

Vol.XVIINo.418. Nov 27. 1920 Registered at the GPO as a Newspaper.

S 1. SVD. 1388

Should Cyclecars Compete with Motorcycles?

See Special Article

As a Motorist has it ever struck you

that 98°/, attention is bestowed upon Tyres, whilst only 2°/, is bestowed on Inner Tubes

and this notwithstanding the fact that the tube is the vital part of the pneumatic tyre? The tube is the factor which enables the cover to function. It is the essence of the pneumatic tyre, and without it the cover would simply be a dull, lifeless object. Therefore, to get the most out of your tyres, first see that the tubes are quality tubes. Such are

SPENCER - MOULTON WOOD - MILNE

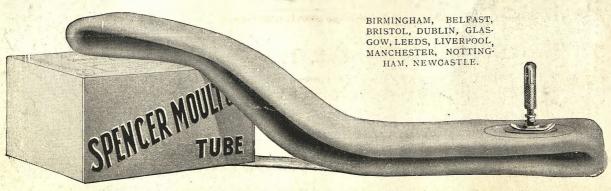
INNER TUBES

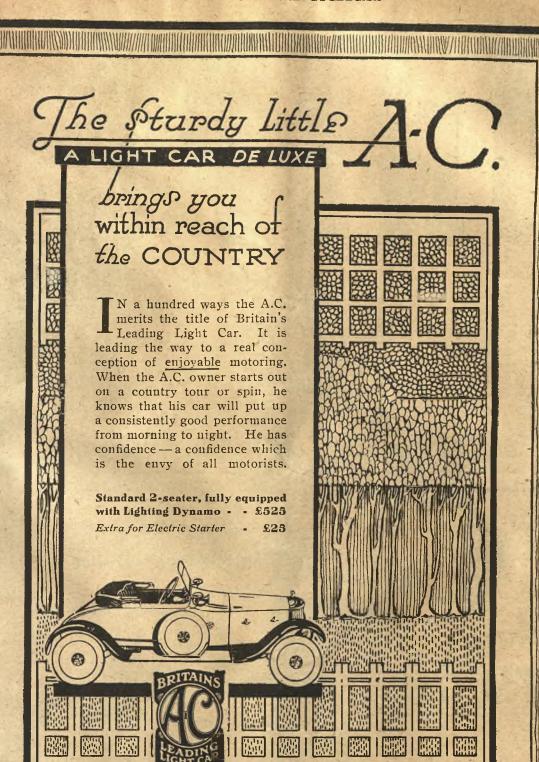
They are the best that expert British workmanship can evolve from the finest of materials, and carry with them the manufacturers' assurance that they are designed to enable your tyres to function to their fullest capacity. By fitting them you will add 100 % to the pleasures of motoring and halve your tyre bill

"Start 2 up by using a Wood ~ Milne GOLF BALL HALF-A-CROWN each."

G. SPENCER, MOULTON & Co., LTD., & WOOD-MILNE, LTD. 42-46, WIGMORE STREET, W.I.

Telegrams—
"Spenmoul, Wesdo, London," & "Wudmiln, Wesdo, London."
Telephone: 6610 Mayfair.
Works: Bradford-on-Avon & Leyland, Lancs.





AUTO-CARRIERS, Ltd., Thames Ditton, Surrey.

Repair Works and Temporary Sales Department— Telephone—Hop 310 and 311. 181-184, Hercules Road, Westminster Bridge Road, London, S.E.1.

It has been decided to fit STANDARD UPHOLSTERY to the \$280 Model, of

in place of the Hammock Seats exhibited at the White City. Our prices remain unaltered.

With door and upholstery £280

Without door and with hammock seats £275

ROTARY UNITS Ltd., Light Car Makers, Wooburn Green, Bucks.



SEE OUR EXHIBIT AT

JUST OUTSIDE OLYMPIA

(Hammersmith Road Entrance).

79 Gns.

Do not miss seeing this wonderful car.

100 m.p.g.

Agents being appointed everywhere.

The Central Aircraft Co., Kilburn, London, N.W.6.



Averaging 40² M.P.G. over 383 miles!



Photo of the winning Calthorpe, an absolutely standard car in every way.

Novice's remarkable Performance in the Leeds-London-Leeds Trial.

In the first appearance of himself and his Calthorpe in competition work, J. H. Leuty, Esq., St. Omer, Headingley Mount, Leeds, went through the entire trial without any trouble whatever, being placed FIRST and winning the SILVER SHIELD and GOLD MEDAL The event was the recent Leeds to London and back trial of the Leeds and District Motor Club. We give a photo of the car and the owner's summary of his success:—

CAR USED—10 h.p. Sporting 4-Seater Calthorpe, 1920.

PASSENGERS CARRIED—Three.

MILES BY SPEEDOMETER—383-7 miles.

SPIRIT USED—9½ gallons.

MILES PER GALLON—40-4

TYRES USED—Palmer Cord on all four wheels.

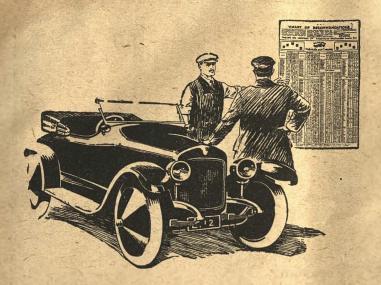
OWNER AND DRIVER—J. H. Leuty.

RESULT—Placed first, gaining Silver Shield and Gold Medal.



CALTHORPE MOTOR Co. (1912), Ltd., Bordesley Green, Birmingham

LONDON "SERVICE DEPOT": Mann, Egerton & Co., Ltd., 1a, High Road, Kilburn, N.W.6, Sole Wholesale and Retail Agents for London and the Home and Eastern Counties.



Take Expert Advice

WHEN you have legal matters to attend to you consult a lawyer. When you are unwell a doctor is called in. Why not use the services of the lubrication specialist to prescribe for the Correct Lubrication of your car?

The correct oil for your car is specified in the Gargoyle Mobiloils Chart of Recommendations—shown here in abridged form. This Chart represents the professional advice of the leading authorities on Correct Lubrication—the Vacuum Oil Company, Limited.

The Recommendations are the result of a careful analysis of the lubricating requirements of each make and model of car produced since 1914. Against each name are the grades specified for the engine (in summer and winter), the gear box and back axle.

You will find this authoritative guide to Correct Lubrication on the walls of motor dealers everywhere in the Kingdom. Indeed it has come to be regarded as an essential part of the dealer's equipment.

The complete Chart, in handy form, is included in our booklet, "Correct Lubrication," a very instructive work on motor car operation, which will gladly be sent on request.

Chart of Recommendations for

Light Cars and Cycle Cars

Explanation.—"A" means Gargoyle Mobiloil "A"; "Arc" means Gargoyle Mobiloil "Arctic"; "B" means Gargoyle Mobiloil "B"; "BB" means Gargoyle Mobiloil "BB"; "E" means Gargoyle Mobiloil "E."

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.I.

Telegrams: "Vacuum, Phone, London."

Telephone: Victoria 6620 (6 lines).

"Nothing of better quality in their line is on the market."—Sheffield Daily Telegraph, Nov. 6

The 10 h.p. 4-cyl.



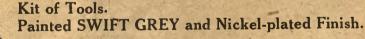
specification embodies every feature to be found on cars of double the cost. Whilst complete in every detail, its undoubted economy-low taxation—low running costs—proved reliability -has placed it high in the estimation of motorists in every part of the world.

COMPLETE WITH

Owners state their petrol consumption to be from 45 to 50 miles to the gallon.

Two-seated Body with Dickey Seat. Electric Self-Starter. Electric Lighting.

Leather Upholstery. 5 Detachable Steel Wheels. 5 Dunlop Magnum Tyres. Wind Screen. Hood and Hood Cover. Five Lamps and Horn.





READY FOR THE ROAD

For Complete Specification write

COVENTRY, LIMITED, OF

Telephone: Coventry 1281 (5 lines).

Telegrams: "Swift, Coventry."

Or their Principal Distributing Centres:—B.M.T. Depot, 20, King Street, St. James's, S.W.1; B.M.T. Depot, 230, Deansgate, Manchester; B.M.T. Depot, Coventry Road, Yardley, Birmingham; B.M.T. Depot, 4, Duncan Street, Leeds: B.M.T. Depot, St. Thomas Street, Newcastle-on-Tyne; B.M.T. Depot, British Motor Buildings, New City Road, Glasgow.

By mentioning "The Light Car and Cyclecar" when corresponding with advertisers, you will be working for the cause of the new motoring. TO THE READER

Entirely New Edition

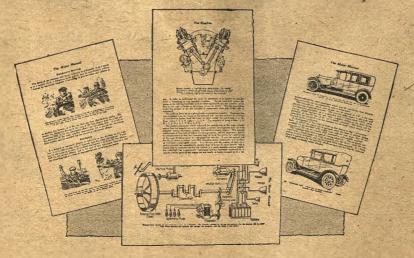
The Store of the Sale of the S

Proven by its sale to be the most popular handbook on Motoring.

Since its first publication nearly six hundred thousand copies have been disposed of.

The Twenty-third Edition, now on sale, is entirely re-written, revised, and re - illustrated throughout.

- It is the most up-to-date, authoritative and exhaustive handbook issued covering the motor vehicle.
- Q Every motorist, whether actual or prospective, should be in possession of a copy.
- It is the complete motorist's 3/6 vade mecum. Price (net)
- Owing to the great demand it is advisable to place an order at once with a bookseller; or post 3/10 free from the publishers at 3/10



TEMPLE PRESS LTD., 7-15, ROSEBERY AVENUE, E.C.1.

Wholesale-E. J. LARBY, Ltd., 30, Paternoster Row, London, E.C.4.





Patent No. 4313, 19-2-1914.

Don't Patch!

-repair tube punctures permanently with the

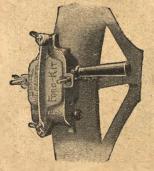


5-minute Vulcanizer

A patch is a mere *temporary* measure. To repair a tube *permanently* it must be vulcanized. "But," you may argue, "vulcanizing is an expert's job." It is *not*—if you use the Shaler 5-minute Vulcanizer.

Vulcanizing the Shaler way needs no technical knowledge—it is as simple as lighting a cigarette. Anyone can make a perfectly successful Shaler repair at the first attempt—a repair that is as strong as the tube itself, one that can't tear off.

The Shaler 5-minute Vulcanizer, with 12 patch and heat units Price 10/6



The FORD-KIT is specially designed for carrying on Ford and other cars using 30-inch × 3½ inch tyres. Full equipment of vulcanizing material and 21/instructions. Price 21/-

RENEWALS.

12 round patch and heat units - 5/6
12 oblong patch and heat units - 5/6
25 extra long patch and heat units - 18/=

ANY GARAGE CAN SUPPLY YOU.

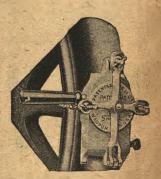
BRITISH MOTOR TRADING

DEPOTS: LONDON-20, 21 & 22, KING STREET, ST. JAMES'S, S.W.I.; MANCHESTER-230, Deansgate; BIRMINGHAM-Coventry Road, Yardley; LEEDS-4, Duncan Street; NEWCASTLE-ON-TYNE-St. Thomas Street

HEAD OFFICE: 50, PALL MALL, LONDON, S.W.1.

Telegrams: "Brimotrade, Charles, London."

Telephone: Gerrard 8800.

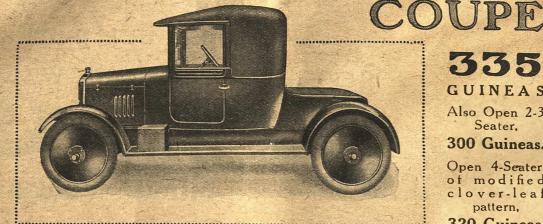


The VUL-KIT repairs cuts in any size covers, curing right through and makes permanent repairs. Also repairs tube punctures. Complete with repair rubber, cement, and full 25/-directions.

B3







335

GUINEAS

Also Open 2-3 Seater.

300 Guineas.

Open 4-Seater. of modified clover-leaf

320 Guineas.

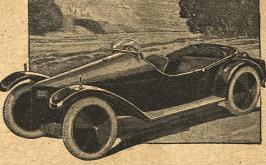
FULL PARTICULARS FROM

The West London Scientific Apparatus Co., Ltd. Premier Place, High Street, Putney, S.W.

THE CARS THAT PLEASE THE HIGHEST CRITIC!!

Essex, Kent, Middlesex & Surrey Agencies.

Write for New Agency Proposals.



Bicars, £235. Monocars, £171 to £185.

Speed 45 to 55 m.p.h.!! Petrol Consumption 60 to 80 m.p.g.!!

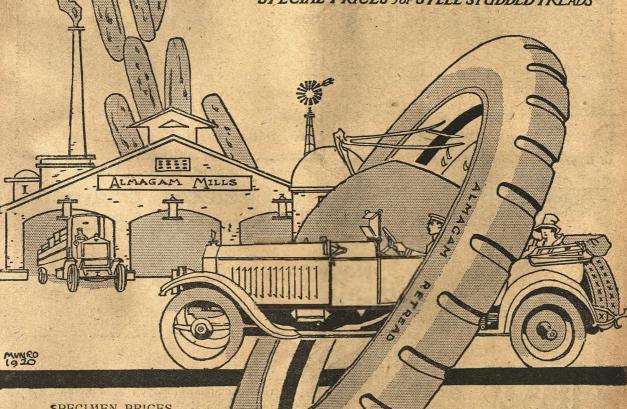
WARD & AVEY, LTD., Somerset, Road, TEDDINGTON.



Send your worn tyres to

3,000 miles guaranteed for the new grooved treads we fit to your old cover

SPECIAL PRICES for STEEL STUDDED TREADS



SPECIMEN PRICES

700 x 80 760 x 90 810 x 90 2 19 815 x 105 30×3 1 14 0 30 x 2 5 10

LONDON.—"I have had more miles out of many Almagam Retreads than I had out of the original covers."

MANCHESTER.—"A tyre you retreaded which has run 7,000 miles."

Almagam Mills, HARPENDEN.

Depots for New Covers, Tubes & Hose:

172. Great Portland Street, London, W. 100, Victoria St., Bristol. 38, Grey St., Newcastle.

ASSOCIATED RUBBER MANUFACTURERS, Ltd.

THOMAS WARWICK Managing Director.

A Few Recent Testimonials -

NORFOLK.—"You did a lot of this work for me before the war with great success."

MARGATE.—"Travelled over 6,000 miles, and is quite safe for another two or three thousand."

LONDON.—It is such a pleasure to find a motor firm who will deal with matters promptly in these days like your good selves."

NOTTS.—"The cover has run 7,000 miles since you retreaded it the last time."

BULFORD VILLAGE (15/9/20).—"Has run continuously since last November."

ST. NEOTS.—"Cover on wheel, October 19th (1919), has not been removed until last Fi²ay, November 5th (1920), on an Overland Hire Car."

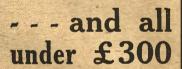
TO THE READER

ROCHFORD.—"A cover which has run over 3,000 miles like all the other covers we have got ron you; it has been most satisfactory." By mentioning "The Light Car and Cyclecar" when corresponding with advertisers, you will be working for the cause of the new motoring.









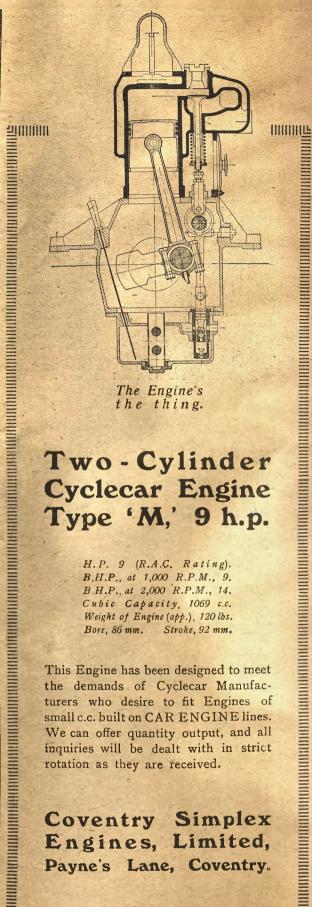
These three light cars are essentially different in design and appeal to varying tastes, but all three embody comfort, reliability, efficiency, and quality at a price which places them within reach of the moderate income.

Demonstration Models always available.

LEYLAND, TATNELL

o6, Gt. Portland Street, London, W.I. Telephone

Sole London Agents for Richardson Cars.



Two-Cylinder Cyclecar Engine Type 'M,' 9 h.p.

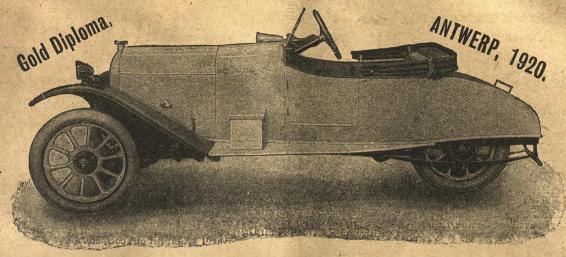
the thing.

H.P. 9 (R.A.C. Rating). B.H.P., at 1,000 R.P.M., 9. B.H.P. at 2,000 R.P.M., 14. Cubic Capacity, 1069 c.c. Weight of Engine (app.), 120 lbs. Bore, 86 mm. Stroke, 92 mm.

This Engine has been designed to meet the demands of Cyclecar Manufacturers who desire to fit Engines of small c.c. built on CAR ENGINE lines. We can offer quantity output, and all inquiries will be dealt with in strict rotation as they are received.

Coventry Simplex Engines, Limited, Payne's Lane, Coventry.

CASTLE-THREE" RUNABOUT.



Price £295

Complete with Spare Wheel and Electric Lighting.

See our Exhibit, Motorcycle Show. Nov. 29—Dec. 4. STAND

The following duly appointed Agents will be pleased to give you full information and to quote Delivery Dates:

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Messrs. J. E. & H. A. Jackson, 97, High Street, GUILD-FORD.

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Messrs. Hewett Bros., 94, Western Road, HOVE.

Messrs. G. Whreeler, 188, Queen's Road, HASTINGS,

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Messrs. T. Baker & Sons, Friar Street, READING.

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Messrs. F. Guyver & Sons, STRATFORD-ON-AVON.

Messrs. Birmingham Garages, Ltd., Navigation Street,

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Messrs. Stour Valley Motor Co., Ltd., Hagley Road,

STOURBRIDGE.

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Messrs. Dalton Motor Co., Ltd., John Daiton Street. MANCHESTER. Messrs. J. Hebden & Sons, St. James Street, BURNLEY. Messrs. Ware & Co., 10, Quiet Street, BATH.
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MALVERN.
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Messrs. Dumfries Motor Co., Ltd., English Street, DUM-

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Messrs. J. Parsons & Co., 2, Albany Road, CARDIFF.
Messrs. F. C. Smith (Motors), Ltd., CHADWELL
HEATH, Essex.
Messrs. English Motor Agencies, Ltd., 14, Osborne Road,
SOUTHSEA.
Messrs. Vincent Greenhous, BISHOP'S CASTLE, Shrops.
Messrs. Birch's Garage, Queen's Square, WOLVERHAMPTON.
Messrs. The Borough Motor Works, The Avenue, SOUTHAMPTON.

Sole Manufacturers and Patentees:

THE CASTLE MOTOR COMPANY, LIMITED, KIDDERMINSTER, ENGLAND.

Show Address: OFFICE No. 288.

STAND No. 42, OLYMPIA

B7

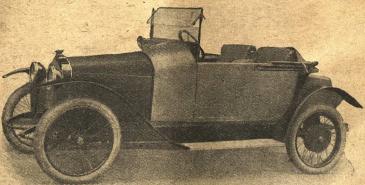
10 h.p. Clement-Bayard

We have a few Brand New Models of this Famous French Light Car for Disposal.

Price

£350

Complete.



Price

£350

Complete.

Engine, 10 h.p., R.A.C. Rating, 8.9 h.p., 4-cylinder, 607 x 100 mm.
Bosch, H.T. Magneto, Solex Carburetter, Silent Chain Drive to Cam-

shaft.
Pump Lubrication, Thermo-Syphon,
Water-cooling.

Gearbox, 3 speeds forward and reverse Gate Change, right-hand control. Clutch, Leather Cone, with adjustable spring insets.

SPECIFICATION.

spring insets.
Live Axle, Cardan Shaft Drive.
Half Elliptical Cantilever Springs all round.

Wire Wheels.
Michelin Tyres, 760 x 90.
Delco Electric Lighting Set.
Three-seater Torpedo Body, complete with Hood and Side Curtain.
Full Kit of Tools, etc.

M.P.G.

Call and Inspect, or Write for Particulars to—

Pearson & Sopwith, Ltd.,

8-9, LONG ACRE, LONDON — W.C. 'Phone _ Gerrard 4865.





HE "T.B." Three Wheeler has behind it the reputation and resources of a firm of engineers which has been famous for over 100 years, and during the war had a big experience in construction of carriages, etc., for aircraft. The methods then employed of jigging and careful standardisation are followed in the production of the "T.B." Three Wheeler which is now made in three types.

Points of Engine and Gearbox one unit. Shaft Transmission. Drive at Rear. Interchangeable and Detachable Wheels. Interest. Belts or Chains and therefore no adjustments necessary.

1921 Models Sports Model. and Prices. 8 h.p.

Air Cooled. 10 h.p.

Water Cooled. 10 h.p.

Bq

Brief General Specification. Three speeds forward and revers. Bevel gear for final drive. Adjustable steering column and foot pedals. Interchangeable and quickly detachable wire wheels with discs, 650×65 and 700×80 , Dunlop tyres, wheelbase 7 ft. 6 in., width of track 4 ft. Petrol consumption 50 m.p.g.

To Agents:-We shall be glad to have applications from agents for particulars of terms for next season.

Olympia, Stand

THOMPSON BROS. (BILSTON) LTD.,

Bradley Engineering Works, STAFFS. BILSTON,

TO THE READER

By mentioning "The Light Car and Cyclecar" when corresponding with advertisers. you will be working for the cause of the new motoring.





On top

The G.N.-with its vibrationless air-cooled engine, perfect clutch, and efficient 3-speed and reverse transmission remains on top, in the premier position gained in many years of development.

Speed and economy are features which have become naturally associated with the G.N., in addition to a degree of accessibility, and ease of upkeep, which do not characterize some other designs.

A pleasant feature of the Show was the appreciation shown by G.N. users, not only for their cars, and the results obtained, but also for the recently inaugurated G.N. service system.

Further Details from G.N. Ltd., EAST HILL, WANDSWORTH, LONDON, S.W.18.

THE **FINEST** LIGHT CAR IN THE WORLD SPORTING 2-3 SEATER

YOU CAN HAVE IMMEDIATE DELIVERY

Illustration shows semi-coupe Hood, as fitted to the STANDARD RICHARDSON.



will do, and has done, and it is now up to you to prove our claims by purchasing one.

CAR COMFORT AND **PRIVILEGES** AT COMBINATION PRICES.

for Complete Car,

(as illustrated).

When you buy a "RICHARDSON" you obtain the acme of ECONOMY AND RELIABILITY.

Full Specification will be willingly forwarded by

CHARDSON & Co., Ltd., -FINBAT WORKS- Sheffield Telegrams-"Finbat, Sheffield." Telephone-36 Sharrow, Sheffield,

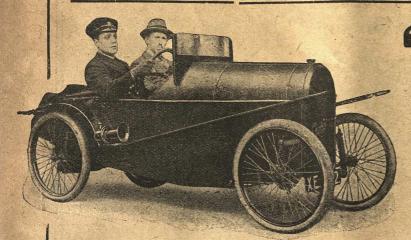
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MOVEMENT in "The Light Car and Cyclecar" interest you. BIO

The FIOO Two-Seater.

The Outstanding Success at the White City Exhibition.

As ordered by H.M. King Alfonso and H.H. Prince Habib Lotfallah.



rden" 1921 Model

NO BELTS!! NO CHAINS!! NO FRICTIONS!!

Demonstration Cars are on view at our London Showrooms: 1, Launceston Place, London, W.8. Trial Runs can be arranged by appointment.

(Nearest Station, Gloucester Road.)
Telephone-Western 6136. Telegrams-" Ettomalb, Piccy, London."

Extract from The Daily News," Nov. 11, 1920.

King Alfonso and the £100 Car. — The Carden Engineering Company's Stand was visited by King Alfonso. He was greatly interested in the £100 car of this firm, and asked when he could have delivery of one. On leaving, he commanded Mr. Bonamy Lamotte, Managing Director of the Carden Engineering Company, Limited, to wait upon him at the Ritz Hotel, for the nurpose of signing an order form and paying the deposit of £15. The completed order form will be on view to-day at Stand 476, White City.

Extract from " The Daily Graphic," Nov. 11, 1920.

King Alfonso Buys a Car.—King Alfonso bought one of the Carden Engineering Company's light cars when he visited the Motor Show on Tuesday. He gave the car a thorough and

business-like examination first, insisting upon completing the order form, and arranging for the payment of a deposi.

Extract from "The Referee," Nov. 7, 1920.

To the credit of the makers, the £100 Card n is a far more handsome little turn-out than many another cyclecar cf higher price. That it should be equipped with an eight horse-power two-cylinder engine with detachable cylinder heads, Brown and Barlow carburetter, M-L magneto, and body to carry two people, makes one wonder how it is done at the price. There is an enormous market for such a car.

Extract from "The Daily News," Nov. 6, 1920.

All day there was a crowd round the lowest-priced and most revolutionary car of all—the little Carden two-seater.

All prices and promises of delivery are subject to amendment when necessitated by circumstances beyond our control, i.e. increased wages or cost of material due to agreements or awards, strikes, lock-outs, accidents, fire, etc.

To ensure delivery in early 1921, orders should be placed without delay.

B. LAMOTTE
J. V. CARDEN
Directors. (Technical)

To The Carden Engineering Co., Ltd.,
Head Office—Empire House, 175-6, Piccadilly, W.1. Phone—Gerrard 2113.

Dear Sirs, -Kindly send me full particulars of the Carden Two-seater, as above.

Yours faithfully,

Date

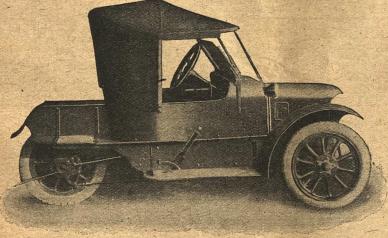


L.S.D. Cyclecar

OLYMPIA

Stand No.

Nov. 29th to Dec. 4th, -1920.



AGENCIES

Sole Makers :-

The smooth running and reliability of this Cyclecar make driving a pleasure. Designed for Lightness, Safety and Durability. OPEN.

SYKES & SUGDEN, Ltd., Linthwaite, Huddersfield.



factured by the Gloucester-shire Aircraft Co., Limited, Sunningend Works, Cheltenham

CAR ON TWO WHEELS

COMPANY - LIMITED,

"Service House," Dept. "A,"
94, Gt. Portland Street, LONDON, W.1. 'Grams: "Serautoco, Phone, Lon 'Phone: Mayfair 3025 and 3028.

READER

By mentioning "The Light Car and Cyclecar" when corresponding with advertisers, you will be working for the cause of the new motoring.

Grace Power

A revelation in speed and hill-climbing.



and Suppleness

Most economical in running costs.

The Car that Stands the Tests.

Specification:

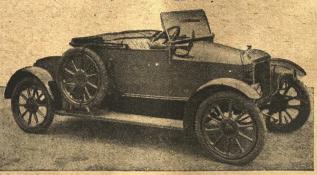
8 h.p., 2 cylinders, 85 × 90 mm. watercooled. engine.

3-speeds: waterproof transmission.

Weight, only $9\frac{1}{2}$ cwt.
Wheelbase, 8 ft.

Track, 4 ft.

Made Entirely at Our Own Works.



The 8 h.p Crouch.

Price:

fully equipped, with hood, screen, lamps, 5 detachable wheels with Dunlop tyres, tool kit, jack, etc.

Quick

Delivery.

Detailed Specifications from:

CROUCH MOTORS (1915), Ltd., Towergate Works, COVENTRY.





Electrical Energy

THE "M.L" Magnetos are remarkable for the quality and quantity of their electrical energy. The latest type—G4 for light 4-cylinder engines—abounds with valuable improvements. These include a new pattern distributor casing, moulded from special insulating material with a new spring held window, which will greatly facilitate timing or wiring up; and a variation in the wiring of the armature, which produces a fat spark at less than two-thirds the speed usually required to secure the same effect.



All inquiries relating to Overseas Trade and to Retail and Trade business in this country to be addressed to Messrs. S. Smith & Sons (M.A.), Ltd., 179-185, Gt. Portland Street, London, W.1. Sole Makers: The M-L Magneto Syndicate, Limited, Coventry, to whom all inquiries from manufacturers should be sent.

TO THE READER

By mentioning "The Light Car and Cyclecar" when corresponding with advertisers, you will be working for the cause of the new motoring.

The type linguated is G4 for 4-cy-Light Engines up to 25 h.p. A similar type, G6, for 6-cylinder Engines up to 35 h.p. is also made by letting advertisers know that their advertisements on "The Light Car and Cyclecar" interest you

The Scroll of Merit places the Payse excelsis, so remarkable is the value of the 10 h.p. Hange 3/4 seater Light Car. British made throughout with beauty of line and very graceful appearance, it is acknowledged to be the finest light car yet seen, and we claim that there is no other car to compare with it at the price, £450

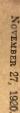
Where the Merit Comes in:

Engine-10 h.p. Coventry Simplex, 66 x 109.5, 1498 c.c., 20 b.h.p. at 2000 r.p.m. Zenith carburetter. M.L. magneto.

Transmission - Through cone clutch and 3-speed gearbox by (DA) Brapeller shalt to silent Springing-1 elliptic front, 1 flat elliptic rear, giving luxurious riding over rough roads.

Wheels-Sankey pressed steel, with 760 x 90 Michelin tyres. Spare wheel included, all detachable,

Long Special alaman 1-62



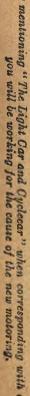
THE

LIGHT

CAR

AND

CYCLECAR





OWNERS PAY TRIBUTE TO THE

8 h.p. ROVER

"I consider her an ideal car for two."

"I am writing you an appreciation of my little 8 h.p. Rover. She is, as you say, a fast little car, an excellent hill-climber, economical on petrol, lubricating oil and tyres, does not overheat in the slightest, comfortable to a degree, and excellently protected from the weather. Altogether, I consider her an ideal car for two."

"Each mile I like her better."

