lock is worthy of notice. This is a petrol tap of somewhat larger proportions than the average, which is self-locking in the off position. It can only be reopened by the insertion of a special plunger key which engages with two holes provided in the back of the tap. Only when the key is pressed in may the tap be opened. Amongst other productions are a very easily operated quickly detachable filler cap and a two-level tap combined with a filter.



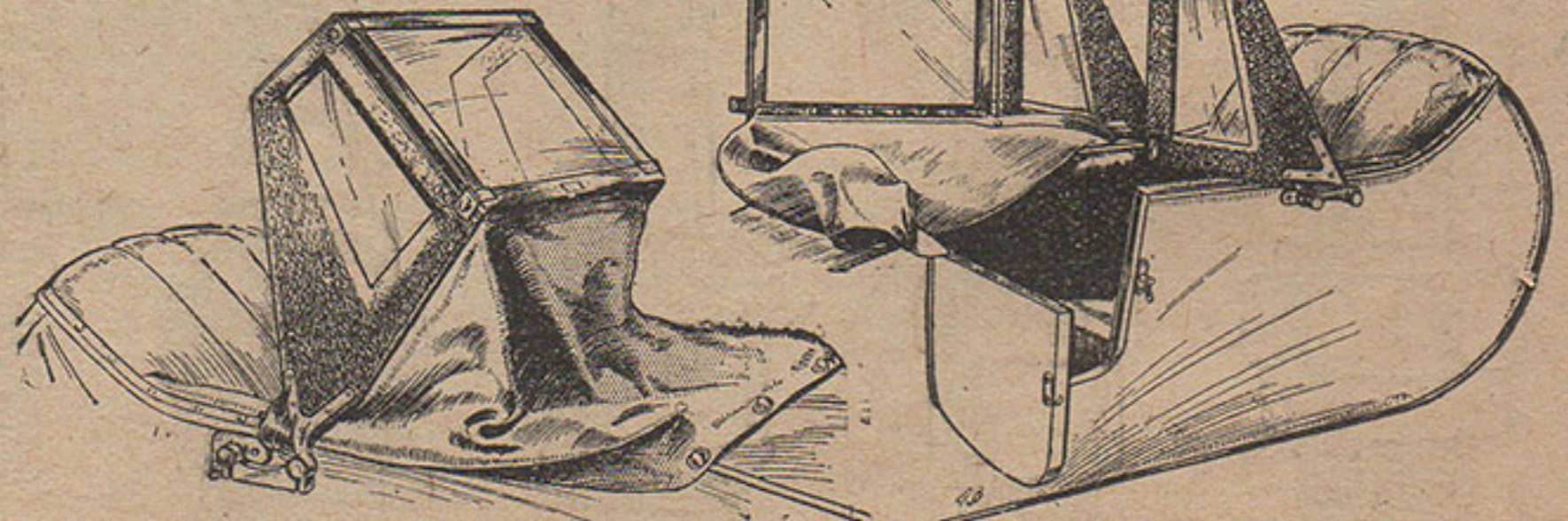
Lamplugh's Ace petrol tap lock; the petrol can only be turned on when the key is inserted.

LEO RIPPAULT, LTD., 1, King's Road, N.W.1.—Oleo plugs in various models are the chief speciality of this firm. The construction is simple and very compact, electrodes of the single point and cross-bar type being used; the insulators are detachable, and are either of mica or porcelain. There is also a new model plug having a non-detachable mica insulator and a single central electrode. Probably this is one of the smallest sparking plugs made for motor cycle use, and it follows the general lines of those which were used successfully on rotary aircraft engines.

LLOYD MOTOR Co., LTD., 132, Monument Road, Birmingham.—A saddle suspension, made familiar on the L.M.C. machines, is now offered as a separate unit for the conversion of any machine which has a top tube not covered by a saddle tank.

LYCETTS, LTD., Bromley Street, Birmingham.—Saddles, pannier bags, and a top tube toolbag are products which are all satisfactory component parts in the specifications of many well-known machines.

MARKT AND Co. (LONDON), LTD., 98-100, Clerkenwell Road, E.C.1.—Adjustable spanners, Veeder cyclometers, fly-

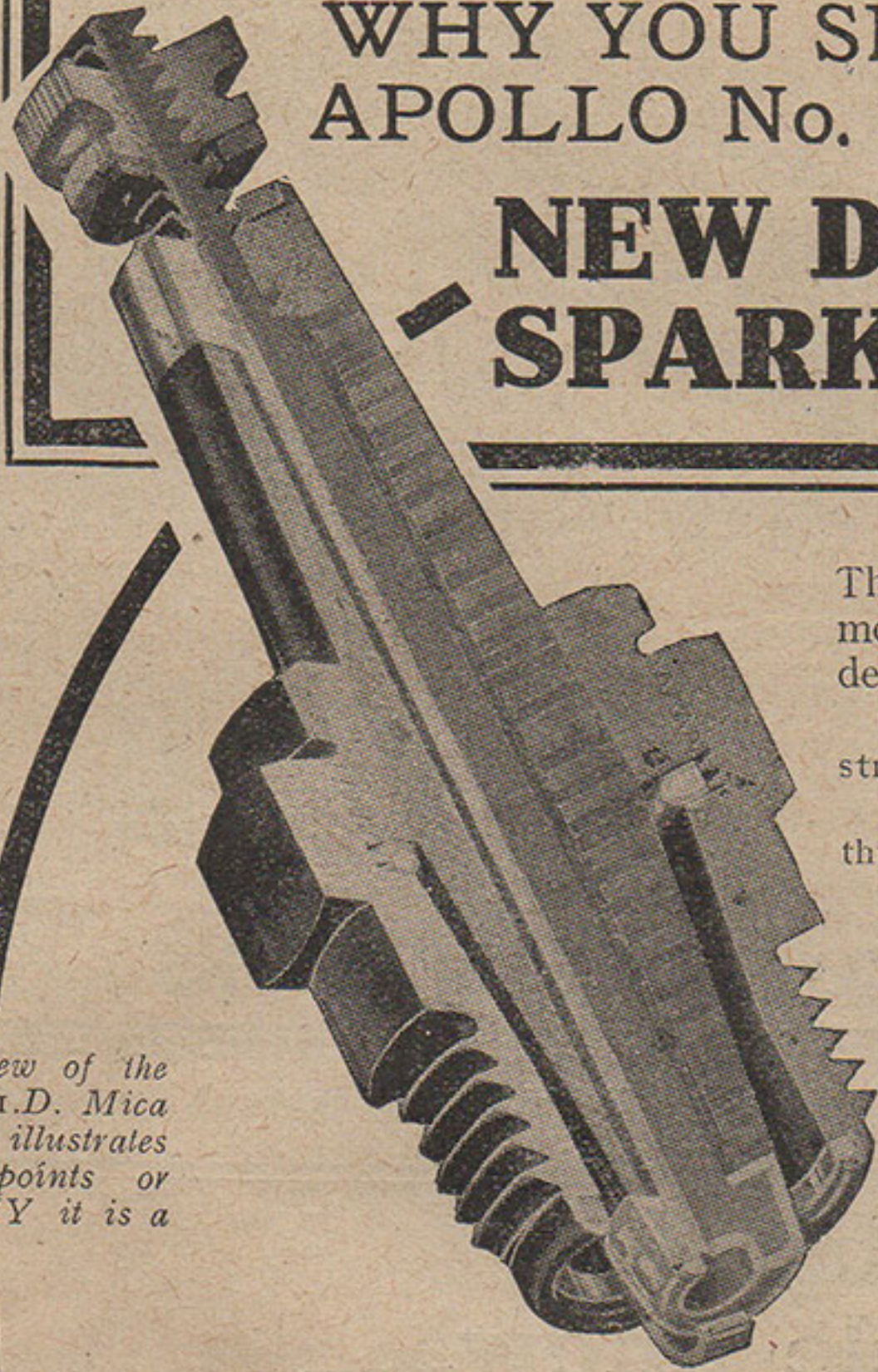


Combined windscreen, apron, and side curtains of Sandum manufacture.

A Sandum windscreen opened to admit the passenger.

SEVEN REASONS

WHY YOU SHOULD BUY
 APOLLO No. 1.D. SUPER MICA
**NEW DETACHABLE
 SPARKING PLUGS.**



Sectional view of the Apollo No. 1.D. Mica Plug, which illustrates the seven points or reasons WHY it is a Better Plug.

The Plug that has been designed to meet Your requirements, and improve the machine, is here set forth in detail. We know you will appreciate a Plug like this.

No. 1. Solid Steel Central Electrode, giving greater strength and conductivity of heat from point than solid nickel.

No. 2. End of Steel Electrode totally enclosed in Nickel, thus preventing oxidisation of the steel.

No. 3. Greater surface between Gland Nut and Nickel End of Electrode, eliminating short circuits.

No. 4. Permanent highly polished finish of mica insulation, thus preventing adhesion of carbon deposit.

No. 5. Large pure Nickel Point, ensuring heat being conducted rapidly through the Plug body to the cylinder.

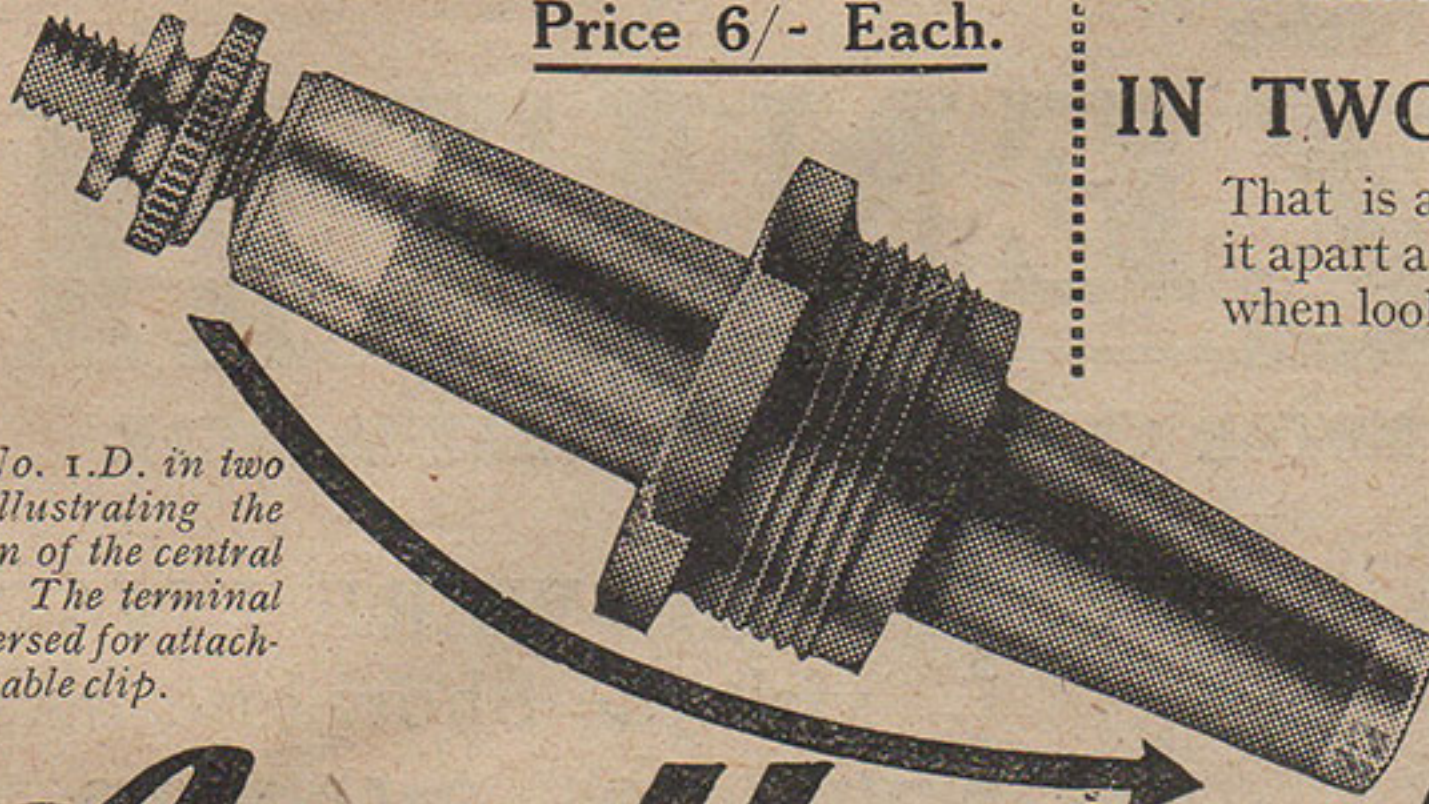
No. 6. Knife edge of point enabling any oil to be burnt away.

No. 7. Detachable Plug in TWO parts only.

Price 6/- Each.

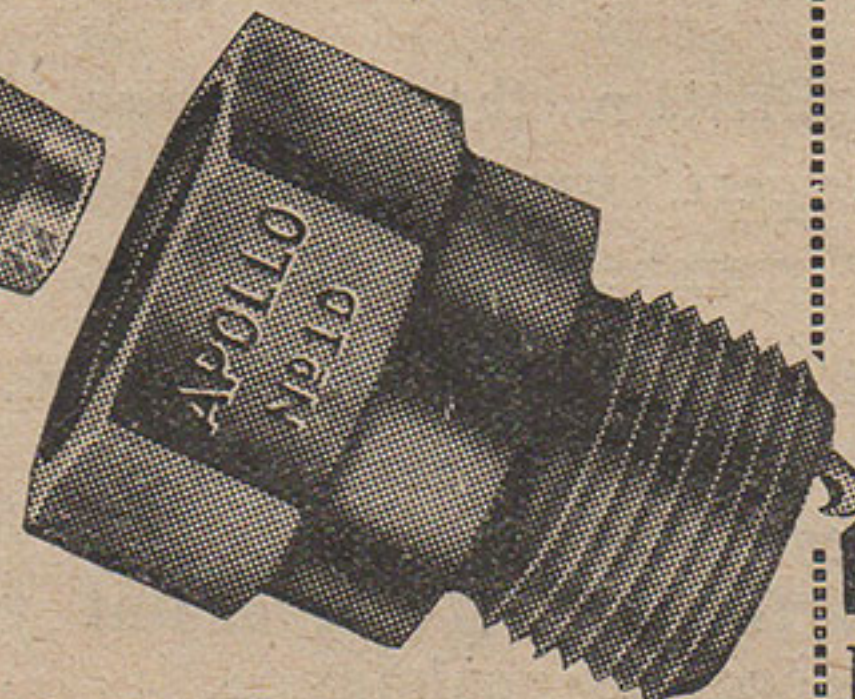
IN TWO PIECES ONLY.

That is a point of interest, take it apart and rub it with an oily rag when looking over your machine.



Apollo No. 1.D. in two pieces, illustrating the insulation of the central electrode. The terminal nut is reversed for attachment of cable clip.

Apollo
 THE SUPER-POWER



PLUG

APOLLO PLUG MFG. Co., Ltd, Moseley St., Birmingham
 'Phone—Midland 278. 'Grams—"Apollo, Birmingham."
 84a, Great Titchfield Street, London.
 'Phone—Museum 6281. 'Grams—"Ugornapal, Wesdo, London."

YOU SAVE A TIN IN TEN.
 A 10% saving on your petrol bill is worthy of consideration, and all you need do to effect this saving is to equip your mount with "Clincher Tyres." Note the grip tread of the Dreadnought cover.

"CLINCHER" MOTOR CYCLE TYRES
 Registered TRADE MARK

The North British Rubber Co., Ltd., Edinburgh, London, and Branches.

The "pièce de resistance"
 of the Motor Cycle Show—
 the



ZENITH

MOTOR CYCLE with the GRADUA GEAR

Mr. Rex Brittain, the well-known motor cycling expert, writes in "The Evening News," November 29th, 1920:

FOR FAST ROAD WORK.

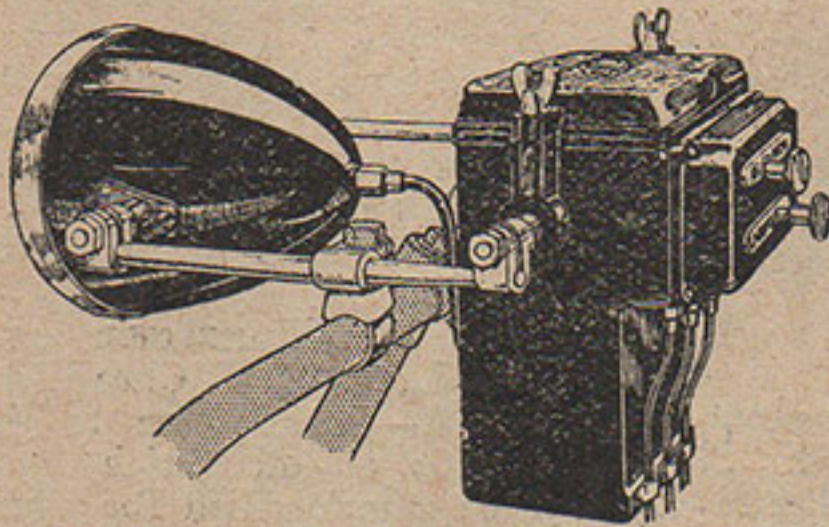
"Solo riders will find a great deal to interest them at the show. The new sporting ZENITH, a flat twin, is the pièce de resistance."

IF YOU WERE UNABLE to visit the Show lose no time in writing for particulars of the latest models. There is a model, of size and power from 2¾ h.p. to 8h.p., to meet the requirements of every motor cyclist.

**ZENITH MOTORS, LTD.,
 HAMPTON COURT, ENG.**

Phone: Molesey 169.
 Wires: "Zenith, East Molesey."

Accessories at Olympia.—



Head lamp and battery box of the M-L Maglita set (lightweight model).

wheel and pulley removers, and the Johns-Manville speedometers are amongst the high-quality productions marketed by this concern.

MIDLAND GEAR CASE Co., LTD., Bridge Street West, Birmingham.—Motor cycle accessories in leather are the special products of this firm, and these include knee grips, which are adjustable to any size and shape of tank, and inner tube cases arranged to clip over a rolled-up tube on the handle-bars. Both these accessories are already well known to motor cyclists.

H. MILLER AND Co., Birmingham.—The special feature of Miller acetylene lamps, apart from the excellent light-giving qualities of course, is the convenient bracket which permits the set to be fitted to almost every type of handle-bar on the market. Miller dynamo lighting sets for motor cycles will shortly reach the production stage, and these include a handsome plated head lamp with a switch-box incorporated in the bracket. The batteries are carried in a box adjustable in all directions, so that when secured to the saddle tube of the machine it may remain vertical. Prolonged testing has proved that the dynamo itself is satisfactory, and the design, which was reviewed in *The Motor Cycle* twelve months ago, remains essentially unaltered. Regulation is by a magnetic arrangement, which reduces the intensity of the flux cut by the armature coils, and, in consequence, no delicate electrical appliances are required to keep down the voltage at speed.

THE M-L MAGNETO SYNDICATE, LTD., Victoria Works, Coventry.—One of the most popular combined lighting and ignition units in the Show is the product of the makers of the M-L magnetos. It was fully described in a recent issue of *The Motor Cycle*, but a further small improvement has been carried out in the head lamp. This consists of a small low-

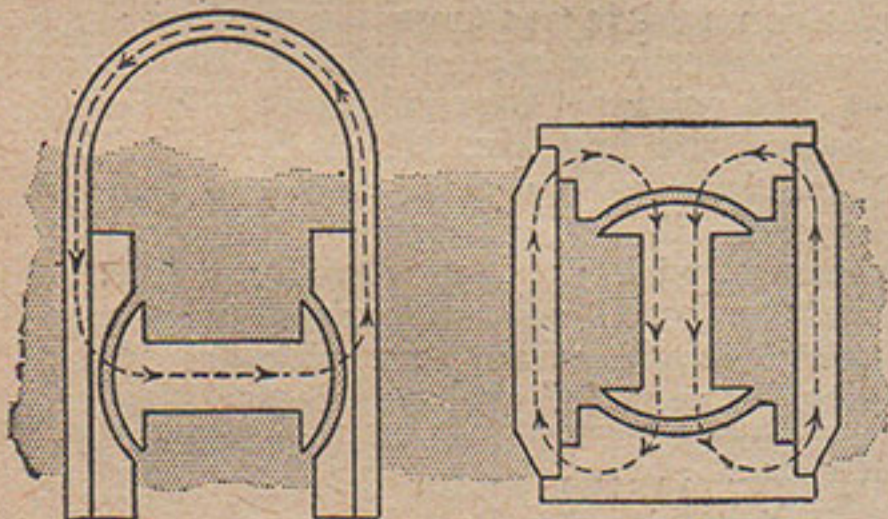
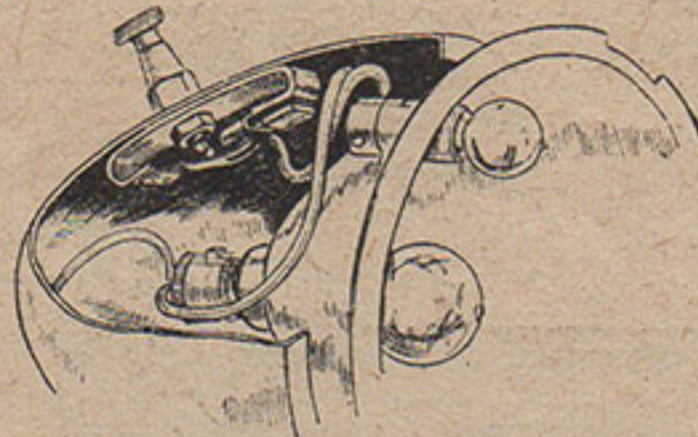


Diagram showing how the new design of M-L magneto allows a double magnetic flux to pass through the armature. It shows its compact nature in contrast with the old "horse-shoe" type.

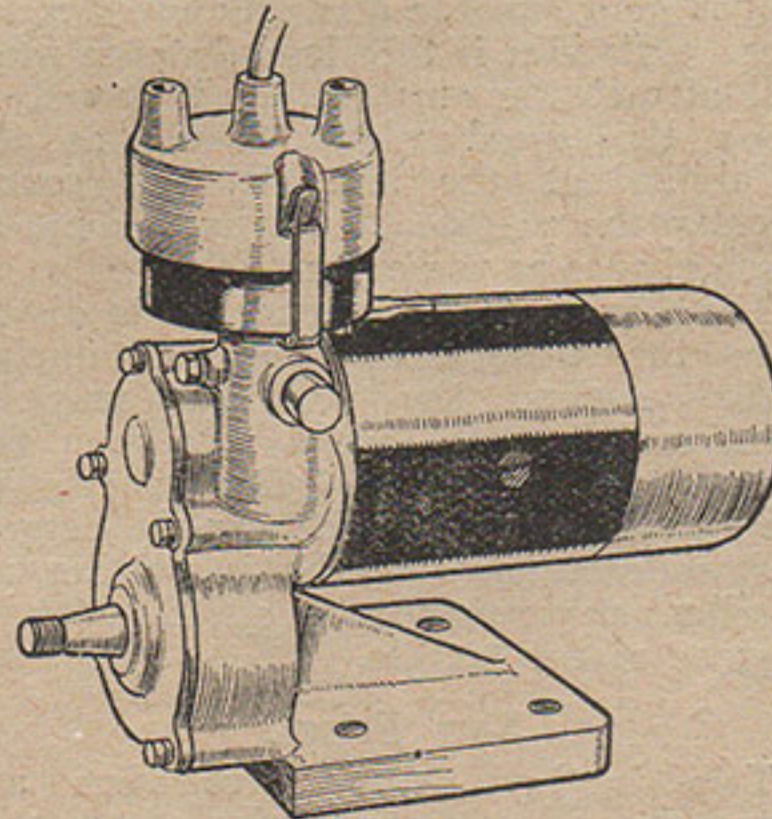
powered bulb for use when the machine is standing or when town riding. The dimming arrangement is controlled by a small knurled knob on the top of the head lamp which brings the small bulb temporarily into operation by depressing it or permanently by giving it a half turn. Of course, the automatic dimming device on the head lamp main bulb is retained; this acts as a reminder to the rider that the battery switch should be pressed in when the engine is running. The Maglita outfit is now being produced



Dim and full power bulbs in the M-L Maglita large size head lamp. A push-down switch controls the latter.

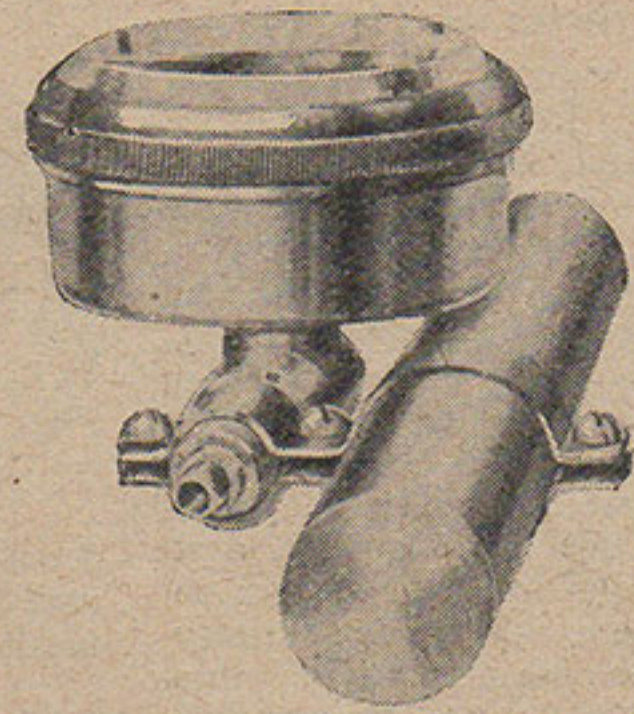
in a variety of forms suitable for light or heavyweight single-cylinder machines and for flat twins and two-strokes. The motor cycle magnetos for all types of engines remain unaltered, but a new pattern magneto, the K.V.-type, is being introduced. This has decided electrical advantages which enable its external dimensions to be considerably reduced, and its appearance is exceedingly compact and workmanlike.

NORTH AND SONS, LTD., 14, Soho Square, W.1.—A range of speedometers is produced by this firm, who, amongst other types, have made a speciality of rear-wheel-driven models. The driving arrangements are very substantial, and do not interfere with the security of the wheel spindle.



The Rotax dynamo with ignition contact breaker and distributor.

PRICES' Co., LTD., Battersea, S.W.11.—Motor cyclists do not need to be reminded of the excellence of Prices' oils, but the enquiring spirit will find much to mark and inwardly digest concerning lubrication if he obtains the various publications and pamphlets which the company offer. The advantages of purchasing small drums of oil are made clear, and a device for safely pouring out the contents of these is worth noting.



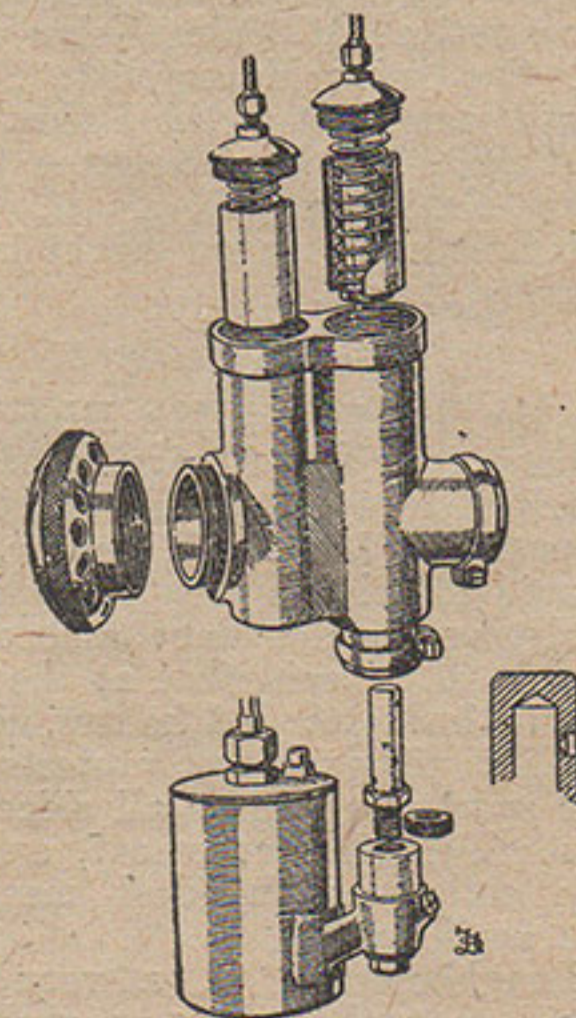
Top tube attachment for rear wheel drive of the Bonnicksen speedometer.

ROTAX MOTOR ACCESSORIES Co., LTD., London, N.W.10.—A development of combined lighting and ignition, which may be far-reaching, is to be introduced. This consists of the Rotax dynamo arranged for providing a means of ignition by the incorporation of a contact breaker and distributor. The dynamo charges the batteries, which supply current for ignition via the contact breaker and a separate high-tension coil.

ROTHERHAM AND SONS, LTD., Spon Street, Coventry.—Standard Rotherham productions are general motor cycle brass fittings, such as oil pumps, taps, cocks, unions, and gauges, but, in addition to these, are the Everest carburetters and Bonnicksen speedometers. The latter have been improved in detail, especially as regards the driving arrangements.

RUNBAKEN MAGNETO Co., LTD., Manchester.—Magnetos bearing the Runbaken name have rapidly developed a reputation not only for their reliability, but also for their small dimensions, which make them specially suitable for small machines. A standard type of contact breaker is now fitted in place of that with stationary contact points which was formerly used.

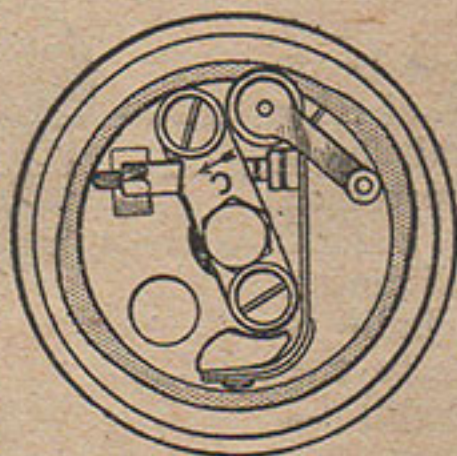
THE SAFETY PETROL FILLER Co., LTD., Northampton.—Besides the well-known Liquall safety petrol fillers, a number of small conveniences for motor cyclists' use are made.



A carburetter produced by Rotherhams—the two-lever Everest with multiple jet.

Accessories at Olympia.—

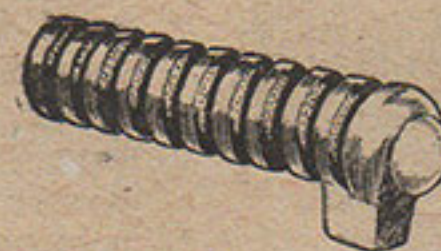
S. SMITH AND SONS (M.A.), LTD., 179-185, Great Portland Street, W.—Speedometers, mechanical horns, handle-bar watches, and similar accessories are all well-known products of this accessory firm, who specialise in fitments of the highest class. In addition to these, the K.L.G. plugs must not be forgotten, and attention must be drawn to the new G.1 type, specially commendable for its simple construction and the detachability of its insulated centre, which may be replaced at any time with a new one should it ever become defective. The body of the plug is finished by a rustproof process, which greatly adds to its appearance. Amongst other useful accessories stocked are Shock-stops, a new type of indiarubber handle-bar grip, which is specially adapted for use in conjunction with inverted lever controls, or with hook-ended grips of the ordinary type. These grips are becoming very popular.



A continuous cam is now used in the contact breaker of the C.A.V. magneto.



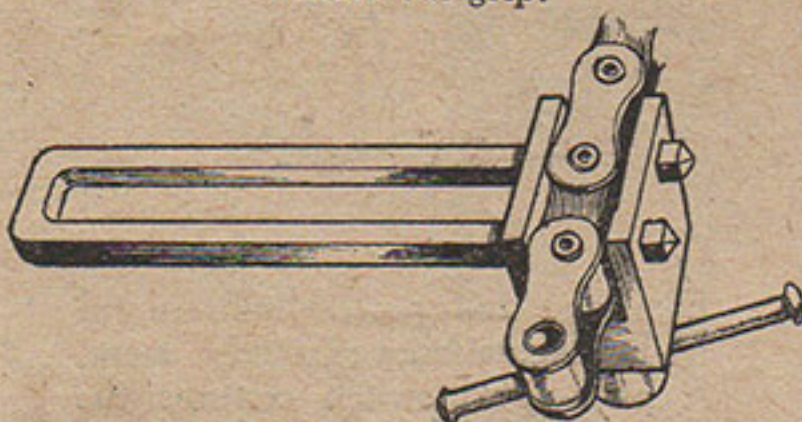
Pettetts' "Fitall" spanner embodying two screw-drivers.



A point about the new Smith "Shock Stop" handle-bar grip is that it protects the inverted lever joint.



An all-rubber Roberts handle-bar grip.



Simplicity and ease of operation are features of the Dandy chain rivet remover handled by S. Smith & Sons (M.A.), Ltd.

VACUUM OIL Co., LTD., London, S.W.1.—Gargoyle Mabiloils, greases, and everything appertaining to the efficient lubrication of motor cycles and cycle cars. The Vacuum names are household words in motor cycledom.

C. C. WAKEFIELD AND Co., LTD., 30-32, Cheapside, E.C.2.—In addition to the brands of oil which have been standardised for many years by a number of leading makers, this firm is introducing a new variety to be known as Castrol XL. This is somewhat

lighter in body than the better known Castrol C, and it has been specially blended for use under racing and competition conditions. Sidecar owners and others who purchase oil in five or ten-gallon drums should make a point of enquiring into the merits of the patent screw-in locking tap for the drums. This is specially suitable for use with the Castrol five-gallon non-returnable drums, and forms a handy method of avoiding waste when drawing off oil for use.

The B.M.C.R.C. Dinner.

FEW dinners that we have attended—and we have been present at a great many—have passed off better than the members' dinner of the British Motor Cycle Racing Club, held on Wednesday last week at the Holborn Restaurant. Nearly 170 members turned up, there were numerous guests, the speeches were as brief as possible, and the whole of the evening was devoted to enjoyment and amusement. An excellent programme had been provided, and, owing to the presence of several visitors from the Continent, the affair might almost be described as being an international one. The chair was occupied by Brigadier-General Sir Capel Holden, K.C.B., F.R.S. On his left sat Lt.-Col. F. Lindsay Lloyd, C.M.G., and among the guests we noticed M. Jules Neher (president of the Union Motocycliste Suisse), M. Egarad (president of the Union Motocycliste Belge), Mr. Paul Kelecom (of the Fabrique Nationale, Belgium), while MM. Mellane and Arnaud might be said to represent France.

Toasts.

After the toast of "The King" had been proposed by the Chairman, that of "The British Motor Cycle Racing Club" was proposed by Mr. H. T. Rutter. Mr. Rutter paid the club a great compliment, congratulating the president and officers of the club, as he said that at the many meetings he had attended he saw nothing but straight riding, few protests, and thorough sportsmanship on all sides. He evoked considerable amusement, and said that the club was an ideal means of testing a machine.

Mr. Loughborough, in a very brief reply, said that the proposer could not have praised the club in a nicer manner, and the club members could not have deserved it better. (Laughter.) He referred to our foreign guests, and made

mention of several generous offers of prizes. Messrs. C. A. Vandervell and Co. had offered a ten-guinea prize for the best aggregate performance, but they had one already. This year Mr. Alec Ross, who had given a prize for the best aggregate performance by a Service member, repeated this offer for next year. Mr. H. Collier offered a ten-guinea prize for an open event; Mr. Olai offered a similar prize, while Capt. A. J. Millar offered a hundred-guinea gold cup for a hundred mile race and a two hundred-guinea gold cup for a two hundred miles race. (His idea is that long-distance races will attract the amateur, as it is not so much the speed which counts as the reliability of the machine, and consequently the private owner has almost as much chance as the expert.)

The Chairman then proceeded to distribute the numerous prizes won during 1920. Among the recipients may be mentioned W. A. Jacobs, who won the Ross Trophy; he has gained nearly all his successes on an eight-year-old Singer, and we learn now that he is putting up excellent performances on a little Metric-engined motor bicycle.

New Prizes.

Two further prizes were then announced: The Norton prize of twenty-five guineas for the best aggregate performance of a private owner, and a ten-guinea prize (presented by Mr Watson-Bourne) for a member or ex-member of the R.A.F.

Mr. T. W. Loughborough then announced that the Godfrey Cup, which, unfortunately, had not yet been engraved, had been won by H. R. Davies. This is a cup presented by Messrs. Godfreys, Ltd., in memory of the late Capt. O. C. Godfrey, for the first 350 c.c. machine to do eighty miles an hour on the track, a feat which Mr. H. R. Davies had

successfully accomplished on a 2½ h.p. A.J.S.

A Reminiscence.

The Chairman then rose, and said that, as he could not present the cup, he would like Mr. Davies to come up to the high table, and would like to shake hands with him. General Holden shook Davies warmly by the hand, and addressed a series of congratulatory remarks to him; but not a word of these could be heard owing to the deafening cheering.

Davies was then persuaded to make a speech, in which he thanked those present for their hearty reception of him, and thanked the officers of the track for their assistance.

Mr. H. Stevens was also called upon to say a few words.

Mr. Loughborough also paid a tribute to the performances of Le Vack, who had accomplished the highest speed ever made on a motor bicycle in this country.

Le Vack, who was called upon to reply, in turn paid a handsome tribute to Mr. C. B. Franklin, who is now at the Hendee Works in America.

Replying to the toast of "The President," by Mr. W. H. Wells, General Holden said it was twenty-five years since he first rode a motor bicycle (referring to his original four-cylinder). He had invited the late Mr. H. J. Swindley (of *The Autocar*) to come and see it, and he rode it and expressed himself very pleased with it, but frankly admitted that he could not understand why anybody should want to ride a motor bicycle, as pedal cycles were for pleasure and exercise. General Holden was a firm believer in the motor bicycle, and he looked to its further development. He sincerely hoped to see an all-weather machine, in which both the mechanism and the rider were fully protected.

The proceedings finished with "Old Lang Syne" and "God Save the King."



READING STANDARD

THE WORLD'S MASTER MOTOR CYCLE.

Solo - £184.

8-10 h.p. Twin Combination - £229.

PLUS ONE

A Single or Double-seater Sidecar at will.

Deliveries will commence positively in one month, with fittings complete for attachment to the undermentioned makes of cycles:—

Reading-Standard,	Sunbeam 3½ h.p. and 8 h.p.	Zenith,	Enfield,
Harley-Davidson,	Triumph,	Douglas 4 h.p.,	Blackburne 8 h.p.
B.S.A. 4 & 6-7 h.p.,	Rudge 6 h.p.	Henderson,	Excelsior (American),
British Excelsior,	Indian,	ACE,	and others.

DUNELT

The £150 Interchangeable Wheel Combination.

CLYNO

The COMPLETE Outfit.

NEW HUDSON

The Most Popular Lightweight.

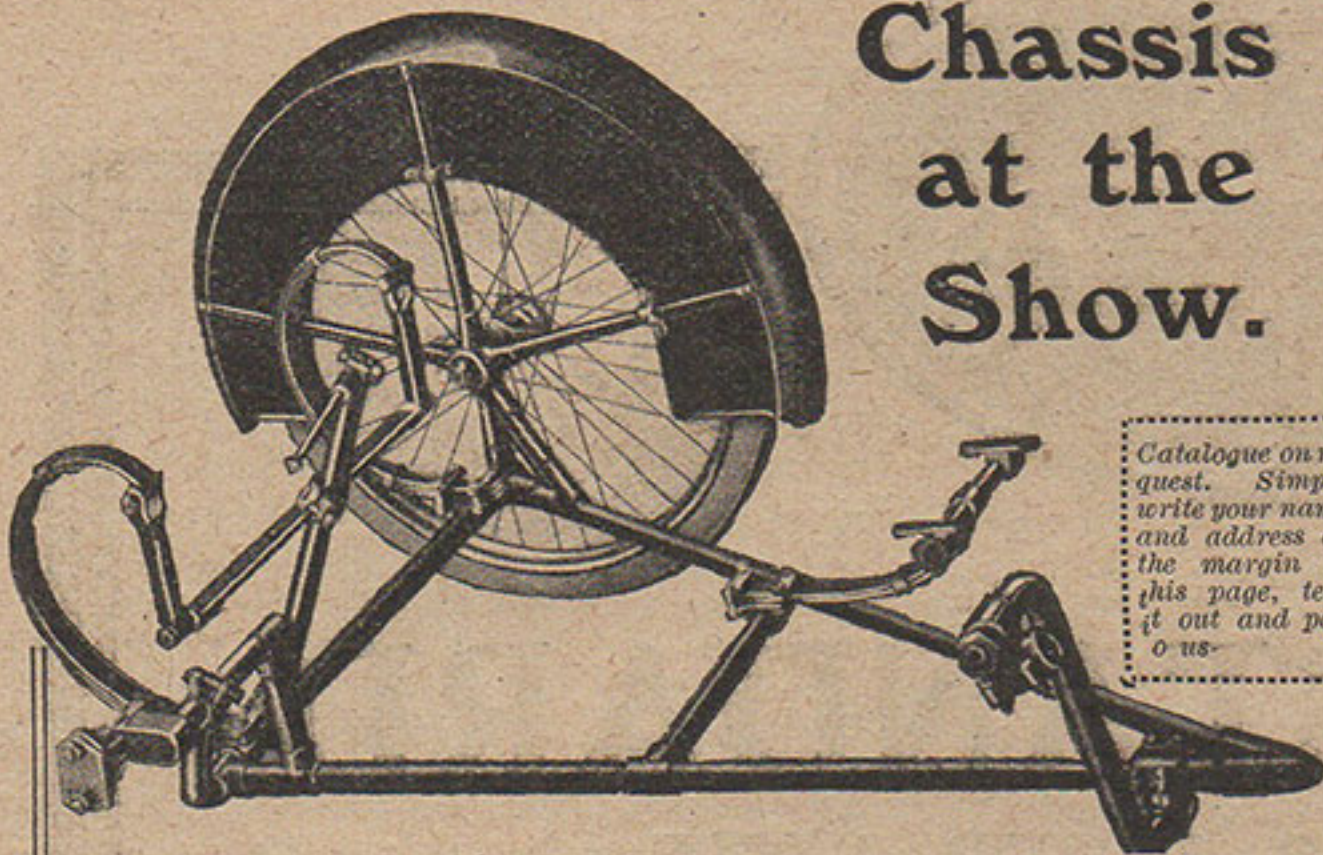
THE ACE

4-cylinder Motor Cycle Combination.

Olympia Show Models of all the above are on show here, see them in comfort.

89, Great Portland Street, ————— London.
Mayfair 5399.

The Triangular Chassis at the Show.



Catalogue on request. Simply write your name and address on the margin of this page, tear it out and post to us.

The Olympia Show proved the following points (among others)—

One— The triangular chassis is the most up-to-date and is certainly the design of the future. Dunhills hold the original patent for this triangular chassis (No. 4784/15), and it is embodied in all their models.

Two— The Dunhill Chassis combines maximum strength and rigidity with minimum weight.

Three— On a weight for weight basis, the Dunhill patent triangular Chassis is the strongest on the market— on a load for load basis there is no lighter chassis.

Five— Dunhill Sidecar bodies are *smart*.

Six— Dunhill Sidecars *study the passenger*. The bodies are given really careful thought and are built for comfort and convenience on the road; their finish pleases the most exacting.

Seven— The greatest efficiency and service combined with absolute "passenger comfort," a Dunhill Sidecar is the one to buy.

Write to-day and get the Dunhill Sidecar Catalogue for 1921. It is of interest to every motor cyclist. Simply write your name and address on the margin of this page, tear it out and post to us.

Dunhills Limited

SIDECAR SPECIALISTS

359-361, Euston Road, N.W.1.
GLASGOW: 72, St. Vincent Street.

HAVING DECIDED—

BUY IT FROM
THE
North Wales Motor Exchange,
WREXHAM.

We are open to accept orders for the following: Norton, Omega, Edmund, Powell, New Imperial, P. & M., Zenith, Indian, Rudge, James, Sparkbrook, Ixion, A.J.S., Levis, Sunbeam, O.K., Douglas, Scott, B.S.A., Matchless, Wooler, Ivy, Bradbury, Rover, and Allon Motor Cycles. Also Singer, Morgan, Coventry Premier, G.W.K., G.N., and Calthorpe Cars.

YOU ARE URGED TO BOOK EARLY.

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THE NORTH WALES MOTOR EXCHANGE



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An Exceptional OFFER!



Quantity	Price each.	Total Price.
1	14/-	14/-
2	13/-	26/-
3	12/8	38/-
4	12/3	49/-
6	12/-	72/-
12	11/6	138/-

Carriage Paid, Cash with Order.

Illustration shows front of case taken out.

Size 5 1/4" x 3 1/4" x 3 1/4"

Surplus Government Accumulators

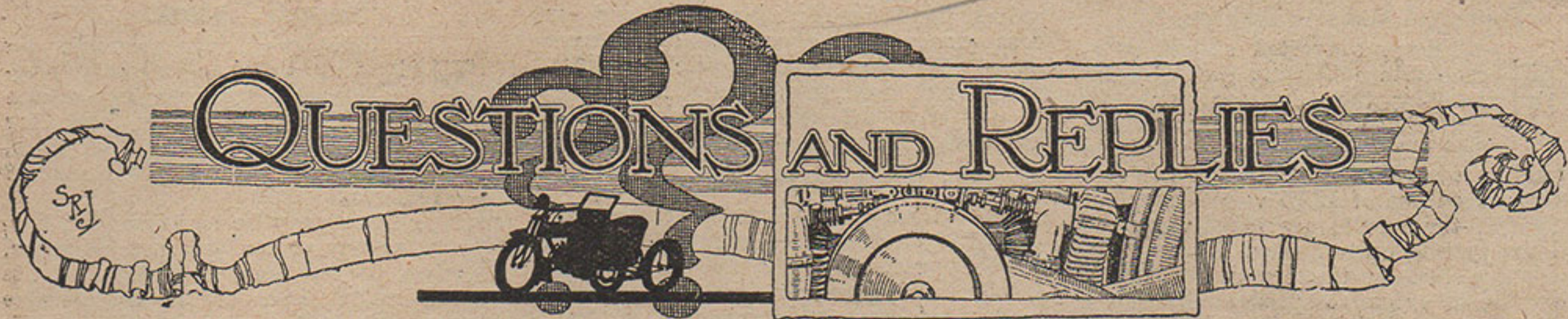
PETTO RADFORD MODEL S.G. ACCUMULATORS

4 Volts. Capacity—12 ampere hour continuous, 24 ampere hour ignition.

DESCRIPTION.—Two separate cells consisting of 5 plates, each in a strong celluloid box with sealed lid, vent plugs and non-corrosive terminals; the two connected together by non-corrosive link and contained in strong black enamelled metal case with leather strap handle. Never had acid in. Weight 5 lbs. each.

Orders promptly executed.

WATES BROS., 132, Charing Cross Rd., W.C.2



A selection of questions of general interest received from readers and our replies thereto. All questions should be addressed to the Editor, "The Motor Cycle," 20, Tudor Street, London, E.C.4, and whether intended for publication or not must be accompanied by a 2d. stamped addressed envelope for reply. Correspondents are urged to write clearly and on one side of the paper only, numbering each query separately, and keeping a copy for ease of reference. Letters containing legal questions should be marked "Legal" in the left-hand corner of envelope, and should be kept distinct from questions bearing on technical subjects.

Pressed Steel Wheels.

? I should be pleased if you would kindly inform me whether there is such a thing on the market as a motor cycle wheel built entirely of discs, minus spokes, etc.—R.A.B.

There are no spokeless wheels obtainable which are suitable for existing motor cycles. Several French makers are using them, however, also the manufacturers of the Unibus.

Long Exhausts Again.

? Could you kindly give me the full particulars respecting silencers or expansion chambers on motor cycles? A friend owns a Rudge-Multi solo machine, which is fitted with a tube 5ft. 2½in. long, and he is now summoned for not having a silencer or expansion chamber.—R.G.C.

The law demands that the exhaust gas shall first pass through an expansion chamber before being released into the atmosphere. Whether a long pipe alone constitutes an expansion chamber within the meaning of the law is a doubtful point; but if the machine is reasonably silent, it might be possible to contest the case.

Rebuilding a Scooter.

? (1.) Will a two-stroke engine rotate in any direction, provided it is timed accordingly? (2.) What size engine sprocket should I require if I fit a 2½ h.p. two-stroke to my scooter? The size of sprocket on the 20in. road wheel is twenty-four teeth. (3.) Is petrol lubrication quite satisfactory on a two-stroke of 2½ h.p.?—P.D.S.

(1.) Theoretically the two-stroke engine will run in either direction, provided it is timed accordingly. Practically, however, we cannot say whether it would be advisable to do this, as we do not know to what engine you refer. (2.) You cannot drive directly from the engine to a 24T sprocket on the right wheel, as you would require a reduction of about 6 to 1; this would mean that you would require a 4T sprocket on the engine-shaft, which, of course, is impossible. The smallest size you can fit on the engine-shaft to obtain reasonable satisfaction is 12T (½in. pitch), and, therefore, you would need one of about 72T on the rear wheel, which is impracticable. (3.) The petrol system is quite satisfactory if the engine has been designed for this type of lubrication.

Higher Gear Ratios Wanted.

? I am in possession of a 3 h.p. Neal Dalm two-stroke motor cycle with a top gear ratio of 5½ to 1. I wish to give it a gear of 4 to 1. (1.) Would this be too high? (2.) What size pulley should I need? The driving sprocket has 18 teeth, the gear box sprocket 32 teeth, the rear wheel belt pulley is 19in. in diameter, the gear box pulley 6in. (3.) Which would be the most advisable to change, the pulley, the gear box, or the engine sprocket?—T.L.D.

Your present top gear ratio is approximately 5½ to 1, and it is probably the most suitable one for your machine. A 4 to 1 top gear would be much too high. In order to alter the gear ratio it will be necessary to fit a large sprocket on the engine-shaft. If you think the machine is under geared, try to get a sprocket with either 19 or 20 teeth—probably 19 would be the more suitable.

Accident to a Dog.

? I was out for a run recently when I had the misfortune to run over a dog. I overtook a flock of sheep which was in the care of two men and two dogs. I had a passenger in the sidecar with me at the time, and I had the machine well under control, and was running very slowly. I had passed one man and dog, and was about half-way through the sheep when the other dog ran right into my front wheel, which went over its hindquarters. Both I and my passenger did all we could to attract the attention of the dog, which came into us suddenly (it was not looking in our direction). I pulled up within 3ft. of the dog, which lay on the ground, but after a short time it got up and walked away with the men. At the time of the accident one of the men was driving the sheep to the side of the road to make room for us to get by. Will you please give me advice as to my responsibility?—T.M.

Provided that you were not travelling at an excessive speed, and that you took every care to avoid a collision with the dog, and provided you can produce witnesses to support any statements you may make in regard to the case, we do not think that you can be held responsible for the injury. We should certainly advise you to ignore any demand made by the owner of the dog, and you should not in any way prejudice your case by offering him compensation. Allow him to take action if he pleases, and place your own case in the hands of a good local solicitor.

Copper Piping for Acetylene Lamps.

? Is it dangerous to use copper piping to conduct acetylene gas to a rear light? I am using one generator, as now, in this weather, I have disconnected the sidecar, and ride solo; and, to avoid a long length of rubber tubing, I have used copper pipe, passing through the clips under the tank, and, of course, connected to the generator and lamp with short lengths of rubber tubing. I was informed recently that spontaneous combustion is likely to occur.—I.J.

The danger of using copper piping for acetylene gas is that the action of the latter upon the copper creates an explosive compound which is liable to detonate when subjected to a sudden blow. On a small scale, however, it is quite unlikely that the formation of this compound will be sufficient to cause any trouble, and we ourselves have used copper tubing for this purpose many times. As it is as well to be always on the safe side, however, it would no doubt be better to use brass tubing.

Compensation for Lost Machine.

? On September 6th last I consigned my motor cycle to the makers at Coventry. It has been lost without any chance of recovery, and the railway company are willing to compensate up to the value of the machine when lost. It was purchased new in March of this year, and had run 5,000 miles at the time of the loss. The purchase price was £103. The whole machine was in perfect order, except in one or two minor details. In view of the fact that a duplicate of this machine could not be purchased much under list price at the time of the loss, I have claimed £127 10s., less £4, the estimated cost of the replacements. The company wish to settle on the basis of the cost of the machine; but I think this unfair, for the result will be that I have to lay out £24 through their fault, if I am to be sure of obtaining as good a machine as the one they lost. Will you please say what you consider would be a fair basis for the settlement of my claim?—C.F.P.

It is rather difficult to say what should be done in the case you describe. If the machine only cost £103 in the first case, and has since run 5,000 miles, we cannot think that it was in such perfect order as to be equal in value to a brand new and unused machine of the same make. If the railway company are willing to pay the full amount of £103, we think you would be wise to accept it.

A Converted Magneto Lighting Set.

? I have converted an old magneto into a lighting generator by winding the armature with 23 S.W.G. I am driving it at one and a half times the speed of the engine, with the result that I am getting an output of 12.15 volts $\frac{1}{2}$ ampere. So far, the results are satisfactory, as I am getting quite a good light. I am using a fuse in the circuit for safety in case of excessive speeds. (1.) Can I increase the ampères by winding the field magnets so that the lamps will be working in series with the field windings? (2.) Would 23 S.W.G. be suitable? (3.) What is the limit in ampères that 23 S.W.G. will pass?—J. T.

It is doubtful whether you can increase the amperage by doing as you suggest, as the magnets of a magneto are hardened steel, whereas you would need soft iron magnets to get the effect you desire. You might experiment with a temporary winding, so that the induced polarity assists, and does not oppose the polarity of the permanent magnet. 23 S.W.G. wire, the same as you are using for the armature, will answer the purpose. Wire of this gauge will pass about .75 amp. continuous current, but the limit depends upon the winding insulation, etc. Provided the armature does not become unduly hot, you may assume that everything is in order.

A Question of Date.

? In January last I purchased a 1916 W.D. Douglas, advertised as uncrated August, 1919. This was my first essay at motor cycling, and as things were not quite as I thought they would be, I advertised the machine for sale as a 1916 2 $\frac{1}{2}$ two-speed W.D. Douglas, uncrated August, 1919, in your issue of April 22nd. Early in May, in response to an application, I sent the machine to a prospective purchaser, using your deposit system as a safeguard. After retaining the machine a week he agreed to buy, and on May 31st I received a letter from him to say that he had just spent a successful tour of the Lake District, and was in every way satisfied with the machine. On October 1st (nearly five months later), I was surprised to hear from him to the effect that he had just taken the machine down and found that the rear cylinder was of 1913 pattern, and accusing me of misrepresentation. He sent me no proof whatever, declaring that he paid £5 more than the machine was worth in the first place (which is surely his own fault), and saying he would be satisfied if I would contribute £7 towards the overhaul, or he would consider a reasonable offer. Unfortunately the gentleman from whom I bought the machine can only give me his word of honour that he actually saw it uncrated at Grove Park in August, 1919.—H.W.M.

Before the buyer can succeed in an action against you, he would have to prove that you deliberately misrepresented the date of the machine. There is no doubt that the explanation is that in the Army workshops, machines were frequently dismantled in large quantities, and after the separate parts had been put in good

order, they were reassembled, and in consequence parts of various dates found their way into the composite machines, which were those turned out. You would be well advised to ignore the claim which has been made against you.

The Weight Basis of Taxation.

? Re the new motor cycle taxation which comes into force next year, does the 200 lb. dividing weight apply to the machine *stripped of accessories*, or will these be added in arriving at the correct weight? I ask because I possess a lightweight which, without lamps, tools, etc., weighs just under 200 lb., but with them a few pounds over the mark.—INTERESTED.

Up to the present time no definite ruling has been laid down, but we assume that the unladen weight of the machine, as delivered by the makers, will be required. The tank should be empty, and the lamps, tools, etc., should not be included.

IMPORTANT DATES.

Dec. 10th-19th—
Brussels Show.

Dec. 27th-28th—
M.C.C. London-Exeter Run.

Jan. 28th to Feb. 5th, 1921—
Scottish Motor Exhibition, Kelvin Hall
Glasgow.

Effects of Prolonged Wear.

? I have an old W.D. 4 h.p. Triumph, and I wish to know what to do to make it less noisy. There is a clatter, which seems to come from the valves. Also, what is wrong with the gear box? It does not slip at the clutch, but it jumps when in second gear.—H.C.

The noise arising from the valves is no doubt due to worn cam gear or to excessive tappet clearance. Probably new parts will be required. If the second gear jumps out repeatedly, it is almost certain that the operating mechanism is worn, and we should advise you to renew the pins and yoke ends which connect the control lever to the operating lever on the gear box.

Reliability of Flat-twin Two-stroke.

? I am thinking of purchasing a flat twin two-stroke engine for building a cycle car. Could you advise me on these engines? Are they as reliable as a single-cylinder, and would there be any trouble from one crank case blowing through into the other?—G.H.

There should be no trouble with regard to reliability with this type of engine. You are mistaken in believing that there is a division between the two parts of the crank case; with the flat twin two-stroke, both cylinders fire at the same time, and consequently one crank case is sufficient for compression. Your greatest difficulty would be in obtaining a suitable form of ignition, and you would need to obtain a special two-spark magneto.

Magneto Lighting.

? Can one draw current for lighting from an ordinary magneto, with a low-tension switch fitted, which serves also for the ignition of motor, and if so, what is the voltage of the lamps used?—HOLLAND.

Electric lights may be run from the low-tension switch of an ordinary magneto, as when the engine is running at its normal speed there is a considerable amount of surplus current. Four volt flash lamp bulbs are used. The system works best with twin cylinder engines, or two strokes; it is not nearly so satisfactory with single cylinder four-stroke engines.

Timing a Flat Twin Two-stroke.

? (1.) What is the correct magneto timing for a 4 $\frac{1}{2}$ h.p. Levis flat twin two-stroke engine? At present it is timed to fire at the top dead centre with magneto fully retarded. I notice, in answer to a question in a recent issue, you advise a more advanced timing for a Scott. Would my engine be improved in power by advancing the present setting? I am using a Thomson-Bennett double spark magneto. (2.) The carburetter fitted is an automatic Amac. What should be the probable size of jet required for this engine?—E.C.L.

(1.) The engine is correctly timed if the spark occurs when the pistons are on top dead centre, with the ignition control fully retarded. You may find a slight advantage by advancing a little further, but this is a matter for experiment. In the particular case to which you refer, we know that the engine will stand a greater advance. (2.) A 26 or 27 jet should be most suitable. The makers of the engine, however, might give you the benefit of their own experience if you write to them.

RECOMMENDED ROUTE.

CAMBRIDGE TO BURTON-ON-TRENT.—
G.T.B.

Fenstanton, Godmanchester, Huntingdon, Ellington, Spaldwick, Hythorn, Thrapston, Cranford, Barton Seagrave, Kettering, Rothwell, Desborough, Market Harborough, Great Glen, Leicester, Groby, Hugglescote, Burton-on-Trent.

GRIMSBY TO KIRKBY MALHAM.—B.D.

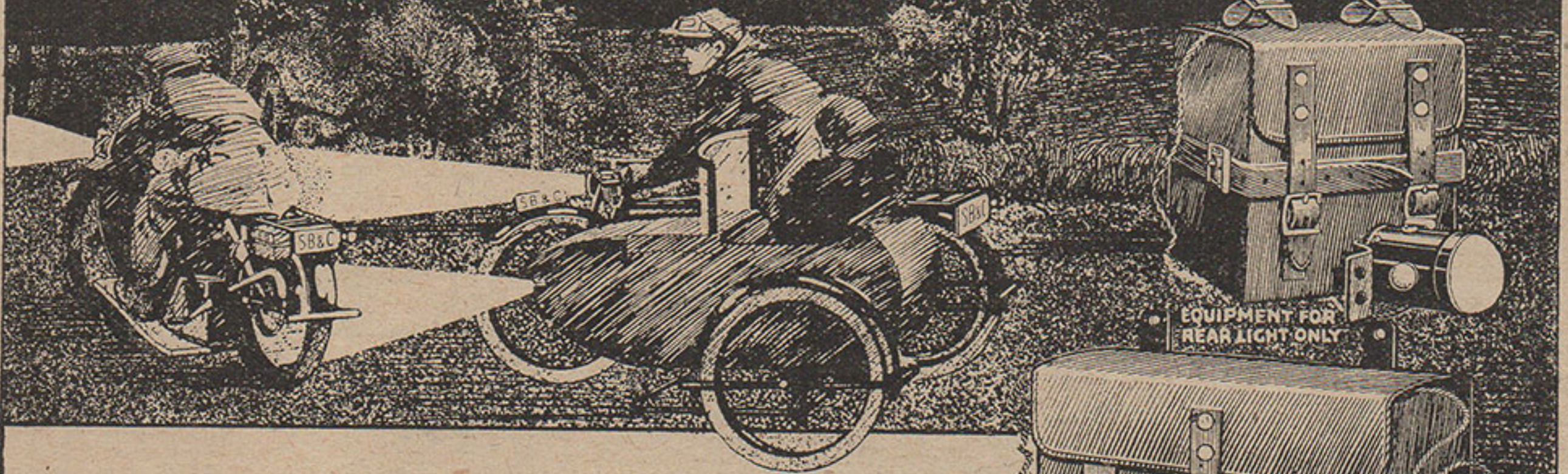
Laceby, Caistor, Market Rasen, Caenby Corner, Gainsborough, Bawtry, Doncaster, Wentbridge, Ferrybridge, Boot and Shoe Inn, West Garforth, Killingbeck, Leeds, Headingley, Otley, Burley-in-Wharfedale, Ilkley, Addingham, Skipton, Kirkby Malham.

PETERBOROUGH TO SOUTHPORT.—R.W.C.

Wansford, Duddington, Uppingham, Billesdon, Thurnby, Leicester, Mountsorrel, Loughborough, Hathern, Kegworth, Shardlow, Derby, Mackworth, Kirk Langley, Brailsworth, Ashbourne, Hanging Bridge, Waterhouses, Leek, Bosley, Macclesfield, Broken Cross, Cholford, Knutsford, Hoo Green, High Legh, Latchford, Warrington, Sankey Chapel, Clockface, St. Helens, Rainford, Ormskirk, Scarisbrick, Southport.

SIEMENS

DRY BATTERY ELECTRIC LIGHT EQUIPMENT



EQUIPMENT No. 1. Comprising SIDECAR and REAR LAMPS, and two Siemens DRY BATTERIES in LEATHER CASE.

EQUIPMENT No. 2. Comprising REAR LAMP only, with glass window for illuminating number plate, and one Siemens' DRY BATTERY in LEATHER CASE.

EQUIPMENT No. 3. Comprising REAR LAMP only (not suitable for illuminating rear number plate) and one Siemens' DRY BATTERY in LEATHER CASE.

Set.	Approximate number of hours light from one Battery.	PRICE, Including Batteries.	Spare Batteries.
No. 1	50	£3 0 0	Side Lamp, 8/- Rear Lamp, 5/6
No. 2	50	£ 12 6	5/6
No. 3	50	£1 2 6	2/6

Illustrated booklet on application to

SIEMENS BROTHERS & CO. LTD.

TELEGRAMS: SIEMENS, WOOLWICH

TELEPHONE: CITY 6400.

WOOLWICH · LONDON · SE·18

£50

2³/₄ h.p. OMEGA VILLIERS

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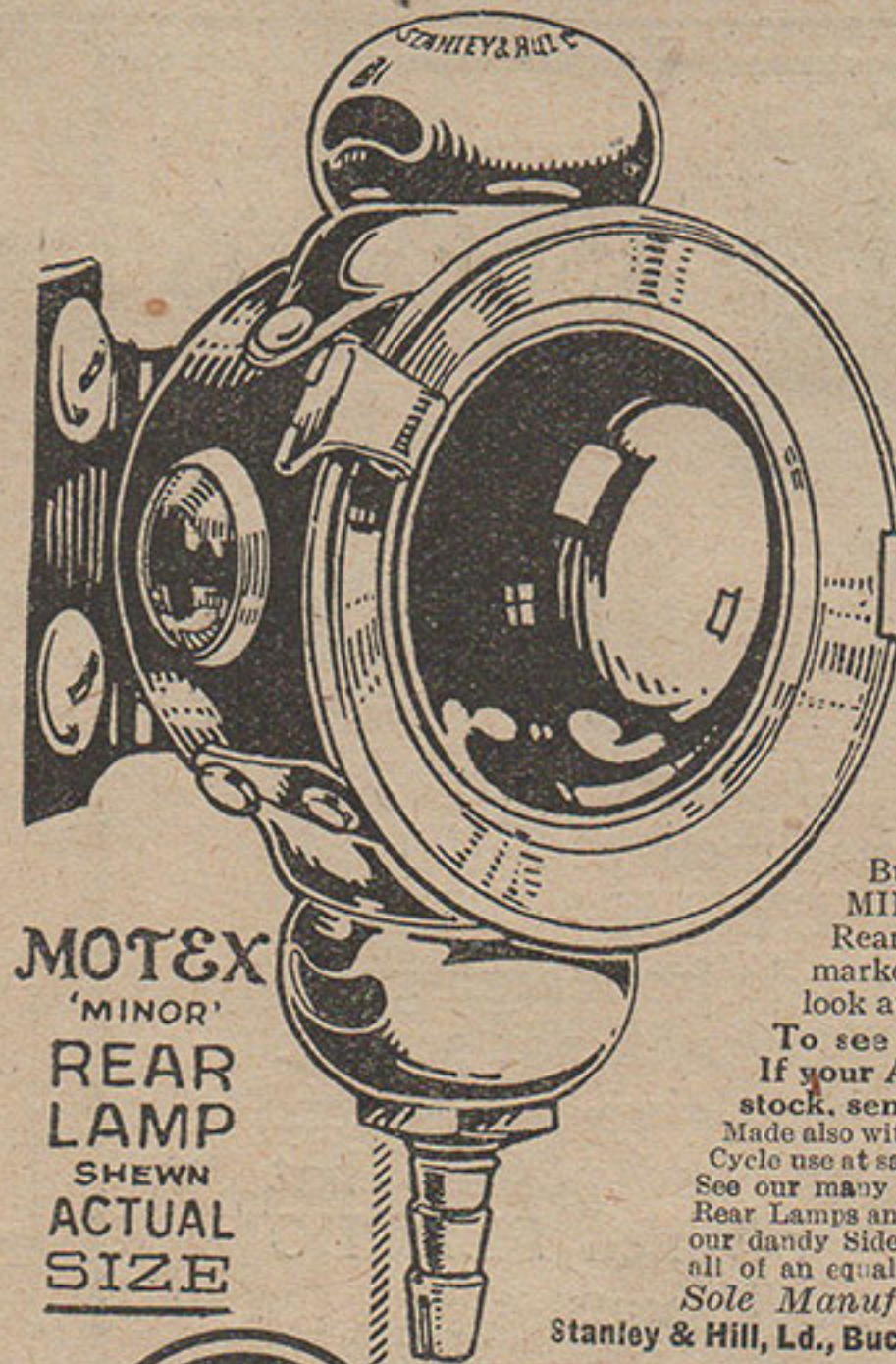
£15 15-0 DOWN AND
TWELVE MONTHLY PAYMENTS

£3-3-4.

LONDON DISTRIBUTING AGENTS:

BARTLETT'S

93, GREAT PORTLAND ST., W



PERFECT
REAR
PROTECTION

THE
IDEAL
of its
TYPE

MOTEX
'MINOR'
REAR
LAMP
SHOWN
ACTUAL
SIZE

Buy a "MOTEX MINOR," the finest Rear Lamp on the market and the Best—look at its price!

To see it is to buy it. If your Agent does not stock, send to us direct. Made also with Special Clip for Cycle use at same price.

See our many other patterns of Rear Lamps and Generators, also our dandy Sidecar Set—they're all of an equally high merit.

Sole Manufacturers:

Stanley & Hill, Ltd., Buckingham St., B'ham



Insist on
MOTEX
Specialities.

B.H.S.

In answering these advertisements it is desirable to mention "The Motor Cycle"

CT9

MARTINSYDE

— SEASON 1921 —

6 h.p. Standard Combination	Price £175
6 h.p. Open Taxi (2-Seater)	Price £185
6 h.p. Closed Taxi (2-Seater)	Price £195
6 h.p. Tradesman's Light Delivery Outfit	Price £175

NOTE :—For this outfit, an interchangeable pleasure sidecar body and chassis could be arranged.

3½ h.p. Twin Solo Approx. Price £125

6 h.p. Model de Luxe Combination Price £225

This Model includes Lucas Magdyno Lighting Set, detachable and interchangeable wheels, spare wheel and tyre, hood, windscreen, and luggage grid. —

SPECIFICATIONS ON APPLICATION

Head Office and Works:
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Telephone:
Woking 551, 552, 553.
Telegrams:
"Martinsyde, Woking."

MANUFACTURERS:
MARTINSYDE, LTD.,
Aeronautical and General Engineers

London Office:
Carlton House, 11d, Regent St., S.W.1.
Telephone:
Gerrard 4500.
Telegrams:
"Martinsyde, Piccy, London."



ASBESTOS BRAKE BLOCKS

Examine specimens of FERODO MOTOR CYCLE BRAKE BLOCKS made from high-grade asbestos. They will not scratch the rim, but give an even, powerful grip, and possess that durability for which FERODO materials are famous.

FERODO, Ltd., Chapel-en-le-Frith.

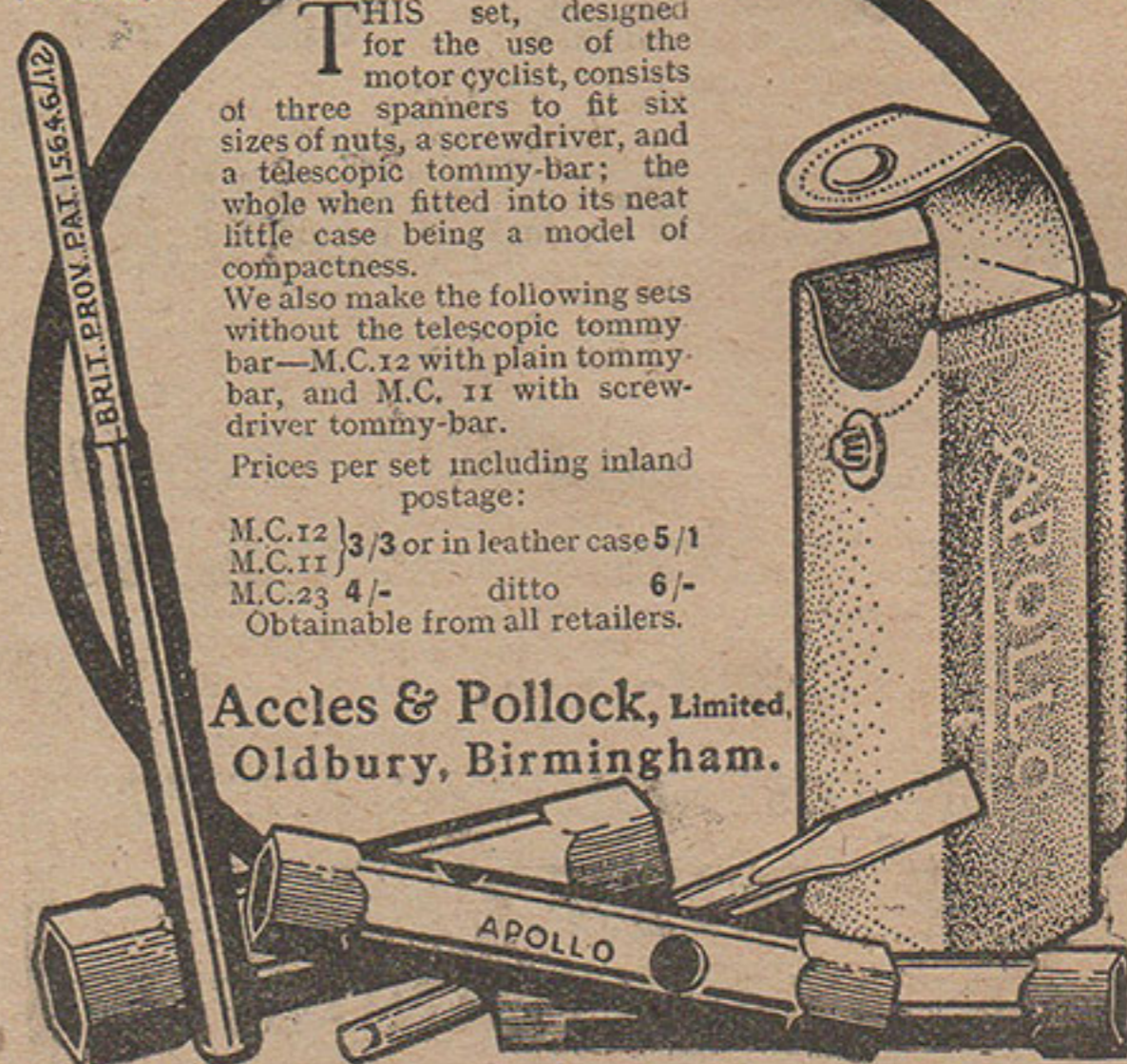
Depots at: London, Birmingham, Manchester, Belfast, Leeds, Bristol, Burslem, Cardiff, Coventry, Glasgow, Liverpool, Newcastle, and Swansea.

