



#### HOMEWARD BOUND.

Homeward Boond.

Having successfully accomplished the arduous task of crossing the Sahara Desert the Citroen mission are returning to Tuggart by the same route as that followed on their outward journey. The old and the modern methods of transport are vividly contrasted in this photograph.



# Appreciation.

Mr. F. A. Byrne has kindly given his permission for the reproduction of this letter "solely that it may be of interest to motorists generally."

> 342, Shaftmoor Lane, Hall Green, Nr. Birmingham. January 10th, 1923.

Messrs. Lodge Plugs Vtd., RUGBY.

Dear Sirs,

I am writing to thank you for your courtesy in examining, adjusting and testing the 6 Lodge plugs sent for your inspection free of all charge to me. I did not expect this as the plugs in question had already done service more than equal to my experience with other plugs, and it is now very satisfying to me to know that the plugs are still good for further service, and this perhaps for a rather selfish reason, in that it settles the plug question for the future for me, which is

no small relief. Out of curiosity I counted up plugs of various kinds (excluding the six sent to you) and found that I had 28, which at 5/- each is about £7. I feel now that my plugs are going to cost not more than £1 per ann. and no worry.

Again thanking you,

I am,

Yours faithfully,

(sgd.) F. A. BYRNE.

LODGE PLUGS LTD., RUGBY.

Standard model
5/everywhere,



THE WORD "CORD" AS APPLIED TO TYRE CONSTRUCTION WOULD HAVE NO SIGNIFI; CANCE TO-DAY BUT FOR PALMER ACHIEVEMENTS ON ROAD AND TRACK DURING THE PAST TWENTY YEARS.

# HERE ARE A FEW SPECIMEN PRICES EXTRACTED FROM OUR LATEST LIST:

Light Car.	Covers.	Tubes.	Car.	Covers.	Tubes.
	£ s, d.	s, d.		£ a. d.	£ s. d.
$700 \times 80 \ (26 \times 3)$	2 17 0	8 4	815×105 (o'size)	8 5 0	16 6
710×85 ···	3 5 5	9 0	820×120	8 12 6	17 6
710×90	3 7 6	9 6	880×120	9 9 0	18 9
7.60×90	3 18 6	10 0		11 7 6	1 0 0

Write for List No. 69G.

#### THE PALMER TYRE, LIMITED.

119, 121, 123, Shaftesbury Avenue, London, W.C.2.
Telegrams—"Tyricord. Westcent. London." Telephone—1214 Gerrard (5 lines).

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MOVEMENT







# The Light Car for the Family Man.

HE new 10 h.p. SWIFT with "chummy" body has no equal as a light car for the family man. It is a combination of efficiency and convenience. Consider what it can do—over 50 m.p.h. at a petrol consumption of 45 m.p.g., climb any hill it is put to, and run with all the sweetness and comfort of a car twice its size. And being made by Swifts, with an industry-old reputation for unfailing reliability, it will easily outlast any other car in its own power category.

4-CYLINDER WATER-COOLED, SELF-STARTER, ELECTRIC LIGHTING AND UPHOLSTERED IN REAL LEATHER.

2-SEATER with Dickey, £275

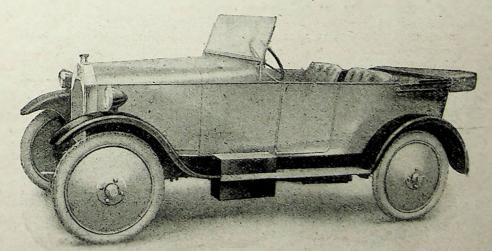
"CHUMMY" Model
(Accommodating 2 Adults
and 2 Children),

Write for name of nearest agent to
BRITISH MOTOR TRADING CORPORATION, LTD.,
132-135, Long Ac e, London, W.C.2.

Manufacturers:

#### SWIFT OF COVENTRY LTD., COVENTRY

Irish Depot: 15-17, South King Street, Dublin.



170



## FRENCH SPORTS MODEL

A small number of these Cars are available to clear stock. The cars are absolutely new and only just received from Works. Six months' guarantee. Lately listed at £240. NOW OFFERED AT

# £150

Fully equipped with dynamo and speedometer. 1MMEDIATE DELIVERY. TRIAL RUNS. SPARE PARTS AVAILABLE.

A.S.C. 166, Gt. Portland St., LONDON, W.1

Automobile Service Company.

lelephone-Museum 6626.

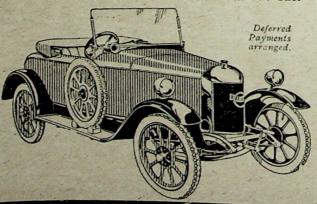


10 h.p. 2-3-Seater "Popular" Model, with dickey seat and mechanical starter ... ... 280 Gns.

12 h.p. 2-3-Seater "Popular" Model, with dickey 300 Gns.

12 h.p. "All-weather" Model, with dickey seat and electric starter... ... ... ... ... 375 Gns.

12 h.p. 4-Seater Touring, with "All-weather" side curtains and electric starter ... ... ... ... 375 Cns.



#### Motor Comfortably at a Low Cost.

A smart, roomy, comfortable, wellsprung body, mounted on a chassis which runs as smoothly as a moonbeam - that's the Deemster. Go for a trial run. Note the silence. the speed, the up-hill and-down-dale equanimity of each one of this handsome car quartette-and keep well in mind that the beauty of construction ensures all round economy. from initial cost onward.

THE OGSTON MOTOR CO. (1918), Ltd.,

Deemster Works, Victoria Road, Acton, W.3.

(Nearest Station: Willesden Junction.) Telephone Nos. . . . Chiswick 2044-2015,

Ask for address of nearest agent.

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MOVEMENT in "The Light Car and Cyclecar" interest you

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# Decide on a Hands

Your choice will make you happy ever after

2-Scater (10-20 h.p.) 260 Gns.

If you know a good deal about Cars from an expert point of view, every ride you take in your Hands will be reiterated endorsement of your sound judgment. If you are a novice you will derive much satisfaction from possessing a car which makes motoring so free from trouble. In either case, the elegance, the comfort, and the exceedingly low costs are matters which make Hands ownership exceedingly pleasing.

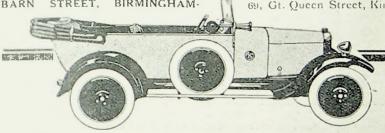
4-Seater (as sketch) 280 Gns.

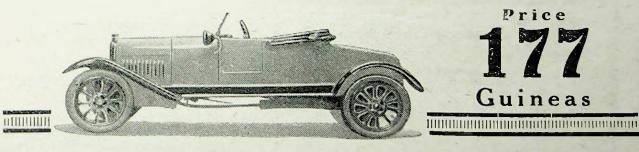
Orders for 1923 Mode's are being rapidly dealt with in rotation. Illustrated Booklet and address of local Agent will be sent free on request.

> Coupé (11-22 h.p.) 330 Gns.

G. W. HANDS MOTOR CO. Lion Works, BARN STREET, BIRMINGHAM-

Sole Distributing Agents for London and Kent: The CECIL MOTOR CO. 69, Gt. Queen Street, Kingsway, W.C.2.





Price Guineas

Friction Discs supplied for G.W.K. and other makes of friction-driven cars.

#### .....CONDENSED SPECIFICATION.....

4-cyl. 10 h p. Water cooled. Friction Disc Transmission, 4 speeds and reverse. Dynamo Electric Lighting, Wheels Pressed Steel.

Tyres: 700 x 80 mm. Spare Wheel and Tyre. Full Equipment. Dickey Seat.

#### Other Models and Prices:

Two-Seater ... 245 Four-Seater ... 250 Coupe

# "UNIT" **SERVICE** CAR

With 10 h.p. 4 - Cyl. Water-Cooled Engine.

Send to-day for full particulars of this wonderful value in Light Cars.

ROTARY UNITS, LTD., Wooburn Green, Bucks.

'Orams: "Rolary, Woodurn Green." Phone: Bourne End 123



SCOTTISH
MOTOR SHOW.

Miss ra. ALENANDER & CO., of Edinburgh, are showing the Stopeleigh on

Stand 56

Write for Folder D.

STONELEIGH MOTORS, LIMITED,

Branch of ARMSTRONG SIDDELEY MOTORS, LTD., Parkeide, Coventry,
London: 78, Marylebone Lane, Wigmore Street, W.1.

MOTORING AT LOWEST

3 Seated Utility Car is the only light car carrying three people and a child in comfort—plenty of room for all.

It has ample space for luggage. Its aluminium body is light, looks smart, and can be cleaned in a few minutes. The Stone-leigh, being air-cooled, can be kept in an open shed without harm. Costs 1½d, per mile to run. With the back seats removed it can carry 4 cwt. of goods.

A demonstration will be given any where and at any time to suit your convenience.

Easy payments can be arranged.



COST

LOOK OUT FOR THE NEW

# Bayliss Thomas

919 POPULAR TOURING CAR

Complete with-

Lucas Electric Equipment, including Electric Starter; 2-Seater Body with Dickey Seat, Spare Wheel and Tyre, and—

COMPLETE FOR THE ROAD.

£260

NET.

No Delivery Charges in the United Kingdom. Illustration and further details on application.

BAYLISS, THOMAS & CO.

(Proprietors: Excelsion Motor Co., Ltd.)
KING'S ROAD, TYSELEY, B'HAM.

'Phone: 125 Acocks Green. 'Grams: " Monaich, Hay Mills."

Paignton, S. Devon.

Two Ladies drive 2,000 miles across the Continent on their Calthorpe

The Calthorpe

The Calthorpe

The Car outside the Cairo at Monte Carlo.

The Car outside the Cairo at Monte Carlo.

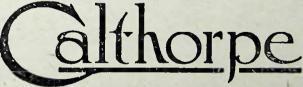
The Car outside the Cairo at Monte Carlo.

The Calthorpe

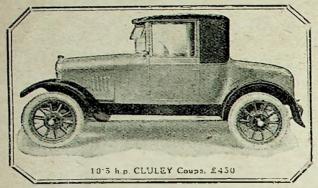
The Car outside the Cairo at Monte Carlo.

The Calthorpe

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



#### "Worth more than any other-"

is what most CLULEY owners think of their car, and with good reason, for the CLULEY is not only good to look upon, but extremely serviceable, workmanlike and economical.



AN examination of the chassis reveals its sturdy and carefully planned design, which will withstand for years the strain and stresses of the road. The 4-cylinder water cooled 10.5 h.p. engine is noticeable for its clean, workmanlike design and careful finish to every detail.



POWER enough for any emergency is provided, with a speed on top gear of 50 m.p.h., which can be throttled down to 5 m.p.h., a flexibility which makes it a most pleasing car to handle in traffic.

THOROUGH all-weather equipment, semielliptic springing, deep upholstery, ample leg room, and an adjustable rake to the steering wheel, make the CLULEY Two-Seater one of the most comfortable of light cars of the year. The Coupe Model is further equipped with a V fronted windscreen, glass windows in both doors, Bedford cord upholstery and leather hood, the whole forming an exceptionally smart little car.



10.5 h.p. Two-Seater All-weather £350 10.5 h.p. Coupe £450 Lucas Lighting and Starter fitted to both Models.

Illustrated particulars and address of nearest Agent post free on application from

CLARKE, CLULEY & CO.,

GLOBE WORKS, COVENTRY

Established 1890.





# The Cycle back-light Problem

Absence of cycle rear-lights has caused countless nerveracking shocks to motorists at night, many serious and minor accidents, and not a little temporary ill-feeling. A far happier spirit on the King's Highway might be engendered if cyclists carried rear-lights—a practice which would make for far greater safety to themselves as well as to motorists.

Look for No. 3 of the series and cut them out to keep for reference.

# PRATTS

For the better Spirit on the Road



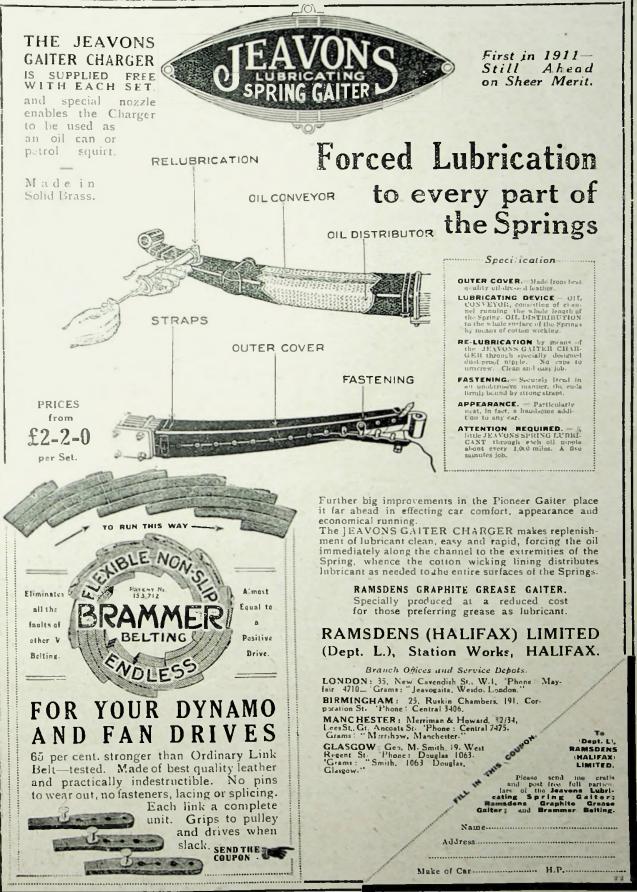
ANGLOCO

ANGLO-AMERICAN OIL CO., LTD. 36, QUEEN ANNES GATE, LONDON, S.W.I.

We are Exhibiting at the SCOTTISH MOTOR SHOW STAND 112

HELP THE MOVEMENT

by letting advertisers know that their advertisements in "The Light Cur and Cyclecar" interest you.



## CONVINCING TESTIMONIAL: The Easting Two-Panel Screen

from Lord POWERSCOURT.\_

POWERSCOURT, ENNISKERRY. IRELAND. December 22nd, 1922.

Eastings Windscreens, Ltd.

Dear Sirs.

I write to inform you how satisfact ry I find your

I selected it from among all the windscreens exhibited at the recent Motor Show for several reasons which I will

leaves no bulky fittings in the way of luggage at the back. now enumerate,

(b) Its extreme simplicity.

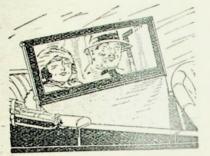
(d) No glass to break.
(e) It can be folded up in a very small space and its apron wrapped round the tale and stowed under any driving sent where it is no nuisance to anybody.

I fitted it myself to my car and experienced no difficulty My passengers were very pleased with it in

every way.

I consider it an excellent article in every respect and it should sell very well for all open touring cars of to-day which are notorious for cold in the back seats owing to their lines.

Yours truly. POWERSCOURT.



Selected from all the Windscreens exhibited at the recent Motor Show for several reasons. The provide its only cheap feature, the manship and materials used are of the finest qualities obtained to the finest qualities obtained to cars with Tip and its table from the first adjustable from the second to t

PRICE COMPLETE: £4 = 10 = 0

Our other specialities in panel Rear Serven "The hand "Side Windows and "Side Windows for fit all cars.

EASTING WINDSCREENS, LTD. 132, STEELHOUSE LANE, BIRMINGHAM. And 24, FINSBURY SQUARE, LONDON,

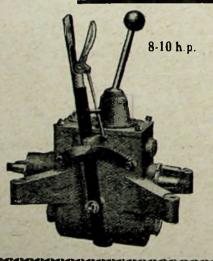
#### A SILENT GEARBOX

CONTRACTOR CONTRACTOR

is an essential factor in the manufacture of Light Cars; therefore you cannot do better than fit an

# 3-SPEED & REVERSE

ABSOLUTE SILENCE GUARANTEED.



Supplied to fit integral with Engine, or as a Separate Unit

We also supply Rear Axles, Front Axles, Clutches, Steering Gear, Universal Joints, etc.

Write for Particulars and Prices:

OPPERMAN, SONS & TASKER, LTD.,

The Light Car Component Specialists. 3, Albemarle St., Clerkenwell, E.C.1

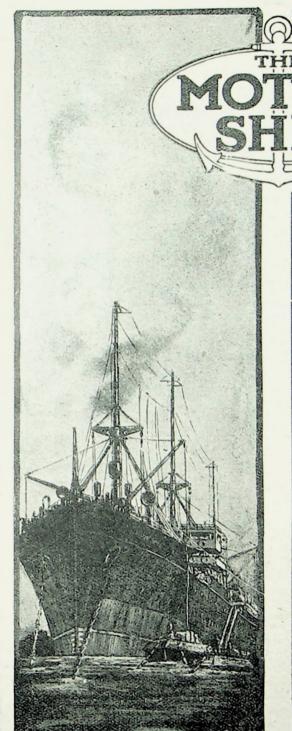
WORKS :- 50. Wharf Road, Latimer Road, W.f.

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NAMED AND DESCRIPTION OF DESCRIPTION by letting advertisers know that their advertisements

in "The Light Car and Oyclecar" interest you.



NOW READY

# FEBRUARY NUMBER 1/-

Leading feature in February Issue:

The Largest British Sulzer Engine. (Illustrated.)

A Geared Diesel-engined Ship.

Comparisons between Different Types of Oil Engines: Weights, Fuel Consumption, Space occupied, etc.

The Single Screw Motor Ship, "Pizarro."

3,000 hp. long stroke Engine. (The largest of its type built).

A 6,000 ton Single Screw Motor Ship.

A New Oil Engine Fuel Valve.

The Motor Tanker, "Scottish Borderer.

A New Diesel Engine Governor.

"The Motor Ship" is published on the first of each month and is obtainable from all principal bookstalls and newsagents.

......

Subscription, 16|- per annum, Post free. Canada and Newfoundland 13|6.

PROFUSELY ILLUSTRATED.

Associated with "The Motor Boat." Publishers also of "The Motor Boat." The Motor." The Commercial Mutor, "The Light Car and Cyclecar," "Motor Cycling." and "Cycling." And "Cycling." The Light Car and Cyclecar, "Motor Cycling." and "Cycling." The Light Car and Cyclecar, "Motor Cycling." and "Cycling." The Light Car and Cycling.

#### FOUR-SEATER

Electric Lighting, Hood, Bulb Horn,

£275 (Starter )

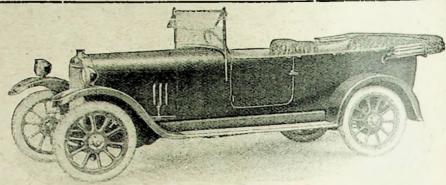
#### Four - Seater All - Weather

(As illustration)

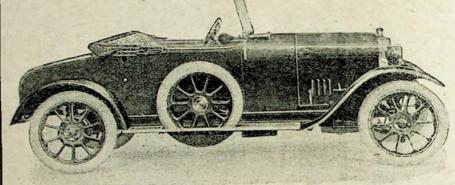
Electric Horn, Electric Starter Speedometer, Clock, Best Leather Upholstery and Double Screen.

£325

London Showroom—
AUTOCARS, LTD.,
15. Woodstock Street, W.1.



# 10.8 HP. CLYNO LIGHT CARS



#### TWO-SEATER

(As illustration)
Electric Lighting, Head, that Horn,
Single Screen.

£265 (Wich Self-Starter)

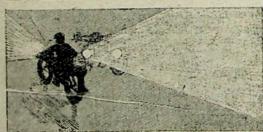
#### Two - Seater All - Weather

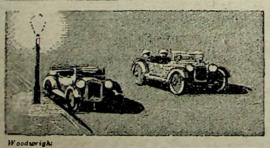
Electric Starter and Harm Clause and meter, Double Screen, these bases Upholstery

£298

ORDER NOW, or you will be disappointed in delivery.

CLYNO ENG. CO. (1972). LTD. Pelham Street. Wolvern ampton. Telephone 272





# Are you adding to the Dazzle Danger??? —— You Need Not!

TURN of the Graham Dimmer Switch gives you three graduations: "DIM" for driving through partly lit streets and to save current when the car is standing; "SEMI" gives you a comfortable driving light without glare; while "FULL" enables you to utilise the full power of your lamps. The "OFF" position allows the headlights to be switched off independently of the Dynamo Switchboard.

You save current in the "SEMI" and "DIM "positions without the risk of overheating.

For fitting to dashboard or **steering column** (state which preferred), also state voltage and wattage of head lamps when ordering, or ask for illustrated pamphlet. "L.C."

Daily Demonstrations at our Showrooms

The Algraphone Salon, 25-26, Savile Row, Regent Street, LONDON, W.1. 'Phone: Regent 1075,

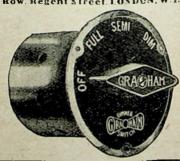
#### ALFRED GRAHAM

& CO., Si. Andrew's Works, Crofton Park LONDON, S.E.I.

Telephone: Sydenham 952 and 1700.

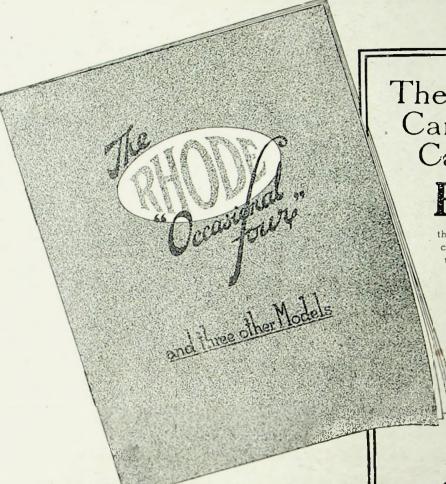
Ireland: Alexander R. Munday, 41, Chichester Street, :: Belfast

Reduced 15/-



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by letting advertisers know that their advertisements
in "The Light Car and Cyclecar" interest you



There are Light Cars and Light Cars and—the

# RHODE

the light car that is different, that cuts out the uncomfortable unprotected Dickey, and brings your occasional extra passengers all under the hood.

This catalogue tells you all about it — gives you its full specification, illustrates it, and, in your own best interests, should be carefully studied before you make your purchase for nine-teen twenty-three.

To ask for the Catalogue will be the first step to an ideal combination of comfort and economy, for apart from the purchase price—

£235

the car it illustrates is particularly low in upkeep costs—TAX £10, PETROL CONSUMPTION 40 50 m.p.g.—SPEED 40-50 m.p.h.

It will give you good and lasting service, for it is built to do so by men who are enthusiastic motorists themselves—built in a British factory where only British brains, British capital, and British labour are employed

And to ask for the Catalogue need cost you but a penny, while that action, in itself, may save you pounds.

Write us or use this page-(see note at side),

## Rhode Motor Co. Tyseley, Birmingham.

London - Mebes & Mebes, 141, Gt. Portland Street, W.

WRITE YOUR NAME AND ADDRESS HERE.

Then tear out the nate and post in unsealed envelope with penny tamp affixed—that's all—the catalogue will reach you by return.



# Scientific Construction combines Lightness with Strength, reduces Running Costs

AFTER developing the 'A-C' Chassis to its present remarkably high efficiency we devoted our attention to reducing weight. The object of this is to reduce running costs and lighten the h.p. load, and increase strength and durability.

The 1923 'A-C' Models are the result of a long series of very exacting tests. Scientific construction and expert selection of materials have enabled us to make a very substantial reduction of weight, thereby giving less stress on tyres, springs, and mechanism as a whole, and greater mileage from every gallon of spirit.

Motor experts know how great a saving in every direction follows reduction of weight, when strength and durability are maintained. A few minutes' consideration will convince the veriest novice of the obvious logic of "Cause and Effect" in this connection.

AC CARS, LTD. (S. F. EDGE, Governing Director)

Sales Dept.

HIGH STREET, THAMES DITTON,

Phone: Kingston 3340 (4 lines) SURREY, ENGLAND.

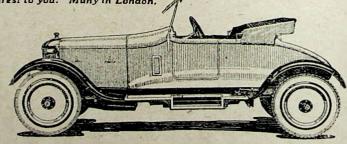
Works: THAMES DITTON.

Service Depot .

181, Hercules Rd., Lambeth, London, S.E.1

AGENTS : Ask for nearest to you. Many in London.

'A-C' PRICES from £395





Reports from different parts of the country show that there is a noticeable increase in police THE ARM OF - activity where motorists are concerned. Here is a significant snapshot taken a few days ago in Fitzjohn's Avenue, Hampstead. THE LAW.

### Notes, News and Gossip of the Week.

#### In the West Country.

Devonshire and other West Country motorists should make a special endeav-our to be at Simms Hill on February 10th. For details see special article in this issue.

#### I.A.E. Awards.

The Graduate's prize of five guineas offered by the Institution of Automobile offered by the Institution of Automobile Engineers annually for the best paper read before any Centre during the session has been awarded to Mr. H. Briggs for his paper on "Repetition Work in the Engineering Industry." The second prize of two guineas goes to Mr. L. F. Watson for his paper on "Mechanical Efficiency."

#### Police Activity.

A sudden increase in the activity of the police with regard to all things the police with regard to all things motoring is noticeable. Motorists living in the metropolis, who use Fitzjohn's Avenue as a test hill, should be particularly careful just now—as our frontispiece plainly shows. During the fow minutes' stop necessary to obtain our photograph we saw no fewer than three cars "pulled up," copious notes being taken by the constable in charge. In other parts of the country, in main roads and in ten-mile limits, the same activity prevails, and the exercise of due caution prevails, and the exercise of due caution is necessary.

No. 532. Vol. XXI.

#### LIGHTING-UP TIMES

#### for Saturday, February 3rd, 1923.

London	5.20	Edinburgh	5.11
Newcastle	5.9	Liverpool	5.25
Birmingham	5.24	Bristol	5.30
, D:	ublin	5.58	

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

Moon.-Last quarter Feb. 8th.

#### The J.C.C. A.G M.

The Junior Car Club held its annual general meeting on Wednesday, January 24th, and beyond the addition of A. J. Crump, W. D. Hawkes, J. Gordon Offord and F. N. Pickett to the council, no changes in the officers for the coming season are to be recorded. The meeting was carried through with an absence of rhetoric that was wholly pleasing, and after the various matters down for discussion had been settled a very interest-

cussion had been settled a very interesting display of films was given.

The financial position of the J.C.C. is extremely satisfactory, and members of the club can look forward to a very interesting series of events both of a social and competitive nature during the present year.

#### **Another New Hill!**

According to a preliminary announcement the M.C.C.'s London-Land's End Trial, which takes place at Easter, will follow much the same route, but will include a new hill on the outward journey. The only awards this year will be gold and silver medals.

#### Masked Revel.

The Wallington Motor Club is organizing a masked revel, which will take place at the Public Hall, Carshalton, Surrey, on Friday, February 9th, beginning at 8 p.m. and terminating at approximately 1 a.m. A well-known London band has been engaged to provide the music, and a thoroughly enter-taining evening is promised.

#### Not the Only One.

In a recent issue we drew attention to the fact that the Matchless light car was the only two-cylinder vehicle to carry four passengers through the London-Exeter Trial: but this statement now needs correction, for we learn that Mr. Alan Gruzelier drove his 8.9 h.p. twin-valuable Debic Drychles 2.5 h.p. twin-valuable 2.5 h.p. twin cylinder Belsize-Bradshaw through the same trial and with the same complement of passengers. Mr. Gruzelier obtained a gold medal, and the performance of his car reflects great credit on the manufac-turers and designer of the oil-cooled engine employed.

#### Southampton's New Club.

The opening meeting of the Southampton and District M.C. and L.C.C. will be held at Lowman's Cafe. Above Bar. Southampton, at 7.30 p.m. to-night (February 2nd). Many items of importance, including the programme of events for the coming spason will be discussed. for the coming season, will be discussed.

All motorcycle and light car enthusiasts

#### Westmorland Motor Club.

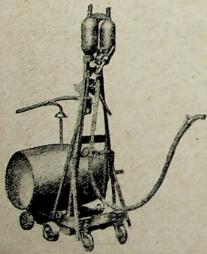
At the annual general meeting the members of the Westmorland Motor Cycle Club unanimously decided that in future this club should be called the Westmorland Motor Club, that it should have a car section affiliated as an asso-ciated club of the Royal Automobile Club, and a motorcycle section affiliated to the Auto-Cyclo Union.

#### The Best Way to the Midlands.

Although the main London to Covenfry road via Barnet, the Stratfords, and Daventry, may be a fairly good route, it is, in the main, very uninteresting, and is usually encumbered with a large amount of heavy commercial traffic.
Two other routes between the Metropolis and the Midlands are via Oxford,
Banbury, and Coventry, or through
Aylesbury and Bicester to Banbury and
thence on to Coventry. The surface on
both of the last-named routes is very

#### The Carburine Pump.

The Gas Lighting Improvements Co., Ltd., have recently introduced a new apparatus for bulk-fuel installations, which is also available as a self-con-tained barrel-on-trolley plant. The accompanying illustration shows the lastnamed type, which is, however, now fitted with a rotary action piston pump instead of a semi-rotary action pump. The most salient feature about the machine is the fact that it combines the accuracy of the calibrated receptacle type of plant with a discharging speed greater than that possessed by the measuring lift type. There are three sets available, the prices of which are as follow:—Kerbside installation with 500gallon tank, delivered and fitted, £100; a commercial set, with 500-gallon tank, delivered and fitted, £85; a portable barrel set at £42.



The new self-contained Carburine petrol installation.

# LIGHT CAR-ICATURES.

#### JEAN CHASSAGNE (A Favourite from France'.

Vivo La France et l'Angleterre! Ze race I love, no matter where. Give me ze car. jus' made to go, Streamline, big noise, vitesse, très chaud!

#### Scottish Trial.

The Edinburgh Club's Six-day Scottish trial is arranged to take place in the second week of May; that is, from the 7th to 12th. The course will be the 7th to 12th. The course will be stiffened up, while the premier award will consist of silver cups, to be earned by those completing the trial without the loss of a single mark. Gold medals will be awarded to those who do not walls more than the stop on a bill. make more than one stop on a hill.

#### The Ideal Tool Roll.

Commenting on a paragraph headed "Trivial but Irritating," which appeared in our issue dated January 19th, peared in our issue dated January 19th, on the question of certain disadvantages of the average tool roll, A. C. Cars have forwarded us the standard tool bag which is supplied with all A. C.s. This is an extremely useful accessory, largo enough to hold all the tools necessary for running purposes. It is equipped with the ringup type of fastener. the rip-up type of fastener.

#### New 10 h.p. Albatros.

New 10 h.p. Albatros.

