

50 Cars in stock for

Authorised Agents for

AUSTIN, CLYNO. CITROEN. RHODE, SINGER, TROJAN.

15 Cars IINDER £200

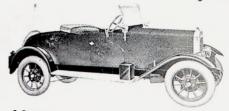
BY PAYING £25 DOWN

you can drive a car away, fully taxed and Balance insured. payable over 12, 18 or 24 months.

Sole London and Kent Distributors

Leyland Motors, Ltd. Price complete on solid tyres £125; on pneumatics £130. There on pneumatics £130. There is also a new 3-door, 4-s: aler model, the price of which, fitted with full pneumatic equipment, is £145; on solids £140.

One of the Fifty!



10°30 h.p. Rhode 2-seater

Two wide doors with the front seat adjustable bodily for reach, and also for angle to suit individual tastes. Large double dickey with ample accommodation. Fully compensating F.W.B. All-weather equipment opening with doors. Pneumatic seats. Overall length, 12 feet. Overall width. 5 feet 1 inch. Petrol consumption 40/45 m.p.g. Speed, 50/55. Oil negligible.

FREE SERVICE FOR SIX MONTHS. GOOD PRICES IN PART EXCHANGE

Deferred Payment Terms

Our "Service Guarantee" is unique. Write for particulars

RHODE DISTRIBUTORS for London and the Home Counties

OPEN UNTIL 6 P.M. ON SATURDAYS



489, OXFORD STREET, W.1.

TELEPHONE: GROSVENOR 3256-7.

92, Gloucester Road, S.W 7, and 7 & 8, Fairmeadow, Maidstone

Immediate ITROEN Price Reduction Buy your Citroën Now!

REATER value than ever at the reduced prices! The famous 11.4 h.p. REATER value than ever at the reduced prices: The famous 1771.p. models, as now being delivered from the British Citroen Works at Slough, unquestionably represent "Supreme Closed Car Value." The strength of the chassis, the beauty of the body, the quality of the finish, and the completeness of the equipment, place them beyond competition at the new prices. Arrange a trial run to-day.

ORDERS EXECUTED IN STRICT ROTATION.

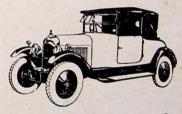
114 h.p. 3-SEATER COUPÉ. £190

11'4 h.p. SALOON, 4 Doors. £180

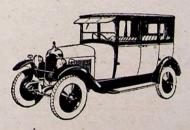
11.4 h.p. SALOON, 4 Doors, with F.W.B. £198

Send for the Citroën Book 18. CITROËN CARS, LTD.,

CITROEN BUILDING, HAMMERSMITH, LONDON, W.6 Showrooms: Devonshire House, Piecadilly, W.I.



11.4 h.p. 3-SEATER COUPE.



11.4 h.p. SALOON, 4 doors, F.W.B.

DELIVERY NOW FROM WORKS AT SLOUGH

BCM/M & C72

NEW Size for LIGHT Cars

Save YOURS from FIRE with the "JUNIOR" rene Fire Extinguisher

70 be stranded on the road with a burning car is an awful predicament for any motorist.
Light Cars run the risk quite as much as large
ones. To meet this danger, for LIGHT Car owners
we have now introduced the JUNIOR "Pyrene" Fire Extinguisher.

This new JUNIOR model is small, handy and instantly ready to put out a car fire. Like its elder brother, it works with any side up and at any angle. It is handsomely Nickel Plated and fits conveniently almost anywhere on the car.

Equip YOUR Light Car with a JUNIOR "Pyrene" Fire Extinguisher. Then you can put out a fire at once and drive on—just like the big car owners do with their standard size "Pyrene" Extinguishers.

EXTINGUISHER

FOR LIGHT CARS

Handsome Nickel-plated finish only. 35/-

"Pyrene" Fire Extinguisher. Standard size for big cars. Filled and complete. Polished Brass 55/- Nickel or Black Plated 60/-

GET ONE FROM YOUR GARAGE.

Write for Illustrated Folder "J.P."

THE PYRENE COMPANY, LTD., 9, Grosvenor Gardens, London, S.W.1

Telegrams: Pyrenextin, Sowest, London.

Junior Model.

Branches: SHEFFIELD, GLASGOW, BELFAST.

R GLIDEA The Smiling Motorist

Why do I smile? Because I never have any trouble with the OLD BUS. Just give the handle a twist and away she goes; ready for any run, whether 2 or 200 miles.

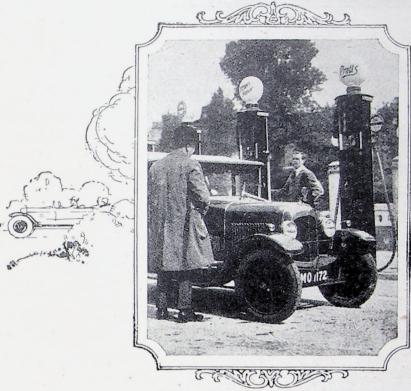
AND THE SECRET! Well, just USE NULSEC for your engine-there's a grade for every car and every season.

> FILL UP with NULSEC and GLIDEALONG!

> For full particulars apply to-The W. Blackwell Oil Co. Victoria Oil Works, ASTON. BIRMINGHAM.



TO THE READER.—By mentioning "The Light Car and Cyclecar" when replying to advertisements, the progress of the small car movement will be assisted.







The new Zenith Air Cleaner

Here is the latest Zenith product. The finest Air Cleaner on the market. Positively maranteed to remove all the harmful grit and dust which marmally helps to wear out the engine long before its time. By far the largest proportion of carbon consists of road dust. A Zenith Air Cleaner helps to prevent carbon deposit, thats for ever. No moving parts—nothing to wear out. Requires no attention—and does not restrict the air supply therefore it does not alter the carburetter setting. Full particulars contained in new Air Cleaner Booklet sent post free. In 3 sixes from 50% cach.

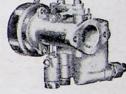
Zenith Carburetter Co., Ltd. 42 Newman St., London, W.1.

Would you pay 6d. per gallon above market price?

F course you wouldn't—what a stupid question, you say. But supposing your car would do another ten miles to the gallon if fitted with a Zenith Carburetter. Wouldn't that be the same as paying a higher price for your petrol?

We know that a Zenith will save you money. And we want to prove it to you. Here's our offer—order any Zenith Carburetter and try it out systematically and critically over a period of several weeks. Test it for its economy and its wonderful flow of power—its terrific acceleration and its silken smoothness. And if you are not satisfied that it is in every way far superior to your present carburetter send it back to us at any time within 30 days and your money will be refunded in full. A line to us to-day—mentioning year and h.p. of car—will bring full particulars of all the special Zenith Carburetters we make.





For your Clyno

We can supply a special Zenith Carburetter which bolts directly to the existing inlet pipe of your Clyno engine. A new control rod and a petrol pipe are supplied ready for immediate attachment. We guarantee all Clyno owners decreased petrol consumption with a much greater power for hill climbing and smoother running. Money refunded if this carburetter does not do all that we claim for it.



Zenith Petrol Filter

A tiny piece of grit in the jet of your carburetter will stop your engine. Avoid annoying dalays and carburetter trouble by fitting a Zenith Filter. Never clogs and outlasts any engine. Once fitted requires absolutely no attention. Employs new principle of edgewise filtration. Fits all cara and carburetters. Price

Postage 6d. extra. Postage & extra

Carburetters - Petrol Filters - Air Cleaners

TO THE TOTAL

ou get more than a good car at the right price if you buy at

Taylor "Service" is Free

with every new car sold—it is a very real and valuable service and far too comprehensive to be dealt with here. Our 44 page "Buyers' Guide" tells you all about our Free Service. May we send you a copy?

ALL MAKES SUPPLIED for CASH-EXCHANGE or by PAYMENTS from 1 to 24 Months.

Amongst the range we handle the following give excellent and economical results:-

JOWETT from £139 to £185 AUSTIN from £145 to £650 ROVER from £220 to £625 MORGAN from £89 to £134

May we send you an Illustrated Catalogue describing the car which interests you particularly?

To ensure satisfaction Taylors supply Second-hand Cars upon 7 days' Trial.

THIS WEEK'S SECOND-HAND SNIPS.

HOURS OF BUSINESS:—
Saturdays 9 a.m. to 1 p.m. All other days 9 a.m. to 7 p.m.

H. TAYLOR & Co., Ltd.
49, 50, 52 & 53, SUSSEX PLACE, SOUTH KENSINGTON, S.W.7.

Phone: Kensington 8050/9 and 6540.

Orama: "Dynametro, Bouthkeps."

ELEPHANT SERVICE

Always insist on ELEPHANT replacements.

PARTS IN STOCK FOR

A-C. AUTOCRAT, CALTHORPE, CALCOTT, CASTLE 3, ENFIELD, ERIC CAMPBELL, HAMMOND, HORSTMAN, LAGONDA, MARSEAL, MERCURY, METEORITE, SINGER, STELLITE, SWIFT, WARRENLAMBERT, DUPLEX, LITTLE GREG, etc.. etc.

WE ARE ACTUAL MANUFACTURERS.

BELSIZE-BRADSHAW SERVICE

Sole Makers of all parts for these cars. Send for Instruction and Improvement Book - 2/6

DEEMSTER SERVICE

All parts for all models with improvements at lower prices than Deemster official prices.

WORM WHEEL SERVICE

All makes from stock in special Phosphor-Bronze. Special Worm Wheels made in three days.

Gear Cutters, Machinists, Founders & Engineers.

Elephant Motors Ltd.

ELEPHANT HOUSE,

97-101, Newington Causeway, London, S.E.1.

'Grams-"Multimart, Sedist, London." *Phone-Hop 7076-7-8.



Anyone can erect a Thornber Garage.

All the work is done for you. Sections are sent fully framed and complete. No loose timber. You bolt section to section. The holes are bored, the bolts are supplied. The job can be finished in one afternoon. Built to last and to please. EVERY GARAGE COMPLETELY ERECTED BEFORE DESPATCHED IN SECTIONS. THIS ENSURES PERFECTION.

A Thornber Garage Saves you Pounds.

You save on first cost, because Thornbers' modern machinery cuts out expensive hand labour. You get a better garage for your money. It repays cost within 9 months. You have no additional expense—all fittings are supplied.

Cliding-out-of-way doors that move at a child's push, occupy no room and obviate hinged door weakness. Free Fire Insurance Policy. Free plans for submitting to Council. Sizes for all popular makes of cars. Deferred Terms arranged. Quick Deliveries. Garages can be inspected at works.

SEND FOR FREE FOLDER AND STATE REQUIREMENTS.

9, MYTHOLMROYD, YORKS.

London Office : 47, Victoria Bireet, S.W.1 (where models may be inspected).

We appreciate this man's "horse-sense."

He knew that to own a car means making the most of—and thoroughly enjoying—life, but

WITH THE SERVICE CO.'s "NO DEPOSIT" & GENEROUS "DEFERRED PAYMENT" SCHEMES THERE IS NO NEED TO WAIT FOR A WIN!



A car now is within the means of almost every man. Surely proof of this—and of the popularity of motoring generally—was the astounding number of cars "parked" on Epsom Downs last week.

Here are the three main Service Co. schemes for supplying that new car.

Austin "7" Touring Model £145 Austin "7" Saloon £165

NO DEPOSIT SCHEME.

Under this scheme you pay for a car in 12 equal monthly instalments and you "drive away" on the payment of your first instalment.

DEFERRED PAYMENT SCHEME

With this scheme you (within reasonable limits) make your own terms. Immediate delivery can be given on the payment of a fifth of the total cost (tax and insurance may be included) and the balance may be extended over periods of 12, 18 or 24 months.

"PART EXCHANGE" SCHEME.

If you have a car and want to change, then this scheme will help you. We make the most generous allowance for your old car and, if you desire, the balance may be paid off monthly.

Rover "9" 2-Seater £220 Rover "9" 4-Seater £225

WHY not write for full details? Or come along to our showrooms in High Holborn and inspect our wide range of cars. There you can marvel at (or criticise) all the leading makes of Light Cars including AUSTIN, CITROEN, CLYNO, JOWETT, PEUGEOT, ROVER, SINGER, SWIFT, and have a "run out" on any make you desire. You will be under no obligation to purchase.

Our Service before and after sale ensures you of trouble-free motoring.

" Service— Our Name and aim."



Telcphone: Holborn 0666 (3 lines).

273-274, HIGH HOLBORN, LONDON, W.C.1

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Brakes

Constructed at the famous works Messrs. Chenard &

Walcker, Paris, and designed and successfully raced by M. Senechal, the 8h.p. Senechal represents the ideal in fast Sports Cars. High speed PART EXCHANGES. combined with hill climbing and acceleration

Complete

Write to-day for particulars to Sole Concessionaires:

THE AUTOMOBILE SERVICE CO., LTD., 166, Great Portland Street, London, W.1.

Telephone: Museum 6626.

DELIVERY FROM STOCK DEFERRED PAYMENTS.

are assured to the Senechal owner, high average road speeds being a feature of this car.

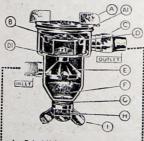
With 2 or 3-seater Sports Body.

Accel. 59 x 100 mm. bore and stroke, 1094 c.c. water-cooled, O.H.V., Solex Carburettor, mechanical lubrication, 3 speeds and reverse. Springing: front, transverse, rear, double independent hand brake, 5 detachable Rudge wheels, complete equipment, including hood. Abridged Specification:

Without change down. Always fill up with

D.A.887

cause 90% of Carburetter Troubles



- Petrol-tight detachable cover. Petrol-tight washer. Spring holding detachable gauze-cylinder to seating. Solderless union.

- D. Twin double fine mesh filtering gauses.
 D1. Twin double fine mesh filtering gauses.
 E. Inverted cone to trap foreign methods.
 P. Bump for dirt, water, etc.
 G. Fetro-tight washer.
 H. Security chain to detachable thumb-serew.
 I. Detachable thumb-serew for ampleting support

and a good deal of serious engine trouble. You provide against these annoyances and ensure sweeter running by fitting a

BLACKMAN PETROL ILTER

Twin filtering gauzes separate all impurities from the spirit, and filtration being on the upward principle clogging of the gauzes is avoided. Easily and quickly fitted by means of solderless unions. From all Garages.

Price

EAT EASTERN LONDON, E.C.2.

126, George Street, EDINBURGH, and Branches

Idle thoughts

You can buy other cars at a little more money than a Jowett. They appear to offer better value. But do they?

You can buy cars which *claim* to be more economical to run than we can *prove* the Jowett to be. But they are *not!*

Read our running costs and folder—and remember we were the first, and for years the only firm, to publish such figures. We may be still the only firm. Such is our confidence in our car.

You rarely see more than one or two Jowetts advertised for sale in the second-hand columns of the Press.

This is because a man buys a Jowett and keeps it. He knows a good thing. If he does decide to sell, there is no need to advertise. It sells itself.

The second-hand price of a Jowett is quite 20% more than other cars of similar first cost and equivalent age.

The Jowett saves your money every time. Decide on a Jowett now.

Short two, £139. Long two, £150. Chummy, £145. Full four, £150. Saloon, £185.

Dunlop Balloons and Stewart Speedometers standard.

JOWETT CARS LTD., IDLE, BRADFORD

For the Cellulose or Varnished Surface —

'CHEMICO' Car Polish

produces astonishing results that last, especially on **NEW** Cellulose paint. Chemico Car Polish when applied removes grease, smears and

WRITE
for a FREE
TEST Sample
of these
3 Polishes.

stains, mud and new tar spots, and at the same time speedily produces a brilliant polish that hardens varnish and further strengthens Cellulose surfaces. Chemico Car Polish is easy to apply, speedy and the most economical of all car

polishes.

Prices 2/-, 3/9 and 7/- per bottle.

On Cellulose Surfaces a more brilliant polish

still can be speedily obtained by these new "CHEMICO" Products — Chemico Cellulose Cleanser and Polish and Chemico Wax Polish. Both these Polishes are rapidly being adopted by the leading Car Manufacturers and coachbuilders, after many comparative tests against other polishes.

polishes. Price of Cleanser and Wax, 3/6 per tin.



Sole Manufacturers:—
THE COUNTY CHEMICAL CO., LTD.,
CHEMICO WORKS - BIRMINGHAM.

your springs, when fitted with Quick Fit Gaiters, are able to function correctly owing to the complete enclosure of the spring which keeps grease or oil in, dirt and water out-

Quick Fit you will eventually fit.



W. DICKINS & Co., LTD. CROSS CHEAPING, COVENTRY



THE PERFECT UPPER CYLINDER LUBRICANT.

PUT IT IN YOUR FUEL.

Write for Explanatory
Book Free.

WE GUARANTEE

ABSOLUTE LUBRICATION
OF THE CYLINDER WALLS
AND ALL UPPER WORKING
PARTS.

LONGER LIFE OF ENGINE. CURES KNOCKING. MORE POWER, SPEED AND PICK-UP.

EASY STARTING.
INCREASED MILEAGE.
CARBON DEPOSIT
REDUCED TO A MINIMUM.

NO GUMMING UP. NO SEIZE UP.

4 oz. Tin 1/-. Postage 2d. extra.
Flat oval shape for tool bag.
8 oz. Tin 1/9. Postage 3d. extra.
16 oz. Tin 3/3. Postage free.
32 oz. 6/-. Postage free.
A 32 oz. Tin treats 64 gallons of Fuel.

Directions: Pour half an ounce into each gallon of petrol or other Fuel. There is a half-ounce measure on each tin. No stirring or mixing required.

THE MIXTROL
43. BERNERS STREET

OIL CO., LONDON, W.1. Telegrams—"Olmizirol, Wesdo."

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FOR EVERY ENGINE

SERVICE STOCK

DOUBLE A RIBBED

SPARK PLUGS

THERE is a correctly designed dependable Champion Sparking Plug for every engine. Your dealer will gladly explain to you which particular Champion you should use to secure the very best engine performance—maximum power, speed, and acceleration plus greater fuel economy.

CHAMPION

Sparking Plugs

No. 8-Metric Standard

Price 4/6

83, PALL MALL,

CHAMPION

LONDON, S.W.

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Special Features of this week's issue

* NEXT WEEK!

HOW TO GET THE BEST OUT OF AN AUSTIN SEVEN.

An Article of Particular Interest and Value to all Owners of this Popular Car.

THE NEW FORD.

Henry Ford's own Statement re the Introduction of New Model.

BROOKLANDS ALVIS MEETING.

And all the News.

Tues., June 7th.

WHITSUN SPORTING EVENTS.

Brooklands Whit-Monday Meeting. London-Edinburgh Run. Southport 100 Mile Sand Race.

INDIANAPOLIS 500 MILE RACE.

Special Report by Wireless.

WHERE TO SEE THE TOTAL ECLIPSE. Map and Special Photographs.

SURPRISING CAR EXPERIENCES.

What the Pressman Has to Put Up With when Testing Cars.

ROAD DANGER SPOTS.

Danger Zones which should be Charted by all Drivers.

A HINT ON COUNTRY DRIVING.

How the Expert Town Driver is Often Regarded by Country Folk.

ROAD TESTS of the 15-40 h.p. Arrol-Johnston Saloon and the new 30 h.p. Eight-cylinder Sunbeam Tourer.

SAFETY WHEN BRAKING AND CORNERING.

The Principle of Differential Braking Explained. Is it Worth While?

EFFORTS TO COMBAT POLICE PERSECUTION.

A New Motorists' Defence Association Formed.

GREAT GARDENS OF ENGLAND.

List of Gardens Open during June.

the property of the special party of

EVERY TUESDAY 4^{D.}

> Offices: 7-15, Rosebery Ave., London, E.C.1.

FOR BEST SERVICE

VALUE.

ACCESSORIES THAT CONCERN THE MOD



FOR THE LIGHT CAR.

Through dash fitting. Nicely made and finished. Gives a very uncommon and penetrating note. Past 6d. Free

THE STADIUM 7 h.p. Austin Gear Extension.

......

Wonderful Offer! Oil Filler and Filter for Austin 7 Cars.

Avoid all that waste of oil, easily filtered in a few minutes

Price 6/6

Carriage paid.

This extension clos on the existir enables all forward gear changes to be made without having to lean so far forward, which greatly adds to the comfort of driving. Post free.

CARS ON EASY TERMS. NO DEPOSIT. DELIVERY ON FIRST MONTHLY PAYMENT

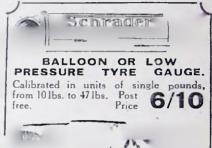


EASYFIT LUGGAGE GRIDS.

Easyfit" Racks chould be fitted to every car. Are efficient luggage rack which also provides an excellent rear buffer and 20/saves damage to car.

To fit 7 h.p. Austin Cars.
For Morris Cowley, 25/-. Other Models from 35/-

.......



CAR DUST COVERS

Strong, practical, and well made.

12 x 9 .. 12/6 15 x 12 .. 20/-

18 x 12 .. 24/-18 x 15 .. 30/-

SPECIAL OFFER. **CLEANING CLOTHS**

Nice and soft, yet of good wearing qualities. Far superior to Mutton Cloth or Cotton Waste. Made up into 50 and 25-yard Rolls.

