

The Light Car and Cyclecar

Founded 1912
The only Small Car Journal

3^d

Vol. XXIX No. 746
Friday Mar. 25, 1927
*Registered at the GPO
as a Newspaper*



GO-ANYWHERE CYCLECARS.

Continual participation in searching tests of reliability have made the British three-wheeled cyclecar a most dependable, economical and road-worthy machine. No lanes or tracks are too rough, and it can penetrate where even "Colonial" four-wheelers would not venture to explore.

Four outstanding features

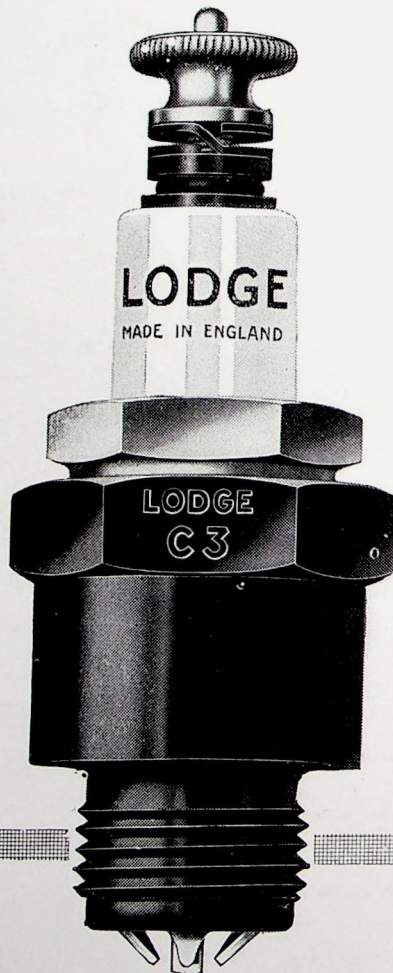
traditionally and inseparably
associated with the

LODGE

PLUG

Easy
starting

Perfect slow
running



Rapid
acceleration

Utmost
power

Standard Lodge C3.
Sold everywhere.

5/-

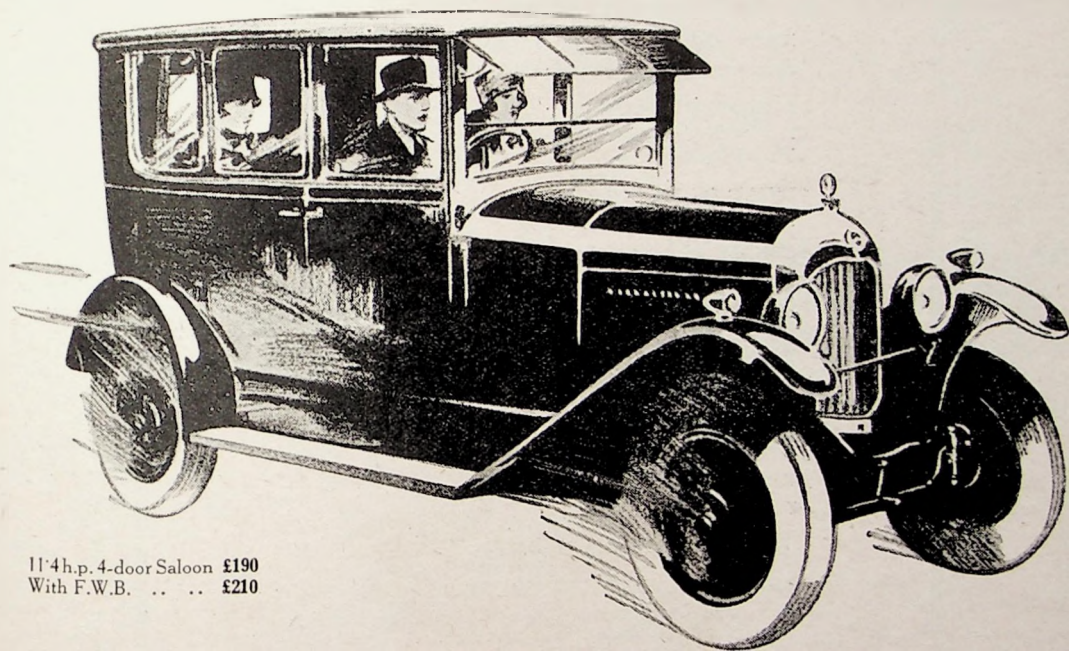
Packed in sealed
red metal box.

LODGE PLUGS LTD.—RUGBY

4 Door Full-sized Fully-appointed Saloon

CITROËN

for
£ 190



11.4 h.p. 4-door Saloon £190
With F.W.B. . . . £210

THE 11.4 h.p. Citroën Saloons, at these exceptionally low prices, offer advantages not to be found together in any other cars of their price and class—4 Doors, Luxurious All-Steel Coachwork, Beautifully Upholstered Interior and Fullest Equipment, including Electric Lighting and Starting, 5 Comfort or Reinforced Balloon Tyres, Clock, Speedometer, Boyce Motometer, Driving Mirror, Automatic Windscreen Wiper, Oil Gun Chassis Lubrication, Rug Strap, Sun Shield, Window Winders, Spring Blinds, Carpeted Rear Floor, Interior Lighting, and every feature which appeals to the owner-driver. Arrange a trial run to-day.

**IMMEDIATE
DELIVERY**

from

**SLOUGH
WORKS**

Send for Citroën Book 18.

CITROËN CARS, LTD.

CITROËN BUILDING, BROOK GREEN
HAMMERSMITH, LONDON W.6

West End Showrooms:
Devonshire House, Piccadilly, W.

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

D.A. 356,

AI

Special Features of this week's issue

The Motor

Tues., March 22

SPECIAL FREE BOOKLET.

"Motoring Facts and Figures."—Information which every Motorist should have at his Finger-ends.

THE NEW DRAFT ROAD TRAFFIC BILL.

First Motoring Opinion and Criticism of the New Measure.

ROAD DIRECTION SIGN REFORM.

How to Render Them Quickly and Easily Readable. Where Existing Road Signs Fail.

WHAT OF THE FUTURE?

Factors of Safety and Comfort in Front-drive and Air-sprung Cars.

THE MAGNETO AND DYNAMO COMPARED.

Important Differences that the Car Owner Should Understand.

ROAD TESTS SHOWING PRINCIPAL CHARACTERISTICS.

The 14.45 h.p. Six-cylinder Talbot. The Chandler Special Six Saloon. The 8 h.p. Senechal.

THE NEW 14 H.P. MATHIS.

A Well-equipped Weymann Saloon Selling at £350.

CHEAPER MOTOR SPIRIT.

The Present Situation Reviewed.

MOTORING ON AMERICAN WATERS.

How Road Congestion is Causing United States Motorists to Forsake the Roads for the Waterways.

NEXT WEEK! A SPECIAL ARTICLE FOR MORRIS OWNERS.—"How to Get the Best from a 1925, 1926 or 1927 Morris Car." All the Points of Maintenance dealt with in non-technical language and with clear Illustrations. **VICTIMISING MOTOR DEALERS.**—Well-to-do People who take advantage of Demonstration Runs. And all the News and News Pictures.



PRICE 4d.

OFFICES: 7-15, ROSEBERY AVENUE, LONDON, E.C.1

A Unique Opportunity

ROVER WEEK and—

The Service Company Ltd.

(LONDON)

A Perfect Combination

FOR over 20 years the name Rover has stood high on the roll of famous cars. Fine workmanship of the real British sort, the best material, thoroughly tested—both these combine to make a Rover a prince among cars.

The Service Company has been the Leading House of the Car Industry since its inception. Pioneers of the "Deferred Payment" Scheme, this House offers the most generous terms on which you can obtain a "Rover," large contracts enable you to get immediate delivery. The Service Company with their helpful exchange and easy payment system, their real Service both before and after sale, offers you the chance to acquire one of the very finest cars ever produced.

1927 Rover Two-seater Model £220 0 0
Cash Deposit £44 0 0
12 Monthly Payments of £15 8 0
18 " " £10 10 3
24 " " £8 1 4
Tax and insurance may be included in these terms if desired.

1927 Rover 9 h.p. "Super" Model .. £225 0 0
Cash Deposit £45 0 0
12 Monthly Payments of £15 15 0
18 " " £10 15 0
24 " " £8 4 0
Tax and insurance may be included in these terms if desired.

1927 Rover Four-seater 'Semi-Sports' £260 0 0
1927 Rover Two-seater 'Semi-Sports' £260 0 0
Cash Deposit £52 0 0
12 Monthly Payments of £18 4 0
18 " " £12 8 6
24 " " £9 13 8
Tax and insurance may be included in these terms if desired.

Buy your Rover Car from the Service Company and take advantage of the above special Deferred Terms. Only an old-established House financing their own Deferred Payment System could offer such facilities. Write, or better still, call and view The Service Company's selection of Rovers. Demonstration runs, of course, can be arranged. There is no obligation to purchase, but should you decide to buy you will have undoubtedly obtained the BEST POSSIBLE TERMS.

"Service—Our Name and Aim."

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

RB

Over 58 Miles per Gallon

on

"BP"

The British Petrol

At a Petrol Consumption Test, held on the 12th instant, by the City of London Motoring Association, Mr. O. C. Young, driving a 1,076 c.c. Rover, on "BP," with three passengers, gained First Award, his consumption averaging $58\frac{5}{8}$ miles to the gallon.

In the Motor-Cycle Class (Solo), Mr. R. R. Hole, riding a 349 c.c. A.J.S., also on "BP," gained First place with a consumption of 184 m.p.g.

For economy, speed, power and acceleration, use "BP," the British Petrol.

British Petroleum Co. Ltd. Britannic House. Moorgate. E.C.2

Distributing Organization of the
ANGLO-PERSIAN OIL CO. LTD.

The MOTOR BOAT

FITTING OUT NUMBER

Friday, March 25th.

NOW ON SALE

The annual Fitting-Out Number, which has been a popular feature of "The Motor Boat" for many years past, is now on sale.

Greatly enlarged, it includes, in addition to all the usual features, many articles on the subject of fitting-out — especially valuable to owners who do their own work.

The repair, overhaul and re-fitting of hulls and engines is discussed in a practical manner, and new-comers to motor boating are catered for by articles dealing with their particular problems.

Do not miss this valuable Special Number, every page of which is full of interest and information.

PRICE 4d. AS USUAL

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

CLUB" Black Enamel

Dries in twenty minutes, and is petrol, grease and oil proof.



Of all Iron-mongers, Stores, Garages and Cycle Dealers.

Sent post free if unobtainable from your local dealer.

Sole Manufacturers:

SILICO ENAMEL CO.,
WARTON ROAD, STRATFORD, LONDON, E.

"WELLINGTON" LIQUID METAL POLISH

POLISH
THAT,
with a
minimum
of labour,
GIVES A
REAL
BURNISH
THAT
LASTS.

CLEANS
and
POLISHES
ALL
METALS
(including
Silver)
and
GLASS
(Windows,
Mirrors),
Motor-Screens
(Glass or
Celluloid).

TRY IT
and
PROVE IT.

In TINS, 3d., 4½d., 7½d. & 1/3; also in ¼, ½ & 1 Gallon Cans.

JOHN OAKEY & SONS, LTD.,
WELLINGTON MILLS, LONDON, S.E.1.

100 m.p.h. Average in the Rain!

at

The Opening Race of the Season,
Montlhery, March 13th.

EVENTS

SALMSONS

FIRSTS SECONDS THIRDS

"THE 1,100 c.c. VOITURETTE RACE AT THE RE-OPENING OF MONTLHERY AUTODOME on Sunday has resulted in another SALMSON triumph

"The SALMSON Team, composed of de Marnier, Goutte and Perrot, were First, Second and Third in all Three Events

"Fourteen cars started in the pouring rain de Marnier, Goutte and Perrot again led from start to finish

"de Marnier covered the 12½ kilometres in 4 mins. 45 secs., an average of nearly 100 m.p.h."

The Light Car and Cyclecar, March 18th, 1927.

"IN THE 1,100 c.c. RACES the new SALMSONS dominated the field

"Casse (SALMSON) was the fastest of the seventeen starters, and showed it by making the record at 71.6 m.p.h.

The Autocar, March 18th, 1927.

A Racing Rendezvous—

The Salmson Works at Chiswick for
the Varsity Boat Race, April 2nd.

All Salmson owners are invited. Apply for admission

CHURCH WHARF,
CHISWICK MALL,
LONDON, W.4.



Sole Concessionnaires
for U.K. and British
Dominions:—

S.M.S. Ltd.

A complete range of models is always on view at the Showrooms of

The Sole London Distributors:

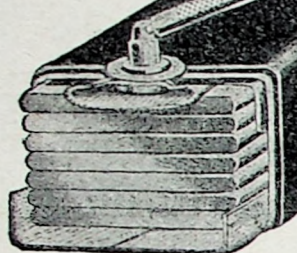
GORDON WATNEY & CO., LTD., 31, BROOK ST., W.1.

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.

Made for Motorists who care for CAR APPEARANCE AND CAR PERFORMANCE.

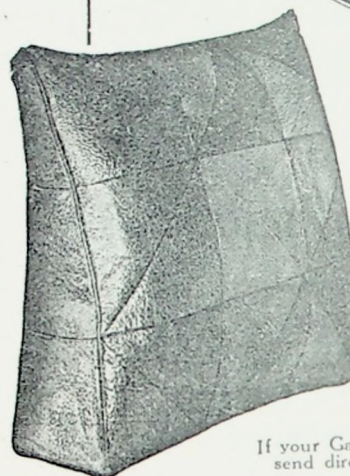


THE GAITER
WITH THE
WICK TUBE.



one hand
one push
thoroughly
lubricates the spring
for the next 1,000 miles.

A RAMSO CLEANING COAT
properly protects your suit. Prices
10/6, 12/6, and 14/9



DRIVER'S CUSHION

Designed to
bring driver
comfortably near
to controls. Size
17" x 17" x 4 1/2".
Made in coloured
waterproof
leather .. 8/6

Write to Dept. L for New Spring Catalogue of Accessories.

RAMSDENS (HALIFAX), LIMITED,
STATION WORKS, HALIFAX, ENGLAND.
London Office & Service Depot: 147/9, Gt. Portland Street, W.1.

Get one at your garage.

If your Garage cannot supply you,
send direct (Cash with Order).

MOTOR HOUSES at Reduced Prices



CONSTRUCTED of
first-class materials
and designed to
comply with the by-
laws of Urban areas,
these Motor Houses are
a sound proposition at
any time. But now that
the prices are further
reduced, these models
become a very profitable
investment. Start
saving your garage
bills now.

Present Prices of Standard Sizes.

These houses are tenants' fixtures and may be easily erected or dismantled by any handy man. High grade finish in every detail.

No. B217 Urban Motor House Size 14' x 8' x 6' 6" high to eaves, for two-seater	£15 : 5	No. B216 MOTOR HOUSE Size 14' x 8' x 6' 6" high to eaves, for two-seater	£16 : 0
Size 16' x 8' x 6' 6" high to eaves, for four-seater	£17 : 10	Size 16' x 8' x 6' 6" high to eaves for four-seater	£18 : 10

Carriage paid to stations in
England and Wales. Ask for Catalogue No. 629.

Boulton & Paul Ltd

Telegrams: BOUTON NORWICH
LONDON OFFICE 135-137 QUEEN VICTORIA ST. E.C.
Telegrams: Boulton & Paul Ltd London Telephone 4642 Cent

Examples of
B. & P. Standard
Motor Houses can
be seen at our
London Showrooms
135, Queen Victoria
Street, E.C. 4.

AT HOMAC'S The

Same Speedy
Deliveries of
**SINGER,
ROVER &
CITROEN**
Cars plus our
**EXTENDED
PAYMENTS
AND PART
EXCHANGE**

These facilities form
an ideal car-buying
combination.

YOUR CAR DELIVERED EARLIER !

No time to waste now. An early
delivery of your Spring car can
only be given by a firm whose
business and contracts entitle them
to priority, and Homac's give you
an undoubted advantage in this
respect. The genuine service, and
fair and square Terms and Exchanges
make them a pleasure to deal with.
Call soon.

1927 MORGAN PRICES REDUCED.

EXPERT MORGAN SERVICE DEFERRED TERMS ARRANGED. CATALOGUES SENT

HOMAC'S
MOTOR AGENTS

243/7, LOWER CLAPTON ROAD,
Works: 46, London Rd., Clapton, E.5

Trade
Supplied
Phone:
Clissold
2408.

A
MORGAN
FROM
£89

Easter's coming! Get these in time



No. 2714.

LUNCHEON AND TEA CASE.

Covered black grained leather cloth. Lined white. China cups and saucers. Nickel-plated fittings. Screw kettle, for carrying water. Stainless cutlery. For four persons, 20 in. x 9½ in. x 6½ in. £5 5 0

Similar case without kettle, but space for thermos, £4 6 0



FOLDING STOOL.

(Patent No. 242751).

For all purposes. Spring steel supports. Strong canvas seat. Price 7/6 each. BACKREST for above, easily fitted, 3/- each. Post free.



M 587. "KNOCK-OUT" PIPE ASH TRAY.

Nickel-plated. Gilt finish inside. Wood Knob. 4½ in. x 2½ in., 8/9 each. Post free.



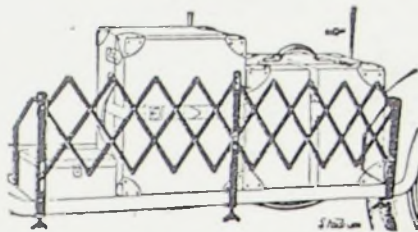
THE SHALER 5-MINUTE (M5) VULCANIZER.

Makes permanent vulcanized repairs to tubes. A smooth, firm repair welded to tube—cannot tear off, and is actually stronger than tube itself. With twelve patch and heat units. 3033/80. Price 8/-. Post free.



THE NEW "CARRY ON" PETROL AND OIL CHEST.

The spare can of petrol so necessary and so ugly is often carried by clips of some useful form, but a box is a much more sightly addition to the running board, and the can is easy to extract and put back again. Complete with bolts and nuts for fixing. 25/-. Post free.



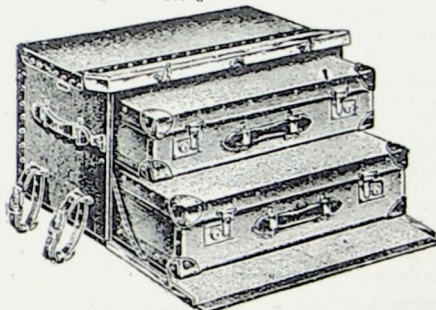
THE "STADIUM" EXTENSIBLE LUGGAGE GRID.

The most convenient method of carrying suit cases, golf bags, etc. Can be extended from 8 in. to 56 in., or in the larger size from 10 in. to 72 in. to accommodate just the luggage you wish to carry. Attached by three powerful wingbolt clamps without drilling or screwing. Quickly detached. Smaller size folds to 8 in., larger size to 10 in. Finished in durable black enamel, hard stoved.

No. 920. Overall measurements when closed, 19 in. x 8 in. x 3 in. Each 17/6

No. 921. Overall measurements when closed, 20 in. x 10 in. x 3½ in. Each 22/6

Postage extra.



THE "AUTOLEE" TWO-IN-ONE TRUNK.

Outer case made of best veneer birch wood, 3-ply body, 5-ply edges, covered black vulcanised fibre, turned over at edges and strongly riveted. Fall-down hinged front and lid protected all round with aluminium binding. Fitted two nickel-plated sliding nozzle locks, 3 spring bolts. Two stout black bridle leather straps at each end for fixing to grid, and hard wood battens on bottom. The inner cases of brown compressed fibre, lined cloth, fitted with nickel slide nozzle locks.

5408/80. Size 27 in. x 15 in. x 14½ in. £4 4 0

5463/80. Size 30 in. x 16 in. x 14½ in. £4 14 6



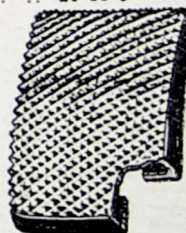
DUNHILL'S DRIVING CUSHION.

Prevent any strained position when driving by using one of Dunhill's Driving Cushions. Made of plain leather cloth in brown, grey, green, blue, and black, 27/6; in antique red, grey, brown, and blue, 30/-. Post free.



Pocket Type Volt or Amp. Meter.

No. 4889/80. Reading 0-7, 0-15 or 0-25 volt. 4889/80. Each 5/- Reading 0-15 or 0-25 amps. 4889a/80. Each 5/- Neat and compact to carry in the side pocket of your car. 6112/80. Price 7/6. Post free.



PEDAL COVERS.

To provide a sure grip on all pedals—to suit all makes of cars. Prices on application.

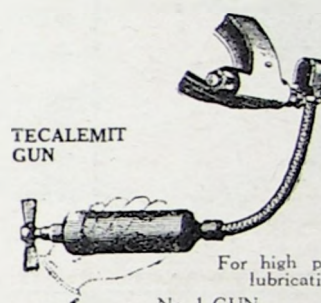


ACCUMULATOR TESTERS OR HYDROMETERS.

Complete, packed in round cardboard tube, with metal screw cover. No. 3370/80. 7/6 each. Post free.

ROMAC MOTORIST'S FIRST AID OUTFIT.

The injury may be slight, but it cannot be ignored. In many cases a little medical attention given at once would have prevented serious and sometimes fatal results later on. The outlay of a few shillings now may be the means of saving life. Neat and compact to carry in side pocket of Car. 6112/80. Price 7/6 Post free.



TECALEMIT GUN

For high pressure lubrication.

No. 1 GUN .. 21/-
No. 0 GUN .. 18/-

NESTHILL POPULAR OIL PUMP

Strong and inexpensive pump for 5 or 10-gallon drums. Length of barrel for 5-gallon size, 28 in., 7/6 Ditto, 10 gallon size 36 in., 9/- Post free.

To Messrs. DUNHILLS Limited,
359-361, EUSTON ROAD,
LONDON, N.W.1.

Please send your fully
Illustrated Catalogue No.
A2 to:—

Name.....

Address.....

(This wonderfully useful and
complete Catalogue sent Post
Free.)

Dunhills

359-361, EUSTON ROAD, LONDON, N.W.1.

2, Conduit Street, Regent Street, W.1.
GLASGOW: 72, St. Vincent Street.

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

Postage ninepence extra.

OTHER D.R.H. ACCESSORIES

Delco-Remy Magneto Replacement Unit for all Light Cars.

Sylphon Thermostat. Gives warm engine in 60 seconds.

is Model 8c, one of the famous Remy line. Simple, efficient and of classic appearance. Tone pleasant, vibrant, compelling. Of all dealers or direct from makers. State 6 or 12 volt.

Delco-Remy & Hyatt, Ltd., 111, Grosvenor Road, London, S.W.1. Telephone: Franklin 6446 (4 lines).

FOR ALL AUSTIN 7 CARS

Two accessories which are worth their weight in gold and can be fitted by any Austin 7 owner.

THE BODELO BRAKE ATTACHMENT for Austin 7 Cars enables all four brakes to be operated by the foot pedal without interfering in any way with the existing hand brake mechanism. Thousands are in use all over the country, therefore fit one to-day.

PRICE 30/-

Turn the petrol off from the dashboard, it ensures clean hands, it stops the drip from your carburettor, thus reducing the risk of fire to a minimum. **THE BODELO PETROL SAVER** works automatically: you pull the control knob out to turn it on, you push it in to turn the petrol off.

PRICE 12/6

Send for our illustrated literature, which will give you full particulars and fitting instructions.

LLOYD & DEELEY,

177, Broad Street,

■ BIRMINGHAM.

Wholesale stockists:
Brown Brothers, London and Branches.

What you Get for what you Spend.

Search where you will, you cannot get better value.

A Thornber Garage will last a lifetime, because everything is solid in its construction. It is sent from works in sections—every section complete, ready for erection, which requires no skilled labour. No loose timber whatever is sent. All Garages have Gliding-out-of-way Doors, which move at a child's push, occupy no room when open, and obviate hinged door weakness. All fittings supplied. Two windows, top half to open. Tenant's fixture. 12 months' free fire insurance.

The OWNER-DRIVERS' Garage

Built of Thornber's Locjoint Weatherboards—the only suitable boards for outdoors. All sections complete, ready for easy erection. No loose timber. All fittings sent. Gliding out-of-way Doors. 2 windows. Insured. Built to last. 2 sizes.
Size: 16' x 9' x 7' x 9½' Carr. fwd. **£15**
Size: 19' x 9' x 7' x 9½' Carr. fwd. **£18**

The SAFETY FIRST

Asbestos Fireproof Garage. All frame sections complete ready for Asbestos Sheets, which are supplied. Gliding out-of-way Doors. Two windows. All fittings supplied. Insured. Built in 3 sizes.

14' 5" x 8' 1" x 7' 12 ens.
x 9½' Carr. fwd.
Floor £3 10 extra Carr. fwd.
16' 5" x 9' 1" x 7' **£15**
x 9½' Carr. fwd.
Floor £4 extra Carr. fwd.
20' 5" x 9' 1" x 7' **£19**
x 9½' Carr. fwd.
Floor £5 10 extra Carr. fwd.



FREE!

12Guineas

Carriage paid price on request. Deferred payments can be arranged. Both Garages can be seen at works.

THORNBERS
FOR EVERYTHING IN WOOD

Send for Folder and state requirements.
9, MYTHOLMROYD, YORKS.
London Office: 47, Victoria Street, S.W.

FACILITATE BUSINESS, and ensure prompt attention to your enquiries, by mentioning "The Light Car and Cyclecar" when writing to advertisers. They will appreciate it.

England's first—truly fine small Car

The most modern as well as the
most economical car to own.

Fully compensating four-wheel
brakes which can be automatically
adjusted from the Driver's seat—
while travelling if necessary—are
only one of the many new and
exclusive features to be found
on this famous model.

*A p.c. will bring you along all details and interesting literature,
or your local Agent will arrange a demonstration for you.*

Two-seater with large
double dickey and four-
five seater models.

Cellulose finish in
standard blue or maroon.

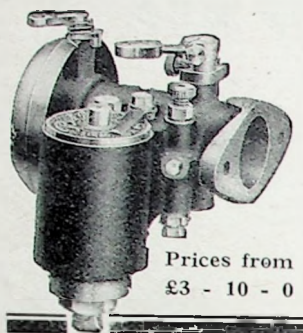
The Rhode Motor Co., Tyseley, Birmingham.

London and Home Counties : Normand Garage Ltd., 489, Oxford Street, W.1.

Manchester and Liverpool : J. Blake & Co., Ltd.

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

Being Different!



Prices from
£3 - 10 - 0

"SAMENESS" is a curse in the motoring world—its offspring is mediocrity.

Outstanding achievement is attained only by pioneer research work and—

As the Oldest British Firm of Carburettor Manufacturers we claim—and can prove—to have produced

A Carburettor that revolutionises all hitherto-accepted principles of carburation.

That is a big claim, but we prove it—

(1) In our explanatory literature (sent free on request) that shows the why and wherefore of B & B design.

(2) By the actual improved performance of your Car under the terms of our

30 DAYS FREE APPROVAL OFFER

We claim nothing that we cannot PROVE.

Why not transform your old Car into a new one—fit the B & B and note the amazing difference!



Write for the Car Book—FREE on Request.

BROWN & BARLOW LTD.,
Carburettor Works, Witton, Birmingham.
London Service Agents: Dartford Eng. & Carriage Co., Ltd., 23/24, Hythe Road, Wileaden, N.W.10.

'THE PLEASURE'S YOURS—'

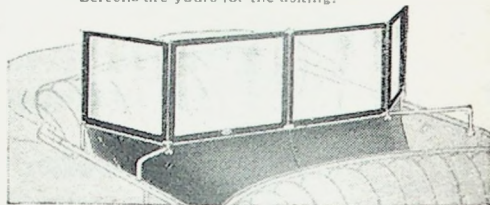
But what about your passengers?

Riding in comfort yourself you are apt to forget your rear passengers, and the run will not be enjoyed by them if they are inadequately protected.

Why not fit a "Starling" Rear Screen and add to their comfort?

The model illustrated is the "Starling-Imperial" four-panel Screen, priced at £4-0-0—a small premium for passenger comfort. With its neat cloth bound edges, taut celluloid panels, and the inherent quality which stamps all "Starling" products, it is undoubtedly the finest screen value on the market.

Full particulars of all "Starling" Rear Screens are yours for the asking.