"Am glad to say I am very pleased with the little bus, which has been admired by all, and I could sell at a good profit. Have had several inquiries, and look like having to refuse £400 for her, as she is much admired. The springing is exceptionally good, which was well tested when bringing her home on that so-called Coventry-Tamworth Road. She was just like an armchair. She is running better daily, and each mile I like her better. Give her her head and she will romp up anything on top, and climb a roof on second. I have found her practically free from engine vibration or any periodical vibration. I like her more each day."

Price = £300

For Complete Specification write:

THE ROVER COMPANY, LIMITED, COVENTRY

AND AT

59a, NEW OXFORD STREET, LONDON, W.C.I. LORD EDWARD STREET, DUBLIN.



SHOULD CYCLECARS COMPETE WITH MOTORCYCLES?

At the present moment the A.-C.U. controls all motor vehicles having two or three wheels, which includes, therefore, the three-wheeled cyclecar, whilst the R.A.C. looks after all four-wheelers. One result of this arrangement is that four-wheelers and three-wheelers have practically no opportunities for competing together in open trials, the latter type of machine being compelled to compete in trials organized primarily for motorcycles.

O anyone who stops to think, the official position of light cars and cyclecars must appear to be curious. At one end of the scale the light car enters into direct competition with the larger cars which are just outside the definition, yet the R.A.C. controls both, as its jurisdiction extends to all four-wheelers. At the other end of the scale the simple three-wheeled cyclecar, which is now a fierce competitor of the motorcycle and sidecar, is under the motherly wing of the Auto-Cycle Union. This is a state of affairs that would not be tolerated in any other industry, and is only allowed to exist in the motor world through apathy.

There is no denying the fact that the sidecar combination of to-day is in practically all instances developing along the line of luxury. The modern sidecar is usually fitted with hood, screen, luggage grid, etc., and is often most luxuriously upholstered and has irreproachable coachwork. Sometimes a dashboard that would do justice to a miniature Rolls-Royce is provided. The net result is that the price of the sidecar combination often exceeds that asked for a self-contained vehicle such as the three-wheeled cyclecar.

This latter type of machine has been popular with No. 418. Vol. XVII

motorcyclists and also with new motorists ever since 1912, but in these days it is in even greater demand. Owing to the fierce competition it has with the side-car combination it naturally requires a certain amount of fostering and its capabilities require to be brought to the notice of the public through the medium of trials and tests of various descriptions. The Auto-Cycle Union is composed of motorcyclists, and there is no gainsaying the fact that they manage their affairs in a very efficient and business-like way. Their energy is inexhaustible, and there is no doubt whatever that a large amount of credit for the rapid development and perfection of the modern motorcycle is due to their guidance. Notwithstanding their merits, it is difficult to see how they can give the necessary help to the motorcycle's chief competitor, namely, the three-wheeled cyclecar; in fact, one is tempted to ask, is it in their interests to do so?

These remarks apply to what we might call the technical side of the question, so we will now glance at the practical. The net result of the division of light cars and cyclecars into three-wheel and four-wheel classes, each under a different controlling body, is that the opportunities for both classes to compete together in trials are few and far between.

SHOULD CYCLECARS COMPETE? (contd.)

It is only in the competitions organized by the Junior Car Club that the three-wheeler is able to show the four-wheeler what it can do, and vice versa. It is true that a few other clubs do make arrangements in their closed competitions for these two types of machines to compete side by side. Judging by the experiences gained during the present year, the ground over which motorcycles are tested nowadays is quite unsuitable for three-wheeled cyclecars, although it must be acknowledged that in many cases, such as that depicted on our front cover this week, the cyclecar has more than held its own against its older rival.

At the same time, we find that there are only six three-wheeled cyclecars being exhibited next week at Olympia, and we feel certain that if the control of these machines were in the hands of an independent body, we should find that the number of manufacturers of three-wheeled cyclecars would increase more rapidly than at present. In fact, if the cyclecar were to receive the attention which it deserves,

it is doubtful whether there would be a sidecar combination on the road at the present day. With this older type of machine, the occupant of the sidecar is well protected from the elements and sits in a comfortable seat, but the driver, who is nine times out of ten the owner of the machine, is exposed to all the ravages of the weather, and occupies a position on the saddle which by no stretch of imagination can be called comfortable. Taking these facts into consideration, and also the price of the self-contained three-wheeler, which is in many instances less than the sidecar combination, it is not reasonable to suppose that the growth of the former would be in the comparatively backward state that it is in at present unless there was some cause.

If, as we have stated before, the controlling body for light cars and cyclecars must be either the R.A.C. or A.-C.U., then let us entrust the future of this popular type of motor vehicle to the tender mercies

of the former.

We would repeat, however, that in our opinion the only satisfactory solution to the question is to hand over the control to an independent organization.

THE MAGNETISM OF MOTORING.

IT is surely a remarkable fact that the promoters of the forthcoming Advertising Exhibition at the White City have seen fit to place in the most prominent position in their very attractive poster, a fac-

is familiar with Bibendum and Mr. Dunlop, just as much as he is with Johnny Walker or Miss "Kodak." Motoring is no longer the monopoly of the rich, but is now indulged in, for business and pleasure pur-



A really attractive poster, announcing the Advertising Exhibition at the White City at the end of the month. "Bibendum" and "Mr. Dunlop" will be familiar to our readers.

simile of which we reproduce on this page, two well-known motoring "personalities." The exhibition is of interest to the general public, and it shows that the organizers recognize that the man in the street

poses, by the democrat—hence these outstanding motoring figures being used to draw the attention of the passer-by. The poster is one of the most attractive that has been seen for some time.

An Autumn Trial.

The Sutton Coldfield and North Birmingham Automobile Club held a successful half-day closed Reliability Trial on November 20th. The Shell Cup for the best performance of the day by a passenger machine was won by Mr. H. F. S. Morgan on an 8 h.p. Morgan. Messrs. S. H. Rowe (10 h.p. A.-C.) and G. Bedford (9.7 Hillman) gained full marks and were awarded silver medals. Many motorcycles and large cars also competed.

The Judges' Report.

The official report and results of the Auto-Cycle Union's recent Six Days' Reliability Trial will shortly be published. Two Morgans out of the three entered are awarded gold medals. The report is a very voluminous one, in which practically no mention whatever is made of three-wheeled cyclecars competing; which shows in a very clear manner the folly of this class of machine being compelled to compete in motorcycle trials.

Notes, News and Gossip of the New Motoring.

A small but important section.

Six three-wheeled cyclecars will be on view at Olympia on Monday, the opening day of the Cycle and Motor Cycle Show.

Detail specifications and noteworthy improvements in the 1921 designs of these machines are dealt with elsewhere in this issue.

The annual dinner of the Junior Car Club has been fixed, provisionally, for Thursday, December 16th. Time and place: 7.30 p.m., Frascati's.

There seems every possibility, according to Mr. H. O. Duncan, that 1921 will see a Paris Salon.

The number-plate strafe is lasting longer than the majority of motorists imagined. Recently, a motorist was fined because an error of one-eighth of an inch was detected in the size of the numbers.

The photograph on this page shows a neat Morgan conversion carried out by Barkers Motors, 194, Balham High Road, London, S.W. 12, to the registered design of Mr. W. J. Barker, A.M.I.A.E. The two-seater tail is readily detachable, and takes the place of the ordinary tail fitted to the Morgan. It is upholstered in pegamoid, is fitted with a mahogany rail, and an arm-rest is arranged between the two seats at the rear. The price is £12 10s. with one flat coat of paint ready for the colour of the customer's own car.

LIGHTING-UP TIMES

for Saturday, November 27, 1920.

London ... 4.26 Edinburgh ... 4.17 Newcastle ... 4.13 Liverpool ... 4.31 Birmingham 4.30 Bristol ... 4.36 Dublin ... 5.4

Lighting-up time in Ireland is one hour after sunset and in Scotland half-an-hour after sunset. Lighting-up time in England and Wales is half-anhour after sunset.

MOON-Last Quarter, December 2nd.

Motoring would soon be cheaper

—The £1 per horse-power did not loom in the foreground!

This year's London-Exeter run will start on the evening of Monday, December 27th, competitors returning to Staines on the following evening.

The drifting fog was responsible for many accidents last week-end. With a view to the safety of all road users under foggy conditions, lights should be covered with yellow paper or other material and the horn used often but with discretion.

At the Motor Show no fewer than 53 individual makes of light cars and four-wheeled cyclecars were shown. Six three-wheeled cyclecars will be on view at the Cycle and Motor Cycle Exhibition, and several makes of light cars and cyclecars are not exhibiting at all this year. It can be inferred from this that there are nearly 70 different makes representing the real economical motoring.

The big odds against which competitors in trials have to fight are vividly depicted in our front cover picture this week. This shows a three-wheeled Morgan cyclecar "still going" despite the execrable surface, and the stiff gradient—a motorcyclist having come to rest, its driver obviously marvelling at the performance of the cyclecar. The photograph was taken on Park Rash Hill during the Auto-Cycle Union's recent Six Days' Trial.



A Morgan fitted with a special detachable two-seater tail—not to be confused with the "Family" Model which is being shown at Olympia by the Morgan Motor Co., Ltd. The latter car is fitted with a special diminutive rear seat that is not detachable. One grown up or two children can be accommodated.

NOTES, NEWS AND GOSSIP (contd.).

Safety First.

A brief but forcible "Safety First" inscription seen on the back of a motor omnibus reads: "Thoughts afar—danger's near."

Full of Life.

The private advertisement columns of a newspaper recently classified the Bleriot-Whippet under the title of "Live Stock."

The Motor Policeman.

The Home Secretary has stated that experiments have been carried out with a view to introducing a special branch of the police force for road traffic, mounted on some form of road vehicle.



Where the oil comes to the surface. It is a remarkable sight to see the frothing, yellowish-green oil bubbling up through a pipe which goes down to a depth of 3,000 feet.

A Ton of Oil Per Day.

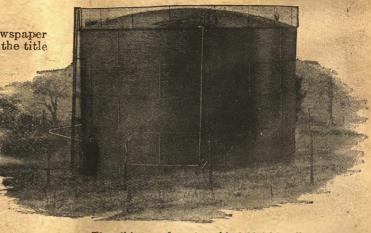
From the first English oil field to yield oil a ton of oil per day is being produced. Certain difficult problems, however, regarding the ownership of the oil are being considered by the Government, and it is for this reason that it is not being released. The photographs show the actual outlet for the oil and also the immense tank to which it is transferred. The former represents the yield from one boring only, but the precious fluid is being obtained from many other borings besides.

Inefficient Garages.

In the lay Press there has recently been an outburst concerning alleged inefficient garages. The Times was particularly energetic regarding its comments, and many of our readers may have wondered why the A.A. did not point out the other side of the question. As a matter of fact, the A.A. did send a letter on this subject to The Times, but, unfortunately, it never found its way into print. In this letter Major Stenson Cooke pointed out that his Association had 2,000 efficient agents and repairers, and that in the past year the number of complaints concerning these garages was only 154. Of these, 94 were settled satisfactorily; 4 garages had their appointment terminated; in 38 instances the member making the complaint had to be told frankly that he was in the wrong, and one or two resigned as a consequence.

Mayor of Thetford Complains.

The Mayor of Thetford has appealed to the Automobile Association to request motorists to be more careful when driving through the town, particularly on Newmarket race days.



The oil is transferred to this 150,000 gallon storage tank, which is now nearly full.

Hands Across the Sea.

With headquarters at Toronto and branch clubs all over the Dominion, the Canadian Automobile Association has become affiliated to the R.A.C.

Price of G.W.K. Reduced.

The prices of the well-known G.W.K. light car have been reduced. The four-seater model is now listed at £375 and the two-seater at £350.

Correction.

In our last issue, the address of the manufacturers of the Jewel light car was not given correctly in their advertisement. We would state that the address is Mr. J. E. Wood, 4, Bowland Street, Manningham, Bradford.

A Record Entry.

We learn that up to the time of going to press the total number of light car and cyclecar entries for the forthcoming London-Exeter run promoted by the Motor Cycling Club is greater than that received from motorcyclists and sidecarists combined. In all probability when the entries close, it will be found that a record number intend to compete.

Our Test Runs Tabulated.

In our next issue we propose to tabulate the results of the various trials run over The Light Car and Cyclecar test course, so that the performances of the various cars which we have handled can be seen at a glance. During last week-end an Eric Campbell and a Crouch were tested, the reports of which will appear in due course, whilst arrangements have already been made to try a Legère G.N., A.V. Bi-car, and Rover "eight."

News for Inventors.

We are given to understand by Messrs. J. S. Withers and Spooner, chartered patent agents, Staple House, 51-2, Chancery Lane, London, W.C. 2, that the time limit for inventions abroad which had been protected in England during the war has:been now extended to January 10th, 1921. This extension applies to any invention protected in England from August 1st, 1913, to the present date. Overdue renewal fees may also be paid up until January 10th next to revive any patent that has lapsed.

NOTES, NEWS, AND GOSSIP (contd.).

Batchworth Hill.

The improvements on Batchworth Hill, on the road from London to Rickmansworth, have progressed no further than the excavation of the new road and, apparently for some unknown reason, the work has been suspended.

The Headlight Nuisance.

Sir Eric Geddes states that he has no power to compel motorists to extinguish their headlights when meeting other cars, but he intends to issue a strong recommendation on the subject. We have continually advocated this method of abating the nuisance.

Abolition of Speed Limit?

Answering a question in the House recently, Mr. Neal said that the abolition of the 20 m.p.h. speed limit was under consideration, but that no action would be taken by the Ministry of Transport until it was in a position to deal comprehensively with the whole question of speed limits as applied to different types of road vehicles.

Dealing With Deposits.

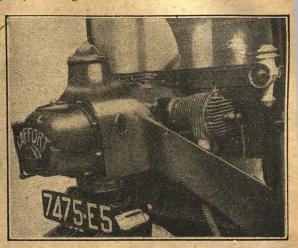
A customer who is required to pay a deposit on an ordered machine paturally resents the fact that he is putting interest into the pocket of the manufacturer. H. Taylor and Co., Ltd., of Sussex Place, South Kensington, S.W., are prepared to allow interest at the rate of 7 per cent. per annum on deposits and the rate of 7 per cent. paid until notice is given that the machine is ready for delivery, this applying to all orders placed for 1921.

Why Not a Fog Report?

In view of the fact that fogs are often local, places a few miles apart being, on the one hand, enveloped in a thick "blanket," and on the other hand perfectly clear, when will enterprising garage proprietors hang a weather report in a prominent position outside their garages? This might be compiled by motorists themselves who have reason to stop for petrol, etc., and could then take the form of a large slate, upon which the briefest report would be written. Thus, at Barnet, travelling north, one might read the inscrintions of those travelling south, and add the conditions prevailing at Finchley, Hyde Park, etc.

How Did It Happen?

During the week-end we passed a light car with a broken windscreen, but, so far as we could see, no other part of the car was damaged, and exactly how the screen came to be broken was a mystery. En passant, it is interesting to note that the Triplex Safety Glass Co. have now received large consignments of glass, enabling them to meet all requirements.



On the new An unusual position for the gearbox. Caffort 8 h.p. van (which has a horizontally-opposed air-cooled engine) the gearbox is situated in front of the engine.

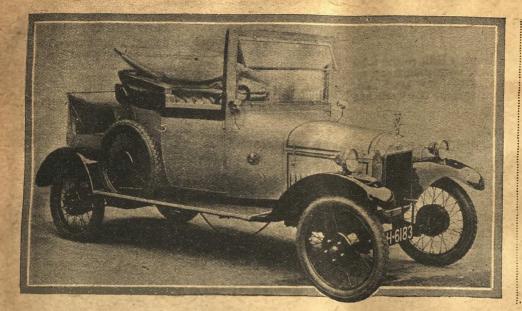
Illegal Towing.

It is not generally realized that it is an offence to cling to the back of any vehicle with the idea of obtaining a tow without the driver's permission. The wording referring to this appears in Section 59 of the Metropolitan Police Act (1839), and is as follows:—
"Cause himself to be drawn by a carriage without
the consent of the owner or driver thereof." The matter was brought to light when a cyclist was fined 5s. at West Ham recently for "hanging on" to a car. Undoubtedly the practice is dangerous, and it is hoped that the police will also take action against small boys who delight in obtaining joy rides in this manner, to the danger both of themselves and other manner, to the danger both of themselves and other road users.

Average Prices of Second-hand Light Cars.

The figures given are merely the average for six weeks of the prices at which second-hand light cars and cyclecars are offered in our advertisement columns, and do not necessarily represent the actual value of the cars.

cars are offered in our advertisement columns, and do not necessarily represent the actual value of the cars.																			
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NO SON

A coupe body on a 1920 G. W.K. chassis, by the Royal Bucks. Motor Co., Reading. The car complete weighs 15\frac{3}{3} cwt., and is fitted with 710 mm. by 90 mm. tyres, which are larger than those fitted to the standard model.

CO-500

All Hands to the Pump.

Hand versus automatic engine lubrication for the cyclecar! How often this has been the subject for debate! We unhesitatingly "plumped" for hand lubrication when, during a week-end run, the automatic pump failed, and we had to stop every few miles to inject oil by hand into the crankcase.

A Lecture.

A lecture, under the auspices of the Southend-on-Sea and District Automobile Club will be held on December 2nd at the headquarters of the St. John's Ambulance Association, Queen's Road, Southend. The subject will be "The trend of motorcar design."

London-Exeter Entries.

As we go to press, the following is a list of the light car and cyclecar entries for the forthcoming London-Exeter Trial: C. J. Mebes (8 h.p. Crouch), K. A. Macdonald (8 h.p. G.N.), A. C. Potter (8 h.p. G.N.), G. L. Hawkins (10 h.p. G.N.), W. G. Brownsort (11.9 h.p. A.-C.), W. E. Line (9 h.p. Hillman), H. H. Vaughan-Knight (12 h.p. A.B.C.), S. C. H. Davis (12 h.p. A.B.C.), C. A. H. Mason (11.9 h.p. Wilton), W. Cooper (11.9 h.p. Morris Sports), N. H.

Keep (12 h.p. A.B.C.), W. E. Cornwall (8 h.p. Castle Three), A. F. Hockley (10 h.p. Douglas), G. W. Lucas (11 h.p. Riley), W. M. Thomas (10 h.p. Hillman), A. A. Prestwich (8 h.p. Richardson), Captain Lloyd (10 h.p. Douglas), W. H. Oates (11.9 h.p. Lagonda).

The Position in Canada.

"It is a mistake for United Kingdom manufacturers to believe that Canadian import trade is so largely in the hands of foreign countries, that British traders have little opportunity for extending their business there," says Mr. F. W. Field, H.M. Trade Commissioner in Toronto.

Pity the Poor Manufacturer!

An excellent feature of the G.N. organization is the special depot that has been arranged to give advice and do repairs for customers, but the running of such a place is, at times, somewhat of a thankless job. On a recent occasion a G.N. was laboriously towed in, and a highly indignant private owner protested that it had broken down hopelessly after only a few weeks' use, and would not go. On examination, the entire extent of the damage proved to be the sooting up of one plug!

FURTHER EXPERIENCES WITH THE ROVER "EIGHT."

Our recent remarks concerning the general running of the Rover "eight" prompted the Rover Co., of New Oxford Street, to examine the engine of our car critically. As a result a cylinder head was condemned as faulty, and replaced; at the same time the engine was decarbonized. Although we still maintain that the Rover is not fast on the level—an unnecessary criticism, actually, in view of the fact that the car is not designed for high speeds—we must admit that its performance during a trial run over

the week-end was very different from the results obtained before the introduction of the new head. It was surprisingly "nippy" in traffic, whilst, on top gear, it made light of hills which formerly called for a change down to second. This is exceptionally good in view of the load we had on board (22 stone, including luggage), the size of the engine (998 c.c.), and the small jet, namely, a 35, in the Smith carburetter. The consumption worked out at approximately 45 m.p.g.

THREE-WHEELED CYCLECARS AT THE SHOW.

Where They Will Be Found.

Car.					Stand No.	Car.				12		Stand No
Castle Three				1	42	Morgan	100		 			93
Coventry Premier	5000	11/2 52	Jan His	7	94	Stanhope			 		=	144A
L.S.D					40	T.B. Tricar		48.	 - 44			31

THE LIGHT CAR AND CYCLECAR and MOTOR CYCLING Stand No. 120.

The Show Opens on Monday Next.

THE 90 DEGREE M.A.G. ENGINE.

A Water-cooled Unit Specially Designed for Cyclecars, with Force-Feed Lubrication, Enclosed Push Rods, and Plain Bearings Throughout.

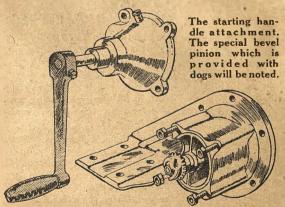
A.G. engines have earned for themselves an enviable reputation in all phases of motoring, and the excellence of these power units Engine Co., Ltd., 839, Harrow Road, London, N.W. 10, have catered for the cyclecar manufacturer with both air-cooled and water-cooled V-twin engines, and it comes somewhat as a pleasant surprise to know that this concern have now introduced another engine almost identical in detail with their 8 h.p. V-twins, but with its cylinders set at 90 degrees. The chief difficulty in designing a V-twin is in attaining perfect balance, as it is a type of engine in which r.p.m. there is scarcely a tremor perceptible in the unit, despite the fact that during the test the engine was not even bolted down to the test bench.

From an exterior view of the engine the cleanness of the castings is at once noticeable, and the

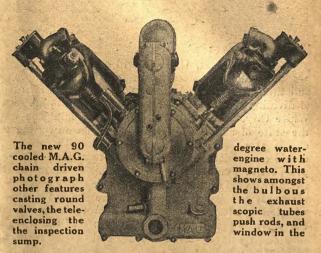
of the castings is at once noticeable, and the machined base of the cylinders has always been a feature in the finish of M.A.G. engines.

Efficient Cooling.

The cylinders have a bore and stroke of 82 mm. and The cylinders have a bore and stroke of \$2 mm. and 103.5 mm. respectively, dimensions which give a cubic capacity of 1,093 c.c. An excellent feature noticeable in the design of the cylinders is that the cooling water is carried right round the exhaust valves, where efficient cooling is most necessary. The cylinders are bolted down to a two-piece crankcase by the employment of four studs and nuts to each cylinder. The crankcase is a clean piece of work and is in one with the sump, which is formed in its base. This sump, which will hold nearly half



a gallon of oil, is provided with a filling orifice of a generous area and a large inspection window. The pistons are of cast-iron, and are each provided with pistons are of cast-fron, and are each provided with two rings, both of which are arranged above the gudgeon pin. No ball or roller bearings find a place in this engine, as experiments have proved that the plain bearing, when accurately fitted, is quite as frictionless and has a longer life than the ball or roller variety. It is, of course, essential that adequate lubrication is provided for, and this is effectively carried out by a pump of the piston type,



situated in the sump and driven by gears from the timing case. The crankcase release is not the least of the interesting features of this engine, and, as will be seen in the photograph, it is screwed into the top of the timing case. It is fitted with a baffle and a valve of the disc type, a light spring being employed to control the disc.

The position adopted for the magneto, that is between the cylinders, where it is driven by a chain, is not standard, as without material alterations, shaft drive can be instituted, when the position taken up by the magneto is on the face of the timing case. An interesting feature lies in the ease with which a legitimate starting handle

mate starting handle can be fitted. structural alterations are necessary, as, by removing the mag-neto drive cover and introducing a "dog" timing wheel in place of that already fitted, the starting handle, complete with cover, can be bolted in

position.
The inlet valves, as is customary practice in M.A.G. engine design, are of the over-head type, the chief feature of interest in connection with them being the telescopic tubes, which, whilst serving effectively to

A simple arrangement whereby both exhaust valves are operated through the agency of a single control,

protect the tappets and push rods from road matter, also play an important part in the lubrication of the inlet valve-operating mechanism, as an oil fog actually travels up these tubes into the inlet valve domes.

An ingenious type of exhaust lifter is employed, in which both valves are operated through the agency of one control. This is accomplished by introducing a metal disc supported on a pin at its centre, mid-way between the two valves. The two arms which serve to lift the valves are anchored at two different points on this disc, so that the movement of one arm directly affects the other arm through the movement of theedisc.

The finish of this engine, both internally and externally, is characteristic of the concorn's other productions, and the success of this unit is assured.

Topies of the Day

Three-wheelers at Olympia.

N Monday next, Olympia will again house a motor exhibition, but this time the machines on view will include motorcycles, sidecars, and three-wheeled cyclecars. We have seen the disadvantages recently of dividing the light car and cyclecar exhibits between Olympia and the White City, but that mistake is quite a mild one when compared with the state of affairs which compels cyclecars having three wheels to be shown at an entirely different exhibition a fortnight later than their stable companions which happen to have four wheels. The unfortunate prospective purchaser of an economical motor has therefore to make three visits before he can finally decide which machine is likely to satisfy his needs and also his pocket. There are not a large number of three-wheelers on view, but those to be shown will be a great improvement on the previous year's models. The future of the three-wheeler lies along very definite lines. Its chief feature should be simplicity, and the manufacturer who burdens his machine with unnecessary luxuries and complications will find that the purchasing public for his production will be alarmingly small. Directly we have a complete miniature car the prospective owner wants four wheels, but provided the design is carried out in a straightforward manner the demand is almost unlimited. Weight must also be kept down for more reasons than one, the most important, however, being the fact that under the new taxation next year owners of three-wheelers over 7 cwt. will have to pay on the car scale, whereas the three-wheeler under this limit will be taxed at only four guineas. It is quite certain, therefore, that the £1 per horse-power tax will help largely to increase the already great popularity of the simple type threewheeled cyclecar.

In a Fog.

THE new Ministry of Transport is resuted to be exceedingly busy in drafting all kinds of complicated schemes for the regulation of traffic and the welfare of road users in general. Judging by the details which have leaked out it would seem that these regulations are not likely to meet with the approval of motorists in general, and it is exceedingly doubtful whether they will ever achieve the object which the Minister desires. If the pigeon holes of the desks at the Ministry are not already filled up we would propose that a clause should be added to the new Transport Bill, making it compulsory for all vehicles on the road to show lights during a day-time fog such as they are compelled to do during the hours of darkness. We realize that the difficulty in framing such a regulation would be to draw up a definition of a "fog." Officials, however, who are accustomed to frame orders and regulations would not, perhaps, be beaten by this task. During the present month we have had an epidemic of fogs such as has seldom been seen before, and the amount of damage which has been caused through them must run into a big figure. The owner of a vehicle who has had the misfortune to collide with either a stationary or moving object during the temporary darkness of a fog, might find when he applies to his insurance company to recover the damages incurred, that it takes no liability whatever, pleading that the concentrated mist was an act of God. There is no doubt that if our suggestion were made compulsory the number of accidents would be considerably diminished. As a matter of fact eight out of every ten vehicles with which one meets under these conditions have their lamps lit, but it is the remaining two that cause the trouble. It is not very long ago that a vigorous agitation was being pursued by some of the lay Press against left-hand drive. We had all the alleged dangers of this arrangement brought before our notice in a vivid manner, but we were never given any hint that with left-hand drive there might, in certain circumstances, be some advantage. Certainly in a thick fog a car fitted with the steering on the near side is easier and safer to drive than the more orthodox vehicle. The driver can guide himself by "hugging" the kerb, which he can see more plainly, seated on the near side, than if he were on the right.



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The . . .

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NOTABLE ADVANCES IN THE DESIGN OF THREE-WHEELED CYCLECARS FOR 1921.

Full Details of the Cyclecar Exhibits at the Cycle and Motorcycle Show Which Opens at Olympia on Monday Next.

Six individual makes of three-wheeled cyclecars will be shown, these being the Castle Three, Coventry Premier, L.S.D., Morgan, Stanhope, and T.B. Tricar. Below will be found detail specifications, so that, at a glance, the reader will be able to compare the outstanding features in each. On the following pages, a brief resume of these three-wheelers is given, revealing their construction and 1921 improvements in greater detail.

HE three-wheeled cyclecar is attracting considerably more attention this year than it did in 1919. There is no doubt that from many points of view it claims the attention of the cyclecarist, whilst unquestionably the motorcyclist will have to consider very carefully the merits of the machine to which he has become accustomed, and the three-wheeled cyclecar which is vastly superior to it, besides competing with it in price.

Of the machines which are being exhibited this year four were shown last year, namely, the Morgan, Castle Three, Coventry Premier, and L.S.D., the two new comers to Olympia this year, therefore, being the T.B. Tri-car and Stanhope.

Judging by the exhibits at the forthcoming Show, decided improvements have been effected in the 1921 machines, without departing radically from the principles which have been adopted by the various makers.

A general comparison of the leading features of

these six machines—as representing modern threewheeled cyclecars-is interesting. For instance, we find that two are fitted with three speeds forward and a reverse, namely, the T.B. Tricar and the Coventry Premier, one is fitted with two speeds forward and a reverse, namely, the L.S.D., whilst the Morgan and the Castle Three have only two speeds forward, those in the former being obtained by dogs, and those in the latter through epicyclic gearing. The Stanhope the latter through epicyclic gearing. The Stanhope alone incorporates expanding pulleys. The final drive on two machines only, namely, the T.B. and Castle Three, is by bevel, and three have final chain drive. The back driving wheels of all are detachable, and, going to the other end of the machine, it is noteworthy that only the Castle Three adopts a four-cylinder water-cooled engine. It would appear that the J.A.P. is the most popular type of power unit, it was a superscript of the cooled to the coo either in its air-cooled or water-cooled form, and the Amac carburetter and M.L. magnetos are well to the fore. The following are the specifications:—

CASTLE THREE.

Stand No. 42. Price £295.

Engine, Peters; capacity, 1,207 c.c.; cooling, thermo-syphon; carburetter, Solex; magneto, Watford; clutch, metalto-metal cone: gears, epicyclic: gear ratios, 4.4 to 1, 13.2 to 1; transmission, open propeller shaft; final drive, bevel; suspension, front quarter-elliptic, rear semi elliptic; steering, planetary; brakes, internal-expanding rear, exterbrakes, internal-expanding rear, external-contracting in gearbox; wheelbase, 8 ft. 6 ins.; track, 4 ft. 1 in.; overall length, 11 ft. 9 ins.; overall width, 4 ft. 10 ins.; ground clearance, 7½ ins.; weight, 10 cwt. (approximately); seating capacity, two persons; lighting, dynamo; equipment, tools, jack, pump, spare wheel and tyre; manufacturers, Castle Motor Co., Ltd., Kidderminster.

COVENTRY PREMIER. Price £288 15s. Stand No. 94.