25-yard Roll, 2/9

50-yard Roll, 5/-

Write for the Gamage Catalogue

A NEW RANGE LIGHT **OF** CAR **MASCOTS**

These are all modelled in Bronze and Silver Plated, the average height is 34°, they are beautifully finished and greatly add to the appearance of any 5/6 car. Post 3d. Price

PETROL CLEANING ! BRUSH.

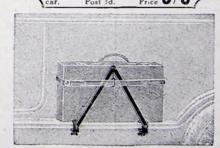
Quick'y and safely Quick'y and sately removes dirt and grease from soiled clothes, car uphol-sery, etc. Simply fill it with petrol, and brush the arti-cle to be cleoned. Price, complete with 4-pint tin of cleaning spirit. 10/-

"BOYCE" MOTOR

METER.

SPECIAL OFFER! CAR WASHING PUMPS.

Fitted with Nozzle to give either a jet or spray. The ideal way of washing down Motor Cars, but can also be used for washing down Yards, spraying Fruit Irees, etc. It is practical and efficient. Saves Time and Labour. Price



This Solves the Luggage Problem. LUGGAGE CARRIERS.

Here's the ideal Luggage Carrier for the Car. Clamps on to footboard so that suit-case or parcels can be strapped to it. Well and strongly made. Price

SPECIAL VALUE!

OIL DRUM PUMPS.

Do away with the chance of getting smothered in oil. Well made and strong at a price within reach of all. To fit 5 gallon drums.

Special Offer. Price

Carriage extra. A.W. GAMAGE, Ltd., HOLBORN, LONDON, E.C.1 CITY BRANCH: 107, CHEAPSIDE, LONDON, E.C.2

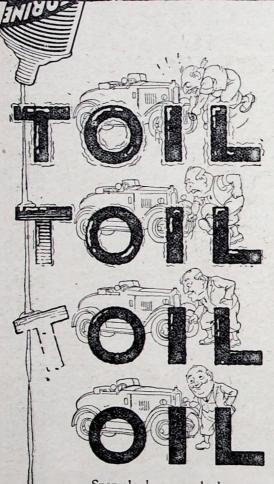
> WHEN REPLYING to advertisements, mention "The Light Car and Cyclecar." It helps the advertiser and you, and assists the small car movement generally.

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THE T TOIL OUT OF



Snap ah ah, snap-ah-ah, snapah-ah. Cranking wastes time and elbow grease; sitting with your finger on the starter wastes battery juice. The kind of oil you use can help or hinder. Use the right grade of Motorine and you get oil as near perfect as possible in this imperfect world. The merits of "fatty oils" plus "hydro-The merits of "fatty oils" plus "hydro-carbons" are simply explained in a book we have written called "The Car." (And a companion volume "The Motor Cycle"). They are yours for the asking from Price's, The Oil People, (Dept. EE9) London, S.W.11.

And the benefit of free advice from Price's Technical Bureau is always to be had. We revel in unravelling knotty oil problems. That's our job.

very special oil

Price's Patent Candle Company Limited, London, S.W. 11

A12



Have you got it?

Have you got that enviable confidence in your brakes that you can sit back at the wheel and really enjoy your motoring, free from worry in all hazardous situations, in busy or awkward traffic, at cross-roads, and on steep hills?

Thousands of motorists have this confidence, which is engendered by the use of Chekko-the only Brake Lining that is guaranteed never to fail through weakness caused by scorching or burn-out. No cotton or anything inflammable is mixed with the astestos used in Chekkohence the guarantee.

For your own safety—and as Chekko lasts longest -for your own pocket also-insist on Chekko, from your garage, from any of your stockists, or direct from-

CRESSWELL'S ASBESTOS CO., LTD.

WELLINGTON MILLS. BRADFORD.

'Phone: 950 Bradford. 'Grams: CHEKKO, Bradford.

London Stores: 27, Percy Street, Totteniam Court Bond, W.1.

Bizmigsham Address: Empire House, Great Charles Street.

Manchester Stockists: Manchester Machinists Co., Ltd., 30, Queen Street,
Deansgate. 'Phone: 3820 Centric.

Liverpool Stockists: Leo Swain & Co., Ltd., 10, Colquitt Street.

Stockist for Seotland: Andrew R. Findlary, 17, Robertson Street, Glasgow.

Stockist for Ireland: E. W. Gwynne & Co., 18, Cromac Street, Belfast.

A NIPPY

30/-

AUSTIN 7

A BODELO BRAKE ATTACHMENT fitted to your Austin 7 will make driving in traffic much easier. You will be able to pull up or get away much quicker and it will leave you a free hand for signalling.

THE BODELO BRAKE ATTACH-MENT enables all four brakes to be worked by the foot pedal only, but at the same time does not interfere with the operating of the front brakes by means of the hand lever.

The BODELO ATTACHMENT can be fitted in a few minutes.

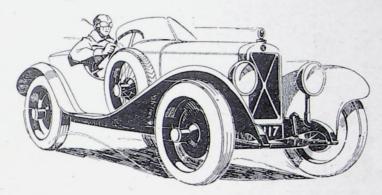
Let us send you our illustrated leastet giving full instructions.

LLOYD & DEELEY. 177, BROAD STREET, BIRMINGHAM.

Wholesale Stockists BROWN BROTHERS, LIMITED. London and Branchos.

READERS, NOTE.—It assists the small car movement and the advertiser, and ensures you prompt attention, to mention "The Light Car and Cyclecar" in your enquiries.

We Quite Realise



that everyone does not necessarily demand 60 m.p.h. from a car, and it is not only because the SALMSON Sports Skiff is easily capable of that speed that we say it is the car for the Sportsman. Combine with that "mile a minute," acceleration that is almost incredible in so small an engine, reliability, comfort and attractive lines—and it is obvious that you need look no further.

And all you need pay is

£44

followed by monthly payments of £8/3/0

SOLE CONCESSIONNAIRES FOR UNITED KINGDOM AND BRITISH DOMINIONS:

S.M.S. Ltd., Church Wharf, Chiswick Mall, W.4

'Phone—CHISWICK 3531

London Distributors: GORDON WATNEY & CO., LTD., 31, BROOK ST., W.1.

"I am extremely satisfied with its performance. I am using a 70 main jet which gives really good acceleration even from cold, a speed of close on 50 m.p.h. with correspondingly good performance on hills. Petrol consumption is just over 40 m.p.g."

Model "K" illustrated fits the following:—

ROVER 9 FIAT 9
SINGER 8 AMILCAR
SINGER 10 WOLSELEY
LEA-FRANCIS

It Costs £3 - 10 - 0 only.

Compare the
IMPROVED ACCELERATION
BETTER PERFORMANCE
GREATER ECONOMY

Hundreds of your fellow motorists have proved our Claims to their satisfaction.

Why not try one on YOUR Singer?

BROWN & BARLOW, LTD., Carburet Works, Witton, Birmingham.

London Service Agents: Dartford Eng. & Carriage Co., Ltd. 23/24, Hythe Road, Willesden, N.W.10.

THE "RIPPINGILLE" PETROMETER

An instrument which accurately records the amount of fuel used

by any internal combustion engine.

Guaranteed accuracy is within 2 per cent. either way. Records up to 10,000 gallons by 1-40th of a gallon and then repeats,

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PRICES:-

Type B, for use with Motor Cars \\ \begin{pmatrix} £3 & 10 & 0 & \text{Nickel-plated Finish.} \\ £3 & 7 & 6 & \text{Brass or Black Finish.} \end{pmatrix}

Send for illustrated Leastet.

ROTHERHAM & SONS, LTD., COVENTRY.

Phone: 4154.

Grams: "Rotherhams, Coventry."



TOMORROW
YOU MAY NEED IT
WHY NOT GET IT NOW?
FLUXITE
simplifies soldering

FLUXITE SOLDERING 7/6

All Hardware and Fronmoneery Stores sc. 1 FLU in tins, price 8d., 1/4 and 2/8. Another use for Fluxite—Hardening Tools and Case Hardening Ask for leadet on improved methods. Pluxite Ltd. (Dept. 420), Rotherhithe, S.E. 9

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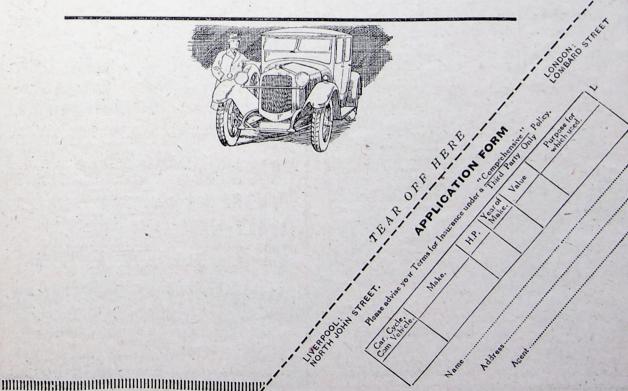


£35,790,927

OWN CHOICE OF REPAIRER

In addition to the unrestricted choice of Repairer, Private Car Policyholders in the "Royal" may give IMMEDIATE instructions for the carrying out of repairs rendered necessary by accident. Every effort is made by the Company to reduce to a minimum the inconvenience incidental to a car being out of commission.

IT IS NOT WHAT YOU PAY THAT COUNTS, BUT WHAT YOU GET FOR WHAT YOU PAY



MENTION of "The Light Car and Cyclecar" when corresponding with advertisers assists the cause of economical motoring.

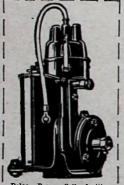
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Better Bettery battery with Delco-Remy Coil Ignition

The Delco-Remy Coil Ignition System produces immediately a full, intense spark at the plugs instead of taking all the current necessary to race the engine to a point where an adequate spark is obtainable. With Delco-Remy Coil Ignition the spark is not dependent upon engine speeds and gives an instant spark always. In addition, with Delco-Remy Coil Ignition there is practically no danger of overcharging the battery when the car is running as the supply is kept constant by the Ignition.

SEND FOR BOOKLET—
"Specifications DO Count." FREE on request.

DELCO - REMY & HYATT, LTD., 111, Grosvenor Road, S.W.1.



Delco - Remy Coil Ignition Magneto Replacement. Easily fitted. Suitable for many Light Cars. Prices from 23-15-0 to 25-10-0. Postage 1/0 Wiring and switch, 12/6 extra-

26,000 MILES on STEPNEY TYRES AND STILL RUNNING

Dear Sirs, Llanelly, 2nd April, 1927.

You may be interested to have the record of the five Stepney Balloons I bought for my 116 Standard when I converted from high pressure tyres.

My agents, Clifford Davies & Co., Lloyd Street Garage, fitted them in July, 1924, and up to date they have run over 26,000 miles, mostly on the so-called roads in this district. I have

had a few punctures recently, owing to picking up nails and the tread being rather thin, but I am sure they will clear the 30,000 mark easily.

I have just replaced two tubes which had deteriorated through rusty rims, otherwise they have never caused me a moment's anxiety. Yours truly,

(Sgd.) T R.D.

BUY "STEPNEYS" NEXT.

Two British Grippers. STEPNEY TYRES, LM., LLANELLY and WALTHAMSTOW, LONDON, E.17



TO THE READER.—By mentioning "The Light Car and Cyclecar" when replying to advertisements, the progress of the small car movement will be assisted.



TOURIST TROPHY NUMBERS

1st Special

Next Week, June 15th.

This issue will contain the first illustrated descriptive report of the JUNIOR RACE, complete and accurate as are all "Motor Cycling's" reports. It will also give the latest news regarding the LIGHTWEIGHT and SENIOR RACES.

2nd Special

Wednesday, June 22nd.

First out as usual with a complete report of the LIGHTWEIGHT and SENIOR RACES.

This will be profusely illustrated with exclusive photographs, and will tell the story of these events vividly and authoritatively.

ISSUES
3D.
EACH.

OFFICES: 5-15, ROSEBERY AVENUE, LONDON, E.C.1. 18

35

LET YOUR CAR HAVE THE BEST OIL

"In Speedolene Oil we discovered an ideal solution of our difficulties. Not only were its non-gumming properties, even in an unheated motor house with the temperature at or below freezing-point, really remarkable, but the consumption was very much better than it had been with an oil previously used."

-THE AUTOCAR, April 1st, 1927.

Some oils are good for easy starting, some are good for fast running, but

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OF OILS gives universal satisfaction

SILVERTOWN LUBRICANTS LTD., Minoco Wharf, London, E.16.

Let "THE MOTOR MANUAL" teach you all about your car!

"The Motor Manual" omits no item of information likely to be of interest or service to the motor vehicle user, It deals fully and clearly with engine types, construction and operation, valves, etc.—carburation, cooling, and silencing—transmission system, from clutch to final

drive—braking systems—ignition, starting, lighting—badywork and equipment, wheels, tyres, accessories—choosing, housing and maintaining a car—repairs and renewals—touring—legal matters, etc., etc., It also gives at length much practical motoring data and information.

2/6 NET Of all booksellers and bookstalls, or 2/10 post free from publishers.

Temple Press Ltd., 7-15, Rosebery Avenue, London, E.C.1. Wholesale Agents: E. J. Larby, Ltd., 30, Paternoster Row, E.C.4.

A "1927" MORGAN

and a square deal at

STANDARD model now fitted with double windscreen, black leather cloth hood, electric horn and celluloid covered steering wheel.

DE LUXE FAMILY and AERO Models now 3" wider and longer; 7" front wheel brakes now standard.

Repairs and Overhauls by Morgan experts.

CURRENT PRICES!

HOMACS

DEFERRED TERMS ARRANGED.

TRADE SUPPLIED

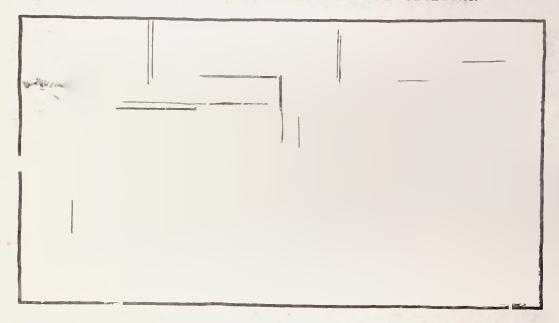
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243/7, LOWER CLAPTON ROAD.

Works: 46, LONDON ROAD, CLAPTON - E.5.

WRITE FOR CATALOGUE.

WHEN REPLYING to advertisements, mention "The Links C.



Lift if the easy Enots way

Hydraulic power instead of perspiration

HE key to the amazing ease with which the Enots Jack lifts any car is in the word "Hydraulic." This jack relies on no chains, cogs or back-breaking effort on the part of the user. If you have never used a hydraulic jack, you will be astounded at the ease with which it operates. Using only one hand you can lift a chassis weighing two tons in ten seconds, and you stand right away from the wheels the whole time. You hardly bend your back, you run no risk of smashed fingers. There is only one thing more remarkable than the easy way the Enots Jack lifts a car and that is its automatic lowering when the job is done. Just slip the end of the rod on to the lowering valve peg, give a half turn and the car comes gently down. The Enots Jack weighs only 62 lbs., it will go into any tool box. Price only 50/-, including 2-piece handle where desired for easy stowage. This is the best jack value obtainable.

This is the lowering value. It enables the car to belowered a utomatically

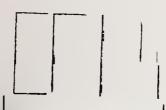


From your dealer or from

BENTON & STONE LTD.. C. Dept., ENOTS WORKS.

London Office: Devon House, 173, Great Portland Street, W.1.

58



Aero" valve springs and speed history

/ITH"Aero" aiding V speeds have crept up from the once astonishing "mile a minute" to 3½ miles per minute.

"Aero" is everything that is best, from 70 years' specialization in spring making.

We know that the finest engine in the world cannot be fully efficient if its valve springs do not act for long periods at high speeds with accuracy of action.

Thus we recommend "Aero" for all engines where high speeds and long life are desired.

List free.

Make your cycle or mo!or - cycle luxu-rious-fit a "Terry" saddle.

The "Terry 4 - ribbed hose clip gives a perfect seal.

Of high grade quality they give good service.

If unable to buy locally order from us.

3/- buys a set
of Terry's
"AVECTA" tool clips for keeping the garage tidy.



Use "Terry" washers to keep all nuts



ent handling of the car in the garage you you should have "Terry"

For the effici-

lifters, and tyre valve levers-all are high grade quality. List post free.

Order from your agent. In difficulty write us.

HERBERT TERRY & SONS, LTD., Monftrs., REDDITCH, ENG. Estab. 1855



Try "Deansgate"

The Coventry Victor Seven.

With the Vibrationless Twin-opposed Balanced Engine.

Prices from 95 Gns

Tax only £4. Speed and Comfort. Family and Sporting Models supplied.

The Finest Specification, including:-

Pressed Steel Chassis, Car Type Starting and Steering, Water-cooled, Dunlop 27" × 4" Cord Balloon Tyres, and fully equipped.

These Cars represent the last word in Economical and Reliable Motoring.

Sole Sales and Service Agents for Lancashire and Cheshire:

The Deansgate Motor Co., Dernsgate House, MANCHESTER.

SUB-AGENCIES ARRANGED.

Manufacturers:

The Coventry Victor Motor Co., Ltd., Coventry.



A Guide Safe and Efficient Driving.

Obtainable from all principal book:ellers and bookstalls, or direct from the publishers 2/9 post free.

NINTH **EDITION**

NET.

TEMPLE PRESS LTD.

5-15, Rosebery Ave., London, E.C.I. Wholesale Agents: E. J. Laiby, Ltd., 30, Palernoster Row, E.C.4. The instructions are carefully graded, so that the learner progresses step by step in the art of driving.

Several chapters are devoted to the attainment of "road sense" and how to deal with the numerous road problems which demand quick decision and correct judgment.

Driving for avoiding waste and undue wear and tear of the car is also dealt with.

with the Jewels of Experience



BATTERIES for LIGHTING & STARTING

36 years of constant endeavour, of continual research in the laboratory, of tests in the works, and on the road, are all embodied in the present C.A.V. Batteries. The years that are past are studded with various improvements that this experience has revealed. The discerning motorist will realise what this means from his experience, not only of motoring, but of life generally, and knows that extravagant advertising and misleading statements as to capacity are not a satisfactory substitute.

We honestly believe that in the latest C.A.V. production, the multiplate battery with THREADED RUBBER INSULATION in our ALL-MOULDED container, we have achieved not perfection but something definitely better than has ever been offered to the motoring

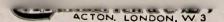
Write, 'phone, or call for Publication No. 485/L which describes, with illustrations, the complete range of C.A.V. Batteries. There's a size and capacity for every car—whether British, American, French, or Italian.

Motor Car Electrical Equipment Manufacturers by Appointment to H.M. THE KING.

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ARE YOU INTERESTED?

Our Radio Department will be pleased to send you particulars of our Wireless Receiving Sets, Accumulators, &c. Illustrated List application.



Telephone: Chiawick 3801 (Private Branch Exchange)
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The powerful service organisation behind

Battery is known by this sign. SALES & SERVICE DEPOTS AT-

Belfast, Birmingham, Bristol, Coventry, Dublin, Glasgow, Leeds, Manchester and Newcastle,

For Care-Free Motoring

PREPARE for TOURING

will make your motoring safer, whether touring or otherwise. Congested roads and garages make this fitment a necessity and may save you many pounds worth of damage For a small sum you can have protection front and rear. The Adjustable Bumpers illustrated are exceptionally strong, of spring steel throughout heavily nickel-plated front bars, black fittings. No drilling.

From 50/- complete.

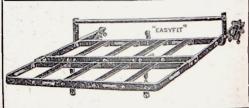
Rigid type for other cars ... from 30/-Front or Rear.

EASYFIT" LUGGAGE RACKS

Over 50,000 sold. Better value unobtainable. For Austin and Jowett, 20/-From 25/-Singer Junior, 30/-

Write for List.

Frank Ashby & Sons, Ltd. Stirchley. Birmingham



The Gaiter with the Wick Tube and the One-Hand Oil Gun.



Jeavens have no equal. Through all weathers they automatically keep the aprings well oiled and clean—free from mud, dust and rute. Perfect spring action is assured and riding comfort is increased.

Prices for Sets complete with Oil Gun:

MOTOR RUGS

All pure wool; fringed, reversible and made in a large variety of beautiful designs and rich colourings. Really wonderful value. Satisfaction guaranteed or money returned.

Size 58" x 72" Better qualities at 42/6 and 88/-

DRIVER'S CUSHION

As above, but in black leather cloth, piped and buttoned; a really smart cushion. Price ... 6/8

Special quality cuchion in Blue Rexine, will appeal to Morris-Cowley Owners. Price ... 8/6

MOTOR CUSHNONS

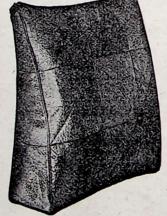
Well made in coloured waterproof leather with leather carrying handle. Size 18" x 18". Price... 6/8 Cushions made to special sizes at a slight extra cost.

DUST SHEETS

Made from special close weave fabric of fine quality which dust cannot penetrate. Yet they are strong and hard wearing. Two qualities are available, white and blue. The blue does not show dust so soon. Size 15 x 12 ft.

In White . .. 35/6 In Blue 42/-

Other sizes at proportionate cost.



If your Garage cannot supply you send direct (cash with order). Write to Dept. L for New Summer Catalogue of Accessories.

STATION WORKS -

RAMSDENS (HALIFAX) LIMITED London Office and Service Depot: 147/8, GT. PORTLAND STREET, W.1.