Will fit any car.

Starling

THE STARLING CO., LTD.
Empire Works, Highgate Road, Birmingham.

The Best Cure for Worn Cylinders

**Let LAYSTALL
regrind the
Cylinders
and fit
DE LUXE
LIGHTWEIGHT
CAST IRON
PISTONS**

Absolute Accuracy
in the Grinding
The Most Satisfactory
Piston in the World.

**SPECIFY
LAYSTALL**
to your Repairers
for the very best
in Accuracy.
Quality & Results

**THE FINEST
CYLINDER
REGROUNDING
PLANT IN
THE WORLD.**

**CRANKSHAFT
REGROUNDING**

Telephone
HOP
6140
(seven
lines)

EWER ST. SOUTHWARK, LONDON, SE1
Northern Branch Works 55 PONTENY STREET, LIVERPOOL

We invite your orders by post or 'phone, wherever you live; the prices are unbeatable and the value right.

GAMAGES

PERSONAL CALLERS will find our Outfitting Salons suitable, viz:—
Helmets and Driving Gauntlets:—
—Ground Floor.
Motor Coats and Undercoats:—First Floor.

ARE NOW FEATURING THE LATEST AND MOST PRACTICAL STYLES IN DRIVING COMFORT FOR EASTER TOURING.

A Few Examples of Our 1927 Models.

ORDER NOW AT THESE PRICES

Unlined TAN CAPE GAUNTLETS

Tan Cape Gauntlets, unlined, of good strong skin. 5 inch loose Gusset and Bolton thumb. A good, serviceable, windproof motoring glove, gusset allowing for extra thick coat sleeves.
Post 4d.
Price

TAN LEATHER WAISTCOATS for all-weather driving, warm and comfortable. Absolutely windproof, made from soft and pliable skins. These are guaranteed all-leather, including back and sleeves.
Price, Post Free
When ordering by post, kindly send size round chest over waistcoat.

THE "HENDON"
A very warm and cosy Helmet suitable for ladies or gentlemen. Made from soft, pliable Tan Leathers with Fur Peak and neck. Each
12/6
Post Free.
Send your order per return of post.

Full Length Leather MOTOR COATS

For the All-weather Car. Smart and Stylish.

Light in weight, warm and windproof, made from selected semi-chrome skins and lined throughout with a woollen fleece. The latest **DOUBLE - BREASTED** style belt all round and elastic wind-cuffs in sleeve.
44 in. long.

84/-

TAN LEATHER UNDERCOATS

(Full Length)

Made from soft, pliable skins, warmly lined. Can be worn under any overcoat or waterproof. Ideal for severe weather driving.

6
Price
Post Free.

TAN LEATHER UNDERJACKET

Strongly recommended for night riding. Windproof and warm and comfortable, cut full and easy fitting.

Post Free.

45/-
Each.

36-in. LONG TAN LEATHER COAT—Smart and Stylish.

Made from selected semi-chrome sheepskin and lined throughout with a soft fleecy lining, the ideal motoring coat for the all-weather car. If unable to call and inspect these coats—please send size round chest and over waistcoat.

77/6

WARM WOOLLEN FLEECY UNDERCOATS

Very light in weight, easily put on or off, full length and, close fitting wind cuffs, the acme of comfort. The correct wear for those cold spina.
Post Free.

37/6
Price

A. W. GAMAGE, LTD., Holborn, LONDON, E.C.1
And 107, CHEAPSIDE, E.C.2.

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

BRIEF SPECIFICATION.—Two-seater. Engine, Villiers 342 c.c. 2 stroke, 4/9 h.p. Dunlop Balloon Cord Tyres 27" x 4-4". Lucas Electric Lighting and Starting. Friction Drive, 4 Forward Speeds and Reverse. Ample Luggage Accommodation. Finished in Rich Heather Purple with Black Wings and Wheels, complete, including Windscreen, Hood and full equipment ready for the road. Maximum Speed 40 m.p.h. Petrol, Oil and Tyre wear cost less than 1d. per mile.

All Models complete with Balloon Tyres, Windscreen, Horn, Licence Holder, Number Plates, high pressure grease gun system of lubrication, upholstered seat and seat squab and body built of steel armoured plywood.

THE



CAR

TAX
£6

BRITISH THROUGHOUT.
READY FOR IMMEDIATE DELIVERY. THE CHEAPEST AND MOST ECONOMICAL CAR ON THE MARKET.

Any Model may be had on Hire Purchase Terms for an initial payment of £20 and the balance in 12 months. Trial runs given.

A limited number of shop-soiled 1927 de Luxe models available at considerably reduced prices. All Prices: ex Works at London.

Insurance

£6

COUPE MODEL.

NOTE.—The Coupe Top is interchangeable with the Standard Hood, thus the Coupe model can be readily transformed into an open vehicle by the fitting of a hood.

Apply to **NOMAD CARS LTD.,**
Offices: 130 & 132, New King's Road, Fulham, S.W.6.
Works: Elysium Works, Elysium Place, S.W.6.
Telephone: Putney 0327. Near Putney Bridge Station. And All Agents. Telegrams: "Nomadikar, Walgreen, London."

PRICE LIST.

£ s. d.

Mark VII Coupe Model, with Electric Starter and Dynamo Lighting (3 lamps, bright and dim)	107 0 0
Mark VI de Luxe Model, with Electric Starter and Dynamo Lighting (3 lamps, bright and dim)	99 9 9
Mark V Model, with Mechanical Starter and Dynamo Lighting (3 lamps)	92 0 0
Mark IV Model, with Mechanical Starter and Accumulator Lighting (3 lamps)	89 0 0

Mark III Model, with Mechanical Starter,

PRICE

£85

BRITISH
MADE

'Stadium'
SCREEN WIPER

A Mechanical Wiper of great efficiency giving continuous wiping of the windscreen without distracting attention from driving.

Write for Illustrated
Catalogue

The New Stadium Black Oxydised Finish renders the Wiper Rustproof and Weatherproof, and requires no cleaning.

DUAL ARM MODEL 12/6

ETIENNE & CIE, 61-63, Gt. Eastern St.
LONDON, E.C.2. Works: B'ham.

Costs nothing to fit and nothing to run!

TA 78



Easter! The REAL Joy of the Open Road.

Find a nice spot, pitch your Tent (with Extension as fig. 2) and have your Lunch in comfort whilst gazing on the surrounding Country. You will find "KAR-KAMPS" everywhere.



Special Sizes Made to Order.

FOR THE
GARDEN
&
THE MOORS.

"KAR-KAMP"
TENTS

Made of strong Green Waterproof Fabric in five sizes, weighing from 10 to 16 lbs. Complete with jointed poles, pegs and ropes. Carriage paid. Cash with order. 50/- to 72/6

Kar-Kamps Ltd. (Dept. B), 29, Cannon Street, Manchester.
Manufacturers of Tents, Dustproof and Waterproof Motor Covers.

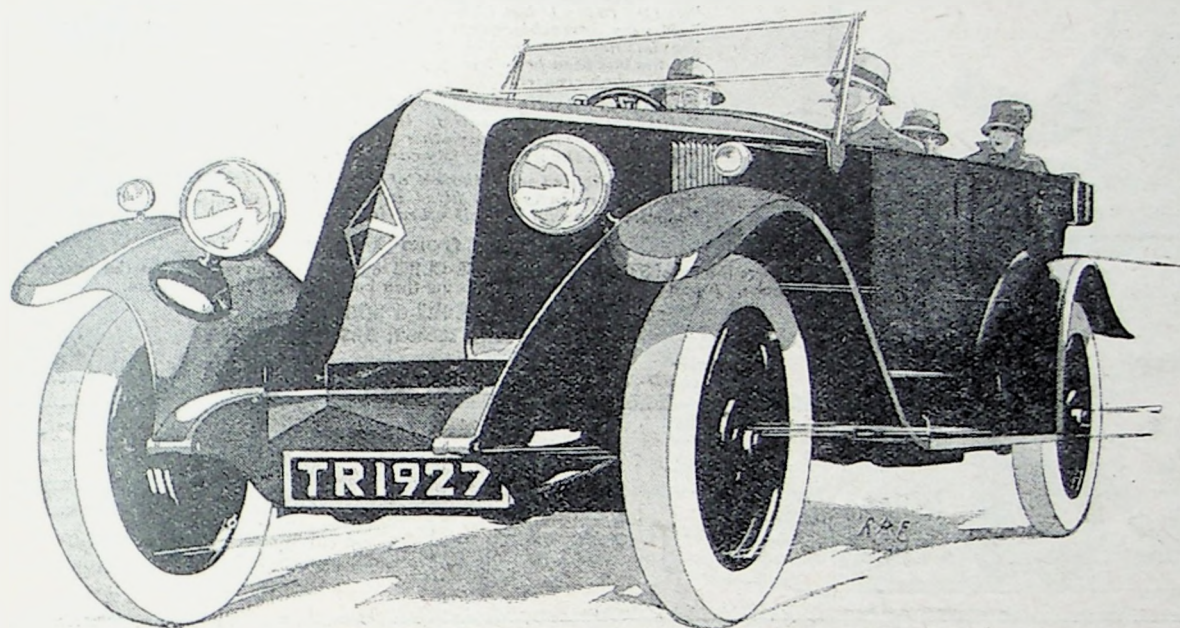


Can be supplied with Patent extension at extra cost, 7/6 to 10/-, according to size, as per figure No. 2.

RENAULT *DeLuxe* 9'15

4 DOOR... 4 WHEEL BRAKES

FULL FOUR SEATER



45 M.P.G. TAX £9 OVER 40 M.P.H.

5 DETACHABLE WHEELS with low pressure tyres. Electric lighting and starting. **FOUR WHEEL BRAKES.** CLOCK. SPEEDOMETER. Windscreen wiper. **FOUR SHOCK ABSORBERS.** All-weather side curtains. **HIGH-CLASS BODY** with superior finish. Mahogany mouldings and **REAL LEATHER UPHOLSTERY.**

Every detail of the 9/15 models demonstrates their amazing value. They represent the very bedrock of comfortable, low cost motoring. Write to-day for illustrated literature and technical specifications.

RENAULT LTD., Head Office and Works,
14, Seagrave Road, West Brompton, S.W.6.

Showrooms: 21, Pall Mall, S.W.1.

DE LUXE TOURER FULLY EQUIPPED

STANDARD TOURER

£179 | £155

SALOONS FROM £197

RENAULT - BUILT TO LAST A LIFETIME

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

THE WISE-MAN OF THE ROAD.

AND STILL MORE FACTS.

Taken from the actual experiences of Owner-Drivers who have fitted the STOTT ANTIBOUNCE CLIPS TO THEIR CARS.

"Some six months ago I fitted a set of the STOTT ANTIBOUNCE CLIPS to my 11 h.p. Clyno Royal Model, and I must say that I am very agreeably surprised at the difference they have made to the suspension of the car. Bouncing and swaying on rough roads has been practically eliminated and comfort in driving is very much greater."

"I am pleased with the STOTT ANTIBOUNCE CLIPS which are still giving me every satisfaction and are all that you claim for them. I have tried many other shock absorbers, but none of them come up to the STOTT. My car is an Austin 7."

"I am delighted with the set of STOTT ANTIBOUNCE CLIPS which I recently had fitted to my Singer car. They seem to effectively damp out all vibration."

PRICES from 11/6 per pair.

There is a set of STOTT ANTIBOUNCE CLIPS to fit your car, no matter what the year, size or make. A post card to the makers will bring their booklet giving full particulars.

RICHARD BERRY & SON (Department A),
Mafeking Road, SMETHWICK.

'Phone—
Smethwick 631-2.

'Grams—
"Springs"
Smethwick

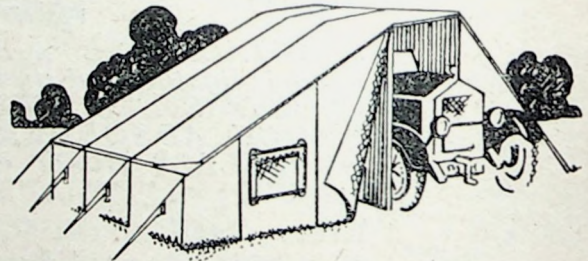
before the Season starts

See that your engine is in perfect order. Inspect your old piston rings, and if they are worn take them out and insert CLUPET Patent Piston Rings in their place. The two famous features—the Patent Bridge and Double Coil—incorporated in the CLUPET Patent Piston Ring ensure always a perfectly "gas-tight" joint, thus guaranteeing full power and no waste of oil or petrol.

RINGS

Send for FREE Illustrated leaflet to Dept. L.A.
The Clews Petersen Piston Ring and Engineering Co., Ltd.,
West Heath Works, Mill Lane, West Hampstead, N.W.6.
Telephone: Hampstead 8801.

Black's Tents



INEXPENSIVE TOURING WITH A TENT

No heavy hotel bills, no definite time schedule to be kept up, just please yourself where you stop and how long you stay. Make your touring a real holiday by carrying your hotel with you. A camping holiday is full of fun. It enables you to reach unfrequented beauty spots. It is a healthy change from ordinary routine.

The above tent is pitched alongside the car, with an awning to pass over top of car and tie down on opposite side. Curtain divides tent from car.

Made from brown rotproof Tent Duck of medium weight. Roll's up damp without harm. Mosquito Net Window. Size 7 ft. x 7 ft. Height 6½ ft. Walls 2½ ft. Total weight 29 lbs. Size packed 2 ft. 4 in. x 9 in. dia.

PRICE £6 10s. Carriage paid by passenger train.

Send for particulars of other tents and camp requisites. We make tents of every size and supply for every purpose.

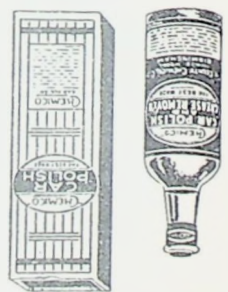
THOS. BLACK & SONS (Greenock), Ltd.
GREENOCK, SCOTLAND.

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

"CHEMICO" Car Beautifiers

"CHEMICO" CAR POLISH

Cleaner and Polish combined, used for years by Coachbuilders and Car Manufacturers to give the finishing touch to the new car. Will clean, polish and beautify a moderate-sized car in 30 minutes at a cost of 2d. Price - - 2/-, 3/9 & 7/- per bottle.



"CHEMICO" WAX POLISH

A Cleanser and Polish. "Chemico" Wax Polish has been described as the "best of its kind." Offered at a competitive price. 3/6 per tin.

"CHEMICO" TYRE PAINT

Imparts a smart appearance to Motor Tyres. Preserves the rubber from the destructive action of sunlight - protects the fabric from the action of water. Colours - black, white and grey. Price - - 2/- and 3/9 per tin.

"CHEMICO" LEATHER RESTORER

Restores dull or faded leather upholstery to its original lustre and freshness. Will not crack or chip. Colours - red, green, blue, maroon, black, brown and colourless. Price - - 4/6 per bottle.

"CHEMICO" ALUMINIUM

A perfect polish for Aluminium. Speedy, clean and brilliant in effect. Price 6d. per tin.

POLISH

ALL

"CHEMICO"

SPECIALITIES

are obtainable at most garages throughout England. If unable to obtain them locally, write direct to Chemico Works.

"QUIKKO" METAL POLISH

Named "Quikko" because of its speed in producing a brilliant and enduring polish on all dull or tarnished metals. It is also an excellent cleanser and polisher of celluloid side panels. Prices - - 7½d, 1/2 and 3/- per tin.



"CHEMICO" CELLULOSE

Cleanser and Polish. This polish is both "Chemico" Wax Polish gives a superb lustre. Liquid polish in tins 3/6 each.

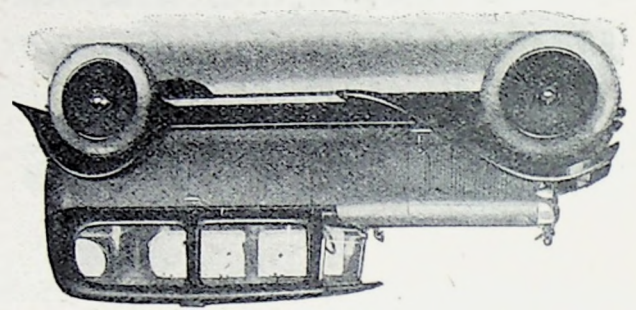
"CHEMICO" KLEERVU

Gives clear vision through the windscreen in rain or mist. It is also matchless for cleaning electric bulbs, mirrors, plate glass, etc. Price - - 2/6 per tin.

"CHEMICO" HOOD PAINT

A flexible waterproof paint which completely renews the hood and makes it in appearance equal to new. Colours - black, brown, red and colourless. Price - - 4/6 each.

SINGER CARS FITTED WITH REGENT SUPER :: COACHWORK ::



Sports Saloon.
Sports 4-Seater.
Sports 2-Seater.
LISTS FREE ON APPLICATION.

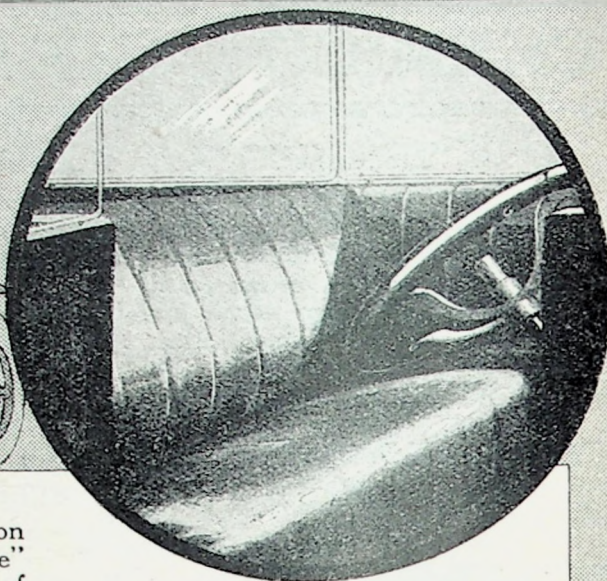
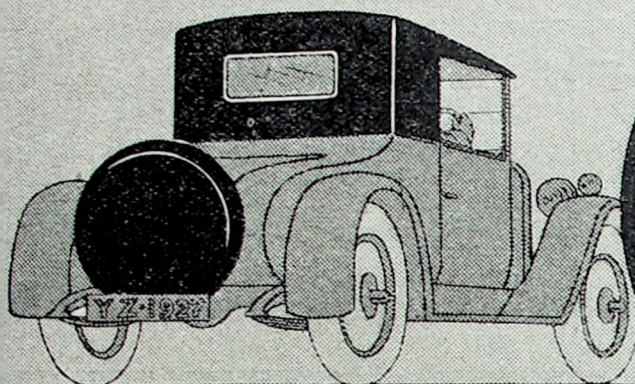
REGENT Manufacturing Co., Ltd., Leicester Causeway, COVENTRY.

Exchanges. Deferred Payments.

SINGER CARS with REGENT COACHWORK are designed for the discriminating buyer who demands distinctive design of highest quality; and service rendered, to cars costing double the money.

A RICH MIXTURE.

FACILITATE BUSINESS, and ensure prompt attention to your enquiries, by mentioning "The Light Car and Cyclecar" when writing to advertisers. They will appreciate it.



Hard wear in all sorts of weather soon makes leather upholstery shabby. "Rexine" Leathercloth is infinitely better—it is proof against water and grease, cannot fade, looks exactly like leather but costs less. When soiled it can be sponged clean.

"Rexine" Rubbercloth is ideal for Hoods, Hood Envelopes, etc.—it is absolutely waterproof and keeps smart for years.

"Rexine"
LEATHERCLOTH
& RUBBERCLOTH

REXINE LTD., HYDE, MANCHESTER
LONDON—60, Wilson Street, Finsbury, E.C.

M7

BUY BRITISH GOODS — SELL BRITISH GOODS



PRICE 3/6 NET

Of bookstalls and booksellers,
or 3/10 post free direct from
TEMPLE PRESS LTD.,
7-15, Rosebery Avenue,
London, E.C.1.

Wholesale: E. J. Larby, Ltd., 20,
Paternoster Row, E.C.4.

The Spirit of the Age

is petrol! An entirely new T.P. manual dealing with the progress and modern application of the Petrol Engine in all its spheres

ready next week.

The forthcoming new T.P. manual, "The Petrol Engine," is a practical guide to the petrol engine in its many up-to-date types and applications.

An interesting opening chapter deals with the development of the petrol engine from early types. Succeeding chapters treat exhaustively of automobile engines, embracing engines used for cars, motorcycles and

commercial vehicles. Motor boat engines, aircraft engines, and portable electric lighting set engines are fully dealt with. Information on petrol engines for various auxiliary power units, both portable and stationary, is included. Written by the staffs of "The Motor," "The Commercial Motor," "Motor Cycling," and "The Motor Boat."

"THE PETROL ENGINE"

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

WITH

THE NO-TROUBLE CARBURETTOR

Realise now that your car will use less petrol, give greater speed and acceleration, start up readily and give certain slow running, if you fit the "Solex" No-trouble Carburettor.

Put one on your car, whatever make it may be, and share the added joys that thousands of other motorists experience.

FREE TRIAL OFFER.

Write to us to-day sending particulars of your engine, no matter what type it is, and we will dispatch by return a "Solex" Carburettor suitable for 30 days, FREE Trial without obligation to purchase; no renovation charges.

SOLEX LTD.

Director: GORDON RICHARDS

SOLEX WORKS,

223-231, MARYLEBONE ROAD,
LONDON, N.W.1.

Telephones:
Paddington 8621,
8622, 8623, 8624,
8625, and 8626.

Telegrams:
"Solexcarb,"
London."

'fit Solex—and note the difference'

For happy days,
and cheap ones

Decide on an

OMEGA

*"The Three-wheeler
that runs like a four."*

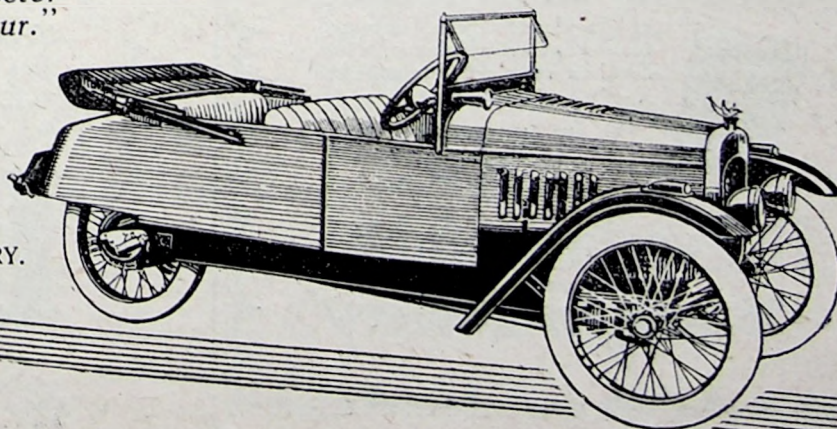
POPULAR MODEL £95
DE LUXE .. £110
FAMILY, as illustrated £115
SPORTS MODEL .. £125

Write to-day for full catalogue.

W. J. GREEN, LTD.,
OMEGA WORKS, COVENTRY.

*Take the open
road in comfort*

Out on the open road, free to travel where you will, and in a car that will take you in armchair comfort at less than a penny a mile. The Omega is your car, and now is the time to be getting busy. Let us tell you how in many ways the Omega is "different and better," and we would remind you that we will willingly arrange for you to prove her on the road. That is the acid test. Arrange to-day.



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.

20% reduction in the price of **EVERLASTIC** Inner Tubes

(Patent No. 217379)

INCREASED popularity of "Everlastic" Inner Tubes has made more economical production possible. From February 23, these trouble-saving tubes are 20% cheaper. "Everlastic" Tubes prevent 95 punctures out of every 100. One user (a tourist in France) pulled seventeen nails out of his tyre in thirty days—they did not puncture the "Everlastic" Inner Tube.

"Everlastic" Inner Tubes reduce wear on the outer tyres and more than pay for themselves. They give balloon tyre comfort without balloon tyre cost. These stout "Everlastic" Inner Tubes make lower inflation pressure possible, prevent bouncing and wheel spin, increase the life of the tyre, and reduce strain on the chassis. With "Everlastic" Inner Tubes reinflation is rarely necessary.

Made of the finest rubber with a patented tough black rubber insertion, the "Everlastic" does not blow out as a thin tube does. Racing men have proved that the extra weight helps to hold the road and gives security without reducing speed. "Everlastic" is the tube for the motorist who wants lower tyre bills, greater comfort, and freedom from punctures and road troubles.

Write for full particulars of "Everlastic" Inner Tubes and learn what users think of them. Send for sample section and new price list.

ST. HELEN'S RUBBER
WORKS, Section C.
SLOUGH.

Fit Everlastic Tubes
—ready for Easter!

JUDD



"PALM," a welcome sign of spring, is already to be found in many country lanes.

*Next
week!*

EASTER HOLIDAY NUMBER

Friday, April 1st.

ALL small-car owners are now thinking of the holiday. You, of course, among them!

Before definitely making your plans, however, you would do well to consult next week's Easter Holiday Number of "The Light Car and Cyclecar," in which will be given expert advice on all aspects of holiday motoring.

Touring will be explored in detail, and authoritative information on preparing the car for the road included.

There will be a valuable article on avoiding the minor wayside troubles that are a frequent source of irritation on a tour.

Seasonable accessories and equipment will be dealt with in a helpful manner.

These few items but suggest the scope of this much enlarged issue. Order your copy from a newsagent *to-day!*

The
Light Car
and
Cyclecar

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



The Motorist who was NOT entitled to the "GET-YOU-HOME" Service

R.A.C. Associate-Members stranded by an accident or mechanical breakdown are conveyed by relief car to their home or destination up to 20 miles free of charge. The Club pays the bill.

During 1926, 8,000 members availed themselves of this benefit.

ROAD SERVICE IS NEEDED BY EVERY MOTORIST.

The R.A.C. provides a complete service for the motorist's every need. Beyond the many Guides on the Road always at hand with help and information, there is the "Get-you-home" Service—which alone is invaluable—then the Touring Facilities are of utmost use, so also are the Free Legal Defence, the Technical Advice and the Special Insurance Facilities. The Licence Reminder and Lost Property Services are in themselves special features, whilst the use of Local Offices and Reading Rooms is often extremely helpful. You know that you will undoubtedly require any one of these Services at some time—so become an R.A.C. Associate-Member now, and enjoy the most complete service whether on or off the Road.

£2.2.0 per annum, without entrance fee.
Cars up to 1,100 c.c. pay **£1.1.0 only.**

Cut out, fill in in Block letters and post to:—

The Secretary, ROYAL AUTOMOBILE CLUB,
83, PALL MALL, LONDON, S.W.1

I would like to become an Associate-Member. Please send me illustrated booklet and full particulars free of charge.

Name

Address

"The Light Car."

AUSTIN

All USED CARS sold
with a SIGNED
GUARANTEE
(full list sent on request)

Special repurchase faci-
lities for OVERSEAS
VISITORS.

NO one will dispute the wisdom of the old saying impressed upon us by our fathers and grandfathers in our youthful days never to buy "a pig in a poke." Yet in the course of our business we are continually coming across people who buy not pigs but cars "in a poke," or its modern equivalent. They pick one up *cheap* at a sale, from a friend, or perhaps from a private owner, and subsequently wish to goodness that they had never seen it.

WHY anyone should do this when they can inspect, examine and try any car in which they may be interested, of 150 or so which are always on view in our "Used Car" show-room, and, moreover, receive a Printed and Signed Guarantee as to its condition and an undertaking to exchange it for a different one if it should prove unsuited to their requirements, is more than we can understand, can you?

Established over 30 years.
(It makes such a difference, you know.)

A free copy of
our brochure
"Cars of Beauty"
will gladly be sent
on request.

USED CAR DEPOT: 237, Hammersmith Road, W.6.
Phone—RIVERSIDE 4646.

WNHA

CARS



DAFFODIL
TIME.

In many woods and hedgerows daffodils are already in full bloom—a sure sign that spring is here. It is pleasant to gather the flowers, but in no circumstances should the roots be disturbed. Another point which should be borne in mind is always to park the car in a spot where it will not inconvenience other road users.

NOTES, NEWS & GOSSIP *of the* WEEK

British Cars in Australia.

Considerable interest has been aroused in motor circles by the announcement made by Mr. Bruce that a deputation representing the British motor industry is on its way to Australia to investigate local conditions and to endeavour to increase the Australian market for British cars, says Reuter.