Engine, Premier; bore and stroke, 80 mm. by 105 mm.; capacity, 1,055.5 c.c.; mm. by 105 mm.; capacity, 1,055.5 c.c.; cooling, thermo-syphon; carburetter, Cox Atmos; magneto, high-tension; clutch, leather inverted cone; gears, three and reverse; gear ratios, 11 to 1, 7 to 1, and 4 to 1; transmission, open propeller shaft from clutch to gearbox; final drive, enclosed chain; suspension, front and year quarter elliptic; steering front and rear quarter-elliptic; steering, rack and pinion; brakes, two, internal-expanding on rear wheel; wheelbase, 7 ft. 6 ins.; track, 4 ft.; overall length, 10 ft. 6 ins.; track, 4 it.; overall length, 10 ft. 6 ins.; overall width, 5 ft.; ground clearance, 7 ins.; weight, 7 cwt. (approximately); seating capacity, two; lighting, electric; equipment, spare back wheel and tyre, horn, jack, tool kit; manufacturers, Coventry Premier, Ltd., Coventry.

L.S.D. Stand No. 40.

Engine, J.A.P.; bore and stroke, 85.5 mm. and 85 mm.; capacity, 964 c.c.; cooling, air; carburetter, Amac; magneto, M.L.; clutch, leather cone; gears, two and reverse; gear ratios, 5.2 to 1, 9.9 to 1, 14 to 1 (reverse); transmission, partially open propeller shaft; final drive, chain; suspension, front helical, rear quarter-elliptic; steering, direct; brakes, contracting; wheelbase, 6 ft. 9 ins.; track, 4 ft.; overall length, 9 ft.; overall width, 4 ft. 8 ins.; ground clearance, 6½ ins.; size of tyres, 700 mm. by 80 mm.; weight, under 7 cwt.; seating 80 mm.; weight, under 7 cwt.; seating capacity, two; equipment, hood, screen, tools; manufacturers, Sykes and Sugden, I.td., Spring Place Works, Huddersfield.

MORGAN.

Stand No. 93. Price (from) £296.

Engine, J.A.P. or M.A.G.; capacity, 964 c.c. and 1,100 c.c. respectively; cooling, air or water; carburetter, B. and B. or Amac; magneto, M.L.; clutch, cone; gears, two forward; gear ratios, 41 to 1 and 8 to 1 (other gears to order); transmission, shaft to bevel box; final drive, chain; suspension, front helical, rear quarter-elliptic; steering, direct; brakes, band; wheelbase, 7 ft.; overall length, 9 ft.; overall width, 4 ft. 6 ins.; size of tyres, 700 mm. by 80 mm.; weight (chassis only), 3 cwt.; seating capacity, two; lighting, acetylene (Powell and Hanmer or Lucas electric extra); equipment, hood, screen, tools, mats; manufacturers, Morgan Motor Co., Ltd., Pickersleigh Road, Malvern Link. For particulars of the various models which will be exhibited see page 12.

STANHOPE.

Stand No. 144a. Price £245.

Engine, J.A.P.; bore and stroke, 85.5 Eugine, J.A.P.; bore and stroke, 85.5 mm. by 35 mm.; capacity, 964 c.c.; cooling, air; carburetter, B. and B.; magneto, M.L.; clutch, three-plate; gears, variable by expanding pulleys; final drive, twin Whittle belts to front wheel; suspension, front quarter-elliptic, rearcantilever; steering, direct; brakes, internal-expanding; wheelbase, 7 ft. 3 ins. track, 4 ft.; size of tyres, 700 mm. by 80 mm.; seating capacity, two; lighting, acetylene; countern, hood, screen. ing, acetylene; equipment, hood, screen, side curtains, lamps and horn; manufacturers, Stanhope Motors (Leeds), Ltd., Dixon Lane Road, Lower Wortley,

T.B. TRICAR STANDARD MODEL. Stand No. 31. Price £260 Price £260.

Engine, Blackburne; bore and stroke, 85 mm. and 97 mm. capacity, 1,097 c.c.; cooling, air; carburetter, Amac two-lever; magneto, M.L.; clutch, floating plate; gears, three and reverse; gear ratios, $4\frac{2}{3}$ to 1, 8 to 1, 16 to 1; transmission, open propeller shaft; final drive, crown wheel and pinion; suspension, quarter-elliptic front, cantilever rear; steering, direct; brakes, contracting; wheelbase, 7 ft. 6 ins.; track, 4 ft. 2 ins.; overall length, 10 ft. 6 ins.; overall width, 5 ft.; ground clearance, 8 ins.; size of tyres, 700 mm. by 80 mm.; weight size of tyres, 700 mm. by 80 mm.; weight (unladen), 7 cwt.; seating capacity, two; lighting, electric (by accumulators) or acetylene; equipment, tools, hood and screen; manufacturers, Thompson Bros. (Bilston), Ltd., Bradley Engineering Works, Bilston, Staffs. Also water-cooled model £275, and sporting model £240 B27



T first sight the Castle Three appears to have a A i first sight the Castle Three appears to have a somewhat heavy appearance, but any conclusions which may be formed in this respect are quickly dispelled by a run in the machine. In the first place, this car differs from many three-wheelers in so much as the wheels are of the Sankey pressed steel type, which gives this three-wheeler a heavy car appearance. The fine coachwork is reminiscent of the best light car construction, and were it not for the absence. light car construction, and were it not for the absence of a fourth wheel, it would be difficult to realize that it was not one of the most expensive light cars.

In keeping with the above is the Peters engine, with a capacity of 1,207 c.c., the largest fitted to any of the three-wheelers at the Show, but in contrast to this it is interesting to note that there are only two

THE CASTLE THREE.

The Only Three-wheeler at the Show with a Four-cylinder Water-cooled Engine.

forward gears and no reverse, the gear-box being of the epicyclic type, with ratios of 4.4 and 13.2-1.

The identity of this cyclecar is stamped upon it in more ways than one. For instance, the radiator suggests the outline of a castle, and a castle appears on the tread of each pedal. The engine being water-cooled, the radiator is not of the dummy variety, but actually serves its proper purpose. Cooling is by thermo-syphon, and no water pump is introduced into the mechanism.

The drive from the gearbox is transmitted by shaft, and then by bevel to the rear wheel, another instance of light car practice. Again, whereas the springing at the front is quarter-elliptical, that at the rear is by long half-elliptic springs and, as we can vouch from an actual run over medium roads, the comfort given by this system of suspension is quite equal to

that obtained by two wheels at the rear.

Comfort has been the main consideration in the Castle Three, and this explains why the vehicle wighs approximately 10 cwt. Before leaving this interesting machine, the fact that dynamo lighting is

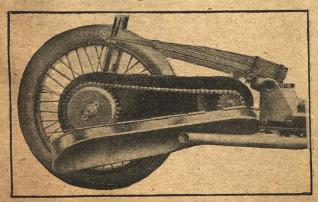
fitted should not be overlooked .

THE COVENTRY-PREMIER.

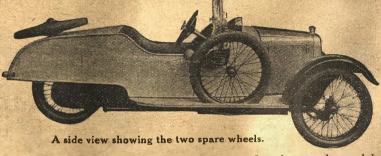
Several Innovations on the 1921 Models.

dome-shaped mudguards, a Brolt electric lighting set fitted as standard, and wider running boards are the principal alterations in the Coventry Premier three-wheeler for next season.

The Brolt dynamo is carried on a metal strip anchored to a bracket low down on the near side of the engine, and is driven by means of a Whittle belt from a pulley and is driven by means of a Whittle belt from a pulley set between the flywheel and the crankcase. Adjustment is provided in the form of a bolt projecting through the near side of the chassis, which pulls the dynamo clip outwards and sideways, thus tightening the belt. The accumulators are carried in a compartment immediately behind the seats, access being obtained to them through a lid.



The final chain drive is well protected but accessible.



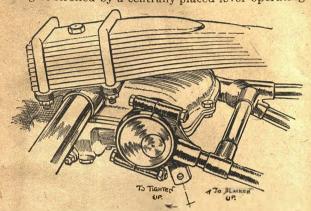
The appearance of the car has been enhanced by the fittings of car-type domed wings to the front wheels and by painting the bonnet the same colour as the rest of the body, the standard colour being grey. Wider running boards, covered with rubber, also add to the general appearance of the car, which otherwise remains much as before. It is fitted with a three-speed-and-reverse gearbox driven by an open shaft from the water-cooled V-twin engine, which is set across the front of the frame. The final drive is by means of a double side-by-side Duplex roller. is by means of a double side-by-side Duplex roller chain running in a sheet-metal case, which can be undone in a few seconds by sliding out two long bolt rods. The rear forks are mounted in an eccentric bearing, which is used to facilitate chain adjustment. The wheel is instantly detachable, leaving the $\frac{5}{3}$ in. Duplex chain drive, sprocket and chain case in position. A spare wheel is carried flat on the top of the tail, whilst a spare front wheel—sold as an extra—can be fitted in a well on the off side running board.

The engine is a thermo-syphon-cooled V-twin, set The engine is a thermo-sypnon-cooled v-twin, set athwart the frame, with its side-by-side valves in front. A pump situated in the bottom of the sump supplies oil to all bearings, the oil then returning to the sump by gravity, being filtered before reaching the pump again. The capacity of the sump is two pints, which should be sufficient for 150 miles. An adjustable pin is fitted in the oil return lead on the back of the grankgase by means of which the samply back of the crankcase by means of which the supply

CYCLECARS AT MOTORCYCLE SHOW (contd.).

can be adjusted. On the near side of the engine a plunger rod is situated and marked in such a way that upon its removal the oil level can be immediately checked.

An external flywheel is fitted with an inverted leather cone clutch and adjustable clutch stop. A metal universal joint and open propeller shaft are found between the clutch and gearbox, the latter being controlled by a centrally-placed lever operating



How the chain is adjusted.

in a gate-change providing three speeds forward and a reverse.

Both brakes function on the rear wheel and are mounted inside the chain drum. Steering is by rack and pinion and springing by quarter-elliptics to all three wheels. The front axle is tubular and is swept down considerably, which allows the power unit and frame to be set low and near to the ground, thus increasing the stability of the machine.

An easy method of adjusting the chain tension

where a single driving wheel is employed is essential if such a vehicle is to appeal to the average owner-driver, and the sketch on this page shows plainly how the adjustment, to which reference has already been made, is carried out.



The rear tool locker.

By means of the eccentric it is possible to tighten or slacken the chains within the very finest limits, and this without any undue complication. The same illustration also shows the many-leaved springs upon which the Coventry Premier depends for its comfortable riding.

able riding.

Another unusual feature, which may be emphasized, is the formation of the front axle, which is "dipped," as it were—an arrangement which, apart from other considerations, permits the whole machine to be slung extremely low. Tool accommodation has not been overlooked, and this little machine boasts of a tool locker, which is almost, if not quite, as big at that found an many four wheeled evelegars. The as that found on many four-wheeled cyclecars. The method of carrying the spare wheel enables it to be handled easily and quickly, whilst the additional spare wheel is accommodated on the off side running board, as shown in the side view of the machine.

THE L.S.D. Sturdy Construction a Noteworthy Feature. HE principal characteristic of the L.S.D. is the undoubted sturdiness of its construction. It is realized that the shocks transmitted in a concentrated form, as it were, by a single driving wheel at the rear must be met by extremely careful design, and in the L.S.D. no pains have been spared in order to make sure that every part of the chassis shall be well up to its work. There are no notable departures from last year's design, but detail improve-ments appear here and there, and these undoubtedly will go far to popularize this particular make of car. There is plenty of accommodation for The engine, an air-cooled J.A.P., is luggage on the L.S.D.

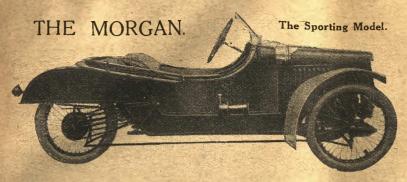
just the right type of power unit for a tyro who wishes to increase his know-

ledge of the internal-combustion engine without the expense of being held up on the road. Owing to the exposed position of the engine, which is situated right in the front of the machine, the possibility of overheating can be ignored even in such exceptional circumstances as long stunt hill-climbs, and the semi-automatic lubrication ensures that this important point shall not be a cause for anxiety.

In passing, it might be mentioned that the pressure inside the crankcase of the J.A.P. engine is utilized to force oil through an exit situated in the bottom of the crankcase, up a special channel to one main bearing and thence by specially drilled holes to the big-end and remaining main bearing. A system such as this possesses obvious advantages, and still permits the ordinary type of splash lubrication to be

Two forward speeds and a reverse are fitted to the L.S.D., the reverse lever being a separate gear lever altogether from that employed for the two forward gears. Helical suspension is adopted at the front which, on existing models, incorporates a pneumatic cushioning device. The springing at the rear is quarter-elliptic. The final drive on the L.S.D. is by chain and the rear wheel is easily removable. A useful feature of this car is the wide platforms arranged in the tail, upon which can be carried a large amount of luggage.

B29



In our last issue we dealt with certain improvements which have been effected in the design of the 1921 Morgan, chief amongst which is the more readily detachable rear wheel, by means of which it is not necessary to unfasten the chains. The stand of the Morgan Motor Co. is sure to create considerable interest, for no fewer than six models will be shown, excluding the plated chassis which shows the Morgan lay-out at a glance.

The following are the actual exhibits:—Two de luxe models, standard Grand Prix, new aero model, family car, and sporting model. Space does not permit of a detail description of each individual model, but the general specification of the chassis includes a J.A.P. or M.A.G. engine, B. and B. or Amac carburetter and an M.L. magneto.

The clutch is of the cone variety, transmitting the drive through an enclosed propeller shaft, to a bevel box at the rear, wherein is contained the bevel reducing gear. The countershaft passes through the bevel box at right angles to the propeller shaft, and upon this are mounted the dogs, by means of which the two speeds are obtained.

The gear shift mechanism consists merely of a couple of arms connected up by rods to a gear lever placed on the driver's right, and the control is thus as simple as possible. The final drive, as outlined above, is by chains to the single driving wheel at the rear. The gear ratios are 4½-1 and 8-1, but different gears can be obtained if specially ordered. The engine is not controlled by accelerator, but ordinary two lever carburetter controls are secured to the steering

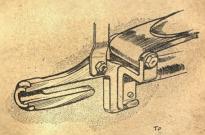
Six Models to be Shown, a Number of Improvements. Including More Readily Detachable Rear Wheel.

wheel, the advance and retard lever protruding through the dash.

Various models of the Morgan are familiar to the majority of our readers, but for the information of those who are making their first acquaintance with this well-known

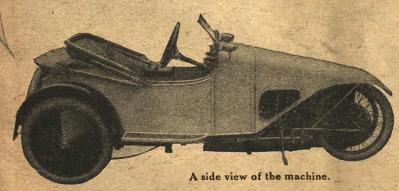
make of three-wheeler, we might mention that the De Luxe model is, as its name implies, an elaborate example, fitted with a door and those little refinements which are dear to the heart of many cyclecarists.

The new type fork for the rear wheel which is now easily detached.



The Grand Prix model is distinct owing to what might be called the gap underneath the oil and petrol tanks and immediately behind the radiator. The engine itself is placed in front of the radiator, where it obtains the full benefit of the cooling air. The new Aero model has a tapering fish tail and a V-fronted air deflector behind the radiator, the object of which is to form an easy means of exit for the cooling draught of air which has passed through the radiator.

The family car will appeal to many cyclecarists for, by adding very little extra weight to the ordinary standard body, an extra seat is arranged which is quite roomy enough to accommodate two children. The sporting model has an air-cooled engine enclosed within the bonnet.



THE three-wheeled Stanhope cyclecar will be exhibited for the first time at Olympia at the forthcoming Show. It is a revolutionary departure from the other machines which are being exhibited, in so much as the single wheel not only is at the front of the machine, but actually transmits the drive and is the steering medium. This ingenious cyclecar was fully described in our issue dated June 5th, 1920.

The advantages of having two wheels at the rear are fairly apparent, for the shock transmitted to the passengers, by two wheels is generally considered to be less than that transmitted by one wheel. The engine of the Stanhope is an 8 h.p. J.A.P. air-cooled, with

THE STANHOPE.

The Only Representative of Front Wheel Drive at the Show.

B. and B. carburetter and M.L. magneto. The gear is an automatic expanding pulley, and the drive to the front wheel is by twin Whittle belts.

The novelty of this drive consists principally in the fact that the front wheel can be locked over one way or the other, thus steering the vehicle without in any way affecting the drive.

way affecting the drive.

The chassis is made from 1½ in. tubing and very rigid, whilst both foot and hand brake are fitted. The body is of the open two-seater type, with hood, screen, and side curtains—the last-named being a refinement seldom met with on such a small car. The body can be painted any desired colour.

This exhibit will undoubtedly create an enormous amount of interest as, to the general public, the system of front-wheel drive and steering is practically unknown. It should not be inferred from this that the Stanhope is an experimental machine, as it has been thoroughly tested for a considerable time and perfected during this period.

THE T.B. TRICAR.

Three Models to be Exhibited.

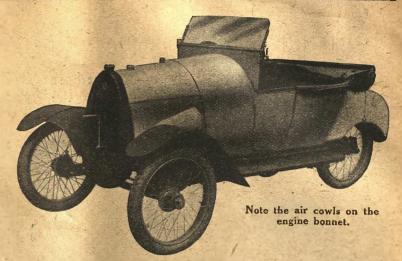
THE T.B. Tri-car has already shown its mettle in competitions, and has acquitted itself with credit. It is a carefully-thought-out and well-constructed machine, and is represented by more than one type. On Stand 31 will be shown a two-seater model, a water-cooled model (both with Blackburne engines) and a sporting two-seater with an air-cooled J.A.P. engine.

The last-named is the lowest-powered of the various types, the Blackburne engine having a bore and stroke of 85 mm. and 97 mm. against the J.A.P. bore and stroke of 85.5 mm. and 85 mm.

All types are fitted with Amac carburetters and M.L. magnetos, and beyond the question of weight, the sporting model being 1 cwt. lighter than the standard and water-cooled models, there is not a great departure in the specification of the three machines.

The engine of the T.B. Tricar is neatly housed beneath a bonnet which is egg-shaped in section, the radiator following the same design so far as appearances go, whether it be a legitimate water-cooling device or merely a dummy. For traversing hilly or otherwise difficult country, the T.B. should be hard to beat, for it is fitted with three speeds and a reverse, the ratios being 43, 8, and 16-1.

A floating plate clutch with cork insets transmits the drive initially from the engine, whilst, on the other side of the gearbox, it is taken to the final bevel reduction through the medium of an open propeller shaft. Powerful brakes of the contracting order



are a feature of this cyclecar, and the steering is direct.

Much has been heard lately concerning the requirements of the family owner-driver. The water-cooled model of the T.B. Tricar should certainly appeal to him, as it will accommodate two adults and one child quite comfortably. Quarter-elliptic springs form the method of suspension at the front, whilst cantilevers, a system towards which the majority of makers of three-wheelers have a leaning, form the suspension at the rear.

The sporting model has been constructed throughout with a view to lightness, and its outline not only suggests that weight has been cut down with discretion wherever possible, but that the little machine is capable of a very fast turn of speed.

As hill-climbers all models should do exceptionally well, the photograph below showing at a glance that the T.B. Tricar is capable of surmounting the stiffest gradients.



The T.B. Tricar shows its mettle on the road. It is seen ascending a freak hill at Tinker's Castle, on the borders of Shropshire and Staffs.

ON THE QUI VIVE!

Boats and Cars in 1921 Show—A One-horse Open Dray—Almost Cruelty—Brooklands in the Slack Season—A Change of Mounts.



What is it?—a long range gun or a fire escape? Neither. A Horstmann light car with a heavy load of Show furniture.

BOATS AND CARS IN 1921 SHOW.

IT seems rather absurd to look forward now to November, 1921, but the Society of Motor Manufacturers and Traders have put forward such an interesting proposal regarding next year's Show that I hope I may be excused for looking so far ahead. The idea is to include in the 1921 Motor Exhibition a marine section. The reason for this proposal is that the Society have decided not to proceed with the Motor Boat and Marine and Stationary Engine Exhibition which was proposed to be held at Olympia in March next. This is certainly a departure which may have very important developments; in fact, if all the buildings at the White City were available for the annual November exhibition, it is quite possible that all the various sections of the motor trade, including motorcycles, could be housed for exhibition purposes at one and the same time. As the Society are evidently thinking out plans for next year, I would ask them in all seriousness to consider the interests of the prospective light car or cyclecar owner by grouping together all three-wheeler and four-wheeler cars that come within the 1,500 c.c. definition.

A ONE-HORSE OPEN DRAY.

SPEAKING of the Show reminds me that few people realize the enormous expense to which an exhibitor is put in order to display his products. In addition he has the worry of transporting his vehicles from the works to Olympia or the White City as the case may be. One manufacturer whom I know ordered a three-ton lorry to take two of his show machines to the Exhibition, but when the time arrived a one-horse dray was sent to the works, much to his dismay. Only one machine could be accommodated on the horse-drawn vehicle, and there was no time to make fresh arrangements. As it was quite obvious that the dray in question could not make two journeys in the one day, there was nothing to do but to tow the remaining show car to the White City.

ALMOST CRUELTY!

HAVING spent a busy ten days, the unfortunate renter of a stand has to make further arrangements to remove his exhibits, and, incidentally, all his stand "props." A friend of mine—Mr. Horstmann, the maker of the car which bears his name—solved this problem of removals in a very practical way. The

contents of his stand, including a roll-top desk, chairs, etc., were transported from the White City to Bath on trailers drawn by two standard 10.4 h.p. Horstmann cars. The larger trailer, of which I am able to reproduce a photograph, bears a striking resemblance to a camouflaged long range gun or a fire escape, but it contains nothing more deadly than the Horstmann sign. The collective weight of the two loads was over two tons, and it certainly speaks well for the power of this popular machine that the two cars were able to carry out the entire journey to Bath without any assistance whatever on hills, although they were further burdened by two passengers and personal luggage in each case.

BROOKLANDS IN THE SLACK SEASON.

FOR some time past the Press has been full of arguments both for and against Brooklands, one section stating that the past season has been an utter failure, whilst the other claims it as a considerable success. A rather interesting sidelight as regards the actual popularity of the famous racing track may be gauged by a surprise visit during a week-end. It is now the slack season at Brooklands, as no race meeting will take place until next spring, but on a recent visit on a Saturday afternoon I was surprised to find a large number of motorists, whose names are well known throughout the sporting world, turning up at the track, either to see what was going on or to test the paces of their own machines, with a possible view to records, etc. Just as I was entering the track, I found Mr. Harry G. Hawker arriving on his big aluminium car with a Sunbeam aero engine. He had come down to see the track activities and also to cast a loving eye on the 450 h.p. Sunbeam racer on which he is shortly going for the world's short distance records.

A CHANGE OF MOUNTS.

IT was rather amusing to see Mr. E. B. Ware, the well-known technical expert of the J.A.P. engine works, and the pilot of the speedy Morgan which has been seen so often at Brooklands, arriving at the track on a four-seater touring Ford. Another well-known racing driver present was Mr. B. S. Marshall, who was at the wheel of a six-cylinder American car (suffering from sparking plug trouble) and not on his famous black Mathis. Mr. J. L. Emerson, the late holder of the motor-cycling hour record, was to be seen on a Bleriot-Whippet

CAN THE THREE-WHEELED CYCLECAR BE IMPROVED?

In view of the increasing interest taken in three-wheeled cyclecars, the following articles by a three-wheeler enthusiast, a motorcyclist and a light car owner respectively, will be read with interest. Naturally the three-wheeler enthusiast himself regards it us the ideal mount, the motorcyclist admits that it scores heavily in comparison with a combination, and the light car owner states frankly that, if not superior to the four-wheeler, it is certainly equal in most respects.

I.—AS NEAR PERFECTION AS POSSIBLE,

By the Owner of a Three-wheeled Cyclecar.

WHEN critics of three-wheeled cyclecars have exhausted all their arguments against this type of vehicle, it is still possible for the three-wheeled cyclecar enthusiast to play the trump card by pointing out that this vehicle not only gives car comfort for the price of a motorcycle, but entails a tax under the new £1 per h.p. scheme no greater than that of many motorcycles, and very much smaller than the amount charged for the smallest four-wheeled cyclecar.

Where the Three-wheeled Cyclecar Scores.

This alone should commend it to the attention of those who are thinking of taking up motoring next year, and if any other arguments were necessary in order to convince them that three-wheeled cyclecars will ultimately prevail and become one of the most popular vehicles on

popular vehicles on the road, one or two advantageous points may be touched upon.

It is not often claimed for the three-wheeler that it transmits shock to its occupants when passing over pot-holes, and I do not say that the following point of view is at all original; but it can be proved unquestionably that on a run over bumpy roads, threewheeled cyclecars actually suffer fewer shocks than four-wheeler. the Assume that three

pot-holes are located so that two of them are in the immediate track of the front wheels of both four-wheeler and three-wheeler, and that the intermediate pot-hole is in the direct path of the back wheel of the three-

In passing over these pot-holes, the four-wheeled car will suffer four individual and distinct shocks, but although the three-wheeler has an extra pot-hole with which to contend, it will only suffer three. I am an ardent supporter of everything in the cyclecar line, but after an extensive experience with both three-wheeled and four-wheeled types, I unhesitatingly plump for the former—especially from the point of view of the owner-driver.

view of the owner-driver.

I find almost invariably that garage proprietors are willing to house my Morgan much cheaper than a four-wheeled cyclecar, and it must be admitted that the three-wheeler can be stowed away in a much smaller space.

The burning question of differential or no differential is solved at the outset, for the single-wheel drive possesses all the advantages claimed by the exponents of one or the other of these systems. The single back wheel obtains as firm a grip on the road as the two wheels of the car without a differential, whilst when moving the car by hand there is none of that drag associated with the differentialless car—a small, but, nevertheless, important, point.

My own Morgan attracts considerable interest wherever I take it, but almost invariably non-mechanical critics stroke their chins and say, "Yes, but what about removing the back wheel?" To these people one might reply with equal sense, "What about lacing up your boots or arranging your neckwear in the morning?" Both are operations which have to be

understood, and in regard to the three-wheeler the removal of the rear wheel is now practically, if not quite, as simple as taking the wheel off any other type of car.

The three-wheeler

The three-wheeler has a definite place to fill. It is making a bid to, and will ultimately replace the motorcycle and sidecar, which is a compromise—and a very poor compromise at that. It also competes more than favourably with the four-wheeled caruntil such time as the present anomalies of taxation are

A single driving wheel, centrally placed, is advantageous on bad roads, for it rides upon, and grips, the best surface.

corrected, and in all other respects it is a serious competitor of any other type of vehicle on the road.

A Poor Argument.

At last year's Show I heard clever people remarking, "What a pity that a good job has been spoiled by omitting the fourth wheel," and it is quite obvious that these people were going merely by appearances. Admitted that a fourth wheel would make a car look prettier, can these captious critics suggest any other advantage that can accrue from this arrangement? I think not; on the contrary, as I have pointed out, the single driving wheel overcomes the differential problem in such a final and decisive way, that, for this reason alone, it will always appeal to the man who understands exactly what motoring means both on good and bad roads. The three-wheeled cyclecar is as near the perfect mount as the economical motorist of the future will be able to acquire.

Can the Three-wheeled Cyclecar Be Improved? -(contd.).

BETTER THAN A COMBINATION BUT NOT YET PERFECT.

By a MOTORCYCLIST.

IKE many another motoring enthusiast, I made my debut into the world on wheels on a motorcycle, and he who has not experienced the peculiar fascination of being astride of a single-tracker has missed the most sporting side of motoring. In a way the solo machine is a selfish vehicle, and as I do not advocate pillion riding my thoughts naturally turned to a combination. During the first



On Thwaites Brow in the llkley M.C. and L.C. Club's trial. The left-hand turn requires careful negotiation with a motorcycle combination as the sidecar has a tendency to rise. But—

twelve months of ownership I covered about 5,000 miles, as I used the machine right through the winter months. So far as the machine's performance was concerned I had little of which to complain, but in inclement weather the position, I might almost say, was hopeless. The passenger is, of course, well-protected, a point which serves only to accentuate the exposed position of the driver. It is, of course, possible to keep comparatively dry, but not unless one rigs one-self out like a deep sea diver; this is where the three-wheeled cyclecar scores heavily. Anyone who has driven a motorcycle combination in a heavy rainstorm, and a three-wheeled cyclecar under the same conditions, must admit that, so far as protection from the elements is concerned, the cyclecar is an easy winner. Even after a storm the sidecar driver is still at a disadvantage, for every pool of water serves thoroughly to swamp his legs, whilst the deepest water-splash does not cause the cyclecar driver the slightest inconvenience, as he can literally rush through them with impunity.

Sociability.

The question of sociability is another strong point in the cyclecar's favour, for it must be admitted even by the most enthusiastic of combination owners that it is exceedingly difficult conveniently to carry on a conversation with the fair occupant of the sidecar. The fact of both driver and passenger being seated side by side, both being afforded equal protection from the elements, tends to make even the longest journey a pleasure trip even under the worst conditions.

Before taking to a three-wheeler I was rather dubious on several points, and I understood from

many sources that in the first place I should have endless trouble with skidding, and, secondly, that the single rear wheel would transmit all road shocks direct to the occupants of the machine. In short, the three-wheeler was not likely to give the same satisfaction as a combination. Despite these derogatory statements, I took the plunge and became the owner of a well-known make of machine of the three-

wheeled variety. I might say at once that the skidding danger is more imaginary than real, and, in my opinion, is not to be compared with the danger attached to the negotiating of an acute left-hand turn with a combination. Respecting comfort, although perhaps there is room for improvement in the suspension system of my machine, it is certainly superior to that which I experienced on my combination.

Mechanically, More Efficient.

From the point of mechanical efficiency the shortcomings of the sidecar outfit are only too apparent, and in view of the "drag" which a loaded sidecar must represent, it speaks much for the efficiency of the modern air-cooled engine that such creditable performances as are put up by combinations from time to time are possible.

by combinations from time to time are possible. Turning now to the cyclecar, whilst its design is distinctly simple and straightforward, in which it compares even more than favourably with the motorcycle, the driving wheel is centrally placed behind the load which it has to propel—a most important consideration.

My chief complaint against my particular machine is the difficulty experienced in carrying out repairs to the rear wheel tyre, owing to the fact that the wheel is not easily detachable, but, apart from this, in every other way it scores



——the motorcycle combination scores on a hill like Lynton (Devon) where the best surface is that which is least used, i.e., close up to the wall. The motorcycle in the photograph is making the best use of it.

heavily in accessibility. It is almost impossible conveniently to carry out adjustments on the sidecar side of a combination without detaching the sidecar, a fault which is almost general with this type of machine. I feel certain if owners of combinations would only avail themselves of the opportunities of taking an extended run in a three-wheeled cyclecar, that they, like myself, would become converts.

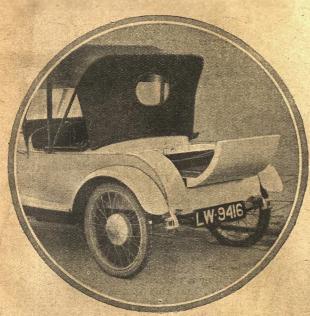
Can the Three-wheeled Cyclecar Be Improved?-Contd.

