

Vol. XXXII No. 11

ONE SHILLING AND SIXPENCE

November, 1956

MOTOR SPORT

LARGEST CERTIFIED NET SALES

33rd YEAR OF PUBLICATION



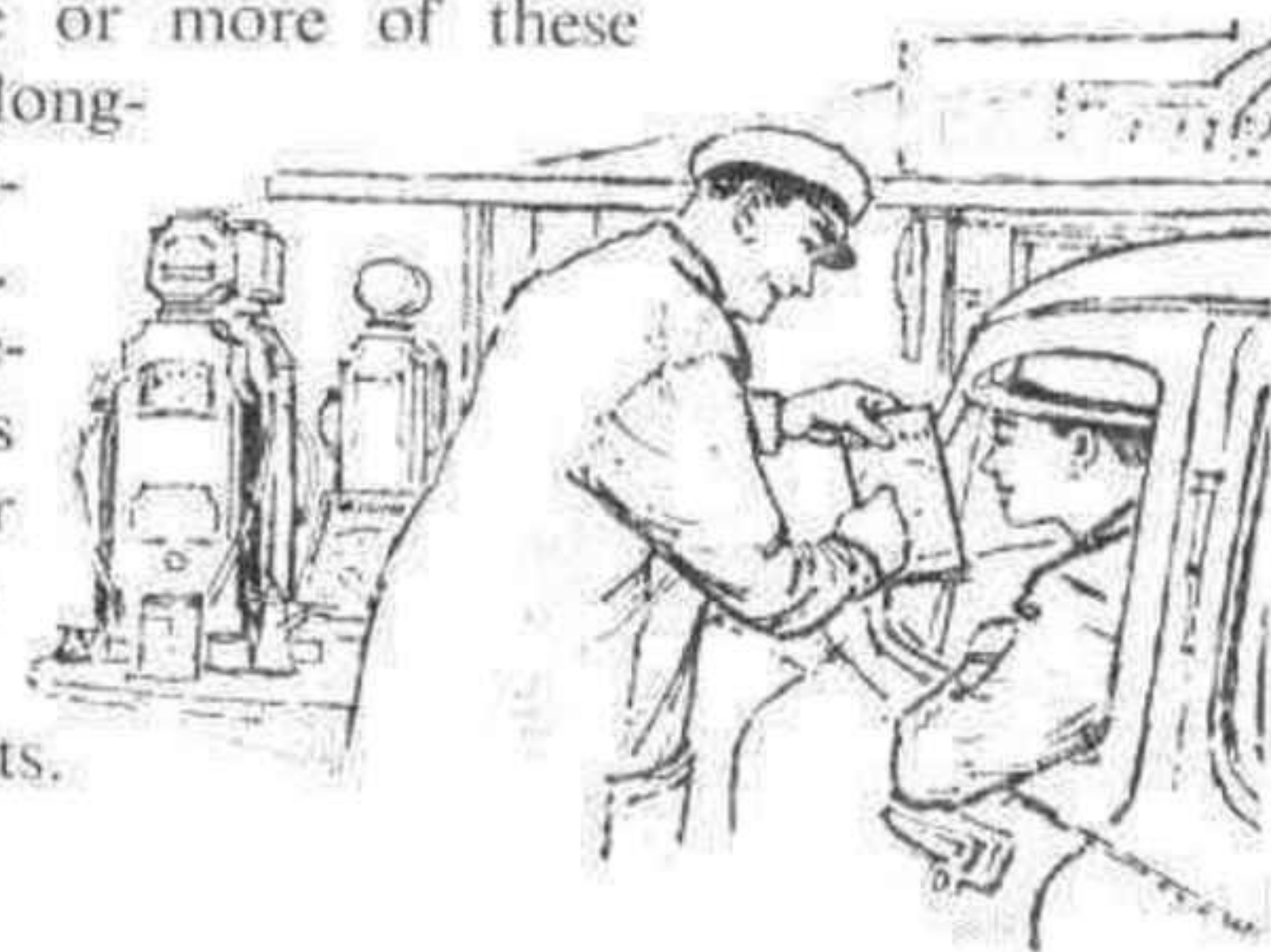


AUTOMOTIVE PRODUCTS
COMPANY LIMITED



MADE BY
EXPERTS IN
SAFETY AND
RELIABILITY

Automotive Products Company Ltd. possess unsurpassed experience in the production of vital components for the British Motor Industry. Over 80% of Britain's cars are equipped with one or more of these absolutely reliable, long-wearing officially approved components. When your car requires replacements you cannot do better than select a garage-man who uses Automotive Products.



AUTOMOTIVE PRODUCTS COMPANY LTD
LEAMINGTON SPA

AT THE MOTOR SHOW - VISIT THESE STANDS

LOCKHEED 373

BORG & BECK 370

AUTOMOTIVE PRODUCTS COMPANY LTD 369

consult us at your local
Car Mart branch


By Appointment to
H.R.H. The Duke of Edinburgh
Motor Car Distributors

The Car Mart Ltd

SOLE LONDON AUSTIN DISTRIBUTORS



The New AUSTIN A95
WESTMINSTER

about the *exciting*
NEW AUSTINS!

Please call, telephone or post coupon below

Please send me a catalogue illustrating
the **NEW AUSTIN MODELS**
What will you allow me for the following?

NAME _____

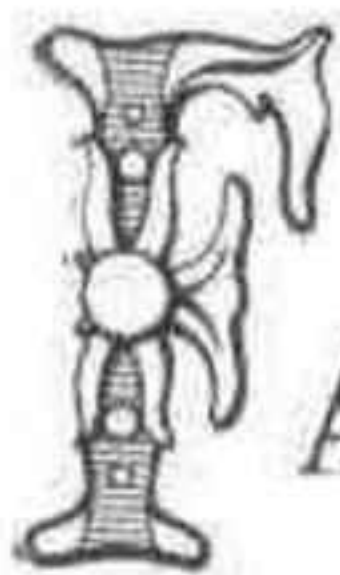
ADDRESS _____

TEL _____

THIS COUPON INVOLVES NO OBLIGATION

M.S.

Head Office: STANHOPE HOUSE, 320 EUSTON ROAD, N.W.1 EUSTON 1212
AUSTIN HOUSE, 297 EUSTON ROAD, N.W.1 EUSTON 1212
GLOUCESTER HOUSE, 150 PARK LANE, W.1 (corner of Piccadilly) GROSVENOR 3434
and Branches in the London Area



FAMOUS

CARS

ALWAYS

ON

SHOW

We shall be very pleased for you to visit our Showrooms, where you can see and try these famous cars at your leisure. We can also give you details of convenient Hire Purchase terms available in strictest confidence. Our contracts allow us to quote reasonable delivery dates.

Appointed official retailers and repairers for



ROLLS-ROYCE



BENTLEY



ARMSTRONG SIDDELEY



DAIMLER



FORD



JAGUAR



LEA-FRANCIS



RENAULT

SHOWROOMS:
18 Berkeley Street, London, W.1
MAYfair 6266/7/8

CHARLES FOLLETT
LTD.

SERVICE STATION:
Barnsdale Yard, off Elgin Avenue,
GUNningham 5936/7/8 London, W.9



A different story....

Many motorists are not satisfied with modern suspensions. Soft springing can give a more comfortable ride, but it frequently produces a feeling of instability at speed or with a full load.

Owners who have fitted the "Ridemaster" have a very different story to tell.

The powerful, progressive action of the "Ridemaster" controls the rear springs, giving the best possible performance at all times. This means greater comfort, much improved cornering and roadholding.

If you want the full story, and it is well worth knowing, please write for brochure R.7.

- ★ Inexpensive
- ★ Simple to fit
- ★ Needs no maintenance

THE RIDEMASTER
variable - rate
SPRING CONTROL

British Pat. No. 734886
Foreign Pat. Pending.

Made by one of Britain's leading car spring manufacturers

TOLEDO WOODHEAD (Sheffield) LTD.

- a new experience in motoring

• CLIFTON WORKS •

SHEFFIELD 3.

TSP 49

55 MILES to the GALLON!

and independent suspension

Here's car economy you never thought possible! The Citroen 2 C.V. Saloon gives at least 55 m.p.g. on low grade fuel. Maintenance and decarbonising are child's play! With a host of revolutionary features, it's *the* car for you.

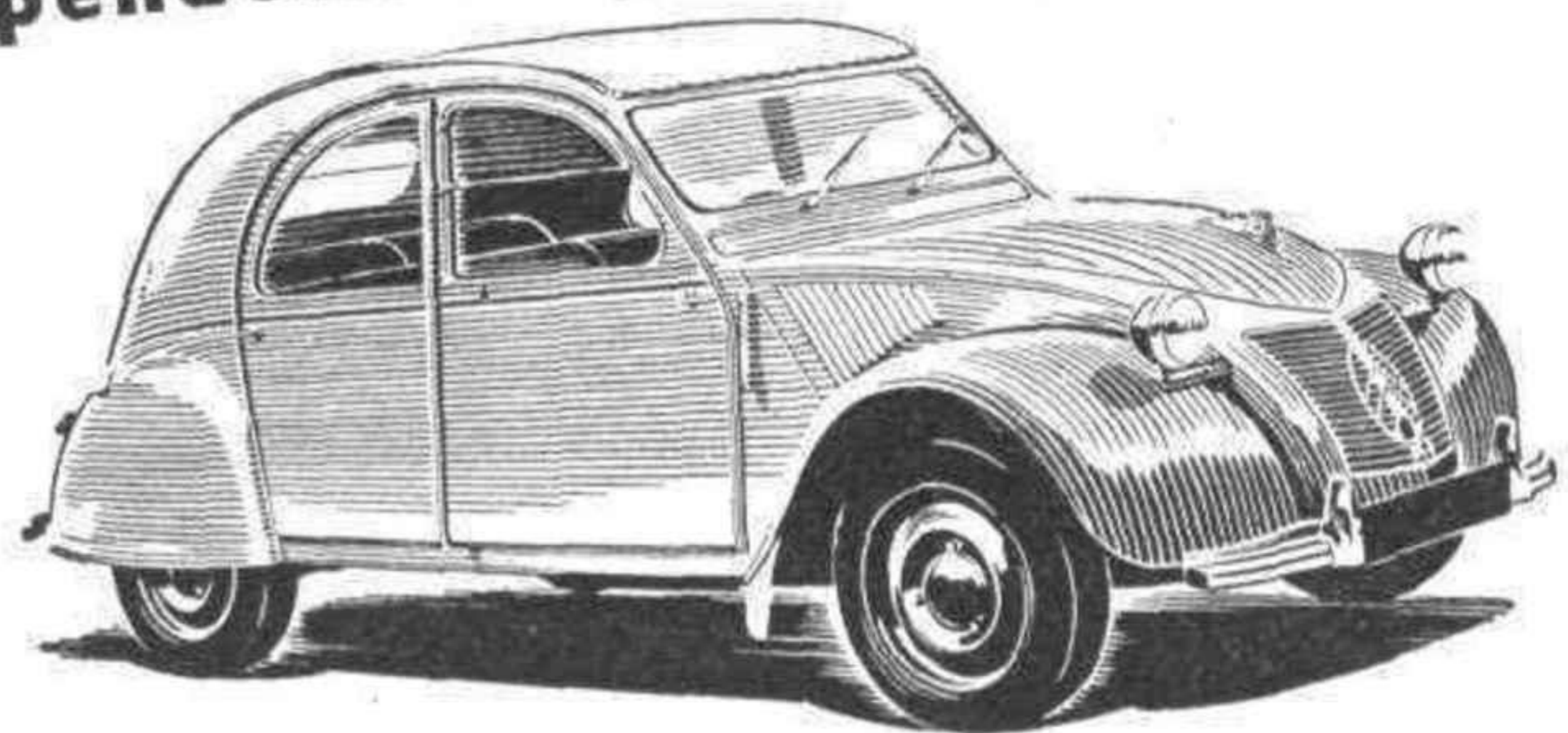
FRONT WHEEL DRIVE A foolproof design that has made the name Citroen famous. Gives extra performance, perfect control and wonderful cornering.

BRAKES Hydraulic brakes on all four wheels.

SEATING A 4 seater with 4 doors and fully opening sunshine roof.

ENGINE 2 cylinder, 4 h.p., 425 c.c., air-cooled. No weather worries! Gives a good 40/45 m.p.h. 3 forward speeds plus overdrive. Centrifugal clutch.

Price—£398 plus Purchase Tax £200.7.0



CITROEN

2CV Front Wheel Drive

CONVERTABLE SALOON

ALSO AVAILABLE AS VAN AND PICK-UP

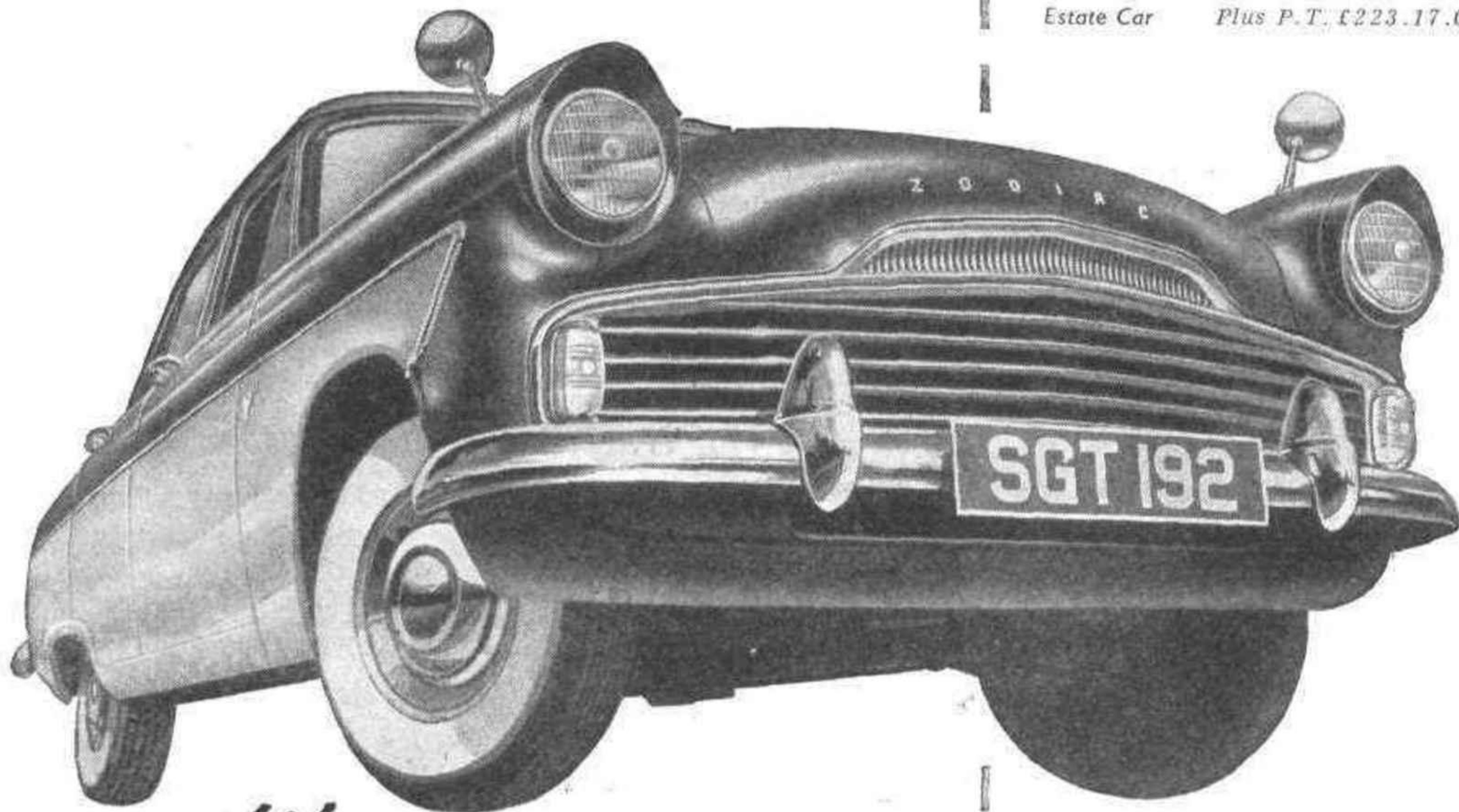


Write for Brochure to: **CITROEN CARS LTD** · SLOUGH · BUCKS Telephone: Slough 23811



BY APPOINTMENT
TO HER MAJESTY THE QUEEN
MOTOR VEHICLE MANUFACTURERS
FORD MOTOR COMPANY LTD.

*NOW,
more than ever -*



-it's

FORD

'FIVE-STAR' MOTORING

the best at lowest cost

EARLS COURT · STAND 145

FORD MOTOR COMPANY LIMITED · DAGENHAM

COMPARE THESE PRICES

POPULAR £275
Plus P.T. £138.17.6

ANGLIA £360
Plus P.T. £181.7.0

PREFECT £395
Plus P.T. £198.17.0

ESCORT £414
Estate Car Plus P.T. £208.7.0

SQUIRE £445
Estate Car Plus P.T. £223.17.0

AND THE

'Three Graces'

NEW CONSUL £520
Plus P.T. £261.7.0

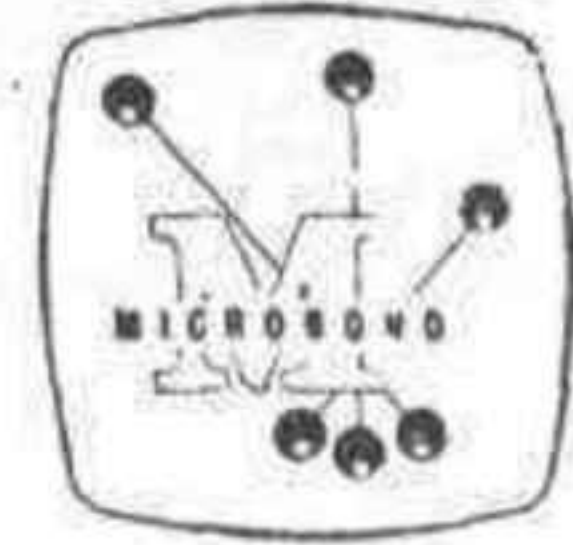
NEW ZEPHYR £580
Plus P.T. £291.7.0

NEW ZODIAC £645
Plus P.T. £323.17.0
(Illustrated above)

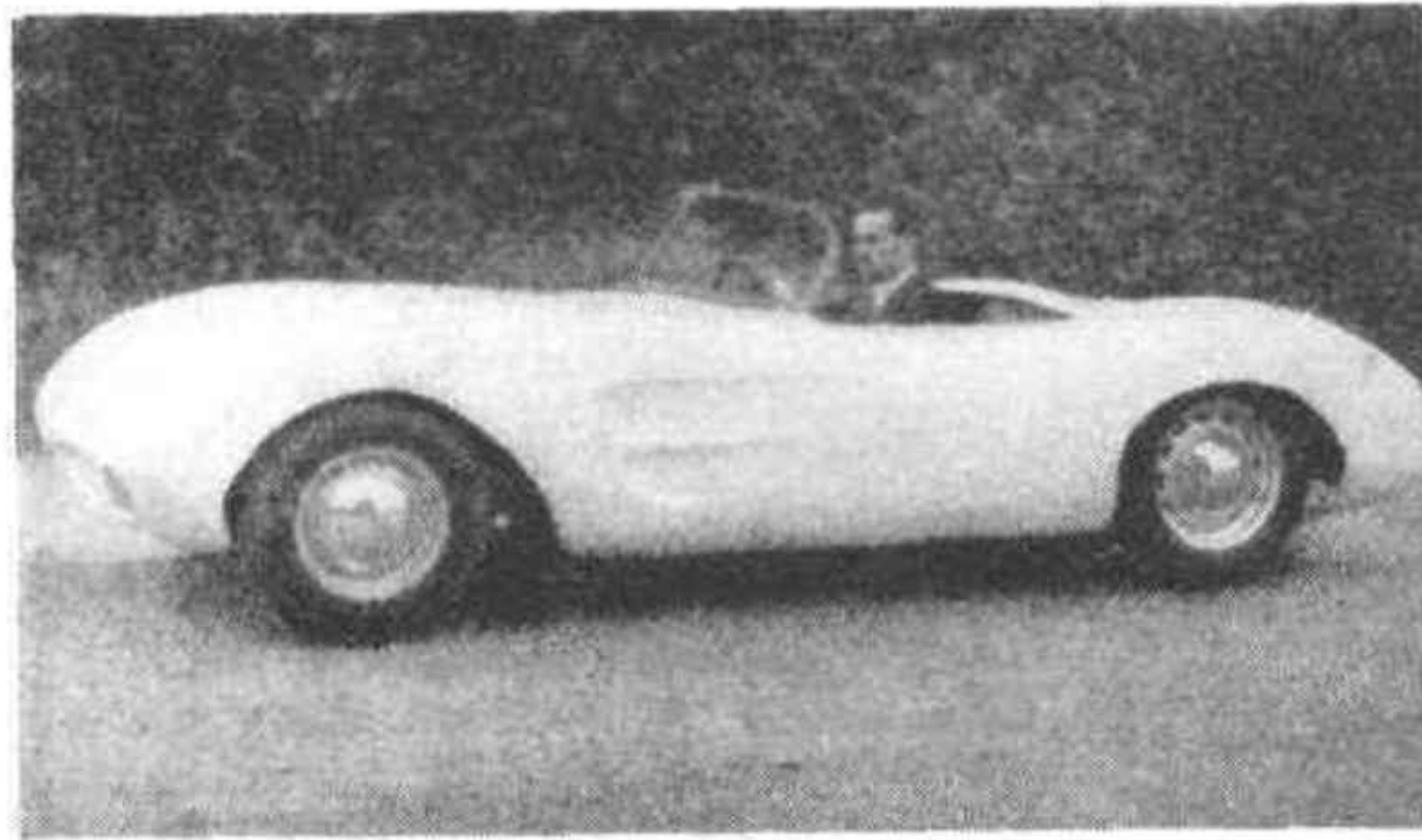
and FORD SERVICE too

MICROBOND

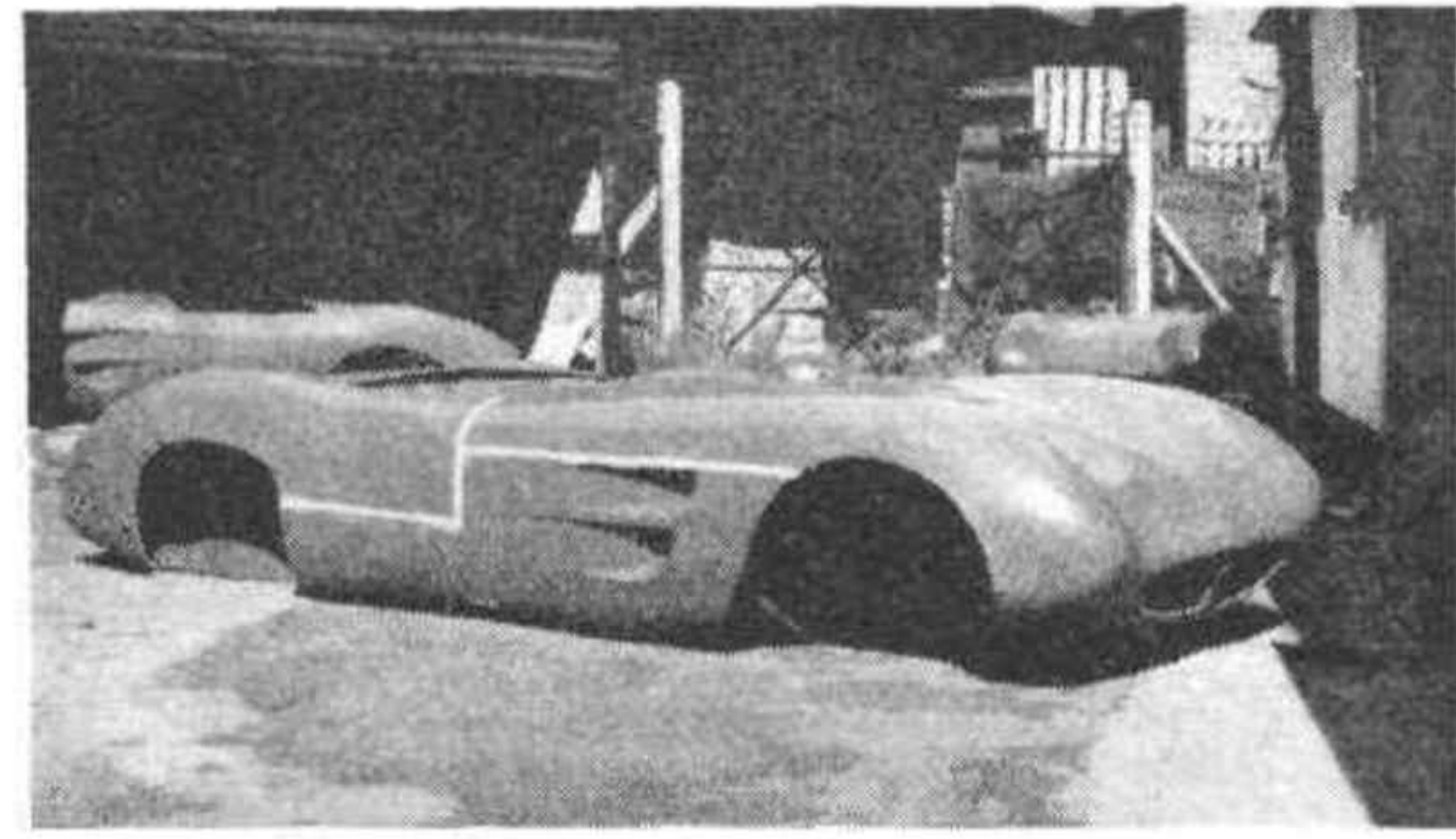
THE NEW "EXPORT MISTRAL" IN PANEL FORM



CRATE SIZE 7 ft. 2 in. × 5 ft. 8 in. × 2 ft. 2 in.



"MISTRAL" on a BUCKLER DD2.



"MISTRAL" SHOWING PANEL DIVISIONS.

NO UNSIGHTLY MOULD MARKS!

Distributors in the South of England: Messrs. Bucklers of Reading

"EXPORT MISTRAL"
"STILETTO"

WHEELBASES 7 ft. 3 in.—8 ft.
WHEELBASES 6 ft. 6 in.—7 ft.

Panels £58 ex-works
Shell only £49 ex-works

MICROPLAS LTD.

Dept. M.S. 21.

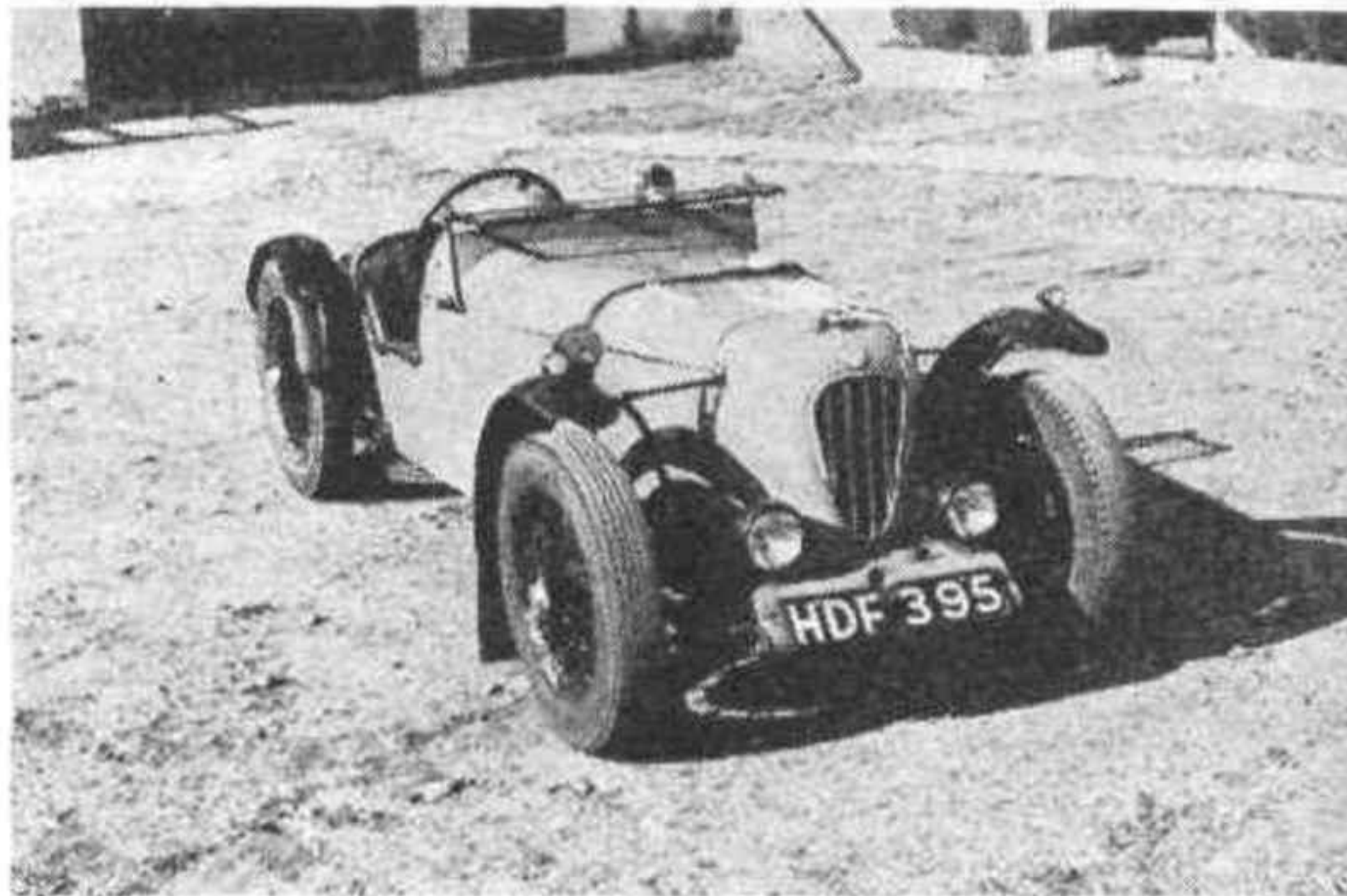
THE JAMES ESTATE, WESTERN ROAD, MITCHAM, SURREY.

Tel.:

MITCHAM 5181/2

Chiltern Cars

11a, Water Lane, LEIGHTON BUZZARD
Bedfordshire - - Tel.: Leighton Buzzard 2069



1948 LESTER-M.G. sports 2-seater. This very pretty and potent little car is fitted with a TC-type engine lined down to 1,100 c.c. Roadholding and braking power are quite remarkable. Full all-weather equipment and fold-flat screen ... £235

1931 BENTLEY 4-LITRE tourer. Black, with red leather upholstery. This car has been maintained in outstanding original condition throughout its life ... £265

1946 M.G. TC 2-seater. New hood and screens, chromed luggage carrier, special bucket seats, TF carburettors. Good tyres and excellent all round ... £295

1947 M.G. TC 2-seater. Finished in red. Works reconditioned engine 8,000 miles ... £295

1937 M.G. VA 1½-LITRE foursome drophead coupe. An attractive and economical family sports car. Very reasonable condition all round ... £165



1948 TRIUMPH 1,800 roadster. One of the last of these popular and economical all-purpose sports cars. Finished in black, with blue leather upholstery and in well above average condition throughout. Extras include twin wing mirrors, mascot, duo-tone horns and spot-light ... £355

1956 COOPER sports/racing 2-seater. Stage II 1,100 FWA 85-b.h.p. Coventry Climax engine and close-ratio E.N.V.75 gear box. Very pretty and light aluminium body with quickly-detachable wings. Virtually new and unraced. Complete with spare axle ratio; wheels, and light low-loading trailer. Offers around £800

1950 HEALEY SILVERSTONE. Red, with fawn upholstery, exceptional condition ... £425

1952 MORRIS MINOR convertible. One private owner. Alta o.h.v. conversion, giving 42½ b.h.p., 85 m.p.h. and 40 m.p.g. Fitted with works reconditioned engine 2,500 miles, heater and almost new tyres. Excellent throughout ... £445

1927 BENTLEY 3-LITRE saloon, in exceptional condition; very good mechanical history ... £175

EASY TERMS — EXCHANGES WELCOMED

NEW LAMPS FOR 1957

from

MARCHAL



"FANTASTIC" elegance and performance can now be enjoyed by the small-car owner. These modern-as-the-moment JUNIOR "FANTASTICS" in full chromium finish set a new high standard in fog and driving lamp design. Manufactured with the same scientific skill and accuracy as the SENIOR "FANTASTICS," they are fitting additions to the Marchal range, providing the finest possible auxiliary illumination. Designed especially to blend harmoniously with the lines of the modern car, these lamps may be mounted singly or in pairs to bumpers, bumper supports or aprons. Supplied complete with standard bracket, switch and cable, alternative brackets available.



670 670/300 JUNIOR "FANTASTIC" FOG LAMP

A truly superb fog lamp, incorporating the Marchal "occulteur." The wide-spreading yellow beam shows up both road sides in fog without back glare, and also proves extremely useful on narrow and winding roads. Supplied complete with bulb.

Model 670/300, price complete with bracket, switch and cable ... 82/6
Model LO/670/300, Lamp only ... 72/6

JUNIOR "FANTASTICS"



672 672/300 JUNIOR "FANTASTIC" DRIVING LAMP

A fitting companion to the Junior "Fantastic" Fog Lamp. This lamp produces a conical beam of great power and range, yet of sufficient spread to illuminate a large area of the road ahead, thus constituting a really excellent fast driving light, greatly increasing the headlamp range. Supplied complete with bulb.

Model 672/300, price complete with bracket, switch and cable ... 82/6
Model LO/672/300, Lamp only ... 72/6

MADE IN FRANCE

MARCHAL DISTRIBUTORS LTD. - GREAT WEST ROAD - BRENTFORD - MIDDLESEX
Telephone: Ealing 2672 Smees MD

AMAZING! FANTASTIC!
MARVELLOUS! INCREDIBLE!

Just a few of the words some of our customers have used about our

AUTOPLAX KITS

The First and Still the Finest Available

These fibreglass kits will repair, as good or better than new, rusted-through door bottoms, wheel arches, panels, etc., split or torn wings, dents, etc., in your own garage.

KITS at 19/4d., 32/-, 47/8d., post free.

All materials available separately for builders of "specials," racing or sports body shells.

Order a kit now and get your car in tip-top condition for the winter.

Talking of winter ... We now have available
AUTOPLAX ANTI-FREEZE

Made to Ministry of Supply specification DTD 779
13/6d. per quart 26/- per 1/2-gallon 49/- per gallon
(Post 1/9d.) (Post 2/6d.) (Post 3/-)

AUTOMOBILE PLASTICS CO., LTD.
62-64, HIGH STREET, BARNET, HERTS BARNET 9147

P.S.—HOPE YOU ENJOY THE SHOW



"... beyond all expectations..."

One of many VALSPAR testimonials

Dear Sirs,

I thought that you may be interested in this photograph taken quite recently of my 1938 Fiat 500.

I had never had any experience of painting before and just painted it in the yard, as you see, it turned out beyond all expectations. I am asked frequently if it was sprayed.

Yours truly,

(Signed) J. KENYON.

- ★ NO UNDERCOATING REQUIRED FOR A FIRST CLASS FINISH
- ★ DRIES IN 2-4 HOURS
- ★ STEAM, HEAT, OIL & PETROL PROOF
- ★ EASILY APPLIED, EASY TO KEEP CLEAN

VALSPAR

2-4 HOUR LACQUER

The enamel that boiling water made famous



If you have any spare time, Valspar Paints are ideal for all home decorating.

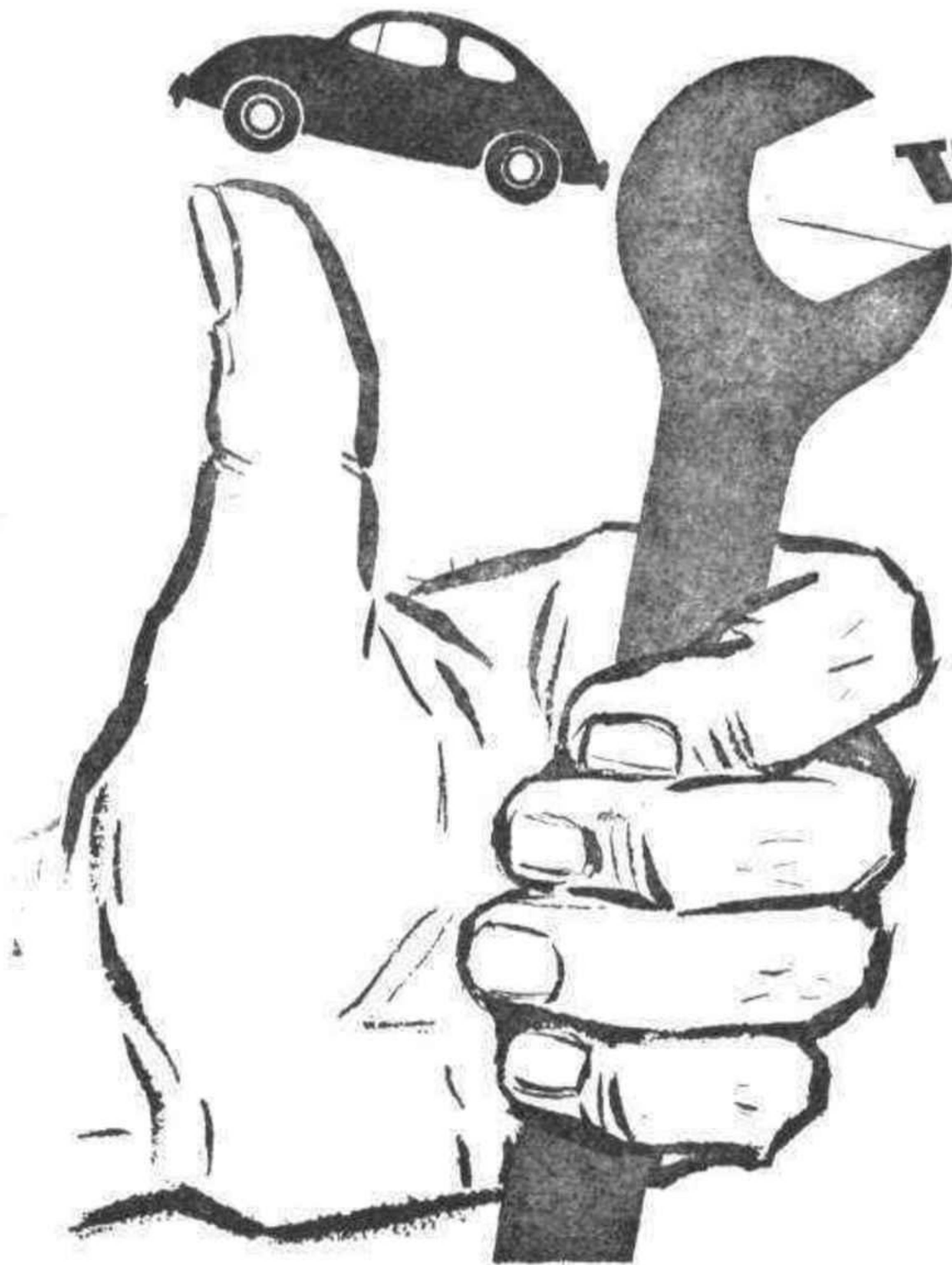
Use
VALSPAR CAR POLISH
Which cleans and polishes at one and the same time.

To: GOODLASS, WALL & CO., LTD. 179/185 (Q11) Great Portland St., London, W.1

Please send me a free copy of the Valspar Handbook giving full details of all Valspar Paints

NAME _____
BLOCK CAPITALS

ADDRESS _____



VOLKSWAGEN

**the car with the
sales service appeal!**

The famous range—Saloon, Microbus,
Delivery Van and Pick-up. All maintained in
our workshop by factory trained mechanics.
We provide the vital link between
the manufacturer and the owner.

EUROPEAN CARS LTD

129 OLD BROMPTON RD, SOUTH KENSINGTON, S.W.7

Tel.: FREmantle 7722. Service Tel.: No. FREmantle 5184.

DEAR SIRS . . .

"I have had one of your conversions fitted to my Ten by a local garage and I am delighted with the result. The car is now endowed with a nippiness that comes as a surprise to drivers of more powerful machinery." (J. C., Banbury.)

"Briefly, I can say that your conversion has changed the entire nature of the machine for the better and made it quite a most exhilarating car to drive." (Sir John B., Middx.)

"My car is certainly an excellent advertisement for your goodselves and my only wish is that when I get another next year you will have discovered means of extracting still more B.H.P. from this engine, consistent with reliability and within your most reasonable charges for conversion." (J.D., Sevenoaks.)

Austin A30, A40, A50, A90;

Morris Minor, Oxford,

Cowley, Isis; Standard 8 and 10;

M.G. Magnette, TB, TC,

TD, TF, Y; Ford Anglia,

Prefect, Consul,

Zephyr and Zodiac;

Wolseley 4/44, Wolseley 6/90;

Nash Metropolitan.

Overdrives available for some models

WE CAN SUPPLY THE CAR AS WELL

ALEXANDER
LAYSTALL

Send for new catalogue and data sheets.

Trade enquiries invited.

ALEXANDER ENGINEERING CO., LTD.
HADDENHAM, BUCKS.

Telephone: Haddenham (Bucks) 345/6



Clearly Ahead..

Attractive by day
Efficient by night...
So little to pay
For this NOTEK Light

One of the famous
BLUE SPOT
Series

Other famous BLUE SPOT models include FOG Lamps, DRIVING Lamps, HEADLAMP Conversions.
Motor Show — See them on Stand 280
Obtainable from Motor and Garage Agents. Notek, Bromley, Kent.



THE LAST WORD
IN LUXURY...