DAYS FREE TRIAL,

YOUR OPPORTUNITY OF PROVING

You can test the "Solex" Carburettor on your car at our expense for 30 days FREE. This is a genuine offer to enable you to prove that "Solex" will save you pounds in a season in reduced petrol consumption and give better running too.

Order from your local garage or write Dept. L.C. to-day, sending particulars of your engine, no matter what type it is. There is no obligation to purchase and no charge for renovation.

READ WHAT "SOLEX" USERS SAY:

MORRIS—"200 miles at 35/36 miles per gallon." CLYNO—"Between 37 and 41 miles per gallon on short runs." RENAULT—"Consumption is 40 m.p.g. for 8/3 h.p. 10 h.p. LEA-FRANCIS—"More than pleased; 50 m.p.g. on long runs, 37 m.p.g. on short runs and town work." 9 h.p. ROVER—"Doing about 45 to the gallon. Engine a pleasure to drive."

THE NO-TROUBLE CARBURETTOR

Director CORDON RICHARDS.

SOLEX WORKS, 223-231, MARYLEBONE ROAD, LONDON, N.W.1. Telephones: PaddIngton 8621, 8623, 8624, 8625, 8626. Telegrams: "Bolescarb, Baker, London."

FIT SOLEX-AND NOTE THE DIFFERENCE

TEMPERATOR

every motorist owes his car THE BABY Knock-Out FIRE EXTINGUISHER

No car is properly equipped without a "Knock-Out" Temperator Security-Reliability Indicates the temperature of the water in the circulating system. Warns the driver against overheating Easy to read at a distance Not only an ornament but a scientific instrument. Every Temperator thoroughly tested

in our laboratories.
"Cool." "Normal" and "Danger" rly indicated in colour.

Reliable and efficient in action Easy to operate Projects a continuous and unbroken jet of fire extinguishing liquid, thus obtaining a perfect aim. Attractive and small, 11 ins. overall. Handy and light, weighs 3 lbs. complete. Can be tested without wasting fluid. Can be completely dismantled

Fluid is non-damaging, non-freezing, non-conductor of electricity. Extinguisher, filled ready for use, complete with bracket for fixing

In nickel-plate

see that it's a

your engine.

Knock-Out Fire Extinguishers Ltd., 16-18, Bardwell St., N.7.

'Phone: NORTH 3747.

Decide now on an

PRICES.

POPULAR MODEL .. £95 DE LUXE " .. £110 FAMILY £115 SPORTS, as illustrated £125

The Three-wheeler that runs like a four."

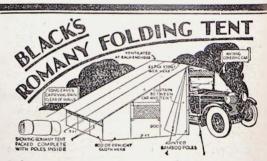
Speedy&Sporty

And with a track second to none. The Omega Sports incorporates all that one could desire in a really racy design. While providing a low driving position, with absolute stability at high speeds, the car is roomy, well sprung and comfortable. Fitted with 8 h.p. J.A.P. water-cooled Engine, 27 x 4 Dunlop tyres,

butterfly windscreens. electric dynamo lighting by 5 lamps, and finished handsomely in tangerine, running 50-55 miles to the gallon. Tax only £4. Fix up to-day for a demonstration, we shall be happy to arrange.

WRITE TO-DAY FOR OUR CATALOGUE OF ALL MODELS. W. J. GREEN, LTD., Omega Wks., Coventry,





Easy to pitch, and provides ample sleeping accommodation for two with separate garage for car. The awning ties down can be used as a dining porch when required.

Curtain (which can be rolled up completely) separates sleeping room. Packs into very small space, and with its bamboo jointed poles is very light and convenient for carrying.

Made of stout, hard-wearing 6 oz. duck (28½" basis) absolutely

water resisting and rot-proof. in brown or green (sample on application). Folds damp without harm.

Sleeping compariment 7 x 7, walls 24'. Height 6½' (jointed poles). Weight 31 lba., complete with poles, pegs, bag, etc.
Size, packed, 2½' x 9' din.
\$6-10-0 COMPLETE.
CARRIAGE PAID.

Motorcycle Combination aize, aleeping accommodation 7 × 4 × 5 6 high, with 14 walls (total weight 14 his, 79 16 mode 6 2 high 99 Other light tents from 23/6 complete.

Tents sent passenger train and despatched same day as receipt of order.



THOS. BLACK & SONS

(GREENOCK) Ltd., Greenock
(Tent wakers & Hiring Contractors),
25, Cathcart Street, Greenock, Scotland. And 5, Royal
Exchange Square, Gasgow; 87, Hanover Street,
Edinburgh. Grams— Satisfaction.
Write for free illustrated catalogue of tents and camp equipment.

To Think of Rovers



MEBES & MEBES

is to think of



OU desire the best possible price for your present car—Rover or otherwise—in part exchange. We can give it—other things equal. Why? you naturally ask. It is simple.









The Manufacturers cannot be burdened with the disposal of varied makes of used vehicles taken in exchange. We have the facilities for disposal and have focussed our attention upon this aspect for years. In addition to new car sales we are recognised by the Motoring organisations as a dependable source of supply for "clean" second-hand cars.







This being so, you will find it to your advantage to negotiate with ourselves, and whatever are your particular problems we shall endeavour sensibly to solve them. We offer exchanges, equal payments, and no deposit, the supply of new and second-hand cars, tuition facilities, and every assistance. To all Rover users and those contemplating the purchase of a Rover car we recommend you to think of MEBES & MEBES, the Car Specialists since the days of the flat belt drive! Write, 'phone Museum 4244, or call for details of Rover models and tell us about your present car. Do it to-day while it is fresh in your mind.

Established at Gt. Portland Street for 34 years.

MEBES & MEBES

THE LEADING LONDON MAIN AGENTS

Rover House, 144, Gt. Portland St., LONDON.

Used Rover Car Depot: 154-6, Gt. Portland St. Service Station: Fitzroy Mews.

DO NOT HESITATE to send your enquiries to "The Light Car and Cyclecar."



The small advertisement columns of "The Light Car and Cyclecar" form a unique mart for the disposal of all goods of interest to small car users.

HIS LAST APPEARANCE.

In pouring rain Major H. O. D. Segrave made his final circuit of Brooklands track on Whit-Monday. Although he was driving his 1,000 h.p. car, most of the spectators who bade him farewell remembered him as the successful driver of 1,500 c.c. racing cars.

NOTES, NEWS & GOSSID The WEEK

An Encouraging Tribute.

"Better car driving, but motor-plists too fast," was the summing-up Whitsun holiday motoring by a M-known daily.

Poor Logic.

Because petrol promises to become in cheaper there is no reason why sof the arguments in favour of light 's should be disregarded. True, your toring will cost you less no matter tat the size of your engine, but, ipso to, the light car is still the more momical type to run.

This Week.

This Week.

graphic and fully illustrated report
the London-Edinburgh run, under
title of "'Way Up North," appears
this issue, whilst, in addition, there
descriptions of the Brooklands and
Southport race meetings. An artile, "is of special interest to new
mers as it deals with practical quesa Gordon England Singer Junior
con during a week-end test and the non during a week-end test and the scription of a novel friction gear will prove to our readers. prove interesting to our readers. Wo. 757. VOL. XXX.

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LIGHTING-UP TIMES (Rea	Lan	zba)
for Saturday, June 11	th.	
0.34 Rieming	men	9.47
Edinburgh 10.15 Bristol		9.44
Moon-Full, 15th Jun	е.	
Wioon—Full, total 30th		

The Bol d'Or.

Driving a 1,100 c.c. B.N.C. car, Mme. Violette Morris, well known in French competition circles, won the 24-hour Bol d'Or race at an average speed of 43 mp.h. Very bad weather was experienced during the night and there were several minor crashes. B.N.C. cars several minor crashes. also gained second and third places.

Dominions Trade.

The delegation of British motor manu-The delegation of British motor manufacturers has arrived at Auckland, New Zealand, after touring Australia. In the course of a statement, Mr. Boyd Carpenter said that too little attention had been paid to the motoring needs of the Dominious, and he felt that British the Dominions, and he felt that British makers should build special cars to compete with foreign makes. Probably better springing, larger bodies and more engine power would be required. Mr. Boyd Carpenter added that the delegation had met with a remarkable conflict of opinion, says Reuter.

Next Week.

To know that the behaviour of his car on the road is up to standard is the ambition of every keen driver, and next week, in an article entitled, "The Meaning of 'Performance," simple methods of testing the running efficiency of a car will be explained. We hope also to publish an article which will explain the best methods of keeping in tune the 11 h.p. and 12 h.p. model Clyno cars. In a feature entitled "Tales of Old Tayerns" an interesting run embracing some of the oldest inns in the South of England will be described. car on the road is up to standard is the will be described.

The Latest Definition.

"It was not really an accident; nobody was killed," said a defendant at a London police court recently.

The National Eisteddfod.

The Minister of Transport has announced that no reductions can be made in Menai Bridge tolls during the period of the National Eisteddfod, which will be held at Holy Isle in the first week of August.

The A.A. Petition.

It is stated that more than a quarter of a million signatures have been obtained by the Automobile Association for its recent petition urging upon the Chancellor of the Exchequer the importance of immediate reform in the distribution of moneys paid into the Road Fund. The petition will be presented shortly.

In East Africa.

The Royal East African Automobile Association is doing good work in conducting an active campaign against malaria. Pamphlets are being circu-lated among all members of the club showing clearly what should be done to get rid of the scourge. Truly, light car owners overseas have more trou-bles than we should care to think of!

A British Product.

The producers of National benzole mixture wish light car owners clearly to understand that their product is obtained and distributed entirely by British labour and exploited by British enterprise and capital. In view of the recent propaganda appertaining to Soviet petrol, it is important to note that National benzole mixture is completely British.

Metal Technicalities.

A report of special interest to motorists has just been issued by the British Non-Ferrous Metals Research Associa-tion. The report covers all the principal non-ferrous metals, such as alu-minium, copper, lead, zinc and nickel, and in connection with these the most diverse problems are studied, the results of which are likely to prove of value to manufacturers. Further particulars of the Association's work can be ob-tained from the secretary, 71, Temple Row, Birmingham.

Refreshments Whilst Driving.

Speaking recently at a meeting of the True Temperance Scientific Com-mittee, Sir James Crichton-Browne, the eminent physician, urged motorists to abstain altogether from alcoholic refreshment whilst on the road. At the same time, however, he urged those who insist upon refreshment to take beer in moderate quantities rather than spirits or wines.



Easily read names are a feature of the new signposts being erected in Birmingham.

Aldershot Searchlight Tattoo.

It is announced that their Majestics the King and Queen hope to be present at the performance of the Aldershot Command Searchlight Tattoo on Saturday evening, June 18th.

The "Ettrick Shepherd."

Probably none of the London-Edinburgh competitors noticed a particularly beautiful memorial to James Hogg, better known as the "Ettrick Shepherd," which is situated just by Shepherd," which is situated just by Tibbieshiels Inn, where St. Mary's Loch joins Loch of the Lowes. James Hogg, who died in 1835, was an acquaintance of Sir Walter Scott, and assisted him in the compilation of his third volume of "Minstrelsy of the Scottish Border"; he also wrote a number of porginal poems. As a boy he was employed as a shepherd, and spent some years of his life among the flocks in this beautiful part of Selkirk.

Motor Gymkhana at Chelmsford.

A motor gymkhana is to be held at the King's Head Meadow, Chelms-ford, on June 25th in connection with the Chelmsford Hospital Carnival, The proceeds will be given to hospital funds.

Corner Made Safer.

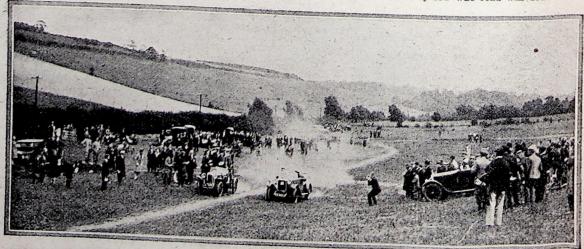
Open iron railings enclosing the grounds of the Brent Bridge Hotel Annexe, Hendon, have considerably lessened the danger which formerly existed at this important junction on the London North Circular Road.

Automatic Signalling.
A message from Tillis to the Commercial and Industrial Gazette says that a Tiflis engineer named Zubalov has invented a lighting apparatus for motorcars which automatically indi-cates the direction in which the car is turning, when it is stopping and when it exceeds the speed limit. Experiments with the system are said to have given very good results.

The Nurburg Ring.

Every seat has been booked for the formal opening on June 18th of the Nurburg Ring, the 20-mile racing and testing track in the Eifel mountains, near Cologne. It is interesting to note that a representative was sent especially to England to invite leading British motorists to the opening ceremony at the track and to induce racing motorists to take part in the events. Festal receptions, balls and gala banquets are being held in all parts of the country to celebrate the opening, as the completion of the track is regarded as an event of national importance.

For Lovers of Old Towns.
"A Chronicle of Rye," by Mrs. L.
Grant (Noel Douglas, Ss. 6d. net.),
is a delightful book which should appeal to every visitor to Rye who can see more in a town that a mere collection of buildings. The reader is not wearied by long "guide-book descriptions," but is given the impression of taking a walk through the town with a companion who knows its idiosyncrasies and is well able to point them out. This impression is strengthened by the charming reminiscences of the author. That a town can have a per sonality few who read will doubt.



The Whitgift Motor Club race meeting at Whitsun was held on a converted golf course near FORF! -Craydon. The photograph shows a diel between two competitors on the last lap of a race. **B12**

Motor Ball and Carnival, 1927.

We learn that H.R.H. the Prince of Wales has given his patronage to the official motor ball and carnival to be held on October 19th in aid of the Motor and Cycle Trades Benevolent Fund. This is the second occasion on which H.R.H. has honoured this deserving institution, as he was present at the annual banquet in 1924, and his patronage this year may be taken as another example of his keen interest in the motor trade.

The ball is to be held at Covent Garden and should be a big success, especially as October 19th is the middle of Motor Show week; it has the official support of the Royal Automobile Club, the Automobile Association, the Society of Motor Manufacturers and Traders and other leading trade and sporting organizations, and a strong committee representing these various bodies has been formed.

This Week's Hero.

The man who gave up his Ford in favour of tennis because there was less racquet.

Buckden Again.

Buckden High Street (Hunts) continues to provide motorists with lessons which cause much hard thinking. Driving at a "dangerous speed" may entail a fine of £3, whilst £2 is the figure for a speed of 34 miles 1,083 yards per hour.

"Chitty Bang-Bang."

The reappearance in the public enclosure of the once-famous racing car "Chitty Bang-Bang" was a feature of interest at the Whit-Monday B.A.R.C. meeting. Possibly owing to professional jealousy at the presence of Major Segrave's gigantic car, "Chitty" developed gearbox trouble during the meeting, and was towed home!

A PLEASING SMALL SALOON. Very Unfair.

"Can nobody do away with the gearbox?" asks a motor scribe in a provincial paper. This is rather hard on novices, for, after all, they do try.

Motor Regulations in Ireland.

Applicants for driving licences in Northern Ireland must now produce two duplicate photographs of themselves when making application. The minimum age for applicants for licences to drive motorcycles has now been raised to 15.

Help Welsh Hospitals.

Motorists who have enjoyed the gorious scenery of Wales may care to assist a movement which is being inaugurated to aid some of the charitable institutions in that country. A cartype mascot has been produced for those members of the Guild of Good Samaritans who own cars, and the whole of the proceeds of the sale will be devoted to the hospitals of Montgomeryshire. The mascots, price 2s. 6d. each, are to be obtained from the hon. recorder, Old Bank Buildings, Newtown, Montgomeryshire.

An unobstructed view and wide doors are features of the Gordon England saloon body on a Singer Junior chassis. A test run report appears in this issue.

Honour for Scientist.

Sir Richard Tetley Glazebrook, K.C.B., F.R.S., has been appointed, by Order in Council dated May 26th, 1927, to be a member of the Advisory Council to the Committee of the Privy Council for Scientific and Industrial Research.

Progress of the R.A.C.

At the annual general meeting of the R.A.C., held recently, some very interesting figures were quoted illustrating the progress made by the Club. Particular stress was laid on the fact that a reduction in the subscription to £1 1s. for associate members owning cars with a capacity not exceeding 1,100 c.c. came into force at the beginning of the year and immediately proved popular. Asso-cinte membership of the Club increased by 18.6 per cent. in 1926, and the number of telephone boxes is now 50 per cent. greater than it was in 1925. The Club controls nearly all of the motor parks at important functions throughout England and Wales. In one month alone last year the applications for routes was 300 per cent. more than in the corresponding month in 1925. This gives an indication of the growth of Club membership.

The R.A.F. Display.

This will be held at Hendon on Saturday, July 2nd, and arrangements have been made for the parking of visitors' cars. Last year it is estimated that some 75,000 people attended.

Nothing New.

We learn from an entirely unreliable source that experiments are being made to produce motor fuel from gunpowder. But have not Shells been supplying spirit for years?

MOTORING MATTERS IN PARLIAMENT.

JUST before the Commons adjourned for the Whitsuntide recess the Minister of Transport stated that the Automobile Association has arranged for the experimental erection of 14 new road signs or posts, with standard reflex lights in red and white, in Kent and Hertfordshire. The local highway authorities have given permission for this experiment to be made.

Mr. Pethick-Lawrence asked whether

Mr. Pethick-Lawrence asked whether the Minister of Transport had received any complaints as to nervous shock caused by "the unnecessary use of strident motor horns." The Minister said he was aware that unnecessary noises are sometimes made by motor horns, and the matter was under consideration in connection with the prospective Road Traffic Bill. It seemed to him, however, that it was more a question of education in the courtesies of the road than one for legislation.

The House was reminded by Lieut.-Colonel Howard-Bury that in France electric horns are forbidden in the large towns, but not in the country. The Minister contented himself with the reply that these points can be discussed when the Bill comes before the House.

Another announcement which was made by the Minister before the rising of the House was that two new traffic beacons of the wire-suspension cross-street type, and with the word "Caution" prominently displayed, are to be erected experimentally in the County of London.

WROTHAM PARK last Friday evening presented the usual spectacle for the start of a London-Edinburgh Trial. There were the usual lines and lines of cars parked in orderly feshion on the grees their in orderly fashion on the grass, their positions being indicated by notice boards bearing their numbers.

Although the beret basque is now out of fashion, there was the usual assortment of strange headgear and quixotic attire. Several gramophones, carried in competing cars, made the evening hideous, blaring forth assistance of the strange of th

forth various musical atrocities, to the general disturbance of the nerves of many to whom the twenty-fourhours' ordeal was regarded as a serious matter.

The Story of the Motor Cycling Club's Twentieth 416

Among the cars we noticed a number of veterans. There was Bliss's old Fiat with its eccentric body and its instrument board bristling with literally scores of strange devices.

competitor stopped his car before a marshal appeared at the double with a cup of coffee. Here it was reported that A. Podmore (11.9 h.p. Lea-Francis) had been in collision a few miles south with a non-competing car, considerable damage being done; fortunately, however, there were no personal injuries.

Dawn was breaking as the later cars left Grantham, after an hour's halt for supper, and a certain amount of mist hung about the road for the next few miles through the flat country in the neighbourhood of Newark and Retford. Fortunately, however, this was not dense enough to cause any real trouble, and most competitors found themselves running into Doncaster well ahead of time. Large numbers of cars were observed, in fact, waiting about in the neighbourhood of the racecourse, whilst their occupants made good use of the time by taking refreshment from thermos flasks.

At Ilkley many competitors found the one-hour breakfast halt a distinct rush. Cars had to be parked some minutes' walk from the hotel and the service did not seem to be quite so rapid as in previous years.

After Breakfast.

Leaving Ilkley, the weather broke and down came icy-cold rain in huge drops.

Fleet Moss was in a very loose state and gave competitors some idea of what to expect when tackling the real work a few miles farther on. The descent, while not troubling those drivers whose cars were fitted with four-wheel brakes, gave considerable anxiety to some of the drivers of older models. We observed one such machine doing a most extraordinary crab-walk on the steeper portion, but with careful handling the driver was able to save the situation. Differentialless cars, for the most part, scored. And so to Askrigg, where was the first observed hill.

The hill itself is not nearly such an easy climb as many are inclined Known locally as Flow to believe. Edge, it climbs from the little village of Askrigg for about 11 miles up to Windgates Currack. In parts the gradient is very stiff-possibly steeper than 1 in 5-and, apart from one small downward dip, the hill provides slogging bottom gear work from start to finish. Just before the steepest section, which is near the top, there is normally a small gully, but this had been dammed up to provide a watersplash about 6 ft. wide and 10 ins. deep.

It was just above this splash that the bulk of spectators had collected, their number being probably about two hundred and most of them being local people. It is clear that the M.C.C. London-Edinburgh run has not the same hold upon the public as the London-Land's End, or even the Exeter.

The Morgans, it was thought,

Run from London to Edinburgh.

The Martineau family had two representatives, both driving Salmsons, and so on right down the list were many familiar names and cars bearing scars of many M.C.C. encounters. There were 10 non-starters among the cars and three-wheelers.

The run through to Biggleswade

was thoroughly enjoyed by everybody, so perfect were the weather conditions. Gone now are the days of lighting and tyre troubles so far as the main-road portions of the Edinburgh run are concerned.