EQUAL, BUT NOT SUPERIOR TO THE FOUR-WHEELER.

By a LIGHTCARIST.

EXPERIENCED my first journey in a threewheeled cyclecar about four years ago, but I have handled practically every make of fourwheeled cyclecar on the market.

My carefully considered opinion is, that whereas the three-wheeler may be equal in many respects to the four-wheeler, it never has been and never will be superior to it. Personally I looked upon the three-wheeler as the stage between the motorcycle combination and the four-wheeled cyclecar at the time when I enjoyed my first run, but since then such progress has been made that, although my opinion is somewhat modified, I certainly think that the three-



A point against the three-wheeler. The photograph shows the tool locker accommodation and "children's dickey" on one of the simplest types of four-wheelers, i.e., the Richardson.

wheeler has points to commend it to the driver of every other mechanically-propelled vehicle on the road.

Very few machines have merited such a volume of well-meant criticism as the three-wheeled cyclecar, and I firmly believe that to this may be partly credited the advancement which this type of vehicle has made. On the other hand, with a degree of per-tinacity, for which one certainly does not blame them, the manufacturers have persistently refused to make these cyclecars more comfortable, adding only those little refinements which are essential in any passenger-carrying vehicle.

Simplicity the Keynote.

Simplicity is certainly the keynote of cyclecar construction, but I cannot see any reason why more accommodation should not be arranged for tools and luggage. From the esthetic point of view it is certainly necessary to bear the fish tail in mind when designing the back of a three-wheeler, but the mere fact of there being a single wheel surely is no reason why the capacity of the tail should be restricted.

I am not going to put forward the well-worn argument concerning the difficulty of removing the rear

wheel, for to anyone who is at all mechanically minded and able to use even the simplest tools, the problem is easily surmountable. I have only one serious criticism to levy at the three-wheeler and this is its liability to skid on tramlines, but I must admit that this really is more the fault of the tramtine than the three-wheeler!

The Bogey of Skidding.

At the same time it is useless for manufacturers to say: "Well, the tramlines ought not to be there." This will not sell their machines; they must adopt means to prevent an evil which scares the new driver and causes the old hand to mutter something stronger than tut-tut. To my mind the remedy is simple and lies in the fitting of an over-size tyre on the back wheel. On the prominent makes of three-wheelers this is done, and on a recent trip through the Metropolis I was agreeably surprised to find that the

on the question of taxation, the three-wheeled cyclecar undoubtedly scores, and when the exact requirements of the £1 per h.p. tax are realized the number of drivers who will meditate the purchase of

a three-wheeler will be legion.
So far as this is concerned, however, I, personally, should not be influenced, for I would much some have car comforts and pay for them in additional taxation, than put up with the comparative restrictions of the three-wheeler.



Does the three-wheeler skid more than the four-wheeler? This is the type of skid on tramlines, to which our correspondent refers, but it is doubtful whether the one type of car is any more liable to skid than the other under the conditions shown in the photograph.

As I outlined at the beginning of this article, I think the three-wheeler has much to commend it, but I do not think it will ever excel the comfort and usefulness of a four-wheeled vehicle, even if the

latter be of the same weight and horse-power.

As a very ingenious example of the modern cyclecar, however, it will always hold its own and certainly should cause motorcyclists to think very hard.

DOES YOUR ENGINE OVERHEAT?

Some Causes and Remedies of a Prevalent Trouble.

The air-cooled power unit represents the simplest type of internal-combustion engine, but in the hands of an inexperienced driver, maltreatment is only too frequently met with. As a rule, the design is such that the engine will withstand a large amount of abuse, but the evils attendant on overheating are many, and every precaution should be taken to guard against it. Water-cooled engines are also liable to the same complaint, and in the following article the writer points out the more common causes of overheating, and suggests obvious and fairly simple means of eradicating the trouble.

T is obvious that an efficient engine will be less prone to overheating than one not working under the best conditions, because a larger proportion of the heat generated by the combustion of a given quantity of fuel will be utilized in useful work and less will require to be dissipated; further, any conditions which tend to prevent the ready transference of heat from the interior of the cylinder walls to the cooling medium will also tend to cause the temperature of the engine to rise beyond the limit for satisfactory functioning.

Overheating is still a very prevalent trouble amongst cars of all types that one sees on the road, and it is proposed to discuss the various remedial

The Importance of Design.

Inferior design cannot be overlooked in discussing this subject, as occasionally cars are still met with which, even when in the pink of condition, overheat if they have to undertake strenuous work. The present fashion of fitting a perfectly smooth bonnet which is innocent of louvres is one case in point, for the cooling effect depends on the quantity of air

Temporary repair to water outlet An effective Easy flow of Exhaust . Easy escape for -Air under floor boards. Points referred to: see that the fan is working properly, and that there is an easy flow for the exhaust and cooling air.

passing through the radiator, and it is essential that passing through the radiator, and it is essential that this air shall find an easy exit from the bonnet if no "back pressure" is to be set up. This defect is most likely to occur if a close-fitting undershield to the engine is provided, or the crankcase is extended to the side members of the chassis, and little clearance exists between the bottom edge of the dash-board and the flywheel rim.

Improvement can generally be effected, either by cutting away the lower edge of the dashboard, providing an outlet from the undershield at the forward

side of the flywheel, or having louvres cut in the bonnet sides, the necessity for such treatment being obvious if overheating is cured by driving the car without the bonnet. Naturally, these remarks do not apply to cars which have a fan incorporated in the flywheel, when it is essential that the bonnet build have a sential that the bonnet are senti should be as nearly airtight as possible, so that all air must enter through the radiator: but the fan is worthy of attention.

This fitting, in some cases, consists of little else than a roughly bent piece of metal, which is next to useless for its purpose, and a considerable improvement may be effected if it is replaced by an air screw of efficient design, which will create a real draught instead of merely disturbing the air in its

immediate vicinity.

Incorrect design of air cooled engines may also be corrected to some extent by simple additions. If the engine is so placed that it does not receive a steady draught, particularly on the exhaust ports and cylinder heads, it may be possible to arrange cowling in such a way that the air current is diverted on to these parts, or on to the back cylinder if it is masked by the front one.

The cooling can also be markedly im-

proved by boring holes through the radiating fins and expanding thin copper tubes into them. If this is done, it is a matter of considerable importance to see that the tubes are arranged symmetrically round the cylinder. If uneven cooling is caused, distortion is bound to follow, and this is one of the essential ill-effects of overheating which accounts for the poor running of the engine when in this condition.

It should be distinctly understood that the foregoing remarks are solely in-tended to refer to engines which habitually overheat when new and in thoroughly good condition, and the remedies are not applicable to the majority of modern cars, which usually only suffer from this defect owing to extraneous circumstances discussed below.

The Human Element.

Individual driving is a factor of considerable importance in the question of the working temperature of the engine, and a sympathetic driver will be able to take a car over a difficult route without the engine showing any signs of distress, when the novice, or a driver who does not understand the finesse of driving, would cause it

to overheat badly in much easier country.
When variable ignition is fitted, the spark should be kept as far advanced as the engine will permit in all circumstances, and, if an air control exists, the mixture should always be the weakest on which satisfactory running is obtainable. Prolonged fast driving on the level is liable to cause the engine to overheat, but it is usually when the car has to do some serious hill-climbing that trouble is most likely to be experienced. In these circumstances, the



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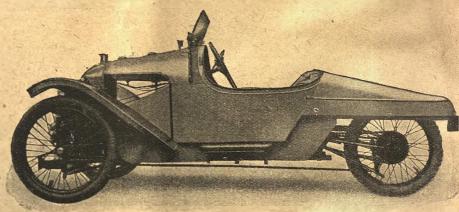
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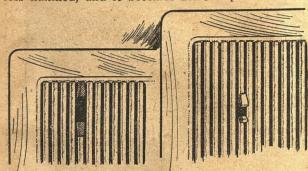
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OVERHEATING (contd.).

tendency is aggravated by holding on to a higher gear than that really suitable for the hill, and it should always be the rule to change down in good time, before the engine begins to labour. The higher speed attained, both by the pump and the fam, if fitted, will aid in cooling the engine, owing to the improved circulation of air through the bonnet and water through the system.

When climbing a hill with a following wind, the conditions are more difficult, as the air circulation induced by the motion of the car and fan is more or less nullified, and it becomes more important than



A burst radiator showing (right) the ends of the tubes hammered flat and doubled back; and (left) the tubes plugged with tapered wooden pegs.

ever that the method of driving should be the best possible to counteract the adverse circumstances.

Insufficient and inefficient lubrication are causes of overheating which should be obvious to everyone, but the latter condition is not so frequently recognized. The makers of a car usually recommend that a certain brand of oil should be employed, and this advice should certainly be followed, as although other brands may be of equal quality, there is no doubt that many engines can only be efficiently lubricated with certain brands of oil. A further point which must be recognized is that oil circulating in an engine does not possess an indefinite life, and even though the oil level in the crankcase may be correct the engine will not be properly lubricated if the oil is old; and dirty.

Correct carburation is another point of vital importance if over-heating is to be avoided. It is known that a rich mixture causes this trouble (amongst others), and it is well to remember this when a change is made to a heavier fuel, the carburetter being suitably adjusted, unless an extra air inlet is fitted, thus permitting the strength of the mixture to be varied at all times.

Free Exhaust Essential.

Restriction of the exhaust is another frequent cause of overheating in both air and water-cooled The exhaust pipe and silencer should offer no obstruction to the easy exit of the gases, and if faulty design is suspected, the car should be tested with the exhaust pipe and silencer replaced by a short length of straight pipe. It is unlikely that any inherent defect will be found here in a modern car.

A comparatively frequent trouble, however, is the

restriction of the exhaust system by an accumulation of soot on the interior of the pipe and on the baffle plates of the silencer, and unless the latter can be dismantled readily, the soot is somewhat difficult to remove. A series of sharp taps with a hammer all along the exhaust pipe will often loosen a good deal of soot, and a few short lengths of chain pulled backwards and forwards through the pipe by a length of wire secured to each end is another effective remedy.

If the silencer cannot be dismantled in order to get at the baffle plates and scrape them, the most effective method of removing soot is to place a quantity of paraffin in the silencer, shake the latter about thoroughly, so that all the soot will be saturated, and then make the silencer hot with a blow-lamp or over a forge fire, so that the oil and soot are burned.

With some designs of silencer it is possible to remove the soot by putting a few large balls, short lengths of chain, nuts, or other pieces of metal inside and vigorously shaking the silencer, the treatment being continued until no more soot comes out. This is only applicable where the baffles are so arranged that the balls, etc., can pass right through the

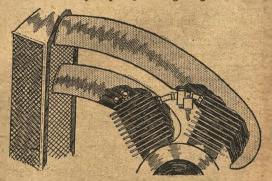
The deposition of carbon in the combustion space and on the tops of the pistons is a fruitful source of overheating in all types of engine, for not only does the increased compression result in a higher working temperature, but the transference of heat is much more sluggish.

It is a common fallacy that excessive lubrication does no harm, but in addition to accelerating carbonization it also results in the engine running less efficiently, owing to appreciable power being absorbed in a useless churning of the oil and in "rolling up" the obstructing film of oil on each downward stroke of the piston.

Methods of Decarbonizing.

Decarbonization of an engine may be effected either by scraping it out or by the oxygen process in which the deposit is burned away. The latter method possesses the great advantage that it is not necessary to dismantle the engine, the whole operation being performed through the valve caps. Scraping tools made of spring steel and designed

to be worked through the valve caps are on the market, these being worked about with the piston at top dead centre until all the deposit has been loosened, when the debris is removed by inserting the nozzle of a tyre pump and giving a few sharp



When a V-twin engine is arranged lengthways in the frame, cowls may be fitted up in order to make the best use of the flow of oncoming air.

blasts. A small brush mounted on a flexible handle and having the bristles smeared with a little thick oil is useful to collect small particles.

Failing either of the above methods, it is necessary to dismantle the engine in order to remove the deposit with ordinary scraping tools, the operation being much easier if the engine is fitted with detachable cylinder heads.

When scraping is adopted to remove the carbon deposit, whether it is done through the valve caps or by dismantling the engine, it is most important that great care be taken that no speck of deposit, is left adhering to the cylinder head, as a small speck is even more likely to cause knocking through

OVERHEATING (contd.).

pre-ignition than when the whole surface is evenly coated.

It is also most essential to see that every particle of the disintegrated deposit is removed, as any which happens to be left in the cylinder is extremely likely to find a lodgment on one of the valve seatings, so soon as the engine is cranked, and render it quite impossible to start up. A thorough wiping with a piece of oily waste is generally the simplest method of removing the ultimate residue, after the bulk of the deposit has been shaken or blown out of the cylinder head.

Radiator Troubles.

Water-cooled engines are liable to have the heat transference between the cylinder and the water, and between the water and the air passing the radiator, seriously impeded, owing to the disposition of "fur" on all the metallic parts with which the circulating water comes in contact. This so-called "fur" is actually the lime and other mineral salts which are dissolved in most well and river water and which are deposited when the water is maintained for a considerable time, at or near its boiling point. A "hard" water contains a much higher percentage of these salts than a "soft" one, and in analysing any water the amount of mineral matter it contains is often expressed in degrees of hardness.

When deposited in the circulating system "fur" rapidly attains a consistency almost like earthenware, in the cylinder jackets, where the greater part separates; but is somewhat softer in the cooler parts of the system. The water spaces in a honeycomb type of radiator are so small that a very slight deposit is sufficient seriously to impede the circulation of the water, in addition to which the deposit acts as a very efficient heat insulator.

Overheating caused by the deposition of fur usually develops gradually, and the reason may thus erroneously be assumed to be carbonization. An examination of the engine, with decarbonization if necessary, will indicate whether furring is the real trouble. If the deposit is not too hard it may be removed by running the engine for some time with the cooling water replaced by a 5 per cent. solution of common washing soda, no harm being done if this is performed by driving the car normally for a day in this way; or the engine may be run in the garage for an hour or so. The solution is then drained off, the system well flushed through with clean water and then refilled. If the deposit is very thick or hard it may not yield to this treatment, and something more drastic is necessary. Caustic soda in the proportion of 1 lb. to three gallons of water may be used as above, the solution being allowed to circulate for an hour or two, and the system then flushed out. Care must be exercised in handling caustic soda, as it has a corrosive action on the skin, and both the alkaline solutions will promptly strip the paint and varnish off any surface with which they come in

contact. Another treatment is the employment of hydrochloric acid, one part of the strong commercial acid being mixed with fifteen to twenty parts of water. This solution is allowed to circulate for about a quarter of an hour, is then drained off, a 2 per cent. solution of washing soda being run in to neutralize any traces of the acid, and the system flushed out again as above.

In some water-cooled engines provided with pump circulation a gauze strainer is fitted to ensure that no solid matter shall get into the pump and mjure it. This strainer should be examined fairly often, as it is not only liable to be choked by solid dirt which it has filtered out of the water, but oil or grease leaking from the pump bearings or glands will collect on the gauze and make it almost impervious to water. Attention should also be paid to the belt driving the fan, as if this is slack it is very liable to slip, particularly at high speeds, and cause the temperature to rise abnormally.

With the exception of a sudden derangement of the carburation or magneto drive, most of the causes dealt with above will result in overheating developing gradually. If the defect occurs suddenly the most probable causes are the fan belt breaking or coming off the pulleys, a burst water connection, radiator, or the failure of the water pump, any of which are obvious on inspection.

Extraneous Causes of Overheating.

Mechanical defects, quite extraneous to the cooling system itself, which impair the efficiency of the car may be responsible for an overheated engine; binding brakes may be quoted as an example. An abnormal increase in the load on the engine, such as the carrying of extra passengers or a pile of luggage, or driving against a heavy head-wind with the screen vertical, will also tend to the development of an abnormal temperature.

A point worthy of attention in any water-cooled car which has a tendency to overheat is to ascertain that there is a ready means for the steam to escape, as, otherwise, sufficient pressure may be developed to burst the radiator or water connections or to blow off the filler cap, the latter occurrence involving serious risk of the occupants of the car being scalded by the boiling water. For the latter reason it is also most unwise to attempt to remove the filler cap for any purpose until the engine has cooled down somewhat after having boiled.

Finally, it may be said that overheating in itself can cause no serious damage to the vital parts of the engine, but it is often an indication of serious trouble. A high working temperature (within limits) tends to efficiency of the power unit, and most water-cooled engines are at their best when the water is maintained within two or three degrees of boiling point. It is, however, extremely annoying if one has constantly to replenish the water, and the cause of overheating should always be traced as soon as possible in case it is any derangement which may have serious consequences if not remedied.

E. DE W.S.C.

A New Club for Barrow.

Following the example of the Leeds Branch, the Barrow members of the National Motor Cyclists' Fuel Union decided after a ballot to withdraw from the now comparatively inactive N.M.C.F.U. and form a new local club. The club will cater for all classes of motorists, and application will be made to the Auto-Cycle Union for affiliation. The secretary of the newly-formed Barrow and District Motor Club is Mr. W. A. Singleton, 144, Sutherland Street, Barrow-in-Furness, who will be pleased to hear from prospective members.

The Accelerator Pedal.

The tension of the accelerator pedal is a point that requires rather more careful attention in average light car design. If too stiff it calls for a tiresome amount of pressure in operation, and if too light, as is more often the case, it is apt to render the driving jerky, especially upon bumpy roads. We have found, too, that with some cars there is quite an appreciable difference in ease of acceleration control, according to whether one is wearing light and flexible boots with which one can really feel the pedal, or stiff and heavy ones.

The Motorists' Map of Best Hotels.



TO THE READER

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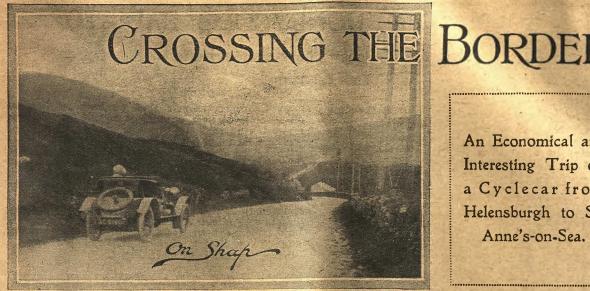
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An Economical and Interesting Trip on a Cyclecar from Helensburgh to St. Anne's-on-Sea.

T was on a Saturday morning, after a frugal breakfast that we decided to leave the old homestead in Bonnie Scotland for a few days in search of

We thought of Blackpool, where one gets value for one's money; but then Blackpool has a name for gaiety. We might even see a joke, smile, and so break the old clan record, a thing not to be lightly treated. So, borrowing a map, we spotted St. Anne's-on-Sea, and thought we might go further and

Then we had a look at Babette to see what could be done for her. She was certainly a bit dirty, and not quite so full of the "joie de vie" as she had not quite so full of the "joie de vie" as she had been, so we thought we would have the cylinders off and clean her out. This is not a long job with the G.N., and an easy way to remove exhaust valves is to take a screw-driver, and using the inlet tappet as a fulcrum, ask some kind friend to turn the starting handle. As the inlet tappet rises it carries with it the collar and spring of the exhaust valve, and it is then an easy matter to give the valve a tap on the head and pull out the cotter pin head and pull out the cotter pin.

After 5,000 miles running, the pistons were in such a beautiful condition that we thought of producing them for the edification of the family.

Much to our astonishment, they—the pistons—were met with a cold reception in the dining-room, and orders to "Take the nasty things away," were obeyed more in sorrow than in anger.

Setting Forth.

Sunday is a day of rest, and we packed our luggage late at night with a furtive and guilty feeling. nine o'clock on Monday morning we started off, taking hills in a manner that would have left most car owners guessing where their boasted horse-power went to in the autumn time. The exhaust note was a dream, and as we approached Dumbarton on execrably-surfaced roads, the beat of the engine seemed to increase in volume, until it resembled that of a 90 h.p. racer on the loose. It was almost with a sigh of relief I noticed that the off-side exhaust pipe had come adrift from the cylinder. This was not to be wondered at, for investigation showed that we had quite forgotten to screw up the clamp conwe had quite forgotten to screw up the clamp connecting the two when we reassembled the engine.

One stop in seven miles was annoying, so after chastising "Mutt" the mascot, we opened out slightly, and streaked along towards Glasgow. To avoid the miseries of the road between Glasgow and Hamilton, the best way of approaching Carlisle from

the North is through Cathcart, Busby, East Kilbride, and Strathaven. The little car was really moving now, and when we stopped at Crawford for lunch, our average worked out at 25 m.p.h. We were rather unfortunate at Crawford, as we had already seated ourselves at the table when the chilly truth struck us. We were in a temperance hotel!

Despite heavy luggage, Beattock was taken in our stride, and a fast run made through to Carlisle. As we crossed the border, what more natural than that the sun should break through the clouds, and with light hearts we sped on to Penrith, a town which "in olden times suffered much from the warlike incursions of the Scots." On this particular day, however, an incursion by certain Foresters caused the Scots to suffer, by leaving them very little for tea.

Surmounting Shap.

It was therefore decided to push on quickly over Shap, and stop the night in Kendal. For the first time that day, a hill called for the use of the second gear, but only for a couple of hundred yards. The greater portion of Shap was easily taken on top at about 24 m.p.h.

My advice to those who plan to stop the night at Kendal is "Don't"; perhaps we did not stop at the right place, but we have since met other unfortunates who have passed the night in Kendal. Others, again, may find the place cheery and amusing, whereas our impressions seemed limited to a Scotch mist and a Salvation Army band. Our average speed for the day's run of some 180 miles worked out at 25 m.p.h.,

and the petrol consumption at 54 m.p.g.

A pleasant surprise awaited us on Tuesday morning, for the sun was already shining brightly by 10 o'clock, so after hurriedly filling up with petrol we started off for Lancaster, which, in my opinion, is the finest sign-posted town in the kingdom. It is absolutely impossible for any motorist to lose his way in Lancaster. The sign-posting is really Hunnish in its thoroughness, and I take off my hat to the authorities responsible for setting this excellent

example. On the beautifully-kept road in Lancaster we slackened speed considerably, as we had been warned that trapping was still being carried out—and "Mutt" had not proved himself infallible!

Merging into the stream of chars-à-bancs on the Preston-Blackpool road, we branched off near Kirk-

ham, arriving in St. Anne's in time for a rather late lunch, and every prospect of a few glorious days—the last of the "Indian Summer." G.J.E.

THE DESIGN OF HONEYCOMB RADIATORS.

The Effect of Various Designs-The Relation Between Air, Speed, and Economy.

THE honeycomb radiator is undoubtedly the most efficient type in existence, when judged from the point of view of the amount of heat dissipated by a given weight of material, and is, therefore, taken as being typical.

The radiator, as understood by the motorist, consists of three main portions, namely:—(1) The header tank, which is the topmost portion of the radiator,

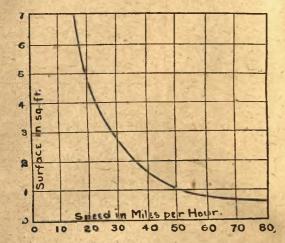


Fig. 1.—Surface required per horse-power. Open radiator.

into which the water is returned after circulating round the cylinders; (2) the actual radiating surface, which consists of numerous thin brass tubes, placed horizontally, which, although touching each other at the front and rear ends, have a space between them for the greater portion of their length, through which the water circulates; and (3) a lower tank, below the radiating tubes, from which the cooled water is drawn to the cylinders.

The Height of Water.

As a certain amount of the cooling water will evaporate, especially when a temperature slightly under boiling point is reached, it follows that the header tank should allow of a water level an inch or so higher than the water connection from the top of the cylinder heads to allow for wastage by leakage or evaporation. The size of the lower tank is usually determined by the size of the pipe leading therefrom.

The actual construction of a radiator has already

been described in these columns, and it is here proposed to deal merely with the design of the actual radiating surface.

The amount of radiating surface required depends upon the following data:—(1) The number of British thermal units to be dissipated per minute; (2) the speed of the air passing through the tubes; (3) the rate of water circulation; (4) the condition of the inner and outer surfaces of the tubes; (5) the inclination, if any, of the tubes to the air flow; (6) the proximity of parts of the car likely to affect the flow of air through the radiator; and (7) the length of the tubes relative to their diameter.

The number of heat units to be dissipated is fortu-

The number of heat units to be dissipated is fortunately very easy to estimate, for if we consider the various losses in the internal-combustion engine we find that the heat lost in the water jackets is almost equal to the heat converted into useful work. We may, therefore, assume that we have to dissipate an amount of heat equivalent to the horse-power, remembering that:-

2,492 heat units per hour are equivalent to 1 h.p.

The speed of the air passing through the tubes has
very little effect on the cooling system above a certain value (about 50 m.p.h.). For example, 1 sq. ft. of surface at 50 m.p.h. will dissipate as much heat as .6 sq. ft. at 80 m.p.h., but if the wind speed is reduced to 30 m.p.h. 2.8 sq. ft. will be required.

It is convenient to consider the amount of heat to be dissipated in the form of here power against left.

be dissipated in the form of horse-power equivalent, and the radiating surface required per h.p. at different speeds is given in Fig. 1.

Rate of Water Circulation.

The rate of water circulation has not a great effect on the cooling powers of the radiator, and the water will circulate by thermo-syphon alone at a sufficient rate to make efficient use of the surface available, provided the pipes connecting the radiator and cylinders are of ample size and free from sharp bends. The obvious advantage of thermo-syphon cooling is the elimination of the water pump, with its attendant

gland troubles.

The inner surfaces of the tubes are usually left bright, as the resistance to the flow of the water is then minimized, but the surfaces exposed to the air are painted a dark colour, with a matt finish, as this surface is the most efficient for radiating heat.

In most radiators the tubes are in line with the air flow, but more heat will be dissipated if the radiator is inclined about 30 degrees, although practical and constructional difficulties rule this out of the question.

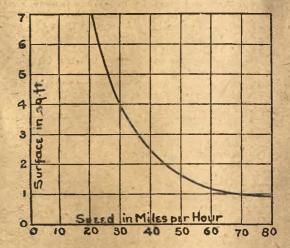


Fig. 2.-Surface required per horse-power. Radiator in front of bonnet.

From experiments it is found that a radiator, when placed in front of an engine enclosed by a bonnet and possibly an undershield, will only dissipate 65 per cent. of the heat it would dissipate if it were placed alone in the air stream. Fig. 2 gives the surface required for a radiator situated in the

placed alone in the air stream. Fig. 2 gives the surface required for a radiator situated in the conventional position in front of the engine.

If the tubes are very long in relation to their diameter the resistance to the flow of air will be so great that the efficiency of the radiator will be lower than normal, and a larger surface will be required for a



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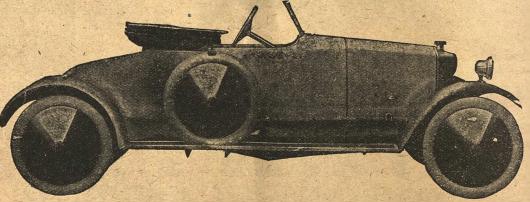
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HONEYCOMB RADIATORS (contd.).

given duty than Figs. 1 and 2 lead us to expect. Up to a length-diameter ratio of 12 to 1 the heat radiated is practically proportional to the length of the tubes.

The actual cooling surface has little interest to any but the actual radiator designer, and a useful figure is the frontal area of the radiating block, which, of course, determines the size of the radiator and bonnet.

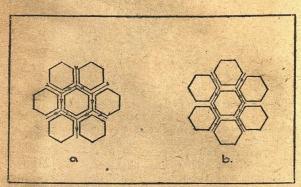


Fig. 3.—Correct (a) and incorrect methods of building up honeycomb radiators. The arrows indicate the water flow.

To obtain this figure we may use the following constants:-With 7 mm. diameter tubes, 100 mm. long, 3.62 sq. ins. of frontal area, gives us 1 sq. ft. of radiating surface. If 10 mm. diameter tubes, 120 mm. long, are used, then 4.025 sq. ins. of frontal area will give the same effective surface.

It would be as well to point out here that if hexagonal tubes are used it is important that none of the sides lies horizontally, as in that case the water will not flow through the horizontal portions, and the cooling effect is consequently reduced by one-third. Fig. 3 will make this clear.

The reader may wonder why a fan is usually fitted to draw the air through the radiator. From Figs. 1 and 2 it will be seen that the cooling effect falls off rapidly when the air speed drops below 40 m.p.h., which is certainly the case for the greater part of the

time. If the engine is not developing its full power, as when running on the level, the full capacity of the radiator is not required; but if the car is climbing on low gear the power developed approaches the maximum, so that the fan is required to increase the speed of the air flowing through the radiator, and so increase the cooling effect, although the actual speed of the car may be very small.

From the above it will be seen that it is a waste of power to design the fan to draw the air through the tubes at a greater speed than 40 m.p.h.

It is common practice to fit a cowl in front of the radiator of a racing car, and, although the opening of the cowl will be much smaller than the frontal area of the radiator, the effectiveness of the cooling surface is often increased, as the air is thereby prevented from flowing sideways off the radiator, and the

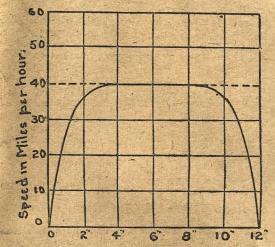


Fig. 4.—Speed of air through a 12-in. wide radiator at 40 m.p.h.

tubes near the sides become as efficient as those in the centre.

This is easily seen if we consider Fig. 4, which shows the velocity of the air across the surface of a radiator. The dotted line shows the effect of fitting a cowl.

A NEAT HOOD AND REAR SCREEN.

A Suggestion for Overcoming Back Draught.

DISADVANTAGE experienced on many light A cars is the presence of back draught, which often causes the occupants of the car considerable discomfort. With a view to eliminating this and at the same time to provide a concealed hood, a novel suggestion has been sent in by a reader.

By referring to the illustration it will be seen that there are two glass screens—one in the usual position in front of the passengers, and the other at the rear immediately behind their heads. The hood itself is of the roller blind type, the roller being situated at the base of the rear windscreen. When it is fully rolled up, however, it can be operated through the medium of two short cords terminating in knobs, the cords being carried through small pulleys at the top

of the uprights supporting the screen.

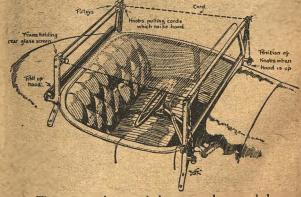
When it is desired to raise the hood these two cords are pulled, passed over corresponding pulleys on the front windscreen, and the knobs finally secured at the base of the front windscreen.

The short lengths of cord on the front of the hood

are duplicated at the rear, so that when the hood is up it is still possible to obtain a clear view to the rear through the glass screen.