PORTMAN
CAR SEAT COVERS
FROM 59/6 A COMPLETE SET

PATTERNS FREE
from **PORTMAN**

Also Portman's **SILVER WATERPROOF CAR COVERS**

Money-back guarantee.
5-thous. P.V.C. 100%
waterproof, silver
sheers, non-scratch
eyelets. Acid proof.
Welded seams. Des-
patch by return



8 ft. by 6 ft.	11s. 9d.	Postage and packing 1s. 9d.
12 ft. by 8 ft.	23s. 0d.	" " " 2s. 0d.
14 ft. by 10 ft.	38s. 6d.	" " " 2s. 6d.
16 ft. by 12 ft.	47s. 9d.	" " " 2s. 6d.
18 ft. by 12 ft.	53s. 6d.	" " " 2s. 6d.
20 ft. by 14 ft.	75s. 0d.	" " " 2s. 6d.

from
11/9
BRAND NEW
Guaranteed

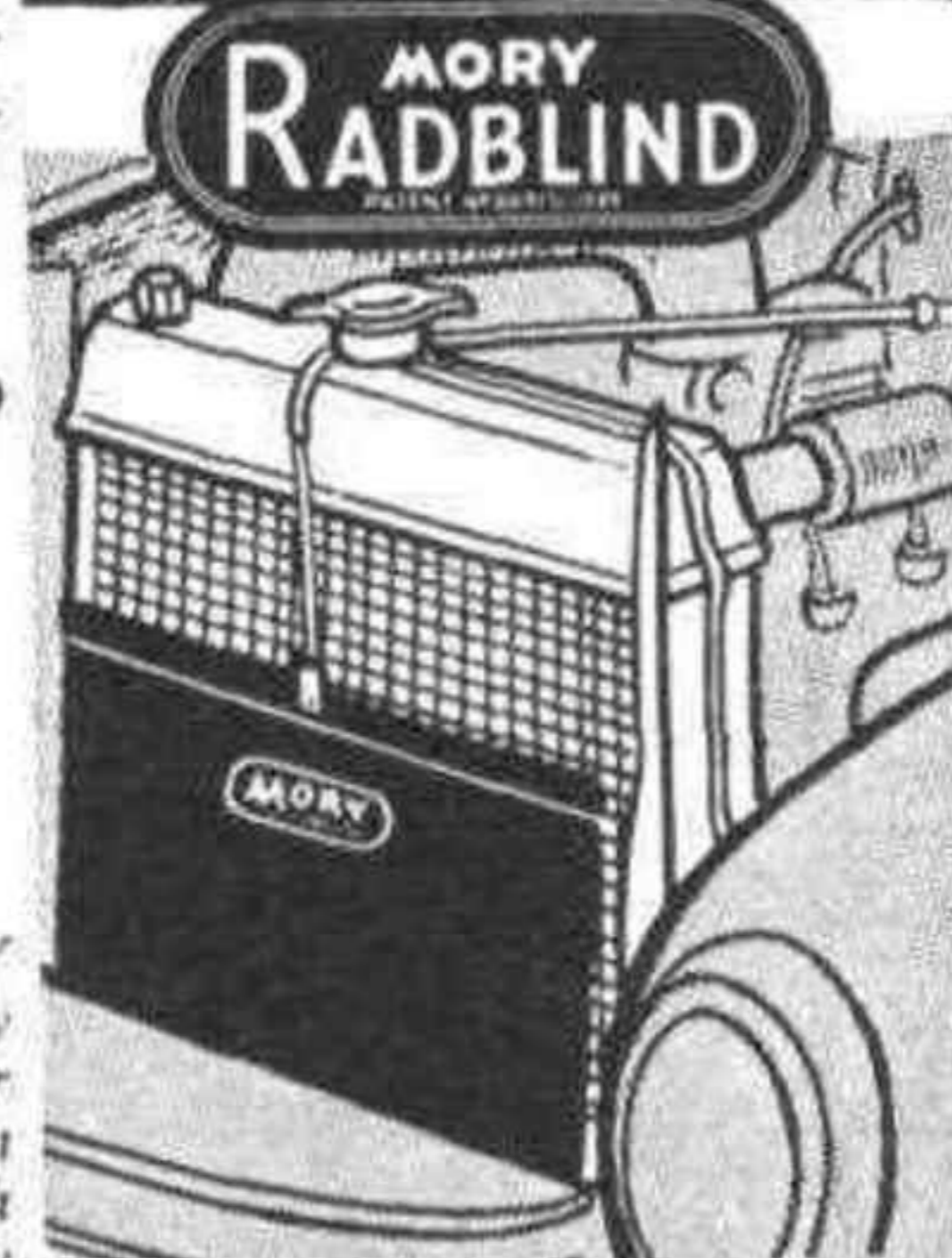
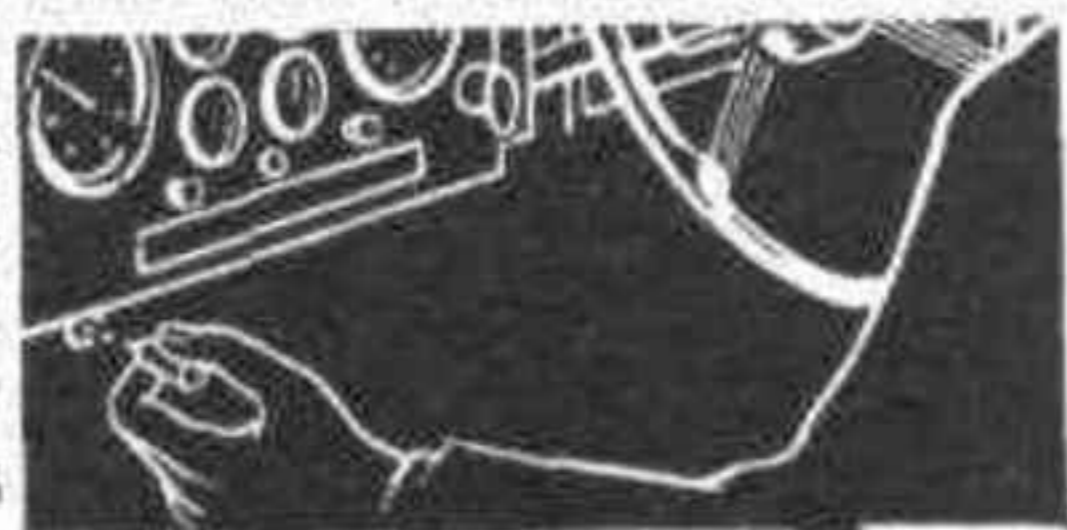
PORTMAN (MS 1)

81 George Street, Baker Street, London, W.1. WELback 2897
OPEN DAILY 9-6 CALLERS WELCOME

Don't muff it! fit a MORY RADBLIND

...instantly adjustable from your driving seat

The MORY RADBLIND makes all external radiator protection as obsolete as cardboard and string. Completely concealed except for its neat dashboard control, it enables you to adjust air-cooling from nil to 100% by a touch of your finger. Here is an accessory that combines practical common sense with labour-saving luxury. It gives you



- * Reduced engine wear
- * Quicker warming-up in winter
- * Economy in petrol
- * Increased power
- * Greater heater efficiency

There is an easily fitted MORY RADBLIND for practically every make and model of motor-car or commercial vehicle. Prices from 50/-, negligible in comparison with the increased comfort and efficiency of your motoring. Why not order one through your garage today? Or write to us for further particulars (stating make and model) and copy of independent technical report.

MORY & COMPANY LTD
88 Leadenhall Street, London, E.C.3
Telephone: AVENue 3434 (20 lines)
STAND 89, MOTOR SHOW, EARLS COURT



THRUSSELLS'

'Silverstone 12'

the coat for the motorist, the traveller and the interested spectator, immensely popular for its warmth without bulk, particularly behind the wheel. In fine quality all wool cloth, camel shade, with tartan lining and back vent, the SILVERSTONE 12 has the tailoring that puts it in a class of its own as an all-round overcoat.

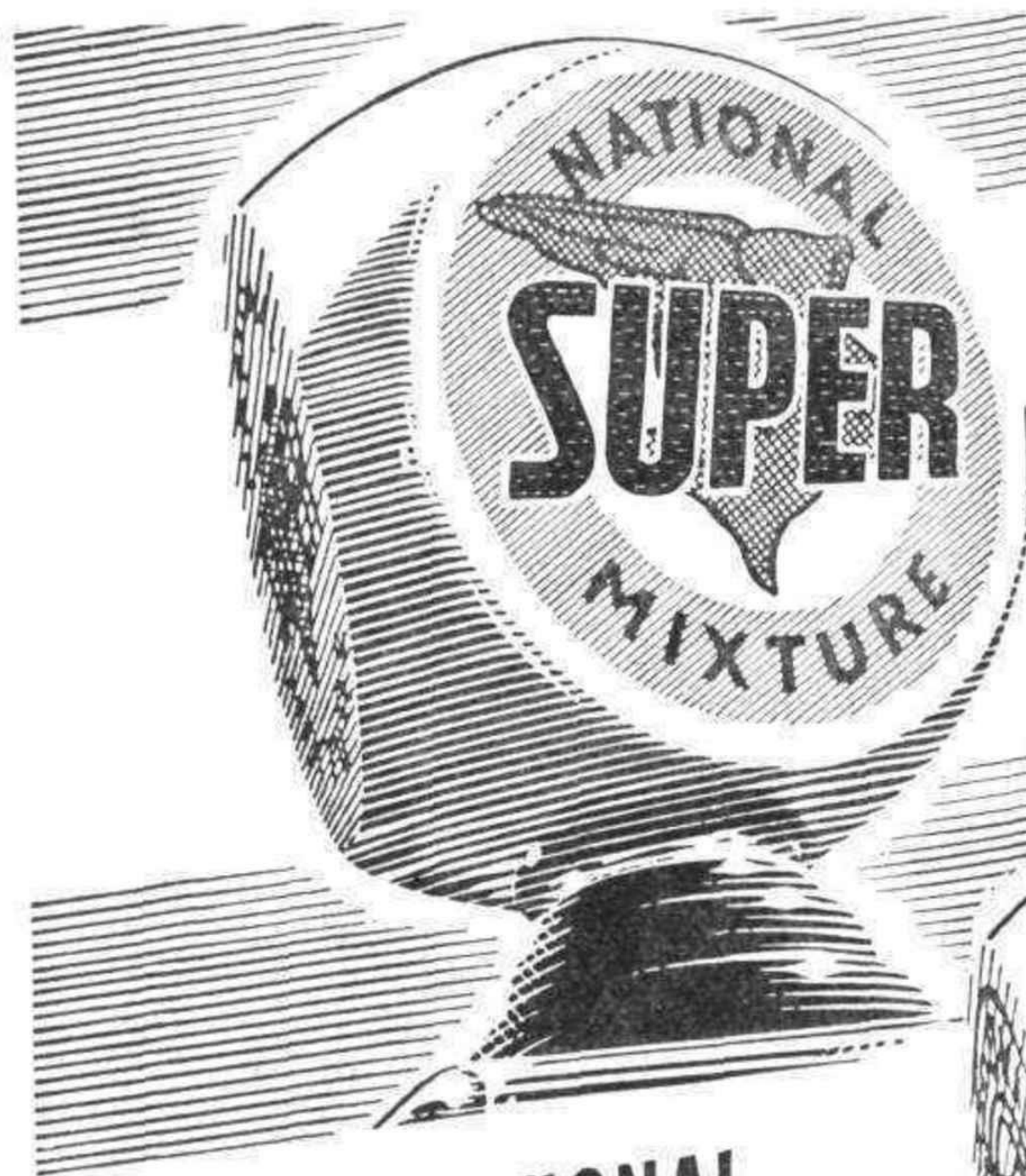
Because there are no sizing difficulties, the SILVERSTONE 12 can be bought through the post. Simply send us your height and chest measurement (and 12 guineas) and we'll send you a coat on approval with a guarantee to return the guineas if it fails to satisfy.

Prices outside U.K. on application.

Thrussells

25-29 TEMPLE STREET, BIRMINGHAM, 2
THE MAN'S SHOP OF THE MIDLANDS

Choose a High-Aromatic Fuel—



**SUPER
NATIONAL MIXTURE**
High-Aromatic
100 Octane

**NATIONAL
BENZOLE MIXTURE**
High-Aromatic
Premium Grade



**AROMATICS FOR THE SMOOTHEST RUNNING
THE QUICKEST STARTING · THE MOST MILES PER GALLON**

NATIONAL BENZOLE MIXTURES

The most modern of all motor spirits

MOTOR SPORT

INCORPORATING SPEED AND THE BROOKLANDS GAZETTE

EDITORIAL AND ADVERTISEMENT OFFICES

15-17, CITY ROAD, LONDON, E.C.1

Telephone: MONarch 8944

PUBLICATION DATE FIRST OF THE MONTH
 SUBSCRIPTION RATE 25/- PER ANN. POST PAID

LARGEST CERTIFIED NET SALES

THIRTY-THIRD YEAR OF PUBLICATION

MATTERS OF MOMENT

THE EARLS COURT MOTOR SHOW

The London Motor Exhibition at Earls Court is an important shop window for the Industry as well as a great social occasion.

In the catalogues issued by the exhibitors ladies and gentlemen elegantly attired in formal clothes or the latest sportswear will be found regarding the new models with high delight and eager anticipation—but, remember, they do not have to face the many hazards of everyday motoring as you and we have to do!

The Show was opened on October 17th by the Prime Minister, Sir Anthony Eden. We are surprised that the Prime Minister should thus encourage the sale of cars when the roads of his country are grossly inadequate for those already in circulation. However, writing prior to the opening day, we can only assume that in his speech he proclaimed his intention of sanctioning immediately brave new motorways for Britain . . .

The 1956 Motor Show is disappointing from the aspect of new British cars. Far too many of our manufacturers seek sales of existing models by modest increases in power and revised colour schemes instead of introducing technical innovations such as independent rear suspension, engines adjacent to the driving wheels, air-cooling, petrol injection and similar features which have been commonplace for years amongst Continental designs.

We had expected a revolutionary new Morris Minor to direct B.M.C. back on to the road to prosperity and full-employment, but the 1957 version of this little car, designed by Alec Issigonis and introduced seven years ago, merely has a slightly revised appearance and an engine larger by 147 c.c. Although this engine at last gives the Minor and Austin A35 a greater power output than the ubiquitous Volkswagen (by 4 b.h.p.), it does so by reason of a compression-ratio as high as 8.3 to 1, which would seem to call for high-octane petrol, an unusual essential requirement for an economy car.

The Austin-Healey 100 appears in six-cylinder 2/4-seater form, with a power increase of 12 b.h.p. over the well-established four-cylinder model to combat an increase in weight of some 3 cwt., while no announcement has been made concerning the equivalent of the former light-alloy, disc-brake 100M version, so that we are left wondering if the new car was introduced mainly because continuation of the four-cylinder engine was contrary to B.M.C.'s production policy. In contrast, Triumph are to be congratulated on continuing the Triumph TR3 in virtually unchanged form, except for better porting and the commendable addition, at no extra cost, of Girling disc brakes on the front wheels.

Britain has made excellent sports cars since the introduction of the 30/98 Vauxhall and continues to do so, as the cars on the stands occupied by A.C., Allard, Aston Martin, Austin-Healey, Frazer-Nash, Jaguar, Lotus, M.G., Morgan and Triumph will confirm. We hope engineers as well as sports-car enthusiasts will make a point of studying the Lotus on Stand 121, because Colin Chapman builds a great deal of know-how into these little cars, now available in club and hard-top versions as well as in sports/racing form, and

the big boys of the Industry's design-staff would be the better for absorbing some of the lessons Lotus has to teach them.

When it comes to the luxury-car market Britain again offers a splendid selection, as visits to the stands occupied by Alvis, Armstrong-Siddeley, Austin, Bentley, Bristol, Daimler, Jaguar, Jensen, Lagonda, Rolls-Royce and Rover will show. Prices range from approximately £1,400 to £5,400 and many of these beautifully-equipped vehicles are in the high-performance category. However, close examination of their wood-veneered dashboards stocked with high-grade instruments reveals a certain "sameness," so that one wonders whether these vehicles were born, if not in the vestry, then in the gallery, for in the gallery at Earls Court will be found standardised proprietary accessories and components in such variety and profusion that it is true to remark that there is little on the floor of the Motor Show which cannot be discovered, dissected, in the area above. Yet, if some detail

affinity exists amongst even the quality cars, let us acknowledge the technical individuality of Rolls-Royce and Lagonda, the former by reason of possessing mechanical servo braking and suspension ride-control, the latter because it is alone (save the !) amongst British non-sports cars in having independent rear suspension. Jensen, too, stand out for their adoption of Dunlop disc brakes and the use of glass-fibre for the body of the beautiful 541, and Austin deserve praise for incorporating Girling power-steering and automatic transmission on the new Princess IV at an all-in price of under £3,400.

At Earls Court these sports cars and quality cars, the economy cars offered by Austin, Ford (still the least-expensive), Morris and Standard, the family cars of Austin, Ford, Hillman, Morris, Standard, Vauxhall and Wolseley, and those cars made by Austin, Ford, Humber, M.G., Riley, Rover, Singer, Sunbeam and Wolseley which bridge the gap between the family and quality vehicles, are set out hopefully for the world's buyers to inspect, alongside their rivals from other nations, at what is recognised as one of the more important of the annual motor exhibitions.

CONTENTS

	Page
MATTERS OF MOMENT	653
FIXTURES FOR NOVEMBER	654
THE PARIS SHOW	655
THE CARS AT EARLS COURT	656
BOOK REVIEWS	662
IMOLA SPORTS-CAR RACE	664
ROAD IMPRESSIONS OF THE 3-LITRE LAGONDA SALOON	666
BRITAIN AND GRAND PRIX RACING	668
GERMAN HIGH-PERFORMANCE	670
THE AUSTIN THAT MARCHED	676
EARLS COURT REVIEW	681
SHOWDOWN	682
A SELECTION OF SPORTS AND HIGH-PERFORMANCE CARS FOR 1957	684
TOUR DE FRANCE	686
ROUND-THE-CLOCK WITH A BENTLEY S-SERIES	689
RUMBLINGS	693
VEHICLES I HAVE DRIVEN	696
LETTERS FROM READERS	704

Front cover picture: MOSS AT MONACO.—Stirling Moss seen in characteristic stance as he approaches the Gas-works hairpin at Monte Carlo in winning this year's Monaco Grand Prix for Maserati.

Motor Sport Events for November

★ Only clubs whose secretaries furnished the necessary information prior to the 8th of the preceding month are included in this list ★
 R. = Restricted Event. C. = Closed Event. C.I. = Closed Invitation Event. N. = National Event. INT. = International Event.

DATE	CLUB	RENDEZVOUS	NEAREST PROMINENT TOWN	CATEGORY	TIME
Nov. 3rd	Old Merchant Taylors' M.C.	Batchworth Heath	Rickmansworth	Rally (C.)	5.30 p.m.
"	Old Culfordians M.C.	Culford	Bury St. Edmunds	Navigation Rally (R.)	3.30 p.m.
Nov. 3rd/4th	Oxford M.C.	Cotswold Gateway Hotel	Burford	Rally (R.)	7.31 p.m.
"	Liverpool M.C.	Wirral	Liverpool	Rally (C.)	7.00 p.m.
"	B.A.R.C. (S.W.)	Winchester Motor Co.	Winchester	Navigation Rally (R.)	9.30 p.m.
Nov. 4th	Bedford A.E.C.	Maldens Farm	Bedford	Rally (C.)	10.30 a.m.
"	Fairey Aviation M.C. & C.C.	Byron Hotel	Greenford	Rally (C.)	1.30 p.m.
"	Newcastle & Dist. M.C.	"Percy Arms," Otterburn	Newcastle	Navigation Trial (C.)	2.00 p.m.
"	R.A.C.	Hyde Park	London	Veteran Car Run	7.30 a.m.
"	Rhyl & Dist. M.C.	U.S. Air Base, Sealand	Chester	Driving Tests (R.)	10.00 a.m.
"	Shenstone & Dist. C.C.	"Swan with Two Necks"	Lichfield	Trial (R.)	10.00 a.m.
"	V.S.C.C.	Wansford	Stamford	Trial (C.)	1.15 p.m.
Nov. 8th/10th	M.C.C.	Hastings	—	National Rally	—
Nov. 9th/10th	Mid-Antrim M.C.	Castle Grounds	Ballymena	Trial (C.)	7.00 p.m.
Nov. 10th/11th	Surrey Sporting M.C.	"Sportsman"	Reigate	Night Rally (C.)	8.00 p.m.
Nov. 11th	Lancashire A.C.	Bayhorse Garage, Osbaldeston	Blackburn	Rally (C.)	1.00 p.m.
Nov. 17th	Bristol M.C. & L.C.C.	Cotswolds	—	Roy Fedden Trial (R.)	—
Nov. 17th/18th	Swansea M.C.	Three-point start	—	500-Mile Rally (R.)	7.00 p.m.
"	750 M.C.	"The King's Arms," Stokenchurch	High Wycombe	Night Rally (R.)	9.30 p.m.
"	Plymouth M.C.	Haldon Road House	Exeter	Navigation Rally (R.)	10.00 p.m.
"	Lagonda C.C.	Ejso Research Station	Abingdon	Rally (R.)	1.30 p.m.
"	Margate & Dist. C.C.	Wrotham Heath	Maidstone	Rally (R.)	10.30 p.m.
Nov. 18th	Cemian C.C.	H. W. Motors	Walton-on-Thames	Rally (C.)	9.00 a.m.
"	Severn Valley M.C.	Shropshire Tyre Co.	Shrewsbury	Ladies' Rally (C.)	10.00 a.m.
"	Windsor C.C.	—	Windsor	Rally (C.)	2.00 p.m.
"	Alvis O.C.	Stapleford Aerodrome	Abridge	Rally (C.)	11.00 a.m.
Nov. 24th	Eastern Counties M.C.	Burlington Motors	Needham Market	Rally (C.)	6.00 p.m.
"	V.S.C.C.	Ilkley	—	Trial (C.)	10.00 a.m.
Nov. 24th/25th	Morecambe C.C.	Midland Hotel	Morecambe	Rally (C.)	9.00 p.m.
"	Burnham M.C.	Hartwells Garage	Slough	Rally (C.)	10.00 p.m.
"	M.C.C.C. (S.E.)	Mill Garage	Woodford	Rally (R.)	8.30 p.m.
Nov. 25th	Rugby M.C.	Autocar Garage	Rugby	Mud Trial (C.)	10.00 a.m.
"	Kentish Border C.C.	Bull Hotel	Swanley	Trial (R.)	10.30 a.m.
"	Nottingham S.C.C.	—	Nottingham	Trial (C.)	10.30 a.m.
"	R.A.F.A. M.C.	Three-point start	—	Rally (R.)	10.30 a.m.
"	Romford Enthusiasts' C.C.	Town Hall	Romford	Rally (R.)	9.45 a.m.
"	Midland M.E.C.	"Fleur-De-Lys," Lowson Ford	Birmingham	Rally (C.)	11.00 a.m.
"	Berwick & Dist. M.C.	Old Road	Berwick	Rally (C.)	2.00 p.m.
"	Hartlepool & Dist. M.C.	Club House, Middleton Lane	West Hartlepool	Rally (C.)	2.00 p.m.
Nov. 30th	B.R.S.C.C.	Odeon Cinema, Leicester Square	London, W.1	Film Show	Midnight

"MOTOR SPORT" TROPHIES, 1956

The winner of this year's MOTOR SPORT Brooklands Memorial Contest, decided on points at B.A.R.C. Members' Meetings at Goodwood, is P. J. S. Lumsden (Lotus-Climax), who receives £75. Second place is a tie between Miss H. Dunham (M.G.) and M. W. Head (Cooper-Jaguar), who in this case share £75.

The winner of the MOTOR SPORT Clubs Trophy, contested on points in certain Silverstone club races and on places gained in a series of MOTOR SPORT sports-car handicaps, is M. Reid (M.G. MGA), who receives £50. H. C. Taylor (D-type Jaguar) and J. B. Naylor (Lotus-Maserati) tied for second place and so receive £15 each.

85 m.p.h.—Real or Imaginary?

The new high-compression engines in the Austin A35 and Morris Minor, necessitating the introduction of lead indium big-end bearings, were tested by driving along the German *autobahn* at an average speed of 60 m.p.h. for 25,000 miles—commendable, but no more than many German motorists cover in a year, often at higher speeds.

In the course of a publicity hand-out issued by B.M.C. it was stated that "the speedometer needle flickered on the 85 m.p.h. mark for mile after mile..." This was a foolish statement to issue, because people still exist who believe speedometers to be accurate. Robert Walling, for example, who, in the *Evening Standard* of October 9th, stated that "At one time both the Austin A30 and Morris Minor touched 85 m.p.h." Millions of people will now expect the new B.M.C. economy cars to attain this near-sports-car speed. Future road-test reports in the technical journals will confirm the true maximum speed of these little cars.

We have commented on the exceptionally high compression-ratio (8.3 to 1) used for these models, and we can hardly wait to see Auntie going uphill in top gear in her A35 which she has insisted on filling with cheap-grade petrol! A sports-car owner who puts such fuel in a high-compression engine qualifies for a mental-home but purchasers of economy vehicles can hardly be expected to buy expensive petrol, especially as recent price-increases, led by Shell-Mex and B.P., instituted by the petrol companies constitute a cold welcome to the majority of motorists.

NOVEMBER EVENTS

The outstanding fixtures next month are the Diamond Jubilee R.A.C. Brighton Run on November 4th and the M.C.C. National Rally from November 8th-10th. The Veteran Car Run is a national institution watched by millions of spectators. As usual it starts from Hyde Park at 7.30 a.m., the first arrivals reaching Brighton around 11 a.m. We appeal to all who use the Brighton Road that Sunday to give the drivers of the veterans as much road space as possible—most drivers of modern cars do this very willingly but the club motor-cyclists tend to come close, knowing their skill and acceleration can get them safely by—nevertheless, this is nerve-racking to those holding tillers and tending primitive machinery, so please give them a wide berth.

The M.C.C. Rally starts from Manchester, Kenilworth, London, Bathgate, Norwich, Cardiff and Glasgow and converges on a common route after Harrogate, through Yorkshire, Westmorland, the Northumberland Moors, the Lake District and into Wales, to finish at Hastings, where the first competitor is due about 8 a.m. on November 10th. Final tests take place at Hastings from then until 3 p.m. Entries have closed but details of the route can be obtained from the M.C.C., 76, Kinnerton Street, London, S.W.1.

FILM REVIEW—"Loser Takes All"

This delightful Cinemascope romance by British Lion, in Eastman colour, a John Stafford production directed by Ken Annakin, stars Glynis Johns and Rossano Brazzi and is set at Monte Carlo. It will be shown in the West End from the middle of November and generally released in January, when it should be seen by wives and girl-friends whose men are away on the Rally. No particular cars star in it, apart from a VW Microbus and a Vespa scooter. Brazzi (whom "everyone" in America was soon talking about—our italics) is said to have been a racing driver, to have a great passion for motor-racing and to own two Alfa-Romeos and a Jaguar.—W. B.

"MOTOR SPORT" AT EARLS COURT

Stand No. 77 on the ground floor will be occupied by MOTOR SPORT during the London Motor Show.

IMPRESSIONS OF THE 43rd PARIS MOTOR SHOW

THIS year the preview news and grapevines indicated that the Paris Salon would not contain very many surprises or new innovations, so we wandered into the main hall with a completely open mind, having no particular objectives in view. Within a few yards we came across an enormous crowd peering down into a huge hole in the ground and, joining the throng, looked down upon a Simca Aronde with cut-away body containing two very bored-looking girls in evening dress, lounging aimlessly about on the "new" reclining seats that are now fitted to Simcas. Apparently these "live" models spend all day down this big hole watching the public peering at them. Next door we met Lance Macklin working on the Facel Vega stand, these Chrysler-engined French cars now blossoming out into a very long wheelbase four-seater model, looking rather like a Cadillac Eldorado but a little less flamboyant. Over the wall of flowers on the edge of the Facel stand we came upon four coupé Lago-Talbots, with the nice rugged-looking four-cylinder 2½-litre Talbot engine, but nothing very new about the whole set-up; the Maserati engine version is not due until next year.

This lack of new things was apparent on all sides and even Pinin Farina was showing a lush and futuristic plexiglass coupé on a 1,900 Alfa chassis that was similar to that displayed at the Turin Show at the beginning of the year. The Singer Gazelle came as a bit of a shock as we were on our way across to see the new Austin-Healey, and we thought the six-cylinder Austin engine under the bonnet made a very exciting-looking scene, while the space behind the seats in which you could put the dog or a heap of parcels was a welcome sight. It was said that they were occasional seats but watching a happy Frenchman trying to be occasional did not convince us, and if the driver's seat is moved back far enough from the steering wheel to allow control of the car then the rear seats really do become a parcels-shelf. In spite of these shortcomings we felt that Donald Healey had once more got a winner from the American sales point of view and with the lovely smooth six-cylinder engine it should be a nice fast touring car, though we felt that a Westminster grille fitted to the Austin-Healey would improve its frontal aspect; the car being mostly Austin anyway, this would not be a bad thing. Leaving the Austin stand we espied a very sleek green car and it proved to be the Carrozzeria Touring-bodied Aston Martin, but then we remembered having seen David Brown driving a prototype of this car about the place at the Rouen race meeting back in July. A pause on the A.C. stand gave us a chance to have a chat with Jacques Pollet and learn that Paul Frere had been lapping Montlhéry fast and furiously in an A.C.-Bristol and was most impressed, as were the onlookers.

Passing on towards the Alfa-Romeo stand we were disappointed not to see a Sprint Veloce among the exhibits, and on the Lancia stand the old faithfuls the Gran Turismo Aurelia and Spyder were quite unchanged, while the Fiat version of Lancia called the Flaminia was just awful to look at, by Lancia standards. The Mercedes-Benz stand contained a blank for there was no 300SL, the only car with a pretence of sporting characteristic being the 190SL, and the Porsche stand caused us equal anguish for they are no longer making the Spyder, though the normal coupé, the drophead and the funny-shaped Speedster were all on show, and the only 1957 modification that was really obvious was a little gold plaque on the dashboard telling us how many times Porsche had won the German Sports-Car Championship. At Ferraris we met de Portago, looking extremely neat and Motor Show like, and for fierceness of modern line the Farina-bodied 4.9-litre Ferrari with pillarless windscreen really was outstanding. The estimated speed of 300 k.p.h. (186 m.p.h.) made us wonder why the Scuderia did not enter the car for sports-car racing and win everything, but then we looked at a luxuriously-bodied 3-litre Europa and remembered how awful Ferrari handling can be when not an actual competition model. Having got into a rorty, sporty frame of mind we crossed over to the Abarth stand and drooled over the beautiful little Bertone-bodied coupé built by Abarth around Fiat 600 components. The engine had received the full Abarth treatment, including an increase to 750 c.c., and the frontal aspect of the car was just like the Abarth record breaker, and had disappearing headlamps controlled by a wire-and-bobbin mechanism. This toy motor car was barely 3 ft. 6 in. in overall height yet had enough room inside for an over-six-foot driver, such as Count Lurani, who had been seen getting into it. Needless to say the engine was at the back. It was interesting to see Derrington and Abarth getting together!

The B.M.W. stand had the sleek white two-seater 507 out once more, but after a whole year it did not look so exciting and the mudguard clearance under the wings really looked insufficient,

suggesting that maybe the suspension had been specially clamped down to make it look low and sleek. In the same way, some manufacturers employ tall, thin salesmen to make their cars look small, and we found the Sunbeam Rapier rear suspension pressed down virtually solid, so that bouncing on the rear bumper did nothing at all. However, it made the car look low and sleek, and most Motor Show exhibits being phoney anyway it was well in keeping. Maserati had a neat and tidy stand with luxury touring versions of the Gran Turismo 2,000 A6G on either side of a new long-nosed 200S sports car, while right next door was Gordini displaying one of his eight-cylinder Grand Prix cars all smartened up for the Show. On a pedestal was a complete four-cylinder 1½-litre Gordini engine for those interested in Formula II.

Awe and amazement accompanied our viewing of the General Motors Firebird II turbine car fitted with all mod-cons. and made of titanium and plexiglass, though the old-fashioned windscreen wipers looked a bit out of place. We felt that it was time these futuristic "specials" were fitted with some sort of electronic water disperser in place of the inadequate rubber wiper. Being in an American frame of mind for a fleeting moment we flashed across the Cadillac, Ford and Chrysler stands, so that our flashing did not look out of place amongst the Yanks, and headed for Studebaker, where we found the Golden Hawk V8 fitted with a McCulloch vane-type supercharger blowing into the carburetter. While not being terribly impressed by all the technical gimmicks under the bonnet, especially as some of them prevented access to the plugs, we did like the neat and tidy instruments that could be read easily and would have done justice to a racing car.

Seeing a vast open space we set off to find out why, but on the way came up all-standing in front of an enormous packing case. After a slight pause this great wooden box disappeared into the ground and revealed a Simca-Vedette Regency in all its glory. Up came the packing-case again, hiding the car from view, and when it sank down again the Vedette had the bonnet open and the engine was raised up in the air. This sort of thing went on and on, showing all the reasons why we should buy a Vedette and we felt that though we did not want one, it being identical to last year, when we did not want one either, at least the stage show presentation was good. Arriving at the vast open space for which we had been heading, we found a Citroën DS19 in solitary confinement, everyone having seen it last year and a lot of people driving about France in them during the summer, so that Citroën enthusiasts were peering at the Cinderella to the goddess, the ID19, which is a sort of poor man's DS19, there being little way of telling the difference from the outside, so that the neighbours would never know. Renault were advertising the Dauphine on its successes in the Mille Miglia and the Tour de France, but carefully avoiding mention of the "hot-rod" mechanical aspect of the works cars, and Panhard were displaying the D.B. that won the Index of Performance at Le Mans, while a drophead Dyna-Panhard had a ghastly interior finish that looked rather like cold porridge.

Normally the Paris Salon is noticeable for the exotic, the bizarre and the plain stupid, which when they are all put together and considered as a Show are always highly entertaining. There is never any need to take a Motor Show seriously, for what you see you are seldom able to buy, so the thing to do is to enjoy the sideshows. However, this year the Salon was very dull and flat and the wonderful Motor Show Specials were conspicuous by their absence, which was a great pity, so that after having looked at all the exhibits of the serious-minded manufacturers of the world's automobiles there was little left to do except go home. As we walked down the Champs Elysees, watching Grand Prix races between 2 c.v. Citroëns, and big American saloons being carved up by 4 c.v. Renaults, we felt sad, for the Paris Salon had given us a feeling that the world's Motor Industry is reaching saturation point not only from production angles but also from design angles, and everyone seems to be running out of ideas.—D. S. J.

BRIGHT BADGES

High-quality badges, such as the Union Jack, for attaching to car bonnets, etc., merely by wetting with petrol, are offered at 1s. 6d. each inclusive of p.t., by Apol Industrial Developments Co., 19, Elizabeth Mews, London, N.W.3 (PR1 6620). The multi-colour process is claimed to be unique and completely weatherproof, and the badges can be heated to follow curved surfaces. Club emblems, etc., are available to special order.—W. B.

THE CARS AT EARLS COURT

A.C. Stand 141
A.C. have abandoned the 2-litre saloon to concentrate production on the sports open Ace and closed Aceca models, which have a Tojeiro-type tubular chassis with independent suspension front and back and transverse leaf-springs and can be had with either the 90-b.h.p. A.C. wet-liner, light-alloy six-cylinder engine evolved from a 1919 design, or a D-type B.M.W.-conceived Bristol engine giving 120 b.h.p. Overdrive is an optional extra on both models. The Aceca coupé has beautiful lines, reminiscent of a Continental production. The Ace Bristol has been increased in price by £48.
A.C. Cars, Ltd., Thames Ditton, Surrey.

ALFA-ROMEO Stand 127
Five cars can be seen. A 1,900 Super Sprint, a 1,900 Super saloon a Giulietta Spyder, a Giulietta Sprint coupé and a Giulietta Sprint veloce.
Thompson and Taylor, Ltd., Oyster Lane, Byfleet, Weybridge, Surrey.

ALLARD Stand 125
Allard is making a bid to remain in the sports-car market, having dropped the saloon, tourer and station-wagon models. The new car is virtually a re-vamped Palm Beach in which either a three-carburettor Ford Zephyr or 3½-litre Jaguar power unit can be installed. The specification of this Palm Beach Mk. II embraces new i.f.s. using torsion-bars and wishbones, Lockheed 12-in. hydraulic brakes, trailing-arm coil-spring rear suspension, Marles steering, tubular steel frame and alloy body. Disc or centre-lock wire wheels are optional, there are twin six-gallon petrol tanks, and the respective axle ratios are 3.77 (three speeds) and 3.54 (four speeds) to 1. These cars, like the 270-b.h.p. de Dion Cadillac V8-engined sports/racing J2R, are to special order only.
Allard Motor Co., Ltd., 24-28, Clapham High Street, London, S.W.4.

ALVIS Stand 137



SWISS STYLED.—The Alvis Graber saloon.

Alvis will soon have the handsome Graber saloon on the six-cylinder TC108/C in production, the Swiss-designed body being built in Loughborough. The straight-forward 3-litre engine gives 104 b.h.p. at 4,000 r.p.m. and pulls a top-gear ratio of 3.77 to 1.
Alvis, Ltd., Holyhead Road, Coventry.

ARMSTRONG-SIDDELEY Stand 143
The Armstrong-Siddeley four- and six-cylinder 234 and 236 models, available with a choice of three transmissions, remain unchanged from last year.
Armstrong-Siddeley Motors, Ltd., Parkside, Coventry.

ASTON MARTIN Stand 174
This long-established British make reverts to *Gran Turismo* form alone for 1957, the DB3S sports/racing car no longer being offered to the public. The 3-litre twin o.h.c. DB2/4 saloon represents the most advanced form of high-performance car. It is backed up by a beautiful new, export-only open Superleggera Spyder in light alloy, styled by Carrozzeria Touring of Milan.
Aston Martin, Ltd., Hanworth Park, Feltham, Middlesex.

AUSTIN Stand 157
Austin models remain largely unchanged but the Princess Mk. IV is a luxury Vanden Plas saloon and limousine with power-steering, hydramatic transmission giving two-pedal control, vacuum-servo

brakes and a two-carburettor, 150-b.h.p., 4-litre six-cylinder engine. A successor to the A30 is the 950-c.c. A35, and there is a lower more powerful A50. A new A95 saloon and Countryman have also been added.

The Austin Motor Co., Ltd., Longbridge, Birmingham.

AUSTIN-HEALEY Stand 118
The sports Austin-Healey is a centre of comment here. The old A90 four-cylinder engine is replaced by a six-cylinder 2.6-litre engine and the body enlarged to accommodate two occasional seats.
Donald Healey Motor Co., Ltd., The Cape, Warwick.

BENTLEY Stand 170
The Bentley Continental is seen in Mulliner and Park Ward forms, and 13 per cent. greater power is now developed because the silent six-cylinder engine has an 8-to-1 compression-ratio, twin 2-in. in place of 1½-in. carburettor, bigger inlet valves and better cooling of the exhaust valves. The S-series Bentley, which is shown in standard saloon form, is unchanged; power-steering and refrigeration are available on export cars. A road-test of this silent high-performance motor car appears in this issue of MOTOR SPORT.
Bentley Motors (1931), Ltd., 14/15, Conduit Street, London, W.1.

BERKELEY Stand 119a
This interesting 322-c.c. two-stroke sports car is exhibited by a special concession on the part of the S.M.M. & T. The car has received considerable attention since it was announced on September 12th this year.
Berkeley Coachwork, Ltd., Biggleswade, Beds.

B.M.W. Stand 123
A 502 right-hand-drive limousine and a 503 drophead cabriolet are being shown, together with a 300-c.c. Isetta.
A.F.N., Ltd., Falcon Works, London Road, Isleworth, Middlesex.

BORGWARD Stand 173
No change has been made since last year. Four models are on show, a station-wagon, TS saloon, coupé and "60" saloon.
Metcalfe and Mundy, Ltd., 280, Old Brompton Road, London, S.W.5.

BRISTOL Stand 147
The beautiful Bristol 405, with its hand-built body and 2-litre B.M.W.-conceived six-cylinder engine, is unchanged from the 1955 Show.
Bristol Cars, Ltd., Filton House, Bristol, Somerset.

BUICK Stand 129
The futuristic-looking Buick Centurion is being exhibited. The car incorporates many advanced ideas, including a closed-circuit television set.
Lendrum and Hartman, Ltd., Buick Works, Old Oak Lane, London, N.W.10.

CHEVROLET Stand 164
A Corvette, four-door sports sedan Belair and four-door sedan Belair can be seen.
General Motors, Ltd., 23, Buckingham Gate, London, S.W.1.

CHRYSLER Stand 159
On the Chrysler stand will be two Chrysler Plymouth Savoy Eight four-door saloons, a Windsor Eight four-door saloon, a New Yorker Eight four-door sedan. All are V8s and have automatic transmission.
Chrysler Motors, Ltd., Mortlake Road, Kew Gardens, Surrey.

CITROEN Stand 148
Two DS19 saloons and one 2 c.v. cabriolet are being shown.
Citroen Cars, Ltd., Trading Estate, Slough, Bucks.

DAIMLER Stand 168
Five models are being shown. A 2½-litre Century, a 3½-litre 104 saloon, a 3½-litre Ladies' Model, a 2½-litre coupé and the 4½-litre DK400 limousine, which is the standard production limousine. Automatic transmission is now being marketed as optional extra equipment.
Daimler Co., Ltd., Radford Works, Coventry.

DODGE

Stand 158

1956 and 1957 models will be on view. A Custom Royal, a Kingsway, a Custom Royal Lancer, all with V8 engines and automatic transmissions, will be on the stand.

Dodge Bros., Ltd., Chrysler Works, Mortlake Road, Kew Gardens, Surrey.

**FIAT**

Stand 139

These famous Italian cars are seen as the rear-engined 600 economy car, which is noted for its brisk performance, extreme economy and good handling properties, with all-round independent suspension and rear engine, the brilliant six-seater Multipla "baby-bus" version, the fast Fiat 1,100B and 1,100TV, 1,400B and 1,900B family saloons.

Fiat (England) Ltd., Water Road, Wembley, Middlesex

**FORD**

Stand 145



FRESH AIR FOR THE MIDDLE CLASSES.—The new Ford Zodiac convertible.

The great Ford Company shows its range of economy and family cars unchanged, the smaller models being old fashioned, with side valves, and all models having three-speed gearboxes, but the Popular is still the least-expensive saloon at Earls Court. The well-established Consul, Zephyr and Zodiac models are enhanced by the availability of Borg-Warner automatic transmission on the six-cylinder saloons. A Consul Farnham estate-car is also on show.

Ford Motor Co., Ltd., Victory House, 99/101, Regent Street, London, W.1.

**FRAZER-NASH**

Stand 128

The long-awaited Frazer-Nash chassis with V8 B.M.W. twin-carburettor engine is exhibited, the power unit mounted skilfully in the narrow, ladder-type tubular frame, so as to be fully accessible and easily removed, the cross-member aft of the gearbox being bolted to flanges to facilitate this. Transverse leaf-spring i.f.s. and torsion-bar de Dion rear suspension is used, with one-shot lubrication extended to the latter. Sump content is indicated by a plunger-operated warning light.

A.F.N., Ltd., Falcon Works, London Road, Isleworth, Middlesex.

**HILLMAN**

Stand 162

In the Hillman range the only changes are to the Husky, which is now available in a wider range of colours. The Hillman New Minx, with unitary body/chassis construction and "gay-look" colour scheme, is one of Britain's better family saloons.

Hillman Motor Co., Ltd., Ryton-on-Dunsmore, near Coventry.

**HUDSON**

Stand 146

On this stand is shown a Rambler Custom four-door saloon, a Rambler Custom Cross-Country station-wagon, a Hornet V8 four-door saloon, a Metropolitan 1,500 convertible and a Metropolitan hard-top. These are hush-hush new models, the Ramblers improved, the Hornet having a 90 deg. V8 255-b.h.p. engine in place of the former "six." Only American Service personnel and members of the Diplomatic Corps with dollars may buy them here.

Hudson Motors, Ltd., Great West Road, London, S.W.4.

**HUMBER**

Stand 149

New models are the De Luxe Hawk and the automatic-transmission Super Snipe. The remaining models will be continued with or without overdrive.

Humber, Ltd., Ryton-on-Dunsmore, near Coventry.

**JAGUAR**

Stand 152

The present Jaguar range continues unchanged but with the addition of a super luxury model of the same basic dimensions as the Mk. VII. The new model will be known as the Mk. VIII. These models, in conjunction with the XK140, are offered with automatic transmission.

Jaguar Cars, Ltd., Browns Lane, Coventry.



NO WONDER SHE IS SMILING.—Her Fiat is easy to park, has i.f.s. and a rear-placed 633-c.c. engine giving over 40 m.p.g. on the cheapest petrol (see MOTOR SPORT, January, 1956). This Fiat 600, of which 450 a day, plus 100 Multiplas, are made at Turin, is Italy's leading economy car. France has the Renault 750 and Dauphine, Germany the Volkswagen, Britain the small Fords. Seventy-five per cent. of these have o.h.v. rear engines and all-round independent suspension, Ford preferring a side-valve front-engine and cart-type rear springing. Incidentally, the approximate average daily output of under-1,200-c.c. cars from these factories is: Fiat 600, Renault 1,000, Volkswagen 1,250, Ford 600.

JENSEN

Stand 151

The Jensen Interceptor and beautiful Gran Turismo 541 saloon of glass-fibre construction, body and Austin-powered chassis both built by Jensen, will attract connoisseurs amongst Show visitors, especially as the de luxe 541 has Dunlop disc brakes on all wheels. A saloon is shown with one door removed to emphasise the interior safety padding, etc.

Jensen Motors, Ltd., Carters Green, West Bromwich, Staffs.

**LAGONDA**

Stand 166

This high-grade British saloon, with twin-o.h.c. 3-litre engine and independent rear suspension, is continued virtually unchanged. A road-test report appears elsewhere in this issue.

Lagonda, Ltd., c/o David Brown Companies, Meltham, Yorks.

**LANCIA**

Stand 133

These much-sought-after Italian cars are shown in three forms. There will be an Appia Series II saloon, its hemispherical head improved to provide 43½ b.h.p. (instead of 38) from the 1,090-c.c. engine (a sports engine of over 52 b.h.p. is supplied to special order), the back-axle ratio raised, the chassis lowered and the wheelbase increased to 8 ft. 2½ in., and the saloon body restyled within and without. A new platform chassis also provides for specialist two- and four-seater coachwork. The very safe, very rapid V6 Aurelia GT 2500 is shown in coupé form with larger rear window and many mechanical improvements. Completely new is the Flaminia, differing from the Aurelia in wishbone i.f.s., Hindley's screw-and-roller steering, and chassis adaptable to special bodywork. The Flaminia has a wheelbase of 9 ft. 5 in. and gives 98 b.h.p. at 4,800 r.p.m. compared with 8 ft. 8½ in. and 110 b.h.p. at 5,000 r.p.m. of the GT 2500.