At Stamford the check was a model of efficiency. Hardly had a

might provide a little excitement after many monotonous but excellent performances by motorcycles and sidecar machines, but they were steadily driven and did not so much as lift a front wheel at the only bad corner on the hill. S. Hall in a Popular model was very good, J. S. Thurlby handled his machine very prettily when almost baulked by a sidecar, and D. S. C. Macaskie's car, with a body which looked as though it was home-made, A. C. Maskell, with a very pretty Aero model, and H. J. Vidler's red Aero were steady and convincing.

G. C. Harris and passenger, complete with Cambridge blue berets to match the paintwork of their Aero model, were rather wild and lurid, whilst H. W. Baker would have performed similarly in his red Aero had not he been held back by W. G. Godley who, like S. A. McCarthy, believed in slow and steady tactics.

The only Morgan failure was provided by E. J. Stafford, whose pretty little blue Aero model was spitting ominously on the higher slopes of the hill and came to a standstill almost on the summit, due to the gear jumping out. M. J. P. MacMahon was late but climbed well, G. E. Smith's light-blue Aero model climbed in a rather wild but very convincing manner, whilst G. H. Marshall steered his Family model to the top wearing an agonized expression, in spite of the fact that his Anzani engine was pulling exceedingly well.

The smaller light cars did not show up to advantage; a strong following wind caused many of them to boil, including Jefferis's Frazer-Nash, Barber's Salmson, Moss-Blundell's Salmson, Herber's Salmson and Fullbrook's Singer Junior. This little car, by the way, and another like it driven by S. G. Hall, both climbed in a most convincing manner.

An 8.9 h.p. Swift four-seater climbed exceedingly well until near the summit, when it was brought to a standstill owing to the magneto distributor working loose. Really outstanding performances amongst the smaller cars were those of

K. F. A. Walker's Salmson, C. G. Fitt's Cup model Austin Seven, and three Jowetts, one of which had four up. These three all came up together and their behaviour really was most convincing.

Amongst the larger makes of light car which showed up to advantage were all the Alvis entrants, Frazer-Nash, with E. Hillary far and away the best performer, Lea-Francis, with honours to P. D. Walker, and Riley, with the credit for the best performance for this make going to E. A. Clegg.

Amongst the failures were those of G. J. L. Saye's 10-23 h.p. Talbot, F. H. Haynes's 10.5 h.p. Bugatti, D. S. Redman's 11.9 h.p. Bugatti, E. E. Watson's 9.5 h.p. D.F.P., and D. L. Gilchrist's 9.5 h.p. Donnet-Zedel.

From the top of the hill rough, winding moorland roads with tricky stony descents and sharp upward pitches were followed for 16 miles to West Stonesdale, where the second observed hill had to be climbed.

West Stonesdale.

This hill caused comparatively little trouble, but it demonstrated how poor was the steering lock on certain cars. The hill is approached by an acute right-hand bend, just before which, by the way, was stationed a secret check; it is not long, but has two acute hair-pin bends. The surface was reasonably good, although the corners became rather loose by the time a few cars had skidded round them.

Considerable confusion was caused amongst the three-wheelers when H. W. Baker (10 h.p. Morgan-Blackburne) stopped on the second bend. He had taken the first hair-pin bend sufficiently fast to cause his off-side front wheel to lift, and accelerated rapidly between the bends, with the result that he was unable to negotiate the next hair-pin and in the excitement stopped his engine! Almost immediately a host of Morgans accumulated behind him.

S. Hall handled his machine very

well and managed to get past Baker, but not so E. J. Stafford, who was baulked and stopped; it was this incident which caused the general crush. S. A. McCarthy made his usual steady but certain climb; M. J. P. MacMahon was fast, whilst the remainder of the Morgans made quite good climbs.

Spectators were surprised to see no fewer than four of the Frazer-Nashes fail to get round the first hair-pin. These were driven by H. Jefferis, O. H. C. Cornish, F. Al Jaques and H. Duncan-Smith, two of whom charged the bank with such force that they had to retire with damaged steering.

There was no other light car which actually failed to get round, but several only just managed it. Amongst them were K. F. A. Walker (10 h.p. Salmson), W. R. Reeve (10.4 h.p. Windsor), S. C. Stanley (11.4 h.p. Alvis) and J. Ward (8.9. h.p. Rover). Driving a 7 h.p. Austin, D. J. G. Ives misjudged the second bend and only just saved himself.

The Austin Sevens on the whole showed up very well, their cornering being good and their climbing without fuss. J. W. Barber, T. R. Berry, L. Martineau and G. H. Martineau (Salmson Sports) made good and fast climbs. C. D. Conradi in a similar car also did well, taking the corners quite fast.

P. D. Walker (11.9 h.p. Lea-Francis Sports) and H. S. Stevens (12 h.p. Lea-Francis) both were good, and the Singer Juniors (driven by S. G. Hall and A. E. Fullbrook, making their first appearance in the London-Edinburgh) showed their mettle, and, although not fast, were quite sure.

The 7 h.p. Jowetts in the hands of H. G. Russell, H. J. Lovatt and E. A. D. Ward appeared to find the gradient easily surmountable. Amongst others who climbed well were R. M. Dixon and G. B. Wyeland (Newton-Ceiranos) R. L. Williams (11.8 h.p. Alvis), C. Rogers (11.9 h.p. A.C.), R. G. C. Schwalm



F. H. Haynes's Wolseley, whilst F. C. E. Cleaver's Lea-Francis and J. G. Simpson Lee's sports Alvis are in the foreground.

and E. Hillary (11.9 h.p. Frazer-Nashes), J. B. Tointon (10.8 h.p. Riley) R. L. Richardson (8 h.p. Lafitte) which had a good lock, R. A. F. Clark (12-40 h.p. A.B.C.) and K. H. Daniel (12-50 h.p. Alvis). Generally speaking, light car competitors made quite good climbs.

An observer in the neighbourhood of Tan Hill, the next point of interest on the course, might well have been excused had he gathered the impression that the steam car was at last coming into its own, so violently were many of the cars boil-ing as they came up from the nonstop section. Very few competitors were on time at this stage, and had, in consequence, to go flat out to the summit. Here there was to have been a check, but this was for some reason eliminated, and so the rush continued to Brough, where an unexpected check was waiting. Many competitors were late there, but the number arriving outside the time limit was not great.

Followed the usual main-road run to the lunch stop at Carlisle, and so over the border towards Moffat. Heavy showers fell in that district, thoroughly drenching the competitors. Often heavy rain would fall from a cloudless sky-a peculiarity of the Border counties.

Time-keeping at this stage was easy, and most competitors managed to snatch two or three short spells of sleep. Scottish first-aid organizations appeared to take the run with great seriousness this year, for every few miles along the route there was a man in uniform, ready for emergencies!

In Moffat competitors seemed to

be awed by the prospect of the new section they were about to tackle. The usual dismal rumours were abroad and, looking up to the mountains, their tops covered by low-lying clouds, there certainly was some excuse for nervousness. Local officials, however, were reassuring in their remarks, and, fortified by hot tea, competitors turned their cars round to make their way out at the southern end of the town, hoping for the best.

The New Section.

For the first 20 miles or so there was little enough to worry about, but from Cappercleuch, where there was a check, on to Talla Reservoir the going was extremely difficult. The road was narrow and the surface was sticky, so that a great deal of low-gear work was called for. The three water-splashes did not seem to trouble car drivers to any great ex-tent, the difficulty all the while being the absolute impossibility of passing.

On the steep ascent to the Reservoir the difficulty again was the slow driver. Granted, the descent is steep and a skid or false step would undoubtedly have led to disaster, but some drivers of cars equipped with excellent four-wheeled braking systems were very nervous indeed and held up large numbers of competitors by their unnecessary slowness.

There was ample opportunity, however, to make up waste of time between the Reservoir and Crook Inn, where large numbers of competitors stopped for refreshment longer than they should have done and then had to "blind" along the main road to Romanno Bridge and Penicuik to make up time.

It was still quite light when the last car approached the Waverley Market House, Edinburgh, in the neighbourhood of which large crowds of enthusiasts had gathered to give the now half-drowned travellers a rousing welcome. Cars, faces and windscreens by then were plastered with filth and mud, after what was by general consent the most strenuous London-Edinburgh run that has yet been held.

The following did not check in at The following did not check in at the finish:—A. Podmore (Lea-Francis), O. H. C. Cornish (Frazer-Nash), F. A. Jaques (Frazer-Nash), F. C. E. Cleaver (Lea-Francis), D. Duncan-Smith (Frazer-Nash), J. Hobbs (Riley), D. S. Redman (Bugatti), and C. R. Whiteroft (Riley).

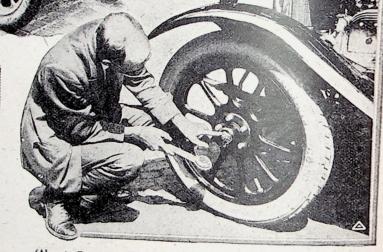
The list of awards will be published in an early issue

lished in an early issue.

B17



After the first few months many new owners begin to realize that they have little time to care for their cars as the instruction books recommend. As a result, they may go to the other extreme and neglect those matters which are essential if their cars are to run satisfactorily. Some of the details in the instruction book are more important than others, while some may be ignored for considerable periods without harming a car. The care of the essential points is dealt with in this article.



(Above) Constant cleaning should be done only if there is a plentiful supply of water at hand. (Right) Greasing is a matter in which the wise owner should be most conscientious.

THE new motorist may well be awed by the reams of instructions and advice given him from various sources on the subject of how to treat his first car and how to maintain it in running order.

In the beginning he probably obeys each and every command religiously; but when once the keen edge of ownership has dulled there is danger of an owner-driver who is not in love with the "messy" side of the control of motoring being daunted by the manifold things to which he is bidden to attend. Realizing that to carry out all these is a standard up to which he cannot, or will not, live, he may go to the other extreme and neglect everything, save the filling up with oil, petrol and water, which, he realizes, must be done if the car

It is, of course, better in every way to carry out all the instructions for the maintenance of the machine faithfully; but some are, without doubt, of much greater importance than others. Some, too, are so simple that it is ridiculous to leave them undone, while others, although attention is desirable, may be ignored for considerable periods without much harm resulting.

Cleaning the Car.

In the latter category comes cleaning the car. The instruction book probably says that mud should never be allowed to dry on the coachwork; this, however, is a pinnacle of perfection quite impossible for the average owner to reach. Which of us is going to start cleaning the car after arriving home in the wee sma' hours from dance or theatre, dressed in our best evening clothes and a boiled shirt?

As a matter of fact, too much cleaning—by the average owner-is distinctly bad for the ordinary paint and

varnish finish, which, one devoutly hopes, will soon be as extinct as the dodo. Every time the car is cleaned some scratches are made and some varnish removed, unless one can spend hours on the job with unlimited supplies of water, clean leathers and patience.

Once mud has dried, one will do less harm to leave it there for a week or even two or three weeks than to clean the car every day in dirty weather. Personally. I make no attempt at cleaning for weeks on end during winter or wet spells at any time of the year.

Time Wasted.

What is the use? On first-class, tarred main roads one does not, it is true, pick up much mud, even in winter, but nearly all my motoring is done on second and third-rate lanes, where every pot-hole—and their name is legion—is full of muddy water in wet weather. A clean car is filthy again in ten minutes, and I have too many other things to do and also am far too indolent to relish spending a couple of hours for the pleasure of a few minutes' motoring in a spotless vehicle

I live in the wilds of the country, with no water I live in the wilds of the country, with no water laid on and, therefore, no hose, and I have not washed a car for years, as I find one of the patent clenners does a much quicker and infinitely more satisfactory job than the sponge-and-bucket method. Consequently, I never touch the undersides of my wings and the under-parts of the chassis.

I do not put this forward as a counsel of perfection.

I do not put this forward as a counsel of perfection, but, so far as I can see, no harm results. Mud accumulates, dries on and then falls off under road vibration, and the deposits never seem to get any heavier. The proof of the pudding is, after all, in

the eating, and I invariably find that when my cars are really furbished up before sale their appearance belies the distance they have covered and the few

times they have been cleaned.

But if I am casual over cleaning I am very thorough over things which do matter. It must grieve the heart of the legendary gentleman from Aberdeen and his relatives in all parts of the country to throw away three or four quarts of engine oil several times a year. There are, unfortunately, so very few purposes to which it can be put by the ordinary householder. It is all right for oiling lawn-mowers and is excellent, mixed with a percentage of paraffin, for squirting between the leaves of springs and for lubricating the outside of brake-rod joints and other similar items; but such uses only absorb a small percentage, and the rest has to be thrown away.

Oil Economy.

Yet, your canny Scot and his equally cautious brother Sassenach should take heart, for the practice is really true economy. Oil is proverbially cheaper than bearings, and by frequently draining out the impoverished, grit-laden sludge in the sump and replacing it with clean lubricant one is postponing considerably the time when bearings will need attention

ably the time when bearings will need attention.

Greasing is another point on which I am most conscientious. Within a few miles of the 500 mark, somehow or other I find time for this, and with the latest types of grease-gun it is a job which has lost much of its terrors. Yet, however messy a business it may be, it is one of those things which really are worth while. In winter, indeed, I do not often go so far as 500 miles without giving each nipple a few charges from the gun, and it is amazing how much dirt and water will have reached brake and other bearings on the underside of the chassis even in that short time.

Considering how very important an item is an ade-

quate supply of electricity for lighting and starting, and how expensive is a new battery, it fills me with amazement that there can be people who neglect this most invaluable auxiliary. On the whole car is there, with the possible exception of the magneto, one component which gives so much valuable service for such little attention?

Yet there are folk who begrudge five minutes once a fortnight to top up the cells with distilled water. Very few car makers nowadays house the battery in a really awkward position, and it is sheer imbecile folly not to give it the small attention it needs when it is so little trouble. In very hot weather I may look at mine once a week, but if water is required more than once a fortnight it is usually a sign of overcharging which causes such quick evaporation. In the long, light days of summer-fime, when lamps are only rarely used, I, personally, find an hour a day with the dynamo switch on "charge" is quite sufficient to keep the battery up to the mark, and on out-and-home journeys I charge for half-an-hour each way if the lights are not wanted and only a normal use is made of starter and electric horn.

Tyre Pressure.

Another thing worth doing regularly, and which is also very little trouble, is tyre testing. The new Schrader slogan, "Test your tyres every Friday," is a very good one. Normally, one will not find the pressure vary more than 1 lb. or 2 lb. in several weeks, but there is always the chance that a leaky valve or tiny thorn prick is causing air to be lost gradually, and a 25 lb. pressure may be down in the vicinity of 15 lb. and show no signs to the eye. Unless extensive pumping is required, I can go round my five tyres—for do not forget the spare—easily in five minutes, and everyone can afford that much in a week.

Really, the demands made by the modern light car for essential attention are infinitesimal. Tyres five minutes a week; battery five minutes a fortnight. To grease and oil thoroughly takes me about an hour, say, once a month. Draining crankcase and refilling every 2,000 miles, say, an hour once every four months; ditto gearbox and back axle an hour once a year.

This time cannot be begrudged.

All this totals 22½ hours, or less than one whole day in the 365. Admittedly it is a minimum, which allows nothing for adjustments, tyre repairs, overhauls, cleaning, etc., but it shows how very little time is sacrificed by attending regularly to the more important items in the maintenance of a car.

MARMADUKE.

TWO POINTS TO NOTE.

Tyre pressures should be tested frequently in the interests of economy. The battery also demands fairly frequent attention if it is to work satisfactorily. These are two of the essential points to which the owner should attend even if pressure of time compels him to neglect other maintenance points.

"Those Warning Signs."

A READER writes to say that in connection with a recent paragraph on warning signs, he has heard of one on the Newport-Cardiff road which reads, "You have been warned. Proverbs 29.1." The reference is, "He that being often reproved hardeneth his neck, shall suddenly be destroyed, and that without remedy."

Not Good Enough.

There are still far too many light cars which have brakes that "waggle." When rough roads are being traversed and the hand brake is used the lever moves backwards and forwards. Similarly, when the foot brake is used the pedal can be felt to be "riding" up and down. The trouble is due in both cases to the arcs struck by the axles as they rise and fall having a different centre from the arcs struck by the remote ends of the brake rods. In view of the harsh braking effect which is thus caused, the discomfort to the driver and the tendency to skidding which is promoted, it is really rather surprising that this fault is still so common.

Things of the Past.

VERY little is heard to-day of wheel wobble, shimmy, patter and other strange symptoms which received so much prominence a year or so ago. These phenomena came into the limelight when front axles suddenly acquired considerably increased deadweight in the form of brake drums, shoes and operating gear, and when simultaneously tyre sections became almost twice as large as they had been.

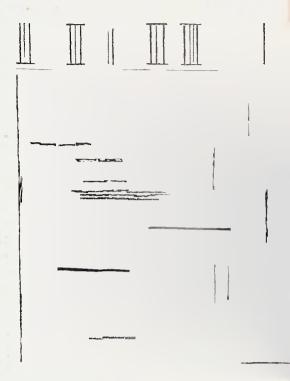
It would be very interesting if some of the clever people who have accommodated their designs to the new departures and eliminated the early troubles and steering difficulties would let us know exactly how they have countered the difficulties which have arisen and given us back the delightful steering which characterized so many light cars three years ago, and which is a feature of nearly every 1927 model which I have tried.

Local Pronunciations.

A PARAGRAPH that I published the other week on the subject of place-names—and the difficulty that local pronunciations often cause—has brought me several letters. From these I have gleaned some very interesting examples of villages likely to trap the inquirer; so many, indeed, that I am wondering whether it would not be worth while for the industrious folk who compile guidebooks to include, for each district with which they deal, a note on place-names that have a peculiar local pronunciation.

One of my correspondents is a Yorkshireman, who makes the perfectly sound point that in England nine places out of ten are pronounced much as they are spelt, and it is the unexpected tenth that catches us. In Yorkshire, so the writer tells me, local pronunciations are uncommon—not taking into account the matter of dialect. But a motorist was badly tied up not long ago near Malton. He wanted to get to a village marked on the map as "Barugh"; losing himself in a maze of lanes, he made inquiries of a local.

"Baroo" and "Barug," not to mention



"Baruff," only made the man puzzled; finally, the driver asked the name of the next village. "Amperby" was the answer, which conveyed nothing. However, when it was reached—and turned out to be Amotherby—a policeman put the traveller on his way and explained that the place he wanted was called "Barf"!

What Old Maps Tell.

ANOTHER interesting letter on the same subject reminds me that old maps often give a useful indication of local pronunciations and of names that are still used by the country people, but which have been dropped both by the Ordnance Survey and the Post Office. Very frequently the spelling found in a map of the 18th century, or even of the early 19th, tallies with present local custom, and it is interesting to speculate—when no further evidence is available on the point—whether the old cartographers, from John Speed onwards, were inclined to phonetic spelling or whether the words have actually changed with the passage of years while their pronunciation has stood still.

The subject opens up a field for speculation that seems almost limitless. Before dropping it, however, it may be worth remarking that some places that are popularly supposed to have names of peculiar pronunciation are not so designated in their own localities. Cirencester is an instance in point; a Cotswold man tells me that it is called "Cisseter" only by visitors.

No-trouble Finishes.

MY Lea-Francis, with a fabric saloon body, and Singer Junior, with a cellulose-finished open touring body, are both delightfully easy to keep clean and smart. Dust can be wiped off with



a duster without any harm being done, whilst a bucket of water and a sponge allow one to obtain just as good a result as the most elaborate hosing down. In neither case is subsequent leathering necessary, as the marks which are left behind when the coachwork dries can be removed in a moment with a dry duster. So far, I have been able to find no disadvantage to either of these trouble-free bodies, and it will certainly be against my wish if I ever own another car finished with paint and varnish.

A Costly Trial.

A CORRESPONDENT who is very keen on the sporting side of motoring thought he would like to compete in the Scottish Six Days' trial this year, and now writes to tell me that, after making inquiries, he found that it would cost him £9 5s. in entry fees, subscription and so forth. He points out that this is a prohibitive figure, and I quite agree with him. A trial of this kind, which provides a really magnificent motoring holiday, would be popularized, in my opinion, if the entry fees amounted to only £2 or £3, whilst the number of entries would be likely to be multiplied by ten.

The Motorcyclists' View.

A N invariable complaint among motorcyclists who forsake a high-powered combination for a small car is that the engine is "too fussy." This, of course, is due to the difference in the top-gear ratios. A big-twin combination is fairly high geared and ticks along at 40 m.p.h. in a manner that is a sheer delight. At the same speed most small cars betray the fact that they are working. I fancy, however, that it is at much lower speeds

that the ex-motorcyclist finds ground for most criticism, the difference in revs. between an 8 h.p. twin and a four-cylinder car engine of similar capacity at, say, 25 m.p.h. being most marked. Indeed, I know one motorcyclist who on his first drive in a small car had to be assured that the clutch was not slipping!

Low Top Gears.

DERSONALLY, I consider that most small cars are woefully undergeared on top. When I hear owners of such cars boast how they climb certain hills on top gear, I despair at the way this fetish is spoiling the whole purpose of the gearbox, for it is obvious that if a car of modest c.c. can surmount respectable gradients without a change down, the engine is revving needlessly fast on the level. This results in a lower maximum speed or a greater petrol consumption for the speed at which one usually travels.