The device has one obvious disadvantage, i.e., the

material from which the hood was made would sag in the middle and not only become unsightly, but



The suggested rear windscreen and concealed roller hood.

probably let the water through. If this could be overcome the idea certainly has possibilities.

R47



THE MOTORISTS WORKSHOP

A FEW USEFUL HINTS AND TIPS.



Carrying the Oilcan.

It is scarcely necessary to emphasize the need for carrying an oilcan. When the means for applying a few drops of oil to a squeaking member is not immediately to hand the owner-driver is inclined to allow



the squeak to develop without paying due regard to the seriousness of such neglect. When carelessly dumped in the tool locker the oilcan is liable to deposit its contents on to the tools and spares, with the result that everything becomes in a terribly messy state. The best position

for the oilcan is beneath the bonnet, where it can be supported on a tin platform. If three "tongues" are brought up from this platform the oilcan will be securely held in position.

S.A.S.

Keeping the Windscreen Clear.

One of the simplest means of keeping the windscreen clear when driving in rain is to apply a little pure glycerine to the glass. Only a small quantity should be used, as an excess will probably make matters worse. The cloth that is used to apply it should be perfectly clean and free from grease or loose fabric. It is not generally known that an ordinary potato

It is not generally known that an ordinary potato if rubbed on the screen serves the same purpose. Any excess of either will, however, defeat one's object, and so long as the surface of the glass is covered, satisfactory results will be obtained.

Position of the Petrol Filler.

There would seem to be some difference of opinion as to where the petrol filler should be best located upon a light car If arranged to protrude from the dash, a full size scuttle tank can be used, and on several cars at the Show there was the sensible improvement of moving the filler closer to the near side of the car, so that filling by can would be easier. If the filler is placed under the bonnet it is certainly well out of the way, there is no smell of petrol, and no chance of spilling petrol in the seating space when filling up, but the petrol tank, usually, cannot be quite so large, owing to the height of the scuttle. The only position for which little can be said, except from the point of view of symmetry and visibility of contents, is when the filler is placed in front of the screen, for, apart from any chance knock from a petrol can, the paintwork is rather liable to be injured when benzole is used. It is appreciated that the position of the filler cannot be altered at will, but a special pourer or even a length of tubing overcomes the difficulty.

S.F.B.L.

Carrying Spare Tubes

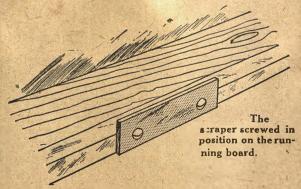
When spares tubes are carried care should be taken to see that no chafing takes place. It is possible that the tube may not be required for a considerable time, and if care has not been used in stowing it, it may be found that the tube is practically useless. Continual rubbing on the doubled-up edges, will soon reduce the thickness of the rubber, and in several instances a hole has been known to form. In any case, the strength of the tube will be considerably reduced, and the probability of a burst is augmented. T.A.W.

Preventing Trouble.

The recent spell of cold weather has told its tale, and many motorists have paid the penalty of carelessness, for cracked cylinder jackets and burst radiators have been the order of the day. This trouble can, of course, be prevented by running off the water in the cooling system, but this is not necessary if a little glycerine is added to the water. Ordinary commercial glycerine is quite suitable, but it should not be forgotten that rubber connections may be affected by its use. This anti-freezer should form about 10 per cent. of the solution, for this mixture will not freeze above 30 degrees Fahr.

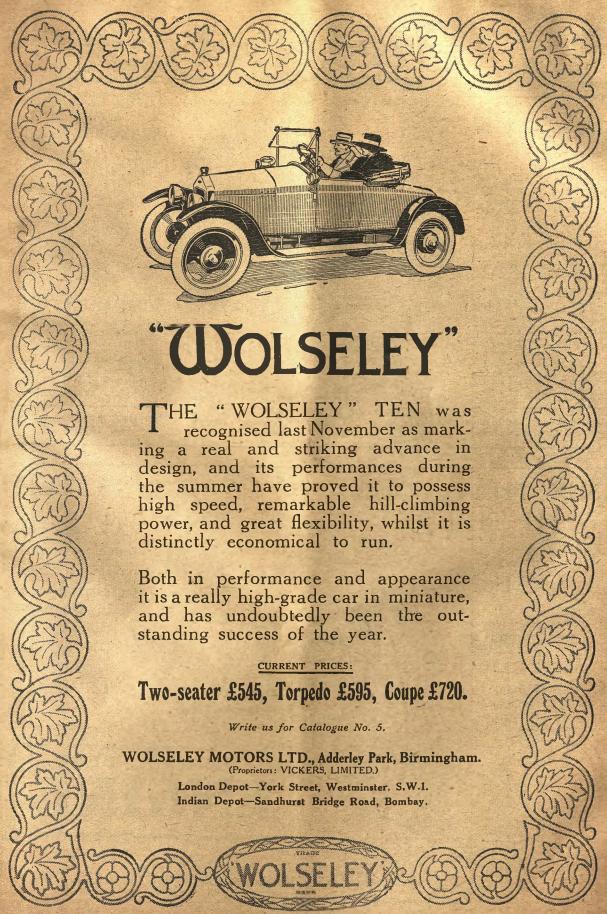
Keeping the Car Clean.

Nothing looks much worse than to see the mat and floorboards covered with road matter. This is somewhat difficult to avoid when one is continually getting in and out of the machine. A neat scraper



can be readily made from a piece of $\frac{3}{4}$ in. by $\frac{3}{8}$ in. bar iron, and it should be screwed to the running board close to the door. The cost of such a mudscraper is but a few pence, whilst it can be made and fitted in a couple of hours. The scraper should not be allowed to project for too great a distance above the running board, or it will constitute a danger and may quite conceivably result in an accident.

Short contributions to this feature—up to 150 words in length—will be welcome. If possible, rough sketches should be enclosed illustrating the point of the paragraph.—ED.



TO THE By mentioning "The Light Car and Cyclecar" when corresponding with advertisers, B4 READER you will be working for the cause of the new motoring.

PHONE-Richmond 1344.

Available for IMMEDIATE DELIVERY

Tredelect

COMPLETE CAR-LIGHTING EQUIPMENT

WIRE—"Dynamos,
Richmond, Surrey."

The Finest and Cheapest Proposition on the Market. Complete Lighting Sets from £13 (including Dynamo).

SWITCHBOARDS

4-way "Tredelect"
Switchboard with ammeter, specially calibrated, and mahogany case (Nickel or Brass).
Each 45/-

Nickel or Brass Ammeters, specially calibrated. Each ... 12/6

Plain Nickel Switches, 2-way. Each (1 or 3way to order) ... 10/6

ACCUMULATORS

6-volt. 30-amp. hr.(actual)— Without case. Each 59/3 With teak case. Each 75/-

6-volt. 40-amp. hr. (actual) — Without case. Each 69/6 With teak case. Each 87/-THOROUGHLY RELIABLE.

PROMPT ATTENTION TO ALL INQUIRIES.

8½" Polished Brass finish Head Lamps, bevelled glass front. I'er pair . . 110/-5¾" ditto do. 85/-

HEAD LAMPS.

SIDE LAMPS.

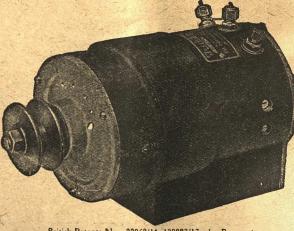
 5¾" Polished Brass finish Side Lamps, bevelled glass front. Per pair . . 85/-Semi-torpedo Side Lamps, Polished Brass finish. Per pair . . . 38/3

Semi-torpedo TAIL LAMP, Polished Brass finish. Each... ... 18/-

N.B.—Bright Nickel finish (to order) 10°/o on above prices.
Black Nickel finish (to order) 15°/o on above prices.

Carriage and packing charged at cost.

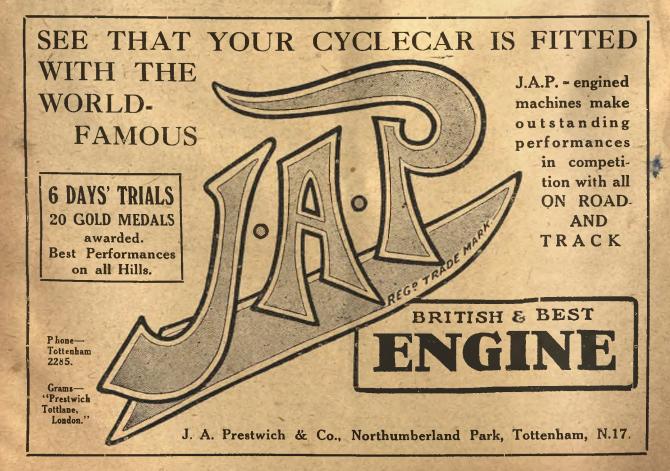
Armoured Cable and Driving Pulleys at Reasonable Prices.



British Patents Nos. 22062/14, 120982/17, also Patented in U.S. America, France, Belgium and Switzerland. The "Tredelect" Dynamo, with 12 months' guarantee. Price £6 15 0

OR WRITE-

TREDELECT DYNAMOS, LTD., Water Lane Works, Richmond, Surrey, For Illustrated Pamphlets.



THOUGHTS & OPINION

NOTICE TO CORRESPONDENTS.

Preference is given to letters intended for publication which are to appear above the writer's name and address, but where this is not desired, initials or a nom de plume will be substituted if requested. In view of the

The Suggestions of To-day may be the Realities of To-morrow

peculiarly wide publicity afforded to letters an light car and cyclecar, subjects appearing in these columns, readers are asked to make their letters as brief as ocssible so that a greater number may be published. Letters received up to Monday morning first post usually appear in the following Friday's issue.

THE LIGHT CAR ON THE FERRY,

Perhaps the following jottings concerning the Queensferry may be of interest to readers of The Light Car and Cyclecar:—The ferry boat between South and North Queensferry is on the direct Edinburgh-Perth road. The other way is to go on by Alloa and Stirling; whilst the ferry saves about 30 miles, although it is rather an irritating alternative. It has only room for about ten cars; it crosses every second hour and misses the dinner hour altogether, so that if one arrives just in time to see it pushing off from South Queensferry at 12 noon, one knows one will have to wait until 3 p.m. for the next trip!

It is also necessary to line up the car in a queue. People who do not know this sometimes fail to get on the boat after waiting for ages, and have the mortification of seeing a later arrival, who had more experience of ferries, secure one of the limited places.

However, the ferry men are very nice to small car people,

However, the ferry men are very nice to small car people, and seem only too delighted to find a good corner for one's machine.

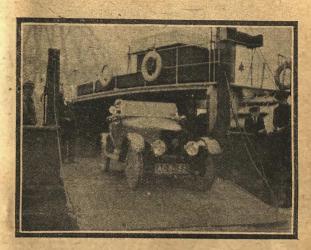
When the ferry does come in there is a rush to get aboard, but the knowing ones try to be last, as they will then be the

During the crossing one gets a unique view of the vastness of the Forth Bridge as one paddles along directly below it. You are told that this structure took the labour of 5,000 men for seven years, day and night, and cost over £3,500,000. It is 360 ft. above your head, making the express trains running over it look like toys. There are 5,000,000 rivets in it, and there were men working high up above the water as we passed, putting in a fresh piece of metal.

One also gets a good view of the Fleet lying at anchor, and

some battered, rusty German destroyers, so that in some

ways you are compensated for the worries of the ferry.
When you land at North Queensferry you are in the Highlands and can wear a kilt! V.M.



Our correspondent's A.-C. light car leaving the ferry boat at North Queensferry.

An Old Complaint Revived.

I have a small car, driven by belts and expanding pulleys, the power unit of which is an 8 h.p. V twin engine. Once away, the little car will go anywhere; but, as seems usual with V twins, it requires fairly vigorous swinging to start. Not being strong, I find this operation very exhausting. There must be many a similar case (especially since the war), and I think it would be of general interest to know if there is any method or attachment upon the market—apart from expensive electric starters—whereby the necessary momentum could be attained without the exertion which is the attendant result of handle swinging. of handle swinging. EXHAUSTED.

* If our correspondent has satisfied himself that there are

* no air leaks, and that the valves and ignition are timed correctly and in other respects in order, we would advise the fitting of an impulse starter, such as was described in the issue of The Light Car and Cyclecar dated October 2nd. Such a device is easily fitted, and should certainly help in starting an obstinate engine.—ED.

We beg leave to inform you that the undermentioned articles were stolen from our premises during the Motor

We shall be pleased to give a reward to any person giving such information as will lead to the recovery of the goods and the conviction of the offenders. We append a list of

the articles stolen:—
1. One Bosch magneto, V twin 45 deg. type Z.E.V., No. 1945527.

Lucas Thomson-Bennett magneto, type G.4, No.

One Lucas Thomson-Bennett magnete, type 3.7, C10976.
 One pair Lucas side lamps, No. R.G. 361.
 One battery, eight volts, No. 618, and black-enamelled metal box for same.
 One switchbox, type F. 5.
 Hammersmith Rd., London, W. Burr's.

Another Explanation.

Respecting "C.B.K.'s" query, to which an answer was given in the issue of The Light Car and Cyclecar, dated November 20th. Whilst the suggestion as to the trouble may solve the difficulty, the symptoms, to my mind, point rather to a bent tie-rod, which might possibly have been brought about in passing over an extra deep and wide pot-hole. I suggest "C.B.K." carefully tests the alignment of his front wheels to see if they are parallel or not. Possibly the marks on his tyres may show him something in this direction. Immediately the tie-rod became distorted, the steering would "suddenly" develop a marked stiffness; on jacking up this would disappear.

H.C.B. Southport.

* Although a bent tie-rod would account for the trouble ex-perienced by "C.B.K.," we scarcely think it possible that unless the machine has been in collision that such would be the case.-ED.

A Satisfied Richardson Owner.

I notice "H.P.B.'s" inquiry with reference to the Richardson in your issue dated November 20th. I have one of these cyclecars, and, on the whole, I think it is an excellent little bus at the figure. I may say that I never handled a car until I purchased this one early in the year. I use it prac-

until I purchased this one early in the year. I use it practically every day of the week.

I have run over 7,000 miles, have never changed a tyre, and get good, reliable, economical service. The transmission is, in my opinion, practically perfect, and the workmanship incorporated in its construction is, generally speaking, good. The machine has a few faults, of course, but I find these do not develop into anything of a nuisance if I keep it out of the hands of irresponsible mechanics. If your correspondent wishes for my address, I should be pleased to give it, and I should be glad also to give him any further information or help should he need it.

Dicky.

* We should be pleased to put our correspondents in touch

* * We should be pleased to put our correspondents in touch

* with each other .- ED.

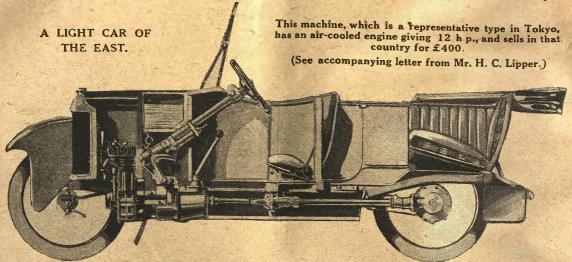
THOUGHTS AND OPINIONS (contd.;

A SINGLE REPRESENTATIVE IN TOKYO.

I am receiving my weekly copy of The Light Car and Cyclecar pretty regularly, and I read every word from beginning to end. The light car question has always interested me very much, and I only wish that some more British light car manufacturers would export to Tokyo, for, as far as I know from many inquiries I have made, there is only one British light car represented, and that is the Calthorpe, Messrs.

car, and if you could persuade a few manufacturers to place their agencies here, I am sure they would receive many orders. The accompanying illustration is of a Japanese light car, which I think may be of interest to readers of The Light Car

The twin-cylinder engine of 12 h.p. is air-cooled, a fan being employed to assist the cooling Three forward speeds and a



Takata, of Tokyo, being the agent. The retail price is Y7,500.00, which at the present rate of exchange is about £1,092. Admitting that duty, freight, and insurance are fairly heavy, the price is high.

American cars sell very much cheaper here than in England, but I do not want an American car. I want a British light reverse are provided by a gearbox of special construction. Two sets of brakes, independently operated, are fitted, one set working on the rear wheels, the other being on the transmission. The estimated maximum speed of this machine is given at 30 m.p.h., and it sells for £400. H. C. LIPPER.

No. 1, Itchome, Yuraku-cho, Kojimachi-ku, Tokyo.

NEW HEADQUARTERS FOR THE BLINDED SOLDIERS.

At the beginning of next year St. Dunstan's organization will be transferred from the situation which it has, since its inception, occupied, thanks to the generous hospitality of Mr. and Mrs. Otto Kahn.

We have been so fortunate as to secure on long lease from the Crown another spacious property in Regent's Park, and here for months past workshops have been in course of erection, while the house has been adapted to serve the purposes of offices and after-care headquarters. There are still nearly 500 men in training, many of whom have been pre-

of offices and after-care headquarters. There are still nearly 500 men in training, many of whom have been prevented by the severity of their injuries from coming to us before, and many others of whom have only lately lost their sight as the result of injuries received in the war.

The high prices ruling for labour and materials have necessitated a very large expenditure upon these removal operations, which we are seeking to meet by a widespread postal appeal of a rather unusual character. This appeal will have reached a large number of readers of The Light Car and Cyclecar recently, or will reach them in the course of the next few days, and I am begging the favour of the insertion of this letter in the hope that it may direct special attention to this very special appeal. to this very special appeal.

Through the unbounded generosity of those who sympathize with the ideals of St. Dunstan's, we have so far been able to accomplish these ideals in a splendidly satisfactory manner. The brilliant success of the men who have passed through The brilliant success of the men who have passed through St. Dunstan's, and are now engaged in the occupations they learnt there, is sufficient proof of this. It is no small thing to have been enabled by the sympathies of the public to convert some 1.200 helpless and hopeless blind men into self-respecting, happy, useful citizens.

I had hoped that the work would have been finished by now, but it is not, for, as I have said above, we still have hundreds of men with us, and I am sure that I shall not in vain call for a continuance of the sympathetic support which has eachled St. Dunstan's to accomplish the seemingly im-

has enabled St. Dunstan's to accomplish the seemingly im-

Allow me, please, to ask your readers to respond as liberally as their means permit to the appeal which will come before so many of them, and to ask any who do not receive this appeal to forward a contribution direct to me.

ARTHUR PEARSON, Chairman.

St. Dunstan's, Hanover Gate, Regent's Park, N.W. 1.

Fair Play for All.

We are not all in the happy position to be able to have our own private car to drive, when and where we like, and for this own private car to drive, when and where we like, and for this reason I think that the remarks which are so often expressed against the char-à-bancs should be moderated. I recently took a short trip in one of these vehicles, and I must say I found it quite comfortable. After all, the general complaint is against the drivers of these unwieldy vehicles, but this has a tendency to reflect upon the passengers he is carrying.

This type of vehicle is certain to stay on the roads, so one may as well make the best of things and keep our grumbles to ourselves. By all means let everyone who can, enjoy the exhilarating pleasures of motoring, whether it be in a smart spick-and-span two-seater or in a mammoth of the road.

spick-and-span two-seater or in a mammoth of the road.

FAIRPLAY

Interest in the "Wanderer."

In the issue of The Light Car and Cyclecar dated November 6th there was an illustration on page 51 of a "Wanderer's last hours, etc. As the owner of the only pre-war car of this model (tandem) in this country, it would be of interest to me if I could get in touch with the owner of this direct.

Kempsford, near Fairford.

Tom Faulkner.

Another Endorsement.

May I, as another family man (wife and one daughter), endorse the views expressed in the letter that appeared in the issue of *The Light Car and Cyclecar* dated November 13th? Clover leaf seating would meet my wants; no car, however, that I fancy offers it, consequently I do without one.

"Tres aut Nullus."

Place your car on afirm



IMMUNE FROM ALL CATASTROPHIES IN THE POSSESSION OF The

ISSUED ONLY BY THE LICENCES & GENERAL INSURANCE

VICTORIA EMBANKMENT (TEMPLE) WC 2

Telephone Central 7360-F

Jpens Next Monday.

THE MECCA OF THE WORLD OF WHEELS, The largest gathering of CYCLECARS, MOTORCYCLES, SIDECARS. SCOOTERS. CYCLES, COMPONENTS. ACCESSORIES. TYRES, Etc., under one roof,

SIXTH

CYCLE and MOTORCYCLE SHOW

(Organised by the British Cycle and Motor cycle Manufacturers and Traders Union, Ltd.)

Nov. 29th to Dec. 4th Both days inclusive. Open from 10 a.m. to 10 p.m.

Admission 2/6 including Tax.

Band of H.M. WELSH GUARDS. Catering by Messrs. J. Lyons & Co., Ltd.

SECOND-HAND

LIGHT CARS, CYCLECARS, and ACCESSORIES FOR SALE

"The Light Car and Cyclecar" deals with its own types of machines exclusively. Old cars produced before 1912 as distinct from modern light cars, and cars with an engine of a cubic capacity exceeding 1,500 c.c., cannot be accepted for its advertisement columns.

RATES.

For Advertisements in this section: 12 words, 2/- (minimum) 2d. per word after. Subject to a discount of 5 per cent, for 13 consecutive insertions, 10 per cent. for 26, 15 per cent. for 52. Terms: Cash with order, and otherwise net. Cheques, Postal Orders, etc., should be crossed and made payable to Temple Press Ltd.

BOX NUMBERS.—Advertisers desiring to have replies sent care of "The Light Car and Cyclecar" may do so on payment of a nominal fee of fid. to cover booking and cost of forwarding such replies. The words Box , c/o "The Light Car and Cyclecar," count part of the advertisement.

DEPOSIT SYSTEM.

DEPOSIT SYSTEM.

The intending buyer forwards to our office the amount of the purchase money which will be acknowledged to both parties.

Notes or money order save time, Cheques must be made payable Temple Press Ltd., and are acknowledged to seller when "cleared." If a sale is concluded, we forward to the seller the amount agreed upon, If no sale is made, we return the amount deposited. In either case we deduct a commission of 1½ per cent. (3d. in the £.26 minimum), on amounts deposited up to £50, 1 per cent. on amounts from £50 to £100, and ½ per cent. on amounts exceeding £100, to cover our expenses of booking, postages, etc. Carriage is to be paid by the buyer. If the article is returned, each party pays one way. The risk oldamage in transitis the seller's. Articles on approvalare not to be retained more than three days, unless by arrangement between the parties. All disputes to be settled by the arbitration of the Editor of "THE LIGHT CAR AND CYCLECAR," whose decision shall be final and binding on both parties.

WARNING,—Acknowledgments of deposits or instructions to forward goods advertised are only written on our special headed paper, which bears a facsimile of the title of this journal. To prevent fraud, the advertiser should ACKNOW-LEDGE IMMEDIATELY any such letter apparently coming from us, and delay forwarding the goods for a day or so. Should we, on receiving such an acknowledgment, find that no letter has been sent by us, we will wire the advertiser not to part with the goods advertised.

DISPLAY ADVERTISEMENTS. Scale of charges, with reduction for series, sent on application.

REGULATIONS WITH REGARD TO ADVERTISEMENTS.

All advertisement orders are subject to confirmation in writing from the Head

Unices.

All advertisements and contracts are accepted and made upon the express continuous tion that "Copy" is subject to the approval of the Publishers generally, who also reserve the right to reject any advertisement, in whole or in part, referring to cars or accessories which in the opinion of the Pu lishers are outside the scope of the journal, and such refusal of copy shall not be a good ground for advertisers to stop a current contract or to refuse to pay for the same or for taking action for breach of contract.

Advertisements received too late for insertion in the issue then closing for press will-unless accompanied by express instructions to the contrary—be inserted in the following issue.

Whilst every precaution is taken to ensure accurate printing, the Publishers will not be responsible for aprinter's errors, nor will they be responsible for advt. blocks destroyed by fire or that are left in their possession for more than one year.

Copy for, and all matter relating to, advertisements must reach the offices first post Tuesday, and should be addressed to THE MANAGER, "THE LIGHT CAR AND CYCLECAR," 7-15, ROSEBERY AVENUE, LONDON, E.C.I, to whom all communications concerning advertisements should be sent. If proof of displayed advertisements is required, copy should be forwarded in sufficient time to allow of it being submitted and returned.

Head Offices: -7-15, Rosebery Avenue, London, B.C.1. Telephone No. 5292 Holborn (five lines). Telegrams: "Pressimus. Holb., London." [Addresses of Branch Offices and other Business and Editorial Notices will be found on the last page of this section.]

NOTICE.

Owing to postal delays and irregularities, it is advisable to post advertisements EARLY ON MONDAY so as to ensure, as far as possible, that they reach us by the FIRST POST on Tuesday.

Lately several advertisements have been received too late for inclusion, although despatched on Monday.

SECOND-HAND LIGHT CARS AND CYCLECARS FOR SALE.

A.C., 1919, 2-3 seater, unused since overhauled by the A.-C. Co. at a cost of £80, open to any trial and inspection, privately owned, £375. Lloyd, 9 South Molton St., W. 1. Mayfair 1011.

A.-C. Sociable by A.-C. Co., modern, good condition, fully equipped, hood, screen, etc., bargain, £65, trial. 29 Allsopp St., Upper Baker St., N.W.L.
419-bl34

A.-C., 1916, 10hp. clover leaf, 3 seater, dynamo lighting and starting, £325. Autoveyors, 84 Victoria St., S.W.1.

A.C. F.O.C.H. have an excellent clover-leaf 3 scater, 1916, completely overhauled, repainted new hood, Fair Offer Car House, 5 Heath St. Hampstead (near Hampstead Tube Station). Thone, Hampstead 355, 418-330

A.C., 12hp, 1919, special competition model, very fast, fitted with 1920 body, aluminium bonnet, dynamo lighting, disc wheels, in splendid condition throughout, £420, Alfred Wastnage, 65 Gt. Portland St., W. 1. Tel., May, 3005.

A.-C. Sociable, splendid condition, tyres good, engine overhauled, electric lighting, £55. 26 St. Michael's St., Oxford. 418-5543

A.-C. Sociable, good running order, large windscreen, electric lighting, speedometer, hood, etc., £70 or close offer. A. Brown, 49 Powlett Rd., East Ham.

A.C. 10hp 2 seater, dickey, fast, economical, 40 miles gallon, acetylene headlamp, excellent condition, £285. Burghes, 162 Evering Rd., Clapton. Phone, Dalston 727.

A.V. monocar, May, 1929, 6hp. 60 m.p.g., small mileage, first-class condition, good acetylene lighting, large generator, hood, and spares, £125. Dr. R., Islewerth Infirmary.

A.V. monocar, 1920, 6hp, perfect order, mileage negligible, electric light, £95. Holywell Motor Co., Ld., 17 Buckingham Palace Rd. S.W., 1. Tel., Vic. 3537.

A.V., 1920. Shp J.A.P. engine, 2 speed, electric lamps, in excellent condition throughout, £115. Elce and Co., 15-16 Bishopsgate Ave., Camomile St., E.C. 3. 'Phone, Avenue 5548.

A.V., 1920, 6hp special, fully equipped, insured £170, real bargain, £110, 38a Sidney Rd., St. Margaret's, Twickenham.

A.V. monocar 1919 (late), only used 4 months, £100 or nearest offer. Green, Martells Hall, Ardleigh, Essex.

A.V. monocar, 1919, 8-10hp J.A.P., very fast, excellent condition, £95. Charles Henry, 15 Cornwall Mews, Gloucester Rd., S.W. 7. 418-c609

BABY PEUGEOT, de luxe model, 1915, spare wheel, luggage grid, hood and screen, excellent condition, £185. Freeman, Oakes and Co., Devonshire St., Sheffield.

BABY PEUGEOTS. A large number of these cars in stock at prices ranging from £150 to £225; other good-class small cars taken in exchange with cash adjustment. Overend and Cotton, 19 Grafton Mews, Warren St., W. 1. Museum 6980.

BLACK PRINCE cyclecar, 3½hp, recently delivered, roomy and comfortable hood, screen, speedometer and lamps, perfect condition, £160. Hills, 13 Albion Pl., Maidstone, Kent.

BLERIOT Whippet, completely equipped, many extras, splendid order, £190, cost £290. Oscar V. Cox, Waylett Pl., West Norwood, S.E. 27, 418-376

BLERIOT Whippet, 1920, hood, screen, spare wheel, all lamps, under 500 miles, as new, £230; exchanges or easy terms. 2 Nightingale Rd., Lower Clapton.

BLERIOT Whippet, complete, handle starter, tyres unpunctured spare wheel, electric lights, well run in, in fine condition, £230 or near offer. Can be seen and tried in London. Box No. 9557, c.o. "The Light Cand Cyclecar."

BLERIOT Whippet, hand starter, speedometer, acetylene headlamp, spare wheel unused, tyres unpunctured, numerous spares, inculding belt, perfect condition, £230. Mann, Heighton, Daneshill, Woking.

418-c595

CALCOTT, December 1914, 2 seater and dickey, dynamo lighting, recently repainted grey, new Cape-hood, £345. 27 Caversham Avenue, Palmers Green.

Green.

418-b842

CALCOTT. Cass's Motor Mart, Ld. Calcott, 2 seater, 1914, 10hp, new
CA.V. lighting set, tyres as new, overhauled and repainted, £350. 5

Warren St., Euston Rd., W. 1. Tel., Museum 623.

418-411

CALCOTT spares. We always hold a good stock of Calcott spare parts for immediate delivery. We are authorized agents for Calcott cars. Wilkins, Simpson, opposite Olympia, London.

CALCOTT repairs. We specialize in repairs to Calcott cars. Any kind, small or large, complete overhauls, repainting, boods re-covered, etc. We are authorized agents for Calcott cars. Wilkins, Simpson, opposite Olympia, London.

CALCOTT. 1916, dynamo lighting, dickey seat, exhaust whistle, clock, spare wheel complete, etc., exceptional condition throughout, £330. Offord and Sons, Ld., 94 Gloucester Rd., S.W. 7.

CALCOTT, 10hp, 1915, 2 seater with dickey, electric lighting and starting full equipment, £375. Chester Motor Co., Ld., 32a Chester St., S.W. 1. Victoria 5837.

CALTHORPE 10hp 1920 super sports model, 2 seater, all polished aluminium body, and wings, electric lighting, special real sporting car, hood, screen, etc., run 400 miles, private owner, will accept £575 or near offere 86 Oxford Rd., Moseley, Birmingham.

CALTHORPE, 1915, sports, 2 seater, bulbous back, discs, dynamo, smart, economical, £295. Oscar V. Cox, Waylett Pl., West Norwood, S.E. 77,

conomical, £255. Uscar V. Cox, Waylett Fl., West Norwood, S.E. '7.
418-377

CALTHORPE. F.O.C.H. have a Calthorpe 16hp 4 scater, in excellent order, fully equipped. Fair Offer Car House, 5 Heath St., Hampetead (near Hampstead Tube Station). 'Phone, Hampstead 3752. Hours 9-7, including Saturdays.