APOLLO

A. & P. LTD. REGD.

Tubular box spanners.

SET NO. MC.23



THIS set, designed for the use of the motor cyclist, consists of three spanners to fit six sizes of nuts, a screwdriver, and a telescopic tommy-bar; the whole when fitted into its neat little case being a model of compactness.

We also make the following sets without the telescopic tommy-bar—M.C.12 with plain tommy-bar, and M.C. 11 with screwdriver tommy-bar.

Prices per set including inland postage:

M.C.12 } 3/3 or in leather case 5/1
M.C.11 }
M.C.23 4/- ditto 6/-
Obtainable from all retailers.

Accles & Pollock, Limited,
Oldbury, Birmingham.

LAMB'S

ADVISE

ORDERING LIGHT CARS NOW
TAKE DELIVERY when it suits you.

G.N.
£241 17 6

ROVER
£300

MORGAN
£206

CASTLE THREE
£295

KINGSBURY
£295

COVENTRY PREMIER
£288 15 0

NEW HUDSON
£250

HARPER BEAN
From £495

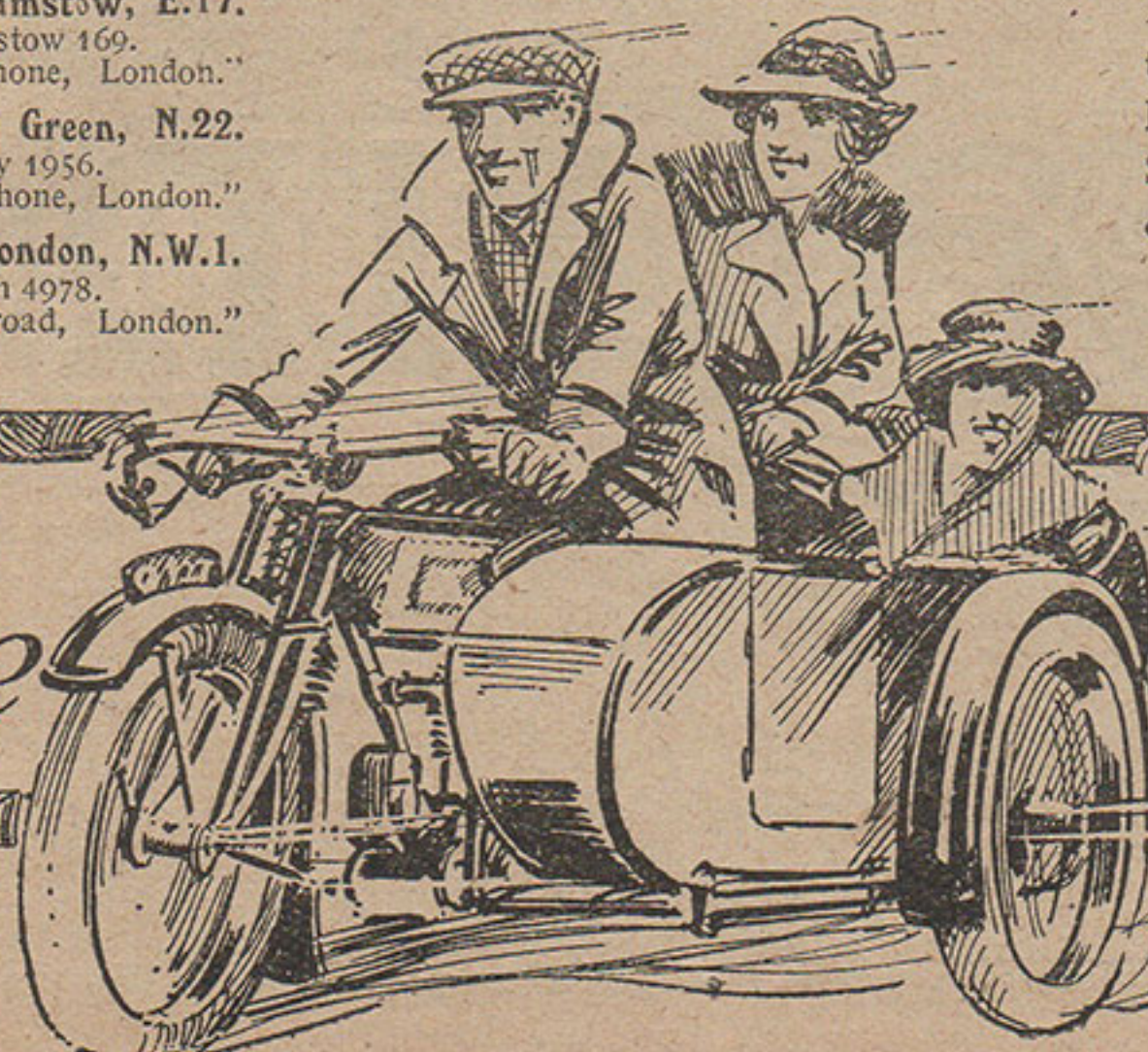
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B.S.A.
CLYNO
JAMES
ZENITH
DOUGLAS
MATCHLESS
LEA-FRANCIS

O.K.
N.U.T.
LEVIS
RUDGE
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ALLDAYS
BLACKBURNE
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NEW HUDSON
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151, High St., Walthamstow, E.17.
Phone—Walthamstow 169.
Grams—"Cyclotomò, Phone, London."
50, High Road, Wood Green, N.22.
Phone—Hornsey 1956.
Grams—"Doulamocy, Phone, London."
387 Euston Road, London, N.W.1.
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DEFERRED TERMS
to suit your own convenience.
NO FUSS. NO DELAY.
Second-hand List sent on appli-
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84 BROAD ST

Phone No: 1024

Reading

MISCELLANEOUS ADVERTISEMENTS.

PRICES.

ADVERTISEMENTS in these columns—First 12 words 3/—, and 3d. for every additional word. Paragraphs of under 8 words are charged double rate. Each paragraph is charged separately. Name and address must be counted. Series discounts, conditions, and special terms to regular trade advertisers will be quoted on application.

Postal Orders and Cheques sent in payment for advertisements should be made payable to **ILIFFE & SONS Ltd., and crossed & Co. Treasury Notes, being untraceable if lost in transit, should not be sent as remittances.**

All advertisements in this section should be accompanied with remittance, and be addressed to the offices of "The Motor Cycle," 20, Tudor Street, London, E.C.4, or 19, Hertford Street, Coventry. To ensure insertion letters should be posted in time to reach the offices of "The Motor Cycle," by the first post on Friday morning previous to the day of issue.

All letters relating to advertisements should quote the number which is printed at the end of each advertisement, and the date of the issue in which it appeared.

The proprietors are not responsible for clerical or printers' errors, although every care is taken to avoid mistakes.

NUMBERED ADDRESSES.

For the convenience of advertisers, letters may be addressed to numbers at "The Motor Cycle" Office. When this is desired, the sum of 6d. to defray the cost of registration and to cover postage on replies must be added to the advertisement charge, which must include the words Box 000, c/o "The Motor Cycle." Only the number will appear in the advertisement. All replies should be addressed No. 000, c/o "Motor Cycle," 20, Tudor Street, E.C.4. Replies to Box Number advertisements containing remittances should be sent by registered post, but in all such cases it is advisable to make use of the Deposit System.

In the case of motor cycles offered for sale under a box number, as it is unusual for these to be sold without first being inspected by the intending purchaser, advertisers will facilitate business by embodying in their advertisements some mention of the district in which the machine offered may be seen and tried.

DEPOSIT SYSTEM.

Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with "The Motor Cycle," both parties are advised of this receipt.

The time allowed for a decision after receipt of the goods is three days, and if a sale is effected we remit the amount to the seller, but, if not, we return the amount to the depositor, and each party to the transaction pays carriage one way. For all transactions up to £10, a deposit fee of 1/- is charged; on transactions over £10 and under £50, the fee is 2/6; over £50 and under £75, 5/-; over £75 and under £100, 7/6; and on all transactions over £100, 1/2%. All deposit matters are dealt with at 20, Tudor Street, London, E.C.4, and cheques and money orders should be made payable to Illiffe & Sons Limited.

The letter "D" at the end of an advertisement is an indication that the advertiser is willing to avail himself of the Deposit System. Other advertisers may be equally desirous, but have not advised us to that effect.

SPECIAL NOTE.

Readers who reply to advertisements and receive no answer to their enquiries are requested to regard the silence as an indication that the goods advertised have already been disposed of. Advertisers often receive so many enquiries that it is quite impossible to reply to each one by post.

MOTOR CYCLES FOR SALE.

A.B.C.

1920 3h.p. A.B.C. Motor Cycle, new; £150.—King and Harper, 6 and 7, Bridge St., Cambridge. [8932]

1920 3h.p. A.B.C. Combination, new; £193.—King and Harper, 6 and 7, Bridge St., Cambridge. [8931]

1920 T.T. A.B.C., as new, very fast; £125.—17, Dover Terrace, Sandycombe Rd., Richmond, Surrey. [2838]

A.B.C. 1920 3h.p., 4-speed, excellent condition, good as new; £115, bargain.—Leng, 164, Broadfield Rd., Catford. [2510]



REDUCED PRICES.

HARLEY-DAVIDSON.

Having purchased another consignment of ex-W.D. Harley-Davidson motor cycles, we are able to still further reduce the prices, and believe we can now offer better value in

Guaranteed and Overhauled machines than can be obtained elsewhere.

ALL 1918 AND 1919 MODELS.

Solo	£100
Fitted with Montgomery sidecar	£130
Fitted with Millford sidecar	£135

Deferred payments 7½% extra, one third down as deposit, and balance in eight equal monthly instalments on approved references.

OTHER W.D. MODELS

P. & M. and INDIAN.

P. & M.

3½ h.p. R.A.F., chain drive, finished all-weather Service green, and overhauled	£68
3½ h.p. R.A.F., chain drive, replated handlebars, tanks and chain cases re-enamelled	£78
3½ h.p. R.A.F., chain drive, overhauled by makers and enamelled makers' colours. Guaranteed	£95
3½ h.p. as above, complete with Millford "Skiff" sidecar, respectively	£100, £110, and £127.

INDIAN.

7-9 h.p. spring frame, 3-speed, all chain drives, finished in makers' colours, and overhauled. Solo	£95
Fitted with sidecar	£120

W.D. Models can be purchased on our deferred payment system. Terms—One third down with order, balance, eight equal monthly payments, on approved references.

1920 MODELS AT BARGAIN PRICES.
Shop Soiled.

List Price.	Our Price.
£110 5. 2½ h.p. Verus-Blackburne, 2-speed	£90
£126 0. 4 h.p. Verus-Blackburne, 3-speed	£102
£80 4. 2½ h.p. Diamond, 2-stroke, 2-sp.	£70
£60 0. 2½ h.p. Portland, 2-stroke 2-speed	£50
£95 18. 2½ h.p. Metro-Tyler, Model "S" 2-speed	£70
£75 0. 2½ h.p. Clyno, 2-stroke, 2-speed..	£60
£157 10. 3½ h.p. Ariel, combination, 3-sp.	£142
£145 0. 4½ h.p. Quadrant, combination..	£130
£135 0. 4 h.p. Blackburne, 3-speed, kick-starter	£120

SECOND-HAND MACHINES.

10 h.p. T.B., 1920, 3-speed, reverse, detachable wheels, overhauled	£205
2½ h.p. New Imperial-Jap, 2-speed	£60



100, GREAT PORTLAND ST. LONDON W.1. TELEGRAMS: ADDICATEWESDOLLONDON TELEPHONE: MAYFAIR 532 MUSEUM 557

100, PARIS STREET, EXETER. TELEGRAMS: COMBUSTION EXETER TELEPHONE: EXETER 933.

MAUDE'S MOTOR MART

MOTOR CYCLES FOR SALE.

A.B.C.

1920 3h.p. A.B.C., run 1,000 miles only, Klaxon horn, original tyres as new; bargain, £110.—Box 9,789, c/o The Motor Cycle. [2648]

A.B.C., brand new, just delivered; selling because of late delivery; another machine purchased; £145.—Leigh, 10, St. James' Sq., Manchester. [2844]

A.B.C., 1920 model, small mileage, condition as new, complete equipment, lamps, horn, chain good, etc.; sacrifice, owner must sell, £120, or nearest cheque secures.—Newton, North Quay, Douglas, I.O.M. [2368]

3½ h.p. A.B.C. Motor Cycle, dynamo lighting model, 32 only run about 300 miles, condition as new; cash, £150; may be obtained on deferred payments for a small extra charge.—Harrods, Ltd., 118, Brompton Rd., London. [2656]

A.J.S.

A.J.S., 1921 models.—Early deliveries at Merrick's Stores, 174, Listerhills Rd., Bradford. [2472]

BRIGHTON, Hove and District A.J.S. Agents. Turpin's, 22-29, Preston Rd., Brighton. [0202]

CROW Bros., Whitehall Garage, Guildford, A.J.S. agents and expert repairers since 1912. [7989]

1920 5-6h.p. A.J.S. Combination, new; £210.—King and Harper, 6 and 7, Bridge St., Cambridge. [8933]

A.J.S. 2½h.p., 3-speed, hand clutch, lamps, splendid order; £58, or near offer.—C.B., 25, Grove Rd., Wanstead, E.11. [2669]

A.J.S. 1914 6h.p., sidecar and cover, lamp, horn, spare tyre, guaranteed perfect; £80.—60a, Trinity Rd., Upper Tooting. Phone: Batt. 1528. [2801]

1920 (March) A.J.S. Combination, practically unscratched, spare wheel, horn, tools; £170.—Lucking, 15, Chatsworth Gdns., Acton, W.3. [2941]

A.J.S. Specialists: Walsall Garage, Wolverhampton St., Walsall. Tel. 444, can give delivery from stock of these world-famous outfits; price £210; write for catalogue. [8998]

F.O.C.H. have a new A.J.S. Combination, 1920.—5, Heath St., Hampstead (nr. Hampstead Tube Station). Phone: Hampstead 3752. Hours 9-7, including Saturdays. [2552]

A.J.S. 1920 6h.p. Combination, dynamo lighting, speedometer, hood, screen, hood cover, side curtains, Klaxon horn, Tan-Sad pillion seat, as new; £250.—Parker's, Bradshawgate, Bolton. [X2901]

A.J.S. 1920 Brand New Combination. Don't miss this bargain, it is the last we can offer at this price; £185.—Flee and Co., 15-16, Bishopsgate Av., Camomile St., E.C.3. Phone: Avenue 5548. [0065]

A.J.S. Combination, late 1919, perfect condition, complete with hood, spare wheel, lamps, wind screen, Tan-Sad, and tools; £190, or nearest.—T. N. Steel, Vance's Chambers, Cloth Hall St., Huddersfield. [2334]

A.J.S. 1920 Combination, small mileage, spare wheel, all tyres unpunctured, lamps, horn, Tan-Sad, policy £200, or close offer; exchange for light car considered.—Hepher, 95, Ennerdale Rd., Richmond. Avenue 1488. [2857]

A.J.S. Spares, prompt delivery.—Cyril Williams, Chapel Ash Depot, Wolverhampton. T.A.: Parts. [7998]

Alldays.

ALLDAYS, 1918, 2-speed, clutch, lamps, horn, fine condition, take 2 anywhere; £58.—100, Manor Rd., Brockley, S.E.4. [2574]

1917 Alldays-Allon, 2½h.p., 2 speeds, lamps, horn, new rear cover, spare tube; £47/10.—Craft, Apsley End, Herts. [2355]

ALLON, 1920, new, run few miles only, 2-speed, K.S., leg shields, Tan-Sad, perfect; £79.—Glen-thorne, Lower Camden, Chislehurst. [2856]

1916 Allon 2-stroke, 2-speed, lamps, speedometer, horn, excellent condition; £40.—Henry, 22, Grosvenor Rd., Chiswick, W.4. Phone: 1186 Chiswick. [2943]

ALLDAYS Allon, 1920, 2½h.p., 2-speed gear, clutch, kick-start, legshields, and accessories, £75; also Canoelet Minor sidecar, £15; both little used; appointment necessary.—Forte, 135, Ladbroke Rd., W.11. Phone: Park 3393. [2325]

American X.

1920 American X., 7-9h.p., specially built bulbous back sidecar, electrically equipped, wind screen, hood, cover, speedometer, Cowey horn, etc., delivered April; owner buying car; nearest £190.—Can be seen at Union Motor Car Co., 19, Denbigh St., Belgrave Rd., S.W. [2731]

Ariel.

1919 3½h.p. Ariel, 3-speed countershaft, splendid condition, guaranteed perfect; £68.—37, Arlington Rd., Surbiton. [2734]

? DID YOU ? CROSS THE ROAD ?

Our part of the Cycle Show at 73, Hammersmith Road (opposite the main entrance), was visited by a very large number of the general public as well as the trade—an interesting proof of the interest taken in our 1921 models.



Were **YOU** at OLYMPIA, and did you cross the road to our **SPECIAL PRIVATE SHOW ?**

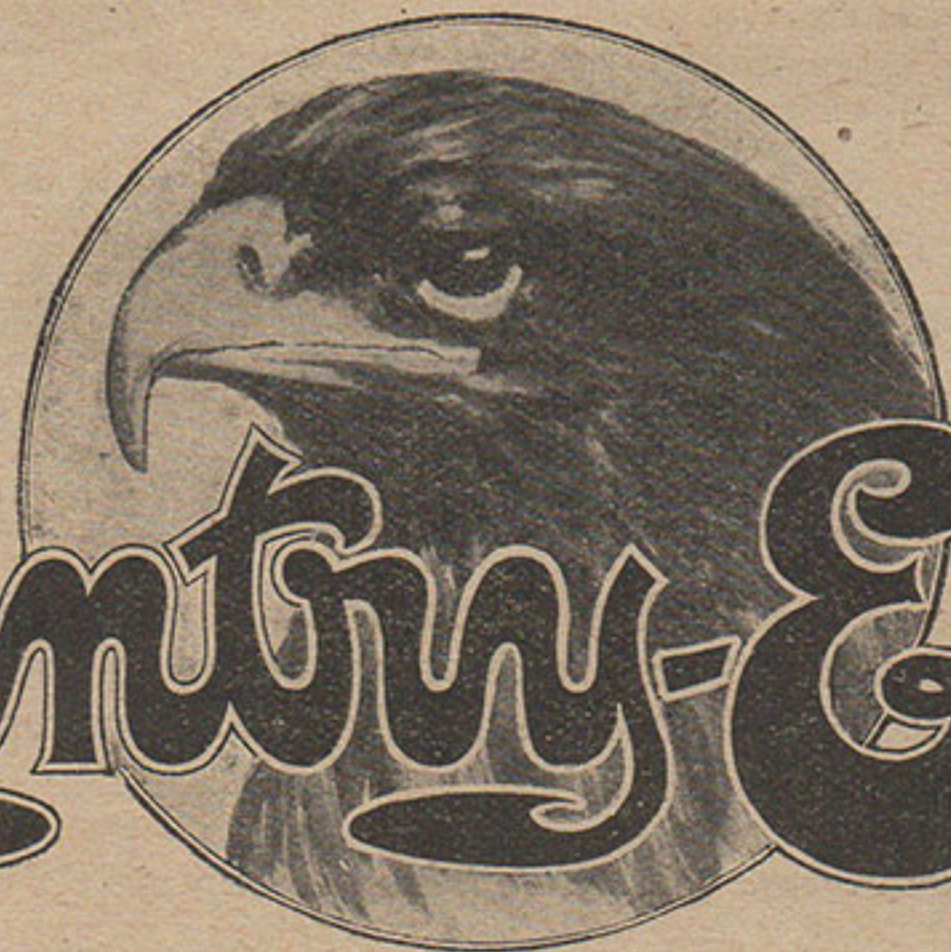
We ask the question, because, if you were not there, we will send you a copy of our

NEW ILLUSTRATED CATALOGUE.

A very special attraction was our new
5-6 TWIN COMBINATION

full particulars of which are given in our Catalogue.

**All the
1921**



*One of the
big "hits"
of the Show.*

Coventry-Eagle

Models will be in vogue this season and can now be seen at our London Agents: GODFREYS, LTD., 208, Great Portland Street.

**The COVENTRY-EAGLE CYCLE & MOTOR CO.,
COVENTRY, ENGLAND.**

MOTOR CYCLES FOR SALE.

B.S.A.

B.S.A., 1919, 3-speed, K.S., canoelet sidecar; nearest £80, must sell—29, Chapel Rd., West Norwood. Tel.: City 2423. [2359]

B.S.A. 1920 4 1/4 h.p. model, Miller's head and rear lamps, Lucas horn, as new; £70.—Parker's, Bradshawgate, Bolton. [X2907]

1918 B.S.A., Rover sidecar, 4 1/4 h.p., chain-cum-belt, lamps, horn, perfect; £100.—Wintle, Nowton, Bury St. Edmunds. [2572]

1920 (June) B.S.A. 4 1/4 h.p. All-chain Combination, wind screen, luggage grid, insurance, etc.; £135.—Linnitt, Bath Rd., Devizes, Wilts. [2405]

B.S.A. Combination, 1917, 3-speed, clutch, kick start, Easting, lamps, accessories, perfect condition; £115.—Holmes, 21, Sefton St., Southport. [2452]

B.S.A., C.S. 3-speed K.S., all chain, 1916, perfect running order; £55, a snip; no letters.—31, Tappan Place, Friar St., Blackfriars, London. [3037]

1920 B.S.A. Model H Combination, brand new, slightly shop-soiled; £125.—Edwards, 50, Harrington Rd., South Kensington. Phone: Kens. 3709. [2204]

B.S.A. Combinations, actually in stock for immediate delivery; price and catalogue on application.—District agents, The Walsall Garage, Walsall. Tel.: 444. [8999]

1919 4 1/4 h.p. B.S.A. with B.S.A. sidecar, Tan-Sad, all accessories, perfect order, as new, only run on early-closing days; £125.—Sandall, Sheep Market, Spalding. [2383]

B.S.A. 1917 4 1/4 h.p. Combination, luggage grid and accessories, condition excellent, insurance transferable; any trial; £130.—Bruce, Plough Cottage, Marlborough. [2788]

F.O.C.H. for 1921 B.S.A.'s; earliest deliveries.—5, Heath St., Hampstead (nr. Hampstead Tube Station). Phone: Hampstead 3752. Hours 9-7, including Saturdays. [2554]

B.S.A., 4 1/4 h.p., 1920, 3-speed, Model H, all-chain, fitted with B.S.A. No. 2 sidecar, unused, shop-soiled; reduced price £138.—Eagles and Co., 275, High St., Acton, London. [X2892]

B.S.A. 1920 4 1/4 h.p. All-chain Combination, Lucas Magdyno, B.S.A. sidecar, screen, apron, Klaxon, tools, mileage 300, guaranteed as new; £160.—30, Crystal Palace Park Rd., Sydenham. [2862]

B.S.A., Model K. £107, H. £110, D. £90, A. £150; combination, Model K. £149, H. £152, A. £198; immediate delivery.—Vivian Hardie and Lane, Ltd., 24, Woodstock St., London, W.1. [0330]

B.S.A. 1920, with B.S.A. 1920 sidecar, all chain, Klaxon, electric lighting, luggage grid with mahogany luggage locker, as new; £145.—Apply, B.S.A., Omra, Regent's Park Rd., Church End, Finchley, N.3. [2526]

WAUCHOPE'S, 9, Shoe Lane, London, E.C.4.—New B.S.A. machines from stock, chain and chain-cum-belt, delivered from stock, prices £110 and £107 respectively; also 4 1/4 h.p. B.S.A., 1919, chain-cum-belt, £85. [3061]

3 1/2 h.p. B.S.A., single gear, rebushed, new crank pin, 2 horns, light machine, £38; coachbuilt sidecar, underslung, 4-point, locker and luggage grid, £18; offers, or exchange both for 2 3/4 h.p. Douglas.—43, Coleraine Rd., Blackheath. [2837]

Calthorpe.

CALTHORPE-J.A.P., Enfield 2-speed, good condition, lamps, horn, etc.; £38.—Chamberlain, Burringham, Doncaster. [2449]

1920 2 3/4 h.p. Jap-Calthorpe Motor Cycle, new; £74/11.—King and Harper, 6 and 7, Bridge St., Cambridge. [8940]

1914 4 1/4 h.p. Special T.T. Calthorpe-Precision, T.T. bars, Bosch, B.B., discs, long exhaust, new belt, very fast; trial; £47.—Ford, Sotwell, Berks. [X2941]

1920 2 1/4 h.p. 2-speed 2-stroke Calthorpe Motor Cycle, new; £71/8.—King and Harper, 6 and 7, Bridge St., Cambridge. [8939]

CALTHORPE 2 1/4 h.p., 2-speed, free engine, just overhauled, splendid condition; bargain, £35.—Harp, Wayford Rectory, Crewkerne. [2813]

CALTHORPE-J.A.P. 2 3/4 h.p., Enfield 2-speed gear, perfect running order, nice appearance; bargain, £37/10.—Dorsett, 211, Garratt Lane, Wandsworth. [3016]

1916 Calthorpe-Jap Coachbuilt Combination, 4-5 h.p. twin, Enfield 2-speed gear, electric lighting, excellent condition; £80, or offers.—C. Smithdale, Acle Hall, Norfolk. [2581]

CALTHORPE Motor Cycles, wholesale and retail agents for the County of Devon, all models in stock for immediate delivery.—The Carlton Motor Co., 33, Torwood St., Torquay. [0201]

CALTHORPE-J.A.P. and 2-stroke, latest 1920 models, fitted with Enfield gears, new and unused; at greatly reduced prices.—Eagles and Co., 275, High St., Acton, London. [X2894]

CALTHORPE 2 3/4 h.p., 2-speed Enfield gear, as makers' specifications; at greatly reduced price; now is the time to buy.—Mebes, 154-156, Gt. Portland St., W.1. Phone: 3426 Mayfair. [7180]



We have made further
REDUCTIONS
IN THE PRICES
of our
SECOND-HAND
and
SHOP-SOILED
MOTOR CYCLES
of which the following
makes are in stock—

- A.J.S.
- ARIEL
- BLACKBURNE
- BROUGH
- B.S.A.
- CLYNO
- DOUGLAS
- DIAMOND
- INVICTA
- JAMES
- LEA-FRANCIS
- LEVIS
- MATCHLESS
- MARTINSYDE-
- NEWMAN
- METRO-TYLER
- NEW IMPERIAL
- NEW HUDSON
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MOTOR CYCLES FOR SALE.

Calthorpe

CALTHORPE-J.A.P. 2 3/4 h.p., Enfield 2-speed gear and clutch, shop-soiled only, bargain, £66; also shop-soiled 2 3/4 h.p. 2-stroke model with Enfield gear, £63.—P. J. Evans, 81-91, John Bright St., Birmingham [X2606]

Campion.

6 h.p. Campion-Jap Combination, new June, 1920, in perfect order, all on; £170.—Cresswell, High St., Grantham. [2444]

CAMPION-J.A.P. 2 1/4 h.p., 2-speed countershaft, nearly new tyres, nice little mount; £32/10.—43, Trevelyan Rd., Tooting, S.W.17. [3029]

SECOND-HAND 2 3/4 h.p. Campion-Jap, 2-speed, clutch, and kick starter, bought new a few months ago; £50; may be obtained on deferred payments.—Harrods, Ltd., 118, Brompton Rd., London. [2661]

Chater-Lea.

CHATER-LEA, 6-8 h.p., twin, Bosch, 1917, Amac, just rebushed, overhauled, list £10 shown, hand clutch, good tyres and condition; £38; any trial.—21, Alexander Rd., Aldershot. [2348]

Cleveland.

CLEVELAND 3 h.p., shop-soiled; at greatly reduced price; now is the time to buy.—Mebes, 154-156, Gt. Portland St., W.1. Phone: 3426 Mayfair. [7181]

WRITE for Catalogue of the 3 h.p. Cleveland, with kick starter, clutch, and 2-speed gear; price £85.—Victor Horsman, Ltd., 7, Mount Pleasant, Liverpool. [0279]

Clyno.

CLYNO 2-stroke, 2-speed, clutch, as new; £53.—97, Pendle Rd., Streatham, S.W. [2724]

WAUCHOPE'S, 9, Shoe Lane, London, E.C.4.—6 h.p. Clyno combination, 1917; £115. [3062]

1920 2 1/4 h.p. Clyno Motor Cycle, new; £75.—King and Harper, 6 and 7, Bridge St., Cambridge. [8937]

CLYNO, countershaft, perfect ride away; offers.—Mitchell, 44, Wellington St., Camden Town. [2672]

1920 8 h.p. Clyno Standard Combination, new; £250.—King and Harper, 6 and 7, Bridge St., Cambridge. [8938]

CLYNO 1918 Combination, 6 h.p., 4 interchangeable wheels; any trial; 100 gns.—280, Camberwell Rd., S.E.5. [1561]

CLYNO Lightweights and Combinations.—Write Rothwell and Milbourne, Cowleigh Garage, Malvern. [1795]

CLYNO 1921 De Luxe Model Combination; best offer clears; Clyno 1920 2-stroke; £75.—Garage, Horsmonden. [3015]

JUNE, 1920, Clyno, 2-stroke, 2-speed, clutch, 1,400 miles, lamps, horn, spare tube, excellent condition; bargain, £58.—Jaques, College Rd., Oldham. [2491]

CLYNO Lightweight, 1920, shop-soiled, at greatly reduced price. Now is the time to buy.—Mebes, 154-6, Gt. Portland St., W.1. Phone: 3426 Mayfair. [2930]

CLYNO Combination, exceptional condition, speedometer, handle-bar screen, leg shields, spare wheel, acetylene lighting, insurance; £95.—Write Tudor House, Riverside, Kingston-on-Thames. [2728]

1916 Clyno Combination, spare wheel, 2 new combination covers, dissolved acetylene, exceptional condition, black and gold; £105; solo part.—65, Clifton Av., Wembley Hill, Middlesex. [2729]

CLYNO—We are sole Wolverhampton agents; write us for delivery dates, repairs, overhauls, re-enamelling, and plating.—The Molineux Garage Co., Ltd., Wolverhampton. Tel.: 1160. [3459]

1917 6 h.p. Clyno and luxurious Dunhill's sidecar, Easting screen, detachable wheels and spare, Binks carburettor, makers' colours, lamps, tools, spares, Klaxon, mirror, in new condition; 92 gns.—Oakdene, Anerley Park, S.E.20. [2827]

CLYNO 8 h.p. 1921 Combination.—Batchelor and Co., East Surrey agents, have a new 8 h.p. combination; demonstration runs given; orders booked for very early delivery.—Batchelor's, Clarence St., Kingston-on-Thames. Phone: 1809. [9545]

CLYNO 1913 Combination, 3-speed, spare wheel, all Clyno luxuries, electric light, speedometer, 5 tyres, 3 brand new (two 3in.), spares include cylinder, valves, races, cones, rings, chains, etc., only done 300 miles since completely enamelled and engine and gear box overhauled by makers, beautiful sidecar, in owner's possession since new, laid up during war; the whole magnificent order; will ride 100 miles to purchaser; any trial with pleasure; sacrifice £85.—Thomas, Bayville, Emsworth, Hants. [2757]

Connaught

1920 Connaught 2 1/4 h.p., kick start, 2-speed, clutch, all accessories; £65.—Brockway, 74, Cophall Gardens, Twickenham. [2422]

CONNAUGHT Miniature 2 1/4 h.p., 2-speed gear, shop-soiled only, bargain, £62; also shop-soiled single speed model, £52/10.—P. J. Evans, 81-91, John Bright St., Birmingham. [X2607]

MOTOR CYCLES FOR SALE.

Coulson.

1920 2½h.p. Coulson-B, brand new; what offers?—Hopkins, Motors, Ledbury. [2480]

1920 Coulson B., 4h.p., with 1920 Gloria sidecar, condition as new; £150.—McDonald, 21, West Parade, Lincoln. [2799]

COULSON-B, 4h.p. and 2½h.p. models, shop-soiled; at greatly reduced prices; now is the time to buy.—Mebes, 154-156, Gt. Portland St., W.1. Phone: 3426 Mayfair. [7182]

NEW Coulson B., 2½h.p., £99/15; fitted with 2-speed gear, spring frame, Blackburne engine; 2½h.p. model, with clutch and kick starter, £110/5; 4h.p. with 3-speed, clutch, and kick starter, etc., 118 gns.; if fitted with smart boat-shaped sidecar, painted royal blue, £162/10, or on deferred payments 4% extra, only one-fifth deposit, balance by 12 monthly instalments.—Harrods, Ltd., 118, Brompton Rd., London. [2652]

Coventry Eagle.

COVENTRY Eagle, 1916, Villiers engine, 2-speed gear, excellent condition throughout; £48.—Gregory, 16, Victoria Rd., Frome. [X2787]

De Luxe.

DE LUXE 2-stroke, 1919; £33, no offers.—30, Copewood Rd., Watford. [X2602]

Diamond.

DIAMOND 2-stroke, new; £56.—Clark, 7, Exhibition Rd., S.W.7. [1501]

DIAMOND-VILLIERS, 1920, 2-stroke, complete with all accessories, mileage under 500, like new; £55.—Watling, 7, Bournebrook Rd., Birmingham. [2970]

1920 2½h.p. Diamond-Jap, 2-speed and clutch, Stewart horn, P. and H. lamp, new last August, condition good; 47 gns.—Edwards, 50, Harrington Rd., South Kensington. Phone: Kens. 3709. [3000]

Douglas.

DOUGLAS, Douglas, Douglas.

1921 Models in Stock; 4h.p. combination, £170; 4h.p. solo, £130; 2½h.p. clutch model, £105; 2½h.p. without clutch, £100.—Douglas Specialists, Vivian Hardie and Lane, Ltd., 24, Woodstock St. (off Oxford St.), Bond St., London, W.1. Phone: Mayfair 6559. [0315]

1920 4h.p. Douglas Solo, brand new; £118.—Below.

1920 4 h.p. Combination; lamp sets, D.A. cyl., mirror, Cowey horn, speedometer, Easting, perfect condition; £134.—Edwards, 50, Harrington Rd., South Kensington. Phone: Kens. 3709. [2205]

1917 Douglas, less mag. and a few parts; £25.—33, Hackford Rd., Brixton. [2759]

1920 Douglas 2½h.p., 3-speed, clutch, as new; £85.—Boulton, Saffron Walden. [2463]

1911 Douglas, 2-speed, clutch, good order; £25.—Box 9,776, c/o The Motor Cycle. [2586]

1916 Douglas 2½h.p., 2-speed, all accessories; £45.—33, Hackford Rd., Brixton. [2761]

DOUGLAS, late 1914, 2-speed, very fast; £39; must sell.—3, Cedars Rd., Beckenham. [2446]

DOUGLAS 1921 2½h.p., 3-speed, clutch, in stock.—Clark, 7, Exhibition Rd., S.W.7. [2594]

1919 2½h.p. Douglas, little used, well kept; £68, bargain.—78, Fordel Rd., Catford. [2423]

DOUGLAS.—Early deliveries all models.—Pollard, Broomfield Rd. Garages, Chelmsford. [X2913]

4 h.p. Douglas, incomplete; reasonable offer accepted to clear.—41, Turnpike Lane, Hornsey. [2993]

DOUGLAS.—A fine assortment in stock at prices to suit all.—Ross, 86, High St., Lee. [3848]

DOUGLAS 2½h.p., 1920, 3 speeds, clutch, as new; £90.—Messiter, Vicarage, Kingswinford. [X2890]

1918 Douglas Combination, lamps, etc., splendid condition; £80.—26, Clare Rd., Maidenhead. [2575]

DOUGLAS 2½h.p., overhauled, splendid condition; £25, offer.—18, Purcell Crescent, Fulham. [2666]

BRIGHTON, Hove and District Douglas agents.—Turpin's, 22 and 29, Preston Rd., Brighton. [0201]

£45.—Douglas 1916 2½h.p., absolutely as new.—Side Door, 36, High St., Hampstead, N.W. [2784]

1911 Douglas 2½h.p., 2-speed, perfect, £36.—Fell View, Halton Lea Gate, Lambley, Carlisle. [X2601]

DOUGLAS 1916 2½h.p., re-enameled and plated, guaranteed; £60.—15, Birchwood Rd., S.W.17. [2877]

1919 4h.p. Douglas Combination, screen, lamps, mileage under 500; £110.—12, Adams Mews, W.1. [2732]

1916 4h.p. Douglas Combination, 3-speed, not W.D.; £70.—Treeman, 181, Tottenham Court Rd., N.1. [2671]

1918 Douglas 2½h.p., lamps, chain case, spares, tools, new tyre; £68.—Dyer, Silk Mills, Redbourn, Herts. [2773]

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 - 1921 2½ h.p. DOUGLAS, with clutch and kick starter.
 - 1921 2½ h.p. DOUGLAS, without clutch and kick starter.
 - 1921 8 h.p. MATCHLESS Combination.
 - 1920 2½ h.p. NEW IMPERIAL, 2-speed.
 - 1920 2½ h.p. NEW IMPERIAL, with clutch and kick starter.
 - 1920 3½ h.p. LEA-FRANCIS, 2-sp., clutch, and kick starter.
 - 1920 2-stroke DIAMOND.
 - 1920 4½ h.p. B.S.A., 3 speed, clutch, and kick starter.
 - 1920 6-7h.p. B.S.A., 3-speed, clutch, and kick starter.
 - 1920 3½ h.p. Isle of Man RUDGE.
 - 1920 8 h.p. ZENITH, sports model.
 - 1920 5-6h.p. A.J.S. Combination.
 - 1920 4 h.p. TRIUMPH, 3-speed, and start.
 - 1920 2-stroke TRIUMPH, 2-speed.
 - 1920 5-6h.p. JAMES Combination.
 - 1920 6 h.p. ENFIELD Combination.
 - 1920 8 h.p. MATCHLESS Combination.
 - 1920 6 h.p. NEW IMPERIAL Combination.
- MORGANS in stock at list price.

SECOND-HAND.

- 1916 2½ h.p. DOUGLAS, 2-speed £55
- 1915 4 h.p. TRIUMPH, 3-speed £75
- 1915 4 h.p. TRIUMPH and accessories .. £85
- 1920 2-stroke JAMES, 2-speed, and acces. £70
- 1920 4 h.p. DOUGLAS Combination and accessories £155
- 1915 4 h.p. TRIUMPH and Sidecar £105
- 1920 8 h.p. MATCHLESS, dynamo lighting and all accessories £205
- 1919 8 h.p. ZENITH, sports model, with Sidecar and accessories £135
- 1920 2½ h.p. EDMUND, spring frame, 2-speed.

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ALL MODELS IN STOCK.

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MOTOR CYCLES FOR SALE.

Douglas.

1919 4h.p. Douglas Combination, electric lamps, disc wheels, splendid order; £135.—Hopkins, New St., Ledbury. [2481]

1918 Douglas 2½h.p., Douglas 4h.p., late, and condition guaranteed; offers.—Ford, Watchmaker, Redhill. [2704]

1920 2½h.p. 3-speed Clutch Starter Douglas Combination; £135, or exchange.—5, Victoria Av., Surbiton. [2733]

1919 2½h.p. 2-speed Douglas, well equipped, powerful, and perfect; £58.—60, Wallingford Av., N. Kensington. [2762]

LATE 1919 2½h.p. Douglas, splendid condition, many spares; £85.—Parker, London Road Garage, Bath-easton, Bath. [2531]

DOUGLAS 2½h.p., 1917, completely overhauled, makers' colours; snip, £40.—3, Courtlands Av., Lee, S.E.12. [2939]

1915 Douglas 2½h.p., running order, horn, pillion, etc.; £50; Saturday and Sunday.—5, Eileen Rd., South Norwood. [2746]

1916 2½h.p. Douglas, electric lights, legshields, a really good mount, 2 speeds; £55.—76, Western Rd., Southall, W. [2523]

DOUGLAS 2½h.p., W.D., 1915; £60, or offer; sound and reliable in all weathers.—Evelyn Wood, 73, Bexley Rd., Erith. [2400]

£55.—Douglas 2½h.p., 1916, plating and enamel new, perfect throughout; real snip.—49, Fassett Rd., Kingston-on-Thames. [2851]

DOUGLAS New 1921 Solo and Combination in stock; cash, exchange, or easy payments.—Motories, 25, Horton St., Halifax. [2539]

DOUGLAS 1919 2½h.p., condition as new, fast and powerful; £65.—Dentist, 216, Portobello Rd., North Kensington, W. [2039]

DOUGLAS 2½h.p., 1914, T.T., 2-speed, lamps, horn, good condition; £46.—Findlay, Crannoch, Larbert, Stirlingshire. [2781]

1920 Douglas Combination, lamps, Klaxon, insurance, splendid condition; £125.—Aldridge, 13, Veronica Rd., Balham. [2710]

NEW Douglas 4h.p. Combination, complete, unscratched; sacrifice, cash wanted.—Basement, 23, Crescent Grove, Clapham. [2500]

1921 Douglas, 2½h.p., 3-speed, clutch, K.S., unscratched, 50 miles, lamp, horn; £101.—Box 9,725, c/o The Motor Cycle. [2346]

1921 Douglas Models, immediate delivery. Write us your requirements. Trade supplied.—Moffat, Douglas Agent, Yeovil. Tel.: 50. [5043]

DOUGLAS 2½h.p., 3 speeds, clutch, kick start, lamps, horn, mirror, etc.; £69.—Bennett, Bungalow, Knoll Hill, Cleat, near Stourbridge. [X2923]

SPEED Douglasses.—Each machine prepared to individual requirements.—Robert Bamford (see under Consulting Engineers). [6693]

DOUGLAS 4h.p. Solo, just delivered, lamps, horn, tools, and insurance; nearest £120.—Seen Ward's Garage, Tubbs Rd., Willesden. [2497]

1919 Handsome 4h.p. Douglas Combination, equipped regardless, mileage 1,000, perfect; £110.—60, Wallingford Av., N. Kensington. [2763]

1916 2½h.p. Douglas, uncrated 1919, small mileage, new saddle, pump, tools, etc.; £56.—1, Melrose Rd., Merton Park, S.W. [1990]

£30.—4h.p. Douglasses, few parts missing, all late. Call early and have your pick.—Banister and Botten, 341, Upper St., London, N.1. [2899]

£85.—New 1921 model 2½h.p. Douglas, 2-speed, just put on the market; immediate delivery.—Moffat, Douglas Agent, Yeovil. Phone: 50. [2683]

1915-16 2½h.p. Douglas, Pedley grips, pump, horn, etc., very fast, any trial, perfect mechanical condition.—Longland, Crowland, Peterborough. [2395]

DOUGLAS, 1918, 4h.p., discs, long exhaust, Brooks, lamps, 2 horns, and renovated, a top-hole bus; £90.—Fox, 226a, Unthank Rd., Norwich. [2694]

DOUGLAS, 1920, 4h.p., fitted Lucas dynamo lighting set, as new in every way; £120; owner bought car.—Pollard, Broomfield Rd., Chelmsford. [X2914]

4h.p. Douglas Combination, completely equipped, special sidecar, smart, good condition, insured £125; accept £95.—15, Dorset Rd., Wimbledon. [2664]

1918 4h.p. Douglas Combination, appearance as new, makers' colours, hood, screen, lamps, etc., a luxury; £90.—Box 9,791, c/o The Motor Cycle. [2989]

DOUGLAS, 1920, 2½h.p., 3-speed, clutch, kick-starter, Binks, knee grips, 1,500 miles, as new; any trial; £85.—71, Holywell Av., Monkseaton. [2372]

DOUGLAS, 2½h.p., 1919, 2-speed, purchased new from makers, in perfect condition, extra large P. and H. lamp set, electric rear lamp, new oversize tyres, aluminium chain cover, tool roll complete, insured till June next, spares; £75.—Moore, 61, Highbury New Park, London, N. [2225]

MOTOR CYCLES FOR SALE.

Douglas.

1920 Douglas Combination, 3 lamps, mechanical horn, registered Sept., as new, expert examination invited, room wanted; £155.—Gibb, Motors, Gloucester. [6340]

DOUGLAS, late 1920, 2½h.p., excellent condition, as new, lamps, horn, owner buying car; £95, or best offer.—Pritchard, 108, Ryelands St., Hereford. [2486]

2½h.p. Douglas, 3-speed, lamps, new tyres, excellent condition; must sell; no reasonable offer refused; £65.—W. Newbery, Misterton, S.O., Somerset. [2386]

DOUGLAS 1915 2½h.p., 2-speed, original enamel and plating, electric lighting, horn, etc., not W.D.; £46.—1, Albert Cottages, Marlborough Rd., S.E.1. [2828]

DOUGLAS 2½h.p., 1916 W.D., new 1919, good condition, mileage 1,000, recent overhaul; £50, or near offer.—H.W.L.M., 26, Upper Gloucester Place, N.W.1. [2490]

DOUGLAS (late 1919) Combination, as new, electric or acetylene lamps, screen, pillion, luggage grid; 110 gns.; must sell; offers.—18, Union Rd., Clapham, S.W.4. [2852]

1920 2½h.p. 3-speed Douglas, Lucas lamps, horn, complete in detail, polished aluminium discs, spare tyre, very smart machine; £88.—208, The Rye, Dulwich, S.E.22. [2385]

DOUGLAS 2½h.p., 2-speed, 1916, just overhauled and renewed where necessary, Thomson-Bennett mag., new controls, new lamp set and horn; £39.—Dowell, Byfleet, Surrey. [2614]

ELI CLARK can give you good service both in new machines and spares; try me. I may be useful to you.—The Pioneer Agent for Douglas Motors, 196, Cheltenham Rd., Bristol. [0016]

1920 2½h.p., 3-speed, clutch and kick starter Douglas, Lucas lamps, bulb horns, good engine, low mileage, and very carefully used; £90.—Herbert Robinson, Ltd., Green St., Cambridge. [2644]

1920 Douglas, 2½h.p., as new, not used until April, 1920, all accessories, many new spares, owner going abroad; must sell; best offer over £80.—R. M. Barnes, Lambourn, Berkshire. [2377]

DOUGLAS 1920 2½h.p., 3-speed, clutch, and kick start, as delivered from the makers, and has not been on the road; must sell; will accept offers.—Williamson, 71a, King Henry's Rd., N.W. [2599]

1920 (June) Douglas 2½h.p., clutch model, lamps, speedometer, and complete insurance, unpunctured, unscratched, mileage 800, owner buying combination; £95.—79, Paddock Rd., Oxhey, Watford. [3032]

DOUGLAS, 1916-17, 2½h.p., 2-speed, semi-T.T. bars, Amac, C.A.V. mag., footboards, speedometer, splendid order; owner leaving town; £48/10.—Clarke, Furnisher, 74, Overstone Rd., Northampton. [2952]

1920 2½ h.p. 3-speed Clutch Model Douglas, P. and H. lamps, Klaxon horn, Stewart speedometer, with light Henderson sidecar, very good condition; £115.—Herbert Robinson, Ltd., Green St., Cambridge. [2646]

1920 Douglas T.T., 2½h.p., 3 speeds, all lamps, horn, kneegrips, guaranteed as new, soiled only; £85; extended payments or exchanges.—Homac's, 245, Lower Clapton Rd., E.5. Dalston 2408. [2922]

60 m.p.h. 2½h.p. Douglas, 2-speed, winner of numerous awards at Brooklands this year, mileage under 3,000 since new, a very sporty mount; £60.—Watson, 6, Cavendish Parade, Clapham, S.W.4. [2871]

F.O.C.H. have a late 1919 Douglas combination, many accessories, as new, cheap.—5, Heath St., Hampstead (nr. Hampstead Tube Station). Phone: Hampstead 3752. Hours 9-7, including Saturdays. [2549]

NEW Douglas 1921 3-speed gear, hand-controlled clutch and kick starter, £105; latest improvement as exhibited at Olympia; in stock, delivered passenger any part of country.—Herbert Robinson, Ltd., below. [2871]

NEW Douglas 1921 4h.p., 3-speed, £130, latest improvement as exhibited at Olympia; or with fine finish coachbuilt Douglas sidecar, including wind screen, painted saxe blue, £174; in stock, delivered passenger any part of country.—Herbert Robinson, Ltd., 32-35, Green St., Cambridge. Tel.: 995. T.A.: Bicycles. [2640]

1919 4h.p. Douglas, mileage 2,000, perfect condition, original tyres, belt, largest Lucas lamps, Klaxon and hand horn, speedometer, watch, and numerous spares; £80.—Wilding, 12, Kempshott Rd., Streatham. [2798]

DOUGLAS 1921 2½h.p. 3-speed models in stock, with all latest improvements, £105; cash exchange or extended terms.—Elce and Co., 15-16, Bishopsgate Av., Camomile St., E.C.3. Phone: Avenue 5548. [0066]

DOUGLAS, 2½h.p., new cover and tube and belt, new C.A.V. mag., tank renovated, makers' colours, Binks, in good order and sound; the lot, complete with lamps and horn, £50.—Fox, 226a, Unthank Rd., Norwich. [2695]

4 h.p. Douglas Combination, 1919, Binks (80 m.p.g.), D.A. lighting, all tyres new, many spares, chain and belt, exceptional condition, insurance: £115; tried by appointment.—Oliver, 27, Percy Rd., Whitley Bay, Northumberland. [2810]



CLEARANCE WEEK.

Machines quoted below.
No reasonable offer refused.
All under cost price.

COMBINATIONS.

- 1920 MATCHLESS Combination, M.A.G. engine, Lucas dynamo lighting, speedometer, etc., new List price
- 1920 RUDGE Combination, 6 h.p., with Rudge-Whitworth best sidecar. Immediate delivery. List price
- 1920 4 h.p. DOUGLAS Combination, brand new List price
- 1920 3½ h.p. SUNBEAM Combination, brand new List price
- 1920 Model H MATCHLESS Combination, M.A.G. engine, Lucas acetylene lamps, Lucas horn, speedometer, legshields. Immediate delivery List price
- 1920 A.J.S. Combination, complete. Immediate delivery List price
- 1920 8 h.p. ENFIELD Combination, Lucas Magdyno, brand new List price
- 1920 8 h.p. ENFIELD Combination, standard model List price
- 1920 8 h.p. ZENITH, countershaft model, Swan sporting Sidecar, complete with lamps. Special bargain; under list price £195
- 1920 4½ h.p. B.S.A. Combination, all-chain drive model, brand new List price
- 1920 6 h.p. B.S.A. Combination, immediate delivery List price
- 1920 latest chain drive 4 h.p. TRIUMPH Combination; immediate delivery. List price
- 1920 Sports Model ZENITH, electrically equipped, speedometer. Cost £165, accept £125
- 1920 A.J.S 6 h.p. combination, Lucas dynamo lighting set. Brand new £240
- 1920 7-9 h.p. 4-cylinder F.N. Combination, complete with all accessories, Lucas lamps, speedometer, hood, wind-screen £199
- 1914 8 h.p. MATCHLESS Combination, M.A.G. engine, just been thoroughly overhauled and re-enamelled at Matchless works £125
- 1920 HENDERSON Combination, dynamo lighting set, electric horn, and Henderson Elite sidecar Offers
- 1920 EXCELSIOR Combination, dynamo lighting set, electric horn, and Henderson Elite sidecar £165

SOLO MACHINES.

- 1920 4 h.p. TRIUMPH, countershaft model, brand new List price
- 1920 RUDGE-MULTI, I.O.M., immediate delivery List price
- 1920 3½ h.p. LEA-FRANCIS, J.A.P. engine, immediate delivery List price
- 1920 8 h.p. ZENITH, countershaft, kick-starter model, immediate delivery, Makers' list price
- 1920 A.B.C., 4 speeds, brand new, immediate delivery List price
- 1918 7-9 h.p. HARLEY, just been overhauled and re-enamelled at Harley-Davidson's, special bargain. Only wants seeing £110

SIDECARS.

Immediate delivery, Henderson Elite Sidecars, suitable for Harleys, Hendersons, etc.; also famous Dinky Sidecars, all models in Stock.

1920 G.N. Light Car, with or without dynamo. Immediate delivery List price
WANTED.—First-class Combinations.

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(Bottom end of Tottenham Court Rd.)
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MOTOR CYCLES FOR SALE.

Douglas.

1919 Late 2½h.p. Douglas, aluminium discs, chain cover, copper exhaust, N.P. flywheel, knee grips, Pedley grips, Tan-Sad, Klaxon, lamps, variable jet, whole in tip-top condition; £78/10.—Young, 77, Lower Sloane St., Chelsea. [2835]

4 h.p. Douglas Combination, 1920, practically new, full equipment, including trip speedometer, Easting screen, Lucas lamps, pillion saddle, spares; a splendid outfit; owner bought car; what cash offers?—Apply, Curator, Zoological Society, N.W.8. [2504]

JULY (1919) 4h.p. Douglas Combination, horn, discs, lamps, speedometer, mudshields, and other fittings, tools, tyres nearly new, sidecar repainted, condition perfect; £120; after 7 p.m.—44, Howard Rd., S. Norwood, S.E.25. Phone: Croydon 471. [3005]

1920 2½h.p. Douglas, 3-speed, P. and H. lamps, Klaxon, Stewart trip speedometer, knee-grips, Pedley H. grips, new spare belt, tools, mileage 1,200, mechanically perfect, appearance new; trial; £79.—Cooper, 28, Trinity St., Cambridge. [1462]

WAUCHOPE'S, 9, Shoe Lane, London, E.C.4.—2½h.p. Douglas machines, 1921, kick start models, 3 speeds, clutch, £105, 3 speeds only £100; 4h.p. combinations; £170; 4h.p. solos, £130; also 2½h.p. W.D. Douglas, supplied from Douglas works, £57/10. Easy terms arranged or exchange. [3056]

DOUGLAS, 2½h.p., 1921 model, new improved type motor cycle, fitted with 2-speed gear box, foot-rests, large tank, wide forks and mudguards; price £85; rotational deliveries.—Apply, authorised London agents, Vivian Hardie and Lane, Ltd., 24, Woodstock St., New Bond St., W.1. [0352]

DOUGLAS Motor Cycles, on easy terms of payment, 4h.p. combination, £170; 2-speed, solo model, £100; 3-speed, clutch, and kick starter model, £105; plus a small charge for delivery from works to London. The above are makers' list prices; for easy payments 4% extra is charged, only one fifth deposit, balance payable by 12 monthly instalments; write for latest lists of other machines in stock, etc.—Harrods, Ltd., 118, Brompton Rd., London. [2659]

Edmund.

EDMUND, late 1920, 2½h.p. J.A.P., Burman gear, clutch, K.S., as from works, practically unriden; cost £98, offers.—Rouse, Limes, Soham, Cambs. [2831]

EDMUND-J.A.P., 2½h.p., late 1920, 2-speed Enfield gear, complete, all accessories, splendid condition; £75.—Roberts, 297, Warwick Rd., Carlisle. [2369]

EDMUND 2½h.p. J.A.P., fitted with Enfield 2-speed gear and clutch, spring frame, shop-soiled only; bargain, £84.—P. J. Evans, 81-91, John Bright St., Birmingham. [X2608]

Enfield.

1920 Magdyno Enfield Combination in stock; list price.—Below.

1920 8h.p. Enfield Combination, brand new; £165.—Edwards, 50, Harrington Rd., South Kensington. Phone: Kens. 3709. [2208]

£35.—Enfield 3h.p. twin, T.T., 2-speed; bargain.—13, New St., Wellington, Salop. [X2886]

BABY Enfield, new, unregistered; £6 under list price.—Stainer, High St., Ryde. [2519]

ENFIELD 3h.p. Twin, long exhaust, complete, perfect; £50.—Rhodes, Cains, Cambridge. [3011]

3 h.p. Royal Enfield, Bosch, Binks, 2 speeds, ride away; 35 gns.—76, Western Rd., Southall, W. [2522]

1918 8h.p. Enfield Combination, new condition; £95.—29, St. Leonard's St., Bromley-by-Bow. [2775a]

1920 Enfield, 2-stroke, 2-speed, speedometer, as new; sacrifice, £65.—107, Pinner Rd., Harrow. [2579]

NEW Enfield Combination and lightweight in stock; exchanges.—Martin Mitchell, Ltd., Stafford. [1691]

ROYAL ENFIELD Lightweight, 2½h.p.; a bargain, £38.—McPherson, Clynog, Llanwnda, N. Wales. [9840]

ENFIELD Combination, 8h.p., nearly new, as left makers, in addition lamps; £130.—21, Newton Av., Acton, W. [2713]

ENFIELD 1920 2½h.p. Model, Miller's head and rear lamps, Lucas horn, as new; £70.—Parker's, Bradshawgate, Bolton. [X2908]

NEW 1920 8h.p. Enfield Combination in Stock; maker's price.—Shepherd and Co., Enfield, Highway. Tel.: Waltham X31. [0340]

1920 8h.p. Enfield Combination, brand new, £160; also 1920 2½h.p. lightweight, brand new, £65.—Rose's Garage, Uxbridge. [2750]

ENFIELD Combination, twin, sidecar, hood, screen, lamps, perfect; £140, nearest offer.—Seen, 7, Central Hill, Upper Norwood. [2954]

ENFIELD 1920 2-stroke, lamps, horn, tools, spares, good tyres, unscratched, perfect order; £65.—91, Grove Park, Denmark Hill, S.E.5. [2783]

ENFIELD 6-8h.p. Combination, in splendid condition, fully equipped; £110, or offer.—262, Black-horse Lane, Walthamstow, London. [2890]

ENFIELD Combination, 8h.p., 1918, lamps, hood screen, perfect running order, insured; £150, nearest.—Purlieu Farm, Blakeney, Glos. [2691]

MOTOR CYCLES FOR SALE.

Enfield.

ENFIELD 8h.p. Combination, used twice, Magdyno lighting; first best offer over £160.—Head, 22, Palmerston Rd., Walthamstow, London. [2374]

ENFIELD Combination, 1918, perfect condition, Easting, 700x80 tyres; £120, bargain; any trial.—Clark, 9, West Heath Av., Golders Green. [2592]

ENFIELD Combination, 8h.p., 1919, complete with lamps, hood, screen, Klaxon horn; any examination.—170, Clarendon Rd., Notting Hill, W. [2577]

ROYAL ENFIELD 2-stroke, 2 speeds, new, for immediate delivery; £65; exchanges.—Homac's, 243, Lower Clapton Rd., E.5. Dalston 2408. [2920]

1916 Enfield Combination, 6h.p., just been overhauled and rebushed, oversize tyres, hood, screen, lamps; £130.—5, Chatterton Rd., Bromley, Kent. [2770]

ENFIELD, 8h.p., sidecar, 1920, accumulator lighting, Easting, speedometer, 610 miles, as new; £180; any trial.—71, Holywell Av., Monkseaton. [2371]

ENFIELD 6h.p. Combination, 2-speed, hood, Easting, pillion seat, electric light, spares and accessories; £105; after 6 p.m.—19, Valnay St., Tooting. [2755]

1917 6h.p. Enfield Combination, in perfect condition, unused two years, new chains and electric lighting set; £135.—King, 27, Woodgreen, Witney, Oxon. [2313]

1921 Enfield Combination, dynamo lighting, with or without dynamo, in stock, immediate delivery; list price.—J. Smith and Co., 52-54, Hampstead Rd., N.W.1. [0352]

1914 3h.p. Royal Enfield, 2-speed, new condition, semi-T.T. bars, Pedley grips, copper cooling fins, fast; £48 cash, or nearest.—Hammond, Castiles, Grantley, Ripon. [X2866]

ENFIELD 1914 6h.p. Combination, all accessories, splendid condition; £100, or near offer; owner going abroad; must sell.—R. M. Barnes, Lambourn, Berkshire. [2378]

1920 Enfield Combination, Magdyno, mileage 1,400, as new, complete tools and spares, original tyres; best offer over £165.—Hill, 60, Marchmont St., Russell Sq., London. [2471]

ENFIELD 1919 Combination, 8h.p., complete, wind screen, Tan-Sad carrier, speedometer, etc.; offers; seen by appointment; no callers.—Jerome, 46, Frith St., Soho. Phone: Gerrard 8197. [2412]

ENFIELD Combination, September, scarcely used, literally unscratched, Lucas equipment, £135; 1920 Scott, unused 4 months, mileage 2,500, F.R.S. lamps, £105.—10, Clonmell Rd., Teddington. [2883]

1916 Enfield Combination, 6h.p., 3 good lamps, new Cowey speedometer, horn, Tan-Sad, new Amac carburetter, wind screen; £100 for quick sale.—Harleyford, The Avenue, St. Margaret's, Twickenham. [2884]

WAUCHOPE'S, 9, Shoe Lane, London, E.C.4.—1912 new 8h.p. Royal Enfield Combinations from stock, dynamo lighting model £182, without dynamo £160; also 6h.p. 1917 Royal Enfield combination, dynamo lighting, £115. Cash exchange or easy terms. [3055]

Excelsior.

EXCELSIOR 1920, 2-speed, clutch, kick start, new last July, like new; £72.—Greenwood, Supper Rooms, Crosshills, Keighley. [X2868]

F.N.

F.N. 5-6h.p.; ride away; bargain, £25.—Arch, 57, Blakenall Heath, Walsall. [2742]

F.N. 4-5h.p., 2-speed, overhauled, assembling incomplete; £25, offers; 2-stroke wanted.—116, Bridge Rd., East Molesey. [2790]

1920 F.N. 4-cyl. Coachbuilt Combination, with wind screen, 3-speed clutch, acetylene lamps, Cowley horn, Palmer cords, all accessories, good condition; £120.—Evans and Sons, Stone. [1251]

Gamage.

GAMAGE-VILLIERS, 1919, 2½h.p., 2-speed, C.A.V., Senspray, unit thoroughly overhauled by makers, tyres as new (unpunctured), lamps, also quantity of useful spares, extra Amac carburetter, leggings, etc.; £55, offers.—King, 125, St. Asaph Rd., Brockley, S.E.4. [2401]

Harley-Davidson.

HARLEY Sports, fully equipped, new; £145.—Clark, 7, Exhibition Rd., S.W.7. [1508]

1918 7-9h.p. Harley, 3 speed, new condition; £85.—29, St. Leonard's St., Bromley-by-Bow. [2775]

1918 Harley-Davidson, with new sidecar, perfect order, lamps, etc.; £145, or offer.—Lieutenant Smith, Barracks, Reading. [2443]

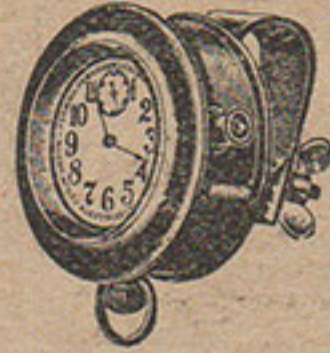
HARLEY-DAVIDSONS.—I have at present a fine assortment in stock, all fully guaranteed.—Ross, 86, High Rd., Lee. [3849]

HARLEY-DAVIDSON 1919 7-9h.p. Combination, head, rear, and sidecar lamps, horn, as new, £190. Parker's Bradshawgate, Bolton. [X2900]

HARLEY-DAVIDSON 4h.p. twin, brand new, for immediate delivery.—Walsall Garage, Wolverhampton St., Walsall. Tel.: 444. [9005]

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These Leggings are firmly held in place by spring clips below knee and above ankle. Afford complete protection, and are very quickly put on and off.

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MOTOR CYCLES FOR SALE.

Harley-Davidson.

HARLEY 1915 Coachbuilt Combination, electric light, mudshields, new tyres, chains, guaranteed; best offer clears.—Garage, Horsmonden. [3015]

TWO Harley-Davidson Combinations, 7-9h.p., 1919 and 1917, splendid condition; £115 each; bargains.—Walker, 15, Green Place, Crayford, S.E. [2355]

HARLEY-DAVIDSON Combination, 7-9h.p., wind screen, fully equipped; £125, or exchange Ford van.—A. Buckner, 1, Tärver Rd., Walworth. [2665]

HARLEY-DAVIDSON 1918 Combination, Klaxon, lamps, insurance, fast, nice lot; £125, offers; appointment.—19, Watney Rd., Mortlake, S.W. [2942]

HARLEY-DAVIDSON 7-8h.p., 1918 model, as new, plating and enamelling, perfect mechanical condition; £120.—Malpass, 46, Oakthorpe Rd., Oxford. [1781]

HARLEY-DAVIDSON, 1919, Montgomery sidecar just fitted, tyres and general condition equal new; £150.—Bunting's Motors, Wealdstone. Closed Sundays. [3023]

HARLEY-DAVIDSON 7-9h.p., 3 speeds, lovely sidecar, part aluminium, perfect condition throughout; any trial; 89 gns.—88, Brook Green, Hammersmith, London. [2829]

1920 Harley-Davidson 7-9h.p., electric model, combination, hood, screen, luggage grid, Tan-Sad, very fast, perfect condition, as new; price £250, or offer.—Apply, Battersea 1730. [2421]

1920 Harley-Davidson 7-9h.p. Electric Combination, Henderson Elite sidecar, discs, completely equipped and guaranteed; nearest £195.—Chrimes, Terminus Rd., Eastbourne. [2314]

OCT., 1920, 7-9h.p. Harley-Davidson, electric, special sidecar, hood and screen, mileage 750, equal new; bargain, £230, or near offer; owner buying car.—Gordon Kideon, Architect, Willenhall, Staffs. [X2867]

HARLEY-DAVIDSON 1920 7-9h.p. Combination, electric, fully equipped, spares and accessories, insurance policy, as new, mileage 1,000; £205.—Barnett, c/o Boyce, 329, Archway Rd., Highgate. [2739]

1919 Harley-Davidson Combination, 7-9h.p., appearance and condition excellent, new hood and screen, cylinder acetylene lighting, Klaxon, speedometer, special head lamp, spares, insured; owner bought car; price £175; trial given.—Apply, Garage, 495, Fulham Palace Rd., or owner, Wilson, Phone Mayfair 6666. [2638]

HARLEY-DAVIDSON, 1918-1919, 7-9h.p., ex W.D. stock, thoroughly overhauled, complete with lamp, generator, and horn, £130; fitted with new 1920 Montgomery sidecar, guaranteed by us, £168; two similar combinations, slightly used since overhaul, but guaranteed, £115; deferred payments no extra.—Maudes', 100, Gt. Portland St., W.1. [2916]

Hazlewood.

SECOND-HAND 5-6h.p. Hazlewood-Jap Combination, 3-speed, clutch, and kick starter, complete with lamps, speedometer, and horn, had about 6 months' use; £130; may be obtained on deferred payments.—Harrods, Ltd., 118, Brompton Rd., London. [2660]

NEW 5-6h.p. Hazlewood Combination, 3-speed, clutch and kick starter, a thoroughly reliable outfit; Harrods have a large stock of these for sale at £186 each, or on deferred payments 4% extra; only one-fifth deposit, balance by 12 monthly instalments.—Harrods, Ltd., 118, Brompton Rd., London. [2651]

Henderson.

HENDERSON, 4-cyl., latest model, new, £220; with sidecar, £265.—Motor, Exchange, Horton St., Halifax. [2540]

HENDERSON, 1921, 12-14h.p., and Henderson sidecar, latest electric model; nearest £240 secures.—26, George St., Hove. [2312]

HENDERSON 10h.p., most luxurious combination, as new, hood, screen, dynamo lighting; £150, or near offer.—41, Malvern Rd., Kilburn Park. [1660]

Hobart.

NEW 2½h.p. Hobart Lightweight.—2-speed models in stock at manufacturers' list price, £75; 4% extra for deferred payment; only one-fifth deposit, balance by 12 monthly instalments.—Harrods, Ltd., 118, Brompton Rd., London. [2653]

Hoskison.

NEW Hoskison-Blackburne 2½h.p., 2-speed, hand clutch; 99 gns.—Martin Mitchell, Ltd., Stafford. [1694]

Humber.

HUMBER 4½h.p. Flat Twin, 3-speed clutch, K.S.; £140.—The Spalding Motor Co., Ltd., Spalding. [2430]

£25.—Humber, 1913, 3½h.p., in good order; seen any time.—40, High Rd., East Finchley, N.2. [2700]

HUMBER 3½h.p. Coachbuilt Combination, 3 speeds, all lamps, etc.; £55, offer.—4, Liverpool Rd., Thornton Heath. [2879]

HUMBER Motor Cycles, new, solo or combination, from stock.—Lankester Engineering Co., Motor Cycle Dept., 63, Brighton Rd., Surbiton. [2392]

1915 Humber, 3-speed, K.S., 3½h.p. lamps, horn, tyres new, perfect condition, stored 3 years; £60, bargain.—Box 9,775, c/o The Motor Cycle. (D) [2585]

MOTOR CYCLES FOR SALE.

Humber.

HUMBER 3½h.p. Flat Twin Combination, electric light, wind screen, etc.; £120; practically new. Bunting's Motors, Wealdstone. Closed Sundays. [3024]

3½h.p. Humber Combination, overhauled, new parts fitted, 3 speeds, S.A. perfect, good tyres, grand condition; trial; £43.—Ford, Sotwell, nr. Wallingford, Berks. [X2942]

HUMBER 3½h.p. C.B. Combination, new sidecar and back wheel tyres, spare belt, never been used, kick start and 3-speed gear; seen Honeyman's Garage, Dunblane; best offer £70.—J. M. Fisher, 10, Forbes Rd., Edinburgh. [2387]

Indian.