This Week.

Widespread discussion will probably take place concerning the proposed new regulations for motorists. In our centre pages we give a résumé of the more important of the recommendations, and we deal with the subject also under "Topics of the Day." With the addition of front-wheel brakes the 9-20 h.p. Humber has been brought thoroughly up to date and our report of a test run carried out with one of the latest models is, therefore, all the more interesting. "Is Street Lighting all Wrong?" is a question which Prof. A. M. Low answers characteristically in an article having that title. He advocates the use of "mushroom lamps."

No. 746. VOL. XXIX.

ON OTHER PAGES

High-speed Engine Carburation ..	468
Road Tests of 1927 Cars:—	
The 9-20 h.p. Humber ..	470
Before You Can Race ..	472
Rich Mixture ..	474
Topics of the Day ..	477
Cyclecar Comments ..	473
Is Street Lighting all Wrong? ..	479
Proposed New Legislation ..	482
Interesting Accessories ..	484
Our Readers' Opinions ..	486

LIGHTING-UP TIMES (Rear Lamps for Saturday, March 26th)			
London ..	6.51	Edinburgh ..	7.05
Newcastle ..	6.58	Liverpool ..	7.03
Birmingham ..	6.58	Bristol ..	7.01
Moon—New, April 2nd.			

Finchley Road Traps.

Motorists should be on their guard along the Finchley road (London), between St. John's Wood Station and Tally Ho corner, as traps are frequently in operation.

Recording Cylinder Pressures.

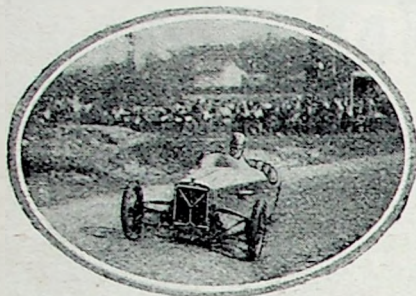
Three French scientists have just introduced an indicator for use on high-speed petrol engines which, we are informed, will record pressure changes taking place in less than a two-thousandth part of a second. A liquid column is used to transmit the pressure from the cylinder to the gauge of the instrument.

Next Week.

With the beginning of "Summertime," and one of the best holidays of the year in the offing, the publication next week of our Easter Holiday Number will be appropriate and will, we hope, divert the thoughts of our readers along those pleasant channels associated with the car and the road. The issue will be greatly enlarged and profusely illustrated. Touring in all its aspects will be dealt with in detail and there will be several novel features intended to appeal to those who, perforce, must stop at home at Easter. Make sure of your copy by placing a definite order with a newsagent.

Our Cover Picture.

The photograph on our front cover this week shows G. Goodall's Morgan at High Oak splash in the Victory Cup Trial, which was held a fortnight ago. It won a bronze medal, whilst three other Morgans finished.



A D'Yrsan three-wheeler, driven by R. Siran in a recent hill-climb at Argenteuil.

Failure of Traffic Experiment.

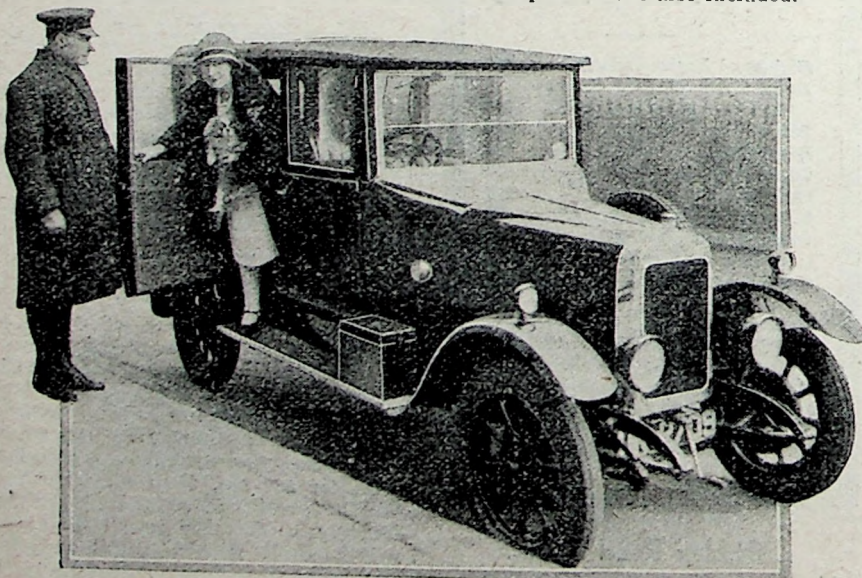
Westminster City Council has decided that the recent traffic rearrangement experiment carried out at the junctions of Knightsbridge, Brompton Road and Sloane Street, London, has been unsuccessful and a return to the old system is recommended.

The A.A. in Sussex.

For the special convenience of members residing in Sussex, the Automobile Association has opened an office at Brighton. The address is: Fanum House, 102, Marine Parade, Brighton. Telephone, Kemp Town 1698-1699. Telegrams, "Fanum, Brighton."

Visible Evidence.

An ingenious exhibit at the annual motor show of Rootes, Ltd., Maidstone, takes the form of an Austin Seven chassis above which is suspended a 2-gallon petrol can fitted with a spout. Secured to the float chamber of the carburetter is a funnel into which fuel drips from the can at an exact rate required to drive the car at 20 m.p.h., thus showing how low is the consumption.



A STAR'S CHOICE.

Miss Yvonne Arnaud and her Clyno saloon. Light cars are becoming increasingly popular amongst the theatrical profession, where smartness is a *sine qua non*.

Nearly Converted!

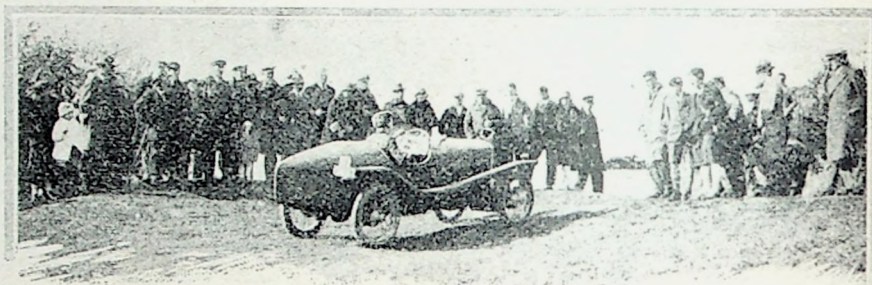
We recently noted a cycle fitted with two independent red reflex lenses at the rear. One good lamp would have cost no more, but, nevertheless, it is encouraging to come across cases like this.

Non-ferrous Metals Research.

An exhibition of considerable interest to motor manufacturers has been arranged at the Science Museum, South Kensington, London. The exhibits deal with the work carried out by the British Non-ferrous Metals Research Association, and many of them are of a distinctly practical nature.

Unauthorized Signs.

In the interests of motorists the Automobile Association has issued to hotel and garage proprietors a warning against the unauthorized use or reproduction of the A.A. badge on advertisement hoardings and notice boards. It is pointed out that the design is registered and that no one has any authority to reproduce it in any form without the specific agreement of the Association.



AN IMPROMPTU HILL-CLIMB.

A number of light car owners competed in an unofficial hill-climb near Newlands Corner last Sunday. The photo shows a sports model making a good climb.

For Motor Boat Owners.

In the specially enlarged Fitting Out Number of *The Motor Boat*, on sale to-day, will be found numerous articles of interest to owners who are preparing their craft for the coming season. Details of the cost of motor boating and contributions of interest to newcomers to the pastime are also included.

American Hustle.

To speed up the repaving of Broadway, New York, the foundations are being made of the English rapid-hardening material "Ferrocete."

Facts and Figures.

Which is the fastest track in the world? What is the highest speed ever attained by a car? What are the figures of the world's census of cars? These and hundreds of other questions are answered by an encyclopaedic little work, a booklet, entitled "Motoring Facts and Figures," presented with each copy of this week's issue of *The Motor*.

Rush for Routes.

The R.A.C. touring department is already experiencing a rush of applications for routes both in Great Britain and abroad. Many requests have already been received from members proposing to tour at Easter, Whitsun and even in the summer. It is not advisable to give such long notice as this, as by issuing a route so far in advance it is impossible to include the latest information as to road conditions.

New Motor Club.

A light car and motorcycle club is being formed at Sidcup, Kent. The organizers are well-known local tradesmen.

World Motor Transport Congress.

The meetings of the Congress have been arranged to take place on November 14th, 15th and 16th, whilst, in addition, an official visit of the delegates to the Commercial Motor Transport Exhibition will probably take place.

Kingston By-pass.

We learn that the following portions of the new Kingston by-pass will be opened on April 1st next:—From Beverley Bridge, on the Portsmouth Road, to Coombe Wood Farm, on the Merton-Kingston Road. From the Raynes Park-Kingston Road to the Surbiton-Leatherhead Road. From the Merton-Kingston Road to the Grand Drive.

By utilizing the first two of these sections it is now possible to avoid Kingston. When proceeding from London traffic should turn off the Portsmouth Road opposite Robin Hood Gate and follow the by-pass as far as Coombe Lane. There turn right and a quarter of a mile on turn left, passing through New Malden. The second portion of the by-pass will be picked up a quarter of a mile beyond Norbiton Park Hotel. At Hook traffic will turn left for Leatherhead and right for Surbiton.

Historic Inn Doomed.

Owing to its dilapidated condition the 200 years' old Blue Anchor Inn at Bridgend, Bexley, Kent, is in danger of collapse and is to be demolished. A new inn with special accommodation for motorists will be built on the site.

Morgan Competition Successes.

A gold medal was won by R. T. Horton in the Colmore Cup trial and silver medals by H. F. S. Morgan and J. C. Chippendale. In the Victory Cup trial a Morgan secured a bronze medal in the hands of G. Goodall, whilst three others finished.

Meeting of I.P.E.

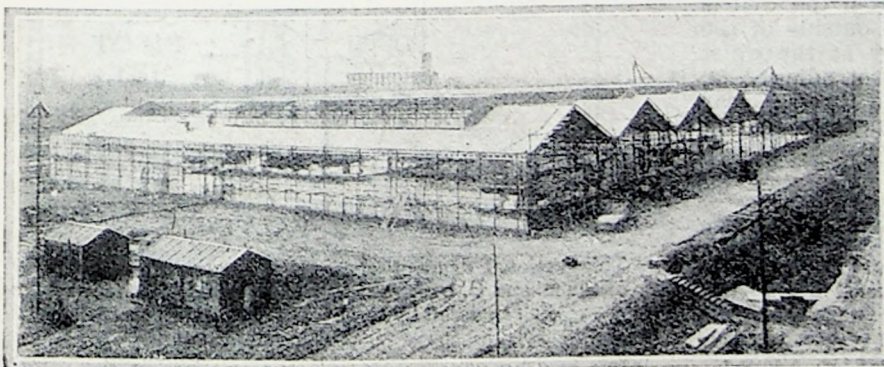
A general meeting of the Institution of Production Engineers will take place on March 30th, at 7.30 p.m., in the Council Room of the S.S.M. and T., 83, Pall Mall, London, when Dr. W. H. Hatfield will give a lecture on "The Development of Rustless and Allied Steels."

Illuminated Danger Signs.

The Hendon Urban District Council has erected a number of illuminated road danger signs, designed by the General Electric Co., Ltd., on the north circular arterial road at Hendon. Tests have shown that the illuminated signs can be distinguished easily from a distance of 500 yds. in clear weather.

Land's End Run.

Entries close for the run on April 2nd and can be accepted only from members already enrolled on the register of the Motor Cycling Club. Up to Tuesday last 280 entries had been received, but it is not expected that last year's record total of 530 will be reached. So far 13 cyclecars and 94 cars have been entered, compared with 20 cyclecars and 185 cars last year.



ENGLISH RENAULTS. The new Renault factory at Acton will consist of a main one-floor structure of nine bays and a number of subsidiary buildings. This photo shows the main shop.

An Anachronism.

Cinema-goers often find considerable amusement in detecting technical errors in the films they are shown, but film producers are becoming more careful and it is difficult to find a single "blunder" in some of the photo-plays now running in London. There was, however, one real "howler" in a film which has recently completed a successful season at a West End theatre in London. The plot was laid on the Continent in 1913, but in a street scene a famous English light car of post-war make was shown.

Looked the other Way.

In a London suburb a string of cars which were held up by a lorry unloading sand for road repairs recently drove over the pavement. A policeman on "point" nearly looked the other way.

Utopia.

A reader who has just returned from a visit to the Irish Free State is loud in his praises of the police attitude towards motorists. He says that they are given every consideration, and cars which are parked at night near street or shop lamps are not, apparently, required to be left with side and tail lamps burning.

NEXT WEEK!

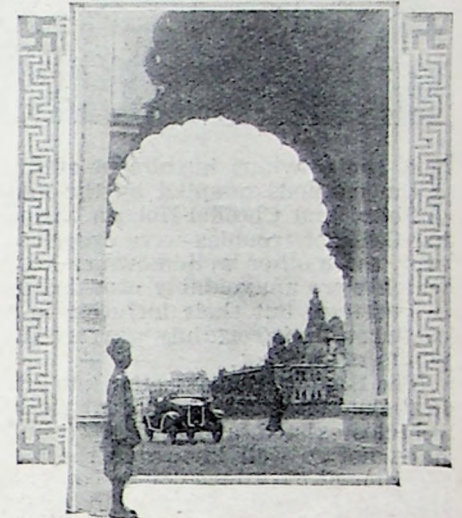
The Easter Holiday Number
of

THE Light Car
AND Cyclecar

PRICE 3d. AS USUAL.

Village Signs.

Interest in the R.A.C. scheme for the erection of signs at the entrances to towns and villages, indicating to motorists historical and other features worthy of inspection, continues to grow, and arrangements have already been made with many councils in various parts of the country for their erection. Recently the club received an offer from a donor, who wishes to remain anonymous, to meet the cost of erecting "What to See" signs in all the suitable villages and towns on the London-Exeter and London-Bath roads.



The palace of the Maharajah of Mysore is seen through this gateway. The car is a Jowett.

Bridging the Brent.

One of the last links in the North Circular Road, which is 26 miles long, is the bridge over the Brent at Stonebridge Park, now in course of construction. The length of the bridge is 500 yds. and it will cost £48,000.

"To What Base Uses—"

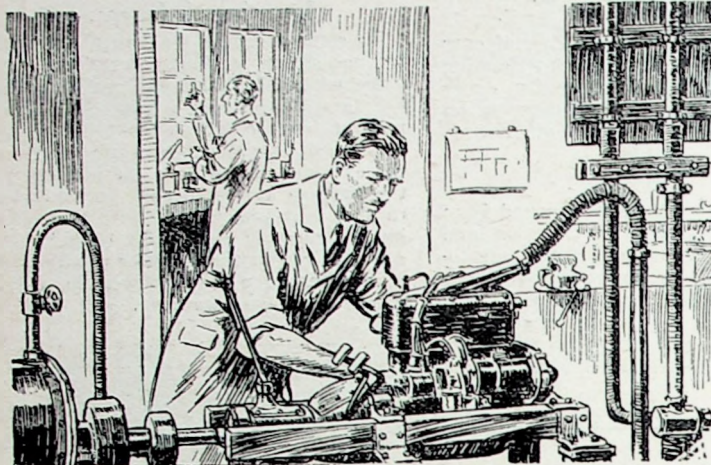
Mr. Jan Safer, an American orchestra director, has found a use for discarded brake drums. He has a set, of varying sizes, mounted on a polished wooden stand, and he uses them as chimes. The drums have been buffed and stippled and are, it seems, both useful and ornamental. They were carefully turned in a lathe until they gave the right notes and are said to be as good as chimes of the tubular type.

Quick Work.

Here is an extract from the diary of a private owner. It is true and speaks for itself:—"Friday (my unlucky day). Collided at 9.50 a.m. with a parcels van, resulting in a crumpled off-side front wing, damaged wheel and damage to steering. Car handed over to repairers, Gladwell and Kell, Ltd., Ampton Street, Grays Inn Road, W.C.1, at 10.15 a.m. Received an estimate by telephone at 10.30 a.m. for repairs, including new front wing, new front wheel and new drop arm. Advised insurance company, received instructions to proceed and notified repairers by telephone at 10.40 a.m. Telephone message received at 5.50 p.m. that car was ready for the road. Drove car away from repairers at 6 p.m. Everything O.K. (Not such an unlucky day, after all!)"

One For Two.

The hon. secretary of the Royal East African Automobile Association has just finished collating the Kenya motor statistics for 1926 and he has discovered that, deducting all motor vehicles owned by the non-white population, there is one motor vehicle to every two adult white inhabitants in Kenya. There are only 9,504 adult whites, and there are 5,329 cars in use on public roads, but this figure can be increased by 5 per cent., as there are many cars used on plantations where they are exempt from taxation.



HIGH-SPEED ENGINE CARBURATION.

By L. Mantell.

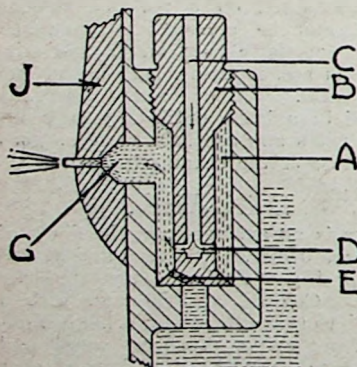
IN THIS INSTALMENT THE AUTHOR DEALS WITH THE WORKING OF THE B. AND B., COX-ATMOS AND SMITH SINGLE-JET CARBURETTERS.

IN the previous instalment of this series of articles the methods adopted by the makers of the Zenith, Solex and Claudel-Hobson carburetters in overcoming flat-spot troubles were described. There are, however, three other well-known makes of open carburetters which were unavoidably crowded out of the instalment in question, but their inclusion in any review of open carburetters is certainly warranted owing to their many points of interest.

The B. and B. carburetter has been a household word in the motorcycle and cyclecar worlds almost since such vehicles existed, and the car carburetter, although perhaps not so well known as the motorcycle type, is an instrument most ingeniously conceived to deal with both load and throttle-curve flat spots.

An illustration on this page shows the main jet system in diagrammatic form, A being a well into which is screwed the waisted main jet member (B), drilled down its centre with an air channel (C), which communicates with the well space through the submerged diffuser holes (D). The member is drilled again at E with a carefully calibrated petrol orifice also submerged, which is the actual metering fuel outlet.

There is no central spraying member in the choke, as in the case of the other carburetters already described, but the emulsified mixture from the well is directed into a channel (G) round the outside of the choke tube (J), thence into the airway at the waist stricture by four $\frac{1}{8}$ -in. diameter tubes protruding $\frac{1}{16}$ -in. into the air stream so that the efflux is thrown clear of the stagnant area that exists in immediate contact



The B. and B. main jet arrangement in section, showing one of the four spraying orifices in the choke tube (J). The letters are referred to in the text.

with the walls owing to the retarding effect of skin friction.

The action of the jet is simple. Whilst idling the main system is inoperative and filled with petrol up to the level as illustrated. Upon suddenly accelerating, a temporarily rich mixture is drawn from the well while it is being exhausted to the level of the holes (D), which then, by admitting air at atmospheric pressure, act thenceforward as corrective agents.

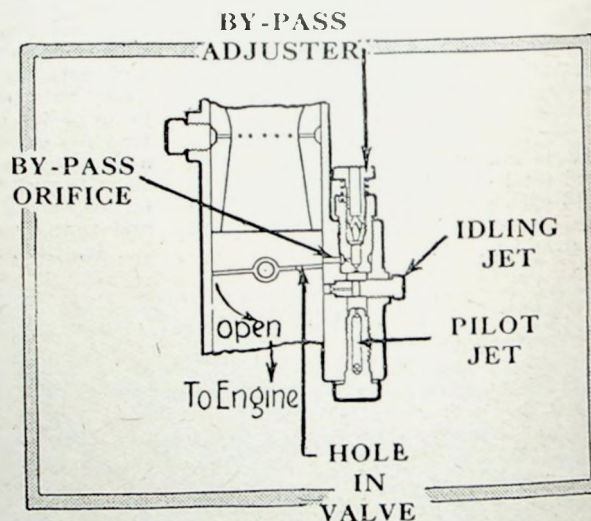
The curve of automatism being directly as the effective area of the holes, the capacity for "snap" acceleration is made up of a combined function of the choke velocity and the lifting action of the air which

B14

enters down the main jet and is claimed to work on the principle of an injector.

The idling and transfer mixtures are handled as in other carburetters of this type by an auxiliary fuel supply at the throttle edge, but the methods of operating and controlling the system are quite original.

An accompanying sketch illustrates diagrammatically the arrangement and action of this part, the throttle being shown in the "closed" position, when the engine takes its fuel from the pilot jet—which is merely a metering device—via the idling jet, and obtains its air through the hole in the throttle valve. The idling jet does not meter the fuel but acts as a depression regu-



This sectional drawing shows the slow-running assembly of the B. and B. carburetter. The quality of the mixture is regulated by the by-pass adjusting screw.

lator, and by varying its size the suction on the pilot is increased or reduced.

The resultant output is not neat fuel but a rich emulsion consisting of fuel from the pilot jet and air which is inspired at the by-pass orifice and regulated by the by-pass adjuster.

As the throttle opens its edge gradually passes across the by-pass orifice, and as the transition progresses from the atmospheric to the suction side of the throttle this orifice, which commenced as a reducing air leak while in the atmospheric area behind the throttle, ceases so to function as its position is transferred to the highly depressed area on the engine side of the valve, and it proceeds, on the contrary, to act as an additional fuel delivery orifice, thus enriching the pilot output where ordinarily the delivery of this jet would be reduced to the point of causing flatness.

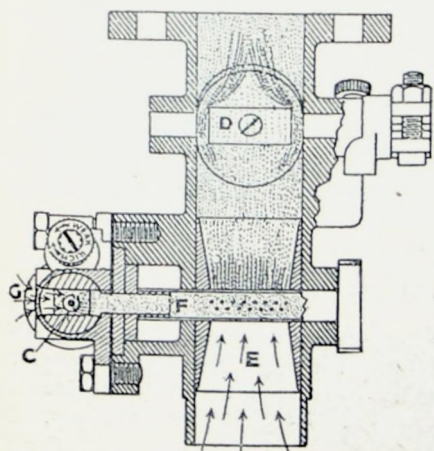
When engine conditions demand an unusual choke area, the transfer mixture can be intensified still further by fitting an extra-large by-pass orifice which will

bridge the wide transfer gap caused by the low choke velocity.

The Cox-Atmos is another fixed carburetter of great interest and well-deserved popularity. It is standardized on several well-known English cars and has a reputation for producing an unusual smoothness of running. With this end in view the carburetter is designed to give the greatest possible degree of fuel disintegration per unit of air speed, and in order to achieve this its spraying arrangements are carried out in a particularly thorough manner. This takes place in three stages, which will be comprehensible from one of the accompanying diagrams, showing a sectional plan view (seen from above). The main jet (C) produces the first stage of the spraying, the air being drawn in at G and, after flowing across the jet and receiving a heavy charge of fuel, passing through into the diffuser tube (F) which is situated in the waist of the choke and drilled with two double rows of fine holes approximately at right angles to the main air stream.

The holes are correctly proportioned to exercise the desired depression on the jet. Those slightly on the atmospheric side act as diffusers and admit a small proportion of air, which carries the disintegration of the fuel inside the tube a stage farther. The finely-divided mixture is then finally sprayed from the holes slightly on the engine side and meets the main stream again at right angles, where it undergoes its final disintegration.

An elevation of this arrangement (seen from behind)



In the Cox-Atmos carburetter a very rich emulsion is drawn through diffuser holes in the choke and diluted by the ingoing air; this results in a finely divided mixture.

is also depicted and shows the relation of these parts to the throttle. The rising coefficient of fluid friction, in conjunction with an increase in the diffuser action of the rearmost holes in the diffuser tube as the air speed increases, act conjointly as the corrective agents, and the curve of operation is regulated by the size and arrangement of these holes.

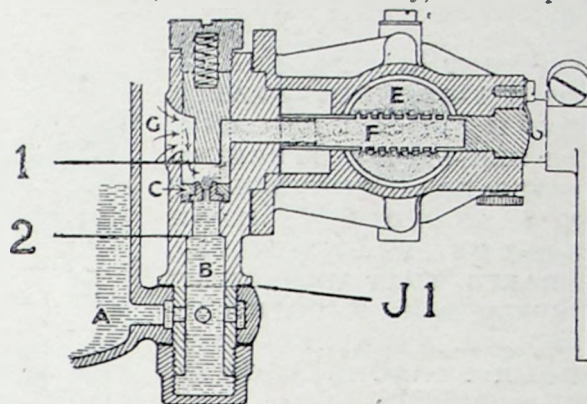
The reserve volume of heavy emulsion in the diffuser system generally is relied upon to act as a carry-over during "snap" acceleration, and when a still higher degree of snap is desired, as in the case of extra large choke areas, the fuel level can be raised from its normal position to the line marked 1 in the sketch by machining the face J1, which submerges the main jet and provides an additional reservoir of fuel for sudden acceleration.

Similarly, if conditions call for the reverse, the level can be lowered to the position marked 2 by the addition of a suitable number of washers at J1. The same policy of fine disintegration is carried out in dealing with the slow-running, which is effected in the orthodox manner by providing a pilot jet at the edge of the throttle.

The next carburetter that comes up for consideration is the Smith single-jet model. This is, perhaps, not so well known as the five-jet constant-vacuum instrument made by the same concern, but it belongs to a type of carburetter which embraces a well-tried and very reliable system and the methods of overcoming

the functional pitfalls of fixed choke carburation are interesting and instructive.

The main and auxiliary arrangements of the Smith carburetter are depicted diagrammatically on this page. The main jet (A) is submerged about one inch below the normal level and feeds into the area (B), where it meets, and is emulsified by, the air passing



In this sectional view of the Cox-Atmos carburetter can be seen the fuel level limits 1 and 2 and the adjusting washer J1.

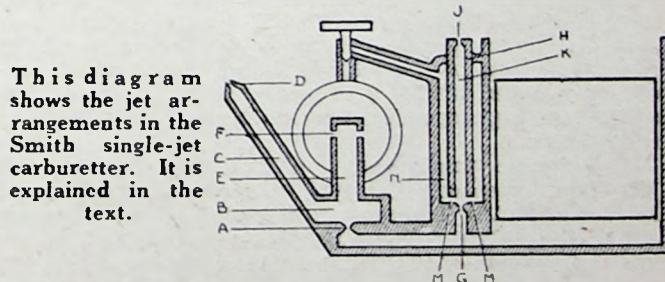
down the channel (C) in a volume metered by the air hole (D), which is variable.

The resultant heavy mixture passes up the tube (E) to the spraying orifices (F), which are situated at the high velocity point in the waist of the choke tube. The correction curve is effected by the relationship of the volume of air leakage via D to the gross area of the holes (F).

The greater the leakage area and the bigger the main jet, proportionately, to balance the relieving action of the leakage, the steeper becomes the correctional curve, and vice versa.

This correctional variation will be evident if one considers the extremes of air leakage adjustment. When the opening (D) is infinitely small the jet will be quite uncorrected and behave as a plain orifice, but if, on the other hand, the leakage is infinitely large the jet will then be deprived of engine suction and will deliver by virtue of float chamber head only, thus becoming enormously over-rich at low speeds and impossibly lean at high revs.

The auxiliary system seen to the right of the main functions in an approximately similar manner; petrol

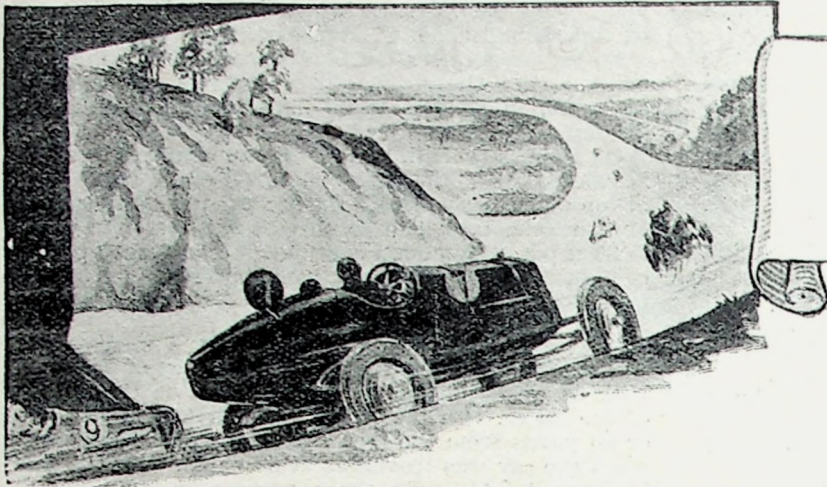


This diagram shows the jet arrangements in the Smith single-jet carburetter. It is explained in the text.

is metered by the jet orifice (G) into the centre of the tubular member (H), where it is emulsified by air entering at the hole (J) and, passing down the central channel (K), thence out with the disintegrated petrol via the holes (MM) into the space (N), it is drawn by a duct to the final spraying orifice at the edge of the throttle.