For myself, I always plump for a reasonably high top gear and do not care a rap for the comments of others when I change down on a hill. I have not paid for a gearbox to have it as an ornament! I recall with amusement that a higher top gear than standard once brought to a bus that I owned a reputation for having a "super-hotted" engine, this being solely due to its superior speed on the level.

A Yankee Notion.

In this connection one wonders whether an idea which is gaining favour in America will some day invade our shores. Over there, in order to satisfy the man who expects to climb everything on his top (direct drive) ratio, they are furnishing a top gear of 5 to 1 or thereabouts, whilst the gearbox contains pinions which give an additional extra-high top.

With the aid of a gearbox of this kind one can enjoy silence and freedom from backlash in the transmission for all ordinary use, whilst on long main-road runs the super-high top is engaged and the benefit of lower consumption and less turmoil from beneath the bonnet enjoyed. There is many a light car which would be much more pleasant to handle on long journeys if its gearbox embodied a super-high top.

High-speed Buses.

OME of the new motorbuses now being put on the road in the provinces are very different from the cumbersome vehicles we used to meet toiling up a rise on bottom gear, and readers who wish to pass one uphill would be well advised to do so in an intermediate gear.

These buses possess unexpected powers of acceleration when the drivers change down, and a driver trying to overtake one on top gear towards the crest of a hill may easily find himself in a difficulty if another vehicle is coming in the opposite direction. For this reason it is safer to overtake in a lower gear, as this usually gives one ample speed to get ahead and eliminates the possibility of being "stalled" in a critical position.

Inflation Pressure—of Cushions.

PNEUMATIC upholstery is believed by some people to be good and by others to be bad. This is because it is most important to adjust the air pressure in the cushions correctly. If the

pressure is right the upholstery is delightful, whereas if it is too high or too low the driver cannot make himself comfortable and the passengers complain of "rolling about all over the car."

My own experience has been that the cushions should be inflated just sufficiently to prevent the scat boards beneath the cushions being noticeable, whilst once the required pressure has been found it maintains itself without attention for a very lengthy period. The "crab" to air cushions is that they are not really springy, so that one would be reluctant to recommend them unreservedly for use in a car which had a suspension system that was "hard."

The Irony of Fate.

A n acquaintance, who is an example of a perfect car owner, was in high dudgeon when I met him the other night. It appeared that he had just taken delivery of a new model, which he enthusiastically informed me was "a peach." That day, however, the road in which he lives had been swept scrupulously clean and ominous piles of bright-yellow sand had appeared on the pavement. He was very anxious to get the car run in, but did not want it spoilt by smears of tar.

Fate certainly seems against him, for this is the third time he has had the same trouble. Six years ago he took up motoring and bought a fairly expensive motorcycle combination; in less than a week the road outside his house was tarred. Some three years later he gave up motorcycling and bought a Rover Eight, but no sooner had he obtained delivery than, sure enough, a gang of men and a tar sprayer came on the scene. His next car, he informed me with an effort at cheerfulness, will be bought just after the Show, when he will, at least, be safe from tar!

Is it Necessary?

MY friend's experience is certainly rather hard, although it has its amusing side; but nobody can convince me that there is any real reason why tarring should be a nuisance. I have come across

stretches of newly tarred road which were quite as pleasant to drive over as a good untarred road. This was not due to any revolutionary method of tarring, but simply to the fact that a very liberal supply of stones—of the right size, be it noted—had been used. As a result there was no tar to be seen, and sticky stones were not caught by one's tyres and flung up on to the bodywork. Why every road authority cannot use an adequate supply of stones is quite beyond me. The ratio of stones to tar in most cases is proportioned in much the same ratio as currants to dough in a railway bun.

I am aware, of course, that there is tar and tar and that bituminous "tars" are much less troublesome to traffic than the usual kind, but adequate use of sand and stones makes all road dressings comparatively innocuous.

Starting Made Easy.

STARTERS have improved. There is no doubt whatever about that. To-day one seldom, or never, uses the starting handle, and I know two people who took delivery of new cars at Easter and so far have not once touched the crank. Their electric starters give them a certain start when the engine is dead cold and their batteries appear to keep well charged, although in each case the mileage covered is far from large.

I know one man who runs an 11.9 h.p. car with one of the latest Lucas 12-volt equipments, and whose only running for five days a week is a three-mile run to the station in the morning and a three-mile run home at night. This man declares that he never uses the starting handle, and, in spite of his daily mileage amounting to such a ridiculously small figure, his battery is always well up to its work. At week-ends he sometimes does 100 miles or so, but he generally leaves his car in the garage and spends his time in the garden. It cannot be denied that present-day batteries and starters are far more efficient than the weak abominations that we had to put up with two or three years ago.



The charms of the old English cottage are emphasized by these delightful specimens in Norton, near Evesham, Worcs.



Still Safer Motoring.

EVEN the most antimotoring of the daily papers were unable to publish more than two or three odd paragraphs last Tuesday morning concerning holiday accidents. We cannot believe that this was because they did not take the trouble to garner road accident news or spare the space to publish it. The fact was that remarkably few accidents occurred. The roads are getting safer. The general standard of

driving at holiday times is improving. Why is this? Surely because caution to-day is not merely advisable; it is essential. Those who disregard its dictates learn their lesson quickly; they find that cross-roads *must* be treated with respect and that side turnings and corners call for care in their negotiation.

The crowded roads problem is beginning to solve itself, as it did in and around the cities of America some years ago, and as it certainly will in this country. So soon as all drivers expect that there will be another vehicle round every corner and another vehicle approaching at right angles at every cross-roads, "avoidable" accidents will cease to occur. Wider roads which allow three vehicles to run abreast already allow the cautious to avoid the reckless; when we have a few more of them "cutting-in" will lose its terrors, and even the confirmed road-hog will cease to be a danger to careful drivers. An era of safe motoring has arrived and a still safer era is coming. Last weekend there were more fatal accidents in the air than on the roads. Whilst deeply regretting the number of the former we note with great pleasure the paucity of the latter.

Scottish Justice!

A SHORT time ago a motorist had the misfortune to appear in a Glasgow court charged with an offence against the motoring laws. We lo not know the nature of the offence, neither do we know the evidence which was given concerning t, but a fine of £2 was imposed. Now comes the staggering part of the proceedings. Upon the defendant saying that he had not £2 with him the Sheriff thereupon raised the fine to £3 and remarked that had the defendant brought the money with him he would have got off more lightly.

The reason given for this amazing action was that the police experienced trouble in collecting



"THE LIGHT CAR AND CYCLECAR" 7/AS FOUNDED IN 1912 TO CATER FOR THE NEEDS OF USERS AND POTENTIAL PURCHASERS OF LIGHT CARS AND CYCLECARS, AND IT HAS CONSISTENTLY ENCOURAGED THE DEVELOPMENT OF THE ECONOMICAL MOTORING MOVEMENT FOR OVER FOURTEEN YEARS.

NO CAR WITH AN ENGINE CAPACITY EXCEEDING 1,500 C.C. (1½ LITRES) COMES WITHIN THE SCOPE OF THIS JOURNAL, THAT CAPACITY BEING GENERALLY RECOGNIZED AND ACCEPTED AS THE LIMIT FOR A LIGHT CAR ENGINE.

Topics of the Day



fines from motorists who were given time in which to pay. This may or may not be the case, but the fact remains that the punishment, in the shape of a fine, is inflicted for a motoring offence. To fine a man additionally for having insufficient money immediately available is grossly unfair even if it is not illegal. Whatever may have been their offence, and regardless of the fact that they have a good defence, motorists have come to regard a

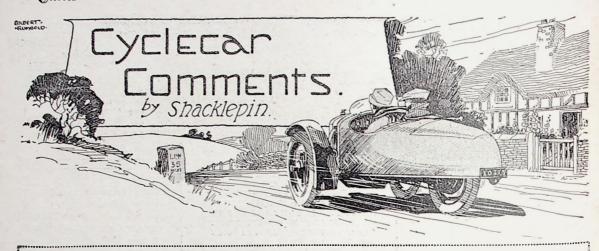
conviction and a fine as foregone conclusions when they appear in court. There is no reason, however, why they should be expected to anticipate the exact amount of the fine and carry the money with them, especially in cases when, if they could depend upon obtaining a proper hearing, there is every chance that the case against them will be dismissed.

Farewell, Segrave!

ALL those who have followed the sport of motor racing during the past few years learned with regret some weeks ago that Major H. O. D. Segrave had definitely decided not to appear at the wheel of a racing car in competition after the end of this season. Last week it was announced that he had cancelled all his entries and that his final appearance was to be made on Whit Monday at Brooklands track, the scene of many of his triumphs at the wheel of light cars.

This attraction brought thousands of sightseers to Weybridge to enjoy the novel spectacle, but to track habitués the thrill of seeing Segrave's giant car in motion was tempered with regret and not a little sadness in that they were looking for the last time upon Major Segrave as a racing car driver. Who is there to take his place; to be the hero of motor-racing enthusiasts and the upholder of British prestige on the race tracks of the world? Thomas has passed, Lee Guiness has retired, and many other once-famous names are now but memories. The question is very difficult to answer.

Meantime, we join our readers in wishing Major Segrave the best of luck in his new sphere. He has said that his future sport is to be that of motor boat racing. If he lends to it the same enthusiasm, skill and courage that he has shown on the road and track it will have acquired a devotee whom marine motorists of the future will discuss with bated breath.



THE FUTURE OF CYCLECARS—A VERY INTERESTING LETTER—THE EFFECTS OF TAXATION UPON DESIGN—UNIT CONSTRUCTION WITH FRONT-WHEEL DRIVE SUGGESTED—MORE H.P. RECORDS.

It is always interesting to hear the considered views of those who have studied the problem of the future of cyclecars. I was pleased, therefore, to receive a letter recently from Mr. Hilton Skinner whose knowledge of the subject is extensive.

Mr. Skinner-starts off with the remark that he does not propose to rush in where even "Shacklepin" might fear to tread, by attempting to define a cyclecar, but for the purpose of his remarks he proposes to assume that it is a vehicle weighing under 8 cwt., and fitted with a motorcycle-type engine and a simple form of transmission. He assumes also that it is a vehicle from which any form of elaboration is excluded.

Before going farther I should like to say that I thoroughly agree with this definition. It will be interesting now to quote some extracts from Mr. Skinner's letter:—

In the past, and particularly at times when high prices were the rule, comparatively cheap and economical cyclecars enjoyed a considerable popularity and were sold in large numbers. Many of these machines, if somewhat crude in execution, were perfectly sound in principle. In many cases, however, their development did not follow normal lines, and with the rapid drop in light car prices a number of them disappeared from the market.

Several makes of cyclecar which were unorthodox in design falled to capture popular fancy simply because they did not "look right." Their performance was all that could be desired, and it is undoubtedly the conservatism of the buying public which was the cause of their demise.

Thus, in 1924 there was practically only one make of cyclecar, and that a three-wheeler, which had reached a position of strength. At the Olympia Show of 1925, however, there were three cyclecars conforming to our assumed definition, all of them being three-wheelers, and in 1926 came another three-wheeled addition to the ranks.

So far as four-wheeled vehicles were concerned, however, there were none which could really be termed cyclecars, and, in fact, the terms "cyclecar" and "three-wheeler" became almost synonymous. It is probable that whilst the taxation on horse-power law remains in force three-wheelers will continue to enjoy their present popularity, but the advent of a petrol tax might make a considerable difference in this direction, because there is a large number of people using three-wheelers who would really prefer a four-wheeled vehicle if its tax were reasonably low.

It is probable therefore that the cyclecars of the future will be four-wheelers selling at prices ranging between £60 and £100, although special sports models will still command a ready if limited market at prices up to £150 or more. The better class touring-type cyclecars will compete on level ground so far as comfort and weather protection are concerned with the less expensive light care, the lower price of the cycle car being achieved by virtue of its extreme simplicity.

With regard to the actual design of future cyclecars, it would seem that the cheapest will have an extremely simple layout and probably chain transmission. Selling at, say, £60, it might comprise an air-cooled motorcycle-type engine and a motorcycle-type gearbox. The steering would be direct and the suspension by simple helical springs, or by some other inexpensive means.

A rather better model, to sell at a figure round about £100, could be offered with improved bodywork, larger engine and other features which make for efficient performance on the road. It would be shorn, however, of all non-essential refinements.

Looking farther into the future,

Looking farther into the future, surely it is not unreasonable to suggest that considerable possibilities lie in the use of front-wheel drive, as, with a layout of this kind, it would be possible to construct the front axle, the steering, transmission, engine and so forth, as a single self-contained unit which could easily be assembled and fitted to the chassis frame en bloc.

A design of this kind has already

reached the drawing-board stage; it includes a 680 c.c. engine with a final drive totally enclosed and running in oil, and the suspension allows of each wheel being independently sprung. A cyclecar of this type should have an excellent road performance, as it would be exceptionally stable because a very low centre of gravity could be obtained.

Given a complete unit of the type suggested it would be possible to build it into almost any type of chassis frame, whether three-wheeler or four-wheeler, whilst the unobstructed space behind the unit would enable really comfortable and serviceable bodies to be fitted.

In conclusion it is as well to point out that unless we are prepared to disregard convention and to encourage new and original layouts an inexpensive and economical type of vehicle is never likely to materialize.

The foregoing is the gist of Mr. Skinner's remarks, and I must say that I agree with them in many particulars. I shall be extremely interested to receive further details of the front-wheel-drive cyclecar which he mentions, because a machine of this type should possess distinct possibilities.

Three-wheeler enthusiasts will be interested to learn that Mr. J. J. Hall, driving a 2½ h.p. 344 c.c. H.P. at Brooklands on June 1st, broke 18 world's records, subject to official confirmation. He was driving for eight hours in all, and during the last hour was lapping consistently at 58 m.p.h. The flying 5-mile record was broken during the fifth hour at a speed of 60.97 m.p.h., whilst 61.07 m.p.h. was recorded for the flying 5 kiloms.

The total weight of the cyclecar was 900 lb., owing to extra large tanks being fitted, but the average speed for the eight hours worked out at 48 m.p.h., in spite of a delay of 25 mins. caused by a chain breaking and smashing the carburetter float chamber.

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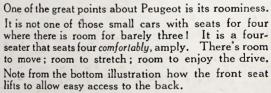
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THE SINGER GORDON ENGLAND SALOON.

ROAD TEST REPORT OF AN INTERESTING AND EFFICIENT SMALL CAR WITH SPECIAL COACHWORK.

NOT many years ago the possibility of fitting a four-door saloon body—with ample seating room for four persons—to an 8 h.p. chassis

four persons—to an 8 h.p. chassis would have been regarded as impracticable if a reasonable road performance was to be expected. Big strides have been made recently, however, in body design by specialist concerns, and one of the most successful in building small, light bodies is Gordon England, Ltd., Felsham Road, Putney.

In our issue of April 29th last we described the four-door saloon body which this concern had fitted to an 8 h.p. Singer Junior chassis and recently we had an opportunity to test the car on the road over a distance of about 180 miles.

The body is of the well-known Gordon England type, built up of very light but strong box-section wooden girders and covered with leather cloth. Three-point suspen-

sion is used, so that any slight distortion of the chassis does not affect the body. This arrangement ensures extreme riding comfort and an absence of all creaking noises or rattles.

Grey plush is used for the upholstery and the cushions are of the pneumatic variety. The two front seats are of the adjustable bucket type, whilst the rear seat is remarkable for its great depth, which affords ample support for the legs even of tall passengers.

Each of the four doors is fitted with sliding windows and the large rear light is provided with a silk blind. The windscreen is a single pane of glass set at a slight angle to prevent the reflection from the lights of following cars being directed into the driver's eyes. An automatic windscreen wiper is a standard fitting.

Both internally and externally the body presents a very attractive appearance, and it is by no means "stumpy." An efficient gutter is fitted above the doors, so that rain, in draining off the roof, will not blow into the car when the windows are open.

The saloon body is almost exactly the same weight as the standard Singer Junior touring body—the complete car weighs about 12½ cwt.—and although there is

SMALL BUT DIGNIFIED. Although affording ample room for four people the Gordon England saloon body on a Singer Junior chassis has a very pleasing and well-balanced appearance, as all the proportions are well maintained.

a slightly greater windage area with the saloon body, the maximum speed of the car does not appear to be affected in any marked degree, as, during our test, we attained a speed of nearly 50 m.p.h. with a full complement of passengers.

Not the least attractive feature of the Gordon England saloon is its extreme silence; at any speed and over any road surface we found it possible to carry on a conversation with the rear-seat passengers in a perfectly normal tone of voice. It is proper to mention here, incidentally, that the Singer Junior chassis is commendably quiet, mechanically, even on the lower gears.

Performance on Hills.

So far as hill-climbing is concerned, we found that the saloon had a performance equal to that of the touring model—which is very good. Those who know Brook Street Hill, Brentwood, on the main London-Colchester road, will agree that the climb from its base to the entrance to the town is long and trying and is made more difficult by the fact that a rigidly enforced 10-mile limit at the foot of the hill prevents it from being rushed.

The Singer climbed the hill in top gear at a speed which did not fall below 12 m.p.h. A second climb was then undertaken and full use made of the gearbox. This, of course, resulted in a very much faster climb, but second gear was required only for a few yards on the steepest portion of the hill.

As an indication of the comfort provided by the pneumatic upholstery and the generous leg-room, it can be said that a fast non-stop run of 80 miles had no fatiguing effects whatever upon the driver or the passengers, and all of them happened to be tall people—the driver and one passenger being over 6 ft.

The four doors provide ample room for getting into or out of the car, that on the driver's side being quite convenient, in spite of the fact that on the Singer Junior chassis the brake lever is fitted on the off side, the gear lever being central.

Altogether we were very pleased with the behaviour of the car, and in view of the undoubtedly increasing popularity of saloon bodies we think that this model will enjoy a ready sale. At the moment the price has not been decided, but we understand that it will be in the region of £200.

"The Light Car & Cyclecar" PHOTOGRAPHS

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ON THE KING'S HIGHWAY.

OMEONE wrote once upon a time that Nature makes The vagabonds. world makes us respectable; perhaps that is why we all love the vagabond, whether in literature or real life. His personal aspect may not be attractive, his contempt of social amenities may take startling forms, but his care-free, happy-golucky manner of life awakens a halfashamed admiration in most of us who submit to fetters for the sake of the flesh-pots.

And it may be that the motorist, seeking his pleasure by wandering along the highways and by-ways of the country, has a closer kinship in spirit with the vagabond than he imagines.

The true vagabond who would go along singing,

"Got no home, got no friends;

Thankful for anything the good Lord sends,"

Is not common, and he keeps himself apart from other denizens of the road. Just how many men there are tramping about to-day it is impossible to say, but, Judging from the reports which workhouse masters submit to boards of guardians, the number must be enormous.

Anyone who meets them congregating towards towns or other workhouse centres at dusk at this time of the year can see that they fall into sharply divided categories. Some are obviously respectable artizans temporarily under the weather—men who feel their position keenly and whose sole desire is to obtain regular work. Others are young fellows who, demobilized from the Army or industry at the end of the war, have since drifted about demoralized and indifferent.

Then there is the frowsy tramp, utterly apathetic to everything but his appetite, shullling along beyond hope of redemption or reform. These form the bulk of the population on the roads; but occasionally one sees the real vagabond—the man who is different from them all.

One such I saw at a famous Thames-side regatta two seasons ago. It was the day of the finals, when all society was on the water or in the grand stands. House-boats brightly decked with flowers had each their gay party. Large luxury cars brought smartly dressed people to even more luxurious launches. Everything spoke of wealth and ease. And standing apart from the crowd on the towpath was a huge ragged man, bareheaded, with a tawny mane like a lions and a long tawny beard; in age about 40, in build a god. Although the day was warm he wore an overcoat very green with age, and he carried an Army valise suspended from a staff that was almost a club.



Queer Characters that Arouse the Interest and Wonder of the Passer-by.

By George Alderson.

And as he stood there, so calmly surveying the scene, so careless of the contrast he was creating with the faultlessly attired people strolling by, the afternoon sun made an aureole of his hair and beard so that be re-sembled a Valkyr of old Even living again. more arresting was the look of grim amusement. turning cynicism and then to downright mockery. with which he regarded the brilliant display. Then, with a half-toss of his magnificent head, he strode away, walking with a kingly tread, like Saul, head and shoulders above his fellow men.

Half an hour later I overtook him on the way to Maidenhead, and one could swear that he had been accustomed to robes. What mystery lay behind him? Why that look of contempt at that pageantry on the river as of one who had tasted it all and found

it husk? Had he also rowed with Leander or helped his college to victory?

Often there is no mystery at all about the vagabond. One evening towards sunset I had pulled up to enjoy a smoke near a wood where I sometimes hear a nightingale when I was approached by a venerable way-farer who asked for the favour of a match. Though patriarchal in appearance, with gentle eyes and a flowing white beard, he was shabbily dressed and obviously on the road. He had neither the whine nor the thinly veiled insolence of the mendicant and so, in addition to the match, I proffered a fill of tobacco. He was very grateful, and while puffing at his pipe he remarked on the beauty of the bird-song in the wood.

"'Hear the wise thrush,'" he began.
"Hullo," I said, "acquainted with Browning?"

His old face became transfigured. "Poetry is everything to me," he replied. "You see, I was born at Stratford-on-Avon a few doors from where Will Shakespeare was born, and I think I know by heart everything he wrote. You can test me if you like."