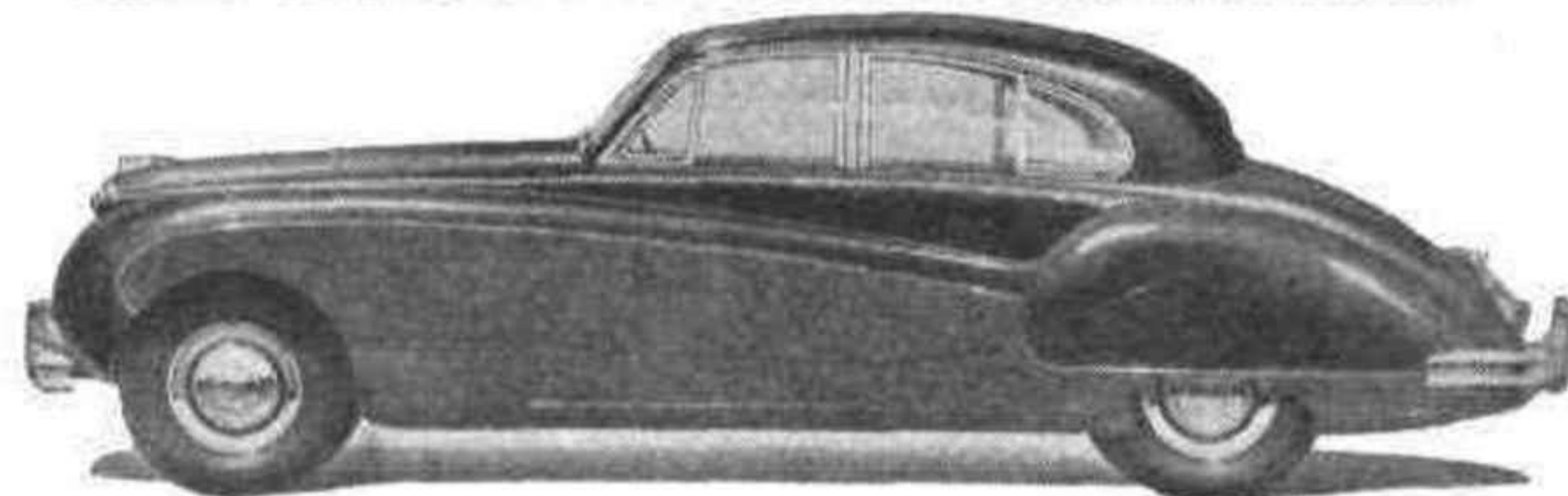
Lancia (England), Ltd., 372, Ealing Road, Alperton, Middlesex.

**LINCOLN**

Stand 135

The 1957 Lincoln Premiere hard-top saloon will be on view, together with the Mercury Montclair hard-top phaeton, the Canadian Ford V8 Fairlane 500 saloon and the Ford V8 Thunderbird sports car. The Lincoln Premiere has automatic turbo-drive transmission, automatic transmission is available on the other Ford and Mercury models at extra cost.

Lincoln Cars, Ltd., Great West Road, Brentford, Middlesex.



LUXURY-PLUS JAGUAR.—The new Mk. VIII.



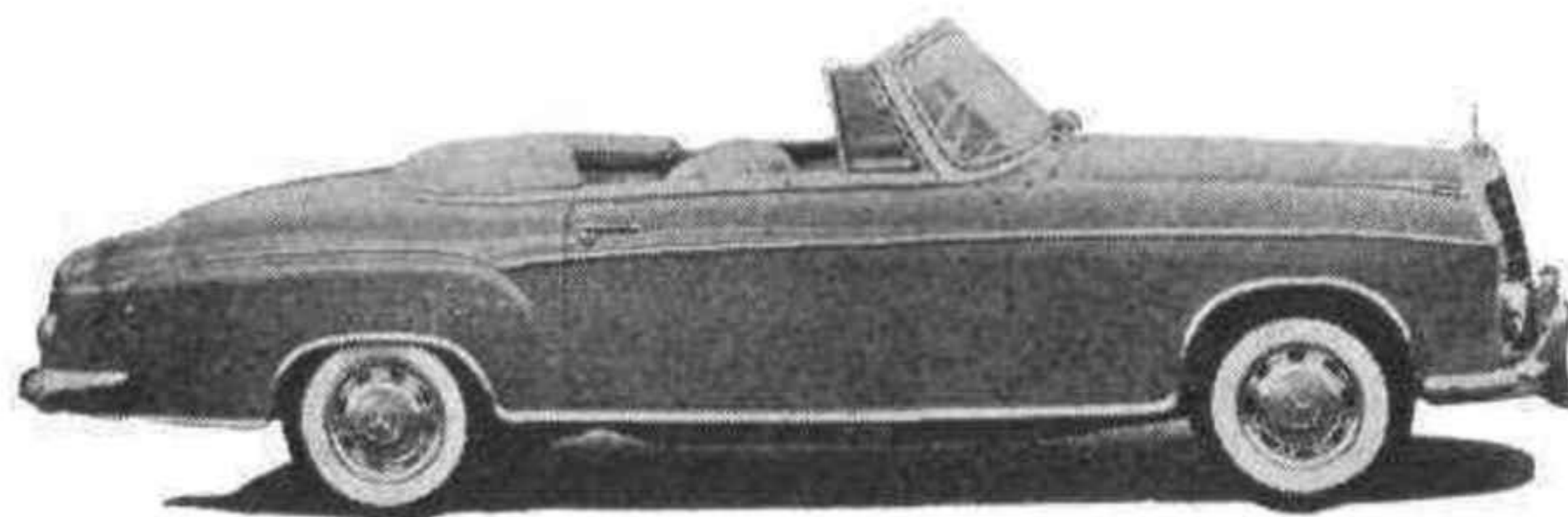
WITH 300 HORSEPOWER, turbo-drive automatic transmission and power brakes, seat, steering and windows—the Lincoln Premiere Fordor sedan.

LOTUS Stand 121

A Lotus Eleven Le Mans, a chassis of the same type, and the new Formula II Lotus will be shown.

Lotus Engineering Co., Ltd., 7, Tottenham Lane, Hornsey, London, N.8.

MERCEDES-BENZ Stand 123



FRESH-AIR MERCEDES-BENZ.—The 220S convertible.

No change has been made in the existing range of models. A 190 saloon, 190SL coupé, 220 saloon and 220 hard-top will be on view. The 300SL will not be shown.

Mercedes-Benz (Great Britain), Ltd., 58, Camberwell New Road, London, S.E.5.

M.G. Stand 154

The M.G. Magnette is now offered in two versions, both with increased power. A duotone saloon is offered with a wrap-around rear window. Manumatic clutch is available as an optional extra. The M.G. MGA is now also available in two basic models, the open sports with folding hood and a new coupé which has a coachbuilt hard-top welded on to the body.

M.G. Car Co., Ltd., Cowley, Oxford.

MORGAN Stand 126

The only surprise here is a price increase, the Ford Ten-engined Morgan 4/4 Series II now costing over £75 more than formerly. The Standard Vanguard TR3-engined Plus Four also remains unchanged.

Morgan Motor Co., Ltd., Pickersleigh Road, Malvern Link, Worcestershire.

MORRIS Stand 160

The Morris range continues basically unchanged, detailed modifications being made to Morris Oxford, Isis and the larger engine is to be fitted to the Minor. This new engine is of 950 c.c. capacity and develops 37 h.p. on an 8.3 to 1 compression-ratio. Borg-Warner automatic transmissions and overdrive can now be fitted to the Isis and manumatic clutch operation to the Oxford.

Morris Motors, Ltd., Cowley, Oxford.

NASH Stand 131

A Nash Ambassador sedan, a Nash Rambler station-wagon, a Nash Rambler sedan and a Metropolitan convertible are being exhibited.

Nash Concessionaires, Ltd., Nash Street, Albany Street, London, N.W.1.

OLDSMOBILE Stand 130

Well-known 1956 models are on view. The 98 Starfire convertible, the 98 Holiday sedan, the Super 88 Holiday sedan and the two-door 88 sedan.

General Motors, Ltd., 23, Buckingham Gate, London, S.W.1.

PACKARD Stand 134

A Packard Patrician, a 400 two-door hard-top saloon and a Clipper Super touring sedan are being exhibited.

Leonard Williams and Co., Ltd., Great West Road, Brentford, Middlesex.

PANHARD Stand 150

The 1957 Dyna Panhard saloons continue unchanged in body styling but incorporate considerable changes to mechanical components, namely strengthened crankshaft, improved camshaft and tappets, an improved exhaust system and entirely new Isodyne suspension. Two de luxe models only will be on the stand and are worthy of inspection by lovers of the unorthodox motor car.

Panhard et Levassor, 19, Avenue d'Ivry, Paris, 13, France.

PEUGEOT Stand 138

Four cars are being shown. There will be two 203 models, a 403 station-wagon and a 403 saloon.

Tom Knowles, 19, Brick Street, London, W.1.

PONTIAC Stand 132

One Catalina V8 four-door saloon and one convertible V8 will be shown, together with a Canadian station-wagon and a right-hand-drive model. Mr. Kaye Don of racing fame is Managing Director of the Ascot works and will be on the stand.

U.S. Concessionaires, Ltd., 5, Jubilee Place, London, S.W.3.

PORSCHE Stand 122

On this stand can be seen a 1,600 drophead cabriolet, a 1,600 Super fixed-head coupé and a 1,500 Carrera fixed-head coupé. A competition model is being exhibited.

A.F.N., Ltd., Falcon Works, London Road, Isleworth, Middlesex.

RENAULT Stand 156

These popular French cars are shown in 750 saloon de luxe, Fregate with Etandard engine, Domaine estate-wagon and Dauphine forms. That splendid 2.1-litre four-cylinder Renault Fregate now has a new four-speed full-synchromesh, direct-top gearbox with slightly higher ratios (top gear 3.89 instead of 4.08 to 1) and conventional steering-column gear-lever positions which render the gear-change much easier than before. The name "Amiral" for this model is dropped. The economical little Renault 750 and the quick, stylish 845-c.c. 30-b.h.p. Renault Dauphine which handles without excessive oversteer, although both have rear engines and all-round independent suspension, have many friends and should make many new ones.

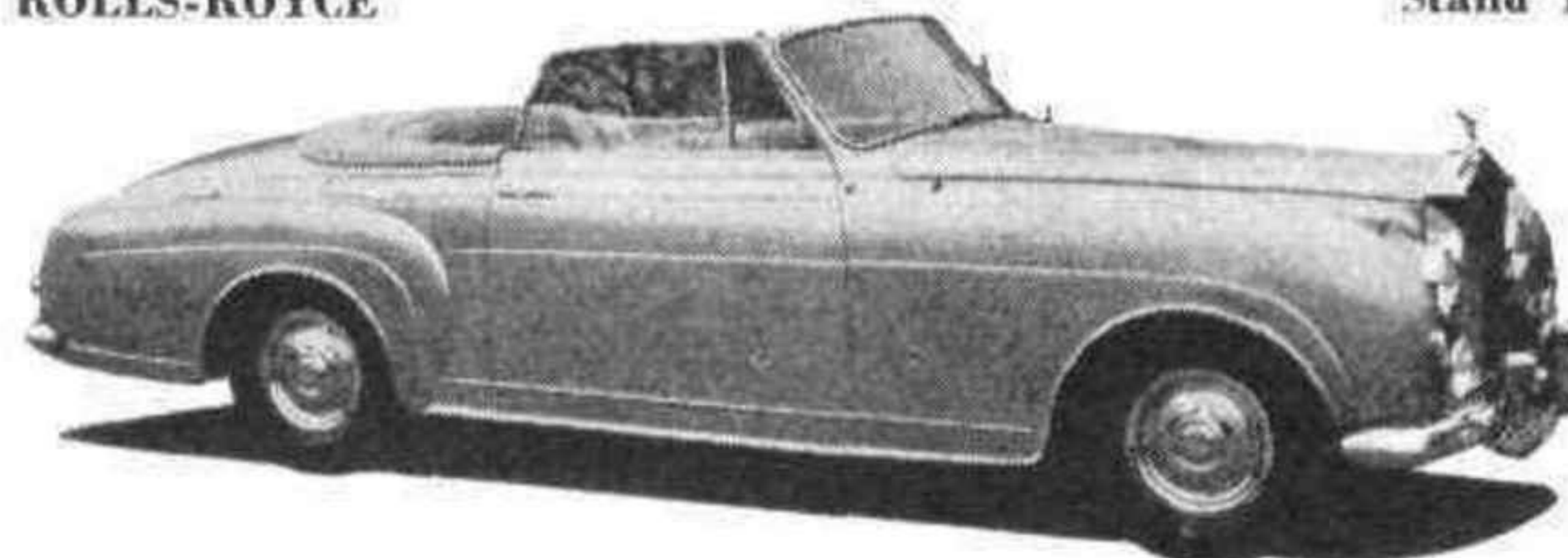
Renault Ltd., Western Avenue, Acton, London, W.3.

RILEY Stand 167

The Pathfinder is being continued unchanged but with a new range of colour styles, as are all the B.M.C. cars for next year. Borg-Warner overdrive can be fitted to this model as an extra.

Riley Motors, Ltd., Cowley, Oxford.

ROLLS-ROYCE Stand 169



OPEN AIR FOR THE UPPER CLASSES.—The Mulliner drophead coupe Rolls-Royce Silver Cloud.

The exhibits of this famous company consist of Park Ward touring saloon, Hooper seven-passenger limousine and Mulliner touring limousine on the Silver Wraith chassis and a Silver Cloud saloon. The Silver Wraith now has twin carburettors and power-assisted steering. The Park Ward left-hand-drive shell-grey saloon is equipped with a refrigeration unit with which it is claimed one could drive from the North Cape to the Equator with the windows shut in complete comfort. The Hooper limousine has a portable television set, for V.H.F. sound reception of the three home stations and a 9-in. screen, in the rear compartment, and a car will be available for demonstrating this on the road. The Silver Cloud is unchanged, but power-steering and refrigeration are available on export models.

Rolls-Royce, Ltd., 14/15, Conduit Street, London, W.1.

ROVER

Stand 153

The refined range of Rover cars is unchanged apart from some exterior cleaning up. A new high-performance 105S model is shown, with twin-carburettor, 8.5-to-1 compression-ratio engine, lifting maximum speed to over 100 m.p.h. A 105R version is available with Rover-designed and manufactured automatic transmission. A left-hand-drive "90" and sage-green "60" will be shown. *Do not miss the T3 gas-turbine car on this stand.*

The Rover Co., Ltd., Meteor Works, Solihull, Birmingham.

**SIMCA**

Stand 124

Examples from the very comprehensive range of Simca cars will be the Aronde Elysee, the Aronde Grand Large, and the Chateleine station-wagon.

Fiat (England), Ltd., Water Road, Wembley, Middlesex.

**SIMCA VEDETTE**

Stand 119

The V8-engined Versailles, Regence and Marly station-wagon can be seen.

Fiat (England), Ltd., Water Road, Wembley, Middlesex.

**SINGER**

Stand 136

An entirely new model, the Gazelle, is now being made available. This is a high-performance 1½-litre car using the single-o.h.c. Singer engine giving 52 b.h.p. A high standard of interior finish is being offered and the car is available as a saloon or a coupé.

Singer Motors, Ltd., Coventry Road Works, Birmingham 10.

**SKODA**

Stand 161

This year four models are shown. A 1,201 station-wagon, a 1,201 saloon, a 440 saloon and a 440 polished chassis.

L. C. Rawlence and Co., Ltd., Queens Chambers, Queens Road, East Grinstead, Sussex.

**STANDARD**

Stand 142

The latest additions to the Standard range of cars are the De Luxe Vanguard III saloons, the Sportsman and the Estate Car. The new Phase II Standard Ten will be on show and now incorporates the two-pedal "Standrive" control available as an extra. The engine compression-ratio has also been raised, giving an increase of 2 b.h.p.

Standard Motor Co., Ltd., Canley Works, Coventry.

**STUDEBAKER**

Stand 140

J. A. Joyce, one-time A.C. racing driver, looks after these exhibits, which will comprise Cambridge-grey Studebaker six-cylinder Champion saloon, a pearl-white Studebaker eight-cylinder Commander saloon and a tiara-gold with arctic-white accent Studebaker eight-cylinder two-door supercharged Golden Hawk saloon with power steering.

Studebaker Distributors, Ltd., 385-7, Euston Road, London, N.W.1.

**SUNBEAM**

Stand 144

The 1.4-litre Sunbeam Rapier will be shown with a new R67 twin-carburettor engine claimed to develop 67½ b.h.p. The carburettors are Zeniths, on new inlet and exhaust manifolds, and special heat-resisting exhaust valves are used. The well-trying, rugged 2½-litre 95-m.p.h. Sunbeam Mk. III saloon has been reduced in price by £105—a refreshing trend at a time when credit is being squeezed.

Sunbeam-Talbot Ltd., Ryton-on-Dunsmore, Coventry.

**TRIUMPH**

Stand 165

Stand 165 is a meeting place of enthusiasts intent on admiring the Triumph TR3, than which no sports car offers better value for money. It now has Ferodo-lined 11-in. Girling disc brakes at the front, these using easily-replaceable single pads and taking 60 per cent. of the braking power. At the back normal 10-in. brakes are used. This innovation increases the already remarkable value-for-money of the TR3 and at the unchanged price of £1,021 7s., inclusive of p.t., it is one of the world's best-selling sports cars. The valve porting is as used at Le Mans in 1955 and a Vanguard III back axle, with ratios of 4.1 or 3.7 to 1, is employed.

Triumph Motor Co. (1945), Ltd., Canley Road, Coventry.

**VAUXHALL**

Stand 163

The General Motors-owned Vauxhall Cresta, Velox and Wyvern saloons will be found to have had a face-lift. Interior improvements have also been incorporated in the 1957 models, two-speed electric wipers replace the mechanical type, a Zenith 34VN carburettor is now used, the compression-ratios of low and high-compression engines have been raised slightly, and the instruments are somewhat modified.

Vauxhall Motors, Ltd., Luton, Bedfordshire.



CLEANER EXTERNAL LINES characterise the 1957 Rovers.

VOLKSWAGEN

Stand 120

The famous air-cooled, rear-engined German best-seller, noted for its durability, excellent finish, pleasant gear-change and indifference to high or low climatic temperatures, is continued unchanged, in saloon and convertible forms. In addition, the striking new Karmann-Ghia coupé is shown in London for the first time. This is one of the most beautiful cars at Earls Court, its body, a 2/4-seater two-door coupé, having been designed by the Italian coachbuilding firm of Ghia and built by Karmann of Osnabruck. The normal VW components, including all-round torsion-bar independent suspension, are used and this model, coming, as it were, halfway between a normal VW and a Porsche in handling and performance, is sure to be in great demand both here and in America. The improved body shape gives the Karmann-Ghia Volkswagen a maximum and cruising speed of well over 70 m.p.h. with little increase in petrol consumption. Upholstery is in real leather and a range of six colours is available. Right-hand-drive versions should be ready by the spring. The price is a modest £1,216 7s. inclusive of p.t. and import duty. The inimitable Microbus, which uses the same air-cooled 1,192-c.c. flat-four engine and carries seven in air-conditioned comfort at 50 m.p.h. and 30 m.p.g., is also exhibited. It costs £1,351 7s. all-in.

VW Motors, Ltd., Byron House, 7-9, St. James' Street, London, S.W.1.

**VOLVO**

Stand 171

Three cars can be seen. The TV 444, the sports convertible and the latest model saloon, the Amazon.

Volvo, Aktiebolaget, Gothenburg, Sweden.

**WOLSELEY**

Stand 155

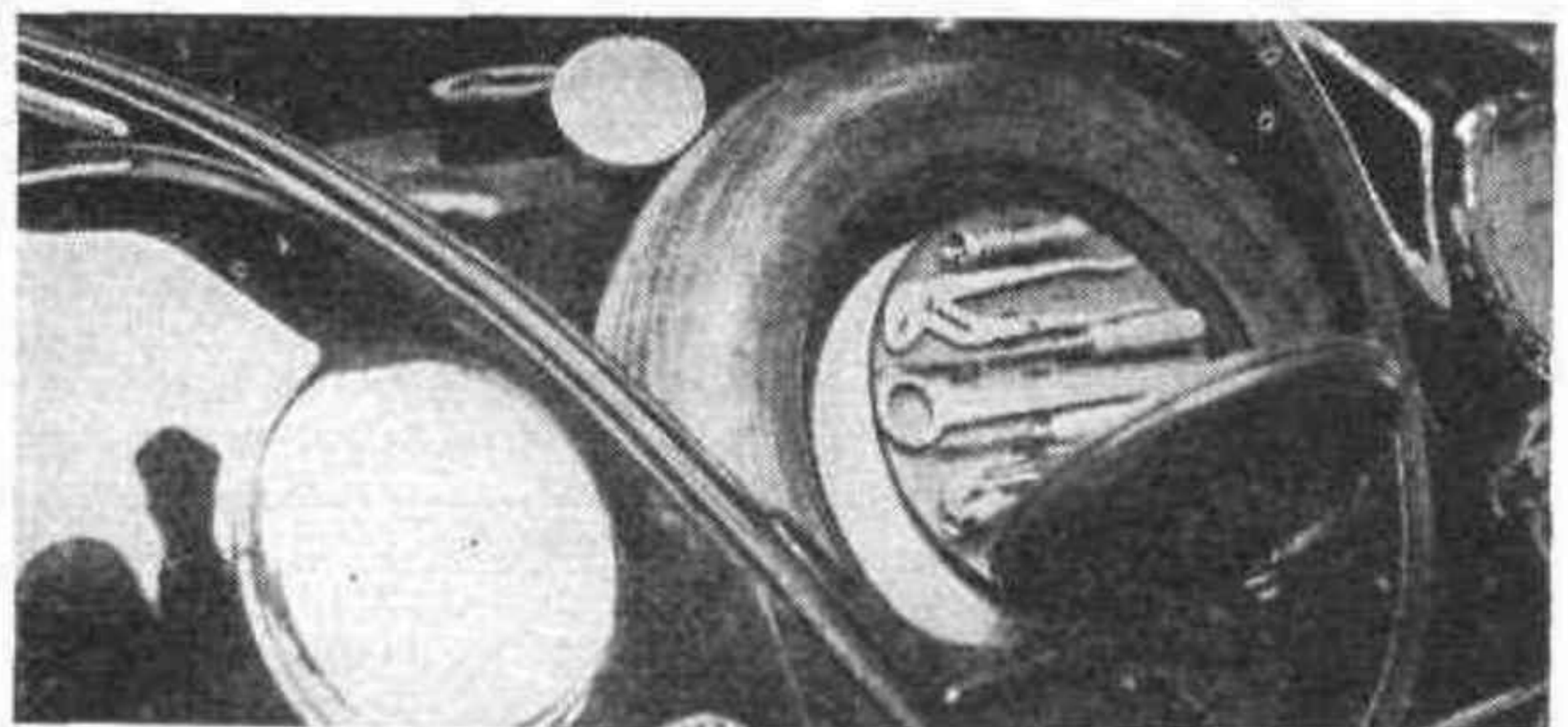
The recently introduced 15/50 now has increased compression giving up to 10 per cent. extra power, manumatic clutch is available on this model. The 6/90 likewise has been increased in power by raising the compression-ratio from 7.3 to 8.3, giving 97 b.h.p.

Wolseley Motors, Ltd., Cowley, Oxford.

**GOGGOMOBIL**

Stand 172

As we close for Press we learn that the T300 rear-engined 293-c.c. two-stroke Goggomobil, smallest car at the Show, is exhibited on Stand 172.



CONVENIENT.—A petrol tank with a filler diameter exceeding 3 in., protected from the rain by the bonnet when refuelling is in progress; when the car doors are locked the petrol and tools are automatically rendered thief-proof—see reference on page 683. The Volkswagen shares this convenient arrangement with the Porsche, although on the latest VW's the filler orifice is slightly smaller.

SOME ACCESSORIES AT EARLS COURT

Automotive Products, Ltd. Improved suspension joints and automatic transmissions are on view and oil and fuel filters. Stand 369.

Avon India Rubber Co., Ltd. The Avon Winter Safety tyre is on view together with the H.M. Airseal, which has no tube. Stand 205.

Bosch, Ltd. New exhibits are the P 11S sparking plugs designed for motor-scooter engines and the M 11S range which has been introduced for the Mopeds. These plugs prevent fouling and pre-ignition, so common with two-stroke engines. Stand 447.

Conway Car Accessories Ltd. Exhibits will include Conway car-seat covers in Kontex, the latest contemporary design, as well as radiator blinds, windscreen mops, wire link mats of the latest type, car-seat covers and dust sheets, luggage rack covers, etc. Stand 98.

Cords Piston Ring Co., Ltd. A wide variety of piston rings, oil rings, and cylinder ridge reamers for service stations will be displayed. Stand 295.

Creators Ltd. Manufacturers of plastic wheel discs for Ford, Austin and Morris cars, also tow-ropes, hoses and various other useful plastic accessories. Stand 313.

Delaney-Gallay, Ltd. Well known for many years as producers of car heaters, this firm is showing a wide range of their products in this field, together with the new B15 4-kW. heater and Avialex combustion heaters. An additional product is the RKN safety belt for passengers in cars. Stand 216.

Delco-Remy & Hyatt. Two additions to the AC-Delco products are available; they are the AC Vivid Arc speedometer and the dual-speed self-parking electric screen-wiper. Other instruments available are the temperature gauge, oil-filled ignition coil, oil filters and sparking plugs. Stand 429.

Desmo, Ltd. Three new products are available from this firm. Namely a 3-D St. Christopher badge, a combined width indicator and headlamp beam shield, and a portable folding chair. The chair is of interest in that it is a sensible height from the ground, in contrast with most picnic chairs, which are too low to afford real comfort. These chairs will retail at 52s. Smaller chairs, picnic tables and many other accessories are on view. Stand 261.

Dunlop Rubber Co., Ltd. An improved Dunlop Fort tyre is being exhibited, and is available with or without the tube. Other tyre equipment can also be seen, together with the popular Road Speed and Weathermaster tyres. Stands 213 and 485. The new Dunlop disc brakes can be seen on a separate stand—Stand 430.

Edison Swan Electric Co., Ltd. A display of batteries and battery chargers can be seen. Stand 301.

Eversure Accessories, Ltd. This stand will interest prospective purchasers of the petrol "Fillacan," roof racks, mirrors, spotlamps, ashtrays, etc. An entirely new product is the "Antican" mist-free panel, a non-electric device in the shape of a small oval window for preventing rear windows misting up. Stand 436.

Douglas Holt, Ltd. Featured at this stand will be the new glass-fibre repair kits, in conjunction with the many other products of this versatile company. Stand 363.

Imperial Chemical Industries, Ltd. Metallised fabrics under the trade name of "Splendex," suitable for kicking panels and other hard-wearing surfaces can be seen. The leathercloth division of this company also exhibits Vynide seating material and other trimming products. Stand 259.

Karobes, Ltd. Amongst the well-known range of accessories produced for motorists by Karobes, Ltd., a new adjustable hood and backrest is on view—this should be particularly welcomed by those who find long-distance driving fatiguing. Stand 183.

Key-Leather Co., Ltd. Makers of defroster and demister strips for curved windcreens. Known as "hot rods," these units will retail for 39s. 6d. each and measure 15½ in. in length by ¾ in. by ¼ in. A black-heat element is comprised in these, giving off a heat of 180 deg. C., the consumption being 35 watts. Available in 6, 12 and 24-volt types. Also on display will be the new K-L 777 underseat heater for public transport vehicles. Stand 405.

K.L.G. Sparking Plugs, Ltd. Smiths Motor Accessories' K.L.G. plugs are now using silver and platinum for maximum efficiency. Plugs with these metals incorporated in them are being exhibited. Stand 378.

Laycock Engineering Co., Ltd. Available on very many British cars, this Laycock-de-Normanville overdrive equipment may now be obtained on the Standard Vanguard Sportsman and as optional fittings on the Rover 60 and 75 models. Stand 267.

Laystall Engineering Co., Ltd. On display will be seen "Cromard" hard-chromed steel cylinder liners, together with Laystall-machined crankshafts. Stand 232.

Lockheed Hydraulic Brake Co., Ltd. Two new disc brakes are displayed, also two new vacuum servo units and improved leading and trailing-shoe type hydraulic brakes. Stand 373.

Joseph Lucas Ltd. A full range of "King of the Road" batteries will be displayed, also Lucas servicing facilities and testing sets. Lucas electrical equipment needs no introduction to motorists. On display can be seen a fine array of lamps, horns, wipers and many other desirable accessories. The most recent product is the electrically-operated screen-washer; this product should give lasting service. Stands 252, 253, 316 and 317.

Marchal Distributors Ltd. Marchal are showing their range of driving lamps, replacement lamps and "Fulgor" horns, including the "Musical," the horn that plays a tune. Stand 330.

Michelin Tyre Co., Ltd. X and S.D.S. tyres, plain and tubeless, and "Airstop" tubes can be inspected. Stand 210.

C. J. Neuman, Ltd. On this stand can be seen the "Nubrex" side-lever cartridge grease gun retailing at 59s. 6d., refills being 2s. 6d. "Nubrex" grease nipples will also be shown. Stand 315.

Notek Electric Co., Ltd. The standard range of Notek driving lamps will be on view, together with the "Bubble" lamp and "Safelite" stop-lamp. Stand 280.

Oldham & Son, Ltd. Batteries will be on view again, showing the latest developments in batteries and battery chargers. Stand 349.

Regency Covers, Ltd. The entire range of Regency seat covers and rugs can be viewed. New washable car mats are now available to fit the foot wells of any make of car. Stand 178.

Servais Silencers, Ltd. High-efficiency manifolds are now being made available for the new Ford Zephyrs, Zodiacs and Consuls, the Renault 750 and the Fiat 600. The standard range of equipment continues. Stand 400.

Smiths Motor Accessories, Ltd. Makers of instruments, heaters and jacking systems, batteries and anti-freeze solutions, visitors can see many of these interesting products. The "Selectroshift" magnetic clutch and Smiths' "Autoselectric" transmission can also be seen on this stand. Stand 307.

Trico-Folberth, Ltd. A complete range of motor-car equipment and working displays to interest every motorist. New merchandising sales aids for this equipment will be of help to every trade buyer. Stand 305.

Tudor Accessories, Ltd. A recent introduction to the extensive range of Tudor accessories is the "Easifill" sump heater. This is a welcome device for winter motoring and anything which simplifies the task of refilling paraffin heaters in winter is worth some little extra cost. The "Easifill" has an easily detachable top gauze for filling and sells for 27s. 6d. Stand 394.

Tyresoles Ltd. will be exhibiting and demonstrating the new equipment for treating worn but sound tyre casings. Stand 488.

Vandervell Products Ltd. A selection of engine bearings, bushes and thrust washers are on view. Stand 269.

Weathershields, Ltd. New lines introduced are the interior sun visor and heel-rest for lady drivers. The extensive range of car-comfort interior fittings can be seen in conjunction with the excellent sliding-roof conversions available for most fixed-head modern cars. Stand 225.

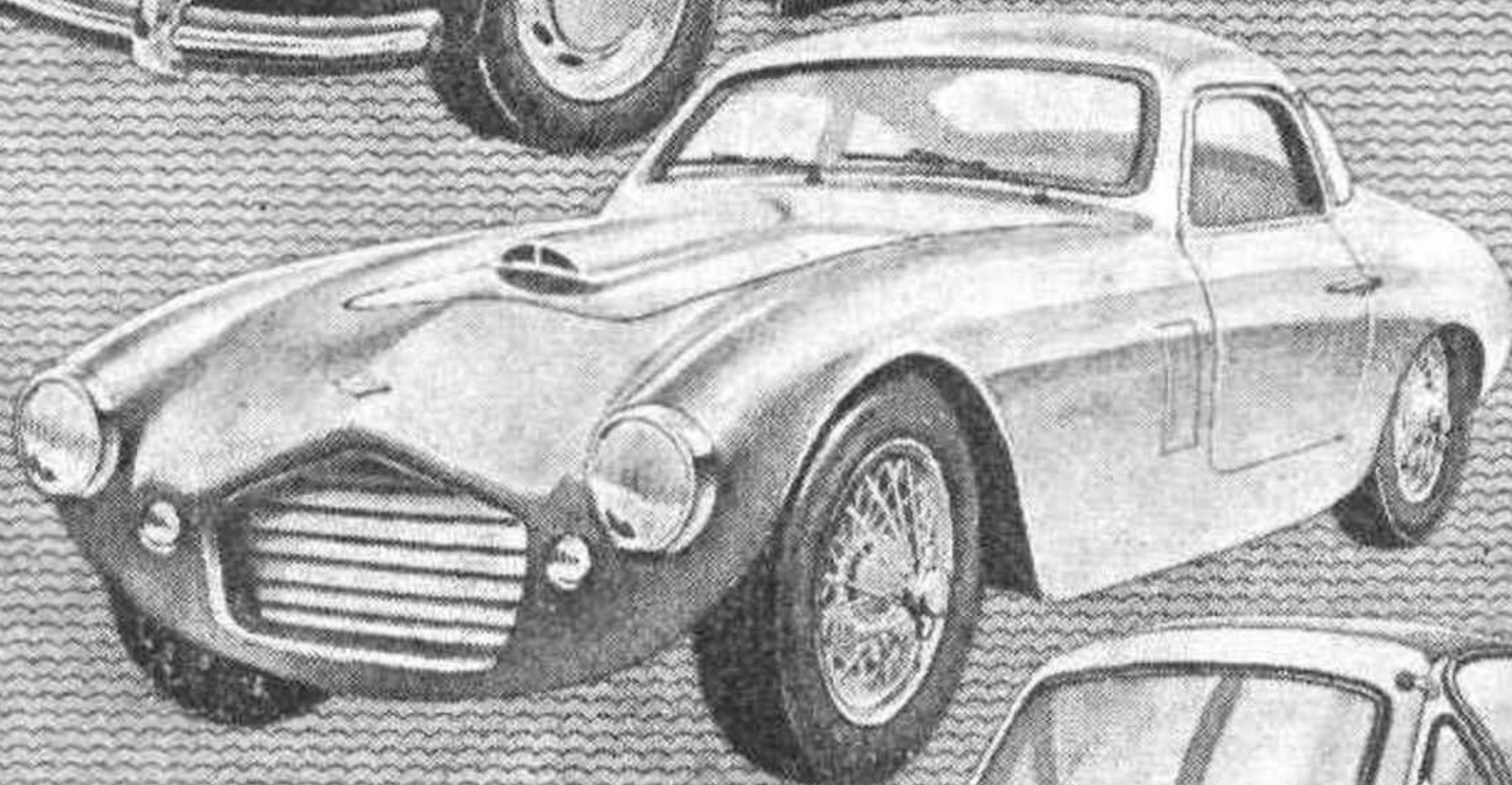
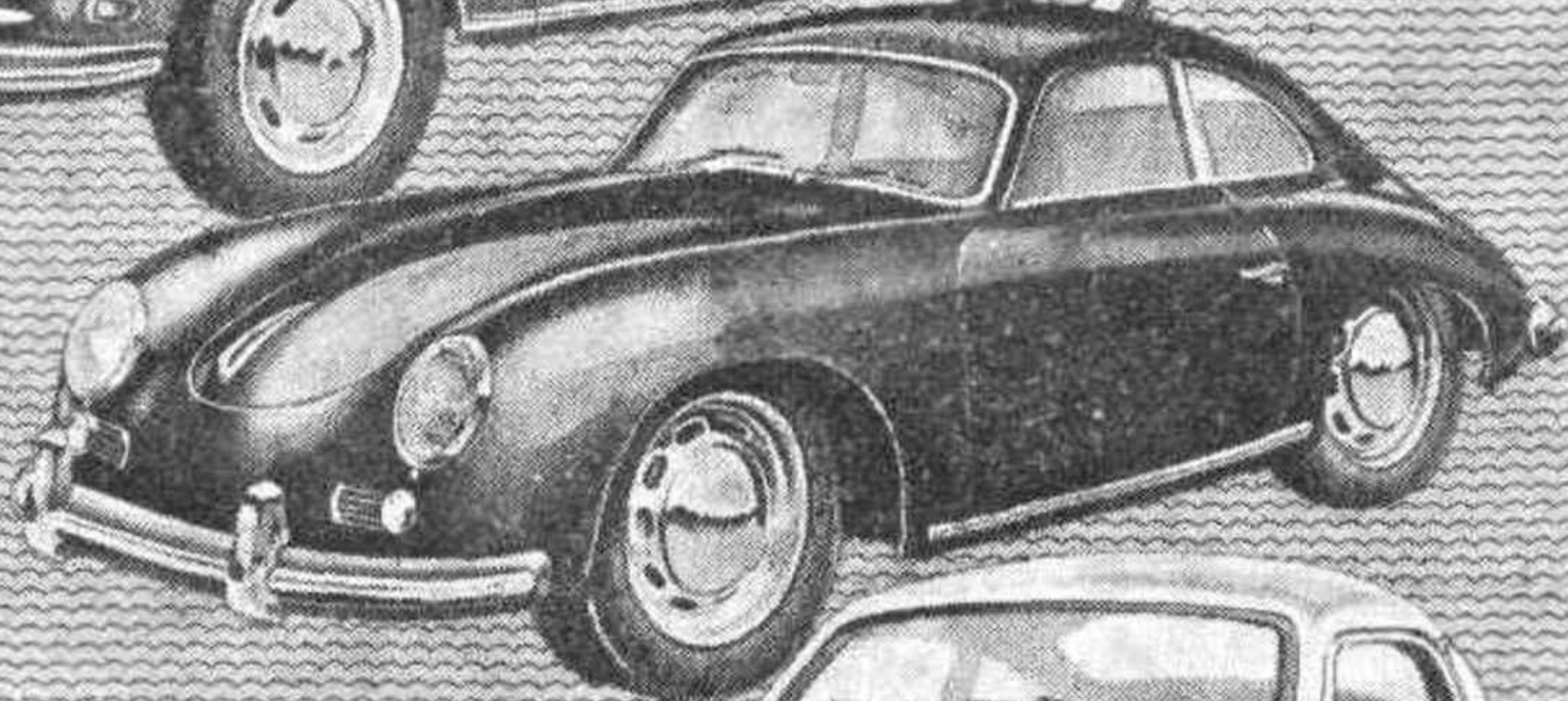
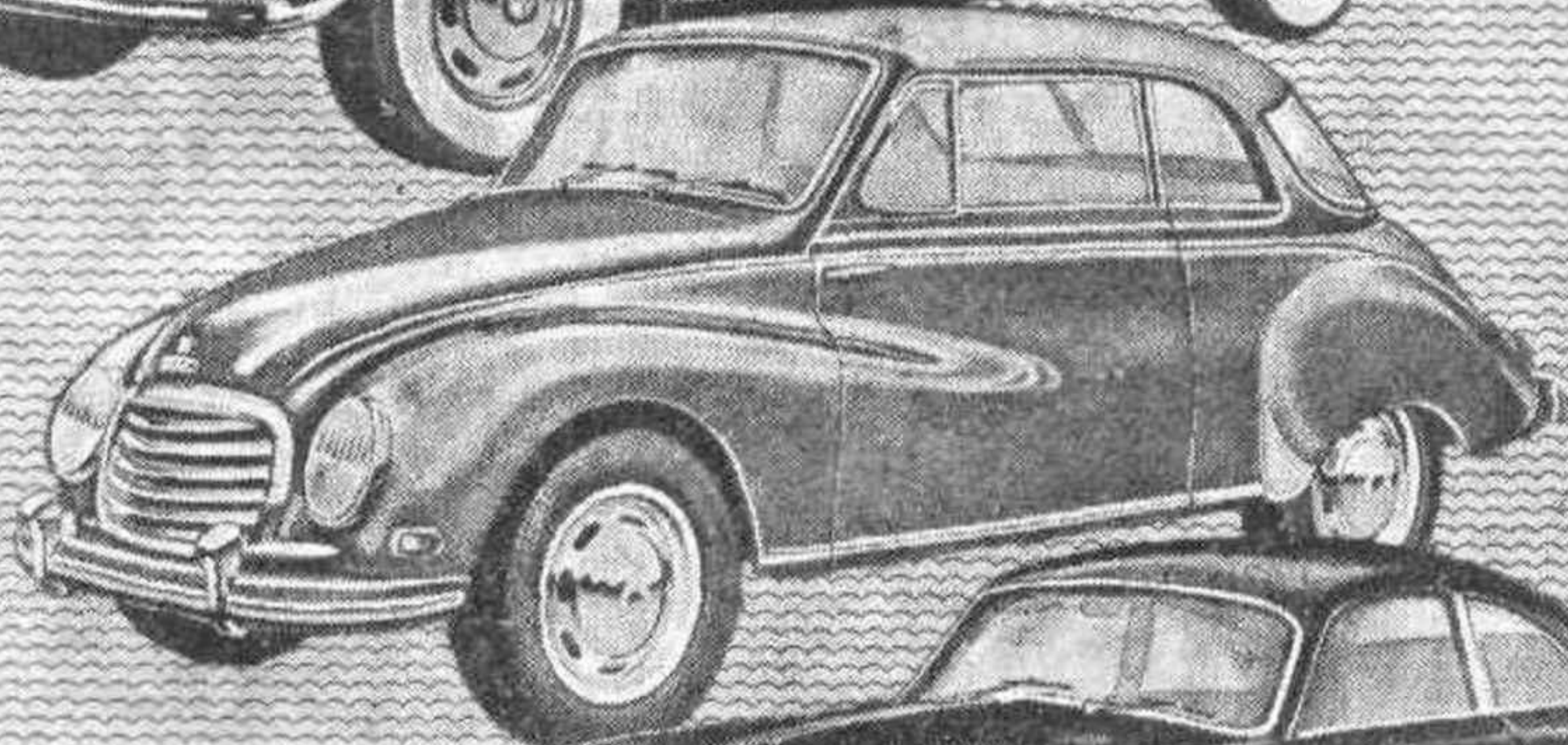
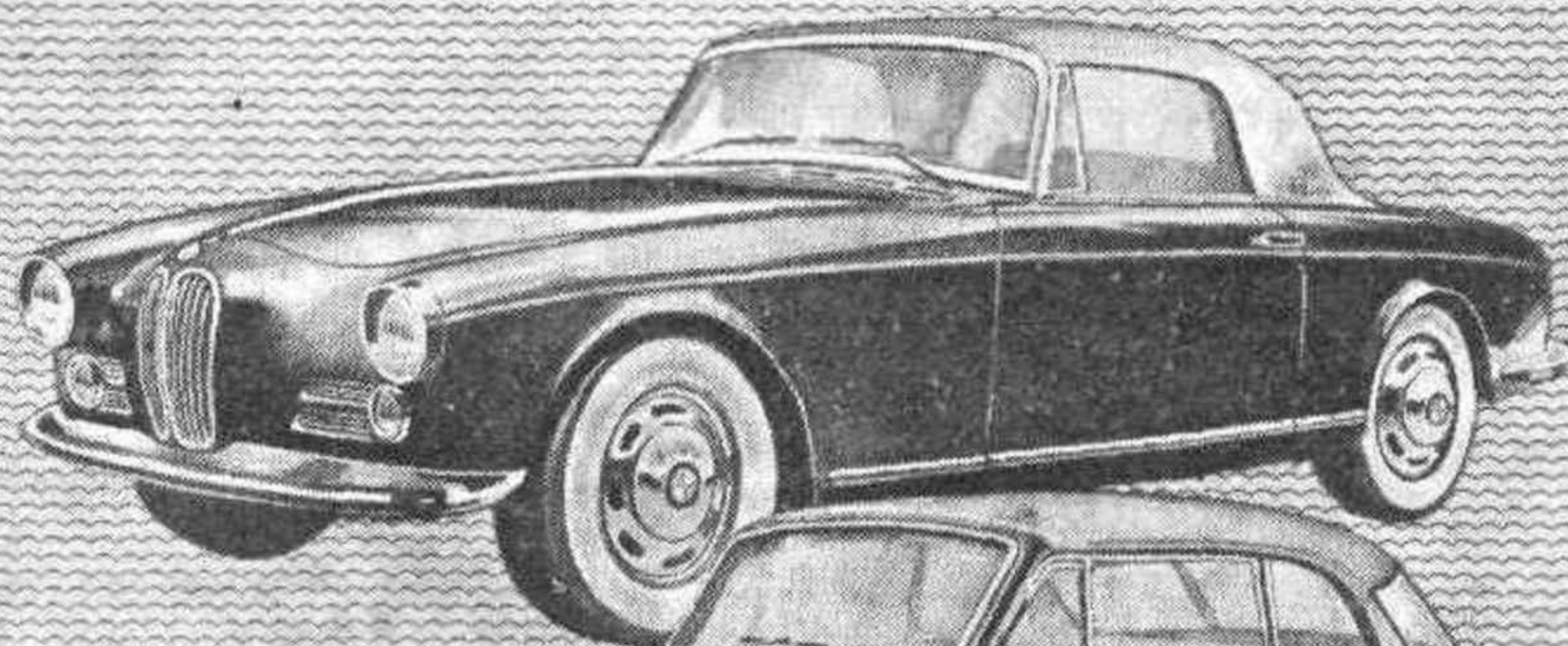
Wingard, Ltd. The following new products will be shown: the Sahara heater, a new sump heater, flashing indicators and a spring-loaded mirror. Stand 389.