A new light car of interest is the Albatros, manufactured by Albatros Motors at Coventry. Fitted with a 10 h.p. four-cylinder water-cooled engine, the mixture is supplied by a Zenith carburetter, ignition and lighting being by B.L.I.C. A cone clutch conveys the drive from the engine to a centrally operated three-speed-andreverse gearbox. Suspension all round is by quarter-elliptics. The utility two-seater model, complete with all equipment, is priced at £200, and the special model which is fitted with a double dickey, sells for £225. Other models include the "two four," £240, family four-scater, £265; and the coupé, £275. The works are situated in Coventry, and deliveries will be made in from four to six weeks. All communications should six weeks. All communications should to be addressed temporarily to Albatros Motors, 11, Montague Road, Richmond,

#### Price of the Unit Reduced.

As from January 25th the price of the standard four-seater Units car becomes 250 guineas instead of 275 guineas. The car is complete with electric fatter.

#### New Single-shell Body.

As a result of instant demands, the manufacturers of the well-known 8-18 h.p. Talbot-Darracq are new marketing an occasional four-coster body on this chassis. The two front seats are adjustable, and hinge, while there is ample room for a large quantity of largage, or for one adult or two caldren in the rear compartment. compartment.

#### Price Corrections.

We are asked to point on that the prices of the Baylia Thomas are as follow:—10.8 h.m. felled with Bowden saloon body, £325. January and £275. Contrary to the statement is one last issue, only one T.P. three wheeler was exhibited at the Scotial Shor, this being the de luxe model whom at £165 10s. The price of the champest T.B. is £155.

#### At the Scottish Show.

During his weekend Glasgow H.R.H the Dake of ork used an 11.9 h.p. Standard, in which he was driven to the Shos through rowded streets. His opening remark there were brief and to the point, after which he made a rapid tour of the hall.

There was a lack of seating accommo-



H.R.H. the Duke of York snapped whilst viewing the exhibits at the Show.

dation for visitors at Kelvin Hall. Lunch on the opening day was only available in the tea-room.

Some drivers from the South found difficulty in understanding the system of traffic signalling in use by the Glasgow police. In this city, for instance motor traffic must store when a traffic must store when a traffic traffic must stop when a tram is picking up or setting down passengers, whilst the parking of cars ir the main streets is a forbidden practice.

Many demonstration cars came up by

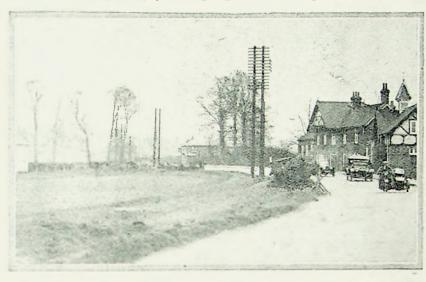
road, their drivers vicing with each other in the stories they told of the time they had taken on the journey and the manner in which they had climbed Shap Fell or Kirkstone Pass.

#### London-Glasgow.

One of the quickest runs down from London to Glasgow for the Scottish Show goes to the credit of an air-cooled A.B.C. light car, which heat a 20 h.p. six cylinder luxury model by quite a big

#### Influence of the Movies

An interesting paper will be delivered by Mr. G. E. Turner, general manager of the Cinema Publicity Service, Ltd., before the Institution of Production Engineers at the Engineers' Club, Coventry



CUTTING THE \_\_\_\_ A noteworthy improvement at Cobham, on the CORNER. \_\_\_\_ Portsmouth road. The corner is being eased off and the highway widened.

savein, and its driver was as firsh when ne finished as were those who had travelled on the most expensive enclosed big cars.

#### A Worthy Cause.

The annual party Pganized by the Essex Motor Club on behalf of crippled and mentally deficient children was held this year at Lowood Street L.C.C. School, on January 25th, when a vast army of excited youngsters enjoyed themselves to the full. Each little visitor received a present, such as a dress and undress "doll, brush and comb, etc., the funds for these and the expenses of the party having been collected by the enthusiastic lady members of the Essex Motor Club, under the able supervision of Mrs. E. J. Bass.

#### Road Improvements.

When Mickleham Corner, between Leatherhead and Dorking, was rounded off and made safe, nearly two years ago, motorists congratulated themselves, and, hko Oliver Twist, asked for more. It is encouraging, therefore, to note that due regard has been paid to this very reasonable desire, and that local councils are appreciating the full significance of the slogan "Safety first." From time to time we have illustrated such improvements; in addition the following information will prove useful and interesting:

A notable alteration has been effected at Honger Lane, leading from Ealing to Alperton. The road has been widened and the corners rounded off.

of equal importance, on the road to Brooklands, is also receiving attention. The somewhat dangerous bend at the London end of the village is being eased off and the width of the road increased where required.

A third road alteration is being carried out in Ealing Road, Brentford, to improve the "bottle-neck."

Street, W.I, to-night, Friday, at 7.30 p.m. The paper is entitled "The Moving Picture Industry," and will be illustrated by cinematograph pictures.

#### On Kirkstone.

The ascent of the Kirkstone Pass from Ambleside is very much more severe than the climb from Windermere or Patterdale, so that when a party of drivers whose cars had been reduced to bottom gear on the "Struggle" heard someone stating that his A.-C. had taken the pass on top, they were naturally somewhat sceptical. For a long while the A.-C. owner stuck to his point, but eventually it turned out that he had mistaken a very much easier gradient for the famous Kirkstone.

#### A Useful Hint.

It sometimes happens that for some reason or another a car cannot be started under its own power. The surface may be soft, the clutch fierce, or the wheels held up by a ridge. If the plugs are taken out and the low gear engaged, it is nearly always possible to wind the car out of a tight corner by a number of upward pulls on the handle.

#### Jamming Starters.

A customer was complaining at the works that his electric starter was inclined to jam, but could not reproduce the defect owing to the fact that the starter, when tested, functioned properly for 147 consecutive times. Feeling rather a fool, he then suggested that they should try some of the new cars in the showrooms, and was immediately rewarded by jams on three different cars! The matter is now being officially investigated.

#### A.-C U. Stock Trial.

It has now been finally decided that the A.C.U. stock machine test, which takes place on Wednesday, March 14th, will start at Birmingham and finish at Cheltenham, the lunch stop also being situated at the last-named town. The course to be covered, details of which have now been disclosed, includes a great variety of country, and is intended to provide a comprehensive test of the representative types of motor vehicle which will be competing. These, be it noted, will be classed not according to h.p., but price.

#### A Bohemian Concert.

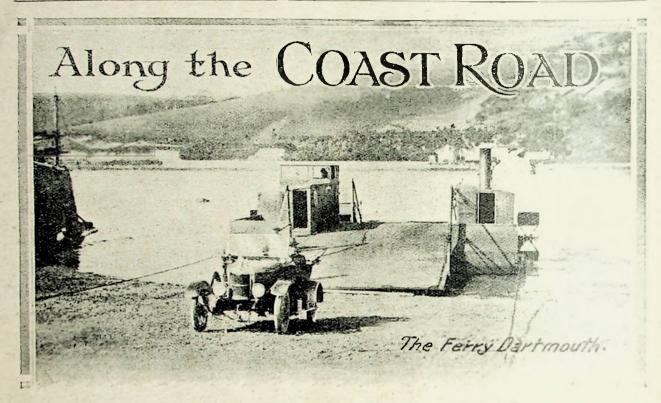
On Friday, January 26th, the Birmingham Centre of the Cycle and Motor Trades' Benevolent Fund held their 14th annual Bohemian concert at the Temperance Hall, Birmingham. Mr. Henry A. Lamplugh occupied the chair, and the secretary, Mr. A. C. Huckstepp, gave a glowing account of the assistance rendered by the fund, and appealed for further help. The hall was crowded by the large audience, amongst whom were many prominent members of the trade, and the excellent programme, which included numerous items by artistes from the local theatres, was greatly appreciated.



CLUB ENTERTAINS A happy snap of the children who attended the CHILDREN.

A happy snap of the children who attended the Essex Motor Club's annual party at Lowood Street L.C.C. School, on January 25th.

B15



#### From Kent to Cornwall on a Light Car.

OAST roads possess a charm and interest which belong to no other roadways. The charm lies in the variety—on one side the green inland ways leading into the country's heart, on the other the wide boundlessness of the blue ocean. The interest is to be sought and found in the ways of shipping and the doings of the shore which belong to an exclusive branch of life.

Any coast road following the contour of the margin of the land holds its choice pleasures for the traveller, and where the rocks meet the onslaught of the waters and creeks rob the sea line of monotony the going is specially delightful; but even the quieter regions of our south have no small reward to offer the pilgrim who pursues his journeys along the shore.

who pursues his journeys along the shore.

Travelling from the Kentish coast on the east to the shores of Cornwall in the west, the coast road presents a variety that is scarcely found elsewhere.

From the highway between Dover and Folkestone a clear day allows visions of the coast of France, and after the hilly journey about Folkestone the road falls to the level of the great marshland. An oldworld atmosphere lingers about the towns of Rye, Winchelsea, and Dymchurch.

#### The South Coast Cliffs.

Countless suggestions are to be found of the days when the generous sea lapped walls and quays now dry and silent after centuries of desertion; but the whole region is so unlike any other portion of our country that one cares to linger and make slow headway, although the level ways offer a course for speed.

At Hastings the white cliff and the inland hills are

At Hastings the white cliff and the inland hills are met again, and the road winds sluggishly across the Pevensey marshes, where narrow, awkward roads call for the exercise of caution and restraint

for the exercise of caution and restraint.

Eastbourne provides a good stiff climb, and the road that hugs the cliffs and crosses the shoulder of Beachy Head should be followed. Should the hours so suggest, a meal may be delightfully enjoyed on the green cliff tops at this point, where the car can be run on to the grass and as near the chill edge as prudence or daring dictates.

The main road is reached again at East Dean, and thus to the Cuckmere valley, with its view of the Seven Sisters—chalk headlands to the east—and Seaford. A perfect roadway links Seaford with Newhaven, mainly constructed during the early days of the war, and then the pleasant undulating run along the cliffs to Brighton.

As far as Worthing the road fully deserves the name of coast road. Westward the appellation may be challenged. The majority of tourists prefer to make their way by Arundel and Chichester, picking up the sea again at Havant; but those who revel in exploring for exploring's sake may pursue a tortuous and difficult course to Littlehampton and Bognor; while those who endeavour to keep close to the Channel may have an interesting story to tell.

#### Unrivalled Devon.

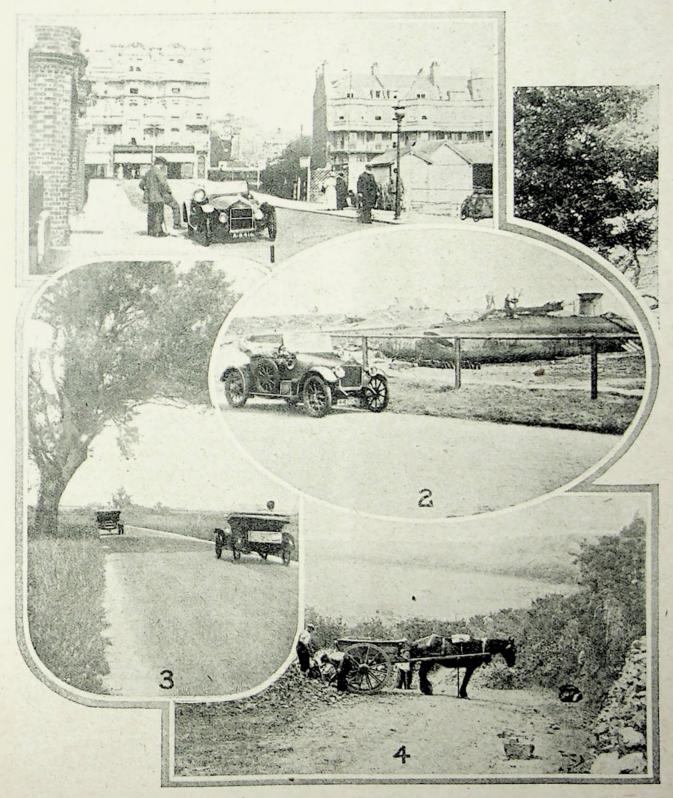
The wise course is to make a bee-line from Shoreham to Bournemouth, although there are interesting chances of touching the shore at many points between Southampton and Bournemouth.

From Bournemouth west, the Dorset coast almost defies acquaintance, save for the pedestrian, for whom it is rich in interest and pictorial beauty. The motorist, having less freedom of choice, may, nevertheless, take the Weymouth road to Portland Bill, and indulge in experiences till Bridport is reached.

The great hills lie west of Bridport is reached. Charmouth are quite memorable, but more so the rough going west of Charmouth. Here surface and narrowness add their deterrents to the stiffness of the hills. The inland road via Axminster and Honton is preferred by those who merely wish to get there; the coast road is the one for those who are out to do things.

From Exeter the easy road follows the coast to Dawlish and Torquay, and the South Devon coast is packed with glorious scenery. Much time is required if one would touch this coast line at frequent points, for the westward road holds an inland course to Plymouth; and this is even more painfully true of the Cornish coast.

#### SCENIC GEMS ON THE SOUTH COAST.



(1) The modern seaside resort of Bexhill, in Sussex. The traveller needs to journey a short distance inland to visit the old rustic village. (2) Despoiling the quiet coastal serenity of Havant. Breaking up a submarine—a relic of the war. (3) The level road across the open spaces of Pevensey Marshes. (4) Running close to the Devon coast—the new Ilsham Road, now in the course of construction.



#### A Critical Causerie of Light Car Comment.

#### A Clear Screen.

"A N apple a day keeps the windscreen O.K." is the modern rendering of an old saying, the truth of which I recently put to the test. The sliced face of an apple rubbed over a windscreen is an excellent method of maintaining a clear view in rain or light mist. Probably a Scotsman would prefer a potato, which, I am told, is equally effective.

#### On Belts.

O UITE a fillip has been given to the interest displayed in air-cooled engines by the man in the street by the introduction of a car in America which is "copper-cooled." The translation of this peculiar term boils down to the fact that this engine has copper fins amalgamated with cast-iron cylinder barrels, which thus increases their capability of getting rid of the heat. One of the most interesting features to me, however, is the fact that what is known as a sirocco blower, the duty of which is to create a forced draught through a shroud which surrounds the cylinders, is driven by a belt.

Personally, I loathe belts as a drive for any engine component, but I have sufficient respect for American manufacturers to know that they do not, in this year of 1923, place a utility car on the market which incorporates some fitting that has not been thoroughly tested out. A particular feature about this new belt drive, if may be mentioned, lies in the fact that the actual core of the belt itself is made practically non-flexible and non-extensible. It does not have to squash up on its underside or elongate on its outer face when it is going round a pulley. The elimination of this desIructive tendency has resulted, so I am informed, in a member that is blessed with true reliability and longevity.

#### A Grouse.

T is fervently to be hoped that British manufacturers who still adhere to belts as a drive for the various engine components that they have added as an afterthought will eventually find some similar type. There is one model of quite a famous make that is even now turned out as standard with the following system for conveying the necessary motion to the fan and dynamo. On the crankshaft there is a belt pulley which drives the fan, and on the fanshaft there is another pulley which drives the dynamo. The fanshaft is mounted on an eccentric, the dynamo is fixed. As a result, when the face helt stretches, one has to indulge in permutations and combinations to find out how one belt can be tightened without the other becoming loose a process which usually ends in giving the whole business up in sheer disgust.

On one of the ears against which I am now directing a venomous pen the fan hearing gave trouble. As a result, both it and the dynamo had to be cut out of action when the owner was faced with a 300-mile journey home over some quite useful ranges of hills. With the prospect of darkness assailing him before he got to his ultimate destination his feelings can better he imagined than described. In favour of the helt we are told that it is silent and that it reduces the cost of manufacture. All that may be quite true, but, personally, I would rather stand the racket of a noisy chain that did its job properly than be soothed blissfully into hidden snares by the silent running of a slipping helt

#### Slower Traffic Up North.

N Southern and Midland towns touring cars form the bulk of the traffic and proceed on their way at a fair pace. As one travels north, passing places like Preston, Kendal, Penrith, and Carlisle, the traffic slows down, and driving which would pass in such places as London or Birmingham arouses cautions from the local police of Westmorland and Cumberland. I have noted this particularly on other occasions and have warned south-countrymen.

#### Motoring Literature.

TAKING out a new car for test the other day I found the following selection of motoring literature in the door pocket and imagine that a similar library is supplied with every vehicle.

(1) Sixty-page work on lubrication, containing many useful hints and tips. (2) Makers' price list of spare parts-20 pages, price 2s. 6d. (3) Booklet on the management of the car. (4) Booklet on the management of the carburetter. (5) Booklet on the management of the electrical equipment. (6) Car instruction book (partly out of date). (7) Lubrication chart. (8) Another lubrication chart (some six years old). (9) Car folder.

RICH MINTURE (contd.).

I cannot help thinking that all this matter would be far better combined and brought up to date. The two features I wished to discover, i.e., at what pressure the oil should circulate, and the gear ratios of the car, were not included.

Teaching the Young Idea.

STOPPING at a wee roadside garage in Scotland, my car was filled up by a lad of about 10 years of age whose knowledge of motoring positively staggered me. He knew every car that had passed up the North road on the way to the Glasgow Show, and had also noted the ears which were going up by train. I have often noticed that the younger generation seem to know far more about cars than do older men. Possibly they have more time to read about them and then they develop an acute mechanical instinct. Many a boy at school knows full well how to double declutch when changing gear (in theory) long before he has ever been allowed to sit behind a steering wheel. All of which is going to assist the progress. of mechanical transport during the years to come.

A 1,500 c.c. Single-sleeve-valve Engine.

WAS recently afforded an opportunity of driving l a 1½-litre car fitted with a single sleeve-valve engine made under the Burt McCallum patents. Although this car scaled about one ton, the engine-a power curve of which is straight-dealt with its heavy load on a 4.5 to I top gear with 760 mm. by 90 mm, wheels surprisingly well, a maximum speed of between 50 and 60 m p.h. being obtained on the level. There is no noticeable sound from the engine, the silent running of which is so pronounced as to emphasize the noise made by other parts of the

chassis which would go unnoticed in the ordinary state of affairs.

Perhaps the most remarkable feature of the job is the rarity with which the removal of carbon deposit is said to be necessary. Petrol consumption, with a carburetter setting suitable for maximum power, is in the region of 35 m.p.g., which is quite good.

The engine, an experimental "tool-room" production, was fitted with aluminium pistons, and allowed a 5 to 1 compression ratio. No attempt was made to hot it up specially, nor was the valve timing abnormal in any way. Plans are being made to market it as a proprietary unit by its makers, Wallaco (Glasgow), Ltd., Cardonald, Glasgow

Doggerel.

When I peruse the records of the motoring dog's sagacity, I feel the angler's yearning to exaggerate the fish
He didn't catch. So, if you'll overlook my pen's mendacity,
I'd like to give expression to temptation's half-formed wish,
And tell the tale of Fido. He's a marvel and a sport.
He'll chase a roadside rabbit, but he wouldn't hurt a fowl.

He will hear a harrel-organ out of tune without a snort, But if he hears an engine pink, he'll sit on end and howl.

He's got an ear for music, and he's also got a caudal Appendage differential that differentiates.

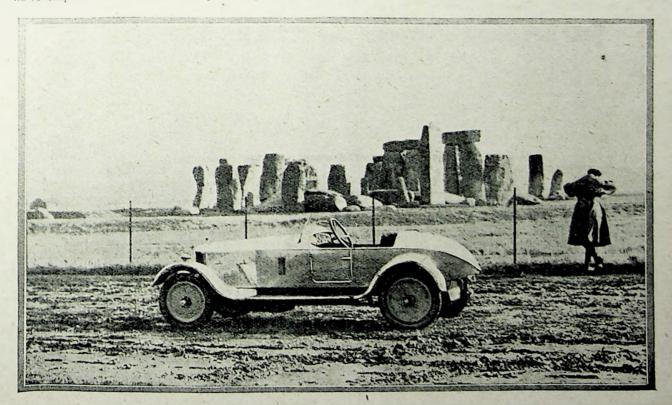
n hearing cars the same make as my own, he doesn't dawdle, But wildly wags his narrative; while, if they're not, he waits.

If I'm tardy in acknowledging an A.A. man's salute,
A quiet nudge from Fido with his fore feet gives me pause.
At retrieving nuts from undershields, his talent is acute.

Or gudgeon pins gone West, or bits of fluff from feed-pipe

He's got a turnspit's instincts, and can therefore judge rota-

tion
To a nicety in engines of eleven-point-nine twelves.
For universal joints he shows both taste and mastication:
If you doubt these Fido stories, tell some taller ones yourS.S.



A direct contrast between the old and the new is provided by the heavy time-worn pillars at Stonehenge and the modern light sports car. Visitors to Simms Hill pass close to this famous locality. ANCIENT AND MODERN.

FEBRUARY 2, 1925

A Venue Worth Visiting.

# . IN AND AROUND . GREAT YARMOUTH.

FOR some reason, which is not altogether obvious, the East Coast of England is not patronized to a great extent by motorists, chiefly, it may be supposed, because the roads from the Midlands and Southern districts are uninteresting, compared with such picturesque routes as those leading north, west

and south.

It must be admitted, however, that for the motorist there are many interesting eastern venues, and of these Great Yarmouth is probably one of the oldest and quaintest. It is not generally known that the Isle of Wight also boasts of a Yarmouth, but Great Yarmouth in England is distinguished from the first-named town by the prefix which was added to the name in pursuance of a charter granted by Henry III.

Many of the quainter parts of Great Yarmouth have to be applied to the foot

Many of the quainter parts of Great Yarmouth have to be explored on foot, for the older streets are too narrow to be negotiated by ears. The "Rows," however, as they are known—145 in number—although by no means beautiful, represent ancient history, and are well worthy of a visit. As distinguished from the new Great Yarmouth, the older part of the town was walled and fortified, and relies of these fortifications including

relies of these fortifications including several rambling old towers, still remain. Of historic and general interest is the Star Hotel, formerly the residence of one of the Elizabethan merchant adventurers, which has associations with Nelson. It is situated on Hall Quay, near the modern Town Hall.

The parish church of St. Nicholas is considered in certain quarters to be the largest parish church in England, and, although of unpretentious appearance, stands in a big extent of ground.

Characteristic of the eighteenth century is St. George's Church in red brick, whilst the thirteenth



century toll-house in Gaol Street, built of flint and stone, with an old-fashioned external staircase—an edifice originally used in the capacity of Town Hall, Courts of Justice, and prison—is worthy of the visitor's attention.

Within easy reach of Great Yarmouth is Caistera little fishing village—the main point of interest being the ruins of Caister Castle. The original fortress was built by Sir John Falstaff.

fortress was built by Sir John Falstaff.

Great Yarmouth is situated 126 miles from London,
18} from Bungay, 223 from Norwich, and 10} from
Lowestoft.

A Hint Worth Knowing.

#### A HOME-MADE LEAF SPRING LUBRICATOR.

TO maintain the suppleness of spring suspension, it is imperative that lubrication should be introduced between the leaves in order to

duced between the leaves in order to facilitate the sliding action which takes place between the various surfaces in contact. The ideal method, of course, is to fit spring gaiters, which can be packed with grease, but they have one small disadvantage, inasmuch as the springs cannot be inspected, with the object of making sure that they are sound.

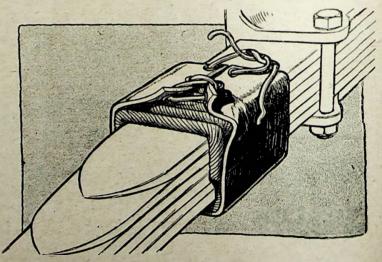
ing sure that they are sound.

The owner-driver can make quite an effective leaf spring lubricator in the following manner:—About 5 ft. of hemp or other absorbent rope is first of all wrapped round the spring two-thirds of the way up, measured from the axle end. This can be loosely secured in position, as it may be necessary to remove it later on. The hemp may be thoroughly soaked in oil in the first instance, or oil may be added afterwards.

A suitable covering must now be constructed, and this can be made from fairly stout American cloth, into which have been let suitable eyelets, so that it can be laced in position.

The hemp having been thoroughly

lubricated, the gaiter is slipped over and tied up, when the oil will find its way in between the leaves.



The home-made gaiter in position, showing the hemp wound round the spring within



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Telephone-Clerkenwell 6001 (seven lines). Telegrams-" Pressimus Holb., London."

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EDITORIAL Communications should be addressed to The Editor, "The Light Cur and Cyclecar," 7, 9, 11, 13 and 15, Rosebery Avenue, London, E.C. 1. Letters relating to ADVERTISEMENT and PUBLISHING Departments should be addressed to The Manager

Anvertisement Cory, Blocks, &c., should come to hand by Tuesday morning to ensure careful attention and allow time to submit proofs, except when an earlier time is specified.

Subscriptions.

"The Light Car and Cyclecar" will be mailed regularly at the following rates:—

	12 ms.	6 ms.	3 ms.
United Kingdom	21s. 6d.	IOs. 9d.	5s. 6d.
Canada	21s. 6d.	10s. 9d.	5s. 6d.
E'sewhere	24s. Od.	12s. Od.	Gs. Od.

Single copies 4d., post free 5d. Subscriptions should be addressed to the Manager.

The

#### LIGHT CAR & CYCLECAR

was founded in 1912 to cater for the needs of users and potential purchasers of various new types of cyclecars and light cars, and it has consistently encouraged the development of this new motoring movement for over ten years

The journal is published every Friday. There should be no difficulty in obtaining a copy at any hookstall or newsagent, as arrangements have been made to ensure a regular supply. Should any difficulty be experienced, we should he greatly obliged to receive the name and address of the reader's newsagent.

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# Topics of the Day

The Taxation Inquiry.

HE public inquiry into the question of taxation, which was opened at the Middlesex Guildhall, Westminster, a week ago, clearly shows that in the British automobile industry there are several distinctly conflicting interests. The discussions have

been marked by a liveliness that has at times threatened to overstep the bounds which are Clear View. usually accepted by those who sit on a committee

that has as its aim and object the amelioration of conditions for the common good. From the welter of words one fact has been clearly brought to light, which is that a form of taxation that is acceptable to commercial-vehicle users is not necessarily the one that would meet with greatest popularity if

it were applied to privately owned automobiles.

It has been urged that the present system of taxation has a restricting influence on design, the opinion being held in some quarters that the present high-speed engine is not so good a proposition commercially as would be a larger engine which ran at a slower speed. We cannot say that we ourselves are in entire agreement with this statement, for the economy car of to-day is fitted with what is admittedly a comparatively highspeed engine by reason of the fact that a small engine (and by this we mean a unit that is small in volumetric capacity) must turn over at a high rate of revolutions if it is to give off sufficient power to make its power-weight ratio economically successful on the road to-day, and a glance through a list of bore-stroke ratios favoured by modern designers of small cars does not show any great tendency towards a big reduction in the bore and a disproportionate increase in the stroke.

Is the Fuel Tax Impracticable?

HERE is no getting away from the fact that the present system on which private automobiles are taxed is iniquitous by reason of the fact that it is not proportionate to the amount of damage which each car does to the road. Payment of a fixed sum for an arbitrary period of ownership is not

Make Taxation fair. The modern small car is not a luxury; it is a

necessity, and should be taxed as such.

It yet remains to be proved that a tax on fuel is quite impracticable, and it is doubtful whether the administration of such a tax would be more expensive to the nation than is the present highly complicated system. In any event, we await the ultimate issue of the taxation inquiry with the liveliest interest. That its effect will in the end be beneficial there is little doubt.

Sportsmanship and the Automobile.

HERE is perhaps no industry in which the human factor is so prominent as is the case where automobilism is concerned. Recently, at a dinner given in honour of a well-known racing driver who had accomplished a very remarkable feat, a manu-

facturer of British light cars paid a striking tribute Considering the to the human element in automobilism, and quite Human Factor, rightly pointed out that the energies of the various

departments responsible for the production of a racing car all ultimately are directed towards and dependent upon the skill of the man who sat at the wheel and controlled the movement of the finished product of their brains. It is only perhaps during the past two or three years that those whose duty it is to organize factories in this country have fully realized what an enormous bearing the social conditions of their employees have on the quality of the finished product. The days when men were regarded as merely machines are past. To-day the individual labourer is certainly a unit in a huge organization, but at the same time he retains his personality and is able to reap the reward of genuine effort.

#### THE RALLY AT SIMMS HILL.

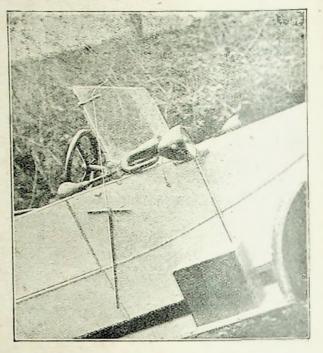
Great Enthusiasm - Highly Interesting Event Promised for February 10th.

THE suggestion, published last week, for holding a Light Car and Cyclecar Rally for the purpose of attacking the gradient of Simms Hill, in Devonshire, on Saturday, February 10th, has met with a whole heartedly enthusiastic response. Already a large number of enthusiasts have notified us of their intention to be present on what promises to be a famous occasion, and we are able to announce that practically all the well-known makes of light cars will be represented. It is probable that a Citroen-Kegresse caterpillar car (similar to those which re-cently crossed the Sahara Desert) will give a demonstration, which, naturally, adds still greater interest to the undertaking.

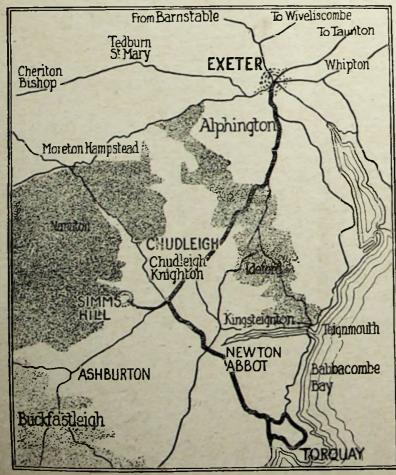
We have made arrangements with the proprietor of the Clifford Arms Hotel, at Chudleigh, which is only a few miles distant from Simms Hill, for accommodation to be reserved for those who make up The Light Car and Cyclecar party. By mentioning the name of this journal, accommodation will be assured for participants in the Rally, spectators, and their cars. As an alternative, similar accommodation can be obtained at the Palace Hotel, Torquay, by

those who prefer it.

The routes from Chudleigh and Torquay to the hill will be arrowed by the morning of Saturday, February 10th, and it is lucky that, whether the weather be wet or dry, the surface of Simms Hill will be in



A good idea of the gradient of Simms is provided by comparing the vertical jack handle with the running board of this Stoneleigh, snapped on the hill.



How to get to the hill on February 10th. The climbing contest starts at 10.30 a.m. Accommodation can be obtained in Chudleigh or Torquay.

a climbable condition for those cars which are equipped with Parsons chains, for the road has a good foundation, which is not greatly affected by water. Among other cars which will be at the hill we may mention the Standard, Lagonda, G.N., Rhode, A.C., Bayliss Thomas, Stoneleigh, Alvis, A.B.C., and 7.5 h.p. Citroen.

