

#  Every Journey a Joy 

Motorists who use Spencer-Moulton and Wood-Milne productions have expected these firms to excel with the new Cord Fabric type. Their confidence is justified in the "Spenwood" Cord Tyre.
Here you have the new cord principle backed up hy the highest possible standard of British I yre manufacture. The dumb-bell tread in the "Spenwood" is a triumph of British tyre design and it is made


# 1,000 "Mitchell" Plug Testers to go out on trial! 



Every time I sell a "Mitchell" Plug l'sister I mahe a rriend.
lireatllatt
pue Jis hame in them thathy having to

> By all : the time. Cimperpmently. When for atine aill really useful device like Vithell", Plag 'Tester. he feels himsplf for having lought it.
to me for laviny invented it.

Have Confidence in Me.

 of the most useful, fascinating and intercoling inventions it is pussible to obtain. 1 : is beautifully made, expensive to momulacture, antid olfers the utmost pos-
BECALSE I am sure you will like it. BECALSE I believe you will keep it, PRECAUSE I know that every word I have stated is true,
1 am going to ark Yout to
Try a " Mitchell"' Plug Tester for
One Week at Wiy Expense.
First, let me tell youn hriefly what
invention is, and what it will do.
In appeatance it is a higlaly polished vulcanite tube, with a handsome nickel Conductor at one end, a bright red erinoid cap at the other, and an oblong Inspection Window in the centre. It can be carried in the wasteoat pocket liko a fommain pen, and is a veritable wizard for detecting plar nuł ignition troubles. To test vonr ignition, you simply hold the " Nlitchell" in your fingers, and apply the Conductor to each of the plug tops in turn. If your plugs aro working proferly, a series of Brilliant Orange filashes wil! appear in the Inspection Window, eich flash coinciding with the spark at tho plug points.
Screwdriver Test Unsatisfactory.
Is cvery motorist knows, the oldlishioned screwdriver method is very crude and unsatisfactory, and it is extremoly difficult to tell if a plug is only missing orcasionally, or whether it is out

## YOU are invited to PERSONALLY test this fascinating invention for SEVEN DAYS AT MY EXPENSE.

Safeguard your EASTER TOUR with a "Mitchefl."

of action altogether. The spark may be Loo weak to fire tho charge regularly at all speeds and on varying mixtures, but the screwdriver cannot diseorer this, neither can it detect a pluy which is "shorting " internally, or find if the insulation or magneto is faulty. With the handy littie "Mitchell," positive tests can be madc, as thie nature of the flashes in the window te!ls you the character of the spark at the plug points. Briefly:Any of the following troubles can be rapidly diagnosed:-
Plug missing. Plug not sparking. Plug points too close. Piug points duty or foul. Spark gap too wide. Broken porcalain. Plug sparking internally instead of at points. High tension wires shorting. Weakmagnero Mag canis worn. Dirty distrlbutor. Faulty insulatlon.
In fact, as a delighted user wrote to us, - It sill do almost anything but talk.

## Don't Injure Your Plugs.

There is no need to injure your plugs and their seatings hy constantly removing them, as the "Mitchell" will enable you to detect you: ignition troubles in a second by external diagnosis.


The " Mitchall" Plus Tester, formerly, knuwen

## The Only Ignition Tester in the

 World fitted with a "Detector." Every Mitehcl1" Plug Tester. and, vemember this. only the "Mitchell," is' fitted with an extremely useful derice called the Detector, which chables you to make dual tests, the value of which will bn readily appreciated. Take, for instance, the puzzling case of a briken plug which is "sparking" internally !nslead of at the piug points, or a phag with a gap) too wide for the spark to jump. Or: dimary tests with screwhivers, Neon gas tubes or ignitian gauges wuld show sparks ar hinthes which would wive you the impres-isn that the plug was workin: correct: The Detectir. hawever, would at unce the ect the faralt by drawing your attention to the fact that the evinder was not firing, althongh the fashes would brove that the emanent to the phine wats 0.5
## A Fair, Straightforward Offer.

As it is impossible for me in open a separate account with every persme whos writes to me for my invention, ] want you tu send me your remittance now ful 88. Gd.. vilher lyy cheque or b,y mastal order, and I will definitely undertake to refind you the amount in full, if within a period of 7 days you return the "Mitchell" to me in good condition. with an intimation that you do not desire to keep it.

Price
8/6
Post Free.
Counplete wish Directions 'tad Steccist Ditisfar as
illuafrited hethw,
Dddress four communication to-
H IRRY MITCHEI.I.
The Iondon Motor Supplies Co.,
Twickenham, Middleses.
('Phone Ricl:mond 1538.)
Special Demoustrations at Gamakes, Dunhills, and Army and N.ury Stures. Selfeidses, and other well-hnown estahlishments in tundun and the Provinces.

This is the Detector referred to above. If not onfy "cuts out" the cylinder under lest, but enables tests of a more exhaus. tive and exact. ing nature to be carricd out than is possible by any other known method.

## The I Proved Light Car



## Accessibility is the keynote

 of the proved McKenzie's construction, the $10.5 \mathrm{~h} . \mathrm{p}$. engine being carefully designed to facilitate the occasional adjustments which a keen driver loves to make.Designed particularly for the owner-driver, the McKenzie provides many refinements not usually found on cars of its class, yet the prices of all models will satisfy the keenest critic of value.
The records of its successes in many competitions give ample evidence of power and reliability under the most trying conditions and fully justify its title of "The Proved Light Car." All models are fitted with electric lighting and starting, fourspeed gearbox, adjustable pedals and complete all-weather equipment.
 McKENZIE MOTORS LTD. Bath Passage, Birmingham.

> Established 19/3.




THHERE are many steel spoke wheels, but only one with rims and sides made in one piece. It bears the name plate "Sankey Patent" -you safety guarantee!

# SANKEY wheels 

## SMARTEN UP YOUR CAR READY FOR EASTER!

## "nutanctions foradnatars

## VALUABLE FREE LEAFLETS!




#### Abstract

How would you like your car beautifully coachpainted, smart and glossy, ready for the road at Easter? You needn't pay a fancy price for having the job done, and you needn't wait. The Robbialac Instruction Leaflets for Car Painting are written by experts in plain, simple language that any amateur can understand. They are full of practical hints and tips, and tell you just how to prepare the work, how many coats you should give. and how to apply the final coat of Robbialac Transparent Finish to secure a resulepractically equal to the best coachpainting. Address your inquiries for the Robbialac Leaflets and Colour Cards to Robbialac Car Leaflet Department, Warton Road. Stratford. London, E. 15. The cost of a coat of Robbialac Gloss (any colour) and a coat of Robbialac Transparent Finish for a 2-Seater Car is only $11 / 6$. A prolessional Coach Painter would charge you five to ten pounds for doing the job.


## ROBBIALAC ENAMEL.

(Any Colour, Whitby Rlack or the Roblialac Greys.)
2-Seater Car, oue coat. 5/9 tin of Roblialac.
+-Seater Car,,$\quad . \quad 10 / 9$
Robbialac Whitby Black for W'ings aud Whéels", for 2'Seater Car. 3/- tiu.
Complete Robbialac Enamelling Outfits for 2-Seater Car, 25/- (any colour) Contents : Sponge, Leather. Rubbing Felt. Punice Block, Two Robbialac Brushes, Glass Paper, Cleaning Soda, Pumice Powder. Auto-Stopper. "Rusnoline" Polishing Liquid, Robbialac Thinners, Medium size tins of Robbialac Stopping, Mat, Gloss. Transparent; and Instructions.

## GREAT CONVENIENCE TO MOTORISTS ! CYLINDER BLACK ROBBIALAC IN 1/. TINS.

The new tin of Robbialac Cylinder Black at $1 /-$ is a great convenience to motorists. It contans just enough to do the eylinders once or twice. Get a tintoday. If your Motor Aceessory Dealer or Garage Agent is out of stock, drop us a posteard with his name and address. We will sce thal he can supply your needs within 48 hours.

## A REALLY G00D HOOD PAINT FOR CANVAS HOODS

Rabbialac Hood Paint for Canvas Hoods will perfectly reproof and renovate a hood. Covers any blemishes or stains, and restores the hood to its origina a hood. Covers any blemishes or stains, and restores the hood to its origina
colour. Does not smell. No appreciable weight is added to the cover by its application. Supplied in Khaki, Black and Grey.

For 2-Seater Car, 3/-tin.

SOLD BY ALL MOTOR ACCESSORY DEALERS AND GARAGES.


OVER II YEARS'REPUTATION FOR RELIABILITY

# 2-Seater Model, 200 Guiness 

Model De Luxe, 230 Guineas.
4-Seater Model, 225 Guines
Model De Luxe, 255 Guineas.

Prompt Deliveries. Value for Money.
G.W.K. (1919), LTD., Cordwalles Works, Maidenhead.

## SINGER

FOR SATISFACTION


THE name SINGER on your car is the best guarantee that you can have for perfect motoring. It ensures you receiving the mature experience of engineers who were the pioneers of light-car construction in 1912, and who retain their lead to-day. British throughout, the SINGER Car, built in one of the most efficient and self-contained factories in the United Kingdom, has established many world's records at Brooklands, and in 1913 won the only Competition ever held for light-cars, organised by the Royal Automobile Club. An outstanding performance in light-car history.
The story of the SINGER is always a story of satisfaction 8
$10 \mathrm{~h} . \mathrm{p}$. SINGER All-weather Two and Four-seaters ... 280 Gns . $10 \mathrm{~h} . \mathrm{p}$. COVENTRY-PREMIER Two and Four-seaters 230 Gns. All the above cars have Dunlop Tyres and Rotax equipment.
The $10 \mathrm{~h} . \mathrm{p}$. Coventry-Premier now manufactured by the SINGER Company is the same engine, chassis, and body as the famous Singer "Ten," but without electric starter, side curtains, and certain refinements which account for the difference in price.

Illustrated Catalogues and full partiuulars sent with pleasure.
SINGER \& CO., LTD., COVENTRY.


# ${ }_{0}$ Striking 

 TestimonyExiract from the "Sheffichd Daity Teles'riph," Fcb. 23, 1923. RELIABIE SMALL. CARS.
"From sime to time 1 have heard so much concerning ine sood qualities of the $7 \mathrm{~b} \cdot \mathrm{p}$. Jowett car that 1 quichly seized an opportunity last week to give one a short but fairly searching test. I confess that 1 am not an odmirer of cither very gmall cars or engines, or of the twin-cylinder tyoe, yet 1 am willing to admit that, although the Jowelt possess all three disabilities, it is one of the most renmarkable small cars I have ever tried, and in many respects is nol merely equal to some 1 mall four-cylinder types, but syperior. Hes twin-opsos. d cylinderi yicld a beautilully balanced unit, and long experis nce no
doubt accounts tor the robust nalure of its drive. I have various test doubt accounts for the robust nalure of its drive. Ihave various test hills on which 1 make general comparisions of performance, and on one ol these the Joweth actually di better than any other have ever had out his season, except a coupic of six cylinder a hill on top. b, the aid of a mo icum of clutch clips. that no other amall car I have had this six moithas could manage. It certainly is a marvel in the way of hill climbing, due, no doubl, in measure to its
 Its secret, I think, is that it is a small car in every particular, and not merely a reduced edition of something large.
7 H.P. FOUR - SEATER, £245


Complete with dynamo lighting, five Dunlop wheels and cord is res. speedometer, horn, beautifully upholatered in real leather. with black leather cloth hool, and metal framed side curlains.
7 H.P. TWO - SEATER, £220
As above, with roomy boot, which holds three suit cases, tin of petrol, ail, and all tools.
Double Dickey Scat. 55 exira. Electric Starter on both modele, $\mathbf{X} 15$ exiras Wrife fo Dept $F$.
JOWETT CARS LTD.. IDLE. BRADFORD
dients weanted-a few territories still when


# Let a Lagonda take you <br> wherever you want to go! 

E
ASTER is round again with its promise of a bright season.
For the man of moderate means who wants 10 get the best out of it in motoring, three factors are essential.
Firstly, that the car be absolutely reliablesecondly, that it be entirely comfortable-and thirdly, and equally important, that it be economical.
The sturdy 11 h.p. Lagonda embodies these three essentials to the full.
Ask for an unbiased opinion on a Lagonda. You will learn that its merit is due equally to its economy -in first cost and upkeep-as to its comfort and reliability.

## Lagondas

THE ALL-BRITISH LIGHT CAR.
Yo ir nearest agent's name and full particulars on request.


LAGONDA LIMITED,
195, Hammersmith Rd., London. W. 6 Telephone
Telegrams $\quad$ "Latondy, Hammer, Loadon." Head Office and Works ... STAINES

## 

## THE ASTONISHING SUCCESS OF


and the wonderful reception accorded to it both by the motoring public and the motor trade has made it possible for us to enormously increase our manufacturing programme, which now enables us to offer this beautiful light car at the remarkable price of


The specifiation includes:-water-cooled horizontally opposed twin-cylinder engine. Three-speed and reverse dearbox. Silent spiral bevel drive and differential. Lucas Jynamo lighting set. Dunlop tyres and wheels.
$£ 215$


De Luxe 3 . t seater body. finished in exquisite shade of grey. All weather hood and side curtains, affording complete protection to driver and nll passengers.

A post card will bring you art catclogne by return
 ARIEL WORKS, LTD., 3, BOURNBROOK, BIRMINGHAM.


## Inexpensive Portable Motor House

## Delivered in Sections

You can have a "B. \& P." Garage erected in your Grounds or Garden within a week or ss from date of order. These Houses are constructed to last and please. Made in sections for easy erection or removal if required. They are designed as Tenants' fixtures and are an artistic addition to any property. Do not garage your car in a fimsy shed, it is an eyesore, and in every. way bad for sheltering a car. A "B. \& P." Garage is a sound investment.


Write for this Interesting Book
Send for a copy of our latest Cataloguc, No. L.C.118, of Motor Houses and Accessorics: ", "Solving a Motor Problem."

[^0]

## Take the Road at Easter in a Humber "Eight."

It is not too much to say that touring in a Humber means " more pleasure and less petrol," for the uniform reliability of the engine means not only freedom from road worries, but greater ease and comfort in driving and an economical expenditure of fuel.

The 8 h.p. model here illustrated could not be bettered in the Light Car class for Holiday moloring. Every well-known Humber feature is embodied in its construction. The $8 \mathrm{~h} . \mathrm{p}$. water-cooled engine has four cylinders and is identical in design and working principle with the $114 \mathrm{~h} . \mathrm{p}$. and $159 \mathrm{~h} . \mathrm{p}$. models. Control is simple and accessibility has been most carefully studied.

Seating accommodation is for two, and a detachab!e seat in the back accommodates two children, or the space may be used for luggage.

A self-slarter is incorporated, five car lamps are fitted, and the Humber All-Weather Equipment, which is standardised, enables this charming model to be converted in a few seconds into a cosy weather-proof vehicle. Ready for the road, $£ 275$.

Send for illustrated and descriptive pambhlet


HUMBER LIMITED, COVENTRY.
LONDON - City Showrooms : 32, Holborn Viaduct, İ.C.1. West End Showrooas and Export Department : Humber House, 94, New Bond Street, W.1.


The 10.5 h .p. CALCOTT Two-seater is a pioneer of light cars, a car with a reputation. Modest in cost and upkeep, yet stamped with that distinction inseparable from the CALCOTT, it is a very desirable car, at the right, price. Two-Scaler with Double Diskey, seat. finished in CalEoil Grey. Black Cuards and Valances, Uphotsicring, Black Leather. Double Windscreen Side Curtains. 12
VoltLighting and Sarting Set. All usual Acressories. Price £325
representing the best value in its class. all Calcott Cars ure iftead will Dinlop Tyres. CALCOTT ${ }^{\text {Illustratel }} \mathrm{BROS}$ nuriculln from $1 T D$. $C O V E N T R$ Y Extabishshet 1 ssi.
London Agents: Eustace Watkins. Lid.
91, New Bond Siret. W.1. ©Cormer oi Oxford S 1 ,) Disuributors. Service and SpareParts.


## み Car

THE WONDER CAR OF 1923.
9.21 h.p. Overhead Valves, Self-starter, 4 -speed Gearbox.

## PRICES :

| 2-seater |  |
| :--- | ---: |
| Double Dickey | 2295 |
| Chummy | 2325 |
| 4 -seater | Coupe |
| Double Dickey | 2350 |

HAMPTON Engineering Co. (1920), Ltd., Stroud-Glos.

[^1]
by letting advertisers know that their advertisements


[^2]
by rood on a Rhode this Easter:


## 9 h.p. OIL-COOLED

## "The Pick of the Bunch."

Before deciding on your Light Car for 1923. examine the 9 h.p. Belsize-Bradshaw.

You will be pleased with its smart appearance, roominess, ample springing, and easy control And for economical and silent running it has no equal among Light Cars. Oil-cooled, too ; no boiling, no freezing, no radiator trouble.

## PRICES:

TWO-THREE SEATER CAR, with flood. Screen, Side Curtains, Dynamo Lighting Set, Spare Wheel and Tyre, and Tool Kit
Dickey Seat, if ordered with car, extra
FOUR-SEATER CAR, as above,
TWO-THREE SEATER COUPÉ, with Dickey Seat

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COMPLETE

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    Large Double Dickey
    Hood to open.
    Double Windscreen.
    Electric Lighiing.
        Self-starter.
        Self-s
    Bulb Horn.
    Dimmer for Lighis.
    Speedometer.
    8-Day Clock.
    Petrol Gauge on Dash.
    OilGauge on Dash.
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THE IDEAL CAR.
THE IDEAL CAR.
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THE IDEAL WAY TO BUY.

Garage and Service Station : 1.3.5. Lambetb Palace Lambetb
Road.
Phone: Hop 5279
(Near New L.C.C. Hall.)


SPECIFICATION-
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GARAGE AND COMPANY
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Isicence Holder. Tax paid to end of 1923 Number Plates (cast). Spring Gaiters. Thiefproof Lock. Rear View Mirror. Dash Lamn. Complete Kit of Tools. Dunlon Cord Tyies. Spare Wheel and Tyre. Mascot
Free Delivery $t o$ London.
Insurance paid for ono Insurance paid for one year.

THIS IS OUR OWN EXCLUSIVE OFFER. COMEAND SEETHE CAR.


## WE SELL LIGHT CARS PLUS SERVICE.



IF you have not yet visited THE SERVICE COMPANY'S NEW SHOWROOMS you should take the first opportunity of doing so
WE Sell LIGHT CARS of all makes, and have always a fine show, with separate departments for CAR ACCESSORIES and OUTFITTING ALL UNDER ONE ROOF.
BUT we realize that prospective owners are not always desirous of deciding in a hurry.
YOU like to walk round, sec and compare, and perhaps come again and egain.
You are freely at liberty to do so.
Our expert salesmen will be helpful and informative but NEVER pressing.
Bring the wife and have a cup of tea in the lounge.

## ANY MAKE OF LIGHT CAR CASH I. XCHANGE DEFERRED PAYMENTS

Among other Cars awaiting yourinspection you will find the latest Model $8 \mathrm{~h} . \mathrm{p}$.


The Universal Economy Car.


IMMEDIATE DELIVERY.


Coupe .... $£ 240$
Sell-starter, any model. £ 15 exira.
The De Luxe includei speedometer, clock ard leather upholatery.
THE SERVICE CO. (London) LTD., 273-274, High Holborn, LONDON ——W.C. 1.


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 rwhole 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 cleanthey will feel clean, which means that all the dirt ground into the pores by hard work has been dug out as well.


LVVER BROTHERS LIMITED, PORT SUNLIGHT.
К.Т. 6.15.


## 服解's VALUE <br> for your Money!

## 3. Speeds.

Reverse.
10 h.p. Water-cooled
M.A.G. Engine.

Electric Lighting
(3 lamps).
Spare Wheel.
Fixed Rear Jack.
Screen.
Hood.
Tool Locker
Luggage Grid.
Tools.
Foot-pump.
Mahogany instrument board with plated switches, etc.

£195
And no extras to buy!

6 Reasons why
The NEW - HUDSON Light Car is growing in popularity.

## SOUND PRINCIPLES OF CONSTRUCTION-The

 New-Hudson has set up an entirely new standard in three-wheel design. Actual performance or the road proves its construction to be sound and reliable in every wayECUNOMY. - The New-Hudson offers all the advantages of the larger car at an annual tax of $£ 4$ per annum only. It is extiemely light on tyres, petrel, and general upkeep.
POWER AND SPEED. - The power and speed of the New-Hudson are amazing-enabling it to take many hi'ls on rop where other higher-powered cars have to change down.
DETACHABLEAND INTERCHANGEABLE WheELS.-Each New-Hudson carries a spare wheel. All wheels are instantly detachable and interchangeable. Back wheel can be removed and replaced without removing chain.
DEPENDABLE SERVICE.-Everything used in the con struction of the New-Hudson is of the finest quality, with the result that this handy little car may be depended upon to give a maximum of efficient service.
SMARTNESS OF APPEARANCE. - The New-Hudson is something to be proud of. Polished aluminium bonnet, body finished in royal blue, interioribeautifully upholstered.
Ask for our free Brochure-arrange for a Trial Run and you will understand whyone New-Hudson in a district risults in many more.

St. George's Works, birmingham.
LONDON : Paskell's, Ls, $^{\circ}$ Oruy's Inn Road. w.c. LIVERYOOL: Colruaro Depot, 21, Hamailso Stivet. AnNCHESTER: H1lsong, Lud, \%o, Deauskate. FDINBURGFI: Rossleinh, Ltd., ja, Shandwick Place, HEWBLINGILAB: Loan'b, do, lonadigo Shect. LEEDS:A. I. Greanwood, 89.d1, Gulldiord Street. LEICESTER: Cotmoro Depot, 62, Bl4h Sereot.


## Striking Testimony to the WonderfulA.F.S.Suspension

FTER exhaustive tests the Press are unanimous in praise of the wonderful A.F.S. Suspension. Read the following opinions then write us for full details of this remarkable invention:-

Recently we drove a Ford car equipped with the A.F.S. Suspension over a course specialiy picked on account of the deep and numerous pot holes and bad surface at high speed. We did not feel the least jar. The steering remained absolutely unaffected by the rough surface and corners cuuld be taken safely at a speed which would have eaused the ordinary sprung Ford to overturn."
"The Motor" As we have previously pointed out, the coil type of spring presents many altractions. and a sirple, j'et clever application is shown in the A.F.S. System. A large num ber of these models are in use throughoul the country, and their owners all claim that they are not on'y very comfortable as regards their shock insulating qualities, but they are, moreover, 10 a large extent immune from skidding, holding the road well." "The Light Car \& Cyclecar." ......A test of it, which we carried out recently showed that its shock-absorbing properties are remarkable, even when a 6 -in. kerb was mounted and left at speed.'
"The Garage and Motor Agent." An invention which not only makes for comfort, but which alss saves repair bills must interest Fordists, and an ingenious system of suscension which accomplishes this purpose merits support. "Fordins'."
" In use the system has many advantages over the ordinary leaf spring and numerous letters testify to the increased comfort road-worthiness and economy in tyres which result."
"The Motor Trader.'


Standardised complete sets (front $\frac{\&}{2}$
and rear).
THE WONDERFUL A.F.S.

SUSPENSION
Write for illustrated folder describing the Wonderful A.F S. Suspension which can bc
fitted to any make of car.
A.F.S. DEVELOPMENT LTD.,

13-14, Basinghall Street, London, E.C.2.
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MOVEMENT
in "The Light Car and Cyclecar" intercst you.


BUILT BY ENTHUSIASTS FOR ENTHUSIASTS

## Manville Trophy MARCH ! 0 th .

耳. RELIABILITY. Did not lose a single mark.
2. HHL-CLIMBING. 8 Test Hills, stop and re-starting on 1 in 4.
3. EFPICIENCY. On time everywhere.
4. SPRINGING. 90 miles on a flat rear tyre.
5. A WARD. Special Gold Medal.

The Car Prize was never more deserved."-Yide "Midland Daily Press."

## General Efficiency Trial

JUNIOR CAR CLUB (March 17th).
Crouch made Fastest Time I Lap Speed Test, Brooklands Track.


## CROUCH MOTORS, LTD., Coventry.

Ask your Agent for a Trial Run.
When in London, see B. S. MARSHALL, LTD. When in Cardiff, see P. W. ROIVE, Cardiff


JTANDARD MODEL *155-0-0
DE-LUXE MODEL \&165-10-0
SPORTS MODEL Water-cooled. Gil miph £175-0-0

Tax $\pm+$ - -0

## Enjoy Easter in a-_ T.B. CYCLECAR.

Prompt delivery of T.B. Cyclecars. in good time for Easter, can still be given. This handsome threewheeler has earned its position as leader in its class in private ownership, as well as in test performances. The simplicity, durability and accessibility of T.B. design. with wonderful speed and hill climbing capacity, give car comfort at cycle-combinati n costs. Shaft transmission instead of chains and belts, is one of the many T.B. advaniages.
Stock Trial-March 14th. 1923,
The T.B. oblained TWO FIRST CLASS AWARDS

IATEST T.B. SUCCESS. Two Gold Medals in Victory Trial on March 17.

Thompson Bros. (Bilston), Ltd., Bradley Engineering Works, Bilston. 'Phone: Ní. 10 Bilston. Wires:" Thounson Bros., Bilulon.


### 60.030 miles on demonstration madel NO TRGUBLE

The Herbert Engineering Co.. Ltd., tell us that they have had a Graham Electrical Autohorn in continual use on one of their demonstration cars which has covered over 60,000 miles. This horn has retained its waraing note with perfect consistency.
You would never give an ordinary horn half the work that it geta on a demonstrntion car. but we quote these faces as indicnting the troubleproof features of the Graham Horn. Note particularly the horizontal diuphragm with its dustprof and rainoronf cover. wh'eh is readjly detachable when needed. This is essentinlly the type for the runciur board. Other models are available for under bonnet fitting.
Pricea range from 27/- Scud for Bowklet "L.C."

[^3]
## The new



## FAMILY MODEL

FOUR people can ride in luxurious ease in the $108 \mathrm{~h} . \mathrm{p}$. Clyno Family
Model. Ample leg room is provided for both rear and adjustable front seats, while thoroughly satisfactory springing assures easy riding at all speeds. Equipment is well thought out in every respect. Design of the 4 -cylinder engine, skilful weight distribution. construction of chassis and hands me body, make sure of economical running and upkeep.

The ten years' experimental road work in everyday service, ere a single car was offered for sale. is amply justified in the efficiency of Clyno performance, at a price so attractively modest.

Service compatible with the worth of the car is assured to every owner -- Clyno Agency appointmants have been made with the greatest discrimination.
4.SEATER
$£ 275$
Standard 4 -seater. £285
De Luxe, 2-seater.
All-weather, £298
De Luxe, 4 -seater. All-weather, £325


## £255 <br> IVITHSTARTER

Full particulars will be sent on application.
The CLYNO Engineering Co. (1922), Ltd., Pelham St., WOLVERHAMPTON.
'Plooe: Wolverhampton 992.
Wires: "Clyno, Wolverhampton."
Write for the name of your nearest Clyno Agent.


## EASTER DELIVERIES OF



1923 Prices
9.21 h.p.; 2-seater -
$9-21 \mathrm{~h} . \mathrm{p} ., 2$-seater. with Chummy body
9-21 h.p., 2 -seater Coupe - $£ 350$

A complete car at a competitive price.
(Cash or Hire Purchase).


S-18 b.p. Model - £245 10-20 h.p. Model - £275 $12-24$ h.p. Model - $£ 335$
Coupe convenience at open car price. (Cash or Hire I'urclase)


## 1923 Prices

| Chassis | - | - |
| :--- | ---: | ---: |
| 2 -seater | - | - |
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Superb performance with loyv running costs at reasonable initial outlay.
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## BIG PRICE REDUCTIONS.