Wico-Pacy Sales Corp., Ltd. Sparking plugs, magnetos, filters, rear lamps, flexible piping, and two new Continental horns are exhibited. Sold in matching sets, these horns retail at 75s., 6 or 12-volt. Stand 323.

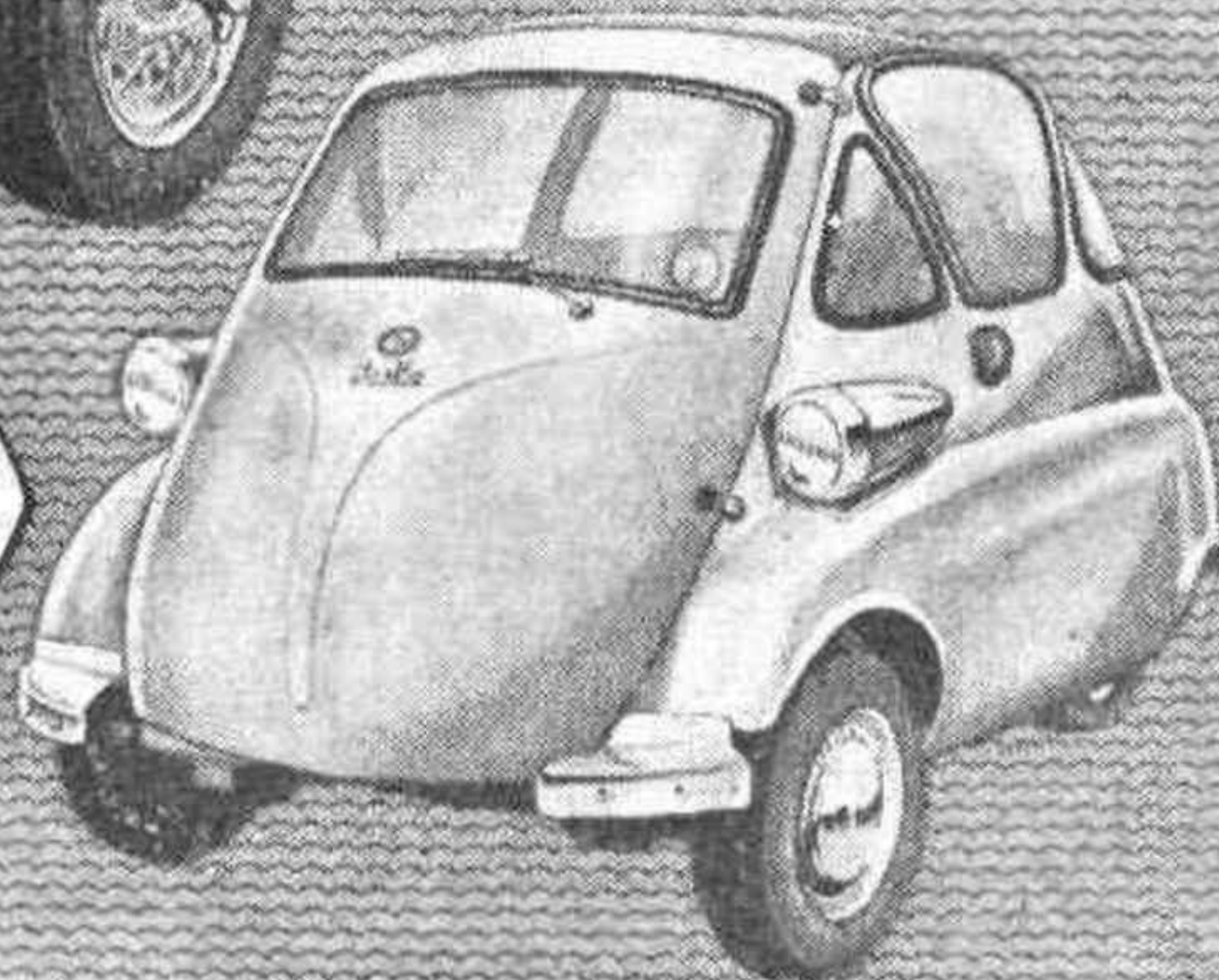
AUTOMATIC TRANSMISSION

European manufacturers are falling into line with America in providing fully-automatic transmission (on certain models), as follows:—

Car	Transmission
Armstrong-Siddeley ...	Rolls-Royce-General Motors Hydramatic
Austin A95 and A105...	Borg-Warner
Austin Princess IV ...	Rolls-Royce-General Motors Hydramatic
Borgward ...	Borgward Hansamatic
Daimler ...	Borg-Warner
Ford ...	Borg-Warner
Humber ...	Borg-Warner
Jaguar ...	Borg-Warner
Mercedes-Benz ...	Borg-Warner
Morris Isis ...	Borg-Warner
Rolls-Royce ...	Rolls-Royce-General Motors Hydramatic
Rover ...	Rover
Wolseley ...	Borg-Warner



EACH COMPLETELY
OUTSTANDING IN
ITS OWN CLASS



A.F.N. LTD. MANUFACTURERS OF FRAZER-NASH CARS. ISLEWORTH, MIDDLESEX
SOLE CONCESSIONAIRES IN GREAT BRITAIN FOR BMW, DKW, AND PORSCHE CARS

BOOK REVIEWS

♦ ♦ ♦

"Maintaining the Breed," by John Thornley. 187 pp., 8½ in. by 5 7/8 in. (*Motor Racing Publications, Ltd.*, 13, Conway Street, Fitzroy Square, London, W.1. 21s.)

This revised edition of "Maintaining the Breed—The Saga of M.G. Racing Cars," by John Thornley, general manager of the M.G. Car Company, is one of the most interesting and informative of all the books on motor-racing. It is so because the author tells in detail how the various M.G. models were evolved and prepared for competition. If he omits any "secrets" the writer isn't aware of it, and the wealth of detail is quite astonishing, so that any owner of an M.G., from M-type to MGA, will feel the urge to commence tuning and "hotting-up" operations at once.

Thornley not only tells "the lot"—and what a fascinating scientific/engineering account this is—but he has an excellent knack of making an informal and exciting book out of these sober technical endeavours, as each tale of the purpose, set-backs and successes behind each competition M.G. is unfolded.

This book appeared some years ago as an album-size scrapbook, but it is excellent that it now comes as a proper book, rewritten, with the addition of fresh chapters covering the evolution of Goldie Gardner's EX 135, the conversion of this famous M.G. into a museum-piece, the creation of George Eyston's record-breaking EX 179 and how the MGA was introduced and entered for sports-car races, including an enthralling, unminced, on-the-spot account of the M.G. *equipe's* visit to the 1955 Le Mans race.

The book touches on the first M.G.s of all, with a charming picture of "Old No. 1," wrongly captioned (but this is delightfully corrected by the author in an insert), and there are many other splendid illustrations. "Maintaining the Breed" will be the pride of M.G. enthusiasts and the envy of those who prefer other makes.—W. B.

"The Brabazon Story," by Lord Brabazon of Tara, G.B.E., M.C., P.C. 227 pp., 8½ in. by 5½ in. (*William Heinemann Ltd.*, 99, Great Russell Street, London, W.C.1. 25s.)

This is the long-promised autobiography of Lord Brabazon of Tara, and it is an excellent book packed full of reminiscences and delightfully written—every word by Lord Brabazon himself, who has no use for literary "ghosts."

Here is the story of early motor-racing, of how the author flew in balloons and early aeroplanes, gaining No. 1 R.Aero.C. Pilot Certificate, of how he pioneered aerial photography for the R.F.C., of his enjoyment of riding the Cresta Run (of which there is a splendid description) and sailing in the post-war years, and of adventures in the realms of business and politics.

Lord Brabazon deals with his motor-racing days without going into detail, and some good motor-racing and flying photographs are reproduced. Some new facts emerge as we meet such pioneers as S. F. Edge, the Hon. C. S. Rolls, the Guinneses, Warwick Wright, Nuzzaro and others. There is a reference to a Lerner-Porsche in the Kaiserpreis race of 1907, but this was entered officially as a Mercedes-Mixte, while a later reference to an Argos which crashed should, perhaps, have been printed as Adler. Also, grandstands and pits of those days were surely called tribunes, not the "tribunal." There is an inside account of Resta—called throughout "De Resta"—while practising for the 1908 Grand Prix with the Austin and of why he had to serve a prison sentence.

Apart from racing there are references to ordinary motoring and it is interesting to find Lord Brabazon hinting, as we have done, that the original Austin Seven may have owed its origin to the Baby Peugeot which preceded it. Other cars the author refers to include the Rolls-Royce Phantom III he used when Minister of Aircraft Production, and his two Fiats and two Jaguars bearing the Reg. No. FLY 1.

Readers will delight in Lord Brabazon's outspoken attack on the apathy of successive governments over a proper road-construction programme, his tribute to racing—"Much of the advance in car design was due to racing in the early days . . .", and his "inside" stories of action taken to avert disasters during the General Strike of 1926 and the air-raids of the last war.

A comprehensive yet easily digested book to delight all who love adventure and life.—W. B.

"Motoring Annual." Edited by Albert Douglas. 96 pp., 9½ in. by 7½ in. (*Ian Allen Ltd.*, Craven House, Hampton Court, Surrey. 10s. 6d.)

This annual covers many aspects of motoring and motor sport and has chapters by Stanley Sedgwick, Nevil Lloyd, John Speed, Barclay Inglis, Dudley Noble, Paul Conrad and Alfred Woolf. There are plenty of illustrations, some good, others rather "fuzzy," many we have seen previously. This is good value as an introduction to motoring affairs.—W. B.

"Test Flight," by W/Cdr. "Sandy" Powell. 212 pp., 8½ in. by 5½ in. (*Allan Wingate, Ltd.*, 12, Beauchamp Place, London, S.W.3. 15s.)

This is a book on the popular subject of the test pilot, written to entertain and instruct a wide range of readers from schoolboys to fellow test pilots. It is not pure autobiography, yet it contains many fascinating reminiscences of experiences shared by the author, who is Sales Manager of the Aircraft Division of Lockheed in this country, and other pilots.

"Test Flight" explains the exacting task of modern test-flying and compares it with such flying in the past. The test-pilot's equipment, plan of flight, rates of remuneration and so on are covered and there are many good pictures of aeroplanes old and new, and a graph showing the rise in the absolute air-speed record from 1910 to the present day.

Brief histories of prominent aircraft manufacturers are included and this comprehensive book seems excellent value at 15s., although in a few places proof-reading could have been done a trifle more thoroughly. Incidentally, "Sandy" Powell is a keen motoring enthusiast, as the picture of him with a very fine vintage 4½-litre Bentley which features on the back of the dust jacket confirms. W. B.

"Motor Racing Sketchbook," by Carlo Demand and Charles Meisl. 151 pp., 7½ in. by 10½ in. (*G. T. Foulis and Co., Ltd.*, 7, Milford Lane, Strand, London, W.C.2. 17s. 6d.)

An album-size book of rather lurid sketches by Demand of divers scenes from past races, 128 in all, with explanations translated by Meisl. If this is the kind of thing you enjoy Demand may be in demand.—W. B.

* * *

Besides the Talylyn Railway Preservation Society and similar bodies, the Festiniog Railway Company has been formed to preserve and operate this, the oldest passenger-carrying narrow-gauge railway in Britain. Anyone interested can join for 20s., applying to R. H. R. Garraway, 35, Holmwood Road, Cheam, Surrey (juniors 10s. per annum), and a very good-value booklet about this praiseworthy venture, the "Festiniog Railway Guide," is available for 1s. 6d. post free from D. F. Ogilvy, Elstree Aerodrome, Elstree, Herts (Elstree 3070).

* * *

National Benzole Co., Ltd., have issued No. 3 in their series of beautifully-produced books illustrating and briefly describing aspects of our national life. This one deals with sport and covers car rallies (rather naughtily illustrating a *timed climb* of Park Rash!), flying, gliding, hill-climbing, motor-cycle racing (a wickerwork-sidecar outfit is seen ascending the Brooklands Test Hill in 1911 in comparison with modern combinations cornering at Brands Hatch), and veteran-car rallies, as well as every non-mechanical sport you can think of. Write to Wellington House, Buckingham Gate, London, S.W.1, about your copy, mentioning MOTOR SPORT.

* * *

The 1957 edition of John Knox's useful "Modern Motoring Diary" (pocket size) is now available, from H. O. Guinn Ltd., 151, Fleet Street, London, E.C.4. It contains maps and the usual racing and other data, circuit diagrams, etc. The Editor has used this year's edition since January.

* * *

The Roads Campaign Council of the British Road Federation has issued an edition of "Roads Matter" covering Scotland. It contains, in 20 art pages, those pictures of traffic jams on inadequate main roads that are fascinating to study but which depict a national scandal. Copies are available free, if you quote MOTOR SPORT, from Roads Campaign Council, 15, Dartmouth Street, London, S.W.1.

This is a ROVER year

The new Rover programme introduces a 5-car range . . . gives every motorist the chance to own a Rover that exactly meets his needs. All models from the economical 2-litre 60 to the 100 m.p.h. newcomers—the 105R, with automatic transmission, and the exciting 105S—have a look and feel of quality that few cars on the road can match. Overall design is greatly improved by a new front contour which gives bolder, cleaner lines.



THE NEW FIVE-CAR RANGE

● **THE 2-LITRE 60** Like all Rovers, a lively performer and superb to handle, with exceptional economy.

● **THE 75** This famous model combines the smooth power of a 6-cylinder engine with surprisingly low fuel consumption.

● **THE 90** For high-spirited performance with Rover smoothness, silence and comfort. Fitted with power brakes.

Automatic overdrive is available as an optional extra on all the above models, taking the place of the free-wheel on the 2-litre 60 and the 75. This gives a higher maximum speed and sustained fast and silent cruising at low engine speeds with a consequent reduction in petrol consumption and engine wear.

● **THE ROVER 105R** A new luxury car fitted with ROVERDRIVE—fully automatic, 2-pedal transmission with built-in automatic overdrive. Here is a high performance car for effortless driving in town traffic or on the open road.

● **THE ROVER 105S** Powered by the same twin carburettor engine as the 105R, this model has a conventional transmission system with automatic overdrive. The result is the liveliest Rover in the range, with superb acceleration to 100 m.p.h., and an inspiring all round road performance.



*By Appointment
to Her Majesty Queen Elizabeth II
Manufacturers of Land-Rovers
The Rover Co. Ltd.*

SEE THESE FINE CARS AT EARLS COURT

THE ROVER COMPANY LIMITED · SOLIHULL · WARWICKSHIRE also DEVONSHIRE HOUSE · LONDON

CVS-328

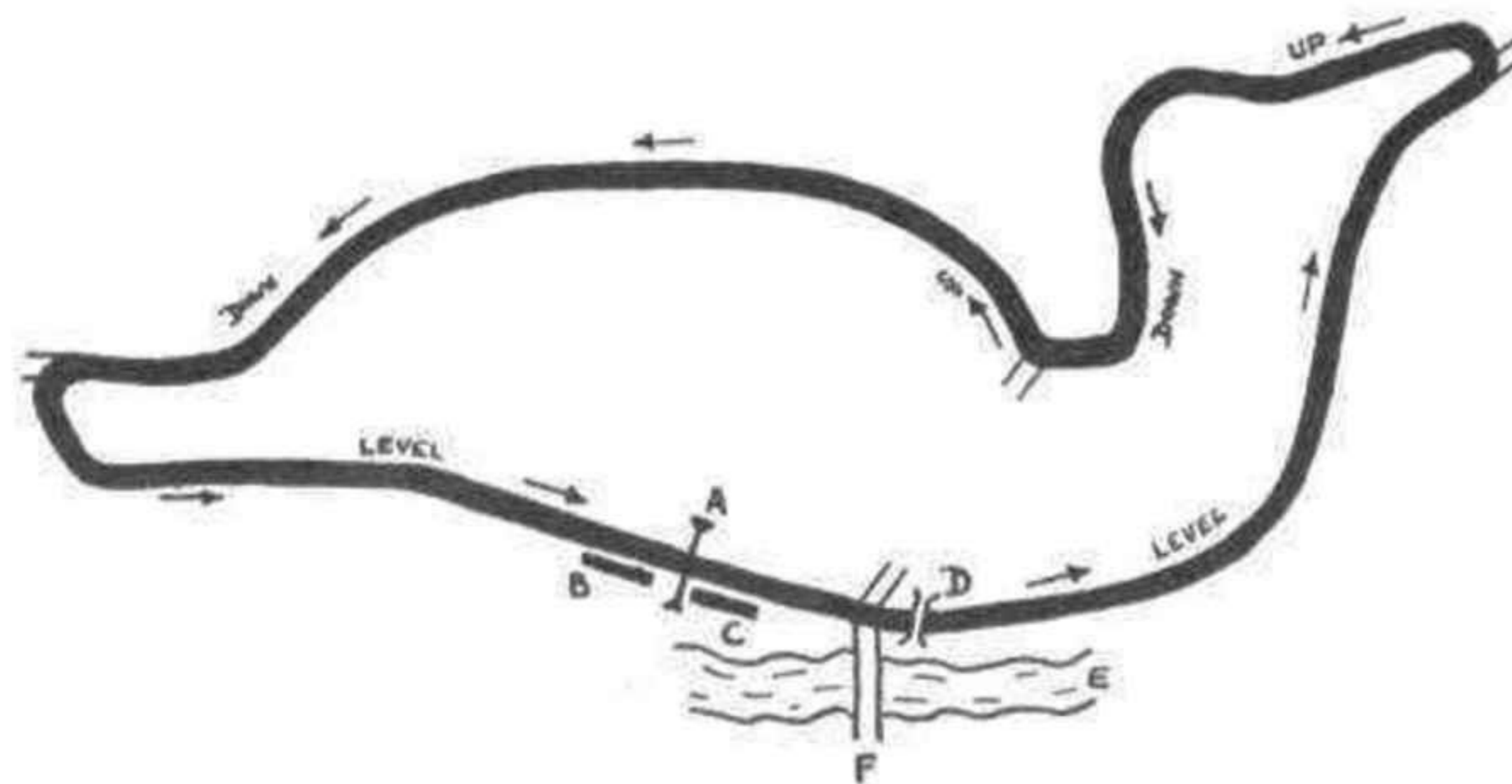
IMOLA SPORTS-CAR RACE

Castellotti Wins for Osca

POSTPONED from the beginning of June, the Imola race was eventually held at the end of September and limited to sports cars between 1,300 and 1,500 c.c. Held over 50 laps of the 5-kilometre hilly road-circuit on the edge of the town of Imola, the race attracted factory entries from Osca, Maserati, Gordini, Lotus and Cooper, so that though they were all running sports cars the race could be viewed as a forerunner of future Formula II events.

Practice saw Osca out with four cars, three of the normal 1,500 models used this season and one brand new one, this having all the same mechanical components but with a much improved location to the rigid rear axle and a sleeker and more aerodynamic bodywork, very much on the lines of the 750-c.c. Osca. The four drivers were Castellotti, Musso, both on loan from Ferrari, Cabianca and Scgorbati, and during practice all of them tried the new car. Maserati did not enter officially and apart from numerous private owners with 150S models the only one showing any hope of going fast was that driven by Bonnier. After the first practice it was clear he could not challenge the Osca team so the factory lent him their latest 150S, actually the one Moss drove at Nurburgring last August; as it was not an official works entry it was painted the Swedish colours of blue and yellow. Causing some considerable consternation amongst the Italians was Team Lotus, with Allison and Chapman in normal 1,500-c.c. models and Mackay-Fraser with the car they had recently been using for record-breaking, now fitted with a 1,500 engine and a normal racing windscreen. Allison was going like the wind and was only two-tenths of a second slower than Musso and equal to Castellotti, while Chapman equalled Bonnier with the factory Maserati. Not only were the green cars from Hornsey worrying Osca and Maserati, but the Cooper team were there also and Salvadori equalled Chapman's time, and just behind came Naylor, with his Maserati-engined Lotus, Mackay-Fraser, Brabham and Leston. Of the first ten cars when practice concluded only three were Italian, the rest being British, so that here, on their home ground, the Italians were being made to think.

Race day was very hot and conditions were good as the cars lined up in rows of three-two-three, with Musso and Castellotti in the old Oscas alongside Allison, and Cabianca with the new car in the fourth row. Burgess was a non-starter with his Osca-engined Special, as his mechanic had bent it badly the day before while trying it out and it was beyond repair. At the fall of the flag Allison shot off into the lead, leaving the two Oscas still trying to combat wheelspin, and Salvadori came out of row three in his usual meteoric style and tucked in behind the Lotus. For three laps Allison was way out on his own, followed by Salvadori with Castellotti and Musso hot on his heels, followed by Bonnier, Brabham, Cabianca, Naylor and Mackay-Fraser, while Chapman was engaged in a battle with da Silva Ramos in the works Gordini. The two Oscas gathered around the little Cooper and tried to crowd their way past, but Salvadori gave as good as he got and the three of them stayed in a bunch and gradually made up on the leading Lotus. By lap seven Salvadori had been elbowed behind and Allison was then dealt with by Castellotti,



CIRCUIT OF IMOLA
Length: 5.017 kilometres

- A. Start and finish.
- B. Pits.
- C. Grandstands.
- D. Footbridge.
- E. Santerno River.
- F. To Imola Town.

Musso not being able to get past, and on lap twelve the Lotus disappeared for the left-hand rear hub-shaft broke and Allison spun to a standstill and out of the race. This left Castellotti comfortably in the lead but Musso was not having an easy time and Salvadori got by once more. Leston, in the Willment-owned Cooper-Climax, was dicing with Mackay-Fraser in the works Lotus until the American spun on a corner, and Brabham was in close company with Bonnier in the factory Maserati. Chapman lost his battle with the Gordini when he spun round, but managed to get going again, and by lap 20 things had settled down.

Castellotti was comfortably in front by 12 sec. and Salvadori could do nothing about it, while Musso was dropping back suffering from overheated oil. After a gap came Bonnier, only just leading from Brabham, while Cabianca was tailing them, and then came the rest. The ordinary 150S Maseratis in private hands were completely out of the picture, as were Oscas in the hands of new drivers, and though Castellotti in the works car was dominating the race, factory Coopers and Lotus were scratching away valiantly behind him. Naylor was unhappy about his brakes and eventually went up an escape road and ripped an oil pipe off, and then Salvadori disappeared from the race when the distributor drive of the Climax engine sheared. Bonnier and Brabham were still engaged in a furious battle and they gradually caught up with Musso and passed him, while Leston stopped to repair a broken throttle cable and then later stopped very suddenly when a big hole appeared in the crankcase due to a violent breakage inside. Just before the end, while Castellotti was preparing to receive the chequered flag, Brabham was leading Bonnier and lapping a slower car when the Maserati spun and crashed into a tree, the driver getting away with a shaking but the car being badly smashed. This left Brabham a certain second, followed by Musso and Cabianca, while Mackay-Fraser followed up.

Although the British cars had stirred things up at Imola they all suffered from inexperience of the more serious type of road-racing, bits falling off, shock-absorbers failing, engines proving fragile or gearboxes not being meant for racing. Admittedly one of the private Maseratis blew its engine sky-high, but none of the Italian cars suffered from petty faults in design or construction or lack of attention to minute detail. Now that the works Cooper and Lotus cars are beginning to tackle the Italians on their home ground there is every opportunity of sweeping the field, but more care and attention will have to be given to the job. The British contingent at Imola did not disgrace itself by any means; in fact it created an excellent impression for a change, but preparation and know-how is far from perfect.

Results :

IMOLA GRAND PRIX—1,500 c.c. Sports Cars—250 Kilometres—Very Hot

1st :	E. Castellotti (Osca) ...	1 hr. 46 min. 46.1 sec.—140.914 k.p.h.
2nd :	J. Brabham (Cooper-Climax) ...	1 hr. 47 min. 25.2 sec.
3rd :	L. Musso (Osca) ...	1 hr. 47 min. 48.0 sec.
4th :	G. Cabianca (Osca) ...	1 hr. 48 min. 48.0 sec.
5th :	H. Mackay-Fraser (Lotus) ...	1 lap behind
6th :	H. da Silva Ramos (Gordini) ...	1 lap behind
7th :	R. Scgorbati (Osca) ...	1 lap behind
8th :	C. Chapman (Lotus) ...	2 laps behind
9th :	G. Berger (Maserati 150S) ...	2 laps behind
10th :	A. Barreto (Porsche) ...	3 laps behind
11th :	C. Bourillot (Maserati 150S) ...	5 laps behind
12th :	L. Leston (Cooper-Climax) ...	Pushed over line
13th :	A. Garavaglia (Maserati 150S) ...	Pushed over line

Fastest lap : E. Castellotti (Osca), on laps 32 and 34, in 2 min. 04.3 sec., 144.951 k.p.h.

Retired : C. Allison (Lotus), broken hub-shaft; A. Mackay (Cooper), gearbox; R. Salvadori (Cooper), broken distributor drive; Naylor (Lotus-Maserati) broken oil pipe; G. Perella (Maserati), crashed; J. Bonnier (Maserati), crashed; M. Boffa (Maserati), engine.



The start of the 1,500-c.c. Sports-Car Race at Imola saw a Lotus on the front row with the works Osca team. From left to right are Allison, Castellotti and Musso.



405 four-door saloon

BRISTOL → fashion...

Bristol fashion in performance. Aerodynamic body, race-bred high-efficiency engine, five forward speeds and great inherent stability give the 405 the speed and handling qualities only to be expected in a car made by Bristol.

Bristol fashion in comfort. The 405 is a roomy and luxurious four-seater. There is plenty of space for golf clubs, fishing tackle, family and family impedimenta.

Bristol fashion in styling. The 405 is hand-built by craftsmen. And the individual owner selects his own colour scheme for his highly individual car.

405 drophead coupe



ROAD IMPRESSIONS OF THE 3-LITRE LAGONDA SALOON

A High-Grade British Car Featuring a Twin-Overhead Camshaft, High-Compression Engine and All-Round Independent Suspension in a Luxury Saloon Possessing Unusually Complete and Luxurious Equipment.



SIDE ELEVATION.—A view showing the elegant lines of the 3-litre Lagonda saloon.

MR. DAVID BROWN deserves the appreciation of enthusiasts for having catered for the continuity of two famous British makes, Aston Martin and Lagonda. The present-day Lagonda is an interesting proposition, combining as it does the sports-type twin o.h.c. Aston Martin engine in a car of luxurious styling and appointments and one, moreover, endowed with that rarity amongst British chassis—*independent suspension of the driving wheels.*

Although the 3-litre power unit installed in the present-day Lagonda is better known as the engine used successfully in competition in Aston Martin cars, it is nevertheless an engine entirely appropriate to the modern Lagonda, having been designed by no less a personality than W. O. Bentley, expressly for the post-war Lagonda model which superseded the V12, the new engine being then of 2.6-litres capacity.

In its 1956 form this six-cylinder engine has a bore and stroke of 83 by 90 mm. (2,922 c.c.) and, on a compression-ratio of 8.2 to 1, develops 140 b.h.p. at 5,000 r.p.m., and a b.m.e.p. of 150 lb./sq. in. at 3,100 r.p.m. Two horizontal S.U. H6 carburettors are used and ignition is by Lucas coil with automatic advance and retard and K.L.G. P/10/L80 plugs. The twin o.h. camshafts are driven by duplex-chain and cooling is by a chain-driven water pump supplemented by a belt-driven five-bladed fan. The coolant capacity is three gallons and flow through the radiator is controlled thermostatically. The lubrication system is conventional, the sump holding 12 pints of oil. The crankshaft runs in four plain bearings.

The drive goes *via* a single-plate clutch and four-speed and reverse gearbox to a hypoid-bevel final-drive unit mounted on the frame, universally-jointed shafts conveying the drive to the back wheels. The final-drive unit holds two pints, the gearbox 2½ pints of lubricant. The chassis is an X-form box-section structure, with wishbone and coil spring i.f.s. and torsion-bar i.r.s. The electrical system uses two Lucas 6-volt STXW 11E batteries. The brakes are Lockheed hydraulic, 2LS at the front and with inboard drums at the back, the lining area being 122 sq. in. per ton. A vacuum-servo is employed. Fuel is fed from a 19-gallon tank with reserve trap by an electric pump. The gear-change incorporates baulk-ring synchro-mesh on second, third and top gears and steering is rack-and-pinion. The front wheels pivot on two balls in sockets attached to the suspension links, grease-gun lubricated on the latest cars, the reservoir oil-supply having been deleted.

In the Garage

Before taking a car of the calibre of the Lagonda out on the road we naturally examined it in detail, finding much to satisfy a person who has just spent over £3,900 on his motor car.

A sense of quality is imparted by the veneered dashboard, deep carpets and beautiful leather upholstery. The arrangement of the controls and the very complete equipment are noteworthy. The front bucket seats are roomy, soft and comfortable, although a trifle more lateral support would be welcome. Small arm-rests, adjustable for height, are fitted to the front doors, which have leather "pulls" and ventilator windows with easy-to-operate catches. The main windows have conveniently high-g geared handles—just over 2½ turns, up-to-down. Well-type pockets are fitted and both front doors have locks. The back doors trail (whereas the front doors hinge at the back) and have elastic-topped pockets and main windows, the handles calling for under 2½ turns up-to-down, supplemented by openable ventilator windows with good toggle-type catches. A feature which suggests that practical men had a hand in the design is a thick panel let into the base of the front ventilator windows to cut down whistle when these windows are partially open. Two other equally-sensible features are apparent—a radio aerial which can be extended through the driver's window without leaving the seat and aircraft-style adjustable cold-air ventilators, with cut-off

controls, set at the base of the scuttle on each side, to provide for cold feet in hot weather. Although this is a four-door saloon, the front seat squabs fold for access to the back compartment, the squab angle being altered by turning screws at the base of each squab. Incidentally, the front door handles push downwards to open the doors. The back compartment is, perhaps, slightly cramped, but it is luxuriously upholstered, the seat having a folding centre arm-rest and fixed side arm-rests. There is a rather shallow parcels-shelf, usefully recessed, behind it. Ash-trays are provided in the backs of the front seats.

Visibility through the wide screen is good, the side pillars being thin and both front wings being visible across the very broad expanse of bonnet. Twin anti-dazzle visors are provided, but they do not swivel to combat side glare.

There is a big, lidded, lockable cubby-hole before the front passenger, the press-button lid catch being rather difficult to use, as it is necessary to press the button in while pulling the knob outwards. A mirror and cigarette-case are fitted to the interior of the cubby-hole lid. The central rear-view mirror is mounted on the dash sill, but the view therein is somewhat cut-off by the roof line.

The handsome dashboard has three large, slightly hooded, dials on the driver's side. That on the left is a combined oil gauge, ammeter, fuel gauge and radiator thermometer, oil pressure varying with engine speed up to about 65 lb./sq. in., the water temperature being normally 80 deg. C. The left-hand of the two remaining dials is a 120 m.p.h. Smiths speedometer incorporating clock and total and trip mileometers. The speedometer needle and mileage readings are rather blanked by a steering-wheel spoke and on the car tested the total mileage recorded seemed to imagine it was a speedometer, as its reading reverted to "30" every ten miles! The instrument immediately before the driver is a Smiths rev.-counter reading to 6,000 r.p.m.—unfortunately, speedometer and rev.-counter needles move in opposition; it is much nicer when they travel in the same direction.

A pleasing feature is the location of the control-quadrants for heating/ventilation and demisting/defrosting on the instrument board, with a separate switch for the fan, which isn't unduly noisy. Above these quadrants is the control-panel for the H.M.V. radio, and above that a lidded, matching ash-tray. A grab-handle is provided above the cubby-hole. On the extreme right is a circular panel incorporating an inexpensive-type Lucas lamps-switch-cum-ignition key, starter button, a button recording sump oil-level on the fuel gauge, the fuel-reserve switch, a socket for an inspection-lamp and switches for off and near-side fog-lamps.

Other turn-switches, appropriately lettered, are provided for the map light under the scuttle and interior lamp (which otherwise functions as the doors are opened), turn-knobs looking after the two-speed, self-parking wipers and the rheostat-graded instrument lighting. A tiny button brings in the screen-washers, there is a cigar-lighter and a choke-knob. The instrumentation is completed by a small switch for the self-cancelling direction-flashers, set for operation by the right hand but a trifle too far to the left, its indicator-light flashing in sympathy with the exterior indicators, and indicator windows for dynamo-charge and fuel-reserve-in-use, a non-dazzling lamps-full-beam window being incorporated in the rev.-counter. Under the scuttle on the right is a small button for releasing the main catch of the alligator-bonnet and an electrical master-switch which was inoperative on the car tested.

The bonnet has a heavy lid which needs propping open. It reveals the polished engine with the dip-stick rather buried, the reservoir for the Jackall inbuilt-jacks fluid, accessible plugs, and oil and water fillers, and the two batteries, one on each side of the scuttle bulkhead. There

is an under-bonnet lamp and the oil-filler has a small breather-pipe. The luggage boot provides an enormous area of flat floor and the lid, which locks, has spring-loaded hinges which obviate the need for a prop, while the interior is lit automatically while the lid is raised. Twin petrol fillers, one in each back wing, are provided, these taking the form of locked flaps which lift to reveal the filler pipes, the caps for which are incorporated in the flaps. This is an excellent arrangement, especially as filling from a can is possible, and it would be better still if the locks were easier to use.

A neat three-spring black steering wheel is used, with matching horn-push in the centre, the column adjustable to individual requirements. The pedals are of sensible size, with a treadle accelerator. Very generous leg-room is a feature of the front compartment.

The Tickford body has handsome yet unobtrusive lines. There is notable overhang to provide for the very large-capacity luggage boot. The rear bumper carries a "David Brown Lagonda" badge and the lamp which illuminates the back number-plate is rather ugly. The car tested was finished in a particularly pleasing two-tone colour scheme.

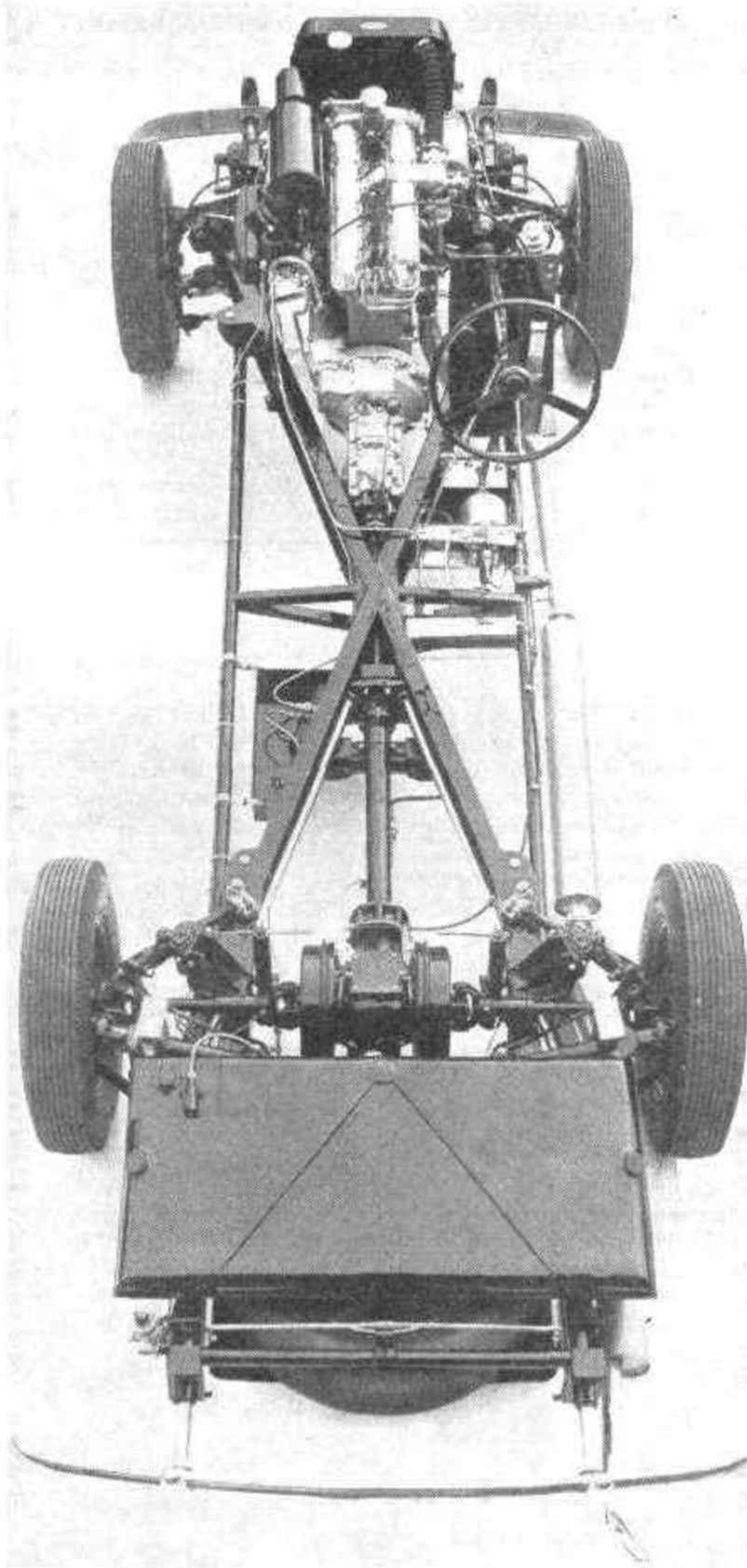
At the Wheel

To drive the 3-litre Lagonda is a worthwhile experience, for here is a luxury saloon powered by an engine of outstanding life and power. The power comes in from about 2,500 r.p.m. onwards in a hard, smooth flow and the engine will run far beyond its peak speed of 5,000 r.p.m. At 70 m.p.h. it is turning lazily at under 4,000 r.p.m. and speeds of over 90 m.p.h. are easily attained on normal British roads, with a maximum of over 100 m.p.h. in reserve—the speedometer several times showed 110 m.p.h. during the test. Rapid acceleration is achieved so easily as to be taken almost for granted, yet it plays a large part in the very high average speeds of which this Lagonda is capable in spite of the inadequacy of our main roads. There is some considerable noise from the valve gear, pleasant reminder to the still-youthful businessman that he is sitting behind the Bentley-designed engine employed in the successful sports/racing Aston Martin cars, yet this remarkable high-compression power unit is so docile that his wife is able to drive at 1,000 r.p.m. in top gear without distress. Naturally, as the throttles are opened it is desirable to drop into a low gear but the only penalty of letting the revs. fall too low is slight "pinking" until crankshaft speed is regained and there seems no call for fuels of higher than 80-octane. On these no vices are apparent, and in a test-mileage of 760 no oil or water was added. Starting is easy, with a minimum of choke.

In the indirect ratios the engine runs smoothly to beyond 5,000 r.p.m., reaching an indicated 30 m.p.h. at 5,300 in bottom gear and 5,500 in second and third, equivalent to indicated speeds, respectively, of 50 and 80 m.p.h. However, the maker's instruction book (which, if you lose it, costs 2½ guineas to replace!) recommends maxima of 25, 42 and 70 m.p.h. in the indirect ratios. On the car tested a short, rigid central gear-lever was used, although the 2.6-litre Lagonda which we road-tested in September, 1951, had the steering-column lever which is offered as an alternative. The floor-type lever is delightful to operate. It could not be more conveniently placed for the left hand and the changes go through with a precise, rather heavy action, with extreme rapidity. There is only one



UNPRETENTIOUS.—The Lagonda has no affinity with modern flamboyant styling and consequently retains a dignity of its own.



THE MACHINERY LAID BARE.—This plan view of the 3-litre Lagonda chassis picks out the twin o.h.c. six-cylinder engine with David Brown gearbox, the cruciform-braced frame and the swing-axle, torsion-bar independent rear suspension.

snag—the lever is spring-loaded towards the first and second gear positions and sometimes springs across the gate as changes between third and top are being made, leaving the driver momentarily in possession of neutral! Occasionally a vibratory rattle emanated from the lever. Reverse is safely located beyond the top-gear position. The clutch action is rather heavy.

Because it is almost unique amongst British cars in having independent suspension front and back, the roadholding and suspension characteristics of the 3-litre Lagonda are of particular interest. The suspension is soft, allowing some roll when cornering, slight nose-dipping under the brakes and some up-and-down movement, the wheels being heard having a busy time over bad surfaces. Yet there is a very commendable balance between comfort and good roadholding, for the car can be taken round corners with confidence, the roll never suddenly increasing, the oversteer not over pronounced, and rear-end breakaway occurring only under extreme

THE 3-LITRE TYPE LB290/1 LAGONDA SALOON

Engine: Six cylinders, 83 by 90 mm. (2,922 c.c.); o.h. valves operated by twin overhead camshafts; 8.2 to 1 compression-ratio; 140 h.p. at 5,000 r.p.m.

Gear ratios: First, 13.3 to 1; second, 9.02 to 1; third, 6.06 to 1; top, 4.56 to 1.

Tyres: 6.00 by 16 Firestone De Luxe four-ply rating on bolt-on steel disc wheels.

Weight: 1 ton 12 cwt. 3 qtr. 14 lb. (without occupants, but ready for the road, with approx. 3 gallons of petrol).

Fuel capacity: 19 gallons (approx. 3½ gallons in reserve). Range approx. 328 miles.

Wheelbase: 9 ft. 5½ in.

Track: Front, 4 ft. 8½ in.; rear, 4 ft. 8½ in.

Dimensions: 16 ft. 4 in. by 5 ft. 9½ in. by 5 ft. 2 in. (high).

Price: £2,600 (£3,901 7s. inclusive of p.t.).

Makers: Lagonda Ltd., Hanworth Park Works, Feltham, Middlesex, England.

provocation on exceedingly slippery surfaces. The i.r.s. provides the back-seat occupants with a comfortable ride, and a passenger occupying the centre of the seat finds no unpleasant ridge where the seat has been reduced in thickness to accommodate a dancing back axle!

The steering is complementary to the excellent and safe road-holding. Geared 2½ turns lock-to-lock (the lock isn't unduly generous, providing a 38 ft. turning circle) this is heavy but very accurate, non-spongy steering. The wheel vibrates a good deal in sympathy with scuttle-float over rough road surfaces and some front-wheel motion is returned. There is excellent castor action and the Firestone tyres protested only occasionally, and mildly, under conditions of acceleration applied out of tight corners.

For normal motoring the brakes are amply powerful and do not call for heavy pedal pressures. On wet surfaces they tended to deflect the car from a straight line in emergency stops and the front drums became hot, leading to some fade in very fast driving.

Britain and Grand Prix Racing

At the beginning of the year I wrote about the possibilities of Britain getting a foothold in Grand Prix racing, pointing out that the combined forces of Connaught, B.R.M. and Vanwall should be capable of producing a win in a major Grand Prix, through weight of numbers if nothing else. More important still was that fact that we did not have to worry if none of the top drivers were in our cars, so long as the cars put up a good performance and finished the races, for then the ace drivers would begin to wonder whether perhaps they were in the wrong cars. Now, after a full season of Grand Prix racing the record shows a truly miserable result, with Connaught achieving third at Monza by reason of not going fast enough to blow up, a fourth at Silverstone by consistent steady driving, and Vanwall achieved fourth at Spa. Admittedly Vanwall finished first at Silverstone in the International Trophy, but that was not a full-length Grand Prix race and cannot be brought into the present discussion, the events under consideration being the National Grandes Epreuves.

If we look back over this season's races we do not see a very impressive demonstration of British ability in the Grand Prix field, especially when we remember that in November, 1955, as I pointed out at the beginning of the year, we had three Grand Prix designs capable of lapping any given circuit as fast as the opposition. In the Argentine none of our teams were ready to compete. At Monaco Vanwall and B.R.M. entered, the Vandervell cars being impressive enough in practice but both being eliminated in the race due to unforeseen crashes which could not be blamed on the cars. B.R.M. practised in a rather mediocre manner and did not start in the race due to faulty material in the engines, while Connaught did not even enter. At Spa, for the Belgian Grand Prix, Vanwall showed a marked improvement and Schell finished fourth, having shown more than one driver in other teams that the Vanwall was much faster down the straights. However, they did not worry for the car was virtually uncontrollable on the corners and the extra speed proved useless. The second Vanwall retired with a loss of power. Once again B.R.M. did not start, the trouble at Monaco taking them an unbelievably long time to overcome. Connaught entered one car, to be driven by a private owner, but it did not last, suffering from a structural failure in the brake-pedal mounting and loss of oil pressure in the gearbox.