418-338

CALTHORPE Minor, 1916, 10hp, 4 seater, dynamo lighting, good order, smart car, accept £365. Reynolds, 147 High St. North, East Ham. E. 6:
418-0554

Readers are referred also to "THE MOTOR" which contains each week many hundreds of advertisements of new and second-hand cars. "THE MOTOR" is published on Wednesdays, price 6d.

SECOND-HAND LIGHT CARS AND CYCLECARS FOR SALE (continued).

CALTHORPE 10hp 2 seater, dickey, self-starter, dynamo lighting, in good condition, £500. Lucas, 10 St. Germains Pl., Blackheath, S.E. 3. 418-655

CALTHORPE 2 seater sporting model, with dickey seat, polished aluminium bonnet, dynamo lighting, 1920 model, as new, complete with all accessories, electric starter, etc., price £450 for quick sale, privately owned. Apply, E. W. Jackson and Son, Ld., Cheswold Works, Doncaster.

CALTHORPE, 1917, super sports 4 seater, hood, screen, 5 lamps, disc wheels, grand order, bargain, £325. Box No. 9566, c.o. "The Light Cart and Cyclecar."

CALTHORPE Minor, 1917, 2 seater, with dickey, Brolt dynamo lighting set, 5 Sankey wheels, good tyres, full equipment, condition as new, £350. or offer; also 1916 sports chassis, completely overhauled, very fast, £225 or offer, Allber Motors, Thornsett Rd., Earlsfield, London, S.W. 'Phone, Latchmere 4388.

ERIC CAMPBELL, 1920, only few weeks old, mileage about 500, perfect throughout, £400. Stretton and Smith, 23 Woodstock St., New Bond St., W. 1.

CARDEN, 1919, in first-class order, dynamo, little used, first cheque £100 secures. Youngs, The Parade, Kilburn, N.W. 6.

CARDEN sporting little monocar, twin J.A.P. engine, magneto, nearly new tyres, disc wheels, great bargain, 68 guineas. Wandsworth Motor Exchange, Ebner St., Wandsworth (Town. Station).

CARDEN monocar, 6hp, just overhauled and painted, a real bargain, £65, must sell, owner gone abroad. Broadwater Garage, Worthing.

418-6821

CHATER LEA, 1914, 8-9hp, wide 2 seater, twin-cylinder, Bosch magneto, Binks carburetter, 3 speeds and reverse, acetylene lamps, Stepney, hood, speedometer, thoroughly overhauled, smart little car. Mr. Rawlingson, co. Barker, 194 Balham High Rd., S.W. 17.

CHATER LEA; 4 cylinder, 10hp, 2 seater with dickey, accumulator lighting, price £230. Chater Lea, Banner St., E.C. 1.

CITROEN, 1920 model, 10hp, 4 seater, complete with 5 detachable wheels, dynamo lighting, self-starter, one-man hood, etc., run under 500 miles, new condition, list price £495, accept £375. 4 Little Cadogan Pi., S.W.I. Victoria 2914.

CITROEN. Gaston, Ld., have a few second-hand Citroen care of various models for immediate sale, in perfect mechanical condition and subject to Gaston guarantee. Prices and particulars immediately on application to Gaston, Ld., 212-214 Gt. Portland St., W. 1.

418-389

be Gaston, I.d., 212-213 etc. Fortaint St., w. 1.

DEEMSTER, late 1290, 10hp, 2 seater, with dickey seat, dynamo lighting, mechanical starter, hood, screen, speedometer, horn and tools, very silent, fast and economical, mileage 750, perfect condition, better than new; this car ran fourth in the Junior Car Club's strendous Efficiency Trial on September 29th; first for silence, first for slow running on top speed, first for gear ratios, slow to fast, against over 30 other cars, price £485. Humphries, Eastgate Garage, Lewes.

Humphries, Eastgate Garage, Lewes.

EMSCOTE; 1920, demonstration model, only done 250 miles, dyname lighting, 5 detachable wheels, 5 Dunlop Magnum tyres, speedometer, horn, etc., £270. II Curzon St., W. 1.

EMSCOTE, 2 seater, new September, 8-10 J.A.P. engine, 3 speed and reverse, Lucas dynamo lighting, detachable wheels, only run 300 miles, £285, buying 5 seater. Box No. 9556, c.o. "The Light Car and Cyclecar."

418-c511

ENFIELD, 10hp, July, 1915, perfect condition, any trial, new tyres, nearest offer £350. Deeks, 40 Limerston St., Chelsea. 488-658
G.N., late 1920, little used, painted grey, dynamo lighting, oversize tyres, side curtains, Binks carburetter, variable ignition, £250. Apply, E. Harnold, 12 King's Rd., Doncaster.

G.N. standard touring car, dynamo lighting, delivered end of July, mileage 3,000, spares, any trial, price £250 or nearest offer. Odell, 12 Castle St., Luton.

G.N., August, 1920, fully equipped, finished grey, dynamo lighting, comprehensive insurance policy, very little used, £255. T. Baker and Sons, Friar St., Reading.

G.N., 1920, dynamo lighting 5 aluminium disc wheels, Apollo electric horn, bulb horn, mirror, Pyrene, petrol can and carrier, 2 spare chains and several spares, fully insured, just been thoroughly tuned up, cost £320, accept for quick sale £265, a gorgeous turnout. J. Jones, 19 Santley St., Brixton, S.W.

G.N. cyclecar, 1920, September, done 1,000, dynamo lighting, spare wheel, speedometer, hood as new, best over £255 secures. Moore, 2 Pembroke St. Cambridge. speedometer, ho St., Cambridge.

G.N., 1920, October, dynamo lighting, as new, only done 1,000 miles, must sell, £240. Gilbert, Dunchurch, Rugby.

G.N. cycleoar, 2 seater, 2 speeds, good going order; seen Saturday afternoon. 2 Priory Avenue, Hornsey, N. 8.

418-6597
G.N., 1920, special demonstration car, specially tuned, balanced engine, fast, economical, doing 70 m.p.g., extra high top speed fitted, mileage under 3,000, hood, screen, dynamo lighting, speedometer, tools, perfect condition, price £265. The Eastgate Garage, Lewes.

618-6505
G.N., new last August, small mileage, painted grey, dynamo lighting, speedometer, spare wheel and tyre, tyres unpunctured, everything in new condition, carefully tuned, very fast, any trial, £250. 558 Moseley Rd., Birmingham.

218-6317 G.N. Cass's Motor Mart. Ld. G.N. cyclecar, 1920, 10hp, dynamo lighting, complete equipment, only run small mileage and is as new, £245. 5 Warren St., Euston Rd., W. I. Tel., Museum 623. GRAHAME-WHITE, 1920, new, not run 30 miles, 2 seater, good climber. Cameron, Beechleigh, Lasswade, Midlothian.

G.W.K., 1914-15, de luxe, with dickey seat, 5 detachable wheels, 5 lamps, in good condition, what offers? Holroyd, 658 Manchester Rd., Bradford G.W.K., 1914, recently overhauled, repainted, any trial, £225. 33 Bond St., Brighton.

G.W.K., 1914 body, 1920 engine, new transmission, extra air and accelerator, Zenith carburetter, 45 m.p.g., tip-top condition, £230 or nearest offer. Globe Printing Works, 186 High St., Aston, Birmingham.

418-c519

G.W.K. 1915 2.3 seater, de luxe model, in splendid order, detachable wheels and spare, shock absorbers, hood, screen, 5 lamps, any reasonable trial, £195. Elce and Co., 15-16 Bishopsgate Ave., Camomile St., E.C. 3. 'Phone, Avenue 5548.

G.W.K.s, 2, 1920, as new, 4 cylinder, dynamo, 5 detachable wheels, 2 seater with dickey and 4 seater, price £325. Denman Motor Agency, 4 Denman Pl., Piccadilly. 'Phone, Regent 986. 418-c359

SECOND-HAND LIGHT CARS AND CYCLECARS FOR SALE (continued).

G.W.K. 1916 conpeter open, overhauled, repainted, re-upholstered, £230.
15 Radnor Ave., Harrow. 'Phono 561.

G.W.K., detachable wheels, extra air, head and side lamps, overhauled, perfect, £225. 25 St. John's Rd., Brixton, S.W. 418-c587

G.W.K. 1920 4 seater, dynamo, some extras, mileage 600, faultless, £360.

G.W.K. 1919 2 seater, acetylene lighting, mileage 1,500, £290; 1916 2 seater, 6 detachable wheels, speedometer, £215. Smith and Hunter, 77 Gt. Portland St.

G.W.K. 1919 2 seater, 2 cylinder, acetylene and accumulator lighting, good Rom and Dunlop tyres, splendid running condition, £300 cash. Weatherill, 73 Springbank Rd., Lewisham, S.E. 418-c601

G.W.K. 1920 2 seater, £415. Wright's Garage, Saffron Walden. Tel. 16.

G.W.K., 1915, 2 cylinder, 2 seater, 5 lamps, 5 wheels, new speedometer, reez Zenith carburetter, mechanical horn, well fitted, owner driven, £215. Cocks, Garage, South Ealing Station. 'Phone, Ealing 535. 418-c632

G.W.K. 1919 2 seater, 2 cylinder, dynamo lighting set, speedometer, disc wheels, in perfect condition. Alfred Wastnage, 65 Gt. Portland St., W. I. Tel., May, 2005.

G.W.K. 1913-14 2 seater, speedometer, Stepney, lamps, etc., excellent condition and appearance, accept £150, cash needed. Whittington, 10b Waylett Pl., West Norwood, S.E. 27. Phone, Brixton 2104. 418-493

H.F.G. 10hp 1920 2 seater and dickey, 2 cylinders, C.A.V. lighting, tyres good, owner buying larger car, £215 or near offer. Piggott, Lake House, Bishops Cleeve, Cheltenham.

HILLMAN 3hp 2 seater, dynamo lighting, detachable wheels and spare with tyre, hood and screen, pump, jack, etc., in very nice order and condition, £375; may be optained on Harrods deferred payment system.

Harrods, Ld., 118 Brompton Rd., London.

418-355

HILLMAN, 1914, 9hp, dynamo lighting, 2 seater and dickey, 5 detachable wheels and tyres, in perfect order, black hood, very sweet-running car, beautifully painted, stored during the war, smartest Hillman in London, £250, 69 St. Paul's Ave., Willesden Green, London. 418-c654

HORSTMANN. To anyone wanting something a bit laster than a standard model car the following will appeal: Horstmann Special, fitted new latest type 2 seater body, hood, screen, dickey, 5 wheels and tyres, special competition chassis and racing engine, guaranteed 6 to 60 miles pur hour on top speed, 35 to 40 miles to the gallon; complete range of spare parts, also standard parts; a real bargain, £495. Edwards and Parry, 4 Blenheim St., Bond St., W. Mayfair 2666.

HORSTMANN 1920 2 seater, dynamo lighting, self-starter, cost £404 5s., sacrifice £315, excellent order. 182 Wightman Rd., Hornsey. 418-c573

HORSTMANN 1920 2 seater, listed £405, perfect, accept £315. 297 High Rd., Leyton.

HUMBERETTE, 1914, w.-c., guaranteed completely overhauled and in perfect condition, Zenith carburetter, oversize types, Stepney and cover, electric lamps and accumulator, speedometer, new gears, chocclate colons, seen in London by appointment to bena-fide purchaser, £195. Hills, 80 Cunningham Park, Harrow.

HUMBERETTE SPARE PARTS DEPT. Repairs, replacements, over-hauls, repainting. Inquiries invited for second-hand cars.

HUMBERETTE. HUMBER SERVICE DEPOT, Canterbury Rd., Kilburn, N.W. 6. 'Phone, Willesden 1298-1299. Telegrams, "Humberonia, London."

HUMBERETTE. F.O.C.H. have a splendid Humberette, w.-c., in excellent crder throughout, tyres almost new. Fair Offer Car House, Heath St., Hampstead (near Hampstead Tube Station). 'Phone, Hampstead 3752. Hours 9-7, including Saturdays.

HUMBERETTE, late 1913, very fine condition, all new gears, axle, etc., a real bargain, £100. 293 St. Benedict's Rd., Small Heath, Birmingham.

HUMBERETTE, air-cooled, excellent condition throughout, many extras, £170 or offer. Write, Hughes, 29 Milner Rd., Merton, S.W. 418-c581

HUMBERETTE 2 seater, 1914, 6-8hp, w.-c., acetylene lighting, economical, splendid condition, £165. Apply, H. B. Creed, Epping. 418-c645

HUMBERETTE, 1915, water cooled, hood, screen, lamps, Stepney, speeds meter, etc., splendid condition, genuine bargain, £150 for quick sale. Ivydell, Southfield Park, Pinner.

KINGSBURY Junior 10hp sporting 2 seater, just received, unused, delivered free 59 miles, £295, owner getting de luxe model. Lieut. Bali, R.N., H.M.S. "Excellent," Portsmouth.

LAGONDA Several excellent second-hand cars in stock for immediate delivery. For full particulars apply to Lagonda, Ld., 195, Hammersmith Rd., W.6. "Phone, 575 Hammersmith."

AGONDA light 4 seater 11hr 1915; complete with accumulators, genty-

LAGONDA light 4 seater, 11hp, 1915; complete with accumulators, acety-lene and electric lamps, Bosch magneto, 5 new Palmer tyres and tubes, hood and screen, price £230. McMinnies, 6 Warwick Row, Coventry. 2ZZ-313

LAGONDA coupe or open, dickey, 5 wheels, perfect condition, £220.

Molyneux St., London, W. 1.

418-660 Molyneux St., London, W. 1.

LAGONDA coupe, August, 1914, 5 detachable wheels, all usual fittings, fine little car, bargain, £210. Ellidge, 76 Grains Rd., Shaw, Oldham.

LAGONDA 1915 2 seater coupe, speedometer, 5 lamps and 5 detachable wheels, bargain, £180. P. Pigott, 116 Hessle Rd., Hull. 418-c675

LAGONDA 1915 11hp 4 seater, 5 detachable wheels, tyres nearly new, 5 lamps, speedometer, Bosch magneto, Zenith carburetter, accessories, £239 or near offer. Watson, 74 Ali Saints' Ave., Maidenhead.

LAGONDA 11hp coupe, just been thoroughly overhauled upholstered and repainted completely re-engined, model H type, 5 detachable wheele, 2 headlamps, 2 side and rear, clock, speedometer, pump, spare tubes, tools and spares; can be seen and tried in Westminster district; price £325.

Box No. 9562, c.o. "The Light Car and Cyclecar."

LAGONDA 1915 11.1 coupe, 5 detachable wheels, speedometer, 5 lamps, good order, privately owned, £300. W., 5 Denman St., S.E. 1.

LAURENCE-JACKSON, 1920, friction drive. J.A.P. 2 cylinder, water-cooled, £200. 42 Molyneux St., London, W. 1.

SECOND-HAND LIGHT CARS AND CYCLECARS FOR SALE (continued).

MACKENZIE, 11hp, 1920, 2 seater with dickey, P. and H. lighting set, repainted, full equipped, £375. Chester Motor Co., Ld., 32a Chester St. S.W. 1. Victoria 5837.

McKENZIE car, 1920, 2 seater with dickey, P. and H. dynamo lighting set, spare wheel and tyre, at £350. John Melbourne, Ld., Wilderspool Mider Works, Warrington.

MARLBOROUGH, 1914, special 1920 body, complete with lamps, he speedometer, full kit of tools, new spare outer cover and inner tube, elent condition, recently fitted with new parts, £300. Apply, Box No. Co. "The Light Car and Cyclecar."

MARSHALL-ARTER, 1915 model, 10hp, 4 seater, 6 detachable wheels, dynamo lighting, speedometer, luggage grid, one-man hood, etc. excellent order throughout, £245. 4 Little Cadogan Place, S.W. 1. Victoria 2914.

MATHIS, 1914, 5-14hp, sporting 2 seater, just overhauled and painted 5 detachable disc wheels, Zenith carburetter, 290 guineas or near. Kensington 5508. E. Loyd, 1 Ovington Gdns., S.W. 418-638

MERCURY, 1920, 10hp, dynamo, detachable wheels, dickey, like new, £350, 42 Molyneux St., London, W. 1.

42 Molyneux St., London, W. I.

MERRALL-BROWN, 1919, water cooled, detachable wheels and spare, hood and screen, lamps, £200. Maudes', 100 Great Portland St., W. 1.

418-467

MORGAN, 1920, Grand Prix, water cooled J.A.P., 8-10hp, 2 extra tyres, 2 extra chains, lamps, hood, etc., best price round £200, seen any time. Herne, "Homestead," Hilly Fields Crescent, Brockley, S.E. 4. 418-567

MORGAN, G.P., April 1920, private owner, done 3,000 miles, new back tyre, perfect condition, foot accelerator, small dickey seat for child, Wood-Milne foot pump, etc., \$200 or near offer, must sell going abroad. Swart, Moss Grange, Whalley Rd., Whalley Range, Manchester. 420-b731

MORGANS. Hall's Garage, Ld., Stevenage, can offer exceptional service facilities to Morgan owners. 426-334

MORGAN, 1916, sporting, 8hp, disc wheels, speedometer, Lucas lighting set, windscreen, hood, numerous spares, thoroughly overhauled, guaranteed in excellent condition, owner bought larger car, £150 or nearest offer. Birkbeck, Market Sq., Lancaster.

MORGAN, 1915, G.P., J.A.P., hood, screen, 3 lamps, speedometer, clock, mats, discs, finished red, excellent condition, any trial, £160 or near offer. Twiggs, Oakley Pl., Old Kent Rd.

MORGAN, 1919, Grand Prix, hood, screen, flush-set speedometer, C.A.V. lamps, 2 horns, etc., as new, £210; exchanges or easy payments. 2 Nightingale Rd., Lower Clapton.

MORGAN, 1920%. Grand Prix, specially-tuned w.-c. J.A.P., under 1,209, very carefully run, now infinitely better and faster than new, 50 m.p.g., 55 m.p.h., completely equipped, aluminium discs, lighting set, hood, screen, horn, etc., guarantee given, £225. Thomson, Engineer's Office, Crewe Station

MORGAN, 1914, 8hp a.-c. J.A.P., in good order, green, black wings, acetylene, nood, screen, £135. Holland, Brownswolds, Congleton. 418-c814

MORGAN, 1915, a.-c. 8hp J.A.P.: mileage 9.000, condition perfect, £170. Box No. 9564, c.o. "The Light Car and Cyclecar." 418-c657

MORGAN 1915, air-cooled J.A.P., fully equipped, just thoroughly over-hauled, tyres excellent, specially fitted toolboxes, etc., perfect order, any trial, owner bought larger car, £130 or nearest offer. Smye, 4 Clarence Rd., Moseley, Birmingham.

MORGAN 1920 model de luxe, J.A.P., a.-c., hood, hood cover, lamps, windscreen, mechanical horn, pump, tools, luggage carrier and straps, run 300 miles only, price £215, perfect. Shaw, Greenhill, Sherborne, Dorset.

MORGAN, Grand Prix, 1916, guaranteed mechanically sound, refitted with new parts, in every way as new, £165; solo motorcycle part. 30 Harold Rd., Upper Norwood, S.E.

MORGAN, 10hp, 1917, G.P., water-cooled o.h.v. J.A.P., electric lights, disc wheels, painted primrose and black, in excellent condition, price £170. Minton, 95 Edgar St., Hereford.

MORGAN, 8hp, 1917, de luxe, air-cooled M.A.G., in good condition. £140. J. Fryer, Ld., Hereford.

MORGAN, 1920, de luxe model, 10hp water-cooled M.A.G. engine, electric side and tail lamps, discs, hood, screen: etc., complete, £175. Elce and Co., 15-16 Bishopsgate Avenue, Camomile St., E.C. 3. Phone, Avenue 548.386

MORGANS. F.O.C.H. for Morgans, G.P. and air cooled, 1914-1920, fully equipped. Fair Offer Car House, 5 Heath St., Hampstead (near Hampstead Tube Station). 'Phone, Hampstead 3752. .Hours 9-7, including Statistics.

MORGAN, Grand Prix, 1915, 8-10 J.A.P., perfect condition, dynamo lighting, aluminium dash, new Capac carburetter, hood, screen, 700-80 new Dunhop tyres, unpunctured, spares, 3 nearly new tyres, complete, extra pair new road chains, tools, best offer over £170. Steward, 19 Baron's Court Rd., West Kensington.

MORGAN, 1920, de luxe, water-cooled J.A.P.: disc wheels, lamps, etc., mileage \$60, delivered March, 200 guineas. Higham, 3 All Saints' Rd... Stockport.

MORGAN, De Luxe, 1820, air cooled, lamps, tools, many additions and improvements, practically unmarked, £225. Rector, Monkton Wyld, Charmouth.

MORGAN, De Luxe, 1919, air cooled, J.A.P., acetylene lighting, spares, trial run, £180. Morris, The Gaer, Hereford.

MORGAN, G.P., late 1919, M.A.G., 5 lamp dynamo, speedometer, spare tyre and tube, insurance policy, £225. 5 Mountfort Crescent, Barnskop, N. 1.

MORGAN, 1920, G.P. model run few hundred miles only. £200: 1919 G.P. model, electric lamps, £190; also 1919 De Luxe, disc wheels, and many extras. Smith and Hunter, 77 Gt. Portland St. 418-431

MORGAN, 1914, 8hp J.A.P., repainted, new hood, smart little car, a deferred payments or exchange. Bunting's, Motors, Wealdstone, Ha deferred payment Closed Sundays.

MORGAN, 1919, Grand Prix, electric lighting, speedometer, hood, cover, repainted, perfect condition throughout, 175 guineas. Edwards, 50 Harrington Rd., South Kensington.

MORGAN, 1520, De Luxe a.-c., mauve, discs, Binks, speedometer, electric side and tail, Magnum, F.R.S., with D.A. cylinder; jack, spare chains, excellent condition, mechanically perfect, £220. Rusack, Depot, Deal. 448-6580

SECOND-HAND LIGHT CARS AND CYCLECARS FOR SALE (continued).

MORGAN, 1914, a.c., repainted, fully equipped, £115. Allston, Bergholt," High St., Harpenden, Herts.

MORGAN. James and Co. (Sheffield), Ld., 263 Ecclesall Rd., Sheffield, are the Morgan agents and specialize in everything for same. If you are in any difficulty for parts wire us. Newly overhauled second-hand machines nearly always in stock.

MORGAN, 1920. De Luxe, M.A.C. water cooled, disc wheels, running boards, hood cover, excellent condition, climbs River Hill easily top gear, £220, namerous spares if required. B., 62 Mayfield Rd., Sanderstead, Surrey.

MORRIS-OXFORD, 1914 model, 10hp, 2 seater, 5 detachable wheels, 5 lamps, spacedometer, driver's mirror, etc., appearance as new, £195. 4 Little Cadogan Place, S.W.1. Victoria 2914.

MORRIS-OXFORD, 1916, 2/seater and dickey, Model de Luxe, dynamo lighting, spare wheel, types in excellent condition, smart car, any trial. 47 Hainault Rd., Leytonstone.

MORRIS-OXFORD, de luxe, 1914, dickey seat, 5 wheels, fully equipped, £245. Taylor, Ld., 52 and 53 Sussex Pl., S.W.7. Telephone, Kensington 2272-896

MORRIS-OXFORD, 1914, chassis only, just been overhauled, price £195.

MORRIS-OXFORD 1914 2 seater, sound mechanical condition, complete equipment, price £225. Stewart and Ardern, Ld., 18-19 Woodstock St. (off Oxford St.), Bond St., London, W. I. Mayfair 5462.

PHENIX light car, 2 seater, dynamo lighting system, spare wheels and tyre, nood and screen, horn, pump, jack, etc., £325. May be obtained on Harrods deferred payment system for a small extra charge. Harrods, Ld., 118 Brompton Rd., London.

PERRY, 8hp, 1914, in excellent condition, not used 1916-1919, recently overhauled, very economical, 50 m.p.g., electric lighting (accumulator), £210. Dr. Middleton Brown, Tring.

PERRY, £230, offer, 1915 coupe, detachables, electric, clock, etc. G., The Saxons, Weybridge.

ROVER, 1920, 8hp, £290, delivered 3 weeks. 4 Denman Pl., Piccadillv. ROVER, 1920. 8hp (new October), H.O. twin, £30 under cost, complete with Lucas dynamo set, as new, to makers' specification, mileage 550, with 12 months' insurance policy, £280 cash, for quick sale; private owner; seen by appointment. 53 Ruskin Walk, Herne Hill, S.E. 24. 'Phone, Brixton 652.

ROVER, air-cooled 8hp. delivered August, 1920, 2 seater, standard model, clock, speedometer, mileage 1,800, what offers? examination, trial. 229
High St., Acton. 418-c640

ROVER, 8hp, not driven 150 miles, condition as new, owner buying larger car, will dispose of at slightly under cost. Apply, Box No. 9563, c.o. "The Light Car and Cyclecar."

SAXON, 1914. 4 cylinder, 2 seater, 10hp, hood, screen, lamps. Stepney, splendid condition, £150; deferred payments for exchange. Bunting's, Motors, Wealdstone, Harrow. Closed Sundays. 418-418-tipfling, dickey, recently overhauled by makers, privately owned, £325. seen appointment. Carey, 92 East Rarnet Rd., New Barnet. 418-b755

appointment. Carey, 92 East Barnet Rd., New Barnet.

418-b755

SINGER, 1920, 2 seater and dickey, dynamo lighting, self-starter, like new, delivered from works in September, only been a few miles, £440. Wilkins, Simpson, opposite Olympia, London.

518GER 1930 coupe, dynamo lighting, self-starter, delivered from works in September, only been a few miles, like new, £540. Wilkins, Simpson, opposite Olympia, London.

518GER, 1915 model, 10hp, 2 seater, 5 detachable wheels, tyres excellent electric lamps, hood, side curtains, etc., excellent order, bargain, £195. 4 Little Cadogan Place, S.W.1. Victoria 2914.

518GER, sporting model 2 seater, 1920, complete, practically new, speedometer and clock, etc., a bargain, £450. A. Mulliner, Ld., Northampton. Tel, 903.

518CER, E.O.C. II. have a Sirver, 1915, 2 scater, duname, viabel wilds of the seater, and duname, viabel wilds of the seater of the seater, and duname, viabel wilds of the seater of the seater, and duname, viabel wilds of the seater of the seat

SINCER. F.O.C.H. have a Singer, 1915, 2 seater, dynamo, nickel radiator, excellent order. Fair Offer Car House, 5 Heath St., Hampstead (near Hampstead Tube Station). 'Phone, Hampstead 3752. Hours 9-7, including Saturdays.

SINGER. Cass's Motor Mart, Ld. Singer 2 seater, 1915, 10hp, 5 lamps and generator, 5 detachable wheels, new tyres, speedometer, in fine order, £235.

SINGER. Cass's Motor Mart, Ld. Singer 2 seater, 1920, dynamo lighting and self-starter, dickey and complete equipment, only run very small mileage and indistinguishable from new, bargain, £400. 5 Warren St., Euston Rd., W. 1. Tel., Museum 623.

SINCER 1915, 10hp, dynamo lighting accounting available condition.

Rd., W.1. Tel., Museum 623.

SINGER, 1915, 10hp, dynamo lighting, accessories, excellent condition, recently repainted and upholstered, seen by appointment, £250. 12 St. James Mansions, West End Lane, West Hampstead.

SINGER coupe, purchased 1916, 10hp, dynamo lighting, dickey seat, painted exceptionally smart in ultramarine, black dome mudguards, 5 detachable wheels and tyres, perfect in every way, indistinguishable from new 1920 coupe, used by owner since purchased, smartest little coupe in London, £335. 69 St. Paul's Ave., Willesden Green, London.

418-655

SINGER, 10hp, very late 1914. 2 seater and dickey, dynamo lighting, thoroughly overhauled and painted, very smart car, accept £240. Summer, 70 Camden Mews, Cantilowes Rd., Camden Rd., London, N.W. 418-c532
SINGER, 10hp, 2 seater, just overhauled, electric lighting, 5 detachable wheels, speedometer, etc., £260. Williams, 16 Dallin Rd., Plumstead.

\$\$\text{\$418-c555}\$\$\$SINGER, 1914. 10hp, 2 scater, dynamo lighting, spare wheel, dickey back, \$230. 29 St. Leonard's St., Bromley-by-Bow.

SINGER, 10hp, 1914. limousine coupe, dynamo lighting, re-upholstered, full equipment, excellent order, £350. Chester Motor Co., Ld., 32a Chester St., S.W. 1. Victoria 5837.

SINGER 1915 coupe, dynamo lighting, 5 detachable wheels and tyres, upholstered Bedford cord throughout, all accessories and spares. £425, view and trial by appointment. R. Pizey, "Casamia," Chingford, Essex. SINGER, 2 seater, dynamo, starter, dickey, epeedometer, mileage 1,200. faultiless order. £415; also 1914 model, dynamo lighting, £280. Smith and Hunter, 77 Gt. Portland St.

SINGER, 1916, 10hp, 2 seater with dickey, electric lighting, spare wheel good tyres, any trial, £225. Allber Motors, Thornsett Rd., Earlsfield, London, S.W. 'Phone, Latchmere 4388.

SECOND-HAND LIGHT CARS AND CYCLECARS FOR SALE (continued).

STANDARD, 9.5. No. 10,046, 2 seater with dickey, just been thoroughly overhauled, fitted with new wings and hood, and painted by the mak.rs, and is as new, ceffrs wanted. Burnell, Rugeley. 420-b535
STANDARD spare parts: everything for the 9.5hp model. Pytchley Autocar Co., Ld., 42a Walmer Rd., North Kensington, W. 10. Park 1299, 422-834

STANDARD 1919 2 seater, speedometer, electric lighting, starter, £430. Reed, 110 Heath St., Hampstead.

STANDARD 9.5 2 seater, dickey, 5 lamps, 6 Sankey wheels, December, 1914, takes 4 anywhere, perfect condition, £360 or near. 286 Nantwich Rd., Crewe.

STANDARD, 9.5.2 seater, 1914, fast, good climber, nearest offer 240 guineas: appointment. Owner, 14 Clarendon Rd., Putney, S.W. Tel. 249. 418.453
STANDARD, 1915, 2 seater, dynamo and self-starter, in excellent order, appearance very smart, £395. Court Motors, 46 Upper Baker St., N.H., Padd 4670.

STANDARD 1915 2 seater, all lamps, in first-class order, price £300. Court Motors, 46 Upper Baker St., N.W. 1, Padd 4670. 418-437 STANDARD, late 1915, 9.5hp, 2 seater, dickey, dynamo lighting, splendid condition and appearance, tyres excellent, accept £275. Whittington, 10b Waylett Place, West Norwood, S.E. Zf. 'Phone, Brixton 2104. 418-493

STELLITE, 1920, 2 seater and dickey, Lucas lighting, small mileage new condition, bargain, £375. Pugh, 9 South Molton St., W. Mayfair 4433.

condition, bargain, £375. Pugh, 9 South Molton St., W. Maylair 4433.