The programme, fuller details of which will be announced next week, is On the evening of Friday, as follows. as follows. On the evening of Friday, February 9th, the parties who are coming from the Midlands and from London will meet at the Clifford Arms Hotel, Chudleigh, and the Palace Hotel, Torquay. Those who are unable to leave London before Friday evening should endeavour to be at the Bridge House Hotel, Staines, at 8 o'clock, a start at 8.30, as about half-a-dozen participants have already expressed their intention of making this their starting point and time for the journey to the West. It will be possible to obtain dinner before starting, but in this ease the Bridge House Hotel should this case the Bridge House Hotel should be reached by about 7 o'clock.

The Simms versus light car contest is timed to commence at about 10.30 a.m. on the Saturday morning. The road leading out of Ilsington to Simms Hill is narrow, and care must be taken that there is no congestion on this road. We, therefore, venture to request all those motorists who do not intend to climb the hill on their own cars to take particular care that they do not obstruct in this narrow roadway. The local inhabitants show a thoroughly sporting disposition towards motorists, but here, again, we venture to remind all those who come down to the hill that it is of greatest importance for no annoyance to be caused to those who live in the

#### SIMMS HILL (contd.).

vicinity. The map published herewith shows the locality of Snows Hill.

As regards lunch on the Saturday, this can be supplied at the Clifford Arms Hotel, and if the day be fine we have no doubt that there will be numerous pienic parties on the slopes of the gradient.

#### Supplies Available.

So great has been the response to the suggestion of holding this Rally, that Shell-Mex. Ltd., have kindly offered to take down a petrol-filling installation, so that there will be both fuel and oil available

on the spot.

There is, of course, no rule against practising on the hill beforehand, and in order to add to the interest of the event, we are making arrangements for the gear ratios of those cars which are successful to be measured, so that useful data will be afforded. We would emphasize the fact that an insufficient head of petrol seems to be the greatest deterrent to climbing this gradient, which hint may enable intending participants to effect detail alterations to their cars that will ensure success.

#### A Real Gradient.

As we announced previously, cars which have easily climbed both Alms Hill and Alt-y-Bady have met their match on the gradient of Simms Hill. Whether it is the steepest hill in England is, perhaps, questionable, but there is no doubt that it is one of the hardest gradients to conquer that it is one of the hardest gradients to conquer that has ever been discovered. The sharp, right-angle turn at the foot puts a premium on skilful driving, and the long, steep rise for the next 150 yards demands a sturdy engine. In order that honour may be given where it is due, the cars ascending the hill will be timed by stopwatch, and the results, if interesting, will be published. It will undoubtedly be most instructive to see

lished. It will undoubtedly be most instructive to see which car achieves the honour of being fastest on tho hill and which can carry the biggest load of people.

#### A NEW NON-LEAK POPPET VALVE.

#### The Valve and Guide which So Considerably Contributed Towards the Success of the Record-breaking A.-C.

T is now apparent that one at least of the secrets of the success of the A.-C. which put up such a remarkably good show at Brooklands was the design of its valve guides, which converted an engine that gave persistent trouble from compression leaks to one which closely approaches perfection in the way in which it retained its gases.

The 16 valves with which the engine was fitted,

notwithstanding every possible attention and care, invariably leaked to such an extent that the compression would not hold for

more than a few consecutive laps at speed. The difficulty was overcome by Mr. Sidney Smith, who designed a valve guide which, although simple enough in itself, nevertheless practically inaugurates a new principle in valve control, inasmuch as the valve is located by its head, instead of

its stem

Most valve leakages are due, as regards their origin at least, to non-alignment of valve seat and guide, which non-alignment is usually due to inequalities of expansion in the body of the cylinder block. The condition thus set up is aggravated by the passage of burning gases through the space for leakage between the working faces of the valve and its seat. In the Sidney Smith design, as may be appreciated by brief study of the accompanying illustration, the valve guide is free to wander, and is not restrained by the hole in the cylinder casting into which it fits. This means that a considerable degree of sale ligarous than is at all likely to

degree of mal-alignment, more than is at all likely to occur, is permissible without the risk of the valve being disturbed from its proper scating.

The valve retains compression under all reasonable conditions of mal-alignment, brought about by any cause, including the prevalent one of uneven expansion. Having done so, it prevents erosion of the valve seat, and thus postpones indefinitely the need for valve grinding. It appears, however, that with a little attention to detail in the design and machining of the valves and seats it is even possible to do with-

or the valves and seats it is even possible to do with-out grinding the valves in at all.

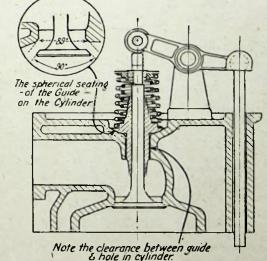
To this end the seats are finished off in the machine with a milling cutter which has very fine teeth: this puts a smooth surface on the seat, free from "chatter" marks, whilst, in addition, the faces of the seat are cut with an included angle between

them of 89 degrees, while those of the valve are at 90 degrees. This ensures that the valve, on first making contact, seats on the outer edge only. Soon after it is working, however, the contact spreads over the whole of the seat, where, owing to the freedom of action which is afforded the valve by the new seat type of guide, it remains.

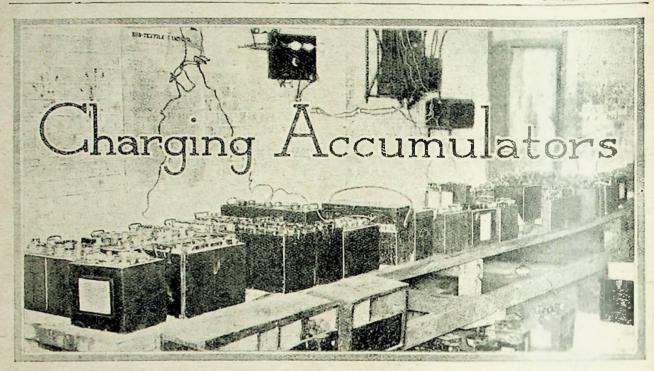
Considerable controversy has been raised among the savants by the introduction of this type of valve. In the above description of the device we have treated the design on its apparent merits, and thero is no doubt that it did definitely improve the racing A.-C. engine. Whether it is better for an engine to be designed so that valve seat warpage does not tend to take place or to fit a type of valve

that does not worry much whether its surrounding parts have warped or not, of course, is open to discussion. In any event, the Smith valve is a very elever device, and beyond proving itself successful on the track in an engine which turned over at 4.250 r.p.m. average speed for over an hour, it has functioned perfectly satisfactorily on the road. At first thought it is difficult to understand clearly

exactly why the valve should find a proper seating on every stroke, but the fact remains that it does so and thus serves its purpor



Showing the spherical seating for the floating valve guide and the principle as applied to a push-rod, overhead-valve engine.



#### Boiling and Frothing Simply Explained-A Very Informative Article.

HEN an accumulator is placed on charge, the electro-motive force, or e.m.f., rises rapidly from 1.8 volts to a value in the neighbour-hood of 2.2, and afterwards more slowly to 2.3 volts, at which stage the charge may be said to be practically complete. If charging he continued beyond this stage, however, a further rapid rise in the pressure to about 2.6 volts will take place, hydrogen being freely evolved during the process, and the electrolyte having the appearance of boiling.

This is due to the fact that, as the charge progresses, the surface of the positive plate becomes gradually converted into lead peroxide (PbO<sub>2</sub>), and hence the material for the current to act upon becomes less and less.

The plates to all intents and purposes decrease in size, and if the current remain the same throughout the charging operation, its value during the latter stages of the charge will be too great for the area of the plates remaining.

The water in the electrolyte is therefore decomposed, hydrogen and oxygen being liberated at the negative and positive plates respectively. When this condition has been attained, the cell is said to be "gassing," and the production of the bubbles may be taken as evidence of the fact that the charge is complete.

#### How to Avoid Trouble.

Gassing may be avoided by decreasing the value of the current as the charge progresses, in order that the remaining active area of the plates may never be too small for the current to act upon. The charge may also be considerably increased by adopting this procedure, but in practice, owing to the time and trouble involved, it would never pay to vary the current in this manner.

Boiling does no harm unless the paste on the plates is loose, in which case the agitation of the liquid may serve to remove considerable quantities of the material. Frequent and prolonged overcharging at much reduced rates is, in fact, the only way to effect a cure in the case of sulphated plates, the mild bubbling or gassing doing no harm in any way.

From what has been said, it will be obvious that

the charging current should not be too great for the area of plates involved, and it is a good rule never to exceed a charging current of a greater value than one-tenth of the stated capacity of the cell in ampere hours.

A 40-ampere hour accumulator would thus require a charging current of 4 amperes. If the capacity of the cell be not given, two-thirds of the maximum current as stated by the makers should be taken, or from 4 to 8 amperes may be allowed per square foot of positive plate, reckoning both sides of all the positives contained in the cell.

Too large a charging current, in addition to causing boiling or 'gassing,' frequently results in



Accumulator plates can be buckled by too large a charging current, but are more commonly damaged by over discharge.

buckling of the plates, and when this occurs, the rapid evolution of the gas tends to work the paste

right out of the plates.

When a cell is first placed in commission the surface of the positive becomes coated with small bubbles after the current has been flowing for a few minutes. The bubbles collect in clusters, and are then lifted through the liquid until they reach the surface, where they break and discharge their gas.

A kind of foam appears to be formed, and this lies in streaks above and along the tops of the plates. Then after some twelve hours a chocolate film begins to appear on the positive plate, until after some thirty hours the film becomes fairly dense.

If the charging current be excessive, the acid, it

#### CHARGING ACCUMULATORS (contd.).

will be noted, will become cloudy or milky, the cell being said to boil, and the completion of the charge attained.

When frothing, as distinct from boiling, takes place, a kind of scum appears on the surface of the liquid, and emerges from the gas release valve on top of the accumulator box. This scum is usually of a lightish brown colour, and leads many people to make an investigation of the acid and water used

for refilling purposes.

Frothing may take place at any period of the charge, and is not necessarily confined to the completion of the latter, as is the case with the more usual "gassing" or "boiling." Some makers have stated that impurities have been present in the electrolyte, and even if this be not the true cause, too much care cannot be taken to avoid the presence of any foreign element in the mixture of sulphuric acid and water in which the plates are immersed.

#### Care is Needed.

The purest acid and distilled water only should be used, and always stored in clean non-metallic vessels. Rain water and boiler water contain impurities, and should never be employed for re-filling, or what is usually known as the "topping up"

It is probable, however, that in the main, frothing is due to the use of wooden separators between the plates. The two sets of plates positive and negative are packed as closely together as possible, and, to avoid their coming into contact with each other, separators are used. The separators are usually treated by a special process in order to eliminate all traces of wood acids, which would be injurious. The acid eliminating processes are secret, and

during a period the nature of the wood is changed

to some extent, and in all probability it is due to this change, or to the treatment which the wood has been subjected, that frothing on charge is to be ascribed.

Providing then that the charging rate is not excessive, and that the electrolyte and water used are pure, frothing may be put down to the cause instanced above. The action is a harmless one, although somewhat objectionable, and care should be taken after charging wipe up all the spilled solution with waste wet with am-monia water. When carrying cut these operations it is always advisable to wear some



Should the acid be too strong it will in time eat away the plates, rendering them beyond repair.

kind of overall. Should any acid be spilt on the clothes the spot should be immediately sponged with strong undiluted ammonia.

#### THE NEW ROADS.

#### Will Wider Corners Mean More Accidents? The Skid Danger.

IT has been suggested that the large-radius corners that are a feature of the new roads should be adopted generally. Excellent as they are, they are not without some disadvantages.

One of the main ideas of the increased radius at the corners is to facilitate the movement of our growing traffic. We do this by minimizing congestion caused by unduly slowing down the traffic at cross-roads and turnings. The speed on the corners is faster, but are we going to be faced with that heartstopping businessthe skid on smooth, tarred surfaces immediately they are wetted? Every railway engineer knows that a large-radius curve has far less derailments than a curve of small radius, but, when of the latter as regards damage—it is a question of speed and braking conditions. Moreover, easy-curves are highly deceptive.

#### Worse Braking Conditions.

Taking the braking conditions first. A cyclist approached a main road by a well-used cross-road having a macadam surface, the main road being tarred. A heavy mist had wetted the tarred surface, but the macadam looked dry. Seeing a car about to cross his track, he applied his brakes. All went well until his wheels touched the main-road tar, then they locked and skidded forward, remaining upright until the car knocked the front wheel away.

About easy curves, most experienced motorists have at some time felt their deception. Not many miles from Blackheath (S.E.) there is a comfortable road having an easy bend which could be taken by many drivers at from 30 m.p.h. to 40 m.p.h., but on a damp drivers at from 30 in n.n. to 40 m.p.h., but on a damp morning a third of that speed, would put many cars hard against the kerb. We have known a bus to hit both sides of the road and finish down a bank; a car to hit the brick wall on the opposite side; and another to lose both its near-side wheels. It was 2

tarred surface, and the man with the sand was miss-The above happened in rather more than twelve months, and they are the observations of a passer-by.

Braking is seldom more used at any one point more than on corners, and to be called upon to brake at all whilst turning on a smooth, wet surface may cause the driver to stop much longer than he had intended.

As an example of what may be expected, we have occasion to use a road that will give a cyclist 20 to 30 miles per hour on the down grade. Half-way down the hill is a by-road at right angles, and at the bottom a highly polished main road. To relieve this main road a new road has been cut through, more or less parallel, and crosses the hill at the junction with the hypoged. the by-road. All corners have a large radius of very useful dimensions, and any ordinary cyclist can leave the hill for the old by-road without slackening speed. The surfaces are mainly of gravel, but the new main road is going to be tarred. If it polishes like the old main road, Heaven help those who have to pull up for the main road traffic "when mists have fallen" or when we have had "just a little"—rain.

#### Higher Speeds - More Trouble.

We do not expect to see piles of wreckage at every such corner—the extra radius will save accidents but if you make it possible to get round a corner

safely at 30 miles per hour instead of six, such accidents as do occur will be at higher speeds.

It is safe to say that there will be few of those who are "for ever on the read" amongst the casualties; the more time a man is on the road the farther he sees ahead, and he does things right because he has "served his time"; best of all, he does them intuitively; his "chance" comes when somebody else skids into him. It is far better to face the joh now; it requires only certain modifications in treatment, and to be really effective the occasional sanding is too costly and "too" casual for safety. B25

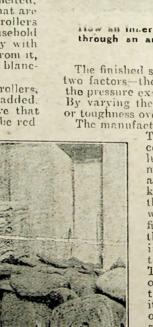
Artistry in Tyre Making

Processes of Absorbing Interest-How Durability is Obtained.

tyres are manufactured cannot fail to be of the greatest interest. Such was the impression we formed during a recent visit to the works of the North British Rubber Co., l.td., Castle Mills, Edinburgh. The immensity of the establishment is truly impressive. There are miles and miles of buildings wherein one can easily become lost. Not all of these are devoted to the manufacture of tyres, for the uses to which rubber can be put are exceptionally numerous. Nevertheless, the extent of the buildings in which the well-known Clincher tyres are made comparts of this country, and the thoroughness of the methods employed and the care that is exercised in the making of these tyres are quickly apparent.

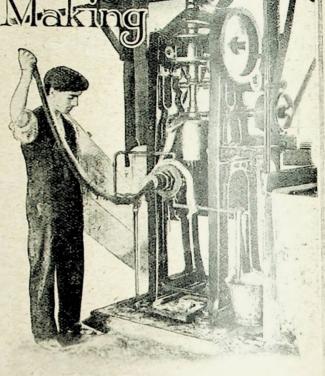
The raw rubber as it arrives at the factory is a most curious material to look at. There are two kinds: one comes in hard black cores rather resembling a tree trunk that has been cut in sections, while the other rubber is in sheets. There seems to be a conception abroad that during the manufacturing processes rubber is in some way heated or melted, as it were. In actual fact it is run between what are best described as gargantuan mangles, where rollers knead it and squash it as though it were household dough, and all the time it is sprayed fiercely with warm water, which washes all the impurities from it, until it finally emerges as very flexible, rather blanchings-like sheets.

These sheets again are rolled between warm rollers, and the materials which colour the rubber are added. In this connection it is interesting to observe that there is no reason why an inner tube should be red.



RAW
RUBBER.
As it arrives at the factory. The raw material for tyres and tubes is very different from the finished product.

It is merely custom that has formulated this habit on the part of manufacturers, and, in point of fact, practically the same kind of rubber is used for an inner tube as that which is used for the tread of a cover, except that the two kinds are put through entirely different forms of treatment.



through an annular orifice so that it forms a long rubber pipe.

The finished state of any rubber article depends on two factors—the heart to which it is ecoked " and the pressure exercised during the volcanizing process. By varying these two almost any degree of pliability or toughness over a very wide range can be obtained. The manufacture of inner tubes is most interesting.

There is a machine rather like a huse coffee-grinder, and in it are placed lumps of red rubber. Inside archimedean rollers revolve in mesh, and after thoroughly pulverizing and kneading the rubber, force it out through an annular orifice, the size of which corresponds to the size of the finished inner tube. The result is that the rubber is extruded from this orifice in the form of a pipe, which is allowed to grow until it is about 20 ft. long. This soft rubber pipe is then threated on to a long steel bar and subjected to the first heat treatment, after which it is cut into proper lengths, the ends of which are joined up, a valve is inserted, the final process is carried through, and there we have the complete inner tube.

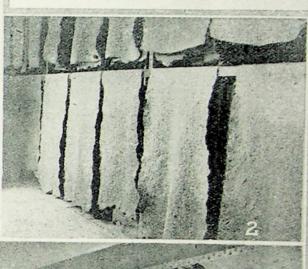
Covers, of course, are made in a different way. Layers of rubber-impregnated cord are superimposed on a former, each layer being very carefully moulded into position, the direction of the cord in each subsequent layer

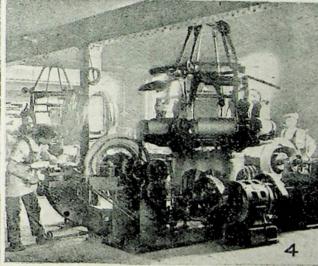
the cord in each subsequent layer varying so that maximum flexibility and long life may be obtained. This forms the foundation of the tyre. The tread is made separate, and then the two are combined and are vulcanized together with the rubber side pieces, which form what are commonly known as the walls, which completes the operation.

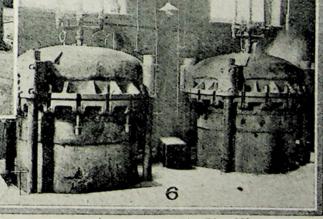
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#### TYRE MAKING.

Modern Methods Ensure Durability ard Resilience.

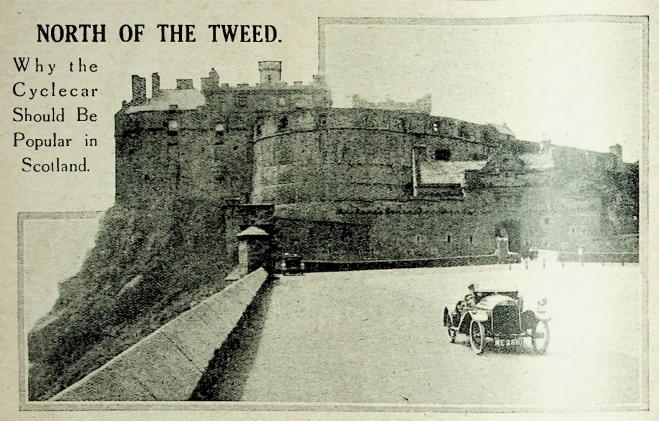






The evolution of the tyre from the raw rubber to its finished state is a most interesting process, the many points of which are pictorially portrayed above. Illustration (1) shows the mills, where the raw material is rolled and washed to clean it of all impurities, and illustration (2) shows the resultant sheets hung up to the process of the sheet of the

illustration (2) shows the resultant sheets hung up to dry in a heated ever-changing atmosphere. The machine in illustration (3) impregnates cord fabric with rubber and the actual moulding of the tyre foundation is shown in (4). Applying the "bead" to clinch inside the rim is the process shown in (5), while the hunge vulcanizing stoves which "cure" the finished covers and combine the tread with the foundation are shown in illustration (6). The whole of the equipment at the North British Rubber Company's Works, Castle Mills, Edinburgh, is laid out to expedite the production of high-class tyres at as low a cost as is possible. The tyres shown in the manufacturing process in the above pictures are of the new Clincher Cord type which has lately been instituted to replace the fabric patterns, and on test these new Clincher tyres have met with great success,



NOBLE An A.V. with historic Edinburgh Castle in the background. The cast'e has been chosen SETTING. as the site for the Scottish National War Memorial.

THE motorist who visits Scotland cannot fail to notice, sooner or later, the comparative rareness of the cyclecar in the Land o' Cakes. He may travel for days in the country districts, by which is meant away from the half-dozen big towns and cities, and not see one. Then a "wee yin" will appear and its very suddenness and strangeness will remind him that it must be the first he has seen.

This is a peculiar fact, especially when it is considered that there are two or three very strong reasons why the cyclecar should be popular in Scotland. One is, of course, the housing system, which is all against the spread of motor cycling, especially

#### A Land of Flat-dwellers.

In all the towns and in many of the smallest villages the vast majority of the dwellings are arranged in flats. The very class of people who in England stick to the two-wheeler or sidecar outfit, because generally they can keep it in their "backyard," have in Scotland no backyard of their own. If they go in for a passenger vehicle, they must garage or store it off their own premises. As the evolver costs not much more than a hig sidear to

cyclecar costs not much more than a big sidecar to buy and run, very little (if any) more to garage, and has undoubted advantages over its "unmechanical" rival—such as comfort and weatherproofness, particularly marked under the appalling skies up north-it eight to be in a very strong position in Scotland.

Again, there are proportionately more people of the class which patronize it than there are of those who can run to a more expensive vehicle. In spite of the nation's drink bill as adduced by Pussyfoot, the record of police-court cases in the big centres of industry, and the apparent stand for Socialism made by these centres recently the savings bank reports by these centres recently, the savings bank reports show that a large proportion of the industrial classes have extraordinary amounts to their credit

Here, then, are some broad reasons, which could

be elaborated in great detail, why the eyelecar should have won its place. The fact is that it has not; but there seems to be no serious reason why it should not yet do so.

What Scotland is still looking for in the cycletar can really be summed up in two words appearance

and strength. That, for Scottish roads, exceptional strength is absolutely essential in the chassis as a whole and in every detail of it goes without saying. The strange every detail of it goes without saying. thing is that the one or two makers who have gone to the trouble and expense of proving in Scottish trials that their products can stand up to the local conditions have still failed to book the orders which they deserve from north of the Border. That is why the question of appearance is stressed.

The Scot will not invest in anything that savours of freakishness: this is partly because of his innate pride. He shrinks from being seen in a vehicle of his own that is out of the ordinary. From this follows the second reason; he realizes that those around him are of similar mind, and that he will not get a sale for anything that is out of the ordinary. That is not a characteristic to cause smiles; it is simply evidence of that quality which has gained for the Scot his world-wide reputation for level-headed-

Strength and Appearance. It is a remarkable fact that there is only one cycleear which can boast any serious figures of sale in Scotland—i.e., anything proportionately approaching its sale in England; and its rise to popularity definitely synchronized with its adoption of light car lines, e.g., a really good-looking imitation radiator and a reasonably deep and comfortable body with tapering beetle-back.

So it will bear repetition that the cyclecur which is to sell in Scotland will have to possess both strength and appearance. And the more important of these - we make bold to say-is appearance.

#### NORTH OF THE TWEED (contd.).

The strength will need proving. No maker need attempt to sell three cars amongst the most cautious people on earth until he has done that much; but he should not go to the expense of proving the strength until he is satisfied that he can provide the appearance also. The last-named consideration is one that seems to be frequently overlooked.

As many a maker, most agents, and all Scotsmen know, a vehicle may be sound to the core, and excellent value, yet not reach that elusive height where it becomes a "selling proposition."

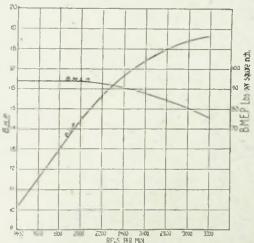
There is plenty of scope for the cyclear in Scotland, but it will have to be a veritable Peter Pan of roadsters—one that has the charm of a "selling proposition" all over it and will never lose that charm with years.

L.M.W.

#### MODERN PRACTICE IN AIR-COOLING.

#### The Hotchkiss One-litre O.H.V. Straight Twin.

PROVIDING that an air-cooled horizontally opposed twin-cylinder engine can be manufactured more cheaply than a small water-cooled "four," the more simple unit will always fill a useful gap in the cyclecar and light car world.



Indicating diagram showing the power curve of the new o.h.v. horizontally opposed Hotchkiss engine.

One of the most up-to-date designs of this type that we have seen is the o.h.v. Hotehkiss which has recently passed out of the experimental stage both on the bench and road. The general composition of the unit consists of a one-

the bench and road. The general composition of the unit consists of a onepiece aluminium erankcase and oil sump, to which are attached singlepiece cylinders fitted with inclined tulip-shaped overhead valves, operated by hollow enclosed push rods. The camshaft is located above the crankshaft, its forward end driving the magneto. As roller bearings are employed for the big-ends, and rollers and balls for the mainshaft, the oil pump serves merely to supply the pistons and cylinders with lubricant, all oilways being contained within the crankcase casting, and thus obviating the use and expense of piping.

of piping.

The bore and stroke of the cylinders are 85 nm. and 88 mm., giving a capacity of 998 e.e., from which a maximum of 19 h.p. has been obtained. Particular attention should be paid to the even distribution of the metal in the cylinder casting and to the comparatively thick

finning. Adequate air spaces are provided between the fins separating the inclined valve chambers, the ports of which are of large diameter.

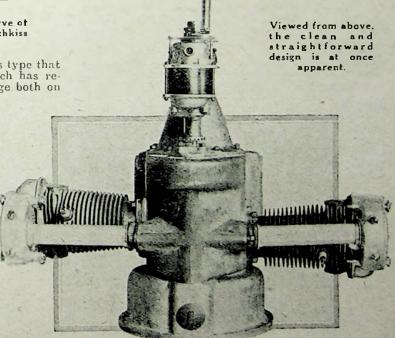
The cylinder is a very simple production job, as there are no loose parts on the pattern and a one-piece core can be used. The stainless steel valves are designed with tulip-shaped heads and operated

by slightly geared-up rockers, thus enabling a lower cam action to be used.

The rockers are enclosed in aluminium covers, whilst each pair of tubular push rods, the top ends of which carry the necessary adjustment, are contained in oval covers, the top and bottom joints of which are made good by floating Dermatine rings. The tappets are disposed in line opposite to each other, being driven by two cams only, and each pair being located in a one-piece tappet guide, an arrangement which enables a plain bore to be made straight through the crankcase, and again secured rapid production. The front end of the camshaft carries the timing gears and drives the magneto through the medium of a vernier coupling, the fitting of an impulse starter being allowed for should this be required.

The front and back of the crankcase are sealed by

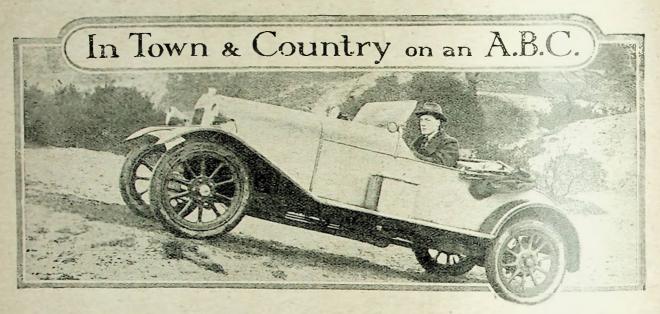
The front and back of the crankease are sealed by cover plates, the former incorporating the starter-handle housing, and making it possible to assemble the crankshaft and connecting rods in one piece. A wet sump is provided, an oscillating plunger-type oil pump driven from an eccentric on the front end of the camshaft supplying the engine with lubricant. The rear housing is designed either to incorporate a clutch pit and unit-type of gearbox, or for fitting



up with a separate gearbox unit. The following figures are of general interest:—
Weight complete with 40-lb. flywheel 210 lb.

Width ... ... ... ... 2 ft. 8½ ins. Length from front cover to rear face of flywheel ... ... ... 1 ft. 10 ins. The makers' address is Hotchkiss et Cie.

**B**29



#### An Air-cooled Car of Considerable Merit-Taking Single-figure Gradients at Speed.

HERE are still hundreds of prospective owner-drivers who look upon air-cooled engines as being more in the light of means tending towards cheap production than as a really practicable alternative to the heavier water-cooled unit. In fairness to the sceptical it must be said that their impressions are born through lack of experience with air-cooled cars, as the proof of the pudding, etc., applies with some emphasis in this particular phase of automobile practice.

unknown country without the existence of anxiety as to one's ability to "get there."

Peculiarly enough one treats the A.B.C. as one would a water-cooled car—that is to say, the last thought in one's mind is that the engine is of the air-cooled type. At speeds over 30 m.p.h. on top the opposing exhaust beats, which at lower road speeds unmistakably identify the engine as being of the twin-cylinder type, mingle into a pleasant purr, the torque being as good as, and even better than, some "fours."

As a high average speed vehicle the A.B.C. is particularly adapted, and for this attribute the efficient braking and four-speed box are responsible.

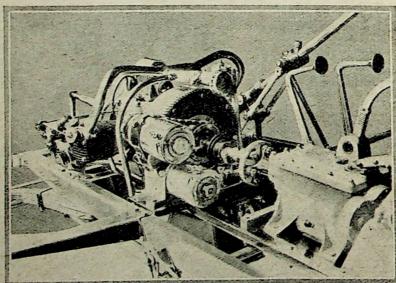
#### 15 m.p.h. Up 1 in 5.

In the course of a cross-country run we struck Pebble Coombe Hill, near Box Hill, Surrey—an acclivity which has a reputed gradient of 1 in 5. Now any good car wolld climb such a hill, but the respective performances would vary considerably. To 80 per cent. of light cars it would be a first-gear climb—assuming a three-speed box—at a speed round about 8 m.p.h. The performance of the A.B.C. would probably be identical were it not fitted with a four-speed box, but it is, and, in second, Pebble Coombe was taken in fine style at a minimum speed of 15 m.p.h. It would have shown up better but for the fact that third speed would not remain in engagement.

The descent of Box Hill represents a good test for the brakes, whilst the nature of the surface on the upper reaches tests the suspension in a very effective manner. In both these features we found little cause for adverse comments but retained to the comments of the co

we found little cause for adverse comment, but rebound dampers on the springs would have been appreciated when traversing pot-holes which might more adequately be described as miniature shell holes.