The next big meeting was Reims, for the French Grand Prix, and

There was some squeak under heavy applications. The hand brake is an umbrella-handle affair set under the scuttle convenient to the driver's right hand; it worked well and held the car securely.

The body is immune from fumes or rattles but under conditions of tropical rain a little water entered the front compartment at the centre of the scuttle. The screen wipers are excellent in action but it was irritating that on several occasions, after self-parking, they would not function again until freed by the driver.

The Lagonda met very bad weather in the course of our test and was obliged to negotiate one very deep section of flooded road. This it accomplished without falter where most cars would have floundered. It seems probable, however, that this immersion affected the electrical circuits, because for a time it proved impossible to extinguish the roof lamp with the dashboard switch and switching on one fog-lamp brought in the map lamp. These shortcomings, were only of a temporary nature, but more distressing was a reserve petrol supply, alleged to be 3½ gallons, which took us a distance of six miles on the first occasion when it was brought into use and eight miles on the second occasion. This does not imply a fuel consumption of 2 m.p.g.! The true figure was 16½ m.p.g. of National Benzole, at average speeds in the region of 45 m.p.h. This represents the not-unreasonable range of 328 miles, although in view of the unreliability of the fuel-reserve arrangements, a larger fuel tank might well be provided.

The headlamps, being reasonably high set, provide an excellent light for fast driving at night and the Lucas paired fog-lamps throw a widespread beam from kerb to kerb.

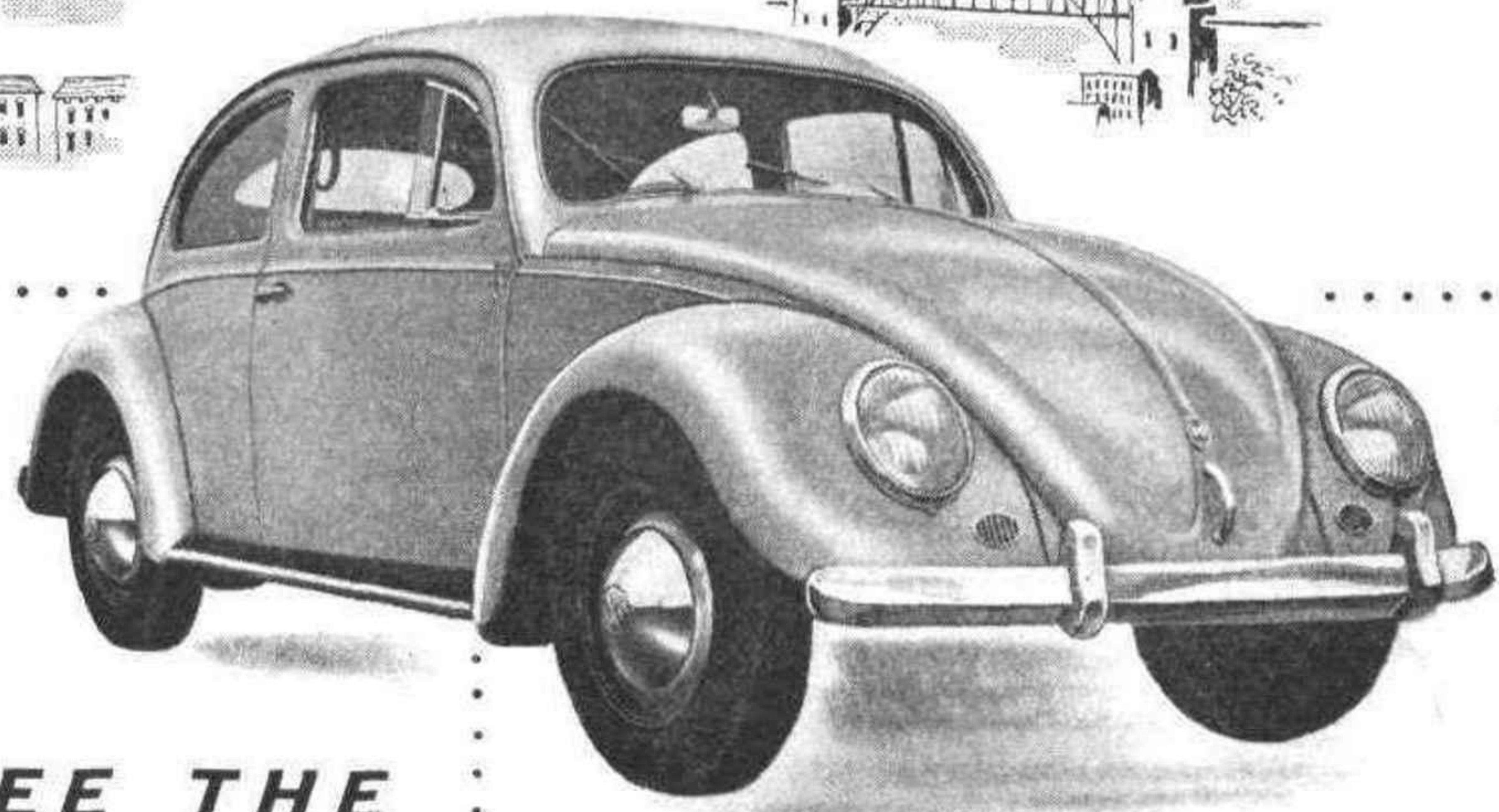
The 3-litre Lagonda is an excellent car for those who require a dignified saloon yet who, even if at an age when the purchase price can be found, still wish to enjoy responsive performance from a pedigree engine with racing ancestry. This famous British vehicle, with its twin-overhead-camshaft engine and independent rear suspension, is the choice of H.R.H. the Duke of Edinburgh and although one of our more costly productions (the basic price of £2,600 is increased by p.t. to £3,901 7s., the convertible costing £4,051 7s.), the high performance, excellent finish and sensibly-planned controls and equipment render the David Brown-built Lagonda a desirable motor car.—W. B.

here the Vanwall really showed enormous promise and while it was going no one could complain, but then all Schell's efforts became fruitless because part of the throttle linkage came adrift, a trouble experienced on the car on more than one previous occasion and really inexcusable. Before taking this car over Schell had retired with his own car due to a number of troubles started by having second gear break up in the gearbox. Connaught did not enter for this meeting and once more B.R.M. were not ready.

At Silverstone the British teams saw their big opportunity, for not only were they on their home ground but all three teams were ready and fielded three cars apiece. Here if anywhere a green car should have won, or at least been well placed, but the result was that one Connaught finished out of nine British cars that started. One Connaught broke a rear hub, another broke a connecting-rod, one Vanwall broke a half-shaft and the other two had the inside coating of the fuel tank disintegrate and choke up the fuel system, while one B.R.M. broke its engine and the other two suffered failures in the transmission. Of the nine cars eight retired due to some structural or material failure and the only saving grace was the fact that two B.R.M.s led the entire field in the opening laps, but it really did not make up for the abysmal display by our cars on their home ground. So depressing was this display at Silverstone that not a single British car entered for the next Grand Prix, at Nurburgring, and it was not until nearly two months later than green cars appeared once more on the starting line. This was at Monza, and though Vanwall showed terrific promise it was Connaught who achieved results by plodding along. Vanwall proved beyond all doubt once again that it is the fastest car racing today, but its chassis leaves so much to be desired so far as handling at high speed is concerned that cars with less horsepower were able to beat it. As if this was not enough the leading Vanwall then retired with a failure in the transmission. Of the other two one went out with an oil leak in the rear axle and the other suffered a structural failure of the front suspension. Of the Connaughts, apart from the third place achieved by Flockhart, another finished fifth but with a completely collapsed suspension, and the third one suffered a failure of the splines in a rear torsion-bar. Once more B.R.M. did not enter. If excuses are needed for the breakages that occurred at Monza one can put forward the excuse that most of the foreign opposition also suffered structural failure, but personally I think the time is past for making excuses for the failure of British cars, for we have been doing that long enough.

Continued on page 706

INTERNATIONALLY FAMOUS



SEE THE

VOLKSWAGEN

ON STAND NO. 120



V W MOTORS LIMITED

Showrooms and Head Offices : 7-9 ST. JAMES'S STREET, LONDON, S.W.1. Telephone : WHitehall 9501
Service and Spares Department : 233 Plaistow Road, London, E.15. (Adjoining Plaistow Station). Telephone : MARYland 7661/5

GERMAN HIGH PERFORMANCE

MOTOR SPORT Visits the B.M.W. and Porsche Factories and Tests Representative Models



Left: AT MUNICH.—The imposing office-block and showrooms of the Bayerische Motoren-Werke which flank the entrance to this vast motor-car, motor-cycle and minicar plant.

Right: PORSCHE IN THE WILDS.—The 1,600 coupe tested by MOTOR SPORT over a distance of 670 miles seen negotiating a dried-up water course, with the snow-capped Bavarian Alps forming an imposing background.

ON arrival at Stuttgart Airport last month, we found awaiting us a maroon Porsche Carrera and a grey Porsche 1,600. The Editor was put into the Carrera, his colleague drove the 1,600, and thus we arrived at the Porsche works in the pleasant factory suburb of Zuffenhausen.

The rear-engined, air-cooled flat-four Porsche is now well and truly established as a compact, beautifully-proportioned high-performance car—in fact, there is no other car quite like it.

So effective is the Porsche body-shape that any change would detract from optimum aerodynamic efficiency, which is why, outwardly, it is almost impossible to distinguish a 1,600 from a 1,600 Super, or these models from a Carrera.

Coming from a country where, although considerable enthusiasm exists for limited production, hand-built sports cars, the firms that produce them are very small indeed, it was heartening to find the demand so great that 700-750 workers are employed in building 20 Porsches a day. They work under conditions normally associated only with a racing-car factory, the benches and floor in the one big assembly hall spotlessly clean and skilled labour employed for the more complicated of the assembly processes.

We were conducted round the compact factory by Fritz Huschke von Hanstein and his assistant Dr. Hortolf Biesenberger, whose efficient manipulation of visiting journalists matches the efficiency encountered in all departments of the Porsche organisation.

The Porsche is essentially a specialised hand-built motor car. The customer orders one of the three basic models—coupé (with or without sliding roof), convertible or open Speedster—he requires, specifies either a 1,600, 1,600 Super or Carrera engine, and finally decides on such details as colour of body, type and colour of upholstery, make of tyres, etc., and then and then only, is a car prepared for delivery to him.

In an age when a sports car is often endowed with a mass-production power unit borrowed from a bread-and-butter model and has many major components which emanate from the same source, a visit to the Porsche factory is like a breath of cool, clean air—the air of enthusiasm taken to the pitch of near-perfection. Half-measures do not get a chance at Zuffenhausen.

For example, before an employee is engaged he has to serve a four-year course at the factory as an apprentice, attending three or four lectures a week given by senior executives of the company and learning thoroughly the Porsche methods. These apprentices work at one side of the factory, preparing supplies of components for the assembly line and undertaking other comparatively unskilled tasks. Only when they have qualified are they employed on car assembly or sent out as Porsche service representatives.

The layout of the Porsche assembly line is simplicity itself. In the well-lit, spotlessly clean assembly hall the body shells arrive on trolleys from the adjacent Reutter coachwork factory. They then proceed along a U-shaped assembly line, the suspension components and detail fittings being attached as the cars move along the first leg of the "U," the power units and components being added as they progress along the remaining leg, until complete cars, ready for road-test, emerge side by side with the body shells entering the factory. Each stage of assembly occupies 22 minutes, as skilled fitters and mechanics go about their tasks, after which the car is moved on to the next station, for the next operation towards completion.

Beside the assembly line is the engine assembly bay, the engine crankcase being held in a rotatable jig running on a waist-high rail, so that as each step in engine assembly is completed the jig can be rolled along to the next fitter on the line, the entire unit being turned over as required. Six or seven fitters build up each engine. Castings are supplied by a local foundry but women are set to work on them with electrically-driven wire brushes, polishing ports and smoothing the insides of the manifolds before assembly. Pistons are warmed on electric stoves to ensure the correct relationship of expansion between piston and rings before they are inserted in the cylinder barrels. When each engine is completed it is taken on a trolley to a test-house outside the assembly hall and run on one of a pair of Schenck-Waage water dynamometers for a period of four hours. In this test-house there is no evidence of noise, heat or fumes, but here every engine—note, every engine—is thoroughly tested, an hour's running being done at 3,000 r.p.m., followed by half-an-hour idling, then 1½ hours at 5,000 r.p.m., followed by a final

half-hour of fluctuating throttle openings. A book is kept in the engine test-house in which full details of each test are entered, atmospheric pressure and air temperature at the time being first recorded. At the end of the test-period a horsepower check is taken and any engine which does not come very close to normal is stripped down for examination by a staff separate from the fitters who assembled the engine. This is not the end of Porsche testing, because every car is driven on the road for one hour.

It is taken as a matter of course that wheel-balancing, a micrometer check of tolerances in roller-bearings for the gearbox, etc., and a final test that the front wheels are correctly aligned, are undertaken.

The staff works from 7 a.m. to 5.30 p.m. five days a week and the racing staff all hours of the day and night as required. Incidentally, tools have to be drawn from the stores, signed for each morning, and handed in at night and the spotlessly-clean spanners, etc., are laid out on the benches like surgical instruments.

We had only been in the factory for a matter of minutes before our eyes alighted on a battery of 16 steering-boxes being motored electrically, from full-lock to full-lock, a process which goes on for some three hours (equal to 3,500 miles' driving) to ensure a perfectly smooth steering action when the customer drives away in his car.

The U-shape assembly line, from which issue 20 complete Porsches a day, has been described. Beside it is a bay, in which stood three cars at the time of our visit, where customers' special items of equipment are fitted.

Porsche uses Bosch electrics, Solex carburettors (Weber on the racing models), and Vdo instruments, the speedometers calibrated in m.p.h. or k.p.h. as required. Tyres are anything the customer desires and we saw Dunlop G.T., Continental, Firestone and Metzeler covers awaiting fitment. The seats can be upholstered in a variety of colours, with leather or corduroy inserts, and if a customer fancies lightweight racing seats in a normal coupé these are fitted as his car moves along the assembly line.

We were shown the nicely-finished crankshafts and camshafts and when Dr. Biesenberger asked a fitter to show us a Super crankshaft this was reverently presented in a cardboard box, covered in greaseproof paper, in which these beautifully finished components are stored until required for assembly in the crankcase.

The specification of the Porsche is too well known to merit repetition, beyond reminding readers that three engine types are available, the 1,600, the 1,600 Super, and the 1,500 Carrera. The engine dimensions are: 1,600 and 1,600 Super, 82.5 by 74 mm., 1,582 c.c.; Carrera, 85 by 66 mm., 1,498 c.c. The 1,600 engine has a compression-ratio of 7.5 to 1 and gives 60 b.h.p. (70 S.A.E.) at 4,500 r.p.m., using Solex 32 PBIC carburettors. The 1,600 Super engine develops 75 b.h.p. (88 S.A.E.) at 5,000 r.p.m. on a compression-ratio of 8.5 to 1, using Solex 40 PICB carburettors, and a crankshaft with roller-bearing big-ends. The 1,500 GS or Carrera engine was developed from the Type 550RS engine of the Spyder and is a very advanced unit with four o.h. camshafts, all-roller-bearing Hirth crankshaft, twin-choke Solex 40 PJJ carburettors, two-plug heads, twin cooling fan, dry sump lubrication, and a compression-ratio of 9 to 1. It develops 100 b.h.p. (115 S.A.E.) at 6,200 r.p.m.

The original 1,300 engine, of 74.5 by 74 mm. (1,290 c.c.) can still be supplied if required. It gives 44 b.h.p. (50 S.A.E.) at 4,200 r.p.m. on a 6.5 to 1 compression-ratio, or 60 b.h.p. (71 S.A.E.) at 5,500 r.p.m. in Super form, with 8.2 to 1 compression-ratio, etc. The Spyder open model, with Carrera 110 b.h.p. (125 S.A.E.) engine, was discontinued after 100 of this model had been made. The basic Type No. of all the production cars is now 356A. Few changes have been made to the specification of these remarkable little cars since the steering geometry was redesigned some time ago to reduce to a minimum the violent oversteer formerly associated with the



rear-engine layout, the shock-absorbers being mounted vertically instead of at an angle at this time. A new soundproof material is now employed to upholster the roof of the coupé, and short funnels now feed warm air to the carburettors in conjunction with the normal thermostatic temperature control of the cooling air, the funnels terminating, however, a long way from the air-intakes.

If Americans are a familiar sight all over modern Germany, this is perhaps of benefit to Porsche, for 52 per cent. of their output is sold to U.S. customers, for whose requirements special items of detail equipment were introduced. Total exports represent 70 per cent. of production and over 10,000 Type 356 Porsches have been built.

After we had been shown the factory Dr. Biesenberger asked which cars we would like to try. We decided to take away the Carrera, returning it late on the Saturday afternoon to exchange it for a normal 1,600 coupé, and borrowing on the Monday a 1,600 Super for comparison. Nothing could be easier—in a few minutes insurance documents were in our hands and we were off on a long test of the fastest normal Porsche model.

Outwardly the Carrera is distinguishable only by its twin exhaust pipes and the name on the side of the body, but a glance at the instruments reveals that the switch operating the screen-washers on normal Porsches is for the fuel pump (a foot-operated washer being substituted) and that two extra ignition switches are fitted for testing separately the two sets of sparking plugs. There are also some fascinating markings on the rev.-counter, "the red" being at 6,500 to 7,000 r.p.m.! Lifting the rear boot-lid reveals the exciting engine, with twin Bosch distributors, fed by two Bosch coils, driven off the back of the upper camshafts, and the smooth fan cowling reminiscent of the cowl round a radial aero engine.

To describe in detail the many sensible, practical and therefore acceptable items of a Porsche is outside the space-scope of this account, but these aspects, which include a rear seat folding to form a luggage platform, with straps for securing cases and loose items, lamps-flasher in the steering-wheel centre, special arrangement of ventilators and door locks, reserve petrol tap, heater knob adjacent to the gear-lever, seats with adjustable squabs which fold to form beds, etc., were described in *MOTOR SPORT* of last February, page 77.



1,136 MILES OF PORSCHE TESTING.—From left to right, the 1,600 Super, 1,600 and Carrera coupes placed at our disposal in Germany.

while a full account of motoring a Porsche 1,500 for 30,000 miles on the Continent will be found in *MOTOR SPORT* dated December, 1955.

Let me proceed to tell you how we enjoyed this Carrera, shod, incidentally, with those excellent Continental "Record" 5.90 by 15 tyres, and with Sigla safety-glass in all the windows.

Leaving the pleasant town of Stuttgart, with its yellow trailer-trams, which draw current from overhead gantries, and the vast yellow buses, we took to the *autobahn* for some preliminary investigations. The next morning we got down to it in earnest, filling up with B.P. Super—forecourt service, by the way, is a feature of German garages—at the beginning of the *autobahn* to Munich, where a Citroën Six with two-door drophead body and a vintage flat-twin Tatra were our companions. No oil was to be needed for the engine but, had it been, Porsche asked us to use Castrol.

Before the war motoring scribes used to come home to tell of sensational average speeds set up along the German *autobahnen*, to their personal satisfaction and the consternation of the manufacturers whose cars they had been thrashing. Today the story is rather changed, because bridges blown up during the war are still under repair and on the road we used there were other two-way stretches where normal repairs were in progress. In addition, a long climb up a ravine is also a two-way road, although a new one-way section will soon be completed. Here, no-passing is the strict rule and as gigantic German lorries and vast (which is a mild term!) U.S.A. tank-transporters proceed uphill and down at about 3 m.p.h., with frequent halts, you need a fast car to return good speeds. On that Saturday morning there was heavy traffic about, so that we could not average better than 88.2 m.p.h. for 188 kilometres—incidentally, this was stop-watch timed against the kilometre posts. The Carrera, although it was still rather stiff, proved happy cruising at 100 m.p.h. and its maximum speed was about 120 m.p.h., or 5 m.p.h. down on a fully run-in car. 200 k.p.h. equalled 6,700 r.p.m.



AT STUTTGART.—A view of the Porsche factory in the Stuttgart suburb of Zuffenhausen, port of call for motoring enthusiasts in search of performance and quality.

on the rev.-counter and the oil temperature on this sunny morning never exceeded 80 deg. F., which provides an answer to Mr. Storey, writing in the last issue.

There is a real punch-in-the-ribs as the throttles are opened in the gears, and the engine emits a hard power-roar above 5,000 r.p.m., although normal conversation is possible as you motor along at 100 m.p.h.

We clocked some acceleration times, without being brutal to the engine: 0 to 50 m.p.h. was accomplished in 8.8 sec., 0 to 70 m.p.h. in 15.0 sec., while the power available in the upper engine-speed ranges is indicated by a figure of 30.8 sec. to go from a steady 3,000 to 5,000 r.p.m., 4,000 to 5,000 r.p.m. taking 15.4 sec. and 5,000 to 6,000 r.p.m. a matter of 34 sec., top gear being used in each case (6,000 r.p.m. was equivalent to approximately 107 m.p.h.).

The Carrera handled in typical Porsche fashion, over-steering, but not excessively, the steering requiring $3\frac{1}{2}$ turns, lock-to-lock. The seats are exceedingly comfortable, providing the support needed in a car of this performance and manoeuvrability, with generous leg-room.

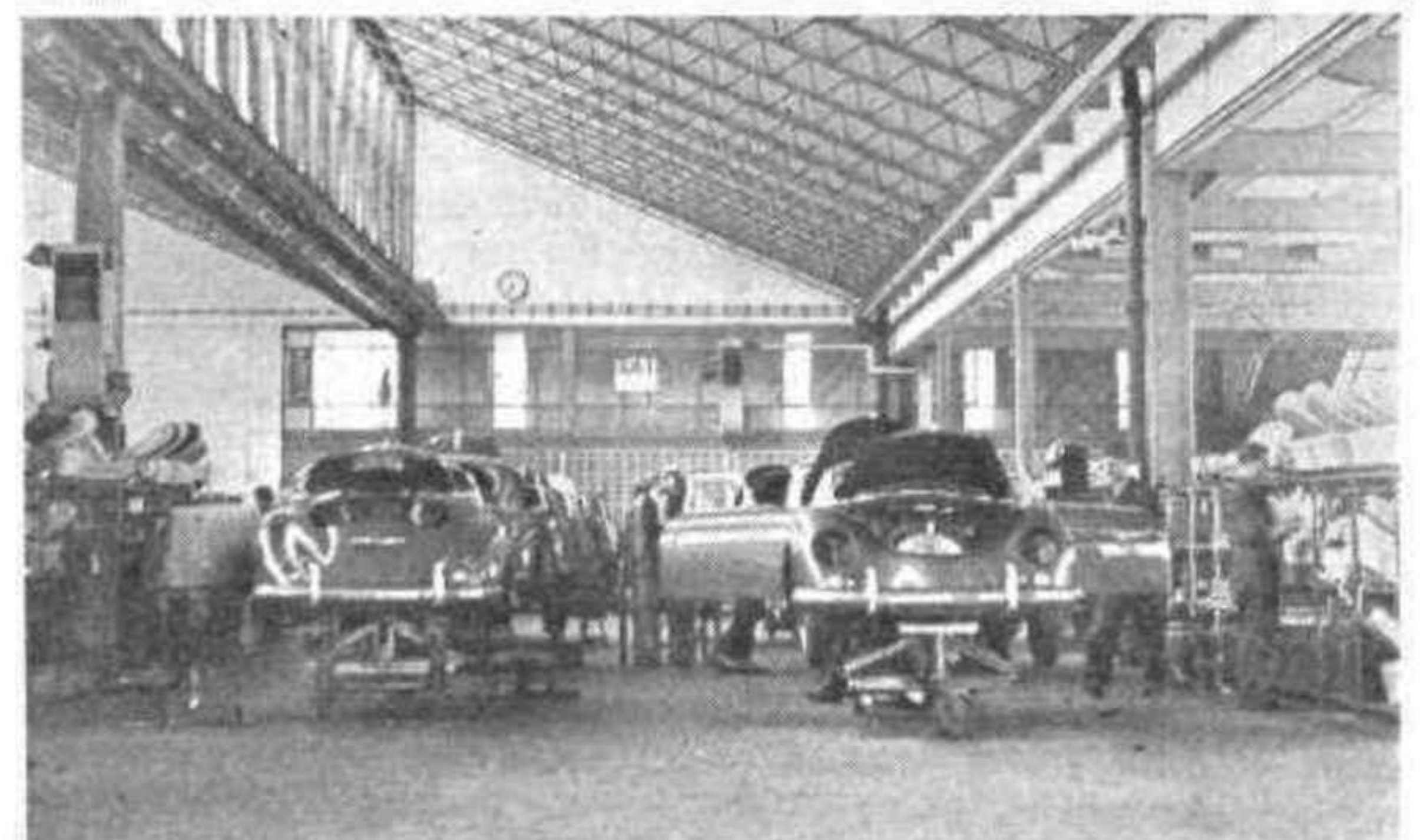
After driving through Munich, where there are more trailer-trams, but painted blue, and where parking meters are again in use—a foretaste of what London will "enjoy"—the Editor relinquished the stop-watch and drove back along the *autobahn*, to lunch at Ulm in the shadow of the famous cathedral.

We arrived at the Porsche factory late on the Saturday afternoon, but although the works was closed, as we came up to the electrically-lifted bar across the entrance, a gate-keeper who had been sitting in the sun outside his office jumped to his feet, waved us in, and in a matter of minutes we were on our way in a normal Porsche 1,600, equipped with more insurance documents. This car we were allowed to use over the rest of the weekend. It was equipped with Metzeler 5.60 by 15 tyres, had the new warm-air funnels to the carburetters, a Fram oil-filter and, of course, a single exhaust tail-pipe.

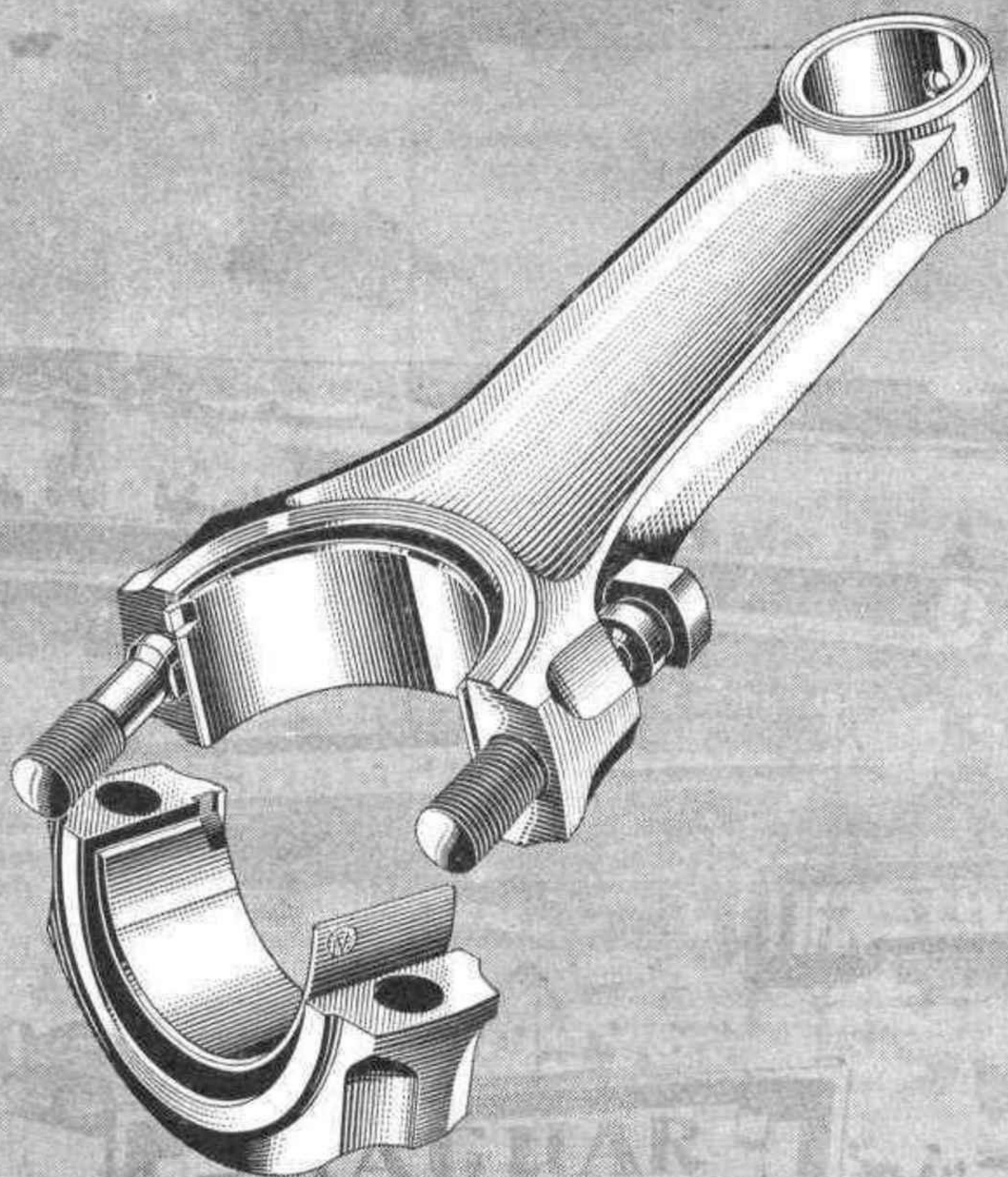
The 1,600 normal or "Damen" Porsche is naturally quieter than the Carrera, which, again, is noisier than a Super. It had rather heavier steering but the same gear-lever, which, in conjunction with the special Porsche synchromesh designed by Leopold Schmid (which is used not only for the cars but for lorry gearboxes with 10 forward speeds designed for an opening torque of some 651 ft./lb.), makes gear-changing an absolute delight, whether the driver wants to go from third into top or second into bottom gear.

Getting up early on the Sunday, we drove along back roads through beautiful country to lunch in the open air at Weissensee, having sampled this silver-grey Porsche on a run beside the river Neckar to Heidelberg the previous evening. For the most sober model of the range, giving a petrol consumption of considerably better than 30 m.p.g., the performance was certainly impressive. It cruised at 100 m.p.h. (4,700 r.p.m.) for miles along the *autobahn*, the oil temperature again never exceeding 100 deg. F., although being higher than on the Carrera as wet-sump lubrication is used. 0-50 m.p.h. was accomplished in 10.6 sec. and 0-70 m.p.h. in 20 sec., while in top gear it was possible to go from a steady 3,000 to 4,000 r.p.m. in 17 sec. and from 3,500 to 4,500 r.p.m. in 20 sec.

After lunch we drove almost to the Swiss border, being unable to cross the frontier as we had no carnet for the car. Summer had come at last and the roads carried a long stream of cars in both directions, so that the Porsche's desire to climb up the Kesselburg with verve had to be curbed, and it was with relief that we returned



PORSCHE ASSEMBLY LINE.—The Reutter body shells have come in from the adjacent coachbuilding factory and travel on rubber-tired trolleys as power units, wheels and mechanical components are added, each stage occupying 22 minutes.



VANDERVELL

BEARINGS & BUSHES



STAND No 269
FIRST FLOOR
INTERNATIONAL MOTOR SHOW
EARL'S COURT

VANDERVELL PRODUCTS LIMITED · WESTERN AVENUE · ACTON W3 · LONDON

VANDERVELL PRODUCTS (CANADA) LTD · QUEEN ELIZABETH HIGHWAY AT 401 KIPLING AVE · (HOLLYWOOD POST OFFICE) · TORONTO · CANADA

PORSCHE DIMENSIONS

N.B.—The differences in the various Porsche models are explained in the text, but all have common chassis dimensions, as under:—

Wheelbase : 6 ft. 11 in.
 Track : Front, 4 ft. 2½ in.; rear, 4 ft. 1½ in.
 Length : 12 ft. 11½ in.
 Width : 5 ft. 5½ in.
 Height : Speedster, 4 ft. 0 in. Coupé and convertible,
 4 ft. 3½ in.
 Turning circle : 36 ft.
 All have torsion-bar trailing-arm i.f.s. and torsion-bar
 swing-axle i.r.s.

along a very beautiful forestry road (toll, 4s.) beside the Walchen-See, amid Bavarian scenery beautiful beyond words, a fitting finale to an afternoon of twisting and turning under the awesome presence of tall snow-tipped peaks. Getting into the Munich-bound traffic stream before joining the *autobahn*, we were impressed with the manner in which everyone drove at 60-65 m.p.h. along a winding road with a drop into fields on either side, faster cars making skilful use of any gap which appeared, and even more impressed by the carefree manner in which solitary oncoming vehicles also held 60-65 m.p.h.! Once on the *autobahn*, however, it was rather a different story, mimmers keeping in the fast lane at the same speeds they had used beforehand. Away from the *autobahn* the 1,600 Damen proved a more useful car than the Carrera, which would have been almost permanently in second gear!

We covered 670 enjoyable miles in this version. The Editor kept an eye open for vintage cars, but they are as rare in Germany as they are prolific in France, where cars built before 1931 now go tax free. Apart from one early Goliath three-wheeler and one of the original B.M.W. 3-15 (Austin Seven-type) saloons, the score was nil. We met only two Mercedes-Benz 300SLs, one at an "embarrassing" moment on a bend, so that, as its driver braked heavily, it went sideways-on! Plenty of the exceedingly-attractive Mercedes-Benz 190SL sports cars were about. Of British cars the Austin-Healey is popular, we saw one German-registered TR2 hard-top, some M.G. MGAs, the odd Riley and Rover, two Austin Sheerlines (one occupied by a bishop!), and a smaller Austin stationary beside the *autobahn* with its bonnet open, and that was about the lot. The tiny Lloyds and Goggomobiles are now a normal aspect of the German scene and very reasonably proportioned and smart they look.

On the Monday morning we found ourselves at the large and imposing factory of B.M.W., with an appointment to meet the Sales Director at 8 a.m.—in Germany the working day commences at 7.30 for workers and directors alike! This was rather like being at Coventry or Birmingham with a Cooper to return to Surbiton, but B.M.W. rose to the occasion, lending us a chauffeur-accompanied 502 for the rest of the day and permitting us to drive it. The two cars motored in convoy back to Stuttgart, the 200 kilometres of *autobahn* being covered at an average speed of a fraction under 80 m.p.h.

At Porsche's we found them happy over their Avus victory and Frankenburg's fortunate escape from serious injury. After a quick stroll through the delightful offices, where brightly coloured ultra-modern furniture and decoration prevail and external striped sun-awnings shield the windows, and a glance at the equally-modern and airy lecture room, where sectioned Carrera engines could be studied, we were dispatched in a third Porsche—a green 1,600 Super, with twin exhaust pipes and Michelin X 155-180 tyres. In this the seats seemed higher, the wheel closer to the dash and the steering very light and sensitive. The deeper growl of the exhaust told of the greater power and a speed of just under 120 m.p.h. (5,500 r.p.m.) was quickly reached, long curves being taken steadily at 105 m.p.h. 0-50 m.p.h. occupied 9.8 sec., 0-70 m.p.h. a time of 17.4 sec., and it was possible to go from a steady 3,000 to 4,000 r.p.m. in 24 sec. and from 3,500 to 4,500 r.p.m. in 20 sec. in top gear. Only after these tests did the oil temperature climb and then not above 110 deg. F.

We regarded this as an eminently satisfactory 1½-litre motor car! After some final photography we left the Porsche factory and set off for Munich in the B.M.W. 502.

It may not be generally known that the present Zuffenhausen factory was not built until 1952, the Porsche originating at Gmünd in 1948 and being shown to the customers for the first time at the 1949 Geneva Show. This factory, where the first fifty Type 356 cars were built, was moved to Salzburg in 1950 and today is headed

by Mrs. Louise Porsche and is the Austrian headquarters of VW. Prominent Porsche personalities include Chief Engineer Karl Rabe; Erwin Komenda, who evolved the famous body-shape; Hans Kern the treasurer; Karl Kern, who manages the buying department; Walter Schmidt, head of sales; Klaus von Ruecker, late of Studebaker, who is head of the technical department; Dr. Ernst Fuhrmann, designer of the four-cam engine for the Carrera, of which over 100 have been delivered and of which a Gran Turismo version is on the way; and Wilhelm Hild, who looks after the racing department. The racing shop is separate from the main factory but the engines of the RS Porsches are tested on the normal test-beds. The drivers are engaged race by race, not signing a season's contract.

Besides the inimitable Porsche car, Porsche engines have been used in aeroplanes and racing boats, tractors are built in the Porsche diesel engine factory at Friedrichshafen under Prof. Albert Prinzling, and much outside design work is undertaken. The tractors have engines of one to four cylinders, developed from the first 12-h.p. and 17-h.p. and later AP22 models, after the first batch had been lost in the O.M. factory at Brescia during the war.

Reutter commenced making Porsche bodies in 1950. After Dr. Porsche's death in 1952 his son, Dr. Ferry Porsche, took charge.

The comfortable and spacious 2.6-litre V8 B.M.W., running on Dunlop "GT" tyres, cruised at a timed 100 m.p.h., its speedometer "spot-on" at that speed. In spite of stopping to extract the uninjured occupants of a Mercedes-Benz 220 which overturned in front of us on to the opposite lane of the *autobahn* in avoiding a swerving lorry—lorry drivers go to sleep frequently on these fast, monotonous motor roads!—we averaged approximately 72 m.p.h. Where in England could you do that between two major towns 125 miles apart? When the brakes of the B.M.W. were required they proved exceedingly powerful. "But they judder," we said. The chauffeur, who hadn't much English, then tapped the mileometer to show us the car had done 58,000 kilometres! A fuller report of the B.M.W. 502 appeared in MOTOR SPORT for November, 1955.

B.M.W. are now producing 20 to 25 cars a day, mostly 501s and 502s, and two or three 503s a day, while the 507 sports/tourer is now in production. Seven thousand workers are employed, although some were stood off recently and short-time working, from 7.30 a.m. to 3.30 p.m., for five days a week is in progress. Production of the little Isetta "bubble car" has been cut from 200 a day to 140-150 a day. The beautifully-finished, shaft-drive B.M.W. motor-cycles, first built in 1923, are still made—single-cylinder types R25/3 and R26 and the flat-twin R50 and R69, and R60 combination. They are exported to 90 countries but demand is falling as the Isetta takes over.

Car production started about 1928 and aero-engines followed. In the vast entrance hall a large model of a B.M.W. 501 and two record-breaking motor-cycles, as well as a 1923, 1930 and early racing motor-cycle can be studied.

The 501 and 502 are beautifully made and appointed saloons, the 501 normally a 2-litre six-cylinder but available with the 2.6-litre V8 engine, while the 502 has either a 2.6-litre or 3.2-litre V8 power unit. All models have torsion-bar suspension, with normal back axles. The 503 is the fast version, with 3.2-litre V8 engine, the two-door saloon having electro-hydraulic window actuation, used for the hood also on the convertible model. The 501 and 502 engines have a single carburettor, the other engines two carburettors. The 2.6-litre V8 engines, which do not give quite as much power as the others on the bench, are reserved for the 501, such engines probably gaining the lost power when fully run-in. The 503 and 507 engines differ from one another only in respect of higher valve lift and polished cylinder heads, the 503 giving 140 b.h.p. at 5,200 r.p.m. and the 507 developing 150 b.h.p. at 5,500 r.p.m., while both units give 24 metres/kg. torque at 4,000 r.p.m. The 507 runs safely up to 5,800 r.p.m., and has a power/weight ratio of 8.4 kg. per h.p. All 2.6-litre cars have unfinned brake drums, the 3.2-litre cars have stiffening fins on the periphery of the drums, while the 503 and 507 have German-made Alfin drums. The suspension torsion-bars run parallel to the side-members of the wide chassis, being considerably longer for the back wheels. Externally the 2.6 and 3.2-litre 502 engines are identical.

The B.M.W. factory is pleasantly situated opposite a club aerodrome on the fringe of Munich, the buildings, which are not overshadowed by tall chimneys or housing estates, covering an area of 94 acres. The clean, well-lit halls cover complete engine building, chassis assembly and body construction. The foundry is famous for its light-alloy castings, which are also produced for outside concerns. The 501s and 502s go through in batches of standard colours but each 503 has to be ordered in the colours required. Much use is made of neon lighting, even along the production lines. Vast Weingarten presses are in evidence, the biggest being of 1,350 tons. Smaller Muller and Schuler presses are used and a huge over-



B.M.W. ASSEMBLY-LINE.—The neon-lit, raised assembly line where B.M.W. cars near completion, with 2.6 and 3.2-litre V8 power units awaiting their turn to go out into the world and work.

head gantry crane distributes castings about the hall. The bodies travel on rubber-tired trolleys, being rubbed down after the first coat of paint. The final finishing bay is fascinating, every body being carefully inspected under powerful lamps and hand-polished—which goes for Isettas as well as for B.M.W.s. Every 10 minutes a body emerges from the paint shop, in which Schilde drying ovens are used. Incidentally, operatives are supplied with the inevitable Coca-Cola as well as milk.

The finished chassis are Tecalemit greased and a 500-kg. overhead gantry conveys power units to the assembly lines. Every two-piece propeller-shaft is electrically balanced on a Hahn and Kolb machine. Radiators are supplied by Kuhlertabrik. Even the Isettas have their headlamps adjusted before they are passed out; Isettas without the rear window are used in the factory to carry Varta batteries and supplies of various makes of tyres to the single, long Isetta assembly line.

The last shop we visited was the new engine and transmission hall, beyond the foundry. This is a maze of costly machine tools as far as the eye can roam—Fritz Werner drills, Gillemeister horizontal drills, batteries of Stachely gear-cutters, Gleason gear-cutters, Wanderer lathes and a new Hurth machine of which no man yet knew the object. At one side of this hall engine testing took place and, although not enclosed, sound and smell were virtually absent. Every engine—note, again, every engine—is tested on a Schenck water-brake, six-cylinder 501 engines for three hours, 501 and 502 V8s for six hours, and the 503 V8 for ten hours. A record is kept of the output and performance of every engine, while running road conditions are simulated by blowing air on to the sump and maintaining the cooling water at natural temperature. Isetta engines are only run for a short time but each Isetta goes for a test run round the grounds. The 507 engine is likely to be run for 20 hours. Road testing covers 20 to 30 kilometres for each 502 and 100 kilometres for each 503. Once upon a time a banked motor-cycle test track existed in the grounds, but it has been dismantled.

Of the finished cars, which included very handsome 503s in two tones of green, cars were ready for dispatch to places as far apart as Vienna, Caracas, North America, etc.

The B.M.W. 502 remains unchanged, although an under-bonnet lamp is an extra refinement. The Isetta now has the hand-brake on the off-side wheel-well and the brake fluid reservoir on the floor beside the battery. They are made in two engine sizes, 68 by 68 mm. (215 c.c.) and 72 by 73 mm. (295 c.c.), the larger-engined model distinguishable because "300" appears on the door after the name.

No storage park is maintained for the cars but Isettas were liberally sprinkled about the grounds. In one park an early B.M.W. prototype small car, a prototype of the 507 and a Citroën DS19 bought for experimental purposes were encountered. Rumour sounds faintly of a slightly bigger, wider track version of the Isetta, fanned by a little Isetta lorry with equal front and back track shot past.