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A complete record of its successes would almost monopolise this issue ; it is not to be wondered at, therefore, that imitations are about to be offered to the public-it is the sincerest form of flattery, and our appreciation is complete.
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4-cyl. water - cooled, 3 -speeds and reverse, spiral bevel rear axle, lighting and starting.

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A copy of the "Duco" Booklet, which fully explains the " Duco" Gaiter principle, is sent post free 10 any reader of "The Light Car and Cyclecar." Just fill in your name and address aud post at once.
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BROWN BROTHERS LIMITED (with which is amalgamated Thomson \& Brown Brothers, Limited), GREAT EASTERN STREET, LONDON, E.C.2.

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There is a sxitable ":1.J.C. inlug fon every motos venicle. The following is a lise oi some Lighat Cars and Cyclocars wisu
 recommendod:

## TYPE G.1.

Albert
Amilcar
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B.S.A.

Calcott
Clyno
Goventry-Premier
Grouch
Deemster
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Hands
Mumberette
Jowett
Palladium
Phoenix
Singer
Standard
Tamplin
T.B.

Warren-Lambert
TYPE G. 2.
A.B.C.

Galthorpe
Morris-Oxford
Morris-Cowley
Stoneleigh
TYPE J.1.
Ashton Evans
Austin"Seven"
Bayliss-Thomas
Belsize-Bradshaw
Carden
Citroen
Humber
Lagcenda
McKenzie
Palladium
Rhide
Riley
Wolseley
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Talbot-Dannaca
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The retail price of each of the
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Renewable insulated centres,
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S. SMITH \& SONS (M.A.) L.td., Cricklewood, London, N.W.g.


HARD GOING.
A snap in the Victory Cup Trial, described elsewhere in this issue. The photograph shows H. B. Denley on a sporting 9.5 h.p. Rhode ascending one of the tit-bits of the trial-Noah's Ark Hill.

## Wotes, Mews and Gossip of the Week.

The Taxation Inquiry.
Word-juggling and brow-beating by the ling mileage interests have been more llan noticeabie at the taxation inquiry: It scems unlikely that we shall have reverted to the petrol tax by this time neat ソe:。

Hill-climbing Thrills.
High speeds, skids and thrills will be the onder of the day at Kiop Ilill, near brinces Risljnrough, to-morrow, which is the "secret" vemue of the Fose? club's hill-climl. An excellent endry of very fast cars has been obtained. Ne "Club News " page for details.

## Saving the Roads.

The Devonshire County Council has prohibited the use of motor coaches (arreving eight or more people unless they are filted with preumatic tyres. An importand paper on multi-axled vehicles was recently read hy Major T. (f. 'Indloch before the I.A.F. The subject is fully dealt with in next week's issue of The Commercial Motor. T?nless the rate of road deterioration can he reduced, taxation is certain In inerease.
No. 539. Vol. XXI.

## LIGHTING-UP TIMES

for Saturday. March 24th, 1923.


## Birdseye for Hawkes.

Slum ior Dufi, hunisman's pink for Ciallop, Brown for Peaty and old gold for Duller. These nre some of the appropriate colours for Brooklands drivers suggested by " L.ong " 'lom Harris, tho sign king. Others are: Black and tan for Guinness, purple for Kings, Quaker green for Oates, tarlan for Camphelt, ind hlack and white spot. for Cushman. Subtio: Yet why not add the picturesque touch of colour to the Brooklands events?

## Easter Holidays.

Next week's issue of The Light Car and $C$ yrlecar will be published on Thursday, March 29th, one day earlier than usual.

Four-wheel Braking.
The remarkable way in which the little 7 h.p. Austin pulled up in the b:aking test in the Geneml Efficiency Trial made screval convarts in favour oi brakes on all iour wheels

## A Busy Easter.

Motorists will have plenty to see this Faster. There are tho M.C.C. Land's End run, the B.A.R.C. Brooklands Meeting, the Staxton Hill-climb in Yorkshire, and scveral mor events, as detailed in our fixture list.

## Single-seater Hillman to Race.

The single-seater Ililhman which Bedford used in race with such regularity in 1921 will he seen at the track again this season. After having covered thousands of miles on the road as a touring car, it has been bought by J. W. Tollady, who used to race a Crouch

## Ariel Nine Price Reduction.

llaving arranged a more extenside manufacturing bogramme the makers of the Arel Nine amounce that the price of this light cat: has now been reduced to £215

## For Wireless Enthusiasts.

To-nighl letween $7 \mathrm{p} . \mathrm{m}$. and $8 \mathrm{p} . \mathrm{m}$. Mr. C. II. (iardner will be broadeasting from the Birmingham station (51T.) an account of his experimental transmissions from racing cars.

## Congratulations.

The Marquis de Casa Manry better known in the automobile world as Mones Maury, was married on Tuesday last at St. James's Catholic Church, Spanish Place, W., to Miss Paula Gellibrand. We offer the happy pair our very heartist congratulations.

## Less Tyre Trouble.

Three years ago one used to pass motorists mending punctures or changing wheels at frequent intervals. Nowadays one can cover handreds of miles without seeing a car hung up from this cause. Better tyres are now being made than have ever been known.

## A New Racer.

A new Deemster racer is on the tapis -in fact, it has already passed through the drawing-office stage and will shortly take form in the erecting shop. The general layout will differ very litile from the standard production, and will include ant Anzani engine. The gingleseater hody will practically enclose the driver and will be much smather than the average. It will consist of a very light steel-not aluminium-shell welded to the stays, which will be placed at intervals coinciding with the cross-members of the frame. Both gear and brake levor will be shaped to the curve of the bedy. The problem of cooling is receiving special attention, and it is possible that the radiator, mounted in the orthodox position, will be quite separato from the body-much on the lines of the Leyland "Eight." The car will probably make its debut al Faster, and will be driven by Alfred Noble and Kaye Don. Towards the end of the season it is hoped that it will be fit for high-speed and long-distance events.

## LIGHT CAR-ICATURES.



Frof. A. M. LOW, D.Sc., A.C.G.I.
(An "Official Recorder" of Motordom).
A "îan" is he, as you can see, In all things scientific;
With arlful toys he measures noise, Producing facts specific;
But when ho writes that slepj) $0^{\prime}$ nights
Should not exceed one hour, He seals his fate. Incarcerato This Tetrarch in the Tower!

## Rovers for Rovers.

In order to provide better protection from the weather for their divisional road surveyors, the Worcestershire County Council have decided to replace with six 8 h.p. Rover light cars the motorcycle comhinations which they have used since 1919. When the council were discussing the matter, a memher suggested that unless the surveyors had mechanical knowledge it would be unwise to provide them with air-cooled engined cars; but against this it was argued that the kover engine was of the same type as those to which the officials had been used to in their motoreycles, and that the absence of trouble with frozen radiators when the machines were lefl standing in cold weather was to the advantage of the air-cooled tupe.


This Alvis was the official car in the 1,000 -mile trial held by the M.C.C. of New South Wales. It behaved well throughout, despite

The Carden Coupe
Wo are asked to point out that thet price of the Carden coupe is now 140 guineas.

Paternal Warning.
"Be rareful, chitdren," is the wording and stylo of a warning board to muturists on the outskirts of Amershatu.

## Quarter Day.

Mutorists who have taken out licences for the first quarter of the year only aro reminded that these expire $10-\mathrm{morrow}$ Saturday. The next quarter is from March 25 th to June 30th.

## Errata.

In a number of copies of our i.ssm dated March 16th, the price in the and vertisement of the Wolsoley "Seven" two-seater was given as £225. Thit, oi course, should have read $£ 255$, heing the price of the car complete with electris starter, all-weather curtains and dickey seat. This model can also be supplied without electric starter, dickey seat or side curtains at $£ 231$. In the same issue reference was made to the $15 \mathrm{~h} . \mathrm{p}$. Swifl in the advertising announcement © concern. Actually the announcement ferred to the Swift "Ten."


A useful tip for trials secretaries. Instead of printed numbers fixed, often insecurely, to trees or railings, the road is marked with whitewash. The photograph was taken at the start of the Colmore Cup Trial.

Light Car Battery Can be Used for Radio.
The light rar owner taking up Radio can turn his hatlentes to good account, providing he gets a clear idea of what tue is loing. If the car is housed not many yards from the room in which the zadio set is used he can run a lengtlo of thick "flexible" between the car and the radio set, and by filling a connector to the motor house end of the flexible tho ran tap the battery current any time at the switchbox at tho inspection-lamp soeket. If the flexible is of heavy gatuge and but a fow yards in lengilt the drop in voltage will bo negligible and then, will bo ample potential to work tha valves. It must not be fo:golten that alsed in this way, the car battery is on discharge, and it must not be "rundown " to so low a point that it will not work the starter. Noreover, it must b: charged up again as soon as possible. This idea of tapping the current avoid. the necessily for having a battery in. say, the drawing-raom. where it may cause damage by the spilling of acid.

Institution of Production

## Engineers.

A general neecting of the Institution oi Production Engineers will be leeld at 7.30 to-night, Priday, March 23id, at the Fingincer Clul, Coventry Street, Jondon, WiI. On this occasion Mr: Axel Wickman will deliver a paper dealing with " Modern Gauging Systems."
Advance copies of the paper will be arailable before the mecting begins, and may be ohataned on application to the hon. secretary, Mr. A. T. Baver, 6, St. James's Square, Molland l'ark. Landon, W 11.

Hands Car Reduced.
Reductions in the prices of all mode!s of the Hands light car are announed. the new prices aie:-Two-seater, £250; four-seater, £270; couper, £320.

## Easting Windscreens.

Action laving been taken by Mr. Charles A. Easting, of Easting Wind screens, Ltd., 132, Steelhouse Lane, Birmingham, a defendant at the SouthWestern Police Court was fined $£ 20$ for selling windsecieens alleged to be of Fasting manufacture when such was not. the cas.


A CHANGE
OF STEED.

Mr. Jack Evans. the well-known jockey, tries a change of steed, his mount being the $8 \mathrm{~h} . \mathrm{p}$. Gwynne.

A Permanent Second-hand Show. In view of the success of tilissis motor hows: thin will be carried on permamently at Mayfair IIall, 7. Iterfford Street, Park Lane. Landon, W. 1. The show will be open daily from 10 a.me to 6 p.m. with the exception of Saturdays, "lien it will be open from 10 a.m. to $1 \mathrm{p} . \mathrm{m}$. Admission will be free. The entry fee has now lieen reduced to C 2 fur rars under 15 hp . and $\ell 3$ ior cars of $15 \mathrm{~h} . \mathrm{p}$. and over: this fee entitling the owner to a fortnight's display. Mayfair Hall is within a few minmtes' wall ni hant? Street station on the Piecadilly Tube.

Planning a Spring Tour.
Motor-eveling readers will find a fund of seasonable information in the Special Easter Number of Motor C'ycling, which is now on sale.
Under the t'tle of "Plamning as Spring Thon'," a leading feature deals comp:ehensively with necessary equipment, what to take and how to carry it.
"Overhauling Your Motorcycle" is also an article of high interest and praciicnl value, whilst amongst other notabla fenlures are "Easter Events in Detail" and "Sideca." Topics," which deals ex!nustively with passenger comfort. body design, wenther prolection, luggage and accessories.

## A Travelling Office.

A closed car, entuinped with a portable typewriter and letter files. was recently seen at a well-known South Coast resori. 'Tlie owner drove out to some pieturesque spot each morning, dictaled his correspondence to his typist, and afterwards keft her to type it while he played a round of golf. At week-ends the car is used for touring.

The Road to Nowhere.
Among other ieatures, next 'Tuesday's issue of The Motor will contain a fascinatingly quaint article on "' The Road to Nowhere," by Douglas W. Thorburn. Other attractive articles include "An Artist's Paradise," "Hill and Vale in Mercia:" "Among the Lakes of Cunberland," fic., etc. Maps showing road conditions will also be given.

## Poor Protection.

speaking at the annual meeting of Swilt oi Coventry, Ltd., which took place at Coventry, on March 14th, Mr. Charles Sangster made an appeal for a transference of taxation from imported commodities which Britain did not or could not produce to those which com peted with articles produced or mannfactured in this country. Mr. Sangster said that the ad valorem tariff on imported cars was incffective. As an in stance, he quoted the figure of $£ 312 \mathrm{~s}$. 10d., which the leading manufacturer in America paid on every complete car sent into this country. Yet we deluded ourselves that we get protection!

## Watching Motorists' Interests

Lieut.-Col. Charles Jarrott, O.B.E., chairman of the Automobile Assoriation has been appointed by the Ministry of Transport to be a member of the Road Advisory Committee of the Ministry, as one of the five representatives on that committee of the users of horse and mechanical road traffic.

## Advances in Carburation.

An important innovation has been made by is. Wolf and Co., Ltd., 115 Southwark Street, London, S.E. 1, who now undertake to supply a special Solex carburetter for each individual make of car. It is recognized that no single car buretter will give equal results on any and every type of engine, and eacli particular engine demands indiviuual care and attention. These special Solex models, iherelore, are actually made to " measure," and we are iniorned by the designers that the results which havo been achieved already exceed their expectations. Every special Solex is stamped with the name of the car ior which it is destined, and the manutiacturers are prepared to supply these models on a 30 days' free trial arrange ment, in order that car owners may test them out for thenselves.


THE CALL OF SPRING.

Although the trees are still leafless, Spring, is in the air, and light carists are eager to be out on the road. Here is my lady off for a spin on ber B.S.A.

Truly a Record.
Orer 360 entries have been received for the l.ondon-land's End 'rrial. The entry list, ronte and times will be given in this journal next week.

## Schooltoy Competitors.

Schoolboys may become hon. members oi the North-west London Motor Clul for the purpose of competing in event held during school holidays.

## STANDARD THREE－WHEELERS ON TEST．

THE Aufo－Cycle Enion＇s standard machine trial held last week was designed to lest machines as actually de－ livered to the public．These machines were selected from agents slocks and delivered to the drivers hefore the trial． one hour being allowed for preliminary tuning．They were then driven over a course which，be reason of the number of tast hills and colonial sections included． no private owner would choose for test ing a brand－new machine

The first 40 miles out of Birmingham where the trial started，were compara tively easy，and the five drivers of ihree wheelers had an opportunity of rumings in their engines．Then followed a timed
hill－climb over a distance of just under a mide up the moderate gradment leadian from Broadway 10 Snows llill，which al machines completed without loss of marks．The ascent of Sudeley followed， and proved a mach severer lest．it colomal section，complete wilh ruts and loose stones，several seeret checks，and a very grease descent into North Cemey was followed hy the ascent of lubhis lill．Here the Morgans went up very well．（iondall＇s machine being ahont the fastest，while the＇I＇B．s climbed steadily： Souse＇s machine did well．making up fot its bad baulking on Snows llill：where it had in slow down，owing io a lady motorevelist falling off in front of it

Lumch at Chelemhan was falluwed Ly a timed ascent of Birdlip，where Nom is last three marks．Wore narvom lan：a and in watersplash in Caudle（iteon led on 10 Portway Hill，which resembleo sudeley in severity and sumber hut cansed no trumble．＇The trial finishmed at Chettenhan，where the A．－C．C．produed he results and extificalem withan an hour of the colselusion of ihte event．＇The following were mwarded certifato．．． Norris（10．95 Morgin－Jukan），II （10．95 Morgan MA．f．ぶ ぶmmo （9．80 T．B．J．A．l’．）． 11 F 9．75 Mo．gan－J．I P．）．
m．lks on solmale sherl

## THE ELEVENTH LONDON－LAND＇S－END TRIAL．

TLIE eleventh anmual Iandon－Tand＇s End Trial，orgimized by the Motor Cycling Club，Itd．，takes place this yem on Masch 30 th－31st，the start being from the premises of the Slough Trading Estate，by the courtesy of the directors．
The arrangements at Slongli have－been greatly improved，an eight－acre covered shed haring been obtained for the use of competitors，whilst supper will be avail－ able ni the canteen．Petrol will also he obfainable，but not in the stayting shed

As the final list of entries was not passed by the Molor Cyeling Club Com－ mittee unill Wednesday erening last we are mable to give the full list in this issue as inticipated，but the actual mum－ her of vehicles entered is approximately 375.

Particular care has been taken by the promoting club to cater for competi fors＇comfort en route．Fresh a：mane． ments lave been made at luridgwater for hreakfost．whilst at Launceston the lun－ cheon arrangements have heen greatly improved．the Town Hall having been ohtained instend of the Oddfellows Hall A special extension has been secured for
competitors and passengers． Reed has inken oser the catering．
It is interesting to note that．this yent no special cups will be offered，tho awards consisting solely of gold，siluer， and bronze medals．Speculation is rifo as to the exact mature of the new hill， Greymare，which has been included： but from personal obse：vation we would state that it is by no means more severe than any of the other three hills．viz， Porlock，Lanton and Beggar＇s Roost， which will be meluded as usual．Thn rarious ascents．howeser，of these hillis must be matr non－stop，which，accort－ ing to the regulations，means that tha rehicle must he in continuous motion relative to road and that the rompetitor andi passengers must be normally seated daring the ascent．

The following details shomld be of in－ terest to competitors and spectators The nctual main entrance to the Slough Tradine Fsfate is opposite the 22 nd mile－ sione from London，fwo miles west of Sloneh．and emmpetiors will enter the starting shed through this gate．They will lease howerer．he the western gate and thereaftar will follow the usual route
ia Marlborongh，Purdgwater and｜lahe on to P＇orlock．
Orer the mensured mile，commonein near the Ship Inn，Portock，tho follow ing average speeds must de inaing
 1,100 c．c． 15 m．p．h．；by three－1 cyclecars， $18 \mathrm{~m} . \mathrm{p} . \mathrm{h}$ ．Failume to n these speeds will mean the 1 coveted gold：but，in addition striving for the premice ay be inore than 10 minutes print of the journes，not mowe than from mimutes kato at Porlock，not five minutes late at tho control la， Lwifon，nol more than 10 minntic lat at ans other puint of the journes．amt in addition．must mako hon－stop nere the Paylnck measured mild and wh Lyuton，Beggars Roost and Creyanar

Utamouned checks may bo but only at places the names of whielt ampear on the route card，with tima anit distances shown．The first man is duco to leave the Slangla depot at 10.30 p．us
 the Tand＇s lind Hoted on Saturdac 1.20 rm ．

## EASTER MONDAY BROOKLANDS MEETING－COMPLETE ENTRY LIST．

THE SHORT HANDICAPS（ezch about 5；milcs）．

S．F．Filize four－cylinder A－C． 69 mun，hy 100 mm．（2（－ntme

 Count Y，Zborowski，cight－rylinder Lallnt， 74 mm by 140 man．
 1：．C．G．England， 1 wocrlinder A．B．C． 91.5 mm ．by 91.5 mm

 I．Ropner，
I．Ropner，four－crlinder Vandiall， 98 umm．by 140 mm R．A．Marshall，out－cylinder 13ngati， 69 minn，hy T00 1 mom． p．C．Clement．four－cylinder Brniley． 80 man． $1 y 149$ min． 180 mm
 1．C．Dourlas，four－crlinder Nston－Marlin， 66.5 mm ．Wy 107 num．＇
THE EASTER PRIVATE COMPETITORS HANDICAP（about 5 ：i miles）
II．W．Cork，four－cylinder Vauxhall． 85 mm，by j 30 mim． C．．A．Porlal lourecylinder Jorliet． 200 mm ．hy 140 man 1．P．Inowey fighterlinder Teyland． 89 mmin ．by 149 min ． 14 mm （ 2 entrics）
 I．C．Dourln \＆．Taur－cylindor Aslon－Marlin． 66.5 mm ．by 107 mm ． I．IR，pme follt－rylinder Vanxhall． 98 mim，hy 140 mim． A A．S．Jneknr．two－cylinder Crourh， 85 minn，by 96 inan．

## THE EASTER SMALL CAR HANDIGAP Gbout $5{ }^{5}$ ：niles．

 Ya，It，Parker，ico－cylinter Crouch 85 mim．by 96 mm ．

I．W．＇lonlady，fooccrlinder Crourh， 85 mm by 96 min．
\％．Vicket，iwo－rvinder C．N．， 84 trm．hw 98 mim．
Q．A．Parker，fwo－eylinier Groush． 85 nim，by 96 uarn．


## THEEE-WHEELERS PROVE THEIR RELIABILTTY.

Surenuous Conditions in the A.-C.U.


All the three-wheelers in the Auto-Cycle Union's standard machine trial acquited themselves well, the majority finishing the course with clean sheets. The course, followed was of unusual severity, including some steep hills. water-splashes and loose-surfaced roads approximating to Colonial conditions.


## Convenience of the Really Small Car from the Point of View of Accommodation.

THERE is no doubt that the accommodation problem is a vital one to many would-be light car or cyclecar owners, for whereas a motor cycle can readily be stored in a marrow shed, and a combination call be housed in a shed of small dimensions, the smallest of small ears is not small in comparison, nad, furthermore, no part can be detached to help matters.

There must be hundreds of moturexelisis today who would hesitate no longer wera it not this


A straight forward method of gaining acces; to a garage when manceuvring space is limited.
question of accommodation, but whilst there is no light car or cyclecar to cope with the solo motorcycle in this respect there are most, decidedly many excellent little vehicles which can compare mort than favourably with sidecar oulfits with regard to orerall width.

The rum-in is, of course, an important factor, for whilst the actual garage space may be large enough to take the vehicle, the manœurring space may be so restricted as to prevent access being gained 10 the shelter. For this reason, therefore, it may be necessary in certain eases to take overall length into consideration, although it must le said that this measurement does not decrease proportionately with the overall width.

It must be remembered that, whilst the track of a 129
car would secm to meet the prosperetive owner particular eircumstance, it does not lollow that the orerall widlh is such as the tara measumemant would lead one to believe. Some whicles ary fited with exceptionally wide mad winers, amb therefore lle only safe measurement is thal taken from wing edge is wing edge.

## Manceavrability of the Three-wheeler

Where it is most dillicult to manoullo: a fonm wheeler with a modest owrail width ot. sily, \& 1 t . the clams of the thee-wheler shouid be considered.
 dimensions of a light car, its narrow lines to the rear of the driving seal give it angree of mandewra bility maproached by the four-wheeler. 'Lake, for instance, a comparatively narrow run-in, in which one has to megotiate a right-angled bemi. Where (ron the narrow-track four-wheeler would find it dificult, perhaps impossible, to take the turn, he thre-wherere would do it comparatively wasily, beomuse the single rear wheel can take up it position which is denied the rear wherls of a four-wheler.

When the home garage is situated at the hack of the house and manceltring space is limited. there may be me way, and one way noly, of rumning the car in. A typical example has ben chosen, the situation heing shown in the accompansing illustrations. The side entrance being just. wide clough to take the ear, it is no use swinging the dnors so that they open out across the rim-in. [f the door or doors be arranged as shown. the ear can be taken forward as indicated and reversed quite rasily. If the size of the garden be such that a complete turning movement can be made, so much the boter, as the car ean then be driven oul firwath instead of in reverse.

Many situations which at first may seem diflicult, perhaps eren impossible, can frespently be overcome if a littlo thought be expended on the manceurring question. Copious measmrments

## 

houd be taken and the problem worked out on baper, but one must be dair to oneself when doing this, as many things look all right on piper, but prive far from being so when an altempt is made to put them into practice.

Perhaps the real solution to the accommodation froblem lies in the collapsable wpe of whicle, but at the monent there is only one such-the Dandy lywe-wheeler. Now the normal track of this machine is 4 ft . 2 ins., but when folded this is redued 102 ft .6 ins . so it will be secm that almost any side contrunce would take it.

## The Narrowest Four-wheeler.

It has been mentioned that the arerage orerall dimensions of a light car or cyclecar is 5 ft ., but thero are several excollent economy cars which span 12 ins. or more, less than this. The Austin Seven, for in scance, is a particularly compact little vehicle with an werall dimension of but 3 ft . 10 ins. The Benjamin, French production of cousiderable merit, measures ; ins. less than this, from wing edge to wing elge, and is, so far as can be ascertained, the narrowest four-wheeler on the British market.
The following are the overall dimensions of several will-known four-whelers:-Friction-drive model Shby, 4 ft : Baughatn, 4 ft ; Ica-Trancis, 4 ft Tamplin, 4 ft 1 in .: Gwymue, ft. $1 \frac{1}{8} \mathrm{in} . ; 8 \mathrm{h.p}$. Charron, 4 ft .1 in : P'ugeot Quad, 3 ft .10 ins ; Nuw Carden, 3 It. 9 in
Gencrally speaking, thew-wheelers do not boast uf narrow front-wheel tracks--it would, of course, Io impracticable to reduce this measurement beyond at cortain limit-hut the G. B., with an overall width of 3 ft .6 ins, and the little Harper runabout, spanning 3 ft. $1 \frac{1}{2}$ ins., are notable exceptions.
There are many prospective owners of small cars who, whilst the mast consider the narrow-track vehicle for reasous of the strictest economy, are doubtful as to the stability of such a machine. To assure the anxious ones, the writer, speaking from experience gained with so per cent. of the cars mentioned alove, can state defintely that, when driven in a normal manner, the narrow track vehicle is every bit as stable as a light car of full dimensions.

Whilst it is not suggestod that freak types should be encouraged, it would seem that there is scope for a four-whecler on the lines of the collapsable threewheeled Dandy cyclecar. Such a machine would have to be a prored success before the public would
venture, but there is no doubt as to the dematd being genuine, for one of the biggest items in the annual expenditure shect is that down to garage accommodation.
This artele has leen writen primarily to show the advantages of the narrow-track vehicle from the point of vicw of the case with which it may be accommodated, but a car with a modest overall dimension possesses desirable qualifications other than this. For-


The manœuvrability of a three-wheeler and a fourwheeler compared. The broken lines indicate the four-wheeler.
instance, in general manouvrability the really small car 1.5 much superior to the light car of arerage dimensions-a feature which is demonstrated to the full when the owner has to do a lot of traffe work. Another important point is that the narrow vechicle can be driven betueen tho tracks formed by cars with an average wheel track, and this is a consideration if one be exploring unknown by roads over which farm wagons are wort to roam. The smaller the car the lower do ene's motoring expenses automatically become, not only in actual running costs but also ir: gratuities.
${ }^{3}$ Some prospective owners will complain that these miniature cars do not look important enough. and the mere fact of being the owner of a true economy car lowers onc's prestige to zoro. Pride of possession, however, soon dispels such ideas and the owner of eren the smallest of small cars will find in the ranks of the economical motorist many folk similarly situated to himself. Cars are getting smaller every year, as the present trend of design will show, and it can be said with some authority that the real small car is the car of the future.

The practical advantage of a vehicle with narrow lines is strikingly demonstrated by the photograph below, which shows a Peugeot Quad passing through a gateway of average width.


The collapsable Dandy threewheeler is shown in the centre. Probably the narrowest threewheeler on the road is the Harper runabout, illustrated below.



A Critical Causerie of Light Car Comment.

## Chassis Lubrication.

I$I$ is rather curious how some comparatively inexpensive accessories save a great deal of time during the course of the season, and 1 confess that 1 guite fail to see why some manufacturers still furn out their cars equipped with the old-fashioned grease cup when the grease gun and mipple system is so much more convenient. Mathematics is not one of my hobbies, but the other day I took the trouble to compare the time taken to grease a shackle pin (a) by means of an Enots grease gun and (b) ly means of the ordinary grease cup. Operating without bias in either direction, it took precisely four times is long to unserew, charge and serew up a grease cup as it did to screw the head of the grease gun on to the nipple, twist the handle until the old lubricant could be seen exuding from around the bearing, disconnect the grease gun, and to wipe off. This dilference represents a saving of two minutes per bearing lubricated. There arc right points on the chassis of my car that require this attention, which means a total saving of over a quarter of an hour a week (if I am conscientious). During the course of a year this amounts to 13 hours, which is over half a day and shows how these little savings of time must affect one in the long run: T regard the force-gun system of chassis lubrication nowadays as being essential.