There are few standard cars that could show their tails to this A.B.C., for, with the accelerator right down, the creditable speed of 53 m.p.h. was reached



MODERN
AIR-COOLED — of aeroplane properties
PRACTICE.

The A.B.C. enging of aeroplane properties
The gearbox properties

The gearbox properties

The A.B.C. enging of aeroplane properties

The B.C. enging of aeroplane p

The A.B.C. engine forms an excellent example of aeroplane practice applied to automobilism. The gearbox provides four speeds with vertical gate change.

The A.B.C. engine is a very fine example of acroengine practice suitably modified in the form of a horizontally opposed twin with overhead valves. This unit, in conjunction with a four-speed gearbox, the ratios of which have been well chosen, is a combination which enables the car to be taken through

A.B.C. ON TEST (contd.).

and held, and, moreover, the car sits well and is

quite easy to hold.

No one could handle an A.B.C. without appreciating the light and positive steering. This feature contributes largely towards rapid manœuvrability, a sine qua non when congested traffic centres have to be negotiated. One can swing the A.B.C. from full lock left to full lock right with the same case as one would turn a steering wheel which was dis-

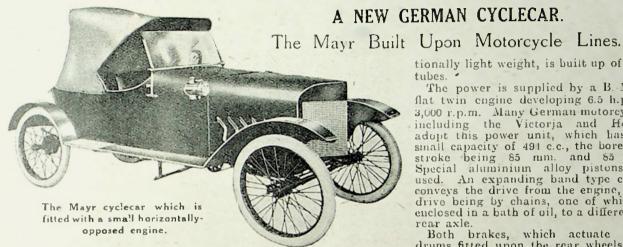
connected from the road wheels.

New owners of A.B.C. cars may find the gear change a trifle awkward during the initiation stages, but, once mastered, one almost visualizes the gate due, no doubt, to the extra concentration on first acquaintance.

During the time the car was in our possession we did not experience the slightest difficulty in starting up the engine, the electric starter being used on all occasions. We found it necessary only to flood the carburetter before depressing the starter button on

every occasion.

It is a quiet-running, comfortable vehicle, and this model, a two-scater without dickey seat, sells for £225 without starter. The car was loaned to us by the sales organization for A.B.C. cars, the British Motor Trading Ltd., 132-135, Long Acre, London.



A NEW cyclecar of novel design is embodied in the German four-wheeled Mayr, which follows closely upon motorcycle principles. The endeavour of the manufacturers was to design a moderately priced reliable car consistent with low running costs, an important item in Germany at the present time owing to the depressed conditions of motoring. The body, of sturdy construction, is employed to take some of the strains and stresses that would normally fall upon the chassis. The chassis, which is of exceptionally light weight, is built up of steel

The power is supplied by a B.-M.W. flat twin engine developing 6.5 h.p. at 3,000 r.p.m. Many German motorcycles, including the Victoria and Helios, adopt this power unit, which has the small capacity of 491 c.c., the bore and Stroke being 85 mm. and 85 mm. Special aluminium alloy pistons are used. An expanding band type clutch conveys the drive from the engine, final drive being by chains, one of which is enclosed in a bath of oil, to a differential

Both brakes, which actuate upon drums fitted upon the rear wheels, are operated by a hand lever. Steel tube axles running in ball bearings are used front and

rear, to which are attached the quarter-elliptic springs, steering being by cables. Staggered seating is adopted for the bodywork, which is of quite conventional appearance.

It will be seen from the photograph that the attention paid to weather protection is scarcely in accordance with the demands of motorists in this country, although the lines of the car are not altogether unattractive.

#### POPULAR MODEL BAYLISS-THOMAS.

9 19 h.p. Overhead-valve Engine. Unit Construction. Two-seater Body with Double Dickey.

S O great has been the popularity of the Bayliss-Thomas cars since their introduction to the public that the latest product of Messrs. Bayliss, Thomas and Co. should be of no little interest. The newcomer, of which the following is the first description, will undoubtedly uphold the high reputation of its predecessors.

Known as the 9-19 h.p. Popular touring model, the new Bayliss-Thomas is equipped with a four-cylinder water-cooled engine of 64 mm, bore and 95 mm. stroke with overhead valves. The whole engine is neatly encased and presents a very clean appearance, whilst a special ribbed aluminium cover is provided for the overhead-valve gear, the rockers of which are oiled by forced lubrication.

The three-speed-and-reverse gearbox is in unit construction with the engine, and the gear lever is centrally mounted. The rear axle is provided with a spiral bevel type differential. Both the hand and foot brakes actuate on the rear wheels, which, as well as the front, are of Michelin manufacture and are shod with 26-in. by 3-in. Avon Durolith tyres, Quarter-elliptic springing is adopted both front and

The two-seater body is exceptionally roomy and comfortable, and is upholstered in brown Rexine. The dickey seat is large and is provided with a high backrest and ample leg-room. Although its seating capacity is large, it is, of course, not advisable to overload this compartment continually. Lucas electrical annium of the continual of the contin

overload this compartment continually. Lucas electrical equipment is used throughout and an electric starter is a standard fitment, as are a petrol and an oil gauge on the mahogany dashboard, which is particularly well balanced and of neat appearance.

The following are the general dimensions of the car:—Wheelbase, 8 ft. 3 ins.; track, 3 ft. 10 ins.; overall length, 10 ft. 3 ins.; whilst the approximate weight is 12 cwt. The general appearance of the car is pleasing, and, selling, as it does, for \$260, should find a ready market.

The makers' address is Bayliss. Thomas and Continuations of the car is pleasing, and selling as it does, for \$260, should find a ready market.

The makers' address is Bayliss. Thomas and Co., King's Road. Tyseley, Birmingham.

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# ROAD MANNERS AND SAFETY.



HAT the proper observance of road courtesies goes hand in hand with the safety of other motorists is a condition which is not always appreciated, especially by new owner-drivers, and the following brief reminders should be read carefully and mentally digested by those who may be guilty or innocent, no matter which, of the misdemeanours which they imply.

When Leaving the Car.

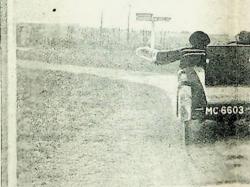
A glaring example of bad manners and carelessness, coupled with danger to passing traffic, is shown in photograph No. 1. Instead of drawing up close to the kerb and allowing passing traffic the maximum amount of room, the car has been left with the nose well away

from the kerb, the front wheels locked over to the left and the door wide open.

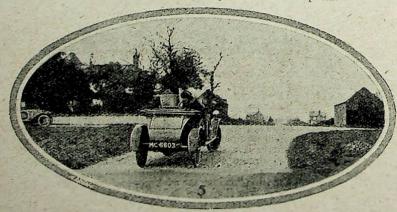
Photograph No. 2 strikingly portrays another example of carelessness, selfishness, or bad manners—call it what you will.

The tank having run dry, the driver's only consideration, apparently, is to fill it up again, and, in her haste, she has "dumped" the spare can of petrol in the middle of the road until such time as the filler cap has been unscrewed and the funnel unearthed.

That other motorists should be called upon to steer round this obstruction is monstrous and quite apart from the danger caused by two cars which might, conceivably, endeavour to pass in the restricted space at their disposal.



READ, MARK, AND MENTALLY DIGEST. (1) Note the position which is emphasize motorists the petron middle of the road of the car behind? I off side of the roac tempted to pass on to signal



WHEN APPROACHING \_\_. A MAIN ROAD.

Do not turn round in the seat, concentrating on the road behind. The front of the car has a habit of "wandering," and one's attention should be riveted on the main road (see companion picture No. 6).

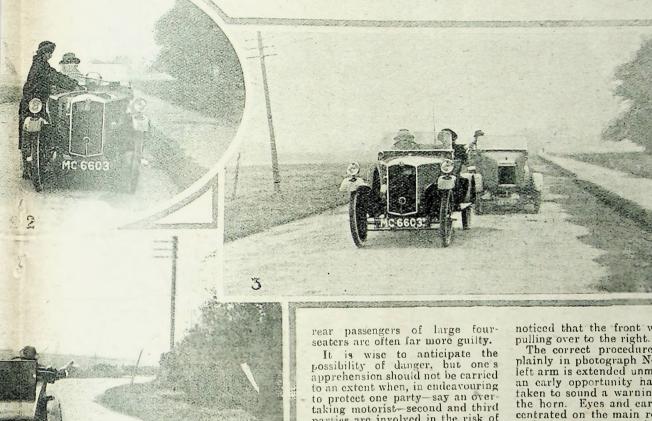
To block the road by running continually more on the wrong than the right side of the road is a practice which requires stern repression, especially when the offender is just touring along, say, at a steady 20 m.p.h.

#### A Golden Rule.

Engrossed in the heauties of Nature or in the sweet running of the ear, the warning signal of an overtaking vehicle may easily be unheard and no small amount of inconvenience caused to other traffic.

Always to keep well over to one's proper side of the road is a golden rule. It should be engraved on

#### FIVE COMMON OFFENCES VIVIDLY PORTRAVED BY PEN AND PICTURE. -



e position in which the car has been left - a heinous offence emphasized by the camera. (2) Regardless of other the petrol can has been "dumped" practically in the the road whilst the driver prepares to fill up. (3) Unaware behind her, the lady driver of the G.N. serenely hugs the the road. Obviously, the driver of the overtaking car is pass on the near side. (4) Seen only too often. Better not to signal at all than to create such confusion.

> every dash in crasable lettering. The incident depicted in the fourth snapshot represents a mixture of zeal and ignorance, the former gratifying to a degree; the latter irritating, inexcusable and

> dangerous. the cross-roads, Approaching both driver and passenger extend an arm and, although it would be thought that commonsense would preclude the possibility of such confusing signals being given, the condition is frequently noticed.

#### The Worst Offenders.

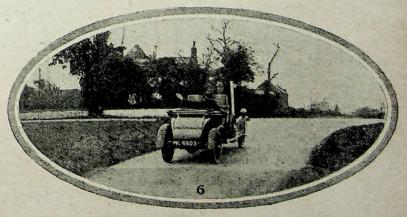
As a matter of interest it-may be mentioned that small car drivers are not the worst offenders. The parties are involved in the risk of disaster.

Such a situation is depicted in photograph No. 5. Here the driver is debouching from a by-road on to a main highway up a slight incline. In her auxiety to ascertain whether another car is following, or attempting to pass, she has turned round in her seat, and so intent is she upon her object that she has quite overlooked the probability of main road traffic-nor has she noticed that the front wheels are

The correct procedure is shown plainly in photograph No. 6. The left arm is extended unmistakably, an early opportunity having been taken to sound a warning blast on the horn. Eyes and cars are concentrated on the main road ahead and the corner negotiated at a crawl.

#### Safety First.

There are countless other instances which might be quoted, but the above, which represent the more flagrant departures, should be sufficient to demonstrate the necessity for cultivating road manners with a view not only of being courteous, but of rendering the road safer as well.

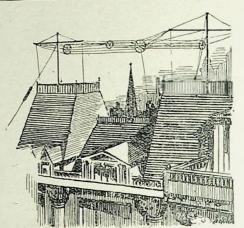


THE MORE IMPORTANT ASPECT. Signal unmistakably to overtaking traffic, sound the horn in plenty of time, wait for any fast-moving traffic to pass, then negotiate the turn into the main road slowly and cautiously.



#### WIRELESS AND THE LIGHT CAR.

The Scottish Show-Experiments With a Five-valve Set-Valve Combinations for Long and Short Range.



of the most outstanding features of the Scottish Show was the great interest shown in cars equipped with wireless. These were to be seen on several stands, while among the exhibitors of accessories were several who showed wireless receiving sets of all types. There appears to be a certain amount of misconception rife as to what are the capabilities of wireless receiving sets for use on a car. In one case, which shall be nameless, we noted that there was a two-valve set working in conjunction with a loud speaker. This would not operate over any but the very shortest of distances from a 1,500-watt broadcasting station, and we would warn non-technical readers that it is problematical whether satisfaction would be obtained from such a whether satisfaction would be obtained from such a

The size of a car has no relation to its ability to carry wireless equipment. The actual set is small in overall dimensions, and the length of aerial does not greatly vary. The B.S.A. and Daimler Co., Ltd., are taking great interest in this wireless reception, and on their cars are to be found an eight-valve set which consists of five H.F. amplifying

valves, a detector, and two L.F. valves. These are used in conjunction with ordinary head 'phones, and this has been found more satisfactory.

During the course of experiments which we have been conducting recently with wireless on a light car we have found that quite good results can be obtained with a five-valve set consisting of two H.F., one detector, and two L.F. valves, this working in conjunction with than 14 ft. long. Within a range of 25 miles of a British broadcasting station and using separate aerial (primary) and closed secondary circuits, reception is quite loud enough for open-air use, and we illustrate herewith a method of mounting an aerial in the hood of a four-

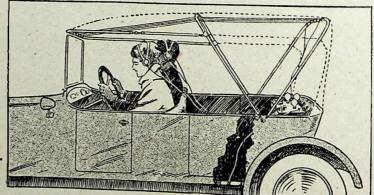
mounting an aerial in the hood of a four-seater open light car that deserves investigation. The aerial wire need not be bare; it can, in fact, consist of three or four lengths of well-insulated wire stretched between the hood sticks and the hood fabric, the wires running parallol to each other. Admittedly, this is not an ideal arrangement, but it works, and for an earth the chassis and ordinary metal parts of the car

suffice very well.

It may be noted that on a dry day we have obtained It may be noted that on a dry day we have obtained signals of fair volume simply by attaching the aerial wire to one of the sparking-plug terminals, and the earth lead of the set to an adjacent water pipe. In this case the body of the car itself acts as an aerial. Needless to say, the engine must not be run when this arrangement is being used. We must here emphasize the fact that in no circumstances can a set of this type be utilized without permission having been obtained from the Postmaster-General. Unless some restriction is placed on the way in which sets are used the whole wireless movement will end in chaos, and it is up to those who are interested in wireless to make an earnest effort to prevent this state of affairs.

Broadcasting Programmes.

From our own point of view, although the musical programmes that are broadcasted at present are very good indeed, and have a distinct spice of novelty about them, it would seem that from a business point of view better results would be obtained if interesting news items, lectures on ordinary subjects, and ether items of this nature were more frequently given. After all, one can obtain excellent music from a pianola or a gramophone, and a certain amount of distortion must be experienced with even the best wireless set. From the commercial point of view, and also from the point of view of general interest and utility, it is to the rapid dissemination of news that one looks for success in the wireless movement;



A four-seater body is particularly suited to the installation of a wireless receiving set. The aerial, as will be seen, can be quite inconspicuously erected beneath the hood.

at any rate, where it is applied to automobilism and all those connected therewith.

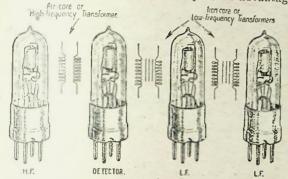
Last Sunday, for instance, it was most interesting to be told in one's own home at 9 o'clock in the evening of incidents that occurred in Ireland at 11 o'clock the same morning. No doubt the Broadcasting Co. will see their way to extend their already interesting pages bulleting.

interesting news bulletin.

There is no doubt that considerable misapprehension exists as to the difference between and the advantages and disadvantages of employing L.F. (low frequency) and H.F. (high frequency) amplification. Before explaining the circumstances in which either type of amplification is employed, some explanation is needed as to the difference between the two principles.

#### WIRELESS AND THE LIGHT CAR (contd.).

The oscillations which are picked up by the aerial are of the high frequency order, and if one is within a few miles of a powerful broadcasting station, strong signals can be detected straight off the acrial, as it were. Assuming, however, that one is 50 miles from the nearest broadcasting station and only a two-valve set is employed, it would certainly be an advantage



The most useful combination for short-range reception. The high-frequency valve may be dispensed with if the broadcasting station be within 10 miles' range.

if the incoming signals could be boosted up before detection; this is where high frequency amplification comes in. The oscillations picked up by the aerial are boosted up before passing on to the detector

On the other hand, low frequency or audio frequency amplification is introduced after the signals have been received and detected and serves to increase audibility.

#### Short and Long Range Reception.

We will take two examples, which will serve to explain the use of high frequency and low frequency amplification. In the one case the receiving set is 50 miles away from the nearest broadcasting station, and as speech is only very faint with a two-valve receiver, the amateur wishes to add another valve, but is in a quandary as to whether high or low frequency would be better.

Now, the reason why the speech is weak is because the oscillations picked up by the aerial are not strong, and, therefore, if the receiver consists of a detector and low frequency amplifier, it is obviously useless to add another low frequency valve, as this only serves to boost up the signals after detection. What is wanted in such a case is increased primary strength; that is to say, amplification of the oscilla-

tions before detection.

If, however, the receiving set is within a few miles of a broadcasting station, there would be absolutely no object in employing a high frequency valve, as, with only a detector in use, the signals should be very powerful. On the other hand, the addition of a low frequency valve would increase the telephone or loud speaker signals so as to render them perfectly intelligible practically all over the house. It must be understood that no addition of low frequency amplification will increase the range of a receiver; this tions before detection. fication will increase the range of a receiver; this is the purpose of the high frequency valves.

A very useful combination for general all-round purposes is one high frequency, one detector, and one low frequency panel, but should the signals not be low frequency panel, but should the signals not be sufficiently strong to operate a loud speaker, another low frequency valve should be added. Should one reside 100 miles away from a broadcasting station, the best combination to employ would be two high frequency valves, one detector, and one low frequency amplifier. Such a set, if preperly handled, should be capable of being tuned in to all the broadcasting stations in this country and on the Continent. To get the best results with any multi-valve set, independent control of each filament is essential, for

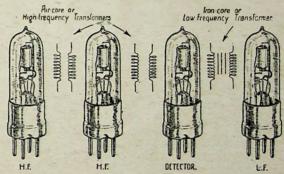
whereas a detector will work efficiently with the filament just glowing, the amplifying valves will often take from 6 to 8 volts across the filament. Then, again, there is the question of providing a variable potential across the plates of the respective valves.

#### Hard and Soft Valves.

Different types of valve have peculiar characteristies, but, generally speaking, the types may be divided into two classes—hard and soft. A soft valve, for instance, will work perfectly as a detector, for the reason, perhaps, that the potential across the plate is lower, as is the filament voltage, whereas the same valve used as an amplifier would be practically useless. A good make of hard valve should be chosen when it is deputed to do the work of an amplifier.

Many novices will have noticed that some valves

emit a brilliant blue light-a characteristic of soft valves-and this is due to the fact that the bulb is only partially exhausted and the molecules of residue gas become ionized. If the high-tension current gas become ionized. If the high-tension current across the plate of such a vaive be reduced, the blue glow will disappear, but there is, of course, nothing about which to worry. It will probably be noticed that when the blue glow is present the incoming signals become indistinct or quite inaudible, owing to a rushing noise in the telephones. It is for this reason that the potential across each plate should be under separate control under separate control.



High frequency amplification is of greater importance for long-range reception. The combination shown above would be suitable for picking up Continental signals.

When tuning-in, it must not be thought that providing the inductance has been tuned to the incoming wave length, the filaments, so long as they are burning brightly, do not require adjusting. As a matter of fact, the finest possible tuning can only be obtained by carefully regulating the filament lighting. It is, however, not by any means difficult to find the best position on each respective valve, as, if the filament is not burning sufficiently brightly, the signals will be inaudible, whilst if too much current is given

will be inaudible, whilst if too much current is given the signals may also be damped out.

Owing to the fine gauge of the wire and the number of turns required on a low frequency transformer, few wireless enthusiasts would undertake to wire their own, but there is no hidden mystery in their construction. When a number of L.F. transformers are in use they should be placed apart so far as possible with their cores at right angles one to the other. Noises in the telephones will be reduced if each core be earthed.

The construction of a really efficient high frequency.

The construction of a really efficient high frequency transformer presents no difficulties, as two coils of wire placed one above the other prove quite effective. Although not absolutely necessary, a variable con-denser may be shunted across one of the coils, whilst the coupling of the coils should be adjustable. Whereas a low frequency transformer operates over all wave lengths, the high frequency variety only operate within a given range, and therefore if it be desired to receive on wave lengths between, say, 300 metres and 10,000 metres, a transformer of the variable type should be purchased.

## THE USE AND ABUSE OF MOTOR TOOLS.

Practical Advice on the Manipulation of the Tool Roll Equipment.

VEN with the best behaved cars the tool roll has to be brought to light sooner or later, and it is the purpose of the writer of this article to explain the correct manipulation of such valuable and indispensable adjuncts as an adjustable spanner, set spanner and box spanner, file, screwdriver,

hacksaw, hammer and punches.

The adjustable spanner is perhaps the tool most frequently used, whilst it also comes in for the most abuse. There are usually two reasons for the latter, the first that the spanner is of inferior quality and probably more nuisance than it is worth and, secondly, it is used in an incorrect manner or on a nut which needs the attention of either a box spanner

or set spanner.
There is perhaps no clearer method of explaining the correct procedure than by illustrations, and it is felt that the photographs which accompany this article are sufficiently clear as to need but little explanatory matter.

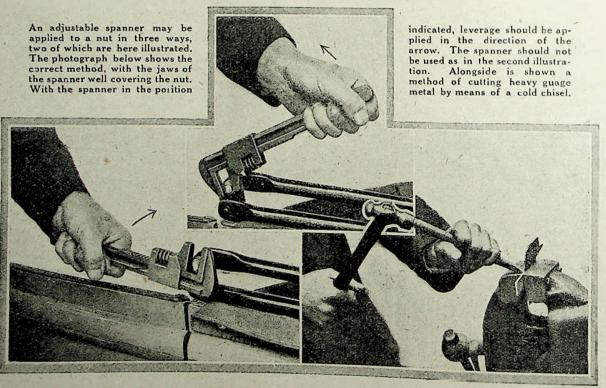
#### Adjustable and Set Spanners.

Most novices and quite a number of experienced motorists do not appreciate the danger of using a large adjustable wrench for all nuts irrespective of their size. Because a 4-in. nut happens to be

Any spanner is designed to give a certain amount of leverage, and it should be understood that a large wrench is intended to deal with really hefty nuts wrench is intended to deal with really hefty nuts beyond the scope of the smaller tool. A range of set spanners may be taken as an example of proportionate leverage. Whilst a \( \frac{3}{4} \)-in. or \( \frac{7}{3} \)-in. set spanner is perhaps 6 ins. long, one capable of tackling a \( \frac{1}{4} \)-in. or \( \frac{7}{16} \)-in. nut is usually half this length. This is, of course, as it should be, for it can be quite understood that a reversal of things would mean that excessive and unnecessary leverage, would be that excessive and unnecessary leverage would be obtained over smaller nuts, whilst it would not be possible effectively to tighten the large ones.

#### The Value of Box Spanners.

A set of box spanners is practically indispensable, for by their use a nut which would otherwise be inaccessible can usually be got at quite conveniently. By reason of the fact that a box spanner completely encircles a nut, excellent purchase is obtained, but if one wishes to preserve the utility of the spanner, and to save one's knuckles, the full face of the nut should be covered. Never endeavour to apply leverage with the box spanner canted over, as it will assuredly slip and damage one's fingers, the nut or the spanner.



accessible to the use of a large wrench, do not let this be an excuse for not uncarthing the small set spanner.

It is not a difficult matter to strip a thread, and if it be a cylinder holding down nut or one serving an equally important function, there is not the remotest chance of finding a similar nut amongst one's junk. B36

There is a right and a wrong way of using an adjustable spanner, and the photographs on this page are used to show the correct and incorrect application of such a tool.

Taking such a simple tool as a screwdriver, it is surprising how easy it is so to deform the screw head that nothing short of drilling out the screw will serve to release it. This trouble is not so much

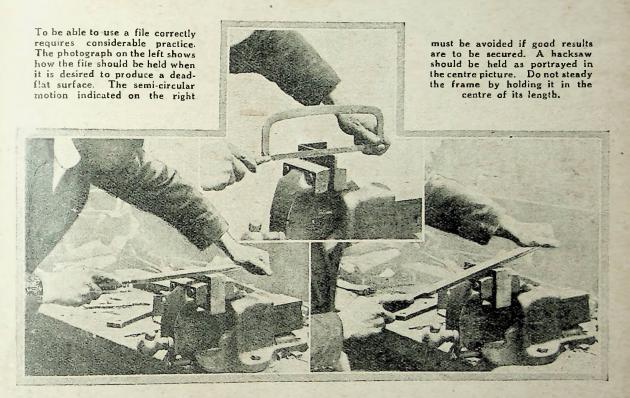
#### USE AND ABUSE OF MOTOR TOOLS (contd.).

the fault of the operator as of the screwdriver blade, for it is a mistaken impression that this should be finished with chisel-like end. Actually the business end should have a slight taper, but it must not finish in a knife edge.

Another very useful tool is a file, although not one person in a hundred even knows how to handle such a tool. For rough work, when precision is of minor consequence, it matters little how the file is handled or applied, but if extreme accuracy is required conof place to show pictorially how such a tool should be handled.

#### Cutting Heavy-gauge Metal.

The hacksaw is unquestionably a most useful tool, the nacksaw is unquestionably a most useful tool, but in certain circumstances its use can be dispensed with and the work carried out with greater expedition. A substantial vice, a cold chisel, and a medium-weight hammer are necessary, and as these tools should form a part of the motorist's epuipment, the tip is worth giving. The work is gripped between the jaws of the vice, the top edge of the jaws coming



siderable practice is necessary. If the face of a file be examined it will be seen that the teeth are set to cut one way only, and therefore more harm than good results if the tool is forced down on to the work during the backward movement. Excessive pressure is also undesirable, and the file, if lightly taken across the work, will feed itself and take off an amount of metal consistent with the nature of its face.

If one wishes to test one's expertness in the use of a file let him try to shape a perfectly square body. Many attempts will be necessary before even a passing good cube is produced, for it will be found that, instead of the faces being flat, they are decidedly convex.

Using a Hacksaw.

When using a file, hacksaw, or other similar tool, always take the fullest sweep possible, making good

always take the fullest sweep possible, making good use of the ends as of the centre.

If an expert were to take up a hacksaw previously used by an amateur the first thing he would do would be to tighten the flynut and so increase the tension on the blade. Although an expert, the blade would probably "fly" at the first cut he made, owing to the fact that, whilst the centre of the blade was considerably worn, the ends would be as new, the result of this unequal wear being that the wider or new teeth would promptly bite, cause the blade to buckle, and, nine times out of ten, snap.

Although a hacksaw is rarely carried as part of the tool equipment of a light car, it will not be out

in line with the work at that point where it is desired to sever the metal. With the vice-jaws as a guide to the chisel, the hammer should be applied smartly and with decision. The photograph shows clearly the modus operandi.

A piece of heavy metal can be cut in this way, and although a file will be needed to square up the edges a considerable saving in time is effected, whilst the actual operation is not nearly so laborious as with a

hacksaw

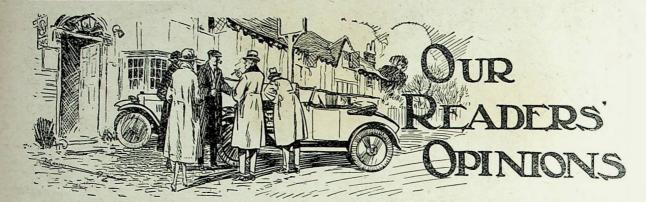
Incidentally, broken hacksaw blades may be repaired by soldering a strip of tin over the back of the blade at the point of breakage. Although the idea does not sound practicable, the writer can assure the sceptical that it is, and that he uses several blades repaired in this manner.

In extreme cases, and after all other methods have failed, should the cold chisel and hammer be used on nuts. If such steps must be taken, it is better to use a punch, the direction of the blow being at a right angle to the face of the nut. A chisel with a cutting edge will only damage the nut.

If you have any respect for nuts, do not use pliers on them. A spanner may not be directly to hand, but if it takes a minute to find, it will save many

minutes in the long run.

The master of a tool roll is usually a capable motorist, for to a great extent the one goes hand in hand with the other. To be able to handle your tools correctly not only adds to the pleasure of motoring, both at home and on the road, but it also saves many shillings during the season's running.



We welcome at all times letters sent us by readers for publication in these columns, and while taking no responsibility for the opinions expressed therein, give preference to those letters which deal with subjects of general interest. No anonymous communications will be accepted, but the writer may use a nom de plume if desired. Letters should be as brief as possible and, preferably, typewritten. We reserve the right to make any alterations or deletions which we deem necessary.

#### Conquering Simms Hill—Possibilities of the Endless-track Vehicle—Overdevelopment of the Simple Type Vehicle.

Simms Hill.

It was with considerable interest that I read your account of Simms Hill, Ilsington, S. Devon. I came across this hill two years ago when pottering about the lanes on a 6 h.p.

Enfield and sidecar. I arrived at the A Motorcyclist's bottom of the hill, and, wondering whence

A Motorcyclist's bottom of the hill, and, wondering whence
Experience. it led, decided to go up (s.c. empty). Of
course I failed before I got far: I knew
my bus and felt sure it could do it. I tried again, taking the
risk of rushing the corner at the bottom. This time I got halfway up, but the engino became very hot and knocked badly,
and so I jumped off and ran beside it, but failed again.
Then I "came down" such a slide—back wheel locked, left

Then I "came down" such a slide—back wheel locked, left foot on the right step standing on the brake, and right foot acting as a brake on the ground. Even so, we slid to the foot and nearly into the ditch at the bottom. I do not mind climbing any hill, but I have slid down a few, and it is a hair-raising feeling.

I still felt the machine could do it, and so I waited round the corner for a considerable time to coul the engine. I engaged bottom gear and roared round the corner as fast as I dare, and we did it. I did not use my feet at all. I stopped at the inn just below the P.O. and asked about the monster, and was told that no motor vehicles ever go up it, consequently I felt very bucked with myself.

Since then I have climbed it twice at different times (after practice at the corner), but I always stopped to cool the engine

practice at the corner), but I always stopped to cool the engine before I tackled it. I tried it once with my brother in the sidecar, but failed, and the machine, when turned, dragged us both down the bill, wheel locked and using our feet as

brakes on the ground. H. A. MOHAN. Torquay.

The Scope of the Light Car.

I was much interested in the article entitled "Increasing the Scope of the Light Car," which was published in your issue of December 8th. In this country (India), officials have

A Convertible
Endless-track
Vehicle.

lock carts. The number of carts required, of course, varies according to the importance of the official who is touring.

but four carts may be taken as an average number. Each of these carts gets about Rs. 22 per diem. thus making a cost of Rs. 10 per diem for carts, for which the Government pays half.