1916 Indian 5h.p., 3-speed; £75.—Greyfriars Lane Garage, Coventry. [X2870]

INDIAN 1915 5-6h.p., standard model, perfect; £32.—17, Heaton Rd., Mitcham. [2749]

INDIAN 1919 Red Powerplus, as new; £80.—3, Courtlands Av., Lee, S.E.12. [2937]

1921 Indians, early delivery of all models.—Hewett Bros., 94, Western Rd., Hove, Sussex. [0345]

PLACE Your Orders for the New 1921 Indians with J. Horswill, 42, Bridge St., Chester. [2344]

1920 7-9h.p. Indian Solo, new; £181/14.—King and Harper, 6 and 7, Bridge St., Cambridge. [8942]

1920 4h.p. Scout Model Indian, new; £140.—King and Harper, 6 and 7, Bridge St., Cambridge. [8943]

1916 5-6h.p. Indian Coachbuilt Combination, hood, wind screen; £80.—1, Othello St., Liverpool. [2474]

1920 7-9h.p. Indian Combination, new; £223/14.—King and Harper, 6 and 7, Bridge St., Cambridge. [8941]

INDIAN 7-9h.p., re-enamelled and overhauled, mechanically sound; £95.—Maudes', 100, Gt. Portland St., W.1. [2918]

INDIAN 7-9h.p. Clutch Model, excellent condition; take £50 cash.—Bunting's Exchange, Wealdstone. Closed Sundays. [3025]

INDIAN No. 71F009, clutch, fast machine, in good running order; private owner; £65.—N., 97, Pathfield Rd., Streatham, S.W.16. [3065]

7-9h.p. Indian Combination, 1920, only done 3,000 miles; could be inspected in Harrogate district.—Box 9,727, c/o The Motor Cycle. [2349]

INDIAN Combination, 1914, 7-9h.p., 2-speed, spring frame, just overhauled, perfect condition; £130.—Deane, Pant Teg, Pant Rd., Dowlais. [2447]

1916 Indian, 5h.p., 3-speed, Millford coachbuilt sidecar, good condition, fast, tyres perfect, horn, tools, etc.; £85.—Beesh Hill, Mayford, Woking. [2686]

1915 Indian, clutch model, good running order, sacrifice £50; also Clyno spare wheel, no spindle, 14/-; wanted, Clyno sidecar.—Parker, Printer, Kelghley. [X2881]

INDIAN T.T., clutch model, Bosch, Binks, new Millers lamps, discs, selling through unemployment; £50.—Stoodley, Mafeking, Ludgershall, Wilts. [2834]

POWERPLUS Indian Combination, electric, Schebler carburetter, 1917, good condition; £120, or exchange.—26, Lower Park Rd., Peckham, London. [2697]

INDIAN Combination, 1915-16, 7-9h.p., 3-speed, K.S., clutch, spring frame, excellent; £90; accept piano player part.—Capt. Collins, Sunbury Common. [2335]

INDIAN Powerplus 7-9h.p., 3 speeds, Canoelet sidecar, discs, leg shields, screen, apron, perfect condition throughout; 89 gns.—88, Brook Green, Hammersmith, London. [2830]

7-9h.p. Indian Road Racing Model, complete with lamps, speedometer, Klaxon, pump, new back tyre and tube, new chains; £60; ride away.—Quickenden, Blindley Heath, Surrey. [2849]

1916 7-9h.p. Powerplus Indian Combination, complete lamps, horn, tools, new gears, chains, and ball races throughout, very fast; £115, or offer.—Thear, Bedford Place, Bridport. [2843]

7-9h.p. Indian Powerplus, solo, delivered Jan., 1920, only run 500 miles, perfect condition, owner buying machine less horse-power; £115.—McLean, 39, Alexandra Rd., Wimbledon. [2402]

5-6h.p. Indian, 1915-16, 3-speed clutch, new chains and sprockets throughout, new Binks, new lamps and horn, one new tyre, perfect; £75.—G. W. Jackson, 20, Mill St., Congleton, Cheshire. [2456]

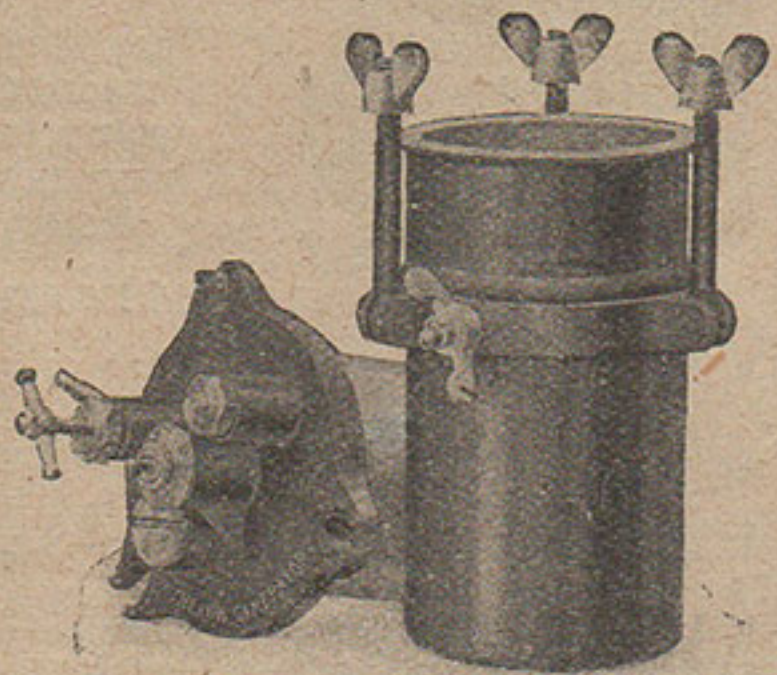
1919 7-9h.p. Powerplus Indian, 3 speeds, H. and F. clutch, mechanical horn, lamps, speedometer, all accessories, just overhauled; offers.—Tonge, 32, Henslowe Rd., E. Dulwich, S.E.22. [2875]

1920 N.E.20 Indian (dynamo lighting) Combination, Indian bulbous back sidecar, converted into double-seater, legshields, Aero pattern wind screen; £190.—Horswill, 42, Bridge St., Chester. [2343]

INDIAN Combination, 1920 (June), electrically equipped, powerplus, aluminium discs, sporting torpedo sidecar, mileage 3,000, perfect condition; £195, or nearest.—Carding, Hillcrest, Leek, Staffs. [2310]

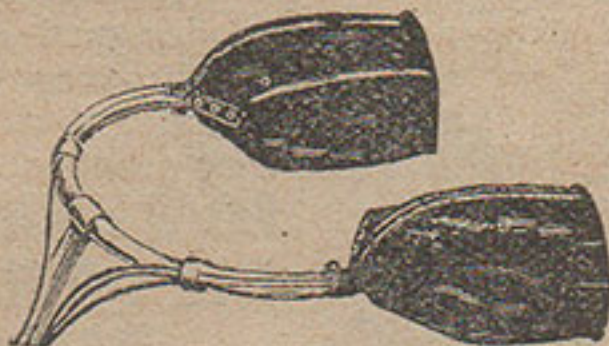
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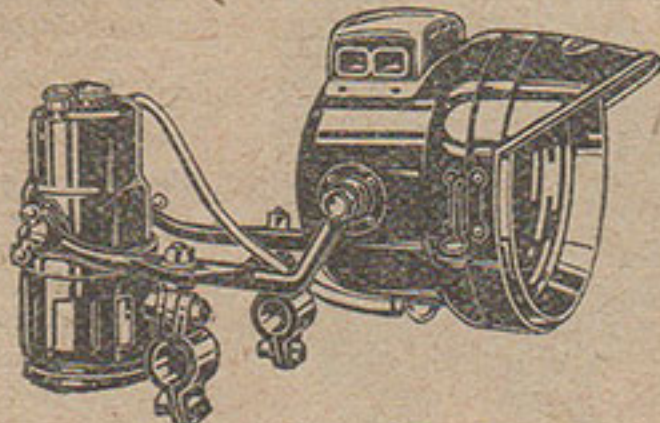
Black Waterproof, Teddy lined, 25/- Black Waterproof, Cloth lined, 15/6 Carriage 9d. Fur lined foot muffs, for sidecars, 42/- Postage 1/-

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MOTOR CYCLES FOR SALE.

Indian.

F.O.C.H. for Indian combinations, 1916 and 1920, dynamo lighting; bargains.—5, Heath St., Hampstead (nr. Hampstead Tube Station). Phone: Hampstead 3752. Hours 9-7, including Saturdays. [2551]

1920 7-9h.p. Powerplus Indian, electric horn and lamps, excellent condition, ridden 2,000 miles only, fast machine; £152/10.—Herbert Robinson, Ltd., 32-35, Green St., Cambridge. Tel.: 995. T.A.: Bicycles. [2642]

1920 7-9h.p. Indian Powerplus Combination, dynamo, mileage 3,000, unpunctured, all necessary spares and equipment, perfect in every way; trial run; best offer over £175.—Elton Morris, The Gaer, Hereford. [1915]

LATEST 1920 Combination N.E.20 Indian, dynamo lighting, Bosch mag., latest control, 1921 pattern, change speed lever, model de luxe sporting sidecar; a magnificent turnout; £200.—Horswill, 42, Bridge St., Chester. [2342]

1920 Indian 7-9h.p. Powerplus Combination, Millford bulbous sidecar, dynamo lighting, speedometer, Easting wind screen, accessories, perfect order throughout; £165; insured £220; after 7.—2, Phoenix Place, Addison Av., Holland Park, W. [2668]

Invicta

SECOND-HAND 2½h.p. Invicta, Villiers 2-stroke engine, single speed, complete with accessories, cost over £70, very little used; only £45; may be obtained on deferred payments.—Harrods, Ltd., 118, Brompton Rd., London. [2662]

Ivy.

IVY Cycles.—Write, Rothwell and Milbourne, Cowleigh Garage, Malvern. [1796]

1919 Ivy 2-stroke, 2-speed; £55, or nearest.—14, Branksome Rd., Merton Park, S.W.19. [2701]

LATE Ivy 2-stroke, 2½h.p., 2-speed, only ridden 600 miles, as new, lamps, horn, tools, etc.; quick sale £58.—353, King St., Hammersmith. [2516]

IVY, the aristocrat of its type, delivery of all models from stock; prices and catalogues post free.—District agents, Walsall Garage, Walsall. Tel.: 444. [9003]

IMMEDIATE delivery of all Ivy models, the acknowledged finest lightweight.—Full particulars, H. G. Henly and Co., London and District Agents, 91, Gt. Portland St., W.1. Mayfair 4084. [0022]

1917 Ivy-Jap 8h.p. Combination, Sturmey-Archer countershaft 3-speed, electric and acetylene lighting, Bosch mag., hand clutch, speedometer, wind screen, pillion seat, luggage grid, horn, spares, in first-class order; 100 gns., for quick sale.—Talbot Arms, 161, Markuse Rd., Walthamstow. [2360]

James.

JAMES Combination, 1919 6h.p. twin, Lucas dynamo lighting, as new; £130.—40, Hertford Place, Coventry. [X2939]

1919 4½h.p. James, first-class order, new heavy Dunlop tyres; £80.—Box 9,803, c/o The Motor Cycle. [2980]

JAMES Combination, 3-speed, kick start, clutch, 4½h.p.; £88; exchange solo and cash.—57, Kenbury St., Camberwell, London. [2706]

JAMES Brand New Combinations, for immediate delivery from stock.—Sole district agents, The Walsall Garage, Walsall. Tel.: 444. [9000]

JAMES 4½h.p. 1919 3-speed Combination, speedometer, all accessories, excellent condition; £115, or offer.—24, Princes Av., Palmers Green, N. [2823]

JAMES, May, 1920, 2½h.p. 2-stroke, 2-speed, horn, P. and H. lamps, excellent condition, ready to ride away; bought Morgan; £70.—Cave, c/o Daniels' Lightpill Iron Works, Stroud, Glos. [2548]

J.A.P.

J.A.P. 6h.p., 1920, 3-speed Sturmey gear box, never ridden; £125, or nearest.—82, Alma Rd., Peterborough. [2458]

J.E.S.

1920 J.E.S. Motorcyclette, 24in. frame; £38; accessories.—369, Brockley Rd., London, S.E. [1588]

Kingsbury.

KINGSBURY 1921 2½h.p., 2-stroke, 2-speed, all-chain drive, Dunlop tyres, fully equipped, electric lighting sets. We have a few of these beautiful machines at £70.—Colonial Motor Co., 104a, Finchley Rd., N.W.3. Hampstead 7822. [2660]

L. and C.

L. and C. 5h.p., Mabon clutch, modern frame, wide tank, powerful, fast; £28; lower power wanted.—57, Kenbury St., Camberwell, London. [2708]

Lea-Francis

LEA-FRANCIS, 3½h.p. M.A.G., 2-speed, in stock; list.—Clark, 7, Exhibition Rd., S.W.7. [2595]

1920 Lea-Francis Twin; solo £120, combination £135.—Tel.: Museum 6626.—A.S.C., 60, Mortimer St., W.1. [2908]

MOTOR CYCLES FOR SALE.

Lea-Francis

LEA-FRANCIS, 4h.p., 1920, 2-speed, good condition, as new; £110; lamps horn.—Cater, 1, Stoneleigh Villas, Ryelands St., Hereford. [2485]

LEA-FRANCIS C.B. Combination, 3½h.p. twin J.A.P., 1915, renovated as new, all on; £90.—48, Criclade Av., Streatham Hill. [2854]

WAUCHOPE'S, 9, Shoe Lane, London, E.C.4.—New 3½h.p. Lea-Francis from stock; £130. Cash, easy terms, or exchange. [3058]

LEA-FRANCIS, 1920, M.A.G., ridden 3 months, per- 105 gns., cost £136.—Tree, 14, Courtfield Gardens, Kensington, Western 5386. [2620]

LEA-FRANCIS, 1920.—Place your name on our waiting list for delivery of these aristocratic mounts.—A. J. Sproston, Ltd., 198, Gt. Portland St., W.1. [0099]

LEA-FRANCIS, M.A.G., as makers' specifications, shop-soiled; at greatly reduced price; now is the time to buy.—Mebes, 154-156, Gt. Portland St., W.1. Phone: 3426 Mayfair. [9887]

NEW Lea-Francis, 2-speed, clutch and kick starter, M.A.G. engine; at list price, £130, or on deferred payments 4% extra; only one-fifth deposit, balance by 12 monthly instalments.—Harrods, Ltd., 118, Brompton Rd., London. [2654]

1920 3½h.p. Lea-Francis, M.A.G. engine, perfect condition throughout, excellent appearance, adjustable T.T. bars, long exhausts, many special fittings, exceptionally fast and sporting machine, guaranteed over 60 m.p.h., thoroughly reliable; £105.—Newall, Ongar, Essex. [2753]

Levis.

2½h.p. Levis, 1916, Brampton forks; £32; ride away. —670, High Rd., Tottenham, N.17. [2846]

LEVIS, 2½h.p., 1920, engine fast, perfect; snip, £40. —G.B., 15, Beddington Terrace, Mitcham Rd., Croydon. [2379]

LEVIS 2½h.p., splendid condition, £40; also Triumph F.E. 3½h.p., cheap, £25.—Drew, Chapman St., West Bromwich. [X2895]

1920 Levis Popular, all accessories, 7 months' insurance; £56, bargain.—Wilson, 6, Brown St., Barrow-in-Furness. [1214]

LEVIS, 1919 (Dec.), good condition, lamp, Klaxon, tools, speedometer, spare belt; £46.—Fairbanks, Preshute, Marlborough. [2789]

1919 Levis, perfect, smart, original unpunctured tyres, accessories; 43 gns.—Fersfield, Westbury Rd., New Malden, Surrey. [2885]

LEVIS, the finest 2-stroke in the world, delivery from stock; £60.—District agents, The Walsall Garage, Walsall. Tel.: 444. [9001]

1921 Levis Popular, latest model just arrived; £60; exchanges or easy payments.—Official agents, Homas's, 243, Lower Clapton Rd., E.5. Dalston 2408. [2921]

LEVIS Popular, latest model, in stock; £60.— Vivian Hardie and Lane, Ltd., 24, Woodstock St. (off Oxford St.), Bond St., London, W.1. Phone: Mayfair 6559. [0318]

LEVIS 2½h.p., 1915, engine just returned after thorough overhaul by makers, new cylinder, piston, etc., good appearance, accessories; £38.—Bateson, 32, Laurel St., Tottington, Bury. [2560]

L.M.C.

LM.C., suspension and ordinary models, shop-soiled, as makers' specifications, at greatly reduced prices; also 6h.p. and 4½h.p. combinations, second-hand; at bargain prices.—Mebes, 154-156, Gt. Portland St., W.1. Phone: 3426 Mayfair. [7185]

Martin.

MMARTIN-J.A.P., 1916, 4h.p., o.h.v., enamelled grey, very smart, new condition, lamps, horn; £65.—Cuss, Holly Cottage, Bruce Grove Rd., Tottenham. [2578]

Martinsyde.

NEW 6h.p. Martinsyde Combination in stock; 160 gns.—Jackson Bros., Horsham. [2820]

6h.p. Martinsyde, the super combination; immediate deliveries, Norfolk agents.—Norwich Motor Co., Ltd., Norwich. [2786]

MMARTINSYDE-NEWMAN.—Sole agents for London, Essex, Bucks, Surrey, Middlesex, and Hertford; also Cornwall and Devonshire, for Martinsyde-Newman combination; £170; delivery ex stock; trade supplied; exchanges and deferred payments.—Maudes', 100, Gt. Portland St., W.1., and Paris St., Exeter. [5777]

Matchless.

MATCHLESS.

1921 Models now ready; all the latest improvements. You can have one now, or book delivery for any forward date. Every combination personally tested by the Matchless specialist. Spares of all dates in stock.—J. Tassell, 1a, Bloomfield Rd., Plumstead. [6881]

MATCHLESS.—Early deliveries.—Pollard, Broomfield Rd., Chelmsford. [X2917a]

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THEY ARE:

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Made double-breasted, with a particularly deep and efficient storm collar, two leg straps wide all-round belt, wind cuffs, and two big pockets.

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Well shaped overalls to match, if required. **17/6** post free.

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London Stockists: Messrs. Burt's, 245, Hammersmith Road, London, W.1.
Manchester Stockists: The Anglo-French Agencies Co., 27, Brazennose Street, Manchester.
Leicester Stockists: Messrs. W. Chapman, Belgrave Road, Leicester.

Or by post, with your satisfaction guaranteed, from: **M. SHEKMAN & Co., 15, HUDSON ST., TYNE DOCK.**

MOTOR CYCLES FOR SALE.

Matchless.

MATCHLESS 8h.p. Combination, with lighting set; £225.—The Spalding Motor Co., Ltd., Spalding. [2431]

MATCHLESS 1921 Combinations in stock; list; exchanges arranged.—Clark, 7, Exhibition Rd., S.W.7. [2596]

1920 Matchless Combination, as delivered, shop-soiled; £195.—Wright's Garage, Saffron Walden. Tel.: 16. [2972]

1920 8h.p. Model H Matchless Combination, new; £205.—King and Harper, 6 and 7, Bridge St., Cambridge. [8944]

1921 Matchless Combinations, Magdyno; delivery from stock.—Agents, Hewitt Bros., 94, Western Rd., Hove, Sussex. [0334]

1920 Matchless, standard, new, shop-soiled only; £175.—Edwards, 50, Harrington Rd., South Kensington. Phone: Kens. 3709. [2203]

1920 Matchless, little used, Lucas lamp, speedometer, aluminium discs, Stewart horn, screen with side wings, spare wheel, spares; £200.—Babb, Porthill, Shrewsbury. [2363]

1912-13 Matchless Combination, 8h.p. J.A.P., 2-speeds, kick starter, recently overhauled, lamps, horn, etc.; £70, or offer.—Elliott, 14, Delamere Rd., Wimbledon, S.W.19. [2723]

MATCHLESS Combination, 1921 model dynamo in stock.—Vivian Hardie and Lane, Ltd., 24, Woodstock St. (off Oxford St.), Bond St., London, W.1. Phone: Mayfair 6559. [0317]

1920 Matchless Combination, all accessories, including Easting screen and hood, new condition; £185, or offer; evenings by appointment.—22, Earls-thorpe Rd., Sydenham. [2721]

1919 Matchless Combination, interchangeable wheels, one spare, equipped regardless, new P.R.S. electric lighting set (cost £15), perfect; £120.—60, Wallingford Av., N. Kensington. [2765]

1920 Model H Spring Frame Matchless Motor, Magdyno, electric lighting, legshields, rear drive, speedometer, and all accessories; £200.—F'reeth, 5, Cornwall Parade, Church End, Finchley. [2196]

MATCHLESS-M.A.G. 1920 Combination, complete with acetylene lamps, horn, speedometer, tools, wind screen, hood, spare wheel, run 2,300 miles; £190, or near offer.—16, Mount View Rd., Chingford. [2528]

MATCHLESS, 7-9h.p. M.A.G., Bosch, Cowey, accessories, spares, insurance policy, really sound, reliable combination throughout, trial, private, bought car; £112.—Nordon, 81a, Powis St., Woolwich. [2364]

1920 Matchless Combination, D.A. lighting set, hood, screen, spare wheel, speedometer, tools, and mascot, perfect condition, any trial; £185, or near offer.—Write Maurice Harris, 2, Fitzjohn's Av., London, N.W.3. [2711]

MATCHLESS Combinations.—Book your orders now with Ross, 86, High Rd., Lee, S.E., for 1921 models; deliveries guaranteed strictly as per order received; a large assortment of 1919 and 1920 models also in stock. [3850]

MATCHLESS 1921 Model Spring Frame Combination in Stock, £205; Lucas Magdyno lighting, £25 extra; exchanges; extended terms.—Elce and Co., 15-16, Bishopsgate Av., Camomile St., E.C.3. Phone: Avenue 5548. [0067]

MATCHLESS-M.A.G. Model H Combination, July, 1920, spare wheel, Magdyno, wind screen, legshields, speedometer, spares, little used, ready to ride away; £230.—Daniels, Lightpill Iron Works, Stroud, Glos. [2337]

MODEL H. Matchless, M.A.G., August, 1920, mileage 800, tyres unpunctured, Lucas lamps, horn, insurance, Watford speedometer, makers' hood, screen, spares, condition as new; £210.—Wilson, 43, Beckenham Rd., Pease. [2501]

£200.—1920 Matchless (June), as new, dynamo lighting, legshields, sidecar, hood, curtains, wind screen, luggage grid, spare wheel, insurance policy, guaranteed first-class condition and genuine bargain.—92, Birkhall Rd., Catford. [2353]

MATCHLESS 1916 8h.p. M.A.G. Combination, 3-speed gear box, kick start, electric lights, hood, screen, luggage carrier, interchangeable wheels, horn, lot of spares, etc., ready for hard work; £100, or near offer.—71a, King Henry's Rd., N.W. [2601]

MATCHLESS 1914 7-9h.p. J.A.P. Combination, clutch, K.S., Millford sidecar, Easting wind screen, electric lighting, new chains and tyres all round, luggage carrier, horn, etc.; the whole lot guaranteed in perfect mechanical condition; £85.—104a, Finchley Rd. Hamp. 7822. [2602]

6h.p. o.h.v. Matchless-Jap, special racing machine with high compression, excellent appearance, sound condition, having lately had £28 overhaul, new magneto, very fast and sporting, will exceed 70 m.p.h., £65 or offer; exchange clutch model Indian or sporting 3½h.p. machine.—Newall, Ongar, Essex. [2754]

MATCHLESS 1921 Models.—Send orders along to S. E. Clapham (Motors), Greenwich. As Matchless specialists, we guarantee satisfaction and unlimited service. Immediate delivery, or date to suit client. We allow you 10% on all deposits.—Note address, Clapham (Motors), 27, Stockwell St., Greenwich, S.E.10. [2999]

MOTOR CYCLES FOR SALE.

Matchless.

MODEL H 1920 Matchless Combination, 8h.p. J.A.P., Lucas electric lighting, spare wheel, Watford speedometer, screen, sidecar step, full kit of tools, mileage 2,000, insured, appearance as new, mechanically perfect; expert inspection invited; reason for selling, owner buying car; genuine bargain, £190, no offers; Glamorgan.—Box 9,777, c/o *The Motor Cycle*. (D) [2587]

Metro.

1920 Metro-Tyler, all red, discs, all on, done 500 miles, beautiful condition.—161, Davenport Rd., Catford, S.E.6. [2354]

Minerva.

MINERVA 3½h.p., good running order, low frame; £15/10.—29, Selkirk Rd., Tooting, S.W.17. [2785]
31h.p. Minerva, m.o.i.v., E.I.C. mag., Triumph carburetter, leaf springs, forks, adjustable pulley, long exhaust, ride away; £21.—Bell, Fellside, Lamb-ley, Carlisle. [2301]

National.

1920 2½h.p. National-Union 2-stroke, E.I.C., B. and B., Burman 2-speed, clutch, kick starter; nearest £60.—Hardman, 10, Lorne Terrace, Darlington. [2737]

New Hudson

1918 New Hudson 2-stroke, 2-speed, electric lighting, Lucas horn; £50.—128, Coopers Lane, Smeth-wick. [2811]

1920 2½h.p. New Hudson, brand new; £65.—Edwards, 50, Harrington Rd., South Kensington. Phone: Kens. 3709. [2207]

NEW HUDSON Lightweight 2-stroke Show Models for sale; £75.—New Hudson Cycle Depot, 45, Gray's Inn Rd., London, W.C.2. [1821]

NEW HUDSON, 3½h.p., Bosch, good tyres and belt, good appearance, in running order; £40.—11, School View, Rainsford End, Chelmsford. [2949]

LATE 2½h.p. New Hudson-Jap, T.T. bars, discs, long exhaust, perfect, smart, fast, sporting; £36, quick sale.—9, Red Hill, Bassett, Southampton. [2817]

1914 3½h.p. T.T. New Hudson-Jap, 3-speed, clutch, excellent condition, gears almost new; £45, near offer.—Gibbs, 58, Ashdown Rd., Worthing. [2495]

NEW HUDSON 4h.p. Combination, late 1919, ap- pearance like new, mechanically perfect, fully equipped; £115; exchanges.—Martin Mitchell, Ltd., Stafford. [1693]

New Imperial.

1915 2½h.p. 2-speed Imperial-Jap, fully equipped; £41.—Arthur White, Holbeach, Lincs. [X2931]

1920 New Imperial Combination, condition as new; £160.—Wright's Garage, Saffron Walden. Tel.: 16. [2975]

1920 8h.p. New Imperial Motor Cycle, new; £147.—King and Harper, 6 and 7, Bridge St., Cam-bridge. [8946]

1916 New Imperial-Jap, 2 speeds, good condition, accessories, fully insured; £50.—Craft, Apsley End, Herts. [2356]

NO. 2 1920 2½h.p. New Imperial Motor Cycle; £89/5; new.—King and Harper, 6 and 7, Bridge St., Cambridge. [8945]

NO. 1 1920 2½h.p. New Imperial Motor Cycle, new; £80/17.—King and Harper, 6 and 7, Bridge St., Cambridge. [8947]

NEW IMPERIAL Montgomery Combination, full equipment; £110; solo wanted.—Box 9,733, c/o *The Motor Cycle*. [2390]

NEW IMPERIAL, 2½h.p., accessories, perfect con- dition; 48 gns., or exchange.—E. Pembroke, Grange Rd., Deal. [2366]

NEW IMPERIAL-J.A.P., 2-speed, good tyres, good condition; £32/10.—Bennett, Wykeham House Cottages, Stanmore, Middlesex. [2858]

1921 New Imperial, 2½h.p. J.A.P., 2 speeds and clutch, kick starter; £89/5; exchanges or easy terms.—Homac's 243, Lower Clapton Rd., E.5. Dalston 2408. [2923]

23h.p. New Imperial-Jap, 2-speed, 1915, Bosch, Dun- lops, P. and H. lamps, good order; £42, or with Cowey £45.—Banwell, Heath, Leighton Buzzard, Beds. [2860]

NEW IMPERIAL 8h.p. Combination, mileage 400, Orto triple wind screen, lamps, spares, excellent condition, appointment; price £125.—Pratt, 15, Clarges St., W. [2692]

NEW IMPERIAL-J.A.P., 1921 model, 2½h.p., 2- speed, kick starter, hand clutch, brand new, un-used; immediate delivery; 85 gns.—Central Garage, Henley-on-Thames. [1074]

WAUCHOPE'S, 9, Shoe Lane, London.—2½h.p. 1920 New Imperial-Japs, 2-speed clutch, and kick start models, £89/5; with 2-speed only, £80/17; cash or easy terms. [3052]

NEW IMPERIAL, 2½h.p. J.A.P., 2 speeds, as makers' specifications, shop-soiled; at greatly reduced price; now is the time to buy.—Mebes, 154-156, Gt. Portland St., W.1. Phone: 3426 Mayfair. [7186]

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MOTOR CYCLES FOR SALE.

New Imperial.

NEW IMPERIAL 1918 8h.p. Model, 3 speeds, kick start, hand-controlled clutch, Sunbeam sidecar. Easting wind screen, full equipment, real bargain; £150.—Parker's, Bradshawgate, Bolton. [X2903]

1921 New Imperial 6h.p. Combination, brand new, for immediate delivery; £186/18, as at Olympia; exchanges or extended terms.—Official agents, Homac's, 243, Lower Clapton Rd., E.5. Dalston 2408. [2922]

NEW IMPERIAL 8h.p. Combination, Mills-Fulford sidecar, Easting wind screen, Lucas lamps, horn, tools, speedometer, Tan-Sad pillion, almost new tyres, excellent condition; £125; seen any time to 7 p.m.—Hedley and Son, Typewriting Engineers Rathgar Rd., Loughborough Junction Station, S.E. [2969]

Norton.

NORTON.—North Yorkshire agents: R. H. L. Pickering and Co., 239, Linthorpe Rd., Middlesbrough. [2997]

NORTON Big Four, all chain drive, just delivered; £135.—Turpin's, 22-29, Preston Rd., Brighton. [0204]

NORTON Motor Cycles.—Place that order with me; early delivery dates.—Cook's Garage, Shifnal, Salop. [8136]

1920 Big Four Norton Motor Cycle; £135; new.— King and Harper, 6 and 7, Bridge St., Cam-bridge. [8948]

1920 3½h.p. Sports Model Norton, brand new; £98.—King and Harper, 6 and 7, Bridge St., Cambridge. [8949]

NORTON Motor Cycles, sole district agents for Derby, all models in stock; enquiries invited.—H. Palin, Ltd., Bourne St., Derby. [8134]

NORTON 1920 Big Four Model, Sandum sidecar, Cameo wind screen, fully equipped, as new; £150.—Parker's, Bradshawgate, Bolton. [X2904]

1920 Big Four Norton, delivered last July, mileage under 2,000, Stewart horn, F.R.S. Major; £123.—A. Hewitson, 38, Grosvenor Rd., Birkdale, Lincs. Phone: 484 Birkdale. [2842]

1920 3½h.p. T.T. 3-speed Norton, racing Amac, in spotless condition, and personally tuned by Mr. Leslie Mitchell; real snip for next season's competitions, will do 70 m.p.h. easy; preference given to rider wanting machine for speed events. Letters only.—Bullough's Motors, Ltd., Waterloo St., Oldham. [2457]

N.S.U.

6h.p. N.S.U. 2-speed Combination, Camber coachbuilt sidecar, any trial; £55.—18, Hartford Lane, Bexley. [2690]

N.U.T.

N.U.T., only ridden 100 miles; for immediate sale, £150.—Pollard, Broomfield Rd., Chelmsford. [X2917b]

1921 N.U.T. 3½h.p. Standard Model, Magdyno; £165; in stock.—Hewett Bros., 94, Western Rd., Hove, Sussex. [0343]

W. SPARROW, Ltd., Osborne Garage, Yeovil, official N.U.T. agents, now booking orders for early delivery; write or phone for particulars.—Tel.: Yeovil 114. [6023]

N.U.T.—Delivery from stock of these models, equipped with magdyno-lighting; price £165; sole wholesale and retail agents for Staffordshire; the trade supplied.—The Walsall Garage, Walsall. Tel.: 444. [9002]

1915 N.U.T., countershaft 3-speed, clutch, 3½h.p., o.h.v. twin J.A.P., fast machine, over £20 spent on overhaul; £80; exchange late 5h.p. counter-shaft Zenith, Norton, Triumph; cash adjustment.—Evans, 57, Church St., Dunstable. [X2600]

O.K.

O.K. Junior 2½h.p., 2-stroke; 48 gns.—The Spalding Motor Co., Ltd., Spalding. [2432]

O.K., 2½h.p. J.A.P., 2-speed, late 1919; £50.—Perry, 3, Fanthorpe St., Putney, S.W.15. [2597]

O.K., 1920, Villiers, bought October, as new; 44 gns.—Davies, Bowerham Dairy, Lancaster. [X2910]

O.K., M.A.G. engine, 2 speeds, fine running order and condition; £35.—51, Finchley Lane, Hendon, N.W.4. [2955]

O.K. Villiers 2½h.p., unused, cost 48 gns., must sell; what offers; cash or exchange.—Dorsett, 211, Garratt Lane, Wandsworth. [3017]

Omega.

23h.p. Omega-Jap, the sporting single; immediate deliveries.—Norwich Motor Co., Ltd., Norwich. [2787]

OMEGA-J.A.P., 2½h.p., 2-speed, 1920 model, only used for demonstration purposes; £60 to clear.—Campbell and Semple, 39, St. Leonard's St., Dunfermline. [2332]

P. and M.

P. and M., very early deliveries.—Pollard, Broomfield Rd., Chelmsford. [X2915]

WAUCHOPE'S, 9, Shoe Lane, London. E.C.4.— 3½h.p. P. and M., 1920; £100. [3057]

MOTOR CYCLES FOR SALE.

P. and M.
P. and M. 3½h.p., 2 speeds, countershaft, mag., runs splendidly; 29 gns.—53, Swaffield Rd., Wandsworth. [2569]
P. and M., 1919, thoroughly overhauled and equal to new; £85.—Pollard, Broomfield Rd., Chelmsford. [X2916]
1920 3½h.p. P. and M. Motor Cycle, quite new; £115.—King and Harper, 6 and 7, Bridge St., Cambridge. [8950]
1918 P. and M., new Foxton sidecar, excellent condition; £90; lightweight and cash considered.—3, Lime St., Evesham. [2559]
3 h.p. P. and M. 1919 Combination, lamps, hooter, 32 speedometer; £110.—James, 12, Grange Rd., Upper Norwood, S.E.19. [3039]
1914 3½h.p. P. and M. Combination, complete with lamps, good condition; £60.—The James' Garages, Ltd., Church Stretton. [2409]
NEW 1920 P. and M. Combination in stock; two 1919 second-hand combinations, 95 gns.; exchanges.—Martin Mitchell, Ltd., Stafford. [1692]
P. and M. Combination, re-enamelled, overhauled, perfect condition, must sell; genuine bargain, £60.—95, Dartmouth Rd., Forest Hill. [2409]
1914 P. and M., kick start, speeds, renovated, Lucas lamps, accessories; £58; accept lightweight part; photo.—Newing Green Farm, near Hythe. [2319]
P. and M. about 1918, 2-speed, new condition, new roomy coachbuilt sidecar, all lamps, horn, tools; must realise; £90, gift.—365, King St., Hammersmith. [2517]
P. and M., R.A.F. Model, excellent condition, thoroughly overhauled, all on, and spares; sell £55, or exchange Douglas.—11, Banbury St., Battersea. [2867]
P. and M. Combination, Dunhill sidecar and storm apron, lamps, etc., fully equipped; £100, great bargain.—Mebes, 154-156, Gt. Portland St., W.I. Phone: 3426 Mayfair. [7188]
P. and M. Combination, delivered 1920, lamps, horn, speedometer, tools, spare tyre, complete; this combination has been exceptionally well maintained; £110 cash.—208, The Rye, Dulwich, S.E.22. [2384]
PHELON and Moore, Ltd.—R.A.F. models reconditioned and guaranteed; £90 solo, or £120 combination.—Fullest particulars on application, 4, Berners St., Oxford St. (opposite Bourne and Hollingsworth), W.I. [0314]
P. and M. W.D. 3½h.p. Model, overhauled and guaranteed by us, £78; others not overhauled but in running order, £68; complete with Mills-Fulford sidecar, £100 and £110; deferred payments, no extra.—Maudes', 100, Gt. Portland St., W.I. [2917]
P. and S.
P. and S. 2-stroke, 1920, 2-speed, fully equipped, small mileage; £55.—3, Courtlands Av., Lee, S.E.12. [2938]
Peugeot.
5 h.p. Peugeot, engine rebushed, Mabon clutch, pulley, handle-bar control, kick start, Dunlop belt, Splitdorf mag., re-enamelled, thoroughly overhauled, must sell; £20, or offer.—Apply, Horwich, Keeper's Corner, Burstow, Surrey. [2477]
Pierce-Arrow.
PIERCE-ARROW, 4-cyl., shaft drive, 2 speeds, plate clutch, original tyres, fast, 60 bore, 190 lbs. weight; £80, as new.—Brailsford 17, Glenalmond Rd., Sheffield. [X2882]
Precision.
PRECISION 3½h.p., 1913 (late), sports model, fine condition; accept £45 quick sale; all spares.—R. Wood, Lingpark, Ilkley, Yorks. [2397]
Premier.
PREMIER 2½h.p., splendid condition, good tyres, ride away; £25.—Whatley, 4, Briar Rd., Twickenham. [3030]
Quadrant.
8 h.p. Quadrant Combination, twin, 2-speed, handle starter, well equipped, fine condition; 100 gns.—Clement, 65, Gordon Rd., South Woodford. [3010]
1920 Quadrant Combination, 3 speeds, clutch, all lamps, etc., as new; £130; exchanges or easy payments.—Homac's, 243, Lower Clapton Rd., E.5. Dalston 2408. [2925]
QUADRANT 1920 4½h.p. Combination, shop-soiled, as makers' specifications; at greatly reduced price; now is the time to buy.—Mebes, 154-156, Gt. Portland St., W.I. Phone: 3426 Mayfair. [7189]
QUADRANT 4½h.p. Big Single; combination £145, solo £115; new machines always in stock; the only moderate-priced outfit left.—Victor Horsman, Ltd., 7, Mount Pleasant, Liverpool. [0277]
1916 Quadrant Combination, 4½h.p. B.S.A., 3-speed countershaft, all accessories, splendid condition, only used three seasons; £95; owner going abroad.—Cowen, back Salthouse Rd., Barrow-in-Furness. [2462]
QUADRANT.—Sole Agents and Distributors for London and South-eastern Counties; see us at Stand 41, Olympia. Best deliveries and subsequent attention.—Clifford Wilson Manufacturing Co., 70, Royal Hospital Rd., Sloane Sq., S.W.3. Tel.: 7113 Kensington. [9403]



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OUR MACHINES ARE
THE BEST.

Our reconstructed Motor Cycles are stove-enamelled and replated throughout in makers' colours, engines and gear boxes thoroughly overhauled in our own workshops and carry our

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Each machine complete with New Tyres, Tool Bag, Pump, and Tool Kit.

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BURLINGTON SIDECARS.
 Noted for sturdy construction and distinctive designs.
HARLEY-DAVIDSON MODEL.

SPECIFICATION:—
CHASSIS.—Underslung type, 4-point attachment, specially built to withstand the strain imposed by this heavy machine. Best quality three-leaf C springs with drop shackles. Extra wide valanced mudguard, with special fitting. Fitted with tyre and tube, 28in. by 3in. wheel.
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 The passenger's comfort specially studied. Beautifully finished in best coach style.

A MODEL ELITE.
 Approximate weight: Chassis 86lbs. Body 64lbs.
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 Packing and Crate (returnable) £1
 Touring and Speedy Models also made.
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MOTOR CYCLE CO.,
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COMMON, S.W.4.
 Phone: Brixton 2417.
 Grams: "Burlington Motors, Clapham"
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MOTOR CYCLES FOR SALE.

Quadrant.
QUADRANT 4½h.p. Combination, Sept., 1920, Sturmey-Archer 3-speed, K.S., Volex electric lighting (unused), Binks, Klaxon, Bonniksen, Clayrite, Bluemel wind screen and side valances, Tan-Sad, black steel discs, new Kempshall cover sidecar wheel, spare valve, chain, etc., fully insured, mileage 800, has been very carefully used, written guarantee; £180, or very near offer; Essex.—Box 9,732, c/o The Motor Cycle. (D) [2389]
Radco.
RADCO, 2-speed, brand new (list £66/11); £62, or near offer; week-ends.—10, Strawberry Hill Rd., Twickenham. [2420]
RADCO Lightweight, single-speed, as makers' specifications, shop-soiled; at greatly reduced price; now is the time to buy.—Mebes, 154-156, Gt. Portland St., W.I. Phone: 3426 Mayfair. [7190]
Reading-Standard.
1920 Reading-Standard, Canelet sidecar, electric lighting and horn, quite new; what offers?—Lait, Oak Terrace, Tipton. [X2924]
READING-STANDARD 1920 Combination, 10h.p., 3-speed, electric horn and lighting, powerful, perfect condition; any trial; make good sidecar taxi.—Chamberlain, Cardiff Rope Works, Ltd., Penarth Rd., Cardiff. [2841]
Regal.
1915 Regal-Precision 2½h.p., T.T. model, makers' finish black and red, a fast sporty mount, in fine condition; £33 for quick sale.—Polehampton, Twyford, Berks. [2832]
REGAL 2-stroke, late model, Brooks pan, tyres sound, brass exhaust, footboards, enamel, plating perfect, fast, nice machine; £30; exchange Levis, O.K.—H. Almond, Shepperton. [2709]
Rex.
5 h.p. Rex, very powerful; for quick sale, £25.—Semple, 39, St. Leonard's St., Dunfermline. [2329]
£25.—3½h.p. Rex, B. and B., Bosch, tyres as new, lamps, horn, etc.—Lloyd, 45, Micheldever Rd., Lee, S.E.12. [2940]
REX Combination, latest model, 4h.p., spare interchangeable wheel, Lucas lamps, etc., unscratched; £110.—40, Hertford Place, Coventry. [X2937]
REX Twin, 6h.p., 1909, engine sound, new C.A.V., N.S.U., good tyres and tubes, ride away, or sell engine, magneto; £20 the lot, or £12 for engine, mag.—Apply, Matthews, Traction Owner, Whitehall, Summer-court, near Granpound Rd., Cornwall. [2440]
Rex-Jap.
1913 3½h.p. Rex-Jap, single speed, topping condition.—Pryce, Winllau, Aberangell, Merioneth. [2455]
REX-J.A.P. 6h.p., 2 speeds, 1914 model, £60; with underslung sidecar, new coach body fitted, £75; or exchange.—H. H. Gaffer, Cotton, Stourmarket. [2685]
Revere.
REVERE 2½h.p., 2-speed, lamps, leg shields, etc., carefully ridden; ride away; £55/10.—42, Irwell Lane, Runcorn. [2566]
Romper.
ROMPER 1920 2½h.p., 2-speed, excellent order; £65.—Sheppard, 108, The Crescent, Slough. [2505]
Rover.
1919 6h.p. Rover, splendid condition; £120.—Wright's Garage, Saffron Walden. Tel.: 16. [2974]
ROVER T.T. Model, with Philipson, 3½h.p.; £115.—The Spalding Motor Co., Ltd., Spalding. [2434]
1919 T.T. Rover, complete, good condition; £85.—Wright's Garage, Saffron Walden. Tel.: 16. [2973]
1920 5-6h.p. Twin Rover Motor Cycle, new; £183/5.—King and Harper, 6 and 7, Bridge St., Cambridge. [8953]
1918 3½h.p. T.T. Model Rover, h.c. Philipson, perfect condition, all on; £76.—7, Bay Vue Rd., Newhaven. [2821]
1920 3½h.p. T.T. Model Rover Motor Cycle, new; £124/3.—King and Harper, 6 and 7, Bridge St., Cambridge. [8954]
1920 5-6h.p. Twin Rover Combination, new; £236/10.—King and Harper, 6 and 7, Bridge St., Cambridge. [8952]
1920 Rover, 3½h.p. countershaft, Middleton sidecar, accessories, excellent condition; £115.—23, Baker St., W.I. [2822]
ROVER 1920 3½h.p. T.T. model, Philipson pulley, perfect mechanical condition; £150.—Parker's, Bradshawgate, Bolton. [X2906]
T.T. Rover, 1919, h.b.c., Philipson, specially fine condition, numerous extras; £78.—Fernside, Ollerbarrow Rd., Hale, Cheshire. [2513]
1918 T.T. Rover, Philipson pulley, all accessories, full tool kit, spares; £80.—20, Queen St., Hammersmith Broadway, W.6. [2804]

MOTOR CYCLES FOR SALE.

Rover.

ROVER 3½h.p. Combination, small mileage, excellent condition, speedometer, fully equipped; £140.—Write or 'phone City 312, A.J.W., 40, Cheapside E.C.2. [26]

ROVER Motor Cycles.—Place your order with an official agent, the man who rides a Rover; immediate delivery.—Collard, Cook's Garage, Shifnal. [2684]

ROVER Late 1920 5-6h.p. 3-speed Combination, latest improvements, new and unused; £185, exceptional bargain.—Eagles and Co., 275, High St., Acton, London. [X2893]

3½h.p. Rover Combination, C.B. underslung, 3-speed clutch, like new; must sell, cheap, what offers?—Williams, 9, Dyson Terrace, Blannerle Rd., New Eltham, S.E.9. [2791]

ROVER Combination, 1919, 3½h.p., in splendid condition, little used, fitted with Easting wind screen, Lucas electric lighting set, horn, spare belt; £160.—J. Snell, Cloakham, Axminster. [2978]

ROVER 1920 Combination, 5-6h.p., Henderson de luxe sidecar, Easting, D.A. lighting set, Lucas lamps and horn, Cowey speedometer, insurance; £165.—1, Melrose Rd., Merton Park, S.W. [1991]

ROVER 3½h.p., countershaft model, also T.T. model, Philipson pulley, as makers' specifications, shop-soiled; at greatly reduced prices; now is the time to buy.—Mebes, 154-156, Gt. Portland St., W.I. 'Phone: 3426 Mayfair. [7191]

NEW 3½h.p. Rover Motor Cycle, fitted with 3-speed clutch and kick starter, and with smart coachbuilt sidecar; £180, or on deferred payments 5% extra, one quarter deposit, balance by 12 monthly instalments.—Harrods, Ltd., 118, Brompton Rd., London. [2657]

1920 Rover 3½h.p., 3-speed clutch, K.S., completely equipped, 2 lamps, generators, Klaxon horn, knee-grips, Watford speedometer, absolutely perfect condition; the engine is in better condition than the day it left the works, having been carefully run in, and tuned for speed and power, fitted with Cox Atmos carburetter, mileage 2,000; bargain, £120, no offers.—E. W. Larby, 14, Whitworth Rd., South Norwood, S.E.25. [2425]

Royal Ruby.

4 h.p. Royal Ruby-Jap, Mabon gear, fine condition; £58.—Harris, Lambton Rd., Worsley. [2573]

1919 8h.p. Royal Ruby Combination, almost new condition; £125.—29, St. Leonard's St., Bromley-by-Bow. [2776]

1920 Royal Ruby, 3h.p., spring frame, kick start, 2-speed, immediate delivery; £120.—The Clydesdale Supply Co., Ltd., 2, Bridge St., Glasgow. [0265]

ROYAL RUBY 8h.p. Combination, bought new this year, lamps, horn, speedometer, Tan-Sad, all in new condition; £160.—Woodard, Farnham Royal Nursery, Farnham Royal, Slough. [2703]

ROYAL RUBY, 8h.p. J.A.P. engine, Aug. (1919) model, electrically equipped, Sturmev-Archer 3-speed gear, repainted and engine overhauled, not done ten miles since; best offer over 100 gns.—Bevan, Castle St., Cardiff. [2416]

3 h.p. Royal Ruby, spring frame, 2-speed, clutch and kick starter, equipped with Tan-Sad pillion seat, lamps, mechanical horn, etc., very little used, and condition as new; £110; may be obtained on Harrods deferred payment system.—Harrods, Ltd., 118, Brompton Rd., London. [2655]

Rudge.

RUDGE I.O.M. Multi in stock; immediate delivery.—Clark, 7, Exhibition Rd., S.W.7. [2590]

1920 Rudge Multi, I.O.M., as new, accessories, must sell; £75.—1, Othello St., Liverpool. [2633]

1920 7-9h.p. Rudge Combination, perfect; cheap to quick buyer.—Ingle, Derby Rd., Ripley, Derby. [X2845]

1919 3½h.p. Rudge Multi, ridden 400 miles; £85.—Ellis and Co., 364, Lillie Rd., Fulham, S.W. [2636]

RUDGE Multi 3½h.p., complete with lamps and horn; £60.—Clarke, New St., Dunmore, Essex. [2850]

1919 Rudge Multi 3½h.p., excellent condition; £75, or offers.—Hackleton, Priory Rd., Warwick. [2714]

1920 3½h.p. Rudge-Whitworth Motor Cycle, new; £110/5.—King and Harper, 6 and 7, Bridge St., Cambridge. [8951]

1920 3½h.p. I.O.M. Rudge Multi, mileage 500, splendid condition; any trial; £95.—Parker, London Road Garage, Bathaston, Bath. [2530]

1920 Rudge Multi, new condition, guaranteed under 600, lamps, etc.; £100.—Ley, Manleys, West Buckland, Wellington, Somerset. [2563]

3½h.p. Rudge Multi, 1914, lamps, horn, speedometer, good condition; £35, or nearest offer.—Apply, A. Northcott, 14, York Rd., Seaton, Devon. [2451]

RUDGE 3½h.p., Nov., 1919, spares, lamps, horn, speedometer, knee-grips fast, absolutely reliable; £85.—Beardmore, The Holt, Loughborough. [X2788]

RUDGE Multi, 3½h.p., T.T., perfect condition, 2,000 miles, complete, lamps, horn; £95, or best offer.—Wright, 108, Ryelands St., Hereford. [2484]

Burlington
Motor Cycle Co., Ltd.

GENUINE DOUGLAS REPLACEMENTS.

Large quantities of
2½ and 4 h.p. Spare
Parts at miles below
makers' price.

Connecting rods, complete with bolts and nuts, 22/6; cylinders, front or rear, 39/6; pistons, 12/-; 2½ h.p. frames, £5; 4 h.p. frames, minus back portion, £5; drip-feed glasses, 1/3; pulleys, plated or black, 8/6; 2½ h.p. chains, 9/6; fork spindles, long or short, 1/-; chain wheels, 8/6; piston rings, 1/6; valve guides, 3/-; Amac carburetter controls, complete with Bowden cables, 12/6; 2½ h.p. crankshafts, £25s.; carburetter gauzes, 4d.; carburetter gauze washers, 6d.; magneto sprockets, 8/6; etc., etc., etc. Carriage extra.

The above are only a few of the Spares we have in stock. We shall be pleased to quote you upon receipt of your enquiries.

To owners of W D. Triumphs.
Convert your clutch into foot
as well as hand control.

Foot Pedal for Sturmev-Archer Gear
Box, 4/-

GENUINE NEW TRIUMPH VALVES.

Ex W D. Stores.

Inlet, complete with Spring and
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MILLER'S GENERATORS.

Ex W.D., Type IIIa.

Brand New, 15/- each.

List Price, 27/6. Postage 1/-.

Douglas Pattern Footboards

2½ h.p., 12/6 per pair; 4 h.p., 15/-
per pair. These footboards are all
rubber covered, with brass edgings.

To 4 h.p. Douglas Owners

Write for particulars of our Clutch
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No more broken drawbolts.

THE BURLINGTON
Motor Cycle Company, Ltd.,
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Phone: Brixton 2417.

Grams: "Burlington Motors, Clapham."
(50 yards from Clapham Common Underground
Station.)

MOTOR CYCLES FOR SALE.

Rudge.

3½h.p. Rudge Multi, 1914, T.T. bars, new bearings and rings, tyres unpunctured, enamelled grey, lamps, horn; £55.—Forden, Ashcott, Somerset. [2494]

1919 Rudge 5-6h.p., perfect condition, with new coachbuilt sidecar, very fast; £125, or offer.—H.F.T., Llanberis Park Crescent, Finchley, N.3. [2678]

NEW 1920 5-6h.p. and 7-9h.p. Rudge Multi Combinations in Stock; maker's price.—Shepherd and Co., Enfield Highway. Tel.: Waltham X31. [0341]

3½h.p. Rudge Multi, I.O.M. T.T., 1920, mileage about 400, with Canoglet Minor sidecar, perfect condition, as new; £120.—Shorrock, 6, Victoria St., Morecambe. [2460]

1914-15 5-6h.p. Rudge Multi C.B. Combination, in perfect running order, good tyres, new belt; £60, or nearest offer.—Conner, 14, Windsor St., Brighton. [2948]

1920 3½h.p. I.O.M. Rudge, unscratched, lamps, horn, tools, etc., mileage negligible, indistinguishable from new; £95.—Fairhaven, Wavertree Rd., South Woodford. [2845]

1920 Rudge Multi, I.O.M. T.T., little used, complete with Lucas horn, lamps, spare belt, etc.; will exchange for 1915 or 1916 2½h.p. Douglas or Cotton lightweight and cash, or sell £95 or nearest.—Davies, Hoo, Rochester. [2464]

1920 Rudge Multi, T.T. model, 4h.p., condition as new, complete with lamps, speedometer, usual accessories, guaranteed to have done under 1,000 miles; will accept 100 gns.—North-Western Motor Garage, Normand Rd., West Kensington, W.14. [2338]

RUDGE 3½h.p., 1913, Philipson, semi-T.T., discs, engine just overhauled by makers, tyres and belt good, generator, rear and very large head lamp, mechanical horn, mirror, very reliable and fast; 45 gns., or offers.—Ellis, 304, Banbury Rd., Oxford. [2308]

Scott.

1915 Scott, fine condition; £68.—Caunter, 29, Compton Terrace, Highbury. [2634]

1915 Scott, 3½h.p., in running order; £40.—Semple, 39, St. Leonard's St., Dunfermline. [2328]

1920 Scott Combination, electric lighting; £150.—E. Cockell, Holly Lodge, Dalston, E.8. [2865]

£38; Scott, engine No. 1015, or exchange 1914 4-stroke.—Whiting, St. Mark's, Henley-on-Thames. [1297]

NEW Scott Combination in stock; £170, or sell separate.—Moore, Motor Engineer, Long Eaton. [2840]

WAUCHOPE'S, 9, Shoe Lane, London.—New 1920 Scott, delivery from stock; £140; cash or easy terms. [3050]

SCOTT, 1920, brand new; first £105 secures; £35 under list price, bargain.—Box 9,792, c/o The Motor Cycle. [2991]

SCOTT 1920 3½h.p. Model, head and rear lamps, full T.T. bars, as new; £130.—Parker's, Bradshawgate, Bolton. [X2905]

SCOTT Solo and Combination (new), 3in. Palmers, in stock; cash, exchange, or easy payments.—Motories, 25, Horton St., Halifax. [2541]

1920 Scott Combination, electric lighting, Bonnicksen speedometer, Easting wind screen, splendid condition; £135.—Mann, Clothier, Spalding. [2744]

1920 Scott Combination, lamps, horn, speedometer, spare tyre and tube, Ride Easy sidecar, mileage 2,000; £140.—G. Gray, Bookham, Surrey. [2418]

LA TE 1919 Scott Sporting, exceptionally fast machine, Miller lamps, horn, watch, etc., excellent condition; £97.—23, Manchester Rd., Burnley. [X2774]

BRAND New 1920 T.T. Scott, shop-soiled, fitted with brand new Henderson featherweight sidecar, unregistered; £150.—Wyresdale, Montreal Av., Blackpool. [2213]

1920 Scott, semi-T.T. handle-bars, horn, lamp, mileage under 500, tyres unpunctured, trial; offers £110, or offer.—Rayner, Clarendon, Chayford, Devon. [2960]

SCOTT, 1920 sports model, horn, very small mileage, enamel as new, plating fair, perfect order, lovely machine; £115.—D. Lavin, Old House, Sonning, Berks. [2483]

SCOTT, fitted Binks double offers, tuned for speed, 56 m.p.h., 75 m.p.g., new bearings, tyres as new, owner has Zenith; £70, or offer.—Croit, 29, West Moreland Rd., Barnes. [3012]

SCOTT Combination, C.B., 1915, recent complete overhaul, perfect order, excellent tyres, lamps, spares, insured; seen London; £72, or offer.—Letters, 55, Bernard St., London, W. [2698]

SCOTT and Henderson Sidecar, Nov., 1920, acetylene head, electric, side and tail lamps, Watford speedometer, light car, rear tyre, only done 100 miles; £165; trial by appointment.—Greenway, Naval College, Greenwich. [2772]

Singer.

SINGER 1914 Coachbuilt Combination, 2-speed, clutch, kick start, guaranteed, all accessories; best offer clears.—Garage, Horsmonden. [3014]

MOTOR CYCLES FOR SALE.

Sparkbrook.

SPARKBROOK 2½h.p., 2-stroke, 2-speed; £75.—The Spalding Motor Co., Ltd., Spalding. [2433]

1920 2½h.p. 2-speed Sparkbrook, used for demonstration purposes, few miles only, perfect condition; £65.—Herbert Robinson, Ltd., Green St., Cambridge. [2645]

SPARKBROOK 2¾h.p., 2-speed, the lightweight with an ultra finish, as makers' specifications, shop-soiled; at greatly reduced price; now is the time to buy.—Mebas, 154-156, Gt. Portland St., W.1. Phone: 3426 Mayfair. [7195]

Sun.

SUN-VILLIERS, believed 1915-16, perfect order, just overhauled, new tyres, take 2; £35.—R. Green, Elmwell, Suffolk. [2866]

1920 Sun-V.T.S., Sturmev-Archer 2-speed gear, hand-controlled clutch and kick starter; soiled only, genuinely as new; £63.—Herbert Robinson, Ltd., Green St., Cambridge. [2643]

SUN-VILLIERS, 2¾h.p., thoroughly overhauled, and in good running order, fitted with discs and lighting set; Manchester district; price £50.—Box 9,802, c/o The Motor Cycle. [2982]

Sunbeam

1920 8h.p. Sunbeam Combination, lamps, horn, in perfect condition; 200 gns.—Hopkins, New St., Ledbury. [2479]

SUNBEAM 3½h.p. Sports Model, 3-speed, clutch, kick starter; 148 gns.—The Spalding Motor Co., Ltd., Spalding. [2428]

SUNBEAM 1920 3½h.p. model, head and rear lamps, bulb horn, as new; £160.—Parker's, Bradshawgate, Bolton. [X2902]

SUNBEAM Combination, 1919, 3½h.p., excellent condition, Lucas lamps and horn; £165, all on.—22, Pinewood Rd., Kent. [3041]

SUNBEAM, 1920, 3 months old, fully equipped, condition excellent; £135; interchangeable wheels.—Payne, Eccleston, Chester. [X2898]

1920 3½h.p. Sunbeam Motor Cycle, only done about 100 miles, condition as new; £150.—Dix, Arcady, Highworth Av., Cambridge. [1443]

1921 Sunbeams; guaranteed delivery of all models.—Brighton and District Agents, Hewett Bros., 94, Western Rd., Hove, Sussex. [0342]

SUNBEAM 8h.p. 1919 Combination, lamps, speedometer, excellent condition, small mileage; £200.—222, Beacon St., Lichfield. [X2978]

SUNBEAM 3½h.p. Combination, unused and still in crate; list price; owner bought car.—Gill, Rutter's Hill, Broomfield, Chelmsford. [X2912]

1921 3½h.p. Sunbeam Combination in stock for immediate delivery; makers' list price.—J. Smith and Co., 52-54, Hampstead Rd., N.W.1. [0353]

SUNBEAM, brand new 3½h.p., solo model, with Lucas lamps and horn; £170.—The Walsall Garage, Wolverhampton St., Walsall. Tel.: 444. [9004]

GIVEN AWAY—Sporting Canoelet with 1914 3½h.p. Sunbeam, 3-speed, re-enamelled, machine £88.—120, Marlborough Flats, Walton St., Chelsea, S.W.3. [X2934]

1920 Sunbeam, standard model, guaranteed as new, mileage about 400, complete with Lucas fittings; first cheque £150.—Clement King, Butcher, Guildford. [2571]

SUNBEAM 3½h.p., 1920 competition model, Star engine, straight through exhaust; seen by appointment.—G. F. Burns, 80, Prenton Rd. East, Birkenhead. [X2918]

1920 Model 3½h.p. Sunbeam Motor Cycle and Sidecar (Sunbeam sidecar) for sale, in perfect condition; price £180; any trial.—Jay, 8, Bridge St., Hereford. [2911]

NOVEMBER (1918) 8h.p. Sunbeam, with Sunbeam sidecar, first-class condition, screen, lamps, horn, spares; any trial; £185, or nearest offer.—Lipton, 6, Brittox, Devizes, Wilts. [3004]

SUNBEAM Combination, K.S., 3-speed, Sunbeam sidecar, completely overhauled, replated, and enamelled, electric light; price £130.—Read, 43, Chancery Lane, London, W.C.2. [3020]

1919 8h.p. Sunbeam Combination, perfect, electric light, Binks, speedometer, spare wheel, hood, wind screen, tyres as new, tool kit, 2 horns, mirror; £185.—Moore, Edendale, Llanishen, Glam. [2726]

1920 3½h.p. Sunbeam Combination, Easting, Cowey horn, discs, P.H. lamps, 3 generators, excellent condition, insured £220, £185; bought Morgan.—Saxton, Beatrice Terrace, Hayle, Cornwall. [2358]

SUNBEAM 3½h.p., 3-speeds, Gloria sidecar, Easting wind screen, Lucas lamps, perfect condition, owner abroad, advertiser instructed; accept £110.—Write 10, Parsifal Rd., West Hampstead, N.W.6. [2751]

1919 3½h.p. Sunbeam Combination, black and gold, child's seat, hood, Easting screen, lamps, horn, Cowey speedometer, College leg shields; any trial; £145, or near offer.—Richardson, 380, Kingsland Rd., London, E.8. [2793]

CRABTREE & SON, Ltd.,

Motor Engineers, WISBECH

The best house for Rebuilt Government

MOTOR CYCLES

All thoroughly overhauled in our own workshops, stove enamelled, replated, tanks in makers' colours, new tyres, guaranteed mechanically perfect. Complete with tool bags, kit, and pump.

- Douglas 2¾ h.p. .. £65
- Douglas 4 h.p. .. £85
- Douglas Combinations, with new body .. £105
- Triumph 4 h.p. .. £95

DOUGLAS SPARE PARTS at special prices. New Ex W.D. stock.

WRITE FOR OUR LISTS.

NEW TYRES at 30/- each, carriage extra, 26 x 2½, and 28 x 3 only, Clincher, Wood Milne, Macintosh, etc.

CRABTREE & SON, Ltd.,

Motor Engineers, WISBECH.

MOTOR CYCLES FOR SALE.

Sunbeam

1920 3½h.p. Sunbeam, almost new, lamps, horn, spare valves and sprocket, spare Dunlop cover and tube unused, mileage under 1,000, guaranteed mechanically perfect; £147/10.—8, Prince of Wales Rd., Bournemouth. [X2567]

3½h.p. Sunbeam Combination, May delivery, just overhauled by makers, £40 extra fittings, including unused spare wheel; owner going abroad; nearest £190 secures.—Webb, Lambsey Croft, Tettenhall, Wolverhampton. [2427]

SACRIFICE 129 gns.—1920 3½h.p. Sunbeam, Binks carburetter, only few weeks on road, unscratched; expert examination invited; no offers, no exchange; guaranteed mileage 500.—Sunbeam, 8, Maple St., Hightown, Manchester. [3033]

SUNBEAM—We are Wolverhampton agents; spare parts in stock; repairs, overhauls, re-enamelling and plating under the supervision of Mr. T. C. de la Hay (late Sunbeamland).—The Molineaux Garage Co., Ltd., Wolverhampton. Tel.: 1160. [3458]

WAUCHOPE'S, 9, Shoe Lane, London, E.C.4.—1919 8h.p. Sunbeam combination, spare wheel, hood, screen, lamps, speedometer, mirror, warning signal, tools, condition as new, 200 gns.; also new 3½h.p. Sunbeam, latest model, £155. [3060]

1920 3½h.p. Sunbeam Combination, new July 30th, Easting screen, Cowey trip speedometer, P. and H. lamps, separate generators, horn, spare inner tube, full set of tools, perfect condition, unpunctured, small mileage, insured to Aug. 4th, 1921; bargain for quick sale; owner going abroad.—Pitcairn, Ampport, Andover. [2725]

T.D.C.

T.D.C. De Luxe, 1917, 2¾h.p., 2-stroke, 2-speed, lamps, horn; £42.—39, Holtswite Hill, Enfield. [2868]

Torpedo.

2¾h.p. Torpedo Precision 2-stroke, 2-speed counter-shaft, lamps, horn; 42 gns.—F. H. Pledger, Ely. [1967]

Triumph.

4h.p. Triumph, lamps, etc.; bargain, £60.—188, Albany Rd., Camberwell, S.E. [2466]

TRIUMPH 3½h.p., variable B.B., magnificent order; £28.—Morgan, Winsten, Stowmarket. [2627]

BEST Offer gets 1914 Triumph; starts first kick.—16, Nutbrook St., Peckham Rye, London. [2396]

1919 TRIUMPH and Gloria sidecar, all accessories; £125.—Greyfriars Lane Garage, Coventry. [X2869]

TRIUMPH 4h.p. Combination, Easting screen, Gloria sidecar; £139.—Box 9,726, c/o The Motor Cycle. [2347]

TRIUMPH 4h.p., S.A. 3-speed, kick starter, clutch; £127/10.—The Spalding Motor Co., Ltd., Spalding. [2429]

TRIUMPH, 1914, coach, 3-speed, genuine; £75, or near.—Tickle, Hockliffe St., Leighton Buzzard. [2417]

3½h.p. Triumph, 1914 clutch model, lamps, horn, etc.; £45.—5, Hawkhead Rd., Willesden. [2712]

1920 T.T. Triumph, solo; list price £115, what offers?—Wright's Garage, Saffron Walden. Tel.: 16. [2976]

4h.p. Triumph; solo £105, combination £125.—Tel.: Museum 6626.—A.S.C., 60, Mortimer St., W.1. [2909]

1920 Baby Triumph, not ridden 300 miles, tools and Klaxon; £70.—5, Chatterton Rd., Bromley, Kent. [2771]

TRIUMPH 4h.p. Combination, 3-speed, in top new condition; any trial; 80 gns.—280, Camberwell Rd., S.E.5. [1562]

1920 Baby Triumph, as new, undershield, footboards, Lucas lamps, horn, mirror; £67.—Stainer, High St., Ryde. [2520]

TRIUMPH 4h.p. Countershaft, just delivered, unregistered; £120, no offers.—Wells, Aston, Hope, Derbyshire. [2508]

TRIUMPH Combination, 1914, Sturmev-Archer 3 speeds, Lucas lamps, etc.; £68, bargain.—40, Hertford Place, Coventry. [X2938]

TRIUMPH, late model, equipped, smart, recently overhauled; £75 solo, or combination £88.—14, Effra Parade, Brixton. [3002]

TRIUMPH 1920 4h.p. model, Triumph sidecar, horn, Watford speedometer, as new; £175.—Parker's, Bradshawgate, Bolton. [X2899]

1921 4h.p. Triumph, countershaft model, in stock for immediate delivery.—J. Smith and Co., 52-54, Hampstead Rd., N.W.1. [0354]

LATE 1919 T.T. Triumph, beautiful condition, fully equipped with lamps, Klaxon, etc.; £85.—L. Bull, 44, Hills Rd., Cambridge. [3009]

BABY Triumph, 1919 (Oct.), appearance and condition, as new, fully equipped; 55 gns.—Lawn Villa, Holly Walk, Enfield. [2869]

1918 Triumph, new E.I.C. mag., fitted in Premier frame and tank; £38 for quick sale.—James, 41, Darren View, Merthyr, Wales. [2320]

MOTOR CYCLES FOR SALE.

Triumph.

- 1919** 4h.p. Triumph, complete lamps, tools, 2 new tyres, splendid condition; £85.—Jones, Glen-thorne, Clarence Rd., St. Albans. [2461]
- TRIUMPH**, July, 1920, Model H., accessories, fully insured; owner proceeding abroad.—Enquire Suther-land, Quebec Hotel, Marble Arch. [3006]
- 1912** 3½h.p. T.T. Clutch Model Triumph, long exhaust, good lamps, few spares, splendid order; £40.—Roshier, Barnby Moor, York. [2361]
- 1920** Triumph and luxurious bulbous sidecar, dark mauve, and cover, accessories, 800 miles; £142/10.—61, New Kent Rd., London, S.E.1. [2727]
- 3½h.p.** Triumph, new C.A.V., new B.B., overhauled, complete, T.T. drop frame, ride away; bargain, 35 gns.—76, Western Rd., Southall, W. [2521]
- LATE** 1920 Triumph, Model H., sporting Renoc side-car, lamps, discs, horn, perfect condition; cost £172.—Box 9,301, c/o *The Motor Cycle*. [2983]
- 3½h.p.** Clutch Model Triumph, overhauled, enamelled as new, heavy Dunlops, new lamp set; bargain, £48.—Reeve, Cooper's Lane, Potters Bar. [2304]
- 3½h.p.** Triumph, 1908, wants magneto and pulley; accept £18; tyres good; or sell in parts: first cheque secures.—Hall, Preston Rd., Chorley. [X2933]
- TRIUMPH** Junior, perfect condition, enamel and plating as new, horn, lamps, spares, very small mileage; £70.—D. Lavin, Old House, Sonning, Berks. [2482]
- 1921** 4h.p. Triumph Combination, all chain drive, ready for delivery; £195.—Ellis and Co., 364, Lillie Rd., Fulham, S.W. Phone: Hammersmith 1553. [2635]
- BRAND** New 1920 Triumph Combination, handsome outfit, equipped regardless, insured; cost £191, accept £150.—60, Wallingford Av., N. Kensington. [2764]
- 1918** Triumph, countershaft, 4h.p., Lucas lamps, horn, not W.D.; £85; exchanges or easy terms.—Homac's 243, Lower Clapton Rd., E.5. Dalston 2408. [2926]
- JUNIOR** Triumph, 1920 model, splendid condition, full equipment, as new; £65; owner must sell.—Letters to Russell, Spring Grove, Tenbury Wells, Wor-ces-ter. [X2785]
- 4h.p.** Triumph, disc wheels, countershaft, 3-speed, clutch model, speedometer, and lamps; £70.—Blake, 4, Park Crescent Mews (East), Gt. Portland St., W.1. [2825]
- TRIUMPH** 4h.p., 3-speed and clutch, with horn, lamps, Tan-Sad, etc., in good condition throughout; any trial; insured; £62.—Baker, Ningwood, Yarmouth, Isle of Wight. [2511]
- TRIUMPH**, and everything for it, in stock; any query re Triumph gladly attended to.—Light Car and Motor Cycle Engineering Co., 26 and 26a, Tulse Hill, S.W. [2966]
- 4h.p.** Triumph, 1914, single gear, fast and sporty, lately overhauled, all accessories, excellent condi-tion; £50.—A. C. McCarthy, 153, Lowfield St., Dart-ford, Kent. [2524]
- 1920** Junior Triumph, new, with £7 accessories, ridden once only; owner going abroad; £64, or near offer.—2, The Chine, Grange Park, Winchmore Hill, N.21. [2809]
- 1919** Triumph, cane Dunhill sidecar, triangular chassis, lamps, Tan-Sad, Klaxon, tools, speedo-meter, etc.; reasonable offer, quick sale.—61, Argyle Rd., Ilford. [3040]
- TRIUMPH** 3½h.p., Bosch, 2-speed, free engine, N.S.U. gear, Chater-Lea wicker sidecar, good covers, lamps, tools, spares, good running order; £35.—39, Selkirk Rd., Tooting. [2500]
- F.O.C.H.** for 1921 Triumphs; earliest deliveries.—5, Heath St., Hampstead (nr. Hampstead Tube Station). Phone: Hampstead 3752. Hours 9-7, in-cluding Saturdays. [2555]
- TRIUMPH**, 1909, 2-speeds, free engine, variable gear, 3½h.p., perfect running order, together with light sidecar; £40.—J.S., 9, Villiers Rd., Willes-den Green, N.W.2. [2720]
- TRIUMPH** 1912-13 Clutch Model, Powell and Ham-mer lighting outfit, overhauled, good condition, spares, tools; £38, offers.—Ellis, Maltese House, Writtle, near Chelmsford. [2715]
- 1920** Triumph and Gloria Combination, nearly new, mileage 700, perfect condition, fully equipped; £138, or near offer.—Hunter, c/o Brantwood, Low-ton St. Mary, Lancashire. [2317]
- BABY** Triumph, 1919, £58; perfect condition, fitted with Bosch mag., new toolbags, footboards; pur-chase of combination sole reason for disposal.—Sleigh, Lilacs, Burgess Hill, Sussex. [2853]
- TRIUMPH** Junior, 1919, 2½h.p., 2-speed, carefully used, 400 miles, hardly distinguishable from new, lamps, horn; list £75, bargain £60.—Humpidge, 111, Cotham Brow, Bristol. [2533]
- 4h.p.** Triumph, 1914, with coachbuilt sidecar, 3-speed gear, accessories, recently overhauled by makers; 70 gns.—Woods, 330, Balham High Rd., S.W.17. Tel.: Latchmere 4368. [2878]
- 4h.p.** Triumph, 1914, coachbuilt sidecar, smart appear-ance, excellent condition, low mileage, stored during war, speedometer, tools, etc.; sacrifice quick sale, 68 gns.—22, Vicars Hill, Lewisham. [3035]

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MOTOR CYCLES FOR SALE.

Triumph.