The culminating point of our visit was being permitted to sample a 503 saloon and the prototype 507. The 503 is an exceedingly handsome car, with pleasingly narrow radiator grille. The car we went out in was in two-tone blue, and the finish of the body and high-grade leather upholstery was fully up to German standards, for they are masters of the art of body-building, especially convertibles. The driver has control of all four electro-hydraulic windows, those



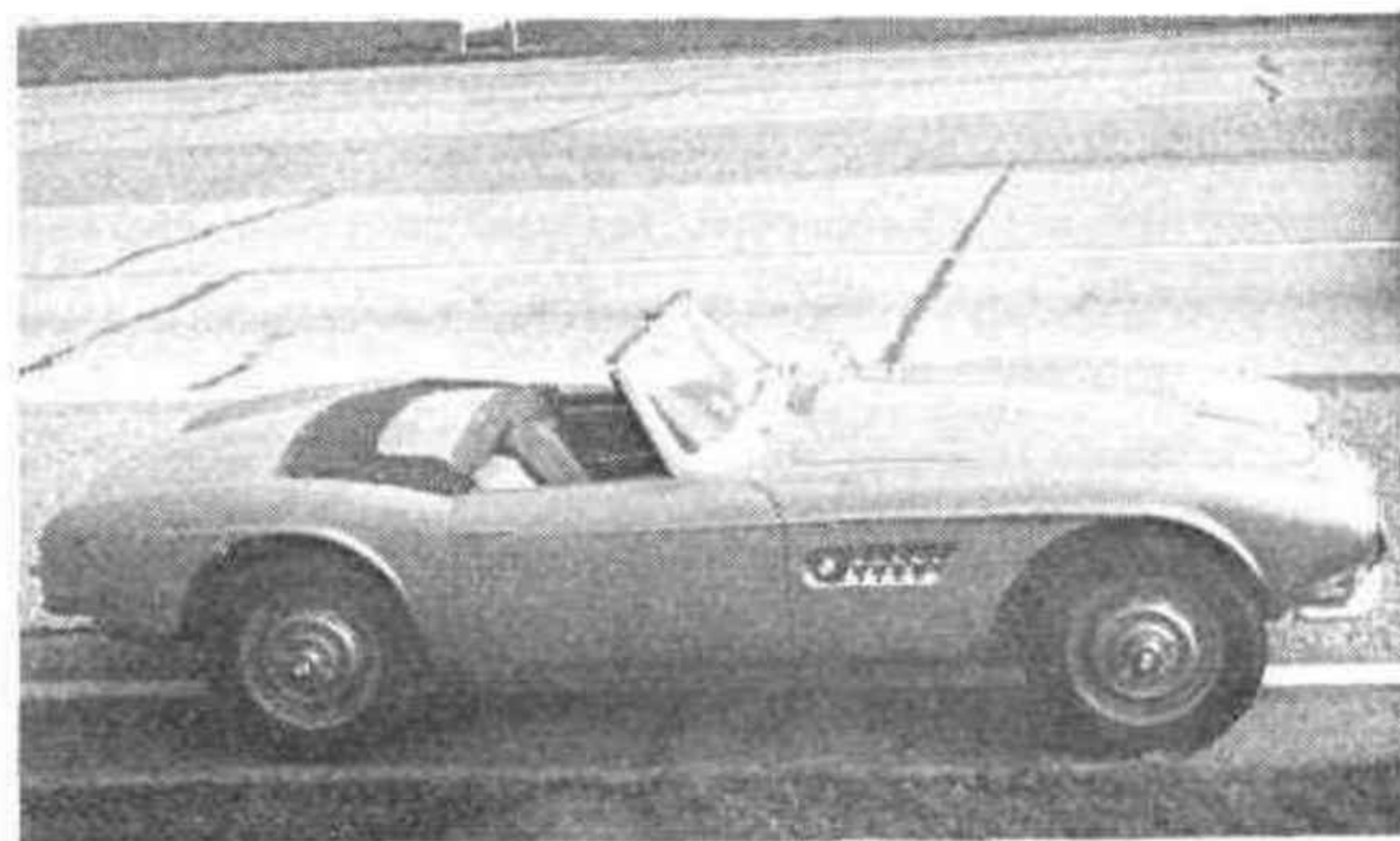
TEST PAIR.—The B.M.W. 503 and, behind it, the new 507, which were tested while visiting the B.M.W. factory at Munich. The narrow radiator grille well offsets the handsome appearance of the beautiful Type 503.

in the doors sliding conventionally, the quarter-lights arcing into the body sides, but the passenger has but one finger-slide actuating the windows on that side. Speedometer (reading to 240 k.p.h.) and rev.-counter (6,000 r.p.m., with red marks from 5,750-6,000 r.p.m.) occupy a cowled panel immediately before the driver, fuel gauge and water thermometer being incorporated in the rev.-counter dial. Traps normally cover the screen hot-air vents. The gear-lever is on the right of the steering column (l.h.d. car), with umbrella-type hand-brake beneath the dash. Each door has large and small elastic-topped pockets. The four-spoke steering wheel of narrow "X" formation has horn pushes across the spokes. The rear compartment was rather cramped for a person of average stature. The car had Continental Super 6.00 by 16 tyres. Being new and still, we took no figures, but the handling qualities and brakes proved first class. No German journalists had driven a 503, which, incidentally, has to be returned to the factory for overhaul.

The impressive 507 had 6.00 by 16 Continental "Record" tyres and knock-on hub caps to steel disc wheels, which are an extra on either model. Both have unobstructed luggage boots, that on the 503 very spacious; the spare wheel is carried under the floor in each case. A pleasing aspect is the use of torsion-bars for boot lid and bonnet! The 507 had a large full-width screen, excellent hood, and an experimental cold-air feed from a shallow bonnet-top intake to the twin carburettors, rubber sealed. Axle ratios of 3.7 and 3.89 to 1 are available for the 503, 3.4, 3.7 or 3.89 to 1 for the 507. All 503 and 507 engines have twin carburettors and compression-ratios of 7.5 to 7.7 to 1.

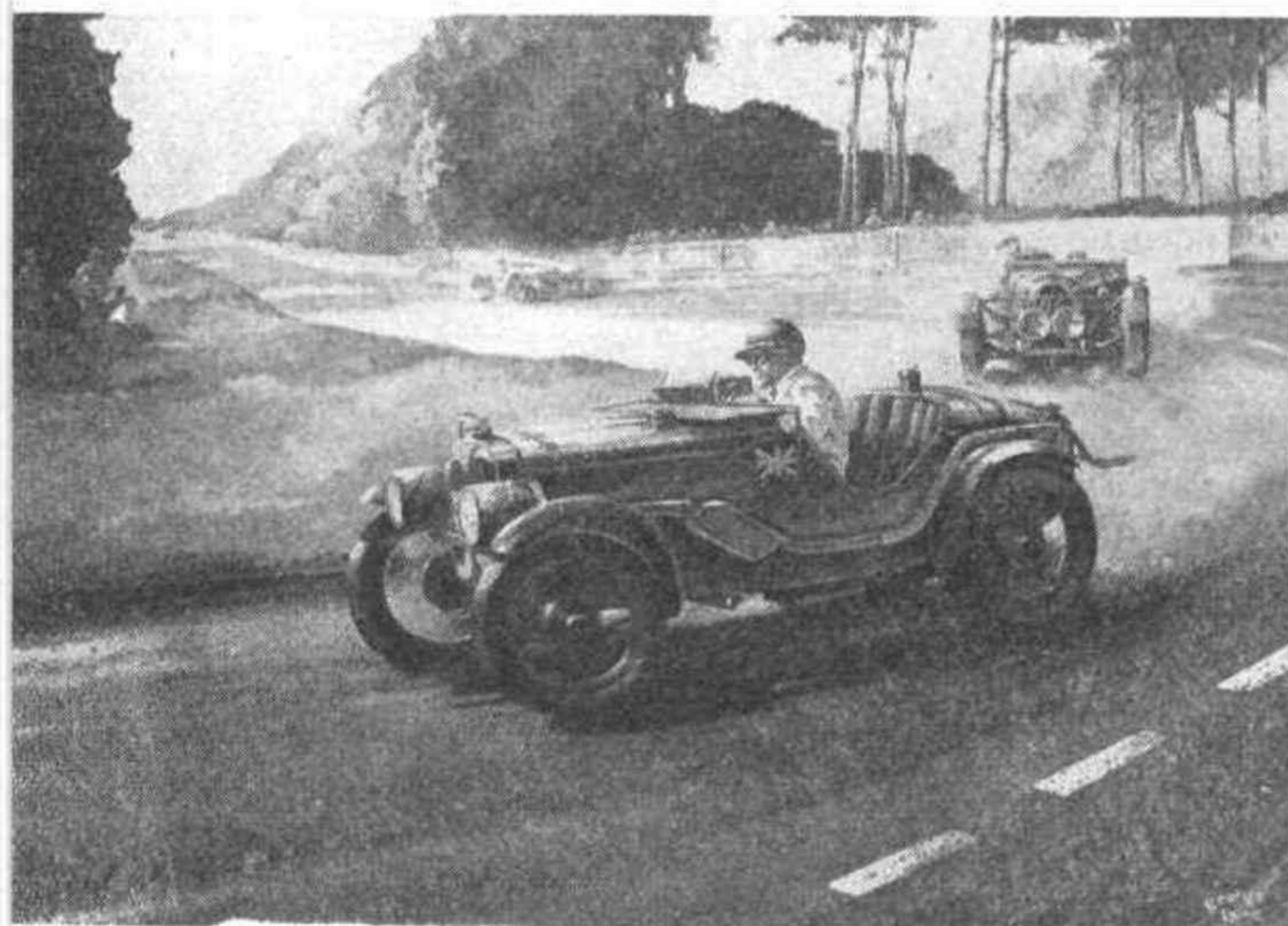
This very handsome "Fahrleistung Wagen 507" is intended as a sports/touring car, B.M.W. realising it isn't fast enough for competition work. Nevertheless, it has a splendid performance. Von

Continued on page 694.



FAST MODEL.—The new B.M.W. 507 sports car, photographed beside the autobahn, hood furlled, before we took acceleration figures. This is the latest and fastest B.M.W. model, possessing a charming gear-change, excellent roadholding and a maximum speed in the region of 130 m.p.h.

THE AUSTIN THAT MARCHED



ULSTER-BODIED.—A reproduction of a George Lane painting of Metchim's Austin Seven competing at Le Mans for the second time, in 1934.

THE years during which I was a regular competitor—1929 to 1934—were the golden age of motor racing. The drivers of those days have never been surpassed and never were races more sternly contested with more magnificent cars! Older drivers will know, and younger ones will in due course, that the golden age of motor racing is the period in which they compete themselves. Nothing will ever compare with that time—ever!

For me, the supreme form of racing was on a road circuit. How to participate in this exquisitely delectable form of amusement had exercised my mind for many years previously. It must have begun early in 1921, at my prep. school, when one of the "big" boys, speaking with all the assurance of ten years at least, informed me that in the 200-Mile Race the Talbot-Darraeqs would come in first, second and third. Which of course they did!

As the only son of a violently anti-motoring family, it was constantly being impressed upon me that my responsibilities, later in life, would be very heavy. Any mention of my owning a car was curtly dismissed. And as for motor-cycles! I did, however, manage to take out a driving licence, ultimately. Indeed, had it not been for the fabulous uncle, all would have been lost. Of this, more anon.

In my urgent desire to participate in a road race I was not alone. In those far-off days of 1929, one could race at Brooklands—and nowhere else. Even the odd Campbell circuit and the even odder Mountain circuit, both of which had corners, were still things of the future. True, in 1925, the Brooklands authorities, pandering to the queer tastes of the Continentals, arranged artificial bends in the finishing straight. By these means, a faint resemblance to a road circuit was achieved. Other than that, races short and long were an all-out blind round the outer circuit. Those were *not* the days!

Then the Junior Car Club had an idea. Inside the Brooklands Track were a number of roads used by the public to reach various vantage points, and the Junior Car Club noted that by using these roads and also part of the track itself a circuit with real corners could be formed. Three real corners and an artificial one per lap! As the Junior Car Club so shrewdly surmised, the powers-that-be would never agree to such a circuit being used for racing—not a hope!—but they might allow a trial, run at fairly high speed. Thus sugared, the J.C.C. administered the pill and the High-Speed Trial was born.

The sugaring had been laid on thick. The set speeds were indeed high for those days, but not unduly so for standard cars in touring trim. True, there was a little bit in the rules about sports models being permitted and another little bit about superchargers being in

[The Austin Seven has probably given more pleasure to a greater number of impecunious enthusiasts than any other car. Consequently, it has received proportionate space in MOTOR SPORT. Articles relating to it have included contemporary road-tests of the Brooklands, Cup, unblown Ulster, blown Ulster and other models; "Austin Seven Can's and Can'ts"—Mallock—Sept., 1943; "An Ambitious Austin Seven Special"—Jan., 1944; "A Blown 750"—Moon—Aug., 1944; "Observations on the Austin Seven Nippy"—Moon—April, 1945; "It's One of the Team Cars, Old Boy"—Boddy—Sept., 1945; "Some Austin Seven Specials"—Boddy—Nov., 1945; "A Single-Seater Racing Austin Seven"—Boddy—Nov., 1945; "A Successful Amateur Venture"—Machlachlan—Nov., 1945; "Recipe for a 70-m.p.h. Chummy"—Boddy—June, 1946; "The Austin Grasshoppers"—Biggs—Jan., 1947; "The Development of the Racing Austin Seven"—Boddy—March and April, 1947 (reprinted by the Austin Motor Co.); "Charles Goodacre on Austin Racing Cars"—Boddy—Feb., 1949; "Early Austin Sevens"—Boddy—Oct., 1949; and "The Austin Seven from the Special-Builder's Angle"—Birkett—May, 1950; etc. That seemed to cover the field pretty thoroughly and the 750 M.C. has carried on the good work. One gap remained—the account of how a private owner twice ran an Austin Seven in the 24-Hour Race at Le Mans. I tried hard to trace the entrant, Charles Metchim, and at last contacted him in Nairobi and persuaded him to write the following fascinating article.—ED.]

order if standard. And again there was a little bit about special awards for those who exceeded their schedule by 20 per cent., which meant going very fast indeed. Announcing that this event was *not a race*, the J.C.C. set the distance at 60 miles. Possibly coincidentally, they allowed the 850-c.c. class to start five minutes ahead of the 1,100-c.c. class, which, in turn, started ten minutes ahead of the 1,500-c.c. class. Oddly enough it was this latter class that might contain the supercharged Lea-Francis T.T. cars and the supercharged Alvis T.T. cars.

Now this really was something. It was certainly not real road racing, but it was the nearest thing to it that had ever appeared in England. Because this event was *not a race*, it enabled people like myself, with difficult parents, to broach the subject boldly. But my suggestion that I should drive one of my father's cars was ruthlessly swept aside. As an afterthought, I would be allowed to drive—if the fabulous uncle would lend me his own car. This was rubbing salt into the wound with a vengeance. There was no possibility of the fabulous uncle lending me his car. For one thing, it was brand new; not only brand new, but the very last thing in Austin Sevens—a Boyd Carpenter Special. And as a driver I, too, was brand new. What a hope! But what a car to drive! And what an event to drive it in!

So, as a forlorn hope, I wrote to my uncle asking him if he would let me drive his car in a Brooklands event. It was absolutely staggering to my father and myself—in our different ways—when my uncle replied saying that despite having to cut short his holidays, he thought it was a good idea but would I mind if he came as my mechanic? Would I mind!

So, on July 6th, 1929, I found myself facing the starter for the first time behind the wheel of this lovely little car. Unfortunately for our ambitions, the M.G. Car Company had also produced a lovely little car, the 850-c.c. fabric-bodied two-seater. In those days, their sense of humour was scarcely less than that of the J.C.C. They announced that as a company they would take no part in racing officially. Nevertheless, five of these cars appeared on the line, three of which were driven by the Earl of March (now the Duke of Richmond and Gordon), the late Chris. Staniland and H. D. Parker. Quite a team!

As for us, we did five stupendous laps on the tail of the fifth M.G. Just when I had persuaded the fabulous uncle that there was no reason why we should not pass it, and was actually pulling out to do so, something in the engine went trrrrrrAHM! Big-end. End.

But it was also a beginning and the infection took strongly.

Once having had the scent of Castrol R in the nostrils it became a matter of supreme urgency to obtain a car in which to compete as frequently as possible and, at the earliest possible moment, to drive in a proper road race.

In April, 1929, at the Easter Monday meeting at Brooklands, a single-seater Austin took part in the 47th 75-m.p.h. Short Handicap, a 2½-lap event. Driven by J. D. Barnes, it covered the flying mile at 85 m.p.h. [Best lap was at 71.35 m.p.h.—Ed.]—not unduly slow for an unblown 750 of those days—and finished fourth in the race. Under the bonnet of this car was a prototype engine, to be known later as the "Ulster." The chassis was standard, with the usual Austin arrangement of springing—transverse front and ¼-elliptic rear—and standard four-wheel brakes. This meant, even in those days, that the car was on the high side, not too well sprung and almost entirely unable to stop.

When the same car appeared again it was in a very different guise. It had been entered for the Double Twelve a month later by F. S. Barnes, who was to drive it with his brother, J. D. The red single-seater body was removed and replaced by one that had started life in all good faith as a "Chummy." The Barnes brothers set about it with powerful tools. They beat at the inside of the scuttle with heavy hammers until it became enormously bloated at the sides. The standard 4-gallon petrol tank was then removed and replaced by one holding nine, with its filler cap protruding through the top of the scuttle. Economically, the 4-gallon tank was placed in the rear space behind the front seats. Seeing that there was still a little space left, this was filled by the battery, transposed from its normal position under the driver's seat. The glass windscreen, which may well have shattered under the treatment meted out to the scuttle, was replaced by a lie-down type. Further mayhem was committed on the body. A portion of the bonnet was removed to allow for the protrusion of the exhaust manifold; another portion was removed from the door on the off side for the driver's arm. An equivalent piece was removed from the opposite side where the door had been blanked out. As this enabled the mechanic to rest his arm on the exhaust pipe, this was not quite such a good idea. What was left of the body, and to prevent it bursting out at the seams, was cross-braced with channel steel running immediately behind the two seats and in front of the rear petrol tank. The whole was then painted orange. There may have been uglier cars in competition, but I doubt it!

In those days sports-car events differed from those of today in several striking instances. At that time, the competing vehicles were in fact standard sports cars. Impressed by the performance of a particular make, it was possible to go to the nearest agents and purchase a similar car. If the car in the race was supercharged, the car which one purchased from the showroom was also supercharged. Against this excellent feature, not seen today, one had the travelling mechanic. This perilous custom has now become defunct, although there was never a shortage of these cheerful and courageous people willing to take the risk. Lastly, so beneficial to the public at that time and so infuriating to the competing drivers, was that the first 10 laps had to be run with the hood erected. Before then, the erecting of hoods on open cars, and sports cars in particular, was a nightmare undertaking, as one was generally soaked through long before the feat—and it was a feat—had been accomplished.

Thus the rule about hoods for the first 10 laps was timely, maddening though it was. A hood that could be raised in a matter of seconds at once became essential. All sorts of ingenious arrangements were put into practice, not least on the Austin. In the latter instance, the lines of the rear compartment were caused to downwards. This, with the hood folding inside the rear compartment, the canvas lying on top of the petrol tank, meant that the usual wind resistance was eliminated. Furthermore, with one swinging motion, the hood could be raised and held in position by two leather straps hanging down each side of the screen and held by clips. It is difficult to state how long this took as the car was usually under way before the clips were made fast.

For those not familiar with the Ulster engine, the difference between it and the standard Seven was considerable. The dimensions were the same, but otherwise the Ulster derived more from the Gordon England Brooklands model, of which it was the lineal descendant and logical outcome.

The Ulster had a high-compression head and a high-lift camshaft. This latter operated the side-by-side valves, the valves themselves being machined from the solid billet and were of tulip type, very beautiful. They were returned to their seats with precision and violence by twin valve springs; the tappets were non-adjustable thimbles. When adjustment became necessary, as was all too frequently the case, shims had to be inserted or, alternatively, the bases of the thimbles had to be ground down. "Hunting the thimble" took on a new and terrible significance. Adjusting the non-adjustable marked a man

for life. Nevertheless, the engine would—and often had to—go up to 6,400 r.p.m., and any signs of valve bounce in practice merely indicated new valve springs.

As in those palmy days splash-lubrication was by no means unusual, it must be said at once that lubrication was at a pressure of 40 lb./sq. in. I believe that the Ulster model, when it went on the market, had had its oil pressure put up to 50 lb. This highly desirable state of affairs was achieved by fitting, to the front end of the drilled crankshaft, an oil bottle—a most diabolical contraption—which quite often enabled the oil from the oil pump to enter the crankshaft by way of an annular ring. Other times it did not, the times appearing to be selected specially to cause the maximum despondency and alarm. The "cork" end of the oil bottle was intended to be sealed by the starting handle. This piece of happy optimism was misplaced. When used, which was frequent, the starting handle did not always return, under the compulsion of a powerful spring, correctly to its seat. The temperature of cold Castrol R did not betray this fact to the driver, nor that appreciable quantities of this expensive liquid were seeping past the faithless instrument. However, as the engine warmed to its work, the pressure went on falling, and falling. On the other hand, it taught one in due course to watch one's instruments with vigilance.

Turning to a happier aspect, ignition for the Ulster depended with unfailing assurance on a magneto. How lovely, the magneto! If the battery gave up the ghost, it was only of consequence after dark. And the more the revs., the bigger the spark.

Carburation on the Ulsters generally was by a large Solex, but for the prototype engine, now being described, this was often removed in favour of twin Zeniths. These immense triple diffusers were of such considerable bulk that they had an equal share, with the rest of the power unit, of the space under the bonnet!

The cooling system was extraordinarily vague despite its impressive title of "thermo syphon." Additional uncertainty was introduced by the removal of the fan and any means of driving one. As a concession to the inexorable laws of nature and the imminent threat of the cooling being undertaken by the production of superheated steam, a water tower with a length of copper pipe replaced the radiator cap and the overflow pipe of the radiator. Inside the water tower was a baffle and this device, in alliance with the copper pipe, cunningly spiralled, conserved the water against loss occasioned by violent braking.

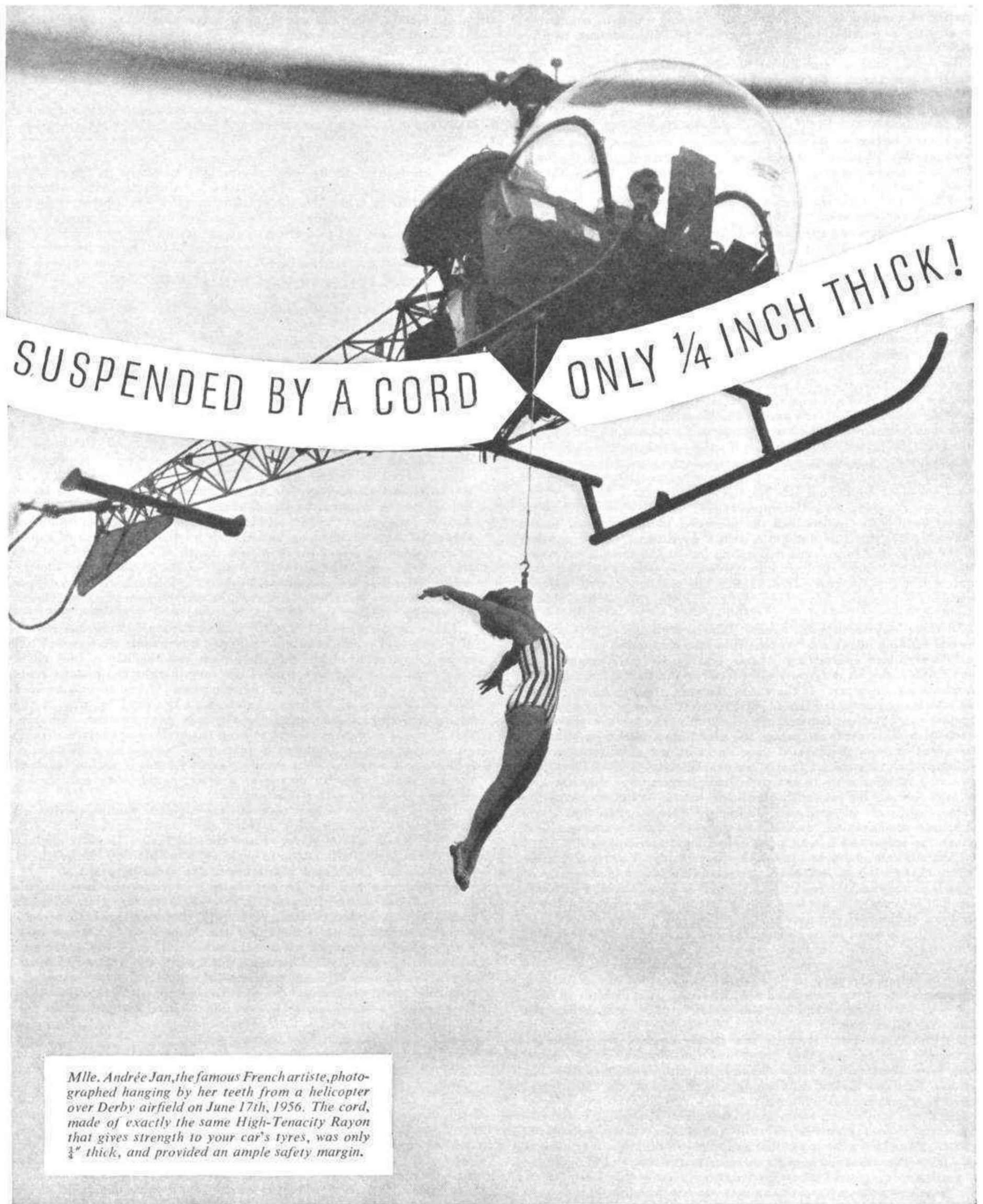
From the point of view of performance, the most important feature of all was that each piston was sustained by no more than two piston rings. This resulted in both the r.p.m. and the m.p.g. (oil) being considerable. One could dismiss the remark that the pistons came up sideways with hauteur; on the other hand it had to be admitted that the passage of oil from the sump to the road by way of the highly polished exhaust ports was virtually unobstructed. To stem this prodigal consumption and to keep the level reasonably constant, an exterior oil tank, holding a quart, was connected to the sump, holding half a gallon. The smaller tank was placed within reach of the mechanic, who, by means of a lever, could, with one stroke, reinforce the sump with ¼ of a pint.

During the 1930 season these Ulster-engined Austins carried all before them, finishing with a third and fourth in the Ards T.T. But their's was a brief glory. From then on their side-valve engines and three-speed gearboxes were completely eclipsed by the overhead camshafts and four-speed gearboxes of the Montlhéry M.G.s.

Nobody who had the good fortune to witness the first British Double Twelve-Hour Race of 1929 is likely to forget it. Superb handicapping welded cars of greatly differing capacity into fiercely disputed equality, while engulfing the unhappy timekeepers in a morass of decimal points. When the cars were brought in at the end of the first twelve hours' running, at 8 p.m., the enthralled spectators went home with an assurance of seeing an historic struggle renewing itself next day. Ramponi's 1½-litre supercharged Alfa-Romeo held a fractional lead over the 4½-litre Bentley driven by Sir Ronald Gunter and S. C. H. Davis. Almost as close behind and equally fractionally divided came another group of three. These were the 1½-litre Aston Martin of Bertelli and Bessant and two 1,100-c.c. cars, the Salmson of Casse and Goutte and the Riley of Staniland and Whitcroft. When the second start occurred at 8 a.m. on the following morning, some will remember how, amid loud cheers and incredulous laughter, the small orange Austin left the line almost at once and had almost completed the lap before another car started. Then the formidable Aston Martin moved off, but for the most part and for several minutes afterwards the cars stayed where they were while their crews strove to repair the damage that twelve hours of hammering on the rough track had inflicted on their sorely tried machines. As the day drew on and the fatal hour of 8 p.m. came inexorably closer, the struggle intensified in fury.

Continued on page 680

No. 1 IN A SERIES OF TESTS SPECIALLY CONDUCTED BY COURTAULDS LIMITED



Mlle. Andrée Jan, the famous French artiste, photographed hanging by her teeth from a helicopter over Derby airfield on June 17th, 1956. The cord, made of exactly the same High-Tenacity Rayon that gives strength to your car's tyres, was only $\frac{1}{4}$ " thick, and provided an ample safety margin.

You're safer when you ride on RAYON!

IT'S...

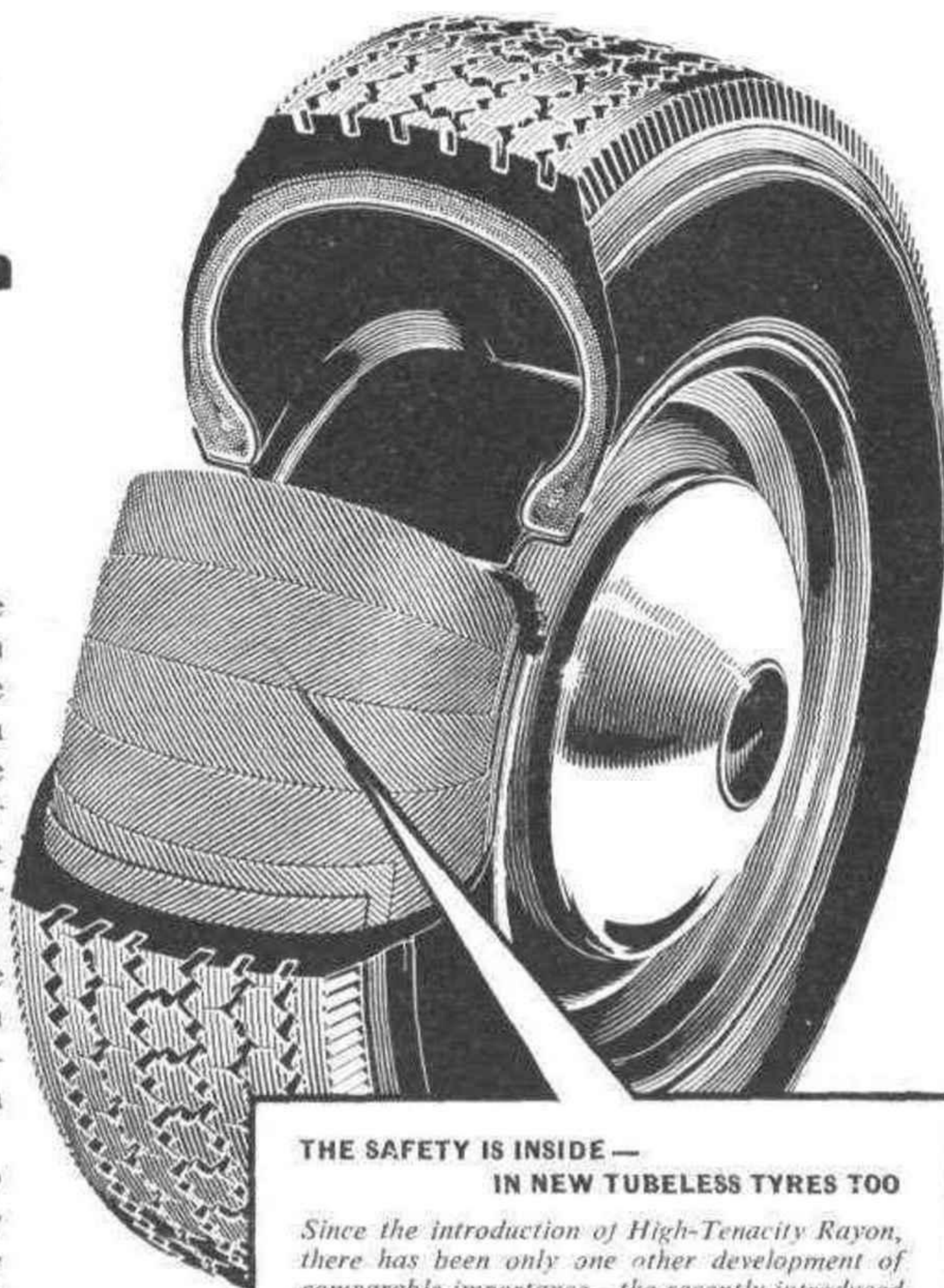
HIGH-TENACITY RAYON...

super strong basis of your tyres

What are your tyres made of? Rubber of course—but not rubber alone. Under the rubber, in 95% of car, bus and lorry tyres in use today, lie several layers of *High-Tenacity Rayon cords*—a very special material expressly designed to give strength to tyres. In some ways, it's even stronger than steel—and in addition it has just the right amount of 'give' in it, so that it doesn't fail under repeated flexing, but yet preserves its shape.

It stands up to heat, too—the bugbear of tyre designers. A fast-running heavily-laden tyre can get as hot as boiling water. Under these conditions, some materials lose much of their strength—but not rayon.

Tyres are much more reliable now than they were before the war. You can thank High-Tenacity Rayon most of all for this, because High-Tenacity Rayon was largely a wartime development, tried and tested under far more arduous conditions than you will ever experience. Like the girl suspended from the helicopter, you can safely put your trust in High-Tenacity Rayon.



THE SAFETY IS INSIDE — IN NEW TUBELESS TYRES TOO

Since the introduction of High-Tenacity Rayon, there has been only one other development of comparable importance—the recently introduced tubeless tyres. Naturally, tubeless tyres also have the security and reliability of High-Tenacity Rayon built into them. It is the rayon cord reinforcement inside that gives them the strength necessary for safety.

RA-A

COURTAULDS HIGH-TENACITY RAYON—THE WORLD'S LEADING TYRE CORD

THE AUSTIN THAT MARCHED—continued from page 677
Aloof and inconspicuous, the solitary Austin continued on at its set speed. A Frenchman, standing beside me on the Test Hill, remarked as it passed: "La petite Austin marche toujours, mon Dieu!" It most certainly did.

Early on in the day, Fate had struck at the well-placed Riley, while its potent rival, the Salmson, had drawn away from the Aston Martin. Only the Alfa-Romeo and the Bentley still clung together. At one stage, the persistent Salmson actually went ahead of the Bentley, only to be passed again. When the Alfa had some trouble with its battery mountings the Bentley was in the lead, with the Salmson still on its heels. The Aston was still in the running, so that at 4 o'clock, with four hours to go, any of these four cars was a potential winner. Then the 4½ burst a tyre and the Alfa, already past the Salmson, again went into the lead. And so it was that when the maroon burst in the air at 8 o'clock to announce the race over, it was found that the Alfa had a formulae advantage of .003 over the Bentley—after twenty minutes of frenzied work on the part of the timekeepers. Some handicapping!

As to the Austin, it had covered 1,141.99 miles, had averaged 47.58 m.p.h., and had finished in 22nd place to tie with a 4½-litre Invicta. Nice "marching"!

Three weeks later, the Austin appeared again in the last of the Six-Hour races. For this event, another attempt had been made to simulate a real road circuit by placing artificial bends in the finishing straight. The car appeared in much the same guise as for the Double Twelve. One might surmise that the 4.4-to-1 axle ratio was replaced by one of 4.9 and that the twin Zeniths replaced the single Solex.

Not alone in its class this time, the Austin had to contend with, among others, the redoubtable Vic. Horstman, driving a Triumph. Behind this class battle, ravenous hordes of 1,100-c.c. Rileys, blown 1½-litre Lea-Francis, Alvis and Alfa-Romeo, 4½-litre and 6½-litre Bentleys bore down on the small fry ahead. For five hours the Austin held the lead and then the field was on its tail. Although it finished first in its class, six larger cars had passed it, so that it finished seventh in general category.

Six weeks later I made my own debut as already described, and from then on began a search for a car of my own in which to compete. A car that marched *toujours, mon Dieu*, was just the job. But how to get one?

Miracles really do happen. I have before me a letter from the Junior Car Club. Dated July 29th, 1929, it states that as Mr. Barnes was a member of the club it could not, in reply to my letter, give me his address. And lo! on August 2nd, four days later, Barnes' car, "La petite Austin" itself, was advertised in *The Light Car and Cyclecar* "as raced in the Double Twelve and Six-Hour races"!

The arguments and delays were frightful. At first my father would not hear of it. Then, just as he was showing signs of relenting, Barnes wanted the car to run at Shelsley Walsh. With the battle ebbing and flowing, the car, after an interminable time, became mine on November 1st. With rosy optimism, I had already entered, a few weeks previously, for one of the J.C.C. Half-Day Reliability trials which was to be run off on November 2nd—the day after the arrival of the car.

After the debacle with the Boyd Carpenter, I had come to the reluctant conclusion that for the moment neither Sir Henry Segrave nor Sir Malcolm Campbell need fear being outshone. The best thing to do would be to start at the very bottom; there seemed to be quite a lot I needed to learn. The J.C.C. half-day events were the answer, now that the season was over.

Promptly I went down with a severe chill, so very severe that, when an appalling uproar outside announced the arrival of the car, I was unable to get up from bed to go and see it. And the trial was the next day. I must have been ill!

Next day I had to get up and did—just. What a moment it was to open the garage doors and see the little brute lurking inside, wondering what its new master was going to be like and what was in store for it. Little did it know! Little did I know! For on that day began an association that was to last over four years, in which I had to endure all the vicissitudes of fortune that covered the whole gamut of human emotions from the blank despair of repeated failures to moments of satisfaction beyond words. Starting as and from November 1st with myself in bed, at the ideally wrong moment!

Now, having made the acquaintance of the car, an attempt to start the engine showed that the battery was flat. Invoking the assistance of my sister and the gardener, we tried a push start; she started. The noise was shattering. Great clouds of blue smoke, pregnant with the smell of "R," drifted away across the flowerbeds. My father's remark that he thought there had been an earthquake was an historic one. From that day on, the car was known to its many friends as "The Earthquake"—and still is!

A trial run showed that even with the single Solex the acceleration was noteworthy by any standards. The engine also ran extremely hot; when the brakes were applied, great jets of scalding water issued from the water tower. Owing to the windscreen being absent on delivery of the car, there was nothing to check the scalding water except the driver's face—which did.

Rushing off to the start, with rags hastily bound round the water tower, with a flat battery, and all the tools left behind, we did not, oddly enough, gain an award. It was the start of a long and weary period of misfortune that lasted, with one bright spot, till early in 1932.

There was the early stage when the car ran too hot. There was the time when two crankshafts went in two weeks. There was the time when, two days before the Monte Carlo Rally, my passenger dropped out. There were the brakes that would not brake. There was the main jet that choked in the non-stop section of the road circuit of the J.C.C. High Speed Trial. There was the oil pressure that could never be relied upon to stay up. There was that leak in the gasket that let water into one of the cylinders, but only intermittently, so that we were for a long time completely baffled. But the performance was there, always beckoning us on towards the time when we would run in that road race.

The one bright spot referred to and a much-needed shot in the arm, occurred in September, 1930. Officially known as the M.C.C. High Speed Trial, it was generally known among the fraternity as "the one-hour blind." The car was lined up with sixty others by the Vickers sheds. When the flag fell, one had sixty minutes to do as one wished round the outer circuit of Brooklands. As a number of vehicles were driven absolutely flat out for this period, some of the averages put up were very impressive. So were the "blow-ups"!

It is interesting to consider what the standard sports cars of those days could do. In the 850-c.c. class, J. C. Elwes covered 73.29 miles in a 747-c.c. Austin in its final Ulster form, supercharged. This was not really a representative average but that of a car superlatively tuned and driven flat out. Three 850-c.c. Midgets and another blown Ulster all averaged over 60 m.p.h.

We ourselves had decided that it was quite impossible for our run of bad luck to continue. Therefore we were bound to be the fastest of the non-supercharged 750s. Sixty miles in the hour would see any of our competitors off. With that elusive road race ever in mind, we also had set up, under Ian Macdonald, what was to be the nucleus of a pit organisation. Macdonald, assisted by a signaller and two timekeepers, would keep us up to covering 60 miles in that hour.

Even on the one big Solex, the car's acceleration gave us a handsome getaway, and when the 1,100s started to come past—all classes started together—some judicious slipstreaming gave a rev-counter reading of 92 m.p.h. down the Railway Straight! As might have been expected, this brought forth an immediate slow signal from the justifiably outraged Macdonald, accompanied, so I seem to remember, by some hand signals of what appeared to be a threatening nature!

The result was that we did in fact finish with the fastest time although only just, as the last two laps were covered at a crawl. The oil bottle tried to turn it up at the last moment. So we only managed 57.18 miles.

Of the 1,100s, Chinery covered 67.39 miles in a Riley, while in the 1,600-c.c. class Westbrook's Alvis was best with 75.51; two others in this class also exceeded 70 miles in the hour. Just why the organisers hit on this peculiar limit of 1,600 c.c. is obscure. No competing car exceeded the usual 1,500-c.c. limit.

Lord de Clifford's Lagonda was the best 2-litre, covering 82.04 miles, Kipling's Hotchkiss the best 3-litre with 85 miles, and C. H. Wood's Big Six Bentley fastest of them all, covering 91.38 miles. How much better—or worse!—would the "off the peg" sports car do today? It must be remembered that while coming off the banking on to the Railway Straight one's speed went appreciably higher than the lap average. On the other hand, the hill up past Vickers slowed the cars, particularly the smaller, very considerably.

In 1932 our luck changed. Everything worked—potently. Awards ranged from such diverse events as the London-Land's End Reliability Trial to the Brooklands Test Hill. In the former, in a particularly tough year, 68 cars failed to finish. Out of 48 starters in the class only 10 received first-class awards, including us. In the Brooklands Test Hill event, a second in the unlimited class was obtained! Most important of all, from my point of view, the car ran magnificently in the J.C.C. High Speed Trial. In torrential rain, it worked its way through the field until only one of the two blown cars in the class was ahead of us.

With wins in the Dancer's End Hill Climb both in the 1,100 and 850-c.c. events, 1932 came to an end. The results had been heartening and I felt that my apprenticeship had been well and truly served. Now for road racing!

(To be continued next month)

EARLS COURT IMPRESSIONS

THE 1956 London Motor Show is notable for modified models rather than exciting new cars. British manufacturers have adopted automatic transmission more readily than Continental companies—besides the cars listed on page 683 Daimler, Ford and Morris can provide “automation” on their six-cylinder cars—picking American brains to do so (Rover provides the exception). However, automatic transmissions absorb power, which uses petrol, and readers of MOTOR SPORT can thus congratulate themselves on possessing the skill and inclination to swap cogs manually, which becomes a pleasure with gear-change apparatus as supplied by Alvis, Bristol, Frazer-Nash, Jaguar, Lotus, Morgan, M.G., Lagonda, Rover, Porsche, Volkswagen and some others. Automatic gearboxes and clutches mean additional complication, as we are reminded on finding that the Manumatic publicity hand-out contains a detailed fault-finding chart!

Disc brakes are finding their way from race circuit to public road, for although the Austin-Healey 100S, D-type Jaguar and Aston Martin DB3S cannot now be bought, Citroën, Jensen, Lotus and Triumph use such brakes. Power-steering is filtering in from the U.S.A., being found on certain Armstrong-Siddeley, Austin, Bentley, Rolls-Royce and Citroën models; it can provide light yet high-g geared steering on heavy cars but proper steering geometry and not too much weight on the front wheels offers this without such complexity, as one of Europe's least-expensive cars well proves!

As a Show, Earls Court offers good value, exhibits which the public see for the first time including Campbell's boat, the record-breaking Austin-Healey, the Targa Florio-winning Porsche, the Renault gas-turbine car, the remarkable Buick Centurion dream-car with T.V. on the dash, the Skoda backbone chassis, which you are allowed to rotate, Allard and Frazer-Nash-B.M.W. chassis, the F. II Lotus and the Rover T3. The Lotus F. II single-seater weighs about 5½ cwt., has the twin-cam Climax FPF engine giving 141 b.h.p. at 7,000 r.p.m. and a very ingenious five-speed all-indirect gearbox in unit with the de Dion axle. The price will be approximately £1,250 without engine. The well-finished Lotus Eleven in Le Mans trim, complete with carpets, backs up the F. II racing car. The Rover T3 deserves warm praise, being beautifully finished and a real gas-turbine *Gran Turismo* car.

New cars include the Lancia Flaminia, which just isn't a Lancia, the Austin-Healey 100-Six with seats for very occasional kids and the beautiful Superleggera Aston Martin with air-scoops to cool the rear brakes and h.c. head, while amongst stunt exhibits the transparent



THE BEST-PROPORTIONED CAR AT THE SHOW.—The Karmann-Ghia Volkswagen, to be seen on Stand 120.

TR3—another car with back seat which is really only a parcel-shelf—and the performing seal supporting a Minx engine should be seen.

On the way to Earls Court we thought perhaps Sir Leonard Lord had invited Michael Christie of Alexander-Laystall to dinner recently, in view of those h.c. engines, and sure enough, there on the Austin stand was Mr. Christie. We like the new A35 gear-lever, but that on the Morris, now called the Minor 1,000 because it has a 950 c.c. engine, is a bit too short.

Stand to stand impressions—The Alfa-Romeo stand is impressive, all the cars in Italian-red, and the Giulietta Sprint Veloce on show, on the new high-speed Pirelli tyres, the honest speed claim of 113 m.p.h. being displayed. Mercedes-Benz content themselves with a white 190SL sports car, in the style followed by B.M.W. and Aston Martin. The smart Rovers flank the gas-turbine exhibit, bowler hats and rolled umbrellas presumably available as extras. Goggomobil parody the Docker Daimler with a golden-hued minicar upholstered in zebra skin and two M.G. exhibits, in ghastly colours, are shown on their sides on a rotating frame so that you can really see into them. The new M.G.-MGA fixed-head coupé looks smart but opening the luggage boot is a tough task, when it is open it is partially occupied by spare wheel, and shutting the lid proved impossible. The B.M.W.-engined Frazer-Nash chassis is shown beside the same old Frazer-Nash coupé we have seen before. The new Allard chassis has a C-type Jaguar power unit and ingenious front suspension incorporating sliding pillars and long, square torsion bars, with coil-spring back suspension. Beside it is a two-seater with three-carburettor Zodiac engine, the body built by Allard themselves—have a look at the very neat bumpers. The new suspension has been tested exhaustively by Sydney Allard on a Safari.