This is not shown in the sketch, but is of orthodox design. It will be noted that by means of the larger reservoirs both in the main and auxiliary systems very thorough measures are taken to prevent weakness either at the transfer position or in cases of snap acceleration.

This completes the description of the working of fixed choke carburetters. The next instalment, which will appear shortly, will deal with constant vacuum instruments.



BEFORE YOU CAN RACE— at Brooklands.

A RESUME OF THE REGULATIONS
WHICH SHOULD HELP TO MAKE
B.A.R.C. AND OTHER MEETINGS
MORE INTERESTING FOR
SPECTATORS.

BROOKLANDS habitués are divided into those who go to race and those who go to watch, the former, of course, being a mere handful compared with the latter; but of the thousands who take up their positions at various vantage points how many are there who do not secretly cherish the thought that one day they themselves will speed away towards the home banking at the fall of the starter's flag? Even if they do not entertain such aspirations, one wonders whether they realize the conditions which are imposed upon their racing brethren.

Obviously, the conduct of those who use the track must be governed by definite regulations, whilst their cars must conform to certain conditions. The former may appear to be obvious, but the latter not so; in fact, it is a common impression amongst spectators that they could, if they so desired, bring any sort of car to the starting line. A brief résumé of the supplementary regulations—governing, say, a B.A.R.C. meeting—to which drivers have to conform should, therefore, be of interest.

An entry form in itself requires careful consideration, for upon it certain facts must be given with exactitude; but in this it is not a great deal different from any other type of official form. It may be pointed out, however, that misstatements concerning the measurements of the vehicle given by an entrant on his entry form may be deemed a corrupt practice.

Play or Pay.

Play or pay, abbreviated to p.p., is one of the first rules of which a driver must be thoroughly cognizant, but, in addition, should an entrant discover that, owing to unforeseen circumstances he cannot take part in the race for which he is down to run, he must make a declaration of forfeit. Should he not do so—backing out after the publication of the official programme—he is liable to a fine of £5; thus, from a monetary point of view, it will be seen that the sport of racing at Brooklands must not be undertaken lightly.

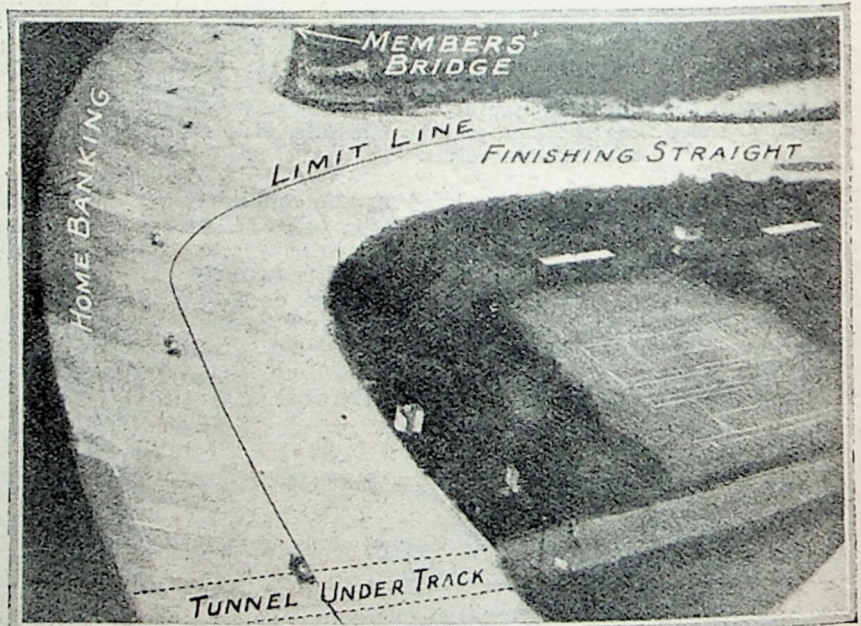
Incidentally, if fined, a driver must pay over the amount to the clerk of the course within seven days of the time appointed for the race. Non-payment of the fine debars an entrant from taking part in other races, and, according to the official wording, "may entail further steps being taken against him by the Club."

During a B.A.R.C. meeting a mechanic may or may not be carried—just as the driver wishes—but no other passengers are permitted.

The equipment of a racing car is subject to strict supervision. Steel-studded tyres, for instance, are not allowed, two independent brakes, conforming with the

requirements of The Motorcars (Use and Construction) Order, 1904, must be fitted and an ignition switch must be so placed that a driver can at any moment stop the engine without difficulty. Every car with a bonnet must have a leather strap not less than 1 in. wide and $\frac{3}{4}$ in. thick firmly secured at both ends and passing right round the centre of the bonnet. The need for the last-named regulation is very real, for a badly fitting bonnet can be a menace not only to the driver of the car itself but to other drivers using the track at the same time. At high speeds wind pressure is sufficient to rip off a bonnet despite the use of ordinary fasteners, and a strap is considered to be a very essential safeguard.

The regulations governing exhausts are very strin-



THE LIMIT
LINE.

A bird's-eye view of a section of Brooklands track which is governed by very strict rules. Owing to increasingly high speeds, the finishing straight is not always used, lightning races being decided in the Railway straight.

gent, the idea being absolutely to bar excessive noise. Prior to the start of a race meeting officials take the necessary measurements to ensure that every entrant has followed the regulations both in the letter and the spirit. The B.A.R.C. still further covers itself in a regulation which reads as follows:—"In spite of the fact that a competitor may have complied with the regulations, the Brooklands Automobile Racing Club, through its official or duly appointed representative, shall have the right at any time to exclude any vehicle from the track or grounds within its jurisdiction if, in the opinion of such official or representative, such a

vehicle has made or might make undue noise."

It is interesting to note that it is definitely laid down in the regulations that "any fuel which is commercially obtainable" may be used, but the oxygen required for combustion must be obtained directly from the atmosphere. So much importance is attached to the latter part of the clause that any infringement of the rule "shall be deemed a corrupt practice and dealt with accordingly."

How to Stop: Official.

The very high speeds now attained by racing cars have, of course, robbed what is known as the "finishing straight" of much of its usefulness—that is, from the point of view of the spectator—but when the finishing line is situated in this straight there are certain driving rules which must be observed. The instructions are:—

"Every driver shall apply brakes and shut off power immediately on passing the finishing line. He shall then bear towards the inner edge of the track and endeavour to reduce his speed to between 20 m.p.h. and 30 m.p.h. prior to reaching the left-hand bend connecting the finishing straight with the main track. A broad, black line is painted on the concrete forming a curve commencing in the last 50 yards of the pull-up and leading into the main track. This line, called the 'limit line,' shall in no circumstances be crossed by drivers when pulling up. When a driver has entered the main track after making the left-hand turn, he shall continue to decrease speed (still bearing towards the inner edge of the track) until . . . he crosses a broad, black line painted on the concrete at right angles to the direction of the main track, called the 'stopping line.' No cars shall in any circumstances come to a stand prior to having passed the above-mentioned stopping line, and any driver disregarding this instruction is liable to disqualification. . . . Any driver crossing the limit line will render himself liable to disqualification, it being conclusive proof that he was travelling at an excessive speed or that his car was not under proper control at the stopping line."

Railway Finishes.

In parenthesis, it may be pointed out that the extreme difficulty which drivers of the fastest cars experience in attempting to pull up without crossing the limit line is one of the chief reasons why the "lightning" or high-speed races are finished in the railway straight, where, after crossing the finishing line, drivers have an unlimited length of safely negotiable track in which to pull up.

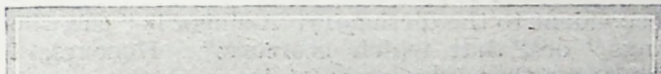
The finishing straight has *not* been abandoned, as some people imagine, and we have been informed by the B.A.R.C. that it will be used for races run at a maximum speed of about 75 m.p.h. The sandbanks

used for special events such as the Grand Prix, 200-Mile Race and so forth are not by any means fixtures; they are erected only for these meetings. It is possible that all high-speed races will henceforth start at the fork, or "Pond" starting line, so as to give spectators in the public enclosure a better view of this interesting part of a race.

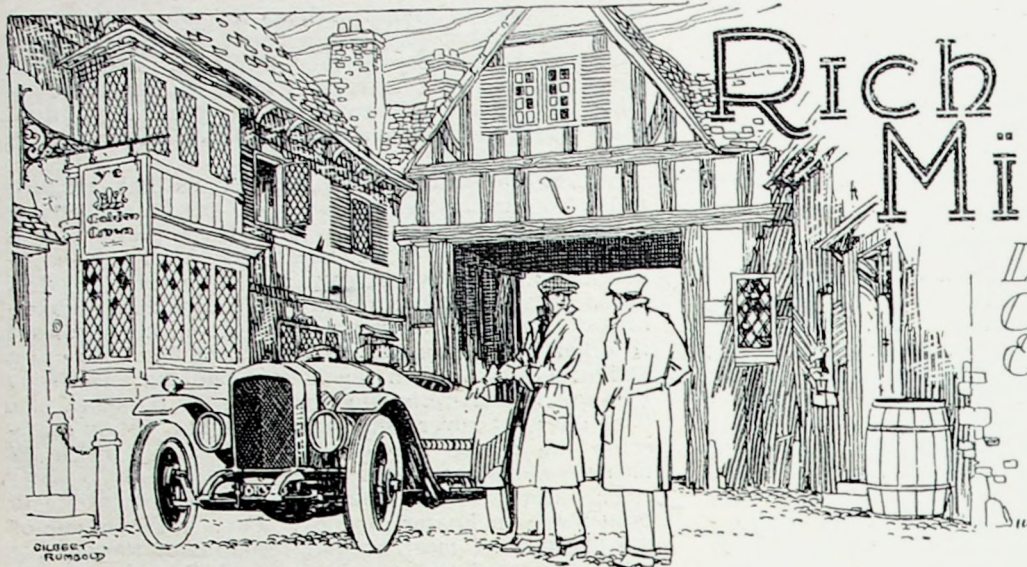
Visitors to the track probably noticed that last year a dotted black line appeared on the home banking about 10 ft. from the top edge of the saucer. This is known as the 110 m.p.h. mark, the idea being to discourage drivers whose cars are not capable of this speed from endeavouring to give sensational performances at risk to themselves and great inconvenience to other competitors by driving above it. There is a similar dotted line on the Byfleet banking. Half-way up the track there is what is known as the 50-ft. line. This does not govern driving tactics, but merely represents the centre line of the track along which all measurements are taken.

The first B.A.R.C. meeting of the season is due to take place on Easter Monday. Usually this is one of the biggest and most popular meetings of the year.

The dates of the remaining B.A.R.C. meetings are June 6th (Whit-Monday), August 1st (Bank Holiday) and September 17th. There will be three other events of outstanding importance, namely, the second British Grand Prix (October 1st), the J.C.C. 200-Mile Race (October 15th) and, it is hoped, a six-hour Endurance Race for sports cars of unlimited capacity, to be organized by the Essex Motor Club. Artificial S-bends will be used in each of the three last-named events.



(Left) Another view of the home banking, showing the continuation and termination of the limit line opposite the gate which gives access to the paddock. The photo was taken when the cars were "all out," and indicates the position on the banking of 90 m.p.h. cars. (Above) When touring car events take place at Brooklands the regulations are slightly modified: A view of the J.C.C. High-speed Trial.



Rich Mixture

*LIGHT CAR
COMMENT
& ADVICE*

*By
Focus*

Pronunciation.

REFERRING to a paragraph of mine dealing with the pronunciation of car names, a reader writes to ask me whether, as a Singer owner, I will decide a knotty point which he has argued with a friend: Is it pronounced Sing-er or Singe-er?

Leaving my personal preference for the former pronunciation on one side, I can only refer my correspondent to the dictionary. A singer is "one who sings" or "that which scorches." Honours, I think, are therefore easy.

Either Will Do.

AT the moment I have two Singers—a Senior saloon, which is now well run in, and a Junior, which is nearing the completion of its first 500 miles. The purchase of the latter has been rather a financial blow in view of the approach of an invoice for my new Lea-Francis Gordon England saloon, which is due to be ready for me early next month, but I am compelled to admit that the little car is delightful.

I shall keep it at least until the end of the summer and being, I believe, the forerunner of a type of small car which is going to make big strides in the near future I expect to find its behaviour distinctly interesting. My first impressions of it on the road certainly confirm the superlatives which were spilled over it by *The Light Car and Cyclecar* when the first road-test report of the car was published last November. The indications are that, once run in, its name could be pronounced in either of the two alternative ways with equal etymological accuracy.

An Anti-dazzle Notion.

RECENTLY I have been experimenting with the system now being adopted in France with the object of preventing dazzle. It consists of nothing more than a Benjamin Autoreelite mounted on the near-side running board just in front of the rear wing. The idea is that on meeting another car one extinguishes the headlamps, at the same time switching on the running-board light, which casts a long beam ahead without in any way dazzling the other driver. So far I have found it very satisfactory and preferable to the method of extinguishing the off headlamp only, which, apparently, is not regarded by some drivers as any

consideration at all. Lorry drivers on main roads soon reveal their opinion as to the efficacy of one's attempts at reducing dazzling, and, if not satisfied, they are apt to retaliate by flashing on their headlights when only a few yards away. With the running-board light in operation I have not found them do this, which clearly indicates that it is causing no inconvenience. I like the fitment so much that I intend to retain it.

Early Holidays.

TO parents who have children at school the advice to take holidays earlier savours of a counsel of perfection, but people who have no such responsibilities miss much by not following it. To my mind, the finest time for spending a holiday on the road is towards the end of May and beginning of June. This is, indeed, the "sweet of the year," when Nature riots in its brightest colours.

At this period there is a swift succession of blossom, hawthorn white and red, lilac and laburnum presenting a glory seen at no other time of the year, and sometimes, if the spring has been late, the apple orchards are in their full beauty as well. The woods, too, are starred with flowers and the meadows gay with buttercups. Last year between Crewkerne and Dorchester I drove through miles and miles of bluebells which were thicker on each side of the road than grass and made the woods like pools reflecting the sky. In the evening in May the whole countryside is flooded with the song of birds, and there can be no purer pleasure than to sit quietly in the lanes and listen to their melody. It is then, also, that one may hear the nightingale. Compared with the wonder of early summer, July and August are drab, for all the blossom has gone and most of the birds are silent.

It should not be forgotten, too, that in May and June accommodation is easy to find and much cheaper, and there is far less congestion at popular resorts. Further, it is not too late for fires, and if the nights are chilly a cosy time can be spent indoors. Two months later the weather may be just as chilly, yet accommodation much less comfortable. No matter how cold it is, comparatively speaking, fires are usually taboo in July and August.

Visible Warning of Approach.

A MOTORIST driving along Watling Street at night a few weeks ago was stopped by the police, who alleged that he had come round a somewhat dangerous bend at excessive speed and without giving audible warning of approach. A summons followed.

The driver's defence was that he knew the road well and that his powerful headlights at this spot were far more effective than any audible warning. The bench agreed and dismissed the summons, the chairman adding that if the offence had happened in the daytime they would probably have taken a different view.

Why South of London?

THE captain of the Motor Cycling Club tells me that the 21st annual opening meeting of the season is to be held, as it was last year, near Dorking, in Surrey, the affair taking the form of a dinner, followed by dancing, the whole being preceded by an entertainment starting at 6 p.m.—all the elements, one would imagine, of a quite successful evening. But why at Dorking? One can ask the same question of the Junior Car Club. Events of this kind seem always to be held south of London. Both clubs, I feel sure, must have many North London and Midlands members who would like to be present at such a social event but who hesitate to traverse London from north to south at 5 o'clock in the afternoon and again some time after midnight.

If one must drive to a place 24 miles out of London to attend a function of this kind, why should not one sometimes drive north, sometimes west and sometimes east? It would make the meetings far less parochial and would, perhaps, deter "local" cliques, which are inclined to take control and leave other members feeling as though they were outsiders. This criticism applies, of course, practically to every club of the kind in the country, and, if it could be removed, I believe that the social side of club life would be far more popular.

It will be hard to put forward this "clock" very well-known old sundial on Wilton

The Latest Game.

A NEW game is being played by mischievous urchins at road junctions. It consists of standing at a street corner until a car approaches, and then rushing out with uplifted hand as if to warn a driver coming along the other road. Naturally, their impulsive action causes one to brake and take other precautions which never fail to evoke hearty laughter from the gamins. Fortunately, their action cannot do much harm, and is to be preferred to the really criminal behaviour of youths who give the all-clear signal at road intersections when other cars are about to cross.

Worth Double.

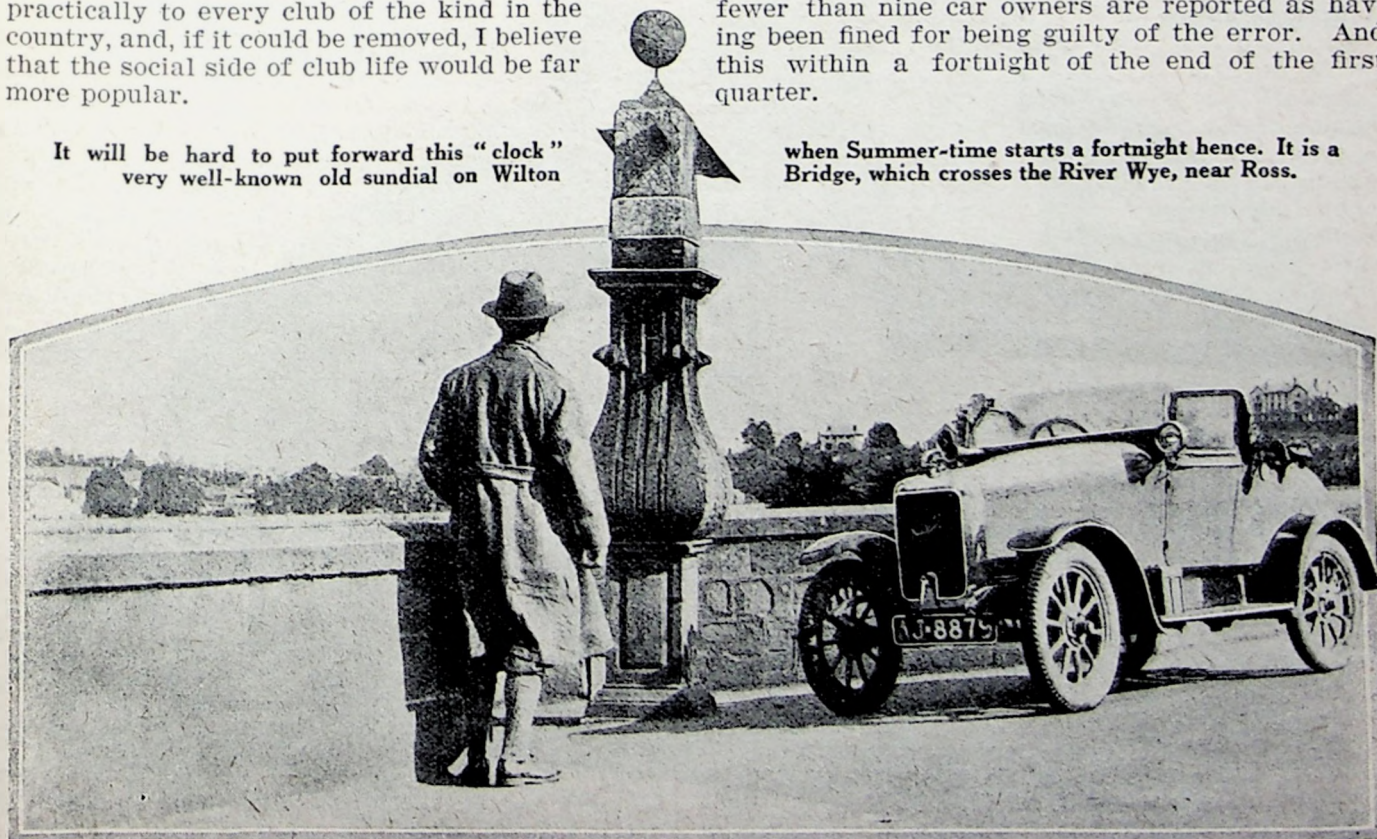
TWO or three weeks ago I bought a 50-yd. roll of cleaning cloth for 7s. 6d., and it has already proved so useful that I should be perfectly ready to pay 15s. for future supplies if it so happened that the price was doubled before my present roll gives out. The luxury of having a fine, soft, white duster in the cubby hole, the door pocket and the toolbox must be experienced to be appreciated, whilst the presence of a generous-sized cloth hanging on the garage wall in readiness for starting up from cold in the mornings with the aid of a muddy or greasy starting handle is really very acceptable.

Those who follow my advice and buy a roll would be well advised, however, to keep it under lock and key, as it makes excellent dusters and cleaning cloths for household purposes, and domestics are inclined to "get their own back" if you leave it where supplies can be conveniently pilfered.

Licence Prosecutions.

IT should hardly be necessary in these days to remind motorists that Road Fund licences are meant to be carried on the car and not in the pocket, yet in a provincial paper before me no fewer than nine car owners are reported as having been fined for being guilty of the error. And this within a fortnight of the end of the first quarter.

when Summer-time starts a fortnight hence. It is a Bridge, which crosses the River Wye, near Ross.



Some trouble has been caused in one area by the fact that the authorities who have been accustomed to notify car owners and motorcyclists when driving licences were expiring have discontinued the practice without warning. As a result, a large number of folk, including clergymen, doctors, and even justices of the peace, have found themselves haled before the bench and duly fined.

The authorities contend that they are under no obligation to give notice to motor owners of the expiry of licences; but it seems to me that, having created the custom, they were under some moral obligation to announce its discontinuance.

Missing Caused by Carburation.

FEW things are more irritating than intermittent and elusive misfiring. I was asked to give my opinion recently on a case which certainly appeared baffling. It was not the plugs; it was not the magneto; the high-tension leads were all O.K., and the compression on all cylinders was good; yet misfiring continued. I decided to go for a short run with the disconsolate owner of the car.

The engine started from cold on the third pull-up and ran evenly. A plug tester showed that every plug was behaving perfectly, and away we went. Symptoms of trouble soon developed, and on an average the engine gave an unmistakable "miss" about every 200 yards.

Now, I have experienced something of the sort before, so we stopped; out came the tool-kit; the petrol tap was shut; the float chamber cover taken off and the float removed; finally, I slacked off the nut under the jet chamber and allowed the contents of the carburetter to trickle away. Exami-

nation of the float chamber walls disclosed what appeared to be blemishes in the casting, which looked rough and black; but a clean rag easily moved the deposit, and upon close inspection it was found to resemble fine, black powder. We re-assembled the instrument, continued our journey, and the engine fired without a suggestion of a falter; moreover, it has behaved in an exemplary fashion since.

Sliding Roofs.

A CORRESPONDENT who went over from an open car to a saloon last year writes expressing disappointment at the experience. Most of his motoring is done for pleasure, and he says that while touring in the Highlands and Wales the best of the scenery was lost to him. He passed through the Cheddar Gorge without seeing anything but the road and the foot of the cliffs, and at the top had to get out and walk down in order to appreciate its grandeur. This drawback of the enclosed car should make manufacturers get to work on standardizing the sliding roof.

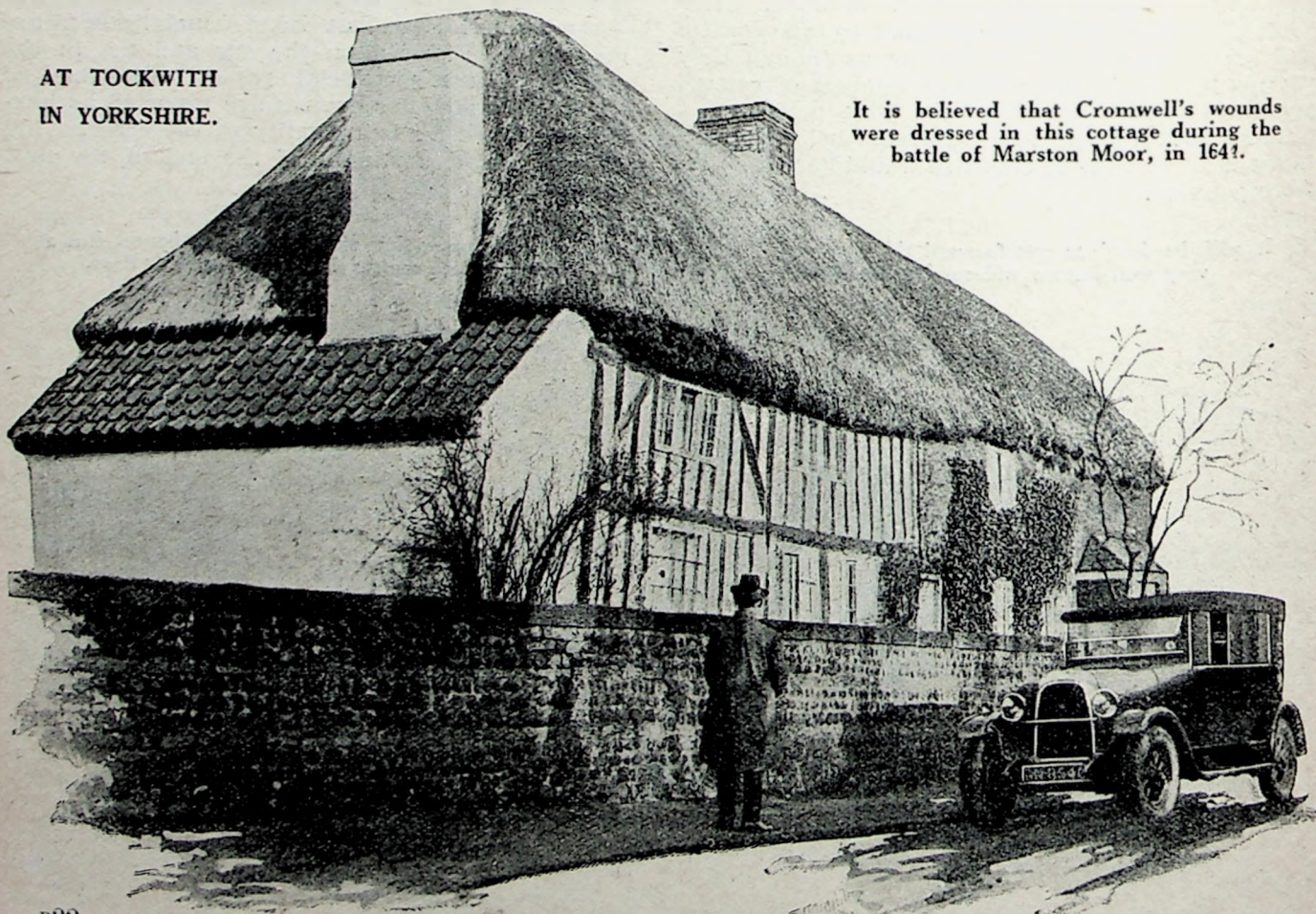
The Oil Level.

I FIND that many readers believe that if the level of the oil in the sump of an engine is higher than the "full" level on the dip-stick, the working parts of the engine receive a more generous supply. This, of course, is not the case, for the pump delivers just as much oil to the engine if there is a pint of oil in the sump as when there is a gallon.

If the level in the sump is much too high the big-ends will, of course, dip into the oil, with the result that plugs will probably oil-up—usually No. 1 when going down hills and No. 4 when climbing.

AT TOCKWITH
IN YORKSHIRE.

It is believed that Cromwell's wounds
were dressed in this cottage during the
battle of Marston Moor, in 1641.