Happening to be pretty well acquainted with a certain passage in "The Tempest," I started a line, and straightway, with a wealth of gesture and wonderfully dramatic expression, he took it up and went on for scores of lines. He told me he was on the road because he liked it and hoped to die on the road. With intense feeling he quoted the verses of Stevenson's "Requiem" beginning

"Under the wide and starry sky, Dig the grave and let me lie."

47

"That," he said, as he turned to go on his way, "is the finest epitaph for any man."

It is not often that one meets a man actually taking to the road, but that was my experience last summer. Whilst standing beside the car in the woods above Henley I was accosted by the driver of a caravan, who asked to be directed to Nettlebed Common. The caravan was obviously a new turn-out, and the man was leading the horse with an awkwardness that betokened unfamiliarity with the job. At the door of the caravan was a women and a child, the latter looking rather wide-cycd as at something entirely strange.

Nettlebed Common was quite near and the man evidently sensed my surprise at his lack of knowledge, for he said, half apologetically, "I don't know my way about yet, sir. It's only my first day on the road." The woman smiled wistfully, but there was anxiety in her eyes, and as they passed on I fell to wondering what had caused them to cut adrift from the life of the towns and what lay before them in their dealings with the nomadic tribes among whom their lot was now cast.

Gipsy Squalor.

Gipsics must have altered much since the days when they inspired Borrow to write "Lavengro" and Watts-Dunton to pen romances about them, for although amiable enough they live in squalor unbelievable. Nevertheless, their camps can present some surprises to those who care to make friendly approaches to these strange people. Some months ago I drew up at the side of the road to avoid a couple of ponies belonging to some gipsies, and a dirty-looking man came out of the collection of caravans and courteously expressed thanks for my consideration. Just then I saw passing up the steps of one of the caravans a girl so beautiful that I could scarcely believe my eyes.

Her loveliness was astonishing. Of medium height and about 19 years of age, she had a small oval face exquisitely formed, with large lustrous eyes full of the languor of the East. Her complexion was dusky and



The man was leading the horse with an awkwardness that betokened unfamiliarity with the job.



He wore a silver badge and that, perhaps, gave a clue to his actions.

her hair fell in long plaits one over each shoulder to the knees. I have never seen a picture that showed a face more lovely. The man to whom I was speaking saw my look and informed me with pride that it was his daughter. He then called her to come down.

No damsel praised by Eastern poets could have been more fair as she obeyed and walked across to the car; but the moment she opened her lips the illusion vanished. She spoke with the accents of the gutter, and a near view showed that she badly needed the assistance of soap and water.

Next day I saw her in a neighbouring town shaking a tambourine, what time a youth, probably her brother, turned a barrel organ.

On a Winter's Day.

Perhaps the most pathetic sight I ever saw on the road was between Hitchin and Biggleswade. It was a raw winter's day, with dull skies and drizzle, and the countryside looked mournful and depressing. Going up a hill, I saw a young man standing on the grass at the side of the road and bending down as if tying up the laces of his boots. To my surprise on nearer approach I noticed that he had a foot on a portable boot-cleaning outfit and was actually giving his own tattered boots a shine! A stranger spectacle on such a day it was impossible to imagine. He wore a silver badge, and that perhaps gave a clue to his actions.

We all know that in the Army a man on active service could become so fed up with his dismal surroundings that he would take to polishing up his equipment in a desperate attempt to preserve a semblance of self-respect, and probably this poor fellow on the road, ashamed by the condition into which he had fallen and depressed by the day, had found consolation in this humble task.

Verily, the true vagabond, whom the world and its ways have failed to make respectable, is to be found on the King's Highway. A little acquaintance with these of Nature's children may serve to bring us nearer to Nature herself.

------E

GLIMPSES OF SOME OF THE MERON FROM LONDON TO EDIA.

BROOKL.

ON THE "EDINBURGH" HILLS

(1) E. G. Stafford's Aero Morgan in the way splash on Askrizg Hill. (2) O. H. C. Corresponding to the way a charging a wall on West Stonesdale. (3) B Stevens's Lea-Francis passing Duncan Smaldamaged Frazer-Nash on West Stonesdale. (4) L. W. Turner's Lea-Francis breasting summit of Tan Hill. (7) G. Richardson's Asseven rounding the first of the Stonesdale. (8) F. H. Haynes's Wolseley making of the upper slopes of Tan Hill.

T IN PICTURES.

NTHUSIASTS DURING THEIR 416-MILE H-SAND RACING AT SOUTHPORT—IN THE RAIN.

ON BEACH AND TRACK.

(5) A 100-mile race, including artificial bends, was held at Southport on Saturday last; D. Higgins (Vauxhall) and C. M. Needham (Newton-Ceirano) are seen taking one of the bends together. (6) H. Mason (Austro-Daimler), closely followed by S. E. McGowan (G.N.), leading the field in the mile race for unlimited standard touring and sports cars at the same meeting. (9) Several races were abandoned at Brooklands on Whit-Monday owing to rain; the wet state of the track is obvious from this photograph.

BROOKLANDS MEETING SPOILED BY RAIN.

50

FOUR RACES ABANDONED OWING TO BAD WEATHER — MAJOR SEGRAVE'S LAST APPEARANCE ON THE TRACK.

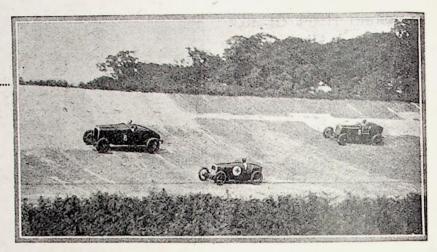
IT is very much to be regretted that the large crowd—probably a record one—which visited Brooklands on Whit-Monday was disappointed in the afternoon's sport owing to the very bad weather, as the heavy showers of rain which fell at frequent intervals made high-speed driving difficult and unsafe. It cannot be doubted that a very large number of the spectators visited the track mainly with the idea of seeing Major Segrave drive his record-breaking 1.000 h.p. car round the course, and, incidentally, to bid farewell to the gallant major, as this was his last public appearance on the track.

The meeting started with a threelap race in which there was a fairly good field. The cars were started from the pond, and all got away well except R. de Reuter (E.H.P.), whose car stopped a few yards beyond the starting line. It was restarted, however, and then got away smartly.

The limit man, J. Crickmay (Morris-Cowley), held his lead for just over a lap, and then was passed by A. F. Ashby (Riley) on the members' banking, with R. F. Oats (O.M.) in third position, whilst Kaye Don, driving H. E. Tatlow's Lea-Francis, succeeded in just heating G. Newman (Salmson) for fourth place. Ashby, who averaged 67.38 m.p.h., finished with a flat tyre.

67.38 m.p.h., finished with a flat tyre.

The second race produced a field of
11 starters, amongst which was F. H.
Boyd-Carpenter's Austin Seven, repaired after its recent crash and defiantly bearing the number 13, an unusual sight at Brooklands. The car appeared to be in particularly good fettle, and with 2 mins. 9 secs. start



R. Wa:ney (Stutz), F. Hough (Alvis) and "R. Wilson" (Austro-Daimler) on the banking in the sixth race.

from scratch, Boyd-Carpenter led for nearly two circuits, after which he was passed by "R. Wilson," driving a 3-litre Austro-Daimler. J. D. Benjafield (Salmson) and P. L. Densham (1,496 c.c. Bugatti) were close together, and on the railway straight Densham got into second place, but was unable to leave Benjafield very far behind. The winner proved to be "R. Wilson," who finished some little distance ahead of Densham, with P. Dutoit (3-litre Bentley) third. The winner's speed was 80.7 m.p.h.

Heavy rain held up the racing at this juncture, but so soon as it ceased another race in which there were 11 starters was held. In this event it seemed likely that light cars would score winning places, as Vernon Balls (Amilcar) took the lead soon after starting, and was followed by A. Whale (Calthorpe). "R. Wilson" (Austro-Daimler) forged his way to the front,

however, but was able to retain this position only for a short time owing to misfiring. This enabled E. K. Rayson (1,990 c.c. Bugatti) to win, with P. Dutoit (3-litre Bentley) second and V. Balls a good third. Rayson's speed was \$2.23 m.p.h.

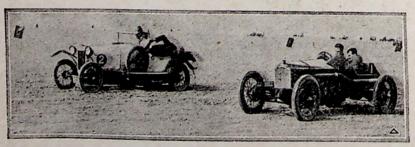
The last race before the meeting had to be abandoned, owing to the weather, produced a field of 13 starters, with F. H. Boyd-Carpenter as limit man. The Austro-Daimler again proved the winner, with R. F. Oats (1.991 c.c. O.M.) second and J. D. Benjafield (Salmson) very close on his tail. The winner's speed was 88.45 m.p.h.

Major Segrave's appearance on the track in the gigantic Sunbeam car aroused many bursts of cheering from the spectators. Unfortunately, however, a heavy rainstorm prevented many people from enjoying the demonstration in comfort. The car was afterwards exhibited in the paddock.

THE SOUTHPORT 100-MILE RACE.

THE race meeting held on the sands at Southport last Saturday, June 4th, included a 100-mile race in addition to a series of straight mile events. The usual section of sands was used, but on the sea side of the line of flags (used to mark the mile course) a series of bends had been flagged off in order to make the long-distance race more interesting and spectacular.

The afternoon's sport was opened by the straight mile races, G. E. McGowan, driving a 1,084 c.c. G.N., winning the 1,100 c.c., 1,500 c.c. and 2,000 c.c. standard sports or touring car events with comparative ease. H. Mason, in a 3-litre Austro-Daimler, took the unlimited class for sports or touring cars. In the racing section E. L. F. Mucklow (Frazer-Nash-G.N.) won the 1,100 c.c. and 1,500 c.c. classes, while Raymond Mays, driving a 2-litre Mercédès, won the 2,000 c.c. and unlimited c.c. classes.



G. Fryer (Frazer-Nash) and D. Higgins (Vauxhall) in the 100-mile race. Note Fryer's passenger holding a wing which has come loose.

In the 100-mile race only two light cars appeared at the first corner—a Newton-Ceirano, piloted by C. M. Needham, and a Frazer-Nash, in the hands of G. Fryer. The Newton-Ceirano was soon out of the race, but the Frazer-Nash got home within the time limit.

Nash got home within the time limit.

A very good race was witnessed for about 17 laps, when the leaders—D. Higgins (Vauxhall), A. J. Barnaby ('Old Iron'—in reality an old Sunbeam) and H. Heyworth (2-litre Bugatti), followed each other for round after round fairly closely. In the third lap Heyworth brought his Bugatti along into second place, a position he held until his car caught fire. The conflagration was soon extinguished but he retired.

guished but he retired.

The leader, D. Higgins, lapped very consistently indeed at about 60 mp. and eventually came home a winner, having completed the 100 miles in 1 hr. 47 mins. The next man home Mason (Austro-Daimler)—came Minson (Austro-Daimler)—came in his Frazer-Nash, completed the in his Frazer-Nash, completed the miles in 2 hrs. 17 mins., exactly an hour after the winner.

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THE B. AND B. CARBURETTER ON TEST.

AN INTERESTING AND EFFICIENT INSTRUMENT EMBODYING MANY NOVEL FEATURES.

THE problem of carburation is one which is always of interest to keen drivers, and, so far, at least, as readers of this journal are concerned, the interest has been accentuated by the articles which we published recently entitled "High-speed Engine Carburation." One of the carburetters described by the writer of the articles in question was the B. and B., and owing to the number of inquiries which we received concerning this instrument, we decided to conduct a test with one on a standard model light car.

The vehicle selected for the purpose was an 8 h.p. Singer Junior. The carburetter was fitted at the London service station of Brown and Barlow, Ltd., Witton, Birmingham—the Dartford Engineering and Carriage Co., Ltd., Hythe Road, Willesden, London, N.W.10—and has now been on test for two months.

Before dealing with the performance of the carburetter it will be interesting briefly to describe its design, which differs considerably from that of other makes. In the first place, the float needle is inverted and the stem, to which the float is secured by a clip, is only about one-sixteenth of an inch in diameter. It is one of the claims of the makers that this very light float mechanism plays an important part in securing minimum petrol consumption, because road vibration does not affect it sufficiently to cause incipient flooding.

The main jet is fitted in a passage formed between the float chamber and the choke tube, and is, therefore, readily accessible; it can, in fact, be removed without turning off the petrol and without stopping the engine, as it has a hexagon head which projects from the top of the carburetter. Instead of the nozzle of the jet being inside the choke orifice, as is the usual practice, the choke tube itself is grooved externally and drilled through in four places, short tubes which project about one-eighth of an inch into the restricted portion of the choke being fitted to the holes; the external groove communicates with the chamber in which the main jet is situated.

Thus, in working, a rich emulsion is drawn through the four small tubes and mixed with the air passing through the choke. In this manner the petrol is atomized twice over and a thoroughly homogeneous mixture results. The actual jet orifice being submerged and the top of the jet being in communication with the atmosphere, mixture regulation is automatic.

A separate jet is provided for slow running and starting, and considerable ingenuity is shown in the manner in which the mixture supplied by this jet is blended

These photographs show the extreme accessibility of the main jet and the air leak. No petrol is lost when changing jets.

with the main supply in order to provide rapid acceleration with an entire absence of flat-

spots. The quality of the mixture from this jet may be regulated by altering the size of the "air leak."

In the earlier model B. and B. carburetters of this type the air leak was adjustable by means of a milled-headed taper screw, but the makers found that these screws were apt to be tampered with in a manner which upset the working of the carburetter; they decided, therefore, to abandon this type of adjustment and to provide a series of plugs drilled with carefully calibrated holes, so that, once set, the quality of the mixture would remain unvarying.

As fitted to the Singer Junior, the carburetter has never failed to allow of an instant start from cold. So soon as the engine is warm, acceleration is in every way satisfactory, whilst the maximum speed under reasonably good road conditions is a genuine 50 m.p.h. and hill-climbing is proportionately good. On combined country and town runs consumption, with a No. 70 sports-type jet, works out at 45 m.p.g., but for continuous traffic driving there is a drop to 43 m.p.g.

Since the carburetter was fitted the engine has not been dismantled, but from the appearance of the sparking-plug points we should say that very little carbon deposit is present in the cylinder heads, and, from various tests which we have carried out, it appears evident that the mixture strength throughout the throttle range is particularly well balanced.

throttle range is particularly well balanced.

The carburetter is nicely finished and is made of bronze throughout; a gauze filter of large area is fitted in the base of the float chamber and the instrument is in every way fully up to the standard of quality which is expected from a concern with the reputation of Brown and Barlow, Ltd.

BRITISH LIGHT CARS IN THE EAST.

In an article entitled "Light Cars for India," which was published in last week's issue of this journal, the writer complained of the apparent indifference shown by British car manufacturers, and stated that, except in great cities, ordinary light cars are unsuitable for the conditions in the East. A point which he did not mention, however, was the somewhat underhand competition of American manufacturers.

How strong this opposition is, is clearly shown in a letter to his father, written by Mr. Claremont P. Skrine, I.C.S., who was formerly Consul-General for Chinese Turkestan. This letter, of which we have

just received a copy, shows in a striking manner how strong is the position of American car manufacturers in India and how they have taken every opportunity to foster prejudice against British cars.

Writing from Duzdap, Mr. Skrine says, "We have got the Singer here . . . and we propose (against everybody's advice) to drive up to Sistan and afterwards to BirJand in it. Everyone says that we shall stick and have to abandon the car—it is too small, the clearance is too low, it will overheat, etc., etc. The real argument is that because it is an English car it must be no good except on pukka

B37

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JUNE 10, 1927.

roads which, of course, are not always to be found in

this part of the world!
"You have no idea of the strength of the propaganda put across by the American car trade. They captured the Indian market during the war, when English cars were not being exported, and they have seen to it that English cars don't have a look in now. Just as in China, the Americans have always pushed their own trade by dint of 'crabbing' our manufac-turers and propaganding against us in every way, so in India they have succeeded in implanting firmly into the minds, not only of Indians, but of British, the idea that British cars overheat, are not worth the money and will only go on pukka roads, etc., and that American cars are the only ones suited to Indian conditions.

"Nowadays everybody you meet, British or Indian, repeats the same platitudes about overheating and low clearance. People are such sheep! A favourite argument is the difficulty of getting spare parts for English cars in India. . . . The answer to that is English cars in India. . that British cars do not require spares—they are so well made that their parts don't wear out or break in the first few months, as do those of the cheap

American cars.
"I have not had to buy a single spar part for the Singer since it arrived in India, although I have run it several thousand miles, including a 630-mile run to Delhi and back, and yet it is already two years old-i.e., at an age at which an American car of the same price would be worth little more than scrap-

This, from one who has tried a British light car in the East, certainly explodes the bogy that they are totally unsuited to the conditions, and also reveals-the chief reason why they are not more used-the fierco American competition and somewhat underhand methods adopted.

We certainly think, however, that British manufacturers might do more to make spare parts really easily obtainable, as this would certainly put an effective check on one of the strongest arguments of American manufacturers. Another point which every manufacturer who wishes to capture these point which markets should bear in mind is to produce cars with plenty of ground clearance. This point is stressed later in Mr. Skrine's letter, when he says, "The Singer does not overheat, and I shall be surprised if we have engine or other serious trouble between here and Birjand, but its low clearance is a draw-back, and we will probably have to get out several

times and cut away obstacles."

Thus, if the question of spares and ground clearance is attended to, it seems that there is no reason why enterprising British manufacturers should not obtain a firm footing in those markets of the world which are now held almost exclusively by American

makers

USEFUL HINTS FOR METALWORKERS.

PRILLING holes in metal is one of the jobs which nearly every amateur mechanic thinks he can accomplish without fear of going very far wrong, but there is a "best way" of tackling the job, and, in the long run, this is, of course, the most practical and

To begin with, twist drills should be treated with the greatest care. They are extremely brittle and small-diameter drills are very easily broken during

drilling operations.

They should be lightly smeared with oil when put away and a safe storing place should be found for them. The best way of keeping a number of drills so that they are handy is to bore holes to take the shanks in a block of wood. Sharpening blunted drills

should be left to an expert.

When drilling, it is most important that the drill brace be kept steady, otherwise the drill will strained and may break. A good way to test if the drill is being held correctly when a comparatively deep, vertical hole is being made is to ease the pressure of the hands, leaving the tool "floating" in the partially bored hole. It should then automatically spring to an approximately correct angle. This test applies, of course, only to hand and breast drills and not to the fixed bench type.

A Common Mistake.

There is a general misapprehension among amateurs that it is necessary, when drilling metals, to apply oil to the job. Steel is the only metal which requires oil, and, as a matter of fact, oil is not so good as a solution of soap-suds and soda, for lubrication is not so im-

portant as cooling.
Cutting metals is another of the operations which have to be performed frequently in motor repair work. The use of a hacksaw is often slow and awkward, and a good way of cutting comparatively thick steel plate—especially if an irregular shape is required—is to drill holes along the outline, which should be marked with a scriber. If the holes are close together, the web between them can be split with a cold chisel; sometimes a hacksaw can be used.

Brittle metals, such as cast-iron and some grades of steel, can be broken off clean if a nick or groove is made with a three-cornered file along the line where the fracture is to be. The job should be placed in a vice so that the nick is level with the top of the jaws and a heavy blow with a hammer given to the projecting piece. It should be possible to break the metal in a clean line exactly at the right place.

Soft metals such as brass, copper and aluminium should be cut with a hacksaw, or the drilling method already described may be resorted to. Sheet metal is best cut by shears or with a small guillotine. Stiff sheet can often be cut more easily by gripping one arm of the shears in the jaws of a vice. After cutting a piece of metal it is usually desirable to finish off the rough edge with a file. The best for this purpose is known as a Dreadnought-one which has curved cutting edges spaced wide apart—for it will remove an appreciable amount of metal at every stroke. This type of file often gives smoother results on soft metals than one of the normal cross-cut type.

Using a File.

Files should be cleaned with a stiff wire brush, but if the chips of metal between the teeth are very firmly lodged they may be removed by soaking the file in a very diluted hydrochloric acid solution for a few minutes, afterwards thoroughly rinsing it in water to remove all traces of acid.

The correct method of using a file, when light cuts are being taken, is to hold the handle in the right hand and the tip of the blade between the thumb and finger of the left hand. When using a large file on heavy work, it will be found easier to rest the palm of the left hand on the end of the file, with the fingers gripping it from underneath. Assuming that a flat surface is being filed, care must be taken to move the file in a true horizontal plane, and this can be done only by maintaining an even pressure on it with both hands.

A file cuts on the forward stroke only, therefore the pressure should be removed on the return stroke so that it just glides over the work; there is no need to lift the file clear of the surface; to do so is contrary to correct workshop practice. The speed at which a file is used depends upon many factors, but, in general, slow, steady strokes—not more than 60 per minute will be found to give good results.

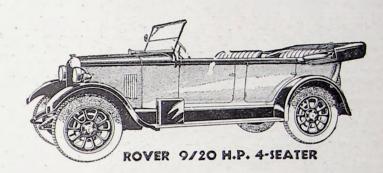
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The route of the R.A.C. observed trial referred to in the adjoining column.



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9/20H.P.

ROVER CARS "STURDY AS AN OLD SEA ROVER"



A DIFFERENTIAL FRICTION GEAR.