- 1918** Triumph C.B. Combination, Dunlop tyres, Lucas lamps, pump, etc., in first-class order, any trial; no reasonable offer refused.—Chesters, Orchard Garage, Bedford Park, Chiswick. [2302]
- 1914** T.T. Triumph, 4h.p., just been overhauled, re-enamelled complete, lamps, mechanical horn, speedometer, tools, etc., splendid condition, very fast; price £45.—19, Barnfield, Wrexham. [2382]
- 1918** Triumph 4h.p., W.D. Model, and Rover sidecar, lamps, horn, tools, smart appearance, thorough running order; owner going abroad; £120, or reasonable offer.—3, Pemberly Crescent, Bedford. [1411]
- TRIUMPH**, new, renovated by Triumph; new 1921 Triumph, Montgomery bulbous back sidecar, guar-anteed for 3 months, lamps, horn, tools, etc.; lowest £139/10.—365, King St., Hammersmith. [2518]
- 1920** Triumph 4h.p., countershaft, Lucas lamps, speedometer, Klaxon, Tansad, spares, etc., mile-age 1,000, perfect; £106, offers; exchange lower power.—Heath, 10, Amblecote Rd., Grove Park, S.E. [2719]
- 1912** Triumph, new Armstrong Mark VI., tank re-enamelled, new piston and connecting rod, adjust-able pulley, takes Sunrising 5½-1 gear; ride reasonable distance; £40.—A. H. Adams, Shipston-on-Stour. [2794]
- 1920** Triumph, 4h.p., back end August, only done about 50 miles, electric light, horn, and full toolkit, spare valve, better than new; nearest offer to list price.—Jameson, 4, Harrogate St., Sunderland. [2307]
- 1919** Triumph, Type H., new June, 3-speed, com-plete with Lucas lamps and horn, little used; no dealers; genuine; £95; seen by appointment.—Parson-age, 87, Northern Grove, West Didsbury, Manchester. [2413]
- TRIUMPH**, Model H. £127/10, S.D. £140, D. £105, L.W. £75; combination, Model H. £182/10, S.D. £195; immediate delivery.—Vivian Hardie and Lane, Ltd., 24, Woodstock St., London, W.1. [0329]
- TRIUMPH** 1919 Combination, Montgomery No. 1 sidecar, hood, screen, luggage and petrol carrier, D.A. lighting, spares, etc., perfect condition, trial; real bargain, £125.—E., 113, Helix Rd., Brixton Hill, S.W.2. [2675]
- TRIUMPH** Countershaft Combination, excellent run-ning order, with lamps, horn and spares; £75; stamp, full particulars; seen by appointment.—Motor, Five Bells, Harmondsworth, near West Drayton, Middlesex. [2583]
- 1919** Triumph, 4h.p., 3-speed, countershaft, with 1920 canoelet sporting sidecar, lamps, horn, etc., apron, spares, grid, excellent running order; offers over £100; must sell, cash needed.—Vicar, Trimdon Village, Co. Durham. [2362]
- READ** This.—4h.p. Triumph, 1920, mag., 3 speeds, countershaft, fitted with new tyres, 2,000 miles, and B.S.A. sidecar, luggage grid, lamps, horn, speedo-meter, Stirling legshields, in perfect condition; £160.—Verity, 28, Park Parade, Cambridge. [X2789]
- LATE** 4h.p. Countershaft Triumph Combination, as new, all lamps, Lucas horn, pump, tools, spares, tyres new, roomy coachbuilt sidecar, wind screen, under-slung, 4-point, fine outfit, ready ride straight away on tour.—Manser, 20, Valnay St., Tooting. [2557]
- NEW** Triumph 4h.p. Countershaft Model, £127/10; 4h.p., type WDB, £105; 4h.p., all chain drive, £140; 4h.p., fixed engine, sporting, £105; all models in stock; Cambridge agents for Triumphs.—Herbert Robinson, Ltd., 32-35, Green St., Cambridge. Tel.: 995. T.A.: Bicycles. [2641]
- WAUCHOPE'S**, 9, Shoe Lane, London, E.C.4.—New 4h.p. Triumph solo, delivery from stock, £127/10; also new 4h.p. Triumph combination, all-chain drive, £195; new 4h.p. Triumph solo, all-chain, £140; and 4h.p. W.D. Triumph solo, £105. Easy terms, or exchanges arranged. [3059]
- TRIUMPH**—Elee and Co., the City motor cycle agents, can deliver from stock the latest Triumph models, brand new, Model H, £127/10; chain-drive Model SD, £140; lightweight, £75; Tourist Trophy racer, slightly soiled, £85.—15-16, Bishopsgate Av., Camomile St., E.C.3. Phone: Avenue 5548. [0063]
- 1920** 4h.p. Triumph, with Gloria sidecar, all com-plete, with Lucas lighting set, cowey trip speedo-meter, Klaxon horn, Easting wind screen, Tan-Sad pillion seat, Binks carburetter, insurance policy, many spares, including Triumph carburetter; price £182.—Apply, McG., 21, Cobham Rd., Kingston-on-Thames. [2391]
- 1917** C.S. Triumph and extremely comfortable C.B. sidecar, Bosch mag., and new Binks carburetter, have been specially fitted, fittings include large P. and H. lamp set, Lucas horn and Lucas side-car lamp, thoroughly sound mechanical condition; 85 gns., or nearest.—Williams, Bedford Terrace Ply-mouth. [2398]
- TRIUMPH** C.S. Combination, 1918 machine, 1921 Montgomery sporting sidecar, 1920 Binks carburetter, best Lucas lamps, Stewart speedometer, W.D. bars, Pedley grips, copper exhaust, oversize back tyre, spares, etc., machine recently overhauled, new piston rings, etc., legshields, in excellent running order; £145.—Vicarage, Wickhambrook, Newmarket. [2492]

MOTOR CYCLES FOR SALE.

Velocette.

HORSMAN can do Velocettes from stock.—Victor Horsman, Ltd., 7, Mount Pleasant, Liverpool. [0328]

VELOCETTE, only ridden 100 miles; for immediate sale, £70.—Pollard, Broomfield Rd., Chelmsford. [X2917]

O'DONOVAN Motors are sole London and district agents for the wonderful Velocette; immediate delivery.—O'Donovan Motors, 76a, Gt. Portland St., W.1. [4708]

1919 Velocette, 2-speed, chain drive, lamps, horn, perfect throughout; £48/10.—1, Othello St., Liverpool. [2768]

IMEDIATE Delivery can be given of the famous Velocette, 1921 model, 2½h.p., 2-speed, all-chain drive; £75.—Agents: W. Sparrow, Ltd., Osborne Garage, Yeovil. [1632]

VELOCETTE, the lightweight with a big heart, in stock for immediate delivery, shop-soiled; at greatly reduced price; now is the time to buy.—Mebes, 154-156, Gt. Portland St., W.1. 'Phone: 3426 Mayfair. [7196]

Verus.

1920 (June) 4h.p. Verus-Blackburne Combination; £120, bargain.—78, Fordel Rd., Catford. [2424]

VERUS, 2½h.p. Blackburne, 2-speed, clutch, new, slightly soiled; £95.—Clark, 7, Exhibition Rd., S.W.7. [2591]

T.T. 1920 Verus, 2½h.p., 2-speed, hand clutch and K.S. nickel fittings, fast; take £80, or exchange Triumph or B.S.A. countershaft; moderate.—15, Howard Place, Carlisle. [2470]

VERUS-BLACKBURNE 2½h.p., 1920, perfect condition, F.R.S. lamps, special spring seat-pillar, very comfortable and speedy; £100, offers.—Box 9,737, *clo' The Motor Cycle*. [2435]

Victoria.

VICTORIA, new Sept., 1920, 2½h.p. 2-speed Villiers; £55.—Pollard, St. George's St., Canterbury. 'Phone: 273. [2465]

Wilkin.

WILKIN, Models B and B4, shop-soiled; at greatly reduced prices; now is the time to buy.—Mebes, 154-156, Gt. Portland St., W.1. 'Phone: 3426 Mayfair. [7197]

Williamson.

WILLIAMSON Combination, 8h.p., kick, 2-speed, clutch; sell or exchange, offers.—29, Selkirk Rd., Tooting, S.W.17. [2786]

Wolf.

WOLF, Albion 2-speed, good tyres, one brand new, footboards, good appearance, owner buying combination; £35, bargain.—134, Lodge Lane, Hyde. [X2883]

WE are Sole London and Home Counties Agents for the Wolf motor cycles; 1921 models in stock; sub-agencies open.—Tel.: Museum 6626.—A.S.C., 60, Mortimer St., W.1. [2910]

Wooler.

23h.p. 1920 Wooler, 6 speeds, McNab's record 24 breaker; £85.—Wanchope's, 9, Shoe Lane, London. [3051]

WOOLER, as makers' specifications, shop-soiled; at greatly reduced price; now is the time to buy.—Mebes, 154-156, Gt. Portland St., W.1. 'Phone: 3426 Mayfair. [7192]

WOOLER 1920 2½h.p., T.T. Model, aluminium footboards, plated lamps, Cowey horn, Tan-Sad; makers' price £103; very little used; bargain, £80, or exchange, cash adjustment, higher power, A.B.C. preferred.—Parsons, 1, Acton Lane, Chiswick. [2738]

Zenith.

8h.p. Zenith Combination, fast; £85.—39, Essex Rd., Islington, N.1. [2888]

1921 Zeniths, in stock.—Agents, Hewett Bros., 94, Western Rd., Hove, Sussex. [0344]

1914 5h.p. Zenith Combination, Gradua gear, wicker sidecar.—For full particulars, write Newman, Moundsmere Manor, Basingstoke. [2769]

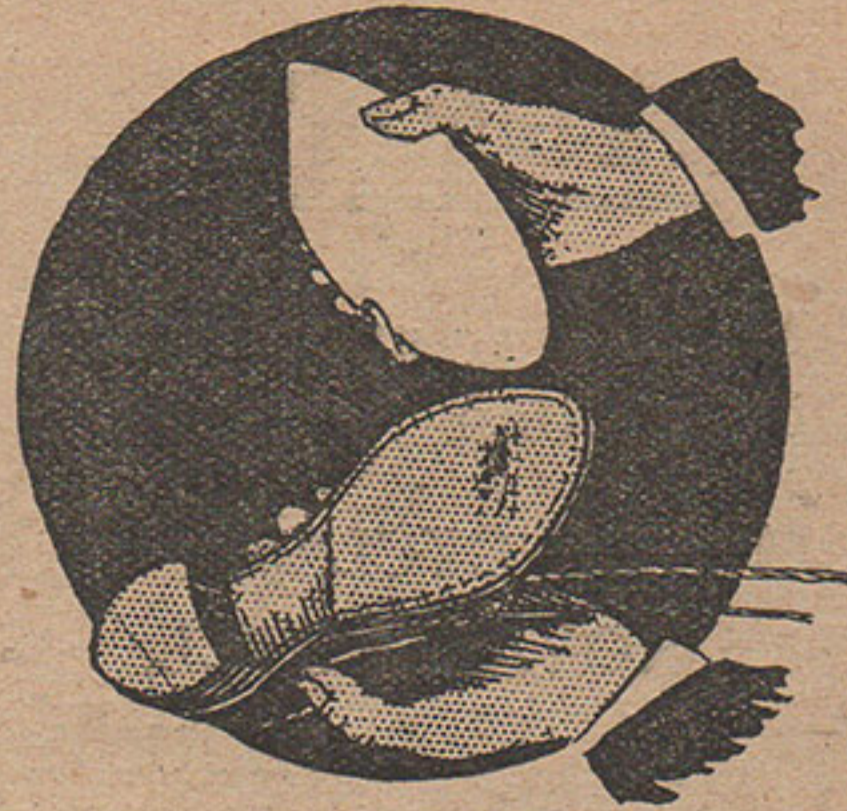
ZENITH-GRADUA, 6h.p. twin J.A.P. engine and magneto, good condition; no reasonable offer refused.—Davis, 22, Tooting Bec Rd., S.W. [3043]

1920 6h.p. Zenith Countershaft, brand new; cost £162, accept £130.—Edwards, 50, Harrington Rd., South Kensington. 'Phone: Kens. 3709. [2209]

ZENITH 1919 (Sept.) 6-8h.p., new condition, hardly used, mileage about 1,200, unscratched; giving away for £90; must sell.—48, Grenville Rd., Hornsey Rise. [2680]

ZENITH-GRADUA, 6h.p. J.A.P., complete, best accessories, week old, 90 miles, perfect; actual value £148, sell £136.—Walwyn, Graham and Roberts, Carlisle. [2370]

ZENITH 8h.p., 1920, Model H, shop-soiled; in stock at greatly reduced price; now is the time to buy.—Mebes, 154-156, Gt. Portland St., W.1. 'Phone: 3426 Mayfair. [7193]



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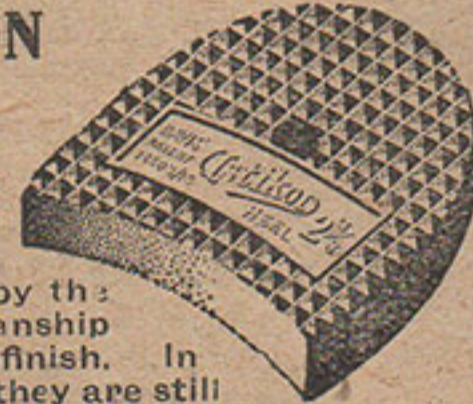
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MOTOR CYCLES FOR SALE.

Zenith.

ZENITH 1915 5h.p. Combination, countershaft, clutch, kick start, 1920 cancellet, thorough condition; £90, or near.—Saker, Wentworth, Chessington, Surbiton. [2718]

ZENITH 8h.p. Sporting Model in stock; £139.—Vivian Hardie and Lane, Ltd., 24, Woodstock St. (off Oxford St.), Bond St., London, W.1. 'Phone: Mayfair 6559. [0319]

1920 5h.p. Sports Zenith, hardly used, indistinguishable from new, lamps, horn, pillion, etc.; sacrifice at £100.—Deacon, Rosebank, College Av., Slough, Bucks. [2881]

F.O.C.H. for 1921 Zeniths; earliest deliveries.—5, Heath St., Hampstead (nr. Hampstead Tube Station). 'Phone: Hampstead 3752. Hours 9-7, including Saturdays. [2553]

ZENITH 1920 8 h.p. Countershaft Combination, Millford sidecar, Easting wind screen, luggage carrier, electric lighting, horn, speedometer, like new; £180.—Cutting, Ebor Villas, Stamford. [2964]

F.O.C.H. have a 1919 6h.p. Zenith, T.T. bars, accessories, grand condition, cheap.—5, Heath St., Hampstead (nr. Hampstead Tube Station). 'Phone: Hampstead 3752. Hours 9-7, including Saturdays. [2550]

AN Exceptional Bargain.—3½h.p. 1916 Zenith-Jap. Gradua gear, new Dunlops and belt and 1920 Amac, overhauled, any trial here; close offer to £45 accepted.—Harris, Grocer, Castlefields, Shrewsbury. [2819]

1920 5h.p. Sporting Zenith, appearance, condition as new, mileage 2,500, Cowey, Klaxon, P. and H., electric rear lamp, all tools, insurance; offers; seen evenings.—Williams, 263, Camden Rd., N.7. 'Phone: North 1778. [2800]

1920 (Sept.) 8h.p. Sporting Zenith, special competition engine (75 m.p.h.), electric lighting, horn, tools, tyres unpunctured, plating and enamel unscratched, mileage 200; £145.—Tame, Chequers, Dorchester, Wallingford. [2394]

NEW 8h.p. Zenith Model H Combination; £204, or on deferred payments; one fifth deposit, balance by 12 monthly instalments, a small extra charge being made for credit terms.—Harrods, Ltd., 118, Brompton Rd., London. [2658]

8h.p. Zenith-Jap 1914 Sports Model, expensive accessories, condition and appearance as new; £65; luxurious C.B. sidecar for above, Cameo apron, luggage grid, lamp; £16; together or separate.—Bacon, Offington Lane, Worthing. [2872]

Ladies' Motor Cycles.

LADY'S Motor Cycle, open frame New Imperial, 1916, 2½h.p. J.A.P., 2-speed gear box, Dunlops, footboards, carefully used by lady only, new condition; accept £35; owner leaving town.—Clarke, Furnisher, 74, Overstone Rd., Northampton. [2953]

Miscellaneous.

SILVER Star Motors, Knightsbridge.

24-HOUR Overhauls to any 2-stroke.

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1920 American X, 7-9h.p., 3-speed, Henderson Elite sidecar, screen, all lamps, etc., as new; any trial; £160.

1920 Scott, 3½h.p., 2-speed, gold medal winner, many spares, all accessories; £120.

1920 Brough, 5-6h.p., all-chain, 3-speed, very fast, long copper exhaust, all accessories; £120.

1914 Lincoln-Elk, 3½h.p., new tyres, spare belt, all accessories, finish as new, long exhaust, very sporting, fast; £40.

SILVER Star Motors, Frederic Mews, Kinnerton St., Knightsbridge, S.W.1. Gerrard 7791. [3034]

21h.p. Levis, as new; £38; also hot stuff solo Indian, cheap.—57, Sellons Av., Harlesden, N.W. [3028]

1920 4½h.p. Flat Twin Combination, new August, electric light; bargain, £155.—14, Claremont Hill, Shrewsbury. [2935]

21h.p. Minerva Engine, perfect, in brand new O.K. frame, £11; also 3½h.p. Triumph, £55.—Sellers, Joiners, Lister St., Hainfax. [2381]

If you want a good privately owned motor cycle or car, apply Kwiksale Private Motor Registry, 35, Long Acre, W.C. Gerrard 2392. [0138]

8h.p. Coachbuilt Combination, 2-speed, K.S., under-slung sidecar, new Palmers, Dunlop; sacrifice, £40.—49, Medway Rd., Bow, E.3. [2876]

MOTOR CYCLES FOR SALE.

Miscellaneous.

WANDSWORTH Motor Exchange.—The finest and cheapest selection motor cycles in London.—Below.

WANDSWORTH.—Easy terms, easy terms, easy terms on any machines.—Below.

WANDSWORTH.—1920 Royal Ruby lightweight, looks just like new; 45 gns.—Below.

WANDSWORTH.—Moto-Reve lightweight, small twin, mag., spring forks; gift, 18 gns.—Below.

WANDSWORTH.—Matchless-Jap, twin, Bosch, 3 speeds, clutch, beauty; 49 gns.—Below.

WANDSWORTH.—1915 Zenith, 3½h.p. J.A.P., mag., Gradua gear, disc wheels; 55 gns.—Below.

WANDSWORTH.—F.N. with coachbuilt sidecar, 5-6h.p. 4 cyls., enclosed Bosch, 2 speeds.—Below.

WANDSWORTH.—Bat-Jap with sidecar, 8h.p., twin, Bosch, countershaft gears; 42 gns.—Below.

WANDSWORTH.—F.N., magnificent machine, 5-6 h.p., 4 cyls., 2 speeds, fully equipped; 85 gns.—Below.

WANDSWORTH.—F.N. coachbuilt combination, 5-6h.p., 4 cyls., 2 speeds, clutch; gift, 55 gns.—Below.

WANDSWORTH.—Triumph with sidecar, 3½h.p., Bosch, 2 speeds, nice order; 49 gns.—Below.

WANDSWORTH.—1918 Triumph coachbuilt combination, 4h.p., 3 speeds, countershaft; gift, 89 gns.—Below.

WANDSWORTH 1915 Singer, 4h.p., mag., 3 speeds, countershaft, kick, beauty; 52 gns.—Below.

WANDSWORTH.—Indian coachbuilt combination, spring frame, 7h.p., 2 speeds, lamps; 68 gns.—Below.

WANDSWORTH.—Rex coachbuilt combination, 5-6 h.p., twin, Bosch 2 speeds; cheap, 45 gns.—Below.

WANDSWORTH.—P. and M. coachbuilt combination, 3½h.p., Bosch, 2 speeds; who wants? 49 gns.—Below.

WANDSWORTH.—Kerry-Abingdon, 3½h.p., Bosch mag., ready drive away; 28 gns.—Below.

WANDSWORTH.—Rex, 3½h.p., mag., 2 speeds, any trial; great bargain, 29 gns.—Below.

WANDSWORTH.—Bat, about 3½h.p., mag., F.E., clutch, wants attention; 19 gns.—Below.

WANDSWORTH Exchanges.—Wandsworth Motor Exchange, Ebner St., Wandsworth (Town Station). Phone: Battersea 327. [3019]

BOOTH'S Motories, Halifax.—6h.p. Rudge combination, lamps, 1920 model, £125; 1920 4h.p. Blackburne-Venus, 3-speed, and new Millford sidecar, £120/10.

BOOTH'S Motories, Halifax.—1920 6h.p. Ariel combination, shop-soiled, £145/10; 1920 Harley-Davidson, very cheap.

BOOTH'S Motories, Halifax.—1915 Harley-Davidson combination, lamps, hood, etc., £87/10; 6h.p. 2-speed Rex combination, £40/10.

BOOTH'S Motories, Halifax.—8h.p. J.A.P., free engine, Druid forks, £30/10; 6h.p. Chater-Lea with sidecar, £35/10.

BOOTH'S Motories, Halifax.—1919 P. and M., with new sidecar, £115/10; 1920 2-speed Wolf, £52/10.

BOOTH'S Motories, Halifax.—Six 1915 Douglases, £49/10; four 4h.p. Douglases, 1918, £85/10; 1914 3½h.p. Sun-Precision, 3-speed, £35/10.

BOOTH'S Motories.—1920 O.K. lightweight, Villiers engine, only run 150, £43/10; ditto with 2-speed, £54/10; 1920 Omega, 2-speed, £69/15; 1914 2-speed Scott, £47/10; 1920 10h.p. Swift light car, £420; 1920 Harley-Davidsons, Ariels, Quadrants, O.K.; exchanges.—Booth's Motories, Portland Place, Halifax. [2621]

3½h.p. C.B. Combination, Sturmer 3-speed counter-shaft (1920), new tyres, lamps, etc., complete: £68.—Price, 26, Avenue Rd., Aston, Birmingham. [2564]

DOUGLAS S. COX, the A.S.M.M., West Norwood, has several real bargains in motor cycles and combinations in his long advertisement under Cars. [7727]

DOUGLASES, 2½h.p., 1915, 1916, and 1917, unrenovated, £25 each to clear; all parts supplied. Also P. and M. solo, £45, running order.—Sulina Garage, Sulina Rd., Brixton Hill, S.W.2. [2932]

LEVIS 2-speed and Sidecar, just re-enamelled, competition model, £70; 2-speed Triumph, 3½h.p., chain and belt drive, £40; just overhauled, £10.—Richards, 4, Lane Ends, Orgreave, nr. Handsworth, Sheffield. [X2776]

1920 Shopsoiled Models, £198; twin Ariel combination, £145; lightweight Enfield, £68; Matchless combination, £175; Quadrant combination, £128, etc.—Clifford Wilson Mfg. Co., 70, Royal Hospital Rd., Chelsea, S.W.3. [1345]

R. D. VARTY has several second-hand machines to clear at bargain prices. Also one Swan sporting sidecar, suitable for Harley or Indian, £14. All accessories in stock. Write requirements.—R. D. Varty, Thundersley, Essex. [1268]



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26 x 2½	Hutchinson Passenger	44/-	68/9
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"	S. Moulton Extra Heavy	37/6	59/-
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"	Beldam Heavy	34/-	58/-
"	Englebert Wired-on Rib	30/-	60/-
26 x 2¾	Palmer Cord Heavy	44/-	66/-
"	Clincher De Luxe Ex. Hy.	39/-	68/6
"	Bates No. 1 Special	37/6	71/6
"	Kempshall Anti-skid	37/6	75/-
"	Avon Tricar Rubber Stud	34/6	72/6
26 x 2½	Palmer Cord Heavy O.S.	59/-	74/5
"	S. Moulton Extra Heavy	45/-	77/-
"	Macintosh Rub. Non-skid	45/-	78/-
"	Palmer 2-ply Ribbed	39/-	50/3
28 x 3	Goodrich Safety Tread	52/6	93/6
"	Dunlop Extra Heavy	48/6	84/-
"	Wood-Milne Extra Heavy	39/6	81/-
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"	Moseley Ex. Hy. 3-rib	28/6	78/-
650 x 65	Palmer Cord Heavy	68/-	79/6
"	Avon 3-rib	58/-	75/6
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700 x 80	Avon Sunstone	70/-	86/3

TUBES—New and fully guaranteed.

*26 x 2	6/6	26 x 2½	7/6	26 x 2½	8/9
*26 x 2½	7/-	*26 x 2½	7/9	*28 x 3	11/9
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Victoria, S.W.1.
Telephone: Victoria 6553.

MOTOR CYCLES FOR SALE.

Miscellaneous

FRANK WHITWORTH, Ltd., 139, New St., Birmingham.—Little used Douglas combination, £120; Ixion 2-stroke, £32; Champion-Villiers, 2-speed, £45; Enfield 2-speed 2-stroke, leg shields, electric lighting, new A.B.C., N.U.T., Lea-Francis, Ivy, Cedros; also

COVENTRY Premier Super Runabout [X1881]

INDIAN 5-6h.p. Combination, 3-speed, kick start, jumps, etc., splendid condition; also Humber combination, 3½h.p., 2-speed, handle start, splendid condition, lamps, etc.; owner got car; the lot £85.—Mr. H. Clark, Spring Rd., Littlemore, near Oxford. [2403]

BARGAINS.—Please peruse our advertisements in small columns. We are disposing of our large stock of shop-soiled models at greatly reduced prices. Do not wait. Come and buy at once. The offer may not occur again.—Mebes, 154-156, Gt. Portland St., W.1. Phone: 3426 Mayfair. [7194]

S. E. CLAPHAM (Motors), Greenwich.—1921 models. Place your orders now with S. E. Clapham for immediate or early delivery Matchless, A.J.S., Henderson, 4h.p. Excelsior, Sunbeam, New Imperial, James, Triumph, Connaught, Coulson B., Edmund, Acme, Rex, Rudge, etc., etc., any leading makes. We allow 10% on all deposits.—Note address: S. E. Clapham (Motors), 27, Stockwell St., Greenwich, S.E.10. [2997]

F.O.C.H., the car, light car, and motor cycle specialists.—A good new and second-hand selection always on view; prices to suit everybody; fair cash price paid for your 'bus; exchanges a speciality. We supply Triumph, Zenith, B.S.A., A.J.S., etc., also the famous Kingsbury Junior, Bleriot Whippet, Grahame White, G.N., etc.—5, Heath St., Hampstead (nr. Hampstead Tube Station). Phone: Hampstead 3752. Hours 9-7, including Saturdays. [2556]

MOTOR ATTACHMENTS.

JOHNSON Motor Wheel and gent's standard cycle; £25.—Broundells, Faversham. Phone: 155. [2515]

YOUNG Motor Engine, 1½h.p., complete, frame for fixing, 1920, new; £10.—R. W. Adams, Market Drayton. [2350]

WALL Auto Wheel with lady's Rudge, excellent condition; £20, or separate.—Crittenden, 75, Salisbury Rd., Maidstone. [2747]

MOTOR Attachments fit any ordinary bicycle, no vibration; price 25½ gns., including lighting generator; agents required.—Economic Motors, 62, East Castle St., London, W.1. [2395]

MOTOR SCOOTERS.

EGERTON'S Northgate, Ipswich, can delivery from stock A.B.C. Skootamotas and mobile pups. [1445]

A.B.C. Skootamota for sale, only done 100 miles, in practically new condition; £45.—King and Harper, 6, Bridge St., Cambridge. [1442]

BARGAINS to clear.—1920 A.B.C. Skootamota, slightly shop-soiled, £40; Autoped motor scooter, £20.—Main, 36, Parade, Leamington. [X2888]

MOTOR Scooter, Auto-Wheel engine, new condition, only ridden 3 times; going abroad; at £32, or nearest offer.—Box 9,780, c/o The Motor Cycle. [2626]

1920 Autoglider, Type D, cost £57/15 last Aug.; accept £37/10; guaranteed perfect and practically indistinguishable from new.—Hartop, Draper, Bedford. [2551]

TRICYCLES FOR SALE.

ARGSON Hand and Motor Propelled Tricycles, for invalid and disabled.—Particulars, Argson Eng. Co., Ltd., 3, Kendalls Mews, George St., W.1. [2647]

HOODS, WIND SCREENS, ETC.

WINDSCREENS.—Avro, Triplex, sporting, cost 42/-; 12/6.—51, Maplethorpe Rd., Thornton Heath. [2874]

AUSTER Aero Triplex Aluminium Wind Screens, 12in., adjustable, fit sporty sidecar, 22/6 each; and other types.—McConnell and Bailey, 73, Gt. Portland St., W.1. [7060]

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VENUS Tandems hold 2 persons. Strong and light, but not unsightly. Get one.

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VENUS Sidecar Co., 6-14, Gourley St., S. Tottenham. [2298]

TAXI Sidecar Bodies for Enfields. We are experts.—Jennings and Davies, Ltd. Tel.: 170 Redditch. [9443]

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SIDECAR Chassis, new, 28in. wheels; £6/10.—39, Essex Rd., Islington, N.1. [2886]

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HENDERSON Elite Sidecar; list price £45; what offers.—Martin Mitchell, Ltd., Stafford. [1696]

SWAN Sporting and de Luxe Sidecars to suit all makes.—Motor Exchange, Horton St., Halifax. [2537]

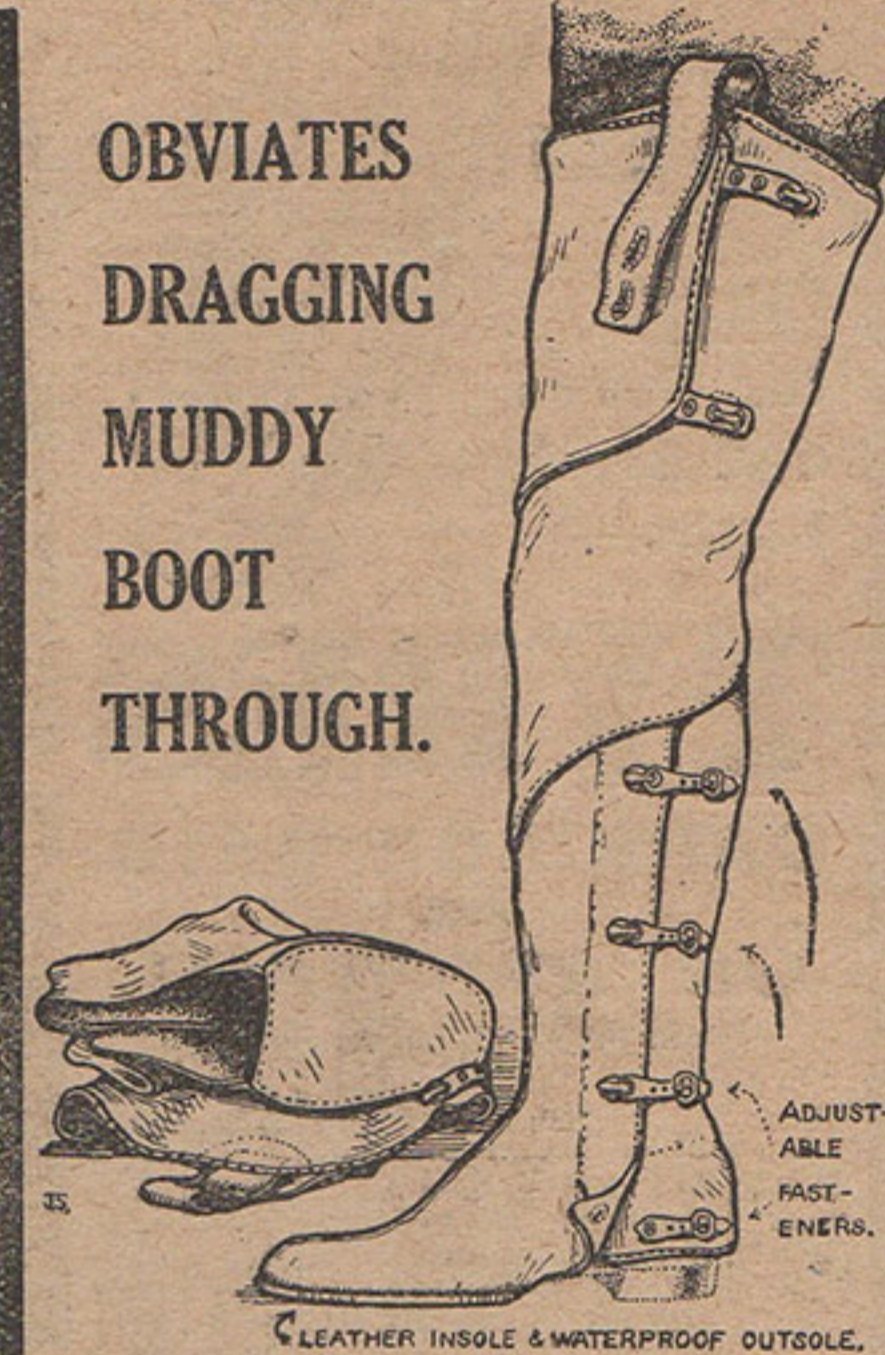
LIGHT Coachbuilt Sidecar, less tyre, off Triumph; £8.—109, Barcombe Av., Streatham Hill, S.W.2. [2743]

UNDERSLUNG Sidecar Chassis, 700x80 tyre, 5in. mudguard; £7.—H. Fisher, Elm House, Shipley, Sussex. [2833]

BEAUTIFUL Roomy Sidecar, complete, less mudguard, valued £30.—Seen Surplus, Sheet St., Windsor. [2327]

PERFECTION Coach Sidecar Bodies; £6/15; deliveries from stock.—Motor Exchange, Horton St., Halifax. [2538]

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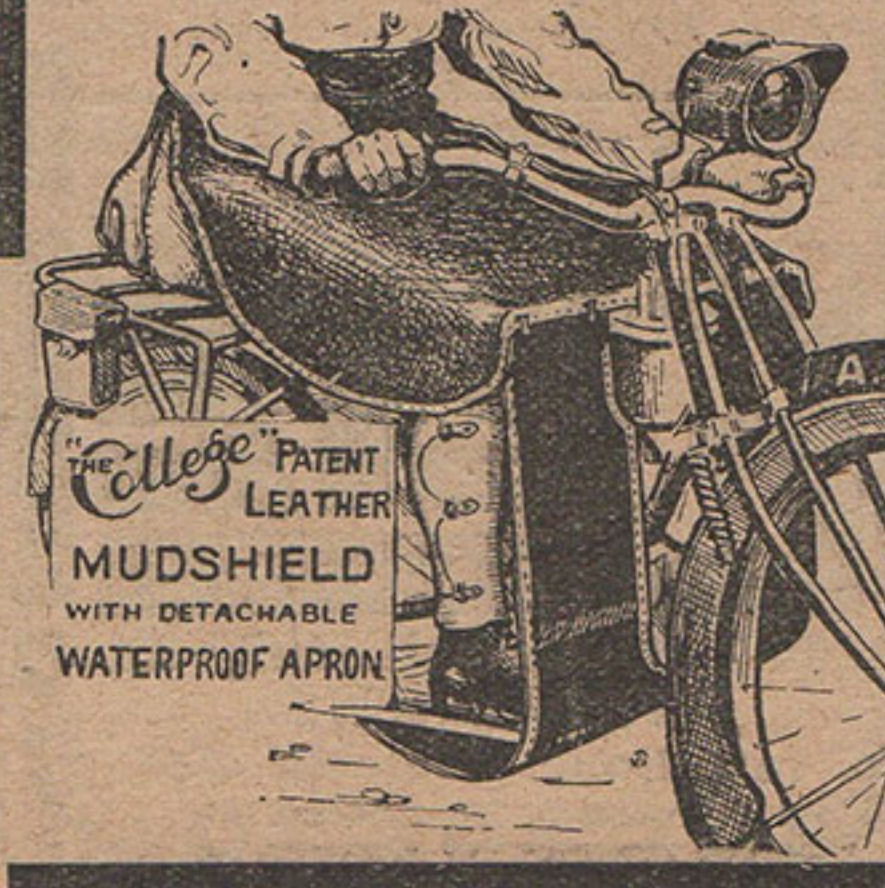


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WITH DETACHABLE
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1920 Swan Sporting, only done 100 miles, off Triumph; £25.—17, Dover Terrace, Sandycombe Rd., Richmond, Surrey. [2839]

ROYAL Leicester Sidecars to suit all machines, roomy bodies, comfortable upholstery, excellent springing; prices from £19/10 upwards.

SEND Your Sidecar to us for renovation. New hoods, wind screens, and aprons fitted. Write for catalogue.

THE Willowbrook Co., Royal Leicester Sidecar Works, Belgrave Gate, Leicester. [0335]

HARLEY, Excelsior, and Henderson new de Luxe bulbous back Sidecars; £42/19.—Motor Exchange, Horton St., Halifax. [2536]

SIDECAR to fit, and colour 1920, new; motor cancelled; list price £38, sacrifice £30; approval; photo.—12, Wray Crescent, N.1. [X2922]

BASTONE'S for Sidecars and Bodies. No better or cheaper house.—228, Pentonville Rd., King's Cross, London, N.1. Tel.: 2481 North. [9347]

BRADBURY 4h.p. Sidecar, 1911, £25; under 200 lb.; before 2 or Saturday, not Sunday.—Cheverton, 13, Norman Rd., Wimbledon. [3038]

1920 Harley-Davidson, brand new; list price £49/10, accept £41.—Edwards, 50, Harrington Rd., South Kensington. Phone: Kens. 3709. [2210]

SIDECAR, coachbuilt, by Varley, Birmingham, well sprung, 5-point, 26x2 1/2 in. Dunlop, suit 4-6h.p.; £12/10.—128, Coopers Lane, Smethwick. [2812]

1919 P. and M. Sidecar, new May, 1920, £20; also sidecar, torpedo shape, Green P. and M. fittings, £16.—Horner, Trimmingham, Halifax. [2436]

SIDECAR (Myers), coachbuilt, re-enamelled, 4-point chassis, wheel complete, new apron; best offer accepted.—3, Rosemont Parade, North Finchley. [2722]

MR. DAVIDSON, riding Harley-Davidson and Flying Middleton sidecar, won 1,000 c.c. championship and broke 5 and 10 miles world's records Oct. 9th.

MR. O. De LISSA came second 1,000 c.c. championship, riding Motosacoche and Middleton touring spring wheel chassis.

MR. BEACH, of O'Donovan Motors, Gt. Portland St., on Sept. 7th broke 12 records with 3 1/2 h.p. Norton and standard Flying Middleton sidecar.

MR. BREESE, riding B.S.A. with Middleton Flyer, broke 4-hour record on June 23rd.

MIDDLETON'S Flyer, on track or road, the fastest in the world.

MIDDLETON'S Undertake Repairs to any make of sidecar, chassis, or bodywork. We do everything in our own works. Kumansaus. What about your old-fashioned father's sorry chassis; let us make it up-to-date by converting it to spring wheel type.

MIDDLETON'S have four models.—the Flyer, for racing; lightweight coach, for 2 1/2 h.p. machines, etc.; medium touring coach, for 3 1/2 h.p. upwards; and special tourers for big twins, Zenith, Harleys, Hendersons, Indians, including spring frame model, etc.; trade supplied.

MIDDLETON'S Spring Wheel, the finest device of this kind, now ready; £4 extra on any model.

MIDDLETON'S, London's oldest established sidecar makers, 27, Stroud Green Rd., Finsbury Park, N.4. Phone: 1584 Hornsey. [1808]

SIDECAR Chassis, springs, and wheel, new mudguard, nearly new Dunlop cover; £4; will separate.—Lusty, 110, Wheat St., Nuneaton, Warwickshire. [X2844]

LATEST Model Regent Sidecars, new, complete with 28x3 tyre, R34 shape bodies, painted blue, upholstered cord; price £25.—Apply, Page, Motor House, Epsom. [2613]

CANOELET MM4's for Harleys, complete with heavy Dunlop tyres and coverall aprons, new; £17/10 to £27 each.—Holliday Bros., 20, Queen St., Hammer-smith Broadway, W.6. [2803]

HENDERSON Sidecar.—Large stock of all models, shop-soiled, at greatly reduced prices; now is the time to buy.—Mebes, 154-156, Gt. Portland St., W.1. Phone: 3426 Mayfair. [7198]

CANOELET Minor, crimson, silver grey disc wheel, mascot, in new condition, new lamp, small luggage carrier, apron; cost £24 two months ago, £15.—Bailey, 93, Frome Rd., Trowbridge. [X2889]

SIDECAR, off P.M., reupholstered best pegamoid, enamelled this year, wind screen, new tyre, £20; P.M. handle-bars, tank, 7/6 each.—Coomber, 97, St. John's Park, Blackheath, S.E. [2670]

WE have a great number of second-hand sidecars and bodies for disposal. These accumulated during a busy season when we had no time to trouble with them. Call and take your choice. Shop-soiled sidecars from £10.—Sandum Sidecars, 336, Gray's Inn Rd., W.C.1. Phone: Holborn 933. [0322]

CHASSIS.—The Sandum lightweight, £9/9; heavy-weight, £12/12; heavyweight enclosed wheel type, £22; spring wheel type, £27. Ask to see our special sidecar connections. Trade enquiries invited.—Sandham Engineering Co., 336, Gray's Inn Rd., W.C.1. Phone: Holborn 933. [0325]

SIDECAR ATTACHMENTS.

SMART Coachbuilt Sidecar for red Indian, perfect condition, new last August, all connections, bulbous back locker, screen, excellent tyres, bicycle sold; bargain, £30.—Cameron, Oakfield, Fortrose, Ross-shire. [2323]

SIDECAR.—Have a Hopley folding sidecar. No need to pay garage. You can keep motor at home; will go through passage 28in. when folded on any motor. Any shape body fitted. They have been well tested for six years on motors up to 8h.p.—Hopley, Upper Highgate St., Birmingham. [0152]

RUNABOUTS AND CYCLE CARS.

8 h.p. Morgan, 1914, fully equipped, excellent condition; £145.—20, Hengist Av., Margate. [2619]

CARDEN Monocar, 1917, 2-speed, good condition; £75, offers.—3, Ladysmith Rd., Cradley, Staffs. [X2487]

TAMPLIN, 1920, as new, all accessories; £150.—Kenilworth Garage, High St., Putney. Before 7. [2745]

1921 Carden 2-seater; delivery February; £15 deposit paid; what offers for transfer?—Cox, 62, Philpot St., E.1. [2766]

ROVER, 8h.p., 1920, the light car of the year; price £300; immediate delivery.—Murdett Bros., Huntingdon. [X1829]

G.N.—We are large contractors, and can usually supply from stock.—Victor, Horsman, Ltd., 7, Mount Pleasant, Liverpool. [0327]

G.N. Cycle Cars delivered anywhere; G.N. spares.—Brooklands Motor Co., G.N. Specialists, Ecclesall Rd., Sole Sheffield Agents. [2936]

A.V. Monocar, 1920, electric lighting, accessories galore; must sell; what offers?—Grimes, 18, Bruton Place, Bond St., W.1. [2967]

ROVER Light Car, 1921 model, 8h.p., in stock for immediate delivery; £300.—Godfrey's, Ltd., 208, Gt. Portland St., London, W.1. [0500]

COVENTRY Premier 3-wheeler, 3 speeds and reverse, dynamo lighting, etc., absolutely T.T.; 275 gns.—Motor Exchange, Horton St., Halifax. [2543]

MORGAN, 1913 Model, newly hooded and repainted, a decided bargain at £120, or close offer.—Bamford. (See under Consulting Engineers.) [2357]

MORGAN Type Runabout, light, fast, good condition; £110; exchange 4-stroke lightweight and cash.—Tonge, Villas, Killamarsh, Sheffield. [2815]

JUST Arrived Works, latest Morgan de Luxe, w.c. 10h.p. M.A.G., hood, screen, lamps, discs; list price £242/5.—Clarke and Co., Queen St., Louth. [2545]

MORGAN, 1914, lamps, hood, screen, good running order, just overhauled; £143; exchange low powered combination.—68, Manor Rd., Bexhill. [2570]

G.N. Cycle Cars, £241/17/6, supplied anywhere, sole Sheffield agents; Crouch Cars, £315, complete.—Brooklands Motor Co., Ecclesall Rd., Sheffield. [2913]

CYCLE Car, 8h.p., 2-seater, 650x60 tyres, sporting body, acetylene lighting, perfect running order; £95; enquiries.—H. Bettley, 3, Regent St., Willenhall, Staffs. [2565]

8-10h.p. 1920 Aero Morgan, M.A.G. engine, yellow finish, done about 2,000 miles, electric lights.—Wauchope's, 9, Shoe Lane, London. Phone: Holborn 5777. [3052]

MORGAN, 1919, Aero model, W.C. M.A.G., just been repainted as new; £176.—Clifford Wilson Mfg. Co., 70, Royal Hospital Rd., Chelsea, S.W.3. Tel.: Kensington 7113. [1344]

GIBBONS Mark HI. Cycle Car, reduced to £115; delivery within one month; trials any time by appointment. Agents required.—Gibbons and Moore, Chadwell Heath, Essex. [4838]

MERRALL-BROWN 3-wheeler, new, with spare wheel and other extras, 4-cyl. Coventry Simplex engine; £358/10; cash, exchange, or easy payments.—Motor Exchange, Horton St., Halifax. [2544]

MORGAN De Luxe, M.A.G. engine, water-cooled, 1920 model, fast and powerful little car, little used, and in perfect condition throughout privately owned.—Box 9,724, c/o The Motor Cycle. [2345]


1920 Tamplin, complete with hood, wind screen, discs, tools; electric lights, mechanical horn, cost £185; sell £135, or exchange Triumph and cash.—Harvey, 335, Gloster Rd., Horfield, Bristol. [2903]

SPORTING 3-wheeler, 6h.p. Singer, w.c., completely overhauled, painted, tyres good, 2 new tubes, Bosch, B.B., dome radiator, fast; trial; £48, exchange M.C. to value.—Ford, Sotwell, nr. Wallingford, Berks. [X2940]

CARDEN Monocar, 6h.p. twin, domed mudguards, aluminium running boards, all accessories, including speedometer and car generator, perfect; £90, or exchange sporting combination.—Akam, Dallam Rd., Shipley, Yorks. [2582]

WAUCHOPE'S, 9, Shoe Lane, London, E.C.4.—New 8-10h.p. Morgan, Grand Prix, M.A.G., water-cooled, fully equipped, just delivered from works, order cancelled, now available; price, including all extras, £236. [3063]

MORGAN 1915, in excellent condition, air-cooled J.A.P. engine, hood, screen, extra tool boxes, fully equipped, tyres good; £135; take solo machine part; Triumph preferred.—Marsden, British Camp Hotel, Malvern. [X2930]

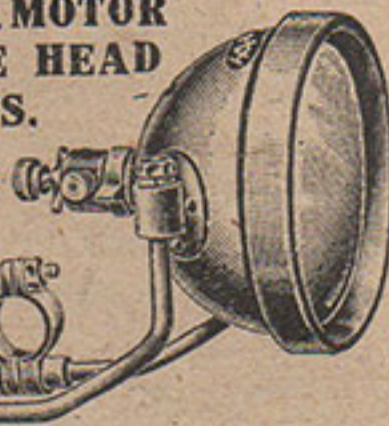


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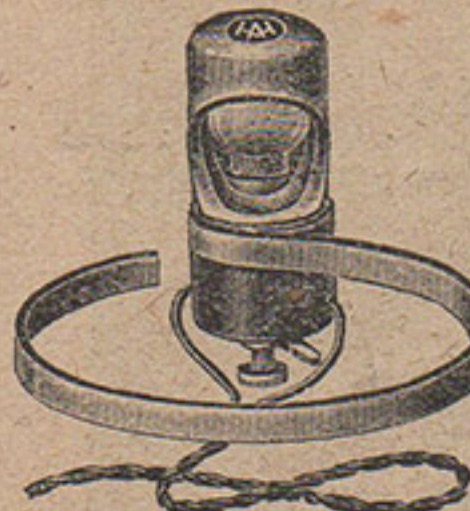
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H.A.H. COMPLETE SIDE AND REAR SET.




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H.A.H. BADGE HOLDER. Price, 1/6 each.
Fig. 778.



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MORGAN.—We are sole Wolverhampton agents; our allotment for this season is already booked, but send us your old machine for repairs, overhauls, or repainting.—The Molineux Garage Co., Ltd., Wolverhampton. Tel.: 1160. [3460]

MORGAN Service Depot.—We are official agents; all spares in stock; overhauls, repairs; if you are in trouble with your Morgan consult us; we will give you service.—Homac's, 243, Lower Clapton Rd., E.5. Phone: Dalston 2408. [2928]

MORGAN, latest type Aero body, 10h.p., water-cooled, M.A.G. engine, all accessories, mileage about 300, condition as new; £230.—Elce and Co., Morgan Specialists, 15-16, Bishopsgate Av., Camomile St., E.C.3. Phone: Avenue 5548. [0072]

LAMB'S give prompt delivery: G.N., Coventry Premier, Rover, Morgan, Kingsbury, New Hudson, light cars and runabouts. Exchanges, deferred terms.—Lamb's, 151, High St., Walthamstow; 50, High Rd., Wood Green, N.; and 387, Euston Rd., London, N.W. [2603]

MORGANS.—Elce and Co., the City Morgan Specialists. Delivery from stock of these famous cycle cars. Grand Prix, £216; sporting model, £206; De Luxe air-cooled, £212; water-cooled, £225; cash, exchange, or extended terms.—15-16, Bishopsgate Av., Camomile St., E.C.3. Phone: Avenue 5548. [0070]

G.N. 1921.—Elce and Co., the City Light Car Specialists. Immediate delivery all models. Standard touring full equipment, spare wheel, hood, etc., £241/17/6; dynamo lighting model, £275/12/6; Legere, dynamo lighting set, £309/7/6. — 15-16, Bishopsgate Av., Camomile St., E.C.3. Phone: Avenue 5548. [0071]

MERRALL-BROWN, late 1920, 10h.p., special 3-wheeler, blue body, aluminium bonnet, 4-cyl. Coventry Simplex engine, C.A.V. dynamo lighting, 5 lamps, speedometer, disc interchangeable wheels, spare wheel, screen, hood, petrol and oil indicators, many costly improvements, full equipment and insurance, mileage 1,200, cost £415; sacrifice, £260 or nearest, quick sale.—Apply, 41, Park Lane, Piccadilly. Tel.: Mayfair 1874. [2963]

TAXICABS.

£100 Down and 12 monthly payments of £20 secures London taxicab.—Details, Palmers' Garage, Tooting. [2611]

TAXICARS.—B.S.A. Canoelet combinations, as exhibited at Olympia, for early delivery.—The originators: County Cycle and Motor Co., Broad St., Birmingham. [9708]

CARS FOR SALE.

£35.—10h.p. Darracq car, 3-speed, brass lamps, perfect order; must sell.—42, Naylor Rd., Peckham, S.E.15. [2630]

1915 10h.p. Trumbull, all spares, English body, perfect running order; any trial; £110.—Chappell, Smockington, Hinckley. [X2864]

£75 Down and 12 payments of £10 monthly secures magnificent Napier landaulet; superb hire car.—Palmer's Garage, Tooting.

£50 Down and 12 payments of £5 monthly secures splendid Dennis landaulet.—Palmer's Garage, Tooting.

£50 Down and 12 payments of £10 monthly secures taxicab ready for service.—Palmer's Garage, Tooting.

£85 Cash secures Peugeot 7-9h.p. smart 2-seater.—Palmer's Garage, Tooting.

£60 Cash secures 7-9h.p. Singer light 2-seater.—Palmer's Garage, Tooting.

20 h.p. Daimler 1916 Roomy Landaulet, renovated like new; £525.—Palmer's Garage, Tooting.

£75 Down and 12 payments of £10 monthly secures magnificent Studebaker, splendid hire car.—Palmer's Garage, Tooting.

£125 Cash secures beautiful R.M.C. Sporting 2-seater.—Palmer's Garage, Tooting. [2904]

8 h.p. Twin w.c. Enfield Light Car, hood, wind screen, lamps, etc., shaft-drive, spare wheel; £120; exchange solo and cash.—Turner, 22, Langley St., Luton. [2934]

HUMBERETTE, dark blue, is beautifully trimmed and finished; price £140; several other light cars from £70 upwards.—Bunting's Exchange, Wealdstone, Closed Sundays. [3026]

NEW PICK Car, 1914, stored 2 years, brand new gears and engine bearings, completely overhauled, repainted, smart appearance, electric light; £285, offer.—Below.

6 h.p. De Dion 2-seater, single-cyl., 2-speed, reverse, new body, good order; £55, offer.—Below.

PANHARD Van, 4-cyl., three-speed and reverse, splendid body; £45, offer.—Rugby Electrical Depot, Earl St., Rugby. [X2920]

HUMBER Car, 15-25h.p., 5-seater, also Martini car, 4-seater, 15h.p., both in good running order, tools and lamps complete; no reasonable offer refused.—Apply, J. Cheeseman, High St., Saxilby, Lincoln. [2933]

8 1/2 h.p. Rover 2-seater, recently overhauled, thorough good running order, new piston and new tyres; trial offered; £75 for quick sale; genuine bargain.—Apply, by letter, English, Colehill, Wimborne, Dorset. [1208]

CARS FOR SALE.

SENSATIONAL Results of my systematic reduction scheme now apparent. If you want real bargains, come and see for yourselves. No need to take auction risks! If some of my cars don't appear cheap, remember many of them are most completely overhauled and renovated, and many almost equal new. Not a dud amongst them.—Cox (below).

TWELFTH Week of my astounding systematic reduction scheme! I reduce at least 10 cars by over £250 total each week. Total reductions to date over £4,000. Many cars below are absolutely absurd bargains, particularly some of the higher priced ones! This week 17 cars reduced £250! All advertised dates guaranteed accurate.—Cox (below).

TWELFTH Week Bargains.—6h.p. De Dion parcel van, mag., Binks carburetter, runs well, reduced from £85, now £20! 3-ton 1915 Seabrook lorry, many parts missing (but all parts can be obtained for £50—then worth £350), bargain, £35; 15h.p. old type chassis, unknown make, about 1902, 4-cyl., live axle, gate, Bosch, Zenith, real antique, £40! 20h.p. Leon Bollee chassis, live axle, enclosed valves, 4-speed gate, reduced from £185, now £75! 1920 Wooler flat twin countershaft bicycle, shop-soiled only, list price £103, reduced £78/10 (fine Christmas present); 14-16h.p. Belsize 4-5-seater, live axle, gate, Zenith, pulls splendidly, £90; 1920 A.V. monoco, extra pillion seat, electric lighting, as shown at White City for £165, bargain, £120! 12h.p. Sizaire-Naudin sporting streamline 2-seater, discs, fast, smart, £125; 12h.p. Alldays van, Ford type body, smart, £135; 8-10h.p. Blumfield-engined streamline light car, 2-seater, 3-speed gear box, smart, £145; 8-10h.p. Warne light car, streamline 2-seater, dynamo lighting, discs, live axle, gate, £175; smart little 8-10 h.p. 1913 Globe coupe light car, Claudel, gate, £185; 10-12h.p. 4-cyl. Humber, sporting streamline 4-seater, 1919 body, bulbous back, armchair seats, particularly smart, £185; Unic 15-cwt. van, sump lubrication, monobloc, detachables, originally £350, now £225; 1920 Bleriot-Whippet cycle car, 8-10h.p., detachable wheels, £225; 16h.p. Bell landaulet, enclosed valves, gate, sump, £235.—Cox (below).

OVER £4,000 Gone West.—10h.p. Delage sporting 2-seater, bulbous back, dynamo lighting set, 4-cyl. monobloc, smart, £235; Chinese Rolls-Royce 4-seater, avec camouflage de luxe, C.A.V. dynamo lighting, £100 worth extras, snip, £245; G.W.K. 2-seater, detachable wheels, £245; particularly smart 12-14h.p. Unic torpedo 5-seater, monobloc, sump, £265; smart 15.9h.p. 1912 Darracq, sleeve valve, roomy torpedo, worm drive, 4-speed, gate, Zenith, £385 originally, £285; nice 11h.p. 1915 Lagonda light car, coupe 2-seater, bull-nosed radiator, detachable wheels, streamline, £285; 1-ton 1916 Clydesdale lorry, £285; 18h.p. 6-cyl. Horbick streamline tourer, £295; 12-15h.p. Opel landaulet, monobloc, gate, cord, Zenith, £295; 10h.p. 1920 H.F.G. 3-seater, dicky, opposed twin, C.A.V. dynamo, detachable wheels, starter, £325; 15-20h.p. Chevrolet 3-seater, English coachwork, dicky, dynamo, starter, smart, £325; Itala sporting streamline 4-seater, low built, raked steering, fast, £325; 11h.p. Brennabor streamline 4-seater, 4-cyl. monobloc, enclosed valves, steel disc wheels, detachables, particularly smart, £350; 15.9h.p. Knight Daimler 4-seater, worm drive, detachable wheels, smart, bargain, £350; 12-15 h.p. Crossley 3-seater, dicky, monobloc, enclosed valves, detachable wheels, £350; smart 12-15h.p. 1913½ Sizaire-Naudin streamline 5-seater, monobloc, detachable wheels, £350; 15.9h.p. Arrol-Johnston 3-seater, dicky, enclosed valves, detachable wheels, smart, £350; particularly posh 11.9h.p. 1913½ Humber streamline 4-seater, enclosed valves, detachable wheels, £375; 12-15h.p. 1913 valveless Darracq streamline torpedo, detachable wheels, 4-speed, smart, £375.—Cox (below).

NOTICE These.—Exceptionally smart 1915 Bedford-Buick 3-seater, 15-18h.p., dicky, English coachwork, C.A.V. dynamo lighting, Zenith, gate, detachables, £385; 9.5h.p. 1915 Standard 2-seater, C.A.V. dynamo lighting set, £385; other cars of all types in stock, landaulets, interior drive saloons, latest turnover-side streamline tourers as fine as any. West End style and finish at suburban prices. Full printed list free (or see "The Autocar" or "The Motor").—Cox (below).

COMMERCIALS. Commercial. Commercial. — Sorry, I'm nearly sold out, but my systematic reduction scheme won't let me keep them. All solid tyred: 3-ton 1913 De Dion lorry, enclosed valves, worm drive, £165; 3-4-ton 1915 Locomobile lorry, worm drive, 4-speed, overhauled, rettyred, £485 originally, £325; 5-ton Lacre lorry, 4-speed, gate, steel wheels, new tyres, roomy body, fine lot, £345; 4-ton 1914 Scout chassis, live axle, enclosed valves, high aluminium radiator, £375; 2-ton 1916 Vinot lorry, monobloc, 4-speed gate, worm drive, £375; 2-ton 1916 Seabrook lorry, worm drive, monobloc, £385; 2-ton 1915 Palladium chassis, worm drive, monobloc, enclosed valves, fine lot, £385; 3-ton 1915½ Belsize lorry, worm drive, overhauled, new tyres, £425; 3-ton 1916 White lorry, monobloc, Zenith, 4-speed gate, £425.—Cox (below).

CHARS-A-BANCS.—20-seater 1915½ Whiting open char-a-banc, 2-ton chassis, new hood, fine lot, £650; 20-seat 1916 Whiting char-a-banc omnibus, detachable glass sides, very smart, £785; 30-seater worm drive Straker-Squire, fast and silent running, magnificent vehicle, worth £1,500, clear £895; take £1,800 for the three.—Cox (below).

DOUGLAS S. COX, the absolutely straight motor man, 6, Lansdowne Hill, West Norwood, S.E., has all the above and others actually in stock and on view. Please call. Hours 9 to 6, Saturdays 5. No business Sundays. No cheques taken (except as deposits, or in advance). Trams and buses pass. 17 mins. Victoria by L.B. and S.C. electric. Taxi fare from West End 10/- return. Established 1902. [2215]



A NEW Generator

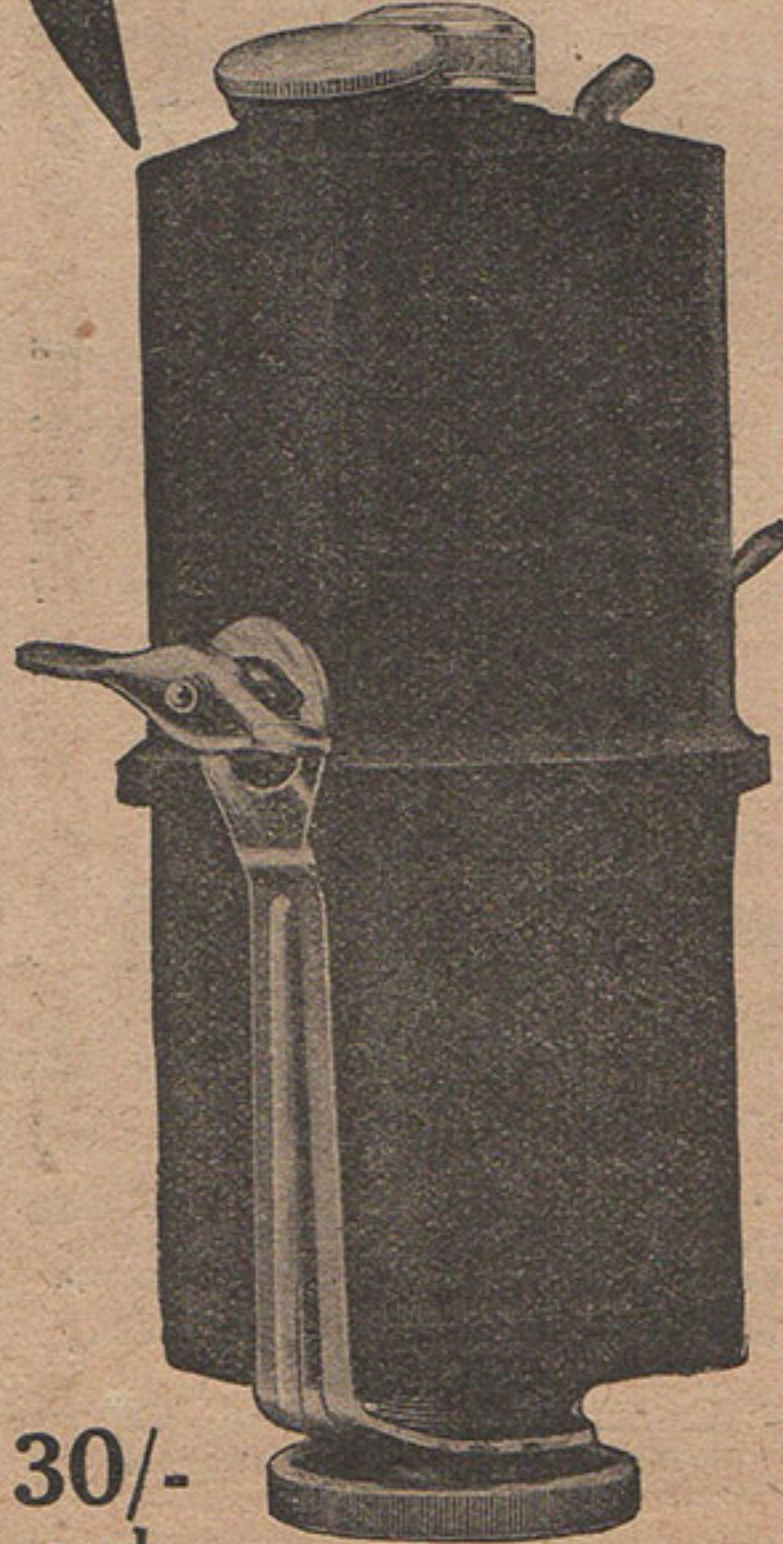
—with all the irritating faults eliminated!

Yes—there have been faults —we admit OURS—but we have profited by EXPERIENCE, and THIS Generator embodies improvements which make it absolutely foolproof.

It gives a uniform supply of gas, ensuring a clear, steady light—and will generate sufficient gas for Head, Tail, and Sidecar Lamps.

Ask your agent to show you one. All the Headlight sets now being sent out have this new generator.

F.R.S. LAMPS
"Beam Works," Pershore St., BIRMINGHAM.



30/- each.

F.R.S. LAMPS.

CARS FOR SALE.

2-SEATER, 8-10h.p. Blumfield engine, water-cooled, 3-speed and reverse, new tyres, hood, screen, mechanically sound; selling owing to ill-health; £150; easy payments arranged to suit purchaser.—62, St. Paul's Rd., Moseley, Birmingham. [X2790]

FOR Disposal low price, 14h.p. 5-seater Argyll car, fitted hood, screen, Zenith carburetter, electric lighting, good tyres, spare tubes, would make good hire car, very reliable, genuine bargain, £135, or exchange new combination, Triumph preferred.—Melton Rubber Works, Melton Mowbray, Leicestershire. [3027]

PAXTON Car Depot, 228a, Gipsy Rd., West Norwood.—1914 4h.p. Green-Precision sporty combination, £67/10; 16h.p. Bell parcels van, live axle, gate, £125; 25-cwt. Unic commercial, large van body, solids, 4-cyl. monobloc, sump lubrication, bargain, £250; 12-15h.p. Opel landaulet, delivered 1915, bargain, £285; 12-14h.p. Crossley 2-seater, dicky, detachable wheels, monobloc, enclosed valves, £295; smart 1915 Overland streamline 4-seater, self-starter, dynamo lighting, £335; also brand new 1920 25-cwt. commercial, £50 below list price. All on view. Call. Part exchange entertained if real good value.—Paxton. [1287]

COMMERCIAL VEHICLES.

£100 Down and 12 monthly payments of £25 secures a magnificent 3-ton lorry.—Details, Palmer's Garage, Tooting. [2610]

£85 Down and 12 monthly payments of £15 secures splendid 1-ton truck, twin solids, will carry 30-cwt.—Details, Palmer's Garage, Tooting. [2606]

ENGINES.

3½ h.p. Minerva Carburetter and controls; £5.—36, Church Lane, Moldgreen, Huddersfield. [2961]

5-6 h.p. Rex Engine, induction pipe, exhaust pipes, silencer; £8.—Lusty, 110, Wheat St., Nuneaton, Warwickshire. [X2843]

4½ h.p. Precision Engine, 1913, Bosch watertight, less pulley and chain cover; £12.—33, Tunley Rd., Harlesden, N.W. [2493]

19 20 2½ h.p. T.D.C. 2-stroke engine, with mag., carburetter, perfect condition; £13.—Louvel Farm, Headington, Oxford. (D) [2957]

2 h.p. Moto-Reve Engine, with magneto, pulley, and sprocket, good condition; £6/10. After 6.—21, Corfton Rd., Ealing, W.5. [3064]

DOUGLAS 2½ h.p. Engines, guaranteed perfect, complete, T.B. mag., Amac carburetter and controls; £14.—Dowell, Byfleet, Surrey. [2615]

SUNBEAM 3½ h.p. 1915 Unit, magneto, carburetter, not junk; offers over £24.—120, Marlborough Flats, Walton St., Chelsea, S.W.3. [X2936]

A BINGDON King Dick Engine, 1920, complete unit, Binks with controls, mag., bracket, silencer, pipes, perfect; £25.—Brierley, Stewartlee, Queen Victoria St., Airdrie. [9558]

5-6 h.p. Rex Twin, new bushes and connecting rods, excellent condition; £8/10, or exchange 2-stroke unit, good gramophone, or cycle.—89, Congleton Rd., Biddulph. [2503]

FOR Sale, 1912 2½ h.p. Douglas engine, complete with mag. and carburetter, less valves, in perfect condition; what offers?—Apply, 20, Oster St., St. Albans, Herts. [2977]

PRECISION Engine, twin 6h.p., with induction pipe, 2 magnets, chain wheels; this is in perfect condition; accept £17.—Dene Motor Cycle Co., Haymarket, Newcastle-on-Tyne. [X2294]

J.A.P. 2½ h.p. Single Engine, in perfect condition, complete with exhaust pipe, silencer, magneto; accept £15/10.—Dene Motor Cycle Co., Haymarket, Newcastle-on-Tyne. [X2295]

4 h.p. King Dick Engine, quite new, complete with exhaust pipe, silencer, magneto, chain case, 2 wheels and chain; £18/10.—Dene Motor Cycle Co., Haymarket, Newcastle-on-Tyne. [X2296]

I HAVE the largest stock of J.A.P. engine parts in London. 8h.p. J.A.P. engines, £20; 4-5h.p. J.A.P. engines, £20 I have all parts for J.A.P. in stock.—Hawkins, 455, York Rd, Wandsworth. [9752]

L AMBERT'S Garage (engine specialists) have several J.A.P. and M.A.G. air and w.c. type engines for disposal, from £17/10 to £27/10. It will pay you to get our quotation. A full stock of spares carried; any engine overhauls undertaken in 5 days certain; £2 singles, £2/10 twins plus cost of replacements. Inspection of our model workshops invited.—343a, Finchley Rd., Hampstead. [3047]

J.A.P. Specialists.—Special J.A.P., 90 bore; 99×77½, side valve, single engine; complete engine, J.A.P., less mag. and carburetter, brand new, specially built by E. C. E. Baragwanath, guaranteed, price £17/17; 1 5h.p. J.A.P. engine, 1 8h.p. J.A.P. engine, all new parts, guaranteed perfect, not cylinders the rats have been at, price 5h.p. J.A.P., £23; 8h.p. J.A.P., £25.—B.P. Garage, 40, Murray Mews, Murray St., Camden Town, N.W.1. [2259]

IGNITION APPLIANCES.

RELIANCE Magneto Repairing Co., specialists in magneto repairs.

RELIANCE guarantee to return your magneto within 3 days, and if necessary, 24 hours.

RELIANCE work under estimate, and guarantee every magneto for 12 months. Armature winding a speciality.

RELIANCE work for, and are recommended by, some of the largest firms in London and country, and can supply every want.

RELIANCE stock spares for Bosch, U.H., Eisemann, E.I.C., C.A.V., Splittdorf, Dixie, and all known makes.

RELIANCE specialise in the repair of U.H. magnetos, and, having the original U.H. parts, can guarantee a sound and reliable job.

RELIANCE stock new and second-hand magnetos at right prices; old magnetos taken in part payment. Send for illustrated leaflet of the new Fellows lightweight magneto, the smallest, cheapest, and most efficient made. Special terms to the trade.

RELIANCE will be pleased to receive your enquiries concerning your ignition troubles, and customers may be certain of obtaining promptness and courtesy.

RELIANCE Magneto Repairing Co., 11, Gt. Sutton St., Goswell Rd., E.C.1. [2186]

WEST London Magneto Co., London's leading magneto repairers, guarantee repairs for 12 months.

WEST London Magneto Co. can supply that magneto you require, either new or second-hand; also spare parts for every make of magneto at a low price.

WEST London Magneto Co. have a 24 hour repair service, which is pleasing thousands.

WEST London Magneto Co., 164, Shepherd's Bush Rd., London, W.6. [2107]

BOSCH Magneto, single, £3/10; 4-cyl. Dixie, £6/10.—Shaw, Park St., Wellington, Salop. [X2887]

PLATINUM Points, heavy, all makes; 15/- pair.—Wallis Bros., Redhill Rd., Hay Mills, Birmingham. [238]

NEW British Magnetos for any machine; exchanges quoted.—Collier's Motories, Horton St., Halifax. [2534]

U.H. Magneto, anti, 50% twin, guaranteed perfect; £4/10.—Semple, 39, St. Leonard's St., Dunfermline. [2331]

MAGNETO Cogs, 8 and 9 teeth 3/6, 10 and 12 4/-, 14 and 16 4/6, 18 5/6, 20 6/6, 24 7/6 each.—Below.

PLATINUM Magneto Screws, 7/- each; platinum scrap bought.—Wood, Engineer, 4a, Kentish Town Rd., London, N.W.1. [2677]

THOMSON-BENNETT Magneto, single, anti-clockwise; offers.—Stockdale, Mears Ashby Hall, Northampton. [2774]

THOMSON-BENNETT Single Magnetos, £5/10; twins, £6/10; approval, deposit.—Ashton, Thornton Edge Dewsbury. [5900]

SPARKING Plugs, best makes, Aero Type, 4 for 6/-, post free; fully guaranteed.—S.B.C., Worcester St., Wolverhampton. [X2387]

75/-—180° Thomson-Bennett magnetos, suit 4h.p. Douglas.—The M.C. Depot, 257, Cavendish Rd., Balham, S.W.12. [2741]

DIXIE Magneto, 50°, suitable Clyno, £4; Bosch contact breaker, £1; other magnetos.—51, Maplethorpe Rd., Thornton Heath. [2873]

THOMSON-BENNETT Magneto, 180° twin, anti and clock, guaranteed as new; £3/15.—Watson, 6, Cavendish Parade, Clapham, S.W.4. [2870]

BOSCH Magneto, clock, suitable for big single; £4; approval willingly; guaranteed perfect.—Semple, 39, St. Leonard's St., Dunfermline. [2330]

4 h.p. Douglas Magnetos: 180° Thomson-Bennett, as new, £4; one 50° E.I.C., £4; carriage extra.—Sulina Garage, Sulina rd., Brixton Hill, S.W. [2115]

UNSATISFACTORY Magnetos should be replaced by a Boulton, £5 each; immediate dispatch. A few shop-soiled to clear at lower prices.—Boulton Magnetos, Ltd., Oldhall St., Wolverhampton. [8955]

BOSCH Magneto, ZEI, anti, in perfect order, as new, accept £6/10; Bosch magneto, ZEY, 55%, anti-clock, in perfect order, as new; a bargain, £7.—Dene Motor Cycle Co., Haymarket, Newcastle-on-Tyne. [X2298]

ACCUMULATORS.—New C.A.V., 4 volt 15 amp. hours, metal case with strap, 14/6, carriage paid; approval against remittance. Trade supplied.—Maudes', 100, Gt. Portland St., London; and Paris St., Exeter. [1168]

SEND Your Magneto for repair to the Loveland Magneto Repair Service, the service with 18 years' practical experience. Spare parts for all makes.—Phone Streatham 1390.—Crescent Magneto Works, Norbury, S.W.16. [8508]

MAGNETO Repairs.—Send your magneto to Palmer's Garage, Tooting. Reply paid; quotation telegraphed on receipt. Quick, efficient repair guaranteed in from two to six days, usually within 24 hours.—Palmer's Garage, Tooting. [2609]

GET YOUR TYRES AT THE TYRE HOUSE

NEW W.D. LIGHT
PALMER CORD
700 x 75 TO FIT 650 x 65 RIM.
COVER AND TUBE
£1 0 0
SUITABLE FOR SIDECAR WHEELS

SPECIAL BARGAINS

Brand New Covers 1st Grade Only.