Rs. 10 per diem for carts, for which the Government pays half. This rate for carts has to be paid whether they are working or not, and on a tour just as many days are spent halting as moving. Imagine, therefore, what a saving it would be to us underpaid officials to have an endless track vehicle which would be able to do the work of four bullock carts, i.e., carry about 30 cwt., not including the weight of two or three passengers, and at the same time to have the necessary speed and comfortable scating to be used, when not on tour, as an ordinary car, because nearly all the senior officials have also to keep a car. to keep a car.

The ideal type of vehicle, to my mind, would be one from which the rear seats could be removed when it was intended to go out on tour, leaving a body suitable for carrying tents, camp furniture and utensils.

If such a car were put on the market, provided that it were reasonably economical to run and foolproof, so that the ordinary Indian mechanic could understand the mechanism and put right anything that went wrong, I, for one, would buy one at once, and I am convinced the vehicle would have a very large sale out here, I.C.S. India,

The Simple Car.

You claim with justification that "this journal has always been firm in its adherence to the cause of the simple type of automobile." You would render a further service if you

Tendency
Towards Overdevelopment.

cult to differentiate. There is, of course, the official definition of "cyclear"—under 1 100 c.c. and under 7! cwt. the that the time of "cyclear"—under 1 100 c.c. and under 7! cwt. the that the time of "cyclear"—under 1 100 c.c. and under 7! cwt. the that cult to differentiate. There is, of course, the official definition of "cyclecar"—under 1,100 c.c. and under  $T_2$  cwt.; but that definition, useful in its way, and at present holding the field, does not adequately describe the "simple" car.

I do not know what is the weight of the "Austin Seven,"

but I imagine that with such a tiny engine it is under 7½ cwt.; yet it cannot becalled a "simple type," whereas the aircooled Rover, which does not come under the weight limit, should, I think, be classed in this category. The G.N. of last year was slightly above the limit, but it was a typical cyclecar -it is a great loss to "cyclecarism" that it is no longer with us. The present weight limit, therefore, seems both too exclusive on the one hand and not sufficiently so on the other.

Personally, I have an opinion that eventually the definition will include a price limit. The first light car trial—a six days' trial held in Herefordshire—was a trial of " cars costing under £200"; obviously a larger sum must be allowed to-day. Other things being equal, simplicity makes for economy, and price may in some respects be considered the measure of simplicity. It is really because economy attends simplicity that the latter is so well worth cultivating and that your advocacy of the "simple type of automobile" has done so much to promote the cause of "nuch cheaper motoring."

It is sometimes urged against the three-wheeler that manu-

facturers so often abandon it in favour of four wheels. This is true; but usually the reason has been an attempt to make a "car on four wheels," and it has seemed obvious to add a fourth. The A.-C. is an exception. It is, however, equally true that the simple four-wheeler tends to develop into the light car proper. In point of fact, there is a tendency every-where towards development—from my point of view, over-development—and your advocacy of simplicity was never more needed than at the present time. needed than at the present time.

Stoke Lacy.

H. GEORGE MORGAN.

## SAVE MONEY

by using

# STERNOL

· in the NEW CONTAINERS that are causing a stir.

> The 20 Gallon Decorated Drum On which you Save 41 8d.

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> On which you Save 9s. 2d.

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In other words the price of Sternol Oils in the 20 gallon drums is 2/1 per gallon cheaper than in the 1 gallon cans, and in the 5 gallon drums it is 1/10 per gallon cheaper.

Here are two recently received testimonials-two more to add to the already imposing numbers we have published. From Mr. S. H. COLBOURNE, 4, Seveing Buildings, High Street, Lewes.

" For the last 17,000 miles I have used your Sternol, which has given me every satisfaction, and since using it have not experienced a 'seize up' as I have at times on other oils.

"I owe this to the fact that your oil is of such a consistency that weather seems to have little, if any, effect on it. Even on the coldest morning it gets 'there' just the same, and undoubtedly it is that fact which eliminates 'seizing.'

"Your taps are a blessing.

"The 17,000 miles mentioned I have done since March 21st, 1922. A little over nine months."

Fr. m Mr. E. H. HARRISON, 25, Collman Street, Hull.

System drum inlesse cross out size not renaired of overloom drum inlesse cross out size not renaired of overloom drum lesse forward me the 2012 is wallon drum.

Out Also Penclose cheque for 2012 is wallon drum.

Out Also Penclose cheque for 2012 is wallon drum. The name and address of my usual dealer are as "It appears to have been eminently satisfactory to the engine judging by the generally efficient dubrication of the essential parts, particularly as the feed is 'splash.' There does not appear to be much 'gunminess' of the piston or rings when starting from cold, which certainly was the case after using a well-known brand of oil which I believe is mainly vegetable."

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"STERNOL OILS MAKE ENGINES PURR LIKE PUSSIES."

HABBUT DAUGRET EACH Station of security of the carriers paid to get the pot security of the se

Car is a root require the heavy grade oil for read read root and the way are the second root and the difference in constant and the difference in constant

The World produces no better value than the Obtainable from

TO car has so many first-class features or such a retinue of enthusiastic owners. The chassis is recognised to be a superlative example of British engineering skill in design and manufacture. Its outstanding qualities of strength, extraordinary engine power, combined with flexibility, its marvellous speed, and the way in which it holds the road under all possible conditions, its delightful springing, powerful brakes, wonderful wearing qualities, and last, but not least, the economy of its running expenses, are features which are now so well known as to require no further comments.

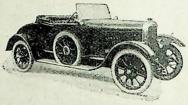
In response to many demands, the 10 h.p. Model has been re-introduced, the chassis of which in its main features maintains all the sterling qualities of its predecessor and of the 12-40 h.p. Model. No car of this type has such a reputation behind it, and motorists desiring a light car of repute, will do well to obtain an ALVIS, recognised to be "The World's BEST Light Car."

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The ALVIS CAR & ENGINEERING CO., LTD., COVENTRY,

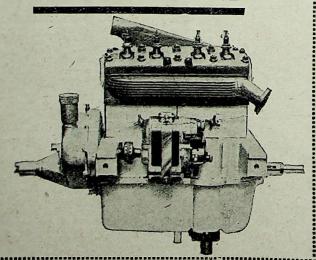
Trade enquiries are solicited and are assured of prompt attention.

The 10 h.p. ALVIS Two-Seater, £39



H P

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OUR READERS OPINIONS (contd.).

## IS MODERN AUTOMOBILE PRACTICE ALL WRONG?

#### The Writer of the Article Stands by His Guns.

The very informative letter from Mr. G. T. Wilson, which appeared in your issue dated January 26th, adds a great deal of interest to the controversial subject which I raised in my article, "Is Modern Automobile Practice In Defence of All Wrong?" Judging by his remarks, Steam Practice, the modern automobile may not be all wrong, but it is certainly not all right. I do not quite follow what is meant by the phrase, "There is more design, in accurate quantity, in the petrol motorcar

is more design, in accurate quantity, in the petrol motorcar than there is in the majority of steam plants. To me the

phrase conveys absolutely nothing. Your correspondent says that any man or woman can be taught to drive a car in a few hours, and asks: "Is it possible to say the same of steam power generators?" Most decidedly it is, for in the case of the latter it is necessary merely to open a stop valve and the mechanism of the engine, even to the

a stop valve and the mechanism of the engine, even to the correct r.p.m. for any load, does the rest.

I would go farther and say that it is possible for anyone with an elementary knowledge of engineering thoroughly to understand a steam engine in a quarter the time taken to master the petrol engine with its complicated cycle of operations, coupled with the intricacies of carburetter and magneto.

The downward momentum of the piston of a petrol engine is partly absorbed by the flywheel, says Mr. Wilson, and this certainly is correct; but I still maintain that the reversal of all the stresses falls upon the crankpin, and if this does not break down under the strain it must materially add to the possibility of trouble with the crankpin bearing.

A cam may be a beautifully designed article, but can it be compared with the smooth operation and practical everlasting life of an eccentric?

I do not suggest that the Corliss valve is suitable for petrol motors, and perhaps my remarks conveyed a wrong impression. I quoted this type of valve as showing what had been

done in steam engine practice with regard to instantaneous cut off, hoping to emphasize the fact that by comparison the petrol engine was far behind in design.

With regard to lubrication, my experience does not agree with that of your correspondent, for in enclosed high-speed steam engines, such as are suitable for small generating plants, the bearings are pressure fed by submerged pump, and there is no possibility of trouble arising from a few pipes "which never remain over the oil holes."

Mr. Wilson asks: "Why should wheels not be meshed while revolving, when they run at the same peripheral speed?"

revolving when they run at the same peripheral speed?" Well, I admit that miracles can be performed, even with toothed wheels, but this remark hardly answers my criticism.

I am somewhat amused by the comparison which is apparently made between the light car and the steam roller, so far as the differential is concerned. Surely the motorcar is on a different plane, and is capable of being fitted with something better

I am indebted to Mr. Wilson for the figures he gives in connection with the efficiency of the fluid variable speed transmission gear, but I think that this system is worthy of closer attention, and that if it progressed on the right lines its weight might be materially reduced and its efficiency increased.

As to the efficiency of the steam turbine; your correspondent admits that at full power my claim is justified, and this. let it be said, is on a par with the fact that a petrol engine is also considerably handicapped unless it be running at a certain number of r.p.m., when it gives off its maximum power.

THE WRITER OF THE ARTICLE.

\* The above reply from our contributor represents only the gist of a fairly long letter. Owing to considerations of space we have been obliged to curtail his remarks.- ED.

Below we publish extracts from three letters criticising the article "Is Modern Automobile Practice all Wrong?" The length of the original communications and considerations of space will not permit of the letters being published in full.-ED.

#### Questionable Efficiency of the Turbine.

The references to the steam turbine in the recent article "Is Modern Automobile Practice all Wrong?" call for some comment. I do not agree with the statement that "there is

Scope for a
Rotary Engine.

Scope for a
Rotary Engine.

Rotary Engine.

Rotary Engine.

Rotary Engine.

Scope for a
Rotary Engine.

Rotary Engine.

Speaking, it is only a prime mover and not an actual "source of power. As a prime mover I contend that the Diesel engine is far more direct conversion of the speaking of of t efficient, and, moreover, it provides a direct conversion of energy in the cylinder, whereas steam turbines have to be

operated by steam generated in boilers.

Your contributor makes some good "points" in the article, and I think we shall arrive eventually at some highly efficient H.T.B. form of rotary engine.

#### Little Wrong with Mcdern Practice.

I have read with some interest and more amusement the article in your issue dated January 19th, and can quite under stand your contributor's desire to remain anonymous. His ideas, instead of being innovations, are as

The Differential far behind modern practice as the revs. of

The Differential far behind modern practice as the revs. of a Necessity. an early pumping engine are behind those of the latest petrol engines.

Dealing with your contributor's first driving lesson, it can only be assumed that his friend was a poor tutor. I have taught scores of novices to drive, including a number of ladies, and it is quite an exception to have a noisy change, even during the first tew lessons. I quite agree that it would be barbarous to mesh rotating gears while running at different speeds, but skill is required in gear changing to ensure that speeds, but skill is required in gear changing to ensure that the peripheries of the two gears are running at approximately the same speed, when they will slide in without the slightest

the same speed, when they fear of damage.

Touching on Corliss valves, one can imagine the wear on these when working at petrol-engine speeds with hot exhaust gases. The action of the poppet valve certainly seems rather fierce to the mechanical engineer, but is remarkably efficient, fierce to the mechanical engineer, but is remarkably efficient, and will last for many years with an occasional grind in. It is also much cheaper to replace than any other type of valve.

With regard to the writer's remarks that he could see no real reason why a differential should be fitted, I can only refer him to the discussion which has been running in the motoring Press ever since he left England. The paragraph asking "... why the few should have discovered the benefits of eradicating such a mass of useless machinery, while the majority still cling resolutely to it, etc.," is exceedingly rich; perhaps he thinks that the function of the differential is to stir up the oil stir up the oil.

The easiest way of answering our friend's question is to ask him to compare the size of the latest 1,000 h.p. aero engine with the 1,200 h.p. twin-cylinder compound-tandem condensing rolling-mill plant that he mentions.

HERBERT CARPENTER, M.I. Mech. E.

#### In Partial Agreement.

In Partial Agreement.

I heartily agree with the main part of your contributor's article, entitled "Is Modern Automobile Practice all Wrong?" in The Light Car and Cyclecar of January 19th; but, while disagreeing with him in a few details, I would go still farther than he. Permit me to begin by opposing some of his statements. He starts by attacking the petrol engine for the harsh and uneven action of its pistons. Now, all defenders of this type of engine must admit that the steum engine has the advantage here; but if the petrol engine had not got great enough advantages over

the petrol engine had not got great enough advantages over the steam engine to cancel this. I am sure that the latter would have been universally adopted for the propulsion of automobiles.

I agree with him that poppet valves are crude in tho extreme.

Your contributor next attacks the differential. As this item is absolutely efficient, is not clumsy, and gives no trouble, I do not think there is any cause for complaint in that direction. Before very long all cars will be driven and steered on all four wheels. Every wheel will be sorung independently of the others—that is to say, there will be no front or back axles as we know them to-day.

D. J. HAMILTON-LISTER.

#### OUR READERS' OPINIONS (contd.).

#### 100 Miles in 3} Hours.

I was much interested in the letter published in your issue dated January 18th, headed "102 Miles in Four Hours" in an A.B.C., as I have one of these cars, and you published

an account in March last year of a run I did from Marlborough to Reading. They A Good certainly are big-hearted little cars, and

are a joy to drive.

I have now a 60 m.p.h. A.-C. sports model, and with a passenger, hood up and luggage I accomplished the best run January 20th—110 miles in 33 hours, with a half-hour stop at Blandford, for lunch and petrol. Top gear was used the whole way except for one change two miles cast of Bridport. The time of departure was 12.15 p.m., and of arrival 3.58 p.m. The route taken was via Dorchester, Blandford, Salisbury, Audover, Basingstoke. Petrol consumption 32 m.p.g.

#### Averaging 26.7 m.p.h.

After reading the comparative average speeds of the Lagonda and the A.B.C. in two recent issues of The Light Car and Cyclccar, I would like to state mine on a Rhode.

Norwich to Birmingham in Under 6 Hours.

miles) one gets a real good road. Here we made a stop to fill up with petiol, two gallons filling up the tank. Starting again, we made for Bedford and Northampton.

We arrived in Northampton at twenty minutes to eight.

We arrived in Northampton at twenty minutes to eight, and left as the clock was striking eight. Eight miles from Northampton one strikes the main London-Birmingham road,

where good time can be made.

Our journey was so good that when we arrived in Birming-ham I thought I must wire my friend in Norwich to the effect that I had arrived safely. The wire was

timed 9.44.

The actual time taken for the journey as six minutes under six hours, this including the stop to fill up with petrol and refreshment at Northampton. The distance according to the Dunlop map is 159 miles. Including stops, our average worked out at 26.7 m.p.h., or excluding stops approximately 29 m.p.h.

Birmingham. C. GREY.

#### Smaller Tyres Give Increased Comfort.

I have from time to time noticed letters in your correspondence columns with reference to Rapson tyres, and although I have never yet taken Smaller Tyres— Less Pressure Less Pressure

Longer Life, to other women motorists, and also to the Rapson Tyre Co., to let them know my experiences with these tyres.

periences with these tyres.

I drive an A. C. coupe, and when the original tyres fitted to this car, which were 710 by 90, wore out, I approached Messrs. Rapson with a view to replacing them with tyres of their make. The first thing they did was definitely to refuse to supply me with 710 by 90 tyres, as they stated that the size of the rims was 650 by 65, and that, if I wanted satisfaction, I must therefore fit 700 by 80.

As, even with my slight knowledge of motoring matters, it seemed to me that in doing this I should lose a great deal of comfort. I decided to try out two tyres only to see how they fared, and, to my surprise, I found that, apparently because low pressures were used, the comfort of the car, far from being decreased, was actually greater than with the 710 by 90 covers which I had been using.

I have now fitted my car with 700 by 80 Rapson tyres all round, and, after 3,000 miles running, can honestly say that they have given me every satisfaction. I have had no trouble at all, with the exception of a leaky valve plunger, which Messrs. Rapson replaced free of charge at their London show-

rooms. The car not only rides better, but does not skid, even on the most greasy roads—a point which I am sure appeals very much to the average woman driver.

In closing, I would like to say that I have no interest in the Rapson Co. other than that of a very satisfied user.

Regent's Park, N.W. 1.

B. S. CELEMAN (Miss).

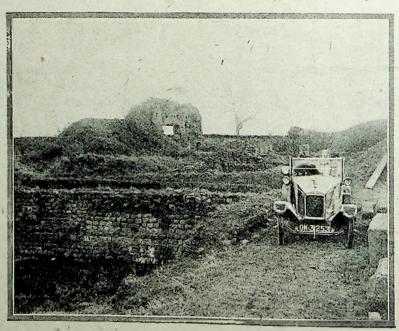
The Price of Petrol. Motorists in India have been watching the reductions which have recently been made in the price of petrol at home, and we (the South Indian Motor Union) recently approached the concerns which distribute motor spirit, as no reductions have been made here in sympathy with those at home, but with-

out success.

As you are aware, the petrol used in India comes principally from Burma, and it only takes from three to four days for the steamer to bring it across. It seems most unreasonable for the steamer to bring it across. It seems most unreasonable that motorists in India should be paying exactly the same price for petrol as you are paying at home, considering the cost of transport, etc. In addition to the actual cost of petrol, we have to pay an import duty of 6 annas a gallon, which brings the price of petrol to the motorist in India to the equivalent of 2s. 6½d, per gallon at seaport towns; for inland towns additional rates are charged.

This association feels that the support of all motorists is necessary to enable these high prices to be reduced, and it seems hardly creditable that we in India have to pay 6½d, per gallon for petrol more than you do. We are well aware that the price of petrol in England has been brought down by American competition, but we feel that at the present time the petrol companies are not treating us equitably.

We might also add that efforts have been made by tho motor unions and motor trades associations by appealing to the Government for a considerable time to reduce the 30 per cent. import duty which has to be paid on all motorcars coming into India, but so far there appears to be no hope of success, as motorcars in this country are still looked upon as



Uriconium, the ancient Romancity, lies half a mile south of the main road between Wellington and Shrewsbury. Excavation work is still being carried out and many of the relics found have been transferred to the Shrewsbury Museum. A Bayliss-Thomas figures in the foreground.

luxuries instead of necessities, which they really are. Considering that racehorses may be imported free of duty, we really think the duty on motorcars should be reduced to at least half that levied at present.

We trust you will be able to give our letter publicity in your paper so that motorists in England will be aware of the varying conditions in other parts of the Empire, and any assistance they can offer will be welcomed by the South India in Motor Union. Ltd.

S.I.M.U., Ltd., Madras.



SCOTTISH MOTOR EXHIBITION: B.L.I.C. Magnetos are being shown on Messrs. JOHN H. THOM'S STAND No. S3.

Distributors for Scotland: Messrs, VICKERS, LTD., 247, West George Street, GLASGOW.



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Sole Concessionnaires for Great Britain and Dominions:-W. L. STEWART & CO., LTD., 26B, ALBEMARLE ST., LONDON, W.I.



## AROUND :: .. THE TRADE.

The Standard Motor Co., Ltd., have issued an attractive calendar depicting a Standard car on tour. The calendar, which is finished in sepia, will be forwarded to any reader upon application.

Ramsdens (Halifax), Ltd., Station Works, Halifax, manufacturers of the Jeavons lubricating spring gaiter, have been appointed solo concessionnaires for the motor trade, home and export, for Brammer belting.

Calthorpe owners will be interested to hear that the Calthorpe Motor Co. have now published an instruction booklet in connection with their 12-20 h.p. model. This book will be supplied free of charge to any Calthorpe owner upon application.

A strongly made, neatly finished attache case, covered in waterproof art leather cloth, which at a moment's notice can be transferred into a convenient seat or stand, is marketed by the Patent Stool Attache Case Co., 93, Aldersgate Street, London, E.C.1, at prices ranging from 14s. 6d. to 28s. 9d.

The TO.M Co., 61-52, Newman Street, London, W.I. are marketing a new device called the Petrograph. Priced at 70s., this instrument shows on a dial on the dashboard the exact quantity of petrol in the tank. A thief-proof lock for 6s., and a preparation for relaxing all the choking deposit from the engine are two other specialities of this concern, who are also agents for Heath plugs.

We are indebted to Messrs. W. D. Foster and Co., 26, Hampstead Road, London, N.W.1, for permitting us to photograph their comprehensive accumulator charging plant, an illustration of which appears at the heading of the article entitled "Charging Accumulators." A feature in connection with the service of this concern is that motorists' accumulators will be filled with distilled water free of charge, and Messrs. Foster would be pleased to examine starter batteries gratis.

The Car Mart, Ltd., of 297, Euston Road, London, N.W. 1, have now acquired the lease of premises at 46-50, Park Lane, W. 1, and 136, Piccadilly adjoining, at present occupied by Carlish, Ltd., and are transferring their head office to these premises, under the personal supervision of their present managing director, Major R. S. Grigg, and general manager, Mr. A. H. Pass. The Euston Road depot will be under the management of Mr. C. J. Joyce, and the premises at 173, Piccadilly will be in the charge of Capt. C. E. Bowman.

We learn that Mr. W. F. Milward, whose several successes in competition on Charron-Laycock cars was such a feature of last season, is now seeking an opportunity to turn his energies in a different direction, and would be interested to get into touch with any manufacturer who has a vacancy on either his works or service staff. Mr. Milward designed the Charron-Laycock light cav and was responsible for its production from its inception. His present address is 96, Lorraine Mansions, Holloway, N. 7.

We are informed that Mr. H. S. Tilley, who established and brought the Industrial Guarantee Corporation, Ltd., to its present influential position in the hire-purchase business, has now transferred his activities to the Continent, where he will act as Continental managing director for this corporation. He will be pleased to keep in touch with his many friends in the trade, and will be very glad to be able to serve them in any way if they will communicate with him at the Industrial Guarantee Corporation, Ltd., 17, Rue Joubert, Paris. Mr. Tilley's position in London will be taken over by Mr. G. E. Ostwalt.

## We would never ask anyone to buy C The Speedy

## AGEN

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Henly and Co., Ltd., 91, Great Portland Street, W. 1.

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Langton, Ltd., Davigdore Road, Hove.
Manner Motor Ca., Ltd., 91, Manor Street,
Chelsea, S.W. 5.

Millard and Co., Bosq Lane, Guernsey, C.I.
Motor Marketing Co., Wantage Road, Reading,
Mumford and Sons, 68, Mutley Plain, Plymouth,
Nickson, C. G., Derby Road, Poulton-le-Fylde,
Northern Motor Utilities, Ltd., Foss Islands Road,
Vork.
Oakley Garage and Motor Works, Ltd., 25, St.
Cuthbert's Street, Bedford.
One Tree Motorcycle Co., Oxford Street, Northgate,
Huddersfield.
Pickford and Co., Ltd., Crescent Works, Ecclesall
Road, Sheffield.
Ponting, Ltd., Crown Point Road, Leeds.
Putter, L., Ltd., 24-50, Gt., Victoria Street, Belfast,
Pullan, J., and Co., Ltd., 50, Tarleton Street,
Literprool.

St. Alchelm's Motor Works, Ltd., Poolo Road,
Branksome, Bournemouth,
Sanderson, T., Ltd., 64, Northumberland Road,
Newcastle-on-Tyne.
Studholm's T., Newtown Grazge, Whitehaven.
Tiverton Motor Co., Lawman Green, Tiverton.
Tourists' Garage, High Street, Chellenbam.
Turner, F., 18, Clarence Place, Newport.
Taik, Foster and Young, Ltd., 51-39 Hopehill
Road, Glasgow.
Upson Bros., The Garage, South Ascot.
Westwood Cycle Co., Ltd., Abergavenny,
Westend Harbour Garage, 1, Lower Sandgate Road,
Folkestone

T has never yet been necessary. The only request that we have made is that the client should take a trial run in the Salmson-that definitely closes the sale-always!

Maybe you have in mind for this reason some particular car at a price near that of the Salmson; if so, it is only fair to yourself that you should at least try the Salmson before you definitely decide. Your first question will certainly be-"but how can you produce this at the price?'

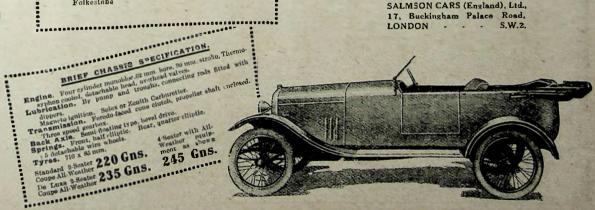
The Speedy Salmson has scored successes against cars of international fame, and it is the experience gained from this work which has made the Standard Salmson indisputably the finest car in the world at the price.

Will you take a run in the Salmson from our Showrooms or any of our Agents absolutely without obligation? You will never be asked to purchase, but we think you will buy the car on its merits.

Ask for Catalogue.

THE SALMSON WAS THE BEST SELLER AT THE-SCOTTISH SHOW.

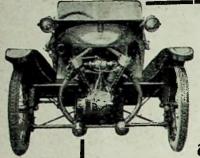
SALMSON CARS (England), Ltd., 17, Buckingham Palace Road, LONDON - - S.W.2. LONDON



Woodwright

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.

B45



The

## MORGAN

Speedy, sturdy, reliable, the trim little Morgan solves many a travel problem. Takes you "there" without the trouble of catching trains at inconvenient times and wasting hours at wayside stations. Easy to handle in town traffic. Ask for a trial run, and for details of the comprehensive service rendered by Homac's. Easy payments arranged.

DISTRIBUTING AGENTS:



(H. W. Holmes & S. A. McCarthy.) 243, Lower Clapton Road, LONDON, E.S. Telephone: Dalston 2108.

## Zero Huile de Luxe

WNERS of the following makes of cars will be interested to hear that, as a result of careful tests in most cases either by the makers or their Agents, ZERO HUILE DE LUXE has been found excellent for each,

> A.B.C. ALVIS BUGATTI **CITROEN**

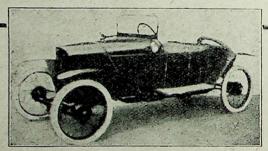
ZERO HUILE DE LUXE has a finer ratio of viscosity than any other oil, for this class of work, giving no gumming up, exceptionally easy starting from cold, no excessive deposits either on the pistons or in the crankcase, reduced fuel and lubricant consumption and less wear and tear,

Most Motorists who write us refer first to the delightfully smooth running experienced, which of course points to improvement in lubrication.

Try a tin and you will experience the very best of which your engine is capable.

Write us for revised E/R Illustrated List.

PRICE'S PATENT CANDLE COMPANY LTD., Battersea, LONDON, S.W.11



DE MARCAY, 8 h.p., two-seater, little known here, but one of the most efficient, fast, and comfortable cars on the market. It is in excellent condition, but owner is ordered to Gold Coast and must sell at once. Accept, cash

Can be seen at 45, Streatham Hill, London, S.W.2

Weather



#### "STANHOLM" Windscreen Wiper Mechanically Operated

by Bowden Cable, from Steering Column, or Body Side. Most efficient and positive in action, and the only Wiper of its kind which cleans your Screen for a full 180°. Price 366. Postage 9d. Types to fit all Screens.



STANHOLM" Petrol Can Opener. Designed to fit on to the under side of Running Board, a boon to motorists either on the Road or in the Garage. No more serazed Knuckles, and ever ready for use. Price 2/8. Postage 4d.



"STANHOLM" Petrol Can Carrier. Substantially made In Brass and ell finished. Sturdy and efficient. Rattle an Impossibility. Price Plated. 12/6; Black. 10/6. Postage 9d.

S. J. H. MOTOR ACCESSORY CO., 8, Vesey Street, St. Mary's -- BIRMINGHAM.



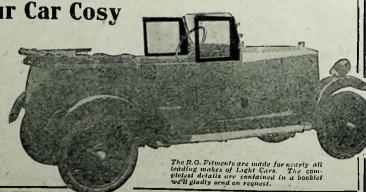
ALL MODELS

ALL MODELS
complete with
Hood. Screen.
Lamps, Mats,
Horn, Licence
Holder, and
Tools.

**Make Your Car Cosy** in Every

The wonderful success of R.O. Side Screen The wonderful auccess of R.O. Side Screen and Coupe Filments is due to their strength, appearance, and simplicity of fitting. R.O. Side Screens cost £2:16:0 per pair. The complete R.O. Coupe Filment costs £4:10:0 to £5:0:0. The benefit you get makes these prices very cheap. Take advantage of it at once.

REC - OLDER CO., LTD., Clement St. Parade. Birmingham.
Phone: Central 123!. Wires: "Plato, fi'ham."



HELP THE MOVEMENT by letting advertisers know that their advertisements in "The Light Car and Cyclecar" interest you.

## A "TOP GEAR" CAR!

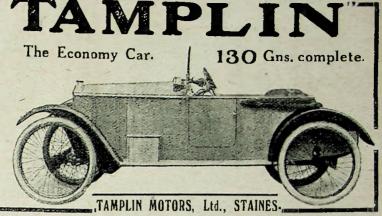
"SHE TOOK REIGATE HILL ON TOP GEAR at something over legal limit; to my mind an excellent performance as she was fully loaded."—The report of a satisfied user (an A.M.I.A.E.) of a

#### STANDARD "TAMPLIN"

Query-Can a standard 'SMALL-FOUR'

The car with the highest power weight ratio.

THE CAR OF GUARANTEED PERFORMANCE.





IS A FIRM FOUNDATION FOR YOUR CHOICE OF

W. GOODYEAR & SONS LTD., DUDLEY.

## Wireless

TTRACTIVE programmes A are broadcast every evening now. Why not hear them, and let the folk at home hear them, too?

To every car-owner wireless should be simple to instal and operate. That same instinct which makes a car appeal to him (or to her) will find a fascination in "wireless" also.

Come and choose a set at Dunhil's. Demonstration We can offer complete sets in every evening great variety, as well as all accessories, such as 'phones, aerials, insulators, etc. — everything, in at 5 p.m.

insulators, etc. — everything, in fact, that you need.

We shall be pleased to show you what any of our sets will do. Broad-casting commences each evening at 5 o'clock. If you can arrange to call at 37/6, 42/-, 63/- and 75/- you can arrange to call any price you may choose to afford. There are valve sets at practically any price you may choose to afford. Call at our Showrooms and make a full inspection. You will find much to interest you.

Free

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



embodies, as the illustration shows, every useful feature required for efficient spring protection. A set of Rappa Gaiters on your springs ensures easy, buoyant riding, per-fect absorption of road-shocks, and thus a longer life for your car by keeping the springs free from mud.

E. HARRISON & SONS, LTD...
19, Mey mott St., Blackfriars, London, S.E.I. Telephone: Hop 2010
Halland Recresentative: R. Bunston Roberts, 27, Southfield Avenue
Edglaston, Birmingham.