NEW VARIABLE-SPEED TRANS-MISSION SYSTEM DESIGNED UPON UNUSUAL BUT PRACTI-CAL LINES—AUTOMATIC VARI-ATION POSSIBLE.

ALTHOUGH friction-drive has been applied to several different makes of car, this type of transmission has never been so popular as an orthodox clutch and gearbox. In a number of cases the failure of friction-drive mechanism was due to wrong application of the principles involved, but it cannot be denied that a properly designed and constructed friction gear affords a very sweet and controllable form of gear-change mechanism.

An entirely new departure from the orthodox layout has recently been patented by Mr. H. M. Goss, 1, Ardleigh Road, Walthamstow, London, E.17, who claims to have produced a more positive and reliable drive than has hitherto been possible with this type of transmission.

A reference to the accompanying partsectional sketch will show that two
friction wheels (B, B) are used, working
across the face of a common driving disc
(A). In this way a more even thrust is
secured, with consequently less wear upon
the bearings and, of course, much less risk
of slip between the driving and driven
members. The great feature of the design
lies in the use of a differential gear to
transmit the drive from each disc to a

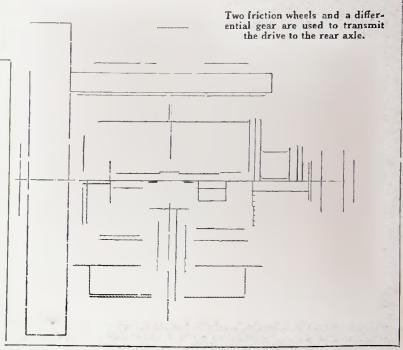
common crown wheel (E), in mesh with which is a pinion (F) secured to the front end of the propeller shaft. At the rear of the differential casing is a metal universal joint, the entire propeller shaft assembly terminating at the rear end in an ordinary back axle of either the solid or differential type.

The working of the gear is very interesting and easily followed. When the two driven discs are at equal radii from the centre of the driving disc no power is transmitted to the propeller shaft, because the discs are running at an equal speed—but, of course, in opposite directions—and their movement is balanced out by the differential gear.

So soon as they are moved from this position, however, this movement being accomplished by sliding the whole assembly transversely on suitable bearers, one wheel is speeded up because it has come on to a larger diameter of the driving disc face, whilst the other is slowed down because it is working on a smaller diameter. The drive is thus differentially transmitted from each member to the crown wheel, thence to the renr axle.

crown wheel, thence to the rear axle.

It will be seen from this that the actual transverse movement of the assembly from neutral to top-gear position is quite small, but the rise in gear ratio will be smooth and progressive, whilst, at the same time, there is no need to separate the driven discs from the driving disc. Thus the normal action of declutching is unnecessary when changing either up or down. A "clutch" pedal is provided for con-



venience, however, so that the discs can be separated when desired.

Normally the discs are retained in contact by means of springs. Accurate means of retaining the discs in the exact neutral position are provided, because any slight error in the relative positions of the discs would cause the car to creep slightly either forwards or backwards when the engine was running, but in the event of the mechanism becoming at any time slightly out of adjustment it is possible to separate the driving and driven discs slightly by means of a lock on the clutch pedal. Reverse motion is provided by moving the discs in the direction opposite to that which gives forward movement.

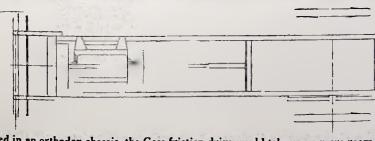
It will be seen by reference to the drawing that full use is made of ball bearings for all rotating parts, and it seems likely, therefore, that the gear would be perfectly satisfactory in use and, as it runs in oil, should be quite silent.

Although in the drawings the driving disc is shown as the engine flywheel it can, of course, be a disc carried farther aft in the chassis. Additionally, if found more convenient, the gear assembly itself can be fixed rigidly and the driving disc moved transversely for gear changing. A further adaptation of the invention comprises an intermediate torque unit introduced into the propeller shaft, which has the effect of varying the gear automatically in accordance with the load, so that the car may be controlled entirely by the throttle. At the moment no drawing of this

torque unit is available, but it certainly is interesting to learn of this feature.

The inventor of the gear, who is a mechanical engineer, is prepared to discuss his invention with anyone who may be interested in its application to cars or for industrial purposes.

So far as can be gathered from the drawings and the patent specification, the gear does not present any constructional difficulties and probably would be no more expensive to manufacture than an ordinary gearbox. Admittedly, there is a certain prejudice against friction drive, but this new gear might tend to overcome it.



Fitted in an orthodox chassis, the Goss friction drive would take up no more room than a gearbox. The assembly is moved sideways by the lever (H) for changing gear. B, B are the friction wheels.



We welcome letters for publication in these columns, but take no responsibility for the opinions expressed. No anonymous communications will be accepted, but writers may use a nom de plume. To ensure publication in the next issue letters should be addressed to the Editor, "The Light Car and Cyclecar," 5-15, Rosebery Avenue, London, E.C.1, and should reach us on Monday. We reserve the right to make any alterations or deletions which we deem necessary. Please write only on one side of the paper and leave a wide margin.

COOLING SYSTEMS OF THE FUTURE.

Faults in Modern Practice-Improvements Suggested.

Physical Properties of Water.

I hold no brief for air, water or steam-cooling, but to "Dissatisfied" and others who may be looking for a liquid which will be an improvement on water I should like to

The Need for Better Oil.

point out that water, although plentiful and cheap, possesses two properties which make it superior to any other

liquid for the purpose under discussion. In the first place, it has a specific heat higher than any other known liquid; that is, a given weight of water will absorb more heat for a given rise of temperature than any other liquid. The second point is that it has an unusually bigh latent heat of vaporization, which means that a given weight of it absorbs more heat in being converted into vapour than any other liquid. As water possesses these valuable properties it seems to me a waste of time to look

for something better.

My own impression is that future developments will lead rather in the direction of finding a lubricant which will do its job at a higher temperature than those now available, and thus reduce the need for cooling. After all, the petrol motor is a "heat engine," and it seems folly to burn petrol to produce heat and to use water to carry it away. The dissipation of heat is only a necessary evil imposed upon us by the limitations of our mechanisms and lubricants.

T. TOTALLER.

Why Not Oil Cooling?

The air v, water-cooling controversy is interesting and of particular importance; present cooling systems are far from salisfactory, and it seems to me that, if light car owners can show united disapproval of the systems

now used and can guide manufacturers into the right paths, we shall very shortly have more efficient engines. Ad-Satisfactory Experience.

mitted that air cooling has several obvious disadvantages, it seems to me that the great fault of modern water-cooling systems is that they are largely not self-contained. Radiator, pump, temperature indicator and connecting joints are all external and add still further to the complicated appearance and layout of the power unit.

What is wrong with oil cooling? I have some very pleasant recollections of over 10,000 miles covered on a twoscater Belsize-Bradshaw light car fitted with one of the later-type V-twin engines. The Bradshaw engine was, of course, partly air cooled-a very claborate arrangement of a shielded suction fan flowed a powerful draught of air over the cylinder heads—but the actual absorption of heat from the cylinder walls and piston was effected chiefly by the oil flow. It always seemed to me that if the massive sump had been formed as a large-mesh radiator the designers could have dispensed with external air-cooling arrangements Splash lubrication was also relied upon to carry the oil over the whole area of the cylinders and to the underside of the piston crown, but if a pump had been arranged to carry oil to the highest possible point in the cylinder, thus allowing the hot oil to drain down to the sump, where it would be cooled, a very positive and self-contained form of cooling would have been obtained.

Belsize Park.

Where Modern Practice Fails.

I am afraid I cannot agree with your correspondent "A.M.I.Ae.E.," who predicts that air-cooled engines will return to favour. Although, personally, I see many advantages in air-cooling, it has two great draw backs which, I think, are quite sufficient to prevent its reintroduction. These are the inevitable noisiness of air-cooled engines and the need for frequent decarbonization. I am quite aware that air-cooled engines can be made me-

I am quite aware that air-cooled engines can be made me-I am quite aware that air-cooled engines can be made mechanically quiet, but if this is done the cost is increased enormously. The troubles which "A.M.I.Ac.E." states accompany water cooling are not, I think, important; modern radiators and circulating pumps soldom give trouble. I must confess, however, that water cooling has one real disadvantage, namely, the time taken for an engine to warm up from cold D. F. NORTH. up from cold.

New Ideas Discussed.

Your correspondent "Not Quite Dissatisfied" calls attention to a difficulty that would have to be overcome by any

manufacturer who adopted my idea of using as a cooling medium some liquid other than water, but this difficulty—that of preventing appreciable losses of the liquid—does not appear to me to be by any means an increase of the cooling appreciable losses of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any means an increase of the liquid—does not appear to me to be by any mean

Given a properly designed radiator, quite equal to the task of rapidly condensing the vapour as it is formed, rises in pressure should normally be negligible, although I quite agree that provision would have to be made for emergencies.

As one who uses a small car for professional purposes and As one who uses a small car for protessional parposes and relies on it for daily transportation to his office, the draw-backs of water as a cooling medium are painfully apparent to me for at least three months every year, and I suggest that the great majority of light car owners—at any rate those who cannot afford brick-built and properly heated garages—will easily areas.

Mr. Tester cites an interesting analogy in the Perkin tube. The principle involved here—that of cooling by chullition—is quite on all fours with my idea, although I cannot quite see what is to be gained by applying the cooling effect by means of a number of small units.

DISSATISFIED.

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C.F.H. 57



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H.P.

OUR READERS' OPINIONS (contd.).

The Road Fund Raid—Unfair Treatment.

A New Organization.

I thoroughly agree with your correspondent, Mr. Neville Robinson, whose letter in your issue of June 3rd was headed "The Raid on the Road Fund." I think that what the average light car owner complains

The Motorist Da- of in this connection is not so much fence Association, that the country everywhere is not being cut up to form fast and ugly motor-

ways, but that those roads which we already have are not being kept in anything like a reasonable state of repair. Until all our main roads and secondary roads are in good condition there can be not the slightest justification for raiding the fund which was created for their maintenance. Not, of course, that the Government requires any justi-

fication for scandalous practices of this sort, because, so far, no one has been able to check them. It is for this reason that an association is at the moment in process of forma-The task that this association will set itself is:-

(1) To ensure that all moneys collected as taxes on motor vehicles shall be spent on road and other improvements that will benefit directly the motor user.

(2) To obtain a lower and more equable tax on motor vehicles.

(3) To put an end to police persecution of respectable motorists in all its many and ridiculous forms.

(4) To ensure that motorists shall have justice and a fair

hearing in police courts.

(5) To establish motorists in the eyes of the general public not as dangerous criminals, rogues and vagabonds (as they are at present regarded), but as law-abiding citizens, ready to help all and sundry in times of emergency,

both private and national.

Should Mr. Neville Robinson or any of your renders care to write to me I will send them further particulars of this association, which is being formed by several correspondents to your associated journal *The Motor*. The founders of this organization have considered many of the possible

means for making heard the voice of the motorist, and I that some very effective methods have been may say that some very chective nictuous hard evolved. Given reasonable support the "Motorist Defence Association" will be a most formidable body to be reckoned with, and the sight of the association's badge mounted on a car will make certain over-zealous officials "think twice" before . . .

I should like to conclude by saying that I have always found The Light Car and Cyclecar, The Motor and Motor Cycling (which papers I have read every week for as long as I can remember) to be the most genuinely active in the interests of their readers and the most outspoken when dealing with the oppressors of motorists. If only for this reason I like these papers and I wish them every success.

Hamilton Lister.

The Definition of a Surplus.

There is little the ordinary motorist can do in the way of protest at the moment, but with a very little organization there might be something at the next General Election.

It should have some weight if, at every Paying Four candidate's meetings, a spokesman put a few agreed questions, every motorist in the hall rising and standing in sup-nan. This is a subject where "party" Times Over. port of the spokesman.

may be forgotten.

There is, and can be, no surplus (i.e., "That which is over and above what is required") until all our roads are over and above what is required ") until all our roads are in good condition. As it is, we pay three times; once in tax, again in repairs and renewals necessitated by bad roads, and yet again in our increased contributions to the Dole. In this part of the country (Somerset) there is a danger of paying a fourth and final time—with life or limb, because, in places, the edges of the road resemble a half-worked quarry, and the average rider or driver is tempted to "keep out" in a way which might well contribute to accident. tribute to accident. A.H.R.

Local Pronunciations.

"Focus" asked for experiences of local pronunciation. I was staying some years ago at Bude and was told of an interesting church at a little village near; I decided to visit it, and on asking whether I was on the

Another Inter- right road for Poughill during the run I

esting Example. encountered a blank stare. I explained about the church of which I had heard, whereupon the person promptly said: "Oh, Poffle Church; yes," and proceeded to direct me. I confess I preferred the local pronunciation, but how could an uninitiated stranger hope to hit on it? There is a place near here spelt Congresbury, usually pronounced "Coombsbury." One could quote many more One could quote E. M. SMITH. many more.

Deferred Payments.

The deferred-payment system of buying cars seems to be very popular with potential motorists nowadays, and, judging by the increased trade that this means for agents and

The Dealer's Attitude.

dealers, I suppose it is only natural that the latter people should regard the scheme in a favourable light. I have tried the idea once, but cannot say that

my experience was very satisfactory. The concern with which I dealt seemed to adopt the attitude at once that because I did not choose to settle the account for the car right away, but preferred to pay off the account on the "easy terms" so widely advertised, I should be treated in

an inferior manner to buyers who paid cash down.

Now, this attitude is quite incorrect. The comparatively high rate of interest charged on the balance left on deferredpayment deals should make the car dealer only too anxious to oblige all potential customers; trade would be reduced by more than a half had not the deferred-payment arrangement been popularized by certain societies. I do not want it to be thought that I am condemning every dealer, as conversations with my friends point to the fact that my experience was the exception rather than the rule. What I wish to emphasize is that those few traders who adopt a superior attitude are pursuing a very short-sighted policy. P.J.

The Extra-air Inlet Controversy.

As the originators of the hand-controlled extra-air inlet which we have advertised regularly for the past 21 years, we cannot let the remarks of your correspondent "Veritas"

pass without denying in the strongest No Extravaterms that we, at any rate, have never

gant Claims. made extravagant claims for our device.

Twenty years ago, with the carburetters then in use, it was no exaggeration to claim anything from 25-50 per cent. saving in petrol consumption, but we have learned something of the vagaries of carburation since then.

We have been content, therefore, for several years past to let the users of the Bowden extra-air inlet make the claims for us. This fact can be confirmed by anyone who cares to examine advertisements which have recently appeared in The Light Car and Cyclecar or your associated journal, The Motor.

Is it not conclusive proof of the usefulness of the extra-air inlet that after 21 years it is still selling so well as to have recently encouraged several other makers to introduce devices of a similar nature? It is, perhaps, needless to add that we have accumulated a considerable number of un-solicited testimonials from users, which are always available for inspection.

For and on behalf of Bowden Wire, Ltd., JAMES R. NESBIT, Sales Manager.

High Mileages in a Day.

Your correspondent "E.P.P." does not appear to have seen Mr. Brown's letter of three weeks ago, in which he asked if any reader had ever done 500 miles in a day. My letter was only in reply to Mr. Brown.

"Not a Stunt Run." Whether your correspondent "E.P.P." sees any point in a performance of this

nature does not matter at all, as mine was not a stunt run; I had arrived in Edinburgh at nine o'clock one Saturday night, and found it necessary to be in Bournemouth on Monday morning early. I did not start at midnight, but at 5 a.m. on Sunday morning, and was on the road a little under 21 hours.

J. F. Deverill.



OUR READERS' OPINIONS (contd.).

Three Speeds or Four?

Simplicity Comes First.

While it is, of course, possible to see exactly—in theory—the number of speeds that are required for a car of known weight and horse-power, it should be borne in mind that the average owner regards the clutch, throttle and foot brake as the only con-Two-Undoubtedly. trols worth worrying over; the gear lever is only an additional unnecessary complication. American car manufacturers seem to have found it possible to pro-duce power units which do not depend for their flexibility on continuous changing of gear ratios; the British motoring public needs engines of the same type—for general touring at any rate—and the demand will eventually cause the supply, no matter how fondly the manufacturers may cling to

the old-fashioned gear change.
"Sporty-boyees" may care to show their driving ability by the constant use of a gearbox, the process being known, I understand, as making "racing changes." Paterfamilias demands a mechanical solution of the difficulty

which savours more of comfort and simplicity.

We may even expect some form of two-speed epicyclic gear, operated by a pedal in place of a hampering gear lever, to prevail over the present system. Clutch trouble, difficult gear changing, double-declutching and the other necessary evils associated with sliding-pinion type of gear change would then be released to the memory and the representative. then be relegated to the memory, and the mechanism itself to the museums. PROGRESS.

Fuel Consumption Affected.

Your correspondent Mr. H. W. Pitt says, in connection with the age-old "three speed or four?" controversy, that "the onus of proof lies upon those who use four-speed gearboxes as to exactly why the complication

Absence of Fuss. of the extra speed is required." The

proof is easily provided. Mr. Pitt cites
the A.C. as an ideal three-speeder. On its highest indirect
gear it will just break into the "roaring forties," and in

order that this ratio has not to be used to offer. gear it will just break into the "roaring forties," and in order that this ratio has not to be used too often the top gear is 5 to 1, even although the power-weight ratio is high. If the A.C. had a top gear of, say, 4.4 to 1 and a third gear of, say, 6.4 to 1, its fuel consumption would be lower, and it would be much faster on hills and less "fussy" at speed.

My own car, which has an engine of similar dimensions to the A.C., will pass an A.C. two-scater with ease on any hill, in spite of the encumbrance of a saloon body and a heavy chassis. It will run at 50 m.p.h. on its highest in-

direct gear without any risk of breaking valve springs or running big-ends, and it will carry on at 55-60 m.p.h. in-definitely with a petrol consumption of 28-30 m.p.g and an oil consumption of 1,200 m.p.g. What 12-litre three-speeder will do that with a saloon body? Perhaps Mr. Pitt can tell us, letting us know at the same time whether the wonder car in question could take its full load anywhere where wheels will grip in the British Isles and still make a creditable climb of Countisbury, Parracombe and other such hills which one commonly meets when bouring.

PERFORMANCE UBER ALLES.

A Complete Mastery of Speed.

Will Mr. Pitt, who is so enthusiastic about three-speeders and who thinks that we four-speed enthusiasts need to prove our case, kindly tell us whether it is not a fact that the greatest pleasure one can obtain at the

Where "Fourwheel of a car is to be able to feel that speeders" Score, one has a complete mastery of speed and the ability at any time, and no matter what the road and traffic conditions may be, to go just as fast as one pleases? One cannot do that with a three-speed car without sacrificing almost essential comfort-giving devices in order to obtain a power-weight ratio of an entirely freak

order. There are few three-speed cars, in fact, which can approach that ideal even in chassis form.

Racing Car Practice.

I read the letter from Mr. H. W. Pitt with interest and certainly agree with a great deal of what he says. I was, however, surprised to see that anyone of Mr. Pitt's standing should state that " a racing car with an

Mr. Pitt's Letter enormous power-weight-ratio generally Criticised. has one or two gears." I have followed racing fairly closely for many years, but except in the case of a Morgan cannot remember any racing car with less than three speeds—a very large proportion, in fact, have four. One has only to witness a modern race to see, also, what good use the drivers make of their gear-boxes. Surely Mr. Pitt will concede that to obtain maximum acceleration at least three gears must be used. So far as his remarks apply to touring cars, I quite agree with what he says, for I certainly think that the average present-day driver does not want to be bothered with four speeds.

BROOKLANDS HABITUE.

Suspension Systems-Motorcycle or Car?

Damping Out Rebound.

In "Our Readers' Opinions" of your May 27th issue, "Puzzled" inquired why car manufacturers make the springs flexible and then fit shock absorbers to stiffen them. The reason is that the manufacturers are Hydraulic Action endeavouring to make the steel springs Favoured. accommodate themselves to flexibility in one direction and stiffness in the other. Stiffer springs alone would not meet the case, as may be ascertained by riding in a motorbus, especially if it is lightly

The springs move comparatively little when a car is running over a smooth road, so that easy riding is not greatly affected, and shock absorbers are an attempt to mitigate the reaction when the deflection is great over rough ground. "Puzzled" has, no doubt, observed that shock absorbers are not found on buses and lorries, because their stiff springs do not need more stiffening—a fact which bears out his opinion that most types are simply spring stiffeners,

the term shock absorber being a misnomer.

As "Puzzled" is evidently a person who thinks, it may be that he has further ideas on the subject which gould be developed; his present conclusions are correct. I therefore beg to suggest to him (and car manufacturers) a few considerations which, embodied in a hydro-pneumatic shock

nbsorber, would solve the problem.

The flexibility of the steel springs must not be restricted, and their movement from normal into extension (as happens when the wheel drops into a pot-hole) must be free. Ninetynine per cent. of road irregularities are a combination of a

pot-hole and a bump; there are very few humps not preceded by a pot-hole or its equivalent. The movement of the spring from normal into compression (for a bump) must be free, but the blow should be cushioned by compressed air in the shock absorber. The reaction of the steel spring from both extension and compression must be damped out by the shock absorber during the return to normal, secondary oscillation being thereby eliminated also.