From Government Stores, etc.

24x2	Avon Druid	31/-
24x2	Englebert	27/-
24x2	Avon Druid	36/-
26x2	Clincher Ribbed	29/-

FOR 2 1/2 RIM.

26x2	Heavy rubber non-skid	27/6
"	Avon Sunstone	39/6
"	Wood Milne Combination	79/-
"	Goodrich safety tread	58/6
26x2	Dunlop heavy rubber stud.	42/6
"	Palmer cord heavy	39/6
"	Bates' special heavy	44/-
"	Wood-Milne extra heavy	37/6
"	Avon tricar	34/6
"	Hutchinson passenger	36/-
26x2 1/2	Hutchinson rubber studded	52/-
"	Englebert super	55/-
"	Englebert touring	47/6
"	Goodrich safety tread	61/-

FOR 2 1/2 RIM.

26x2	Heavy non-skid	37/6
"	Wood-Milne combination	55/-
26x2	Clincher de luxe heavy	50/-
26x2 1/2	Dunlop heavy	45/-
"	Englebert passenger	47/-
"	Rom combination	57/6
26x3	Pedley heavy 3-rib	67/-

FOR AMERICAN RIMS.

28x2 1/2	Kempshall anti-skid	35/6
"	Kempshall non-skid	42/6
28x3	Moseley extra heavy	28/6
"	Kempshall	35/-
"	Dunlop extra heavy	48/6
"	Goodrich safety tread	59/6
"	Palmer cord	55/-
"	Clincher de luxe extra heavy	55/-
"	Wood-Milne extra heavy	55/-

FOR 650 x 65 RIMS.

700x80	Dunlop grooved	80/-
"	Spencer-Moulton	70/-
"	Avon Sunstone	70/-
650x65	Dunlop grooved	57/6
"	Avon square	59/-
"	Avon 3-rib	59/6
"	Clincher de luxe ex. heavy	59/-

BELTS.

6ft 6in x 3/4	Complete with fastener	13/6
7in Avn length	2/- per ft.	
8ft x rin.		21/-

NEW CLEARANCE TUBES.

26x3x2 1/2	Pedley heavy	10/6
26x2 1/2	endless	6/6
26x2 1/2	endless	6/9
26x2 1/2 x 2 1/2	endless	7/6
26x2 1/2 x 2 1/2	butted	10/-
26x2 1/2	endless	6/6
28x3	endless	8/6
28x3	Hutchinson	13/9
28x3	Avon	13/4

Sent carriage paid on 7 days' approval against remittance.

PIKE TYRE and RUBBER Co., Ltd.

The TYRE HOUSE,
83, Theobald's Road,
HOLBORN, W.C.1
Phone: Museum 1543.

IGNITION APPLIANCES.

RUNBAKEN Repair Service.—Thorough and efficient repairs to any make of dynamo, starter, or mag. We have the spare parts, plant, and skilled labour turning out guaranteed work only.—Enclose instructions and send by rail to The Runbaken Magneto Co., Ltd., 115, Gt. Portland St., London, W. (Phone: Mayfair 3586.) North of England: Derby St., Chesham, Manchester. (Phone: City 8266). [0258]

MAGNETOS, Magnetos.—We hold a stock of V twin magnetos of all degrees, and recommend the new B.T.H. 42° to Indian riders; Bosch magnetos, all degrees and rotations; B.T.H. singles in stock; exchanges. The only official Indian electrical service station B.T.H., Thomson-Bennett, and Peel Conner repairs service.—Euston Ignition Co., 329, Euston Rd., N.W.1. Phone: Museum 5034. T.A.: Magdymo, Eusroad, London. [3786]

THE Magneto Repairing and Winding Co. (Established 1912), contractors to H.M. Government, and officially appointed by the R.A.C.—Magneto repairs of every description. All repairs at lowest possible prices, and strictly guaranteed. We can mostly return them within 24 hours. We have several new and second-hand single and 2-cyl. magnetos in stock, all guaranteed.—The Magneto Repairing and Winding Co., 78, Hampstead Rd., Euston Rd., London, N.W.1. Phone: Museum 1158. T.A.: Kumagnelec, Eusroad, London. [1539]

EUSTON Ignition Co.'s 24 hour repair service. Guaranteed repairs to all types of magnetos; Splittdorf and Dixie specialists; official Indian electrical service station; Thomson-Bennett repairs and spares. All repairs are tested on an approved A.I.D. test bench before dispatch, and therefore carry our guarantee for 12 months. We hold the largest stock of guaranteed magnetos in London, twins all degrees; spare parts for all makes in stock; charged accumulators all voltages always ready in stock, plugs, cables, 1/2-watt and vacuum bulbs all voltages. We give you real live service always.—Euston Ignition Co., 329, Euston Rd., London, N.W.1. Phone: Museum 5034. T.A.: Magdymo, Eusroad, London. [0263]

TYRES.

H. EMANUEL'S for your motor cycle tyres.—Below.

28x3 Dunlop Extra Heavy, 4-ply, 50/-, Palmer cord heavy 50/-, Palmer cord 45/-, Wood-Milne extra strong 39/6, Moseley ribbed 35/-, Kempshall anti-skid 35/-.—Below.

700x80, for voiturette rims, will fit 650x65: Dunlop grooved 75/-, Wood-Milne Gruvrib 70/-, Spencer-Moulton 70/-, Beldam Bulldog 70/-, Avon Sunstone 70/-.—Below.

26x3x2 1/2 Dunlop Heavy 45/-, ditto tubes 8/6.—Below.

650x65 Palmer Cord Heavy 57/6, Palmer cord 50/-, Dunlop heavy 50/-, As follows for voiturette rims: Michelin steel-studded 70/-, Dunlop steel-studded 75/-, Wood-Milne square 45/-.—Below.

26x2 1/2 Dunlop Heavy Rubber-studded 45/-, Bates heavy pattern ribbed 39/6, Avon Sunstone 41/6, Dunlop combination rubber and steel-studded 57/6, Rom ditto 55/-, Wood-Milne 55/-.—Below.

26x2 3/8 Dunlop Heavy 39/-, Wood-Milne extra strong 39/-, Moseley ribbed 34/-, Dunlop combination 55/-.—Below.

26x2 1/4 Dunlop Heavy 39/6, Dunlop combination 55/-, Rom ditto 55/-, Beldam ditto 55/-, Bates special heavy 37/6, Macintosh chain pattern 35/-.—Below.

THE Above Tyres are Government surplus, not in any way perished or soiled. All orders 7 days' approval against remittance. If not satisfactory money refunded. Country orders dispatched passenger train same day as order received.—Below.

H. EMANUEL, Tyre Factor, 27, Belgrade Rd., N.16. Stores: 37a, Balls Pond Rd. Phone: Dalston 3161. [0235]

15/6 is the cost for retreading your cover with extra heavy studded tread.—Below.

14/6 for retreading heavy ribbed pattern; send for sections of tread, post free.—Below.

REPAIRS of every description from 2/6.—Phoenix Tyre Repairing Co., 224, Sherlock St., Birmingham. [X2896]

BASTONE'S.—Special purchase. New Michelin motor cycle covers, beaded edge, 26x2 1/2 21/-, 26x1 1/4 15/-.

BASTONE'S.—New Michelin Tubes, 26x2 1/4 and 26x2 1/2, 8/6 each.

BASTONE'S for Covers and Tubes.—Special line of Englebert wired edge covers, 26x2 1/2, raised tread, 25/-; ditto rubber-studded, 32/-; also large stock of beaded edge covers, all makes, at low prices.—228, Pentonville Rd., King's Cross, London, N.1. Tel.: 2481 North. [2253]

BRAND New Clincher Tyres, 26x2 1/4 33/6, 26x2 1/2 39/6.—Wandsworth Motor Exchange, Ebner St., Wandsworth. [6171]

650x65 American Victor Covers, heavy, brand new, not clearance; 35/-, listed £4/10.—5, Weardale Rd., Lee. [2305]

TYRES. Great sale.—Don't buy any until you have seen our list. It is a revelation.—Bancroftian Co., 64 and 78, Bishopsgate, E.C. [0054]

TYRES.

ECONOMIC Tyre Co.—Genuine bargains in new clearance and Government surplus stock; all goods sent carriage paid on 7 days' approval against remittance.

ECONOMIC.—24x2 1/4 (fit 2in. rims) heavy rubber non-skid, 41/-, listed 54/6; 26x2 1/4 Dunlop heavy, 37/6, listed £2/16/9.

ECONOMIC.—26x2 3/8 Dunlop heavy, 39/6, listed £2/19/9; Palmer cord heavy, 39/6, listed £3/19/4.

ECONOMIC.—28x2 1/2 Goodyear diamond tread, brand new, 45/-, for pre-war American rims.

ECONOMIC.—28x3 Kempshall non-skid clearance, 55/-, listed £5/10; Palmer cord heavy W.D., 45/-, listed £4/13/6.

ECONOMIC.—650x65 Clincher de Luxe W.D., 57/3, listed £4; 700x80 Dunlop grooved, 75/-, listed £4/19/6.

ECONOMIC.—Fully guaranteed. 24x2 Dunlop rubber stud, 30/9; 26x2 Dunlop rubber stud, 33/-; 26x2 1/4 Dunlop rubber stud, 34/9.

ECONOMIC Tyre Co., 314, New Cross Rd., S.E.14 (near Town Hall). Phone: New Cross 1393. Repairs and retreading. [9324]

BULL'S.—Large stock of motor cycle and voiturette covers and tubes at clearance prices.—Bull's Rubber Co., Ltd., 3, Upper St. Martin's Lane, London, W.C.2. Tel.: Gerrard 1347. [0243]

STOCKTAKING Sale, 14 Days Only.—5,000 motor cycle covers, brand new soiled goods, 26x2 26/-, 26x2 1/4 27/6, 26x2 3/8 (for 2 1/4) 28/-, 26x2 1/2 28/-, 700x80 55/-.—Millards, Chesterfield. [1460]

KEMPSHALL Non-skid, also Hutchinson T.T., 28x2 1/2, brand new, at a remarkable figure; 35/- each; special prices for quantities over 6; carriage free; greatest bargains in tyres.—J. Smith and Co., 52-54, Hampstead Rd., N.W.1. [0259]

A 26x2 1/4 in. High-class Rubber-studded Cover, straight from the factory, for 30/-; just think of it; not clearance; money refunded if not satisfied. Have one of these bargains. Send for our repairs and retreading list.—Melton Rubber Works, Melton Mowbray. [0347]

BARGAINS.—Seven days' approval; limited number only: Englebert 26x2 1/4 heavy rubber-studded passenger 30/- (list 46/3), touring 35/6 (list 53/-), solo 34/6 (list 49/-); Avon 3-ribbed, 20/3 (list 25/3), plus postage 1/-; tube, 8/6 (list 12/-). Repairs, all kinds, to tyres and tubes.—Armstrong, 17, Goldhawk Rd., Shepherd's Bush, London. [2752]

MOTOR Cycle Tubes.—Best red quality, with small patch vulcanised by makers: 24x2, 5/3; 24x2 1/4, 5/6; 26x2, 5/9; 26x2 1/4, 6/-; 26x2 3/8, 6/3; 26x2 1/2, 6/6; 26x2 1/2 x 2 1/4, 6/9; 26x3, 7/-; 28x2, 7/3; 28x3, 7/6; 29x3 1/2, 7/9; 650x65, 8/- All leading makes and sizes in stock.—H. Emanuel, Tyre Factor, 27, Belgrade Rd., N.16. Stores, 37a, Balls Pond Rd. Phone: Dalston 3161. [0346]

GOVERNMENT Surplus.—Huge stock of specially selected second-hand covers, Dunlop heavy, Palmers, Kempshalls, Clinchers, etc., 26x2 1/4, 26x2 3/8, 12/6 each; 28x3, 17/6 each; new Dunlop and Bates tubes, 26x2 1/4, 2 3/8, and 2 1/2, 7/6 each; special line of new 700 grooved rebuilt covers, 40/- each; goods cash approval.—Homerton Rubber Works, Brooksbys Walk, Homerton, E.9. Phone: Dalston 3483. Grams: Emanrubwor, Hack., London. [0331]

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PETROL Tanks, bonnets, and sheet metal work made and repaired. Send your requirements. We will quote you.—B.B.F. Co., Melbourne Rd., Coventry. [X1933]

TANKS Re-enamelled to pattern. High-class work only.—D. Jenkins and Sons, 6, Richard St., Atkinson St., Deansgate, Manchester. Established 25 years. [1797]

TANKS, Re-enamelling, etc.—We complete in 6 days and guarantee makers' latest colours with original transfer trade marks; lists free.—Park Works, 1a, Paradise Rd., Highbury, N.5. [2787]

TANKS of every description replaced, repaired and re-enamelled at our own works; all kinds of fittings stocked; quick service and reasonable charges.—Send postage for illustrated price list to A. Green, Water St., Chapel St., Salford, Manchester. Tel.: 2191 Central. [0256]

BELTS.

BELTING, all best makes, 2-piece, 1 1/2 in. 2/6, 1 in. 2/-, 3/4 in. 1/9, 1/2 in. 1/6; 1-piece 1 in., round tap, best make, new from the works, in all lengths, 2/6 per foot, post paid, on approval against cash.—Pitts, Evesham St., Redditch. [2285]

SURPLUS Government Stock, made by Pedley, Silver-town, Lycett, and Dunlop; perfectly new, cash refunded if not approved; 3/4 in. x any length, at 1/7 per ft.; 1/2 in. x any length, at 1/9 per ft.; 1/4 in. x any length, at 2/1 per ft.; 1 1/2 in. x any length, at 2/10 per ft.; special offer of 3/4 in. belts in 6ft. 6in. lengths, at 10/- each, and 10 1/4 in. lengths at 17/6 each.—H. Emanuel, Tyre Factor, 27, Belgrave Rd., N.16. Stores, 37a, Balls Pond Rd. Phone: Dalston 3161. [0348]

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FOR Insurance of all kinds (specially motor), apply Ernest J. Bass, Insurance Broker, 40, Chancery Lane, W.C.2. [0005]



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"THE Motor Cycle" Insurance Policy is the policy authorised by "The Motor Cycle," and covers motor cycles or cycles and sidecars used for private purposes. Complete comprehensive cover. Maximum benefits, minimum rates. Free weekly copy of "The Motor Cycle" to all policy holders paying a premium of £5 or over.—Full particulars and prospectuses on application.—The Autocar Fire and Accident Insurance Co., Ltd., 20, Tudor St., London, E.C.4. [0007]

PATENT AGENTS.

J. E. S. LOCKWOOD, Motor Specialist.—Guide free. —3, New St., Birmingham. [8992]

PATENTS Advice, handbook free.—King, Registered Patent Agent, 146a, Queen Victoria St., E.C. 35 years' references. [0129]

W. BRYSON, B.Sc., Assoc. M.Inst.C.E., A.F.R., Ae.S., Chartered Patent Agent, 29, Southampton Buildings, London, W.C.2. Phone: Museum 3651. [9622]

BUSINESSES AND PROPERTY FOR SALE, TO BE LET, OR WANTED.

GARAGE for Sale, good going concern, best residential part Brighton; price £300.—14, Dyke Rd., Brighton. [2693]

MOTOR Repairing and Stove Enamelling Business, going concern, for sale in Coventry.—Box 963, c/o The Motor Cycle. [X2879]

MOTOR Cycle and Cycle Business, small town, main street, 30 miles London; price £350.—Box 9,778, c/o The Motor Cycle. [2588]

WANTED, small cycle and motor cycle business, living accommodation.—Moreton, Rosemont, St. Albans Av., Weybridge. [2498]

WANTED, motor cycle and cycle business as going concern, or premises suitable for same.—Box 964, c/o The Motor Cycle. [X2858]

BUSINESS Wanted, motor cycle, cycle, and repair business on main road within 30 miles of London.—Reply Box 9,796, c/o The Motor Cycle. [2988]

MOTOR and Cycle Works, main road, west, old established corner premises, under exceptional circumstances long lease, low rent; no opposition; first genuine offer.—Box 9,572, c/o The Motor Cycle. [1432]

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ROBERT BAMFORD, A.M.I.A.E.—Independent advice based upon over 20 years' practical mechanical experience; specialist in carburation and speed tuning.—36, 38, and 40, Pelham St., South Kensington, S.W.7 (close to tube station). Tel.: Kensington 7213. 1482

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EX-OFFICER, public school and university, thorough practical experience of motor cycles, desires salaried post, view partnership; can invest capital.—Box 9,774, c/o The Motor Cycle. [2584]

STOLEN.

STOLEN from garage, Triumph 1920 4h.p., engine No. 69116, frame No. 308741, magneto M-L 10172, belt driven, fully equipped, Mills-Fulford coach-built sidecar.—Information to Ives, 24, Bingley Rd., Heaton, Bradford, Yorks. [2649]

£15 Reward.—Stolen on Saturday, Nov. 27th, from Emylene Rd., Acton, a 7-9h.p. Indian motor cycle and sidecar (red), registered No. LP 3960. The above reward will be paid by J. Trevor, F.A.I., 23, Coleman St., E.C.2, to the first person or persons giving such information as will lead to the apprehension of the thief or thieves and the recovery of the motor cycle. [2674]

GARAGES.

NORTH London.—Private garages for light cars and motor cycles; cars 5/- per week, combinations 3/-, solo 2/-; every convenience.—Knights, 30, Legard Rd., Highbury, N.5. [2489]

GENERAL TRADE.

SHEET Metal Work wanted, every description; trade supplied.—39, Liverpool Rd., Eccles, Manchester. [1364]

ADVERTISER wishes to get into communication with manufacturers of the following, with a view to contracts: Tubes, lugs, castings, stampings, small pressed steel girders, hubs, rims, spokes, mudguards, and tanks.—Write, Box 9,606, c/o The Motor Cycle. [1628]

AUCTION Sales.—Palmer's Garage, Tooting, the oldest solely motor auction rooms in London. Terms, 7 1/2%, not chargeable if automobile unsold. Motors bought and sold for cash. Nearest goods stations: Falcon Lane, L.N.W. Rly.; Wimbledon, L. and S.W. Rly.; and G.W.R.—Sole address: Palmer's Garage, Tooting, London. [5250]

WANTED.

WANTED, sidecar, cheap.—204, Brownhill Rd., S.E.6. [2625]

PALMER'S Garage, Tooting.—The pre-eminent place for disposing of motor cycles.

PALMER'S Garage, Tooting, will make you a cash offer at sight.

PALMER'S Garage, Tooting.—You will be sure of a good cheque if you sell your machine at Palmer's Garage.

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PALMER'S Garage, Tooting, make a speciality of motor cycles in the fortnightly auction sale.

PALMER'S Garage, Tooting.—Auction fee for motor cycles under £50 reserve 5/-. over £50 reserve 10/-; no garage charge is incurred until 7 days' notice is given.

PALMER'S Garage, Tooting, will collect machine from any London railway station. The auction sale is held on Thursdays fortnightly, commencing 2 p.m. [2605]

LATE Solo or Combination.—Write, lowest cash, 69a, Hambalt Rd., Clapham Common. [2797]

4 h.p. Solo or Combination, Triumph preferred, cheap.—204, Brownhill Rd., Catford. [2624]

DOUGLAS, 2½h.p., 1916 or later; write or call; cheap.—H., 63, Solon Rd., Brixton. [2696]

WANTED, 2-stroke, any make, must be cheap.—181, Newton Rd., Burton-on-Trent. (D) [2968]

WANTED, 2-stroke, for cash, complete, sound, cheap.—Stephen, 711, Commercial Rd., E.1. [1527]

N.S.U. Gear, condition immaterial; also cheap motor or parts.—Box 9,795, c/o *The Motor Cycle*. [2994]

INCOMPLETE P. and M. or Parts wanted immediately; cheap.—1, Othello St., Liverpool. [2767]

W.D. 4h.p. Douglas, cheap; state year, lowest cash.—66, Umfreville Rd., Harringay, London, N. [2689]

FRAME for 8h.p. o.h.v. J.A.P., with or without wheels, forks, etc.—Hare, Caius College, Cambridge. [2324]

WANTED, Triumph, countershaft model, any condition; cheap.—Box 9,736, c/o *The Motor Cycle*. [2439]

SCOTT Gear Quickthread Drums, gear pedal, footboards, front brake.—79, Berkley St., Liverpool. [2891]

WANTED, front forks for 7-9h.p. Indian, 1914-1916, new or second-hand.—Cook, 22, Newport Rd., Cardiff. [2529]

WANTED, late model solo or combination, cheap for cash.—103, Thurlow Park Rd., West Dulwich. [2863]

WANTED, exhaust cam wheel for 3½h.p. Precision, and B. and L. lubricator.—87, Lordsmill St., Chesterfield. [X2909]

WANTED, 4-cyl. F.N.'s, T.A.C.'s, T.M.C.'s. Hendersons.—Wandsworth Motor Exchange, Ebner St., Wandsworth. [6185]

WANTED, motor cycles, combinations, light cars, any condition; cash on sight.—Dunn, 326, Euston Rd., London. [0332]

GOOD Second-hand Sidecar Chassis of 7-9h.p. Indian or to suit same.—Apply, Box 9,804, c/o *The Motor Cycle*. [2981]

WANTED, Auto-Wheel, engine wanting repair; also scooter wheel and sidecar chassis.—Feltham, West Moors, Dorset. [2546]

WANTED, P. and M. rear wheel sprocket, drum, good condition.—Sadler, 60, Newport Rd., Middlesbrough. [1420]

WANTED, pulley side half or whole engine case for 5-6h.p. Blumfield.—Write 386, Icknield Way, Letchworth, Herts. [2352]

WANTED, urgently, 1912 Clyno back wheel, with twin sprockets, good price paid.—Whitworth, Northop, Flintshire. [2947]

WANTED, 6 to 10h.p. combination. State price, age, and full particulars.—H. Parkinson, 203, Gloucester Rd., Bristol. [2376]

WANTED, good combination, not earlier than 1916; state particulars, price.—3, Lime Villas, Oakfield Rd., Penge, S.E. [2782]

1912-14 6h.p. Bat, with speeds, must be cheap; state particulars and price by letter first.—19, Wood Lane, Shepherd's Bush. [2667]

WANTED, Scott gear, late pattern, good condition; for sale, Scott forks and front wheel.—18, Lower North Av., Barnoldswick. [3445]

WANTED, Triumph frame, engine, gear box; exchange furniture suite, gramophone, cycle.—Searles Stores, Southborough. [2945]

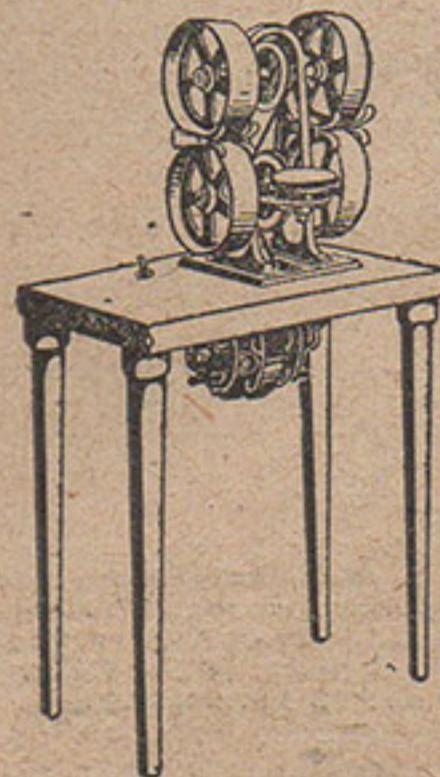
WANTED, good up-to-date second-hand accessories.—State particulars and prices, Service Co., 292, High Holborn, London, W.C.1. [0172]

STURMEY-ARCHER or Armstrong Hub Gear, one requiring repairs not objected to.—Phibbs, 20, Forrest St., Letchford, Warrington. [9562]

ENGINES, spring forks, N.S.U. gear, 42° Bosch magneto, gear box, and modern frame; cheap.—17, Wilcox Rd., South Lambeth, London. [9163]

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WANTED, pair of flywheels and pair cylinders for 8h.p. J.A.P. engine; also pair flywheels for 5h.p. J.A.P.—H. Brown, 71, Twilley St., Wandsworth. [2326]

WANTED, Sunbeam back wheel and sprocket, ½in. pitch, ¾in. wide, about 42 teeth, rim to suit 26x2½in. tyre.—Climpson, Crown St., Peterborough. [2824]

WANTED, Ariel frames, etc.; Triumph engines, frames, etc.; Indian 1915 handle-bar stem, magnetos, carburettors for Triumph.—Box 9,735, c/o *The Motor Cycle*. [2438]

£100 Available for well equipped combination, 6h.p. or over, roomy sidecar, late model; might give a little more for a high-class lot.—Letters, Hart, 34, Devonshire Rd., S.E.23. [2315]

SPECIAL Cash Buyers Indians, B.S.A.'s, Triumphs, Humber's, Harleys, A.B.C.'s, Bradburys, Zeniths, P. and M.'s, Scotts, Matchless's, Clynos, Rex-Japs.—Wandsworth Motor Exchange, Ebner St., Wandsworth (Town Station). [6170]

IF you wish to sell, exchange, or buy (for cash or easy payments) a motor cycle or combination, let us know your requirements; we undertake to give satisfaction; distance immaterial.—Bunting's Motor Exchange, Wealdstone, Harrow. [7781]

WANTED, small water and air-cooled cylinders, body cracked, but with valve seatings and ports in good condition, for lecturing purposes; state price. A few valves wanted, stems must not be bent.—Write, Lecture, c/o Smith's, 10, High Holborn, W.C.1. [2979]

SEND Your Motor Cycle to Palmer's Garage and Motor Auction Rooms, High St., Tooting. Cash offer telegraphed immediately on receipt. Nearest station Wimbledon. We will collect from any London station. Machine can be included in auction sale if desired.—Sole address, Palmer's Garage, Tooting. [2612]

EXCHANGE.

EXCHANGE, 5-6h.p. countershaft Rex for 2-stroke.—R. Hills, Warboys, Hunts. [2803]

24 Bolton House, Southowram, Halifax. [2514]

1920 Indian Combination, dynamo lighting, for cycle, car.—Dromand, Bernard Rd., Cowes. [2380]

EXCHANGES.—Get our list of machines and exchange quotation.—Collier's Motories, Horton St., Halifax. [2535]

MAXWELL 2-seater, exchange good combination; sell £130.—E. De Cort, 39, Essex Rd., Islington, N.1. [2887]

LATE 1919 Scott Combination, perfect order; part exchange solo machine.—Sinclair, Blencathra, Walton-on-Thames. [2688]

4 h.p. Royal Riley, complete all except brake; exchange for 2½h.p., any make.—Adgent, Dronagan, Ayrshire, Scotland. [2]

EXCHANGE 3½h.p. P. and M., 2-speed, 1918, like new, for Douglas 2½h.p. or 4h.p.—Motorist, 11, Arcade, Bedford. [X2604]

EXCHANGE 5-6h.p. magneto motor cycle and coachbuilt sidecar and cash for Morgan.—Box 959, c/o *The Motor Cycle*. [X2861]

NEW 6in. P. and H. Lamp Set (list price £4), 60/-; Remy dynamo, £6, or exchange accessories.—97, Angell Rd., Brixton. [3046]

ENFIELD Combination, perfect condition, value £125, for good 2-stroke.—Clark, 9, West Heath Av., Golders Green. [2593]

A.V. Monocar, J.A.P., 2-speed, disc wheels, 100 gns., for cycle or combination.—57, Kenbury St., Camberwell, London. [2707]

EXCHANGE 1920 2-speed 2½h.p., 2-stroke, for lower machine, Baby Triumph, Levis.—Sheppard, 108, The Crescent, Slough. [2506]

WOULD Exchange £227 ten per cent. investment in motor business for 1920 G.P. Morgan.—Box 9,790, c/o *The Motor Cycle*. [2995]

EXCHANGE 3½h.p. 3-speed coachbuilt combination for Baby Triumph with speeds, or other offers.—Box 961, c/o *The Motor Cycle*. [X2863]

EXCHANGE good Germain chassis and van body for good motor cycle and cash.—1, Burwood Mews, Burwood Place, Edgware Rd., W. [2663]

HUMBER 10-12h.p. Touring Car, 4-cyl., gate change, etc.; would exchange for motor cycle, or sell £150.—L. Bull, 44, Hills Rd., Cambridge. [3007]

EXCHANGE that Typewriter, Reliance Co. will make a fair allowance for it in part payment.—Reliance House, 2, Gray's Inn Rd., W.C. [1330]

1920 6h.p. Bradbury Combination, discs, adjustable wind screen, etc., less 1,000 miles; lightweight and cash.—Motor, The Saxons, Weybridge. [2736]

1914-15 5-6h.p. Rudge Multi Combination, complete; wanted, 4½h.p. B.S.A. combination or similar.—E. Atherton, Killinghall, Harrogate. [2617]

COMPLETE Professional Cinematograph Outfit, ready for showing; exchange motor cycle, or would sell.—Box 9,779, c/o *The Motor Cycle*. [2589]

O.K.-J.A.P., 1919, 2½h.p., 2-speed, clutch, kick start, lamps, Klaxon, for Douglas or Blackburne, cash either way.—17, Dyers Lane, Putney, London. [2730]

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EXCHANGE.

NAPIER 40h.p. 6-cyl. 7-seater, needs repair and tyres, make sports car, char-a-banc, or van, for sound combination.—Rose, 22, Surrey St., Strand. [2468]

35 h.p. Iris Limousine, £300; Indian combination taken in part exchange; limousine body, £40; exchanges entertained.—96, Phoenix St., West Bromwich. [X2860]

PHOENIX 2-seater, hood, screen, water-cooled 8h.p. twin, 3 and reverse, wants slight attention, for combination.—14, Ecclesbourne Rd., Islington, N.1. [2681]

EXCHANGE, Indian 7-9h.p., clutch model, 1913, in good order, for 2-speed lightweight, or sell £30.—Bootmaker, 82, Godstone Rd., Whyteleafe, Surrey. [2576]

EXCHANGE Motor Lorry, 4-cyl. Bosch magneto, 4 speeds and reverse, for motor cycle and little cash, or piano or furniture.—Box 960, c/o *The Motor Cycle*. [X2862]

EXCHANGE lighting plant for small house, engine, dynamo, bulbs, accumulators, all fittings, for 3½ h.p. old motor cycle, with magneto.—Box 9,767, c/o *The Motor Cycle*. [2488]

A.C. Sociable 3-wheel 2-seater, De Luxe Model, fully equipped, hood, screen, electric lamps, wheel steering; £85, or exchange combination.—46, Cromwell Rd., Walthamstow. [2893]

CLYNO 6h.p. Coach Combination, 3-speed, K.S., clutch, interchangeable wheels with spare, value £90; exchange less power solo and cash.—Box 9,797, c/o *The Motor Cycle*. [2987]

N.U.T., 1920, dynamo lighting, fully equipped, absolutely faultless; cost £170; sell reasonable, or exchange less expensive 1919-20 machine.—Collis, Laver, 199, Unthank, Norwich. [3036]

EXCHANGE 1920 T.T. Scott, with Canoelet Minor sidecar, fully equipped, for late model lightweight, Omega or Metro preferred; sell £130.—Craven, Bradford Rd., Wakefield, Yorks. [2512]

EXCHANGE Gent's £21 model Elswick, new 6-8h.p. Fafnir engine, w.c., Harvey-Frost vulcaniser, N.S.U. gear; any of above, with cash, for 3½h.p. motor or 2-stroke.—Miller, Occumster, Caithness. [2951]

5 h.p. Twin Sidecar Machine, new, heavy Druids, high-tension Bosch, 2-speed, hand clutch, good running order; exchange 2 or 4-stroke lightweight; sell £25, or offers.—Pearson, 110, Marston Lane, Bedworth, Nuneaton. [X2911]

1920 Rudge Multi, 3½h.p. (mileage 800), with Swan sporting sidecar, Cowey, lamps, etc.; any reasonable offer, or would exchange for higher power solo machine.—Client, c/o Clapham Motors, 27, Stockwell St., Greenwich, S.E.10. [2998]

A HILLMAN Conversion 5-seater with lorry attached, 12-15h.p., Bosch mag., Zenith carburetter, Charlesworth body, ready for road, and good tyres; exchange for combination, or sell; giving carrying up.—Ashton, 8, St. Helen's Rd., Bolton. [1448]

1916 4h.p. Triumph Combination, 3 speeds, countershaft, Lucas lamps and Klaxon horn, 2 spare tubes, guaranteed perfect; any trial; will exchange for good lightweight with speeds and cash, or sell £100.—Box 9,798, c/o *The Motor Cycle*. [2984]

TRIUMPH Countershaft, engine No. 47089, just been renovated at cost £15, lamps, horn, 1919 Millford Corvette sidecar; exchange P. and M. or lightweight, cash balance; or sell. £115.—Palmer, 61, Commercial Rd., Lambeth, S.E.1. [2525]

28 h.p. 4-cyl. Daimler Lorry, 4-speeds and reverse, pneumatics front, twin solids back, fast and powerful, in good order, carries 25-30 cwt., for Morgan or Matchless, or A.J.S. or Enfield combination; or sell for £130.—Birch, Littlecot, Sutton-at-Hone, near Dartford, Kent. 'Phone: 12 Farningham. [2855]

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ANY **ARMSTRONG** or Sturmev-Archer Gears Repaired promptly and efficiently.—County Engineering Co., Hounslow.

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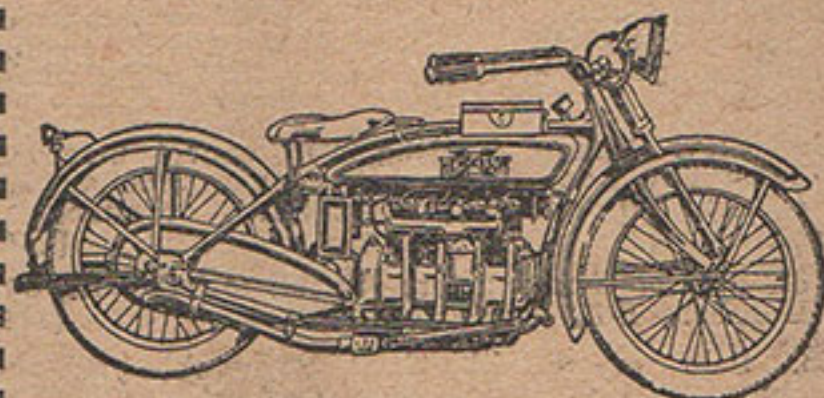
£1,000 is the value of the machine and equipment that will grind your cylinder at our works.—Foster of Leeds, 170, Cardigan Rd.

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"The Aristocrat of Motor Cycles"
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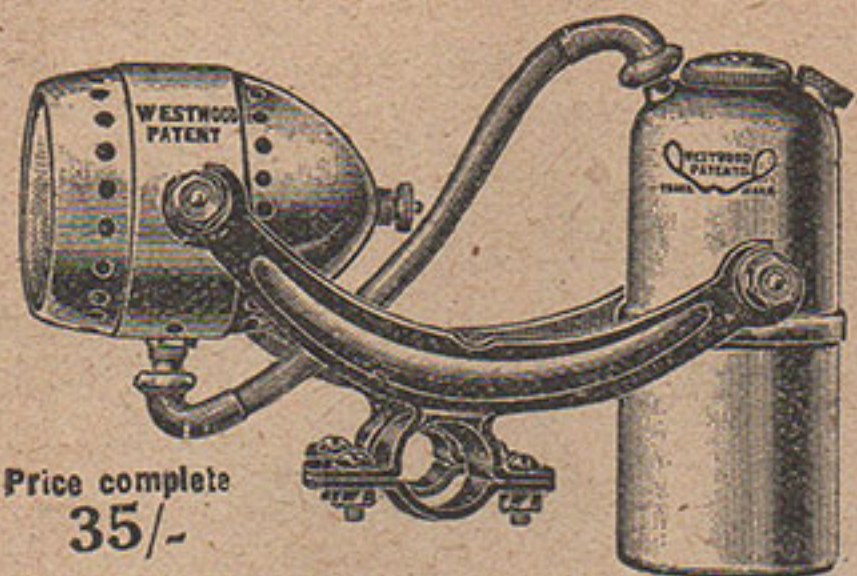
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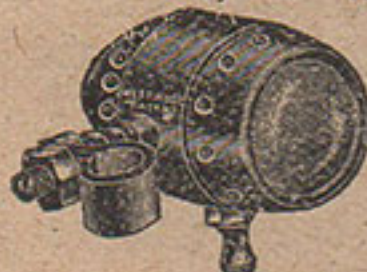
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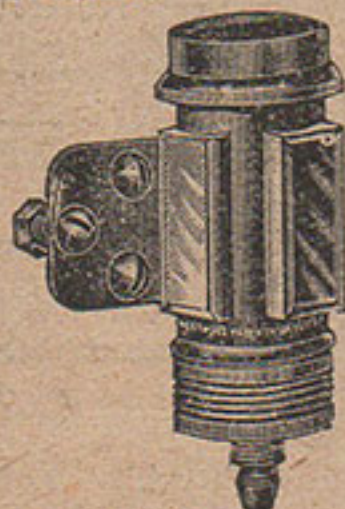


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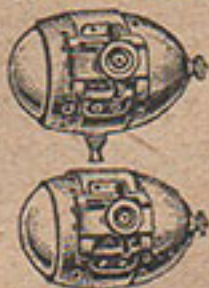
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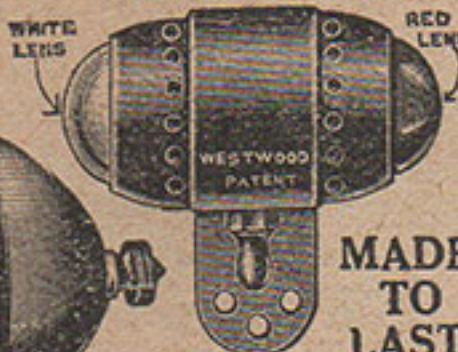
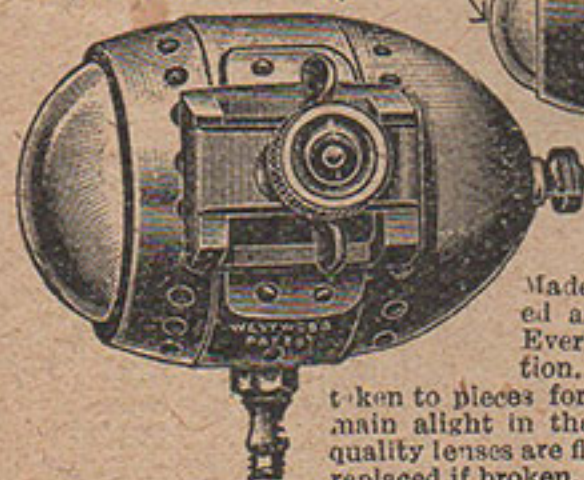
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Made from solid brass, turned and threaded at joints. Every part of solid construction. These lamps may be taken to pieces for cleaning, and will remain alight in the strongest gale. Best quality lenses are fitted, and can be easily replaced if broken. These lamps will last as long as the machines they are used on, & are absolutely rustless.

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19/10	7 1/2 x 4 x 3 1/2	10/6
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About 7 yards cloth. 15/- each

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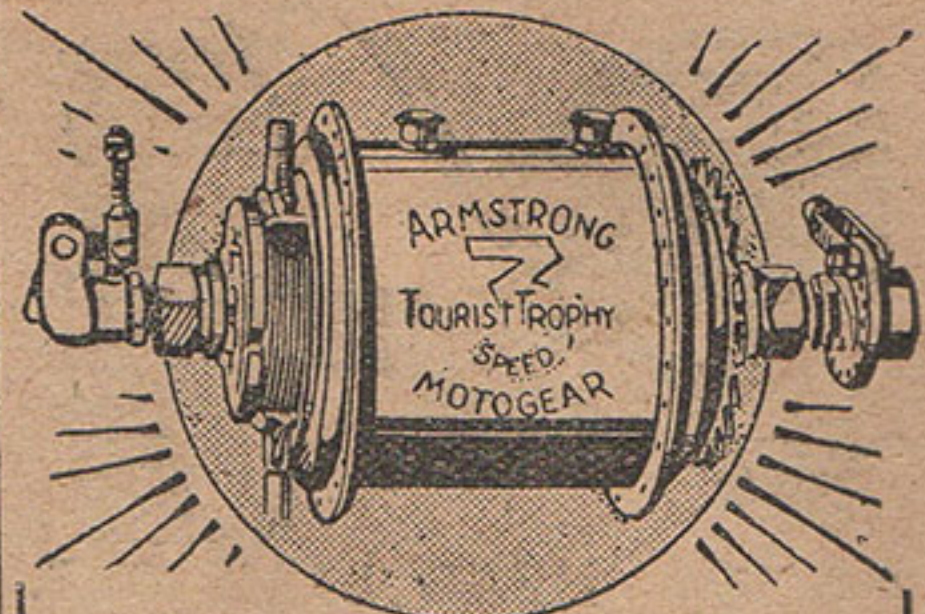
PISTONS all sorts in stock, or made to requirements from 35/-; delivery one day.—Wards, 51, Upper Richmond Rd., Putney, S.W. [0326]

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REPAIRED IMMEDIATELY, and in urgent cases we can repair while you wait.
 Actually in Stock.—New Sturmev-Archer Countershaft Gear Boxes and spare parts. Send for illustrated list. Trade supplied.
 Send wheels, Hounslow L.S.W. Railway.

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NEW IMPERIAL 8 h.p. Combination, 3-speed, kick start, all-chain drive	178 gns
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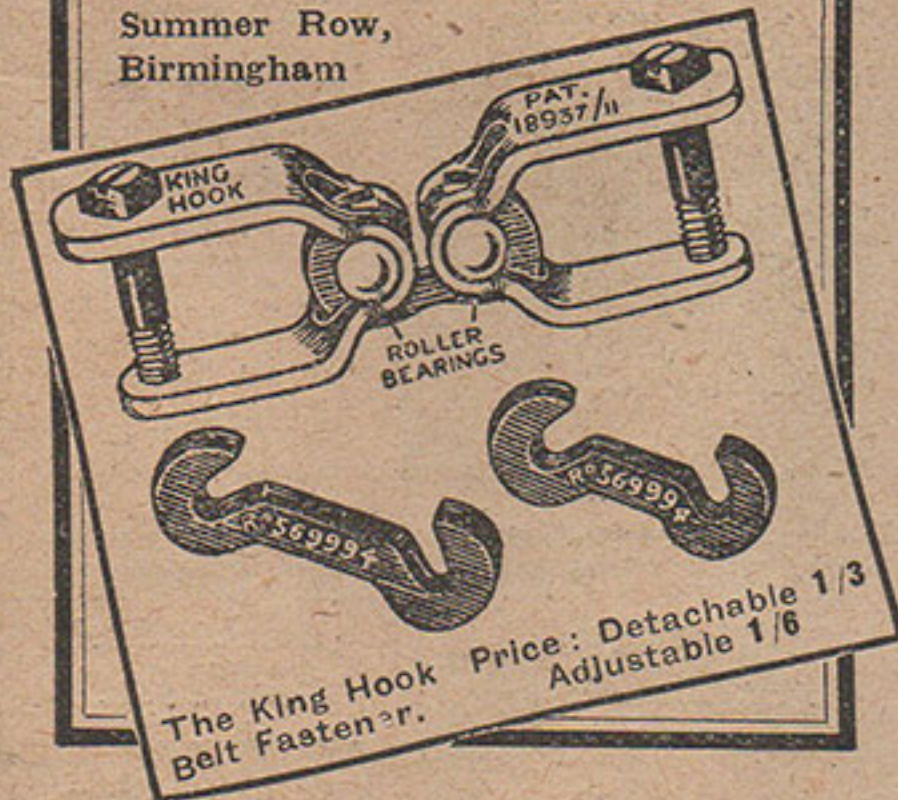
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suggested in the Darwinian Theory may have been something between a monkey and a man. That is probably something you don't worry about, but what *does* concern you—vitality—is THAT missing Link—THE FORWARD—you had always intended to buy but never did, when, stranded miles from anywhere with a broken Belt, you hunt frantically through your spares for anything as a makeshift. And—after a fruitless search and an equally hopeless half-hour or so trying to make a Belt, already stretched to its utmost, strain just that extra fraction of an inch which the FORWARD or KING HOOK LINK would have bridged, well—it generally ends in pushing "the bus" home, doesn't it? And, trudging the weary miles you vow you'll get a FORWARD at the first opportunity. So, with the bad weather coming on, let that opportunity be NOW; select your Fastener and Spare Link from the following, add a Forward Belt Punch, and you are safe against any possible belt trouble.

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Armstrong and Sturmey-Archer Hub Gears.

We repair the above Gears promptly. Sturmey-Archer Countershaft Gear Parts Stocked. When sending wheels please remove all outside fittings, label clearly with owner's and our address, and advise hub number and type of gear. Recommended by Sturmey-Archer Co., for Repairs. Armstrong and Sturmey-Archer gear Adjustment sheets supplied. Send 2d. stamps and stamped addressed envelope. **The CROMWELL ENGINEERING CO.,** 327, Putney Bridge Road, Putney, London, S.W.1. Phone 1601. Putney. L. & S.W. Ry. Putney Station. We do not repair push cycle gears.

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MANCHESTER.—O. E. Carfer, Expert Motor Cycle Engineer, has fully equipped works for perfect repairs to motor cycles. He specialises in making faulty engines perfect. Repairs and renewals of all makes of machines promptly and properly executed. Special magneto repairs service. Your testing means recommendations.—17, Webster St., Greenheys, Manchester. [X2420]

WE Specialise in repairs to N.S.U. engines and N.S.U. engine-shaft gears; our enormous stock of N.S.U. spare parts (having acquired the company's entire stock-in-trade and patterns) enable us to supply to suit practically all N.S.U. models, including the earlier types, fitted with Eiseman L.T. mag., also for the 2h.p. N.S.U. engines fitted to 1913-14 O.K. machines. In ordering, it is important to submit old parts as pattern, trade enquiries invited.—Eagles and Co., Acton Hill Works, Spares Dept., 275, High St., Acton, London. [X2459]

FOR 13 Solid Years we have earned our daily bread by properly repairing motor. We are the oldest firm of motor repairers in the Midlands, and our experience is worth a lot to you. You run no experimental risks here. Specially selected men and specially selected machinery enable us to turn out work which is a pleasure to our clients and us. Cylinders rebored and ground to a glass finish. Pistons, rings, and bushes made that really fit. Engines overhauled; bodes rectified; satisfaction guaranteed. If we cannot please you, your are hopeless.—Tennant Engineering Co., 238, Bristol St., Birmingham, official repairers to the A.C.U. and R.A.C. [0047]

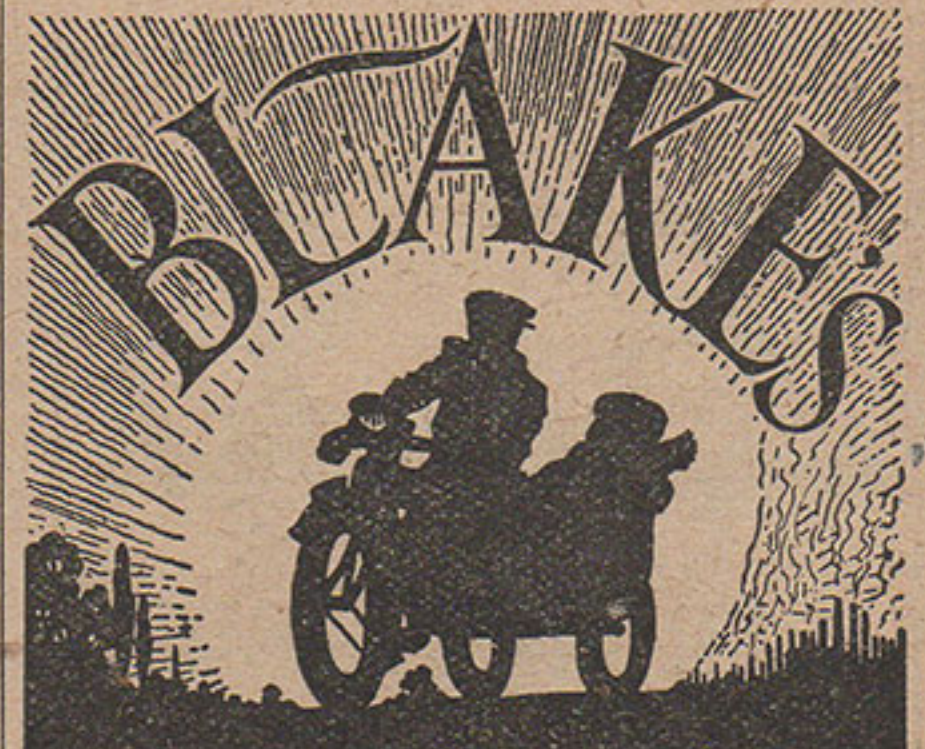
MISCELLANEOUS.

ANY ARMSTRONG or Sturmey-Archer Gears repaired, promptly and efficiently.—County Engineering Co., Hounslow. [9625]

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NEW High Tension Cable, 36in., 40in., and 54in. lengths, with terminal eyelets, 4d. per yard, postage 1/2d. per yard; Triplex aluminium wind screens, Avro or Auster, perfect, 10/-, postage 1/-; new Bowden cable and casing, 6ft. lengths, 1/3 per length, postage 2d.

PROMPT Despatch. Money back if not satisfied. We have other bargains. Tell us what you want.—Bowman, 122, Everton Rd., Liverpool. Phone: 569 Anfield. [2318]



Unprecedented Offer of Shop soiled 1920 Models.

Must be cleared to make room for 1921 Stock.

- A. V. MONOCAR** 1920 8 h.p., fitted with rear cushion for passenger. Price (shop-soiled)..... £150
- A. V. BICAR** 1920 (two-seater), fitted with hood and screen, 8 h.p., Jap. 2-speed gear. Price (shop-soiled)..... £200
- A. V. MONOCAR** 1920, 6 h.p. Jap. like new, fitted with electric lamps. To clear £120
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- Also 7-9 h.p. Second-hand **INDIAN**, thoroughly overhauled, re-constructed, and re-enamelled, etc. £80

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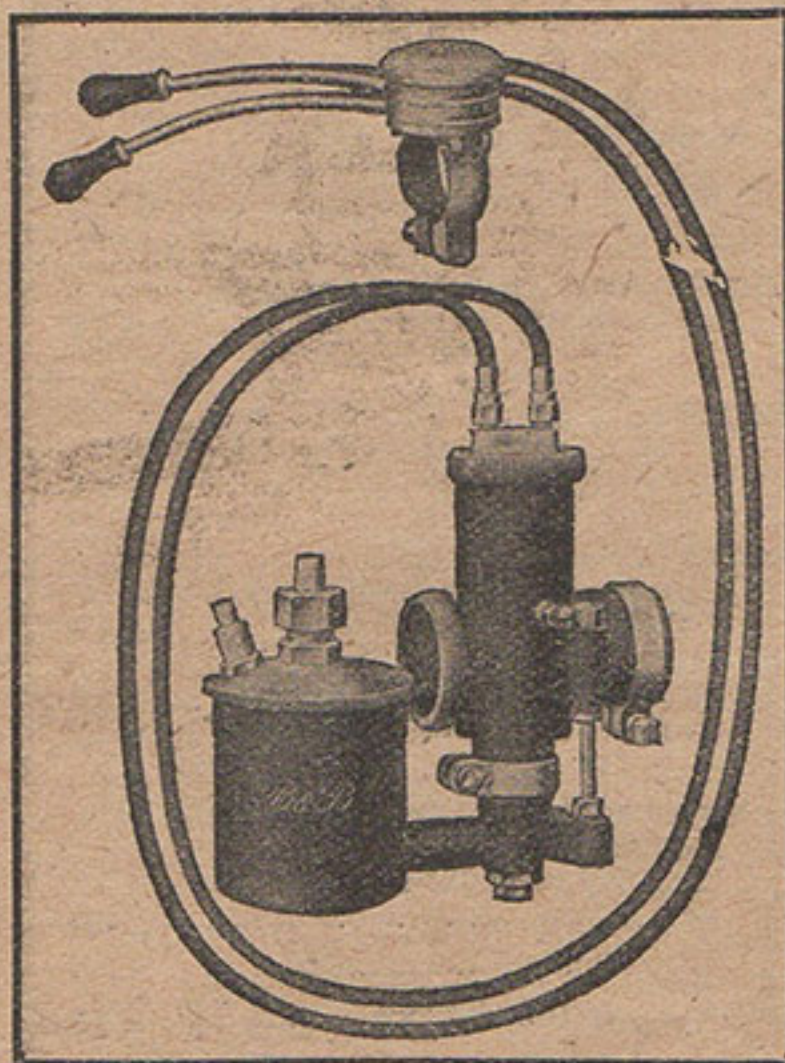
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SOMETHING Really Good.

BRAND New B.S.A. Engines, 4 1/4 h.p., £17; new B.S.A. gear boxes, £15; new B.S.A. frames, back stays, and bottom bracket, £8; new B.S.A. front forks, complete with all fittings, £4/10; new B.S.A. tanks with all fittings, including Best and Lloyd lubricator, £4.10; new B.S.A. rear wheel and chain sprocket, 50/-; new B.S.A. front wheel, 25/-; new B.S.A. handle-bars, complete with all fittings, including front brake, £2; B.S.A. footboards, 15/- pair; B.S.A. cush drive, complete, 30/-; B.S.A. valve, complete in case, 5/-; B.S.A. magneto sprockets, 3/-; B.S.A. carburettors, 50/-; Renolds B.S.A. driving chain, 88 links, 20/-; B.S.A. silencers, 25/-; B.S.A. front rim brakes, complete, 25/-; B.S.A. rear carriers, 35/-; B.S.A. front mudguards 22/6, rear 18/-; B.S.A. chain case, complete, £2/15; numerous other B.S.A. parts. All above brand new, as from makers.—Below.

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DOUGLAS 4h.p. Front Forks, complete with all fittings, and new as from makers, £4; brand new Sturmev-Archer countershaft 3-speed gear box, £19; new Binks carburettor, never fitted, as from makers, 55/-; brand new C.A.V. magneto, single, anti-clock, £4/15; new Miller generators, 9/6.—Below.

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INDIAN Gear Boxes and Engines, and all parts for same. Below.

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TRIOUMPH and Douglas Belts, ex W.D., quite as good as new; 7/6 and 8/6 each.—Marble Arch Motor Exchange, 135, Edgware Rd., W.2. [8133]

DOUGLAS 2 1/4 h.p. Engine Spares, buffer head, forks: £6.—33, Pennard Rd., W. [2958]

COWEY Horn (handle-bar), new; 50/-.—Martin, 191, Czerleon Rd., Newport, Mon. [2894]

N.S.U. Gear, £6/10; Grado, 90/-; ditto K.S., £8/10.—Box 2,793, c/o The Motor Cycle. [2992]

GENUINE Douglas 2 1/4 h.p., pistons, rings, gudgeons; 50% off list.—Crow Bros., Guildford. [2145]

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ONE Week Old Binks, off Douglas; 60/-.—Faber, Eggescliffe Village, County Durham. [2450]

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WE have the largest stock in the world; all prices reduced. Write requirements; stamp please.—Claridge's, Clyno House, 8, Chandos Rd., Redland, Bristol. [2896]

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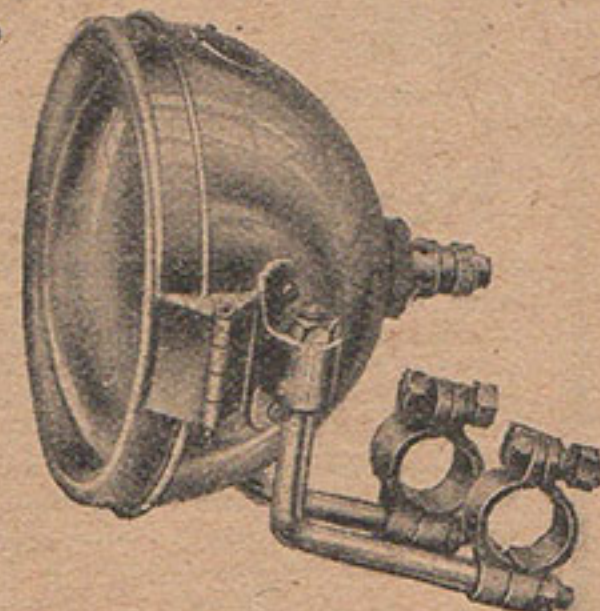
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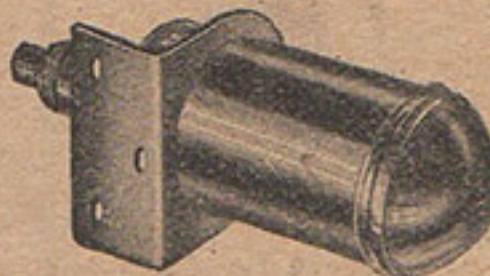
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Gives a pencil beam light; screws direct to sidecar body.

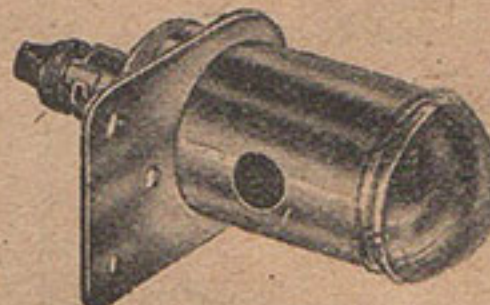
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Screws to Number Plate. Back removes and can be used as an inspection lamp.

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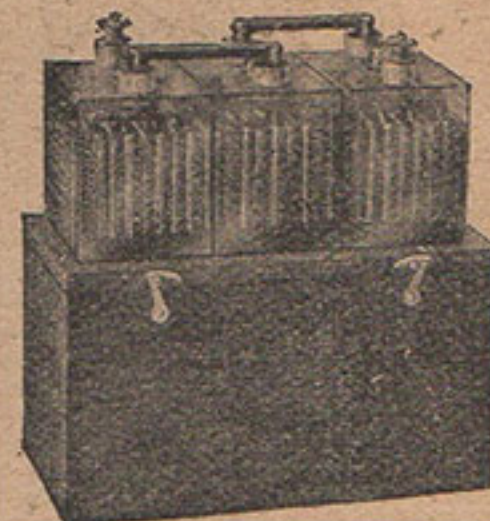
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6 volt 40 amp.

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Vulcaniser
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BINKS Carburetters enable your engine to tick over; try one.—Booth's Motories.

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STATIONARY Engines.—1½ h.p., run on petrol or paraffin; list free.—Booth's Motories.

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NEW 1920 Lightweight Frame, fitted with Villiers engine, magneto; £19/10.—Booth's Motories, Halifax.

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SADDLES, Brooks B170, 35/-; Le Grande, 25/-; as new.—Turner, 78, Church Rd., Willesden. [2437]

19 17 Douglas, less mag. and a few parts, £25; Douglas wheels, 12/6.—33, Hackford Rd., Brixton. [2760]

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MABON Clutch, perfect, off 3½ h.p. J.A.P.; £3.—Ellis, Maltese House, Writtle, near Chelmsford. [2716]

LARGE R.A.F. Helmets, 18/6, cost £4/4 each; sent on approval.—76, Dalling Rd., Hammersmith. [2805]

STURMEY-ARCHER Countershaft Gear Box for sale.—Ideal Trading Syndicate, Cromwell House, Holborn. [1630]

ARMSTRONG and Sturme-Archer Gears repaired while you wait.—County Engineering Co., Hounslow. [9626]

PATRICK—4¼in. S.C. lathe, ¾in. hollow spindle; deferred payments; list 15E.—Penraevon Place, Leeds. [2235]

GEAR Box, Alldays, 2-speed, clutch, controls, perfect; £5.—Burrell, Cheriton Lodge, Fareham, Hants. [X2772]

TRIUMPH Clutch Wheel, complete, controls, pedalling gear; £6/10.—36, Winchester St., Coventry. [X2932]

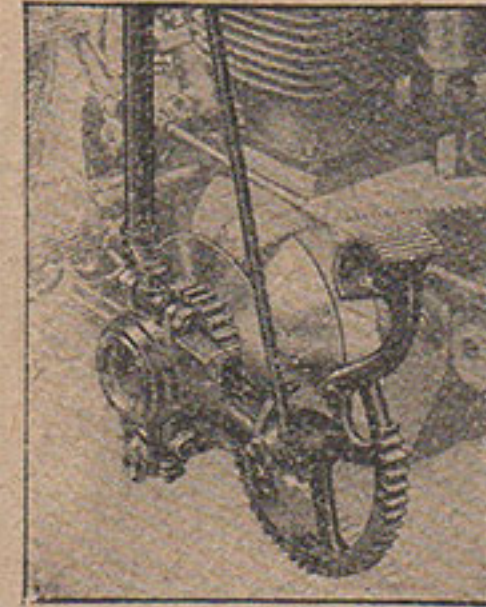
BARGAINS—Triumph countershaft, frame, tank, front wheel, tyre; £7.—Searles Stores, Southborough. [2944]

4 h.p. Douglases, few parts missing, W.D. models; £30, real snip; worth dealers' consideration.—Below.

4 h.p. Douglas Engines, gear boxes, frames, etc., cheap.—Banister and Botten, 341, Upper St., London, N.1. [2900]

MOTOR Repair Plant, electric power, fitted with Hendy lathe and various other machine tools, only wants viewing.—Motors, 39, Essex Rd., Islington, N.1. [2889]

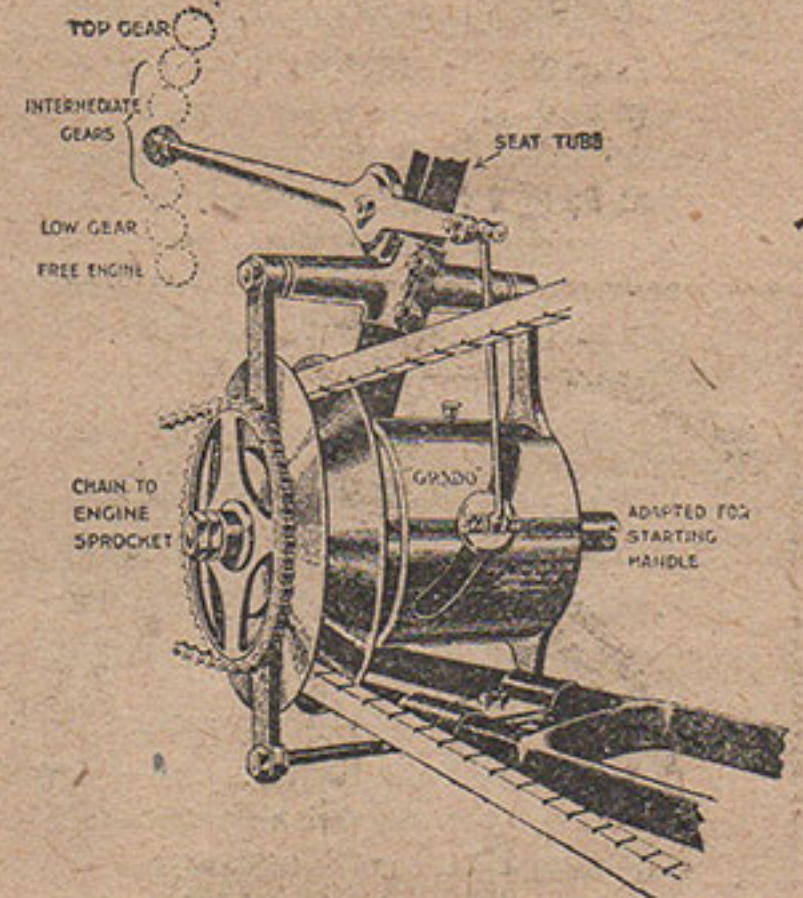
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Sit on your saddle and start engine. Variable gear, free engine, kick-start. Here is our world-famous kick-start model for all machines from 3 to 10 h.p. DELIVERY FROM STOCK.

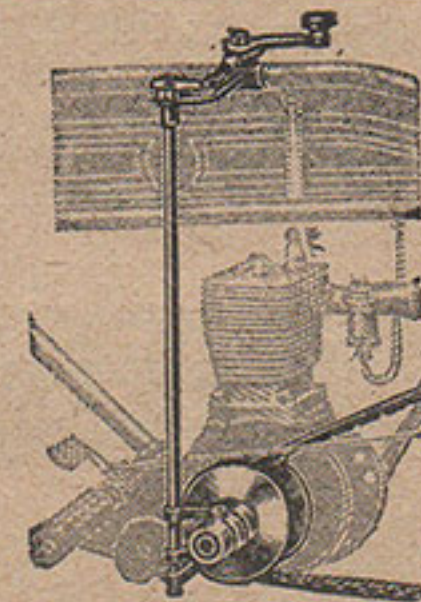
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THIS IS OUR NEW COUNTERSHAFT MODEL FOR TWO-STROKES.

Variable gear, free engine, handle-start.

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This Gear gives variable gear and free engine.

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Order to-day or write for further details.

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Perhaps you have been waiting for the Show before deciding which make of machine you would purchase for 1921, and now, having studied the various makes of machines exhibited, you have possibly realised that it is difficult even now to make your choice from the great number that appeal to you.

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THE Effra Motor Works.—Huge consignment of War Dept. Douglas spares, far below list prices.—As below.

2 3/4 h.p. Douglas Spares.—Gear boxes, £4/10; all gear box parts; frames, £5; wheels, front 27/6, rear 40/-; forks complete, £3; all engine parts, flywheels; pistons, 10/-; connecting rods, 22/6; back stands, new, 10/-; everything; write requirements.—Below.

4 h.p. Douglas Spares.—Wheels, back £2/10, front 30/-; forks complete (late), £5; fork shackles and blades; fork springs, 10/- pair; all spares for engine, magneto wheels, etc., clutch spares, in fact everything for your Douglas; small orders receive same consideration as large.—Below.

4 h.p. Douglas Head Lamp Brackets for models after 1917, to fit in steering column, 3/-, post 6d.

2,500. Government stock, brand new.—We, the Effra Motor Works, do hereby guarantee that the motor cycle lamps and generators to be sold by us are genuine Powell and Hammer or Miller.—As below.

32/6 for a full size, e.g., 5 1/2 in. glass (or 4 in. suitable for Douglas's, lightweights) Powell and Hammer motor cycle head lamp, complete with full size Miller generator; lamp only, 22/6; is a gift to every motor cyclist; all brand new; postage 1/6.—As below.

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19/6.—4 h.p. Douglas head lamp, complete with Douglas brackets, fit 2 3/4 h.p. Douglas 1919-20 models; postage 1/6.—Below.

THE above is all brand new stock, bought at huge discount. Compare prices. Goods forwarded against cash; money returned if not satisfied. Open Sunday mornings.—Cheques and postal orders should be made payable to The Effra Motor Works, 14, Effra Parade, Brixton, London. [3003]

DOUGLAS. Triumph, less engine, parts cheap; mag., speedometer, etc.—Simpson, Engineer, Sunbury-on-Thames. [2806]

SPARE Parts, replacements, repairs.—Humber, Ltd., Canterbury Rd., Kilburn, N.W.6. Phone: 1298 Willesden. [C197]

RENOLDS Chain, 101 links, 5/8 x 3/8, new, 40/-; 56 links, 23/-; approval.—Davis, 35 1/2, Whittall St., Birmingham. [X2926]

FULL Size P. and H. Head Lamps, No. 127, 19/6; No. 128, 18/6; Millers No. 31H, 18/6; all brand new.—Below.

LAMP Brackets, 5/- pair; Lucas and P. and H. and Miller, second-hand.—Below.

MILLER Generators, full size, brand new, 11/6.—Marble Arch Motor Exchange, 135, Edgware Rd., W.2. [2212]

MAUDES'.—Plugs: Clearance line of reconditioned Lodge Aero, K.L.G., and Sphinx plugs, 1/9; post free.—Below.

MAUDES'.—Discs, polished aluminium, 77/- set, sidecar wheel 42/-; genuine Ace discs, specially recommended, 90/- set, sidecar 45/-; leg shields, polished aluminium. 32/- pair, steel 17/6.—Below.

MAUDES'.—Bradbury 2-speed gears, Rudge and Triumph, brand new, £10/5; Rover, £11/15.—Below.

MAUDES'.—Horns: Klaxon, 36/-; Cowey, 55/-; H.B. bulb horns, 27/6; rear lamps, Motex, 5/-; T.W.R., 8/6.—Below.

MAUDES'.—Speedometers: Cowey, 120/-; Smith's, 105/-; Watford, 104/6; immediate delivery; Easting wind screens, 90/-; sidecar luggage grids, 27/6.—Below.

MAUDES'.—Spanners: Dum-bell, 3/-; Patchquick outfits, 3/3; knee grips, leather, 10/6 and 11/6; A.K., 12/6.—Below.

MAUDES'.—Chains: 3/4 x 7-16ths for Morgans, 9/- foot; 5/8 x 1/4 in., 7/-; 1/2 x 1/4 in., 6/-.—Below.

MAUDES'.—Hart and Peto Radford accumulators, 4 volt 12 amp. hour, shop-soiled only, 12/6.—Below.

MAUDES'.—Hutchinson type wader boots, 20/- pair; Tan-Sad pillion seats, 43/9; shop-soiled saddles, 22/6.—Below.

MAUDES'.—Tyres: Special line Wood-Milne clearance covers, 28 x 3 in., 27/6; approval.—Below.

MAUDES'.—Phelon and Moore parts, new but soiled; brake drums, 9/-; rear mudguards, 11/-; front mudguards, 15/-; front stands, 7/-; rear, 11/6; front wheels, 20/-; gear levers, 7/6; service green. All accessories on approval against cash; trade supplied.—Maudes, 100, Gt. Portland St., W.1, and Paris Exeter. [2915]

2 3/4 h.p. Machine, complete, less unit and tyres, good condition; £8/10.—Proudlock, 1, Lily Av., Newcastle-on-Tyne. [2950]

SCOTT Engine, 1915 cylinders, main frame, carrier with stays, perfect order, little used.—79, Berkeley St., Liverpool. [2892]

WATFORD, Cowey, Smith trip speedometers, complete as new; £4 each.—30, Crystal Palace Park Rd., Sydenham. [2864]

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Extra Heavy	...	20/-
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SENSPRAY Carburetter, new, 50/-; electric lighting set, 50/-; Jones speedometer, 50/-.—1, Othello St., Liverpool. [2632]

LEATHER Coat, Opossum collar, medium size, excellent condition.—Tippett, Augusta House, Esplanade, Weymouth. [2459]

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OFFICER'S Leather Flying Coat, suitable motor cycling; first cash £6/10.—Stagg, 24, South St., Newport, Wight. [2499]

48 Brand New Vevo 3-spout Grease Injectors; only 4/9 each, post free.—Monteath, 8, Bridge St., Brierfield, Lanes. [2567]

B.S.A. and 8h.p. Royal Ruby Spares. We hold a huge stock under list; let us have your enquiries.—Below.

CANOELT MM4 Spares, also complete sidecars in stock; under list.—Below.

500 4-cylinder magnetos, £4 each; a quantity of tool boxes, waterproof covers for combinations and Engineers' benches; cheap, carriage extra; stamp please.—Holliday Bros., 20, Queen St., Hammersmith Broadway, W.6. [2802]

SPEEDOMETER, Cowey, 24in., registered 1,350 miles, off Enfield 2-stroke; 4 gns.—Box 9,800, c/o The Motor Cycle. [2986]

SPROCKETS, new, 1/2in. pitch, two 23 tooth 7/6 each, one 30 12/-; 25/- the three.—Hollingsworth, Uley, Glos. [X2897]

BARGAINS.—3h.p. Antoine cycle, less saddle, mag., £8; new J.A.P. cylinders, pistons.—Whatley, Briar Rd., Twickenham. [3031]

CAPAC Carburetters.—Fit one of these and make your lightweight equal to a 3 1/2 h.p.; liberal exchanges.—Below.

CAPAC Automatic Carburetters, £4/4; new model Capac for Douglas, with hot air attachment, £5/5; liberal exchanges.—Below.

CAPAC Carburetters give easy starting and increased power; liberal exchanges.—Halifax Motor Exchange, Horton St., Halifax. [2532]

SPEEDOMETER Specialists.—We can supply from stock the following makes of speedometer: Watford, Stewart, Jones, Cowey, etc.—Below.