## Curing Skidding.

A$S$ the result of the very changeable weather we have had during the past two or three months, all of us have been considerably troubled with skidding, and during the past week I came across no fewer than five minor accidents that were brought about simply by cars sliting when the brakes were applied. There is no hard-and-fast remedy for preventing shids, but I seem to remember having seen it suggested somewhere or other that a car that has its tyres pumped board-hard will hold the road better in greasy weather than will one with flabby eovers, and, allibough this may be true when it refers to the piercing action of the projecting studs of the modern " non-skid" rubber cover, it is advice that must be put into effect cautiously.
I usually find that if the tyres are pumped up very hard the wheels have a iendency to bounce on any but the smoothest of smooth surfaces, and on wooden
setts and cobblestones instead of rolling over the road they procected in a series of minor jerks that may or may not be noticed by the oceupants of at citr -as is decided by the quality of the suspernsion but which in either case break the adhesion benween the tyre and the road and thus induce: skiddling. Flattish covers that roll are, again, tomible provokers of skids, and so it is the happy medium that must be found in order to render driving satin iti greasy weather.

## Nervous Tension.

$\mathrm{N}^{0}$O matter how experienced a competition driser may be, he or she always feels mervous just hefore the start of any race or competition, or well a test such as those held during the Gemeral Efficiency Trial. Most starters count " Fixe, four, three, two, one-go!" and it was noticeable on Siltur day last that whereas the new hands at the game raced their engines when the starter satid "five," others waited for "three " and then speeded up. It least two competions-one of them a lady-counted with the starter. The effect of two people staring at each other and intently reperating the same words appeated to me as being rather comic.

## Place aux Dames.

MISS WINIFRED PINK, who drove a fourseater Horstman in the aforementioned event, is rapidly becoming one of the best-known lady exponents of light cars in the country. She is sccretary of the Women's Motor Club, which is steadily attracting members, and last year she handled a racing car at Portheawl and Cacrphilly with great elan. In point of fact, both the lady competitors in the Efficiency Trial showed up very well indeed, and, so far as they are concorned, there seems now to be only one possihle answer to that old question, "Can women drive?"

## Fire and the Position of the Petrol Tap.

IHAVE always had a fad that the petrol tap should not be located under the bonnet. Last week an engine I was trying to start back-fired inin the fooded carburetter, and the bonnet was soun enveloped in flames. With the petrol fap, which was located under the scuttle, turned of I attempted, unsuccessfully, by using the electric starler. to let

RLCHMAXTURE (contd.).
the engine suck the fire out, and then pushed the car out of the garage and set about beating out the flames. The petrol in the float chamber was sonn exhansted and the diaming rubber leads were easily extinguished. Had the petrol tap heen under the bonnet the car might now be a mass of serap.

## The Petrol Tax.

AI a luncheon recently given to the Press by the representatives of the sleven united motoring organizations, who are fighting a just battle for a return to the petrol tax, Sir Arthur Stanley, Lt-Col. Charles Jarrott, and Lt.-Col. J. A. Cole put forward in efutable arguments in support of their cause, and in gencral the prevailing atmosphere at the function was one of a genuine desire for co-operation against the "hig-mileage" interests, which are wishful for the retention of the present iniquitous system. It behores all of us to stand for ourselves, and no one blames the syndicates that run big fieets of vehieles for endearouring to retain a taxation system that lets them off lightly: On the other hand, private motorists are in the majority. 'They proride the bulk of the money that is spent on the roads, and as he who pays the orchestra is in a position to demand cither valse, fox-trot, or a one-step (to modernize the old saw-), then we ought to get back to the petrol tax and pay for use, not ownership.

## Press Parasites.

IN the discussion that followed, one live wire, who has a nodding acquaintance with one or two joumals that are supposed to be interested in motoring, gol up and made a specch, in which he inferred that he would be supported if he styled !imseli and those other Pressmen present as parasites on the motor industry. Of course, some folk do possess a curious kink when it comes to afterluncheon humour, but it is to be hoped that in future this gentleman will refrain from making such rash utterances. To suggest, as he did, that the I'ress of this comntry needs prodding to make efforts on behalf
of just undertakings may be applicable in some cases, but certainly not in all. Jhis journal has always been firm in its advocacy fer a return to the tax on fuel, as have other tcehnical papers. I doubt, also, whether representatives of other journals relished the accusation, and on an occasion when serious aftains were being discussed-matters that affect every motorist in the laud-the tone of the speceh seemed quite out of place.

## Starting from Cold. The Crucial Test.

ACONCERN which specializes in the simplest type of service or utility car makes a great point of casy starting from cold. Its test cars are left out in the oper all night, and if any trouble in starting up be experienced next moming the cause is investigated immediately. Thas is the ownerdriver truly assisted.

## Quantity Production and Pricas.

0NE of my correspondents recently pointed outrather foreibly-that if sufficients spare rarts were bought from a manufacturer and a complete car assembled privately, the cost thereof would be far in excess of the catalogued price of the same model. Factory rent, storcheepers' wages, and inierest on sunk capital, of course, explain this apparent discrepancy, but what is even more surprising is the huge difference between the cost of assembling an engine when new and the price charged for having it taken klow in a garage. Manufacturers all over the country are now straining every nerve to cut production. ensts, and the labour charges for assembling one wellknown light car unit are under $18 \mathrm{~s}^{\circ}$. Done singly and with garage equipment, the cost of the same job would be orer £.

## Have You Heard This?

CLSTOMER (having scrutinized every light car in the showroom): "I want to see something cheap in a touring model."

Exasperated Salesman: "Right, sir. Sit in this."
S.S.


THE SEASON.
The Junior Car Club had the honour of organizing the first Brooklands race in 1923. After the General Efficiency Trial an impromlu two-lap handicap was run off. Thirty-four faced the slarter. N. Black and C. Finch, on 4 -cyl. G.N.s, were first and second. An Eric-Longden was third.

# CHELTENHAM AND THE VALLEY O? THE LOWER SEVERN. 

Ideal Country for the Early Tourist


worth while in the fullest sense, for this hill country is amazingly beautiful. lun passing through 'Tewkesbury one cannot fail in nolice the Bell Inn, with its striking black and white architecture, and one is reminded by a notice alfixed to the wall that the house has b,een immortalized by the pages of 'John Halifax, Gentleman.

Source of Father Thames. At the summit of Leckhampton Hill there is a curious natural formation on

ITOWN that has a spring season is one to be chosen before others for a spring sojourn, and Cheltenham has such. Morcover, it is a town of which the shops and promenade, winter gardens. and public halls give it a charm and character of its own. In the matter of museums, art galleries and libraries C'heltenham has much of which it may justly be proud, while the Cheltenham College for young ladies is known and famed chroughout the land.

## Surrounded by Beauty.

Lying in the heart of the hills. Cheltenham enjoys a large measure of protection, and, consequently, is comparatively miid climatc.
There are many delightful runs in the surrounding country along roads that, are practically level. Eight miles south-west lies Gloucester with its cathedral, and the rood has no semblance of a hill; and the same description applies to the ten miles north from Gloucester to Towkesbury, as also to the return nine miles from Tewkesbury to Cheitenham-a level run of nearly 30 miles. This is to the west of Cheltenham, where the fertile land of the valley stretches, with mile after mile of meadow land and cornficld! and orchard. In this ierel country many pretty ri]lages lic scattered, and it is not until one reaches the foot of the Malvern hills that there is any chance of climbing: but the riews about Malvern itself are


From the bills some very fine views of the surrounding country can be obtained. The "Devil's Chimney,' a photograph of which appears on the right, is a curious natural formation at the summit of Leckhampton Hill.
the slopes above the road which is known as thr "Deril's Chimney," and not far distant, at the road side, the seven springs that constitute the somece of the River Thames.
The Cotswold Hills form the great barrier to the nast of Cheltentam, and on this high ground there are many attractive runs to Burford, to Stow-on-th:Wold, to Moreton-in-the Marsh, and Broadway, sait to be the prettiest riliage in England.
The River Aron and the River Severn join their waters at Tewkesbury, and the $\Lambda$ von loses itself in the larger stream. These xivers are justly regarded as the uwo most beantiful in our'land, and in their united flowing they do not forfeit their good name, fos those who risit the river wherever possible by roul in the neighbourhood of (theltenham, and more especially those who trace its course on foot, will have nothing but praise for the charm of the scenery through which it flows.

It may he mentioned that Birdlip Hill rises nearly 800 ft and is tro miles in length. It lies on the roat to Cireucestar, and is the stecpest and most exacting of the main-road hills around the fown.

Before the lure of forcign spas and health resorts began to exnert their powerful inflnence. Cheltomham held a position of eminence among English resorts, and many there were of affluence and title who made this their venue year by year. If the town has lost in a large measure the glamour of those days, it still retains the genius of understanding the requirements of those who come and go and of fulfiling those requirements in a quite exemplary degree.


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## \section*{তhe} <br> LIGHT CAR \& CYCLECAR

was founded in 1912 to cuter for the needs of users and polential purchasers of varions new types of cyclecars and light cars, and it has consistently encouragea the development of this new motoring movement lor over ten years.

The journal is published every Friday. There should be no difficulty in obtatning a copy al any bookstall or newsagent, as arrangemen/s have been made to ensure a regular supply. Shoutd any' difficulty be experienced, we should be greatiy obliged to receive the name and address of the reader's newsagent

## CONYENTS.

## Topics of the Day

## On the General Efficiency Trial.

THE inteltigent observer cetn mobably obtain more useful information from the results of the Junior Car Club's. General Efficiency Trial than from any other one-day test that is held during the season Not only is the road-worthiness of the competing cars put to a premium, but the hundreds
Much Useful of cther features that the prospective purchaser Information. wishes to discover are hrought to light in no uncertain fashion. Not highly spectacular, and nos particularly exciting, the trial itseli may appear to be unenterprising compared with those events that include the porular watcr-splash, the common "Colonial section," or the ubiquitous freak hill (the like of which any sane tourist would never attempt), but, by the same token, it serves a liar more uscful purpose. Those who are interested in small car development, as riewed from a commercial standpoint, will notice that three points stood out prominently on Saturday last, when the Sixth Anmal General Effecency Trial was held. The first is that the one-litre class is gaining in popularity and that cars fitted with .engines of this denomination are surprisingly speedy. Secondly. it must he remarked that the hill-climbing ability of small ears is improving greally (any car that can climb Brooklands test hill from a standeng start is capable of ascending any main-road hill in the British Isles). Thirdly, carburetters appear to have improved considerahly of late, for very few engines failed to start within 15 sees.. while the slow-running performances on top gear were extraordinarily good

## The Three-wheeler Successful.

THE fact that the premier award was gained by the only threcwhecher in the trial proves that the true eyclecar, when handed properly, can pat up a remarkable pe:formance. All the more is eredit due when it is realized that the Morgan was the lowest-priced car entered. and so cuce again we

## Our Claims

Justified. have to place on record an instance that justifies our oft-repented assertion that the light, simple type of two-seater is deserving of closest attention. The inter-councetion between the result of the Gereral Elficiency Trial and tho article on "Power-weight ratio" that appeared in our last issue is worthy of more than passing comment, for proof is afforded that, giver reasonable engine power and low rumning weight marvels can be accomplished in the shape of speed acceleration and hill-climbing by a vehicle that is low-priced and vet thoroughly roadwerthy.

## The Shame of Our Present Taxation.

NEVER hare a body of taxpayers had a more just cause for complaint than have motorists at the present time. We are badged and badgcred, put to unnecessary trouble to obtain licences, aud subjected to official scrutiny at every turn, yet these oppressions might be bearable were not the inci-

## How to Effect Alteration.

 dence of the tax wrong from every angle. A tax on ownership is not fair. It favours those who aro professional motorists, and means that those who do least damage to the roads have to pay an entirely disproportionate sum per milo covered. The fight that is being put up by the 11 representative motoring organizations in favour of a return to the petrol tax deserves the support of every private-car owner in this country. The subject will be brought up in Parliament in the near future, and a way in which all readers ean effectively work in farour of improvement is by acquainting their local Member of Pirliament with their abhorrence of the present system. Concerted action will achievo the desired result. and it is a step we whole-heartedly recommend. Only hy united action can reforms be bronght about, and particularly is this true in the present instince.

WITH the first mention of Faster-tide the motorist's thoughts at once turn to the everinviting oper road an:l to the little car which renders all places accessible and no distance too great Those owner-drivers who failed to ret. their cars last spering, and who in consequence did not experience is trouhle-free season, will not make the same mistake this year, whilst those who for the first time are about In enjoy the pleasures which only a motorcar and the apon road can provide will no doubt welcome a few hints regarding the preparations needed to guard againsi breakdowns of both a minor and scrious nature.

## Tyres the First Consideration.

Perhats the first consideration is the trres, for it is, indeed. false economy to start the reason with a set of old covers. Much can be done to give a new lease of life to a trre which has covered, say, 6,000 miles in the way of "stopping" and reinforcing with canvas, but it is so much waste of time to try to make a new cover out of an old one. It is a rery good plan to thange the wheels round-the off-side rear to the nearside front and the near-side rear to the off-side front. The driving-wheel tyres naturally suffer more than the front, as an examination of the respective treads will prove, whilst if the front wheels be set over un equal wear on the covers will take place, hence the reason for changing the wheels in the mammer de seribed. A small vulc:mizer saves its cost in a very short time if nesol to advantage in the doctoring of partly worn covers.

If the car was not properly "laid up" for the ler, or has not recently reczived other attention than periodical greasing, it is a good policy complew. 1 pmpty the sunny and to swill it out with paraflin Whilst the paraflin is in the sump the engrne maty be cranked briskly round so as to induce the patation th flow through the oilways. Drain off the maraif:n aml replenish with the correct brand of oil. Aiter such an operation do not race the engine at once, hum allow it to tick orer for a few minutes to give the oil time ut circulate
The gearbox. the lubricant of which has nut heen changed for some considerable time. may be treated in a simiar manner with heneficial results. Whilst ans shortage of lubricant in the back axde shouk be made good.
A damp atmosphere is an enemy of clectrical in struments, and it is quite possible, if the ciar has been stored during the winter, that the magneto will refuse to probluce is spark at the plug points. If the rocke arm be free on its pin and yet no current is felt at tl blug, it may be necessary to dry off the instrument an oven. Not a hot one, be it understood, hut one jus: sufficiently warm in eraporate any moisture which may have settled nu and in the magneto.
I most important consileration is that of the brakes, as should the owner-driver be of an exploring turn of mind he will. of course, like to prepare against all eventualities. If the shoes require relining do not forget that the ear ean better be spared now than in


BRAKES AND The efficiency of the braking system is of vita! importance. (Left) The awner-driver WHEELS. testing the compensation of the hand brake. (Right) The wheels should be changed

the middle of summer. The degrec of adjustment wheady taken up on the rods foms a useful indication as to the state of the shoes-that is, of course, when the brakes are enclosed. If the braking system is not provided with compensating mechanism it will be necossary to check the effect of each pair of brakes, and this is advisable whether new linings have been fitted or not.

## Testing for Compensation

To do this jack up the back axle so that hoth wheels are off the ground, and, with a frieud at the control, each brake should be adjusted until the effort re-

Regardinge the steering, it is almost certain that hacelash exists, and whilst to a small dugree this is not altogether undesirable, the cause of excession slackness should be investigatel. Ball connectin? joints are usually adjustable, as is also the mechanism in the steering box, so that there is no excuse for the steering not being reasonably tight

cumed to move cach whecl is approximately the same when the lever or pedrl, as the case may be, is suitably operated. The wheels should, of course, be quito minovable when the brakes are fully on. These remarks do not apply in the case of a differentialless biack axle, it being then necessary only to adjust the brakes to hold the wheels.

In both eases care should be taken to see that the shoes do not touch the drums when the brakes are in the off position, as the friction thus set up will affect materially the road performance of the car. After a sharp run of about five miles the car should be allowed to "roll" the rest, the temperature of the drums then being gauged by placing the hand on them. If in order they should practically be cold to the touch.

Many an owner-driver complains of the poor qualifies of the suspension system of his ear. but let them reflect for a moment. It is a?most safe to say that but fow motorists ever grease the springs, yet they grumble when they are pitched and tossed about when megntiating a stretch of had road. An application of gond graphite grease between the leaves wiil be found to work wonders, and the operation is by no means a difficult one.

## Greasing the Springs.

Whilst a spring-leaf nuener is a valuable aid and well worth its cost, no great difficulty will be experiensed in introducing the grease if the car be lifted with the jack under the side member of the frame. Quarter-elliptic springs readily open, but the semiolliptic type keep pretty tight. A screw-driver will prove useful in separating the leaves, the grease beinr introcluced on the blade of a table knife. Whilst dealing with the springs, the clips or bolts. whichever are used, should be examined, as they do fracture and come adrift sometimes.

Do not spare grease or oil, and if an oilinge hart be: handy produce it and work systematically to it.

## Adjusting the Dynamo Eelt.

With the longer evenings ahead, lighting problems lose much of their importance, but the dyanmo ind its drive should not be neglected on this account. If the instrument be positively driven there is nothing about which to worry on this score. but if a belt be used test it for tension. I good method is tor run tho engine on about half throttle for a matter of 10 minutes and then to feel the dynamo pulley. If it he warm a slack he't is indicated. Do not, howner, mako the mistake of running it too tight, as. whilst a slack belt can do no harm. undue tension puts an cxcessive load on the armature bearings, and the results mar be disastrous.
Regurding the equipment, examine the hood and side curtains. making certain that the formen is waterproof and that the latter still fit nicely and are all complete. Do not forget that there are rejurenating media with which hood material may be anointed. such a we being Acenrdian fiexible canvas paint.

Apart from an owechath of the tool roll and trere inflator, there is littie else which the owner-driver can do to provide against normal happenings, and if his car bears a good character he will k!:nw that he has at least taken every reasonable precaution against breakdown.

Although all the greasers will be serewed down and replenished and the oilcan used freely where required. such parts as require fairly frequent attention in this direction should not be nestected during the season. It may even he neenssary to force paraffin through the grease-ways, as the inguess of dirt may serve to choke them up, with the result that considerable difficulty will be experienced in forcing the lubricant in by means of the serew-down cap.


## NEW COVENTRY-GULSON ENGINE.

## Special Features: Overhead Valves and Camshạt. Thre-bearing Crankshaft, and In'erest ng Lubrication System.

above the camshaft, the oil mppitin derect on to reach cath, the resthat being led by an external pipe to the magneto bearing and chant driving the camshaft.
The combastion chambers alo machined and vory slighty recuased at the sides to allow fur the jnemertion of the valves. The guides ary of large size, to reduce the ellects of side thrust, but the inlet and exhaust, passanges aro not restricted, as that parb of the ralvo stem situated in the How of the gats is of the usual dimensions.

On the oll side of the encme amo found the cadburetter, sparking mhas, and large-size oil-filfer cap, while on the: near side is the ribbed aluminmm exhaust collector, which is designed with a single central discharge port.
It is worth noting that the head san be removed withom: disturbing ih timing of the valors, as the camshath coupling cin be slid forwands in its housing in the chain case sulticiently (1) allow the removal of the shatt and the raising of the heat, which is threaded on to studs anchored in the hareol block in the usual mamer.

ANEIV engine, with urerhead valies and canshaft, is being protuced in two sizes, i.e., 9.8 h.p. and 10.5 h.p., by the Gulson Engineer ing Co., Lid., Gulson Joad, Coventry. In both models the stroke measures 110 mm . but the bores are G 3 m nin. and 69 mm . respectively. For an oh. cannshari inb, with three-bearing erankshalt, the engine is fairly compact, measuring 21 ins. in length and 27 ins. in height. It is compossed of the cylinder bloc, which is formed in one with the upper half of the crank chamber six-pint oil sump carrying the trays into which the bigrends dip, detachable marhined head carrying the valies, and a domed cover yate secured by four thumbserews.

The camshaft, puns on two hall bearings, the front one being the larger, and is driven by daplex rollow. chain from the frout end of the crankshaft. Th: chain is automatically tonsioned by a spring-loardad jockey sprocket, and also drires a short shaft on then off side of the unit, which, in turn, operates flamesh a twe-taper coupling the magneto and generator. the former being locatel behind the chain cinse and the later in front of it.

## Cam and Pump Operation.

The cams operate direct on the valve stums, which are enlarged for part. of therir lengih, so as to withstand the effects of the sile thrust. I novel method of providing the necessary arljustment. by means of a finger-rineratind lork ring. is a feature of interest. At the rear end of the camshaft is an cceentric which onerates the oil pump. a sturdy affair mounted at the hack of the head. This pump draws oil through a quickly detachable evlindrical ganze in the sump and froces it to a gallery feeding the four trouthes fir the higends, whence the overflow drains back through a second gauze into the sumb. Another ford from the pumb takes oil to a gallery locatal $\mathrm{B}: 0$

The crankshaft is a very rigid aflair, its outer bearings cunning on balls and its central one bemes plain. Plain big-ends, stamped comecting rods, and fully fioating gedgeon pins :bre standardized, whits light east iron pistons, litted with two narrow ranss apiece, complete the equipment.
The overhead values and camshaft are scaled has a neat arch-shaped cover, held in place ly four thumbserews, while the timing cover is covered by it


The valves are of unusual design in that the lower half of the stem is strengthened with a view to counleracting wear consequent upon side thrust set up by the direct - action cams The eccentrically operated oil pump is shown on the righl It will be appreciated that this component is readily accessible.

large, almost pear-shaped easting, which incorporates the tarting-handle housing. 'This unit, forms an arlinirable example of the modern tendency in the design of the high-efficiency small four, for it is quite evident that accessibility; a most desirable feature from the owner-driver's point of view has heen carefully studierl.
In addition to tho two types of engine described, a three-speed gerbox with side or central coutrol is hring designed for unit construction with the Coven-try-Gulson engine.


IN PICTURESQUE $\qquad$ A scene in the pretty, wooded Colonial section, near Oxshott, which formed a ditficult part of the preliminary road lest.

> Last Saturday's Interesting Trial Described in Detail. Morgan Wins Westall Cup. G.N. and Gwynne, Second and Third.

KLNGSTON VILLE at 8 a.m. with an easte:ly wind blowing is not calculated to inspire the competitor faced with is fairly trying 8 -hour ordeal with any marked degrec of enthusiasm.
Nevertheless, it was a very optimistic army of small can drivers and observers Which assembled at this venue on Sat:nrday morning last, whero item No. 1 rin the programme of the Junior Car Cluh's Sixth General Efficiency Trial was carried cut.
Despite the uninviting conditions spectators were numerous and the scene soun hecame ore of lively animation, marshals larting hither and thither in hot pursuit uif their duties, drivers making eleventhlour examimations of their cars, und spectators moving in curious groups from ono car 10 another, quietly examining and weighing up the various good points and, he it hoped, the few weak points in errih

Here it should be mentioned that : victory was scored by IE. B. Ware's Morgan, which captured the Westall Cup, the ramers-up being A. G. E. Nash (G.N.) and D. Chinery (8 h.p. Gwynue). Detail results are given at the conclusion of this report.
As the first man was due to slart on the 25 -mile relinbility tast punctually at nime o'elock no time was lost in fifling us the special one-gnllon tanks which
had been fitteck to tho competing machines and in scrutmizing them in order to make sure that they coninnmed with the regulations-namely, that each car must be a standard, as catalogued. touring or sporting model, with full equpment of hood, screen, horn, etc., elc.
a few minutes before nine a crowd

## TESTS AND MARKING <br> AT A GLANCE.

## Reliability

Petrol consumption 300 200 Speed
Easy starting
Hill-climbing
Slow running on top
200
.. 300
Top-gear acceleration 100

## Brakes

100
Springing
Noise
Acceleration
Cooling-water loss
100

Manouvrability
100
200
50
Total 2,000
The car showing the best performance in its class in each test was awarded maximum marks, other cars being marked comparatively.

Which collected round E. C. Gordon Fingland's 7 h.p. Austin grive evidence of the fact that the first test, i.e., easy starting: was about to commence.

Gordon Fingland, by the way, bas hardly recovered yet from his gliding smash and still has to walk with the aid of sticks. lior a cripple he was particularly simble, however. Standing by the nearside wing of his car, he reached easily for the starting handle on the word "Go!" gave a single sharp puli up, and the Austin was purring casily and steadily on all four eylinders. England, however, was hasdicapped in this test, as etch driver was timed from the word "Go!" at the moment when, laving yamel the driving scat and engaged lirst gear, the road wheels actually moved.
Despite the fact that the carburetters had been switched over to a new supaly of fuel asd that thero was the chance of an air lack, tho ease with which practieally every car was stated hip in this test was surp:ising.
One noted that the cars fitted with plectric starters were partioularly eflicient. and in this respeet mention mist be mado of the Rovers, which were both quiet and sure in starting up directly the pedal was depressed. In this !est the two lady drivers, Miss WV. M. Pinls (11.9 h.p. Horstman) and Miss E. Nicol (10 in.p. Werwoy) showed promise of

THE EFFICHENCS THI.LL(contl.)
their proficiency in handling small ears in a difficult trial.
Having started up, the cars with their observers who. had been changed over from other cars, rolled gently up to the start, where Mr. A. V. Ebbblewhite sent them off promptly one by one at minute intervals on the none too difficult but certainly useful 25 -mile pait-Colonial course calculated to test their crosscountry capabilities.
The route lay through Kingston aind along tho straight stretches of the Leatherhead Road, whence the stream was turned back to Oxsholt. About half a mile after this village a surpriso was waiting in the shape of a couple of miles of really reagh Colonial section. The surface was composed of louse, wet sand, waterlogged hollows, and multed grass banks, whilst very muddy patches irere encountered whiclı made añ average of $20 \mathrm{~m} . \mathrm{p} . \mathrm{h}$. no easy matter to maintain. Two or three drivers stopped their engines through bad handling of the controls, but in the main the deviation from main roads served to break the monotony of the $20 \mathrm{~m} . \mathrm{p}$.h. schedule. After Esher the main road through Hersham was taken to Brooklands.

## Measuring the M.P.G.

On arival at the track the cars were at unce parked in the paddock and vary carciul measurements were taken of tha amount of fuel left in each special tal: $k$ with a view accurately to masuring the consumption over the 25 -mile conrse. Following this the one-mallon tanks were removed and the ordinary main tank of the car was coupled up to the carburetter : but no adjustment of any kind lias allowed during the change over, indo. pendent official observers being appointed to see that this rule was enforced.

Meantime, a saloon-bodied Fiat, a Sports A.C., and an 11.9 h.p. Citroênofficial cars-were worming their whys tortuously through the barriers erected in connection with the mancurrability test, and not until each of these three cars had made a perfectly clean passage without touching any of the obstacles was the course approved by the officials.
This proved to be one of the most in-
teresting tests of the whele frial, and it. was surprising that quite 80 per cent. of the entrants failed to get through withcut either tonching the barriers or having to reverse. In many cases it was due to sheer bad driving. in othess to ans, ineffective lock, whilst in some cases the failuro was due to hoth of these reasons.