Folder & Price List sent on request

LIMIT THE FEED AND ELIMINATE THE CARBON.

## Buy 3 gallons at a time



and save money

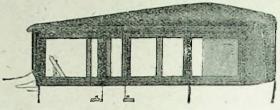
THE larger the container the cheaper the price per gallon. It is cheaper to buy your Wakefield Castrol in 3-gallon drums than in Castrol cans, and as safe. You get a sealed package just the same.

C. C. WAKEFIELD & Co., Ltd., All-British Firm: Specialists in Motor Lubrication. Wakefield House, Cheapside, LONDON, E.C.2. You can keep the drum (3, 5, or 10-gal.) sealed with the Wakefield patent Self-Locking Tap.

WAKEFIELD

Pocket Lubrication Index and Price List Free.

IT SELLS BECAUSE IT EXCELS!



## Hoods

of"Rexine" Rubbercloth are really weatherproof. They keep pliable under all conditions, and are absolutely waterproof.

The fabric is tremendously strong-and only pure live rubber, thoroughly vulcanised, is used.

For hoods, head leathers, knee rugs, tyre covers, hood envelopes, etc., "Rexine" Rubbercloth is unsurpassed.



REXINE LTD., Rexine Works, Hyue,

London Office: 42, Newgate Street, E.C.I.

Important to LIGHT CAR OWNERS.

Can Opener.



of exceedingly strong construction, and produced specially for the numerons LIGHT CARS now on the road having fairly accessible tank. An ABSOLUTELY PERFECT porting device.

TYPE "LX," similar to above, with 9" 11/3

"LIGALL" productions (including 100 designs CAR, LIGHT CAR and MOTORCYCLE MASCOTS) stocked by the trade throughout the entire motor world.

"LIGALL" productions (proprietors, and Manufacturers:

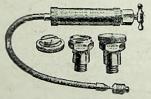
THE SAFFTY DETDOL FILLED CO. LTD.

THE SAFETY PETROL FILLER CO., LTD., Bedford Place, NORTHAMPTON

وحديد والمحادي فعام المحاديدة والمحاددات

#### MAKE GREASING A PLEASURE

By Adopting THE "R. & S." GREASING SYSTEM



A cheap, clean, quick, and simple device which does away with the attendant dirt on the usual grease cups.

Can be used for oll and grease.

Price 15/- each.

Grease cups with caps (Nickel or Brass), 11- each.

SEND FOR ILLUSTRATED LEAFLET.

Rotherham & Sons, Ltd., Coventry., Telegrams: "Rotherhams, Coventry."

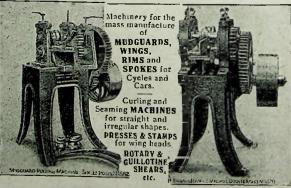
## The Car you require

Cash Credit Exchange Terms.

can be seen in our New Showrooms - whether it is a Rover, Marseal, Bleriot, Unit, Coventry-Premier, G.N., Bayliss-Thomas, Morgan, or any other light car.

The



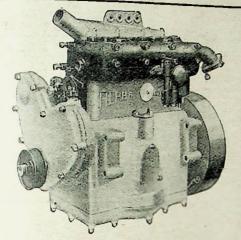


DANIEL SMITH, LIMITED, Peel St., WOLVERHAMPTON. Telephone: 210. Telegrams :" Presses."

HELP THE MOVEMENT

by letting advertisers know that their advertisements

in " The Light Car and Oyclecar" interest you.



THE POWER UNITS OF PROVED WORTH, EMBODYING 21 YEARS' EXPERIENCE OF ENGINE MANUFACTURE.

THREE MODELS-

- 9 h.p. Twin-Cylinder Engine, 33" x 33", 1099 c.c.
- 9 h.p. Four-Cylinder Engine, 23" x 33", 1088 c.c.
- 11 hp. Four-Cylinder Engine, 25" × 33", 1330 c.c.

PROMPT DELIVERY OF ALL TYPES.

JOHNSON, HURLEY & MARTIN, LTD., ALPHA MOTOR WORKS, COVENTRY.

## Gears in 4 Days

Most types are in stockwe deliver by return.



quality is of far greater importance than

No. 544a. Set of 5 accurately made, hardened and tempered STEEL Spanners, of very best quality. Gives 10 grips, from 1" to 3" Whitworth, and 1" and 16" across flats. Blued 3/6: Plated 6/- per set of 5.

No. 305.

The "AVECTA" Workshop or Garage Tool Rack. Good and reliable.

10 3/6 4/6 5/6 6/6 7/6 each Clips and screws only 3/- dozen. From your agent.

its price. We know and guarantee that every piece of workmanship that passes our hands is perfect for its purpose and that it will be reliable under test of service.

Write for our lists and buy our goods through your own agent.

In case of diffi-culty order from us.

HERBERT TERRY & SONS, LTD.,

Ma infacturers of high grade springs, washers, &c.,



UTILITY CAR ON AIR COOLED OIL AWARDED GOLD MEDAL IN CLASS A IN THE SCOTTISH SIX DAYS RELIABILITY "DEEDS NOT WORDS" SOLE MAKERS. FILTRATE WORKS, LEEDS.

9 H.P. STONELEIGH

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 Slipping Clutch Melancholy Motorist

He knows he's twenty miles from the nearest town, he knows it's muddy, and he knows that putting the Clutch to rights is going to be the filthiest job possible. One thing he doesn't know — KIT. Or he wouldn't be melancholy!

KIT is the new hand soap for motorists and mechanics, and it's going to be the hand soap. This is why: a very little of it spreads over the hands more effectively than a lot of any other soap, and moves the whole of the dirt and grease in next to no time. Paint and oil and tar—KIT thoroughly enjoys a stiff job of that sort.

And your hands will not only look clean—they will feel clean, which means that all the dirt ground into the pores by hard work has been dug out as well.

Price 6d. per Tin.



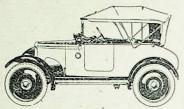
LEVER BROTHERS LIMITED, PORT SUNLIGHT.

K.T.6-4

## MUMMUM

## 'A Sound Proposition.

NEW 1923, 8 h.p. ROVER



4-Seater Model, £190 (fully equipped).

ALL MODELS FROM STOCK.

HIGHEST MARKET VALUE ALLOWED for your present Car or Motorcycle in PART EXCHANGE.

DEFERRED PAYMENTS.

MAY WE SEND YOU FULL PARTICULARS?

BAMBERS

SOUTHPORT.

2, Eastbank Street,

Telephone: 007.

Cooper Car

The CAR that is Built to an Ideal.

11 h.p. Four-seater

£260

Fully guaranteed.
Tax £11
Electric Starter
£15 extra.
Speedometer, £5 5s.

AN inexpensive Carthat is, above all, reliable. Good looking, well sprung, very economical of petrol; fast and full of power, the "COOPER" comes successfully through all tests.

Write for free illustrated descriptive booklet to-day.

THE COOPER CAR CO., LTD.,
Ampthill Road, BEDFORD.

Sole London Agents:
Messrs.
WILLIAM WHITELEY, Ltd.
Queen's Rd.. London, W?

### 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 indvertisements in this section: 12 words, 2/- (minimum); 2d, per word after. Subject to a discount of 6 per cent for 13 consenting inserting from 52 per cent, for 52. Terms: Cash with order, and otherwise net.

DISPLAYED ADVERTISEMENTS. Scale of charges, with reduction for on applicat

Cheques, Postal Orders, etc., should be crossed and made payable to

REGULATIONS WITH REGARD TO ADVERTISEMENTS.

All advertisement orders are subject to acceptance in writing from the

All advertisements and contracts are accepted and made upon the express condition 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 Publishers and outside the scope of the journal, and such refusal of copy shall not be a good ground for advertises to stop a current cutract, to refuse payment, or to take 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. In the case of series orders, burrent copy will be repeated if new copy is not received at the time of closing for press.

Whilst every precaution is taken to ensure accurate printing, the Pub-lishers will not be responsible for printers' errors, nor will they be re-sponsible for advertisement blocks destroyed by fire or that are left in their possession for more than one year.

BOX NUMBERS —Advertisers desiring to have replies sent care of "The Light Car and Cycleon" may do so on payment of a nominal lee of 6d. to corer booking and cost of lorwarding such replies. The words "Box", c/o 'The Light Car and Cyclecar, "count part of the advertisement.

#### DEPOSIT SYSTEM.

DEPOSIT SYSTEM.

For the convenience and security of our readers we have an approvaldeposit 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. [5d. in the £. 2s. 6d. minimum], on amounts deposited up to £50. I per cent, on amounts from £50 to £100. and ½ per cent. on amounts from £50 to £100. and ½ per cent. on amounts acceeding £100, to cover our expenses of booking, postages, etc. Carriage is to be paid by the huyer. If the article is returned, each matty pays one way. The risk of damage in transit is the seller's. Articles on approval are not to be relained more than three days, unless by arrangement between the parties. All disputes to be settled by the statistical of the Editor of "THE LIGHT CAR AND CYCLECAR," whose decision shall be final and binding on both parties.

Whose decision shall be final and binding on both parties.

WARNING.—Acknowledgments of deposits or instructions to locward goods advertised are only written on our special headed paper, which bears a facsimile of the title of this fournal. To prevent fraud, the advertiser should ACKNOWLEDGE 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.

#### CLOSING TIME.

Copy for, and all matter relating to, advertisements must reach the Head offices first post Tuesday, and should be addressed to THE MANAGER, "THE LIGHT CAR AND CYCLECAR," 7.15 ROSEBERY AVENUE, LONDON, E.O. 1. If proofs of displayed advertisements are required, copy should be forwarded in sufficient time to allow of it being submitted and returned.

Head Offices: -7-15 Resebery Avenue, London, E.C. I. Telephone, Clerkenwell 6000 (7 lines). Telegrams: Pressimus, Hoib London. iAddresses of Branch Offices and other Rusiness 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 MONOAY, 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.B.C. Whether you are buyling or selling an A.B.C. second nand, it would pay you to corduct the husiness through George England (1922), Ltd., it Curzon St., Maylair, W.I. None but guaranteed accond-hand cars are sold. Terms to sellers most reasonable, zzz-744

A.B.C. Gordon Watney and Co., Ltd., 31, Brook St., W. 1 (Phone, Maylair 2965 and 2960), West End wholesale and retail concessionnaires, have several second-hand 1921 and 1922 models, carrying our guarantee, from £150. Can be purchased on the deferred payments. Cart taken in part exchange.

A.B.C., 1922, Regent and Sports models; choice of 3; prices from £150; extended terms from 10 per cent, down. Rey, 378-384 Faston Rd. Phone, Museum 7736.

A.B.C., 1921 sports 2-scater, full equipment, splendid condition, £120; exchanges. Allber Garage, Thornsett Rd., Earlafield Lombon. Phone, Latchmere 4588.

A.B.C., practically new, 1922, sports, every possible accessory, 2160, 24 Bailiol Rd., North Kensington 552-a541

A.B.C., 1921, sports 2-scater, rully equipped, smart and sound, tax paid, £120. Garage, 12 Cornwall Terrace Mews, N.W.1. Rear Baker St. Station. 'Phone, Laugham 2953. 552-456 A.B.C., 1922, sports, 2-scater, fully equipped, tax paid, £145 Garage, 12 Cornwall Terrace Mews, N.W.1. Rear Baker St. Station. Phone, Laugham 2953.

A.C. Let us quote you for your present A.C in part exchange for a new 1923 model. Prices from £395. Authorized agents, Caithuess and Co., Ltd (late Alfred Wastnage), 65 Gt. Portland St. W. 1. Tel., Laugham. 2172.

A.C., 1915, dynamo, detachable whoels, oversize tyres. 5 new, in good condition throughout, £85, K. J. Motors, Bromley. 'Phone 1727.

A.C.s wanted in part exchange for new 8bp Talbets. Liberal terms, Easy payments system. Warwick Wright, Ltd., Sole Landon Distributors of Talbet cars, 150 New Bond St., London, W.1. Telephone, Maylar 6504.

6504.

A.C., 1921, 11.8hp, all-weather 2-scaler, dickey, solf-starter, cynamo, luggago grid, Klazon, etc., 260 extras, perfect condition throughout, 2275. Vivian, 35 Spenser St., Victoria St., S.W. 1. Vict. 3677.

A.C., 1922, de luxe model, 2-seater, starter, lighting, specdameter, dickey, etc., superb condition throughout, mileage 1,900, painted blue with grey leather upholstery, whole sindistinguishable from new, 330 guineas; exchanges and deferred. Edwards, 101 Gt. Portland St., W. L. 552-571

A.C. 3-wheeler, well sprung, splendid running order, £30, must seel, space required for larger car. W. M. Hills, Lingfield, Surrey 532-a465 A.-C. 1921 2-seater, all accessories, recently overbauled and repainted, condition perfect, £240. Smith Motors, Ltd., High Rd., Goodmayes, London. zzz-612

Albert bargains. As we are rebuilding and enlarging our premises, we are compelled to dispose of some of our stock and can offer, at very low prices, soveral Alberts, including 1923 demonstration cars and 1922 Gwynne all-weather. Olympia Motor Co., Albert specialists, 1 Hanmer-smith Rd., Kensington. Phone, Western 4140.

Smith Rd., Rensington. Faces, western 4740.

ALLDAYS, 10bp, 4-cylinder, 1915 model, genuine all-weather 2-3-seater, windows open with doors, £70 just spent complete repainting, rouphoistering, and overhaul, arerything perfect, fast, silent, Lucas electric lights, new tyres, reason sale given, tax paid, £110. Flat 1, 169 Fulham Rd. Telephone, Kensington 6293.

A.V. monocar, 1919, electric lights, disc wheels, Zenith carburetter, Triplex screen, repainted, smart appearance, £30. la Abbeville Rd., Clapham Common, S.W.4.

A.V. monocar, with dickey, 8hp J.A.P., 1920, 2-speed, electric light, speedometer, accessories, good condition, £45. Write, Griffith, 11 Beau-champ Pl., S.W.5.

A.V., June, 1921, Shp. 2-scater, small mileage, fully equipped, 5 months' licence, perfect condition, £58 or nearest. Clegg Tetney, Bath Rd., Skengh.

A.V. The Light Car Co. offer a very nice A.V. 2-seater, in excepten, condition throughout, £50; exchange or hire purchase. 551 Euston Rd.,

A.V., sports, 1925 model, side-by-side, aluminium: body and mudguards, wire detachables, 700 by 80 tyres, Harford chock absorbers, electric lighting and D.A. acetylene, speedometer, fitted with either 700 c.c. Blackburne o.b.v., or 1,000 c.c. S.S., 3-peed, handle start, exceeds for m.ph., not done 300 miles, very sporty appearance, £110; exchange super sole combination or Morgan. 2 Madrid Rd., Barnes, 552-552 A.V., latest 1922, 2-scaler, fitted dynamo, hood, detachable wheels, many extras, absolutely as now, £85 or exchange, 3 Stamford Brook Rd., Haumersmith.

BEBE PEUGEOT, 3 speeds, exceptionally nice condition, £72 10s.; extended payments from 10 per cept, down, Rey., 378-384 Easton Rd. Thone, Museum 7756

Phone, Museum 7736

BEBE PEUGEOT, 1914, 4 cylinders, expensively equipped, overhauled numing perfectly, £00

Bunting's Motor Kxchante, Wealdstone, Middlesex.

Meanistance, and the second se

BARY PEUGEOT, 1915, 3-speed, de luxe, leather upholetery, real par-gain, £60, or exchange. 3 Stamtor | Brook P. Hammersmith. 532-546 BABY PEUGEUI, 65 guineas; exchanges; do luvo 2-seater, 7hp, 4 con-dors, gate change, spare rim, smart, any examination, trial. Seabridge, 35 Hansler Rd., East Dulwich Sydonham 2452. 532-541

BELSIZE-BRADSHAW 3-sexter, new 1923 model, ready for delivery to advertiser, sacrifice, £185-or nearest; deliver 50 miles from Crosse it desired. Box No. 979, co. "The Light Car and Cycle at." 552-355

BELSIZE-BRADSHAW coups to be delivered February, brand new 1925 model, cash wanted, £250. Box No 980, c.o. "Tee Light Car and Cyclecar." 532-3534

Readers are referred also to "THE MOTOR" (Tuesdays, 4d.), which contains each week many hundreds of advertisements of new and second-hand cars of all kinds.

#### 28 (Supplement viii.)

#### - SECOND-HAND LIGHT CARS AND CYCLECARS FOR SALE

BELSIZE-BRADSHAW. Gordon Watney and Co., Ltd., 31 Breck St., W.1 ('Phone, Maylair 2965 and 2966), the West End wholesale concessionnaires, have several second-hand 1922 models, carrying our guarantee, from £175. Can be purchased on the deferred payments. Cars taken in part exchange.

BELSIZE-BRADSHAW, 9hp. 4-scater, hood and screen, colour grey, pholstery blue, nickel fittings, wheels and tyres standard, dynamo lighting, with head and tail lamps, horn and tools, splendid condition, bargain price, £210; in London. Write, Box No. 411, care of "The Light Car and Cyclecur."

BELSIZE-BRADSHAW, as new, tex paid, posh little car, full equipment, perfect condition, 50-mile trial run to genuine buyer, £175 or near offer, owner bought larger car. Walter East, Envelope Specialst, 532-a483.

BELSIZE-BRADSHAW, 2-3-scater, with dickey, speedometer, starter, brand new, £220; also 2-3-scater, with speedometer, £200. Putney Bridge Auto Mart, 222 Putney Bridge Rd., S.W. 15. 532-579
BLERIOT-WHIPPET, F.O.C. II. have 1921 Bleriot-Whippet, bargain 5 Heath St., Hampstead (near Tube).

BLERIOT-WHIPPET, 1920, dynamo lighting, spare wheel, excellent condition throughout, 50 guineas; exchanges and delerred. Edwards, 101 Gt. Portland St., W. 1. 532-572

101 Gt. Portland St., W. 1.

BLERIOT-WHIPPET 1920 2-seater, 5 detachable interchangeable wheels, new black bood, aluminium dash and improved interior finish, electric lighting. Lucas 8-in. headlamps, excellent condition throughout, £65. Owner, Coniston, Anchorage Rd., Sutton Coldfield. 535-8468.

BROOK £75, 1921, Shp 2-seater, dynamo lighting, 5 detachable wheels, speedometer, clock, exchange. Denman Motor Agency, 4 Denman Pl., Piccadilly Circus. Regent 986.

Piccadilly Circus. Regent 986. 532-626

BUCKINGHAM, 1923, 10hp, 2-seater and double dickey, latest model, pastel blue, Lucas lighting, horn, spare wheel, Sandum side screens, mascot, etc., tax paid delivered December 30th, cost £195, mileage under 500, accept £165. Lancaster Motor Co., 158 Notwood Rd. West Norwood. Phone, Streatham 2541. 552-492

BUGATTI, 1922, 16-valve, English cloverleaf 2-seater body, in exceptionally nice condition, fitted with every possible accessory, tax paid, £385. J. Smith and Co., Motor Agents, Ltd., 52-54 Hampstead Rd., N.W. 1, Tel., Museum 5938.

N.W. 1. Tel., Museum 5938.

BUGATTI, 1921, 16-valve, sporting 2-seater, dynamo, detachable wheels, clock, speedometer, splendid condition, £355. Below.

BUGATTI, 1914, special 2-seater body, dynamo, detachable wheels, speedometer, dash lamp, exceptional condition, £165. Pickworth and Hull, 107 Gt. Portland St., W. 1. Lungham 1998.

552-151

CALCOTT spares and repairs. All Calcott spare parts in stock for immediate delivory. Trads supplied. All kinds of Calcott repairs, small or large. Complete overhauls. Authorized direct agents for Calcott cars. Trade supplied. Calcott Service Depot, Wilkins, Simpson, opposite Olympia, London. Phone, Hammersmith 258.

CALCOTT, 1922, 10hp, 2-seater, dickey, as new, mileage 1,500, £215.

CALCOTT, 1922, 10hp, 2-seater, dicker, as new, milenge 1,300, £215, Storer and Tait, 20 Bourdon St., Bond St., W.1. Mayfair 625, 552-633

CALCOTT, 10hp, 1919, tully equipped, newly painted, overhauled, C.A.V., special body, £175. Sansbury, 7 London Mews, Maple St., Tottenbam Court Rd. 'Phone, Langham 2245.

CALTHORPE, special, fast, recently overhauled by makers, aluminium pistons, L. and S., 6 wheels with v.g. tyres, special streamlined body, 2 seats and dickey, hood, screen, lamps, side curtains, tcols, bargain, £220.

Buyers' Agents, 170 Piccadilly. Regent 5448.

CALTHORPE, 1922. 4-scater, all-weither, lighting, starter, shop-soiled only, genuine bargain, £500; deferred terms. Smith and Hunter, 77 Gt. Portland St., W. Phone, Langham 2565.

CALTHORPE coupe, 1925 car, done few demonstrations and practically unblemished, burgain, £585. Smith and Hunter, 77 Gt. Portland St.; W. 'Phone, Langham 2365.

unblemished, Burgain, £505.

W. 'Phone, Langham 2365.

GALTHORPE, 1920 model, 4-seater, electric starting and horn, new hood, overhauled and painted, £180. Putney Bridge Auto Mart. 222
Putney Bridge Rd., S.W. 15.

CALTHORPE, 11hp, 1920, 4-seater saloon, exceptionally smart body, new condition, trial London, £275. Owner, Warsash House, Hants.

534-545

CALTHORPE, 129 guineas, exchanges, deferred payments: 1914-15, 4-scater, double screen, 5 detachables, one-man hood, electric lamps, smart Scabridge, 35 Hansler Rd., East Dulwich. Telephone, Sydenham 2452

CALTHORPE, 1918, 2-scater, with dickoy, lighting set, self-starter, detached wheels, £130. Hales, 16 Bourdon St., Berkeley Square, W. 552-4450

CARDEN repairs and spares.

Repairers to Carden Engineering Co. Works 4 minutes' run from Victoria. Immediate delivery of spares, such as layshafts, clutch plates, gears, bushes, etc. 15 per cent. off list prices. Send for particulars of many Carden improvements marketed by us. Reconditioned and guaranteed Cardens in stock for sale from £50. Running adjustments while you wait by Carden experts. Lowest charges in London. Ravenscourt. 288 Baitersea Park Rd., S.W. 11. Telephone, Latchmere 4720-1. zzz.52

CARDEN, 1921, hood, screen, lamps, £50 cash, or £10 15s, deposit and 11 payments of £3 15s., less rebate. Service Company, 273-4 High Holborn, W.C. 1. 222-957

CARDEN Official Repair Depot. The only one in London and district Having taken over the whole of the repairs and sale of spare parts from the Carden Engineering Co., Ltd., we have organized a special department to deal with this work. Only guaranteed spares supplied. Reware of imitations at reduced prices. Numerous important improvements for Carden cars. Send for particulars. Patences and Sole Concessionnaires:—The New Carden Light Car Co., Ltd., 22 Hyths Rd., Willesden, N.W. 10. Phone, Willesden 2297.

CARDEN, 1921 2-seator, accessories, splendid condition particulars and trial run on application, 50 guineas. Stapylton, Woningworth, Newton Heath, Manchester. 552-3530

CARDEN, 1921 (July), electric lighting, head, screen, 1922 Jul-16a-tion, spring-acats and other extras, splendid condition, £45. Wildsmeth, 31 Lynton Rd, Acton, W.5. GARDEN, latest 1921, fine 2-scater, lighting set, extra good tyres, head, screen, any trial, only 49 guincas; motorcycle part; easy terms; first deposit secures immediate delivery, Wandsworth Motor Exchange, Ehner 8t., Wandsworth (Town Station).

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

CASTLE THREE. F.O.C.H. have 1922 Castle Three, bargain. 5 Heath St., Hampstead (near Tube).

CHARRON, 1915, 8hp. 2-seater, detachable wheels, spare wheel, all good tyres, nectylene headlamps, oil side and tail, in perfect mechanical condition, carefully used by clergyman, usual tools and spares, tax paid to March, 30 m.p.s., any trial or examination, £75. Day, Okehampton,

CHARRONETTE. Cass's Motor Mart. Ltd. 1921 8.9hp 2-scater, dynamo lighting and starting, 5 lamps, speedonieter, 5 wheels and tyres, excellent condition, bargain. £140; delerred terms, exchanges. 5 Warren St., W. 1. Museum 625.

CITROEN, 10hp, 1921, speedometer, rear screen, leather gaiters, in splendid condition throughout, £165. 11 Gloucester St., Oxford.

CITROEN, coupe. 10.4hp, order as good as new, a most complete car, price £275. Westminster Bridge G. and E. Co., 202 Westminster Bridge Rd. Hop 6187.

CITROEN, 1921, 4-seater, fullest equipment, perfect order, £160. Smith and Hunter, 77 Gt. Portland St., W. 'Phone, Langham 256.

CITROEN, new, 5-7hp, 2-seater, 1923, 5 speeds, reverse, self-starter, dynamo lighting, wonderful little car, £175, tax paid to March. Van de Maele, 21-22 Upper Rathbone Place Garage, London, W. 1. 532-a545

CITROEN 4-scater, in good condition, solf-starter, dynamo lighting, 5 wheels, tyres good, very smart appearance; this car is open to R.A.C. or A.A. examination, £145. 5 Putney Bridge Rd., Wandsworth. Phone, Putney 2728.

COVENTRY-PREMIER, 5 in stock, 1922 models, £145, £157, £175; one-quarter down and 12 payments with option of discount; 1925 model on show. Lamb's, Ltd., 151 High St., Walthamstow; 50 High Rd., Wood Green; 387 Euston Rd., London, N.W. 2zz-427 COVENTRY-PREMIER, 1922, mileage 350, as new, fully equipped, £190, oliet. 244 Old Christchurch Rd., Bournemouth. 532-418

COVENTRY-PREMIER, 8hp, 1922, new in June, double dickey, dynamo lighting insurance inclusive, mileage 3.000, £145 17s. 6d.; excellent condition. Wilkins, Simpson, opposite Olympia, London. 532-a245

COVENTRY-PREMIER, Packing of the state of th

car, £130; exchanges. 29 January Avenue, spare wheel, thoroughly good order, £120. Frank Whitworth, Ltd., 139 New St., Birmingham. 532-523

COVENTRY-PREMIER, 1922, 4-wheeler, dynamo lighting, clock, speedometer, de luxe model, double dickey, indistinguishable from new 145 guineas; exchanges and deferred. Edwards and Co., Gt. Portland

CROUCH, 1915, 7-9hp, 2-scater, sporting w.-c. V twin, magneto, tyres good (2 new Dunlops), in good running order, must sell, £40 or near otter, J., 5 Ranelagh Ave., Hurlingham.

CROUCH. F.O.C.H, have a 1921 Crouch, bargain. 5 Heath St. Hamp-stead (near Tube). 532-450

DE MARCAY 8hp 2-seater, little known here, but one of the most offi-cient, fast and comfortable cars on the market. It is in excellent condi-tion, but owner is ordered to Gold Coast and must sell at once; accept 275 cash; photo. of car will be found in advertisement pages this issue. Can be seen at 45 Streatham Hill, London, S.W. 2. Address Inters, "De Marcay."

DE MARCAY 1921 10hp 2-seater, dynamo lighting, detachable wheels, adjustable screens, excellent condition, 60 guineas; exclanges or deferred. Edwards, 101 Gt. Portland St., W. 1.

DOUGLAS, 1920, 2-scater, C.A.V. lights and startor, run 3,300 miles, £160. White House, near Tenbridge.

ERIC CAMPBELL, 2-eater, 1920, luxuriously equipped, £150. 244
Old Ohristchurch Rd., Bournemouth. 552-419
ERIC CAMPBELL, late 1921, 2-eater, dynamo, spare wheel, speed of meter, clock, all aluminium body, cost over £500, accept £145; exchanges. Hiller (sido bell), 127 St. Mark's Rd., North Kensington.

ERIC CAMPBELL, 1921, all-aluminium body, speedometer, revolution counter, clock, condition throughout perfect, bargain £135, or exchanges, James, c.o. Bradmores, 482 Harrow Rd. Raddington, 532-606 ERIC LONGDEN, April, 1922, 8.9 twin Blackburne, water-cooled, 5-speed, reverse, dyname, speedometer, spare wheel, 55 m.p.h., perfect throughout, £140. Esmond, 38 Pertland Piace, Lenden. 532-w437,

throughout, £140, Lemond, 38 Portland Flate, London.

G.N., 1922. A few slightly shop-solied demonstration, touring, sporting and racing models available, extremely attractive prices. G.N. Motors. 222 Gt. Portland St., W. 1. 'Phone, Museum 2271. 536-26 C. G.N. wanted in exchange for 8hp Talbots. Balance by instalments Warwick Wright, Ltd., 150 New Bond St., W. 1. 'Phone, Maylair 5504-5. zzz-180

C.N., 1921 dickey, exceptional condition in every way, low mileage, trial willingly, Holly Park Garage, Finchley, N.J. 'Phone, Finchley 2432, 532-y156

C.N., 1920, dynamo, £90; 1921 Legere model, without dynamo, £90 cash, or £18 16s, deposit and 11 payments of £16 16s., less rebate. Service Co., 273 High Holborn, W.C. 1. C.N., Sept., 1920, small mileage, in good condition, dyname lighting, £90. Autocurs, Ltd., Ilfracombe, Devon. 552-177

G.N., 1921, as now, £115; deferred payment with option of discount Lamb's, Ltd., 151 High St., Walthamstow; 50 Righ Rd., Wood Green, 387 Euston Rd., London, N.W.

G.N., all aluminium sports model, dynamo, speedometer, exceptionally fast, £135; extended terms from 10 per cent. down. Below.

G.N., 1920, specially long chassis, 3-scater, dynamo, clock, speedometer, 2 spare whoels, exceptionally good condition, 100 guiness; extended terms from 10 per cent. down. Below.

G.N., 1922 dicket, etc. eplendid order, £135; extended terms from 10' per cent, down. Rey, 378-384 Eusten Rd. 'Phone, Museum 77.56, 552-463,

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

C.N., 1921, dynamo lighting, shock absorbers, done under 4,000 miles of careful driving, perfect condition, any trial, £95. Dr. Jordan, Dover.

C.N., exceptionally smart, dynamo lighting, speedometer, clock, aluminium 5,000, £110; exchange or deferred payments over 18 mentus. Alter-Bennett Motor Co., £td., 9-11 Royal Parade, West Croyden. Phone, Croyden 2450-2451.

C.N., 1921, 2-scater, French, zrey, dynamo lghting, exceptional engine, Zentth carbinetter, exceptional appearance, best of all accessories, good for compatitions, £150. Pountney, Broadstairs. 532-a377 C.N., March, 1922, tax paid, dynamo lighting, dickey eat, 5 detachable wheels, accessize tyres, special, £115, no offers. Foucar, 18 Mariborough R-b., Baubury, Oxfordshire.