MIDLAND OFFICES:
BIRMINGHAM: 16, Bennett's Hill.
Phone: Central 2572-3.
COVENTRY: 6, Warwick Row.
Phone: Coventry 4775.

NORTHERN OFFICES:
MANCHESTER: 196, Deansgate.
Phone: Central 2457.

The Light Car and Cyclecar

Conducted by
EDMUND DANGERFIELD.

TEMPLE PRESS LIMITED,
7-15, Rosebery Avenue,
London, E.C.1.

Inland Telegrams - "Pressimus,
Holb, London."

Cables - "Pressimus, London."
Telephone - Clerkenwell 6000
(7 Lines).

"THE LIGHT CAR AND CYCLECAR" WAS
FOUNDED IN 1912 TO CATER FOR THE
NEEDS OF USERS AND POTENTIAL
PURCHASERS OF LIGHT CARS AND
CYCLECARS, AND IT HAS CONSIST-
ENTLY 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.

at the present time, notably the 20 m.p.h. speed limit, the risk of being prosecuted for dangerous driving when the offence was really of a minor character, the need for always carrying a driving licence and the somewhat chaotic lighting regulations, but it is clearly more desirable to put up with these for another year or two than to find our use of the roads governed by hastily prepared regulations which may be very rigidly enforced.

Topics of the Day

Proposed New Laws.
THE suggested new legislation set forth in the draft of the Road Traffic Bill need concern neither motorist nor pedestrian. The draft consists of 66 printed pages, in which a very creditable attempt has been made to supplant the numerous quaint Acts, Orders and by-laws which at present govern our use of the roads. There are, of course, points with which we do not agree, whilst there are others which obviously will improve our lot. Amongst the former is the suggestion that the Minister of Transport should have vested in him the rights of a dictator, whilst amongst the latter we may mention the proposal to have a modified degree of "dangerous" driving, to be known as "careless" driving. Another obviously sensible and practical modification to the existing law which is proposed is that if a driver were pulled up for his driving licence it would be in order for him to produce it on the spot, at a near-by police station within three days or at any other police station which he named to the constable who stopped him.

No one, we imagine, will object to the clause making it necessary for two front lamps to be carried, but it is difficult to agree with the Minister of Transport that there is any justification for considering that vehicles carrying special kinds of goods should be exempted. *The Light Car and Cyclecar* believes that any measure calculated to increase safety is a good measure and, therefore, advocates that every two-track vehicle should carry two front lamps and one rear lamp, and that every single-track vehicle should carry one headlamp and one rear lamp.

There Is No Hurry.

WE do not hold the opinion that motorists should be too anxious to rush this proposed new legislation on to the Statute Book. Let us first have the discussion and the grievances thoroughly thrashed out. The great thing to remember is that nails are being driven into the coffin of anti-motoring prejudice more rapidly to-day than they have ever been. Many thousands of new motorists will come on to the roads during this season and next, and their inclusion in our ranks will necessarily help to broaden the minds of legislators, magistrates and the police force. There are certainly serious grievances from which we suffer

The speed-limit question is, of course, the most important of all. It is now recognized that speed within reason cannot in itself be dangerous, and no regulations could provide for all the circumstances which dictate the degree of danger, if any, which any particular speed entails. It would be an indication of broadmindedness if the police were to recognize the fact and withdrew from now onwards the 20 m.p.h.-limit traps on perfectly safe stretches of road, which at present occupy so much of their time and bring, in the minds of many of us, considerable discredit upon them.

Tax Dodging.

THE news that, in these days of licence discs and registration books, it is possible to avoid paying the tax comes as a surprise. In the opinion of the Surrey County Council, however, tax-dodging is on the increase, and within a few weeks 58 cases of default have been dealt with. In consequence of this, the county council has decided that the absence of organized road inspection of cars and the issue of part-yearly licences facilitate tax evasion, and a representation to this effect has been made to the Ministry of Transport.

This is a rather disturbing state of affairs, but it goes to show that, so long as there are black sheep in the motoring fold, immunity from unwelcome police supervision will never be obtained. When a man neglects to pay his rates or his dog licence he is summoned and, in due course, appears in court. This happens, also, in the case of anyone who does not pay his car-licence fees, but hundreds of law-abiding motorists are inconvenienced before the culprit can be discovered.

It would seem that a man whose car licence is unpaid could be discovered in the same way that his unpaid rates are discovered, but whilst this, apparently, is impossible, holds-up will continue.

CYCLECAR COMMENTS.

By SHACKLEPIN.

THE AVONJAP NEARING COMPLETION—SPECIAL FEATURES—A TEST OF MIXTROL—SECONDHAND G.N.s.

The workmanlike appearance of the modified AvonJap is made clear in these photos. The machine will shortly be ready for its trials.

A SHORT time ago I mentioned that Mr. Vivian Prestwich was busy preparing the AvonJap cyclecar for serious attempts upon various records this season. I have since had an opportunity to examine the machine, which presents many points of considerable interest to cyclecar enthusiasts and especially to G.N. owners.

The chassis frame, bevel box and rear axle are about all that remain of the original G.N. from which the AvonJap is built, but these parts have formed a very useful basis. Last year on the track it was found that the bushes of the radius rod anchorages wore out rather quickly; this trouble has now been overcome by modifying the anchorages and fitting them with ball bearings.

To obtain a low seating position and low centre of gravity the engine, propeller shaft and bevel box have been dropped 4½ ins. below the normal G.N. position. With 26-in. by 3-in. tyres a ground clearance of 9 ins. is provided and the overall height of the machine is now only 3 ft. 10½ ins.

The petrol tank is fitted at the rear, fuel being fed to the carburettor by air pressure supplied by a standard J.A.P. oil pump, which easily maintains the pressure at 1½ lb. per sq. in. The pump is driven off one of the cam wheel spindles, that of the other wheel driving the oil pump proper in the ordinary way.

It will be seen from the accompanying photographs that the aluminium body is a single-seater and very carefully streamlined; it has been specially built by Jarvis and Sons, Ltd., and is arranged so that the tail can very easily be removed to give access to the chains and sprockets.

B24

Moving the steering column to a central position called for a new spindle and drop arm. In the ordinary way these would have been two separate components, but it was decided, on the score of strength and lightness, to make a special single forging in 3 per cent. nickel steel. The resulting job is a fine example of forging and turning skill.

Not the least interesting feature of the AvonJap is the arrangement of the engine cradle plates, clutch mechanism and so forth in order that engines of different cylinder capacities can easily and quickly be fitted. This is necessary because it is proposed to attack records in the 500 c.c., 750 c.c. and 1,100 c.c. classes.

Gear ratio alterations to suit each engine will be made by having spare sprockets on the rear axle and sliding the appropriate ones into line with the driving sprockets. This was a practice adopted frequently by G.N. drivers in hill climbs and competitions. For track work the AvonJap will be fitted only with foot-operated rear-wheel brakes, but provision will be made for a hand brake to be fitted if necessary.

I have recently been testing Mixtrol oil in the 8-45 h.p. J.A.P. engine of my Aero Morgan. The test is the outcome of some remarks which I made a few weeks ago upon the subject of upper cylinder lubrication. A number of readers wrote to me asking what was my real opinion of the benefits given by these special oils, and I decided to carry out a fairly careful test with Mixtrol.

The results have been very satisfactory, although I must confess that my engine has always run well and has shown no signs of sticking

valves or other troubles due to faulty lubrication. With Mixtrol, however, the engine is freer to start from cold and I can drive it flat out in low gear without the need for increasing the normal supply of oil through the drip feed.

Upon removing the heads for decarbonizing I found that the small amount of carbon present was of a very soft nature, which needed little more than a wipe with a rag to remove. There was one patch in the off-side head which was a little harder, but it came off readily by the use of an old knife blade—there was no need whatever to chip the deposit.

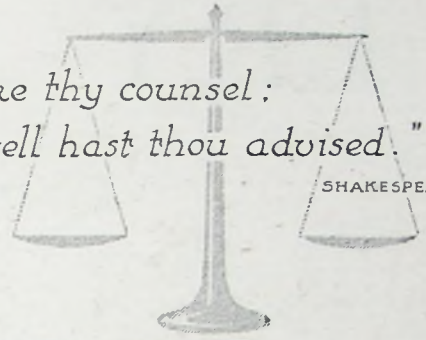
One great advantage of Mixtrol is that it is not messy in use; the proportion mixed with the fuel is so small that none is deposited on the outside of the carburettor in the event of flooding—an important point in dusty weather. Altogether I feel confident in recommending upper-cylinder lubricants to my readers.

There still appears to be a fairly brisk demand for second-hand twin-cylinder G.N.s. The fact that they can be picked up for absurdly low prices is, I suppose, one of their chief attractions. One or two folk have asked me recently what they should look out for in the way of excessive wear when examining one of these cars—a rather difficult question, because a machine with a very big mileage to its credit might reasonably be expected to be fairly worn out all over.

Generally speaking, the usual tests should be applied, and a prospective buyer who finds backlash in the steering, "shake" in the road wheels and other reasonable signs of wear should not be dismayed. If a machine is bought for, say, £15, a £10 note spent on repairs should not be grudged. One test worth trying is ease of starting. If the engine proves exceedingly obstinate it is a bad sign; if, on the other hand, it fires quickly and runs evenly, it may be taken for granted, as a rule, that there is nothing very much the matter with the chassis as a whole.

*"I like thy counsel:
well hast thou advised."*

SHAKESPEARE.



“What, exactly, do you mean by the A-C Short Shaft, Mr. Edge?”

S. F. Edge:—“In most cars, my lord, the gearbox is situated at a considerable distance from the back axle, necessitating the use of possibly 5 feet of transmission shafting. In the case of the A-C car, however, the gearbox is part and parcel of the back axle, and the length of the shaft is reduced to a matter of inches. This A-C back axle design reduces useless weight by over one cwt. My service department can prove its wonderful wearing and reliability qualities.”

4-CYL., 12-24 and 12-40 h.p., from **£299**

EVERY MODEL GUARANTEED FOR 3 YEARS.

A-C CARS LIMITED, THAMES DITTON, SURREY, ENGLAND.



*Dunlop Cord Tyres are
best, and we fit them on
all A-C cars.*

We can supply perfect used cars, under guarantee.

**Full range of A-C Cars at
A-C LONDON CONCESSIONAIRES,
55-56, Pall Mall, S.W.1
(Opposite Marlborough House.)**

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

TRY A TROJAN

Do you remember how, on the first day of last holidays, laden with two heavy suitcases, a rug, overcoats and golf clubs, you struggled to the station? As, with the family, you wearily mounted the infinitely long station slope, you thought of the colleague who had thrown everything—necessities and luxuries—into his TROJAN and was travelling merrily to the sea-coast; enjoying the champagne air of a priceless day. . . . And as he whistled in the sheer joy of untrammelled holiday delights, you were watching the trains come in, waiting for yours, bracing yourself for the inevitable struggle for seats and wondering whether the outside porter had brought your trunks.

Will it be the same this Easter?

ATTRACTIVE HIRE PURCHASE OFFER

Particulars of an attractive and inexpensive insurance policy and of hire purchase terms may be obtained by application to any Trojan Agent.

LEYLAND MOTORS
LIMITED
LEYLAND LANCS

there is a

FOUR-SEATER CAR
waiting for
you.

No previous
driving experience
necessary
Gears that cannot be bungled
Hand lever starter from driver's
seat
No mechanical attention
Maintained without the slightest
mechanical knowledge
INCLUSIVE COST OF RUNNING
2 $\frac{3}{4}$ d. PER MILE

You can dodge
trippers with a
Trojan—seek the
beauties of the
countryside in
your own

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

A home garage without Mobiloil is like a fountain pen without a handy supply of ink.



Keep a 5-gallon drum or 4-gallon can of Mobiloil always at hand. You are ready to add oil when needed. You are ready to drain the crankcase

Your local garage man sells Mobiloil. See him, for

He has a complete Mobiloil Chart of Recommendations, the recognised guide to scientific lubrication. Remember, Mobiloil is backed by nearly half a century's specialization in lubricants. Experience counts. That is why a change to Mobiloil means reduced petrol consumption, less carbon, increased power, lower repair bills.

There is a substantial saving in buying Mobiloil in 5-gallon drums or 4-gallon cans.

Send for a free copy of "Correct Lubrication for your car," a booklet invaluable to every owner.

Mobiloil

Make the Chart your guide

Mobiloil

VACUUM OIL COMPANY LTD., Caxton House, LONDON, S.W.1

Make the Mobiloil Chart your guide

If your car is not listed below you will find it in the Mobiloil Chart at your Garage.

WARNING:

Don't ask for "A" or "BB"; always ask for Mobiloil "A" or Mobiloil "BB."

NAME OF CAR	1927 Engine		1926 Engine		1925 Engine	
	Summer	Winter	Summer	Winter	Summer	Winter
Alvis	BB	A	BB	A	BB	A
Armstrong-Siddeley	BB	A	BB	A	BB	A
Austin, 7 h.p.	A	A	A	A	A	A
Austin, 12 h.p.	BB	A	A	A	A	A
Austin (other)	BB	A	BB	A	BB	A
Bean	A	A	A	A	A	A
Citroen, 7.5 h.p.	A	A	A	A	Arc	Arc
Citroen, 12/24 h.p.	A	A	A	A	BB	A
Citroen (other)	BB	A	BB	A	BB	A
Clyno	BB	A	BB	A	BB	A
Crossley, 14 and 18/50 h.p.	A	A	A	A	A	A
Crossley (other)	A	A	BB	A	A	A
Daimler (all models)	A	A	A	A	BB	A
Darracq, 12/32 h.p.	BB	A	BB	A	BB	A
Darracq (other)	A	A	A	A	BB	A
Hillman	A	A	A	A	BB	A
Humber, 8 and 9/20 h.p.	A	A	A	A	A	A
Humber (other)	BB	A	BB	A	BB	A
Jowett	A	A	A	A	A	A
Lagonda, 12/24 h.p.	A	A	A	A	A	A
Lagonda (other)	BB	A	BB	A	A	A
Lanchester	A	A	A	A	A	Arc
Lancia (Lambda)	A	Arc	A	Arc	A	A
Morris-Cowley	A	A	A	A	A	A
Morris-Oxford	A	A	A	A	A	A
Peugeot (Sl. Valve Mds. and 11 and 12 h.p.)	A	Arc	A	Arc	A	Arc
Peugeot (other)	BB	A	BB	A	BB	A
Riley, 11 and 12 h.p.	BB	A	BB	A	BB	A
Rolls-Royce	BB	A	BB	A	BB	A
Rover, 8 h.p.	A	A	A	A	BB	BB
Rover (other)	A	A	A	A	A	A
Singer	A	A	A	A	A	A
Standard, 14 h.p.	A	A	BB	A	BB	A
Standard (other)	A	A	A	A	A	A
Sunbeam, 4 and 6 cyl.	A	A	A	A	A	A
Swift	A	A	A	A	A	A
Talbot, 18/55 and 20/60 h.p.	A	A	A	A	BB	A
Talbot (other)	BB	A	BB	A	BB	A
Trojan	A	A	A	A	A	A
Vauxhall, 14/40 h.p.	A	A	A	A	BB	A
Vauxhall, 23/60 and 25/70 h.p.	A	A	A	A	A	A
Vauxhall (other)	BB	A	BB	A	BB	A
Wolsley	BB	A	BB	A	BB	A

Mobiloil Recommendations are endorsed by hundreds of Motor Manufacturers the world over.



Prof. A. M. Low.

IS STREET LIGHTING ALL WRONG?

INGENIOUS SUGGESTION FOR REDUCING DAZZLE AND PROVIDING
BETTER AND SAFER STREET ILLUMINATION.

By Prof. A. M. LOW.

The writer of this article is well known to our readers as a scientist who has, and still is, devoting a great deal of his attention to the solution of problems which arise in connection with motors and motoring. Prof. Low has given deep thought to the subjects of street lights and dazzle; he makes no exaggerated claims in putting forward the suggestion for "track lighters," but hopes that it will open up a new line of investigation.

IN the case of any science so new as that centring in modern transport it is a little dangerous to indulge a sense of satisfaction. There are people to-day who can remember a London of darkness and of dangers more unpleasant than the conditions suggested in scare headlines like "The Motor Peril."

Traffic dangers must necessarily increase with a growing proportion of motorcars per unit of population, and until overhead roads, aeroplanes and subways are in common use pedestrians will regard themselves as greatly ill-used.

No one should be willing to save time at the expense of safety, but "speed first" is a logical slogan for any progressive community, and during the next few centuries we shall probably hear bitter complaints about noisy aeroplanes and their effects upon the nerves.

The reliability of modern cars has greatly increased the number of vehicles on the roads at night, but a corresponding increase has not taken place in the degree of sensitivity of the human eye. Each year of improvement in artificial light—still one of the most inefficient of the essentials of civilization—will probably lessen the range of vision possessed by the average person and may simultaneously decrease our powers of "accommodation," however much the accuracy of observation may be increased.

The problem of dazzle arises out of vehicle and street lighting. Some people are unable to operate their iris diaphragm with ease and, consequently, are so plunged into darkness after passing a brilliant headlamp that even the old method of shutting one eye is of little help and merely serves to remove all sense of perspective.

It has recently been suggested that the Ministry of Transport may attempt to define the maximum distance over which a beam of light may be emitted from

any headlamp. Such legislation might lead to a new form of indeterminate persecution and would be, withal, of very little service. The smallest side lights can be very trying to the eyes—it is the contrast of the surrounding conditions that affects the degree of dazzle—whereas the most powerful headlamp, if properly adjusted, will cause no trouble whatsoever.

There are many devices for dipping and regulating headlamps, and all of them serve merely to correct adjustment so as to suit any particular conditions. To tilt the beam downwards or sideways on to a kerb in fog is very useful, a different elevation of the centre of the beam being required for varying road conditions, and if the height of the main pencil of light is kept below the line of vision of drivers of oncoming traffic it will be found that there is little to be gained by having recourse to tinted lenses and special glasses.

Under present-day driving conditions cross-roads are most dangerous, but a good headlight gives warning to crossing traffic, and even on such highways as the Corniche Road, outside Monte Carlo, where cars are travelling at high speeds, dazzle from properly-set headlamps is trifling.



THE CONTRAST.

In these sketches an artist has endeavoured to "catch the idea" which is discussed. Most motorists have experienced the sensation of all-round dazzle created by highly-elevated lamps—especially when the wind-screen is wet. The left-hand sketch shows the general effect which, Prof. Low hopes, would be obtained by the use of "track lighters" or "mushroom lamps."

Unlighted cyclists and other unlighted and comparatively slow-moving traffic demand powerful headlamps, for no one would seriously contend that a speed limit of 20 miles per hour should be rigidly observed on clear roads at night time. It has been suggested by the authorities that no beam should extend more than 300 yds. with a definite illuminating value. This would be most difficult to establish with different adjustments and with a constantly changing reflecting value or a voltage which alters with every speed.

A 300-ft. beam, it is said, would be ample for driving safety, and tests have been made to prove that motor-cars can be pulled up very easily within 300 ft. from a speed of 45 miles per hour, but no account is taken during these tests of the time which elapses before a driver acts in the case of an emergency, or of poor brakes and wet, slippery roads.

Every driver must have noticed that with properly set headlamps the slight dazzling effect of an approaching car passes off as the car draws near and the main beam strikes low. Does this not suggest that the modern method of street lighting may be entirely wrong?

Great care is taken at present to elevate street lamps as high as possible, with the result that the spreading beam strikes the eyes of drivers, whereas the headlamps of an oncoming car, when set to a low elevation or when screened by a corner, will often make a road clearly visible for a quarter of a mile with a soft, general lighting effect. It often happens that the lights of an oncoming car are a blessing when one's own car is fitted with poor headlamps, and in this lies an interesting possibility.

The Only Sufferers.

At present we light our streets in a series of oases, but if street lamps were at a height of about 2 ft. 6 ins. from the ground, sending out a powerful parallel beam which illuminated the entire road, no dazzle would result and very little additional headlamp lighting would be required on any car. The only new class of sufferer produced by this method would be small children, dogs and cats.

In crowded areas illuminated kerbs would be most helpful, and a few advertisements displayed upon them would probably cover all expense. It is not easy, in a car, to maintain a beam exactly 2 ft. 6 ins. from the ground or to prevent an unpleasant bar of shadow when driving behind a light so occluded, but street lamps would operate in different circumstances, for they could be fixed and the beam set in accordance with the exact conditions of gradient and so on. The upward illumination by reflection would be ample for pedestrians, and the problem of "invisible police" would be largely solved.

Dazzle is so irritating under present-day conditions that many strange suggestions have arisen. It has even been proposed that a selenium cell apparatus should be interconnected with headlamps so that any approaching light would cause the lamp to dip automatically. The idea of headlights which wink or dip every time the moon strikes the sensitive apparatus will not commend itself to many motorists. Complication and rattle is already sufficiently prevalent without the addition of selenium cells and relays.

To return to "track lighters," as I have called them, it may be many centuries before they can be illuminated by radio power, but it seems inconceivable that with the possibility of motorcars eventually being controlled by wireless we should still light our streets in the manner adopted two centuries ago. The only noticeable change is that we have increased the power and nature of the actual source of light.

Night driving is a problem closely allied with the physiological and psychological effects of lights upon the human eye, and if the general adoption of electrical power does not eventually cure the fogs which are endured to-day it may be that some form of polarized light will make objects visible only to those provided with the necessary lenses for their eyes.

It is wrong that other folks' cars should interfere with us through any of our senses of perception, but we cannot hope to achieve success in dealing with this problem by following methods which were of doubtful value in the days of the stage-coach. A. M. Low.

(Above) How the "glare" of a single street light affects the "eye" of a camera. When this glare is thrown first upon a windscreen the conditions are magnified. (Left) St. James's Street, London, showing typical central street lighting arrangements.

A SUPERCHARGED CYCLE-CAR ENGINE.

FIRST DETAILS OF A NEAT COVENTRY-VICTOR UNIT WHICH IS TO BE MARKETING.

CONSTRUCTORS of sports and racing cyclecars will be interested to learn that supercharged engines can now be obtained as ordinary commercial productions from the Coventry-Victor Motor Co., Ltd., Coventry. The unit is of 63 mm. bore and 78 mm. stroke, giving a capacity of 499 c.c. With normal induction the brake horse-power, it is claimed, is $17\frac{1}{2}$, whilst a further 25 per cent. is obtained with the supercharger in action. The last-named figure is given by using a blower pressure of 4 lb. to 7 lb. per sq. in. and a normal compression ratio of $5\frac{1}{2}$ to 1. If a still greater power output is desired, the blower can be arranged to give about 25 lb. pressure, but the compression must then be reduced and special fuel used.

The engine is of the air-cooled, horizontally opposed, twin-cylinder pattern, and weighs 82 lb. with supercharger. If a clutch is fitted to cut the blower in and out the weight is 2 lb. more.

The cast-iron cylinders have detachable heads with metal-to-metal spigoted joints, the faces being ground together. The standards for the overhead valves are part of the head castings, the rocker bearings being fed with oil from wick cups above them.

The camshaft is above the crankshaft and operates the rockers through push-rods with tappets for adjustment; double valve springs are fitted. A motorcycle-type carburetter and magneto are used.

Driven from the crankshaft by gears is the Rootes-type Berk supercharger, with twin rotors of the three-blade or cloverleaf pattern. The supercharger runs at one-and-a-half times engine speed and is fed with oil from the crankcase through a release valve. The rotor casing is finned for cooling purposes. By means of a change-over valve, induction takes place either through the blower or direct from carburetter to induction pipe.

A release valve in the blower circuit is provided to guard against the effects of back-firing.

When the multi-plate clutch which controls the supercharger is "out," the gas flows from the carburetter to the change-over valve, thence direct to the ordinary inlet pipe. The clutch for disengaging the blower is controlled by a Bowden lever with a ratchet device to hold it in the desired position.

The flywheel may be of the plain variety with a chain sprocket behind it or, for certain types of cyclecar design, a wheel can be supplied with a single-plate clutch incorporated. Another model has a three-speed-and-reverse gearbox bolted to the engine to form a unit, whilst the crankcase can be supplied for mounting on two parallel tubes or on a flat base-plate.

Claims advanced for this power unit are that it gives better acceleration than normal induction engines—even those of higher compression—and is very flexible. As racing cams are not necessary the valve gear should wear for long periods and retain its silence of operation. By reason of the positive pressure in the induction pipe good mixture distribution should be obtained.

GOING FOR A FIVER.

A CHANCE for impecunious enthusiasts to pick up a light car or cyclecar for a matter of shillings instead of pounds might well lead one to suspect that the machines were fit only for scrap; yet my recent experience as an interested member of a crowd visiting a local auction sale left me very astonished by what I witnessed. This, I believe, is only one example of sales of a similar nature which take place in all parts of the country.

In the first case it must be made clear that, in the particular case under discussion, the proceedings are conducted by a well-known local auctioneer, who holds these sales about once a month and who invites inspection and trial runs prior to the sale.

The actual building in which the vehicles were on view was divided, one portion being taken up by older light cars and cyclecars, while the other held cars which were in practically new condition.

The specifications, year of manufacture and descriptions of all models were strictly correct, while in one case a faulty machine (with only a minor trouble) was described as such, so that a bidder, whether experienced or not, would hardly be "let down" unknowingly.

Being interested, particularly in the cheaper models, I made a thorough examination of several and could find no more flaws than one would expect in cars that sell usually for £15 to £25.

Here are a few examples, and the reader will probably share my astonishment at the prices obtained:—

G.N., 1922, dynamo lighting, appearance quite good, tyres all O.K. bar one, £6; Bleriot-Whippet, 1923, belt

drive, fair condition, all tyres good, £5; two Singers, 1922, two-seaters, with dicky, all-weather equipment and dynamo lighting, £10 each; Horstman, 1921, a really good car but paintwork shabby, £23.

Among the "equal to new" were a Bean, Citroën and Standard, which fetched £30, £65 and £90 respectively, the last-named being unscratched.

With regard to the G.N., it is difficult to understand how such an excellent little cyclecar came to be offered for so low a figure, for, even bearing in mind the question of taxation and the general drop in the prices of such vehicles, it must be remembered that the value of components like the dynamo lighting set, tyres and so on alone exceed the price obtained, while to the real enthusiast complete stripping, rebuilding and, say, a few pounds allowed for renewals would allow him an excellent machine for approximately £10.

Even from the point of view of the family man, the purchase of a second-hand motorcycle combination could hardly be effected for the price obtained for the Singers, while for the buyer who wanted something cheap but extra-good the remainder offered the necessary choice.

I am not interested in the owners, sales or buyers, but hearing of such unheard-of prices and having actual experience of a similar purchase some two years ago by a personal friend, I went, I saw, and I was most surprised; in fact, to any fellow-enthusiasts who possess more ardour than hard cash, I most certainly advise a casual visit to sales like this, especially when trial runs and so on are allowed.

G.P.
31

A SIMPLIFIED PRECIS OF THE DRAFT
OF THE ROAD TRAFFIC BILL WHICH MAY
ULTIMATELY GOVERN THE USE OF THE
ROADS BY VEHICLES.



THE only law-abiding people who can find any serious grounds for complaint in the draft of the Road Traffic Bill, which is an outline of the long-promised new legislation, are boys of 14, who, it is proposed, should not be allowed to hold licences to drive motorcycles (which includes three-wheelers) until they are 15, instead of 14, as at present.

The principal matters which are covered by the Act are the speed limit, questions of dangerous driving, new regulations with regard to the issue of driving licences, new lighting regulations and important provisions concerning public-service vehicles.

So far as the speed limit is concerned, two alternative suggestions are put forward—one to the effect that there shall be no general speed limit and the other that a definite figure should be chosen, but that drivers should not be convicted for exceeding it, provided they can prove that the speed was not excessive, having regard to all the circumstances of the case. This speed-limit question is described in the Act at some length, but at the moment it is hardly worth discussion, as the proposed regulations are somewhat hazy and are likely to be materially altered before the proposed new regulations become law. In any case, whether we have a speed limit or not, the dangerous driving question is likely to be on a very much more satisfactory footing.

Reckless Driving Penalties.

People who drive recklessly or negligently will be liable to a fine up to £50 or three months' imprisonment, or a fine of £100 and/or three months' imprisonment for second and subsequent offences, whilst the possibility of six months' imprisonment for this offence is suggested. Matters which will determine the question of dangerous driving include the nature, condition and use of the road and "the amount of traffic which is actually at the time or which might reasonably be expected to be on the road."