## A Sad Deficiency.

Tho test, howerer, proved conclusively that many small cans are sadly deficient. in lock, for where one four-seater made a perfectly clean passage, another, pe:haps, of approsimately the same tracis and wheelbase, would have to reverse two or three times.
At the ontsei it appenred as though the test was too easy, for Gordon England (Austin), Deverill and Chiners (Gwynues), Samaelson (E.S.), Ware (Nlorgan), and O'Connor and Bennett (Rovers) slid through without any trouble. Randall's 8 h.p. Talbot, however, headed the procession of those who failed to get through. A few were successful, and of these conspicuously good handing wis exhibited by Watson (Surrey). P. A. Denny (Calthorpe) and S. H. Newsomo
(Cooper)
Nany ondy just touched the barmets.
Having emerged satisfactority or utherwise from what one of the drivers doscribed as the Hampton Court Maze, the cars proceeded at once to tho foot of the test hill in preparation for Test No. 4, the timed climb. In conirast to last year's trial, when many of the cass failed to make clean ascouts of this
(1) Measuring the precious fluid. A. country run. (2) Miss Pink (Horstro of the morning run. (3) Outmanøeuvi gives an excellent idea of the "course. 4 section of the test hill during the tirn in the act of pulling the chocks a wayri test. (6) F. A. Houghton's Tamplin a test. (7) Joyce (A.-C.) demonstrates th
notorious Brocklands pimple with its final stretch of 1 in 4 , only wo cars this year were beaten. 'These were C. Nevile Green's liric-longden, which afterwards mathaged the elimb mimus passenere, athed 1F. M. 13. Samuelson's 8.9 h.p. I'.S., an interesting litilo home-built machino which otherwise put up quite a crodit able performance throughout the trial.

dcene at the conclusion of the $\mathbf{2 5}$-mile crossan) trnversing part of the Colonialsection , ad in the manmuvrability test. Tr is picture
(4) Bennett's Rover snapped on the 1 in ed ascent. (5) The chnck marshals caught from Chance's Enfield-Allday in the braking pailing the word " Go !" in the acceleration slow top-gear-running qualities of his car.

Fint iscents wew made Ly F. C. Ciordon Vingland's 7 h.p. Austin, E. I; II are's Moigan, which suffered from is grad daal of whecespin at the start owing to a wet patch on the concrete, C. J. Randall's Talbot coupdé, N. Black's ame Q. Finch's Ci.N.s. W. G. Brownsort's A.C., II. C. Dates's Lagomda, J. Cocker's Clyno, Miss W. M. Pink's Horstmon, V. G. Wialisgrove's Riley: s. Watson's Surre:, J. A. Joyre's A.C., A. E. Moss's Crouch. J. T. Clance's Fintield Allday, and A. G. F. Nash's G.A.

## Ascents of Test Hill.

Tho two Mercuries only just managad the climb, whilst Capt. Brittain's B.S.A. pulled slowly at low revs. but very billrdily on the last portion.

This test concluded the anorning's programmo in good tirue, and a hungry army af competiors, observers, officials and spectators invaded the luncheon room un the Members' Hill. With much regret we have to record the fact that the catering was not by any means beyond criticism, principally owing to the delays which occurred in serving a none 1 ou appetizing meal. It had been properly
announced that no fewer that 100 percins would arrive for luncleon at twedve now. but $1: 0$ artangements seemed to havi: Leen made to cripe with the rush.

Punctually at I p.m. the first of tho cars which had been lined up at the top of the test hill proceeded stowly dunn the gradient in preparation for the braking test. Eacht car was chocked by two marshals at a white liue rumin's acruss the concrete on the 1 in 5 slope, and at a given signal the chocks were pulfed away and, with both luakes off, the car was allowed to roll forwa:d under its own momentum until reaching a secrind crossline ; then a flay dropped by a marshal indicited the precise moment when each driver could apply his brake. The actual distance taken to pull up was then measured, white lines at yard interwals showing the correct reading at a alance.

## The Brake Test.

The braking test was adversely citicised. but until a better method call I, found the system adopted mast be: :egarded as being the most satisfictury possible. These criticims were levellod from various points of siew : for instance, it was suggested, very rightly, that the slightest variation in tho landling ui the marshal's flag or the adeptuess of the driver in being able to pull on his brathes rapidly, might make a difference of twi and perhaps three yards. Again, itl efficient brake should be really prozres. sive in action and should not lock the wheels, as did the majority oi iho.י. during thi; test.

The importance of weight distribution, however, was proved by the fact that. whereas the wheels of some cars of $p:$ :". tically equal size and weight were locked at the same spot, they slid varying ti, tances. The Austin, with its frus-whed brakes, wis distinctly good, whilst Ware's Margan, which also had front wheel brakes, pulled un as thoughasit Lad mun into a brick wall.

The Marseals both pulled up in a very short distance. whilst the little Tamplin also performed creditably, although its back axle dithered painfully before fle car was brought to rest.
The majority of the cars slid varyin distances with locked wheels, 25 already described, and in very fey: tinstances did a car with rear-whecl brakes

## IHE EFHLCIENCY TRIAL (contd.)

only, pull up with road wheels revolving until it came to rest.
Perhaps in view of the smooth nature of the concrete and the steepness of the: gradient such ideal braking is too much to expect, nevertheless we should not he surprised if next year's Elficiency Trial shows that great improvements have been made in this direction.

## The Audiometer in Action.

During the limed ascent of the test hill Professor A. M. Low tested the ears for silence with an improved audiometer, or walher his instrument gave a very accurate record of the exhaust note of each, and created no small amount of curiosity on the part of the spectators, who crowded round craning their necks in order to ohtain some enlightermen! as 15) what was going on.

Carrying on to the foot of the hill, lop-gear slow rumning and top-gear acceleration were tested in the following manner. The competitors were given as 50 -vard start, over which distance they had to change into top gear, covering the ensuing 100 yards as slowly as possible in top gear- crossing a line and accelerating, still in top gear, to the utmnst capability of the car fo: another 100 . yard stretch. The times for each of the

Although somewhat brutal in concention, there is no doubt that this lest will produce valuable data. Given 50 ya ds stant the cars had to aceclerate to 25 m.p.h. and pass over a plimenk approximately $1 \frac{1}{2}$ ins. by 5 ins. laid in their path, the ensuing rise and fall of the chassis being recorded by an ultra-rapid cinematograph apparatus, by means of which tho behaviour of cach car could be studied at leisure afterwards and its performance compared with those of :ts meighbours.
firom the observers' paint of view the test, revealed nothing, for the cars hehaved very much in the same way-a couple of nasty jolts as first the frort wheels and then the back passed over the obstruction, and obvious relief on the driver's face when he discovered that nothing had been broken, being ti.e features which characterized each at lempt.

## Acceleration Test.

The next item consisted of an acceleration test, from a slanding start and a speed test over a timed lap of Brooklands. The accelemtion lest was carried out :il the ordinary Fork start, where so many famous Brooklands races have begum and the cars then sped round the track to the lilometre lime. performing ane complete circuil of the track, crossing the kilometre line again and then retum-


## EXCELLENT BRAKING. <br> E. B. Ware (Morgan), who captured the Westall Cup, It waped as he brought his car to rest in the braking test. It was pulled up in less than 4 yards, as the markings on the concrete plainly show.

Jast two stretches were taken by means of stop-watches at the vantage points.
It was noticeable in this lest that Hhere was very little difference in the performances of the various cars, particuJarly in accelerating from a dead-slow rrawl over the last stretch. Carburetters with flat spots gave their drivers a little trouble and certainly lost them a valuaable second or two when it became neces. sary to switch over f:om the pilot jei. upon which presumably the majority oi the cars had been ruming in the slow Lest, to the main jet, which was essential for the acceleration which followed.
Operations were now transferred to the Fork, where a crowd. which had greatly swelled since the morning. viewed with) interest the suspension test which followed.
ing in their own time to the paddock. In view of the fact that all the cars were standard productions, the m.p.h. as they came off the banking and sped over the kilometre line were very high, and allhough they were beiug driven all out, disaster only overtools one, namely, S. H. Newsome's 11 h.p. Cooper, when within 20 yards of the completion of lio Lest.
When gning at least $45 \mathrm{~m}, \mathrm{p} . \mathrm{h}$. excossive whip was sel up in the propeller shaft, which tore ilself adrift.
We exlend our sympathy to Newsome, for he had held his num admiralily throughout the trial, and his bad luck put him right oul of the running at the elecenth lour.
Considering the fact that the suspen. sion systems were standard and that in
not one case, wo believe, wero shockabsorbers fitted, the manner in which all the cars clung to a straight course, with very little bounce or dither, was commendable and shows that serions attention has been given to suspension during the past twelve months.
The tria! actually concluded with a test for the loss of cooling water, which took place in the Paddock, and here it should be noted that from 8 o'clock in the morning no adjustment whatever or replenishment of cooling "water hatl Luen allowed. Any car that regnired mone than half a gallon to make up the amount lost during the trial was pemalized 50 marks.

## The Results Dissected.

On the next page will be found detail results showing the positions of the various cars on the markings of the whole trial, and also their positions in cach pasticular class, but a gencral analysis of the rusults is not without interest.
The bese petrol consumption was given by A. G. Fi, Nash's G.N. the actual figure being $75.5 \mathrm{~m} . \mathrm{p} . \mathrm{g}$. The fastost lap wourd the lrack was put up be A. J. Moss ( $12 \mathrm{~h} . \mathrm{p}$. Crouch), the speed for the timed lap being 61.64. This is a very interesting sponting car, by the way and should figure prominently in fortlicoming competitions.
E. B. Waie (Alorgan) collects quite a small bagful of "hests," obtaining first. place in no fewer than three of the tests -namely, the brake, top-gear acceleralion, and acceleration from a standing start. R. G. MeVicar's Waverley was timed to put up the best performance on the slow-rumning on iop gene test, while J. Cocke: (Clyno). D. Chinery (8 h.p. Giwynne) aud N. l3lack (G.N.) were bracketed first in the easy starting test.
To Capt. A. IV. Britlain's B.S. A. goes the honour' of being judmed the liestsprung car in the trini, whilst the B.S.A. is bracketed with Miss E. Nicol (Mercury) and IV. H. Oates (Lagonda) as the cguiclest vehicles.
Owing to S. II. Newsome's unfortunato mishap in the speed trinal he was julged not to have finished, and, Werefore, docs not figure in the results.
It is interesting to note that there were only three non-starters, these being W. D. Hawkes $(8$ h.p. Talbot). A. W.
Knghi ( 10.8 h.p. Surey) and ir. T. Smallwand ( $12 \mathrm{~h} . \mathrm{p}$. Palladium): thus 34 cars representing the principal makes of light ca:s and cyclecars built in this country conreted in the classic and insiructive t:-ial.

After the official conclusion of the event the sporting element sugfested is half-crown handicap, and the idea was enthusiastically received. Over 30 cars weee, therofnie, handicapped by Mr. Ebblewhico and a very inleresting 5\%mile race resulted. Norman Black's $\mathrm{G} . \mathrm{N}$. romped home guite a league in fiont of Finch's car of the same make, whilst thiid place was gained by E. Longden's Eric-Longden.
The rest of the field came in fairly close together, but it was obvious that in the speed lest, which had taken placo during the afternoon, many drivers were playing for saicly, as some of the carsBlack's $G$ N., for instance-had at least, another 5 m.p.h. upon which to fall back. Tho limit man, Moss, on tho Sporting Crouch, ra: innough at least two-thirds of the field, brit failed to secure ons of the premier places.


## SIDELIGHTS ON THE TRIAL

Several cars only just managed to "Lop" the test hill, but only twu actually failed

Many Brooklands habitués were guile ghorant of the existence of a weig! bridge in the paddock. and in conve. quence ' quide was necessary.

As Copt. Brittain got off the mark in the speem trest his acceleration was such that his passengers appeared to ha:o rubler neeks.

Several proud possessors of Gauntlite gloves were seen disporting this ingeni nus imnovation, but owing to the daylight they were unable to demonstate tho novelty to its best advantage.

It is suggested that next year the cars. having passed through the mandura bility lest. should be made to reverse throigh the same obstacles: hat the majority of the divers are not enthusiastic.

One omlenker arrived just in time to see the first car lump over the mlank in the suspension tast., and was heard to remark sarcasticilly: "Some people drive with their eyes shut; he deserves all he gets.'

Gordon Fingland complained of fecting semsick. This was not to be wondered at considering tho number of people who were anxions to demonstrate the remarkable flevilility of the Austin Sevin's suspension.
The gymnastics performed by some of the drivers in their endearours to move quickly from the near-side wings of their cars, via the starting handles, to the driving seats were veally worth secing. In this connection the ladies appeared to be far more nimble than the men.

Many enthusiastic motorists were under the impresion that a genemal eflicicncy trial is a rather dry and dull affiair. Those who we-e present on Saturdas, however. think otherwise, and have decided to endeavour to persuade their friends to go next year. It was hicer's entertaining from start to fin:


## \section*{WITH A FEW} <br> STROKES OF THE PEN.

Lightning sketches of persons and incidents in the trial by our special artist.

The imp:omptu half-crown handicap was voted a great success barring the delay which preceded the start. This was due to the conscientious cudeavours of Mr: A. $\Gamma$. Thiblewhite to perfo:m his officiai work first.
"Ebby" " was seen to lonk long and hard at Black's (B.N.. which prosed to le an easy wime:-

Competitors who grumbled at th. alleged severity of the manouvrability test are remiuded that threc official standard cars-namely, an A.C. sport. model, a silloon-bodied Fiat. and an 11.9 h.p. Citroen-successfully negotiated the obstacles without tonching or reversing. the hatriers being closed in untii they could only just accomplish it.

## THE RESULTS.

 SUBJECT TO CONFIRMATION BY THE J.CC.

 (28) H. H. B, Samuelson, 8.9 h. F. . A. I291
 Eury: (3う) A. A. Orfehis. 10 hr . Mereury.
The marking was very c!oze, the first anal sccond positions being Eeparated by less than 1.745 marks, while thu lowest ligure of merit 1.743 runr
wis 1,079 .

> Positions in class aro as follow:-

Class 1-(1) F. H. Wars, Morgar (3) $\mathbf{D}$.
 (6) J. J. Hamiall, 8 hg. Tulkul: (7) 1", 11. 1:

Samutison, 8-9 h.n. F.S.: (8) C. II O'Cornor. 8 h.p. Rovur 19) W. Birurrii, 8 h.p. Rorei-
 Cinch. 8

 Lagouia; 17) IR. G. McVicar. $11 \mathrm{~h} . \mathrm{p}$. Waver ley: 181 Nise Nicol 10 h.p. Mercury: ( 9 ) A. Ortela, 10 h.p. Mcreury.
W.ass 4.-(1) V.G. Wallagrove, Rilev: (2) Mixs son. 10 h.p. Surrcy: (4) A. W. Brittain, jo h.p B.S.1.: (5) J. Cocker, 10 Jt -i. Clyno.

Class 5.-(1) A. F. Na三h, G.N: (2) A. F: Musi. Crousho (al J. A dere. A. © : (4) J T Marsmal: 161 I. A. Denhy, 10.5 h.11. Calliornu: (7) I'. IMeson, 9 in.p. Derbs

## HINTS ON BUILDING A GARAGE．

The Necessary Formalities to be Observed before the Commencement of Operations

IVITH the present demand for garages and the high rents charged，many have no doubt， considered the advisability of building a portable garage for themselves．Whe will，therefore， give some information regarding the oltaining of a permit and the building of a garage in the London district．
All building operations are under the control of the London County Council，but portable buiidings， measuring not more than 7 ft．to the caves，can be ：anthorized by the local borough council．In the first place procure a site，then apply，with two copies of


The top illustration shows a half long section and elevation of the proposed building．It will be noted in the plan view in the lower illustration that no sill is provided to the doors．The walls are constructed of rebated weather boarding．
the plans ta．．the local borough council for a licence to erect a poisable private lock－11p garage．This licence is usually granted for three years and is renewable．No fee is charged．

Before building，it is best to get a builder to submit the plans to the district surreyor（an officer responsible to the L．C．C．）．who charges a fee for inspecting the building．This inspector has the right to veto a building if urisatisfactory Hence the suggestion to submit the plans to him first．

## Precautions Against Fire．

If the proposed building is at the side of a house with no openings in the wall，it may be built quite closely to it，but if the：e are any openings in the wall，such as doors or windows，the garage must either be made fireproof，or it must be built 10 ft away from the existing building．
It will be noticed that the door is cut away so as to give more than 7 ft ．clear－ B30
ance．A few cars measure f ft ．with hood up，and，by cut－ ting the doors as suggested，the extra height is obtained with out taking the briilding out of the local coun－ cil＇s hand．With


A rear view of the campleted garaze．Ample venilition and illumination is provided by the spacious windows． regard to con struction，rebated weather boarding is much prefer－ able to the ordinary rough weather boards and will cost about $£ 1$ extra．

## Cost Roughly £23．

This gives a smooth fimish inside．The framework should be constructed from $2-\mathrm{in}$ ．bv 2 －in．material， with 4 －in．by $3-\mathrm{in}$ ．cross－picees and 3 －in．by 2 －in．sill． A convenient size of wood for the doorposts is $4-\mathrm{in}$ ． by 3 －in．，and the roof can be covered with rubleroid． The cost of such a building（without the floor）would be about $£ 20 . £ 23$ when crected．The cemented floor will cost from ${ }^{2} 4$ to $\mathbb{E}$ ，according to the depth and consistency．
It is advisable to get a local man to do the building and erecting，as some of the portable buildings adver tised will be found to be warped badly when received， and considerable fitting is necessary to make a good iob．As the average garage chargo is about $£ 13-£ 15$ a year，$£ 10$ can be saved in a year by employing one＇s own garage．The expenses are merely

$$
\begin{aligned}
& \text { Ground rent, say … ... £1 } 10 \text { o per annum. } \\
& \text { Rates and taxes ( } 3 \text { per } \\
& \text { cent. of cost of building, } \\
& \begin{array}{llll}
\text { plus ground rent) } \\
\text { nlerest and depreciation } & 1 & 10 & 0 \\
210 & 0
\end{array} \\
& \text { Interest and drpirciation } 2100 \\
& \text { ます } 10 \quad 0
\end{aligned}
$$

It will，of course be appreciated that the prices mentioned above are purely approximate and aro Jiable to variation according to the ground rent and ihe rates and taxes ruling in the particular locality where it is proposed to erect the building．Should the owner be possessed of a knowledge of carpentry， a considerabla saving can be effected on the actual cost of the garage，it being possible to build many of the portions from rough material already in the possession of the owner．


A front and rear elevation．Over seven feet clearance is allowed for the door，and the windows are hinged to open inwards．Each long side is framed in two sections which are bolted to the end framings．The roof is conatructed in four sections．

## TK凡 Amazing eisc

The Amazing


12 h.p. Car
Worth more than any other."
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Octuber 23rd, 192?
Auto-Carriers, Ltcl., Ferry Wiorlis, Thames Ditton. Dear Sirs,
" It might interest you to knozi that $I$ purchased car in March, 1921, and up to the present I hate covered 15,571 miles. The engine has not had anything done to it, the cylinders have not bee'n decarbonised, and pulls as well as ever.
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Yours jaithfully,
(Sgd.) ALFRED HICBS.
12 h.p. 4 -cylinder Models from $£ 325$

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No matter what make of Light Car you own there is now a Special ＂Solex＂Carburellor which has been specially designed，tested and proved to give your car increased power，speed and accelerat on， together with more milcs per gallon than you have ever obtained before．
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Make Easter a real holiday this year with an＇A．C．＇ At the new reduced prices this paragon among the Light Cars offers more amazing value than ever．

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## 

# The Pulse of the Power 



The compleat pulse reader. It is fitted wite essential instruments, such as oil gauge and rev. counter, whilst in addition there are clock, ammeter, speedometer, magneto switch, lighting switches and dash light.

The reader should be warned against one snag ir. connection with the former type. Whan the oil is cold and thick the gange is more likely to register a high pressure than when the engine has heen running some time and the flow has become easier. For the purposes of eomparison. therefore, due notice should be taken of the reading when the engine is warm.
The radiator thermometer is a somewhat expensive addition to the equipment of a car, but it is a vital factor in ascertaining the fitness or otherwise of the power unit. One can prove this by very obvious reflections.

## The Reassuring Thermometer.

On night rums, for instance, when gradients are deceptire, it mavy appear that the engine is pulling badly; in fact, the driver may be assailed by the fe e r that it is actually orerheating and partially seizing. A glanee at the thermometer. how cver, will cither ctonfirm or dispel the suspicion.

Is a contrast it may be noted that, whereas the engine appears to be running quite well, the radiator is getting steadily hotter and hotter, in which case the symptoms call for altention. The opposito effect will seldom be noticed. except in very cold weather, when somewhat sluggish rumning will be casily explained by the low temperature ruling throughout the engine, and the owner will


To the car doctor the temperalure of the engine conveys information of incalculable value. The radiator thermometer shown above can be kept under observation both by day and night.

## THE PULSE OF THE PONFR E゙NTY (rontd.).

rither make allowances or wili blank up his radiator until his thermometer tells him that the approximate correct working temperature has been attained.

Turning now to the third factor in pulse reading, is


A revolution indicator graduated to show both engine revs. and road speed on top gear.
is really surprising, when one considers the usefulness of the engine revolution indicator, that it is not fitted as standard equipment to every sports model at the very least.

Whether it be due to lack of enterprise on the part of the maker, or to lack of appreciation of its value by the average motorist, the rev. counter is certainly not nearly so popular as it should be. Few motorisis realize that, with its aid, the general tune of the engine can be ascertained in moment; while, for gear changing, especially when "double-clutching," a rev. counter makes the whole operation of changing up or down mere child's play.

Miany motorists, eren those who take an intelligent pride in their car, do not know the maximum revs. of which their engine is capable. A rev. counter will tell them this and more. Three or four seconds with the accelerator fully depressed should sultice to run the engine up to its maximum speed, and if the revs., as indicated by the instrument, are not the same as on a previous occasion, it is clear that the engine is out of tune.

## The Range of Power.

It is possil)le that some may query the value of always insisting on the maximum revs. on test. "What is the use," they remark. "We are content to get a steady 20 to 25 m.p.h., and tour in comfort." They imagine that "revs." are the fetish of the speed merchant, not realizing that the easiest, quicteste and correct method of hillclimbing is to keep the engine turning.over within a crrain range of rep.m.
Far less strain is imposed upon an engine when a ligh number of revolutions per minute are maintained than when it is labouring un a hill and generally showing signs of distress at low r.p.m.
B40

Two somewhat different types of revolution indigator are illustrated, both of which, however, work on the same principle. Briefly, is connection is made from a drive taken off the crankshalt, or some portion of the gearbox, by means of a fexible spectometer cable to the indicator mounted on the daslaboard.

The intermal mechanism of the instrument is similar to a speedometer, and operates on the cendrifugal principle, the dial, however, being calibratea r.p.in. instead of m.p.h. Although it is made to register revolutions of the crankshait, the actual connection is seldom made there owing to the difliculty of incorporating a gear drive. It is, therefore, taken off one of the intermediate shafts, such as the camshaft, or the spindle of the magneto shalt, the instrument being geared internally to the correct ratio to ensure it indicating crankshaft speed.

Some car manufacturers are now making special provision for taking a rev. counter drive, if the instrument is called for, although they do not include it in their standard equipment.

## For Correct Gear Changing.

Revolution indicators may be purchased to matech up with the speedometer, and thus lend a hamonious eflect to the dash. They are usually flush fitting, having silvered dials with black markings.

An accompanying illustration shows a revolution indicator specially marked with scales showing road speeds proportioned to gear changes, so that the instrument reveals at a glance not onlv engine sevolutions but also the road speed of the car, whichever gear is in operation.

When used in conjunction with an ordinary speed?meter, that is, placed side-by-side, as shown in the illustration, the revolution indicator will indicate the exact moment for dropping in the gears.

For demonstrating the theory of gear changing to anyone learning to drive, the synchronized pointer method is ideal, it only being necessary to watch the pointers and operate the change-speed lever when they are reading alike. The gears will then slip in without a scrape or a sound of any kind.
The value of such instruments for lightning gear changing in hill-climbs and specd events is proved by the number of sports models which are fitted by enthusiastic amateur and professional competition drivers. It is to be hoped, however, that many owners of touring cars will realize that the vev.

counter is not in "gadget" for the speed maniac only, but a really useful fitting for any type of car.

The inside knowledge of one's engine, which is provided by the instruments herein described, is of incalculable value. If the exchequer permits, they should figure on every car, whether it be for touring, sporting events, or racing.

## BRILLIANT LIGHT CAR PERFORMANCES.

## Over Difficulı Victory Course, including Greasy Gradients, Water-splashes, and Hair-pin Bends

THREE T.B.s, Tour Morgans, thes berbe (iwyme and New Hadsur bronght up ithe long trail of over let matureyeles in the Bh mingham M.C.C: trial, which was held on Saturday March 17 l . The course was the misi severo fliat compelitors have had to face His, season, for in addition to a dozan lisst grade Wircesterfire thest hills. test on a gradient of 1 in 6 a restartin, lion test, and a very diflicult lill mos fared by an :icute hairpin were in luderl. In addition, mach of the coums lay over marrus lanes, so that mom pertitnss had a dificult tank in maintain Hes the 20 mbes an hour average.

## A Difficult Test

One of the most diffacult tests of the


#### Abstract

replomishing diue mathator with water, which he carried in a spare oil tin. An Hiree Rovers made excellent restarts on platin tyres, whee spm being cont spicumsly alsent. Mead (Rhode) used one l'atsons. The two T.B.'s then restiated without any fuss, while the fistest of the Morgan team appeared : he tho Awand-engened inachane driven by Carr. Weston (T.B.) stopped, and Ridley's New Yudson made a creditable climb. The other Rhodes, as usual, performed irreproachably. The Giwynne Eiyht also restarted excellently. Between Bewdey and the lunsheon stop at Hundred House, Weston's 'T.J. ratislied ot is corner. After lunch the first serions difficulty was IIfigh Oah hill. which land served as an admirable: brake test in the mo ning. causin? everal of ham there-wherlers to winh for front-wheel brakics. Here the cals


THREE WHEELS VERSUS FOUR.
True examples of economy cars in the Victory Cup Trial. (Above) W. A. Carr (Anzani-Morgan) making light of Noah's Ark Hill. His machine performed consistently well throughout the trial. (Right) The Austin Seven, handled by B. W. Harcourt, making a good climb on the same gradient.

Hill. Commencing with 50 yards of rocky water-splash, ihe lill imumediatelv rears up and then eases off stighty hefore the final and mosi severe grahent is reached. It was at the bottom of the last slope that competitors were stopre:i and required to make a clean getatiay on a ve:y greasy and rutfy surface. Ah nsual, most of the three-wheclers were erpuipped with Parsons chains, with the resuli that when they restarted the rear wheel sent a cascade of stones into the faces of the officials and spectators. Mould ( 8.3 li.p. Derly) got away well. and Marcourt (Austin Soven) was de. layed for some time by the courso being blocked, and seized the npportunity for
made a deeideaty more credtiable per Commane bian did the sidegars: the only iailuse beins Mlould's Derby
By far the iastest ascent was mad hy Norris on the eight-valve air-cooled Anzani-Morgan, who shot up at speed. IT. F. S. Morgan was slower and did not seem to have much in hand, while the ment of the llorgans and T.R.'s climbed streadily. The Ruvers all mado grod wimhs, as did the Rhodes. Denloy's car being the fastest, while tho Anstin Seven, driven by Harcon:t, made an excellent ascent, seeming to havo power in hand, athough there was a ferrible clatter from the cngine. The Gwyme Fight came up steadily.

## On Mill Hill Hair-pin

Vent Sumbey many oi the expentencel driwers we:e tation by surprise by -ulden and extrmely acute hair-pin lend leading off the main road. For : dozen yard the track was greasy and then cilanged to at 1 in 5 gocky path strewn with otones. Here there was onle 10 on for she machine at a time. Sphus: ('T. If.) and his passenye: caused eradess amticement by their wellsynchronized and highly developed houncing. Merentith, oini at similar machine. periormed ergually well with fut any gymantics; Cuiler 18 h.p. hover), fitling Parsons chains, climherd steadily; Stwh and Bernett on similar machimes male excellent climis: Monld (Derby) hatd to reverse: Morgan, having practiend on the day perious, obviomsly knew the bond hut was not re fast is Carr's Anzani Morgan; Mead. carreing two passengers, had to reverse; $\begin{gathered}\text { Ourris's was the fastest Morgan: }\end{gathered}$ while Gocdall (Mnrgan) sprayed the crowd at the iout of the hill with stones and mud. Ridley (New Mudson), did ex-- ellently, as did Broomhead (Gwynne). Denley (Rhode) aut the grass on tho inside and made one of the best ascents of the day. The Austin Seven did nou appear and wias remorted to havo experienced empine trouble.