The Vauxhall Cresta has a luggage boot full of what appear to be very odd birdcages. Riley, which, like Pontiac, is called a Pathfinder, has a transparent bonnet-top to show that the old high-camshaft engine is still used. The Morris Isis has a r.h. gear-lever like the Riley—nice that B.M.C. have reverted to proper gear-levers—and shares with the Minor a dished steering-wheel styled on that of the 1923 Austin Seven Chummy. Big model cars provide decoration on the Standard and Triumph stands and the location of the o.d. switch and driving position of the Vanguard Sportsman was admired, but the window-beading, like that on a cheap caravan, was *not*.

The Singer Gazelle Convertible is shown with head half-folded, *coupe de ville* fashion, but is spoilt by a silly little radiator grille. Chevrolet show a sports Corvette and a lone exhibit is the tiny Berkeley sports car, which is to sell for 3d. under the maker's target of £575. It has a driving position many will wish to have modified. The Goggomobil, smallest car at Earls Court, now costs less—£494 17s. with p.t. and there are the Citroën 2 c.v., B.M.W. Isetta and Fiat Multipla which, we have observed previously, the world would be a poorer place without. Citroën also show the ID19, with the disc front brakes and pneumatic suspension of the more futuristic DS19.

Altogether this is a good, well-balanced Motor Show, of boats and caravans and thousands of accessories and gimmicks as well as cars.—W. B.



SHOWDOWN

The Editor's Annual Discourse on Various Aspects of the Motor-ing Scene

GAY AND IMPOSING SPECTACLE.—The London Motor Show of 1955 seen from the gallery at Earls Court.

ANOTHER Motor Show has come round and it behoves us to consider what sort of motor car it is that we require as we scan the glossy catalogues and study the sparkling exhibits. I understand that it is now practical to install a television set in a motor car, and someone suggested to me the other day, when I was expressing regret at the rapid spread of subtopia, that perhaps such a car will soon form an essential part of road travel in England, inasmuch as at least some of the occupants will be able to concentrate on the B.B.C. or I.T.A. programmes and thus ignore the horrors through which they are passing . . .

If you think I exaggerate the defilement which seems inseparable from transition from the steel-and-aluminium to the tin-and-plastics age, just take a look at what planting a bang-factory at Aldermaston has done to that once-beautiful part of Berkshire, or contemplate the line of pylons which now march across the Surrey heathland by Red Roads Hill (where, long, long ago, motor-cycle and car trials-enthusiasts used to enjoy their healthy sport) and on over Chobham Common, that one-time popular run from London for cyclecarists and light-car owners. Although this aerial wire mesh is bad enough as it is, I am surprised no one has sanctioned the attachment of advertising hoardings to the pylons as a sort of high-voltage reply to I.T.A.

Not only do factory sites and their accompanying blocks of dwellings (a friend refers to them as "breeding-boxes"—few people seem to appreciate *houses* these days) ruin the beauty of the countryside from which they arise, but their presence alters the character of the area for miles around. Even when you are sufficiently fortunate to skirt such desecration the presence of new spoilation close at hand is hinted at by the streams of drab grit-lorries which make their way to and fro.

It sometimes seems to me that the atom-bomb is nature's logical weapon against subtopia, because if man is foolish enough to blow-up and knock-down his creations by this means, at least there will be room again for the grass and the trees.

All of which lends weight to the idea that for the present-day motorist a car with synthetic entertainment built into the back compartment may be the answer, or, for those unable to afford a paid driver, more ordinary vehicles which, by possessing good powers of acceleration, speed and retardation, will occupy the minimum time on a given journey and thus will not prolong the misery of travel through subtopia. Daimler and Rolls-Royce in the former category will, I understand, be a feature of Earls Court, and there will be plenty of exhibits in the latter category.

On a brighter note, it is pleasing to observe that, in spite of pessimists' prognostications, design-stagnation is as far away as ever. In the past we have seen significant developments in engine efficiency, the application of brakes to all four road wheels, the use of more supple springs in conjunction with independent front suspension;

the next step would seem to be more efficient transmission of power to the road wheels.

Already the manually-operated gearbox is on the way out and the clutchless or fully-automatic transmission is emerging to the forefront of every designer's mind. In America, where the horsepower race from big V8 overhead valve engines is raging, fully-automatic transmission is general, the complexity and power-absorption of such transmissions being of little moment. In Europe the problem is how to couple an automatic transmission to lower-power engines, without killing performance until you have killed the sales of the car. Fleet operators, such as taxi and hire companies and commercial travellers, present the additional problem of providing such a transmission in foolproof and readily-serviced form. Yet, ere long, any car without such transmission will, except for sports models, be as much an oddity as a car without front-wheel brakes would have been in 1926. England, God bless her, pioneered such advances with the Daimler fluid-flywheel, and the Wilson preselector gearbox which was adopted for all Armstrong-Siddeley models; which makes it all the more regrettable to find that a make which combined both these aids to smooth progression, the Lanchester, has gone from amongst us, and that even Rolls-Royce have to borrow an automatic transmission from America!

American transmissions of this sort work—Heaven help you when they don't—but much development remains to be done, because at present such automatic gearboxes swap cogs too soon, stifling good acceleration, they tend to jerk in spite of possessing highly complex hydro-electric "brains," and they are suited only to powerful engines which possess good low-speed torque. However, "jerkomatic" transmissions has come to stay and it seems to me that *the stage has been reached when a car should possess either fully automatic transmission or a decent close-ratio gearbox with a proper gear-lever rising from it.* By this means those who cannot control machinery and those who delight in controlling it properly will both be catered for. I can see no use in continuing for more than a year or two with such half-measures as preselector gear-changes and automatic clutches; I include steering-column gear-levers controlling synchromesh gearboxes in this useless category. Already those big-selling, inexpensive French cars, the Citroën 2 c.v. and Renault 750, and our own small Standards, are available with automatic clutches which render the clutch pedal unnecessary, and it cannot be very long before more expensive cars will look very out-dated unless they have no gear-lever either.

Some time ago I was driven by a well-known engineer and a Le Mans-winning racing driver in a Standard Vanguard saloon fitted with an automatic transmission far less complex than those now in production on the other side of the Atlantic. This is the Teramala hydraulic coupling, evolved after twenty years of research on the part of the Italian engineer, Count Piero Teramala, who before the war had brought his Salerni transmission to a sufficient pitch of

perfection for a Riley so equipped to win the 1932 Torquay Rally, as readers with long memories may recall. Simplification of the moving parts has eliminated "buzzing up" and it is claimed that, far from increasing petrol consumption, the Teramala transmission gives slightly better m.p.g. than an equivalent engine driving through a gearbox, that it functions smoothly, requires merely the addition of a forward/reverse gear, and that it can be manufactured inexpensively and without using elaborate castings.

Count Teramala is the "darling" of Harry Ferguson, and if his transmission is all that he considers it to be, it does seem that at last foolproof automatic transmission is round the corner and that the train of thought which was the outcome of the fluid flywheel, pre-selector gear-change (and magic like the Constantinesco torque-converter), developments halted by the advent of the synchromesh gearbox, is about to be taken up again.

Even when automatic transmission of one form or another—already fully-automatic transmission is available on the following British cars: Armstrong, Austin, Bentley, Rolls, Humber, Jaguar, Rover and Wolseley—becomes as commonplace as hydraulic brakes, design will be in no fear of stagnating. There is the bigger problem of transmitting the power to the road wheels in the most efficient way possible and of improving the method of applying braking power to those wheels.

Harry Ferguson thinks he has the answer and many who have been shown his secrets, as I have, believe he is right. The solution may be to drive all four wheels, as is common for military and farm vehicles, and as was tried for racing by Spyker, Miller and Bugatti, as employed on the Railton Mobil-Special in which the late John Cobb motored in excess of 400 m.p.h., and now on the Rover T3s.

The problem isn't that easy, however, because the conventional four-wheel-drive vehicle scruffs off its tyres on a hard road. Merely providing a differential in the propeller-shaft coupling front and back axles as well as in the axles themselves simply negates most of the advantages of four-wheel drive in thus eliminating excessive tyre wear. Harry Ferguson, who employs Claud Hill, late of Aston Martin, and Major Tony Rolt, late of Le Mans, on his engineering staff, has shown me his solution and maybe therein lies the car-of-the-future. The application of the Ferguson principle also vastly improves braking efficiency, but I fear that amongst the front-engined, water-cooled, cart-sprung exhibits of British manufacturers at Earls Court we shall see little indication that the problems of automatic transmission, better traction and safer braking are being tackled.

However, it is obvious that great strides should be possible in the next few years, along the lines of mass-production of disc brakes, the simple replacement of brake-pads on disc brakes (pioneered by Dunlop on this year's Le Mans Jaguars), interconnected suspension, as adopted for vehicles as far apart as the Citroën 2 c.v. and the Packard, and methods of preventing locking wheels when braking on slippery surfaces, which Citroën has looked to in the DS19 and aircraft engineers already understand.

Another development will be that of universal plastics construction. We have seen in two decades the channel-section chassis frame give way to unitary body/chassis construction in Europe, box-section, heavily-braced frames in America and tubular space-frames for specialised sports cars. Now the all-plastic body/frame looks like an important future development, and one which will kill the menace of the body-presses wagging the tail of the production lines and styling changes involving manufacturers in overheads running into millions of pounds—the new Berkeley miniature sports-car points the way in this direction. Incidentally, it is interesting to see how one development leads to another—front-wheel brakes rendered rigid, front-axle beams unacceptable, which made way for independent front suspension, which rendered practical the use of low-pressure tyres, which focused attention on comfort, calling for rigid chassis, or unitary frame/body structures, which spelt independent rear suspension, and so on. Similarly, crowded roads and the great increase in the motoring population, embracing more and more lady drivers, call for simplified transmission systems and better braking. Tyres themselves have been the subject of recent development, for the tubeless type eliminates the nightmare of a puncture and tyre wear can virtually be ignored—I have covered over 30,000 miles on normal Michelins without a puncture and with tread still left on each of the five covers on my Volkswagen.

Most of the foregoing intriguing matters are for next year or the year after, and our present concern must be to find the car best suited to our purse and purpose. In looking at the main specification it is easy to overlook the details, but these are important in a car you are to occupy for a considerable number of hours each week. I have personal fads and am, for example, grateful that the car I drive at present has its screen-wipers wired independently of the ignition circuit, so that when stationary with the engine off I can still see what is



BRITISH INITIATIVE has produced the Rover T3 gas-turbine car. It has a free-turbine power unit, developed from the Rover IS/60 industrial gas-turbine of 1954, comprising a centrifugal compressor driven by a single-stage turbine and a single-stage power-turbine. The compressor-turbine runs at 52,000 r.p.m., compression pressure is 3.85 to 1 and the air-mass flow at maximum r.p.m. 2 lb./sec. at 55.8 lb./sq. in. absolute pressure, maximum nozzle temperature being 830 deg. C. The power-turbine drives a 7.45-to-1 reduction box, from which the drive is taken to all four wheels.

The gas-turbine unit is started by a 12-volt electric motor which drives the compressor-shaft at 15,000 r.p.m. through a 10-to-1 step-up gear, and is located in the boot of the car. No clutch or gearbox is required and on a power output of 110 b.h.p. the Rover T3 has a maximum speed in excess of 100 m.p.h. and is claimed to accelerate from a standstill to 60 m.p.h. in 10½ sec. and to 80 m.p.h. in 18 sec. A plate-type, secondary surface, contra-flow heat-exchanger ensures a relatively low paraffin consumption, the quoted figures ranging from 13.8 m.p.g. at a steady 40 m.p.h. to 12.8 m.p.g. at a steady 80 m.p.h.

The Rover T3 has a wheelbase of 7 ft. 10 in. and carries spare wheel and fuel tank in front, luggage behind the back seat. A de Dion back axle is used and the hard-top coupe body is of plastics-reinforced glass-fibre.

Although the Rover T3 is not intended as a production model, it is nearer that stage than any other gas-turbine car and great credit is due to the Rover engineers, headed by Maurice Wilks, M.I.Mech.E., Peter Wilks and Spencer King, for thus presenting at Earls Court a car so well able to wave the Union Jack. It can be seen on Stand 153.

ahead of me and any scenery which may be worth looking at. Similarly, I am delighted to have a reserve petrol tap—so much more decisive than the warning needle on a petrol gauge—and a petrol tank which can be filled easily from a can, the bonnet, incidentally, protecting the generous orifice from rain while filling is in progress. Incidentally, at one time I would have agreed that to have a car without a starting-handle was a bad thing, but it is only fair to say that the little 6-volt Exide battery on the aforesaid car, although in no way pampered and now 19 months old, has never failed to start the engine, even after five-day spells of inactivity in the open.

I like the doors of a car to shut decisively, even if it is necessary to open a window to enable them to do so, for then you know they are water and dust-proof. I do not love a foot-dipper because with it, sooner or later, you have to dazzle someone momentarily while you use the clutch to change gear. An interior lamp which illuminates the car's interior when the doors are opened imparts an air of luxury to any class of vehicle, and I am exceedingly fond of those excellent Continental-style lamps-controls which protrude stalk-like under one's hand from the steering column. Quite why a driver is thought to need a warning lamp to tell him he has his headlights full on I can just comprehend, but I do not understand at all why this warning lamp should project a violent mauve light into his eyes! In an age of warning lights and indicators instead of gauges, a proper oil gauge or water thermometer is an asset indeed, and I prefer direction-indicators to "flashers," nor am I troubled if I am required to cancel these by hand. I particularly like a car which, merely by locking the doors, renders petrol and tools immune from pilfering—and as a firm believer in Castrol as the masterpiece in oils and a lover of freedom, I am dead against the tied-garages system. And, finally, although the years roll by, I can still manage to manipulate a gear-lever and possess sufficient strength to turn a steering wheel unaided . . .

These fads may not be your fads, but Earls Court is the place at which to compare one car with another in respect of those details which will add or detract considerably from your enjoyment when you sally forth on the open road, bound (can you find it?) for our glorious countryside.—W. B.

A SELECTION HIGH-PERFORM FOR



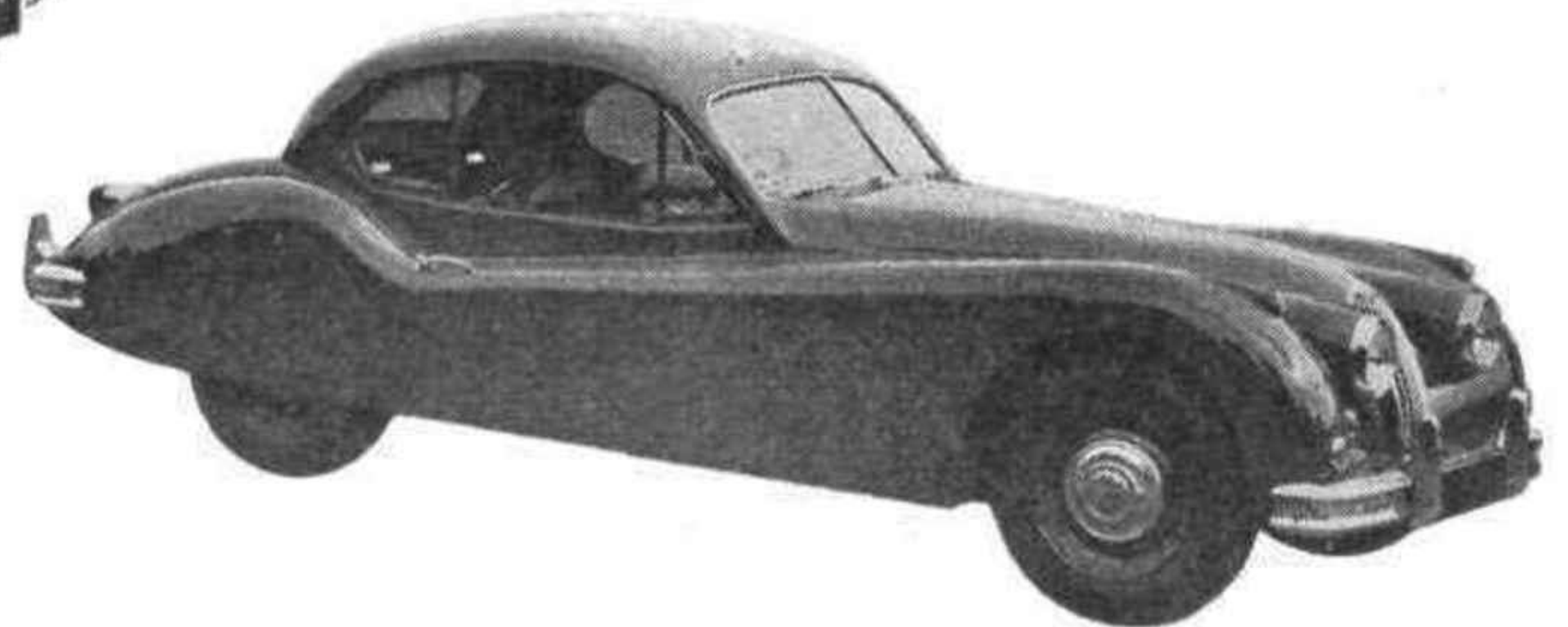
Borgward Isabella TS



Aston Martin Superleggera Spyder



M.G.-MGA



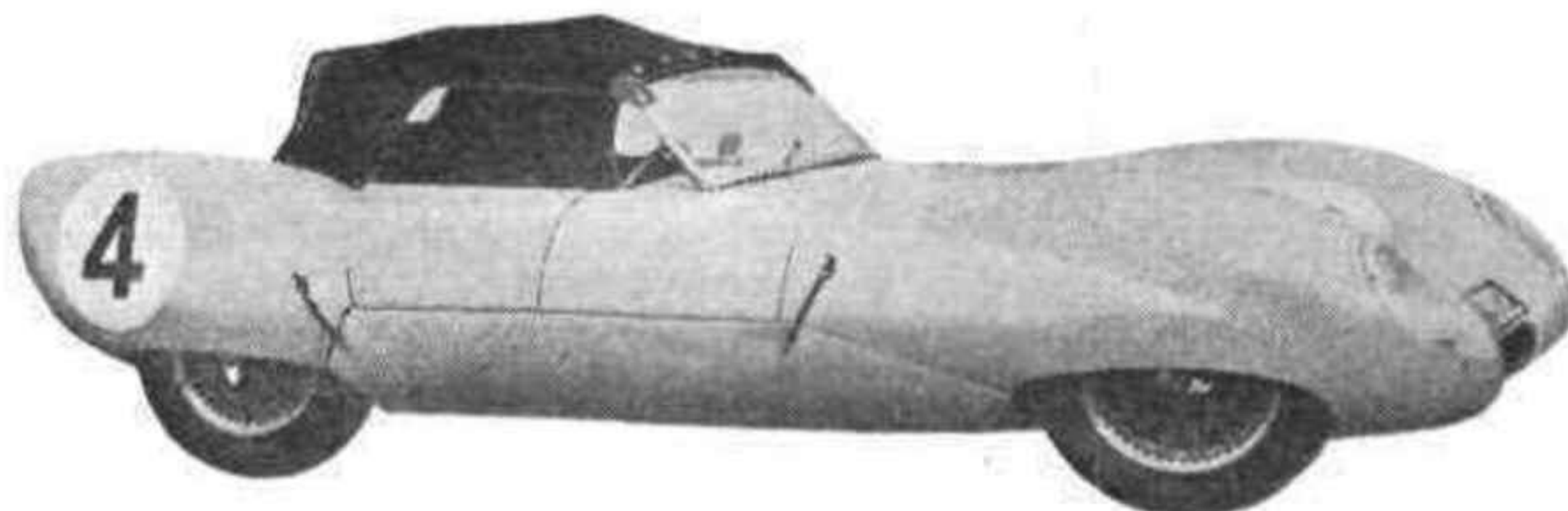
Jaguar XK140



Lancia Aurelia GT2500



A.C. Acedes



Lotus Eleven



Porsche 356

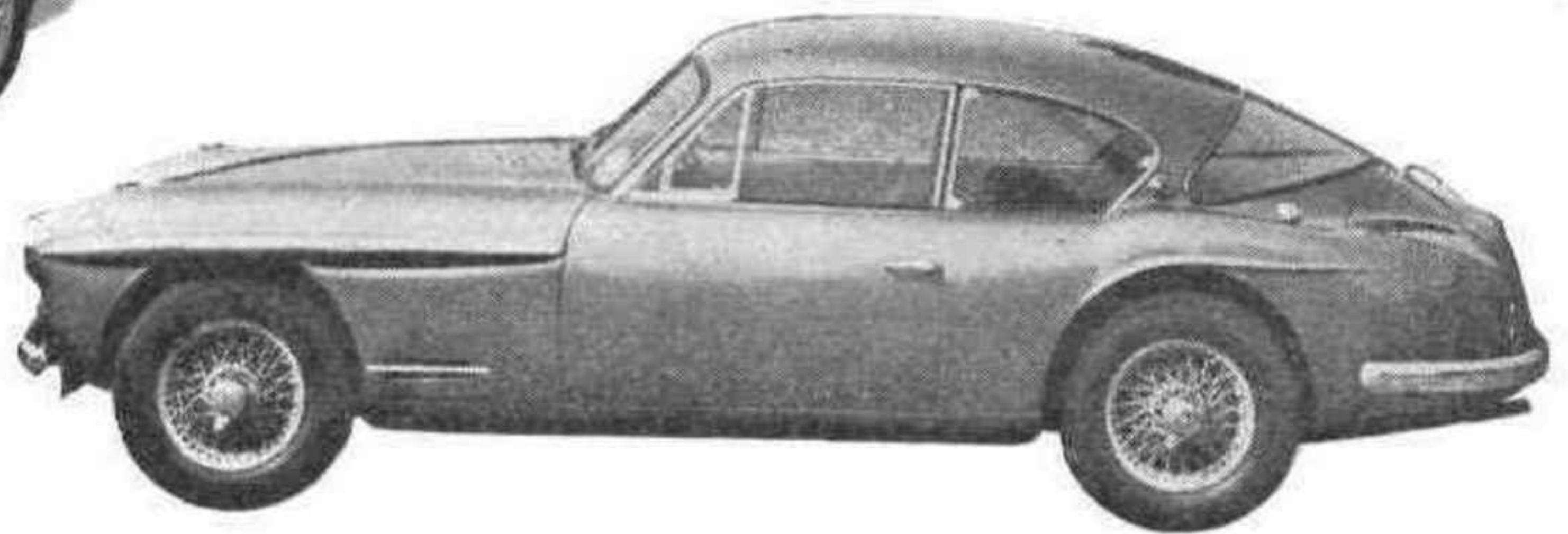
OF SPORTS AND PERFORMANCE CARS 1957



Bentley Continental



Austin-Healey 100 Six



Jensen 541



B.M.W. 507



Mercedes-Benz 190SL



Allard Palm Beach Mk. II



Alfa-Romeo Giulietta Spider



Triumph TR3

TOUR DE FRANCE 1956

September 17th - 23rd

SOME idea of the severity of the Tour of France can be assessed from the results of the General Classification, with the first three places taken by Marquis de Portago, Stirling Moss and Olivier Gendebien, the cars they used being Ferrari Europa 3-litre, Mercedes-Benz 300SL and Ferrari Europa, with another SL, Porsche Carrera, two Giulietta Sprint Veloce and yet another Ferrari Europa following on. This enormous rally, covering more than 6,000 kilometres throughout France, was no milk-and-honey affair, as the above results indicate and success was gained by competition-bred Gran Turismo cars driven by drivers with Grand Prix experience. The route took in every possible type of road that France possesses and, starting on the morning of September 17th, it continued until the evening of September 23rd with only two night stops, one at Le Mans and the other at Vichy, and the hardest part of the route, that which took in the Alpine passes around Briançon, had to be done at night.

Altogether 103 competitors left Nice at minute intervals, and by devious back roads and with an average speed varying between 55 and 60 k.p.h. they made their way to the first special test. Broadly speaking the Tour consisted of visiting all the major racing circuits in France, and taking part in a scratch race at each one. Throughout the rally points were lost, the times in the races being translated from seconds into points, and the crew with the minimum total at each stage were adjudged to be in the lead of the general category. In addition, the entry was divided into two classes, Strictly Series and Non-Series, all cars having to be of the Touring or Grand Touring type as listed by the F.I.A. The General Category was a free-for-all and the two groups were subject to a formula which took into account the cylinder capacity of the cars.

Observing at the first test, which was a timed climb of the 21.6-kilometre mountain road up Mont Ventoux, near Avignon, one obtained an appreciation of the worth of the entry for this super rally. Mechanically it was to be a battle between 300SL Mercedes-Benz and Ferrari Europa 3-litres, while not far behind were Sprint Veloce Alfa-Romeos and Porsche Carreras. In the small group were D.B.s and Panhards, while factory Dauphines were up against private ones as well as normal Panhard saloons. Of the entry it was noticeable how few British cars were entered, there being an MGA, Jaguar and Aston Martin DB2 with French and Belgian drivers. Leaving the foot of the mountain at minute intervals, the whole entry made the timed climb, continuing down the other side and on to the next control without stopping.

The Dyna-Panhard 54 saloons were noticeably faster than the normal Dauphines, a Denzel 1,300-c.c. roared past with much noise and smoke and going very fast, while a string of Giuliettas proved yet again what fine little competition cars they are. Among them was one cornering on its rims which was driven by Harry Schell, and only a little slower were Guelf and Frere in similar cars. Of the Porsche Carreras one could be seen to be outstandingly fast from a



TOUR DE FRANCE 1956
September 17th-23rd

6,020 Kilometres.

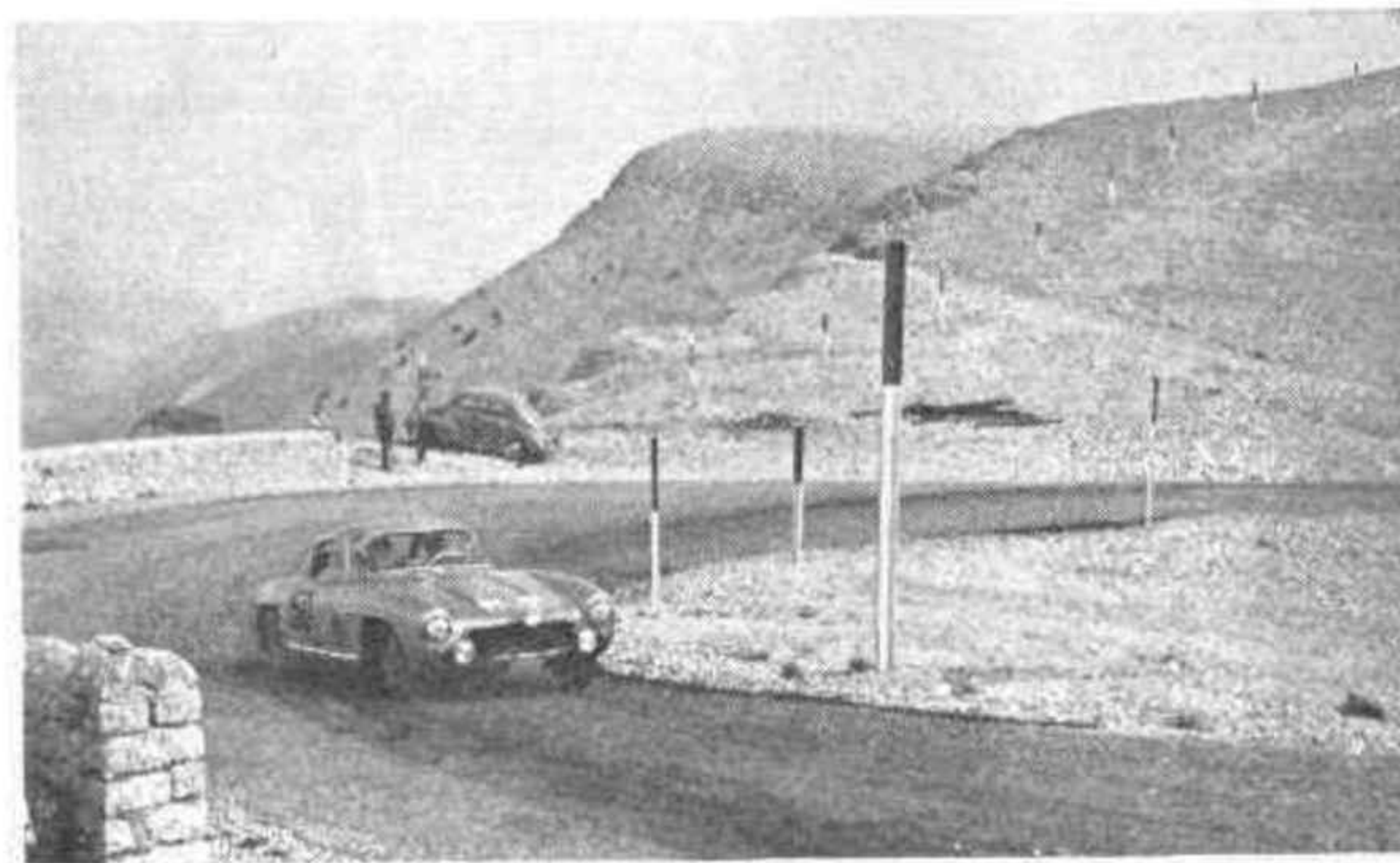
Start NICE.
▲ Special test.
● Controls.
□ Night stop.

long way off, and it was driven by Jean Behra with his brother as passenger. To end the string of standard production models came a collection of Ferraris and Mercedes-Benz, the Ferrari clan consisting of Rosier, Trintignant, de Portago, Gendebien, Peron and Lena, and of these Rosier and Gendebien had bodywork by Farina meant more for the boulevards than the mountains, while the others had the sleek competition coupé bodies by Scaglietti. The two boulevard cars were horrible to watch, suffering from too much weight in the wrong places, and Gendebien was tying himself in knots trying to make a fast time. By contrast the others were excellent and Trintignant was going at a terrific pace, but he spun on the last hairpin and spoilt an otherwise excellent time. Three SL coupés followed, the Moroccan driver La Caze making a good impression, while Jacques Pollet, Gordini Grand Prix driver and winner of the 1954 Tour of France, not only looked neat and tidy but proved to make the fastest climb of the day. By contrast this group ended on a comparatively quiet note with a climb by an XK140 coupé.

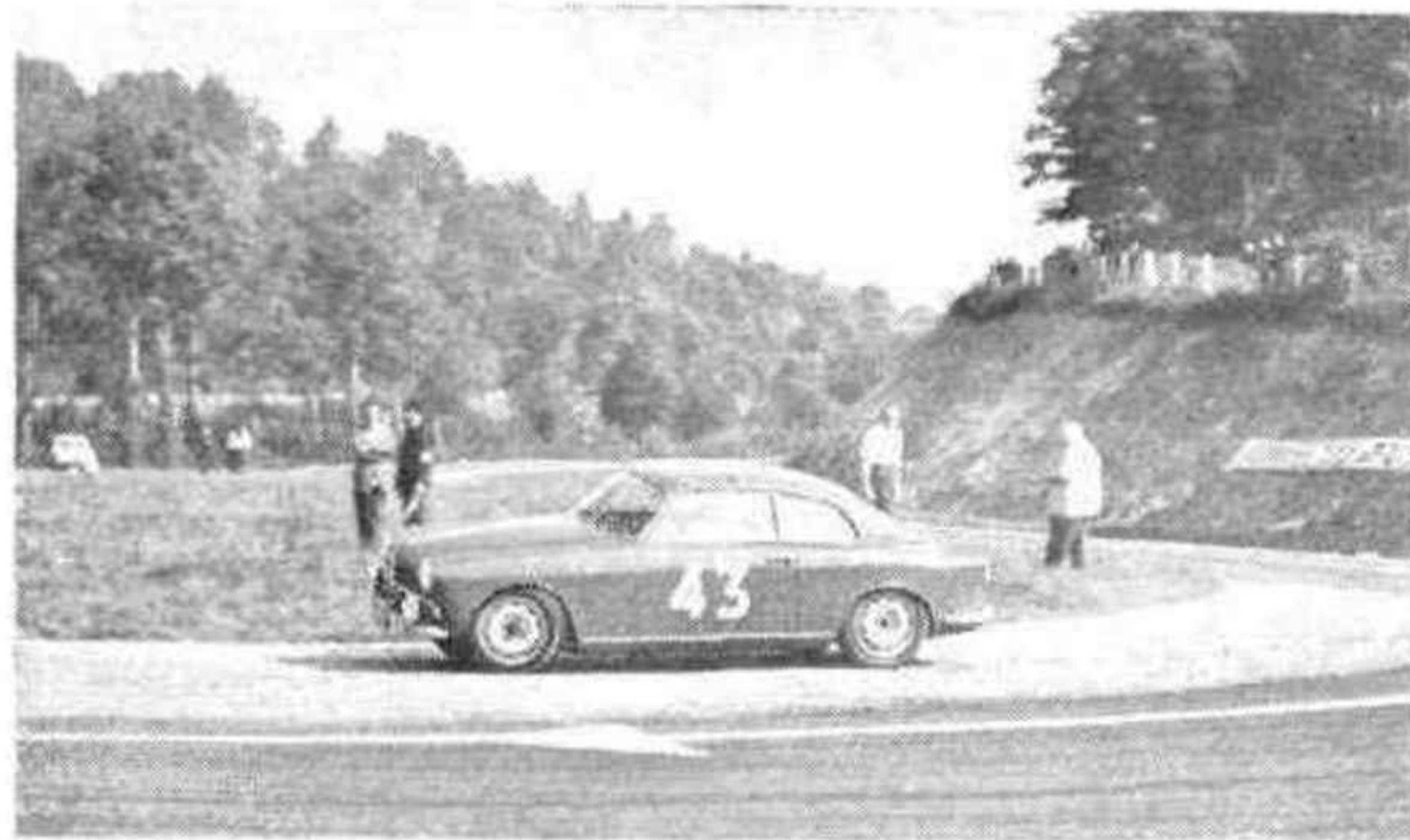
The modified group followed, this in some cases meaning only the removal of a bumper, while in others, such as the factory Dauphines, only the name remained standard. In this group Gilberte Thirion in a Porsche Carrera not only made up a minute on the mere man who left in front of her, in a similar car, but actually overtook him on



The Alfa-Romeo Giulietta Sprint Veloce of Mme. Honore and Dutoit is seen approaching the summit of the 21.6-km. climb of Mont Ventoux. The finish was at the tower in the centre of the photograph.



In the running for the lead of the Tour de France in the early stages was Willy Mairesse, winner of this year's Liege-Rome-Liege, who is here seen holding his 300SL round one of the corners on Mont Ventoux.



One of the features of the special tests in the Tour de France was Schell's handling of his Sprint Veloce Alfa-Romeo, and this view of him at Rouen shows him cornering on the limit of adhesion.

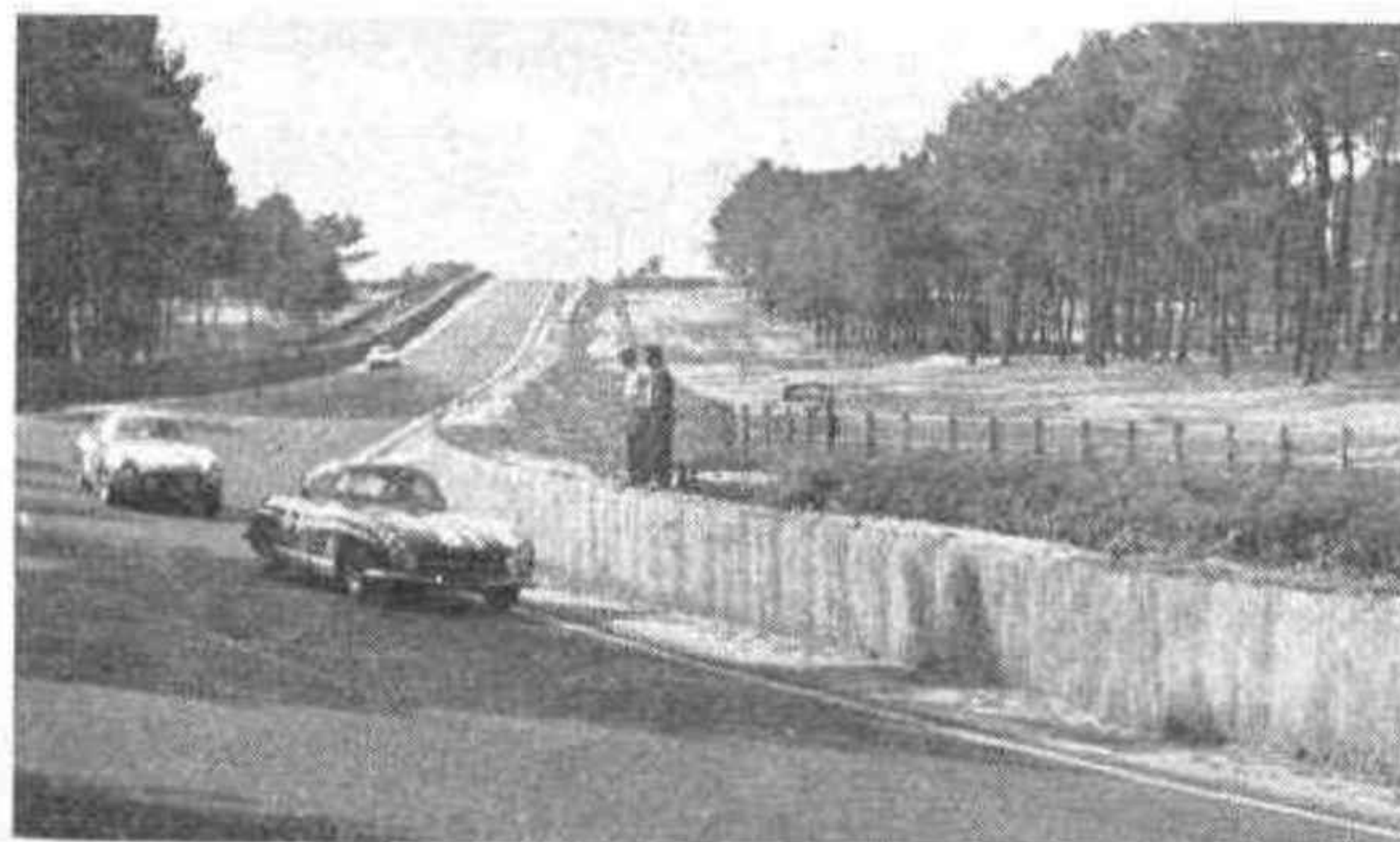
the outside of an unprotected corner. Modified Alfa-Romeo Giuliettas, other Porsches and a line of factory D.B. coupés, their flat-twin Panhard engines beating away lustily, all climbed well, and to close the day came four 300SL cars, "modified" mainly in respect of removal of bumpers, radiator grilles and so on. Cotton, who climbed strongly, while Moss did the best he could with a car he had only met that morning and on a climb he did not know well. Finally, in a series of hair-raising full-lock slides, came Mairesse, the up-and-coming Belgian driver, and what he lacked in finesse he made up for by force, the rear wheels of his SL spinning and scrabbling at the loose stones on the edge of the narrow road.

While the timekeepers did some arithmetic the competitors continued on to Nimes, for a brief stop and a check point before setting off across the Massif Central and down towards the Pyrenees. In spite of grouping the entries and applying a formula to make up for differences in cylinder capacity, it was soon obvious that the outright winner of the rally was going to be the man of the moment and as none of the aces lost points on the road section to Nimes the times up Mont Ventoux became the order of the day, and were Pollet, Mairesse, Moss, Cotton, de Portago, La Caze and Trintignant. Right from the word go the Mercedes-Benz cars were showing a marked superiority and but for de Portago had swamped the Ferrari opposition.

Through Monday night the competitors made their way to St. Gaudens, where early on Tuesday morning a five-lap race was held round the full length of the Comminges circuit, now in good condition but unfortunately no longer used for serious racing. Here Moss was able to employ his racing skill to combat his fellow SL drivers and still the Ferrari boys could not make any impression and it began to look as though the Tour was going to be a walk-over for Stuttgart machines. A short distance farther on the competitors came to the Peyresoude Hill and were timed over 4½ kilometres of its twisting climb, and once more it was a Mercedes-Benz benefit with Pollet being fastest, followed by La Caze and Moss, though de Portago and Trintignant improved their positions in the General Category. Leading all the small cars came Storez with his special



At Rouen de Portago really got into his stride. He is here seen, cornering forcibly on the circuit Rouen-les Essarts in the Scaglietti-bodied 3-litre Ferrari Europa—a really Gran Turismo car.



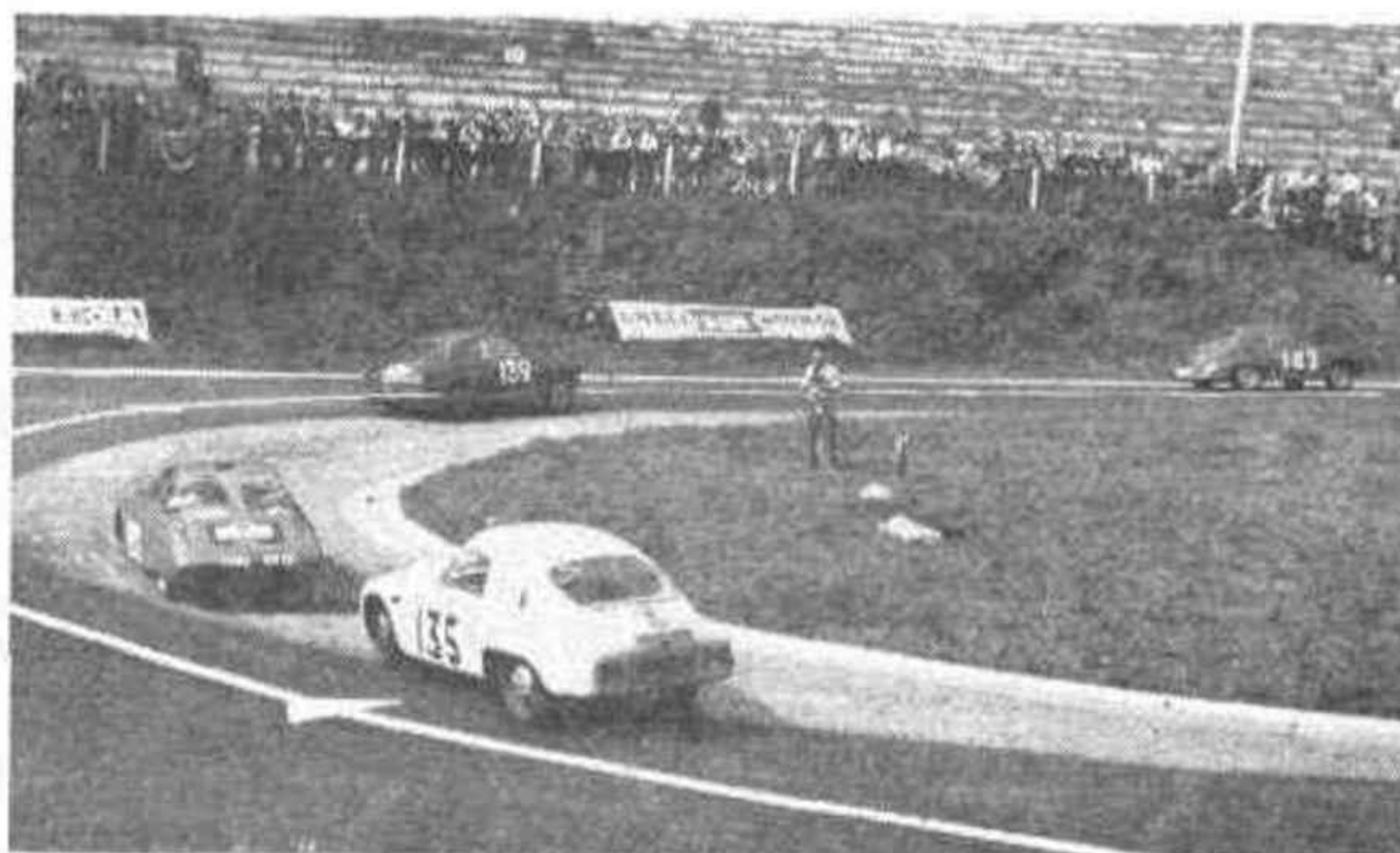
At Le Mans de Portago began to mount the leader board of the Tour de France and he is here seen close on the tail of Pollet (300SL) with his Europa Ferrari, at the entrance to the Esses.