The question of suspended driving licences is mentioned and the court may impose this penalty even for a first offence.

A modified form of dangerous driving should be recognized, it is suggested. This would be described as "careless driving," and affects drivers who use the road "carelessly or without reasonable regard to the safety, comfort or convenience of other persons using the road." Presumably, this is not intended to include such matters as noisy exhausts, mud-splashing and so forth, although a court clearly could hold that offenders in this connection were not using the road with reasonable regard to the "comfort" of others.

"Careless" or "Dangerous"?

Some discussion is proceeding at the moment concerning the use of the word "careless," and it is thought in some well-informed quarters that there will be confusion between "careless" and "dangerous" driving which might lead to complicated lawsuits and so forth.

Offenders against speed-limit restrictions (if any) and those who drive dangerously or carelessly will be able to have notices legally served upon them by registered post, addressed either to the driver concerned or to the person registered as the owner of the vehicle, and there is a note to the effect that drivers should be warned of intending prosecution at the time the offence was committed.

If, when pulled up by a constable in connection with dangerous driving or careless driving or drunkenness, a driver refuses to give his name and address or pro-

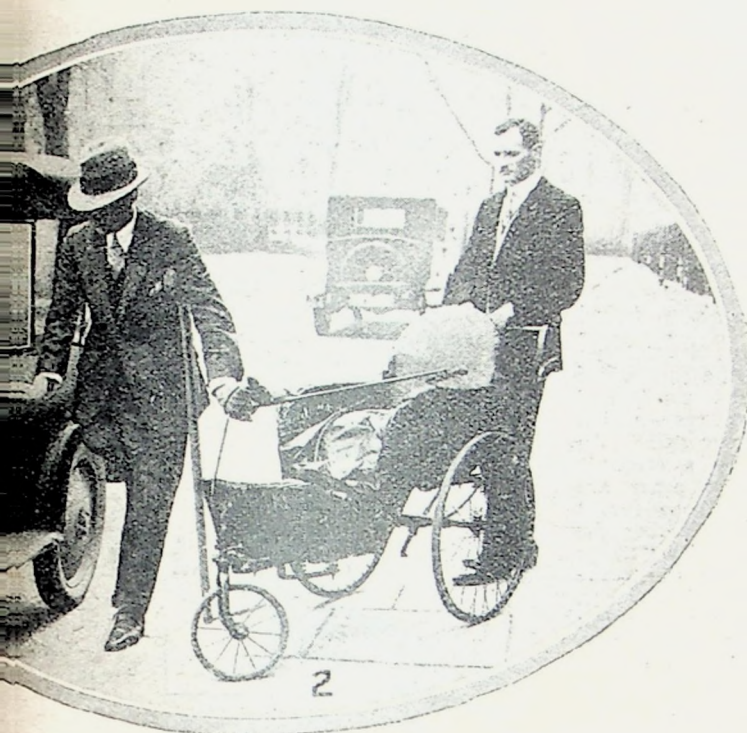
THE PROPOSED NEW

Important points dealt with in the draft of the new Road Traffic Bill: (1) Drivers who are caught without their licences immediately on demand. (2) Specific arrangements for the issue of licences to "hanging" drivers. (3) Boys who steal rides, or cyclists who "hang round" motor vehicles, are proposed as penalties for

duce his licence, or if the motor vehicle does not bear identification marks, a driver may be arrested without warrant by any police constable.

For drunkenness in charge of a motor vehicle the Act proposes that very severe penalties should be imposed. In any case, the driver's licence would be suspended for at least a year, whilst he would be liable in addition to four months' imprisonment and/or to a fine of £50.

MOTOR LEGISLATION.



Bill. (1) It should not be essential for drivers to produce are made in connection with the licensing of disabled mentioned. (4) A fine of £50 or three months' imprisonment another man your driving licence.

A small point worth noting relates to boys who take free lifts on luggage carriers or cyclists who hold on to a car. This is described as being an offence to be punished, to a degree, presumably, dictated by a magistrate's discretion.

If any kind of accident occurs, it is suggested that drivers must stop and give their names and addresses if the accident is due in any way to the presence of their vehicle on the road. Even if a dog is run over on a

THE SPEED LIMIT, DANGEROUS DRIVING, LICENCES, DISABLED DRIVERS, NEW LIGHTING REGULATIONS AND RED REFLECTORS FOR CYCLISTS ARE DEALT WITH.

country road at night, a police station must be found and the matter reported.

If this part of the act becomes law, it will be extremely unwise for a driver to carry on if an accident happens anywhere near to his car, as it may easily be held—one presumes—that the presence of any vehicle within sight of the driver concerned in the accident might have been a contributory cause of its occurrence.

The new proposed driving licence regulations have been dealt with at some length in the daily Press. A really important point is that it will be in order when a driver is asked for a driving licence for him to produce it within three days at a police station in the district where it was asked for, or at any other police station specified by the driver, within the same period. If that becomes law, it will certainly be a big improvement upon the present system, which makes it obligatory for every driver always to have his licence with him when he is at the wheel.

Lending a Licence.

Drastic penalties await drivers who lend their licences to others "with intent to deceive," and those who forge or alter a licence and those who make any false statement in connection with obtaining driving licences. A fine of £50 or three months' imprisonment are mentioned.

Applicants for driving licences will have to make a declaration that they are fit persons to drive. Those who are judged or suspected to be unfit will be able to have their driving ability tested, and if a licence is still refused and they are not satisfied that they are unfit to hold a licence they will be able to appeal to a court of summary jurisdiction for the matter to be further considered. Specific mention is made of disabled drivers who are able to "drive vehicles of a particular construction or design only," and it is suggested that "the licence shall be limited to the driving of such vehicles."

Endorsements will continue as at present and the sponsors of the Act give their further blessing to the present arrangement whereby an endorsement which is three years old, provided there have been no others, may be expunged.

The Omnipotent Minister.

Apart from defining motor vehicles, this Act does not attempt to interfere with the Motorcars Use and Construction Order, 1904. Technical questions such as brakes, silencers, steering gear, signalling devices and certain lighting matters it is suggested should be left in the hands of the Minister of Transport.

Coming to general lighting regulations, cars and three-wheelers will have to carry two forward white lights and a red rear lamp. Motorcycles (solo) will have to carry one front lamp and one rear lamp, and bicycles and tricycles (not mechanically propelled) will have to display one front lamp and a red rear reflector or red light.

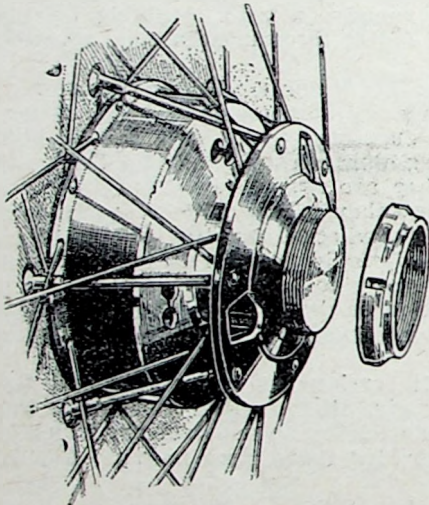
It is proposed that the Minister of Transport should have "power, by order, to exempt" various classes of vehicle from specific execution of the regulations, to control the nature of the light projected by lamps and to sanction the use of special kinds of lamp.

It should be pointed out that the whole of the foregoing deals only with *proposed* new legislation and that none of the matters contained in the draft Bill on which we have commented and from which we have quoted can pass into law for some considerable time, whilst the probability is that they will be considerably amended.



Wheel Discs for Austin Sevens.

AUSTIN SEVEN owners will be interested to learn that Cornercroft, Ltd., Ace Works, Vecqueray Street, Coventry, makers of the well-known Ace wheel discs, are now producing a type especially for these cars. The discs are of polished aluminium moulded from a single sheet of stout-gauge metal and are thus seamless. The method of fitting is very neat; an aluminium casting fits over the outer end of the hub shell and is linked up to a steel washer on the inner face of the wheel by means of six butt-ended bolts, the washer holding the inner disc in position; thus, to all intents and purposes, the inner disc becomes an



The method of fitting Ace aluminium discs to the wheel of an Austin Seven. (See paragraph).

integral part of the wheel. The casting, which registers with the hub shell, carries a thread for a locking ring which secures the outer disc, it being necessary to remove this ring only to take off the outer disc. The casting is provided with three apertures to allow the wheel brace to be used. The price of these discs and fittings for five wheels is £6 10s., fittings for one wheel only costing 26s.

An Ingenious Jack.

AN accompanying photograph shows a very novel garage jack, which has recently been placed on the market by U and I, Ltd., 7, Hertford Street, Mayfair, London, W.1. The great features of the system, which is known as the "U.M.I. All-4," are ease of operation and the fact that all four wheels are jacked up simultaneously. The advantage of this for adjusting four-wheel

brakes and washing or greasing a car is too obvious to need emphasis. Reference to the accompanying illustration will make the action of the jack quite clear; it will be seen that it consists of two units having pivoted arms which support the front and rear axles. As these units are joined by a chain it follows that, if the front arms are raised, the whole car will be forced backwards slightly, thereby lifting the back as well as the front. By altering the effective length of the chain the units can be adjusted to suit any car, whilst the height of the supports can also be altered, as the arms are of telescopic form and held in the desired position by pins. The price, complete with all fittings, is £5 17s. 6d.

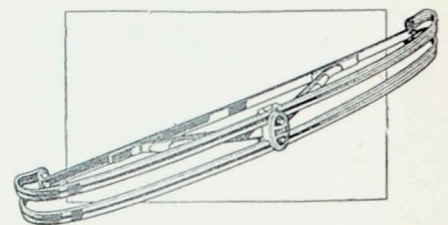
New Laystall Pistons.

THE Laystall Motor Engineering Works, Ltd., Ewer Street, Southwark, London, S.E.1, are now manufacturing aluminium pistons constructed on similar lines to their well-known de luxe cast-iron pistons. The new pistons are naturally of somewhat stouter build than the cast-iron type, but even so the makers claim that they are the lightest pistons at present on the market. To ensure strength a

of rapid conduction of heat from the piston head. The alloy employed has been used by the Laystall concern for many years and its coefficient of expansion is low, so that a comparatively small clearance can be allowed and piston slap is thus eliminated. It should be pointed out that these new pistons do not supersede the cast-iron type, which, incidentally, are still recommended for ordinary purposes, the aluminium type being intended for sports or racing cars. Full particulars and prices will be forwarded on application to the makers.

Well-designed Bumpers.

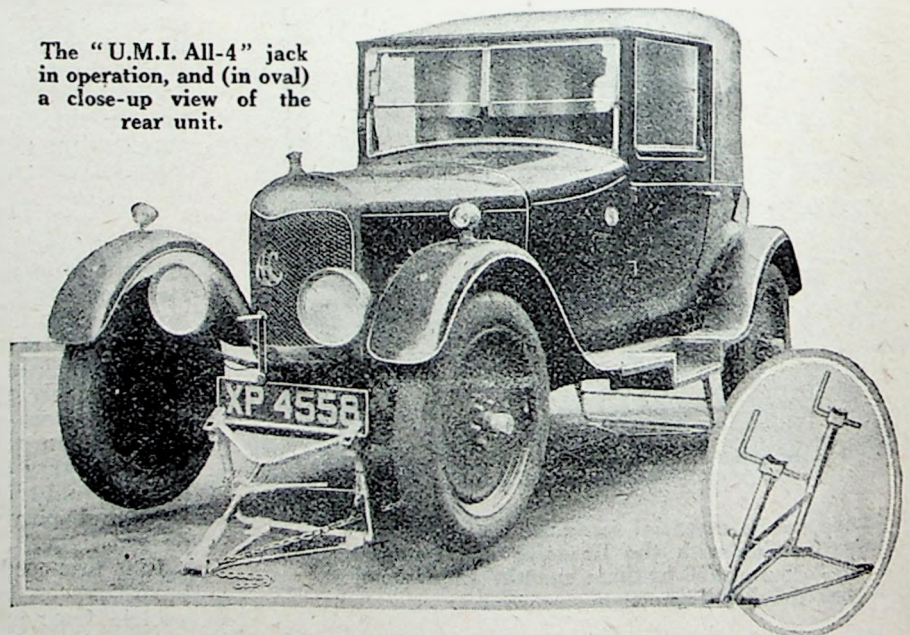
THE Pyrene Co., Ltd., 9, Grosvenor Gardens, London, S.W.1, are marketing a very useful range of bumpers incorporating leaf springs to absorb impact shocks. The Pyrene bumper consists of twin front bars which are bent round at the ends and secured to a single rear bar. Clamped to the centre of the



The latest Pyrene bumper, showing the laminated spring for absorbing the shock of an impact.

front bars is a laminated spring somewhat similar to the conventional semi-elliptic arrangement used for car suspension. Mounted on the rear bar are two plates on which the ends of the leaf spring bear when under compression; owing to this construction the bumper is very resilient, but as any

The "U.M.I. All-4" jack in operation, and (in oval) a close-up view of the rear unit.



system of webs which radiate from an annular ring in the head and lead to a the whole system, independent of the skirt is employed. The gudgeon pin bosses are embraced by these webs and the whole system, independently of the walls and head, forms a rigid structure, whilst the webbed construction allows

shock is well distributed it is, at the same time, very strong. The finish is black and nickel and three sizes are made, the smallest, which is 57 ins. long and has 1½-in. by ½-in. bars, being suitable for most light cars. The price of this model is £3 10s., for either front or rear, and includes the standard

Sea-Rover

9/20 h.p. Semi-Sports
4-Seater £260.

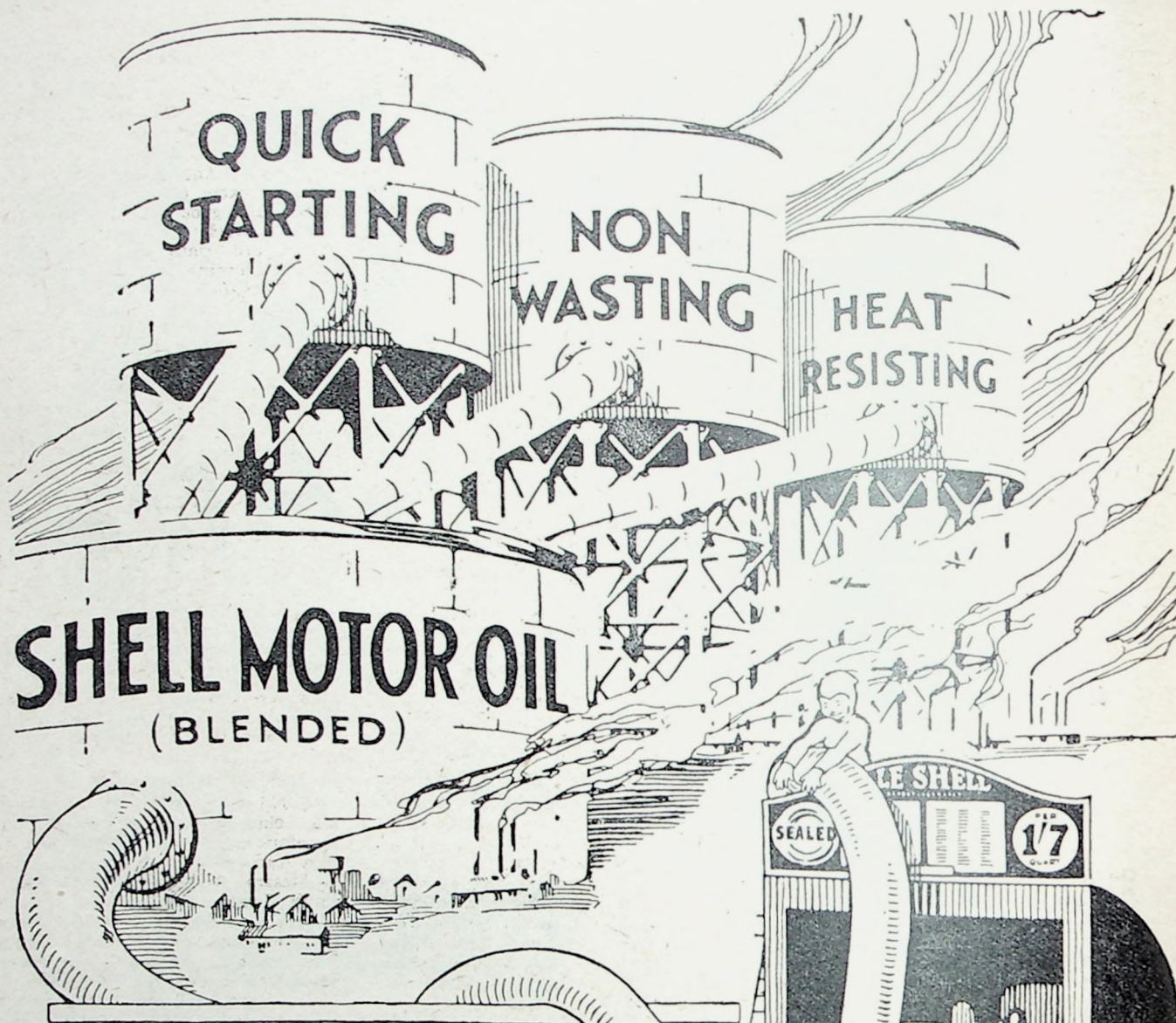
***This week
Rover W***

and Rover Dealers throughout the country are making special arrangements for you to inspect and try any model of the finest car you can buy. Write for the catalogue now!

9/20 h.p. models from £220

THE ROVER COMPANY LTD. 61, NEW BOND STREET, W 1, AND COVENTRY

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



SHELL offers you motor lubricating oil scientifically blended to do properly the three things which oil ought to do.

1. At cold air temperatures it is free flowing to give quick starting.
2. At crankcase temperature, relatively thick to ensure economical consumption.
3. At cylinder temperature it has good fluidity to reduce friction but retain sufficient body to ensure efficient lubrication.

Shell Oils as sold to the public are exactly the same as were used to set up the world's speed records of 1926 for both cars and motor cycles.

Sealed Shell Cabinets everywhere (as shown here) thus afford you the security of the sealed container without the necessity of paying for a useless can.

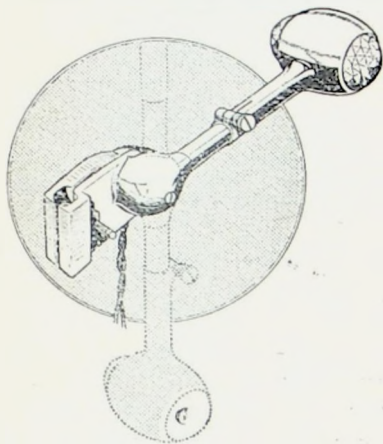


AS GOOD AS SHELL PETROL

bracket; in cases where special brackets are needed an extra charge of 10s. may be made. In addition to the range of Pyrene bumpers the makers supply wheel fenders for use at the rear of a car which cannot be fitted with a conventional bumper owing to the presence of a luggage carrier.

A Neat Parking Light.

AN accompanying illustration shows a very neat and most ingenious parking lamp. It has just been placed on the market by the Cooper-Stewart Engineering Co., Ltd., Stewart House, 136-7, Long Acre, London, W.C.2, and takes the form of a small lamp mounted on the end of an adjustable arm clamped to the off-side windscreen pillar. The lamp contains a small bulb and shows a white light to the front



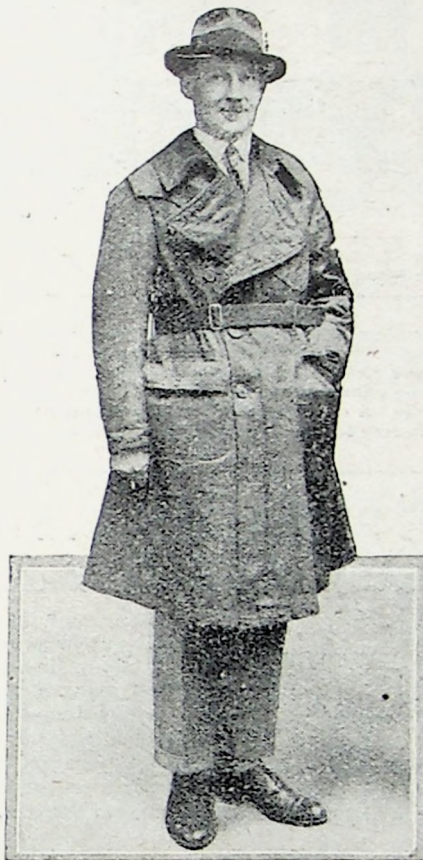
The Cooper-Stewart parking light. The dotted lines show alternative positions when it is not in use.

and a red light to the rear. When not in use the arm can be folded back so that it is parallel with the screen pillar and is out of the way; a special switch, incorporated in the pivot, automatically switches off the current when the arm is vertical, whilst to switch on it is necessary merely to push the arm into the horizontal position. The Cooper-

Stewart parking light can be obtained with either 6-volt or 12-volt bulbs, the prices being: all nickel, 16s.; black and nickel, 15s. 6d.; all black, 15s.

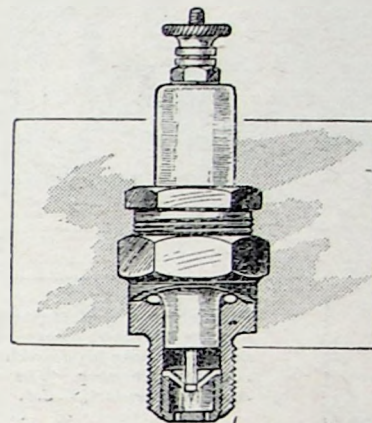
Stormgard Coats.

A MEMBER of our staff who drives a sports car, has been using a Stormgard coat for some time and reports very favourably concerning it. The coat, which is designed to be suit-



An all-weather garment—the Stormgard coat, which is particularly suitable for sporting drivers

able for use under almost all weather conditions, is water-proof and has a warm detachable fleece lining. The appearance of the coat is in keeping with a sports car and we can thoroughly recommend it to all-weather motorists. The price is four guineas, and an extra charge of one guinea is made for a good quality comfortable fur collar which is readily detachable. Stormgard coats are supplied by the Direct Trading Co., 25, Wharf Street, off Kirkgate, Leam.



A cut-away view of the Brennan sparking plug, which is designed to withstand the effects of oil.

A New Sparking Plug.

A NEW sparking plug, which is claimed to be self-cleaning and is therefore unaffected by oil or carbon, has been introduced to the English market by Messrs. Brennan and Brennan, 68, South Island Place, London, S.W.9. As an accompanying illustration shows, the electrodes and insulator are provided with a protecting cap through which four large holes are drilled. The makers state that the rising and falling of the piston creates a strong draught which flows through these holes and round the electrodes, thus keeping them free from oil. The price of this plug, which is known as the Brennan, is 4s.

MOTORING MATTERS IN PARLIAMENT.

Board of Trade Statistics—Silencers—The Toll Question.

THE progress of the motor industry in Great Britain was illustrated by figures given by Sir Burton Chadwick, Parliamentary Secretary to the Board of Trade. The number of private motorcars produced in this country in 1926 exceeded the number for 1925 by 19 per cent. and was 48 per cent. greater than the production in 1924. Several British makers had extended their factories during 1926.

Since the McKenna Duties were reimposed in 1925, Sir Burton said, one foreign motorcar manufacturer has started work in Great Britain, employing about 5,000 people, and another foreign company has acquired a factory site here.

The Home Secretary gave the impression to the Commons that he would like, if he could, to increase the penalties upon motorists who fail to use silencers. But the question of penalties, he added, is one for the magistrates, and, no doubt, there would be a great outcry if he

attempted to coerce them in the matter. There were 9,575 convictions in the Metropolitan area during 1926 for this offence, and 377 in the City of London between March 31st of last year and March 1st of this year.

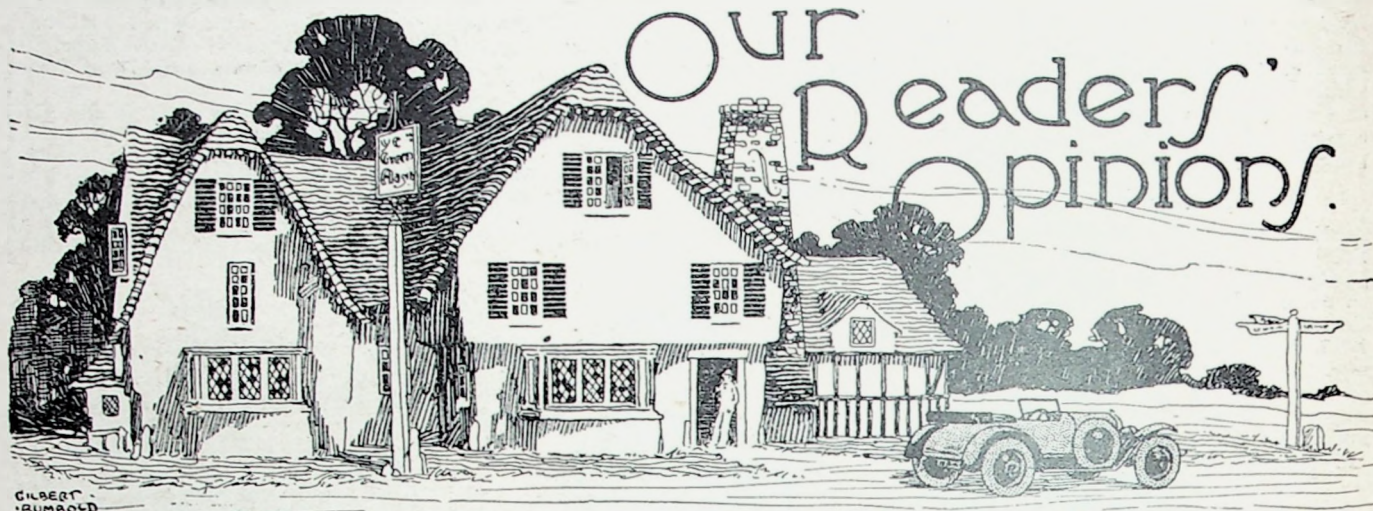
Asked whether warnings were given by the police to offenders, Sir William Joynson-Hicks said it was no doubt the practice to do so, but where proceedings are to be taken no purpose would be served by a warning in addition to a summons.

There is to be a reduction, from April 1st, in the tolls for the Menai Bridge. Colonel Ashley, the Minister of Transport, stated that the existing tolls of 1s. 9d. and 1s. 2d. would be reduced to 1s. 8d. and 1s. respectively. Season tickets for three months would be available on and after the same date in respect to all vehicles, other than hackney carriages, at charges equivalent to one-half of the reduced amount which would otherwise be payable by

daily users. Mr. Paling, a Labour member, wanted to question the Minister as to whether tolls would be reduced in a great number of other cases, but the Speaker ruled this out of order at that stage.

A suggestion was put to the Minister of Transport that a 10-mile speed limit should be imposed on the Victoria Embankment in the neighbourhood of Charing Cross underground station. Colonel Ashley stated that 41 accidents, involving injuries to persons, had occurred at that part of the Embankment during 1926, but declared that there are objections, on general traffic grounds, to the imposition of the speed limit suggested, and that such a limit would be ineffective. The Commissioner of Police, he added, concurred in this view.

APRIL 1st.
EASTER HOLIDAY NUMBER.
Be Sure Not to Miss It.



We welcome at all times letters sent to us by readers for publication in these columns, but take no responsibility for the opinions expressed therein. No anonymous communications will be accepted, but writers may use a nom de plume if desired. To ensure publication in the next issue letters must reach this office not later than Monday morning. They should be addressed to the Editor, "The Light Car and Cyclecar," 7-15, Rosebery Avenue, London, E.C.1. 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.

HIRE-PURCHASE SYSTEMS.

The Interest Question—Satisfactory Deals.

A Trader's Viewpoint.

That age-old controversy on the rate of interest in connection with deferred-payment deals seems to have cropped up again. The point is that if a balance of £100 has to be paid by D.P. about £7 10s. is charged for the privilege. Is this excessive? Where the Money Goes. Out of it clerks have to be kept to check, receive and acknowledge payments, whilst postages, receipt stamps, stationery and many other incidentals have to be paid for.