Thethorough protection against the roughest weather,
FOR RAIN OR SUNSHINE. coupled with the ease of transformation to an open touring car, renders a cabriolet very attractive in a changeable climate such as ours. Note the capacious glass windows and double-panel windscreen of the Surrey.

W$T$ HEN a concern effects no radical alteration in the layout of a motorcar chassis in twelve months, it can be taken for granted that not only are the designers satisfied, hut that their customers also are well pleased with the production as it stands.
These remarks apply particularly to the 10 h.p. Surrey, which emanates from the West London Scientific Apparatus Co., Ltd., Premier Place, High Street, Putney, S.W. 15 , and when we suggested that we should test one of the $192310 \mathrm{~h} . \mathrm{n}$. cars, we were informed that it would only be nossible for us to record our impressions of a model different from that with which we hatd already dealt, the specification of the 1922-1923 models being practically identical.

## Small But Important Improvement.

We subjected the 1922 model to a fairly extensive road test, a full report being included in our issue clated April 20th, and at the outset it is worthy of mention that the only point which we criticised, viz., the somewhat awkward accelerator pedal, has leen entirely redesigned, is now adjustable in all directions. and is withou doult the last word in accelerator comfort.

Accepting the invitation of the West London Scientific Apparatus Co., Ltd., we recently took over one of the four-seater cabriolets, the first model of which was shown at the last Olympia Exhibition, and a bricf recapitulation of the gencral specification may be included here, in order to refresh the memories of our readers.
The engine is the well-known $10.8 \mathrm{~h} . \mathrm{p}$. CoventrySimplex, with a bore and stroke of 66 mm . and 109.5 mm ., giring a cubic capacity of 1,498 c.c. The magneto is a B.T.H., and the carburetter a Cox Atmos. The drive is transmitted through a Ferodnlined cone clutch to a three-speed Meadows gearbox, the final drive being to a Moss back axle incorporating a differential.
The enntrols, both gear lever and brake, are on the right, but the gear lever is mounted in a cantilerered bracket, which forms part of the assembly of the gearloox, and thereby eliminates any troubles which might arise owing to twist or slight distortion
bucket type, that on The front seats are of the semn pe, that on the passenger's side heing hingit and collapsable, so that access to the rear seats is easy, the operation being greatly facilitated by the wide near-side door.

## Passenger Comfort.

The back seat is slightls rounded at the corners and has a well-padded squath, which makes for really comfortable riding, whilst beneath the seat is it tool locker sufficiently large to accommodate atl the usual running tools.

An interior electric roof light, which is switched on merely by revolving the metal reflector, adds materially to the cosimess of the vehicle when driving at night, whilst, under the same conditions, the headlights, which throw in powerful hat not too dazaling b:am, are all that could be required.


A wide door permits of easy access to the car, particularly for the rear passengers, who passin:o the vehicle behind the front seat, which collapses, as shown above.

##  <br>  <br> When you buy tyres you are tuying mileage.



Never forget that fact. FT is the price you pay per mile that matters, not the initial cost. Never think of a tyre as an article. Think of it as distance to be covered for the least amount of money. The tyre that will carry you safely over the greatest number of miles is the tyre that is truly economical. Dunlop tyres last the longest. We made the first pneumatic tyre - we are to-day making the best Cord.


## (2) * 园

## 210 FIRSTS, SECONDS \& THIRDS IN 1922!

Acknowledged the Speediest, Most Efficient, Yet Most Economically Run of Small Light Cars, the 1923 11.5 h.p.


Is something Every Real Judge Should Try, On any Roads. As a Comfortably Equipped 2-Seater, 3-Seater, or 4-Seater. WHEN MAY WE DEMONSTRATE ITS MERITS? 1923 Catalogue Post Free. Chassis, with 5 R.W. Wheels, and Electrical Equipment, £450. Complete Cars from $£ 575$.

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Telegrams
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[^5]
## The Fame of the ALVIS

Alvis fame has been built up on a disregard for every coas deration other than that of firstclass quality. Until quite recently this meant a car, costly in comparison with cthers of similar capacity but nevertheless it was in great demand by owners who looked beyond first cost to the service and satisfaction their car would give.

## so

10.30 h.p. ALVIS TWO-SEATER with electric lighting and slarting, fourgearbox, all-weather curlains, bve steel de tachable wheels and double dicky seat,
£ 397
FOUR - SEATER £430

Now that ALViS prices have been redu :ed to a level competitive with other cars of the same rating, whilst retaining every detail of the original ALVIS quality, we are confident that there is not obtainable to-day, better value than the AL YIS represents.

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These are a few of the outstanding features of the ALVIS :Long wheelbase, sem:--lliptic springing, four-speed gearbox, right-hand change, silent bevel axle, five detachable wheels titted with non-skid tyres, all of which combine to give the ALVIS that superiority which is admitted by the great majority of the motoring public.

## 

Ample leg-room for provided for all the occupants of the ear, whilst, for the consenience of the driser, the driving seat cam be slid forward or fackward in ortor to obtain just the right leg-reach.

Motoring in inclement wather, smugly ensconced within a comfortable cabriolet, possesses attactions which have to be experienced to be appreciated.

## Rain, Sleet and Snow

THring our test we were out in rain, sleet and snow, not any of the inconvenience of which was felt, thanks to the complete protection alforded and to the gentle wamth which permeates the interior of the vehicle from the power unit forward.

The double pamel windsereen permits of a clear iew ahoad, even under the most trying conditions, and it is worthy of note that with the upper panel open in its lillest extent our passengers uttered no romplaint regarding dranghts.
The eomplete catr weighs just orer 16 ewt. unloaded, and has a fairly large wind-resisting area. It is not to be expected, therefore. that with four up its per formance will equal that of the open two seater touring model which we tested last gear.
The power unit. however, is of proved quality and minbility, and we found that it would do all
firmed the impressions already formed. In addition, however, it should be recorded that starting up from cold was commendatly easy, the congine firing evenly on all cylinders on approsmately the fourth pull-ul. provided that the carbureter had becn flooded. When warm, the eleetric starter (which was not abused first thing in the morning) functioned without a hitch, thereby adding enormously io the comfort of the car.

## A Suggestion

We renture to offer one suggestion, viz, that the power that the porer unit would be eren more satisfactory if a fan were
litied-at any litied-at any rate. on this particular model, which calls for a greater response from the engine. Bearing in mind its capacity, ar: ample radiator-cooling area is essential: but the radiator on the Surrey is not by any means too big, and a fan would certainly ensure the engine being kept at a proper working temperature, even under the most gruelling conditions.
This model can, of course. be converted to in open touring car, but we cloubt whether any owner-driver would go th the trouble, in riew of the fact that plenty of air can be admitted by letting down the side windows and that the view unon all sides is unrestricted. In short. onl dops not experience that feeling of being boxed in.

## The Complete Range.

The Surrev is marketed in three other forms, the first being the Surrey two-three-seater which, as the title jimplies. allows plenty of room for seating threc abreast, the seat being 42 ins. wide. Tool and luggage? accommodation is provided in the capacious tail, while there is also a useful locker under the seat. The price is 255 guineas. or as a de luse model with real leather upholstery, dickey seat. elec-
required of it, if at a slightly more dignified pace than that fitted in other models.

## Negotiating Traffic.

Thanks to the now smooth and velvety action of the accelerator pedial, traffic driving was a pleasme, and top gear could be maintaned at specds so low as $5 \mathrm{~m} . \mathrm{p}$.h., a sure, if not altogether rapid, pick-up) heing possible. Bottom gear was seldom resurted to, and tho most congested traflic areas could be nerotinted at a crawl on second.
In view of its weight when loaded, the eabriolet proved to be a good hill-elimber, and by a judicious use of the spark lever the car tieked over gradients on top gear that, halli-way up the ascent, suggested the need for a chance down. Thirty-five miles per hour, a really comfortable touring specd could be maintained without diflicully, the steering, suspension, and rond holding qualities olfering no cause for criticism.
We have already commented on the adaptability of the ('os Almos earburetter to the CoventrySimplex engine, and our test of the eabriolet coit- tric starter and all-weather equipment, $2 S 3$ guineas.
The second model. the four-senter. priced at 285 The second model, the four-seater. priced at 285 fittings at 315 guineas. whilst on the same chassis an occasional four-seater body with a somewhat smaller rear compartment suitable for carrying two children or in an emergency, wo grown-ups, is maketed at gTo guineas.
The third type is a coupe which seats three abreast. is upholstered in antique leather or Bedford cord, and is fitted with frameless glass windows and double windscreen. It is of course quickly convertible into an open car. With real leather upholstery. electric starter, and dickey seat the price is 328 guineas.
It should be noted that, if desired. a four-speed gearbox can be supplied on all models, but otherwise the specification is similar to that already described in conncetion with the cahriolet. This certainly represents the most comfortable of the whole range.
In conclusion, we would express our entire satisfaction with the performance of the car. which certainly represents one of the cosiest and cheapest cabriolets on the market.


Central Cornwall Motor Club.
At the ammal meeting of the Central Cornwall Motor Club, it was announced that the report of last season showed a small deficiency on the year's working. and the question of developing the social side of the club was discussed. It was decided that monthly runs should take place, interesting venues in the county being chosen as the objectives.

## Essex Motor Ciub's Hill-climb

An exvellent entry has been received for the Essex Motor Club's hill-climb, which takes place to-morrow, Saturday, March 24 th, at 1.30 p.m., on Fop Hult, Princes liisboro'. Cars under 1,500 c.c. predominate, and a very fine afternoon's sport is promised. Tho following are the entries:-
W, WI Wells (Chander), II. W. Cook (NauxMarendaz (Marscal). C.T. Mabeshal) (Rbode), M. C. Morgan (Aston-itartin), Me Du Cane (13n.
 (Bumpiley). Ryymond Mays (Bugatit) Miss Ivy A. S. Fitch (Vweau). A. R. Linsley (Bugatti) A. Lavenster (Bugati). Capt. C. A Glentworth (Exsex), W. J. Sully (M.E.1. Major Lolrero (Bur Fatio), N. Uivd (A) (is), A. M. Pass (Sunbeam) F. Ciemenis (Bentlise), Frazor Nash (G....) E. A. Colliver (IRiley), A. E. Moss (Cnoucb) 11. S. Eaton (G.N.). Count Zborowsti (Ballot) 13. S. Marshall (Bucati), B. S. Marshall (Croich), T. II. Hesketh (Litle Greg.), L D'Erlanger (Bugatti)

## J.C.C. South-Western Centre Dance.

The supper and dance organized by the South Western Centre of the Junior Car Club, which took place on Wednes day, March 14th, at the South Western Hotel, Sonthampton, passed off very successfully. The following costurie prizes were awarded: Ladies, (1) Miss Liddell. Easter Egg ; (2) Mrs. Jukes, Duchess of Devonslire. Gentlemen, (1) Mr. T. G. Hayter, Michelin Biben dum, " a man of tyres"; (2) Capt. Young, an Indian Rajali. After supper the prizes won during the season by members of this Centre were presented by Mrs. G. F. Smith, wife of the chairman. The next important event organized by the South Western Centro is the 'Jhird Annual Half-day Rel'ability Trial, which takes place on April 14th, tho start being from Cumberland Place, Southampton, and the route, which will be kept secyet until the day of the trial, about 70 miles in length and finishing at Winchester. Entries close on April 2rd, and forms can be oblained from the competition secretaries, Messrs. C. A. Allison and G. F. Egerlo:I, 9. South Hill Lane. Southampton.

B-16

## Cyclecar Races at Boulogne.

Saturday. September 1st, is the date chosen for the cyd lecar Grand Prix at Boulngne. Readers who wish to have personal experience of an exciting French road race should keep this dato in mind. It is easier to get to Boulogne from Loudon than it is to go to the lsle of Man.

## Pin Through High-tension Wire.

The tronble that afficted the Rover car driven by J. A. Miller in the Manville Trophy Trial was due to the fact that a mischicrous person had inserted a pin through the high-tension cable of one of the cylinders in such a position that it caused a slort circuit on to the induction pipe.

## FORTHCOMING EVENTS

 FROM MARCH 23 rd TO APRIL 8thMarch 22nd-26th.-Monaco Molor Trials. March 24 th:-Essex IIill-climls.
March 30th (Grod Friday)-Iondon-Land" End. Yorkshiro nnd Dishrict N.C Opeving Run. West Kent M.C. Con
blned Kent M.C.s IIfl-climb. March 31st and April 2nd-Scottish Western Two-cias Hightand Tria
April 1st-15th, -Tour de France Light Cas 1ris.
April 2nd (Easter Monday)-B.A.R.C. Meeling, Bcarborolleh Motur Chuio's Hill-clinh. Sork Motor Club's Run to April 7th. Western Contre combe Pitch Hill-climb. B. M.C.R.C Open Mecting North-West Londor Mic. Petrol Consumplion 'Trial. Dis-
April Thh-8th.-Women's Molor Club Open ing Hun. Essex M.C. Onening Wewlend liun lo Clacton.

- Tho above list of fixtures has been - compiled from information received from tho clubs secretarics, and masy bo subject to alleration.-ED


## Easter Monday Hill-climb.

The event previously known as the Staxton Hill-clmmb will be held on Easter Monday, commencing at 11 a.m., on the hill between Foxholes (three miles from Staxton) and Octon Lodge. Classes for cyclecars and three-wheelers under 1,100 c.c., for light cars up to 1,500 c.c., for cars up to 2,000 c.c., and for vehicles of mlimited size are included, in addition to a number of classes for molorcycles. The event, which has been run annually since 1909, with the exception of the war period, is generally well supported, entry forms being ohtainahle from E. Wilkin son, 21 Wheclgate, Malton

## R.A.C. and Competitions Another Announcement

We have received the following nouncement from the Royal Automobile Club :-Inquiries receivell by li:o R.A.C. indicate that a certan amount of misapprehension exists as to the scope and olyect of the competition l'ules. aithough they have been in force for 23 years, and recent revisions are mostly of an unimportant character. 'Thero appears to be in particular, at frar that the application of the Closed Cumpetition Rules to all closed competitinns may have a hampo:ing effect on the sport. It should, therefore, be clearly unter stood that such is not the casse. Thes Closed Rules merely lay down the loroad principles under whicli closed competi. tions should be beld. and will ho lount, on a little stady, to be applicathle to all forms of competition. In past vears, when thair adoption was optional, inslead of compulsory, they have been used by the promoters of handreds of competitions with excellent vesults. Tho promoter drafts his now special regula. lions for the competition in question and submits them to the R.A.C. They aro examined to see that they do not conflict, with the Comnetition Rules of the R.A.C., to which the special regulations ition become supplementary, and are so described on the programme. If desired, the promoter can apply to except one nmorn of the Commetition Rules to suit special circumstances, lut this is rately, if ever, found to be necessary

A new feature of the Closed Competitinn Rules is the refinition of what constitutes "membership" of a club for the purpose of competitions. Such definition las become necessary in view of tho increasing practice of evading the necessity for applving for a permit for what is to all intents and purposes an open meeting, by including membership of the promoting clul, in the entry feo for the so-called closed meeting. Such meetings have actuallv been advertisel as "open to all." The definition has, therefore, been d"afrerl so as to restrict the entries to bona-fide members of the promoting club, who have been electexd prior to the puhliention of the regulalions for tho comnetition.

From the point of view of the compelitors one outatanding advantage to be gainad by the holding of all mectings under the Commetition Rules is that a person areriever be a decision of tho stewards at in closed meding will in futu"e always have the right of appeal tr the stewards of the R.A.C.


The

# WOLSELEY Seven 

This miniature All-Weather Two-seater is on an entirely different plane from the numerous cheap cars of cyclecar type-it is a really ligh-grade car, built throughout to the same high standards as the larger Wolseley models. worldfamous for their robustness and road efficiency. The twocylinder engine possesses marked advantages ov.r the miniature four-cylinder type. It gives a better performance on hills, the water passages are larger and more efficient, and the engine is consequently much more durable.
In bad weather the hood and all-weather curtains transform it into a really weather-tight closed car. Electric slarting and lighting are filted, and an emergency dickey seat is provided at the rear.

## Price £255

The squipment includes:
Waterproof canvas hood. All.weather curtains. Electric starting and lighting outfit. Spare wheel with tyre. Electric horn. Dickey seat at rear. Number plates. Tool kit.

This car can also be supplied without Self-statter. Dickey
$\mathrm{S}: \mathrm{at}$ or All-weather Curtains . . Price $£ 231$

Dunlop Tyres filled as standard.
Catalogue No. 5, post free.

WOLSELEY MOTORS LTD.
(Proprictors: Vickers Limited).
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Loadon Showroome: Wolecley Housz, 157-160, Piccadilly, W.
 Cyincer, as i lustrated. Many other models, including 4.cylinders, nie listed in the new G.i. Catalogue.


HELP THE by lstting advcricers know that their advertisements

We relcome at all times letters sent us by readers for publication in these columns, and uhile takink no responsibilty for the opinions expressed therein, give prefercuce to those letters suhich deal reith subjects of demeral interest. No amonymons commmnications will be accepfed, but the writer may use a mom de plume if desired. Letlers shomld be as brief as possible and, preferably, typeturillen. W'c reserve the right to make any alterations or deletions which we deem necssary.

## MOTORISTS' MONEY FOR HOUSE BUILDING.

In these days one is prepared for almost anything, and it was 110 great surprise to mo to read that one well-meaning Member oi Parliament has suggested that the motorists money might be used to reliere unemploy-

## A Pertinent

Suggestion. ment in providing the wherewithal to put up houses. The suggestion, however, did not receive the support which, no doubt, the enterprising membe: anticipated; but this is not the point. ls there such it surplus that a home is required for a few m llion pounds? It is rather admitting that there is, and, if such be the ease, is it not time that the whole scheme of motor taxation was revised?

From your report of tho proceadings which took place in the liouse, it seemed quite clear that the motorist finds all the money ior road maintenance. What aice people motorists
must be to be sure! They pay the money and the roads are repaired at the discretion of the Road Board-when, how, and where they like. Is it not only reasonable to suggest that as the motorist pays for the roads his voico should be heard, and that he should be abie to expeess his opinions as to the workings of the Road Board?

The all-important problem at the moment is that of unemployment. We have the money-the motorist has found this -our roads are in need of improvement all over the countryThe only ingredient which appears to be missing is efficizat administration.

Motorists generally are sportsmen, and, if their money is used to benefit the country as a whole, they would not object, but they would oppose any " behind-the-back "schemes.

Unelltaxen.

## A SUCCESSION OF FAILURES.

I was rather surpresed to rend the unfortumate experiences of "S.S.". whose many failures are outlined under " sich llixture," in the issuo of The Light Car and Cyclecar, clated March 16 th. 'laking the first failure Unreliable Elec- on car $A$, "the dynamo drive slipped trical Equipment.
instearl of owing to there being a laper Nuw this was obviously due to the means provided for tightenngr tho pulley on to the armature shaft not being hard up. If the nut, or whatever it was, came loose, the key would not last five minutes. 'The remedy here was simple.

Regarding the failure of the starter motor on cars $B$ and $E$ might this not have been due to the use of the wrong brand of lubricating oil? An engine can gum up almost solid on certain brands of oil, making it almost mpossible for an electric starter to give the initial movement to the crankshaft. Really, "S.S.," I do not think you can put the whole of the hlame down to the starter motor
Now on car $C$ the coil and accumulator ignition system
broto down hopelessly." More details would have bean helpiul, as $I$ find inyseli unable to ufter criticisms. On cars D. and F, "S.S." experienceal dynamo trouble; on car l" it faled, and on car $\mathrm{F}^{\prime}$ tho brushes rapidly deteriorated th such an extent as to spread over the commutator. Surely something was radically wrong liere. as the brush holdeis are usually arranged to come well up to the commutator to form a support for the brushes. I suspect that the eprings behind the brushes were unnecessarily strong or the same eflect was produced by the bearing plate having becone bent.

From the details available it would appear to me that a few minutes with a spanner might have saved "S.S." endless trouble. My car is fitted with battery ignition, electrics starter, and, of course, a dynamo; and. whilst touching wond, I have to record that I have not bad the slimhtest tronble in any direction since I bnught the car eight months ago, but perhaps I have been lucky.

Sithsfied.

## 7 he Good Samaritan.

Recontly my car broke down on the Parndon Road, near Epping. I had hardly realized the fact when another motorist drove up, and, inquiring the nature of the delay, waited

## A Spirit of Camaraderie.

 and then conveyed me to the Epping dealt with. 1 often read in The Light Car and Cyclecar tho advice given to road users askiug specially for extended courtesies to one another on the road, and I think this is perhaps the fruits of your exhortation. I sincerely hope, tho spirit will continue.Should this meet the ove of the G.N. owner who showed such consideration, le will perhaps appreciate the depths of my gratitude.

Tottenham. Johs Beile.

## OUR READERS' OPLYIONS (contd.).

## Anzani Sports Engine.

We have read with interest a lelter from Mr. J. Holmes, of Newport, appearing in your correspondenco columns, wherein he asks for certain information respecting the British

## Trouble with Valves

Unlikely.
interest to Mr. Holmes and others:-
While we know that certain other manufacturers who have altempted to build an air-cooled engine with four overhead valves per csinder have experienced great trouble and difficulty with the cylinder head casting, we have happily been able to overcome this trouble by very careful designing, embodying a scientific distribution of the metal so as to aroid uneven heating with its consequent troubles.

With resard to the question raised respecting the valres, we would like to say that these are constructed of special steel, which, although exceedingly expensive, is by far the strongest and toughest known materal suitable for valves. The stems are of large diameter, with a good radius under the heads, and, although we have now constructed several of these engines, we have never heard of a valve breaking, nor have we the slightest fear of sucha thing happening, and ie feel quite conlident that Mr. Holmes may rest assured that he will not experience any trouble whatsoever from the points he raises in his letter.

Those of your readers who are interested in high-efficency engines may care to know that, owing to the success we have inchered with this V'type air-cooled model litted with four overhead valves per cylinder, we have now decided to put a water-cooled angine of exactly the same type on the market, at the special request of some of our friends, who prefer water-couling to air-cooling This minine is now practically ready and will be a wiilable fur delivery to the public in three or four weeks' sime.

The Britisif Anzani Engine Co.. Ltd.

## J. W. Simiri, Sales Manager

## Economical Motoring.

I always rend with interest figures of running costs; the same interest, jndecd, with Which I listen to the statements of my friends who are golfers and fisher-

## Criticism on men. I never dispute them-

 Running Costs. some day I myself may wish to be believed-but I am not always convinced. Take, for example, the actunl figures" quoted (but not, I think, fully endorsed) in The Light Car and Cyclecar of March 161h. The mileage is not given, but rerlain data enable one to discover the remark:ble economy of this unnamed light car, fitted with an 11.16 h.p. engine and a particularly roomy body." Petrol, for example, at 2 s . per gallon, cost .28 d . per mile. This means, of course, that this very spacious car avernged $85 \mathrm{~m} . \mathrm{p} . \mathrm{s}$. Arrain, taxes, etc., cost .13d. per mile. As the tax alone on an $11.16 \mathrm{~h} . \mathrm{p}$. car is $£ 12$, it follows that the car had been driven over 22,000 miles. That this should have been accomplished on one set of iyres "costing $£ 10$ " is unusual, and one is not surprised to discover that the repair bill for this distance was only $£ 410$ s.A correspondent in the same issue gives very
different figures, although he compares even these very favourably with those of a three-wheeler, which is generally acknowledged to be an ultra-economical machine. For petrol, tyres, and repairs he gives a total of 1.5 d . per mile against the .54 d . of the unknown car. The three-wheeler cost him 1.58 d . I notice that he gives no figures for taxation, insurance, and depreciation (which is perhaps a little unfair on the threewheeler), and apparently he only obtained 33 miles to the gallon of petrol. Perhaps he was somewhat inexperienced. I have known a driver of quite ordinary skill obtain-but no, I will keep that one for the club house.
May I call attention to another letter in regard to a revised formula for competitions with which I am in cordial agreement? The matler is closely connected with the question of economical running. It is exceedingly difficult, though certainly not impossible, for an ultra-light machine to win в50
the highest award when this depends on a short acceleration test under formula, but, apart from a certam unfairness, it is most important, in tho interests of economy, that a high ratio of horse-power to weight should be encouraged in every way. The present formula has a directly opposite elfect; indeed, I know of cases where dead weight has been added in order to obtain better results. Tho limit was perhaps reached when in a certain competition the nward for coclecars was gamed by a "light" car weighing nearly a ton, and which came very low indeed in the list of "best "timers.
Stoke Lacy.
11. George Morgis.

## Comparing Running Costs.

The letters from Mr. II. F. Mohun on "Rumning Costs Compared" have been of much interest, and, as the writer of the article in question, I may perhaps be allowed to point The Writer of out a iew facts in reply. Ten months of the Article the year's rumning with the Morgan were Replies. covered on petrol at the higher price. Consequently there is no appreciable difference in the totals of "the two sets of figures-" 'Ihreewheeler" versus "Four." Mr. Mohun, however, ignores the fact that less than three months before I purchased tho new Morgan he paid over $£ 100$ more for his Deemster secondhand. Whuld not this hundsed out of your pocket have kept a Morgan on the road, all "exes." paid. for nbout two years, Mr. Mohun? It would ior my annu:al mileage, at any rate.

> FREAKISH
> REFLECTIONS.


Varied and freakish are the pranks which a silent pool will play, and a good example is shown above. If the photograph be turned upside down it will be seen that the occupants of the West car, which figures in the piclure, appear to be in imminent danger from drowning.

In addition, the four-wheeler tax is $£ 6$ more, insurance quite $£ 5$ more, and garage (ior those unlucky, as I am, in being compelled to use a public garage) moro than twice as much.
Thanks are due to "F.B.D." for adding to the weelly gaiety of your journal. A hearty laugh such as I had on reading his concluding sentence is good for one, and I am glad to say that the leak in my radiator was so slight that I can still laugh. I note that "F.B.D." did not pay anyone for assistance in decarbonizing or other Rover adjusimentsthis is bound to make a difference, of course.
G.L.

* The opinions of readers on topical subjects are welcomed. * Tetfer's should be marked "O.R.O." for convenience in sorting.


1905. 



# The Story of A.A. Road Service 1.-The A.A. Patrols 

Koad service for motorists was unknown until the Automobile Association was instituted in 1905. When road troubles and breakclowns occurred, motorists had to depend upon themselves, or the voluntary aid of passing road users, to put things right. lioadside information 10 assist motorists in selecting the best roads, or to avoid trouble in regard to speed limit regulations, was not a vailable.
A.A. Road Service was started with a small band of eight cyclists distributed along the Brighton Road. The simple services of these patrols, although in no sense comparable with what they are to-day, were appreciated by all who benefited from them.
In the course of seventeen years the A.A. patrol organisation has becone an essemial
adjunct to motoring, and is now distributed along the principal main roads in Great Britain. Nany of the patrols are mounted on motorcycles. whilst others, in charge of Road Service Outfits carrying an equipment of smail tools. etc., help members, in cases of breakdown, to proceed on their way.

All the patrols are competent to undertake minor roadside adjustments. and are thoroughly acquainted with local conditions affecting road users.

To sum up. . .A. Road Service is unique for efficiency, mobility, and strength of personnel. Every day hundreds of the 160,000 members of the $A .1$. are realising its practical value.

Roadside help from patrols is only one feature of A.A. Road Service. Other benefits include free legal defence in proceedings under the Motor Car Act, fric legal advice on any matter arising out of the use or ownership of cars or motorcycles, free use of roadside telephone boxes at any hour of the day or night, free home and foreign touring assistance, expert engineering advice, officialiy appointed repairers, also hotels in practically every town in Great Britain, etc., etc.
Full particulars of these bencfits are given in a booklet which can be cbtained from the Secretary, The Automobile Association, 29, Fanum House, Whitcomb Strect, London, W.C.2. Send a posteard for a copy to-day.