232.424

STELLITE, 1914, excellent condition, dynamo lighting and many improvements, efficiency nearly 40 m.p.g., £230. Summers, 23+Cheapside, London.

48-635

SWIFT. F.O.C.H. have a 7-9hp 2 seater, fully equipped, excellent dition, newly painted, new hood. Fair Offer Car House. 5 Heath St. Hampstead (near Hampstead Tube Station). 'Phone, Hampstead St. Hours 9-7, including Saturdays.

SWIFT, 79, 2 seater, perfect order, Stepney and spares, £170. 10 Roche Rd., Norbury.

SWIFT, 79hp, 2 cylinder, 2 seater, 2 and reverse, waterproof Bosch, Solex, tyres, and mechanical condition perfect, a bargain, £100. Hardcope Motors, 30 Old Kent Rd., S.E. 1.

SWIFT. F.O.C.H. have a Swift 7-9hp 2 seater, fully equipped excellent condition, newly painted, new hood. Fair Offer Car House, 5 Heath St., Hampstead (near Hampstead Tube Station). 'Phone, Hampstead 3752. Hours 9-7, including Saturdays.

SWIFT 2 seeter, hood, screen, Bosch, Claudel, Stepney, lamps, horn, tyres practically new, excellent condition, any trial, seen by appointment, £150. F. J. West, \$5 Vyner St., Cambridge Heath. Tel., 4020 Central, £150. F. J. West, \$5 Vyner St., Cambridge Heath. Tel., 4020 Central, £150. F. J. West, \$5 Vyner St., Cambridge Heath. Tel., 4020 Central, £150. F. J. West, \$5 Vyner St., Cambridge Heath. Tel., \$250. Court Motors, \$6 Upper Baker.St. N.W. 1. Padd 4870.

Central.

SWIFT, 1915, 2 seater, dynamo, dickey, in very good order, price £360. Court Motors, 46 Upper Baker-St., N.W. 1. Padd 4670.

SWIFT, 1920, 2 seater, dynamo lighting, speedometer, only run 3,000 miles, in excellent condition throughout, £385. Alfred Wastnage, 65 Gt. Portland St., W. I. Tell, May. 3005.

TAMPLIN, 1920, splendid condition, hood, screen, disc wheels, lamps, speedometer, £135 cash, exchange or extended payments arranged. Service Co., 292 High Holborn, W.C. 1.

TAMPLIN, 1920, £30 accessories, small mileage, perfect order, offers. Kenilworth Garage, High Street, Putney.

TAMPLIN, 1920, 840, Brixton.

TAMPLIN, 1920, 840, Brixton.

TAMPLIN (Carden, 1919), 8hp J.A.P., 2 seater, electric lights, tools, spares, £98. Archer, 21 Villa Rd., Brixton.

TAMPLIN (Carden, 1919), 8hp J.A.P., engine, Sturmey-Archer 3 speed gear, clutch, battery lighting, speedometer, horn, tyres run under 500 miles, hood, 2 seater, tools, etc., £160. Box No. 9555, c.o. "The Light Cardand Cycleoar."

TAMPLIN, 1920, 2 seater, excellent condition, all accessories, 12 volt.

miles, hood, 2 seater, tools, etc., £160. Box No. 9555, c.o. "The Light Car and Cyclecar."

413-c504

TAMPLIN, 1920, 2 seater, excellent condition, all accessories, 12 volt. electric lighting, speedometer, luggage rack, special brake, 2 spare covers, and full outfit of tools and spares, for £50 cash, owner going abroad: appointment. Martin, Glendower Hotel, S.W.7.

718., 1920, 10hp Precision, 3 speed and reverse, detachable wheels, screen and hood, just been completely overhauled, guaranteed, £205. Maudes. 100 Great Portland St., W.1.

418-650

WARREN-LAMBERT, 1920 modet, 2 seater, electric lighting, 5 disc wheels, not done 2,000 miles, most economical to run, gear changing almost unnecessary, guaranteed speed 55 m.p.h., will climb Nailsworth Ladder, immediate delivery, any trial given with pleasure, price £395. Box No. 9574. c.o. "The Light Car and Cyclecar."

WARREN-LAMBERT, 1921, polished aluminium bonnet, electric lighting, 5 wheels, painted grey, only run few miles, very fast and wonderful hill-climber, unfortunately, must realize cash, any trial with pleasure, sacrifice £390 or nearest offer. Write, Owner, Montrose, Aldwick Rd. Beddington, Surrey.

WARREN-LAMBERT 1920 models, a few cars used for demonstration and competition work, not done more than 300 miles, as new in all respects, price £370 to £385. Warren-Lambert Eng. Co., Ld., Petersham Rd., Richmond, Surrey.

Rd., Richmond, Surrey.

LE ZEBRE, 1920, 8-10hp, 4 cylinder, electric lighting and starting, 4 speeds, smart English 2-3 seater body with special hood and hood bag, side curtains, unused spare wheel carried in locker, full maker's equipment of tools, mileage under 1,000, appearance and mechanical condition absolutely as new, any possible examination welcomed, £365. Offord and Sons, Ld., 94 Gloucester Rd., S.W. 7.

ZEBRE, 2 seater, 6hp, 3 forward and reverse, shaft driven, good condition climb anything, 4 brass lamps, generator, Stepney, all accessories, tyres new this year, cheap, £100. Bosomworth, Salt St., Bradford.

418-c572

NEW LIGHT CARS AND CYCLECARS.

A.B.C. light car. Main agents for Lincolnshire, Best and Son, 182 Clee-thorpe Rd., Grimsby. Tel., Grimsby 2126. 223-164
A.B.C. light car. Agents for Halifax, West End Motor Co., Halifax. Telephone No. 1163.
A.-C., latest model, 2 seater, immediate delivery, list price £525.
A.-C. cars (second-hand) always in stock at low prices. Chester Moco., Ld., 32a Chester St., Grosvenor Pl., S.W. Vic. 5837. 222-280
A.-C., 1921, 11.6hp, 2 seater, dynamo lighting and starting, £475. Auto-418-404
A.C. new 16th price of the starting of

veyors, at Victoria St., S.W. I.

418-404

A.-C. new 10hp cars supplied for cash at makers' list price or on deferred payments 4 per cent. extra; early delivery. Harrods, Ld., 118 Brompton Rd., London.

A.-C., 1921. 11.5hp, 2 seater, dynamo lighting and self-starter, dickey, imediate delivery, £550. G. L. Francis and Co., 169 Shaftesbury Ave. Thone, Gerrard 3288.

NEW LIGHT CARS AND CYCLECARS (continued).

A-LFRED WASTNAGE, authorized agent for A.-C. cars, is now booking orders for the new 11.9hp A.-C. 1921 model, price £55, sell-starter £25 extra; cash or deferred payments; immediate delivery; demonstration car now available, £5, £6t. Portland St., W. 1. Tel., May. 3005. 418-420 A.-C., 1921, latest model, immediate delivery, dickey seat, £536; cash, exchange or extended payments arranged. Service Co., 292 High Holohom, London, W.C. 1.

A.-G., 1921, 2 seater, dynamo, starter, disc wheels, speedometer, clock, dickey, 2500. Smith and Hunter, 77 Gt. Portland St.

A.-G., 1921, 2 seater, with recessed and upholstered dickey seat, dynamo lighting and self-starter, in stock ready for immediate delivery, list price, 2560. Offord and Sons, Ld., 94 Gloucester Rd., S.W. 7.

418-460

A.C., Il.9hp, standard 2 seater, immediate delivery. Chester Motor Co., Ld., 32a Chester St., S.W. 1. Victoria 5837.

A.V. bi-car, 8hp, new, hood, screen, speedometer, first cheque £200, must sell. Orient Cycle Co., Spring St., Hull.

BLERIOT Whippet light car, £250, deliveries weekly, demonstration car available, economical and comfortable. Lloyd and Son, Station St., Lewes.

BLERIOT Whippet. Immediate delivery from stock, £250. Leyland, Tat-nell and Co., 96 Gt. Portland St., W. 1. 6929 Mayiair. 222-898 BLERIOT Whippet, immediate delivery, £250 cash; exchange or extended payments arranged. Servico Co., 292 High Holborn, W.C. I. zzz-338 Balerior Whippet London service repairers and agents. Specialists in Whippet repairs. Ballard's Motors. Works: 92 Gloucester Rd., S.W. 7. Telephone, Kens. 6312. 443-372

BLERIOT Whippet, new, 8hp, 2 seater, with latest handle starter, hood and screen, detachable wire wheels, standard equipment, £250, or on Harrods deferred payment system 4 per cent, extra; one-fifth deposit, balance by 12 monthly instalments. Harrods, I.d., 118 Brompton.Rd., London.

BLERIOT Whippets. F.O.C.H. for Bleriot Whippets, 1921; earliest deliveries; order now; our name implies our business methods. Fair Offer Car House, 5 Heath St., Hampstead (near Hampstead Tube Station). Phone, Hampstead 3752. Hours 9-7, including Saturdays.

BLERIOT Whippet, immediate delivery from stock. Caffyns, Ld., East-bourne. 316-457

BRITON CARS.

FACTS.

- MEBES and MEBES, the Original Light Car Specialists (Est. 1893), are the sole London and district agents, also Surrey (part of) and Sussex, for this famous car.
- EACH car bearing this name is a running advertisement in itself. Ask the motorist who has owned or is running one.
- 3. THE 9.5hp 2 seater.
- 4. 1T was the universal opinion of the Press and the public at the Olympia Exhibition that the new 9.5hp model was one of the cleanest and most up-to-date chaesis to be seen there.
- THIS model, complete with 2 seater body, full equipment, including dynamo lighting and self-starter, is listed at £4%, ready for the road.
- 6. THE exhibition chassis is now on view at our showrooms.
- 7. OUR demonstration model is at the disposal of any potential purchaser or his agent.
- 8. WE invite inquiries from trade friends in our territory.
- 9. OUR telephone number is Maylair 3426.
- 10. OUR address is 144, 154-6 Gt. Portland St., W. 1.

CALTHORPE SERVICE DEPOT, the House for Motors, Colmore Depot, 200 Deansgate, Manchester.
CALTHORPE new standard 2 seater, 1920, with starter, 470 guineas. Below.
CALTHORPE new standard 4 seater, 1920, with starter, 495 guineas. Below.

CALTHORPE new stangard 4 seater, 1920, with starter, 495 guineas. Below. CALTHORPE chassis only, with full equipment, £404 5s. Below. CALTHORPE cars. Buyers in the north will receive every attention from the House for Motors. Colmore Depot, 200 Deansgate, Manchester, and 24 Paradise St., Liverpool.

CALTHORPE 1921 sports models for immediate delivery. Authorized agents, Stretton and Smith, 23 Woodstock St., New Bond St., W. 1. 418-391

CALTHORPE cars. We are authorized agents, and in a position to give immediate delivery of all models. Inquiries invited. The Euston Motor House, 337 Euston Rd., N.W. 'Phone, 4484 Museum. 418-363

CALTHORPE, 10hp, 2 seater, standard and sports models, new electric lighting and starting, disc wheels, spare wheel and tyre immediate delivery, 470 guineas. P. J. Evans, 81-91 John Bright St., Birmingham, 418-345

CALTHORPE, 10hp. 4 seater, sports model, electric lighting and starting, disc wheels, immediate delivery, 495 guineas. P. J. Evans, 81-91 John Bright St., Birmingham.

CALTHORPE. Immediate delivery, 1920 10hp model, dynamo lightings self-starter, special 4 seater body, by Mulliners', £525. Parker's, Bradshawgate, Bolton.

418-505
CALTHORPE, immediate delivery, latest model, special coupe by Charlesworth, self-starter and dyname set, grey, with aluminium bonnet, concealed dickey, £551; also 2 scater in stock, £500. Freeman, Oakes and Co., Devonshire St., Sheffield.

ZZZ-151

CALTHORPE, 1921, 4-seater, sporting, dynamo, starter, £520, special three-quarter coupe, list price £619. Smith and Hunter, 77 Gt. Portland St.

POTUAND St.

CALTHORPE. Sole distributors for Sussex. Caffyns, Ld., Eastbourne.

436-458

ERIC CAMPBELL, £450; immediate deliveries; demonstration and trial run willingly. New Sussex Co., 30 Harrington Rd., South Kensington Station. Kensington 7215.

ERIC CAMPBELL. Norwich and district. Deliveries from stock. Limited number available, price £525. Norwich Motor Co., Ld., Recorder Rd., Norwich.

ERIC CAMPBELL light car, brand new, complete equipment, in stock, £450. A. Mulliner, Ld., Northampton. Tel. 908.

NEW LIGHT CARS AND CYCLECARS (continued).

CARDEN 1920 2 seater, No. 217, hood, screen, delivery expected early December, £15 deposit paid. Offers to McGeorge, 88 Bournbrook Rd., Birmingham.

Bermingham.

GARDEN, £100, fitted all extras, total price about £145, delivery December £15 deposit paid, what offers? Owner going abroad. Lieut. Taylor. Dodworth Grange, Barnsley.

CASTLE THREE, Warwickshire, Wcrcester, Shropshire, and Staffordshire. Inquiries for early delivery to Leamington Automobile Co., 2
Parade, Leamington Spa.

CITROEN, 10hp, famous French mass production car, new 4 seater, ceetric lighting and starting, right-hand steering, immediate delivery, £485. P. J. Evans, 81-91 John Bright St., Birmingham.

CITROEN, latest type, 4 seaters, with right-hand steering, £495; deferred payments; also immediate delivery of coupe, £625. Smith and Hunter, 77 Gt. Portland St.

COVENTRY Premier, 1921, delivery within 2-3 days, 275 guineas; cash exchange or extended payments arranged. Service Company, 292 High Holborn, W.C.

COVENTRY Premier. G. L. Francis and Co., authorized agents for the Coventry Premier runabout, 7-9hp, immediate delivery, £290. 169 Shattesbury Ave. Phone, Gerrard 3288.

CROUCH light cars, 2-3 seaters, 300 guineas complete, early deliveried. Sole Agent, Manchester District, Hugh Dobson, 39 Dean Rd., Blackfriars, Salford. Telephone, 7284 City.

CROUCH LIGHT CARS.

FACTS.

- MEBES and MEBES, the Original Light Car Specialists (Est. 1893), are sole London and Home Counties agents for this famous car.
- THIS is one of the few light cars marketed at the reasonable figure of 300 guineas that will seat 3 abreast comfortably, with a door on either side.
- 3. THE power unit is universally acknowledged as being perfect, and the engine is one that is perfect in design and balance.
- 4. THE latest model incorporates all that a light car user could desire.
- 5. EACH car is just as well fitted out as if it cost twice the price, and includes adjustable ecreen, electric lighting, detachable wheels, etc., and is fully equipped ready for the road.
- DURING the season 1920 we have sold more Crouch cars than any other agent in England, and each client has been perfectly satisfied with his purchase.
- WE are Crouch enthusiasts because we are convinced of their wearing quality and reliability.
- OUR demonstration car is at the disposal of any potential purchaser or his agent.
- 9. WE invite inquiries from our trade friends in the districts we repre-
- 10. OUR telephone number is Mayfair 3426.
- 11. OUR address is 144, 154-6 Gt. Portland St., W. 1.

DEEMSTER. Early deliveries this popular model. Halifax and district agents, West End Motor Co., Halifax. Telephone, No. 1163. 422-120
DEEMSTER light cars. Book your orders with the Eastgate Garage and Works, Lewes. Sussex agents. 422-39

Works, Lewes. Sussex agents.

122-39

DEEMSTER. 10hp. 1920, 2 seater. complete with dynamo lighting and self-starter, fully equipped as maker's specification, in stock for immediate delivery at maker's list price. £475. Mebes and Mebes, The Original Light Car Specialists, 144, 154-6 Gt. Portland St., W. I. 13126 Mayfair.

416-483

DOUGLAS 10.5hp 1920 light car, new, £500. J. Hebden and Son, 148-85. James's St., Burnley. Tel 488.

DOUGLAS latest 1921 model, 10.5hp, standard 2 seater with dickey seat, CAV lighting and starting, detachable wheels, spare wheel and tyre, speedometer, horn, lamps, etc., list price £500 complete. For early delivery apply to the authorized London agents for Douglas cars and motor-cycles. Vivian Hardie and Lane, Ldi, 24 Woodstock St. (off Oxford St.), Bond St., W. I. 'Phone, Mayfair 6559.

DOUGLAS. Immediate delivery. 1920 10hp model, C.A.V. dynamo lighting, self-starter, hood and screen, 2500. Parker's, Bradshawgate, Bolton.

DUPLEX cars. Austin Hooton and Richardson, Ld., 64-66 Coombe Lane. Raynes Park, Wimbledon, the authorized agents, invite inquiries. Pleiveries immediate. Phone, Wimbledon 1930.

GIBBONS Mark III cyclecar, reduced to £115; delivery within one month; trials any time by appointment; agents required. Gibbons and Moore. Chadwell Heath, Essex.

G.N. Lamb's assure you of promptest delivery of all models; exchanges and deferred accounts if desired. 151 High St., Walthamstow; 50 High Rd., Wood Green; and 387 Euston Rd., London, N.W.1.

G.N., just delivered, latest model, touring, dynamo lighting, £275 128, 6d. Official contracting agents, Shepherd and Co., Enfield Highway. 'Phone. zzz-253 G.N. We are one of the largest contractors in New York.

G.N. We are one of the largest contractors in Norfolk for this machine, and are able to accept orders against early chassis numbers, strict rotational delivery given. Howes and Sons, Ld., Chapel Field, Norwich. zzz-451 G.N., 60 miles per gallon. Book your car now. Largest contractors in Wales. North's Motor Co., Canton, Cardiff. 434-538

Wates, Wolth S Mood Co., Calbon, Catolin.

G.N. Early deliveries. Special agents, West End Motor Co., Halifax.
Telephone, No. 1163.

G.N., immediate delivery. cash, exchange or extended payments.

Co., 292 High Holborn, W.C. 1.

G.N. cyclecars, standard, electrically-equipped models, from stock. Have a set of our adjustable tappets for these cars, £2 per set of 4. Victor Horsman, Ld., 7 Mount Pleasant, Liverpool

G.N. For G.N. cyclecars, book your orders with the Eastgate Garage and Works, Lewes, Sussex.

G.N. Coles and Shirley, St. Mary's Garage, Chepstow, can give immediate delivery of 1 standard G.N., complete with dynamo lighting, as per makers' specification, at list price, £75. Phone, 48.

G.N. Distributing agent for Staffordshire. Early deliveries.

Cyril Williams, Chapel Ash Depot, Wolverhampton.

NEW LIGHT CARS AND CYCLECARS (continued).

G.N. cyclecars. We offer nothing else, value unequalled. Call or write, Kemps, 50 Hardman St., Manchester; also 125 Devonshire St., Sheffield.

C.N. We have one of these famous cyclecars in stock at list price. North's Motor Co., Canton, Cardiff.

G.N., 1921. Delivery from stock standard touring model, fully equipped, ready for the road, spare wheel £241 17s. 6d. or with dynamo lighting set, £275 12s. 6d. Official agents, Elce and Co., 15-16 Bishopsgate Ave., Camomile St., E.C. 3. 'Phone, Avenue 5548.

G.N. CYCLECARS.

FACTS.

- MEBES and MEBES, the Original Light Car Specialists (Est. 1893), are the agents who have always taken a keen selling interest in the above.
- DURING the season 1920 they have taken delivery of more G.N. cycle-cars from the manufacturers, and have given delivery to their clients, of more cars than any other agents in England.
- THEY keep a special staff, each one an expert on the G.N., for dealing with various requirements of clients purchasing G.N.s from them.
- 4. EACH car is thoroughly timed and tested before leaving our works.
- THEY are prepared to accept retail orders from any part of the country, and will deliver free within 100 miles.
- 6. SEASON 1921. We are still the largest contractors in the London area.
- 7. OUR reputation warrants satisfaction.
- 8. OUR demonstration car is at the disposal of any potential purchaser.
- 9. YOUR order will receive prompt and personal attention.
- 10. OUR telephone number is Mayfair 3426.
- 11. OUR address is 144, 154-6 Gt. Portland St., W. 1.

G.N. F.O.C.H. have a new G.N. standard touring in stock. Fair Offer the House, 5 Heath St., Hampstead (near Hampstead Tube Station). Phone, Hampstead 3752. Hours 9-7, including Saturdays. 418-332 G.N., new 160 pp cyclecar, dynamo lighting system, etc. and to maker's specification, ready for immediate delivery, £275. Deferred payments 4 per cent. extra. Harrods, I.d., 118 Brompton Rd., London. 418-353 G.N. 1921 cars for early deliveries and extended payments. A. P. Rey, 378-394 Euston Rd. 'Phone, Museum 6436. 418-358 G.N. Sole agents for Devonshire for these popular cars. Demonstration models in stock. Earliest delivery. Maudes', 100 Paris St., Exeter. 418-463 G.N. Immediate delivery of 2 seater, £275 12s. 6d Deferred payments. Smith and Hunter, 77 Gt. Portland St.

G.N. Main agents for Hampshire and Isle of Wight. Prince, Lake Rd., Portsmouth. 421-653 G.N. cyclecar, 1920, just delivered, standard teuring, £241 17s. 6d. Drake

Portsmouth.

G.N. cyclecar, 1920, just delivered, standard touring, £241 17s. 6d. Drake and Mount, I.d., Bracknell, Berks.

GRAHAME-WHITE cyclecar, £150, in stock. immediate delivery. Field's Garage, Parkstone, Dorset.

GRAHAME-WHITE 1920 cyclecar, £150. Sole distributors for Surrey and Sussex, Catiyns, Ld., Eastbourne. 'Phone 861. 436-279
GRAHAME-WHITE. F.O.C.H. for Grahame-White light cars; earliest deliveries; order now; our name implies our business methods. Fair Offer Car House. 5 Heath St., Hamostead (near Hampstead Tube Station). 'Phone, Hampstead 3752. Hours 9-7, including Saturdays. 418-337

GRAHAME WHITE, immediate delivery; cash, exchange or extended payments. Service Co., 292 High Holborn, London, W.C. zzz-793
G.W.K. Main agents, East Surrey, 2 or 4 seaters. County Garage. Caterham Valley.

Caterham Valley.

G.W.K.s for immediate deliveries. Shipside, opposite Central Station, Nottingham. Also at Daybrook, Notts.

G.W.K. Immediate delivery 4 seater model. Large Yorkshire agents, West End-Motor Co., Halifax. Telephone No. 1163.

G.W.K. latest pattern, new 2 and 4 seaters, for immediate delivery. Ariel Motors and General Repairs, Ld., 78 North St., Guildford. 465-772 G.W.K. SERVICE DEPOT. The House for Motors, 200 Reansgate, Manchester.

chester.

G.W.K. cars. Immediate delivery of 2 and 4 seaters. £425, from the House for Motors, Colmore Depot, 200 Deansgate, Manchester. zzz-983

G.W.K., 4 seater, just received from works, £425. Parsons, Sherwin and Co., Ld., Station Rd., Hinckley.

G.W.K., 10hp, friction drive, electric lighting, spare rim and tyre, immediate delivery from stock; 2 seater, £415; 4 seater, £425. P. J. Evans. 81-91

John Bright St., Birmingham.

G.W.K. 2 seater in stock, £415. Wright's Garage, Saffron Walden. Tel. 16.

418-415

G.W.K. brand-new 4 seater, dynamo lighting, all complete, in stock, immediate delivery at makers' price, £425. Wilkins, Simpson, opposite Olympia, London.

Olympia, London.

HORSTMANN. The new Horstmann all-British light car represents the best value for money obtainable to-day. Earliest possible deliveries of the 2 seater, 4 seater and coupe models from the London agents: Walter Engall and Co., Ld., 20 Long Acre, W.C.2: and 153 Euston Rd., N.W. 1 'Phone, Gerrard 4457 (2 lines), Museum 6177.

HORSTMANN Scottish Agents. Garard Wakeham and Co., 114, Duke St., Glasgow. Immediate delivery can now be given.

HORSTMANN 4 seater, latest model, just delivered, £440. Stretton and Smith, 23 Woodstock St., New Bond St., W. 1.

HORSTMANN. Messrs. Edwards and Parry, London agents for Horstmann cars, have for immediate delivery the special Horstmann 2 seater coupe model shown at the Motor Exhibition, White City; no premiums, list price only, £555; first cheque secures. 4 Blenheim St., Bond St., W. 1.

Mayfair 2666.

HORSTMANN, 19hp, standard 4 seater, £448. Chester Motor Co., Ld., 32a Chester St., S.W. 1. Victoria 5837.

HORSTMANN, 19hp, standard 2 seater, £408. Chester Motor Co., Ld., 32a Chester St., S.W. 1. Victoria 5837.

KINGSBURY. Lamb's, assure you of promptest delivery of both models; exchanges; deferred accounts if desired. 151 High St., Walthamstow; 50 High Rd., Wood Green; and 387 Euston Rd., London, N.W. 1. zzz-223

NEW LIGHT CARS AND CYCLECARS (continued).

KINGSBURY Junior, £295; demonstration and trial run willingly. New Sussex Co., 30 Harrington Rd., South Kensington Station. Kensington 7215.

KINGSBURY Junior, £295, in stock, immediate delivery. Field's Garage,
418-5803

KINGSBURY Junior light cars, twin-cylinder, horizontally-opposed, water-cooled, electric lighting, disc wheels, demonstration and trial, deliveries immediately, list price £295. Mulliner, Ld., Northampton, sole county agents. Tel. 908.

KINGSBURY, a British car, earliest deliveries at list price, £295. Authorized agents, Stanford and Gray, Ld., Regent House, 233 Regent St., W. 15 Maylair 518.

KINGSBURY. F.O.C.H. for Kingsbury light cars, finest value ever offered; car practice throughout; £295, including spare wheel, dynamo lighting; immediate deliveries. Fair Offer Car House, 5 Heath St., Hampstead (near Hampstead Tabe Station). 'Phone, Hampstead 3752, Hours 9-7, including Saturdays.

KINGSBURY Junior, 10hp, sporting 2 seater, just received, unused, delivered free 50 miles, £295, owner getting de luxe model. Lieut. Ball, R.N., H.M.S. 'Excellent,' Portsmouth.

KINGSBURY. Immediate delivery from stock. Caffyns, Ld., Eastbourne. KINGSBURY, list price, £295, immediate delivery. Court Motor Upper Baker St. Padd. 4670.

LAGONDA coupe, brand new, for immediate delivery at list price; cash, exchange or extended payments arranged. Service Co., 292 High Holborn, W.C. 1.

LAGONDA coupe for immediate delivery, self-starter, at list price, cash, exchange or extended payments arranged. Service Co., 292 High Holborn, W.C. 1.

LAGONDA. Immediate delivery of the new model coupe, with double dickey, electric starting and lighting and full equipment, £475.

Horsman, Ld., 7 Mount Pleasant, Liverpool.

LAGONDA 1921 coupe with double dickey, dynamo fighting, self-starter, latest pattern engine, price £495, delivery December. Taylors, I.d., 52-53 Sussex Pl., S.W. 7. 'Phone, Kensington 7260. zzz-360 LAGONDA coupe. Cass's Motor Mart, Ld. 1920 11.9hp, long wheelbase, dynamo lighting and starting, complete equipment, £475. 5 Warren St., Euston Rd., W. 1. Tel., Museum 623.

LAGONDA cars. Mebes and Mebes, the Original Light Car Specialists, are in a position to offer early deliveries of these famous cars. Place your order with us and avoid disappointment. 144, 154-6 Gt. Portland St., W. I. Tel., 3426 Maylair,

LAGONDA, 4 seater, actually in stock, dynamo lighting, starter, £475; exchanges; deferred payments. Maudes', 100 Gt. Portland St., W.1.

LAGONDA coupe, with long wheelbase and double dickey for 2 adults; delivery from stock; modern motorcycle entertained in part payment, no rubbish, £475. Frank B. Roper, 166 and 8 London Rd., Sheffield. 2zz-508 MACKENZIE, 1lhp, standard 2 seater (special price), £435. Chester Motor Co., Ld., 32a Chester St., S.W. 1. Victoria 5837.

McKENZIE, 1920. To make room for the new models, we are disposing of the remainder of 1920 models now coming through at the special price of £435. Chester Motor Co., Ld., 32a Chester St., Grosvenor Pl., S.W.

MERCURY, Yorkshire agents, Early deliveries, West End Motor Co., Halifax. Telephone, No. 1163.

MERRALL-BROWN light cars, 325 guineas. Earliest delivery from 10coper and Chalk, Agents, 84 Holland Park Ave., W. 11. 'Phone, Park 5108. 469-389 MERRALL-BROWN. Parker's, 71 Bradshawgate, Bolton (Tel. 1348), and 245 Deansgate, Manchester (Tel. Central 864). Book your orders now for the new Merrall-Brown 4 wheeler; deliveries this month. 418-507

MERRALL-BROWN. Immediate delivery, 1920 10hp 3 wheel model, Coventry-Simplex 4 cylinder engine, 2 speeds, reverse, interchangeable wheels, twin rear wheel, £325. Parker's, Bradshawgate, Bolton; 245 Deansgate. Manchester.

MORGANS in stock. Lamb's, 151 High St., Walthamstow; 50 High Rd., Wood Green; and 387 Euston Rd., London, N.W. 1. Zzz-224 MORGAN SERVICE DEPOT. The House for Motors. Colmore Depot, 200 Deansgate, Manchester.

MORGAN runabouts. To secure early delivery place your order with the House for Motors. Grand Prix, water cooled, and De Luxe models in stock at makers' list price. The House for Motors, Colmore Depot, 200 Deansgate, Manchester, and at 24 Paradise St., Liverpool. zzz-984

MORGAN, brand-new Grand Prix model, in stock, discs, lamps, list price ex works. J. Hebden and Son, 149 St. James St., Burnley. Tel. 488. zzz-641 MORGAN. Brighton, Hove and district agents for Morgan. Turpin, 29 Preston Rd., Brighton.

MORGANS! Morgans! Morgans! We are accredited agents Lamb's, 151 High St., Walthamstow, E. 17; 50 High Rd., Wood Green; 387 Euston Rd. NW.

Rd., N.W. 1.

MORGANS, 1921. for early deliveries and extended payments. A. P. Rey. 378-384 Euston Rd. Phone, Museum 6435.

MORGANS, We can deliver the latest models from stock. Grand Prix, £216; sporting model, £206; de luxe, £225; M.A.G. engine £5 extra to all models. Official Agents and Morgan Specialists, Elce and Co., 15-16 Bishopsgate Ave., Camomile St., E.C. 3. Phone, Avenue 5548.