If the sequence of operation is considered, it will be seen

that the basic principle is that in movements either way from normal the beneficial action of the steel spring should be fully retained and that the objectionable reaction to normal should be absorbed.

The Comfort of Motorcycles and Cars

After reading "Ex-Motorcyclist's" experience of light cars. After reading "Ex-Motorcyclist's" experience of light cars.

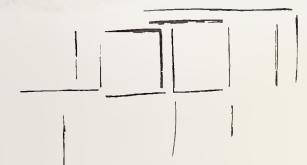
I feel I must give my own experience. I have recently taken delivery of a light car after riding a motorcycle, also a combination, for the last 10 years. As I only drive for pleasure I make few long journeys, although I cover about 200 miles on Sunday very often and, roughly, 500 miles a week. "Ex-Motorcyclist" does not mention the make of ear he purchased but I seriouply adviso tion the make of car he purchased, but I seriously advise him to scrap his present car or give it to his biggest enemy and buy an Austin Seven. Then I feel he will have no wish to go back to a motorcycle or make any other complaint; be will also have the satisfaction of dealing with a concern which will give him every consideration if he needs it; that, at any rate, is my experience.

J. SKINNES.



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OUR READERS' OPINIONS (contd.).

Slipshod Garage Methods.

I have often noted the promptitude with which some of your correspondents say that their repairs have been carried out by manufacturers and garages, although I notice also that "Focus" has recently com-

Annoying Delays.

plained about the methods of some service stations. Perhaps my experience of a wayside garage may prove inter-

esting. Some little time ago I decided to take a holiday at Ostend and, to economize, decided to drive to the coast. of my car proving faulty. I therefore decided to leave the car at the nearest garage and carry on by train. The proprietor informed me that it would be ready for me on my return in a week's time.

When I came for the car I was informed that it was not ready, that the clutch plate could not be obtained in London and that the manufacturers of the car had not yet sent a spare. I therefore returned to my home and waited four days, when I wired to the garage and was asked to call on the manufacturers to request them to forward the plate at once. I duly called on the makers and was told that they had only received the order six days previously and had temporarily run out of stock, but would send on the spare the same night. Two days later I called at the garage, but was told that the job was not done, so I decided to stay at an hotel for the night and to collect my car the following day. I have at last got it, but I am wondering if motoring DISGUSTED.

Our correspondent's experience emphasizes the wisdom
of placing important repairs in the hands of the manufacturers of the car or their authorized agents. Some garages cannot deal with large repairs .- ED.

White Roofs for Saloon Cars.

I quite agree with "Focus" in his condemnation of black as a colour for the roofs of saloon cars, but I do not think much would be gained by painting them white; although the rays of the sun would certainly be re-

L.G.O.C. Used Them.

flected instead of absorbed, a white roof would very soon get discoloured and look very ugly. It is very significant that the

covered-top London buses introduced a few months ago originally had their roofs painted a very light grey (almost white), but they are now being repainted in a considerably darker shade. I do not know why the London General Omnibus Co. have taken this step, but it certainly seems to point to the fact that very light roofs showed the dirt too much. So far as cars are concerned, I think a medium colour which would match the colour scheme of the rest of the car would be suitable, as it would show dirt no more than the rest of the body, but would have the advantage of keeping the car cooler in hot weather. D. E. BARNES.

INFORMATION WANTED.

SINGER .- The loan or sale of an instruction book dealing with the 1924 model would be appreciated.—J. B. Robertson, 14. Westmoreland Street, Glasgow, S.2.

SINGER.—The opportunity to buy or borrow an instruction book for the 1924 10 h.p. model would oblige.—S. Davey, 140, Newington Causeway, London, S.E.1.

DEEMSTER.—The chance to purchase or borrow an instruction book for the 1922 model would be appreciated.—H.D., 15, Upper Clapton Road, London, E.5.

CLYNO.—Any reader who has fitted shock absorbers to the rear of the 1924 four-seater model is asked to com-municate with—R. C. Pearse, 2, The Walk, Launceston, Cornwall.

CLUB ITEMS AND SPORTING EVENTS.

BELSIZE-BRADSHAW L.C.C.

BELSIZE-BHADSHAW L.C.C.
The next meeting will be a run to Bexhill-onSca on June 12th. Members will meet near
Mitcham Junotice Station at 9.50 a.m., and the
rendezvous at Bexhill will be Cooden Beach.
On June 25th the club is having a combined
run with the Morgan Club.

R.A.C. PERMITS.

The R.A.O. has recently issued closed permits for the following events:—June 11th, Ipswich and D. M.CO. Speed Trials at Minsmer Beach; June 22nd, Middlesbrough and D. M.C. Ladies' Reliability Trial; June 29th, Middlesbrough and D. M.O. Fuel Consumption Test.

CITY OF LONDON M.A.

The Southern Countres Trial, which will be held by the City of London M.A. on July 10th, is open to the Wood Green and D. M.C., the Amateur M.C.O. and the London Ladies' Club. The route will lie through Surrey, Kent and Sussex and will finish at Rye. Silver cups will be awarded to all competitors keeping to schedule and making non-stop climbs of hills, whist tilver and bronze medals are also offered. The entry fee is 5s. Intending competitors abould communicate with the bon. secretary, Mr. T. C. Coombs. 27. Allen's Buildings. Leonard Street, London, E.C.2.

The club's night run to Eournemouth has been postponed until June 18th. 19th, owing to the South Middland Centre A.-O.U's Championship Trial, in which the club hopes onter a team. Members taking part in the Bournemouth night run will leave Finsbury Creus, London, at midnight on June 18th.

LEICESTER AND D. M.C.

A gymkhana is to be held by the Leicester and District M.C. at the Agricultural Show Ground, Leicester, on Thursday evening, June 23rd. The club hopes to distribute at least 2100 to charities from the proceeds. Entries for those events which have not already closed will be accepted up to June 16th. The club asks for offers of belp on the ground from members, whilst a number of women will also be needed to sell programmes. All who can help are asked to write to Mr. W. C. Gibbins, 179. Charnwood Street, Leicester, as soon as possible, of the control of the

FORTHCOMING EVENTS.

June 10th.
Redditch M.C. and C.C. Hall day Amateur Trial.

dune 11.

Brighton and Hove M.O. Brighton to Beer Trial.

Henlys, Ltd. Alvis Rally, Brooklands.
Huddersfield and D. M.S.C. Freak Hülching.

climb.
A.-C.U. (South Midland Centre). Championship Trial.
Wood Green and D. M.O. Tour to T.T.
and Lake District.
Ipswich and D. M.C.O. Speed Trials at
Minsmere Beach.

Munsmere Beach.

June 12.

Montihéry Grand Prix and Women's Champlouship Meeting.
London Eagle M.C. Trial.
J.O.C. (S.W. Centrol. Rally.
Morgan Club. Run to Storrington.
Wood Green and D. M.C. Ladies' Trial.
Leicester and D. M.C. Run to Alton
Towers.
Belsize-Bradshaw L.C.O. Run to Bexhill.

hill. June 18. Rudge-Whitworth Cum Race, Le Mana. J.C.C. High-speed Reliability Trial. Blackpool M.C. Speed Trials. Langford and D. L.C.C. Pinco Memorial Trial. West Kent M.C. Reliability Trial. Shemeld M.O. All-night Trial.

June 19.

Penya Rhin Grand Priz, Spain.
Liverpool M.C. Derbyshire Trial.
Morgan Club Cup Trial.
Wood Green and D. M.C. Social Run to

Clacton. Leeds M.O. Novelty Team Trial.

LAND'S END TO JOHN O'GROATS.

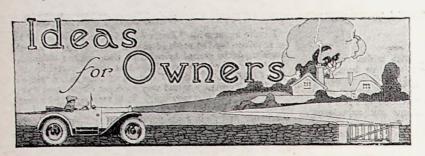
The fith Land's End to John o'Groats run of the Motor Cycling Club will be held from Tuesday, July 5th, to Friday, July 8th. It is open only to members of the organizing club, and motorcycles, three-wheelers and cars of any horse-power will be taking part. The run will be in two parts, the first ending at Carlisle on Wednesday night, July 6th; this section is 466 miles in length, and will be accomplished in 26 miles in length, and will be accomplished in 26 hours, whilst the final run from Carlisle to John o'Groats is 409 miles, the times taken being 23th hours, which should be sent to the trials secretary. Mr. F. T. Bidlake, 84, North End Road, Golders Green, London, N.W.11, close on

Wednesday, June 22nd. It should be nointed out that the number of competitors will be limited to 125 in all, the maximum number in each class being as follows:—Solo motorcycles 50, sidecar combinations and hree-wheelers 25, cars 50. Motorists who are not already members of the club, but who wish to take part in the run, should apply for membership to the general secretary. Mr. J. A. Masters, 22. Norland Square, Loudon, W.11, as soon as possible, and forms for membership completed, with a remittance of £1 6s for the annual subscription and entrance fee to the club, must reach the secretary not later than Monday, June 13th. The entrance fee for the trial is £2. Prospective members who have already applied for election to the club may send their entry forms and fees to Mr. Bidlake in advance of election, the money being returnable in the event of the prospective member not being elected prior to the run.



In the "Edinburgh." K. F. A. Walker (Salmson) just misses the bank on West Stonesdale.

WOOD GREEN AND D. M.C
The Wood Green and District Motor Club's
programme of events for June is as follows:
11th, start of tour to the Isle of Man to witness the T.T. and to the Lake District: 12th,
Isdies' run to Bedford: 19th, run to Clacton:
20th, pillion trial. The hon, secretary of the
club is Mr. O. E. Harling, Wood Green and District M.C. Offices, Crescent Road, Alexandra
Park, London, N.22, and further details of the
events can be obtained from him.



We invite readers to send us hints gained from their own experience for inclusion in this feature. Five shillings will be paid to the sender of any hint published, but we cannot undertake to return contributions not used.

Drilling Frame Members.

Amateur mechanics should bear in mind the important fact that holes should not be drilled in a haphazard manner in the main frame of a car. Shock absorbers and similar accessories which necessitate holes being drilled in the chassis frame for their accommodation should be fitted with due care, or the side members may be weakened to a dangerous degree.

When a lond is placed upon a side member of the usual channel section the top flange is put in compression, the bottom flange in tension and the centre of the member is practically unaffected. If, therefore, it is absolutely essential to drill holes in the frame to accommodate extras, it is advisable to choose the centre of the web and to drill the holes as small as possible.

For Austin Drivers.

The position of the rubber weather strip on the top of the lower panel of some Austin Seven windscreens may be annoying to drivers of short stature, for the rubber comes directly in the line of vision. If the strip is taken off and shortened slightly it can be fitted to the lower edge of the upper panel. A reader has found this position much more satisfactory and the strip will stay in position without any fixing cement, provided that it is long enough for the ends to press against the edges of the frame.

A Bulb Horn Idea.

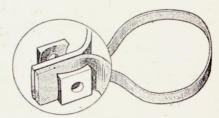
Flexible metal gas tubing can be made to serve as an extension piece for the bulb of an ordinary reed horn. The trumpet portion may be mounted wherever convenient, under the bonnet, on the running board or bonnet board, and connected by means of a length of tubing and the rubber connections usually sold with it to the bulb. The last-named may be mounted in some convenient and inconspicuous place where it would be impossible to fix the complete horn. The connections may be made more secure if they are given a touch of Secotine and bound with insulating tape. The metal tubing should be enamelled.

Keeping the Windscreen Clear.

It is no easy matter to drive a car with the windscreen blurred by rain, but owners who have not a screen wiper will find that a potato cut in half and rubbed over the screen when it is wet will have the effect of keeping the glass clear. Glycerine gives a better result, but is not so easily obtained just when it is wanted.

Joining Rubber Belts.

One difficulty that is always experienced with the use of rubber belts for driving speedometers and cooling fans is the means of fastening the ends in an easy manner and without setting up a disturbing clicking noise during use. An accompanying sketch illustrates a



Claw-footed washers are excellent for joining flat helting as they will not set up an annoying click.

simple method of using claw-footed washers to grip the ends of the belt, a small bolt passing through both washers and rubber belting.

Washers similar to those illustrated

Washers similar to those illustrated can be simply made from nuts of suitable size. One surface should be filed in a vice in two directions with a round file so that the corners are left raised. The claw-feet washers will effectively grip the belt, and it is, of course, impossible for them to rattle.

A simple method of adding distilled water to a battery without splashing.

Care of the Battery.

When topping up the battery electrolyte with distilled water, or when taking readings of the level, great care should be exercised to prevent any foreign matter getting into the battery through the vent holes. Small particles of rust or metal filings resting between the plates might make a short-circuit inside the battery. It is a wise plan to keep distilled water always in a glass bottle or container; if a metal vessel is used for this purpose particles of metal are liable to find their way into the battery and cannot easily be removed even if detected.

The water should be poured into the battery from a container of the type shown in the sketch. An air vent in the stopper controls the flow of the liquid and it is an easy matter to prevent the water splashing the terminals.

Queries of general interest will be answered under this heading whenever possible, but a stamped addressed envelope must be enclosed for reply by post. Telephonic inquiries cannot be answered.

100

R.D.O. (London, S.W.).—We do not advise you to proceed with the erection of a temporary building for use as a workshop and garage until you have obtained permission from the local council. In certain instances a penalty is attached to any such transgression of the building by-laws, and this may be inflicted together with an order to dismantle the structure.

A.T. (Whetstone).—The best plan would be to obtain bolts of the correct length for the purpose, as there will then be no danger of the support working loose after a short time. To effect a temporary repair, washers may be inserted to bring the split-pin up to the level of the castellations; care should be taken to see that the top washer is of the split variety.

T.F.J. (Caterham).—The Morgan is now fitted with a spiral bevel. The Jowett clutch is lined with bonded asbestos cord wound on a grooved aluminium internal cone. The Morgan clutch has a fabric-lined internal cone

H.F. (Kew).—It is most probable that the stiffness of the operation of your gear lever is due to slight chassis distortion as a result of the hard usage to which your car has been subjected. Usually this stiffness is apt to result after extensive use if the bearing holding the gear-operating shaft to the frame has not received proper lubrication.

frame has not cation.

O.A. (Bishop's Stortford).—Ordinary methods cannot be adopted in solder ing aluminium, as the metal cannot be soft solder. Special fluxes and usual solders are obtainable for the purpose of particular difficulty, it is open and portant to see that the metal most on joints is quite clean and perfectly the from the least suspicion of story the

To try it is to buy it.

A famous car with a famous name.

A car you can be proud of.

A car that will serve you exceptionally well.

Such is this 11.22 h.p. Wolseley at £215 for the open car and £300 for the saloon. It represents the finest possible value obtainable in the £11 tax class.

TAKE A TRIAL RUN.—Write for catalogue and permit us to arrange a trial run for you from your own home through your nearest dealer.

WOLSELEY MOTORS (1927), Ltd., Adderley Park, Birmingham.

D.A.

AROUND THE TRADE

In our "Miscellaneous" section of the small advertise-ments most attractive offers are frequently made. Readers should watch these announcements.

We are asked to point out that in the advertisement of the Service Co., Ltd., on page 31 of our issue dated May 27th, a printer's error was made, the four-seater 10 h.p. Swift at £210 being accidentally described as a 14 h.p. model. The price of the 14 h.p. model is £259.

We are informed that Dave Lewis, who won the recent 200-mile race near Atlantic City, California, at an average speed of 129.89 m.p.h. was using Champion sparking plugs, these plugs also being used by Frank Lockhart, who put up the fastest lap—147 m.p.h.—and in every car which qualified. In addition, the first three cars home in the stock car race which preceded the above event were equipped with Champion plugs.

Miss J. Weekes, an enthusiastic owner-driver of an A.C. Sports, with some of the cups and medals she has won in competitions.

Tests which they carried out having proved entirely satisfuctory, Rootes, Ltd., have arranged to fit Dewandre vacuum servo brakes to Clyno cars at their chief service station, Lodge Place, London, N.W.S.

We learn that Mr. H. Synyer, for many years the Dunlop district manager in Nottingham, has retired from that position and Mr. G. F. P. Chapman has been appointed acting district manager, while Mr. A. D. Hawksley will continue as assistant district manager.

The really excellent means which our leading oil firms have adopted for marketing their engine lubricating oils in small retail quantities deserve the highest praise. Motorists can now buy first-rate lubricants in perfect condition. Not so very long ago there was some uncertainty with regard to the nature of the oil supplied by garages and excellent reasons for doubting its purity.

We are informed that on June 1st the business of Messrs. Joseph Bradbury and Sons, of Braintree, and Messrs. Garage Equipment Co., of Bocking, were amalgamated and will be carried on by a private limited liability company which is now in the course of formation. The title of the new concern is Joseph and Sons, Ltd., and all communications should be sent to New Street Works, Braintree, Essex.

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The Royal Insurance Co., Ltd., has recently opened a magnificent building in William Street, New York, in which the principal offices of the company in the United States and some of its affiliated companies there will be housed. Some idea of the size of the building can be gauged from the fact that it covers an area of 2,354 sq. yds., and comprises eight acres of floor space. Incidentally, this is the third building which has been owned during the 76 years in which the concern has carried on business in the U.S., each building at the time of its construction being considered ample for future requirements, but each in turn has proved inadequate. future requirements, but each in turn has proved inadequate.

CHEVRON CORD TYRES are of UNFAILING HIGH QUALITY.

The number of Motorists using them increasing every day and they are chosen because there is no other tyre so good, no matter where it is made.

YOUR MILEAGE IS ASSURED.

ENGLEBERT TYRES,

MANCHESTER: 79, Downing St.

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B52

Warwiek Wright Says

If your problem is your old car—

And you want to buy a new car-

Consult us.

Warwick Wright Old.

150 New Bond Street, W.1. mayfair 2904

Eighteen Records on



Mr. J. J. Hall, on the H.P. Cyclecar, has secured at Brooklands a further Eighteen World's Records in Class H on Palmer Flexicords

OF STANDARD PATTERN TAKEN FROM STOCK.

10 miles -	_	56.82 miles per hour.			I hour -			- 51'16 miles per hour.			
50 ,, ~	-	56.84		.,	2 hc	urs		50.64	,,	,,,	
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10 kilometre	es -	55.65	**		5	,,		48.97	,,	,,	
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All standing start.

5 miles - - 60.97 miles per hour. 5 kilometres - 61.07 miles per hour.

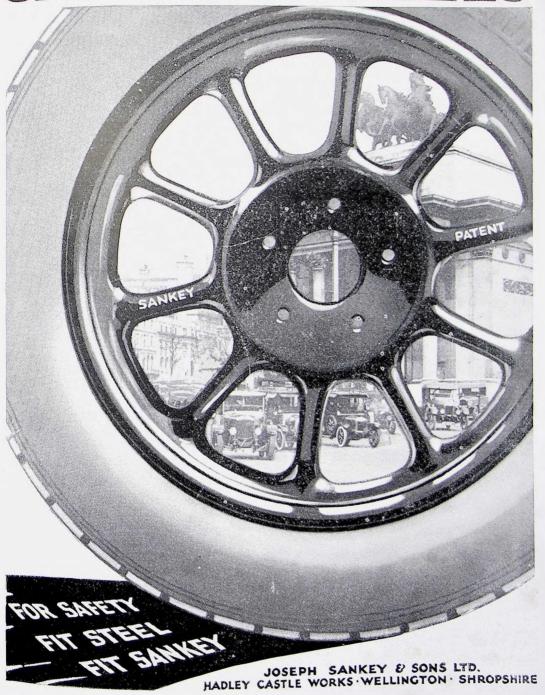
Flying start.

(Subject to official A.C.U. confirmation.)

The lack of resistance to tractive effort in Palmer Flexicords, which enabled Mr. Hall to attain the remarkable speeds set out above, is interpreted on the road by greater resilience—hence more comfort—and by considerable reduction in petrol consumption. In addition to this, the well-known Palmer durability gives greatly improved mileage.

(467)

SANKEY WHEELS



PLEASE REFER TO "THE LIGHT CAR AND CYCLECAR" IN YOUR LETTERS TO ADVERTISERS.

MODEL

TAX ONLY £4

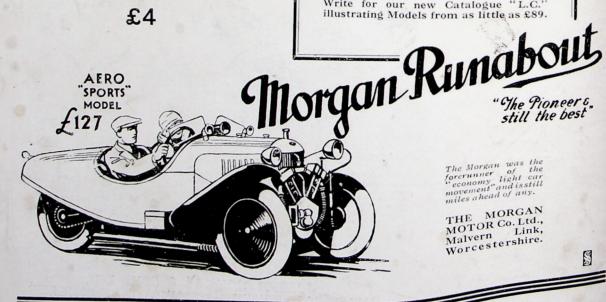
Motor-but with Economy!

THE Morgan Runabout is a real car in every sense of the word. It has the comfort of a car, performs like one, though its running cost is no more than that of a motorcycle outfit.

There are only three tyres to maintain, it is taxed only £4, and averages 50 miles to the gallon of fuel.

Simple to handle, easily understood and capable of a road speed of 60 mp.h.—
the Morgan is ideal motoring—motoring you can afford.

Write for our new Catalogue "L.C."



The Morgan was the forerunner of the "economy light car movement" and isstill miles ahead of any.

THE MORGAN MOTOR Co. Ltd., Malvern Link, Worcestershire.

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