Road-Repair Rules When a Motorist (B) encounters a stretch of road under repair, the car (A), having the right to the left of the road, has also the right to the usable portion indicated in sketch.
The rule of the road is for "B" to wait until "A" has passed, when, if the road be clear, "B" may proceed. Where a considerable amount of traffic is running, there is usually a Police Constable or Roadman in control, whose signalling instfuctions should be observed.
look for No. 10 of the Series.
Correspondence on thesc interesting subjects is invited.
PRATTS
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ANGLO-AMERICAN OIL CO, LTD 36. QUAEN ANNE'S CATE, LONDON. S.W.I.

## AROUND

## THE TRADE.

A representative selection of Clyno light cars, including tho new family model, may be inspected at the new showroom: opened in Birmingham by Mr. Frank Taylor, at. 133. Steec. honso Lane. Mr. Taylor has been appointed sole agent for Clyno cars in Birmingham and district.

Stoneleigh ilotors, Ltd., nnmounce that the Stoneleigh three-seater utility car can now he supptied with the bodywork painted in grey or red, in place of the frosted in mimanimm finish which until recently was the standard siyle. No eatra is charged for these colours.

$\because$
Sectional illustration of the Ego automatic lubiicator designed by Mr . Herbert Gordon, 147, Gowthorpe, Selby, Yorks.

The premises of the Wia:ren Jambert Ligh (in Cn at I'rersham Road. Richmond, lave been taken uxer ly the Jablot Mator Co., Heron Court, Kichmond, Sumey, whin ith. tend turning them into lock-ups fitted with electric light atmel water supply. It may interest owners of W'arren-bambet light cars to know that this eoncern also have a supply of spare parts for these cars.

We are plonsed to learn that Nr: William Tomer Messis. William Turner and liros., LAd., 44. Eyre I, Sheffield, makers of "Kismed" and "Renrrut" wipe pumps. elc. lias progeessed sufficiently from his rewent neciduthe (when the base of his skall was fractured) to be allowed tw get out of had. It will, however, be a considerable tima before he can be back in active control of the busincss

A compehencive trade 1 st and cataloguc of the varions (Hemico specialities has heen issued by the County Chemieal Co., Jttl., Chemion Works, Birmingham. In addition (o) tho many lines with which the trade and pubtic are ircady familiar. thore are ruito a large numbor of new, novel, anal interesting lines. Traders who have mot already received a copy should make application to the County Chemieni Co., Jid.

The Anglo-American Oil Co., Ltd., are puhlishing a sorics of 12 novel ndvertisements under the tits of " l'att-itudes of the Road," designed to p:omote a greater measure af safety on the road, a closer spirit of friendliness and n wide: sphere of help for all those who motor for pleasure or busimess. Nine of the seres liave alreidy appeared, apd the Anglo-American Oil Co., Itd., imsite en respondence on the interesting sulhects with which they deal.

An extremely useful pocket-sized end for finding metric eguivalonts and monsumation results at a glance hats heen puhlished at the price of 1s. by Mr. A. E. Bawtree, 7, Manor Park Renad, Sutlon, Surey. The scales enable approximate estimations, correct in within 0.2 per cent., to be made. and when exprimentai results and thenretical calculations have tar be worked ont with a higher degree of accuracy they afford an instantaneous clieck upon the correctness of thio proress of calculation.

The Service Co.. Lld. are promoling a Se:vice Luncheor Clab, with the idea of attracting persons interested in motoring, photoglaphy, wircless, and other pastimes, with a view io forming a rendezrous where they will be able to meet iogether in congenial surromolings. The"e is a hig space a mailable on the concern's premises in High Holborm, in the heart of London, where a luncheon and recreation from will lie flimind. Lunchicons and teas wall be provided on n modeqate basis. and full information can be obtained from the Secreta: $x$ of the Sirvice Co.. Ltd.. 273.274, High Holhorn, London, IV.C.


The supreme test of stamina and courage.
st $\begin{aligned} & \text { RAPSON CORDS } \\ & 17,500 \text { Miles. }- \text { NO } \\ & \text { trouble, still going. }\end{aligned}$
6 nd RAPSON CORDS trouble, still going.

RAPSON CORDS 10,000 Miles. - NO trouble. withdrawn fortrack tests, August lith, 1922.
THE REST - ALSO RAN!

In the whole history of the Royal Automobile Club, no other maker's tyres entered in an official tyre trial have exceeded 5,000 miles running. (In so far as this adverlisement werers to Rail.C. Official Cer:ified Triats, it has lecen approted by the R.i.C.)

## THE RAPSON TYRE \& JACK COY., LTD.

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## "The Car that passes you!"

ALL you see of the Hortsman on the road is the back. It is a car with a super turn of speed that passes other cars at will. Af.er racing experiences and evhaustive tests during the past two years, and the fitting of the famous British Anzani Engine, hitherto only a vaiiable with the most expensive of cars-the 1923 Horstman is a car to wonder at. lis performance equals its beauty, it is a car that is as good as it looks, and that is saying much. The remarkable efficiency of its springing transforms riding into "gliding," whilst the simplicity and efficiency of design makes you forget about lubrication. Greasers are entirely eliminated, and, apart from the engine the chassis only requires oiling once every 1,000 miles.

## 웅

Body comfort is quite exceptional; well sprung, adjustable seats, numerous and roony lockers, ripid side screens. adaptable as a " V " shaped rear screeu if desired, the Horstman patent mechanical foot starter, operated from the driver's seat-these are a few of the exclusive advantages only to be found in the Horstman.

## 9

## Read this Owner's Opinion.

## HEREFORD.

- The car of which I took delivery at the end ol March, having completed neasly 1,000 miles of work in my practice and some pleasure runs, has been sufficiently 'tried out' to warrant a report to you. Having owned and driven mostly far higher powered cars in the past, co nparisons are the most interesting, and are entirely in favour of the light car as represented by the Iforstman. I really have no adyerse criticism to offer. The comfort is to me extreme and springing super-excellent, as two patients (abdominal emergency operatioucises) can testify. They were transported for 7 a d 3 miles respectively LYING FIAT, after removal of front passengers' seat. The design of body is exceptionally pleasing. particulariy on account of generous length of wheel base. and it is particularly gratifying to me to drive a car which arouses universal interest and admiration."

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\text { Dr. F. C. H. } \quad 30 / 5 / 21
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The Lishl Car an I Cyclecar' deals with its curn types of machines exclasively. Old cars produced before 1912 as distinet from modern light cars, and cats wth an engine of a cubic capactly exceeding 1,500 c.c., cannot be accepted for its advertisement columns.

## RATES.

For advertisements in this section: 12 words, $2 /$ (minimum): 2 d . per ward alter. Subsect to a discount of 5 der cent, for 13 conspelitivo
insertions, 10 fer cent. for 26 . 15 per cent. Ior 52 Terms: Cash insertions, 10 fer cent. for 26 . 15 per cent. Ior 52 Terms: Casla
with order, and otherwise net. DISPLAYED ADVERTISEMENTS. Sca.e of charges, with reduction for series, sent on application.
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or in pate. refertng to cars or accsorits which in the ounion of the
publishers phalishers aro cutside he seope of the lournal, and such refusal of cony
bhat not be a good ground for odivertisers to stop a cutrent eftitract, to shail not be a good ground for odvertisers to stop a cutrent
refuse payment or to take action for breach of contract.
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closing closing for press.
Whalst every precantion is taken to ensuro arcurato printing. tho Pub-
 glonsible lor arivertisement hlocks destroyed
their possession lor more thay ene jear.
BOX NUMIBERS-Adrertisers desuring te havo renties sent care of "The

 advertisement.

## DEPOSIT SYSTEM

For the convenience and security of out readers we harc an approvalthe purchase wones, which will be acknowledged to both parties
 eluded, we forward to the seller the amount agreed upon. It no sale is
 posited up to C 50 . 1 uer cent. on amounts lrorn $£ 50$ to $£ 100$, and $\% \mathrm{~A}$ per cent. on amounts excceding $\ell 100$, to cover our expenses of bouking, nost-
ages. otc. Carriage is to bo paid lyy tho buyer. it the article is returned, each paty pays eno way. The risk of dawage in transit is the seller's. Atticles on apmoval are not to be tetained niore than three days, unloss by nrangement incween the partiec, All disputes to be setled by the arbicration of the Editor ni Thl LIGHI CAR AND C
whoso decision shall be final and binging on both parties
WARNING.-Acknowledgments of deposits or instructions to forward goods advertissd are only written on our snecinl headed parper, which
 enty coning trom us, a nd delay torwarding the gends for a day or oo. been sent bs we, we will wiro tha advertiser not to part with the goouls adverlised.

## closing time.

Cons for, and ati mather relating to, advertiscments must reach the Head OTlless Lirst post Tuesilay, and should de addressed to THE MANAGER. London, E.C. 1. It proofs ol displaycd advertisemenis aro required, oony should be fowarded in suficient time to allow of it being sub: mitted and returacd.
 [Addresses of Branch Offices and other Business and Editorial Noticea will bo lound on the last pago of this section.]

## NOTICE.

Owing to postal delays and irregularitles. It Is aduisable to post advertisements EARLY ON MONDAY so as to ensure, as far as possible, that they reach us DIf the FIRST POST on Tuesday. possible, that thay reach as oll have been received too tate foi inclusion although despatched on Monday.

## SECOND-HAND

## LIGHT CARS AND CYCLECARS FOR SALE

A.B.c. Wucther gota are bugiag or selling an A.f: E. eecoud bani, A would pay 3 ou 10 conduc: the Lusiness thosjo George Englacd ceondehand cars are suli Terme to aclers ciost reacorable zzz.74त
A.B.c. Gordon Watney and Co., Ltd., 51 , Brojb St., iv. 1 ('Phano. Mayfair 2965 and 29661 , West Etid whitesale and retial cuncessionnaires. bave eeveral second band 1921 and 1922 mortels, carrying our guarantee,
from $\mathcal{E} 150$. Can be purchased on the deferred paynents. Cars takin in

A.B.C. Sports atul Regent raniele, 1922, phrice at 5, price $£ 130$ ax
 A B.C., 1921. dickey, starter, speckemeter, beautiful condition. s. 155. Below.
 A.B.C., sirecial 1921, ju-t overhauled. repainted and re-upholstered hy

A.B.C. 1923 -ports model, fitted with-extra large stcerin, wheel, spot
 A.B.C., 1921, Fogent mociel, 2-teater with dickey, disnamo lighting, \&125; ; exchavgo of hire-purchase. The litht Car Co., 331 Euston Rd. 539.585
N.W.


A.B.C., 1921, 2 -scater, donble sunken dickey, dynamo lifhting, selfstarter, 2 doors, tas fruid Decemlicr, reals hor air run. £150. Giaraze,

A.-C. 19212 -seater, all accezsories, recently overbaulerd ond repainicd, condilion perfect, 2240 . Smith Motors, Lid., High Rd., Goadmayez
Leniz-612
A.-C., 1920, thoronzhls overhauled repainted bluo and replated like

A.C., 192L, 4 -seater, lightin and starting, done small mileage. tiaz

A.-c., 1914, 2 -sezter, dickey dynmo lizhting, 5 wheels, all coud tyres, any trial, 95 nuincas. 26 Tulse Hill. Brixton. 'Phone. Brixton
1292.
 $540116 t$ A.-C., 1921, \&e luxe model, dismamo. S.S., in first-class condition. s235 rash, or delerred; exchanges. Raillon, Cobhan: and Co., Ltd., 21 Black.
triars St. Nanchesler. A.C. Sosiable, excellent condition. £25. 75 Ruscaidile Rd., West Dulk
wich.
$539-\mathrm{f} 275$ A.-C. 1920 morlel 2 -seater, dy namo lighting, in exceecingly fre condition throughout. £180; exchange or hirc-purchase. The Light Car Co.. 531
Eusion Rd. N. 590 A.-c. Sociable 2 -seater, 6 hp, excellent condition, nersly painted, tyres ind


A.-c., 1914-15, 4 -cylinder, 2 -seater and dickey. 5 deiachabl

A.C. 6 hp, 4 -wheeled cyclecar by the A.-C. Co., a good, coniforisble,
 Lish St., Sjdenham.
ADAMSON, 9 hp. 2 -seater, 3 and reverse, gate, efectric light. hood, screna, all accessorios, smarl appearance, $\pm 50$ or near. Grossentior. Car-
ALBERT, 1921, 11.9hp, 2-sazter, double dicker, lizhting and starting. royal bluc, gearantecd. examination invited. Giles Garage. Dorthaturton,
ALLDAYS, $9 \mathrm{hp}, 2$-seater, dickey, electric light, orerhauled, new tyre3 and parts, repainted. Emart little car, hargain, \&95, oller; or exchinge
piano and cain. 71 Langdale Rd., Hove.
ALVIS, genuino 1922. Snorla model, perlect condition. carefully dirven, owned, beling tarount bo dault of car, lowest $g_{0} 00$.

AMILCAR, 1923, new French, 8hp, 2 -seater, complete equiproent. list
AMILCAR, 1925, replica of abuve but slizhtly shop-soiled barpain.



Readers are refcried also to "THE MOTOR" (Tuesdays, 4d.), zehich contains each weck many hundreds of advertisemonts of new and second-hand cars of all kinds.

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

A.V. monocar, 9hp J.A.P.. September, 1921, 2-speed clutch, electrio

 A.V. A.V. Garage, 23 Eleanor Grore, Whito Hatt Lane, Barnos, Ior A.v.
 A.V. latest model, 3 -seator, dynamo lighting, detachable wheels, with
 A.V. monocar, in excellent condition, guarantecd, $\mathcal{L} 55$. J. Mebden and
Sors, 149 St. Jamos St., Burnley. Tel. 488.
$\delta 59-618$
A.V. monocar, 1920-21, 8 hp J.A.P., Capoc carboretter, encedometer, electric lighting. dickey seat, new rear tyres finished red and black, exceptionally lost and smart, £́s, also one 1920 A.V, monocar, standard speciticaion iully equipyed, \&J5; archanges. Castelnau Motor BABY PEUGEOT, 1915-16, rooms 2-senter, electrio lights, etc., pertect, RABY. Moroney and Co., Semley Place, Ebury St., Victoria. Viciorin 8245


BEBE-PEUGEOT, in excellent mechanical onndition, repainted, spare

 SAYLISS-THOMAS, 1922, 10.9 2-seater, dickey, all accessories, mile-
 lasey.
BAYLISS-THOMAS, $1922,10.8 \mathrm{bp}$, rery small milenge, equal to new.

BELSIZEEBRADSHAW, Gordon Watney and Co., Ltd., 31 Brook St., W. 1 ('Phonc, Marlair 2965 and R966), the West End wholesale cunt cessionnaires, bave sererna second-band 1922 models, carrying our Curstante, trom in part exchange. purcuased on the deferred payments.
BELSIZE-BRADSHAW, 9 bp . 4 -seater, hood and screen, colour grey, ing, with bead and tail lamps, horn aud tapls, splendid condition, har
gain price. 2210 in in London. Write, Box No. 411, care of The Light Gain price, y210; in London. Write, Box No. 411, care of "The $\underset{z z z-0}{\operatorname{Ligh}}$
BELSIZE-BRADSHAW, 1922, 3 -seater, sereral extras, spocdomoter licensed, lise new, 160 guineas. 16 Rudthorpe Rd, HorGeld, Bristol $559-c 457$
 car exchanged. Rey, $\mathbf{3 7 8 - 3 8 4}$ Euston Rel. Phone, Museum 7756. BELSIZE-BRADSHAW, March, $192 \overline{3}$, advestiser offers J-seater, not yot run or
Rd. West Didsbury, Jianchestor.
BELSIZE-BRADSHAW, 1922, 9hp, 2-j-seater, liko new, $£ 140$. Surrev
Motors, Lid., Sutton, Surrey. 'Poone, Sution 1000 .
BELSIZEBRADSHAW, 1922, 2 -seater, dynamo lighting, specdometer, spare whecl, side screcns, etc. 6plendid order, 155 guineas: exchanges
or deferred. Edwards, 175.77 GL. Porlland St., W. 1. BELSIZE-BRADSHAW, 1923, unablo to accept delirery, sacríice 2195; BELSIZE.BRADSHAW 1922. private owner, 165 guineas Tebb, 46 Aibemarle St., London. Telcphone, Gerrard 2565.
BLERIOT-WHIPPET. F.O.C.H bave 1921 Bleriot-Whippet, Magdyno, reverse, bargain: exchange or deferred. 5 Heath St., Hampstead near
BLERIOT-WHIPPET, 1921. 2-seater, mileage 5,000 , fully equipped, pertect condition, cost $£ 235$, aocept $£ 65$ : any examination. irial.
gioke Fields, Guildord.
$5 J 97$
BLERIOT, 1920, Derfect order and appeatance, completely orerlanuled,

BLERIOY.WHIPDET, 1921, bandle starter, reverse gear, electric light ing, licensed, 6pare wheel. perlect condition, 65 guineas: exchanges or
delerred. Edwards, 175-7 Gt. Portland St., w. 1.
$539-607$
BLERIOT-WHIPPET, 1921, splendid condilion, 255 cash, or deferred; eacharges. Railton, Cobbam and Co., 21 Blackfriars St., Manchester. BLERIOT-WHIPPET, 1920, dynamo lighting, hood, windscreen, spare

 $\Sigma 40$ or ofter; appointment. 17 Park Avenue South, Crouch End 539.1317

B.S.A.s. Exohange your old B.s.A. Ior a new 8bp Talbot Liberal allowances. Our hire purchaso scheme is unique; it is arransed to suit your convenience. Trial rane
Warwick Wright, Ltd. (Sole Distributors in the London Area), S.T.D.
Honso, 150 New Bond ${ }^{\text {St. }}$ Losdon, W.1. Telephong, Mayinir 6504.

## SECOND-HAND <br> LIGHT CARS AND CYCLECARS FOR SALE (conlinued).

SUOKINGHAM, 1922. Slup. Jseater, dynamo lighting, epare whecl,
 BUCKINGHAM, 1922, new. dynamo, उ-seater, aluminium body, el20 cash, or deferrod; exchanges. Jailton, Cobham nad Co.، 21 Blackfriarg
St., Manclester.
559596 BUGATT1, 1921, 16 -ralve, sporting 2 -seater, dynamao, detachablu wheels

calgotts.
Wantek. Evahana your old Calcott for a new 8hp Talbot. T.jberal allewances. Our hirs purchase echeme is uniquc, it is arranged to suit youls convenience. Trial runs.
 CALCOTT, 1919,2 -seater, with double dickey C.A.V. lighting, specelo-
 CALCOTT, 1919 model, 2-seater, with dickey sart, dynamo lifuting

 SALTHORPE
5ड゙9-657 CALTHORPE, special, inst. recently overhauled by makers, alumunurn


 ster Bridge Md., S.E.1. Hop 6187.
CALTHORPE, 1922, de luxe, doublo dickey, real leather upholstery,
 CALTHORPE, 1920, 2 -seator, dickov, taxed full raar, very fine condition, $£ 345$. Below.
CALTHORPE Coupo 1 y 23 car, dono iew demonstrations nud practio
 CALTHORPE, 1916, 2-scatcr, electric lizhting and starter, all-weathor hood, used as open or closed car, nalntwork Euod, insuranco paid, Mri-
vately owned, $\{1 \in 0$ : aller 6 p.m. Armstrons. 47 Drayton Park. Mikh-
burs. burs.
Cf,LTHORPE, 1914 , new conditioned, smart 2 -seater. $\mathbb{L 8 5} \begin{aligned} & \text { Jones } \\ & \text { 539-ilo }\end{aligned}$ GALTHORPE, 10 hp 2-sazter, dickey, dynamo limhtinz, detachables, all accessories, sooù order, emart, s.110, 7 Victorin lid., Guildford. 539.542 CALTHORPE, 4 -seaters, 1918 , 1921,1922 , do luxo merclels, 539165 K1S5, 2235 ; cash or delerred: exclanges. Raillon, Coblinm and Co, CGLTHORPE, 1922, 2 -scator, with doublo dickey scat. dynamo and

CALTHORPE, 9 guinens, exchanges, delerred paymente; 1914-15, 4 seater, double screon, $\delta$ detachablos. one-man hood, olectric lamps, smart. Seabridge, 35 IIansler Rd., East Dulwich. Telophone, Sydenhnm 2452 .
GALTHORPE, 177 gns., exclunnges, deferred payments: 1920-21 sporta 4-seater, lifhting. starter, elock, specdometer, polished bonnet, 5 delach ahle diso whels, extremely $\begin{aligned} & \text { mart. any examination, trial. Seabridge, } 35 \\ & \text { Hansler Rd., East Dulwich. Sydenham } 2452 .\end{aligned} \quad 539.554$
CALTHORPE, $192 \overline{5}, 10 \mathrm{hp}, 2$ sentor, with dickey, 4 -specd, Eoh-sharter,

CARDEN Offecial Repair Depot
We have taken over the whole of the repairs and gale of epare parta trom the Carden Engincering Co. Many great improvements to Carden suardg, hod covers, Sond for full particulars to the New Carden Liglt Car Co., Ltd., 22 Mytho Rd., Willesden, N.W.10. 'Phone, Willescien
CARDENS ${ }^{3}$, 1921. beautiful 2-sazters, electric lighting, hood, screcn,
 depojit secures immediate diclivery. Wandsworth Mowr Exchange, Ebner
St., Wandsworth (Town Station).
$595-553$
CARDEN, 1S21, gres. 2-seater, electric lighting, 1922 lnbrication spsing grats, etc., splendid condition, £シ7. Wildsmith, 31 Lynton Rd, f.ARDEN, 1921 model, almost new condition, price ©55. exchange or CARDEN, 1921, just completely ororhanled and renalnteit, splendid iftlo runahout, late demonstration model of agent, $\& 50$ or near olfer.
$539-649$
Cundell. Harbour, Pignton.
CARDEN, 37 guineas; exchanges or deferred paymenes: 1921 Carden 2-seater, hood sereen lamps any examination, trlal. Soabridge. ${ }^{3} 55$
Hansler Rd., East Dulwich. Sydenham 2452.
6593 CASTLE THREE, F.O.C.H. haro 1922 Castlo Threo, dymamo, bargain, CHARRON 8, 3-geater, clover-leat body, handsome little car dynamo lighting and starting. sparo whel, etc., bargain. \&165. Sunting'e
Exchange, Wealdstone.
$539-550$
CHARRON, 1921, clorer-lent 3 -senter, 9hp, dynamo lighling and start ing, perlect condition, ang trial, $x 130$, a real bargain. Prlnce Goorre,
High St., Tlornton Heath.
6391299

PRIVATE OWNER alike recognise the value of these pages for the disposal of their goods.

## SECOND-HAND <br> LIGHT CARS AND Cyclechars for sale (continued).

CITROEN CLULEY, 1921 , whud 2 -seater. with dirkey seat, dynames lighting in
 COVENTRY-PREMIER, 1922, filted oversizo Duntol) cord tyres, spare Shers, dramo, matingay dash, speedometer, Cawey nirror, aluminium
 COVENTRY.PREMIER, 1920, in Mactically mew condition, fitted with
 COVENTRY-PREMIER, Tuly, 1922, A-wheeler, 2-stater and bickey,
 GCVENTRYPREMIER, 1921 dynamo jightin\%, nerfect condition CUVENTRY-PREMIER, $15 \Omega 2$ incklel, 4 -whecler, double dickey, many
 COVENTAY-PREMIER, 1922, omly showromm soiled, e 175 cash or c 4515 s , loxtimy 12 payments of 8119 s . 9tl metorusetes accepted
 COVENTRY-FREMIERS, F-whelare, chnice of 2, \&.90 natd $£ 100$ cas?
 COVENTRYPREMIER, I 92 J, IOHn, 4 -senler, electric lighting. Jow

 COVENTRY-PREMIER, 1921, 8lı, J-whecler, wilh dickoy dranmo
 CoVENTRY.PREMIER, 1922, 4. wheler dynamo, specdometer, faultiess contion thrangom, $\mathcal{L 1 1 0 ,}$ no oliers. Simenar, Last Moleses, Surrey. GOVENTRY.PNEMIER, J922, 1. wheeler, dyianio. excellent condicion,
 GUVENTRY-PREMIER, lute 1922, 4-whlucler, dynamo, sparo wheel. Vorth Kotasington.

COVENTRY-PREMIER, 1922. 4-whecler, praclically now, dynano limht ing, hary wheel, laxed lo: year, \&I2S. 24 Balliol Rd. Norlh cnouch. pro.Cir. have 1921 Crouch, complecty overhauled, harzain;
exchangu CROUCH. 1923 , allweather model, is new, mileago netrimible, 8190


 DAY-LEEDS, 1920 (Junz), 10 hrp, cost 5500 , many extras, ben well 2Z10. Sucretary, Doncaster Collieries Association, It i., Doneasler. DEEMSTER Two demondration model Duemsters for intmediato disposat, bokh hate thel of viit 2205 : holly insured, equnty Garage Caterdam Villey, Surres'. 'Phone, Caterham 191. 539-856 DEEMSTER, 1920, low milange, splendid condition, recently overhauled,
 DEEMSTER 10hp 1921 2-scater and dickey, standard equipment, light ing nul btarting. specdomoter, fantless condition throughout, fully
 DEEMSTER, 1914, 10hi, 2-seater, detuchable whects and spare, good

DE MARCAY, 8hp, 2-scater, lillle kimwn here, but ono of the most officiunt fast and comfortable cars on the market. it is in wxcellent condition but owacr is ordered to Goli Coast nnd must sell at once, socept $E 60$ casle. Cun be seen at 45 streatham hill. Iondons S.W. 2.
Addess letters Do Marcay.
ENFIELD, $9.2,1916,2$-senter, dynmo lighting, 2 spara wheels, me clirnically perfect; Pimmer tsres, electric and bulb horas, . 110 offers.
168 Balfour IRd., Illord.
ERIC CAMPBELL, all-alnminium, fully equipped, excellent condition C145: exrended larms nud cars exchanged, liey, $378-584$ Enstan 1 Rd
Phone, Museuru 7730 .
ERIC-CAMPBELL, exceptionally smart 1921 , dynamo lighting sparo wherl, spedentheter, clock. very fast, s145: exohanyes. 24 Balliol Rd.


G.N., 1920, dyumo, splendid condition, $£ 90$ cash, or $£ 18$ 16s depesit


## SECOND-HAND <br> LIGHT CARS AND CYCLECARS FOR SALE (conlinued).


 G. N. 1922. dickey, elactrine hntu, oversize tyrez excellent condition. G.N. 1922 z-seater and dickey, bramn lizhting, sme bhecl, painked
 C. 1 ., 1922, pracically Grand new, spesial dontre-purpse herfy sell

 C.N., £120, or deferped ternis, or kood motarescle part paswent, 1922 (late) G.N. model de luxe, dy ramo lighting, diekes. hond, serent, spesta
 G.N., 1920.1. thoroughly ow haulal, 5 nowe tyras, dan spethumeter, Stanstead Rd., Forest Hill, S.E. 25. G.N., March, 1922, dyama fighting. dickey seat, 5 detarhzle whenls.


G.N., belt drive, good condition, $\boldsymbol{E 3 D}$; catended terms ancl cars ex. changed. Below.
G.N., 1921, dynamo excellent condition, 287 10s.; extended terms an G.N., late 1922, all-weather modth, tax paid for year, exceilent condition.
 G.N. $19 \% 1$, as tew $£ 115$ cash or $£ 28153$, down and 12 rayment ${ }^{\circ}$ of
 and I2 lavments of $\mathcal{f} 9 \mathrm{Os}$. 6d.: motorcyiles accented as drposir3; jm.