MORGAN, G.P., M.A.G. engine, 1920, green, black wings, lamps, horn, fully equipped, new, in stock for immediate delivery. Deferred payments arranged. Mebes and Mebes, The Original Light Car Specialists, 144, 164-6 Gt. Portland St., W. 1. Tel., 3425 Mayfair.

MORGANS for reliability, comfort and economy. Early deliveries of new models. Potter, Morgan Specialists, 21 Leleester Grove, Blackman Lane, Leeds. Tel. 22578.

Leeds. Tel. 22578.

MORGANS, Grand Prix and De Luxe, 1920, ex stock, air-cooled models, 10 days; exchanges: trade supplied Maudes', 100 Gt. Portland St., W. 1.

418-466

MORGAN, very smart new sporting Morgan, London-built streamline body, immediate delivery. Clark, 7 Exhibition Rd. 'Phone, Kensington 4986.

418-469
PEUGEOT, 11hp, latest model. self-starter and lighting set complete,
English 2 seater with double dickey, full equipment. Hodson, 51 West
St., Brighton.

NEW LIGHT CARS AND CYCLECARS (continued).

PHŒNIX, immediate delivery, 2-3 seater, with self-starter; cash, exchange, or extended payments arranged. Service Co., 292 High Holborn, W.C. 1.

PHENIX 11.9hp 1921 model, 2-3 seater, lighting, starting, spare wheel, and full equipment, now in our showrooms for immediate delivery, list price £475. Cars de Luxe, Ld., 154 Cromwell Rd., S.W. 7. Western 7011.

PREMIER Super runabouts, 1921, for early deliveries and extended ments. A. P. Rey, 378-384 Euston Rd. 'Phone, Museum 6436, 4

ments. A. P. Rey, 378-384 Easton Rd. Phone, Museum 6136. 418-339
PREMIER Super runabout, immediate delivery. See us at the Premier stand at the Show and ask us to arrange a trial run for you. Frank Whitworth, Ld., 139 New, St., Birmingham.

**RICHARDSON 1921 models, as exhibited at White City, £262 10s., immediate deliveries. We have large contract for these popular cars, and solicit your inquiries. Percy H. Smallbone, Ld., Agents Berks, Oxon, portfon Hants, 499 Oxford Rd., Reading. 'Phone, 1117. Telegrams, "Tyredom." Tyre-3001.

RIGHARDSON. Now you have seen the 1921 model, place your order early to avoid disappointment. We are booking orders for definite deliveries to suit our clients, provisional price £932 *10s. Agents Berks, Oxon, and portion Hants. Percy H. Smallbone, Ltd., 499 Oxford Rd., Reading. 'Phone, 1117. 'Telegrams, "Tyredom, Reading." 2zz-306

RICHARDSON light cars from stock. Cooper and Chalk, Agents, 84 Holland Park Avenue, London, W. 11. Park 5108. zzz-282

RICHARDSON. Immediate delivery from stock, £262 10s Leyland, Tatnell and Co., Ld., 96 Gt. Portland St., W. 1. 6929 Mayfair. zzz-899

RICHARDSON. Immediate delivery, 1920 10hp model, double dickey seat, electric lighting, horn, windscreen, hood, complete kit of tools, jack, tyre pump, £262 10s. Parker's, Bradshawgate, Bolton; 245 Deansgate, Manchester.

RILEY 1921 11hp 4 seater, painted dark blue, immediate delivery, £650, G. L. Francis and Co., 169 Shaftesbury Ave. 'Phone, Gerrard 3288.' 418-380

ROVER Eight. Promptest delivery assured; exchanges; deferred accounts arranged. Lamb's, 151 High St., Walthamstow; 50 High Rd., Wood Green: and 387 Euston Rd., London, N.W.1.

ROVER, 1921, 8hp, for immediate delivery, £300. Cash, exchange or extended payments arranged. The Service Co., 292 High Holborn, W.C.1.

ROVER, 8hp, price £300, deliveries commencing this week Chester. Motor Co., Ld., 32a Chester St., S.W. Vic. 5837.

ROVER 1921 8hp 2 seater, immediate delivery, list price, £300. Stretton and Smith, 23 Woodstock St., New Bond St., W. 1. 418-393 ROVER district agents, 8hp, 2 seater, in stock. Wright's Garage, Saftron Walden. Tel. 16.

ROVER 8hp light car. Jarvis, Ld., official Rover agents, can generally give delivery of the 8hp light car from stock, price £300. 205 Edgware Rd., London. Tele., 2512 Padd. 421-c644

ROVER, Shp. immediate delivery. £300. Chester Motor Co., Ld., 32a Chester St., S.W. 1. Victoria 5837. ROVER, 1921, 8hp, air cooled, dynamo, Magnum tyres, at list price, £390. Smith and Hunter, 77 Gt. Portland St.

ROVER light cars now on view, earliest deliveries. Agents, R. B. Clark and Co., 7 Exhibition Rd., South Kensington.

SILVER HAWK, 1921 model, 19-35hp, every bit the equal of the finest Continental light sporting cars, 35 m.p.g., speed 4-55 m.p.h. on top guaranteed; 27 successes this season; chassis price £495. Silver Hawk Motor Co., Cobham, Surrey. Telephone, 36 Cobham.

SINGERS. Immediate delivery of 2 seaters and coupes. Shipside opposite Central Station, Nottingham; also at Daybrook, Notts.

SINGER SERVICE DEPOT, the House for Motors, Colmore Depot, 200

SINGER cars. Immediate delivery 2 seater phaetons, £500; sporting 2 seaters, £500; coupe, £610. The House for Motors, Colmore Depot, 200 Deansgate, Manchester.

SINGER 1920 2 seater, dickey, dynamo lighting and self-starter, brand new, in stock for immediate delivery at reduced price. Alfred Wastnage, 65 Gt. Portland St., W. Tel., May. 3005.

Portland St., W. Tel., May. 3065.

SINGER, 1921, all models for immediate delivery. Ballard's Motors, 92 Glorocster Rd., S.W. 7. Phone, Kens. 6312.

SINGER, new. 10hp, open 2 scater, in stock for immediate delivery, dynamo lighting and self-starter, detachable wheels and spare with tyre, dynamo lighting and self-starter, detachable wheels and spare with tyre cent. extra. Harrods, Ld., 118 Brompton Rd., London.

SINGER cars. G. L. Francis and Co., authorized and Earliest deliveries given. 169 Shaftesbury Ave. Phone, Gerrard 3288.

SINGER coupe, 10hp, 1920, dynamo lighting and self-starter, Rcyal blue, Dunlop Magnum tyres, brand new, fully equipped as makers specification. Lie price for immediate delivery. Delerred vpayments arranged and Mebes. The Original Light Car Specialists, 144, 154-6 Gt. 104-114.

SINGER 1921 10hp cars. The Kingeway Motor Co., authorized agents.

SINCER 1921 10hp cars. The Kingsway Motor Co., authorized agents. Place your order now and ensure early delivery of new model with latest improvements. Waldorf House, Aldwych (opposite Strand Theatre).

SINCER. Immediate delivery, 1920 10hp sporting 2 seater, dynamo lighting, self-starter, £500. Parker's, Bradshawgate, Bolton. 418-503

SINGER. We can give immediate delivery of 2 seater or coupe. Referred payments. Smith and Hunter, 77 Gt. Portland St. 418-423 SINGER, 1920-21. 2 scater and dickey, dynamo lighting and 1921 type self-starter and transmission, absolutely unused and perfect condition, has been exhibition model and slightly short-solled, 2455 for immediate sale. Offord and Sons, Ld., 94 Gloucester Rd., S.W. 7.

sale. Offord and Sons, Ld., 94 Gloucester Rd., S.W. 7.

SWIFT, 10hp, 1920, 2 seater, grey, black wings, dynam lighting, Dunlop tyres, fully equipped brand new, for immediate delivery, makers list bytes, fully equipped brand new, for immediate delivery, makers list bytes, for payments are not all the seater of the control of the contro

SWIFT, 1921, 10hp, 2 seater standard equipment, 2495. Deferred parents. Smith and Hunter, 77 Gt. Portland St.

TAMPLIN tandem, new, 8hn, J.A.P. engine, 3 speed Sturmey-Archer near, clutch and foot starter, £185, or fully equipped with hood and screen discs on all wheels, lamps and horn, £189 7s. May be obtained on Harrods deferred payment system. Harrods, Ld., 118 Brompton Rd., London, 418-350

TAMPLIN new light car, for immediate delivery, price £165. Central Motor Co., Ryley St., Coventry.

NEW LIGHT CARS AND CYCLECARS (continued).

7.8. 1920 new models, shop-soiled only, maker's usual specification, reduced price £250; trade supplied. Maudes', 100 Gt. Portland St., W. 1, and Paris St., Exeter.

T.B. new cyclecar, 8hp J.A.P. engine, in stock, immediate delivery, £275.

Maudes, 100 Paris St., Exeter.

TEMPERINO. The Kingsway Motor Co., sole concessionnaires for Gt. Britain and Ireland, can give delivery of the Temperino car, latest model in 3 to 4 weeks. Waldorf House, Aldwych (opposite Strand Theatre). Regent 691.

WARREN-LAMBERT, 1921, polished aluminium bonnet, electric lighting, 5 wheels, painted grey, only run few miles, very fast and wonderful hill-climber, unfortunately must realize cash, any trial with pleasure, sacrifice £530 or nearest offer. Write Owner, Montrose, Aldwick Rd., 1926.611 Beddington, Surrey.

WOLSELEY, 10hp, a few unsold, bodywork to order. Early delivery Pwo-sealer with dickey. Frank Burtenshaw, Ld., 71 Bell St., Reigate, Surrey. 'Phone 225.

WOLSELEY 1921 10hp 2 seater, just delivered, dynamo, starter, speedometer, clock, spare wheel cover, dickey, etc., list price £554. Stretton and Smith, 23 Woodstock St., New Bond St., W. 1. 418-392

WOLSELEY new 10hp 2 seater and dickey, self-starter and lighting eystem, detachable wheels and spare with tyre, hood and screen, painted blue £550. May be obtained on Harrods deferred payment system for a small extra charge. Harrods, Ld., 118 Brompton Rd., London. 418-354

WOLSELEY, 10hp. Mebos and Mebes, The Original Light Car Specialists, are now in a position to accept orders for this famous production for delivery early 1921; this is, without doubt, one of the finest light cars marketed to-day; your inquiry esteemed. 144, 154-6 Gt. Portland St., W. 1. Tel., 3426 Mayfair.

WOLSELEY, 10hp, early deliveries, list price, orders booked in rotation.

Court Motors, 46 Upper Baker St., N.W. 1. Padd. 4670. 418-439

ZEBRE, 10hp, 4 cylinder (new tax £7 10s.), immediate delivery with full makers' guarantee, compete with dynamo lighting and self-starter, 5 detachable wheels and tyres, 2 seater English body with dickey, price £495, trial runs arranged here or in London. Western Motor Works, Perry St., Chislehurst, nearest station Sidcup (S.E. and C.R.). 'Phone, Sidcup 160.

LE ZEBRE 10hp chassis self-starter and lighting, fitted with model de luxe 2 seater body, hood, windscreen, spare wheel, complete with tyre and full equipment, £425, immediate delivery. Hodson, 51 West St., Brighton.

LE ZEBRE, 10hp, 4 speed gearbox, 5 detachable wire wheels, self-starter and lighting set, fitted with our 2 seater de luxe body, real feather upholstery, double dickey; delivery ex stock, no extras; price, including horn, speedometer, clock, one year's insurance, Inland Revenue tax, registration and embossed aluminium number plates, ready to drive away in every respect, £559; deferred payments and maintenance arranged. George England, Ld., 11 Curzon St., W. 1. 'Phone, Maylair 2191.

PARCELCARS.

A.-C. tradesman's box carrier, in thoroughly good mechanical condition, not used last 5 years, £45; bargain to clear. Taylor's Garage, Falmouth.

ALLDAYS van, 10hp, 1916, 4 cylinder, royal blue, black wings, body specially strengthened, detachable wheels, Lucas lamps, running boards at rear, luggage rail at top, many extras, condition excellent throughout, no further use, bargain, £325; deferred payments arranged. Mebes and Mebes, The Original Light Car Specialists, 144, 154-6 Gt. Portland St. 418,477

MISCELLANEOUS LIGHT CARS AND CYCLECARS

YOU can get exactly the car or motorcycle you want through Kwiksale Private Motor Registry, 35 Long Acre, W.C. Gerrard 2392. zzz-474

F.O.C.H. for reliable new and second-hand cars, light cars. Morgans, etc. ready to drive away. Exchanges arranged. Cars also sold on commission. Our name implies our business methods. Fair Offer Car House, Heath St., Hampstead (near Hampstead Tube Station). 'Phone, Hampstead 3752. Hours 9-7, including Saturdays

SPORTING 2 seater, Shp. w.-c., disc wheels, dynamo lighting, gate change, differential, bargain, £135. Qscar V. Cox, Waylett Pl., W. Norwood, S.E. 27.

SMALL cyclecar 2 seater, 6hp a.-c. unit, 3 speed, reverse, new tyres, tubes, discs, built 1920, owner abroad, £60 or near. 138 Burton Rd.. Derby. 488-5502

1920 FRICTION-DRIVE J.A.P. 2 cylinder water-cooled Lawrence-Jackson, £180; Lagonda, £220. Barretts, Barrow-in-Furness. 418-c564

A.V., 1920, equal new, £140; friction-driven Lawrence-Jackson, £180, 42 Molyneux St., London, W. 1.

Molyneux St., London, W. 1.

618-c562

676LECAR, part built, 2 seater, 8bp w.-c. Swift engine, upholstered green, 235 or near offer. Full particulars. Gore-Graham, Brighouse, Yorks.

618-c631

618-c631

618-c649

618-c649

618-c649

Al8-c649 CYCLEGAR, 10hp a.-c. J.A.P. engine, Binks' carburetter, Bosch magneto chain-belt drive, 26 by 2½ tyres, direct steering, 2 seater, 4 wheeler, clectric horn, side and tail lamps, windscreen and hood, £130, or would sell in parts; also 3 speed and reverse gearbox, suit 10hp, £6 10s.; Dixie 4 magneto, perfect order, £7; seen by appointment. Parker, 83 Clitton Grove, Harchills, Leeds.

BODIES.

SALOON body, 4 seater, suit 10-12hp light car chassis, dark blue, grey Bedford cord upholstery, plate-glass windows, complete with wings, running boards and valances, brand new, £250. 154 Cromwell Rd., S. 419-342.

CONSULTING ENGINEERS.

HUGH P. McCONNELL examines ears for clients and reports on condition and value; unbiassed opinion on new and second-hand cars. 199 Piccadilly, London, W. Gerrard 1960.

LEONARD BAYNES, The Motorists' Advisory Engineer, 167 Oxford St...
W. 1. 'Phone, Museum 4125.

W. 1. 'Phone, Museum 1/25.

CHARLES A. WICKES, Consulting Automobile Engineer. Expert Advice. 11 Victoria St. Tel., "Assessing London." 'Phone, 4690 Victoria. zzz-301

ENGINES,

ENGINES, 9.5 Standard and 10hp Singer, both 4 cylinders and late models. Wortham-Blake and Co., Waltham Cross.

J.A.P., 1920, water-cooled, 50 degrees, twin, 8-10hp, practically unused, fitted A.M.A.C. single-lever carburetter and M.L. magneto. Offers to McGeorge, 88 Bournbrook Rd., Birmingham.

10hp V TYPE air-cooled engine (Spacke), external flywheel, Bosch magneto, carburetter, fan, spare accumulator and coil unused, designed for cyclecar, £35 for quick sale. Magneto, twin 50, Splitdorf, unused, £5. Ness, 9 Richmond Rd., Twickenham. Phone, 614 Richmond. 418-c633

2 CYCLECAR engines, new 1920, 8hp w.c. J.A.P., twin, complete, with gear drive magneto, Zephyr carburetter, and plated radiator, £55 each. Flook and Hall, Ld., 46 Stokes Croft, Bristol. 418-c619

10hp DOUGLAS water-cooled engine, new, complete with magneto, carbu-retter, radiator, silencer, starting handle, etc., £65. Tandy, 17 Clarenden Gdns., Maida Vaie, London. After 6 o'clock. 418-c612

EXCHANGES

EXCHANGE 1920 Overland, model 4, not soiled, for good 2 seater and cash. Deane, Rosebury, Matlock Bath, Derbyshire.

EXCHANGE 1917 6hr Clyno combination, spare wheel, electric lighting, handsome turnout, like new, and cash, for Morgan or Singer light car. 29 St. Leonard's St., Bromley-by-Bow. 418-c556

SINGER, 10hp, 1914, in first-class condition, for 1920 G.N. cyclecar. 182 Revelstoke Rd., Southfields. 419-c624

EXCHANGE Triumph, countershait, 1916, and Bradbury, S.-A. hub, 1913, for Morgan, 1916. Henderson, Theatre de Luxe, South Shields. 418-c628

EXCHANGE 1920 G.N. touring car, mileage 700, for late Singer, cash adjustment. Platt, 1 Pennel Rd., Liverpool, N. 418-c626

£175 or EXCHANGE Morgan to value, 12hp 4 cylinder 2 seater car, new in 1918, electric lighting and starting, 3 new tyres, paint as new. Grafton, Norman Rd., Sutton.

418-c672

EXCHANGE Maxwell 5 seater touring car, purchased from makers December, 1918, mileage under 5,000, electrically equipped, detachable rims, 2 spares, in thorough good and reliable condition, for 1920 G.N., Morgan, or combination, and cash, or sell £300. 17 Cromwell Rd., Wimbledon. 418-c642

HOODS AND SCREENS.

HOODS for light cars re-covered in best khaki material. Stockport Garage Co., Parsonage St., Wellington Rd. North, Stockport. Tel. No. 2503. zzz-189

MOTOR hoods. Up-to-date firm of motor hood manufacturers open to make contracts for motor hoods, side curtains, etc. Marsh and Wright, Weymouth. 418-b29

HOODS re-covered, 2 days; 2 seaters, £3 5s. Henry Jones, 778 High Rd.. Tottenham, London. 418-c454

HOODS. The Service Manufacturing Co., having acquired additional premises, can now undertake to recover your hood in double-texture khaki material in a few hours; 2 seaters, £2 15s.; patterns of material submitted; all work guaranteed. 67 Dalberg Rd., Brixton, S.W. 418-403

IGNITION.

MAGNETO repairs. Rewinding, remagnetizing, overhauling and general repairs promptly and efficiently executed at moderate charges, average despatch 3 days, satisfaction guaranteed. Electrical Trades Supply, Ld., Gt. Charles St., Birmingham. T.A., "Motors, Birmingham." Tel. No., 1601 Central.

RUNBAKEN REPAIR SERVICE. Thorough and efficient repairs to any make of dynamo, starter or magneto. 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., Ld., 115 Gt. Portland St., London, W. ('Phone, Maylair 3896). North of England: Derby St., Cheetham, Manchester ('Phone, City 8266).

THOMSON-BENNETT 4 cylinder latest type magneto, guaranteed in perfect condition, clockwise or anti, £7 10s. 15 Nelson Terrace, City Rd., London. 418-c653

INSURANCE

PREMIER is the best. Have you secured your Premier policy? 434-73

LLOYD'S—M.M.I. Policies at Lloyd's. Minimum Premium Policies (non-profit sharing) now issued. Fullest benefits. Prompt settlements. M.M.I. Association, Ld., 1 Cushion Court, Old Broad St., E.C. 2. 439-786

ROYS, LD., invite inquiries for insurance of all kinds. Competitive rates for light cars. Lloyd's and companies' prospectuses on application. 170 Gt. Portland St., London.

MISCELLANEOUS.

ALUMINIUM castings It is worth your while to let us quote you. The Wednesbury Foundry Co., Cross St., Wednesbury. 422-b768

SPECIAL line. An exceptionally well-made set of torpedo pattern lamps, consisting of 2 side and 1 tail, complete with metal filament bulbs and double-ended holders, 58s., brass; new electric horn, powerful and penetrating, 58s. 6d. Full particulars from the Essex Accumulator Co., Ld., 499 Grove Green Rd., Leytonstone, E. 11.

SPARE parts for Morgans and J.A.P. engines; light car repairs of any description; spare parts made in shortest possible time; try us. 'Phone. 4441 Latchmere. Barkers Motors, 194 Balham High Rd., S.W. 18. 2zz-364

ACCUMULATORS, shop soiled, otherwise new; 4 volt 20 ampere, 18s. 6d.; 4 volt 40 ampere, 22s. 6d.; 4 volt 60 ampere, 31s.; 4 volt 80 ampere, 38s. 6d.; 6 volt 40 ampere, 33s., net cash, carriage extra. Essex Accumulator Co. Ld., 489 Grove Green Rd., Leytonstone, F. II.

MORGAN spares. Set bevel wheels, 90s.; chains, best quality, high gear, 44s.; low gear, 47s.; back wheel bearings, 18s. 6d.; back axls. 6d.; exhaust valves, 6s.; above spares in stock. Carriage or post extra, Hall's Garage, Morgan Specialists, Stevenage.

MISCELLANEOUS (continued).

SPEEDOMETERS, second-hand, various makes, with complete fittings for any car, fully guaranteed, from 47s. 6d. Robins, Speedometer Specialist. 97 Latchmere Rd., Battersea. 423-208

BLERIOT Whippet. Gear spares can be obtained from the Weyside Engineering Works, Farnham Rd., Guildford.

ALUMINIUM number plates, best pressed on black background, any number within 24 hours, post free l5s. per pair. Freeman, Oakes and Co., Ld., Devonshire St., Sheffield.

6hp A.C. and Warrick engines, £15 each; 6hp De Dion, £8; small 2 seater body with dickey, £10; several Warrick box carrier bodies, £5 each; Zenith carboxetters, 65s.; Solex, 50s.; 709 bw 85 wire wheel, fitted 2 gear, £5. Mardcope Motors, 90 Old Kent Rd., S.E. I.

2 8hp w.-c. J.A.P. engines, 50 degree, £35; 1 8hp a.-c. Blackburne engine, 60 degree, £33; 1 Fellows 2 cylinder magneto, 60 degree, £6; 3 C.A.V. dynamo lighting sets, £25 each; several hundred feet ½ in. by 4 in. Brampton and Coventry chain. King, 61 Somerset, Teddington. 418-348

DON'T throw away your old tyre covers. Send them to the Beldam Tyre Co. (1920), Ld., Brentford, Middlesex, to be retreaded, and they will last nearly as long again. Send an old cover (any make) and ask for estimate of cost.

TYRE lever. Owens' patent tyre lever appliance quickly removes and replaces tyres without injuring tubes. Owens, 16 Park St., Slough. 418-c177

OFFICER'S tan leather flying coat, fleece-lined, wind cuffs and belt, three-quarter length, suitable motorist, either sex, 5 ft. 7 ins. to 5 ft. 10 ins., £7 7s. 7 St. Mark's Mans., London, N. 4. HUMBERETTE pinione in stock, 35s. Longney, Oswestry. 423-c508

CYCLECAR parts. 2 speed gearbox and clutch, with bearers complete, £4 l0s.; crown whoel and differential ball bearings and pinion, suit I in shath, £3; multi-disc clutch for chain drive on countershath, ball races and housings operating pedal, sprockets, chain, £3 l0s.; other components. Write, Palmer, 16 Fox Hill, Crystal Palace.

418-c505

ST. MARTIN'S, the premier house for accessories. Everything for the motorist at lowest prices; new and second-hand goods of every description; bargains too numerous to mention. Write, phone or call, St. Martin's Motor Works, Ld., 11 and 12 Upper St. Martin's Lane, London, W.C. 2. 'Phone, Regent 5070-1.

BARGAINS! Bargains! Pair electric sidelights, complete with 15 ft. flex, 15s. 6d.; Morgan plated bonnet, very smart, 35s.; brand-new pair Morgan wings, 50s.; unwrapped Michelin, 650 by 55, Baby Peugeot, 45s.; large brass acetylene generator, perfect, 30s.; pair plated P. and H. headlights, used twice, £3. Bleach, Tailor, Marmion Rd., Portsmouth. 418-c550

CYCLECARISTS. Ash members, angleplates, springs, seats, complete sets, £10, list 4d. Nine Golder's Green Crescent, London. 418-c588

GEARS and bevels in stock for Humberottes, Swifts, Premiers, Trumbulls, Calthorpes, Rovers, Deemsters, Mathis, Perry, Peugeot, Singer, and Standard. The Streatham Engineering Co., Ld., 47 Streatham Hill, Lonzard Landard.

MORGAN spares in stock for all models. Set of aluminium discs, £5; Watford speedometers, £6; with trip recorder, £6 10s.; new A.M.A.C. carburetter, £2 10s. Official agents, Elce and Co., 15-16 Bishopsgate Avenue Camomile St., E.C. 3. 'Phone, Avenue 5548.

SPARE parts for Morgan and G.N. cars in stock; write for lists. Official agents, Elce and Co., 15-16 Bishopsgate Avenue, Camomile St., E.C. 3.
'Phone, Avenue 5548.

ELITHORN bonnet radiator, attractive designe for air-cooled cars. "Looks tip-top, finish really fine," writes satisfied customer. Elithorns, Ld., Manufacturers in Sheet Metal, Portsmouth. 419-474

COMPLY with new regulation! Side lamp brackets altered, returned next day, 5s., carriage paid. Elithorns, Ld., Portsmouth. 419-a474

ACCUMULATORS made by us for users of light cars and cyclecars, quality guaranteed, prices from 22s. 6d., carriage paid. Write for prices and particulars; you will be pleased with results from our C. and R. sets; accessories supplied. Ceanar Electrical Co., 18 Fairhaven Avenue, Christon-cum-Hardy, Manchester.

DISCS, polished aluminium or light steel, for any make of car, wire or artillery wheels, £1 per wheel (2 discs per wheel), accurate and good finish, buy of makers and eave money, trade supplied, ammediate delivery. Service Manufacturing Co., 67 Daiberg Rd., Brixton, S.W. 418-402

HUMBERETTE crown wheels and pinions, immediate delivery. Wandsworth Motor Exchange, Ebner St., Wandsworth. 443-401

TYRE lever. Owen's patent tyre lever appliance quickly removes and replaces tyres without injuring inner tube. See Olympia Show. Mohawk Co., Gallery, Stand 172.

NEW dynamo lighting set, £15 15s.; large Klaxon electric horn, £4 4s.; generator and pair P. and H. acetylene headlamps, £4 5s.; twin pumps, 12s. 6d. Beardshaw, Wood Green.

HUMBERETTE crown wheel and pinion, new, maker's price. 7 Gtbson Sq., Islington, London, N. 418-636

HUMBERETTE cylinder, air cooled, brand new, cash or exchange. 29 Peel St., Lincoln. 418-650

SPEEDOMETER, by Stewart, complete with flexible drive and bevel wheel, good condition, 30s. Robins, c.o. Cox and Co. (R.E. Dept.), 16 Charing Cross.

Charing Cross.

ECONOMY. Reduce your petrol bill and start your engine easily by fitting the Leskost primer and extra air valve, one appliance incorporating two features, controlled from the steering column. More miles per gallon obtained. Saves your starter batteries and time when cranking your engine. A real time and money saver. Fit any car. Sent on approval for 7s. 6d. post paid; write for leafet. Manufactured by J. W. Robins, 97 Latchmere Rd., Battersea, W. II. 'Phone, Latchmere 4395.

2 LARGE acetylene headlamps, generator, and rear lamp; also S.U. carburetter, latest model, for light car, little used, £12 the lot, or sell separately. Moore, 117 Ashley Gdns., S.W. 1.

PATENT AGENTS.

LET the Consulting Patent Agency, 253 Gray's Inn Rd., W.C. 1, advise PATENTS and trade marks. Advice and handbook free. B. T. King, Registered Patent Agent, 146a Queen Victoria St., London. 222-656 W. BRYSON, B.So., Assoc.M.Inst.C.E., A.F.R.Ae.S., Chartered Patent Agent, 29 Southampton Buildings, London, W.C.2. 'Phone, Museut 365L 423-738

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RADIATORS, wings, tanks and bonnets made and repaired; prompt attention and reasonable terms. Alford, Kimber and Co., 18a Featherstone St., City Rd., E.C. 1. Telephone, Clerkenwell 2196.

REPAIRERS.

K.C. MOTOR WORKS specialize in repairs to Morris-Oxford, Calthoupe, A.-C., etc. Rodborough Mews, Woodfield Crescent, Harrow Rd., W. 9. 422-b919

STANDARD.car repairs, mechanical and coachwork; 9.5hp model specialized in. Sole London agents for several years. First-class mechanics, Moderate charges. Pytchley Autocar Co., Ld., 42a Walmer Rd., North Kensington, W. 16. Park 1299.

STANDARD cars repaired or overhauled under the personal supervision of our Mr. H. L. Field (late of the Standard Motor Co.). It pays to consult and employ a specialist. Cars letched and delivered within 100 miles radius free of charge. The Bradfield Engineering Co., The Wharf.

WEYSIDE ENGINEERING WORKS, Farnham Rd., Guildford, specialize in light car overhands; gears cut: obsolete and worn parts renewed from sketch or pattern; every description of repairs promptly and efficiently executed.

423-236

CYLINDERS re-ground and fitted with oversize pistons complete from £2 per cylinder; delivery 3 days. Write for particulars, C.M.D. Engineering Co., Tavistock St., Leamington Spa. 423-350

BLERIOT Whippet London service repairers and agents. Specialists Whippet repairs. Ballard's Motors. Works: 92 Gloucester Rd., S.W. Telephone, Kens. 6312.

CYLINDERS reground by Heald machine, new pistons fitted from £2 12s. 6d.; 4 days' delivery. City Cylinder Regrinding Co., Crown Works, Guildford St., York Rd., Lambeth.

SITUATIONS VACANT.

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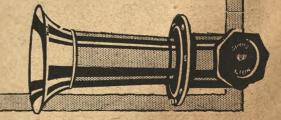
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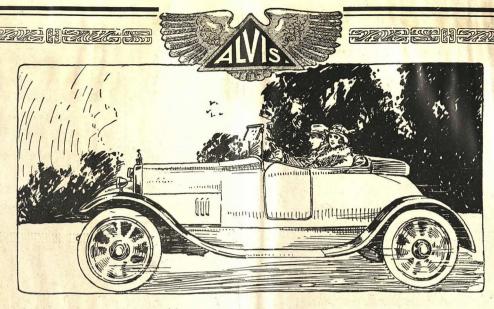
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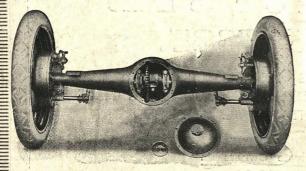
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