REPAIRS in all Departments. Parts supplied. Gear boxes for Stewarts in stock, also repaired. All work and goods guaranteed. Send on your enquiry; prompt attention; goods per return.—Pioneer Accessories and Speedometer Supply and Repairing Co., 228, Gray's Inn Rd., London, W.C.1. (Trade supplied). [4000]

150 SCREWS, nuts, washers, set screws, 3/-; 144 bright steel bolts, 2/6; 72 bright hexagon nuts, 2/6.—See below.

72 BEST Spring Washers, 3-16 to 1/2in., 1/9; 36 castle nuts, 1/2in. to 1/4in., 1/9.—See below.

144 COPPERED Bifurcated Rivets, 8d.; 12 8in. hack saw blades, 1/6; any of the above carriage paid.—Wood, Tithebarn St., Preston. [X2349]

TRANSFERS, design-name, 14/6 gross; cycle linings wholesale, samples 6d.—Transfer Co., 9, Churchmead Rd., Willesden. [1777]

2 1/2 h.p. complete, less engine unit, new tank, new saddle, new handle-bars, good tyres; £9.—Graham, Newcastle St., Carlisle. [2814]

250 BRIGHT Steel Assorted Nuts, studs, bolts, etc., sent carriage free 10/-; approval.—Palmer's Garage, Tooting. [2608]

VALVES.—The finest pattern valves procurable, 3% nickel; all patterns stocked, 5/6 each; valve springs, 8d. each.—Below.

PISTON Rings.—High tensile cast iron; all patterns in stock, 1/9 each.—Below.

PISTONS, complete, for all engines, standard or oversize keenest prices, immediate delivery.—Reid Watt and Co., 14a, Snow Hill, Birmingham. [1388]

TWO New Motor Cycle Houses, 8ft. x 6ft. x 7ft.; £10/10 each to clear; in sections.—Harvey, 341, Battersea Park Rd., S.W.11. [2426]

LAMPS, acetylene, head, tail, and generator, unused, 2 gns.; also electric head and tail, 1 gn.—Box 9,799, c/o The Motor Cycle. [2985]

NEW Bowden Valve Lifting Levers (list price 14/6) complete with 6ft. cable, 4/6; Bowden wire and casing, 3d. per ft.—Below.

THOMSON-BENNETT Starting Magnetos, new, £3/10; Fellows and C.A.V. 6-point magnetos, £8/15.—Below.

DOUGLAS Chains, heavy, 1/2 x 1/4in., 2/6 per ft. Premier parts. Main shaft for Bowden 2-speed gear box, 7/6.—Below.

LUCAS 12-volt Aero Dynamo, complete, with magnetic cut-out, £7/15/6.—Burke and Goodman, 25, Burscough St., Ormskirk, Lanes. [2311]

P. and M. Spares.—Huge stock, all parts, cheap; frames, brand new, 35/-; tanks, 17/6; etc.—1, Othello St., Liverpool. [2631]

SELLING OFF. GENUINE BARGAINS.

We have a large stock of shop-soiled New Motor Cycles and Combinations. No offers refused. 1920 Stock must be cleared at once.

NEW SHOP-SOILED SOLOS.

BLACKBURNE, 4 h.p., 3-speed	£125 0
NEW IMPERIAL, 8 h.p., twin J.A.P. ..	£140 0
ZENITH, 8 h.p., K.S., clutch	£155 0
DOUGLAS, 4 h.p., 3-speed	£117 10
INDIAN, 4 1/2 h.p., 3-speed, K.S., clutch ..	£117 10
ROYAL RUBY, 3 h.p., spring frame, 2-sp.	£105 0
OMEGA-J.A.P., 2 1/2 h.p., 2-speed	£70 0
COVENTRY-EAGLE, 3 1/2 h.p., 3-speed ..	£115 0
B.A.T. 6 h.p., spring frame	£137 10
ROVER, 3 1/2 h.p., T.T.	£105 0
ROVER, 3 1/2 h.p., 3-speed	£135 0
N.U.T., mag. dynamo lighting, 3 1/2 h.p. twin	£157 10
RUDGE-MULTI, T.T.	£100 0
RUDGE-MULTI, I.O.M.	£97 10
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NEW COMBINATIONS.

CLYNO 8 h.p. Combination, spring frame	£250 0
MATCHLESS Comb., 8 h.p., mag. dynamo	£210 0
ZENITH 8 h.p. Combination	£200 0
HAZLEWOOD Combination, 6 h.p.	£195 0
A.J.S. Combination, 6 h.p., 3-speed	£210 0
ROVER Combination, 6 h.p.	£195 0
B.A.T. Combination, 6 h.p. and 8 h.p. ..	£190 0
ROYAL RUBY Combination, 8 h.p.	£195 0
B.S.A. Combination, 4 1/2 h.p.	£152 0
NEW IMPERIAL Combination, 8 h.p.	£177 10

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RUDGE-MULTI Comb., 5-6 h.p., 1919 ..	£130 0
QUADRANT Combination, 4 1/2 h.p., 1919	£120 0
1919 LEA-FRANCIS Comb., 3 1/2 h.p. twin	£100 0
AUTOPEE Scooter, dynamo lighting	£30 0

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Goldstein.—“It is a **Big Money-Saving List** from Jones' Garage, and if my eyes tell me truthfully, we can save enough money to run ze motor for ze whole Season.”

Abraham.—“You don't do said so.”

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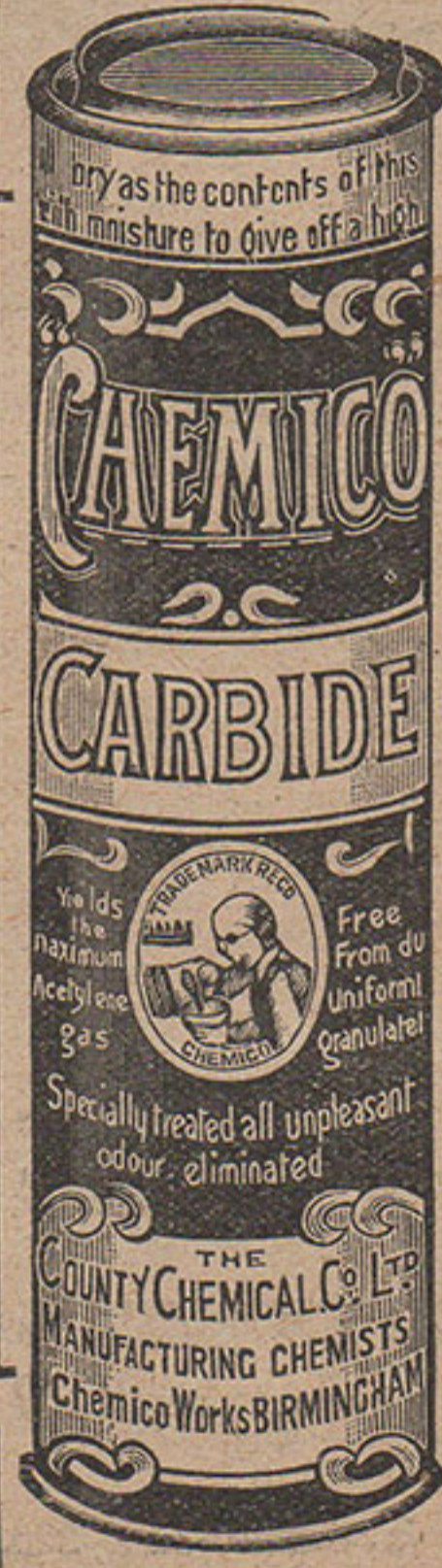
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Why not you follow their example—“money saved is money earned,” and as much to you as them. If it is not convenient to purchase for cash we can supply any new machine at List Price, on the deferred payments, and it is strictly confidential, plus only 4%

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CARBIDE is of such a character as to cleanliness, coating, and packing as to render it indispensable to the man who likes to be on the safe side and feel safe.

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Cycles	2/3	1/-
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2-Seater Cars	5/9	1/3



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2 1/4 h.p. T.D.C. Engine, E.I.C., Senspray, frame, tank, and carrier, new; bargain, £24.—28, Durnford St., Middleton, Manchester. [2407]

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SENSPRAY Carburetter, had very little use, 30/-; also Douglas carburetter, 2 1/2 h.p., 25/-.—James, 41, Darren View, Merthyr, Wales. [2321]

RENOLDS Motor Chains, new, 1/2 in. x 3/4 in., very heavy pattern, 60 links, 10/6 each, post free.—Edwardes Bros., 20, Blackfriars Rd., S.E.1. [3022]

DYNAMO, car lighting, £4/17/6; switchboard, £1/7/6; charging dynamo, £1/15/6; stamp.—Lucas, 84, Ground St., Blackfriars. [201]

CROWN Adjustable Pulleys from Stock; Triumph, Bradbury, B.S.A., Humber, Precision, Premier; 15/9.—Ridington.

DOUGLAS Adjustable 6in. Model, 21/6; J.A.P., Fainir, Peugeot, Rex, Minerva, 17/6; piston rings, 1/9; valves, 5/-.—Ridington.

MAGNETO Sprockets, 7T, 8T, 9T, 3/9; 10T, 11T, 12T, 4/3; 14T, 16T, 4/9; 18T, 5/9; 20T, 6/9; 22T, 7/3; 24T, 7/9. Boring 2/-; engine sprockets manufactured.—Ridington.

LIGHTER Flints, 11d. doz.; 3 doz. 2/2; long squares 8d.—Ridington, Southampton St., Cambridge. [7776]

ARMSTRONG and Sturmey-Archer Gears.—Any gear repaired immediately by skilled mechanics.—County Engineering Co., Hounslow. [9627]

350 TYPEWRITERS, all dependable makes, at exceptional prices.—Reliance Co., 2, Gray's Inn Rd., Holborn. Phone: Holborn 2388. [1323]

TRIUMPH Oil and Petrol Syringes (genuine), ex W.D., 3/6 each; Douglas, 1/6.—Marble Arch Motor Exchange, 135, Edgware Rd., W.2. [8681]

CARBIDE for all purposes. Quality considered, we give best value. 43/- cwt., drums free.—Kemp's Garage (Importers), Louth, Lincs. [X2859]

STURMEY-ARCHER 3-speed Wheel, complete with all controls and kick start pedal, perfect; £12/10.—Davis, 35 1/2, Whittall St., Birmingham. [X2928]

1 1/4 h.p. Clement Engine, £2; B. and B. carburetter, 14 as new, nearest offer £2.—H., 5, Cornwall Rd., Braintree St., Mile End, E. East 672. [2467]

MOTOR Cycle Gloves, fingerless, leather outside, lined with lambs wool; 5/- a pair, carriage paid.—H. Emanuel, 27, Belgrade Rd., N.16. [0125]

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LUCAS New 6-volt single meter, car type switch-box, £4/15; new 6-volt Lucas horn, 52/6.—17, Poplar Av., King's Heath, Birmingham. [X2603]

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TYPEWRITERS that Give no Trouble.—Reliance Company's machines are dependable; get list.—Reliance House, 2, Gray's Inn Rd., Holborn, W.C. [1322]

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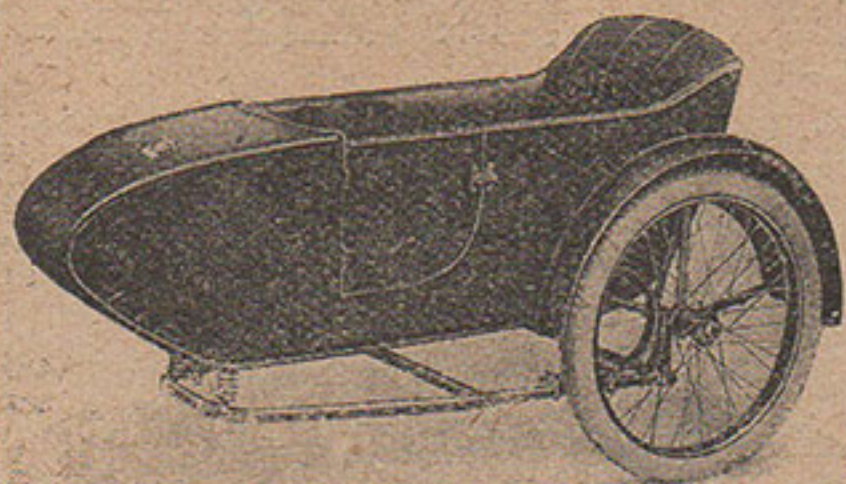
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1920 4 h.p. B.S.A. Comb., Model K., all lamps, speedometer, unused	£130
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Motor Cycles, solo or comb., and Light Cars.

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New Lightweight Model

Strong chassis, underslung type, roomy body with well-sprung upholstery. Finished to match your machine.

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STURMEY-ARCHER 3-speed Countershaft, as new, £18/10; Douglas 2-speed, £4/10; Jones speedometer, 55/-.—Sinclair, Blencathra, Walton-on-Thames. [2687]

SCOTT, incomplete, engine No. 571, £18; also Minerva, less accumulator, £4; offers considered.—Darlington, Jun., Vlearage, Kennington Oval, S.E.11. [2880]

FLYING Outfit, leather coat, helmet, Triplex goggles, sheepskin high boots, perfect, almost new; lot £14.—67, Park St., Greenheys, Manchester. [2406]

CARBIDE, finest quality, giving 100% pure yield, cwt. 44/-, half cwt. 24/-, 28 lb. 13/6, including drums.—Young, Importer, Misterton, Somerset. [5693]

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ROC 2-speed Back Wheel, complete, in perfect order; also Rex back part to suit it; a bargain, £8/10.—Dene Motor Cycle Co., Haymarket, Newcastle-on-Tyne. [X2297]

HEAT your Garage with Cheepeat Patent Stove, burns sawdust 10 hours without attention.—Maud and Raistrick, Baikwel Works, Laisterdyke, Bradford. [7618]

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A JOURNAL Dealing with the Second-hand motor trade only; your advertisements inserted free; specimen copy 2d.—H. Jowitt, 41, Falmouth Av., Bradford. [X2605]

DOUGLAS 4h.p. Wheels £7, 2½h.p. £5; latest pattern 2½h.p. frame, £12; all the above brand new, genuine 1920; approval.—Box 9,805, c/o The Motor Cycle. (D) [2996]

SPECIAL Offer brand new 28x3 Capon Heaton red motor cycle inner tubes and valves, 7/6 each, post free, or 78/- dozen.—Edwardes Bros., 20, Blackfriars Rd., S.E.1. [3021]

ARMSTRONG 3-speed Gear, complete, new condition, £7/10; lightweight spring forks, suitable for Ivy, £2; pair P. and M. wheels, £2/10.—Warwick, Hinckley Rd., Leicester. [2502]

STOCKTAKING Sale, single articles at less than wholesale price; horns, carburettors, plugs, faps, repair outfits, oil squirts, tubes.—King, 61, Somerset Rd., Teddington. [2415]

SIDECAR Covers and Aprons.—Send old cover, paper pattern or sketch. We send sample material and price for new one per return.—Waterproof Co., Rutland St., Nottingham. [1522]

DOUGLAS Binks, £3; anti magneto, £3/10; new lamp set, £2/10; 2½h.p. Douglas rear cylinder, 15/-; electric hand drill, £7/10.—602, King's Rd., Fulham, S.W.6. [2756]

FALLOT Motor Cycle Head Lamp, new July, spare jet, perfect working order; cost £3/15, sacrifice £2, or offer; owner fitting electric.—Box 9,768, c/o The Motor Cycle. [2487]

CLYNO Spares.—I have secured a large consignment of spares cheap, and can therefore cut prices.—Write Stampeth, enquiries Babbage, 65, Cotham Brow, Cotham, Bristol. [2897]

B.S.A. Rear Stand, new, Model K, 1920, 20/-; Rotax electric head lamp and bulbs, 20/-; leather flying helmet, new, fur lined, 20/-.—14, Fairlawn Court, Chiswick Park, W.4. [3049]

ELECTRIC Self-generating lamp set, £4; 2½h.p. Douglas, like new, all accessories, £60; 1916 Lewis, £35; 2-speed F.N. single, £36.—31a, Compton Rd., Kensal Green. [2419]

DOUGLAS Engines: 1914, 2½h.p., £12; cylinder, 15/-; crankshaft, 1911, mag., carburetter, £12; 55° Tompson-Bennett, £4/10.—Simpson, Engineer, Sunbury-on-Thames. [2807]

100,000 Shop-soiled and Second-hand Files, genuine salvage stock, all guaranteed usable; send 12/6 for 3 doz. assorted, carriage paid; approval.—Palmer's Garage, Tooting, S.W. [2607]

2½h.p. 3-speed Douglas Gear Box, new, complete with adjustable pulley and chain wheel, £12/12; carriage extra.—W. S. Bird and Sons, Motor Engineers, Henrietta Park, Bath. [9846]

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With a confused medley of impressions, you will find one or two models standing out clearly in your memory. Amongst them, these—"Roper Machines," all of them, as shown at the exhibition, and now on view here. Machines you want to know more about—please write me, or call.

Combination Models. £ s. d.

1920 A.J.S.	..	..	210	0	0
1920 7 h.p. Indian	..	..	223	14	0
1920 6 h.p. Bat Jap	..	..	210	0	0
1920 6 h.p. Bradbury	..	..	200	0	0
1920 4 h.p. Bradbury	..	..	160	0	0
1920 3½ h.p. Scott	..	..	185	0	0
1920 4 h.p. Wilkin	..	..	164	0	0
1920 2½ h.p. Hoskison-Blackburne	..	..	125	0	0
1920 2½ h.p. Wilkin	..	..	145	0	0

Solo Machines. £ s. d.

1920 7 h.p. Indian	..	..	181	14	0
1920 6 h.p. Bat-Jap	..	..	160	0	0
1920 4 h.p. Bradbury	..	..	128	0	0
1920 3½ h.p. Scott	..	..	145	0	0
1920 4 h.p. Wilkin	..	..	132	7	0
1920 2½ h.p. Hoskison-Blackburne	103	19	0
1920 2½ h.p. Wilkin	124	2	6
1920 4 h.p. Racing Indian Scout	150	0	0
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Also INDIAN SCOUT (immediate delivery) £140

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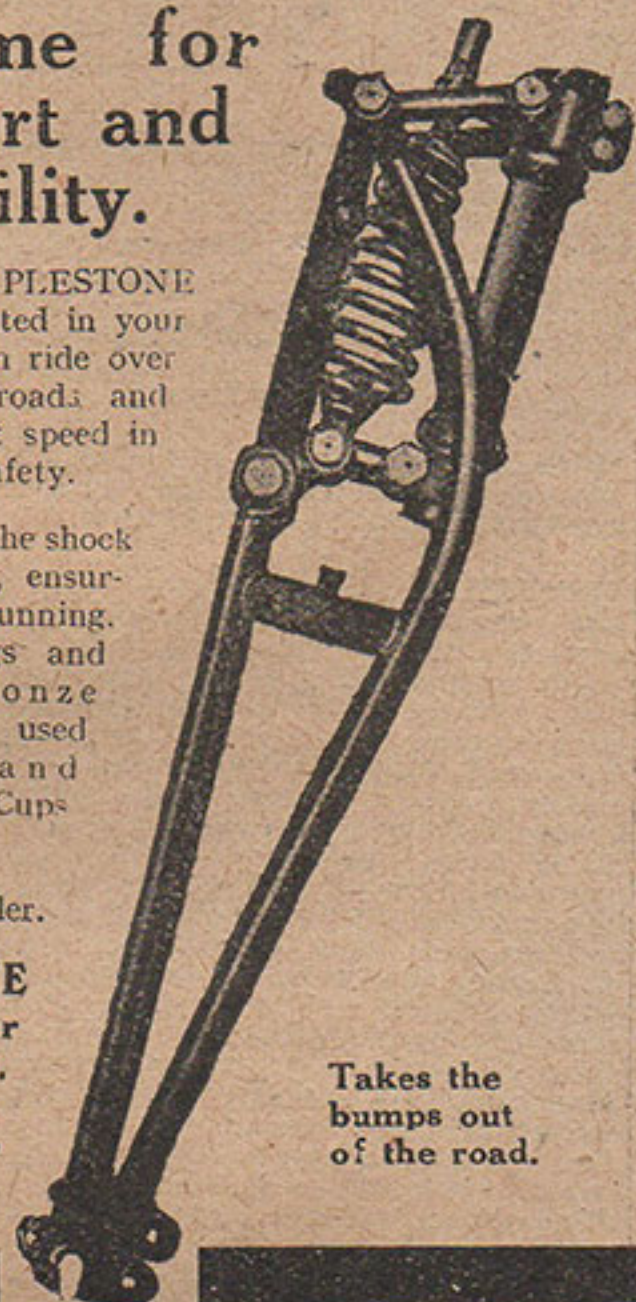
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With a MAPLESTONE Spring Fork fitted in your mount you can ride over the roughest roads and at the highest speed in comfort and safety.

It absorbs all the shock and vibration, ensuring easy running. Drop Forgings and Phosphor Bronze Bearings are used throughout, and large Grease Cups are fitted.

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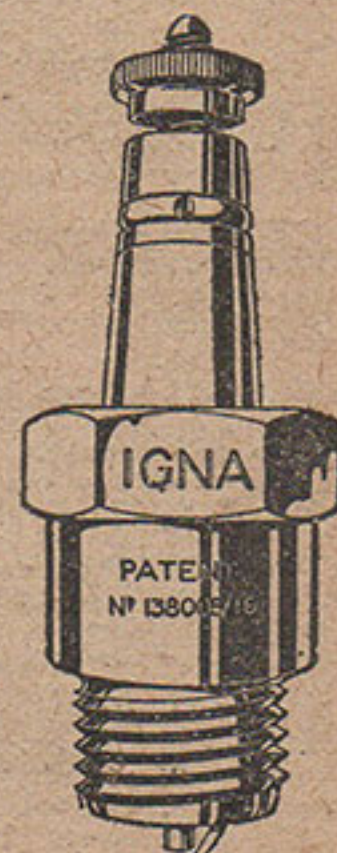
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R.H.S.

MISCELLANEOUS.

AMAC Carburettors, suitable for 2½h.p. and 4h.p. Douglas, 67/-; complete; handle-bar controls, 15/6; float chambers, 25/-; float chamber caps, 5/-—Robinsons.

BELTS.—Dunlop, ¾in. 2/9 ft., 7/8in. 3/2 ft., 1in. 3/11 ft.; John Bull, ¾in. 2/9 ft., 7/8in. 3/4 ft., 1in. 4/- ft.; Pedley, ¾in. 2/9 ft., 7/8in. 3/2 ft., 1in. 3/11 ft.—Robinsons.

CHAINS.—Renolds, 56 links, 5/8x¾, 27/-; 54 links, 5/8x¾, 24/-; 88 links, 5/8x¾, 39/7; 68 links, 5/8x3-16, W. Douglas, 19/9; spring cranked and inner links, 1/3. Morgan chains 10/9 per ft. Ex-Government stock: Renolds, 3ft. 5/8x¾, 22/6; 5ft. 5/8x¾, 37/6; 3ft. 5/8x¾, 22/6; 5ft. 5/8x¾, 37/6; Clyno, 5ft. 5/8x5-16, 16/2; Douglas driving chain, 8/-—Robinsons.

CRANKSHAFTS.—2½h.p. Douglas, 1911, 2 gns.; 1915-20, 55/-; 4h.p. Douglas, 84/-; Villiers halves, 18/- each.—Robinsons.

CYLINDERS and Connecting Rods.—2½h.p. J.A.P., £5/19/6; 4, 6, and 8h.p., £6/10; 3h.p. Enfield, 70/-; Humberette, £6; Humber, £5/15; Sunbeam, £6/10; Rudge, £4/10; Rover, £5/7/6; B.S.A., £4; Premier, £6; 2½h.p. and 4h.p. J.A.P. connecting rods, 30/-; 6h.p. and 8h.p., 79/6 pair; Douglas 2½h.p., 40/-; 4h.p., 60/-—Robinsons.

DOUGLAS Handbooks for 2½h.p. and 4h.p.; your own repairs; 1/9, post free.—Robinsons.

DOUGLAS Spares, all parts in stock, no waiting; complete list post free; special terms to trade.—Robinsons.

DRUID Forks to fit any 3½h.p. or 4h.p. machines, with 15-16in. stem, 105/-; heavy double sprung, £7.—Robinsons.

DISCS, in polished aluminium, suitable for any make of machines, easily fitted, very sporty, 60/- and 70/-; Ace, 90/-—Robinsons.

DOUGLAS Chain Cases, for any year: 2½h.p. Douglas 1913-19 2-speed, 7/6; 1920 clutch model, 5/6; 1920 non-clutch model, 3/6; complete with fittings. When ordering, state for which model required. Send for illustrations, post free.—Robinsons.

DOUGLAS Chain Guards for 2½h.p., 7/-; 4h.p. 12/8.—Robinsons.

EXHAUST Pipes for 2½h.p. Douglas, direct from engine, no back pressure, very powerful note, easily fitted. plain steel, 12/6; heavy nickel-plated, 21/- pair; clips, 1/2; union nuts, 5/-; also for any year Triumph, plain, 17/6; heavy nickel-plated, 21/-; clips, 1/-; union nut, 5/11; send for illustrations, post free.—Robinsons.

FEELERS showing exact adjustment for tappet clearance, plug points, and contact breaker; 2/6.—Robinsons.

FOOTBOARDS.—Douglas 2½h.p., complete with all fittings, 52/6, 4h.p., 30/- pair; aluminium for Baby and 4h.p. Triumph, 34/6; we will send on approval.—Robinsons.

FRAMES.—2½h.p. Douglas, £15; 4h.p. Douglas, £18/18; Triumph front portion, £8/14; rear top stays £2, rear bottom stays £4.—Robinsons.

GEAR BOXES.—Albion 2-speed free-engine, complete, 150/-; Albion 2-speed, with clutch and kick starter, £12; Roe 2-speed gear, complete with controls, 150/-; Douglas 2-speed pulley and chain wheel, 200/- the trade supplied.—Robinsons.

HANDLE-BARS.—Douglas, semi-T.T., good position, 55/-; touring 25/-; Triumph W.O., 54/-; touring, 54/-—Robinsons.

HORNS.—Covey mechanical, nickel or black, 60/-; Mecaphone (2) mechanical, 30/-; French bulb, 25/-; Clayrite bulb, 27/-; a few shop-soiled bulb horns, 15/-, usual price 30/-—Robinsons.

LAMPS.—Large head lamp sets, handle-bar fitting, £4; smaller size, ditto, 63/-; P. and H. sidecar lamp and brackets, 27/6; P. and H. rear lamp, 6/9; Lucas King's Own, 67/6; rear lamps, 6/6, 7/6, 8/6; sidecar, 13/6.—Robinsons.

LIGHTING Sets.—Hunt's electric sets, head lamp, N.P., 70/6 and 67/-, black 32/-; rear lamps, 9/6; Hellesen batteries, 14/7 and 3/9; leather cases for battery, 12/6.—Robinsons.

DOUGLAS 2½h.p. Gear Box and Clutch Spares.—2-speed secondary shaft, 27/6; 24T. screwed sleeve, 17/-; 30T. plain sleeve, 12/-; mainshaft, 17/-; dogs, 7/-; 3-speed spares, 16T. screwed sleeve, 17/-; 20T. plain sleeve, 14/-; 16T. pinion, 13/-; dogs, 9/-; ball bearings, large, 14/-, small 10/6; fixed pulleys, 10/-, adjustable, 25/-; keys, 6d.; 30T. chain wheels, 12/-; chain wheel nuts, 6d.; kick start bolts, 9/-; kick start springs, round, 9d., flat, 1/-; clutch draw bolts complete, 5/-; cuain guards, 7/-; kick start quadrants, 15/-; 2-speed clutch mainshafts, 25/-; 2-speed gear box with pulley and chain wheel, £10; 3-speed ditto, £14; 3-speed with clutch and kick-starter, £26.—Robinsons.

(This advertisement continued in third column.)

HERBERT ROBINSON
GREEN STREET, CAMBRIDGE LTD.

Telephone, 995, Cambridge.
Telegrams, "Bicycles, Cambridge."

DOUGLAS
1921 MODELS
AVAILABLE
IMMEDIATELY

We can despatch per Passenger Train IMMEDIATELY any of the following New 1921 Machines, as exhibited at the Olympia Show:

- 1921 2½ h.p. DOUGLAS, 2-sp., improved model £85
- 1921 2½ h.p. DOUGLAS, 3-speed, clutch, and K.S. £105
- 1921 4 h.p. DOUGLAS, 3-speed, clutch, and K.S. £130
- 1921 4 h.p. DOUGLAS Combination .. £170

Write for latest Illustrated Catalogues (Free) giving full particulars of the latest

1921 2½ h.p. and 3½ h.p.

Sporting Douglas Machines.

ALSO IN STOCK

1921 TRIUMPHS, SUNBEAMS, and HUMBERS.

Exchanges entertained.
Special Payment Terms arranged.

DOUGLAS SPARES

EX GOVERNMENT STOCK.
2½ h.p. DOUGLAS SPARES.

	List Price.	Our Price.
Tool Rolls, complete	51/6	25/-
Connecting Rods	25/-	19/6
Driving Chains	16/6	8/-
Front Brakes, complete	30/-	20/6
Pulleys	10/-	8/6
Cam Wheels	20/-	18/6
Sprockets	5/-	4/6
Chain Wheels	12/-	7/6
Valve Guides	3/-	2/9
Rocker Arms	7/-	6/-
Amac Caps	5/-	4/-
Tappet Heads	2/-	1/6
Petrol Pipes	5/-	2/6
Hubs	21/-	18/6
Front Forks, complete	80/-	55/-
Forks only	50/-	37/6
Fork Links	2/-	1/9
Magneto Studs	3d.	2d.
Gear Boxes	£10	130/-
Frames	£15	100/-

4 h.p. Spares.

Connecting Rods, 27/6; Crankshafts, 40/-; Hubs, 18/6; Worm Screws, 4/6; Worm Wheels, 2/-; Piston Rings, 1/9; Valves, 4/6; Petrol and Oil Filler Caps, 1/6; Bronze Operating Forks, 10/6; Head Clips, 8/6; Front Wheel, complete, less tyre, 45/-; Frames, complete, 140/-.

THE TRADE SUPPLIED.

See columns on each side of this advertisement for other interesting items, or send for complete Lists (Post Free) of

DOUGLAS, TRIUMPH, VILLIERS, and STURMEY-ARCHER SPARES.
ALL IN STOCK.

ROBINSONS
GREEN STREET, CAMBRIDGE

MISCELLANEOUS.

MMAGNETOS.—Unused shop-soiled Thomson-Bennett, £6/17/6; twin, £8/17/6; C.A.V. twin-cylinder model, £6/4. Can be had on approval.—Robinsons.

MOTOR Cycle Covers.—Shop-soiled Moseley touring, 25/-; heavy, 45/-; Pedley touring, 30/-, extra heavy, 45/-; tubes, Moseley, Pedley, St. Helens, all sizes, 7/6 each.—Robinsons.

MUDSHIELDS.—College mudshields for winter, 16/6, 20/6, 32/6, and 36/6; Stirling metal mudshields, 50/-—Robinsons.

OVERALLS.—Suits, very heavy, dark fawn, double breasted, very warm, waist-foot leggings, 67/6; lightweight, 50/-; cheaper quality, 37/6. Black waterproof suits, 65/-; leggings with seats, 40/-; waist-floors, 30/-; single legs, 19/6. Brooks leggings, short brown, 28/-; long brown, 45/6; black, short, 32/- Any suit sent on approval.—Robinsons.

DRUID Forks.—Complete for 3½h.p. and 4h.p. machines, 5½in. head, 1½in., 15/6, column, £6/5; heavy double spring type, £7.—Robinsons.

HUBS.—2½h.p. Douglas, £1/5; 6h.p. Enfield, rear, complete, £3/18/6, front, £1/6; 3h.p. Enfield, rear, £3/16, front £1/5; Triumph 1919 rear hub, 31/10; A.J.S., £4/4; B.S.A., 30/-—Robinsons.

PISTONS for 3½h.p. Premier, 35/-; J.A.P. 4, 6, and 8h.p., 35/-; 2½h.p., 30/-; Triumph 3½h.p. and 4h.p., 30/-; Douglas 2½h.p. 18/-, 4h.p. 26/-; 3½h.p. 25/-; New Hudson, Indian, Sunbeam, and B.S.A. pattern, 30/-; Rudge, 39/9; 8h.p. Humberette, 35/-; Rover, 35/-; all complete with rings and gudgeon pins; Rover 1913, 35/-—Robinsons.

RENOLDS Chains.—101 links, 5/8x¾, 47/8; ditto, 56 links, 27/-; 5/8x¾, 54 links, 24/-; ditto, 88 links, 39/7; Morgan chains, 10/9 foot; rivet extractors, all sizes, in stock, 7/3 and 10/9; spring cranked and inner spare links, 1/3.—Robinsons.

TRIUMPH Carburetter Spares.—Carburetter complete, 100/10; needles, 7d.; air caps, 3/10; springs, 5d.; air and throttle pistons, 2/3; ticklers, 1/6; petrol union nuts, 5d.; jets, 7d.; needle valves, long 4/10, short 3/8; controls, 26/10.—Robinsons.

VALVES.—Rover, A.J.S., B.S.A., Enfield, 2½h.p., 2½h.p., 4h.p. 6h.p., and 8h.p.; J.A.P. 4h.p. and 2½ h.p. Humber, New Hudson, Douglas, Premier, James, Williamson, Ariel, Harley-Davidson, Indian, 5/6 each.—Robinsons.

VILLIERS Spares.—Cylinders, 52/6; exhaust pipes, 10/-; silencers, 18/-; crank case halves, complete with bushes, £2 each (state which half required); crank pin and nuts, 9/6; connecting rods, 12/-; pulley and screws 6/8; driving centre, 9/-; locking nut and washer, 1/6; extractor, 4/6; pistons, 15/8; gudgeon pins, 3/3; crank case bushes, 5/3; shafts, 18/-; set of rollers, 4/6; piston rings, 2/6; flywheel, 27/6; flywheel caps, 2/-; sprockets, 5/3; oiling bolt with elbow union, 5/-; chain covers, 16/-; magneto chains, 5/-; release valves and springs, 4/6; complete illustrated price list, post free. The trade supplied.—Robinsons.

PISTON Rings.—High tensile cast iron, Douglas, Triumph, J.A.P., Indian, Sunbeam, Rover, A.J.S., Baby Triumph, P. and M., Humber, Premier, Enfield, B.S.A., all sizes in stock, no waiting, 1/9 each.—Robinsons.

STURMEY-ARCHER Countershaft Gear Spares.—Gear box covers, £5; Dix controls, £2/10; axles, 16/-; main gear wheels, £1/3/6; sliding pinions, 12/-; low gear axle pinions, 7/-; kick start pinions, 4/-; ball bearings, 9/6; layshafts, £3/1; layshaft sliding pinions, 10/-; cranks, 17/-; fibre rings, 5/-; clutch sprockets, £2/2; ball caps, 7/-; kick start springs, 1/3; pulleys, 22/6; send for our complete list of Sturmev-Archer countershaft gear spares.—Robinsons.

TERRY'S Spring Links.—B.S.A., Rover, Douglas, and Druid forks, 3½in. centres, for any make of machine, 18/6 pair.—Robinsons.

TRIUMPH Spares. Compression taps, 2/3; rear stands, 34/-; front guard stays, 5/- pair; rear carriers, 40/-; valve caps, inlet and exhaust, 4/8; valve cotters, 2d.; pistons complete, 25/-; connecting rods complete, 28/10; connecting rod rollers, 2/2; cam wheels, 25/-; rocker arms, inlet and exhaust, 11/- and 10/4; tappets complete with guides, 29/8; union nuts, 3/3; rear brake pads, 3/9; rear brake spring, 5d.; kick start springs, 1/-; foot brake complete, 37/6; fork buttresses, 12/6; valve springs, 8/9; gudgeon pins, 3/9; bushes, large, 4/9, small 2/9; piston rings, 1/9; valves, inlet and exhaust, 6/6; valve springs, 9d.; filler caps, 2/6; footrests, rubber, fitted to frame, 5/6 each; footrests complete, 5s/-; flywheel, sprocket side, with mainshaft, £2/18; flywheel, gear side, with gearshaft, £2/17; crank case bearings, 11/6; tank complete, £5; magneto control complete, 14/-; aluminium footboards, junior or countershaft, 34/6; front portion of frame, £7/5; top back stays, 5s/-; bottom back stays, 67/-; front fork girders, 34/-; front stand, 23/-; hub complete, front, 25/2, rear, 26/6; front spindles complete, 12/-, rear 13/4; front wheel complete, less tyre, 49/2; rear wheel ditto, 77/-; adjustable pulleys, 22/6.—Herbert Robinson, Ltd., Green St., Cambridge. Tel.: 995. T.A.: Bicycles.

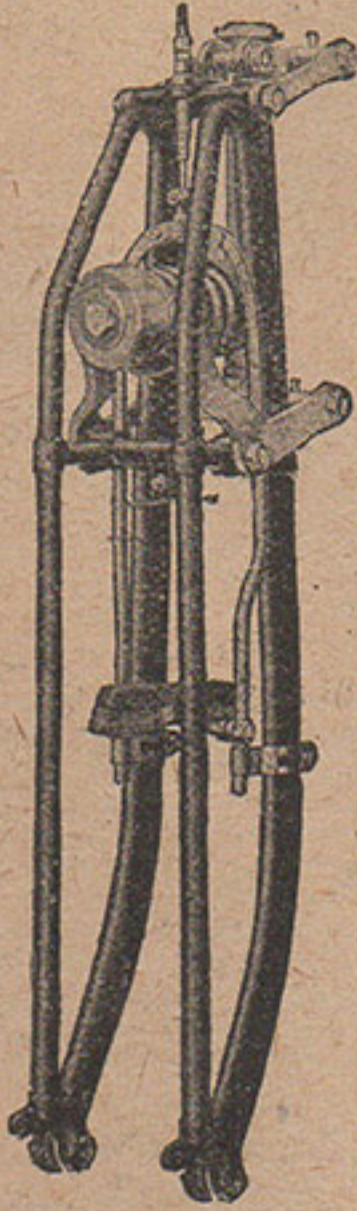
[2639

— THE — SAXON AT OLYMPIA.

The praise and admiration showered upon Saxon Spring Forks at the Show marks just another instance of the great popularity enjoyed by the best of all spring forks. Saxons still remain pre-eminent in shock absorbing qualities, giving perfect ease in steering and vibrationless comfort a wheel.

Have you ordered yet? Full particulars and price from

S. R. Ridgway,
73, Digbeth, Birmingham.



MISCELLANEOUS.

NEW Binks, Senspray, and Capac carburettors to suit any machines; liberal exchanges quoted. 1920 nearly new carburettors at special prices.—Collier's Motories, Horton St., Halifax. [2533]

REMY Dynamo (late), £6; large P. and H. lamp set, complete, brackets, 27/6; never fitted; fur lined helmet, 14/- (new); Stewart speedometer gear box, 12/6.—97, Angell Rd., Brixton. [3045]

PULLEYS for any Motor.—Adjustable, 5in. diameter, 15/6 plated; fixed, 4 1/2 in. diameter, 8/6; guaranteed; post free.—J. Perkins, 455, High Rd., Leyton. Phone: 248 Walthamstow. [3270]

LADIES' Suede Leather Hats, 10 colours, latest fashions; 9/6, worth 30/-; send 2d. addressed envelop for illustrations and full set patterns.—Swift Co., 3, Parade, Northampton. [2628]

PISTONS from Stock.—B.S.A., Bradbury, New Hudson, Precision, Harley, Scott, Rudge, Sunbeam, Singer, Enfield, J.A.P., Premier, Triumph.—W. Cole, 53, Sarehole Rd., Sparkhill, Birmingham. [X2462]

TRANSFERS.—Head, tank, and line transfers for motors. Complete sets for pedal cycles, single colours 1/6, double colours 2/-; 2d. stamp brings list.—Axon, Station Buildings, Altrincham. [X2423]

HARLEYS. Harleys.—If you want speed without getting covered with mud, equip your machine with Barker's mud shields; set, £2/2.—Barker's Motors, 194, Balham High Rd., S.W.12. [1843]

RILEY 4 1/2 h.p., W.C., pump, B. and B., shaft clutch, £10; Riley 2-speed all chain gear box, £3; perfect, suitable motorcar, boat, stationary.—4, Sadler Crescent, Lea Rd., Birmingham. [X2919]

WESTWOOD Aluminium Head Lamp, good condition 10/-; Wood-Milne 26x2 1/4 x 2 1/2 in. extra heavy 4-ply, brand new from makers, unused, 45/-.—T., Barnett Hotel, Camborne, Cornwall. [1410]

B. and B., 1 1/2 in., complete, 17/6; mag. Bowden control, 8/6; B. and B. levers, 5/-; Triumph footrests, complete, 15/6; and rear brake, less shoe, 8/6.—47, Millbrook Rd., Brixton, S.W. [2777]

3IN. Cushman Chuck and spares, £1/15; two circular saws and spindle, £1/4; 3in. Emery wheel and spindle, 10/-; sprocket wheel, 32 teeth, 3/8 x 1/4, 15/-.—Morris, 15, Beaconsfield Rd., Chatham. [2847]

NUTS, bolts, washers, for all motorists, all sizes. Sample bag of 50, 2/6; 100, 4/3; 200, 7/6; 300, 11/-; 500, 15/-; 1,000, 30/-; carriage paid.—Special Nut and Bolt Co., 63, Well St., Hackney, E.9. [6456]

TRANSFER Lining, complete set for pedal bicycles in gold, red, or green, also in double colours; prices on application.—The British Transfer Printing Co., Ltd., Transfer Specialists, Coventry. [0114]

UNBREAKABLE Chrome Nickel Valves, guaranteed one year, any pattern, 7/- each, 12/- pair, step-cut piston rings, 5/- pair, post free, per return.—Capacity Tool Co., Broseley, Shropshire. [2465]

£23, 4 1/2 in. screw-cutting hollow mandrel lathe; 6in., £95; second-hand 6in., £45; pillar drills, £7/10; miller, £35; shaper, £30; chucks, 9/6; Balata belting, 1/- foot.—Ashton, Granary Lane, Mirfield. [2373]

4h.p. Douglas Engine, £15; S.H. carburettors from 25/-, B. and B., Amac, Claudel, Triumph, B.S.A., Senspray, Binks; lamp sets from 30/-.—Putney 1652.—Britnell Bros., 43-45, High St., Fulham. [2705]

AN Exceptional Opportunity.—Footboards, new, 12/6 per pair; 4h.p. and 2 1/2 h.p. Douglas, aluminium, or special line lino covered, 10/6 pair, brass edged; packing and postage 1/- extra.—Below.

LAMPS.—P. and H., ex-W.D., acetylene, brand new, 4 1/2 in. lens, complete with generator, £2/12/6; packing and postage 1/6 extra. Generator only, large size, 12/6; packing and postage 1/- extra. Below.

HANDLE-BAR Muffs, fur lined; a wonderful bargain, 6/6 pair; packing and postage 9d. extra.—Below.

KNEEGRIPS, leather; 6/6 pair; postage 6d. extra.—Below.

TRIUMPH and Douglas Spares of all kinds in stock. We specialise in parts for the above machines, and can supply anything you require; write stating your requirements; cheques and P.O.'s to be crossed.—Light Car and Motor Cycle Engineering Co., 26 and 26a, Tulse Hill, London, S.W.1. [2965]

POWERPLUS Indian cylinder, connecting rod, £4, offer; touring bars, £2/15; 28in. speedometer, £3/15; Mabon clutch, 15/-; New Hudson silencer, 12/-.—Seward, Red Hill, Bassett, Southampton. [2818]

AMAC, 28/-; pair forks, 10/-; 3 1/2 h.p. Ariel motor cycle, £27/15; Belsize gear box, £5; Humber, £4; car carburettors, Sthenos 58/-, Poppe 50/-, B. and B. 17/6.—47, Millbrook Rd., Brixton, S.W. [2778]

RELIANCE Company's Business is the supply of dependable writing machines; 360 always ready, to suit all requirements; moderate prices.—Reliance House, 2, Gray's Inn Rd., W.C. Phone: Holborn 2388. [1321]

J.A.P. Specialists.—All genuine J.A.P. Parts in stock; also a quantity of J.A.P. W.D. parts, at greatly reduced prices; quotations by return.—B.P. Garage, 40, Murray Mews, Murray St., Camden Town, N.W. [2260]

ELECTRIC Light Bulbs for Motor Cycles and Cars, one watt and half watt types stocked, any voltage.—W. T. Clarke and Co., Ltd., Electrical Engineers, Silver St., Near Oxford St., W.C.1. Phone: Museum 1019. [9601]

THE HALIFAX MOTOR EXCHANGE

New Address—
**25, HORTON STREET,
HALIFAX.**

EXCHANGES WANTED.

NEW MODELS.

LAGONDA , 11.9 h.p., coupé, dickey ..	£495 0
DOUGLAS , 2-3-seater	£500 0
CALTHORPE , 4-seater	495 gns.
MERRALL-BROWN , 4-cyl., 3-wheeler	£325 0
COVENTRY-PREMIER , 3-wheeler ..	£288 15
REX-BLACKBURN Model 55 8 h.p. Combination, 28x3, spare wheel ..	£218 18
DOUGLAS 4 h.p. Combination	£170 0
DOUGLAS , 2 1/2 h.p., 3-speed, solo	£100 0
SCOTT , 3 1/2 h.p., 2-speed	£130 0
ROYAL RUBY , 3 h.p., spring frame ..	£120 0
NORTON , Big Four	£135 0
NEW IMPERIAL , 2 1/2 h.p., 2-speed ..	£80 17
B.S.A. 4 1/2 h.p. 3-speed all-chain Com- bination, hood, screen, and carrier ..	£161 15
RUDGE-MULTI , 3 1/2 h.p., I.O.M. Model ..	£110 5
SCOTT Combination, 3in. Palmers	£183 10
BRADBURY , 6 h.p., and Sidecar	£187 10
AUTOPEE Scooter, shop-soiled	£29 15
HENDERSON , 4-cylinder, latest model ..	£220 0

Easy payments arranged.

AGENTS FOR

**AMERICAN EXCELSIOR, BRADBURY,
DOUGLAS, ENFIELD, HENDERSON, NEW
IMPERIAL, NORTON, SUNBEAM, SCOTT,
and TRIUMPH Motor Cycles; L. S. D. and
MERRALL-BROWN 3-WHEELERS; AIRE-
DALE, DOUGLAS, CALTHORPE, and LAGONDA
Light Cars. Exchange enquiries solicited.**

SECOND-HAND MACHINES.
Guaranteed in Running Order.
Solo Machines.

A.B.C. , 1920, dyno lighting, superb mount	£150 0
DOUGLAS , 1920, 2 1/2 h.p., 3-speed, lamps, horn, etc., almost as new ..	£87 10
CLYNO , 1920, 2 1/2 h.p., 2-speed, like new	£62 10
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ROYAL RUBY , 2-stroke	£39 10
TRIUMPH , 3 1/2 h.p., single-speed	£30 0
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DOUGLAS , 2 1/2 h.p., 2-speed, as new ..	£69 10
TRIUMPH , 4 h.p., single-speed	£49 10
METRO-TYLER , 2-speed, red	£62 10
TRIUMPH , 3 1/2 h.p., 3-speed hub	£42 10
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Passenger Machines.

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ARIEL 3 1/2 h.p. 1920 3-sp. Combination	£125 0
VINDEC , 5 h.p., 2-speed, and Sidecar ..	£55 0
HARLEY , 1920, and new latest type bulbous back Sidecar	£198 10
TRIUMPH 3 1/2 h.p. 3-speed Combination	£64 10
HUMBER , 1919, 3 1/2 h.p., 3-speed, flat twin, 1920 Millford Sidecar	£125 0
CLYNO 6 h.p. 3-speed Combination ..	£95 0
INDIAN 7-9 h.p. spring frame Com- bination, very fine condition	£99 10
DOUGLAS 1919 4 h.p. Combination ..	£135 0
B.S.A. , 1912	£39 10
CHATER-LEA 8 h.p. coach Combi- nation, all-chain, 3-speed, F.E.	£85 0
DOUGLAS 1920 4 h.p. Combination ..	£152 10

NEW ACCESSORIES.

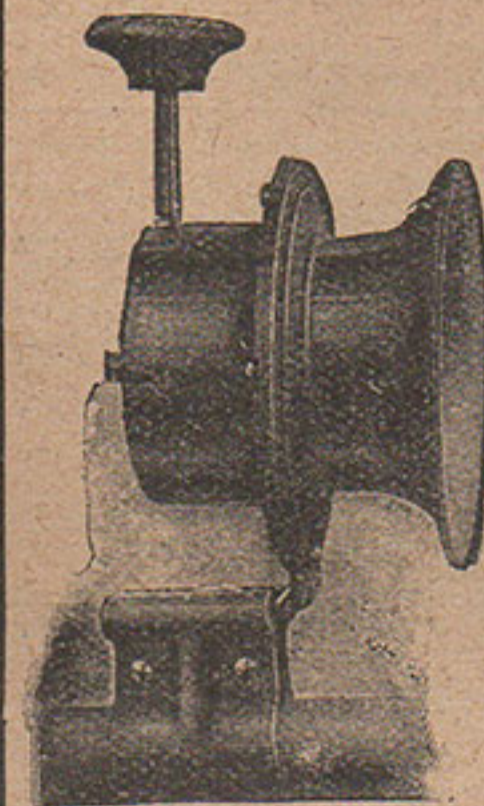
Easting Windscreen, standard	£4 10 0
C.A.V. Magnetos, from	£7 17 6
Thomson-Bennett Magnetos, from ..	£7 17 6
Cowey Horns, 50/-; Klaxons	£1 16 0
Double-twist Bulb Horns	17 6
Cowey Speedometers	£6 0 0
Bonnixsen, Trip	£6 16 6
Smith, Trip	£5 15 0
Binks Carburettors, post free	£4 16 10
Capac Carburettors, post free	£4 6 0
New Army Knapsacks, 13 1/2 x 11in. ..	5 6
Plated T.T. Bars for Triumphs	£1 5 0
One-inch Touring Bars, black	15 0
26x2 1/2 x 2 1/2 Palmer Sidecar Covers ..	£1 15 0
Dixie Mag. for Douglas, second-hand	£2 15 0
Coachbuilt Sidecar Bodies	£6 15 0

Carriage extra.

CAPAC CARBURETTORS
constitute a remarkable combination of slow running, abnormal power, together with extreme simplicity. Price £4 6s., including packing and carriage. Your present carburettor taken in exchange.

THE LONG HORN

Mechanical—not a Musical Box.



THE function of a horn is to sound an alarm to clear the road—the Long Horn does this more effectively than any other warning signal at present invented. The Long Horn is not a musical box but a real road clearer—the hoarse growl does the trick at once; better scare a red-strian than kill or injure him with disastrous consequences to follow.

Fit the Long Horn to your car—it's the safest alarm under any circumstances. It can be modulated according to pressure from a mild warning to a sharp attention-compelling command.

FITS ANY MAKE OF MOTOR CYCLE.

LENGTH 4 1/2 in. Price 36/-
DIAMETER OF BELL ... 4 1/2 in. each.
WEIGHT 3 1/2 lbs.

FULL PARTICULARS FROM
MARKT & CO (LONDON), LTD.
98-100, CLERKENWELL ROAD E.O.

GRIMSHAW LEATHER

& Co. LTD.

MOTOR CYCLES, CYCLE CARS.

We can offer you the finest selection of *Motor Cycles* and *Light Cars* in the North.

SOLOS.

SPARKBROOK INDIAN SCOUT
BEARDMORE PRECISION

COMBINATIONS.

INDIAN MODEL N.E.20 REX
ACME-J.A.P.

LIGHT CARS AND
CYCLE CARS.

SINGER ENFIELD-ALLDAY
G.N. CASTLE THREE
A.B.C. SKOOTAMOTAS

Send your enquiries to us.

NEWCASTLE ON TYNE

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TURPIN'S

FOR LIGHT CARS & MOTOR CYCLES

22-29 PRESTON ROAD,

BRIGHTON

MAIN LONDON ROAD

ORTO HOODS & APRONS.

The smartest and best designed hood on the market. Price complete with Side Curtains and all Fittings plated finish, £4.

Special Models for Matchless, Harley-Davidson, Douglas, Enfield, Indian, James, Blackburne.

APRONS.—Coverall 16/6, Storm, with neckhole, 20/-; Storm Coverall 21/6, Detachable Cape 25/- in best quality Double Texture Twill.

ATKINSON'S, 306, Uxbridge Rd., Shephard's Bush, W.12.
Phone: Hammersmith 140.

NEW WOODEN HUTS.

Dwellings, Bungalows, Offices, Workshops, Motor Car Houses, Pavilions, Stables, Stores, Canteens, Greenhouses, Frames, Heating Apparatus, Rustic Work, Barrows, Stoves, Asbestos Sheets, Poultry Appliances of every description, Glass, Horticultural, Window, and Picture.

Illustrated Lis. Post Free.

T. BATH & CO., LTD., 18, SAVOY ST., LONDON, W.C.2.

MISCELLANEOUS.

GENUINE J.A.P. Parts.—J.A.P. cranks, 5h.p. and 8h.p., 50/- pair; connecting rods, 50/- and 60/-; valves complete, 4/- each; rings, 2/- each. I have all parts for J.A.P. engines. Stamp for reply.—Hawkins (below).

BURMAN 3-speed Countershaft Gear Box, £15; and I have all parts for 3-speed gear box in stock. Seal mainshaft driving gear, layshaft, and all others in stock. Stamp for reply.—Hawkins (below).

NEW IMPERIAL Frame for 8h.p. J.A.P., and back stays, 50/-; heavyweight Druid forks, 50/-; new Imperial front wheel, 28x2 1/2, complete, 30/-; rear wheel, complete with chain sprocket, 50/-; Imperial aluminium footboards, 10/- pair. I have all parts for Imperial in stock. Stamp for reply.—Hawkins (below).

ROVER Frames for 5h.p. and 8h.p. J.A.P., with back stays, 50/-; forks, 50/-; mudguard front, 15/-; rear, 15/-; footboards, 10/- pair; front wheel, 30/-; rear wheel, complete with chain sprocket, 50/-; aluminium chain cover, 20/-; tanks; and I have all parts from Rover in stock. Stamp for reply.—Hawkins (below).

1,000ft. of New Chain, 5/8x3/8 and 3/4x7-16, at 5/- a foot; or 4/- foot in 24ft. lengths.—Hawkins (below).

500 Gross of 5/8x3/8 Connecting Links, and 3/4x7-16 ditto, and 5/8x3/8 spare links, and 3/4x7-16 cranked links; 5/8x3/8 ditto, 10d. each, or 7/6 doz.; and 5/8x3/8 links for spring chains for Rovers, 1/6 each; carriage extra.—Hawkins (below).

1,000 Pairs of Heavyweight Druid Fork Springs, ex W.D., new, 2/- pair; and 500 Rover fork springs, 2/- pair; postage 9d.—Hawkins (below).

500 Pairs of Rims, 28x2 1/2, all new, 7/6 pair.—Hawkins (below).

1,000 J.A.P. Valves, all complete, 4/- each, or 36/- dozen; 500 J.A.P. rings, 2/- each, or 18/- dozen.—Hawkins (below).

SUNBEAM Sidecar Wheels, 20/- each; springs, 10/- pair. I have a lot of Sunbeam sidecar bodies, want upholstering and painting, 50/-. I have all parts for Sunbeam sidecar in stock. Stamp for reply. Carriage extra.—Hawkins (below).

50 LARGE Car Generators, 15/- each. I have a lot of parts for B.S.A., Triumph, Matchless, and Rover gear box parts. Stamp for reply.—Hawkins, 455, York Rd., Wandsworth. [9753]

INDIAN 7-9h.p. 1915-16 Spares: Frames, front, rear wheels, hub brake, flywheels, domes, cylinder, chain, crank, timing cases, connecting rods, clutch.—Indian, 45, Handcroft Rd., West Croydon, Surrey. [2848]

CYLINDERS In Stock (New).—Triumph (1910-20), 3 1/2h.p. and 4h.p. Singer, 3 1/2h.p., 3 3/4h.p., and 2 1/2h.p. Precision, 3 1/2h.p. Premier, 2 1/2h.p. Premier, F.N., 2 1/2h.p. J.A.P., 3 1/2h.p. Peugeot, 7-9h.p. Peugeot.—Below.

CYLINDERS.—Enquiries invited for B.S.A., Rover, 3 1/2h.p. Brown, New Hudson, 5-6h.p. Precision, and any make of cylinder.—Noyse Engineering Co., Rugby. [X2975]

WE Can Bring your machines up-to-date and make it into a countershaft model by fitting a new back, with Sturmer-Archer gear box; any machine converted.—A. Pilkington and Co., 390, Lichfield Rd., Birmingham. [2912]

SPARES, Spares.—Get them quickly and cheaply. I can supply most spares for leading makes. Try me for satisfaction.—R. G. Gamble, the spare part specialist, Blue Ball Yard, St. James's St., Piccadilly, Gerrard 6536. [2959]

1919 6h.p. Royal Enfield Front Wheel, £1/1, as new; speedometer, Corbin Brown, to fit 1915 Indian, £4; 1919 Indian dynamo set, head light, sidecar lamp, and switch, £10.—Horswill, 42, Bridge St., Chester. [2340]

B.S.A. Parts (1914), nearly new, front forks, complete, 50/-; front wheel, 10/-; semi-T.T. bars, 10/-; front brake, 8/-; brand new C.A.V. magneto, anti single, cost £7/17/6, sell £5/10.—9, Osborne St., Barrow-in-Furness. [2507]

TRIUMPH Pattern W.D. Wide Sporting Handlebars, new, 27/-. Write me for any Triumph parts you want; say whether new or second-hand. Stamp for reply will oblige.—Ward, 11, Radford Rd., Leamington Spa. [X2977]

CLYNO Spares at Catalogue Prices.—Not the largest stock, but the cheapest, compare our prices before buying elsewhere; magneto platforms, 5/-; stamped enquiries.—Motor Cycle Dept., 341, Upper St., London, N.1. [2758]

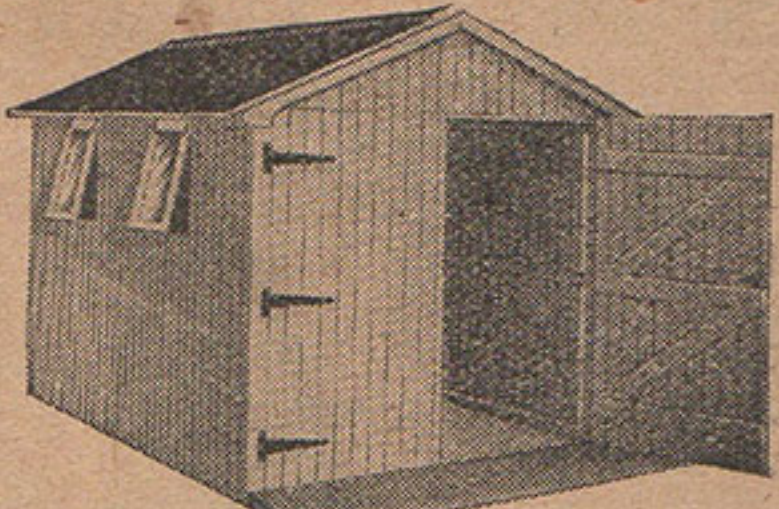
RUDGE Long Exhaust Pipes, weldless steel tubing, complete, all attachments, 37/- carriage paid; nickel plated, 15/- extra; fit in 5 minutes.—C.W. Motor Co., 209, Broadway, West Hendon, N.W. Phone: Kingsbury 162. [2913]

KNICKER Stockings, hand knit from Harris brushed wool, all colours, 14/6 pair, post free X approval. Harris tweels for sports suits, exclusive quality; latest patterns free.—T. B. Macaulay, Harris Tweed Warehouse, 90, Stornoway, Lewis. [1658]

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10 1/2 ft.	7 ft.	8 ft.	£19 0 0	£5 10 0
11 ft.	8 ft.	9 ft.	£23 10 0	£7 0 0
15 ft.	12 ft.	10 ft.	£39 0 0	£14 0 0
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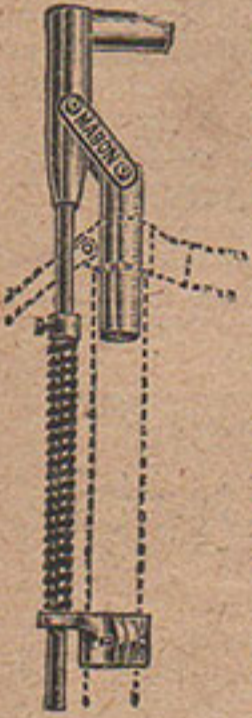
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2 1/2 h.p. Douglas Spares.—Gear boxes, £4; frames, £4 25; forks complete, 70/-; front wheels, £1, rear £2; connecting rods, 17/6; front/brakes, £1; carriers, 15/-; belts, 7/6; saddles, 25/-; lamp sets, £1; any parts supplied.—Below.

TRIUMPH Frames, £3; front mudguards, 17/6, rear, 10/-; carriers, 15/-; stands, 12/6.—Below.

TOOLBAGS, Douglas and Triumph, 4/6 each; new flying helmets, fur-lined, 17/6.—Below.

LAMPS and Generators, £1 set; good belts and fasteners, 7/6; saddles from £1; new Miller generators, 12/6.—Sulina Garage, Sulina Rd., Brixton Hill, S.W.2. Phone Streatham 40 and 2563; carriage and postage on all goods extra. [2116]

NEW Admiralty Pattern Black Oilskin Trousers, fully lined, 8/6; jackets to match, 10/6; new packs, 3/6; part worn, 2/6; haversacks, 2/6; high-class Virginia cigarettes, 500 for 19/-, post free; trade supplied.—Sutherland, Bridge End, Wick. [2558]

PULLEYS Supplied to suit your engine, gear box, or cycle car, and made either fixed or adjustable from 3in. to 12in. diameter; spare flanges made to any pattern.—A. and E. Lower, Engineers, 670, Seven Sisters Rd., South Tottenham, N.15. [2227]

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GENUINE Douglas Spare Parts of every description in stock, at Douglas catalogue prices; trade supplied. We are the largest stockists of Douglas spares in the South of England.—Vivian Hardie and Lane, Ltd., 24, Woodstock St., New Bond St., W.1. [0276]

HARLEY Cylinders, £3/10; tanks, £2 each; Schebler carburetter, new, £4; saddle top, £1; plugs, 2/-; enquiries invited for Harley spares. Indian gudgeon pins, 4/-; small bushes, 5/-; valves, 3/-; crank pin, 7/6.—Stock, 107, Coningham Rd., Shepherd's Bush. [3048]

TRIUMPH and Other Parts, second-hand and new, a large assortment, practically any part for any year machine; also wheel building, enamelling and plating, best Coventry finish; belt rims supplied and built on to wheels, etc.—Wright, Avon House, Whitnash, Leamington. [X2891]

DYNAMO Car Lighting, £4/17/6; switchboard, £1/7/6; electric motor 1/2 h.p., £6/10; Druid forks, stem missing, suit 3 1/2 h.p., 30/-; contact breaker, Bosch DU4, anti, 30/-; or exchange good C.B. sidecar.—Broome, Bungalow, St. George, Abergele, N. Wales. [2454]

SPEEDOMETERS.—Stewart gear boxes in stock, 22/6 complete; flexible shafts, 20/-; trade supplied. Repairs to all makes of speedometers; Stewart repairs a speciality; new and second-hand sets supplied.—The London Speedometer Co., Kramer Mews, Earl's Court, S.W. [9284]

FOR Sale, a large quantity of new and good second-hand engine spares, suitable for 1914 and upwards Triumphs, 2 1/2 and 4h.p. Douglases, B.S.A., etc.; state requirements, or would accept cash offer for the lot; seen by appointment.—Box 9,773, c/o The Motor Cycle. [2562]

ALUMINIUM Number Plates, raised polished lettering and border on black background, 12/6 a pair, please state make of motor cycle when ordering; car size plates, 20/- a pair, post free, delivery 2 days.—Martin Bros., 90, Brunswick St., Hackney Rd., London, E.2. [9095]

DRUMMOND Lathes, all models, 3/2in. and 4in., separate foot motors, stands and treadles, counter-shafts. Now in stock. Immediate delivery. Engineers' fine tools, micrometers, verniers, etc. Price list.—Barns and Co., Ltd., 54, and 63, Stapleton Rd., Bristol. Phone: 1535. [9621]

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1914 Premier C.B. Combination, 3-speed clutch, lamps, overhauled, splendid condition, 2 spare handle-bars, 2 lamps, horn, Klaxon, 3-speed reverse gear box, tyres, tubes, overalls, heavy motor coat, several other things; lot £65; separate.—2, West View, Farnborough Rd., Hants. [9185]

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FOR Sale, 5-7h.p. Coventry Victor engine, brand new, complete, less carburetter, Sturmev-Archer 3-speed box, 2 700x80 Avon Sunstone covers and tubes, 4 Lynton disc wheels, cycle car steering heads, and hubs for Lynton wheels; letters only.—Simms, 56, Green Lane, Oldham. [X2884]

TRIUMPH Parts.—Every part, any year, in stock; new or second-hand, guaranteed serviceable. Enclose stamp for reply. Why not second-hand goods in place of new while prices are so high? Half the price, satisfaction guaranteed.—Forfield Motors, 11, Forfield Place, Leamington Spa. [X2976]

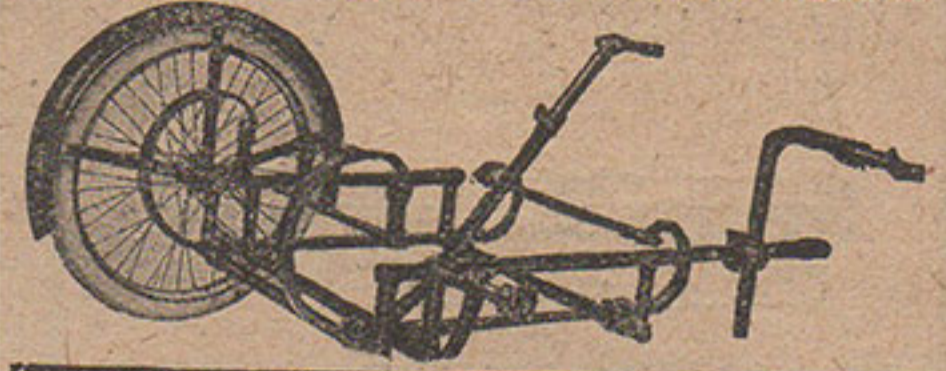
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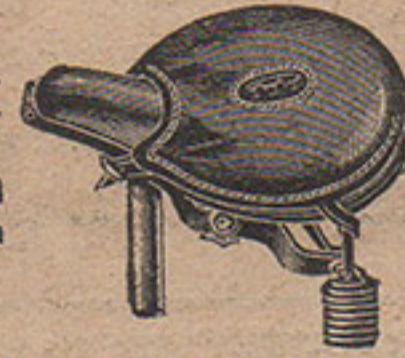
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Tubes, 1/2 (post free).

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Punctures cease—and Rear Cover wears 20% longer.
From All Agents 8/6. By post 9/-
Write for Free Leaflet, "A Joyride over 80,000 Miles."
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REX 1909 3 1/2 h.p. Cylinder, new, £4/10; Precision 2 1/2 h.p. cylinder, new, £4; Villiers cylinder, second-hand, perfect, £2; Humber 1911 cylinder, new, £3/10; 1913 ditto, £3/15; 1914 w.c., £4/10; Rex twin cylinders, second-hand 50/-, new £4/15; Triumph 1909, S.H., £3.—Below.

LARGE Consignment of Belt Rims, suit Triumph, fixed and free engine, 11/6 each; also many other sizes.—Below.

SPECIAL.—Sidecar mudguard valances, complete with stays, new, 12/6; Rex twin connecting rod, £1; pair of Indian connecting rods, 30/-; Humber connecting rod, £1; dozens of connecting rods in stock, many patterns; Villiers free engine wheel, £3/5; Binks 3-jet, complete, 35/-; Armstrong belt wheel, £1; large quantity of Armstrong and Sturmey gear parts. I have a tremendous stock of all accessories, especially old pattern parts.—Syd. Pearson, Gate House, Cheylesmore, Coventry. [X2984]

TRIOUMPH Chain Cases, 12/6 each; Douglas 2 1/2 h.p. wheels, back £1, front 18/-; 26in. tubes, 2/6 each; second-hand belts, all sizes, from 7/6; 3 Indian sidecars, minus wheels, £4/10 each; Indian cylinders, 15/- each.—Speechley, 1, Gunnersbury Lane, Acton Hill, W.3. Phone: Chiswick 1902. [2792]

LEG Shields for any make of machine, polished aluminium, 22/6; light steel, stove enamelled black or finished in any colour, 17/6. The above are wire-edged, swaged, and complete with frame fittings. Packing and carriage free. Trade supplied.—Mersey Disc Co., 34, Sutton St., Warrington [2898]

MOTOR Cycle back wheel, 26x2 1/2, fitted with new extra heavy Dunlop cover and tube, £4; new 26x2 1/2 Palmer cover, 4-ply, 45/-; new J.A.P. pulley, adjustable, 7/6; rear part frame, fitted with Sturmey-Archer countershaft bracket, £1.—Apply, Howich, Keeper's Corner, Burstow, Surrey. [2478]

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INDIAN.—The Dennis Accessories Stores, 89, Brixton Rd., London (Phone: Brixton 3129), can supply all 7-9 h.p. parts from stock, all new, including frames, mudguards, wheels, silencers, exhaust pipes, tanks, controls, brakes, linings for clutch and brakes, tools, gears, clutches, kick starter. They also specialise in Indian repairs. [9605]

TRIOUMPH countershaft 1921 engine, brand new, £25; ditto Sturmey-Archer gear box, £18; centre frame, back stays, 1914 cylinder complete, new, £4; 3 1/2 h.p. decompressor engine, less cylinder and piston, £8; everything for Triumph; write your requirements.—Miles, 11, Chichester Rd., West Kilburn, N.W.6. [3042]

ELECTRIC Lighting Sets for motor cycles and small cars supplied complete or in parts. English manufacture throughout and supplied either in nickel, brass, or black finish; fitted to machine if required. Call, or write your requirements.—A. and E. Lower, Engineers, 668 and 670, Seven Sisters Rd., South Tottenham N.15. [9652]

TRIOUMPH Frame, 1913, 35/-; tank, 1913, dropped, re-enamelled makers' colours, transfers, 37/6; back wheel, 26x2 1/2, belt rim, 19x2 1/4x7/8, 20/-; Douglas spring forks, complete, front wheel, tyre, mudguard, handle-bars, 75/- lot; good Dunlop tyre, 26x2 1/2x2 1/2, 17/6; belt rim, 19x2 1/4x7/8, 8/-.—E. Jacobs, 95, North Rd., Brighton. [2946]

P and M. Cylinder, 70/-; Amac carburetter, 30/-; magneto, 4-cyl., £5/10; Ford Stepney, £2; Douglas crankshaft, new, 50/-; S.H., 30/-; flywheel, 35/-; mechanical horns, cycle and car, new, 30/-; Vicar's vices, cheap; other parts to clear: 1917 Bradbury twin, 3-speed, £85, guaranteed.—Mason, 42, Glenthorn Rd., Jesmond, Newcastle-on-Tyne. [2475]

MOTOR Cycle Lighting Sets, head lamp (7in. front), side and tail lamps, black and nickel, all brackets, finest British make, armoured cable, bulbs, switch, distribution board, 4-volt 40-amp. accumulator; the finest and best value on the market; 6 gns. complete.—The Colonial Motor Co., 104a, Finchley Rd., N.W.5. Hampstead 7822. [2598]

NEW Heavy Beaded Edge Covers, 26x2 27/6, 26x2 1/2 35/-, 26x2 1/2 (sidecar) 27/6; endless tubes, 26x2 8/6, 26x3 12/6; new rubber belts, 7ft. 6in. x 7/8in. 12/6, 8ft. 6in. x 7/8in. 15/-, 6ft. 2in. x 1in. 10/6; inflators, 15in., 2/6; powerful foot pumps, 11/6. Sent approval, carriage paid, receipt remittance.—Palmer's Garage, Footing, S.W. [2604]

TRIOUMPH 1919 Spares.—Frame centres, 60/-; tanks, 35/-; front forks, complete, 100/-; wheels, back, 55/-, wheels, front, 38/-; Douglas 4h.p. 1919 cylinders, 25/-; gears complete, £12; handle-bars, 20/-; front brakes, 20/-; hubs, 18/-; front forks, new, complete, £6; numerous other parts; state wants, stamp.—Jury, The Mews, West St., Bromley, Kent. [2914]

ENFIELD Parts, quite new and faultless, for 6h.p. 2-speed gear, 1916, onward, 36 tooth chain wheel with brake drum, their reference No. 102, 19/-, spindle only, reference No. R106, 18/-; expanding band only, reference No. R110, 9/-; high gear centre drum, reference No. 115, 15/-; spring roller, reference No. 124, 2/9.—Dene Motor Cycle Co., Haymarket, Newcastle-on-Tyne. [X5983]

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Large size suitable for small car.