The specific transaction which "Would-be Rover" mentions can be disregarded. I have bought ill-fitting clothes, bad eggs and stale fish before now, but I do not condemn all tailors, dairies and fishmongers on that account. My files contain several hundred letters from customers who have done D.P. deals with me and who are perfectly satisfied with the cars and most grateful for the ease with which they were able to buy and pay for them. DEALER.

Growing in Popularity.

It seems to me that the letter signed "Would-be Rover" regarding hire-purchase systems is a little hard on reputable dealers. Several of my friends have purchased cars on deferred payments, and the transactions have given unbounded satisfaction in every case. I cannot help thinking that "Would-be Rover" must have been unlucky in selecting a dealer and come across one of the few black sheep. I believe I am right in saying that at least

50 per cent. of the new cars sold to-day are bought on the hire-purchase system, and there is no doubt that this method of buying is steadily gaining in popularity; it is also true that many a buyer who could pay cash in full prefers buying by instalments to disturbing his investments—a fact which any motor agent will confirm. If every firm tried to impose on prospective customers as described by your correspondent would this be the case? I leave the answer to your readers. A. L. R. HILLFOOT.

Fair and Generous.

"Would-be Rover" must have been extremely unfortunate in his choice of a firm with which to do business on the hire-purchase plan. Being interested about two years ago in the possibility of buying by instalments I approached the manager of the motor department of one of the largest stores in London, and he went to a good deal of trouble in explaining just where my liabilities would begin and where they would end. So far as I remember the only formalities required were the provision of two references and the first instalment down, whilst the firm did no more in the agreement than protect itself against sharp practice. The impression left on my mind was that the offer was distinctly generous. Actually I waited a few months longer and paid cash in full, but it was not because I distrusted or was dissatisfied with the terms offered on the hire-purchase system, and I should not hesitate to buy my next car by instalments. N.F.

Constant-vacuum v. Fixed-choke Carburetters.

The Automatic Vacuum Valve.

Mr. Skinner has now forced me, in self-defence, to confine my further remarks to the S.U. carburetter. This is unfortunate, as I was hoping that some of the other well-known C.V. carburetter experts would give him a well-earned rest. The length of my technical experience would not be of vital interest to your readers, and I will therefore commence by criticising the S.U. automatic valve and applying to it the elementary physical forces to which it must bow down.

Take an S.U.-fitted engine and throttle it down to run at

about 200 r.p.m. Then snap open the throttle. What happens? A heavy pressure of air strikes the atmospheric side of the air valve and causes friction (on the spindle). This momentarily delays the lift of the valve and allows a still heavier pressure of air to bear upon its side; at the same instant the air under the lifting piston is rapidly increasing its endeavours to raise it.

When the lifting pressure is sufficiently strong to overcome the friction and inertia the valve commences to rise, gathering momentum in so doing. Once the valve is in motion it soon rises to a height at which the required vacuum is reached. The engine calls upon it to stop, but

Owners are agreed that all the good points required in a Small Car are combined in the 7/12 h.p.

Peugeot
(PRONOUNCE IT PUR-JO)

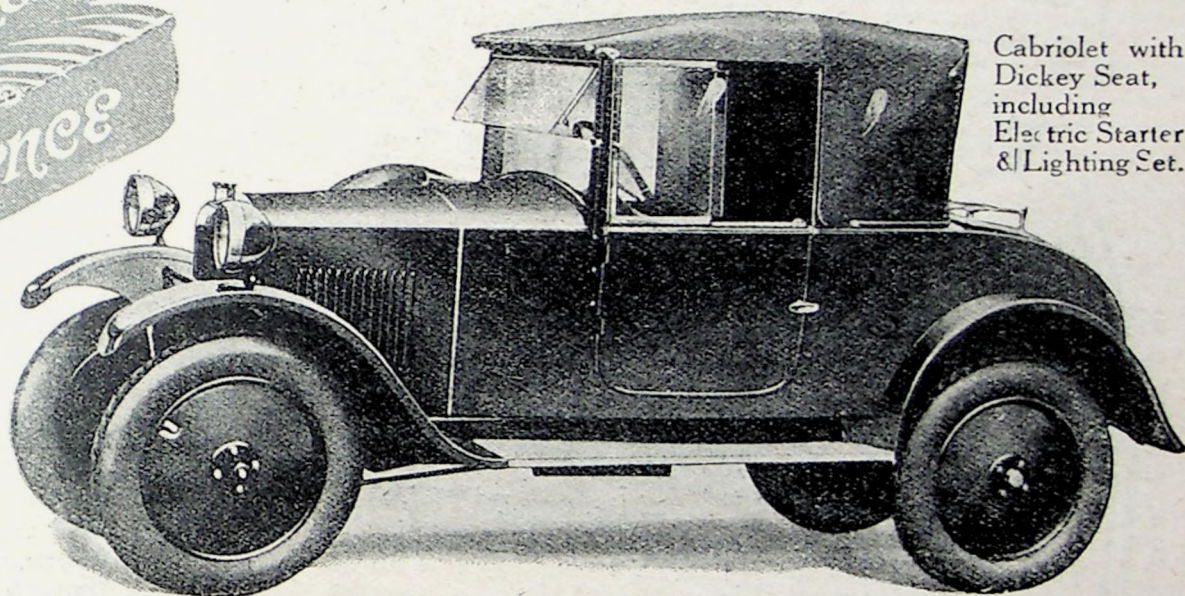
Cabriolet or **£165** Four Seater

Performance

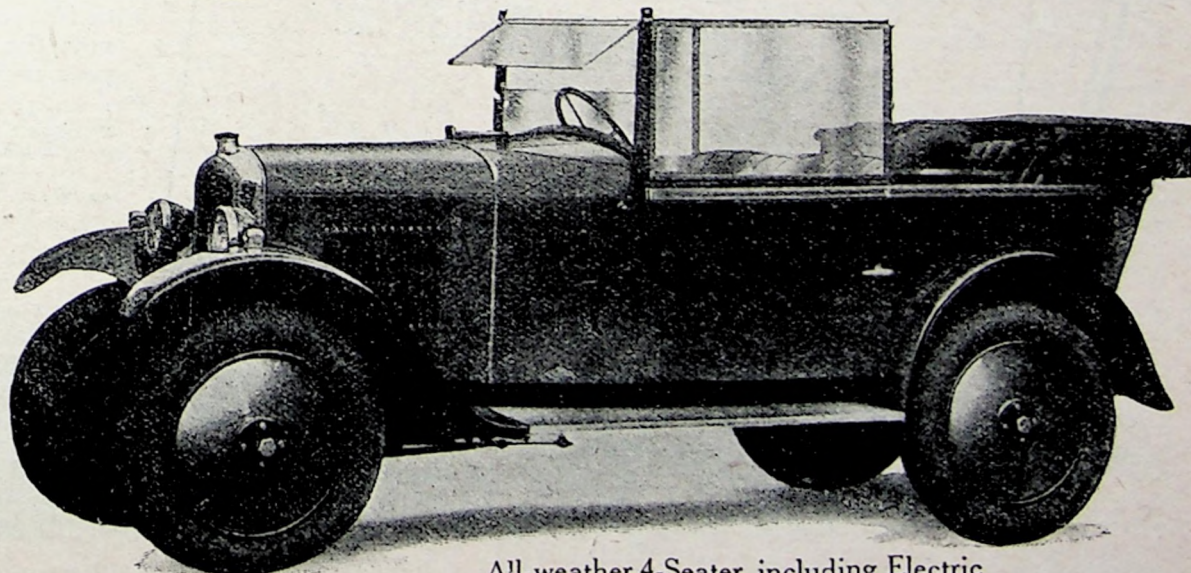
Comfort

Economy

Silence



Cabriolet with Dickey Seat, including Electric Starter & Lighting Set.



All-weather 4-Seater, including Electric Starter and Lighting Set.

Write for Booklet of Owner Drivers' Opinions and Expert Press Opinions, and read what the Owners say!

PEUGEOT (ENGLAND) LTD.

78/80, Brompton Rd., London, S.W.3.

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

MARCH 25, 1927.

THE SUNBEAM MOTOR CAR CO. LTD.

MANUFACTURERS OF
AND MARINE MOTOR
CONTRACTORS TO
AND TO GOVERNMENTS

12, PRINCES ST., HANOVER SQUARE, LONDON, W. 1.

1st. March 1927.

Messrs. C. C. Wakefield & Co Ltd.,
Wakefield House,
Cheapside, E.C. 2.

Dear Sirs,

I have much pleasure in informing you that we shall be using Wakefield Castrol R. on the 1,000 H.P. car with which I am going to attempt to attain 200 m.p.h. in Florida.

Needless to say, there was never any doubt that we should use any other oil on the car, as Castrol R has always given complete satisfaction, and it has been used for S.T.D. racing cars during the past four years.

I sincerely hope I shall be successful in obtaining a World Record for England, which will remain unbroken for some considerable time to come.

Yours faithfully,

*Make Maj. Segrave
Choice Yours!*

Wakefield
ASTRO

is the one lubricant which meets every demand of the modern high efficiency engine. Its unexcelled lasting qualities ensure economy in consumption, while by minimising wear and carbonisation, its use will save pounds in the long run.

See the Wakefield Chart at any Garage, try the grade recommended for your need—and note the difference in your engine's running.

C. C. WAKEFIELD & Co. Ltd.
Wakefield House, Cheapside,
LONDON, E.C. 2

Scotland
40 West Campbell Street
GLASGOW

Ireland
16 Marlborough Street
DUBLIN

1000 HP. CAR
BUILT BY
THE SUNBEAM MOTOR CO.
WOLFE

OUR READERS' OPINIONS (contd.).

unfortunately it is compelled by *momentum* to continue upon its upward course and is only checked when *gravity* has asserted itself. The descent, however, is prevented by the lifting pressure, which is now more powerful (owing to increased engine "revs.") and it remains here for a period awaiting further orders.

This is my explanation of the erratic behaviour of the automatic valve, as mentioned in my letter, and I now ask Mr. Skinner whether his valve is exempt from the effect of the natural laws mentioned above, or if this behaviour comes within the negligible limits mentioned by him.

With regard to the respective peaks of open and C.V. carburetters, this question cannot be dealt with in a few sentences, as there is more in the effect of fluid pumping losses than most people imagine.

With regard to Mr. Skinner's kind offer, I regret that I cannot accept his hospitality, as I do not consider that the results obtained with one carburetter tuned by a man of his ability would be of so much interest to your readers as a technical reply to my criticisms. ECONOMY.

A Technical Defence of the S.U.

Mr. Mantell calls me to book for asserting that there were more cars fitted with the V.C. (vacuum controlled) carburetter than the open type on British-made cars; in my

statement I did not take commercial cars into consideration, and I admit that I ought to have mentioned this, but if

you omit this type of vehicle, my statement was, I think, absolutely correct, of course including my "one swallow."

The S.U. carburetter, generally speaking, is not fitted in large numbers on light cars; at the same time it is not by any means non est, as during 1926 round about 3,000 were fitted as standard on British light cars. The reason, however, that more were not fitted is, not as Mr. Mantell suggests, that they are not suitable, or they would never have been fitted as standard to the Aston-Martin, which is admittedly one of the best, if not the best sports light car on the market, and no technical defence is at all necessary. Although I cannot say all I should like to on this subject, I know the approximate price of the open type of carburetter to light car manufacturers, and I presume Mr. Mantell knows the price of the S.U., which, in itself, should convey to him quite sufficient reason for their comparative absence on light cars.

Now Mr. Mantell continually throws in my face the fact that I make no technical defence in my contradiction of his statements as to acceleration and power. I think, however, that from your readers' point of view, the practical results given by your various correspondents are sufficiently conclusive, but for Mr. Mantell's sake I will try to justify theoretically my reason for contradicting him.

Mr. Mantell admits that there are too many unknowns to permit a defence on paper, so that if I ignominiously fail, he will have to forgive me for not achieving what he thinks impossible.

Now I think Mr. Mantell will agree that the governing factor as regards carburation in obtaining efficiency at any speed is to obtain the correct air speed across the jet with the correct amount of fuel; to quote his original article, "the mere production of power at high revs. is almost entirely a question of choke area and jet size." Let it be assumed that X ft. per second is the most suitable. To obtain maximum power at, say, 4,000 r.p.m. the choke area must be of such a size as to give this air speed. We will now reduce our revolutions to 2,000 r.p.m.; this will require quite a different size of choke to arrive at the same result, for acceleration the choke area would have to increase in size as the engine increases in speed, also the fuel supply.

Now I submit that a carburetter giving such a condition theoretically should give the best acceleration and maximum power. I claim that a properly designed C.V. carburetter fulfils this condition as nearly as it is possible for practice to conform to theory, because in the C.V. type the choke area and the petrol supply vary with the requirements of the engine, keeping the air speed across the jet constant under all conditions. Now what happens with the open type of carburetter? As Mr. Mantell has already told us, to obtain maximum power at the peak of the curve a large choke is necessary; as soon as the engine revolutions decrease down must go the air speed, with consequent bad atomization, and the lower the revolutions the worse the conditions become.

To compensate for such conditions, the designers of the

open type of carburetter have been forced to incorporate diffuser jets and venturi chokes and other compensating devices, which to a considerable extent do help atomization, but when all is said and done it is a compromise only, as in practice, when an open type of carburetter is used on a purely racing car, the choke area is so large that for ordinary touring work it is as a rule hopeless, whereas with the C.V. type flexibility is not impaired. T. C. SKINNER.

Large and Small Engines.

Mr. Mantell states that the Bentley engine does not come within the category of the engines about which his articles on high-speed carburation have been centred. He says

No Great
Dissimilarity.

that on the small engines they turn at anything up to 3,500 r.p.m. or 4,000 r.p.m., but as the speed model Bentley engine does not peak until a speed of 4,000 r.p.m. is reached there is not such a great dissimilarity.

I quoted in my letter that the range of the speed model Bentley engine, with a constant-vacuum carburetter, was from 8 m.p.h. to 85 m.p.h. on top, and Mr. Mantell asks me if I would for a moment suggest that the 85 m.p.h. is the absolute maximum of the Bentley. If the car were fitted with a fixed-choke carburetter, I should think, personally, that the speed could be increased by about 2 m.p.h.; but it would be necessary to fit a large choke, which would spoil the flexibility of the engine.

It is quite conceivable from an acceleration point of view that one would have quicker acceleration from, say, 2,500 revs. to 3,500 revs., against a stop-watch, on the fixed-choke carburetter, but the acceleration on this type of carburetter through the total range would probably be down on that of the constant-vacuum carburetter.

On tests which I have carried out the low-speed acceleration, from 10 m.p.h. to 30 m.p.h., has been better on constant-vacuum carburetters, mainly due to the fact that the throttle does not have to be nursed through any "flat spot."

Seven out of the eleven long-distance international class records which the Bentley holds at Montlhéry were made on a set of standard twin S.U. carburetters, at speeds in excess of 100 m.p.h. The 24-hour international class record which the car holds at 95 m.p.h. was made on twin Solex carburetters.

H. KENSINGTON MOIR.

Carburation Problems of the Aston-Martin.

The S.U. carburetter has indeed a doughty champion in that popular sportsman, Mr. Lionel Martin, and on the whole I am in agreement with his remarks thereon as applied to the Aston-Martin, for among

The Balance of
Opinion.

sporting light cars this is, I think, the one bright star in the constant-vacuum firmament, and Mr. Martin is correct in saying that it has proved a puzzle to the fixed-choke carburetter experts generally.

According to my experience, however, the problem did not lie either in the acceleration in indirect gears or at the peak, but at the lower part of the load curve where there was an unusual tendency to flatness unless a minimum induction depression was maintained below a certain critical mean gas speed.

This put the fixed-choke carburetter of that day—almost two years back, I believe—out of court for all general purposes, although I fancy that Mr. Martin will be obliged to agree with me that many—I believe I am even safe in saying most—of the sporting Aston-Martin owners who go to Brooklands with pot-hunting aforethought do not quite see eye to eye with him as regards the choice of carburetters for that purpose.

However, is not all this rather in the nature of drawing a red herring across the trail? The present controversy is the direct result of my original remark that for small high-speed sports engines C.V. carburetters had not quite the peak efficiency or the hanging-on qualities of those of the fixed-choke order, which I consider, and still maintain, is fair and just criticism. More or less isolated cases of success in competition can, of course, be quoted, but as these bear such an infinitely small proportion to the whole, surely they merely serve to emphasize the obvious preference both of makers and sporting owners for the fixed-choke type in this class of work, in which acceleration and ultimate "revs." are required to an extreme degree.

Mr. Martin, as a sportsman and devotee of Brooklands, must know that this statement, which has been the unforeseen cause of so much acrimony, is substantially correct. He speaks of the C.V. carburetter as he finds it, which is

OUR READERS' OPINIONS (contd.).

fair and just; but I think he must realize that the compliment he pays it, and a well-earned one in this case, has but little bearing upon the disputed point.

The position as I see it suggests to me an extraordinarily uncompromising spirit on the part of C.V. adherents.

This type of instrument has been given best (by me at least) on snap acceleration from very low speeds, foolproof throttle, and so forth, under all conditions of driving, in which points I have agreed throughout that it can generally show a better performance than carburettors of the fixed-choke type, where small "high revvers" are concerned, and large choke areas are therefore necessary. While accepting

the palm for these admirable qualities, which I think they certainly do possess, Mr. Skinner apparently wishes to claim an equal ascendancy in those other qualities which precedent shows they do not possess and the claims to which have astonished me greatly; apart from the technical aspect of the question, which I duly hope to deal with, I should have thought that a sober consideration of the direction in which the overwhelming balance of expert opinion lay would have restrained those interested in C.V. carburettors from putting forth claims the defence of which is bound to expose statistically their weakness.

L. MANTELL.

* * This correspondence must definitely close next week, * when no letter longer than 150 words will be published. —Ed.

The Morgan v. d'Yrsan Match to Materialize?

M. Siran Alters the Conditions.

If one of you will come over to France to race I shall be agreeable; but may I say to Mr. Beart that his proposition is anomalous? In my opinion—and those with whom I have

Only Five Miles Supercharged.

spoken to-day at Montlhéry where the Grand Prix Detour is being run, bear me out—the race should be five miles with supercharger and 50 miles without. Personally, I simply propose that he should come and compete in the 750 c.c.-1,100 c.c. class of the French Tourist Trophy, which is being run from April 4th to 11th, 1927. In this trial an average speed must be maintained, and the winner will be the competitor who totals the largest number of miles during 80 hours of the trials. Further, I propose that he should compete with us with strictly standard machines, the manufacturers of the Blackburne, Ruby and Scap engines to make a definite statement that the engines are the same as those ordinarily supplied to customers. I would make a statement to run only with cyclecars which can be obtained at prices given in our catalogue. I know that in England, more than in France, customers take a greater interest in trials where engines are standard.

If future clients should require a special engine I shall be pleased to make it. I have fitted a new 1,100 c.c. Cozette two-stroke engine in one of our chassis, and very few examples of this engine exist; on the bench during a 10-minute test it gave from 90 to 100 French b.h.p. This engine is not the ordinary standard engine like the supercharged Scap, with which my client, "Casa Nova," has attained 110 m.p.h. I therefore hope to meet Mr. Beart in the Tourist Trophy on a standard Morgan against the d'Yrsan, Sandford and French Morgan. R. SIRAN.

* * On receipt of this letter, we immediately sent a copy * to Mr. Beart, so that his reply could also be included in this issue, thus avoiding undue delay. Mr. Beart's letter appears in the next column.—Ed.

The 50-mile Race Challenge Accepted.

With reference to M. Siran's reply to my letter of the 5th inst., I noticed, in the first place, that he considers my proposition anomalous; but as he mentioned having

Mr. Beart's Reply.

attained a speed of 110 m.p.h.—a higher speed than any hitherto attained in the three-wheeler class—I am sure that he will agree that I had every right to challenge him and defend the Morgan, which at the present time claims to be the fastest three-wheeler in the world. If, therefore, he wishes to prove this claim incorrect, why does he not attack the three-wheeler records in Class II?

I accept M. Siran's proposal with reference to the suggested race between ourselves at Montlhéry over a distance of 50 miles without supercharger, but I am afraid that my handicap would be too great if I accepted his proposition of a five-mile race against his supercharged d'Yrsan. However, if he is agreeable to increase the distance to ten miles, I shall have great pleasure in taking a sporting chance against him with my Morgan (unsupercharged).

With reference to the French Tourist Trophy, in which race he expresses a hope of meeting me, I am sorry to say that, apart from the fact that the entry list is closed, it would be impossible for me at this time of the year to spend at least ten days away from my business. In any case, I fail to see the object, apart from a sporting point of view, of taking eight days at an average speed of 31 m.p.h. to find out what can be proved in half an hour on the track at a speed in excess of 100 m.p.h.

Finally, with reference to racing standard cars, what is there to be gained by this? Surely the object of racing is to further design and carry out tests to a maximum in the minimum amount of time. Makers naturally race the best possible machines that they can produce, and I personally maintain that, as a means of proving the capability of any one car as against those of any other, racing is the best medium.

H. BEART.



A WELL-ATTENDED
RALLY.

B42

A few of the large number of cars lined up outside the Burford Bridge Hotel during the opening rally of the Junior Car Club, which was held on Saturday last. The day proved warm and bright—a fact which contributed to the success of the event.

says
Henlys
Chief.

In this unequalled stock of 200 cars, there is a model for almost any pocket and purpose. Every car has Henlys' name and reputation behind it, and carries all the advantages that go with every car they sell. Unique payment terms financed by Henlys are available from £25. Positively highest prices given for cars in exchange. Here are some examples of the Light Cars on view :—

NEW MODELS IN STOCK.

ALVIS. Full range of models at prices from £485—£650

SWIFT. Full range of 10 h.p. models at prices from £210

AUSTIN. Selection of 7 h.p. models from £145

FIAT. 7 h.p. and 12 h.p. models from £195

SINGER. 8 h.p. and 10/23 h.p. models at prices.. .. from £148 10 0

CITROEN. 11 h.p. models at prices from £165

LEA-FRANCIS. Sports 4-seater £425

WOLSELEY. 11/22 h.p. models from £215

USED CAR BARGAINS.

ALVIS. 4-seater Sports, 1925, 12/50 h.p.	£310
1925, 4-seater, 12/40 h.p.	£250
2-seater, Semi-Coupe, 1925, 12/50 h.p.	£275
2-seater Semi-Coupe, 1925, 12/50 h.p.	£295
2-seater, Semi-Coupe, 1925, 12/50 h.p.	£310
1925, 12/40 h.p., 2/3 seater	£275
1925, 2-seater, 12/50 h.p.	£285
1923 Coupe	£145
FIAT. 1922/3, 10/15 h.p. Saloon	£139
FIAT. 1926, 10/15 h.p. Limousine	£295
FIAT. 1925, 10/15 h.p. Saloon	£195
PEUGEOT. 1926, 7/12 h.p. Cabriolet Coupe	£110
STANDARD. 1925, 11 h.p. Saloon	£159
STANDARD. 1926, 11 h.p. Saloon	£175
STANDARD. 1925, 11-4 h.p., 4-seater	£115
CLYNO. 1925, 11 h.p., 4-seater	£95
GWYNNE. 1924, 8 h.p., 4-seater	£85
RHODE. 1924, 10-8 h.p., 4-seater	£85
RILEY. 1924, 11 h.p., 4-seater	£175
SINGER. 1924, 10 h.p., 4 seater	£95
SINGER. 1925, 10 h.p., 2-seater	£110
SWIFT. 1925, 10 h.p., 4-seater	£115
AUSTIN. 1925, 7 h.p. Chummy	£95
AUSTIN. 1924, 7 h.p. Chummy	£77 10 0
AUSTIN. 1925, 7 h.p. Chummy	£75 10 0
CITROEN. 1925, 7 h.p., 2-seater	£99
CITROEN. 1921, 10 h.p., 2-seater	£35
JOWETT. 1925, 7/17 h.p., 2-seater	£85
ROVER. 1924/5, 9 h.p., 2-seater	£95
SWIFT. 1925, 10 h.p., 2-seater	£110
WOLSELEY. 1924, 10 h.p., 2-seater	£70

Many others to choose from.
Full lists sent by return.

HENLYS

LONDON'S LEADING MOTOR AGENTS,

91, 155-157, Gt. Portland St., W.1.

Telephones - Langham 3341 (9 lines).

MANCHESTER.

We have great pleasure in announcing that we have secured valuable showroom premises at 3, 5 & 7, Peter Street, Manchester, and shall open these showrooms on Monday, March 28th. We have also been appointed sole ALVIS Distributors for Manchester, and the fine selection of cars on view include many amazing bargains of all types.

DEVONSHIRE HOUSE.

HENLYS beautiful new additional Showrooms at Devonshire House will be officially opened on Monday, April 4th.

FACILITATE BUSINESS, and ensure prompt attention to your enquiries, by mentioning "The Light Car and Cyclecar" when writing to advertisers. They will appreciate it.



Warwick Wright Says



Our showrooms are not the largest, nor are they the most expensive, or the newest, in Europe. They are just in the "Bond Street Tradition"—practical and good.

They contain the Right Kind of Cars at the Right Kind of Prices. The Right Kind of Terms, too, to suit your convenience.

When you are "Up West," just take a glance at our Bruton Street Depot, our premises in Bruton Place, and our Service Section in Grosvenor Mews.

Whilst your car is here, we will run the tape over it . . . and if you would care to know its Real Value, the figure is yours, Gratis.

Warwick Wright, Ltd.

150 NEW BOND ST. LONDON. W.1.

(Mayfair 2904)

The Car with the "Winning Way"

Success with the Bugatti is a habit; its remarkable record shows a consistency of performance which is little short of marvellous. Follow the lead of the world's great drivers and win the admiration of all by possessing a Bugatti.

CURRENT PRICES.

4-cyl. Type 40 Touring Model, Chassis only £325
4-cyl. Grand Prix Model, Type 37, with standard 2-seater racing body £550

418 WINS
in 8 months
including
45 RECORDS
and the
CHAMPIONSHIP
OF THE
WORLD.

A New Feature:

Specially designed ENGLISH coachwork embodying high-class finish and maximum comfort available for Touring Type Chassis.

2-seaters from £100
4-seaters from £150

ETTORE BUGATTI AUTOMOBILES,
1-3 BRIXTON ROAD, LONDON, S.W.9.
Telephone: Brixton 0466.
Telegrams: "Bugattimo, Claproad, London."
London Agents: Malcolm Campbell (London) Ltd.
42, Buxton Place, South Kensington, S.W.7.
(Sole Concessionaires for the sale in Great Britain of our Grand Prix Models.)

OUR READERS' OPINIONS (contd.).

Light Cars in 1947.

"Young Moore" evidently is young or he would probably have remembered that dreamers of 20 years ago prophesied exactly the same things for to-day. Comfort and stability

Six Wheels

Forecast.

will be the main features of development in the future, and six wheels are far more likely than two. High speeds such as "Young Moore" suggests will be impossible when all the people of this little island are a wheel, as they will be in 1947.

ALVIS.

Accessible Switchboards.

I was, as always, very interested in the remarks of your contributor "Focus," in last Friday's issue. Curiously enough, I had already fitted rubber matting to my car, and it has proved very satisfactory. What

An Interesting
Suggestion.

particularly interested me, however, were the comments on switchboards; surely one big drawback to the alteration suggested by "Focus" is that a scuttle tank would make it impossible to fit the steel rod as proposed without a number of bends. Would not a simple solution be to fit the switchboard from the back of the facia board? By removing the usual two screws, which in this case would screw into tapped holes in the switchboard itself, the whole unit, with wiring in place, would drop down between the tank and the facia board.

This would make the back of the board accessible for inspection without the necessity of having an untidy group

of spare wire hanging from the back of the facia board. With the present arrangement it does not seem to matter how much spare wire there is—it is never enough to make the back of the board really accessible. W. B. WELSH.

* * A number of other letters on this subject have been received, but owing to pressure, of space have had to be omitted from this issue: a selection of them will be published next week.—Ed.

CONDENSED CORRESPONDENCE.

Following the recent correspondence on the possibilities of single-cylinder cyclecars we have received a letter from "Ultra-modern" regarding his sports model H.P., which is fitted with a 500 c.c. British Vulpine engine. He claims that it is capable of a speed of 60 m.p.h. and states that its acceleration is "perfectly amazing," whilst he finds that the comfort is not affected by having an unsprung rear wheel.