 G.N., 1922 standard model, complete, special double windscrenn in.
 G.N. 1922 dynamo lighting, spendometcr, spare wheci, licensed, exceptional condilion, 125 guineas. Helow.
G.N. 1922, all-weather coupe model with dickey, dyuaro lightinge speedomeler, cl
guincas. Below.
C. N. 1920, dynamo limhting. clock, optetiometer, spare whee!. gnow condition ihroughont, is
G.N. 1920, epecinl o.b.v model 2 spara wheels. etc., sll-aiuminius

 chaniges. Jiailoon, Cobham and Co., 21 Blackitiars St. Manchester, G.N., 1921 , ainted aluminium, all trres as new, spare wheel ayd tyic.
 hood, winoseremg, side screcns, shock absorbers, mectinumial horn, wit and 4 chains, late uwner reánily stent eloo on this car. incluting fitting new conipetition ensinc 78 guineas: cash or deterred. Mrianecy St. Garasc, Camden Town, Niw.1.
 exchange or hire-porchase. The Light Car Co., 331 Euston rd, N.W. 578
 G. N. 1922 touring splendld condition, new iyrc3, Kiaxon. speriomete-: Shields. dynamo liphting. many extras, si20. Restalls Carike $541-622$
241 Lower Clapton Road.
G.N. Cass's Motor Mart. Ltd. 1921. 10hp. dyramy lighting. tax pail]
 c.N., 1920 (Julg), accumulator lighting many spares. splendid condition, carelully used, e70, a bargaiv. sifitics, $124-127$ Minories, E 1
 G.N., 19213/, dices, dynamo, dawhikht, eversize eyres, Kinxon, ctack,

G.N. Legcte, 1921, nluminium. enpine improved by company, perfect






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

G.N., 1922, dises, perlect, £125. 6 Cburch Rel., Forest 1illl, 539-1364 C.W.K. 1921 -seater with dickes, excellent condition, fitio cash, or entertained. Service Co., 275-274 nigb Holborn, W.C. 1 . C.W.K. F.O.C.H. haro 1920 G.W.K. 4 -enter, 1921 back axte, fulls C.W.K., 2 -senter and dickey. 4 -cylinder, £165. W.B.G. and E. Co., 202
Bzz- 395 C.W.K., 1915 complotely overbauled, new Zenltb nevt tyres and hood,

 G.W.K. 4 ecater, C.A.F. Lighling, specially built for well-known $53-1148$ left warks May, 1921 , and carêullr drisen by vendor only larish cruip-
 year's tax which enhance value fully sit
ler, 20 Kingsdown Ave., Wes Ealing.
G.W.K., A-scaler, 1920, orechanled, repainted, news hood, f140: eash or delerrod: oxchanjes. Mailtov. Cobhan and Co., 21 Blaclefriars St.
Manchester. C.W.K., 2-cylinder, 1917, dsnamo lightine, rery fulls eminged, nicely
 c.w.K. $10 \mathrm{hn}, 1920$ model 2 -seater, in excellent condition, £ 110 ;
 HANDS coupe, complete with self-starter, double dickes. etc., persect ear for prolessional man. new, shop-soiled only. liet price SJo guineas, Clearance price 2530 . Potter's. MOA Grove llouse Lane, Claspit Lane
Leds. 'Phone 22578 . "Grams, "Runabouls."
HANDS, 1922 , dynamo and startcr, double sunt dickey, side curlaine,

HILLMAN ears. Ofinial repairers, Landon district, J. C. Brodic. Lid 94a Cheype Walt, Chelsea, Londrn, S.W. 10. Tclenhone. Kensinglon HILLMAN, special all-weather 2 -seater body, bulbons back, dises, Lucas
 HILLMAN. 1921 alumininm sports Ilillman, all-nickel finish, Iucay ulectric lighting and staring, 5 wheels completo with twres. milatge HILLMAN, 1914, dynamo, epeedome!er. electric horn, tax paid for 5151 orersize whele, paini, hood tyres, cte, in excellent condition, $£ 10710 \%$.
 cicton Rd. 'Pucte, Muscum
HILLMAN 1921 molel sports 5 -seater, dynamo lighting, excecdirgly nice condition, A250; exchange or hire-purchase. The Light Car Co. $\overline{3} 51$
Eiuston Rd.. Niw.
$539-580$

HILLMAN, 1921, speed model, aluminium bodj, outsido copper exhaust, dynamo lighting. Houdaille shock absorbers. very last perlect oider, | tax paid, $\mathbf{\text { 2 } 2 2 5 \text { . }} 40$ CreMeld Rd., Ealing. Pbonc. Ealing 1267.1288 |
| :--- | HORSTMAN 1921 2-seater, dickes, dynamo, Coventry-Simplex engine all-weather sido curtains, whole in perlict order, \&140, bargain. Jones,

c.o. Bradmoro's, 482 Ilnrrow Rd., Paddingion.
humberette Spare Parts Dept. Repairs, replacements, orerbauls, repainting. Inquiries invites for second-band ears.
HUMBERETTE. Ilumber Serrice Depol Canterbury Rdi, Kilburn N.W. ${ }^{\text {G.: }}$ : 'Phone, Willesden 1298-1299. Telegrams, " llumberonin,
zzz-999

HUMBERETTE, water-cooled, 1914, completely orerhauled, dicker, bar.
EAin, Ej5. Warren, Bootmaker, Swanscombe, Graresend.
540 . 258 gxid, Ej̄5. Warren, Boctmaker, Swanscombe, Graresend. 540-c'258
HUMBERETTE, a.e.e, excellent condition incide and out. Well equipped

HUMBERETTE, 39 guineas; exclanges. 2 -scater, 8hp, nlt-cooled, wiro wheels. spare rim, zood anpearance nny exanination, trlal. Seabrider.
35 Hansler Md., Fast Dulwich. Sydeuham 2452 .
 exchanges. Railton, Cobham and Oo., 21 Blackiriars St., Manchester. 601 HUMBERETTE, 1915. a.-c.. good condition, rocently orerhauled, bood

HUMBERETTE, ghp, 2 -seater, dickoy seat, good rondtion nnd running order, acelslene lighting, 250 or oller. 32 A:kew Mansiono, W, 12 .
HUMBERETTE, a.-e., as new, orerhauled, repainted, dptachalile duniny

Jowetr, 1922 model, 2 -seater do luxe, dickey seat, small mileage, mil,
vatels owned, $\delta 185$ or near ofter. Gibbs, Fawcett St, York. $539-874$ vatels owned, $\boldsymbol{\Sigma} 185$ or near ofter. Giblus, Fawcett St, York. 539-874 JOWETT. A very limited number of second-liand Jowetts now arailable Write at oncu fri particulars. Kinscy's, o! Croydon, 350 Lower Addis-
combo Rd. Phono 1129 . JOWETT 1922 (November) 2-seater, double dictes, dynamo, excellent Nondition, owner golng abroad, $x 185$. S., 28 St. Lnse's Mit., Claphant.
s.W.
S. JOWETT, 1921 perfect running order tyres Tery good lonest running KEVAH, weekls bargain, £115. Buy a 1921 2-seater with 5 . 2 - 1161 Enster, satisfaction guaranteed, trials, iuEpections millingly inv. 1 d d. cost $\boldsymbol{\alpha 2 7 5}$, hood, curtains, mat, speedometer, 5 detachables. orersize Dunlons,
shaif drive, reverse, wire. H. E. J. Radelife, Fordingbridge. $539-1113$ LAGONDA. Several good secoml-hand cars for sale. Full particular and prices from Lagonda, Ltd., 195 Hammersmith Rd, London, W. 6 .

## SECOND-HAND <br> LIGHT C.ARS AND CYCLECARS FOR SALE (continued)

AGONDA, gpecifiov 1919, 11.9, standare 4-statcr, escellent condition. bevel dired A. V wenamo highing, 5 whecls and tyres spectometer, iensed, fli45. We
Phove, Sidcup 160 .

## LAGONDAS

LAGONDAS.
Whnted. Exchange Jour old Lagonda lor a new 8hp Tnlbot. Liberal
allowances. Our birepurchase schemo is unique; it is arranged to suil your convenjence; trial runs. Warwick Wright, Lid. isole distributors in the I, ondon area), ST.D S.. London W. 1. 'relcohone Maytair 5395048 LAGONDA 11 hn all-weather 4 -senter, new March, 1922, tax naid 1923 rery good condition all round, instrument board light, oul-feed indicaLAGONDA counc, 1922 model. Mebes and Mobes, The Original Light Car Specialists festablishcd 1893), havo one of these high-olass lipht cars to ollor from stock, painted maroon, fitted with C.A.V. dy namo byit
 in splondid. condition throlggont, bargnin at £275. 144 Gt . Portland
 LAGONDA, 2 -seater, coupo, repainted, electric, good condition, 275 , cash, or deierred; oxchaniges. Raiton, Cobhana and Co., 21 Blackirinrs
$539-600$ LAURENCEJACKSON, meN, shon-gilled, 2-senter "Ith dlckcy, dsnamo LITTLE MIDLAND 19212 -seater and dickes, spare whecl 5 Inmps, excellent condition, £13D, oller. 244 Old Christchurch 1ld., Bournenonth
 McKENZIE 1 Ohy 1920 2-senter, dynano lighting, etc., englne fust over MARSEAL 101 p 2-scater and dickey, anl-aluminium model, qull electrical
 MARSEAL compe, $10 h p$ dynamo lighting, sparo wheel, etc., painted
 MARSHALL-ARTER, 1916 , 2 -seater, dickey, 9 hn, 4 -eylinder Chapuis
 MATHIS shn 1922 2-scatcr, dynamo and starter, run 500 milos only,
 MERRALS-BROVJN, 1920, 4-cylinder Cowentry-Simplex encine, delachs Myecum 6980. MERRALL-BROWN, 1920 , 2 -scaler, Coventry-Simplex engine, nlu-
 MERCURY. 129 gumeas, exceptional bargnin; exchanges, delerved pas

 METEORITE, 155 gulocas, exchanges, exceptiunally amart $1919-20$. 2 scater. dickey, dynazo. 11hap. A cylinders, 5 detachables, silcnt. Hexlbe MORGAN Scrvice Depot. OMcially appohted repairers by the Morgan Notur Co. for London. Finl range of shares carried. Now nind second
 MORGAN speciallsts. James and Co. (Shemicldy, Led., 263 Feclesall 1Rd., Shemield. Telephone, Central 2460 . G.ad theck of sparas carrice. in stock. MORGAN. Dan Guy, Wesmouth, minin Dorset agent. Trade supulied. MORGANS, $\mathrm{CS5}$ to c 173 , new and second-hand; exchanges or deforfed
$640-\mathrm{c} 224$
Cleveland Grage, Ackorth, Pontelract. MORGANS. Hall, omcial ngent, servico denot, spare part stockist second-hand Morgans alwaya in stock. 91 St. Peler's St., St. Albans. MORGAN 1920 de luxe water-cooled J A.P. dynamo lighting, zezxer
 MORGAN, 1014 , awner abroad, must sell, £55, ycal bargala. 75 Migh
St., Hountlow, Middceex.
$559-c 255$ MORGAN, Grand Prix, 1923, royal blue, latest roller bearing, 10hp M.A.C. enginc, waler-coled lucas elcerric bighling get, election horn jighihouso radiator, niascol petrol can carrier, rat wheel shock abeorbers -xtra 4 -in, leg rootn, specinh $41 / 2$ th 1 top gear, Cowey speciometer and walch, tyras and mechanical ronditun herfect, any trial, $£ 150$ or non
olfer. Box No. 1569, co. .
 MORGAN. F.O.C.II have a 1921 G.P. Morgan, luxurlonsly equipped hargan: exchange or deferred. 5 Ifeath St., Mempstead (near Tuhe. 5 MORGAN. 1920. Do Luxc, watar-cooled M.A.G. many extras, perfoct
 MORGAN, Do Luxe, nater-cooled, 8hn, Lucas dsnamo lighting, colour grey black hood. aluminium dash, has boen used a3 demonstration St. Petor's St., St. Albans.
MORGAN, Grand Prix, in excollent order, Jell tubo, new chains and in excellent condition, $£ 95$; exchamges. W. and G. Lambort, Lid,,$\frac{\text { Thrlford }}{539.365}$

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




 MORGAN, Do fixte 1921, w-c., rictrio lighting peciometer, clock.



morgan, late i922, Acro melel Anzani w.c. engine, olectric hore.

 E84 Enston Rd There, Mustune 7756 . $539-500$





 MORGAN, fanily morlel 1925 Johp MAG. Frine dymano lighin:

 morgan,



 morgan, 1922, Granu Pix, Ma.G., spevdometer, diese, lax paid, MORCAN, 1921, de Juxe, specciometer, cloek, tax paid, c125. Below. MORGAN 1920, de luxe TA. P. water-cooled. honil winlscreen, Rotana


 MORGAN, De Iaxe, w.c. late 1920, original tyres, climb ansthine
 MORGAN, Gip, 1920, elcetric, 60 m.p.1. C1, C110, cash, or deferred: MORGAN (sportingl, elip J.IP a.-c., perfoct oriler, arcessorios 559.597
 morgan, 1921, De Luxe, 10 hp w.e. M.A.G.. discs, heary Slegney
 MORGAN, gnecial, long chassisatuminium bonnet and tail, n.ep radia-

 MORGANS ITom: E7O. Evecrnl Gi.P. and De Luxo models; ready to meet MORCAN

 MORGAN, Family, wec., dynamo. guarantecd, fudy equippod, nearest MORGAN. 1920, 10hp, wants tuniag, smart, iE55; exchanges. 89
 Morgan, 1916 Do Luxe, ${ }^{2}$-seator, M.A.G. engine, f65. Newnham,
223 Jiammersmith Ral, w. G. MORGAN, 1919, a.ce, excellent contition, acecssories, e72. Carpenter,
Waterworks IIonse, Frimley Green, Surtey. MORGAN, special G.P. flted "200-mile" bods, special cyclecar $10-12 \mathrm{hp}$, oh.v. J.A.P. excentionally fist. new tyres, $\boldsymbol{E} 135$; this is an exceplfonal machine, and aflords an excellent opportanity to anyono dasirous of obtainitg a really hol-slufl Morgan at a low tigure. Below.
MORGAN, 1922, Grand Prlx, w.-c., M.A.G., fully equipped, tax paid, orlsinal tyres, mascrutchad perlizet condition, mileago 2,000 only, guarznteed fitultless, $\operatorname{E15} 0$. liclow.
MORGAN 1917 , sporting motlel, 10 hp, n-o., M.A.G., fully equipper,


## SECOND-HAND <br> I.IGHT CARS AND CYCLECARS FOR SALE (conlinucd)


 MORRISOXFORD, 1914, zatator, dgun mo lighting. gickny seat. tas
 NEW HUDSON. 1922, onls shomrocm enilad. \&175 cash or $£ 4515 \mathrm{~s}$ down and 12 busments of $£ 11$ 9s, 9d, notorcyeles accepted an riv-
 PEUGEOT, in Bromptara Mi., S.W bate the folmang largains in diz of:-1915. Baby Pullgen, Ir Lilxe, just repalnted ail compleqe blue Lucas cemtic Quad chassis, fitted wilh val twaties, sumable for light deliveries or PEUGEOT, 1922 ; 11Hp, 4 -acter lowing bady, firdished bluc. showrom conlitiore, belivered ita Juse, amail masage, rax paid, campleta with peedometr and oulder aceasorig, self-starter and lighting. fog 20 .
 PEUGEOT Quadrilietts, 1922, 4-çliraier, water-cobled, e7 tax, spinudid order, hood, spare wheel, hargain, $£ 105$ : 4 seater wanted. Brariford,
Optician, Jigia $12=$, Kiluarn.
 PHCENIX, 1920, 2-zater, stater, ctickey, dynama, te., pxcellnat condition, fargain. £l亏u. Virian, 33 Symbicr ob., Victoria Aと., S.W.1. 539.54 PREMIER 1921 S-whecler, cickey, dyamo, tor paid for year, aplendid
PIEMIER, 1922, 4-whcilur, dickes, dynamu, excellent condition, \& $1 \overline{0} 5$ :

RHODE, 1922, 9.5 , occasional 4 enaler, gitarantecd in splendid running order, £140. Simiste:, Jordangate, Maccicsfied. 540-193 KHODE, slhipather sicon, 1923, zoral blue, dyamo lighting and sald startor, 5 litinps. spceunmeter, clock, desh lamp, lool locker on running rifes, cost ownor \& 510 , bargain at $£ 270$. Your presnot limht car ia exchange. Delerred terms 4 per cint. Mcbes and Mebis (Fist. 1893), 'he. Orizinal Lizht Car Specialists, Phode Distributors, 144 Gt. Port-
land Sl., W.1. Phoac, Langlam 2230 . $539-509$ RHODE, 1922, 2-4-arater, demonstration ar. in neis condition. \& 165. More

RICHARDSON, 8hp. 2-scater, e50. W.B.G. and E. Co, 202 NectRIGHARDSON, 1920 . Binp, 2-scater athd dickev, dunazas lighting, hood,
 RICHARDSON, 1920. 2 -scater, dickey, recentls orerhauled, gond condi RICHARDSON

 ROVER, 8hp, May, 1922, side curtains, mirror. speedometur, impulse
 Phone, Gillingham $4 \overline{0}$.

ROVER 1925 8hp coupe, new, would exchange for a mood-rlass American saloon, with adjustment. King and IIarper, 6 and 7 bringn. St..
Cambridge.
HOVER, 1925 , coupe, 8 hp, 2-seator, dsnamo lighting, self-starter, clock, spocaometer, ctc., ezal cazh, or easiest of casy pasmects; any fance no objzct. Withins, Sirupion, opposita Olympia, London. Pbon
IIammessmith 238 . ROVER. Excentional oppoturity for private parchasfr to acauire rea!ly good 1922 Rover-8hp-car, spwedomerer, kido curtairs, 4 brani-new covers, tax paid, owner bought arget car; scpn Vie. appontment: who ROVER 8, 1925 (naw October), leather upholstery, sido curtains clock. perfoct, small mileage, appesranco as new, quick sidu, i149. Dr. Hreese,
Stafford $\Delta$ venue, Meltod Mowbrag. ROVER 8 s, choice of 3.1921 and 1922, prices from 8100 ; extended terms and ears exchan
'1hone, Museam 7735 .
ROVER, Shp. 1920 , small mileage, rs new, $£ 15710$.; extended terms and cars exchanged. Rey (Rover Azent), $378-384$ Euston RU Phone,
atascum 7735
539-50í ROVER, 8lip, as ucw, run 2,230 miles only, clock, speednoneter, mir. and Parsons, Junction Garage, Mighosone, Lestonstone. 'Phone. Winn-
atedd 405 . ROVER, $£ 100$, 1921, 8hp, dsnamo lighting, axtras, taxcy excellent condition, mechanically perfect, trial. 18 Dulwer Jd. Lrjtonstone, $539-1238$,
 ROVER, 8hn 1922 , peedometer, clock, 2 dash lampa mat, petrol carrier, alumititum numbers and running beards, filly taxed and insured, ROVER, 84p, 1022 . eperdometer, beaufiful condition, 2130 , 539.1290 stapleton LIaf Rd., Stiond Greer, N.4.

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

ROVER. 1921 , dymamn lighting, spare wheel, specdometer, mirror, ete.
\&105. Whiter, Cocil Rd. Cheam.
$539-1304$ ROVER 8, 1923 . 4-seater standard specification, Heenoed, absolutely as new, 165 Fuinens; exchanges or deferred. Edirards. $175-177$ Gt.
Porthnd St., W. 1.
ROVER 8s, 1922, coupe attachment, £145: 1922, splendid condition, L135; 1921, perfect. E115; cash, or deferrerl; exchanges. Rasilion ROVER, 8 hp . 1922, engine perlact. good general condition, specdometer, dash hmp, new tyres, ell Wh. Wishire, Sunrise, Grovelands Rud.
Purley. Tel. 977 .
ROVER, 1922, 8 hp, clock, specdometcr. RO. coupe fitment, dash lamp, mnts, etc. perfect condition, 9140 . Pickworth and 11ull, 107 (it. Port
land St. W. 1. Langham 1998. ROVER. 2, with special fittings, 1921 and 1922 modele, at 100 and 120 guineas, cash or deforred. Delancey St. Garage, Camden Town.
N.W. 1.
ROVER 8,1921 good condition throughout, R.O. coupe fitment, speedo meter, oilers on dash, licensed 1923 , 5 new tyros, spare valve, tube, all
necessary accesories, 118 guinoas. Paika, Langley Park Md.. Sutiont

ROVER 8 (2), 1921 and 1922, both tax paid for tho jenr, 495 and S110. Gararc, 12 Cornwall Twrace Mews, N.W.1. rcar Baker St.
Station. Phonc, Langham 2933.
ROVER 8 , practically new, 1922 , late larishly fitted, unsoiled condition, insured, Ens trial. £125. 24 Balliol lid. North Kensington. SALMSON 1922 de Jnxe side cartains, self-starter, specdometer, perect concition, 2180 . belor.
SALMSON, 1922, latest all-westher de luxe, speedometer, tres un marked, as new throughout, taxed 1923, 2175 . K.J. Mocors, Bromley SALMSON 1922 de laxe, excellent condition, 2152.7 Exhibition Ril. SALMSON, new Jane, 1922, drivon 2.000 miles, as new, 5 wheels dyammo lighting. 5150 . Schaler, 14 Sherborno Rd.. Oheadle Ilealh,
Stockport. SALMSON, 1922, do luxe, dickey, speedmmeter. electric horn, tax paici,

SALMSON, Do Laxe. Cass's Motor Mart. Ltd. 1922 Sports aluminium bods, dynamo, starect, clock, speedometer, used lor demonstralion onds bargain, fif5: delerred ierms from one-teuth down; exchanges. 5
SHORT-ASHBY, 1922, 8hp, 4-cylinder water-cooled, 2 -seater and dickey, Iriction drive, hood ano screen, Lucas dinamo ighting, spare whecl. Thi with actualmmebonmet An ideal no-irouble car. Trinl run can in arranged in London. What oflers\% Major, 18 Russell Gdns.. Golder"9 Green, London. N.W
SINGER, 1916, JOhp, dynamo lightivg, in spienlid condition. £85. 11
SINGER. F.O.C.II, hare 2 Singets, 1919 and 1920, both dynamo starters, dickey seats, condition excellent, bargains; exchange or delerred
5 Meath St., Hampstend tmear Tubel. SINGER, 10 hp, 2-scater, dictachable wheels, specdometer, excellert conNition. L57. Padd. 2854 . Linhope St., Upper Park Place, Upper Baker st. SINGER 2-seaters, 1920 and 1921 . 5140 ; extended terms and cars exchanged. Rey (Singer Agent), $378-384$ Euston Rd. 'Phone, Museum
$7 \% 36$.
53y SINGER, 10hp 1919. Mebss and Mebes (Est. 189J), Tho Original Light Car sposily equipned with specdometer, etc, in nico condition

SINCER, $1919-20$ model, $10 \mathrm{hp}, 2$-seate and dickey, stirter and electric lighting, just repaintod, new tistes, excellent condition, easy pay-
nucnts or cxehanae. $£ 1 \overline{3} 5$. Cleveland, 169 Piccadilly. SINGER, 10hp, 1916 (rounded radiator), 2-seater, dicker, dynamo, yerr's hax, etc. perfect condition, £85. Virian.
toria St., s.W.1.
SINGER, 1923. 10hp, 4-scater, all-weather, lizhting and starting, ductric and lulb horn, ete., sery small mileage, abisolntely as new. was King's Rd., WesteliU-on-Sea.

539-128
SINGER, $10 \mathrm{hp}, 4$ eylindese, water-cooled, 2 -ecater, lood, windsercen, 5 Mis gnims, wols, jack, perfect condution throughout, e75: instalments. 6.: Solon Rd., Brixton.

SINGER, 1921 coupc, beautiful condilion, starter and light, 150 gns.; SINGER, 1914, 10hp, 2-zeater and dicker, detachable wheces, side cur taine, specrometer, etc. exceptional condition, ${ }^{2} 78$ : deferred terms ar 539-1254 SINGER, 1920 mudel, 2 -seater, dynamn 1920 coupe, dynnmo anil starier, £160. The Light Car Co., 331 Euston Rd. London, N N 1
SINGER, 1919. 2-scater, dickey, sell-starter, dynamo lighting, detach解 at. $x 125$. 2 Grenvllue Place, South Kentington. 294 G Western. 539.1312
SINGER 191810 hp 2-seater, double dickey. dynamo lighting. detach able wheele, tax paid, periert condition throughout, £100. 5 pannan
539-\{311
IEws, Earl's Court. 2946 Western. SINGER, 1920-1, 2-senter, and dickey, dynamo, starter, spectnmeter new conditlon throughout, 120 guineas. 5 Victoria Arenue, Surbitnn. $\begin{gathered}539-1295\end{gathered}$ SINGER, 2-seater dickey, dsnamo lighting and starter, tax paid, emart

SINGER (2), 1916, 2-scaters, dickcy, dynamo tax paid, good raning grder. 885 earh. Garage, 12 Cornwal
St. Station. Plionc, langham 2933.

## SECOND-HAND <br> LIGHT CARS AND CYCLECARS FOR SALE (conlinucd).

 STANDARDS
Whnted. Exchange sour old Standard for a ner 8 hp Talbot. Xitueral
allowinces. Our hirepurchase schemo is uniguc; fo is arrangel to suit Warwick ifripht, hed. solo distributors in the Iondon area). ST.D.
 STANDARD coure, £260; 9.5hy (Scnt.. 1920), dynamn lighting and
 STANDARD, 1920, 2-scater, all-weather, dickey, startcr, dynamo. elc.
 SiANDARD, $9.5 \mathrm{hp}, 2$-senter, dicke5, all-weather, 1920. long wheelbaso
 STANDARD 1915 9.5hp 2-senter, dynamo lighting, specdometer, detach
 STANDARD, $95 h p, 1920$ long wheelbase, all-went hor 2 -seater, dyname
 STANDARD. 9.5, 1914, nickel finish, dickey, dynamo, 5 lamps, dome
 Irontuonger. Walthan Gross. STANDARD (2) 1914, 2 -seater, dickey, dynamo, another with oil



 STELLITE, 1920, 2-ecator, with dickey, perfoct condition, £165. Newn han, 223 Hinnmersmith Rd. W.6. 'iplone, Hammersmuth 1525. STELLITE, 1919 , 10hp, 4 -seater, starter and dynmmo, tax pald Jocems
ber, vers good condition, bargain, \&167 10 s . Below. STELLITE, 1919, 10hp, 2 -senter nnd dickey, dsnamo lighting, over
 2194.
 Station. Phone, Langham 2933. STONELEIGH (madn by Armstrong-Siddeloy), hargait. 1923 morlel

SWIFT, £75. 7-9, twin, 1914 , Eseator, electrle lighting, iax paid St. Birminghan pondition; terms, exchanges. Midland Garage, 1 Brond

 SWIFT, 7 hp, 1914 , in axcellent running condition, $£ 60$ for quick sale.
Can bo seen at 11 Atlingworth St., Brighton.
540 -1196

 SWIFT 10 hp 1913 2-senter, double dickey, exceptionally reliable, splen did order, new gears throughnut, clectric lightink, \&58, 10 Roland
Mansions, Old Brompton Rid. S.W. 7. Kens. 3639. SWIFT, 52 guineas: exchanges. 2 -seator, 9 hp .2 eylinders, 5 detach

 TALBOT, 1922, 8bp, 2-seater, polished alumindum bnnnet, dark blue.
 TALBOT, 8 hp, 1922 , starter, dickey, all-wenther curtains, clock, specdo mam 199. TALBOT-DARRACO. The I.ight Car Co. offer a (shop-sollect) 2 -scater Mackango or Vire purchase. The Lisht Car Co., 531 Euston Rid. con.