R. Banbury, Oxfordshire.

G.N., 1920, dynamo lighting, speedometer, dark blue, aluminium dash almost new oversize tyres, very fost, 50 no.ph., 55.60 per gallon, only wants seeing and trying, tax paid, £78, offers. 1 Glebe Ave. Ended. 552-a511

C.N., 1920, touring, dynamo lighting, mileago 6,000, any trial, £95
Purney Bridge Auto Mart, 222 Putney Bridge Rd., S.W. 15. 532-578
G.N.s wanted in part exchange for new 8hp Talbots. Liberal terms.
Pare parameter system. Warwick Wright, Ltd., Sole London Distributors of Talbots cars, 150 New Bond St., London, W. 1. Telephone, Maylair 650-1.

G.N., three 1921 de luxe models, fitted dynamo lighting, epare wheel, appearement, one with dickey seat, £85 each; or exchange combination, each company way; can be viewed any tume, any trial, Hiller, I Thorpe Mana, Cambridge Gardons, North Kensington (Ladbroke Greve Station),

Mers, Cambridge Gardons, North Kensington Leaurose Drove Stabon532-357
G.N., exceptional 1922 de luxe, dynamo lighting, dickey seat, spare
wheel, unsofied condition, £125; ditto, 1921, £85; exchanges, 24
Balliof Rd, North Kensington.

552-353
G.N., 1920, dynamo, spare wheel, excellent condition, £77 10s. Storer
and Tatt, 20 Bourdon St., Bond St., W.1. Mayfair 625.

552-654
G.N., 1921 (November), thoroughly overhauled, 4 nearly new tyres,
6xname, spare wheel, specilometer, born and several improvements firstclass condition, £70. Collinson, Ackworth School, near Pontefract.

G.N. Cana Meter Mart, Ltd. 1921, 8hp, 5 hamps, horn, speedometer, hood, screen, just overhauled and repainted, bargain, 80 guineas; defented terms, exchanges, 5 Warren St., W. I. Museum 625, 532-559 G.N., 72 guineas, exchanges, 1921, 2-seater, dynamo, electric horn, check, speedometer, fast, any examination. Scabridge, 35 Handler Rd., Last, Dulwich, Sydenham 2452.

C.W.K., 2-scator and dickey, 4-cylinder engine, Rotax lighting and lamps, one only 2,688 miles, in first-class order, 215 Westmunster Bridge (and Long). The control of the

C.W.K. late model 4-scater, in extremely good order, bedywork and mainlatery like new, £115, cash or deferred terms. Autocars, Ltd., 15 Woodtock St., London, W.1. Telephone, Mayfair £631. 532-631 Woodtock St., London, W.1. Telephone, Mayfair £631. 525-601 C.W.K. 4-cylinder 2-seater, dickey, dynamo, detachables, etc., excellent condition, £115. Vivian, 33 Spenser St., Victoria St., S.W. 1532-601

C.W.K. 1915 de luxe model, dynamo lighting, detachable wheels, 270 cash. Elec. Ltd., 15-16 Bishopsgate Ave., Camomile St., E.C. Phone. Avenne 5548.

HILLMAN cars. Official repairers, London district, Chester Motor Co., Ltd., 94a Chevne Walk, Chelsea, London S.W. 10. Telephone, Kensington 3200. All spare parts in stock. Well-equipped work 546-412 HILLMAN, 1914, with dickey, 5 wheels, sound, any trial, £72 10s. 552-521

HORSTMAN, 1920-21, smart 2-seater, dickey, 6 wheels, dynamo starter, bargain, £135, or cheaper car and cash. Ben-ma-chice, Patchain, 532-a498

HUMBERETTE Spare Parts Dept. Repairs, replacements, overhauls, repainting. Inquiries invited for second-hand cars.

HUMBERETTE. Humber Service Depot Canterbury Rd. Kilhurn, N.W. 6. Phone, Willesden 1298-1299. Telegrams, "Humberonia, 1298-1299.

HUMBERETTE, 1914, water-cooled engine, recently put in sound and E. Co., 202 Westminster Bridge Rd.

HUMBERETTE, 1914, water-cooled engine, recently put in sound and E. Co., 202 Westminster Bridge Rd. Hop 6187. 222-365

HUMBERETTE, 1915, water-cooled, dynamo lighting, speedometer, modern body, awner-driven, in perfect running order, 60 gainness, tax and insurance pald; any trial. 1 Julian Ave., Acton, W.5. 552-357

JOWETTS. Second-hand. You can't get them! Write and ask us why. Kinsey's, of Croydon, The Jowett Specialists.

KEVAH, 1921 V twin, water-cooled 8hp. spare water, dickey, very

KEVAH, 1921 V twin, water-cooled 8hp. spate ward, dicker, very smart and fast, cost £279, £85, a bargain. 244 Old Christ-hurch S52-420 Rd., Bournemouth.

Rid., Bournemouth.

Rid., Bournemouth.

KINGSBURY JUNIOR, 2-seater, 1921 model, dynamo lighting, disc.

KINGSBURY JUNIOR, 2-seater, 1921 model, dynamo lighting, disc.

KINGSBURY JUNIOR, 1920, J. II. Sutherland and Co., Ltd., 11

wheels, in first-class order, £90. J. II. Sutherland and Co., Ltd., 11

Renshaw St., Liverpool.

KINGSBURY JUNIOR, 1921, 9hp, 2-seater, dickey, thoroughly over
KINGSBURY JUNIOR, 1921, 9hp, 2

MATHIS 8.9hp 1922 31/2-seater, demonstration model, fully equipped, painted maroon, bargain, £275. Below.

MATHIS, 7.5hp, 1922, used for a few trial runs only, £200. Below. MATHIS, 7.5hp, 1922, only run 1,000 miles and in perfect condition, £175.

MATHIS, Borough Mills Garago Co., Manchester Rd., Bradford. 'Phone, 533-w995 6177 Bradford.

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

LITTLE MIDLAND car, electric light, gr-y colour, new 1922, not been used, £150 or nearest offer. Box No. 1,000, c.o. The Light Car and Cyclicar."

Cyclocar."

532-003

MATHIS. The Light Car Co. offer a 1922 Mathis 2-acter, dynamo and starter, used for a few trial runs only, price £186; exchange or hira purchase. The Light Car Co., 331 Euston Ibl., London.

532-591

MERCURY, 139 guineas, exceptional barguin; exchanges, deferred payments; 1920 Mercury, 2-scater, sunk dickey, 10bp, 4 cyfinders, gaighthauge, dynamo, clock, speedometer, 5 detachables, smart, speedid coudition. Scabridge, 35 Hansler Rd., East Dulwich. Sydenham 2452.

532-540

METEORITE, 169 guineas, exchanges, exceptionally smart 1919-20 2-seater, dickey, dynamo. 11hp, 4 cylinders, 5 detachables, silent, flexible, fast. Seabridge, 35 Hansler Rd., East Dulwich. Sydenham 2452, 532-539

MORGAN Service Depot. Officially appointed repairers by the Morgan Motor Co. for London. Full range of spares carried. New and second-hand machines always in stock. Trade supplied. Official agents, Bonac's, 243 Lower Clapton Rd., E. S. Dalston 2408. 222-580

MORGAN specialists. James and Co. (Sheffield), Ltd., 265 Ecclesall Rd., Sheffield. Telephone, Central 2460. Good stock of spares carried. It in difficulty wire us. New and second-hand machines nearly always in stock.

MORGAN, Grand Prix, late model, excellent condition throughout, to clear 260. Midland Garage, Broad St. Birmingham zzz-239

WORGANS, £55 to £120; exchanges or deferred payments. Cleveland Garage, Ackworth, Pontefract.

MORGANS, choice of 3. 1922 Popular, 1922 Grand Prix, M.A.G., dynamo, 1921 be Luxe; extended terms from 10 per cent. dwm. Rey (Morgan agent), 378-384 Euston Rd. 'Phone, Mnseum 7736, 532-455

MORGAN. Bar Guy, Weymouth, main Dorset agent. Trade supplied. Spares in stock; exchanges and deferred payments. 544-454

MORGAN. F.O.C.H. have 1921 G.P. Morgan, bargain. 5 Heath St. Hampstead (near Tube).

Hampstead (near Tube).

532-429

MORGAN, 1922, Popular, stored since September, extrai on, best offer over £30. 36 Peaseod St., Windsor.

MORGAN, 1921, M.A.G., do luxe, absolutely as new throughout, £37 10s. 102 Westwood Rd., Earlsdon, Coventry.

MORGAN, 1915, Grand Prix, 8bp w.-c. J.A.P., bood, screen, 5 lamps, etc., in splendid condition, guaranteed perfect, £80. Below.

MORGAN, 1922, Grand Prix, 10bp w.-c. Blackburne, aluminium pistors and special cams. Lucas dynamo lighting, speciometer, dash lamp, tyres almost new, special body, wide chassis. This is one of our own competition machines, and has many first-class awards to his credit, £150, lower Clapton Rd., N.E. Those, Dalston 2408.

Daiston 2408.

MORGAN, 1922. Grand Prix, special o.h.e. J.A.P., specidometer, discs, all in new condition, £128. 7 Exhibition Rd., S.W. 7.

MORGAN, April, 1922, de luxe, w.c., speedometer, mirror, hood cover, unpunctured, taxed, scarcely used, perfect, reasonable offer. Heath, 4 St. Stephen's Rd., Hounslow.

MORGAN, Grand Prix, 1915-16, recently overhauled, perfect candition throughout, electric light, £55. Cooke, 35 Hoveden Rd. Crisclewood, N.W.

MORGAN, 1922, Shp. Pogujar model, just repairted and in first-class condition, 290. Newstham, 223 Hammersmith Rd., W. 6. Phone, Hammersmith 1325.

MORGAN, 1921, Grand Prix, M.A.G. engine, lighting set, £112 Below. MORGAN, G.P., 1920, J.A.P. engine, lamps, etc., £95. Elce, Lad., 13-16 Bishopsgate Avenue, Camomite St., E.C. Phone, Avenue 5548.

MORGAN, Grand Prix. J.A.P., water-cooled, lamps, recently overhanded and repainted, equal in condition to many 1921 models, £90. Below,

MORGAN, 1919, Grand Prix, J.A.P., water-cooled, boad, winds-reen, discs, £100. Maudes' Motor Mart, 100 Gt. Portland St., Loudon, W 1, MORGAN. Cass's Motor Mart, Ltd. 1920 G.P., water-cooled M.A.G. engine, disc wheels, 5 lamps, speedometer, overhauled, painted red, bargain, £105; deferred terms, exchanges. 5 Warren St., W. 1. Museum 025.

MORGAN, 1920, G.P., water-cooled M.A.G., taxed, excellent condition, £85. 3 Stamford Brook Rd., Hammersnuth. 532-849 285. 3 Stamford Brook Rd., Hammersmith. 532-549 MORGAN, Sports model a -c. J.A.P., absolutely perfect condition, we chains, etc., £75; trial with pleasure, 16b The Promenade, Paimers Green, N. 15.

chains, etc. £75; trial with pleasure. 100 Mer. 532-4429
Green, N. 15.

MORGAN de luxe, late 1922, water-cooled, J.A.P., Lucas dynamo lighting, electric horn, etc., mileage only 400, guaranteed, £130; exchanges illiliter (side bell), 127 St. Mark's Rd., North Keosington. 532-3535

MORGAN-ANZANI, 1922, G.P., July, xellow, very fast, about 3,000, berlect condition, unpunctured, £150. Rouse, Vet., Soliam, Cambis, 552-3501

MORRIS-OXFORD, 2-scater, £140, or good offer, late 1916, recently overhauled, dynamo lighting, electric horn, side curtains, speedometer, 6 good tyres, trial by appointment, Reade, Newchurch Rd., Wellington, Salop.

MORRIS-OXFORD, De Luxe model, just overhauled and painted Royal blue, new tyres speedometer and double dickey, in perfect condition, £120. Arden, High St., Thrapston. 532-a512 MORRIS-OXFORD, De Luxe, 1915, dynamo, clock, speedometer, splendid order, £110; extended terms from 10 per cent, down. Rey (Morris agent), 578-384 Euston Rd. Phone, Museum 77-56. 52-464 NEWEY, 1920, 2-sacter, 10pt, 4-cylindec, 5 whoels, whole as new small mileage, 90 gus. 43 Turnham Green Terrace, Chiswick, 552-520 PERRY, 1914, 8hp, 2-seater, dickey, all-weather curtains, spare wheel, 5 lamps, speedometer, good condition, £65. 37 Chandos Ave., Whetstone, N.20.

stone, N.20.

PERRY, 7hp, 1916, 2-seator, dickey, dynamo lighting, detachable wheek, 1 spare, hood, side curtains, grand condition, taxed, 68 guiteas, 17 Berwick Rd., High St., Walthamstow.

PERRY, 7hp, 1914, 8hp, coups body, excellent condition, £120, M. 89 Cromwell Rd., South Kensington, London.

532-4504

PREMIER, 1922, choice of 2: 4-wheeter, dickey, dynamo, excellent condition, £135; extended terms from 10 per cent. down. Rey (Premier agent), 378-384 Euston Rd. Phone, Museum 7736. 532-466

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

RHODE. Messrs. Mebes and Mebes (Est. 1895), The Original Light Car Specialists, sole distributors London, South and West of Eng-land, have o of these famous cars, all late 1922 models, and in new condition, for £185 each. Buy your Rhode from the Rhode Specialists, 144 Gt. Portland St., W.1. 'Phone, Langham 2230.

RICHARDSON 8hp 2-seater, electric light, speeds, Magnum tyres, hood screen, etc., good order, £60. Westminster Bridgo G, and E. Co., 202 Westminster Bridge Rd. Hop 6187.

Richardson, bought now 1922, 9 J.A.P., overhauled, repnitted Royal blue, perfect, smart, economical car, electric, 100 guineas; easy payments accepted; any trial. 28 Ryedale, East Dulwich. 532-a487

FILEY. 1922 model, 4-scater, complete with self-starter, dynamo lighting, 5 lamps, spare wheel and tyre, usual tools, hood and side curtains, excellent condition, nico steering, very flexible and easy in traffic, in tip-top condition throughout, price £525 spot ca.h. Box No. 9282, co. "Tho Light Car and Cyclecar."

RILEY service depot. Guaranteed 1922 second-hand models from £325 Lewey Motor Works, Lewes. 542-425

ROVER, 8hp, 1921, licensed, Easting side screens and curtains, dynamo lighting, speedometer, clock, etc., £120. Darke, Mapesbury Works, 140 Willesden Lane, N.W.

Willesden Lane, N.W.

ROVER de luxe 8, October, 1922, navy blue, mileage 500 only, speedometer, clock, dash lamp, floor mat, leather upholstery, practically new, cost £210, first offer £165; appointment. 86 Trinity Rise, Tulse Hill, 8.W. 2.

ROVER 8, 1921, in perfect order, recently repainted and overhauled, any trial, £105 cash. Liquorish, Bedford House, Northampton, 553-415 ROVER 8, 1923, mileago under 500, side screens and other extras, unsoiled, £150 cash no offers. Meacham, 31 Thursby Rd., Northampton.

ROVER, 1921, 8hp. dynamo elighting, spoedometer, mirror, etc., noto tax paid for whole of 1923, excellent condition and very smart in appearance, inspection invited, genuine bargain, £105, Wilkins, Simpson, opposite Olympia, London.

ROVER de luxe, 1923 model, clock speedometer, upholstered leather, grey colour, tax and insurance paid for year, hardly colled; what offiers. Entertain recent Morgan with dynamo as part. Box No. 986, co. "The Light Car and Cyclecar."

ROVER 8, 1922, mileage under 1,000, as new in every respect, £142 10s.; deferred payments over 18 months Allen-Bennett Motor Co., Ltd., 9, 10, 11 Royal Parade, London Rd., Oroydon Phone, croydon 2450-2451.

ROVER 8's, choice of 3: 1921 and 1922, prices from £105; extended terms from 10 per cent. down. Rey (Rover agent), 578-584 Euston Rd. 'Phone, Museum 7736.

Phone, Museum 7756.

ROVER 8, 1921, speedometer, absolutely sound, £110. Smith and Hunter, 77 Gt. Pertland St., W. 'Phone, Langham 2363. 532-444

ROVER, 8bp. 1922, de luxe model, clock, speedometer, all-weather curtains, gaiters, dashlamp, mirror, year's tax, small mileage, £150. Pickworth and Hull, 107 Gt. Portland St., W.1. Langham 1998, 532-512

ROVER 8, 1921, 100 guineas; smart appearance, good condition, 6-guinea speedometer, 2 horns, tools; seen any time, 317 City Rd., E.O.1, 532-a432

ROVER, 8hp. 1921, dynamo, not done 500 miles since thoroughly overhauled by makers, price £100. Can be seen at Winkworth, 8 Grest, W.1 Tel., Gerrard 1515.

St., W.1 Tel., Gerrard 1515. 552-a428

ROVER, Ehp, largeat second-hand stock in London; from 90 to 100
guineas, cash or deferred. Delancey Street Garage, Camden Town.
532-a516

ROVER 8, 1922, speedometer, original tyres, late property of a prominent naval commander, absolutely as new, 120 guineas; also late 1920 model, new tyres, speedometer, full equipment, 95 guineas; exchanges. Alber Garage, Thornsett Rd., Earlsfield, London. 'Phone, Latchmere 4588 532-576

ROVER 8, 1922, fully equipped, excellent condition, 128 guineas; ex-ohanges and deferred. Edwards, 101 Gt. Fortland St. 532-569

ROVER, 1921, dynamo lighting, electric horn, speedometer, spare wheel, etc., good tyres, any trial or examination, £88. 15 Sandall Rd., Camdon Town (29 'buses).

ROVER, 1921, 8hp, dynamo lighting, speedometer, electric and bulb horns, all tools, etc., very nice condition, £95. Kenilworth, Penshurst Rd., Thornton Heath, S.E.

ROVER 8, 1922, late, every possible fitting, as brand new. £135, or exchange combination and cash. James, c.o. Bracknores, 482 Harrow Rd., Paddington.

ROVER 8, 1921, exceptionally good condition, £100. Box No. 1004, c.o. "The Light Car and Cyclecar."

ROVER, 1922, new, complete, £155, bargain. D. and S. Autocar Co., 53 The Parade, Golders Green.

ROVER 8, late 1921, engine No. 83,977, fitted side curtains, dynamo, side mirror, etc., beautiful condition, any trial, £100; exchanges, Hillier (side bell), 127 St. Mark's Rd., North Kensington. 552-a536

ROVER 8, 2-seater, dynamo, fully equipped, in excellent order, tax paid, £105. Garage, 12 Cornwall Terrace Mews, N.W. 1. Rear Baker Street Station. 'Phone, Langham 2935. 532-4458
ROVER 8, 1921, just repainted, full equipment, excellent condition, £107 10s. Storer and Tait, 20 Bourdon St., Bond St., W. 1. Maylair 625.

ROVER, 1922, as new, used three times, £160. Peel, Charlton Ave., Weston-super-Mare.

ROVER, 8hp, June, 1921, 2-seater, perfect condition, many extras, £110. M., 89 Cromwell Rd., South Kensington, London. 532-a503
ROVER. The Light Car Co. offer excellent 1922 8hp Rover, dynamo lighting, many extras, price £120; 1921 model, excellent condition, £105; exchanges or hire purchase. 351 Euston Rd., London. 632-597
ROVERS wanted in part exchange for new 8hp Talbots. Liberal terms. Easy payments system. Warwick Wright, Ltd., Sole London Distributors of Talbot cars, 150 New Bond St., London. W.1. Telephone, Maylair 6504.

SALMSON, sluminium sports, 1922, V windscreen, 60 m.p.h., 6 wheels and tyres, cleck, speedometer, fully equipped, guaranteed perfect and faultless, taxed, £185. K.J. Motors, Bromley. Phone 1727, 553-375

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

SALMSON, 1922, de luxe, starter, dynamo, speedometer, mileage under 1,000, perfect and faultless, £200. k J. Motors, Bromley. 532-149 SALMSON, 1922 (December), standard 2-seater, dynamo lighting, sparo wheel and tyre, Iully equipped, mileage under 500, £160. K.J. Motors, Bromley. 'Phono 1727.

SALMSON, 1922, with dickey, unused, shop-soiled only, full guarantee, 165 gns. 43 Turnham Green Terrace, S.W. (near Station). 552-516. SALMSON 1922 do luxe, excellent condition, £152. 7 Exhibition Rd., S.W. 7. 552-565

S.W. 7.

SALMSON, 1922 (August), de luxe, double dickey, dynamo, speedometer, mileage under 3,000, spare wheel (unused), guaranteed perfect and faultless, taxed, £180, K.J. Motors, Bromley, Phone, 1727, 552-599

SHORT-ASHBY, 1922, 8bp, 4-cylinder water-cooled, 2-scater and dickey, friction drive, hood and screen, Lucas dynamo lighting, spare wheel. This is the actual model exhibited at Olympia last November Dark blue berry with aluminium bonnet. An ideal no-trouble car, Trial run can be arranged in London. What offers? Major, 18 Russell Gdns. Golds. Golds.

Green, London, N.W.

SINGER, 275 purchases epecial 1915 Singor 2-seater, recently overhauled, tuned and hotted up by well-known Brooklands competition driver, dynamo lighting, 5 lamps, detachable wheels, 200d tyres, hood, acres, shock absorbers, etc., the whole absolutely O.K., taxed and would deliver 100 miles. Solwaybank, Hayes, Kent. 'Phone, Bromley 552, 552-421

SINGER, 1922, 10hp, 2-scater, dynamo lighting, self-starter, doubld dickey, speedemeter, etc., insurance inclusive, new in June, small mideace, condition better than new, £215. Wilkins, Simpson, opposite Olempia, London.

SINGER, 1915, 2-seater, dynamo lighting, speedometer, etc., 5 new tyres, excellent condition and very smart appearance, inspection invited, genuine bargain, £115, tax paid. Wilkins, Simpson, opposite Olympia, London, 552-2559

SINGER, 1920, 2-seater, starter, lighting, full equipment, exactlent condition, £145; extended terms from 10 per cent, down. Rey (Singer agent), 578-384 Euston Rd. Phone, Museum 7756.

SINGER, 1922, 2-scater, now, but shop coiled, £240. Smith and Hunter, 77 Gt. Portland St., W. Phone, Langham 2363. 532-442

SINGER, 10hp, with dickey, 5 wheels, beautiful order throughout, 50 gns. 43 Turnham Green Terrace, S.W (near Station). 532-516

gns. 43 Turnham Green Terrace, S.W (near Station). 532-516

SINGER. Cass's Motor Mart, Ltd. 1917 coupe, 10hp, dynamo lighting, 5 wheels and tyres, in eplendid condition, bargain, 105 gns.; deferred terms; exchanges, 5 Warren St., W.1. Museum 625.

SINGER, 1920, dynamo and starter, dickey, new tyres, remainted, excellent order, £125 or deferred payments. Le Grice Elers, 27 Sussex Pl., S. Konsington, S.W.7. Kens. 6609. 552-a428

SINGER 10hp 1917 2-seater car and dickey, dynamo lighting, all spures and accessories, 6 interchangeable wheels, perfect condition, trial, £85. Foster, 51 Clissold Rd., Clissold Park, London, N. 16. 'Phone, Dalston 2812.

SINGER, 10hp, late 1921, self-starter, dynamo, double sunken dickey, tax paid, indistinguishable from brand new, £165. 69 St. Paul's Ave., Willesden Green, London.

Willesden Green, London. 552-a525

SINGER, 1920, starter and lighting set, excellent condition double dickey, trial in London by appointment, £120. Box No. 1005, co. "The Light Car and Cyclecar." 532-a532

SINGER, 1913, 2-seator, electric light, good condition, £94; or exchange G.P. Morgan, A.V. 2-seater, G.N., late model. Bartlett, Preshte, Marlborough.

SINGER. The Light Car Co. offer several bargains in Singer cars; exchange or hire purchase. The Light Car Co., 351 Eusten Rd., London. 532-595

SINGERS. Wanted in part exchange for new 8hp Talbots. Liberal terms. Easy payments system. Warwick Wright, Ltd., Sole London Distributors of Talbot cars, 150 New Bond St., London, W. 2. Telephone, Maylair 6504.

Maylair 6504.

SINGER, exceptional late 1920, 10hp, Rotax lighting and starter, £155; exchanges. 24 Balliol Rd., North Kensington. 552-3542

SINGER, 1916, 2-seater, dynamo, very smart, and everhauled last month, equipped, tax paid, £105. Garage, 12 Cornwall Terrace Mews, N.W. I. Rear Baker Street Station. Phone, Langham 2935, 552-365, STANDARD, 1914 2-seater, 9.5hp, with dickey seat, excellent condition throughout, £135. Foster, 204 Capstone Rd., Bournemouth. 222-815

STANDARD, 2-seater and dickey, 1914, 9.5hp, lighting and starting, 5 lamps, many extras, everything, including tyres, in good order, £140. Westminster Bridge Rd. 1190, 6187.

STANDARD, 1920, 2-seater, all-weather, dickey, self-starter, dynamo, 2 spare whools, etc., appearance and condition as new, £210. Vivian, 33 Spenser St., Victoria St., S.W.1. Vict. 8677 532-500

STANDARD, 1920-21, 9.5, 2-seater, double dickey, in new condition, starter and lighting, closes as coupe, electric born, speedometer, many extras, tax paid December, £190; exchanges. James, c.o. Bradmores, 482 Harrow Rd., Paddington.

482 Harrow Rd., Paudington.

STANDARD. The Light Car Co. have a very nice 1920 9.5hp 3-scated Standard, dynamo and starter, £210; also a 9.5hp 2-tealer at £85; exchange or hire purchase. The Light Car Co., 331 Easten Rd., London. 552-596

STELLITE 10hp 2-scater, in perfect condition, £120. Smith Motors, Ltd., High Rd., Goodmayes, London.

STELLITE, 1920, dickey, dynamo, exceptionally nice condition, £165; extended terms from 10 per cent. down. Rey, 378-384 Euston Rd. 'Phone, Museum 7736.

STELLITE. Cass's Motor Mart, Ltd. 1914, 10hp 2-scater and dickey, 5 lamps, speedometer, 5 whoels and tyres, just overhauled and repainted grey, splendid condition, bargain, £115; doferred terms; exchanges 5 Warren St., W.1. Museum 623. 670NELEIGH, 9hp, 3-scater, utility car, new last May, £145 Renwick, 58 Leam Ter., Leamington Spa. 532-y76

SWIFT, 1921, 2-soater, double dickey, starter-lighting, excellent condi-tion, £195; terms arranged. Midland Garage, Broad St., Birmingham. zzz-456

SWIFT, 1914, 2-scater, 7-9hp, very fast, sound examination invited, 55 gps. 43 Turnham Green Terrace, S.W. (near Station).) 532-517

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

SWIFT, 62 guinens; exchanges; 2-senter, 9hp. 2 cylinders, 5 detach-abirs, hord, screen, lamps, pulls well, any examination and trial. Sca-bridge, 35 Hansler Rd., East Dulwich Sydenham 2452. 532-544

bridge, 55 Hansler Rd., East Dulwich Sydenbara 2452. 532-544
SWIFT, 7-9, 1915, 2-yelinder, guaranteed perfect mechanical condition, all tyres good, tax pand March, any trial or examination, 275. 6., No. 5 52-5251
SWIFT, 7-9, 2-scater, racing body, butbous tail, Aero windscreens, rounded radiator, electric light, 440, 62a Church St., Kensington.
SWIFT. The Light Gar Co. bare 2 very nice 10hn Switt cars, dynamo and starter, at bangain prices; exchange or hire purchase. The Light Car Co., 531 Eastern Rd., London.

532-594

TALBOT-DARRACO, 1922, 2-scater, double sunk dickey, self-starter, dynamo ngaring, speedometer, practically new condition, £225. J. Smith and Co., Motor Agents, Ltd., 52-54 Hampstead Rd., N.W.I. Tel., Mineum 5936.

TALBUT DARRACO. The Light Car Co. offer a (supp-soiled) 2-seater Talbot Darraset, fitted with dynamo and starter, in perfect order, £255; eschatzes at large purchase. The Light Car Co., -551 Euston Rd. Lendon.

TAMPLIN 1921. £50 cash, at £10 15s. deposit and 11 payments of the control of the

TAMPLIN, 1920, 2-seater, 8hp J.A.P. engine, perfect condition littogramme, inside self-staretr, £55; terms arranged, Midland Garage, Brood St. Girmingham, zzz-260

TAMPLIN, 1920, Sing air-cooled, 2-scater, good order, £45. Gray's, Lad., Guddford. 'Phone 557,

TAMPLIN. 100 guineas, shop-soiled, 1922 side-by-side agent's model; another used 1922 model, 100 guineas; also new tandem Show model, 155 guineas. Tamplin Motors, Ltd., Staines. 932-3506
T.B., July, 1922, cloverleaf, w.e., JA.P., spare wheel, dynamo lighting, speculameter, condition as new, nearest £150; or exchange small 4-scatter, 196 Ferndale Rd, Swindon. 532-3518
T.B. coelecar, lato 1920, very low mileage, tip-top condition, nearest £120 accurate, trial by appointment. Box No. 1001, care of "The Light Car and Cyclecar."

532-3515

light Car and Cyclecar." 532-a515

TEMPERINO, 8-10hp, 1921-1922 model, little used and in new condition, cost £175, accept £85 or near offer; this leautiful little car is very economical and costs under ½4, a mile to run; 5 speeds and reverse, detachable disc wheels and spare, electric lighting and mechanical starting, genuine bargain; irial and inspection will convince owner bought larger car; appointment. 89 Selburst Rd., South Norwood. 552-a472

UNIT, April, 1922. A very attractive 9.8 Coventry Climax-engined sporting model, fully equipped with dynamo lighting, etc. all-aluminium 2-scater body, red wings, wheels and unholstery, nick-plated fittings, mechanically perfect and looks like new, photos, and any other details on request, final drive by spur gearing, tyres good, 2 new Kempshalls on front and unused spare, nearest offer to 2220 secures. Apply, 1 1-c.o. "The Light Car and Cyclecar," 7 Rosebery Ave., E.C. 1. 222-545.

WARREN-LAMBERT, 1923, 10hp, sports model, 2-seater and dicker, 3 speed and reverse, dynamo lighting, spare wheel, hood, screen, condition as brand new, 160 guineas, exchanges and deterred. Edwards, 101 Gt.
532-570

WARREN-LAMBERT, £140; 1921, 2-scafer car, very smart and last, discs, dynamo lighting; deferred terms. Denman Motor Agency, 4 Denman Pl., Piccadilly Circus. Regent 986.