"Satisfied Owner" writes in praise of the service provided by Swift of Coventry, Ltd., Coventry. He purchased a Swift Ten in 1924, but returned it to the agents two months later owing to a defect in the suspension system, and, to his surprise, he was notified that the makers had decided to supply him with an entirely new car. The latter has now covered 25,000 miles and has given no trouble at all, whilst its performance and appearance have not deteriorated to any appreciable extent. "Satisfied Owner" goes on to say that the car was returned to the works recently for a few minor repairs and the makers carried out several adjustments and so forth that were not specified, but the charge was very reasonable.

CLUB NEWS AND SPORTING EVENTS.

WOOD GREEN AND D. M.C.

On March 27th the club is running an inter-club sporting trial of about 120 miles for motorcycles and three-wheelers. The London Ladies, North West London, Enfield and Manor Park Motor Clubs have been invited, and the entrance fee is 5s., with an additional 10s. 6d. for teams of three. The awards are silver cups, silver and bronze medals and silver-gilt medals for the winning team. Prospectives are available and can be had on application to the hon. trials organizer. Entries close on March 25th. The trial will start at 10 a.m. at the East Terrace of the Alexandra Palace, London.

VICTORY CUP RESULTS.

The results of the Victory Cup Trial, as they meet light cars and cyclecars are as follow:—P. J. Evans's Cup, H. Taylor (Lea-Francis). Wasdell Georgian Tankard, J. G. Orford (Austin). Gold Medals, R. W. Harcourt and W. J. Milton (Austin). Silver Medal, F. S. Barnes (Salmson). Bronze Medals, G. Goodall (Morgan), G. Eadington (Salmson), R. J. Martin (Omega). In addition to the foregoing the following checked in at the finish:—H. T. Balleny (Austin), J. C. Chippendale, R. T. Horton and H. P. S. Morgan (Morgans), J. E. Pearson (Amilcar) and S. H. Roe (Riley).

MANY CYCLECARS AT ARGENTEUIL.

The annual hill-climb of the M.C.F. at Argenteuil was held in splendid weather on Sunday last. Many three-wheelers were to be seen, including Sandford, D'Yrsan, Morgan and Villard machines. The 1,100 c.c. cyclecar class was won by Japy (Sandford) and the 750 c.c. class by Siran (D'Yrsan). It may be noted in passing that there was only a difference of one second between the winners' times in these two classes. The 500 c.c. class was won by Dhome (Fench Morgan) and the 350 c.c. class by Villard in his tiny 350 c.c. single-cylinder friction-driven machine. Villard beat the 350 c.c. class record for the hill originally established by Doré in a similar type of machine. Villard's time was 2 mins. 8.25 secs., an average of nearly 3½ m.p.h. on a difficult hill over a mile long. An even more striking small cyclecar success was that obtained by M. de Rovin in the 350 c.c. "racing car" class. De Rovin's microscope four-wheeler had a 350 c.c. four-stroke engine and chain drive. He climbed the hill in 1 min. 51 secs., an average of 58.378 k.p.h. (over 55 m.p.h.).

The 1,100 c.c. racing voiturette class was, as usual, the largest of all. This class was won in splendid style by Martin (Amilcar) in 1 min. 16.45 secs. Martin broke the class record for the course, and made best time of the day for all vehicles.

Doré (La Licorne) made another very fine climb, winning the 1,500 c.c. racing car class. The spring-like conditions brought out a huge crowd to the course, estimated at between 30,000 and 35,000 people.

SOUTHPORT RACES

The Southport Motor Club's beach race meeting will be held on April 9th. There will be no handicaps and the fastest men will win. The hon. secretary, who will supply further particulars, is Mr. D. Burns, 8, St. Paul's Street, Southport.

A NEW JOWETT CLUB.

An effort is being made to establish a Midlands Jowett Club of a social nature, with its headquarters in Birmingham. The annual subscription has been fixed at 5s. and there will be no entrance fee. In general, the procedure adopted will be that which is proving satisfactory with other Jowett clubs. A committee has been formed, pending the permanent organization of the club, the hon. secretary (pro tem) being Mr. E. Pacey, Ferndale, 94, Pershore Road, Birmingham. The initial club rally will take place on March 27th, and any Jowett owner interested should apply to the secretary for further particulars. It is hoped to organize simple and instructive competitions from time to time, but the social side is the club's raison d'être.

The Motor

is claimed to be the most authoritative, the most enterprising, and the most original of the comprehensive motoring journals.

THE first motoring journal to use wireless to illustrate American news—to issue classified car price lists and other presentation booklets—to adopt perspective illustrations of mechanical drawings—to publish a motoring-wireless feature—and to originate other ideas, since copied.

It is first with exclusive descriptions of new cars and all the NEWS by aeroplane and wireless services.

THE MOTOR caters for ALL MOTORISTS, from the small car owner-driver to the user of high-powered automobiles, and any statement suggesting that this is not the case is untrue.

Next Week—

EASTER HOLIDAY
NUMBER.

Order Now.

J.C.C. OPENING RUN.

Although it took place two days before the official first day of spring, the opening rally of the Junior Car Club, which was held at the Burford Bridge Hotel, Surrey, on Saturday last, was blessed with weather which would have done credit to midsummer day. The principal feature of the afternoon was an appearance competition, in which the year of manufacture, cleanliness of engine, chassis and body were taken into consideration, in addition to the general appearance of the competing cars. Entrants had obviously spared no pains to make their cars as smart as possible, and the sight of 50 spotlessly clean cars lined up outside the hotel, their radiators and windscreen frames glittering in the bright sunlight, was as striking as it was unusual.

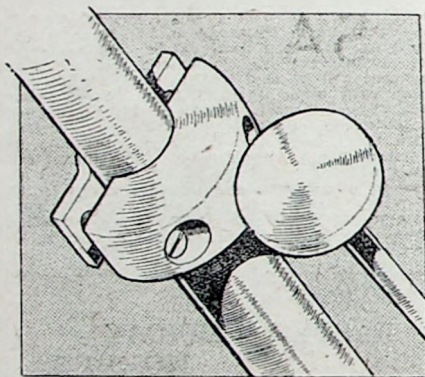
Competitors were divided into three classes: Privately-owned models under 1,500 c.c., a similar class for cars over 1,500 c.c., and an under 1,500 c.c. trade class. Miss Lillian Roper carried off the prize in the first class with a remarkably well-kept 1924 A.C., whilst the consolation prize went to Miss Norah Woods (1926 Lea-Francis). In the private owners' class for cars over 1½ litres, D. Monro (1927 Star) and Capt. G. E. Teok (1924 A.C.) proved to be the winners, whilst in the trade class first prize went to R. C. Glazier (1926 Windoor saloon).

After tea a film display was given, and some incidents in last year's 200-Mile Race, which were included, proved very popular. Dinner followed and dancing continued until midnight, much amusement being provided by a Charleston competition, which was held during the evening.

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.

A Novel Greasing System.

There is still a large number of cars in use which are fitted with the old-fashioned screw-down greaser type of lubricator. Readers who own such cars will be interested in a cheap and easy conversion to the up-to-date grease-nipple system. The idea consists simply of drilling holes in the centres of the caps and fitting nipples to them. To fill the cups it is necessary only to apply the grease-gun to the nipple in the orthodox manner, but if the grease passage should be blocked the cap can be screwed up tight and the full pressure of the gun exerted.



The wooden footrest mounted in position on the steering column.

Jowett Footrest.

When traversing rough roads in a Jowett it is difficult to maintain a steady pressure on the accelerator pedal unless some kind of rest is provided. One method is to shape a piece of hard wood to fit the column on the portion of the circumference nearest to the pedal (see the accompanying sketch). The wood is held in place by means of a strip of metal bolted by two countersunk-headed bolts round the column. The support is fitted in such a position that the foot rests naturally on it when holding the pedal about midway down its travel. It is then an easy matter to twist the outer edge of the foot a little up or down to effect variations of the speed. If it is found that this movement will not give full throttle, it is necessary only to slip the foot off the rest, for, when driving on full throttle, no support is needed, and, in any case, it is not usual to employ full throttle on rough roads.

B46

A Use for Sump Oil.

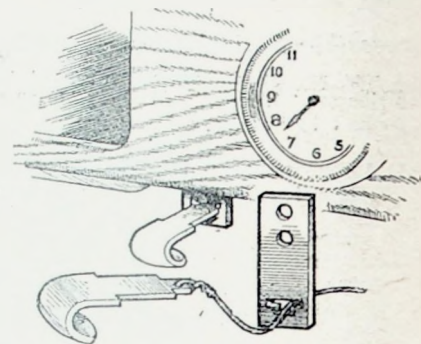
Oil emptied from car sumps can usually be obtained almost for the asking at garages, and it can be used quite satisfactorily for lubricating the chains of three-wheelers and G.N.s, and, owing to its small cost, users can be fairly liberal with it. As the oil, as a rule, is rather thin, chains can be left to soak in it. In theory, of course, sump oil should not be used for lubricating purposes, but as the chains are exposed to grit and mud from the road, used oil will probably be just as beneficial as good-quality lubricant.

A Clyno Speedometer Tip.

As the speedometer on Clyno cars is driven from the rear end of the propeller shaft a long length of cable is necessary. This is apt to run dry and to require greasing at frequent intervals. To do this properly would entail the removal of the whole length, which is a dirty job, as there is a number of clips fixed to the torque tube and the dash. A simple way of overcoming the difficulty is to remove the clip which holds the cable to the dash and to fit it with a grease-gun nipple of the type standard on the car. A small hole should be made in the outer casing of the speedometer drive to coincide with the hole in the nipple when the clip is replaced in position. If a grease-tight joint is made it will be possible to lubricate the cable along its entire length by forcing the lubricant through the nipple by means of a grease gun.

Cutting Screwdriver Slots.

Although it is a practice well known to "old hands" and garage men, perhaps newcomers to motoring are unaware of an easy method of cutting a "screwdriver" slot in a bolt head. It consists simply of fitting two blades in a hacksaw frame so that, with one operation, the slot will be wide enough to receive a screwdriver blade.



For keeping a strangler open. This simple attachment can be fitted to almost any fascia board.

Another Strangler Device.

A number of carburettor stranglers are worked by a wire pulling against a spring, and there is no means of holding the strangler closed when starting up with the handle. This difficulty is overcome on Clyno cars by the use of a very neat fitting, which can be obtained from Clyno agents for a small sum and easily fitted to cars of other makes. It consists of a slotted bracket which is screwed to the instrument board, and a special handle with a hole drilled at one end to take the wire from the strangler. Shoulders on the blade make it possible to fit the handle in two positions in the bracket, so that the strangler can be kept open or shut. The accompanying illustration shows the two separate pieces and the assembly in position.



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.

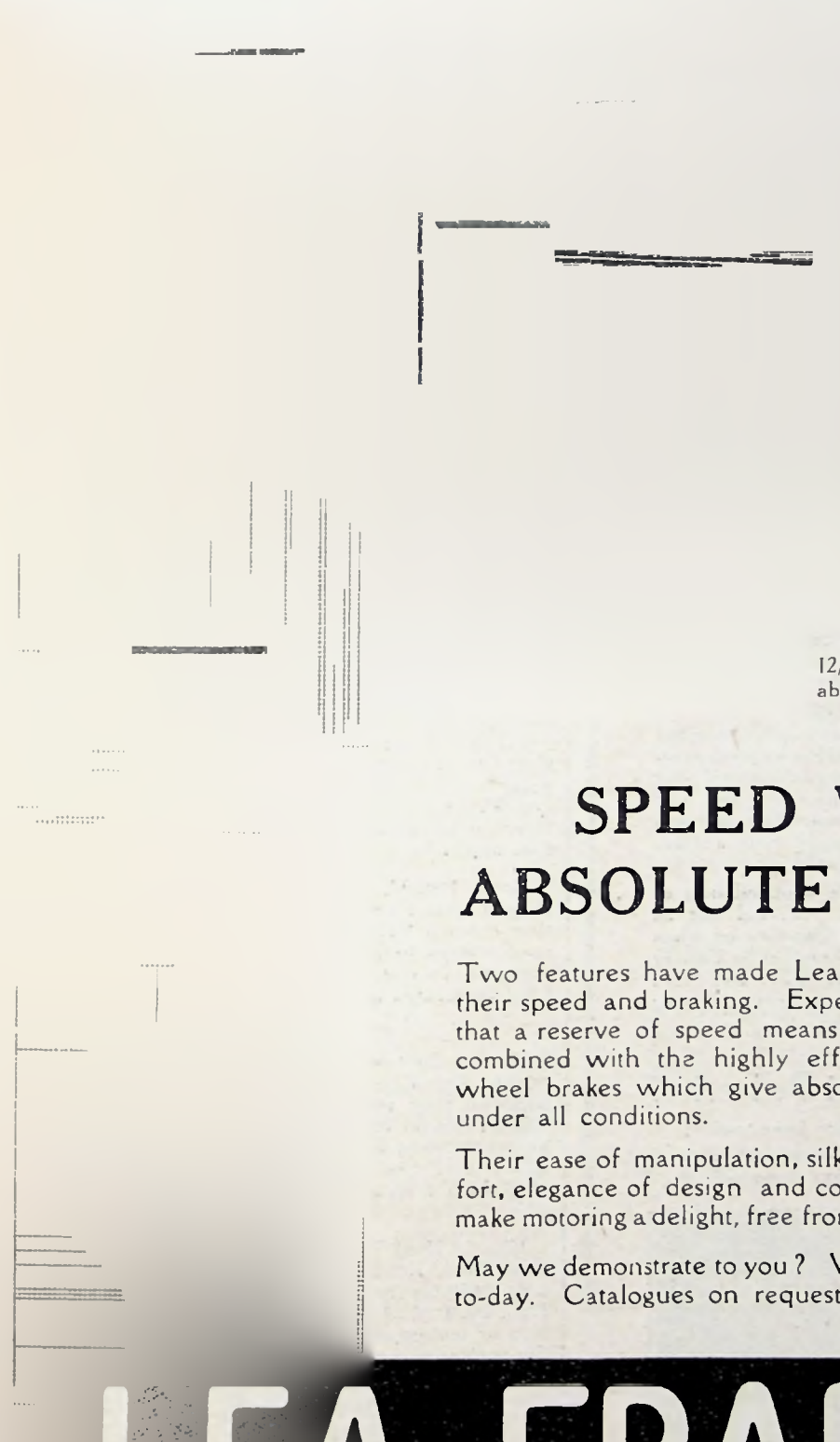
E.G.T. (Salisbury).—A small amount of side play is always allowed in big-end bearings in order that the connecting rods may automatically obtain correct alignment.

L.L. (Bristol).—Considerable harm will be done by using ordinary rag and metal polish in an effort to restore the brilliance to your headlamp reflectors. Dry silk should be used for polishing or, if necessary, jewellers' rouge may be employed.

T.E.F. (London, N.W.).—The low-level mark on the oil indicator of your 11.4 h.p. Citroën shows that there are three pints, and the high-level mark, seven pints in the sump.

M.A.L. (Brighton).—Watch each of the brake arms in turn, whilst an assistant operates the brake pedal. The arms should return smartly to the "off" position. If they do not, go over all brake mechanism joints and bearings and oil or grease them thoroughly.

A.C.D. (Dorking).—The Trojan is driven in top gear like any other car, the clutch working in the normal manner. Depression of the clutch pedal when the first gear is engaged causes the lever to return to neutral. First gear is engaged by merely pushing the lever firmly into the appropriate slot.



12/22 h.p. Lea-Francis 4-seater with
absolutely complete equipment £285

SPEED WITH ABSOLUTE SAFETY

Two features have made Lea-Francis cars famous—their speed and braking. Experienced motorists know that a reserve of speed means safety, especially when combined with the highly efficient Lea-Francis four-wheel brakes which give absolute control of the car under all conditions.

Their ease of manipulation, silky power, luxurious comfort, elegance of design and completeness of equipment make motoring a delight, free from all mechanical anxiety.

May we demonstrate to you? Write for an appointment to-day. Catalogues on request.

LEA-FRANCIS

LEA & FRANCIS, LTD.
COVENTRY. (and reduced)

London Showrooms

- - 118, GREAT PORTLAND STREET, W.1.
Telephone—MUSEUM 8720.

MODELS AND PRICES:—

10 h.p. Models from £210. 12 h.p. from £285. 12/40 h.p. Sports Models from £370. 12/50 h.p. Brooklands "Sports" from £425. Coupe, Saloon or Open Cars. *Deferred Payments and Exchange*

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.

B47



Thirty-five years in the same spot means the confidence of our clientele.

Some Additional Reasons for this confidence are as follows:—

(1). **EXCHANGES.**—Our allowances for your present Motorcycle or Car in Part Exchange for any make of Car are positively unbeatable. We always allow better prices than elsewhere obtainable.

(2). **EASY PAYMENTS.**—Our EASIEST OF EASY PAYMENT SYSTEM offers you every facility for purchasing your Car out of income. Business controlled entirely by ourselves. Smallest deposits. Strictest privacy. Lowest charges. Periods from 3 to 18 months. Deliveries usually within 36 hours.

(3). **DELIVERIES AND COLLECTIONS.**—When selecting your new Car remember it is not essential to come to town. Correspondence is as good as an interview. Upon receipt of fullest particulars of your present Car or Motorcycle together with new Car required, we make you a definite offer by return and arrange delivery and collection at your address anywhere in England, Scotland or Wales.

(4). **YOUR NEW CAR** can be supplied now or when required. We can take your old Car as deposit and supply your new Car now or when required, and the balance payable either by Cash or on our EASIEST OF EASY PAYMENT SYSTEM.

(5). **REMEMBER** we supply ANY MAKE OF CAR, and take any make in Part Exchange, and can offer either

Immediate or Earliest Deliveries.

Don't Delay. Call, write or phone to-day.
Telephone - - - Riverside 0238.
Open from 9-8, Saturdays included.

Some of
OUR LEADING AGENCIES
include

**SINGER PEUGEOT
CITROEN HUMBER
ROVER CLYNO
AUSTIN RENAULT**

etc., etc.

Any make of car
supplied.

WILKINS SIMPSON & Co.,
Opposite OLYMPIA,
LONDON - - - W.14.

AROUND THE TRADE.

We are informed by Mr. Russell, 28, Harrington Gardens, London, S.W.7, that the design of his Newt saloon Morgan is registered.

The secretary of Brown Brothers, Ltd., Great Eastern Street, E.C.2, informs us that the ordinary dividend warrants of this company have been posted.

Reavell and Co., Ltd., Ranelagh Works, Ipswich, advise us that they are now manufacturing an electrically driven garage type pump that is fitted with an air cooler and an oil separator, and it is claimed to be unique in that it delivers cold dry air to the tyre.

Hydraulic Cable Brakes, Ltd., 1, Laundry Road, Lillie Road, Hammersmith, W.6, inform us that they are now prepared to fit their detachable straight-cable front-wheel brakes to any make of car and to divide the payment into equal monthly instalments to suit the customer's convenience.

Frank Ashby and Sons, Ltd., Bournville Stamping Works, Charlotte Street, Stirchley, Birmingham, have issued a catalogue of "Easyfit" motor accessories, including luggage racks, bumpers, step mats and "Collapse" seats. They will be pleased to forward a copy to readers who apply to them.

Driving a car fitted with Dunlop tyres, Norman Smith and Otto James have just established a new Australian record by travelling 1,468 miles on Marouba Speedway, N.S.W. in 24 hours. The car covered the first 1,000 miles in 1,000 minutes, the average for the 24 hours being 61.1 m.p.h.

Hans Renold, Ltd., Burnage Works, Didsbury, Manchester, have forwarded to us a copy of their latest publication entitled "Renold Products." It has been compiled to enable them to present to their customers all the Renold products in one comprehensive volume. It is, of course, fully illustrated and contains a wealth of interesting detail.

Messrs. Motordom, 439, Edgware Road, London, W.2, remark that since we commented a few weeks ago on the fact that they were prepared to test sparking plugs free of charge, several of our readers have called on them and they have been most surprised to find how many have been quite ignorant of the fact that their engines have been firing on only three cylinders.

Glass's Used Motor Show opens at the Royal Agricultural Hall, London, on April 11th, and the prospectus is now available from the proprietors, Glass's Certified Motors, Ltd., 50, Pall Mall, S.W.1. Readers who have second-hand cars or motorcycles for sale would be well advised to send for copies, as previous records indicate that quick sales are made and good prices obtained.

Auto Auctions, Ltd., Horseferry Road, Westminster, S.W.1, advise us that they have been appointed Wolseley distributors (both trade and retail) for London and have models in stock of the 11-22 h.p. Wolseley cars; demonstration cars are also available. With the combination of their weekly auction sales and distribution of Wolseley cars they say they are in a position to give exceptional terms for part exchange.

C. A. Vandervell and Co., Ltd., have recently produced two very fine showcards for advertising their batteries. The latest one shows in splendid style a battery of Royal Horse Artillery galloping into position, dressed in full review order; below is a picture of a typical C.A.V. battery, and the whole is entitled "A Fine British Battery." The size is 25 ins. deep by 20 ins. wide, and it is fitted with a strut allowing it to stand up for display in a window or any other convenient position.

100

GUARANTEED CARS

ALWAYS IN STOCK

FROM £52 to £250

REMEMBER! *They all carry our well-known written guarantee.*

AMILCAR,	1926, Grand Sports, 3-seater, cost £325 last July ..	£165
AUSTIN,	1927, 7 h.p., Chummy Model ..	£145
"	1926, 7 h.p., Chummy Model ..	£110
"	1925, 7 h.p., Chummy Model ..	£98
"	1924, 7 h.p., Chummy ..	£80
A-C,	1924, "Royal" Model 2-seater and dickey ..	£110
CITROËN,	1926, 11'4 h.p., 3-seater as new ..	£110
"	1925, 7 h.p., 2-seated Coupe ..	£85
"	1925, 7 h.p., 2- and 4-seaters from ..	£85
"	1925, 7 h.p., 3-seater, fine order throughout ..	£75
"	1925, 7 h.p., 2-seater ..	£60
CLYNO,	1925, 2- and 4-seaters from ..	£85
FIAT,	1925, 10/15 h.p., 4-seater, excellent order ..	£145
"	1922, 10/15 h.p., 4-seater ..	£85
HUMBER,	1923, 11'4 h.p., O.H.V., 4-seater ..	£145
JOWETT,	1925, 7 h.p., 2-seater, real fine condition ..	£90
ROVER,	1925, 9/20 h.p., 2-seater and dickey ..	£115
RENAULT,	1924, 9/15 h.p., 3-seater, excellent condition ..	£85
STANDARD,	1925, 11'4 h.p., de Luxe, 4-seater ..	£110
"	1925, 11'4 h.p., "Piccadilly" Saloon ..	£145
"	1924, 11'4 h.p., All-weather 4-seater ..	£85
SINGER,	1925, 10/26 h.p., 4-seater, excellent condition ..	£125
"	1924, 10/26 h.p., 4-seater, real good order ..	£85
"	1922, 10 h.p., 2-seater and dickey ..	£40
TALBOT,	1923, 10/23 h.p., 4-seater, excellent order ..	£115
WOLSELEY,	1925, 11/22 h.p., 2-seater and dickey ..	£105
"	1925, 11/22 h.p., 4-seater ..	£110
"	1922, 10 h.p., 2-seated Coupe ..	£75
"	with dickey ..	£75

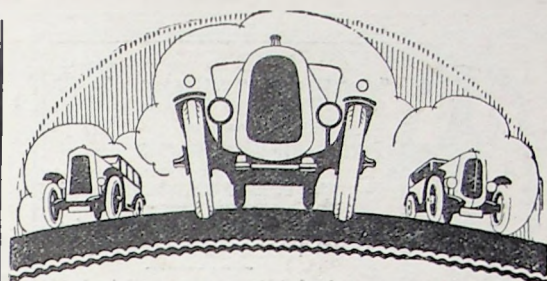
Easiest Exchange and Deferred Terms on any Make of New or Used Car.



404, 410-414, EUSTON ROAD,
LONDON, N.W.1.

'Phones: Muscum 3081 and 3143.

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.



About that Car you need for Easter!

If you want your car for the Easter holidays, don't delay ordering. If you haven't quite made up your mind just which make of car will best suit your purpose, pay a visit to our showrooms and let us take you round; We will be pleased to give you unprejudiced advice and help you in every way we can. You will find our Deferred Payment Scheme absolutely unique in its accommodation and its privacy. If you have a used car you wish to be taken in part exchange, it is worth while considering that we are able to offer the best possible price for it now at the beginning of the season.

These 1927 models are ready for IMMEDIATE delivery.

**AUSTIN PEUGEOT
CITROËN RENAULT
CLYNO SINGER**

and other leading makes.

USED Cars guaranteed by GODFREYS.

If you don't want a new car this year, we have some exceptional bargains in second hand cars. Come and see them. All are guaranteed by us, and can be purchased by gradual payments.

GODFREY'S

LIMITED

for Cars and satisfaction

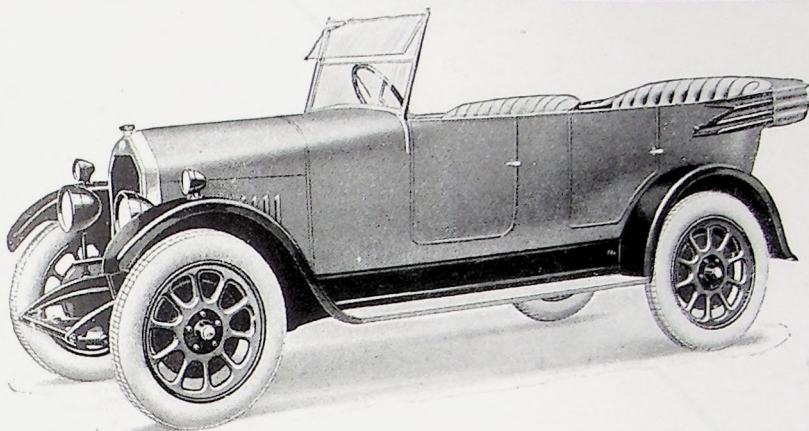
366/368, Euston Road
London, N.W.1.

Telephone: MUSEUM 3401 (3 line.)

232, Stamford Hill, London, N.15

Telephone: CLISSOLD 7127.

Hours of business at Stamford Hill: 9-8. Thursdays 9-1.



FRONT WHEEL BRAKES

are now a standard fitting on all
9/20 h.p. Humber Models.

VERY provision for driving security becomes more urgently desirable with the constant increase of traffic. Your own and others' safety depend upon control, and the greater the mechanical efficiency of your car the greater will be your confidence at the wheel. The Humber 9/20 h.p. models, besides comfort and running economy, will give you a wider margin of safety on the road.

**MODELS ARE AVAILABLE FOR
IMMEDIATE DELIVERY.**

Revised prices of models fitted with
Front Wheel Brakes:—

9/20 H.P. 2/3-Seater with
Dickey Seat .. £267 7s.

9/20 H.P. 4-Seater
Tourer .. £267 7s

9/20 H.P. 4-Seater
Saloon ..

Dunlop Tyres Standard

The front wheel brakes are on
internal enclosed type operated by means
of levers and cams, located above the
axle bed. The entire mechanism forms
unit with the front axle.

**Send for
fully illus-
trated Cata-
logue and name
of nearest
Humber agent**

HUMBER LIMITED, COVENTRY.

LONDON:

West End Showrooms: 94, New Bond Street, W.1.
Export Branch Office: 32, Holborn Viaduct,
E.C.1.

Repair Works and Service Depot: Canterbury
Road, Kilburn N.W.6.

Pages from the Diary of an Austin Owner

Page Five

A delightful run down to Worthing and back yesterday with Madeline and the two children, Bob and his wife accompanying us with their sidecar outfit. The "Seven" behaved splendidly, the outward journey taking only two hours and ten minutes for the 43 miles (including 35 minutes for lunch), and accounting for less than a gallon of petrol. Glorious weather going down, but after twenty miles of the homeward trip, we ran into steady and continuous rain. With our all-weather equipment we were perfectly dry and happy, but I'm afraid the sidecar party had a pretty thorough soaking. I really can't imagine why a man remains a motorcyclist, when real motoring costs so little more. And I think Bob himself is beginning to wonder!



The Austin Seven

£145

at Works.

Saloon **£165**

The

Austin Seven



THE AUSTIN MOTOR CO., LTD.,
LONGBRIDGE, BIRMINGHAM.
LONDON SHOWROOMS: 479-483, Oxford Street, W.1.
(Near Marble Arch.)