	Price.	Floor and Sloping Platform extra.
8ft. x 6ft. size	£15 17 6	£3 7 6
9ft. x 7ft. "	£18 7 6	£4 5 6
10ft. x 8ft. "	£21 0 0	£5 0 0
12ft. x 8ft. "	£23 8 6	£5 15 0
14ft. x 8ft. "	£26 10 0	£6 2 6

NOTE.—All sizes are 6ft. high to eaves.
Treating outside with our wood-preservative "Creosoleum," 12/-, 14/-, 17/-, 19/-, 21/- each extra respectively. Carriage paid to stations in England and Wales for cash with order.

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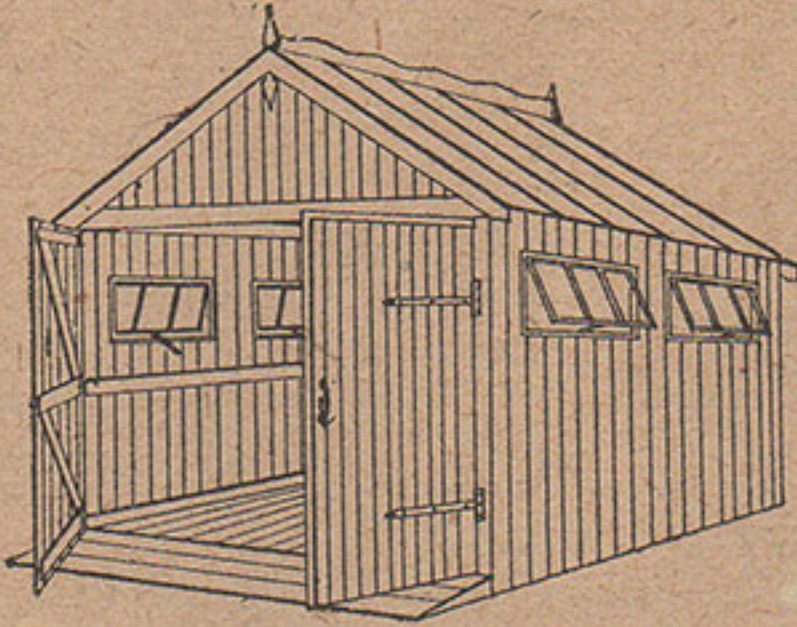
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Grams: Clapham-Motors, Greenwich. "1921" PROGRAMME: Matchless, 50 c.c. H; Royal-Ruby; A.J.S.; Triumph; "He d rson," 4-cyl.; Excelsior, etc. Now Booking all Leading Makes Immediate or Early 1) liv ry. See Motor Cycling Advt. Showrooms—27, Stockwell St., Greenwich, E.10.

119, KING GEORGE ST. GREENWICH, S.E.10

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6ft.	5ft.	6½ft.	8 17 6	2 6 6
8ft.	6ft.	7ft.	13 5 0	2 14 0
10ft.	8ft.	8ft.	21 10 0	5 5 0
15ft.	11ft.	9½ft.	34 0 0	12 0 0
20ft.	12ft.	9½ft.	46 0 0	18 0 0
30ft.	15ft.	11ft.	77 15 0	27 0 0

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MISCELLANEOUS.

EVERY Part in Stock for 1915 5h.p. Indian motor cycle, all sizes of motor cycle chains in stock, any pattern of piston made within 12 hours, huge stock of J.A.P. (all sizes), Triumph, Humber, Indian, etc., engines overhauled at short notice, parts duplicated, special prices for tanks, mudguards, etc.; cheapest house in the trade.—Walter Matthews, 114, Suffolk St., Birmingham. [4951]

S.H. Douglas Amac carburetter, 15/-; B. and B., complete, 15-16in. inlet, 15/-; Amac, ¾in. inlet, less levers, 12/-; P. and H. large generator, complete, 10/6; 1914-15 Douglas 2½h.p., 2-speed, recently re-bushed and new tyres, belt, lamp set, and Lucas horn fitted, mechanically perfect, and very sporty, plating as new; bargain, £45.—Popular Cycle Co., Riversley Rd., Nuneaton. [2795]

E.I.C. Magneto, clockwise, £3/10; B.S.A. 2-speed wheel clutch, control, £8/15; new Thomson-Bennett starting magneto, £4/10; A.J.S. engine sprocket, 19 teeth, 6/-; Premier adjustable pulley, 7/6; B.S.A. front wheel with brake rim, £2; Douglas gear box, £4; heavyweight frame, 18/-; back rest, 9/-; motor cycle electric horn, wants adjusting, 15/-.—James Geary, Burton-on-Trent. [X2775]

SCOTT Back Wheels complete, 35/-; 6h.p. Enfield back wheel (1 cone missing), 30/-; Triumph wheels, complete, fronts 25/-, backs 35/-; 2½ and 4h.p. Douglas wheels, complete, fronts 12/6, backs 20/-; Douglas hubs, complete, 6/-; Triumph belt rims, 6/-; Triumph back hubs, complete, 7/6; Triumph free-engine wheel, complete, £2; knock-out spindle hubs, complete, 6/-; Stamp, reply.—Cox, 149, Chepstow Rd., Newport, Mon. [X2865]

T.T. 3½h.p. J.A.P., o.h.v., complete, as new, £55; Douglas carburetter, 5/-; fork spring, Saxon, 2/-; ditto Triumph, barrel, 5/-; sidecar wheel, 26in., 5/-; Emery grinder (treadle), 20/-; Jap and Brown pulleys, 5/- each; Precision flange, 2/-; Jap pistons, 76 mm., Triumph-Precision, 85 mm., 5/- each; 1½h.p. Minerva engine, belt rim, new tank, 50/-; 2h.p. Minerva engine, needs repair, 20/-.—2, Worcester Parade, Gloucester. Stamp reply. [X2786]

DISCS for Any Make of Light Car, cycle car, runabout, or motor cycle wheels; solo sets for motor cycle, in polished aluminium, 55/- per set, in light steel, stove enamelled black or finished in any colour, 42/-; provision made for belt rims, brake rims, security bolts, speedometer, oiling, and our nickel neat fitting valve covers; all fittings are nickel plated; packing and postage free; trade supplied.—Mersey Disc Co., 34, Suttor St., Warrington. [1269]

VILLIERS Free-engine Wheel with controls, Palmer tyre and tube, in perfect condition; £6 (26x2¼ rims); also one Thomson-Bennett magneto, single, C.W., £4/15, watertight; one Thomson-Bennett magneto, twin, C.W., watertight, £5/5; Triumph clutch wheel, with back stays, stand, carrier, all controls, and brake, £8, condition new; also one wheel only, with all controls, £5.—B. Bastick and Co., 122-124, Edward Rd., Balsall Heath, Birmingham. [2901]

TIME Sheets, for immediate use, supplied from stock, 1/3 per 100; 12/6 per 1,000. Copyright forms ruled and printed for daily, weekly, and foreman's time sheets; also workmen's time sheets and pay sheets, showing where employed on outdoor work, travelling and other expenses; variations of work forms; material sheets, contractor's record of carting. Specimens free of charge and post free.—J. C. King, Ltd., 42, Goswell Rd., London, E.C. [8972]

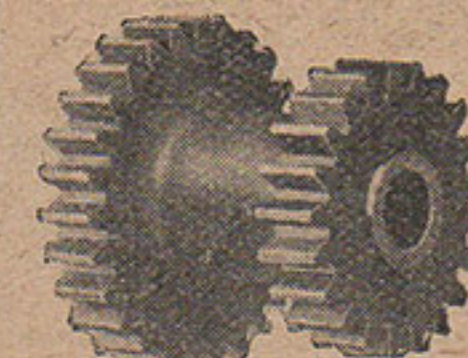
WRITE for List.—J.A.P. 8h.p. twin, a.c., 1918, 50%, second-hand, guaranteed, £25; Matchless gears, complete, 1920, £15/10; Amac carburetter, 1920, complete, £3; Thomson-Bennett magneto, 50%, chain and sprocket, £6/10; Kempshall anti-skid, 650x65, £3/5 each; Grimston tubes, 650x65, 10/- each; rims, 6/3 each; belt rims, 9/- each; hubs, 16/3 each; spokes and nipples to suit; wind screens, Avro, 25/- each.—Tait, Glendower Hotel, South Kensington, London. [2322]

GOVERNMENT Waterproofs, quite new, best possible quality oilskin jackets, lined, 13/6, 17/-; trousers, lined, 12/6; Sou'-westers, 2/6; Pegamoid rubber trousers, 15/6; officers' rubber Poncho capes, 22/6; oilskin capes, lined, 13/9; many worth double. Second-hand jackets 8/-, trousers 3/-, coats (lined) 18/6; new fawn cap covers, with neck shields, 1/11; all carriage paid; approval or money back. Obtain our prices for all kinds of waterproofs.—Hawthorn, Ltd., Dept. M., Shrewsbury. Established 32 years. [0110]

BARGAINS: clean sweep this week, all brand new, H.A.H. black electric head lamp, complete bulb, holder, and wiring, £2/10; ditto rear, 7/6; ditto sidecar, 10/6; acetylene lamp set, 25/-; Douglas pattern semi-T.T. bars, 12/-; Senspray carburetter, suit Rudge, £2/5; Splitdorf mag., single, £4/15; T.B., 50% twin, £4/15; Cowey speedometer, £4/15; valves, 4/-; piston rings, all sizes, 1/9; Rudge touring bars, all fittings, £2/5; Bowden brakes, 12/6; all-leather toolbags, 7/6.—Popular Cycle Co., Riversley Rd., Nuneaton. [2796]

GOVERNMENT Surplus.—A small stock only remains in response to our offer to enthusiastic winter riders in "Motor Cycle Show" (July issue), viz. Solid leather field boots, the ideal winter motoring boot, well repaired, as worn by R.A.S.C. and R.A.F., any size, 15/- pair carriage paid; also Canadian army lace to knee boots, solid leather, in sound condition, all sizes, 14/- pair carriage paid. Note, all boots guaranteed waterproof, and no extra charges for sizes 10-11. Money refunded willingly if not satisfied. Cross all P.O. money orders and cheques Barclay's Bank.—Jay Bros., Government Dealers, 41, Caesar St., Shoreditch, London, E.2. [2956]

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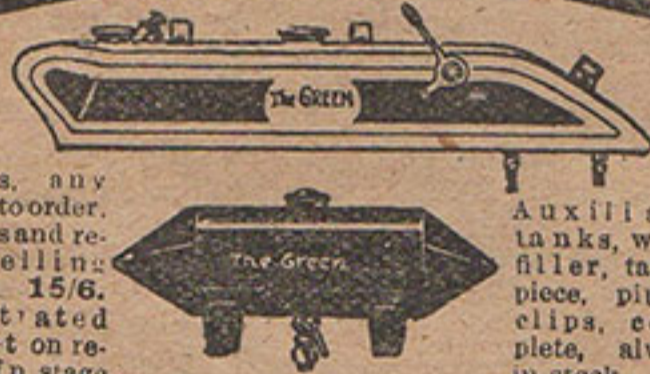
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DISCS.—We are makers of discs for any type of motor cycle, polished aluminium 25/- and 30/- per wheel, enamelled steel 20/- per wheel, Rudge Multi discs 5/- per wheel extra; discs for Douglas, Triumph, Indian, Harley-Davidson, and Rudge Multi motor cycles always in stock; prompt deliveries.—Hill and Co., Discs Specialists, 1 and 3, Walmersley Rd., Bury, Lancs. [0351]

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WHEELS, Wheels, Wheels.—Motor cycle wheels built to order, all sizes in stock. Motor cycle frames repaired, altered, and brought up-to-date. Sidecar chassis repairs, discs fitted 26in. wheels, steel front 20/-, back 22/-, enamelled black, others to order. Contracts wanted for frame and wheel building, customers' own materials. Motor cycles overhauled, re-namelled, plated, 2 1/2 h.p. £8/5, 4 h.p. £10. Wanted, belt rims, all sizes, cheap for cash. Stamp enquiries.—Pendleton, 28, Lonsdale Sq., Liverpool Rd., London, N.1. [1848]

AEROPLANES.—Splendid Xmas present for your boy; genuine flying models, automatic stability, the result of years of experiments; signed guarantee with each one; 9in. twin screw, 3ft. long, 22in. span, will rise off ground after run of 15 to 20ft., and fly 300 yards; 10/6 postage 1/-; smaller size 6/-; postage 1/-; competition model, rise off ground, length 3ft. 6in., span 30in.; 17/6; postage 1/6, as sold in the large stores at double these prices; testimonials gladly shown.—M.S. Aviation Co., 21, Moring Rd., Tooting, S.W.17. [7587]

500 Douglas Forks, 25/-; handle-bars, 12/6; 500 P. and M. frames, 25/-; tanks, perfect, 20/-; Grado gear, K.S., £9; 1,000 large car spanners, 4/-; 1914 Roe 2-speed back wheel, complete, stays, etc., £9; 2-speed wheel, all-chain, £3; complete new, light back axle, hubs, centre differential, and chain drive, enclosed, £15; new 3-speed and reverse box to fit, £12; 1920 sporting canoelet sidecar, £17/10; sidecar body to order, from £8/10. Ask your wants. We repair, renovate all kind of motor goods. Buy, sell, and exchange new second-hand. Payments arranged.—Montague's Motor Mart, 85-87, London Rd., Manchester. Phone: 7745 Central. [2411]

1916 New Imperial, 2 1/2 h.p., 2-speed, clutch, and K.S., in splendid condition, date guaranteed, £40; 3h.p. unit, complete with magneto, adjustable pulley, Amac carburetter, silencer, and engine plates, sound, £10/10; lightweight dropped frame, complete with 26in. wheels, Druid forks, tank, Lycett's pan saddle, handle-bars, front and belt rim brake, £12; Bosch magneto, anti, guaranteed by Reliance Magneto Co., £2/15; head lamp and generator, £1; polished aluminium mechanical horns, 15/6 each; offers considered. Please send stamp if you require a reply. 3 1/2 h.p. P. and M. wanted, cheap.—A. S. Phillipson Hilda St., Grimsby. [2404]

THE Cheapest House in the Trade for Accessories.—Mabon gears, £10/8; clutches, £6/1; sidecar bodies, 7 varieties, £7/15 to £10/15; Nelson hood, £4/10; Blumel wind screen, £4/10; the Easting, £4/10; the Orto, 52/6 and 72/6; the Raper, 57/-; the Cameo, £3; the Wallboro, £2/10; Taylor's, 33/6, 37/6, and 51/-; luggage grids, 25/-; storm aprons, 25/-; sidecar stand, 14/-; underslung chassis, £11, step body type; £7/5; auxiliary arms, 17/9; spring shackles, 6/6 set of 4; magnetos, M.L. £10/14/6; E.I.C., £8/10, all leading makes stocked; Watford speedometers, trip, £6/5, plain model, £5/15; Enot's drip-feed, 38/6, Best and Lloyds, 28/6; pillion seats, Tan-Sad, 44/9; Tynesider, 52/-; Willowbrook, 29/-; the Juno, 18/6; engine pulleys, fixed, 4in., 13/9; 5in., 14/6; 6in., 18/6; adjustable, 4in., 25/6; 5in., 27/9; 6in., 30/-; 7in., 32/6, made to order; College mud-shields, 32/6, 16/6, 12/-; aluminium legshields, 36/6; footboards, 15/- and 17/- pair; 3 1/2 in. and 4in. mudguards, 14/6 and 16/6 set; W.S.R. adjustable jets, 8/6; waterproof suits, 61/-; seatless trousers, 23/-; leggings, 14/6; leather helmets, 10/6; goggles, 4/6, 3/6, and 2/-, Triplex 12/6 and 15/-; gauntlets, 14/-; carburetters, B. and B., Amac, Senspray, and Binks at makers' prices; Bowden control levers, 7/10; band brakes 44/- and 61/-; front brakes, 39/-; and 49/-; footbrakes and footrests, 48/9 and 23/9; cross-over brakes, 51/6; belt rim brakes, 17/9; magneto control, 25/-; Lucas No. 462 lamp set, £4/17/6; P. and H. lamp sets, No. 145, 60/-; No. 125, 55/-; sidecar lamps, 11/9 and 12/9; rear lamps, 6/9; Lucas horns, 27/6 and 14/0; mechanical, 15/6, 30/-, and 37/6; Clayrite mirrors, 13/-; Brooks B170 saddle, 60/-, B1., 67/-; Lycett's pan seat, 43/-; Ukantes stands, 13/6 pair; tubular carriers, 15/6, extra strong, 22/6; pannier bags, 6/6, 11/6, and 14/-; Auto-Wheels, in new condition, £22 cash; large illustrated list, price 6d.; as perusal will repay you.—M.Y. Dept., The Metropolitan Machinists Co., Ltd., 248, Bishopsgate, E.C. [2650]

MISCELLANEOUS.

GOVERNMENT Surplus.—Leather waistcoats, lined flannel, 12/6; all wool cardigans, 10/6 (new); officers' field boots, lace up to knee, black and tan (new), 47/6; solid leather leggings, whole backs, spring fronts, black or tan (new), 11/6; officers' trench coats, lined rubber (new), 32/6 with belt; officers' brogue shoes, tan, 21/-; rubber thigh boots (new), 17/6; naval boots (new), 21/-; army wool natural shirts, 12/6; all goods post paid; approval cash with order.—Army and Navy Stores, Wensum St., Norwich. [2629]

LAMPS: Lucas, Miller, P. and H., Howes and Burley, large, £1; smaller sizes, 15/-; ex-Government stock, undamaged, postage 1/-; Brackets of all descriptions, 3/- per set, ready to fit on machine, no missing bolts, etc. When ordering, please state type required, rough sketch preferred. Handle-bars, ex-Government, sound, black, 5/-; P. and M. and Triumph, various others, plated, 10/-; postage extra. Money returned if not satisfied.—Snodgrass, 18, Junction Rd., Brentwood, Essex. [2618]

TRIUMPH Engine Sprocket, 4/-; Triumph T.T. bars, 12/6; Watford speedometer, almost new, cost £8, sell £4; Tan-Sad, 25/-; Lucas lamp and generator, good as new, 25/-; Amac carburetter (2-stroke), complete with controls, £1; another, without controls, 15/-; X'fall saddle, good condition, 16/-; 2 1/2 h.p. Douglas sprocket gear box, 6/-; Indian chain, long, 10/-; back wheel, fit Triumph, 12/-; new toolbag, 5/-; second-hand, 3/-; new 3/4 in. belt, 8ft., 12/-; Douglas clutch pedal, 1913, 5/6; postage extra.—L. Bull, 44, Hills Rd., Cambridge. [3008]

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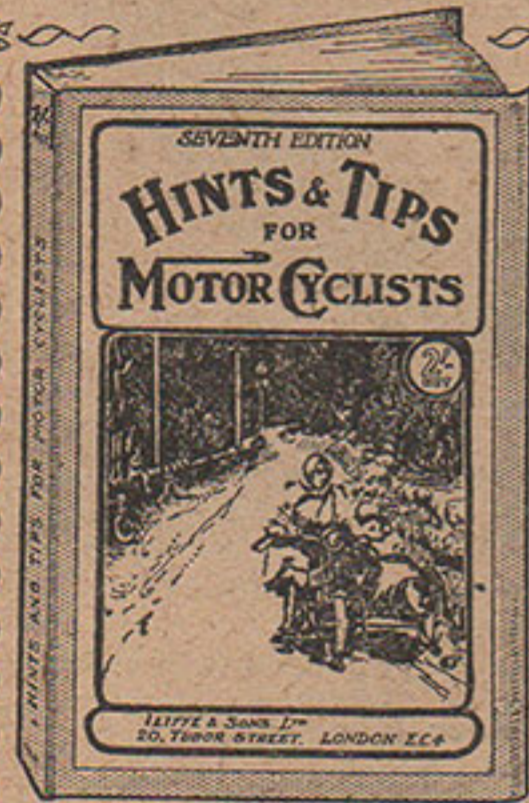
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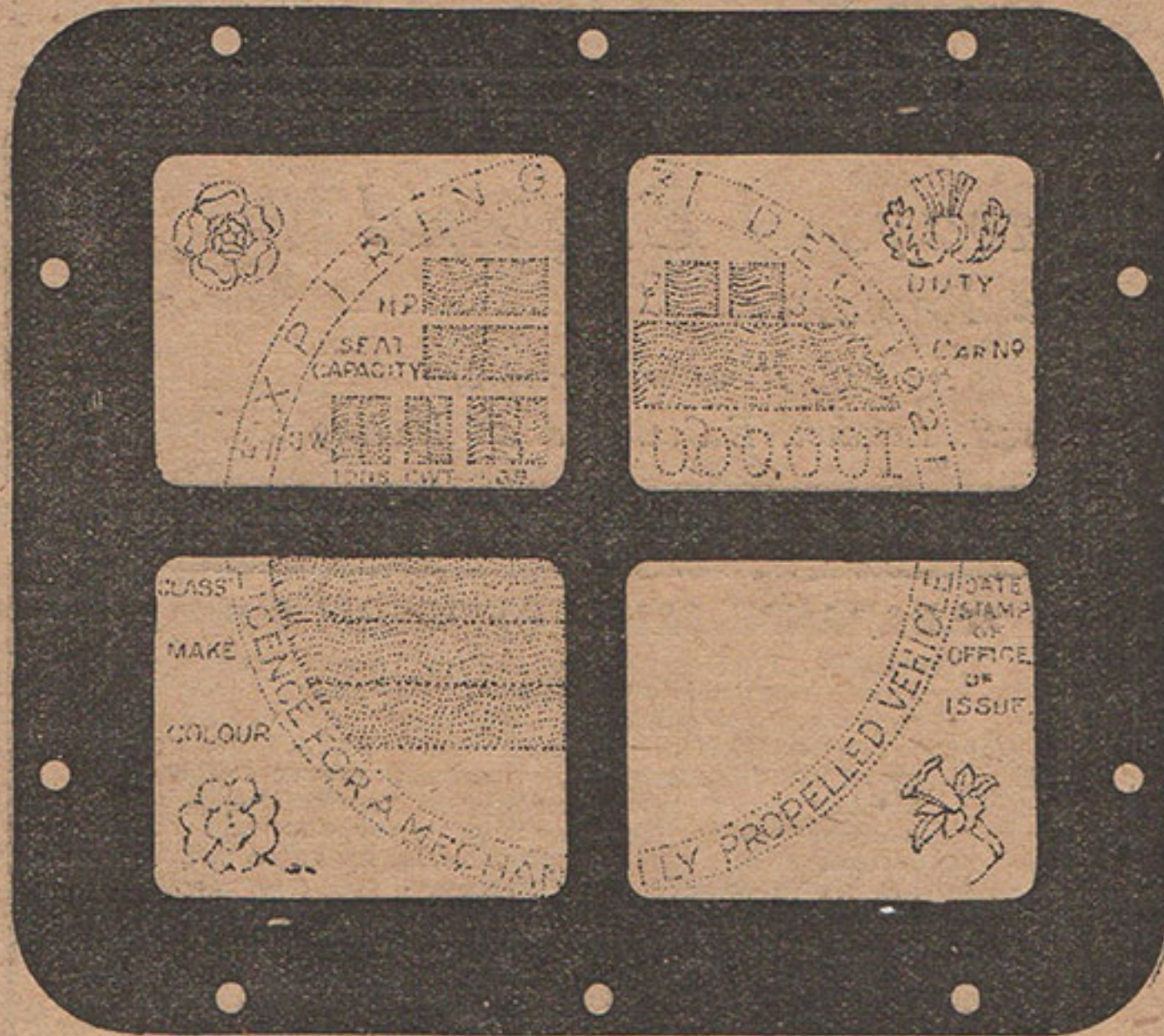
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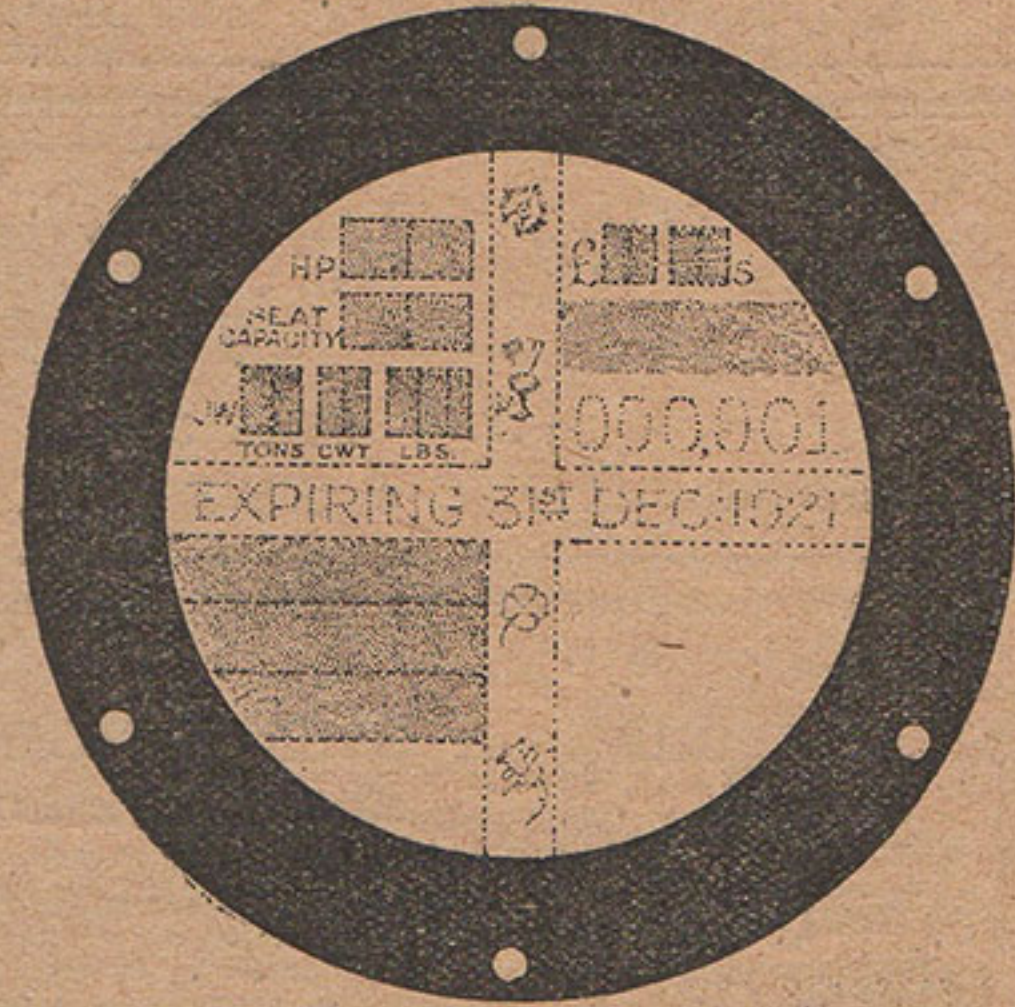


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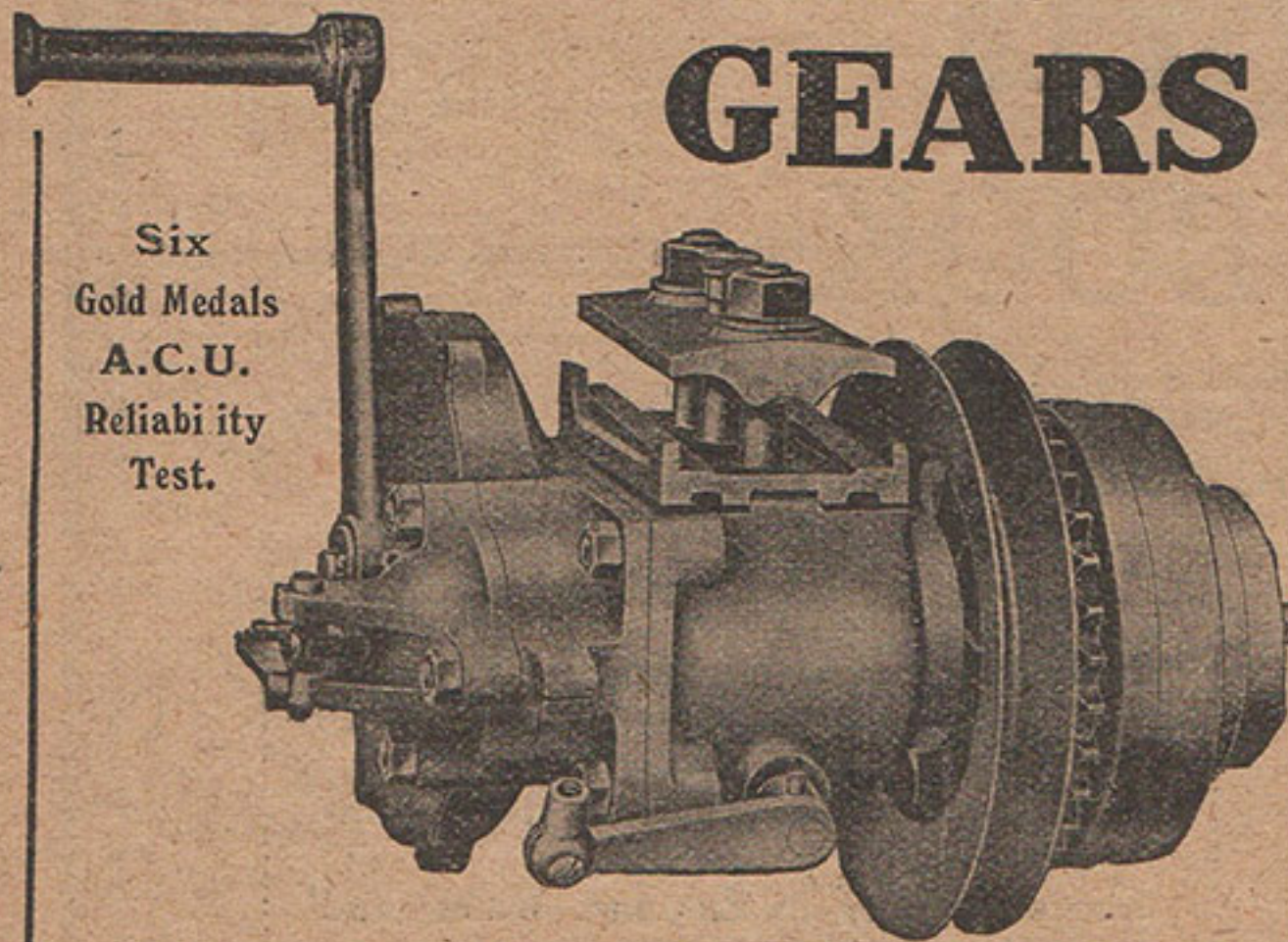
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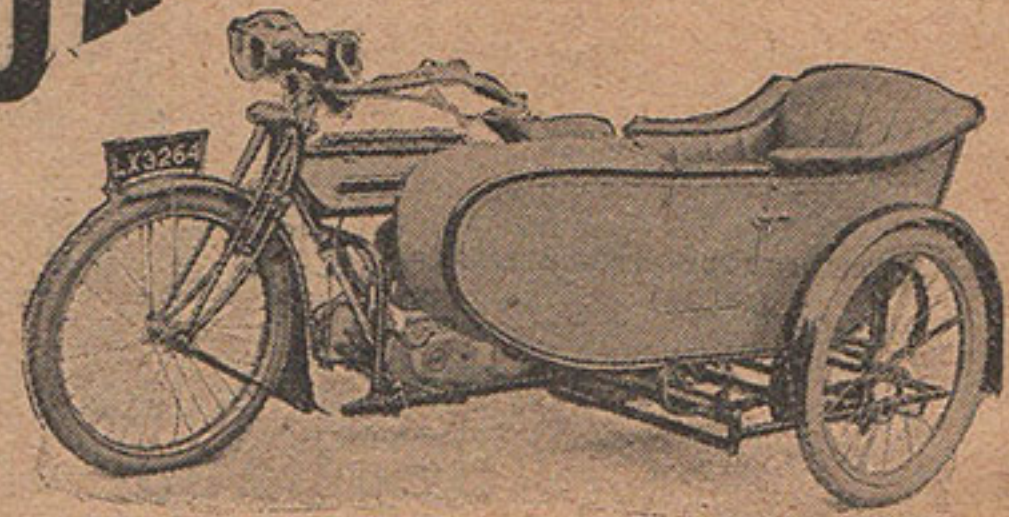


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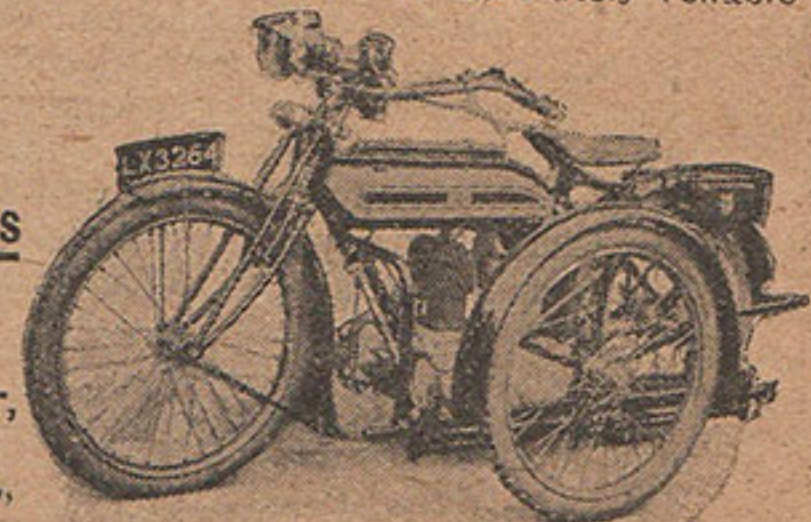
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FOLDED

THE HAGG TANDEM MOTOR CYCLE

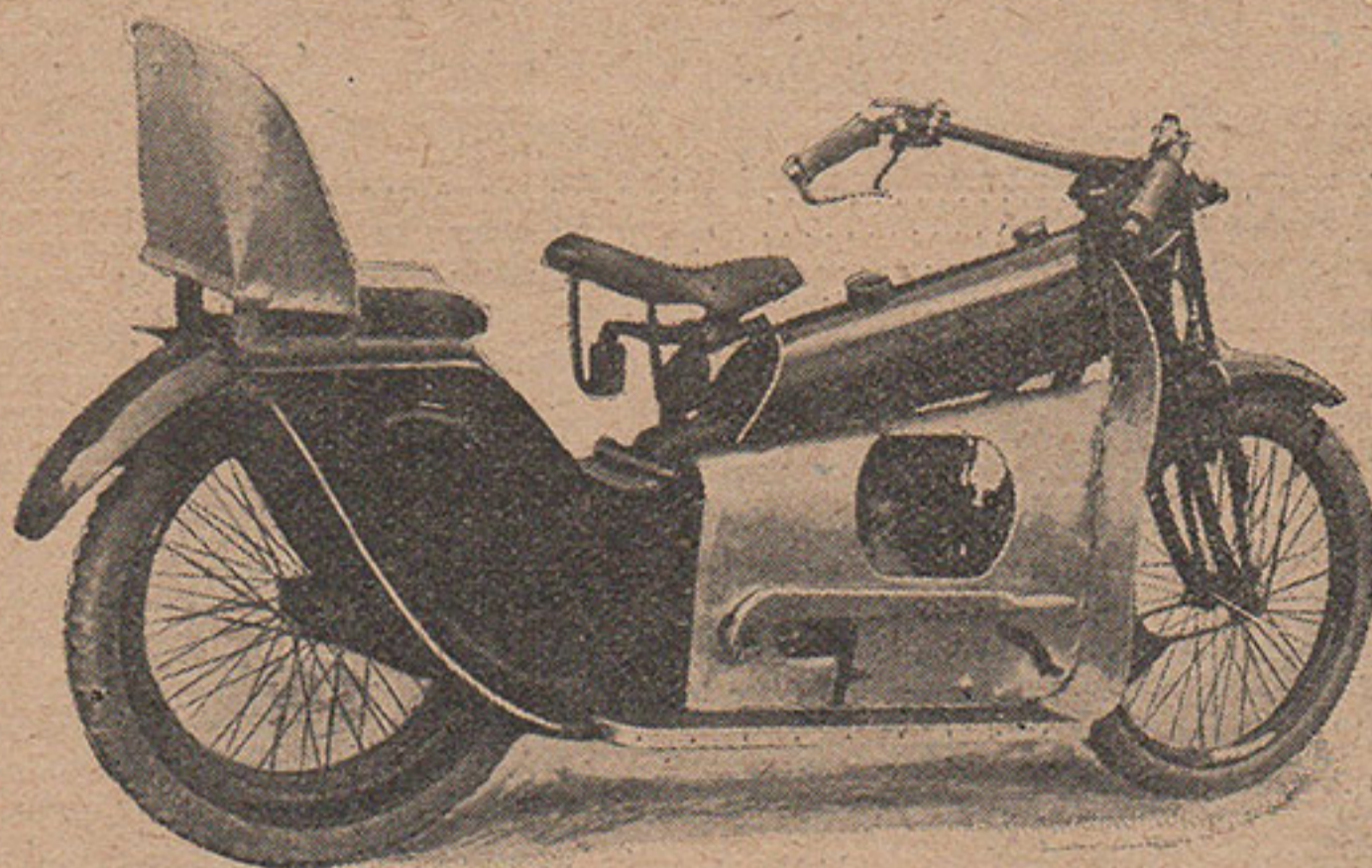
The most economical form of motoring for two persons.

Absolute Security, Comfort, and Cleanliness.

Rear wheel patent springing device, eliminating lateral movement in rear wheel. Handle starter operated from driver's seat.

Brief Specification—

- 3½ h.p. "A" type Precision 2-stroke, with self-contained oiling system.
- E.I.C. Magneto.
- Cox-Atmos single lever Carburetter, with easy starting device.
- Burman 2-speed gear box, clutch and handle starter.
- 26 × 2½ in. wheels.
- Passenger Seat, H.T. special design with folding back, all in aluminium.



SPECIAL FEATURES.

By removal of passenger seat, can be used as a solo machine. Driver and passenger being mounted between the wheelbase, give greater stability. Change speed controlled by the feet. Handle starter enables rider to start the machine while seated on the saddle. Polished aluminium side-shields, keeping both driver and passenger absolutely clean. Easy accessibility to all working parts. Safety and stability, due to rigidity of frame and rear wheel springing device. The top member of the frame being of specially large diameter, gives great torsional stiffness. Skidding minimised, owing to disposition of weight and low centre of gravity, combined with long wheelbase. Tyre economy—experimental machine done 10,000 miles on same set, with two persons.

For further particulars apply—

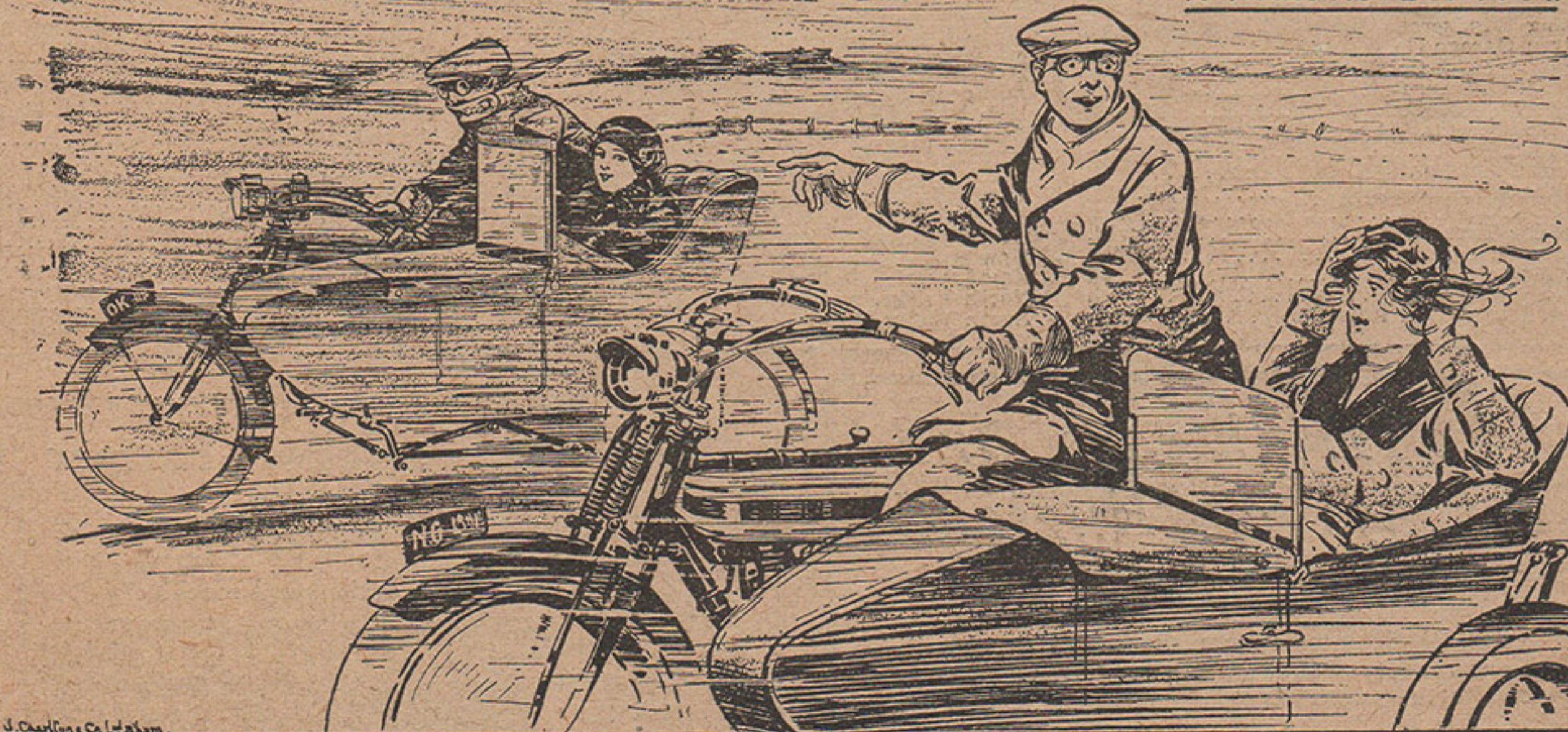
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THE MOTOR CYCLE

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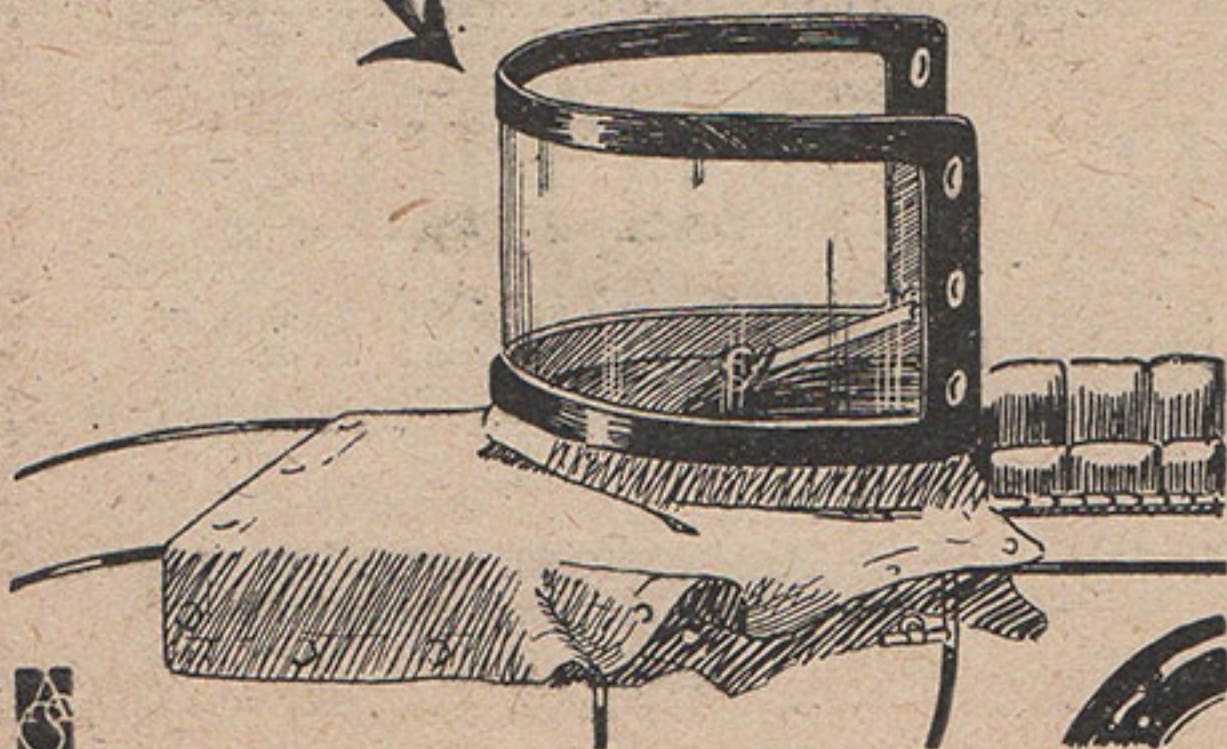
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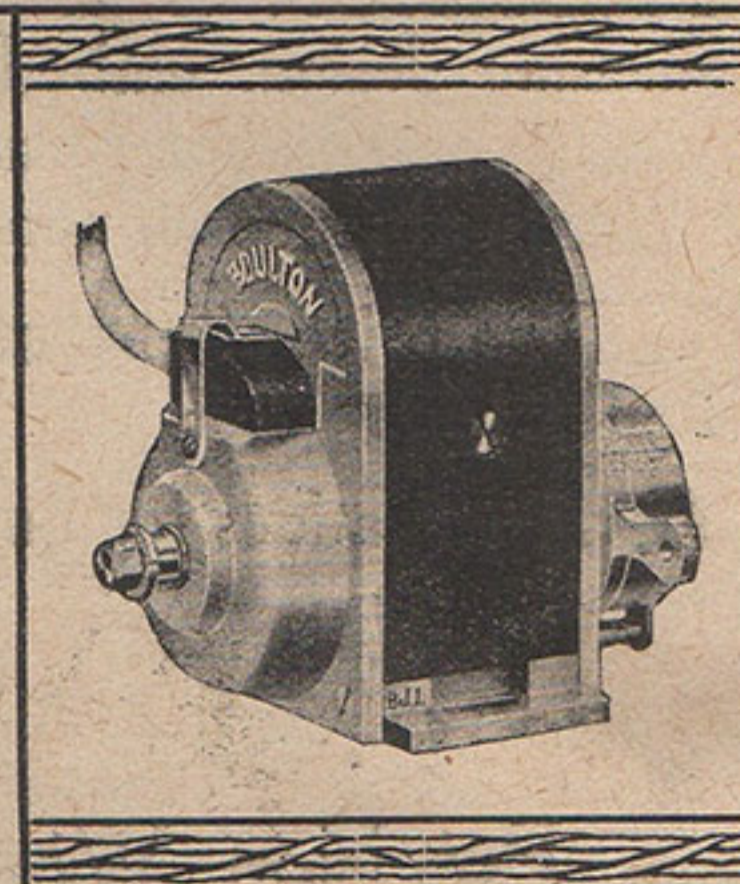
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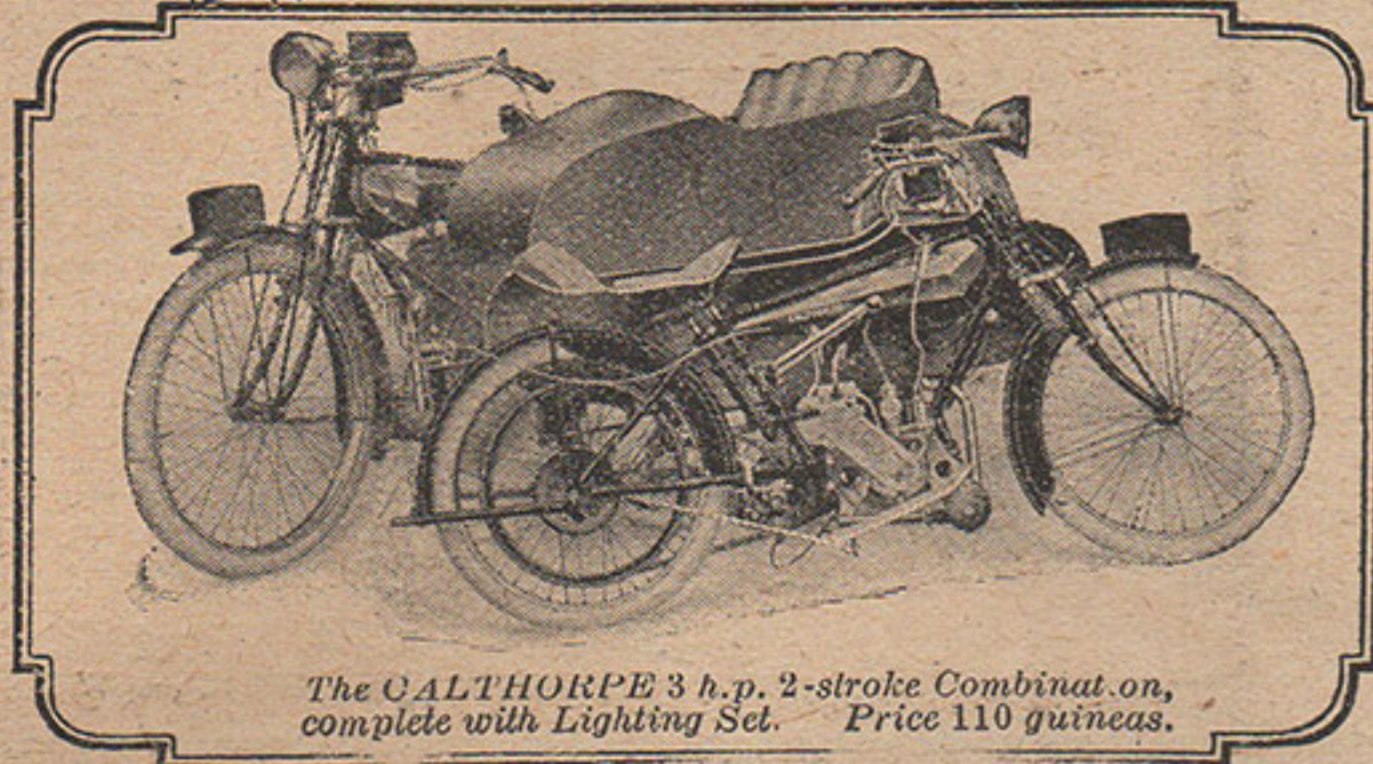
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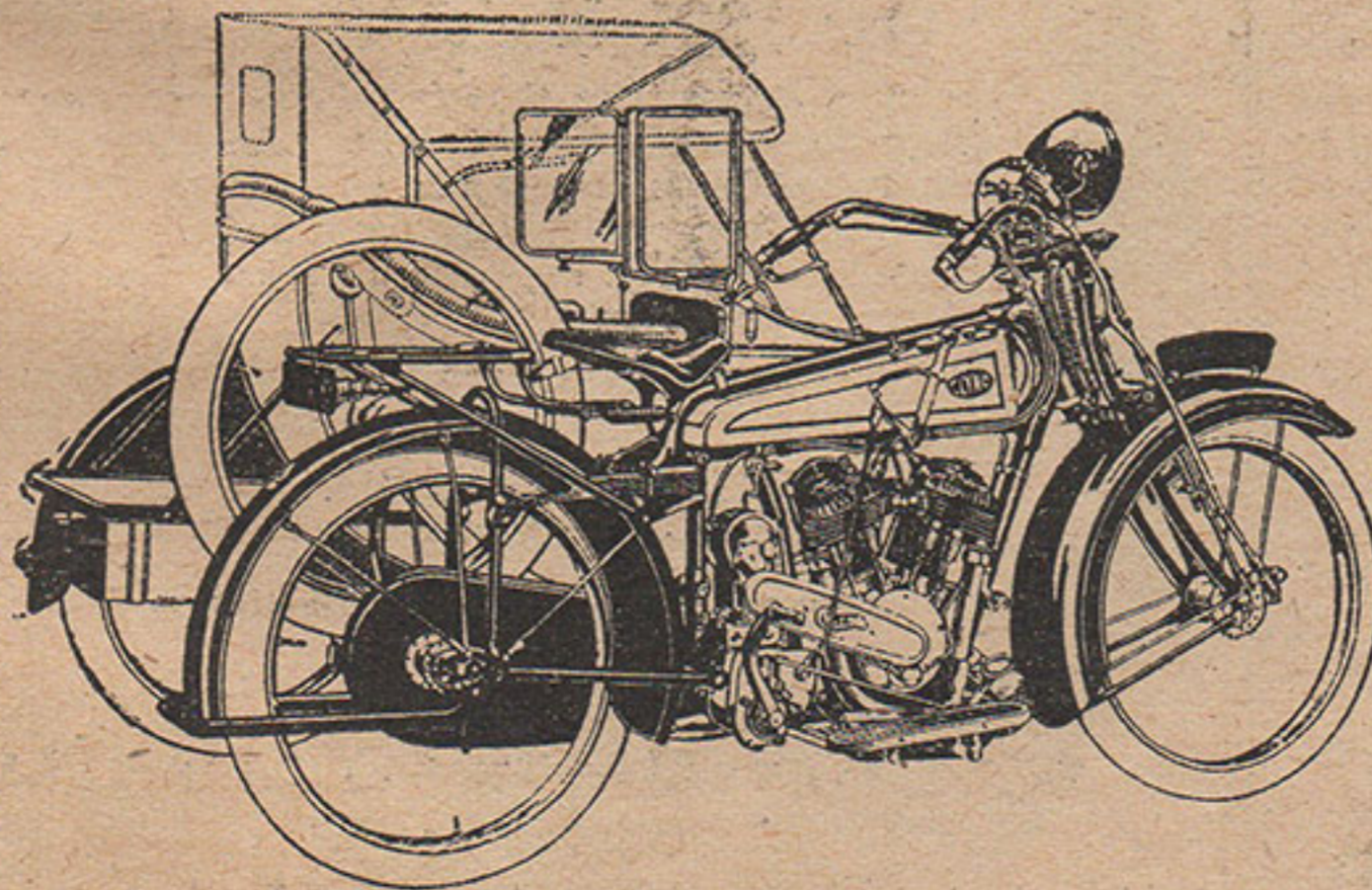


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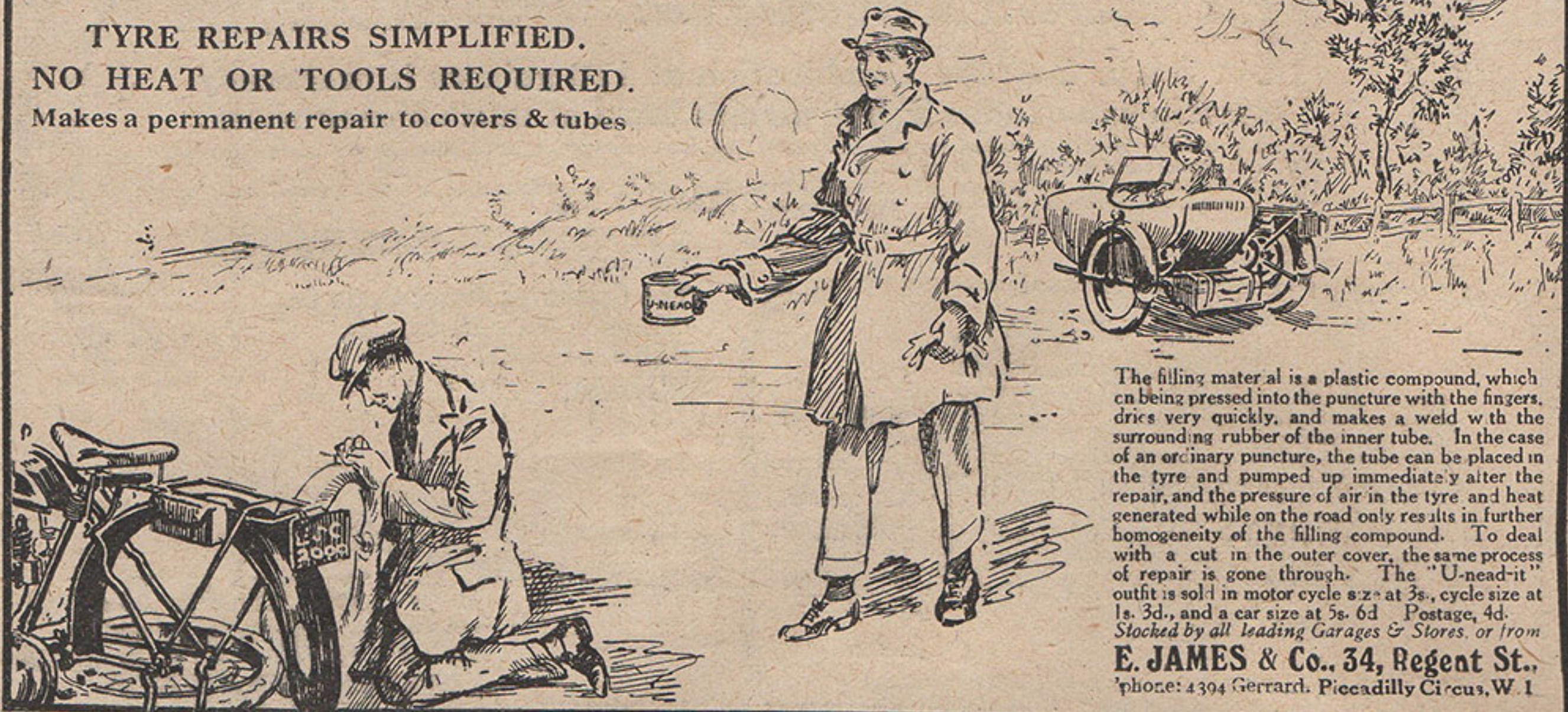
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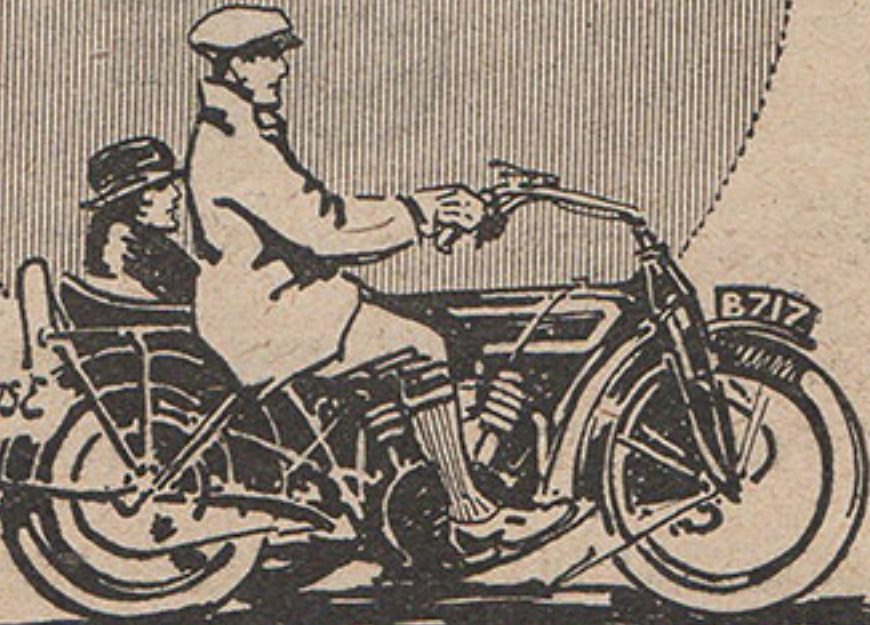


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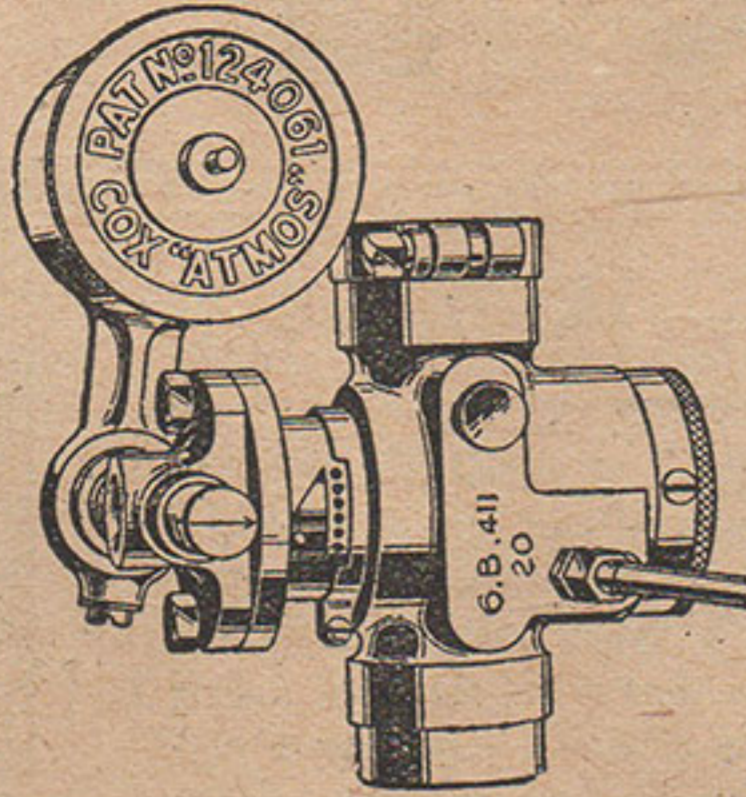
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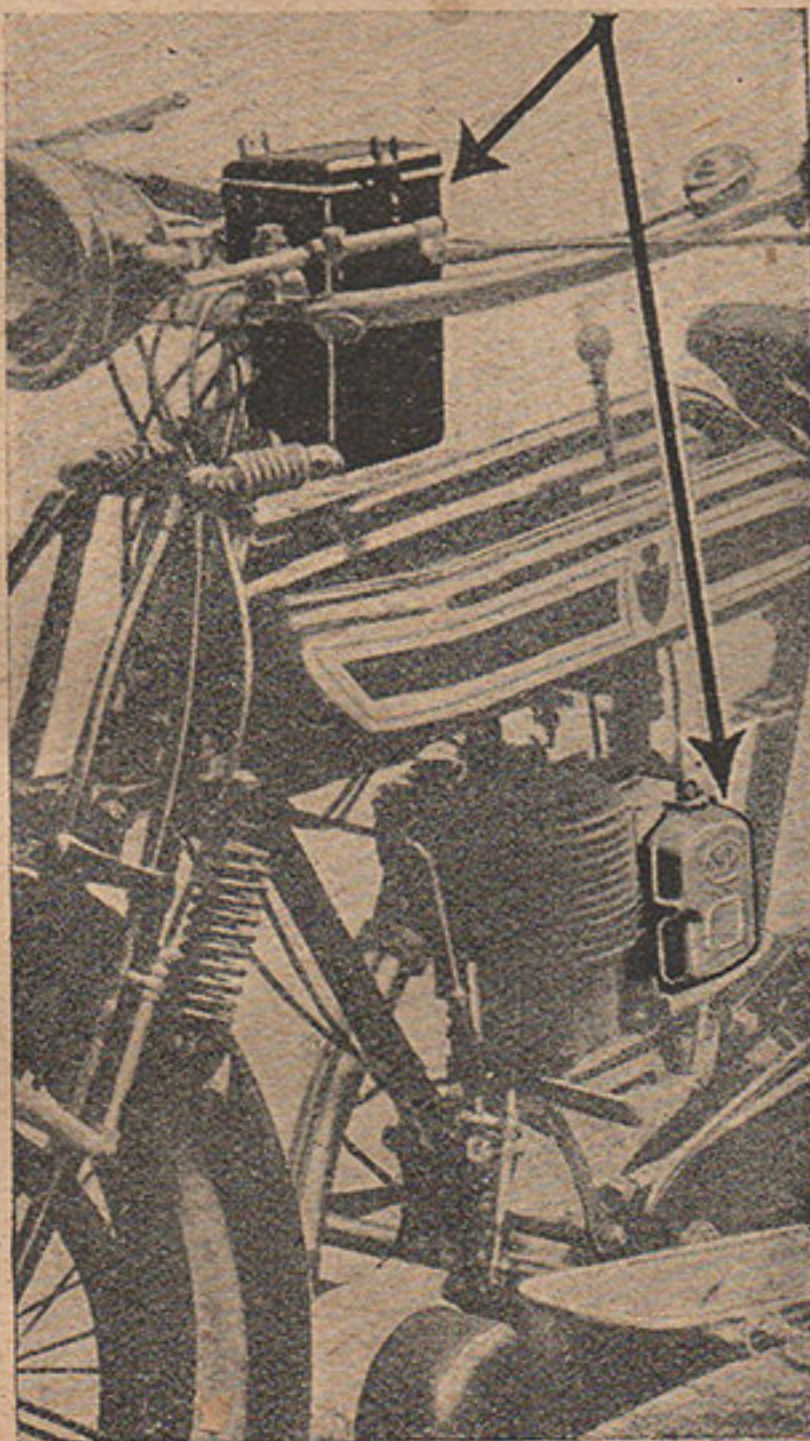
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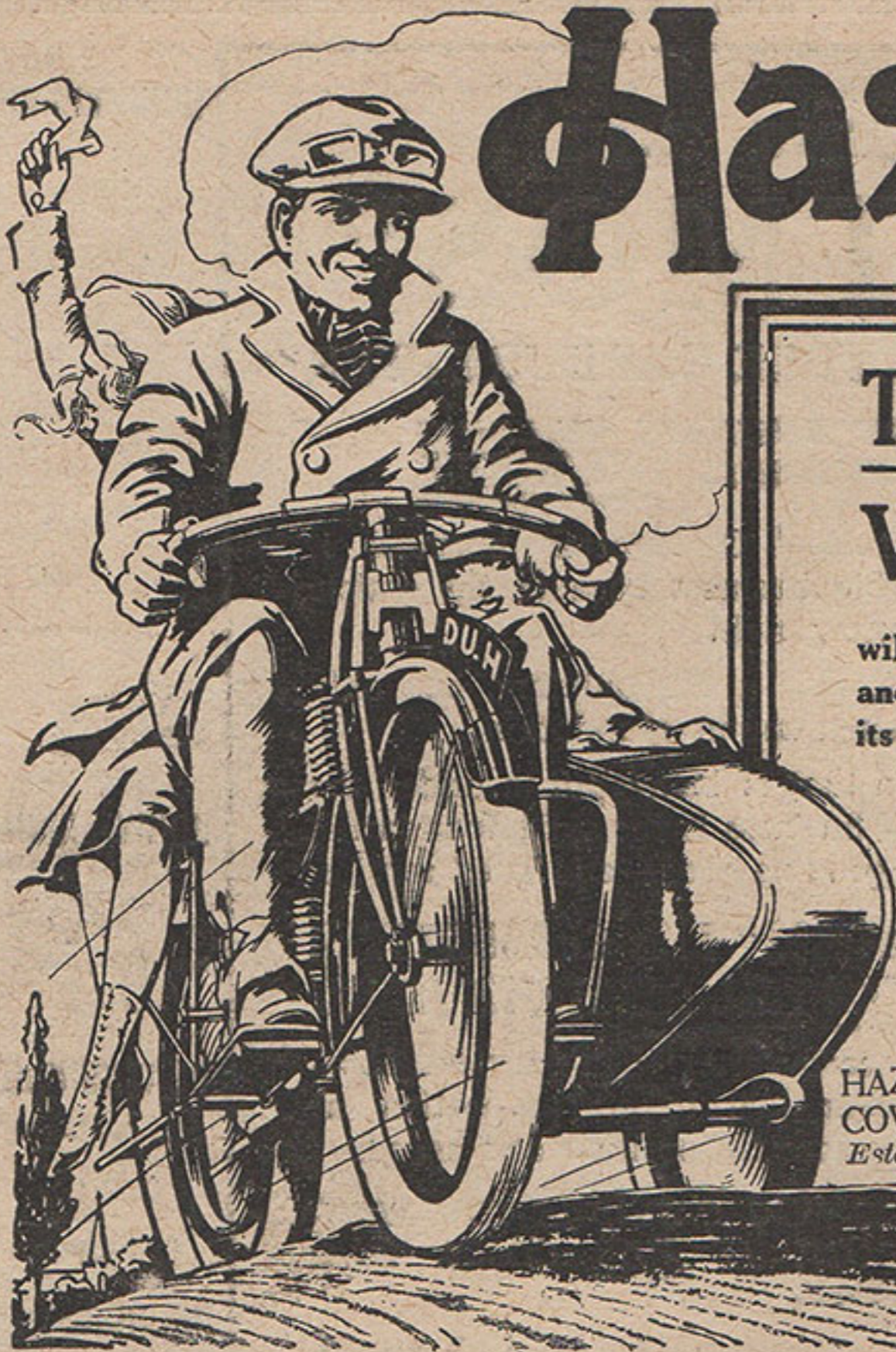
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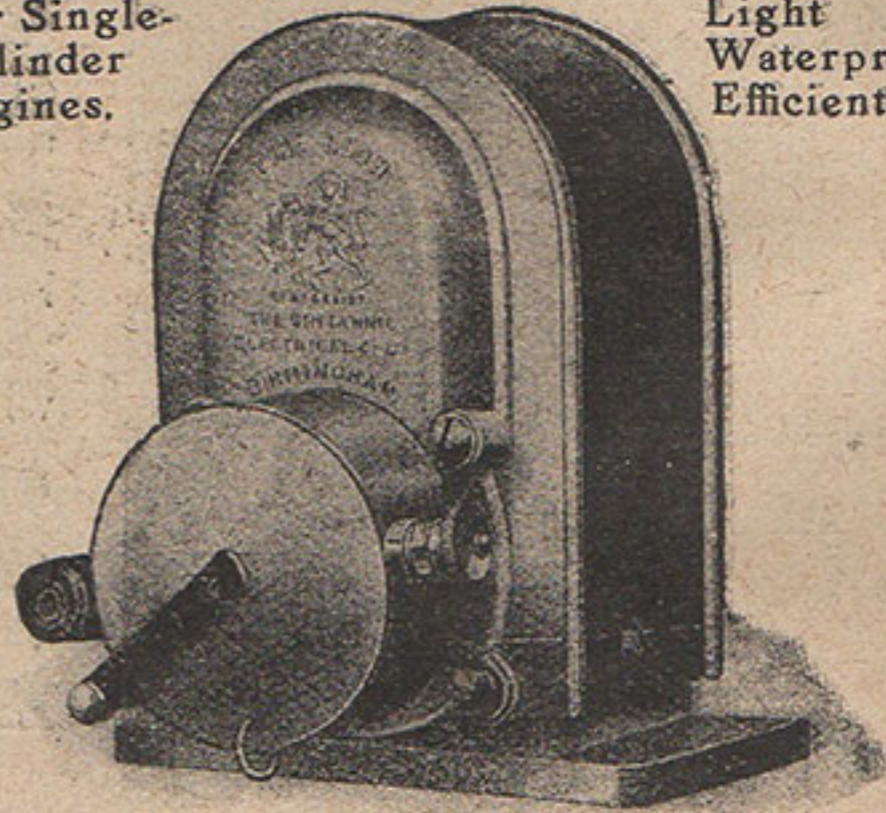
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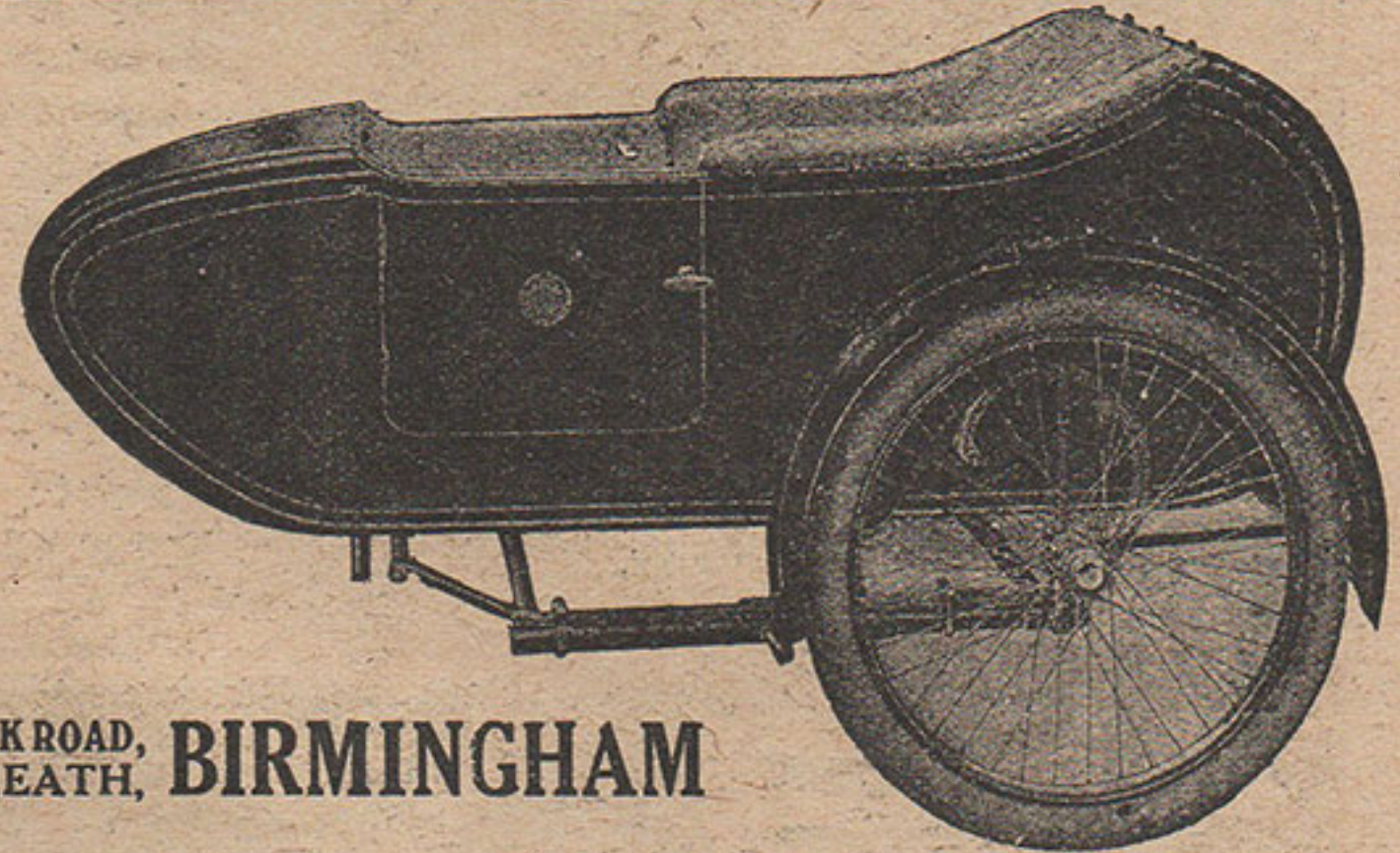
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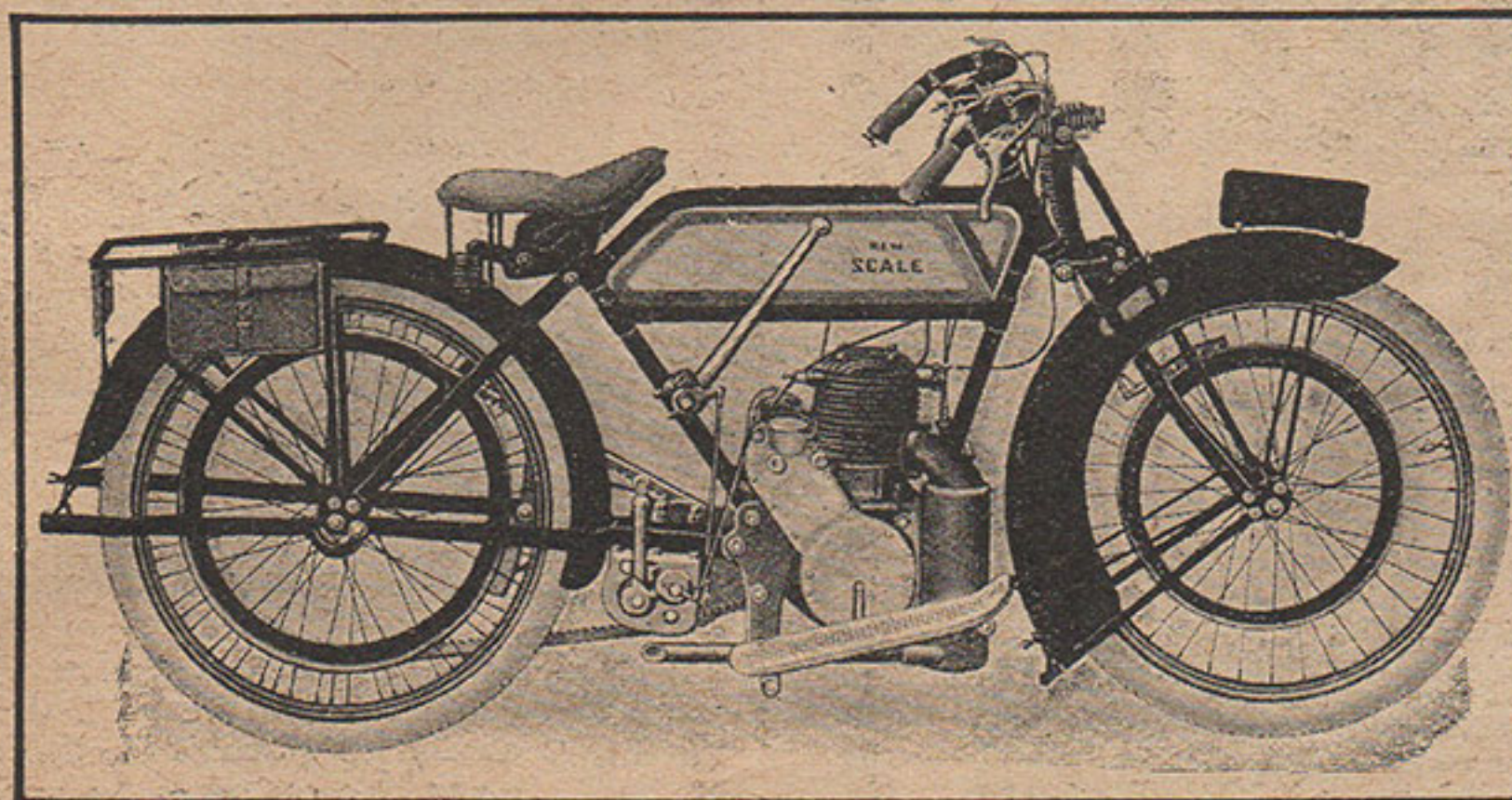
3½ h.p.