WOLSELEY, 7hp, unused, but slightly shop-soiled, self-starter, etc., bargain, £259. Barnett, Pembroke and Slater, Ltd., 58, Knight-sbridge, S.W.1.

wolseley, 7hp. 1923 model, starter, all-weather curtains, described screen, practically new, £235. Pickworth and Hull, 107 Gt. Portland St., W.1. Langham 1998.

St., W.1. Langham 1998.

WOLSELEY, 10hn, Inte 1922, sell-starter, dynama, double sunken dickey scat; this car only delivered in July; all tyres as brand new, coachwork unscratched, £275. 69 St. Paul's Ave., Willesden Green, London.

WOLSELEY, 7hp. electric self-starter and lighting, 2-scater body, only received from Wolseley works January 24th, 1925, list price £275, my price £195, 69 St. Paul's Arc., Willeaden Green, London. 552-a527 WOLSELEY, exceptional, 10hp, practically new, C.A.V. lights and starter, every possible fitment faxed, handsome car, unsoiled, £240; exchanges, 24 Balliel Rd., North Kensington. 522-a538 LE ZEBRE, 1921, electric light, self-starter, dickey scat, side curtains, new Michelin cables all round, repainted, £150. Fester, 204 Capstone 222-815 Rd., Bournemouth.

LE ZERRE, a snip, excellent 2-seater (English body) and dicker, dynamo, sharter, speedometer and numerous accessories, small mileage, as new, £165, cost double, cash or deferred payments. Write, call or phone, Western Motor Works, Porty St., Chislehurst, Kent. Phop. 222-377

#### SPARE PARTS FOR LIGHT CARS.

CALTHORPE 1920-21 parts for sale at 50 per cent, below makers' list; radiators, front axles, Hardy couplings, shackle springs, timing chains, valve caps, ball races, change-need wheels; state requirements. Hamp-ton Wick Garage, St. John's Rd., Hampton Wick, Middlesex, 'Phone, 202 Kingston.

HUMBERETTE spares. Crown wheels, pinions, balance boxes. Wandsworth Motor Exchange, Ebner St., Wandsworth.

HUMBERETTE spares. Everything stocked, from cotter to back axie, Wandsworth Meter Exchange, Ebner St., Wandsworth. 532-505

K.J. (KINGSBURY-JUNIOR) spares in stock. The Kennedy Motor Co., Ltd., Shettleston, Glasgow. Telegrams, Minervanyt. Glasgow. Telephone, 220 Shettleston. MERRALL-BROWN spares and repairs. Merrall-Brown, 28 Chorley Old 538-e317

MORGAN spare parts from stock for all models. Send your inquiry to MORGAN spare parts from stock for all models. Send your inquiry to Hall, Morgan Specialist, 91 St. Peter's St., St. Albans. Tel. 636, 563-658

MORGAN spares. The Stevenage Motor Co., I.d., Stevenage, Herts, can supply from stack all spares at makers hist price, plus carriage. Repairs and overheads carried out by experts. Write, wire or phone your requirements. Prompt attention given Phone, Stevenage 53. zzz-599

#### SPARE PARTS (continued).

MORGAN spare parts depot. Spares for all models from stock. List free. Elec. Ltd., 13-16 Bishopsgate Ave., Camonile St., E.C. Phone, Avenue 5548.

ROVER spares. We carry a £3,000 stock of Rover parts. Correspondence invited on all matters pertaining to Rover cars. John Pollitt and Son (successors to the Rover Co., Ltd.), Renshaw St., Liverpool. 536-184 8hp ROVER spares. Practically every part in stock; immediate de-livery. Kays, 8-16 Bond St., Ealing. 537-361

#### NEW LIGHT CARS AND CYCLECARS

A.B.C. Gordon Wainey and Co. Ltd., 31 Brook St. W.1 (Phone, May-fair 2965 and 2966). The Wholesale and Retail Concessionnaires, ear give immediate dolivery of the 1925 types at faither reduced prices: sports model, £225; standard model, £250; 4-scater, £265; deferred juyments arranged and cars taken in part exchange.

A.B.C. George England (1922), Ltd., 11 Curcon St., Mayfair, W I (Phone, Grovenor 2191), have fully-equipped A.B.C. repair works, stocks of spares, and are experts in tuning; sports model, £225; Regent model, £240; special featherweight 4-seater; surer sports model, aluminium body, to specification. Write for gadget list, Deferred payments are exchange:

A.B.C., sports, £225; standard, £240. Part exchanges; deferred payments; many second-hand cars. For details and trial write British Motor Trading Corporation, Ltd., 132:135 Long Ac.e. London. Recent 4626.

A.B.C. 1922 sports model, dynama, shop-soiled only, £200. Mandes, 532-497

A.B.C. sports, new, unregistered, shop soiled only, 1922 model, dynamo lighting, £200. Burditt, Boddington House, Biggleswade, 535-a522

Caithness and Co., Ltd. (late Alfred Wastinge) for quick deliveries of A Cs and the best service after purchase. Deferred payments.

Deferred payments.
Part exchanges
Chithness and Co., Ltd., 65 Gt. Portland St., W. 1. Tel., Langham 2172
S32-453
A.C. Cass's Motor Mart, Ltd. Royal (£475) and Empire (£325) in stock, immediate delivery; your present car taken in part exchange, balance cash or deferred. 243 Brompton Rd., S.W. 5. Kensington 2194
532-553

A.C. 1925 models in stock for immediate delivery; prices from £395 to £1,000; highest prices allowed on second-hand cars of any make in part payment; deferred terms if desired; trial runs at any time. Newnham Motor Co., 223 and 245 Hammersmith Rd., London, W. 6. Phone, Hammersmith 1325.

Motor Co., 223 and 245 Hammersmith Rd., London, W. O. Annual Hammersmith 1525.

Hammersmith 1525.

A.-C. Immediate delivery of all models can be obtained at Autorepors, Ltd., leading London agents and concessionnaires for Surrey. Demonstrations can time; easy terms arranged. 84 Victoria St., SW. 1. 552-615

ALVIS cars. North London agents. 2 and 4-scaters. Deliveries from stock. Official repairers and sparte parts depot. Ewens, Golders Green Garage, Finchley Rd. 'Phone, Hamp. 6187.

ALVIS. Official Agents, Mebes and Mebes (Est. 1893). The Original Light Car Spocalists, sole distributors South Bucks and London agents, can offer immediate delivery of all models, including the 10-30hp, which are on view in their showrooms, price from £397. Your present light car in exchange. Deferred payments over 12 or 18 menths to suit chent's pocket. 144 Gt. Portland St., W.1. 'Phone, Langdam 2230.

552-480

AMILCAR specialist and distributor, North and Tast Riding Yorkshire, S. Glover, North St., Ripon. 'Phone 172.

ARIEL 'Nine,' the £235 all-weather car with the thousand-quinca personality, water-cooled, right-band change, long wheelbase, 3-4-scaler, single-shell body, adjustable seats; have a trial run or free tuition without obligation: cash, exchange or deferred payments. 'Phone, Horusey 2917. Jones Garage, Broadway, Muswell Hill, N. 10.

2917. Jones Garage, Broadway, Muswell Hill, N. 10.

ARIEL, 9hp, water-cooled, 3-4-scater, £235; easy paymont terms ar ranged; meaern cars taken in lieu of deposit. For particulars of this marvellous light car, write Ariel Motors and General Repairs, Ltd., 320-2 Camberwell New Rd., London, S.E. 5.

ZZZ-339

ARIEL, the new 9hp water-cooled 3-4-scater, price £235, is the nicest light car on the market, a combination of speed, reliability, and elegance, Particulars from Fred Speakman, Ariel Garage, Harpurhey, Marchester, Particulars from Fred Speakman, Ariel Garage, Harpurhey, Marchester, Particulars from Fred Speakman, Ariel Garage, 18-19.

A.V. coupe, 1925, brand new, 10hp Blackburgo engine, 3 speeds and roverse gearbox, carries 2 adults and 2 children, oversize types, a bargain, 100 guineas, would take monocar as part payment. Williams, 51 Arlington Rd., Teddington, Middleax.

AUSTIN, 7hp. £165, order now for early delivery, cash or deferred payments. Bound's Garage, 225 High Rd. Kilburn.

Zzz-590

AUSTIN. You can now see and try the new Austin Seven at our Show-rooms. The price is £16S, and there is a great demand. Book your order now for earliest deliveries, which can be obtained from F. G. Smith Motors 1.td., High Rd., Goodmayes. Thone, Illord 1082. 222-452

AUSTIN 7hp. Can give prompt delivery. Write for specification. George England (1922), Ltd., 11 Curzon St. Mayfair, W. 1. zzz-817 AUSTIN. Stretton, and Smith for 7hp Austins. Earliest deliveries, Deferred payments. 12 Woodstock St., Oxford St., London. 222-930

AUSTIN, 7hp model, early deliveries. Official agents, Motoria, Regent's Parade, Tally-ho, Finchley. 542-w994

Parade, Tally-ho, Finchley.

AUSTIN, new Thip model, £165. Place your order now for early delivery. Deferred payments.

Parker's, 246-52 Deansgate, Manchester; also Bradshawgate, Bolton.

S52-3488

AUSTIN. Cass's Motor Mart, Ltd. All models supplied. Thip model, £165, delivery February. 245 Brumpton Rd., S.W. S. Keusington 2194.

BAYLISS-THOMAS. The Westminster Bridge Co., Ltd., have opened now showeroms at 202 and 204 Westminster Bridge Rd., near the New County Hall. We are distributing agents for Baylies-Thomas in all London south of the Thames and 25 miles' radius. We have always several of each model in stock. Peterred terms and exchanges. Demonstrations with pleasure. Service station and works opposite.

222-99

BAYLISS-THOMAS.

BAYLISS-THOMAS, Junior, £260 cash, or £54 16s, deposit and 11 payments of £19 12s, less rebate. Service Co., 275-4 High Holborn, W.C.I.

BAYLISS.THOMAS. All 1923 models in speck; 10.5hp 2-scatter, with dickey, 2295; 10hp 4-scatter, £520; 8.9hp Junior, £260; trade supplied. Mann and Overton's, Ltd., 10 Lower Grosvenor Place, Sw. 1 Tel., Victoria 4634.

#### NEW LIGHT CARS AND CYCLECARS (continued)

EAYLISS-THOMAS Junier, starter model, purchaser having paid 10 per cent. deposit finds himself unable to take delivery, is willing to anothice deposit to anyone who will purchase car. C. R. Saunders, Brockwell, Chesterfield.

BELSIZE-BRADSHAW, 9hp dynama lighting, £210, speedometer 5 extra. Immediate delivery from the authorized agents, liarris Garage. Slough. Taone 88.

BELSIZE-BRADSHAW, Shp. £210; also supplied on our payment out of income system. Send for particulars, Ratcliffe Bros., 200 St. Portland St., W.1.

St., W. I. 222-103
BELSIZE-BRADSHAW. Gordon Watney and Co., Ltd., 31 Brook St., W. I (Phone, Maylair 2955 and 2966), the wholesale and ratail concessionnaires, can give immediate delivery of the 1925 types at reduced prices. Standard 2-seater, complete, £210; and Standard 4-seater; complete, £235. Cars on show and demonstrations given. Deferred parents arranged and cars taken in part exchange.

BELSIZE-BRADSHAW, 9hp. oil-cooled 2-5-seater, delivery from extended county Garage, Caterham Valley, Surrey. 549-d512

BELSIZE-BRADSHAW, £210 cash, or £42 8s. deposit and 11 parments of £16, less rebate. Service Company, 275-4 High Holborn, V.C. 1.

W.C. 1. zzz-290

BELSIZE-BRADSHAW, £210. C. A. Britten and Co., sole distributing agents for Liverpool, St. Helens and districts; carly delivery. 31 Islington, Liverpool. 'Phone, 1529 North. zzz-225

BELSIZE-BRADSHAW, 9hp, oil-cooled, 2-3-seater; immediate delivery from stock, £210. C. W. and J. Mason, Ltd., 3 St. Luke's Place (top of Bold St.), Liverpool. Royal 3531. 557-d841

BELSIZE-BRADSHAW, with 9hp oil-cooled engine 2-5-seaters, £210; 4-seaters, £235; 2-3-seater coupe, £260; immediate delivery. Tom Norton, Ltd., Charles St., Cardiff.

BLERIOT-WHIPPET, £155 cash, or £52 10s. deposit and 11 payments of £11 14s., less rebate. Service Co., 275.4 High Holborn, W.C. 1.

B.S.A. Learnington Automobile Co., Ltd., appointed special agents for B.S.A. cars. Display of latest models on view at our showrooms, Delivery anywhere. Complete repair depots and stocks of spare parts. 2 Parade, Learnington Spa. Tel. 113

Parade, Leamington Sps. Tel. 113

B.S.A. Are you looking for a bargain? If so, does this appeal to you?

1922 model de luxe, royal blue, dynamo lighting and self-starter, all-weather coupe fittings, list price £542, our price £285; brand new but shop-soiled. Mebes and Mebes (Est. 1885) The Original Light Car Specialists, 144 Gt. Portland St., W.1. Phone, Langham 2250.

532-481

BUCKINGHAM, 10hp. The value for money light car. Call and see the latest model 2-scater, with double dickey, price £185. Book your order now for early delivery with the Lancaster Motor Co., 158 Norwood Rd., West Norwood, S.E. 27. 'Phone, Streatham 2541.

RUCKINGHAM, £185 cash, or £38 8s, deposit and 11 payments of £14, less rebate. Service Co., 273-4 High Holborn, W.C. 1.

BESS rebate. Service Co., 273-4 High Holborn, W.C. 1. 22z-529
BUCKINGHAM. Mebes and Mcbes, (Est. 1893). The Original Light
Car Specialists, sole district agents, can ofter immediate delivery of this
lamons all-British light car from stock, at list price £185; your present
car in exchange; deferred payments 4 per cent. 144 Gt. Portland St.,
W.1. 'Phone, Langham 2250.

CALCOTT, 10hp, all-weather, 1925 models, £325, immediate delivery;
motorcycles in part exchange. Ratcliffe Bros., 200 Gt. Portland St.,
xzz-704

CALCOTTS. 1923 10.5hp models, brand new, just arrived; cash or easy payments. Your old Calcott, or any motorcycle or car, taken in part payment for a new Calcott. We specialize in exchanges and allow best prices. Direct authorized agents, Wilkins, Simpson, opposite Olympia. London. 532-a255

CALCOTT. 1925, 10.5bp, just arrived, £325; inspection invited of this very smart model; cash, easy payments, or exchanges; exchanges arranged appropriate the control of th

CALCOTT. Smith and Hunter, authorized agents, can give earliest de-livery of 10.5 models: special 2-seater, all-weather, £325. 77 Gt. Port-land St., W. 'Phone, Langham 2363.

land St., W. 'Phone, Langham 2000.

CALTHORPE. All models, including new all-weather, in stock. Deferred payments. Your old car taken. Mann, Egerton and Co., Ltd., 379-391 Euston Rd., N.W. 1; and Norwich Sole distributors for London and the Home Counties. Calthorpe Service Depot, 1a High Rd., Kilburn. 222,530

CALTHORPE. Craydon agents for Calthorpe cars. Immediate delivery from stock of all models, with efficient service to follow. Moore's, Press Motor Works, Ltd., North End, Craydon. Phone 2624. 565-117

CALTHORPE, 1922, 10bp 2-seater and 4-seater, all-weaths, at special end of season reduced prices, respectively £325 and £340, a new and fully gnaranteed, part exchanges and deferred payments Agents, Lankester Engineering Co., 39 Eden St., Kingstor.

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CALTHORPE SERVICE DEPOTS. 200 Deansgate, Manchester.

CALTHORPE 10-15 standard 2-seater, 285 guineas. In stock at Colmoro Depot.

CALTHORPE 10-15 de luxe 2-seater, 325 guineas. In stock at Colmore Depot.

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CALTIORPE 12-20 2 or 4-seater, 410 guineas. Early delivery from Colmore Depot.

CALTHORPE cars are always available from Colmore Depot, for cash, exchanges or easy terms.
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CALTHORPE cars. Denman Motor Agency, 4 Denman Place, Piccadill Circus. Regent 986

CHARRON, 8.3hp. clover-leaf body, electric starting and lighting. £275.
Pattock's Garage, Guildford. 532-297

#### NEW LIGHT CARS AND CYCLECARS (continued)

CITROEN. 7.5hp, 10hp, 11.4hp. CITROEN. The Leighton Garage.

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son's Garage, Guildford. 'Phone 545.

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5.52-595

CLYNO. "The Light Car Supreme." 11hp 4-cylinder, water-cooled, dynamo lighting, 2-seater with double dickey, detachable wheels, complete, £265; cash or deferred payments. Official Service Agents and Spare Part Stockists, Kays, 8-10 Bond St., Ealing.

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COVENTRY-PREMIER. West Bros.

COVENTRY-PREMIER. Authorized agents, 42 Cranbrook Rd. Hord. Deferred payments. Telephone, Hord 740.

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COVENTRY-PREMIER, 1923 models, in stock, 230 guineas; motorcycles taken in part exchange. Ratcliffe Bros., 200 Gt. Portland St. W. 1.

W. 1. 222-705

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Laugham. 222-356

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CROUCHES, 1922, new, exceptional opportunity, 200 guineas, originally £285. Brooklands, Ecclesall, Sheffield

CROUCH, 8-18bp, 1923, alt-weather coupe, royal blue, as standard epecifications, only done 100 miles carrying maker's guarantee, list price £245, great bargain at £215; also another model, open cat, at £200. Mebes and Mebes (Est. 1895), The Original Light Car Specialists, 144 Gt. Portland St., W.1. 'Phone, Langham 2230.

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Exchange, Horton St., Ilalifax.

DERBY care, 8.5 4-cylinder water-cooled engine, 2-seater and dickey, Standard, £220; de luxe. £245; Sports, £275.

Museum 6626. A.S.G., 166 Gt. Portland St., W. 1.

ERIC CAMPBELL. F. G. Smith Motors, Lid., The Essex County Agents, High Rd., Goodmayes, can give immediate delivery of these speedy, amant and comfortable 2-seaters from stock. Cars, complete with dynamo lighting set, detachable wheels and full equipment. £300; with statter, £315. Phone, Ilford 1082.

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ERIC LONCOEN., Mann and Handover, sole concessionnaires for London and Home Counties for Frie Longden cars. Two-scater sports nuring, 9.8 4-cylinder Alpha engine, all-aluminium bedy dynamo lighting, hood, acreen, spare wheel, tyre and tube, consumption 50 miles per bour. 265 guiness; deferred payments; delivery 4 days. 116 Gt. Portland St. Museum 2878.

#### NEW LIGHT CARS AND CYCLECARS

#### (continued)

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G.M. The Motor Marketing Co. offer immediate delivery all 1925 models, cash, exchange, deferred, to suit clients. Wantage Rd., Reading, 227-347 G.M. Rey's, authorized agents for G.N. cars. Exchanges and extended payments arranged from 10 per cent, down. A. P. Rey, 378-384 Euston Rd. 'Phone, Museum 7756.

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G.W.K., 1925 models standard 2-scater, £200; 4-scater, £225; do luve, including self-starter, speedometer, all-weather fittings, mats, 2-scater, £230; 4-scater, £260; coupe, £500. Surrey Agents, County Garage, Caterham Valley. Phone, 191 Caterham.

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Telephone, Bromies 21-64.

GWYNNE 8 cars. 2-scater or clover-leaf, from £203. Contracting agents, Denman Motor Agency, 4 Denman Place, Piccadilly Circus.

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HANDS. Mann and Handover, the only authorized agents for Hands curs on Gt. Portland St., W. 2-seater, dynamo lighting, self-starter, double dickey, 4-cylinder, water-cooled, £275; deferred terms of exchanges with pleasure; demonstration any time; immediate delivery, 116 Gt. Portland St. Museum 2878.

HANDS. 1925 models for immediate delivery Standard 2-seater with double dickey, 260 guincas: 4-seater 280 gas.; coupe, 330 gas. Deferred payments arranged. Demonstrations. Potter's Motor Agency, 30a Grove House Lane, Claypit Lane, Leeus. 'Phone 22578 534-188

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HANDS. All 1925 models stocked, a trial run will convince any Intending purchaser. Deterred terms to suit your own pocket. Sole London and Kent Distributors Cecil Motor Co., 69 Gt. Queen St., Kingsway, W.C.2. Regent 1207.

HORSTMAN, latest 11.9 Anzani-engined models

HORSTMAN, the car which looks and runs like a £600 car, but costs-

HORSTMAN coupe, £399.

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HORSTMAN special super sports model, £506.

HORSTMANS do over 50 miles per hour and 40 miles per gallon We are the sole London agents for the new models; exchanges and deterred terms a speciality. Edwards and Parry, Horstman Service Depot, 4 Blenheim St., New Bond St., W. 1. Maylar 2666.

HUMBER, Shp. £275, order now for early delivery, cash or deferred payments. Bound's Garage, 225 High Rd., Kilburn.

HUMBER, Casa's Motor Mart, Ltd., are now booking orders for these celebrated cars. Shp model, £275; delivery February, Your present car taken in part, exchange, balance cash or deferred, 243 Brompton Rd., S.W. 3. Kensington 2:194.

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JOWETT. 2 and 4-scaters.

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JOWETT. The Westminster Bridge Co., Ltd., have opened new show-rooms at 202 and 204 Westminster Bridge Rd., near the New County Hall. We are distributing agents for Jowetts in all London south of the Hall. We have alway, several of each model Thames, Kent, Surrey and Sussex. We have alway, several of each model in stock Deferred terms and exchanges. Demonstrations with pleasure. JOWETT. Jones Garage for this famous car. All models, demonstrations given, 2-seater, water-cooled, £220. Motorcycles taken in exchange Broadway, Muswell Hill, N. 10.

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541-405

LAGONDA, 1923 models; cash, exchange or deferred. Halifax Motor Exchange, Horton St., Halifax.

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LTC.-141.

LACONDA cars. West-end, London. Messrs, Mebes and Mebes (Est. 1893), The Original Light Car Specialsts, have a full range of models on view, including the 2-seater, 4-seater and coupe. We are Lagonda specialists and experts and we shall be pleased to demonstrate the various claims put forward for this all-British light car's outstanding merits at any time to suit your convenience. Prices from £275. Fully equipped. Your present Lagonda or other light car in exchange. Trade supplied. 144 Ct. Portland St., W.1. Phone, Langham 2230. 532-4378.

LACONDA. FO.C.H. main agents. Trial runs daily, Immediate delivery. Cash, exchangus, deferred terms. Trade also supplied. 5. Heath St., Hampstead (near Tube). Thone, Hampstead 3752-532-437.

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MARSEAL, 1925 models; cash or deferred. Challenge Motors, I.td., Ilaig Are., Southport. 538-d211

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MARSEAL light cars, District agents, The Eastgate Garage and Works, Lowes Sussey. 543-51

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MARSEAL coupe, now ready for immediate delivery, £275. Holloways, Shereham-by-Sea, near Brighton.

MARSEAL, 4-cylinder, 3-speed, C.A.V. starting and lighting, polished aluminium body, tax £10, £215 cash, or £44 17s, deposit, 11 payments of £16 5s, less rebate. Sole London sgents, Service Co., 273-4 High Horn, W.C. 1.

MARSEAL. All models in stock from £215, with self-starter. 907 Woodbridge Rd., Ipswich.

Woodbridge Rd., Ipswich. 556-t2
MARSEAL car, brand new, 7-11hp, coupe, with dickey seal, painted
Royal blue, electric lighting, etc., never been run, list price £286, will
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MATHIS. Smith and Hunter, authorized agents. New models for corliest delivery: 2-scater, £197 10s.; 35/2-seater, £365. 77 Gt. Portland St., W. Phone, Langham 2365.

MORCAN specialist, Hall. Distributor for South Herts, Luton, Dunstable and Bucks Early delivery all models. Trade inquiries invited. Several guaranteed second-hand Morgans to select from. 91 St. Peter's St., St. Albans.

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MORGANS, 1923 models, prices from £128, complete. Write for catalogue and arrange demonstration. Deferred payments if required. Spare parts in stock. Repairs. Potter's Motor Agency, 30a Grove House Lanc, Claypit Lanc, Leeds. 'Phone 22578.

MORGANS. Immediate delivery, all models and spares; exchanges, Chaeton, Blackwood, Mon. Tel. 66.

MORGANS. Barker's Motors, official Morgan agenta and service depot. Delivery of all models; cash or deferred payments; spare parts, repairs, etc. 194 Balham High Rd., S.W. 12. 'Phone, Latchmere 4441. 'Grams, "Pushfully, Bal., London.' 222.716

#### NEW LIGHT CARS AND CYCLECARS

MORGAN, 1925, Standard Popular, £135 cash, or £28 4s deposit and 11 payments of £10 4s, loss rebate; other models on similar terms. Service Co., 273-4 High Holborn, W.C. 1.

MORGAN, all models, immediate delivery; motorcycles accepted in part payment; deferred payments with option of discount. Lamb's, Ltd., 151 High St. Walthamstow; 50 High Rd., Wood Green; 587 Euston Rd., London, N.W.

MORGAN. Reg's, authorized agents for Morgan cars; exchanges and extended payments arranged from 10 per cent. down. A. P. Rey. 378-584 Euston Rd. 'Phone, Museum 7736.

MORGAN, 1923, do luxe model, 8hp w.-c. J.A.P., dynamo lighting, brand new, immediate delivery from stock, £168; exchanges or deferred. Homac's Morgan Service Depot, 245 Lower Clapton Rd., N.E. 752-574.

MORGANS. 1925 models actually in stock. Deferred payments, one quarter down, balance 12 months. Below.

MORGANS. As one of the largest agents for these cars, we give quickest deliveries, best exchange figures, keepest trade quotations. Below.

MORGANS. Mandes Motor Mart, 100 Gt. Portland St., London: 100 Paris St., Exeter; The Norwich Garage, Norwich; also Walsall. Garage, Walsall.

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MORGAN de luxo largo body, Blackburne, 10, w.-c. Peel, Charlton Avenue, Weston-Super-Mare. 552-a507

NEW CARDEN. The cheapest all-British light car. 2-seater, 128 guineas; family model, 138 guineas, or on deferred terms at £10 per menth; guaranteed for 12 months. Give us a ring and we will send a demonstration car to your door, or write for full particulars. Patentees and sole concessionnaires the New Carden Light Car Co., Ltd., 22 llythe Rd., Willesden, N.W.10. 'Phone. Willesden 2297. zzz.510

NEW HUDSON, brand-new 1922 model, £175, real bargain Lamble, Ltd., 151 High St., Waltbamstow; 50 High Rd., Wood Green; 387 Euston Rd., London, N.W.

RHODE. Scottish Distributors, D. McNeil, Ltd., 144 Buchanan St.,

RHODE cars for immediate delivery; exchanges or easy payments arranged. P. W. Surplice, Poole Hill, Bournemouth. 'Phone 1793 535-a881

RHODE. Immediate delivery offered of 1923 Rhode all-weather saloon 4 seats, price £265 complete. Sole district agent A. J. Rice, 183 Londor Rd., Brighton. Write for catalogue.

RHODE, 9.5hp. What a wonderful production this is. Can we prove our words to you, if so, kindly favour us with a call, and view the various models on exhibition in our showrooms, including the occasional 4-scater, sports all-weather saloon and coupe models? prices from \$2.55. Your present light car in exchange. Deferred payments spread over 12 or 18 months to suit chients, pockets. Sole distributors for London and South and West of England, Mebes and Mebos (Et. 1893), The Original Light Car Specialists, 144 Gt. Portland St., W.1. Phone, Langham 2250.

RILEY service depot. New and second-hand cars in stock. Lewes Motor Works, Lewes. 542-424

RILEY, 1923, 2 and 4-senters, all-weather, in stock, Immediate de-livery; exchanges and deferred payments. Authorized West End agents, Pickworth and Hull, 107 Gt. Portland St., W. I. Langham 1998.

ROVER cars. All models in stock.

ROVER 2-seater, £180; 4-seater, £190.

ROVER coupe, £240.

ROVERS. Cash, easy payments or exchanges. S. G. Cummings, Rover agent, 101 Fulham Rd., London, S.W. 3.

ROVER, Shp, standard model, £180; Shp, 4-seater model, £190; Shp, 4-seater De Luxe model, £210; Shp, 2-seater De Luxe, £200. Ratcilide Bros., 200 Gt. Portland St. W.

ROVERS, 1923. Immediate delivery of all models. Jackton's Garnge, Guildford. 'Phone 345.

Guildlord. 'Phone 545.

ROYER, 1925 models for immediate delivery at the reduced prices:
2-seater standard, brown finish, 180; 2-seater model do luxe, any
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ROVER, 8bp, 2-scater, £180; 4-seater, £190. The North Wales Motor Exchange, Wrexham. Phone 283. Can give immediate delivery. zzz-990

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ROVER, Shp. Authorized agents. Cash or deferred payments. Taylor's, 52 Sussex Place, S.W. 7. 'Phone, Kensington 7260. zze-570

ROVER, 8hp. Fowler and Brigden, authorized Rover agents, 130 Eusten Rd., King's Cross. Museum 4827.

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zzz-529

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552-a257

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532-958

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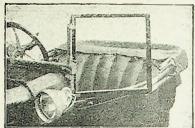


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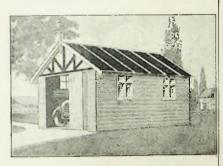
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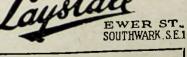
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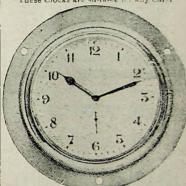
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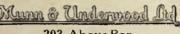
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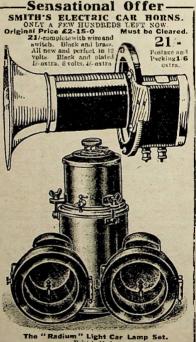
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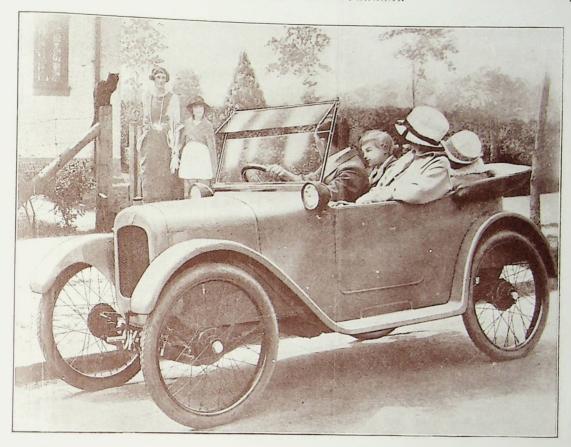
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