 TAMPI.IN, 1921. in good order throughout, lyres food, praperty of officer now in Coligne, mist sell, d
Paignton. UNIT, April, 1922, mileago 8,000, an exceptionally netractive aporting tion gearbox and final drixe by enclosed epur genting, 2 -senter body for alominium. reil wiags and whecls, nickel-plated radiator and fitungs looks ns goond as new, 5 good Kempshall 705 mm . by 80 mm . tries, Brol electric lighting, trin run, impection or pheto, willingly. . 2200 or nea
 UNIT, 1921 Shn, 2 -senter, diynamo lighting, detachable whecls, spare,


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


 UNIT 1921 ghp, 2 amier, as lew, only usel 6 months, elos deferred
 UNIT, Apal, 1 si22, 9.81 , suorts type, 2,000 mits, porfect condi-
 WARPEN LAMBERT, $2,1921,2$-seaters, $10 h_{1}$, 4-cylinder, dynamn, 5

 WOLSELEY 14, 1925 model, used 500 milev. left manufacturer, 5


 LE ZEBRE, why, \&220, 10hn, 1922 dynamo, slarter, ute Mor:gan LE ZEBRE 8, a beattilus lulle 4-cyliuki., dynamu Jighting and




SPARE PARTS FOR LIGHT CARS.

 HUMBERETTE eparis Crown Wheds, plaions, balance boxes. Wands-
 MERRALL-BHOWN spares and mpairs Merrall-Brown, 28 Chorley Old Morgan nare The Sterenago Motor Co., letd., Stevenage, Iferiz, can






## NEW LIGHT CARS AND CYCLECARS

A.B.C. Gordon Watney and Co, Ltd, 31 Brook St, W. 1 (Phone, Maybive immodiate dielivery of the 1923 tynes at further rednced prices sports model, $£ 225$; standard model, $£ 240$; 4 -senter, $\mathbf{~} 265$; defores

 slocks of spares, nod are experts in tuning: aporis model, 2225 ; Regent modil. 4240 : special featherweight 4 -seater; suner sports model, al minnim body, lo specification. Write for gadget list. Deferred payments or exchanaes

22z-818

 A.-C. Birkenhead Molor Works, 54 Duks St., A.-C. agcutz, immediale
rielivery, and 6 IIartman St., Liverpool. A.-C. carf in slock from $£ 325$ cash, or 281 Es. down and 12 payment*

 A.-C

Caithness and Co., Lidd. (Into Alfred Wasthage), for quick deliseries ante Writo lor pamiculars of revised prices aud nem models
penionstration runs nt any time
loferred paymonts and nart axchanges.
GS Gt. Portland.SL., W.1. -Trl., Langham 2172 . Telegmans, "Cathness.
W39-447 Wesdo, Irondon.


## NEW LIGHT EARS AND CYCLECARS

 (continued). A.C. Autoryyorz, Itd., 84 Virtoria St. S W. 1

A.-C. Eimpire 2 -scaler model, all colourd, £325. Autoresors, L:d
A.-C. Royal 2-beater all-weazher-modela, e395. Autoreyotr, Idd.
A.-C. Royal 4-seater all-weather malels, e415. Alitovegors, fid.
A.-C. Itryal coupc, anj rolour, £475. Autoreynrs, Itd
A.-C. Autosesors, lid.ican supply any of tha above rars on deterreal
 Alvis. Official Arenti, Meloss and 3fuca (Est, 18G3), The Origina includins and Sondan aninnt. hato car in exchange. Deferred payments over 12 or 18 months light. lent's pocket. 144 (it. Portlanel St. W.1. 'Phone Iantiat 10 vill
AMILCAR specialift and distributwre North and Fast Ridine s. $39-5$. AMILCAR specialift and distributwr, North and East Riding. Yorkshife
S54-w4:2 AMILCAR, 1923, brand new, shrip-haled, 2 -satarei, statharil apecifith
 ARIEL, the new 9 hp vater-ccoled $5-4$-seatar, price $£ 235$. Is the ricest light car on the marhot, a combinatiun ul speed, reliability, and eleganct
1'articulars from Fred speakman. Ariel Garage Harpurhes. Manchester
$550-5 i c$ ARIEL Nine, water-ccoled, J-seater, e235, in stock. A smart rocemy ioht car. Lixtonded payment terms, ur vour car part paymant. Ario Motars and General Repairs, Led. 320-2 Camberwill Now lid. sti.5. ARIEL " Nine," the 2215 all-weather iar with the llatisanditulition ingleshell body, adjustable seats; have a trial run or iree tuitlon with
 AUSTIN. Jisit can Dow aee and try the new Austin Eeren al our Shou. roler now for earlicat deliveriew. shich can he cobtained frem F. G. Smith Motors, Ltd., High Rd., Goodmaves. 'Phone, lHord $1082 . \quad$ zzz-452 AUSTIN 7hp. Can gire prompt lelivery, Write Iw spreificatiun. Geurg, AUSTIN. Strettou and Smilh inr 7hp Austing. Earliat deliveries

 1ppocin Olymuiz London AUSTIN, wew 7 hp model, 5165 ; pliex vour reriner uru fur carly delivers exchanges, heferreat parmeat. Parkers, 240-52 lleau:


 225-40) BAYLISS-TH9MAS ars in Hrightun at Welintis, SL. Jaturs St.j3rizh-
ton, athorized main a gents for the distrect.

 BAYLISETHOMAS. All 1923 mokels in stock: 10.5hjp 2-seatcr, wilh

 BELSIZE-BRADSHAW, 9hp dynama lighting, ES10. specdounetarr 5
 BELSIZE-BRADSHAW, Shp, £Q10: alsu eupplicd oll our pasureal out nf Sl., IV sritens. Send lor particulars, Rateliffe B103., 200 Gl. Pordind
BELSIZE-BRADSHAW. Gordon Wainey and Co.. LtJ., 31 brouk St., W, 1 (Phono, May\{air 2965 and 2966), the wholemale and retail conces. sionnaires, can give immedinte delivery ol the 1923 types at reduced prices. Standard 2 -seater. compitte. .210; aud Standard 4-geater, paymente arranged and cars taken in part excliange.
BELSIZE-BRADSHAW, 9lip, oil-tooled 2-J-seatir. telivery from stock.
County Garage, Caterham Valles, Surrey. BELSIZE-BRADSHAW, $£ 210$ cash, or $£ 428_{3}$ jepsilt aod 11 pas-
 BELSIZE-BRADSHAW, E210. C. Bijtten avi Co, sole diatibibuting agents lor liserpool, Nt. IIclens and divericts: arly delivery ol lsting ton, Liverpenl. Phouc, 1329 North
BELSIZE-BRADSHAW, with 9hp oil-cuoled chaidu 2-J-se.ters. $\operatorname{s210}$
 BELSIZE-BRADSHAW, Willmults can givo immediate dtlisers al Bel-

 BELSIZE-BRADSHAW 9月p coupe, L260, 4-zeater e235, 2-3-seater E210. all in stu.k. deferred pavments arranged, exchanget $585-968$
Pateroon and Co. llarbauld St, Warrington. 'Pione 545 . BELSIZE-GRADSHAW, 9hp, oil-coolert, deluchable wheels, dynamo light


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## BELSIZE-BRADSHAW. We can deliver 1 rom stock 1925 2-3-seaters,

 BELSIzE.BRADSHAW. We can deliver iram stockfuly efuipped, E210. Filcon Motor and Ciclo Co., North Finehley,
N. i2. Phone, Finchley 2827. BELSIZE-BRADSHAW, 9 hp , oil-rooled, $2-5$-seater, immediate delivery
 BELSIZE.BRADSHAW, Shp, Irom stock, £210; deferred par ments. Sur-


 ol E:11 14s., !ess rehate. Service Co., 273.4 High Holborn, $11 . C_{2 z z} 409$ B.S.A. Lesmington Antomobile Co., Led., anpointed speciai azents for Birery anywhere. Complete repair denots and stochs of spare marts. 2
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 BUCKINGHAM, 10hp. The ralue for moncs light car. Call and see ser the latest mollel 2 -scater. with double dickey, price $£ 185$. Book, your
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W2z-704
CALCOTT, $11.9 \mathrm{hp}, 1925$. Fitted with handsome all-weather 4 -seated bools by Clarlesworth, shiding from sents, Royal biac, blue leather unholstery, frameless windows Lucas dynamo lighting and sell-starter. speedometer, clock, the whole enr has beer filted irrespectire of cost,
 CALCOTr, 10.5 special bluc. cannot tako delivery, emall allowance.
Arlon House, Brecon.
CALCOTRS. 192510.5 hn models, brand new, just arrived, cash or easiest of eass payments. Your old Calcott or any motorcycle or car taken in part, parment for a new Calcott. We specinlize in exchanges and afloll
 CALCOTT 1923105 hp , jutst arrived. £5 25 , finished grey; nlso one finished crimson-lake: inspection inviled of this rery gmart model. casb
 metinith 258 .
CALCOTT. Smith and Hunter, authorized agents. Defisery from slock:
 CALTHORPE. All models, Including new all-wenther, in stock. Deferted payments. Your ond car tiaken Mann, Egerton and Cu.i.td., and the Home Countices. Callhorpe Service Depot, Ja High Rd., Kilburn
CALTHORPE. Crosdon agents for Calthorpe cars, Immerliate delivery from stock of all models. With efficient service to follow Moore's, Presto CALTHORPE SERVICE DEPOTS. 200 Deansgate, Manchester.
CALTHORPE 10-15 slandard 2 -seater, 285 gunneas. In stock at Colmore Depot.
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## Depot.

CALTHORPE 12-20 2 or 4 -seater, 410 zulneas. Earls delivers from
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## exchanges or ansy terms. Bright St.

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 CALTHORPE, 1923 models: cash, exchange or deferred. IIalifax Motor CALTHORPE. Lankeste: Engineering Co., Kingston, Surrey agents for Calthorpe cars. Sub-agents wanted wherc not already represented in
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 CALTHORPE, 1925 models for immediate or earls delivery, prices from 285 guineas; second-hand cars accepted in part payment; deferred terms if required. Newnhmm Motor Co., 223 and 245 Hammersmith Rd.. W. 6.
Shone, Manmersmith 1325.
 CITROEN. Dellivery from elock of 11.44 -soctor, prico $£ 265$; deferred naywents and 1ari exchanges. Authorized agents, Caithness and Co.,
Ltd. 615 Gt. Portand St. W.1. Tel., Langham 2172. Telretams. "Caithness, Wesdo, London" " $\quad 539-448$
 CITROEN, $7.6 \mathrm{hp}, 2$-seater, dynamo $H_{\mathrm{ght}} \mathrm{ing}$, selt-starter, $£ 196$. Imme Sinte delivery from the authorized agent, Harris, Garage,
Shone 88.

## NEW LIGHT CARS AND CYCLECARS

(continued)
CITROEN. $7.5 \mathrm{hn}, 10 \mathrm{hp}, 11.4 \mathrm{~h}$.
citroen. The Leighton Garage.
CITROEN. Earliest delivers of all 1923 models.
citroen. Personal service at any time a featurc. Deferred payment arrangel a speciality
CITROEN. Satislaction guarantecl. We are genuino authorized ngents Clephone, Hind CITROENS, 1923, with Engilish bodywork, All models froni Jackson's cithoen.
citroen. Sec w. II. Joncs,
citroen specialist.
GITROEN. For all new models. Any second-land cars laken in part
 CLULEY, "The Cream of Coventry's Light Cars." 2-scater with doublo
 CLULEY, 1923. Immediate delivery from tho authorized agonts, Jack-
zon's Garage, Guildiord. Phone 545. CLYNO. For power, comfort, finish and reliability, 2 anel 4 -seater
 $\begin{array}{ll}27 \text { Lowsp Mosloy St., Marchester, Phone, } 4978 \text { Central. Sce also } \\ \text { Jowett. Singer and Coventry-Prenier columns. } & 550-160\end{array}$
 4-senter Fannily, starter
St., Burnley. Tw. 488.
CLYNO, latest family model 4 -seater with starting, lightug. detachable


## coventrr.premier

COVENTRY-PREMIER
 COVENTRY.PREMIER, 1923 models: cash, exchange or deferrech, IIalitax Motor Exchange, IIorton SL., IIssifax, exctange or zzz-525
 w. 1 . COVENTRY-PREMIER, 1Ohp, 1925 model, 4 -cylinder, orerhead valves,
 COVENTRY-PREMIER. Godircy's aro authorized ngents. 1923 , 10 hnp,
 Langham.
COVENTRY-PREMIER. II. B. Cook, Ittd, largest contractors Tondon and Southerp England, now exhibiling new 10 lip morlels, 250 gns
unique credit system, $£ 22$ cash secures iolivers; exchanges. 202 Ge. portland st., W. W. ${ }^{\text {und }}$ Langlam 1726 .
 COVENTRY-PREMIER. Dan Guy, Weymonth, main Dorsce azent.
 cGVENTRY-PREMIER. Ernest Grimaldi, Y.td, authorized agents, 1923 models, 2 and 4 -seater, 4 -cylinder, 2301 nuincas; part exclinizes, deterred
Iayments. 87 Gt. Portland St., W.1. Tci., Langlam 2983. zz-493 COVENTRY-PREMIEN, 1923, 4 -cylin ler, 2 and 4 -scaters, 230 puineas, in slock. Aplharized agent, Snxon Jelloris, 253 Deanganio nnd 27 Lower
Mosley St., Manchester. Tel., 4978 Cenlrnal. Sce also Singer and Jowett colunis.
COVENTRY-PREMIER new 2 and 4 -seaters in slock from 250 guineas cash. or $£ 60$ 7s. Gd, down and 12 payments of $£ 1517 \mathrm{sin}$, wilh option
 COVENTRY-PREMIER. Immediato delirery. Exchanges or gradual enquiries Invited. Frank whitworth, Ltd., 159 New St., Dirmingham. COVENTRY-PREMIER, 1923 models for immedinto delivery from slock, 230 guineas, best passible prices allowed on fecond-hand cars in
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In mpistend 3752. COVENTRY-PREMIER $1923 \underset{2}{2}$ and 4 -seater models in stock, 230
guineas; exclanges, deferred payments. Parker's, Bradshamgate, Bolton. COVENTAYPREMI COVENTRY-PREMIER, 1923 , 4 scater, completo dynamo lighting, full Authorized agents, J. Smith and Co., Molor $\Lambda_{\text {genls, Lid., } 52-54 ~ W a m p-~}^{\text {Led }}$ Etead Rd., N.w. 1. Mrusoum 5938. Nor COVENTRY-PREMIER, 4 -scaler, Customer unable to accent, e241 10s., will acrept e2200. quick salc. J Itebden and Sons, 149 St. James St. COVENTRY-PREMIER, 1923 models, 2 and 4 -seaters, 230 gulneas: deferred payments if desired. Kingsway Motor Co., Waldorla Houso.
Aldwych. Regent
6939 . 664 CROUCH brand new, 2-aeater. dynamo list 2245, our prico 2195 ; Sash or delerred, exchanges. Rallon, Cobham and Co. 21 Blackirinrs CROUCHES, 1922, now, exceptional opportunity, 200 guineal, originally
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 deemster. Nicholls for Deemsters.
Deliveries from slock 10 and 12 hp models, cash or torms; genuine after-
 DEEMSTER cars can be seen in our showroorns. Five minutes from Immelinte delivery and the best gervico after purclase
Defered twms and wart oxchanges.
 OEEMSTER, bargain, shop soilcd, 10hn 2 -scater, in slock, seli-starter

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 ERIC CAMPBELL. F. G. Smith Motors, LLd. The Fissex County igents,

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 C.N. Autoreyors, Itd eau olfer inmmediate delivery of this well-tried !ighl car and arrant delerred p.sments to suit the customer. Author-
izad agents, 84 Victoria St, S.W. 1 .
$539-675$ GRAHAME-WHITE, $E 100$ : new, 2 -seater, simple and strong; delerred
 GWYNNE-EIGHT light car, 2-4-seater, immodiato delivery, Cars now in

GWYNNE 8 in stork, immediate detivory. District agerts, Bromley Auto GWYNNE 8, 2 -3-zeater cloverleaf body, from stpek, 4 -cylinder watercooled engine, differential: delerred parments arranged. 198 guineas.
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Oxdord GWYNNE and Albort cars at Maudes' Best deliverios, best torms, and
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Phono, Western 4140 . GWYNNE Eight inght car, wrould ifko to pieot tho next best suall lour

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 doublo dickey, 4 -cylinder, water-cooled, 2275 ; deferred terms or ex.
changes with pleasure demonstration any limos immediate delivery. 116 Gt . Portland St. Musenm 2878.
HANDS. Omplal asents Immediate deltioery of all 1923 models.
 and speedometer linclusivel. Trisal run wilh pleasurc. Delerred pay-


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HANDS. All 1923 marele stocked, a triat run will conriaco ans in eliding rurehaser Deterred tertn io suit your own Fiorket. Sole Lon. wiy, w.C. 2 Regent 1207. HANDS shop--oilc. 2 2-eater, complete with epllatarter and firkev, si2j̃o; HORSTMAN, later 11.9 Anzaniengioed meder.
HORSTMAN, the car which looks and run: like a es00 car, hut cuale
Corstman coupe, ess9.
HORSTMAN 4-acater, £357
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HORSTMANS do over 50 mile, per bur and 40 miles per gallurn We are the sole London agents fer the new motels: exchanges and ir.

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 Dasidson ald Nocl, Motur ELzitcere, Miphes, Sarrey. $\overline{5} 4 \overline{5}-2 \overline{5}$
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LAGONDA. The above cari, complete with dynatao, starter, ctock, speedo.
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 LAGONDA, 1923 medels, eash, exchange or deterred. Halliax Motur LAGONDAS. Cash or deferred rayments. Write. F. G. Smith Motiris
LAGONDA, K model, 2tealer. £275; coupe molel, £340: in sloct:
driarred termas. OHord and Sons. Ltd., 94 Gloucester Pl., S.W.7. 7212
LAGONDA. F.O.C.II., mait agents. Trial puns dialy, Immediate de Hampstcad (near Tubel. 'Phone, IIampstead $\mathbf{3 7} 52$.
LAGONDA cars. West-end. Lundon. Nesers, Meleng and Yeelws 'Fice 1893), The oriping tiem, including the 2-seater, 4-seater and coupe. We are. Lagonda spectalists and experts, and we shall be pleased to derponstrato tbe various claims put foriward lor this all-British light car's outstanding equipred. Your present Lagonds or ouber light car in exchange. Trade
MARSEAL. Inimediate delirery of 1923 medels, prices from 5215
MARSEAL, 2 -senter, $£ 215: 9.8 \mathrm{hy}, 4$-cylinder, water-cooled. $\begin{gathered}1 \mathrm{kmpers} \\ 54 \mathrm{~J}-\mathrm{m} 429\end{gathered}$
Slater St., Liveryool.
Lewes, Sasscs.
MARSEAL coupe, now readr for immodiate delitery, $£ 275$. Hollowasa,
Shorehaw-by-Sea,
near
Brighton.
MARSEAL. 1925 medeha, 9.8 hn , 4 -cylinder. C. A.V. starting and light-

MARSEAL. Sole agents for this wonderiul car in Croydon, Sonth Lnn-


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## (conlinued)

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MARSEAL ears; carliest deliverics; snur present car takon in exclange;
 MATHIS. Dibnam Motors, Aherstone Mews, Cromwell Rd., SW, KenMATHIS. Smith and Honter, authorized agents. New moricls for im-

morgans. Alien-Bennett Motor Co., I.td., sole Surres agents. Varlest delivery of all models; second-hnnd Morgans always in stock. We specinlize in these wonderiul machines; repairs executed by Morgan experts all spares in stock; ensh or extended payments. 9-11 Roral Tarade, Jondon Rd. W. Croydon. 'Phene, Croyiun 2450. 'Grams,
MORGANS. 1923 models for early delivery, your second-hand motorcycle taken as part payment; ehould extended maymont be renuired. your old machino treated as firsi pasment down, remainder in equnl monthly payments. Standard air-cooled 8 hp . 1. A. P. n 10 hp Blackburne enpine 10 hp Blackburne engine $\mathcal{E} 155$, de luxe water-cooled, $£ 158$, farnily watercooled \&l63. M.A.G. Water-cooled erngine f5 extrn, Anzani water-cooled

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MORGANS! Morgans!! Morgans!!! Jrumediate delivery from stock of Standard. Grand Prix, and De Mive medel
 St. Albans. delly zzz-215 MORGAN, 1923 Standard Popular, $E 128$ cash or $£ 2 G 10$ s deposil and

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MORGAN. Rey's, nuthorized azents for Morgan enrs; extended terms and cars exchanged. A. P. Res, डT8-384 Euston Rd. 'Plone, Museun
MORGANS. 1925 models actualls in stoch. Deferreal payments, ofe quarer down, balance 12 months. Below
MORGANS. As one of the inrgest agents for these cars, we five immediate deliveries, buph Below.
morgans. Mandes' Motor Mart, 100 Gt . Portlinal Sl. Tondon: 100 Paris St, Exeter: the Norwich Garage, Xorwich; alen Walsall Garnge,
MOREANS, all models, eash ir deferred lerms. J. Mebien and $559-616$
MORGAN, 192 dash black leather hood, for inmediate delivery tasy jayment ac

 | Morkan Service Depol, 243 Lower Clapton Ris., N.E. Phone. $\begin{array}{l}\text { Dalston } \\ 53508.621\end{array}$ |
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lighting; delerred terms 10 , $10 s$ cash, balance by small inomith in stalments. Order promplly for siring delivery. Write for finll minticulars to the New Carden Light Car Co., Litd., 22 Irsthe Rd, Willestion
N.W. 10 . Phone, Willeden 2297 . PALLADIUM. E:ncst Grimaldi. J.id, authmized agents. 1925 models

PALLADIUM Light Twelve Sinndard 2 and 4 -seater, 565 and 575 suineas: de luxe ${ }^{2}$ and 4 -seaters, 428 guineas; collpe and all-wealber models br quotatinn; 100 per cent. efficiency, London-Land"s Fnd London-Excter Trialsia 1 car entered, ${ }^{1}$ god medalithe 4-seater that is
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RHODE cars Sor immerliate delirery; exchanges or eafy payments ar-
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RHODE 9.5 hp . Mobes and Meles (Est, 1895), Tbe Original Lipht Car Specialists. Gule ristributors for South and llest of Engiand have pleasure in annuoneing that the Rhorle can entered for the Colmore Cup were evecessinh fecuring the Medale. They literally swept the board. All models on view. $\bar{A}^{\prime}$ in the pasi, fo in the fulure. Kep yur eye on thr Thade.

 RILEY, 1925. 2 and 4 -scalers, in slack, also Snoris moich, I495: exchanges or deferred paymeuti. Wesl-Enk agents, Pickworth and $59.56 \dot{3}$
107 Gt . Portland St., W. 1. Laugham 1998.

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ROVER carsi. All models in stock
ROVER 2 -seater, \&180; 4 seater, $£ 190$.
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ROVERS. Cash, easy payments or exchanges. S. G. Oummings, yover ROVER, 8hp, standard model, \&180; 8hp, 4 -seater model, £190; 8hp. Bros 200 Gt. Portland St., W.
 ROVER, $192 \overline{5}$ models for irracdrate delipery at the reduced pricos: 2-seater standard, brown finish, ${ }^{2} 180 ; 2$-seater model do luxc, any olcur, £200: 8hp 4-seater, standard brown finish, \& 190; 8hp 4-seate model de luxe, any colour £210 seli-starter on any model $£ 15$ extra as grse phyment. Demonstration car sent to sour nddress wilh pleasure Calnlogue post Iree on reauest, Allen-Bennett Motor Co, Lid., 9-17 zzz-741 ROVERS, 1923 models, immedinte delivery Motorcycles, cmmbinations aqual monthly payments. 2 -seater standard, brown fnish, ilisel 2 .

 Rover, 8 hp, 2 seater, ©180; 4 -seater, 190 . The North Wales Motor
Exchange, Wrexham. Phono 283. Can give immediate delivery. ROVER, $8 \mathrm{hp}, 1925$ models in stock; cash, exchnnge or delerred pay ments; motorcycles Laken ln part payment: frec inition; dinnomstrations
dails. Phone, IIornsey 2917 Joncs Garage, Broadway, Muswell Irill
N. 10 .
 ROVER, 8hp Fowler and ibrigden, authorized Rover agents, $1 \bar{j} 0$ Thaston
Rad., King's Cross. Muscum 4827. ROVER, 8 hp, All models in slock, Deterred parments Yruir old car Rover. fiodreys are authorized agents. fmmediate delivery of ash
1925 models. firadunl payments, exelhanges, fres tuition. 208 Gt.




 ROVER 8 carE. Cash or delerred payments. Write, F. (i. Smilh Motore
L.t.d. Migh Rd., Goolmayes Mhone, Jlloril 1082.

 ROVER, 8 hp, 4 -seater, e190, in stock; extended paymenls nuranged:
 ROVER 1925 cars, 8 hp, 2 -seater, $£ 180$ cash, or $\mathcal{E} 45$ down and 12 free thilion, prompt delivery molorcscles aken in mart parment. omriciaj
ngent. Eaglus nad Co, 275 High St. Acton, London. ROVEn 8 ling cars for immediate delivery, Stanclard 2 -seater, $\& 180$; lakion in part payment. Official Agents and Spare Part Stockists, Kay. ROVEn, 8hp, n!t 1925 models in stock for immoctiate delivery: 2 -seater




 ROVER, 8 hp, brand new, shop-soiled, complete in zlandn rad specifica-


 ROVER cars in slock, £210, £200, \&190, \&180 cash, or from discounts. and 12 payments of $£ 11163$. 3d, with optinn nt liberal
 ROVERS. Rey's, authorized agents for Rover cars; extended payments and cars exchanged. A. P. 1Res, $378-584$ Enston Rd. 'Ihone, Musenm
77596.486 ROVER, $192 \overline{5}$. All 8 hp models for immodiato delivery from stock: pricos from $x^{2180 ;}$ second-hand cars and motorcycles accented in part Hammersmith lid., W.6. 'Plone, Mammorsmith 1325. ROVER 19238 hp 2 -sonter standard model, In stock, $£ 180$; deferred mayments and demonstrations. Aatoveyors, Litd., Authorized Arents. 84
Victorin Sl., S.W. 1.
SALMSON. The Motor Markellng Co., distributors Lor Berkshire, ollor


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SALMSON. 1923. Y'ercy YI. Smalluone, Xutd., can suppls 2 -seater, with

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 SALMSON. Sulth ,nil Irunter, allhorized agents, Immediate delivery SALMSON, 1923, filted will, 4-senter body, all-wealher equipment.

 SINGERS, 1925
Singers. Wilkins, Simplsou nad Co
In sloch, imuediate delivers, latest models, jnst arrived, bolh 2 and 4.







 SINGER and Coventy-Premier cary in slock, from 230 guineas: best and Co., 275 Hiph st., Acton, London.

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 SINGERS Divivery from slock of latest 10hp 4 setter, price 280


 SINGEN, $1923,10 \mathrm{hp}, 2$ and 4 -scalers, in stock for immediate dollvers, 280 guiness; best posible allowince od second-hand asis or motorcycles
 SINGER, shon-soiled 10hp model in stock £275. Deferred nayments as

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age, Caterliam Valley, Surrey. STONELEIGH. Usifinl and reliable उ-seater runabout at e185 onlg, dyamo lighting, 反ilare wheel; no other car such value; mado by Arm-ztrong-Siddeley delerred payments or exchanges arranged. District
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STRAKER-SOUIRE, Lirnost Grimaldi, Ltd. futhorized agents, 1925

TALBOT. Snith and Ilunter authorized agents, can supply from stock
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Warwick Wright, Ltd
Solo liondon distributorà of Talhots
Before yon docich on a new car, cone and inspect tho wondorful littl run; your nid car or motoresole necepted in part exchange our hilre


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