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**SOLO
OR**

COMBINATION



4 h.p.

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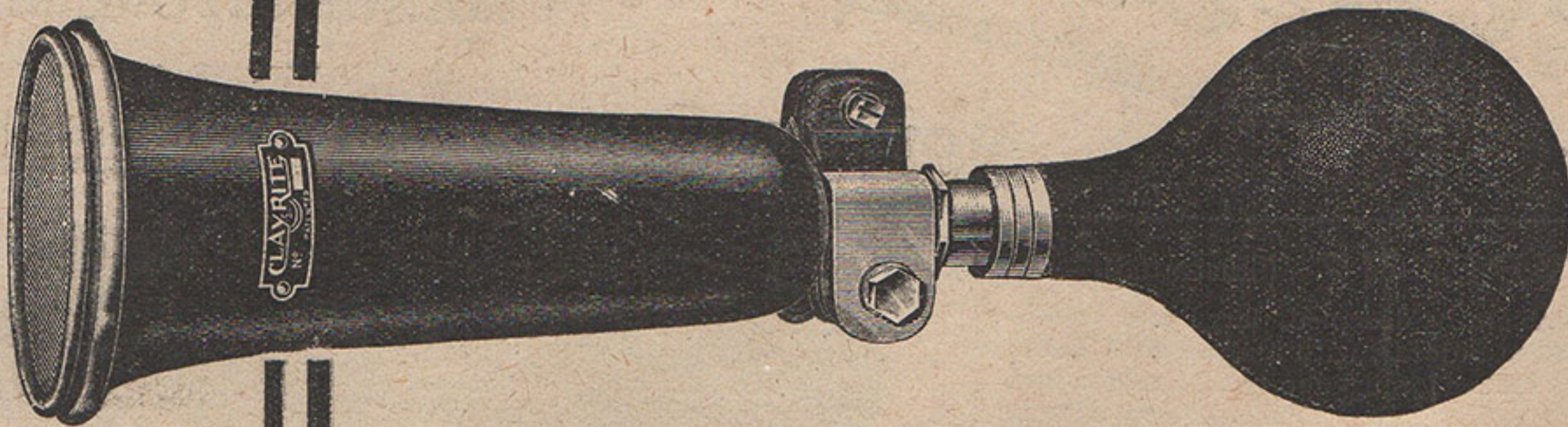
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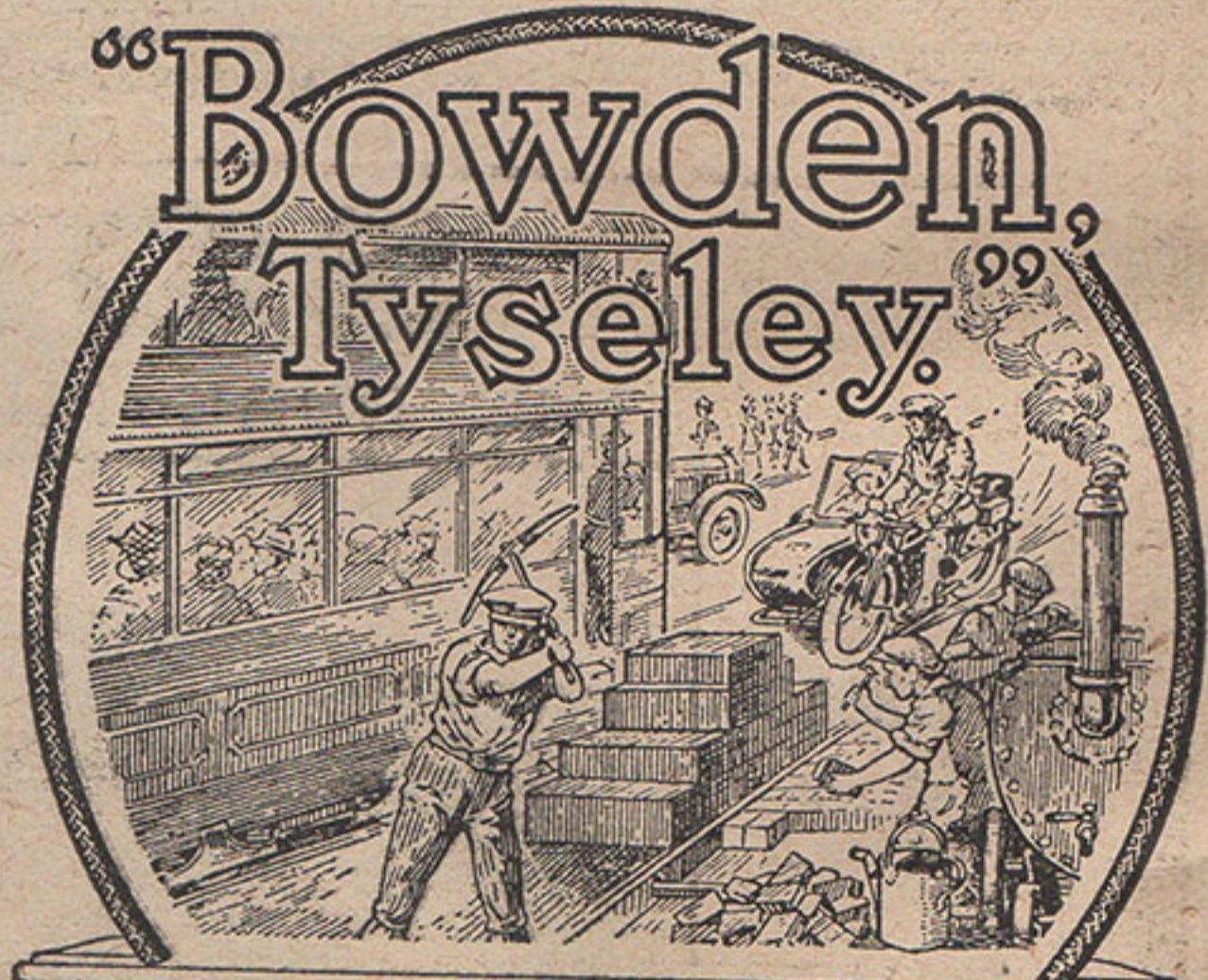
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Works: Durham Wharf, The Mall, Hammersmith.
Phone—Hammersmith 1606.



In the crowded thoroughfare as on the open Road, "BOWDEN," Tyseley Brakes and Controls are equally indispensable in effecting the instant and dependable control of the machine.

Perfect in manufacture, and reliable and efficient under all conditions, these famous Fitments give a never-failing service, thereby ensuring the rider's perfect safety and his increasing confidence a wheel.

BOWDEN BRAKE Co., Ltd.,
Tyseley, Birmingham.



PROGRAMME for the 1921 Season.

As in previous years, the JAMES is to the front with a range of models designed to cover all riding needs. In each type, UTILITY is the standard of construction. The range comprises:

No. 6.	4½ h.p. "Big Single," 3-sp., 600 c.c.	- - -	£135
No. 7.	3½ h.p. Twin Solo, 500 c.c.	- - -	£135
No. 8.	2½ h.p. 2-st. 2-sp. Lightweight, 240 c.c.	- - -	£75
No. 10.	7 h.p. 3 speed Twin, 749 c.c.	- - -	£160

JAMES Modele de Luxe Sidecar for fitment to Models Nos. 6 and 10, £35

Each machine listed above is backed by the JAMES reputation, and, in the world of Motor Cycles, that reputation has no superior.

Did you inspect the JAMES at OLYMPIA? If not, we should welcome the opportunity of sending you our illustrated Catalogue giving complete information.

A Post Card with your address brings it.

THE JAMES CYCLE CO., LTD., GREET, BIRMINGHAM,
LONDON DEPOT 22, HOLBORN VIADUCT, E.C.1

Note re Deliveries.

Immediate delivery of all JAMES 1921 Models.

R.H.S

RATCLIFFE BROS.,

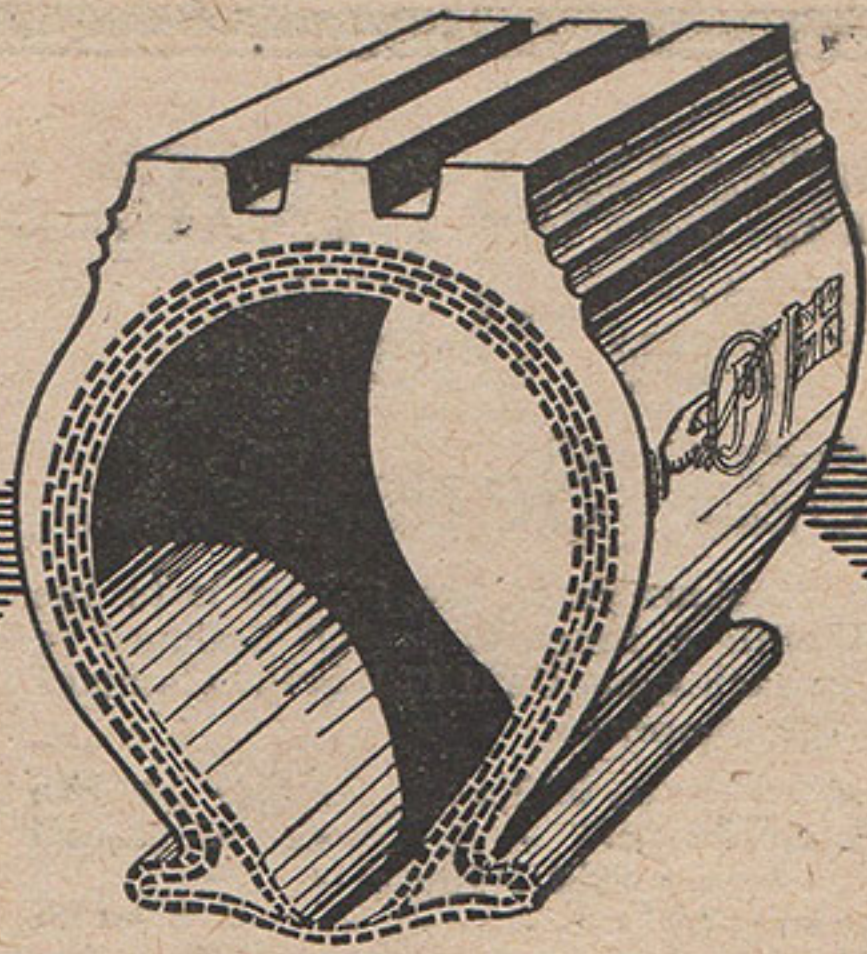
200, GT. PORTLAND ST., W.1.

'Phone: Mayfair 5042.

BUY YOUR MACHINE FROM US.

Having placed large contracts with the principal manufacturers we are in a position to give you good deliveries, and shall be pleased to quote delivery date for any make of machine. We shall be pleased to see you at our Showrooms, and discuss the matter with you.

We have for immediate delivery a large selection of shop-soiled and second-hand machines at very special terms, call and inspect our stock before deciding elsewhere.



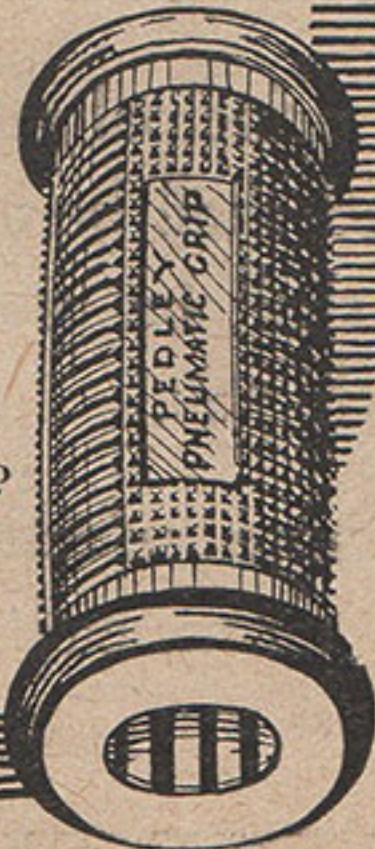
Sundries the Motor Cyclist will insist upon

WHEN it comes to *rubber* you cannot afford to offer anything but the very best.

Pedley Tyres, Belts, and Grips *are* the very best—they cannot be improved upon—and, every sale you make ensures a satisfied customer. Good supplies are now obtainable, also a full range of advertising matter. Get in touch with us.



J. PEDLEY & SON LTD
Oxford Works
Birmingham



"FLEXEKAS"

Patent Applied for Read.

"My brother is riding a 1919 2 1/2 h.p. Douglas, to which he has lately fitted a set of FLEXEKAS. The improvement in the running of the machine is really remarkable: she will start in her own length in top gear and can be throttled down to six or seven miles per hour, still on high gear. We have not yet tested the petrol consumption fully, but there is an improvement in this also. Perhaps the biggest difference in running is the quietness of the entire valve mechanism. I enclose 10/- postal order for a set of FLEXEKAS for my own machine."



An airtight flexible spring casing enclosing the valve stem and filled with special heat-proof graphite paste

2/6

EACH.

A notable advance in engine design which should be fitted to all motor cycles old and new

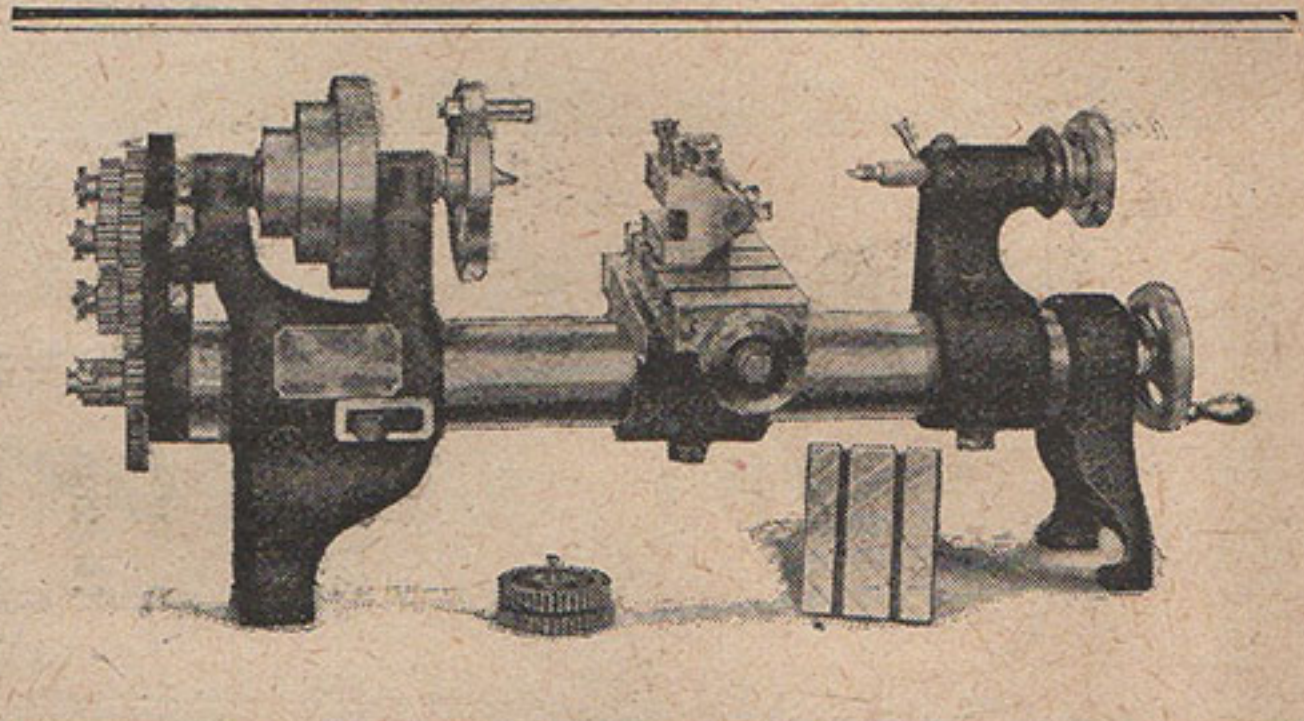
ECONOMY, EASY STARTING & SLOW RUNNING.

Prevents your valve guides wearing, stops air leaks absolutely, and permanently quietens valve clatter, and enables you to obtain perfect carburation in each cylinder.

No packing used. Nothing to wear out. Refill with "Flexekas" Paste (carton 1s. 6d.) when you overhaul—this is all the attention necessary.

State make and year of machine

Obtainable through Garages or direct from the Patentee & Sole Manufacturer:
CLIFFORD FRESSLAND, A.M.I.E.E., Engineer, Hampton-on-Thames.



The DRUMMOND 4in. LATHE

You can do all motor cycle repairs on this Screwcutting, Drilling, Milling, and Boring Lathe. You should use one. You will then always have supreme confidence in your bike. You will quickly save the machine's first cost.

All the help and advice you require we give FREE.

May we post you details and a quotation? Send us a postcard.

DRUMMOND BROS., Ltd.
Reed Hill, GUILDFORD.

3,357 miles of Comfort!

Note what this rider of the famous LYCO Pan Seat says:

Dear Sirs,

Sheffield, November 5th, 1920.

I used one of your No. 5 Pan Seat Saddles on the A.C.U. Observed Trial round the coasts of England, Scotland, and Wales. The surface of the road on two-thirds of the journey was in a shocking condition, yet the comfort was really surprising, and never once during the whole 3,357 miles did I feel saddle sore, which in itself speaks volumes.

G.W.W.

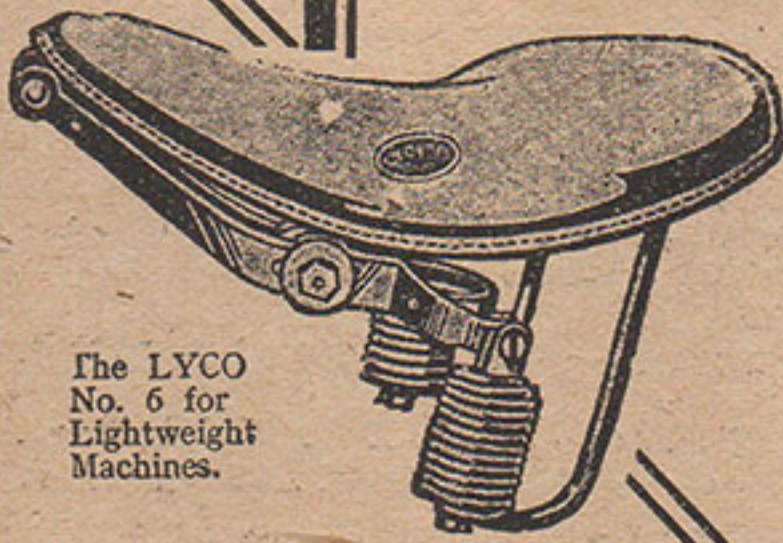
And that is typical of the sort of service you always obtain from the widely popular

LYCETT LINES

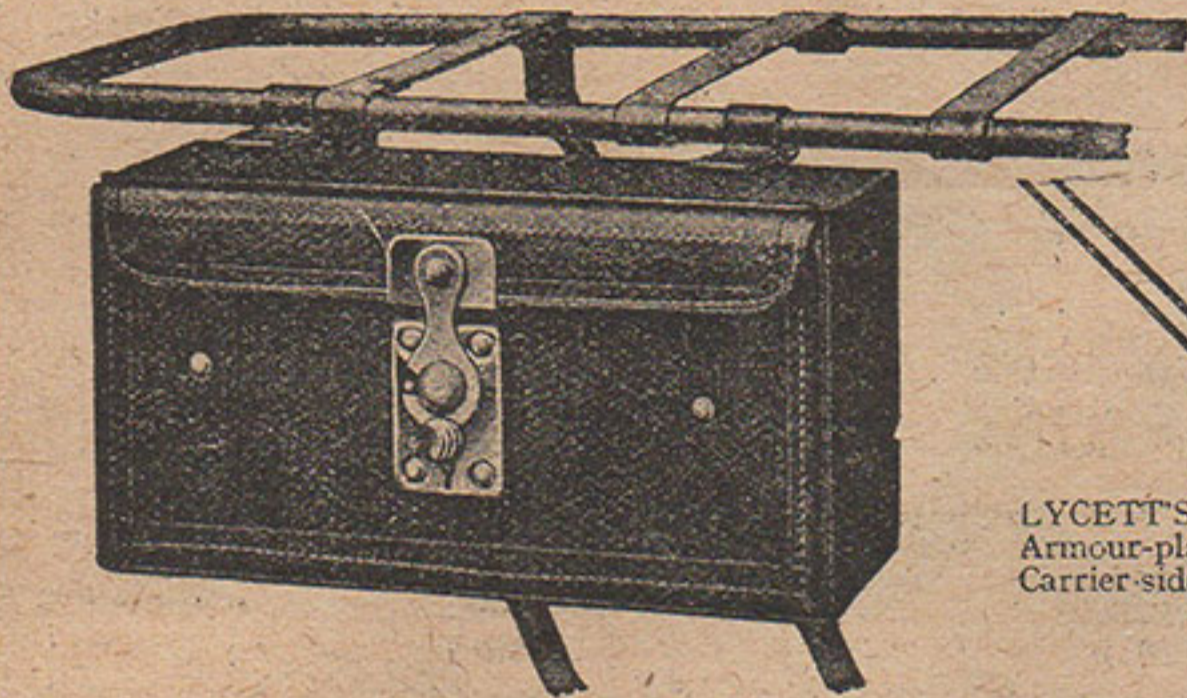
The LYCETT range of Motor Cycle Specialities is noted for extreme utility and superior manufacture, and LYCETT Lines are regularly specified and chosen by experienced motorists everywhere.

LYCETT'S

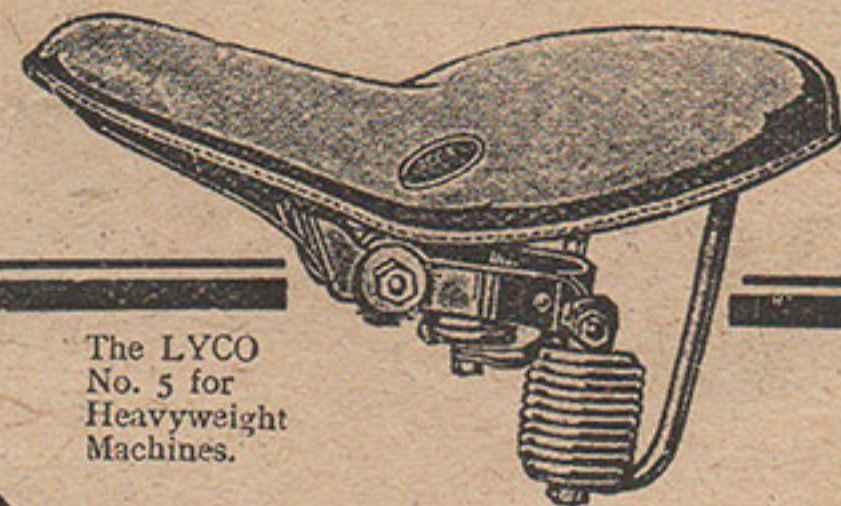
"The Saddlery," Birmingham



The LYCO No. 6 for Lightweight Machines.



LYCETT'S Armour-plated Carrier-side Bag



The LYCO No. 5 for Heavyweight Machines.

R.H.S.



MILLER

the Lamps that Won't Go Out—

are stocked by every good agent, who will always be pleased to explain the points that make them highly distinguished among the finer classes of lamps.

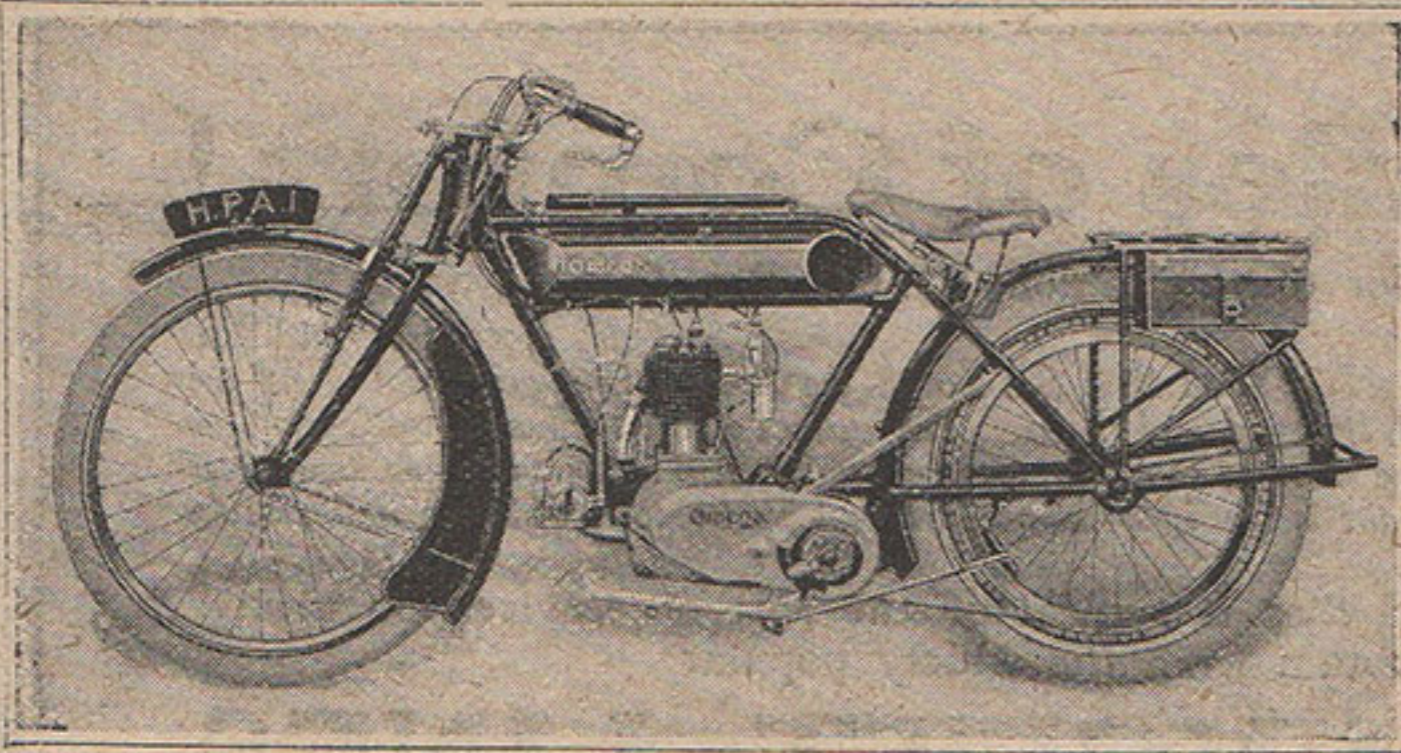
Night riding in Winter *demand*s a head lamp of great merit. Examine a "Miller."

H. MILLER & CO., LTD.,
Light Specialists, Birmingham.

In answering these advertisements it is desirable to mention "The Motor Cycle."

1849

A27



Model "C," with Clutch and Kick-starter.

SPEED!!!

¶ The OMEGA is the fastest sporting single on the road—the ideal machine for the solo rider who is a sportsman and engineer in one. You've got to be a sportsman to appreciate her responsiveness and speed—and an engineer to appreciate the sterling qualities of design, workmanship, power, and reliability.

¶ If YOU want SPEED and POWER, get an OMEGA, "The Sporting Solo Single."

¶ Get an OMEGA—and get the advantage.

Models A and B 71 Guineas.
Model C, with clutch and kick-starter . . 79 Guineas.

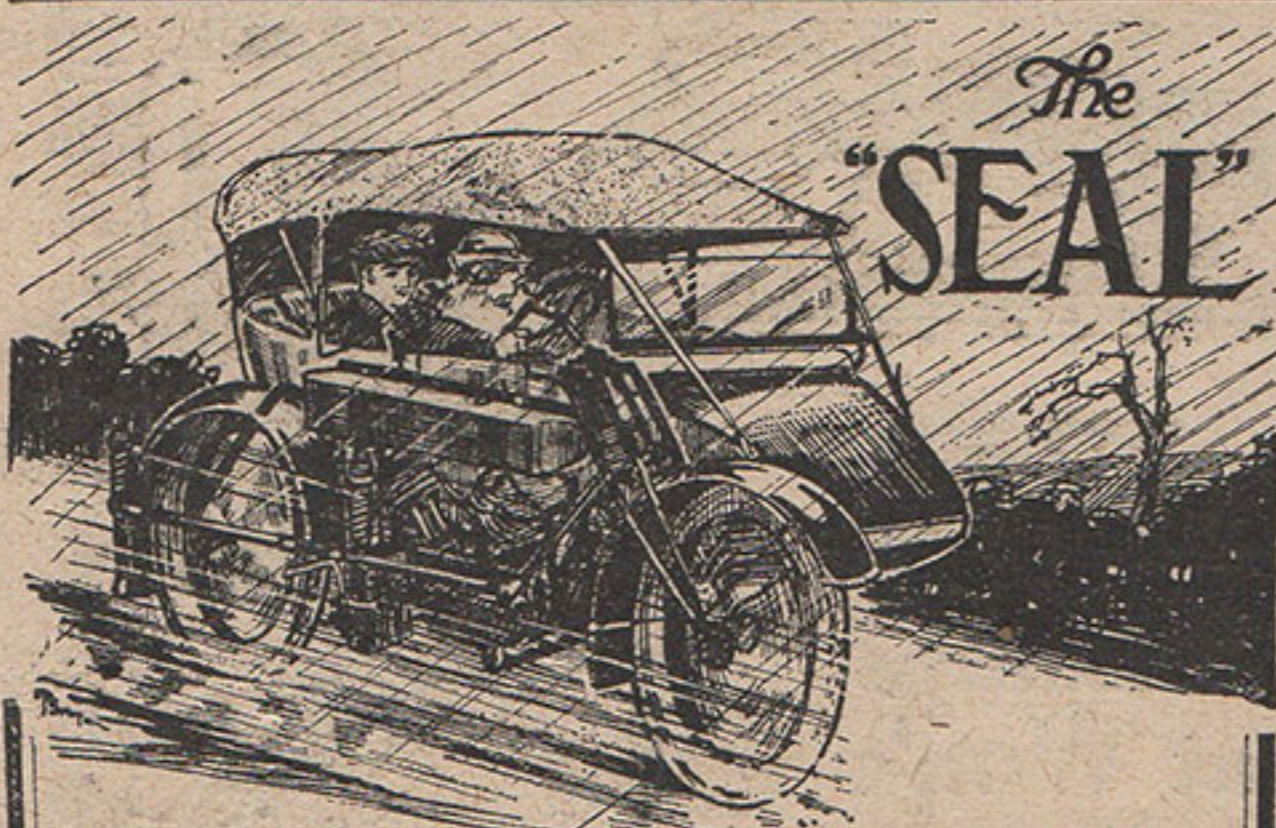
Write TO-DAY for Catalogue.

W. J. GREEN, Ltd., COVENTRY.

London Agents: Bartlett's, 93, Great Portland Street, W.

OMEGA

"The Sporting Single Solo." 



WHY RIDE ON A SADDLE-EXPOSED TO ALL WEATHERS, WHEN "THE SEAL" OFFERS YOU A COMFORTABLE SEAT IN A COSY BODY?

Brief Specification:

J.A.P. 8 h.p. engine, 3-speed gear box, interchangeable wheels, car tyres, wheel steering, comfortable two-seater body, wind-screen and hood.
Price £200, spare wheel and tyre £6 15.
These prices are subject to alteration.

"The Seal" is the only machine with patented suspension carrying the load over the driving wheel to the outside of the motor frame.

Sole Makers and Patentees:

SEAL MOTORS LTD.,
348, STRETFORD ROAD, MANCHESTER.
Phone: Central 2364. Telegrams: "Detachable, Manchester."
For Agency and terms apply to the makers.

THE IDEAL MACHINE FOR WINTER USE.

The Comfort and Reliability of a car at less than motor cycle combination price.

SPECIAL SPRINGS REDUCE ROAD SHOCKS TO A MINIMUM.

Valve production

During war the demands of the Aero Engine taught us much we did not know before concerning Valve production.

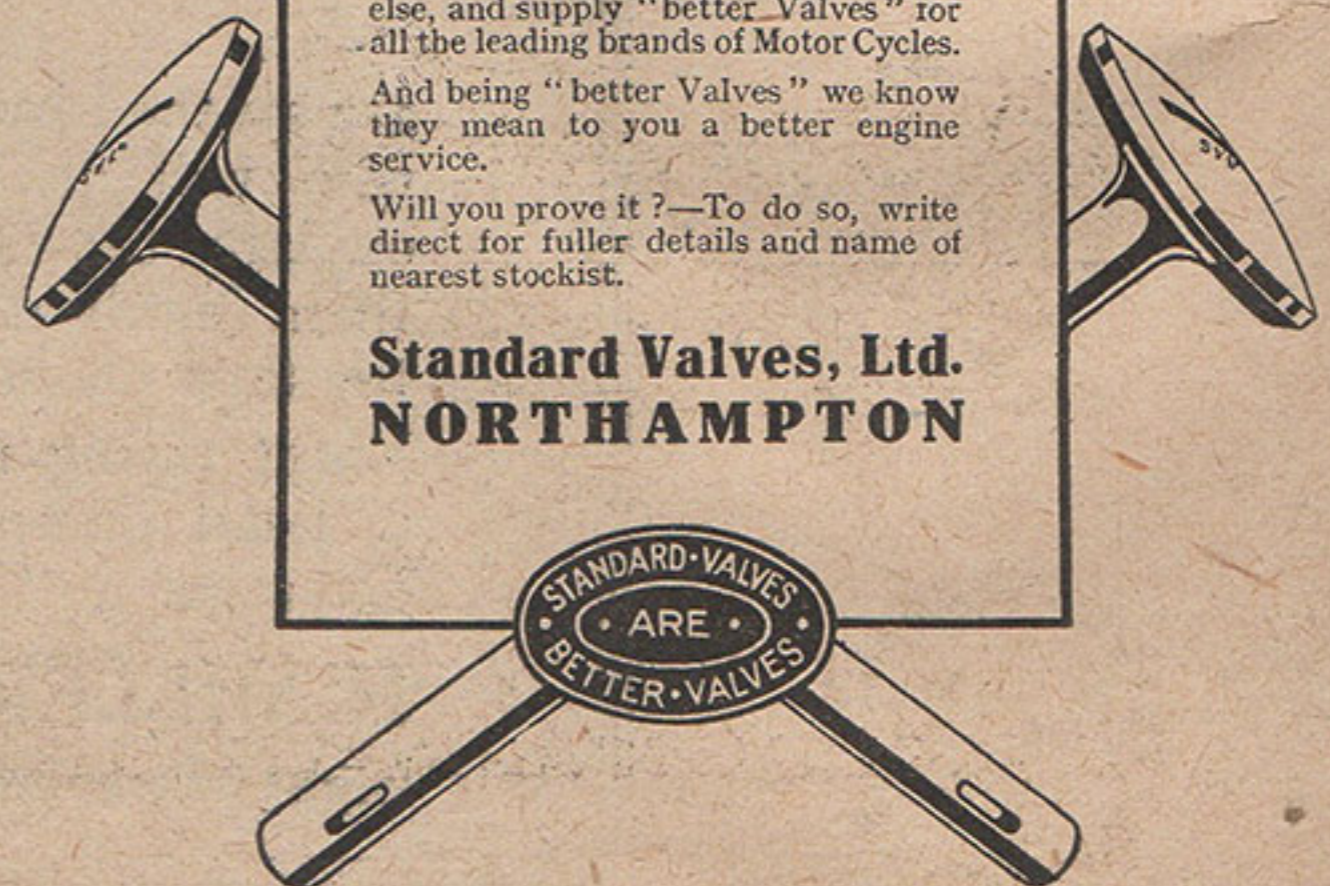
For War service we manufactured over half-a-million Valves, and the standard of efficiency which we achieved was universally regarded as remarkable.

To-day, as then, we still make nothing else, and supply "better Valves" for all the leading brands of Motor Cycles.

And being "better Valves" we know they mean to you a better engine service.

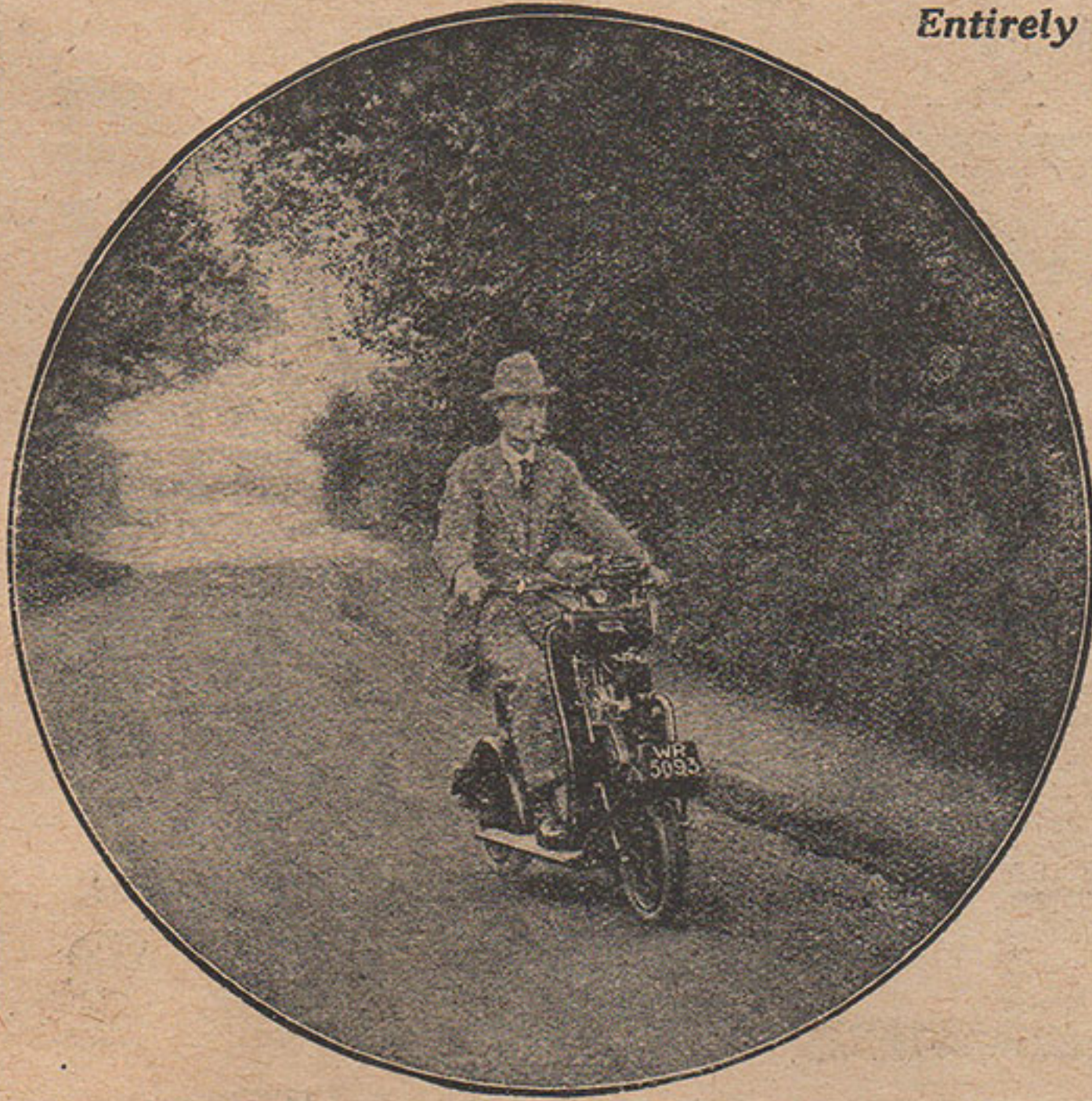
Will you prove it?—To do so, write direct for fuller details and name of nearest stockist.

Standard Valves, Ltd.
NORTHAMPTON



1921 MACKLUM MOTORETTE

Entirely British.



“Sooner or later the lightweight open-frame machine will come. Of this we are convinced.”

Vide “The Motor Cycle,” Jan. 22, 1920.

Letter from customer:
“The springing is wonderfully good; in fact, easier than any motor cycle I have ever ridden.”

SHORT SPECIFICATION—2½ h.p. Pero 2-stroke engine, Brampton spring chain, two band brakes.

PRICE - £60

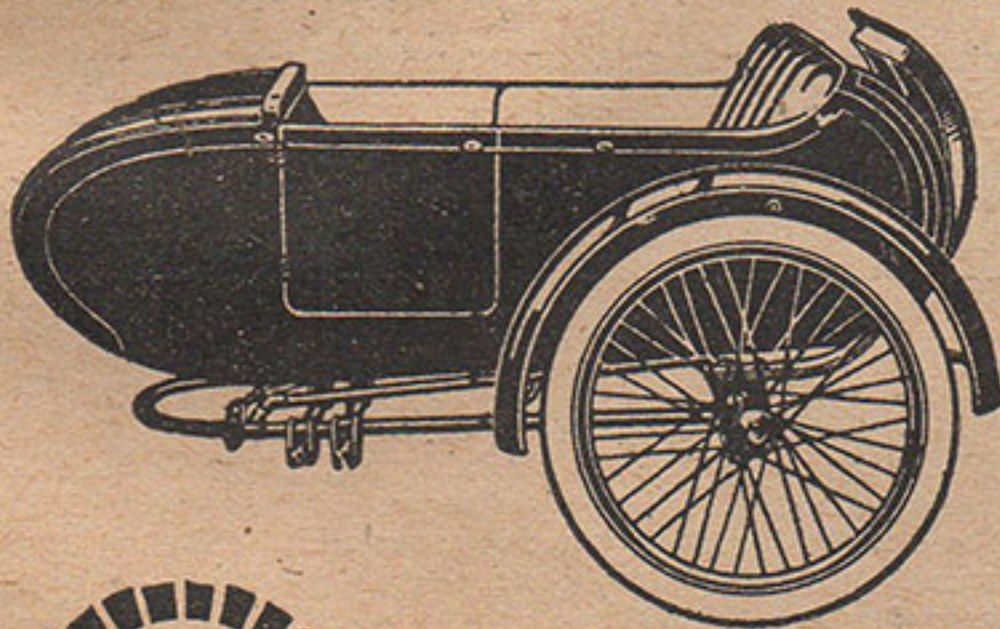
For further particulars apply to the manufacturer:

F. MACCALLUM,
Guildhall Buildings,
Navigation St., BIRMINGHAM.

Canoelet

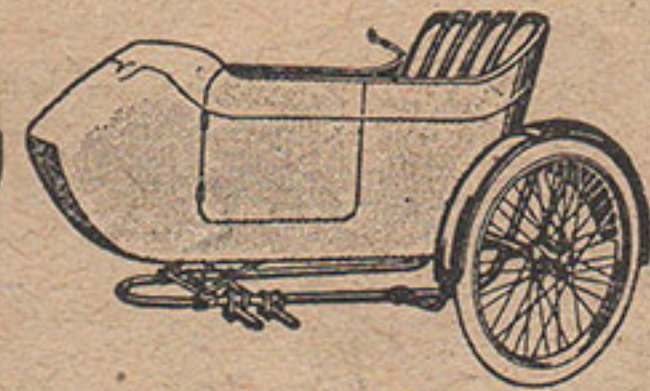
THE PERFECT SIDECAR

embodying all that experience proves best in utility combined with exceeding beauty in design. Write for particulars of full range of beautiful Canoelets, especially the New Semi-Sporting Model and two complete Taxi Sidecars.

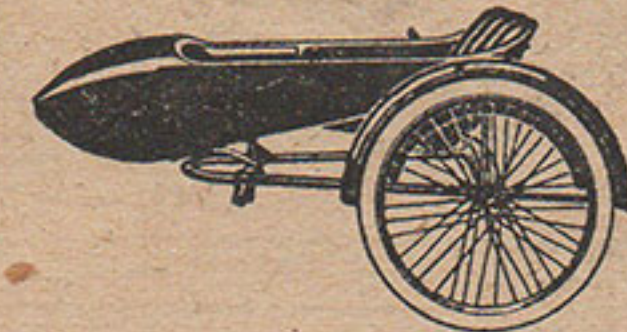


Catalogues free from

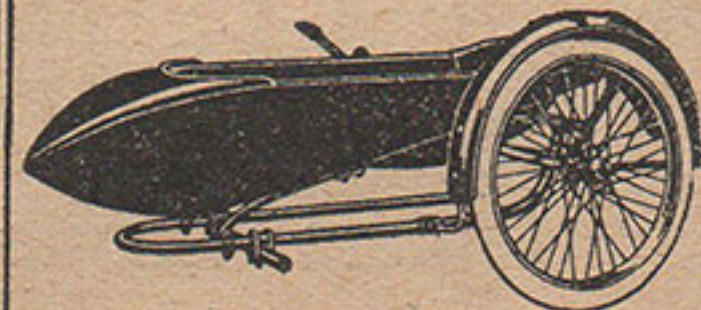
MEAD & DEAKIN,
Tyseley,
BIRMINGHAM.



Model D4.



Model Minor
for Lightweights.

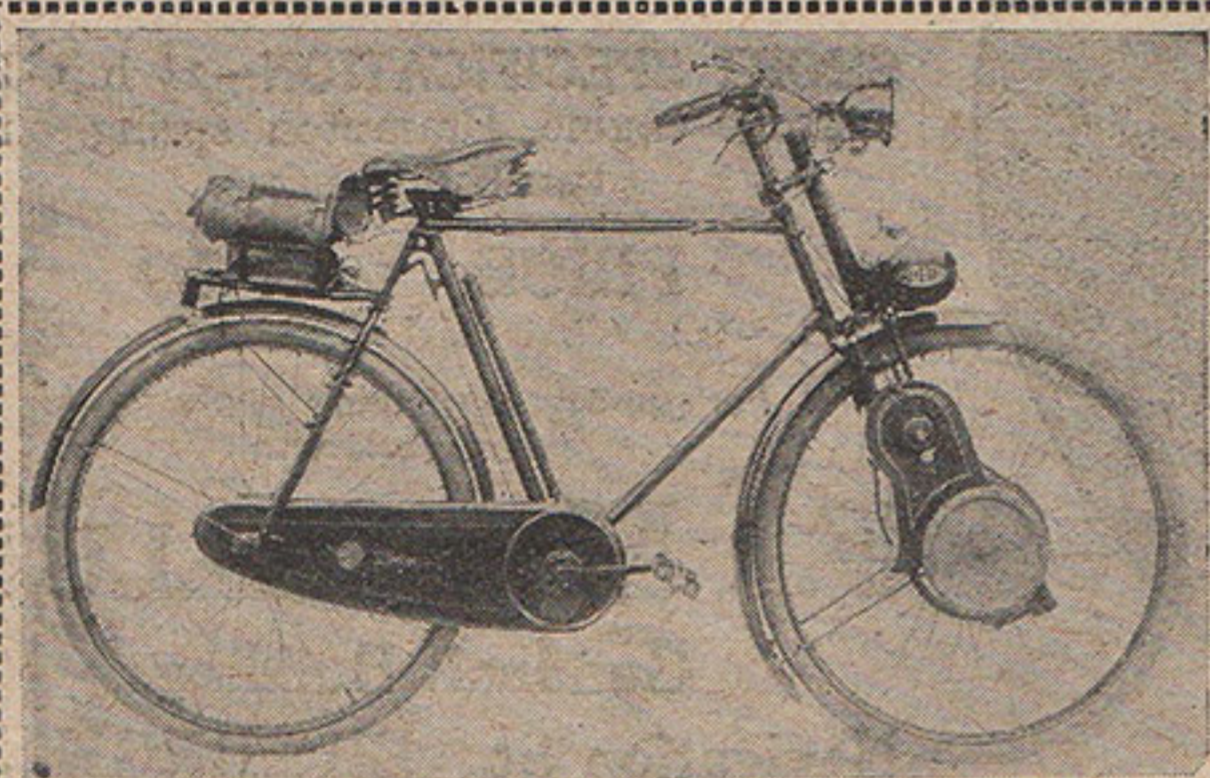


Model K4.
Sporting.

CYKELAID

CYKELAID

**DON'T PAY ANY ATTENTION
TO OUR ARTIST—PAY ATTENTION TO THIS!!!**



The Cykelaid fitted to a Sunbeam.

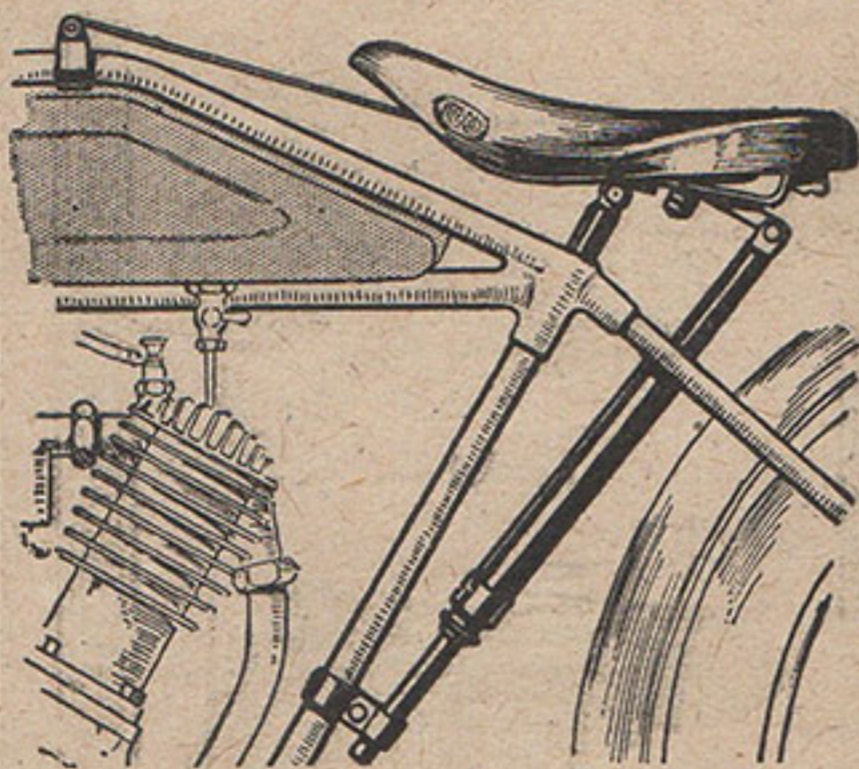
**THE CYKELAID
POWER UNIT FOR PEDAL CYCLES
IS THE UNIT FOR YOU!**

1½ h.p. Two-stroke.
Automatic Lubrication.
Spring Forks.
Cork Inse. Clutch.
Runbaken Magneto.
Amac Carburetter.

**TO FIT EITHER LADIES'
OR GENTLEMEN'S MACHINES.**

SOLE MAKERS:—The
Sheppee Motor Co., Ltd.
59, THOMAS STREET, YORK.

Write for full particulars.



**L.
NEW PATENT
SUSPENSION.**

The owner of a 6 h.p. combination of another make, reports that it "transforms the running of the machine."

**A PERFECT SUSPENSION
SYSTEM FOR MOTOR CYCLES.**

This saddle suspension has had 18 months' testing on L.M.C. machines, and is now marketed as a separate fitting for use on other makes. Fits practically any standard machine, and improves its running to a degree which must be experienced to be realised. Affords the comfort of a spring frame without its drawbacks.

Price (provisional) **£6 6s.**

Fuller particulars on request to
The Lloyd Motor Engineering Co., Ltd.,
132, Monument Road, BIRMINGHAM.

London Showrooms:
144, Great Portland Street, W.1.

**The Hoskison
Motors, Limited,
Lozells, BIRMINGHAM.**

Northern 643
Homobik, B'ham.

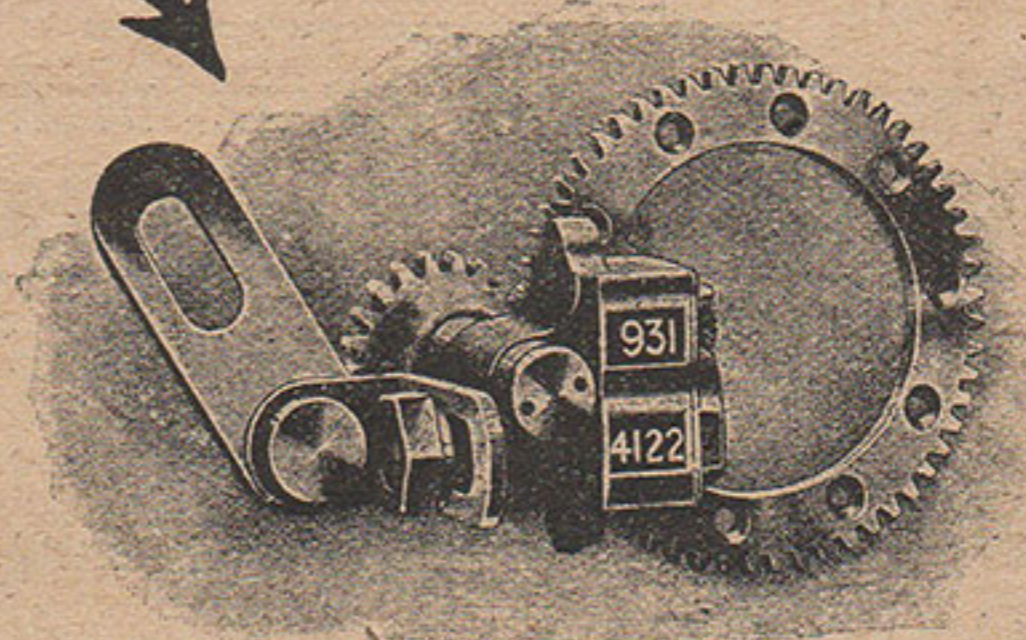
1921.

For 1921 we are concentrating on an exceptionally high-class 2½ h.p. Solo Motor Cycle and a 4 h.p. model which is suitable alike for Solo or Sidecar work. The engine used in each case is the BLACKBURNE, and we have not succumbed to the temptation of fitting the higher powered engine into the Lightweight frame, or vice-versa. The two models are separate and distinct, each being specifically designed for its own particular purpose.

The prices are 99 Guineas and 120 Guineas respectively, and we guarantee THESE PRICES TO REMAIN CONSTANT TILL MARCH, 1921. Highly finished, luxuriously equipped, and efficient to the last degree, we claim each to be the best in its class on the market.

What mileage have YOU covered?

The
Veeder



**NEW GEAR DRIVEN
CYCLOMETER** Price 45/- each,
WILL TELL YOU.

A SUBSTANTIALLY BUILT AND RELIABLE INSTRUMENT FOR ACCURATELY
MEASURING THE MILEAGE OF MOTOR CYCLES.

THE WORLD'S STANDARD DISTANCE RECORDER.

Write for Particulars from:

MARKT & CO. (LONDON), LTD., 98-100, Clerkenwell Road, F.C.

**A.C.U.
Test.**

**A.C.U.
Test.**

**An Astounding Revelation in Petrol
ECONOMY**

with a Standard 1921 Model

AMAC CARBURETTER

**320 Miles per Gallon on
a Standard Levis Machine
— well run in —**

**245 Miles per Gallon on
a Standard Levis Machine
— straight from stock —**

The above Results were obtained in a test officially observed by the A.C.U

Fitted to standard LEVIS machines, and carried out over a distance of 54 miles over give-and-take roads starting at Stechford, through Castle Bromwich, Water Orton, Coleshill, Stonebridge and back, along the main London and Birmingham road to Yardley, and thence onwards to Stechford. The course included the main street in Coleshill which is a gradient of about 1 in 9.

Average Speed 21.6 m.p.h.

Write for Catalogue
(stating type interested in).
Hints and Tips 6d.

Phone: East 477-8. Grams: Terminal

AMAC LTD.,
Aston Cross, Birmingham.

**A.C.U.
Test.**

A.B.C.

ORDER NOW: IMMEDIATE DELIVERY.
A.B.C. 3 h.p. Motor Cycle

complete with kick-starter. £150

A B.C. COACHBUILT SIDECAR

With special Spring Chassis. £40
(Waterproof Cover £1 7s. 6d. extra).

A.B.C. SPARES

Ample supply immediately available.


A.B.C. REPAIRS

The Repair Dept. gives instant and expert service for A.B.C. repairs, large or small.

THE SOPWITH AVIATION AND ENGINEERING CO., LTD.

(In Liquidation)

KINGSTON-ON-THAMES.

W WSR R	MORE M.P.G.	W WSR R
A.M.A.C. and B. & B.		Senspray and Triumph Postage and Packing, 6d.
} 8/6	10/6	
SLOW RUNNING		MORE POWER
EASY STARTING		HIGHER SPEED
State make of engine, carburetter, and length of jet, including plug, when ordering. For Triumphs state diameter of thread across base of plug, and date of carburetter.		
Of all well-known Agents, or direct from:		
W WSR R	RUDGE BROS., Motor Fittings Manufacturers,	W WSR R
FLEET STREET, BIRMINGHAM.		

FLEXA SEAT PILLAR



(Patent applied for.)

An adjustable springing device
A stoutly made and thoroughly tested Laminated Spring Seat Pillar for Motor Cycles.

PRICE 33/-

No alterations required, can be attached in a few minutes to most Rigid-Frame Machines.

Write for leaflet and copies of testimonials if your Agent cannot supply.

E. H. DERRICOTT, 74B, Lozells Road, Birmingham.

MOTOR OILS

for Cars, Cycles, Tractors, Aeroplanes, and Boats.

High-grade and Unexcelled.

Can be obtained from all Motor Garages and Motor Car Dealers.

"SPEEDON"

Don't be satisfied with less than the best, but demand "SPEEDON."

Sole Manufacturers
JOHN S. MORRIS & SON (OILS), LTD.,
Cross Lane Oil Works,
SALFORD, MANCHESTER

SECURITY EQUIPMENT



YOUR LUGGAGE CANNOT BE LOST.

Your luggage cannot be attached by means of straps or other equipment. There is a visible means of the case is held permanently in place and cannot be removed unless then be detached with leaving the carrier uses. The "EACO" Security Equipment, can be required, or the equipment can own suit case.



be lost or stolen, if it of "EACO" Security are no straps or other attachment, and yet perfectly secure and cannot be unlocked. It can ease and celerity, perfectly free for other cases, with "EACO" made to any size re be fitted by us to your

Size of Standard Cases:
C1, 15 1/2" x 10" x 6". C2, 18" x 12" x 6 1/2". C3, 22" x 14" x 6 1/2".
Prices:
C1, £2 2 0. C2, £2 12 0. C3, £3 3 0.

Order through your local motor cycle dealer, or write to—
THE ENGINEERING ACCESSORIES CO.,
11-13, SPENCER ST., VICTORIA ST., WESTMINSTER, LONDON, S.W.
Telegrams: "Euclidian, Sowerth London" Telephone: Victoria 9292.

"STANDARD"

THE BEST BELT FASTENERS



for any machine of any power.

Try one on yours and be free of trouble.

"Simplex" Improved, 1/- "Simplex" Adjustable, 1/3
"Standard" 1913, 1/3 "Standard" Adjustable, 1/6

All sizes same price. All Agents sell them.
PATENTEES AND MANUFACTURERS
HERWIN, CANNY & CO.,
William St., WOOLWICH, LONDON.

"SIMPLEX"

MILLFORD ALL PURPOSE

The MAP PLUGS.

A FREE TEST




MICA INSULATION. DETACHABLE.
Cleaned, and replaced in one minute, with a simple mechanical Gap adjustment.

SOOTING PRACTICALLY IMPOSSIBLE
Send 8/6 for each Plug up to a set of Four, and if you wish to return the Plugs within 7 days your money will be returned

Manufactured by
MILLFORDS, LTD.,
Bullock Street, Birmingham.

Price 4/6 each.



Show this to your lady enthusiast.

Remarkable direct offer.

The Stylish Ramont Raglan
WARM WINTER COAT
Tailored by the famous *Ramont Sports Coat People.*

Made to measure in Six Styles. Tailor-made to your measure in Tweeds Striped, and Over-check Fleecy Blanket Cloths and Velours, and sold with **MONEY-BACK GUARANTEE.**

This is the greatest direct offer ever made by a manufacturer, and, judging by results, many women are quick to realise it. The Ramont is the smartest and most serviceable Warm Winter Coat ever offered, and any lady who has not yet sent for patterns should do so NOW. **WE GUARANTEE**—made to measure—perfect fit—superior finish—and every coat is sold with a money-back guarantee.

SOLD WITH MONEY BACK GUARANTEE. SEND NO MONEY—PATTERNS FREE.

A p.c. brings patterns, styles booklet and measurement form. Also send for patterns of tailored Dress Skirts (from 12/6), Ladies' and Gents' Rain-coats (from 40/-), and Gent's Overcoat (from 70/-)

MADE TO MEASURE from 45/-
(slight extra charge for over 42in. bust.)

Ramont (Dept. 14a),
Finsbury Pavement House, E.C.2

Huile de Luxe

CALL IT "WHEEL DE LOOX"



If you have a sidecar machine consider the economy of buying a 5-gallon drum of oil for your season's requirements—the saving is considerable.

We have ready an interesting, illustrated leaflet showing how you can pour oil from a drum without spilling a drop.

The current Lists give the prices of oils in drums. Please mention "The Motor Cycle."

PRICES COMPANY LIMITED
BATTERSEA, LONDON, S.W.11

"There's a time for everything"



Party-Time

at Christmastide is the happiest time of the year

—and everybody at parties loves Mackintosh's Toffee de Luxe; the little folk and grown-ups and even grandad watching the fun from his arm-chair by the fire.

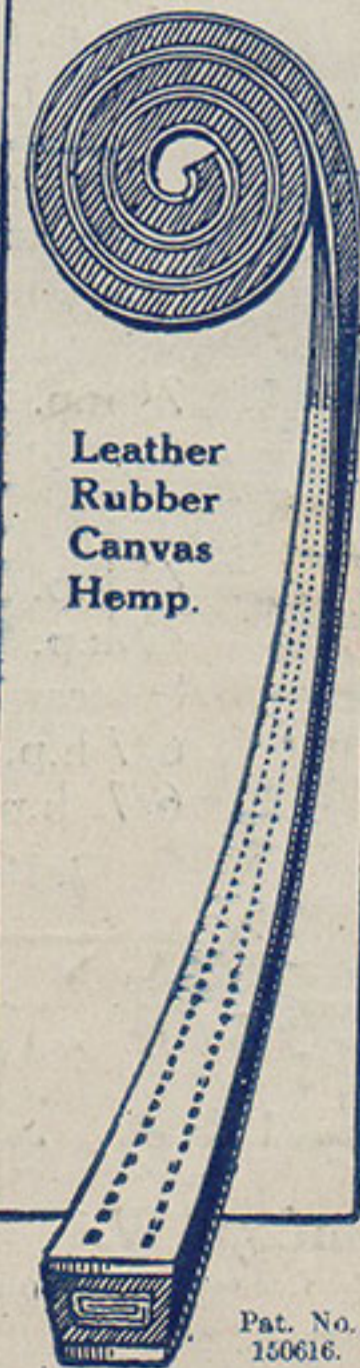
Get a 4-lb Family Tin for Christmas. Sold also in 1-lb. and 1-lb. Tins and loose by weight.

Buy from Confectioners everywhere.

Mackintosh's time is all the time



©P1



Leather
Rubber
Canvas
Hemp.

The Big Four

Leather, Rubber, Canvas, Hemp.

THE Big Four (Leather, Rubber, Canvas, and Hemp) are winning all along the line. Their enormous strength and powerful grip keep things moving at full speed.

The 'Quadrupull' Belt

is unaffected by heat or cold, dry or wet, and is unbreakable. Its flexibility makes adjustment an easy matter and it grips the smallest pulley.

PRICES:

1 1/2 in. 6/- per ft.	3 in. 5/- per ft.
1 3/4 in. 5/9 "	2 1/2 in. 4/9 "
1 in. 5/6 "	2 in. 4/6 "
3/4 in. 5/3 "	

All Belts tested before leaving the works.

VULCAN SOLES and Heels will treble the life of your boots, and can be fixed by a child. Send shape of boots on piece of paper, enclosing P.O. for 2/8. (men's size). Cash refunded if dissatisfied.

Pat. No. 150616.

Sole Manufacturers:

Vulcan Sole Co., Dept: 1, Princess Road, B.4, MANCHESTER, S.

London Agents: R. P. Jones & Co., 7, Rochester Row, Westminster, S.W.

Stop!



BOOK YOUR ORDER WITH MAUDE'S

1921 MATCHLESS.

8 h.p. M.A.G. or J.A.P. engine..	Price	£205	0	0
With Lucas magdyno lighting set, speedometer, and horn ..	..	£238	4	0
With two-seater sidecar ..	..	£212	10	0

London Contracting Agents and Wholesale Distributers for Cornwall, Devon, and Somerset. TRADE SUPPLIED.

1921 MARTINSYDE.

6 h.p. standard model ..	Price	£175	0	0
6 h.p. model de luxe with Lucas dynamo lighting ..	..	£225	0	0
3½ h.p. twin solo model ..	..	£125	0	0

London Contracting Agents: Wholesale Distributers for Devon and Cornwall. TRADE SUPPLIED.

1921 ENFIELD.

8 h.p. model 180 ..	Price	£160	0	0
8 h.p. model 190, with Lucas magdyno lighting and horn ..	..	£182	0	0
2½ h.p. two-stroke, two-speed, chain drive ..	..	£65	0	0

(Kick-starter £5 extra.)

1921 B.S.A.

4½ h.p. model, H2 ..	Price	£110	0	0
4½ h.p. ,, K2 ..	..	£107	0	0
Sidecar No. 3 for H2 or K2 model ..	..	£42	0	0
6/7 h.p. twin model, A ..	..	£150	0	0
6/7 h.p. twin and sidecar, No. 1, with Lucas magdyno lighting, luggage grid and spare wheel ..	..	£34	3	0

MAUDE'S MOTOR MART

100, Gt. Portland St., London, W.1.

Telegrams: "Abdicate, Wesdo. London." Telephone: Mayfair 552. Museum 557.

100, Paris St., EXETER.

'Grams: "Combustion, Exeter." 'Phone: Exeter 933