Porsche Carrera, a 1954 Porsche, stripped of all unnecessary weight, fitted with aluminium panels and a very healthy Carrera engine. His times at Mont Ventoux and Peyresoude put him well ahead of even Behra, who was running a strictly standard Carrera.

Through the second night of the Tour the file of cars wound its way up the west side of France, and it was interesting to see them at a control point at midnight on Tuesday, just south of Perigeux. The control was at a Shell filling station, the French Shell company patronising the event, and in spite of the hour a vast crowd of locals turned out to watch the cars passing through or wait should they be a bit ahead of schedule. Although the average speeds required were seldom more than 40 m.p.h. there were a number of secret checks to prevent unnecessary speeding, anyone found to be averaging over 50 m.p.h. being disqualified. In general the road averages were easy to maintain, especially for the big Gran Turismo cars, but navigators had to pay strict attention for the route lay mostly on small side roads and they had to keep an eye out for not getting too far ahead on the easier parts. In the little village of Lalinde, where this particular control point was, the public interest in the Tour was typical of the whole of France. Seldom does the man in the street have a chance to see close at hand such a desirable collection of fast cars, Ferraris, Mercedes-Benz, Porsches, Alfa-Romeos, factory Panhards, D.B.s and so on, while those happy owners of Dauphines or Dynas were able to watch with amazement the acceleration of the factory versions as they left the control. To see a Dauphine spin its wheels on a dry road, or a D.B. coupé give a squeak from its front tyres as the driver snatched second gear were things the normal French public seldom get a chance to enjoy at such close quarters, while a V12 Ferrari being taken up to 7,000 r.p.m. up your own High Street is always worth staying up late for.

This second night was not terribly difficult, though a certain amount of mist in the early hours caused eyes to be strained, but by breakfast time the field had arrived at the Le Mans circuit. Here a flat-out blind for 12 laps of the Circuit of the Sarthe took place.

Continued on page 702



As well as winning his class on handicap, Armagnac put up a consistently good performance in the open class, and here his D.B. is seen following an Alfa-Romeo and the Le Mans Panhard Monopole of Hemard Flahaut at Rouen.

**"It's risky to ask
just for 'oil'
I SAY CASTROL"**



Geoff Duke
6 times a World Champion

This is why

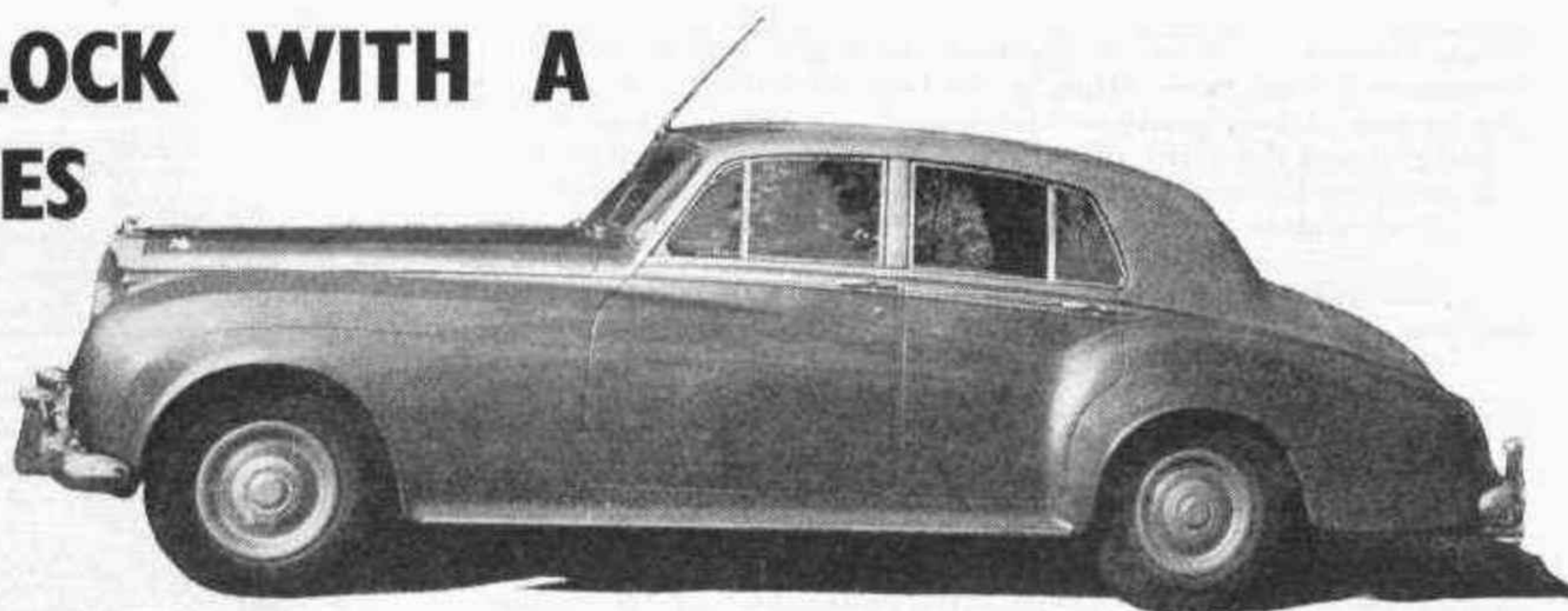
"Your garage man can't guess what you want. That is why I always ask for Castrol by name. I advise you to do the same—both on the forecourt and in the service bay."



THE MASTERPIECE IN OILS

ROUND THE CLOCK WITH A BENTLEY S-SERIES

A Fast Return Run from London to Scotland Underlines the Silent High-Performance, Powerful Braking and Luxurious Specification of the Latest Model of this Famous Make. Every Conceivable Comfort and Convenience, including Servo Brakes and Automatic Transmission.



BEAUTIFULLY-BALANCED LINES render the Bentley S-series standard metal saloon a very elegant fast car.

BENTLEY is not a name to be taken lightly, even by Bugatti fanatics! Indeed, the development of the Rolls-Royce-built cars has been steady, sensible and continuous. From the original 3½-litre "silent sports car" came the more powerful 4½-litre cars, later endowed with overdrive gearboxes and developed as the war-time Mk. V with independent front suspension. Other, similar but always slightly better, Bentleys followed, leading to the recent B7 and culminating in today's S-series 4.9-litre model, of which MOTOR SPORT was recently able to conduct a road test extending over more than 1,360 miles.

The modern Bentley has a specification in which traditional engineering is blended with the requirements of the present. The six-cylinder engine has a bore and stroke of 95 by 114 mm. (4,887 c.c.) and uses a modest compression ratio of 6.6 to 1 and twin S.U. HD6 carburettors with automatic starting control. The power output remains locked in the bosoms of the Rolls-Royce technicians. Piston speed at 2,500 f.p.m. is equivalent to 3,330 r.p.m. Push-rod actuated o.h. valves are set above side-by-side exhaust valves. The pistons each have three compression rings, the top one chromium plated, and one scraper ring, and the nitrided crankshaft runs in seven copper-lead-indium-lined steel-shell main bearings and possesses integral balance weights. The lubrication system is conventional, except that the connecting-rods are drilled for lubrication of the little-ends. The sump holds 16 pints of oil. A light-alloy cylinder head with six separate inlet ports is employed. The camshaft is driven by single helical gears, with a drive for the oil pump in the centre. It runs in four plain bearings. The cooling system contains 3½ gallons of a 25 per cent. anti-freeze solution, and incorporates a belt-driven five-bladed fan and a thermostat. The latter can be supplied to open at a coolant temperature of 75-77 deg. C. or at 84-86 deg. C., as required. Fuel is supplied from an 18-gallon tank by two independent electric pumps. The 12-volt electrical system incorporates a Dagenite or Exide battery, Lucas C-47 dynamo, Lucas M-45G starter motor and a main fusebox containing eight fuses, with separate horn fuse. Lodge or Champion plugs are specified, and twin Lucas ignition coils fitted. The drive is taken via an automatic gearbox comprising a fluid coupling and a set of compound planetary gears through a divided propeller-shaft to a semi-floating hypoid-bevel back axle with four-star differential, giving a final-drive ratio of 3.42 to 1. The axle holds 1½ pints of lubricant.

The chassis is of welded-steel closed-box-section construction with cruciform centre bracing, a steel front pan carrying the suspension and steering units and box-section and tubular rear cross-member. Centralised chassis lubrication is fitted, supplied from a scuttle-mounted reservoir. Front suspension is by unequal-length wishbones and coil-springs, and a normal back axle is sprung on ½-elliptic leaf-springs and located by a Z-type anti-roll bar. At the front opposed-piston dampers of Rolls-Royce construction and a torsional anti-roll bar are used, while at the back the piston-type shock-absorbers are electrically controlled by the driver. The back springs are enclosed in gaiters and the shackles possess rubber bushes.

Steering is cam and roller to a transverse link and three-piece track-rod linkage, and 15-in. steel disc wheels are carried on five studs. The brakes have 11 in. by 3 in. cast-iron drums with peripheral cooling fins, and are applied hydraulically at the front and by combined hydraulic and mechanical operation at the back, through the famous Rolls-Royce gearbox-driven friction servo motor introduced in 1924, which runs at approximately one-fifth propeller-shaft speed. The proportion of braking at the back is 60 per cent. hydraulic, 40 per cent. mechanical. The hand-brake applies the back-brakes only, through part of the pedal linkage. The front brakes have twin trailing shoes.

"Static" Observations

In a car of this price and reputation one expects every conceivable luxury appointment, and in this the Bentley does not disappoint the most fastidious. The car we tried was the standard four-door, 5/6-seater saloon of stressed-skin pressed-steel construction.

It is endowed with seats upholstered in deep high-grade leather, with every possible kind of armrest, those on the front doors being adjustable for height. The front squabs are adjustable for inclination, aircraft fashion, by means of little levers beside the cushions, and their backs carry ashtrays and folding tables for the convenience of rear-compartment travellers. Upholstery is in English hide and foam-rubber overlays on spring cases, and dash and garnish rails are finished with french walnut veneer. The floor is covered with deep carpets. Incidentally, although the body is of steel, luggage-boot lid, bonnet and doors are made of aluminium in the interests of keeping the kerb weight under two tons.

Reverting to the luxury of the "static" appointments, the high-backed front seats, lacking only a headrest, can be adjusted separately or set as a three-passenger bench seat. The front doors possess normal windows, calling for 2½ turns of the handles to fully raise or lower, ventilator windows with unpleasantly stiff catches, and well-pockets, while the armrests act as "pulls." The rear doors have rigid metal "pulls" and the window handles call for almost 2½ turns, up-to-down. Fixed quarter-lights match the front ventilator windows. External push-button handles are used. Recessed mirrors, with a cigar-lighter adjacent to the off-side mirror, flank the back seat. Locks are fitted in both front doors.

The front-seat passenger has a very large, lined cubbyhole before him, closed with a lid which matches the dashboard and possesses a Yale lock. A similar cubbyhole, unlidded but with a useful step to retain small objects, is provided in front of the driver. Behind the rear seat is a very wide parcels shelf. Under the dash is a pull-out table, with the H.M.V. radio above it, the radio using a roof aerial elevated by turning an interior knob.

The air of high quality and refinement conveyed by the beautiful upholstery and veneered instrument panel is enhanced by the sense, from contemplation of small details, that this is a car in the true Rolls-Royce-built Bentley tradition. The large non-sprung three-spoke black steering wheel, unencumbered save for a sedate plated horn-push in its boss, the switch-gear in separate panels, the type of direction-"flashers" control set on the right of the dashboard sill, and the shape of the brake-pedal in this now two-pedal car are typically Bentley.

The instrument panel contains a Smith's 110-m.p.h. speedometer with trip and total mileometers, matched by a dial incorporating fuel gauge, water thermometer, oil gauge and ammeter. These gauges have only superficial calibrations such as "Hot" and "Cold," "High" and "Low," and, in the centre, a Smith's clock. Between these main dials is the panel containing the detachable ignition key, which is turned to start the engine (after the gear-lever has been set to neutral) and its removal locks various circuits, according to its setting, rendering the car tamper-proof, generator and fuel-warning lights (the latter indicating when less than three gallons of petrol remain), and a switch for selecting side and tail-lamps, head, side and tail-lamps or fog, side and tail-lamps, as required. On the left of this panel is a cigar-lighter, on the right a switch for releasing the flap over the petrol-tank filler, which is in the near-side back wing and has a screw cap, rather small and secured by a wire—not a filler for your chauffeur to approach with dignity and a can. Two further panels carry switches for controlling demisting and ventilation, wipers and washer, panel and map lights and ventilation and heating, these

being cleverly arranged to perform several functions by either turning or pulling them; thus hot or cold air is selected by pulling out to one of two positions the appropriate knob, fan speed by turning it, and the wiper switch controls the two-speed, self-parking screen-wipers by turning, the screen-washer by pulling it out, etc. A button enables sump oil level to be read on the petrol gauge. There is provision for an inspection-lamp.

A little switch on the left of the steering column selects hard or soft ride control, the left foot operates the automatic chassis lubricator, which requires two strokes every 200 miles, and a lever on the right of the steering column provides a degree of control over the automatic transmission, a button on the end of the lever guarding the neutral and reverse positions.

The Bentley has an old-style bonnet, levers on each side of the scuttle interior releasing the appropriate, centrally-hinged bonnet panel. The roof lamp is operated automatically as the doors are opened, with an overriding finger-switch on the near-side door pillar.

Visibility through the big curved windscreen is excellent, thanks to slim screen pillars, and both front wings are just visible to a driver of average height. In-built headlamps are naturally fitted, the semi-inbuilt sidelamps above having tiny red inserts to show them to be alight. The headlamps provide good but not exceptional light for fast night driving and are dipped by a big rubber knob on the floor. Lucas fog-lamps are effective in mist and fog.

The doors of the modern Bentley do not close with quite the "coachbuilt" action of pre-war models and we have to report some minor body rattles and an irritating creak from the region of the near-side screen pillar.

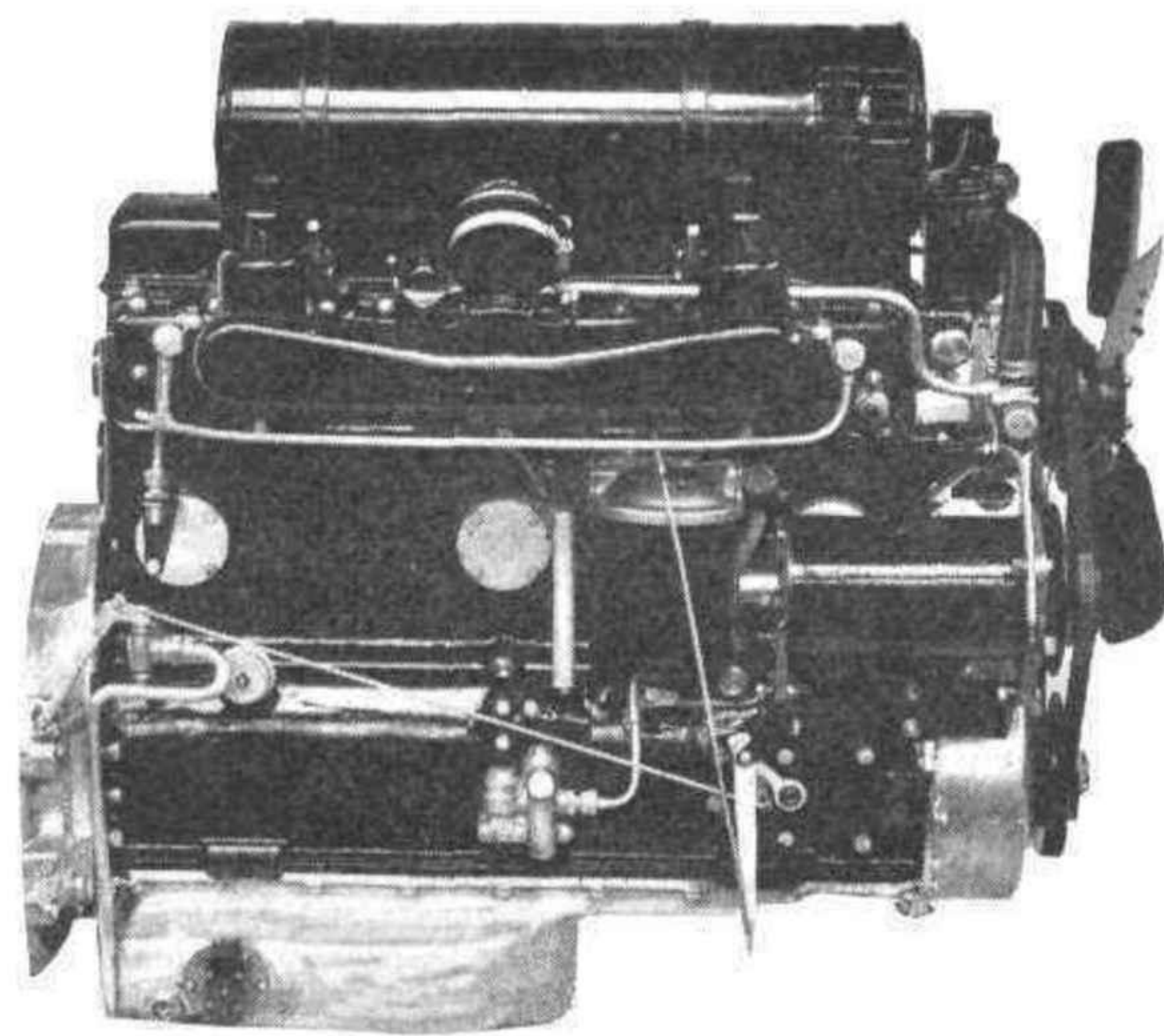
Nevertheless, one of the first impressions is of the wonderfully quiet functioning of the car. The 4.9-litre engine is inaudible and with all the windows closed wind-noise dies away to less than a whisper, so that it is possible to converse in low voices while cruising at a speed of 100 m.p.h. To enable the full benefit of this charming absence of effort to be enjoyed, very thorough air-conditioning and heating is provided, each system separate, so that the car can be driven with all windows shut as a matter of course. A separate duct ventilates the rear compartment. Demisting is looked after by cold or hot air feeds to the windscreen, and by an electrically-warmed rear window.

A central, scuttle-mounted mirror provides the driver with a good rear view, at the expense of slightly impaired left-forward vision. The hand-brake is a pull-out toggle on the right under the scuttle; on the car tested it did not hold very well and came out so far that the driver was in danger of hurting his knees on it when vacating the driving seat. The doors are amply wide, for dignified entry and egress, although, as the seats are high, one steps down quite a long way.

The body lines of the S-series Bentley are beautifully proportioned, rendering this big car handsome as well as imposing. The luggage boot is of very generous capacity, with a flat floor broken only by the fuel filler-pipe, as spare wheel and tools, the small tools in a tray, the large ones in clips, are stored beneath it. The lid has over-centre hinges, and locks. The radiator is, of course, a dummy, the actual cooling element being located some way to the rear of it. Twin screen visors are fitted, arranged to swivel sideways when detached from clips; the passenger's having a vanity mirror. The steady white-tipped needle of the speedometer provides for easy reading of the Bentley's speed but the matching rev.-counter of earlier cars was missed, albeit with automatic transmission the driver has little control of engine speed towards maximum r.p.m. The beautiful hand-throttle control, too, is missing on the modern Bentley. There is no choke, starting being automatic.



THE ESSENCE OF LUXURY allied to high performance places the modern Bentley in a class of its own.



ENGINE OF THE 4.9-LITRE BENTLEY.—Note the typical Bentley high-grade finish, twin S.U. carburetors with their huge air-cleaner and neat external pipe-runs, etc.

Road Behaviour

Having thus set down the technical specification of the S-series Bentley and examined its complete and luxurious detail appointments we set about discovering how the present-day representative of this famous make performs on the road.

Following a preliminary canter of some 250 miles we set out to drive to Scotland and back, and, being gluttons for punishment and having to compress the test into as short a space of pre-Motor Show time as possible, we decided to return without an overnight stop, thus gaining experience of the modern Bentley in strenuous round-the-clock motoring. We had anticipated without thought of road conditions in Britain. From London that Sunday until "over the border" we had to contend with an almost continual stream of week-end traffic, nosing along at 20-30 m.p.h., as well as with congested towns (Doncaster!) and long hold-ups at one-way road blocks. That the Bentley was able, under these conditions, to average 47.6 m.p.h. to beyond Abington, including getting clear of London and two stops, respectively for refuelling and screen-cleaning, is a clear measure of its excellent roadholding and high performance.

A very big car to contemplate at the kerbside—it has a track of 5 ft. and is 17 ft. 8 in. long—it has that elusive but desirable quality of seeming quite small when gaps in tight-packed traffic have to be negotiated. It goes up to 100 m.p.h. in a very short distance and is arrested from such high speeds very easily by the servo brakes, in spite of its considerable weight. Because of these characteristics we made comparative light of the appalling traffic conditions, making Stamford from East London in 1 hr. 59½ min., Grantham in 2 hr. 23 min., Doncaster in 3 hr. 21½ min., Boroughbridge in 4 hr. 25½ min., and arriving at Scotch Corner in 5 hr. 2 min. total time. Carlisle was reached in 6 hr. 16 min., Gretna in 6 hr. 33 min. Abington, where we branched off A74 for A73, was accomplished in 7 hr. 28 min., after which in rain and mist, over incredibly slippery roads which had resulted in one unfortunate in a Ford overturning into a field, we crossed to Edinburgh and, after about an hour's sleep at daybreak, were in Cambridge, looking at the new F. II Lister-Climax, soon after 9 a.m. on the Monday.

This journey had not been devoid of interest. Our best hour's average while hop-scotching the mimers was 53 m.p.h. Just before Newark a police Austin did a lurid dive across the oncoming traffic, presumably to make sure of "escorting" the Bentley through the town, and at Grantham we noticed the "Antone" Rolls-Royce van rolling steadily South on its way from Oulton Park. Just before Boroughbridge a Type 44 Bugatti tourer was encountered, and towards the end of Bowes Moor a Cooper, bearing racing No. 50, was spotted on its trailer outside a garage. A forlorn traction engine with tattered tarpaulin was noted by the Editor as being on the left of the road out of Locherbie. The object of the run, however, was to check the behaviour and habits of the Bentley. Its automatic gearbox provides a brisk step off, after which progressive upward changes occur at 6, 11 and 20 m.p.h. using a light throttle opening or at 18, 31 and 65 m.p.h. if full-throttle is employed. Similarly,

when the accelerator is lifted, automatic downward gear changes occur at 14 (top to third), 8 (third to second) and 4 (second to bottom) m.p.h. The gear-lever, however, enables second and third gears to be held up to the normal maxima when desired, and by dropping into the third position excellent acceleration can be obtained, although one never quite loses one's desire for a normal gearbox. That acceleration isn't stifled by the automatic transmission is indicated by times of 10 sec. from 0-50 m.p.h. in either fully automatic or third gear and of 18.4 sec. from 0-70 m.p.h., holding third gear, which increased to 19.5 sec. using fully-automatic transmission. A steady 50 to 70 m.p.h. in top gear occupied 9 sec. and 10-30 m.p.h. in third gear took 6.5 sec., actually improved to 4.6 sec. in automatic control.

This excellent acceleration, accomplished in complete silence without any suggestion that the big six-cylinder engine is even running, carries one past the worst of the hold-ups, and along the double-track piece of road before Scotch Corner the speedometer went to the stop at 110 m.p.h., as it was to do again on several occasions. This performance is matched by the aforesaid exceedingly powerful, mechanical-servo, hydrastatic brakes, which are certainly a feature of the Bentley. With practically no effort on the driver's part it is possible to pull the car up on dry roads in a straight line, and so powerful is the action, with a slight lag as the servo comes in, that some practice is needed to make smooth, progressive non-emergency stops. A slight squeak from the servo was occasionally noticed, otherwise the brakes are vice-free—in the dry. On exceptionally slippery roads care is necessary, as the back wheels lock first and the tail of the car slides all too easily.

Roadholding and cornering are very good for a large and heavy luxury car of this sort, and rapid cornering calls forth only mild protest from the Dunlop Fort tubeless tyres. Moreover, the tail-wag we recall on the Mark V has been completely eliminated. There is neither appreciable over- or understeer and roll is subdued, especially with the ride-control set to "hard," although the difference in suspension characteristics seems less pronounced than on pre-war Bentleys, the ride being fairly hard on both settings. This transmits some slight shake to the steering wheel, but return action through the front wheels is conveyed only over really bad surfaces and then not as pronounced kick-back.

The steering asks four turns from one to other of a generous lock (turning circle, 41 ft. 8 in.) and is exceptionally smooth and light at all times save for very low-speed manoeuvring, although it is essentially spongy steering. There is little sense of low-gearing at speed, but the driver is called upon to do considerable wheel twirling when making pronounced changes of direction, in which he is aided by very strong castor-action. In future, on overseas models, power steering will be available and it seems probable that this will be provided more from a desire to raise the ratio of the steering than from any need for nicer or lighter action at speed. The automatic transmission does not jerk excessively, although once or twice it juddered in moving the car away from rest and on slippery roads automatic upward gear changes tend to promote momentary wheelspin and loss of adhesion. Incidentally, it seems a pity that this transmission is of American origin, especially as once upon a time Rolls-Royce made most of their own equipment, even to electrical components.

There is no gainsaying the ease of control provided by the Bentley in its present form. As one eases up to a traffic obstruction and stops the car merely by depressing the brake pedal, the nose with its winged-B badge dipping faintly in gentle acknowledgement of the superb braking power, the car ready to glide away in bottom gear, engine inaudible, with no movement of the owner's hands from the wheel, appreciation of first-class engineering is unrivalled, especially in view of the very high performance, in terms of speed, acceleration and road-ability, combined in this comfortable and elegant motor car.

We made a careful check of the essential fluids on our fast run to Scotland and back. Petrol consumption was 13.6 m.p.g. Unfortunately, this represents a fuel range of only 245 miles, which, on Continental roads, could be covered in some four hours. A larger tank seems to be called for. No water and less than half a pint of oil was consumed in the hard 1,000 miles, which is eminently satisfactory, while the automatic chassis-lubrication virtually obviates chassis maintenance. On long runs the front seats, for all their depth of cushion, feel hard and a headrest for the front-seat passenger would be a worthwhile addition. In the back compartment, however, sheer luxury and comfort prevail, while in all seats there is ample leg-room and an entire absence of fumes.

Other cars can equal the Bentley's top speed and its vivid acceleration, but it is the astonishing mechanical silence and absence of wind-noise when the windows are shut, allied to the manner in which the

THE BENTLEY S-SERIES SALOON

Engine: Six cylinders, 95 by 114 mm. (4,887 c.c.). Push-rod operated o.h. inlet valves, side exhaust valves. 6.6 to 1 compression-ratio.

Gear ratios: Hydramatic transmission with over-ride and "kick-down" control. First, 13.06 to 1; second, 9.00 to 1; third, 4.96 to 1; top, 3.42 to 1.

Tyres: 8.20 by 15 Dunlop Fort tubeless on bolt-on steel disc wheels.

Weight: 1 ton 19 cwt. 1 qtr. 7 lb. (without occupants, but ready for the road, with approximately 14 gallons of petrol).

Fuel capacity: 18 gallons (range approximately 245 miles).

Wheelbase: 10 ft. 3 in.

Track: Front, 4 ft. 10 in.; rear, 5 ft. 0 in.

Dimensions: 17 ft. 8 in. by 6 ft. 2½ in. by 5 ft. 4¼ in. (high).

Price: £3,495 (£5,243 17s., inclusive of purchase tax).

Makers: Bentley Motors (1931), Ltd., Crewe, England.

vehicle can be driven in and out of traffic obstructions, steering accurately with but a light touch on the wheel, those outstandingly powerful brakes in reverse, that render it the supreme high-performance luxury car. At its price of £5,243 17s. inclusive of p.t. not many can afford it, but for those who can the genuine quality of its interior, appointments, no less than the splendid finish of the engine and the air of security imparted by the deep veneered dash and broad bonnet, will be a source of constant pleasure and inspiration. In the course of our round-the-clock drive we counted many Bentleys and at least seven of the latest S-series, in which hydramatic transmission coupled with the over-riding gear-lever represents the ultimate in automatic gearboxes.

The British lion may spend much of its time lying down these days but it is still capable of getting up and facing the world in a bold and dignified manner, and such productions as the Bentley S-series remind us that this is so. This is the Company Director's motor car *par excellence* and it is fitting that men who control British destiny should drive these fine cars from Crewe rather than chromium-draped floating drawing-rooms of other than British origin.—W. B.

International Class G Records Broken in England

For the first time since the war a record attempt has been officially observed in England by the R.A.C. At a Bedford aerodrome last month Wing-Comdr. F. Sowrey, A.F.C., broke the International Class G standing-start kilometre and mile records, respectively, at 87.64 m.p.h. and 93.88 m.p.h. These records were formerly held by R. J. W. Appleton (Appleton-Riley), who was timed at Brooklands at 82.16 and 91.3 m.p.h., respectively.

Sowrey's attempt was timed by Bob Wright, using Longines crystal-quartz ray apparatus. The R.A.C. is prepared to consider further attempts on records in this country, but only when a suitable course can be used, which, in the absence of access to banked tracks, seems to rule out long-distance or even short-distance flying-start records.

Sowrey drove a supercharged Cooper 1,100 with all-enveloping body, of which some details are appended.

The car is a Mark VI chassis with a streamlined fibreglass body which George Wicken made about two years ago using the works Cooper streamliner as a mould. Sowrey bought the chassis from him at the end of last year and fitted the suspension components from his own normal Mark VI. He also cleaned up the car aerodynamically by fitting a perspex bubble canopy. John Cooper adapted the engine-bay to take the 1,100 J.A.P. engine, and fitted a disc brake, and Robin Jackson tuned and installed the engine and Wade supercharger. Dunlop supplied tyres buffed to a tread depth of 1 mm. to give the lowest rolling resistance and power loss, and the car used Esso fuel, Castrol oil, Lucas magnetos, and K.L.G. plugs. Teleflo shock-absorbers kept the wheels on the ground at speed.

The car was geared to an overall ratio of 3.18 to 1 for the mile, giving 141 m.p.h. over the finishing line and 3.45 to 1 for the kilometre, giving 127 m.p.h. Jim Clark, Robin Jackson's head mechanic, looked after the car during the attempt.

The tactics were to drive the first run over each distance inside a safe rev. limit, leaving an extra 400 r.p.m. in hand, to be used, if necessary, for the return.

Unbeatable!

GOLDEN

ESSO EXTRA

Finest Petrol in the World



DAILY HERALD GOLD CUP MEETING

OULTON PARK, SEPT. 22nd

GOLD CUP RACE

- | | | | |
|-----------------------|------------------------------------|---------------|--------------|
| 1st | ROY SALVADORI | Cooper-Climax | 83.85 m.p.h. |
| | <i>Entered by Cooper Cars Ltd.</i> | | |
| 2nd | TONY BROOKS | Cooper-Climax | |
| | <i>Entered by R. R. C. Walker</i> | | |
| 3rd | RON FLOCKHART | Lotus-Climax | |
| | <i>Entered by John Coombes</i> | | |

TEAM PRIZE won by Cooper Cars Ltd.

SPORTS CAR CLASSIFICATION

- | | | |
|-----------------------|----------------------|--------------|
| 1st | RON FLOCKHART | Lotus-Climax |
|-----------------------|----------------------|--------------|

1100 c.c. CLASS

- | | | |
|-----------------------|------------------------------|--------------|
| 1st | CLIFF ALLISON | Lotus-Climax |
| | <i>Entered by Team-Lotus</i> | |

GRAND TURISSIMO RACE

- | | | |
|-----------------------|-----------------------------------|----------|
| 1st | TONY BROOKS | Mercedes |
| | <i>Entered by R. R. C. Walker</i> | |

(Subject to official confirmation)

All using GOLDEN ESSO EXTRA and ESSO EXTRA MOTOR OIL, exactly the same superb petrol and motor oil you can buy from your local Esso Dealer

RUMBLINGS

Another miniature vehicle is soon to join the Lloyds, Goggomobiles and Isettias which are a familiar feature of the German road scene.

A NEW MINIATURE

This is the Zundapp Janus, unique in having a *dos-a-dos* saloon body seating four adults back-to-back on a wheelbase of 6 ft. 0 in. A single-cylinder 67 by 70-mm. (248 c.c.) two-stroke fan-cooled engine, mounted centrally, drives the back wheels via a four-speed gearbox with ratios of 26.0, 13.1, 8.3 and 6.25 to 1. Independent suspension is by coil-springs all round and the tyre size is 4.40 by 12. In Germany, this little economy saloon, with 12-volt electrics and hydraulic brakes, will sell for about £270.

* * *

Last month, in an article under the heading of "The Genius of Dr. Porsche," we published a table of race-results for the years 1934 and 1935, showing how well the comparatively small concern of Auto-Union MERCEDES-BENZ battled against the might of Mercedes-Benz in the opening stages of this sensational new era of Grand Prix racing.

To continue beyond 1935 was not the theme of this article, but so much interest has been aroused, and the younger generation seems so keen to know how this battle waged, that we continue the tabulation hereunder. Naturally, this sketches only part of the story and for the full facts the appropriate back issues of MOTOR SPORT and various reference works should be consulted.

1936 (see MOTOR SPORT, Jan., 1941).

Race	First	Second	Third	Remarks
Monaco	Mercedes-Benz (Caracciola)	Auto-Union (Varzi)	Auto-Union (Stuck)	—
Tripoli	Auto-Union (Varzi)	Auto-Union (Stuck)	Mercedes-Benz (Fagioli)	—
Penya Rhin	Alfa-Romeo (Nuvolari)	Mercedes-Benz (Caracciola)	Alfa-Romeo (Farina)	—
Eifelrennen	Auto-Union (Rosemeyer)	Auto-Union (Stuck)	Alfa-Romeo (Brivio)	—
Budapest	Alfa-Romeo (Nuvolari)	Auto-Union (Rosemeyer)	Auto-Union (Varzi)	No Mercedes finished.
Milan G.P.	Alfa-Romeo (Nuvolari)	Auto-Union (Varzi)	Alfa-Romeo (Farina)	—
German G.P.	Auto-Union (Rosemeyer)	Auto-Union (Stuck)	Alfa-Romeo (Brivio)	—
Coppa Ciano	Alfa-Romeo (Nuvolari)	Alfa-Romeo (Brivio)	Alfa-Romeo (Dreyfus)	No Mercedes started.
Coppa Acerbo	Auto-Union (Rosemeyer)	Auto-Union (Delius)	Auto-Union (Varzi)	—
Swiss G.P.	Auto-Union (Rosemeyer)	Auto-Union (Varzi)	Auto-Union (Stuck)	—
Italian G.P.	Auto-Union (Rosemeyer)	Alfa-Romeo (Nuvolari)	Auto-Union (Delius)	—

Score: Auto-Union: Six 1sts; eight 2nds; five 3rds.
Mercedes-Benz: One 1st; one 2nd; one 3rd.

1937 (see MOTOR SPORT, Sept., 1941).

Race	First	Second	Third	Remarks
Rand G.P.	Auto-Union (Delius)	Auto-Union (Rosemeyer)	E.R.A. (Howe)	—
Tripoli	Mercedes-Benz (Lang)	Auto-Union (Rosemeyer)	Auto-Union (Delius)	—
Avusrennen	Mercedes-Benz (Lang)	Auto-Union (Delius)	Auto-Union (Hasse)	—
Eifelrennen	Auto-Union (Rosemeyer)	Mercedes-Benz (Caracciola)	Mercedes-Benz (Brauchitsch)	—
Pan-American Cup	Auto-Union (Rosemeyer)	Mercedes-Benz (Seaman)	Alfa-Romeo (Mays)	—
Belgian G.P.	Auto-Union (Hasse)	Auto-Union (Stuck)	Mercedes-Benz (Lang)	—
German G.P.	Mercedes-Benz (Caracciola)	Mercedes-Benz (Brauchitsch)	Auto-Union (Rosemeyer)	—
Monaco	Mercedes-Benz (Brauchitsch)	Mercedes-Benz (Caracciola)	Mercedes-Benz (Kautz)	—
Coppa Acerbo	Auto-Union (Rosemeyer)	Mercedes-Benz (Brauchitsch)	Auto-Union (Muller)	—
Swiss G.P.	Mercedes-Benz (Caracciola)	Mercedes-Benz (Lang)	Mercedes-Benz (Brauchitsch)	—
Italian G.P.	Mercedes-Benz (Caracciola)	Mercedes-Benz (Lang)	Mercedes-Benz (Brauchitsch)	—
Masaryk G.P.	Mercedes-Benz (Caracciola)	Mercedes-Benz (Brauchitsch)	Auto-Union (Muller/Rosemeyer)	—
Donington G.P.	Auto-Union (Rosemeyer)	Mercedes-Benz (Brauchitsch)	Mercedes-Benz (Caracciola)	—

Score: Auto-Union: Six 1sts; four 2nds; five 3rds.
Mercedes-Benz: Seven 1sts; nine 2nds; six 3rds.

1938

Race	First	Second	Third	Remarks
Pau	Delahaye (Dreyfus)	Mercedes-Benz (Caracciola/Lang)	Delahaye (Comotte)	No Auto-Unions started.
French G.P.	Mercedes-Benz (Brauchitsch)	Mercedes-Benz (Caracciola)	Mercedes-Benz (Lang)	—
German G.P.	Mercedes-Benz (Seaman)	Mercedes-Benz (Lang/Caracciola)	Auto-Union (Stuck)	—

Race	First	Second	Third	Remarks
Coppa Ciano	Mercedes-Benz (Lang)	Alfa-Romeo (Farina)	Alfa-Romeo (Wimille/Biondetti)	No Auto-Unions started.
Coppa Acerbo	Mercedes-Benz (Caracciola)	Alfa-Romeo (Farina)	Alfa-Romeo (Belmondo)	—
Swiss G.P.	Mercedes-Benz (Caracciola)	Mercedes-Benz (Seaman)	Mercedes-Benz (Brauchitsch)	—
Italian G.P.	Auto-Union (Nuvolari)	Alfa-Romeo (Farina)	Mercedes-Benz (Caracciola/Brauchitsch)	—
Donington G.P.	Auto-Union (Nuvolari)	Mercedes-Benz (Lang)	Mercedes-Benz (Seaman)	—

Score: Auto-Union: Two 1sts; no 2nds; one 3rd.
Mercedes-Benz: Five 1sts; five 2nds; four 3rds.

1939

Race	First	Second	Third	Remarks
Pau	Mercedes-Benz (Lang)	Mercedes-Benz (Brauchitsch)	Darracq (Etancelin)	—
Eifelrennen	Mercedes-Benz (Lang)	Auto-Union (Nuvolari)	Mercedes-Benz (Caracciola)	—
Belgian G.P.	Mercedes-Benz (Lang)	Auto-Union (Hasse)	Mercedes-Benz (Brauchitsch)	—
French G.P.	Auto-Union (Muller)	Auto-Union (Meier)	Darracq (Le Begue)	—
German G.P.	Mercedes-Benz (Caracciola)	Auto-Union (Muller)	Maserati (Pietsch)	—
Swiss G.P.	Mercedes-Benz (Lang)	Mercedes-Benz (Caracciola)	Mercedes-Benz (Brauchitsch)	—
Yugoslav G.P.	Auto-Union (Nuvolari)	Mercedes-Benz (Brauchitsch)	Auto-Union (Muller)	—

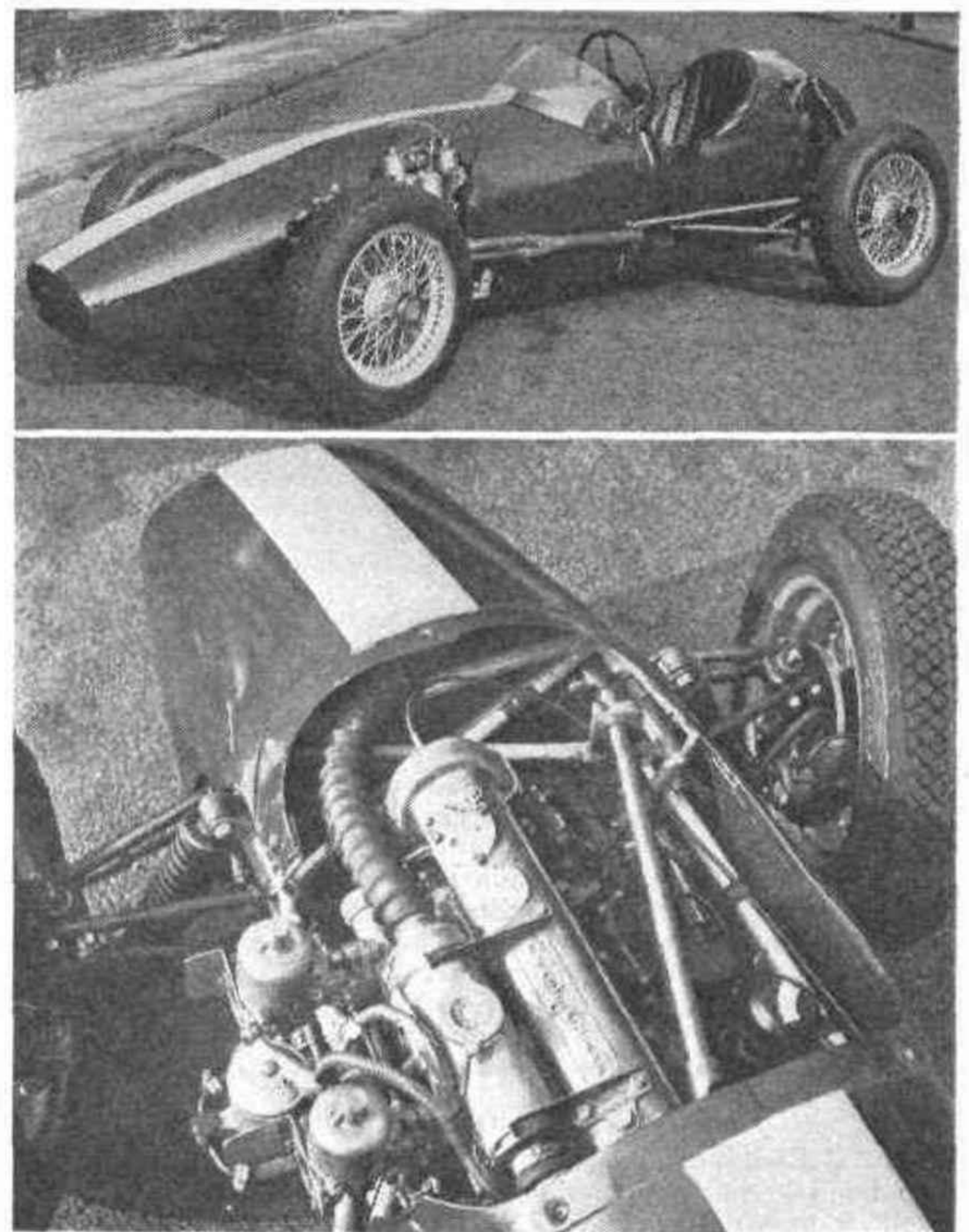
Score: Auto-Union: Two 1sts; four 2nds; one 3rd.
Mercedes-Benz: Five 1sts; three 2nds; three 3rds.

That was how it went and no one can say that Hitler's interest didn't produce close racing!

* * *

To join battle next season with the Formula II Cooper and Lotus cars, Brian Lister has designed and built an F. II Lister. Archie Scott-Brown should have driven it at the Oulton Park Gold Cup Meeting but the lightweight car proved uncontrollable out of corners due to excessive wheelspin. This will be considered during the winter and a potent vehicle should emerge from George Lister's works, where all manner of general engineering and wrought-iron work is undertaken and where 16 Listers have been built, either as kits of parts or complete cars, mostly for use with Bristol power units. Incidentally, the Lister-Maserati, raced this year by Archie Scott-Brown, is being sold.

Continued overleaf



Two views of the prototype F. II Lister-Climax.

GERMAN HIGH PERFORMANCE—continued from page 675



READY TO GO.—The three B.M.W.s which MOTOR SPORT sampled before being shown round the factory. From left to right, the 503 coupe, 507 convertible and 2.6-litre 502 saloon, all powered with V8 engines.

Faulkenhausen let us take the following figures: 0-50 m.p.h. in 5.2 sec., 0-70 m.p.h. in 10.2 sec; 3,000 to 4,000 r.p.m. in 11.8 sec., 3,500 to 4,500 r.p.m. in 16.4 sec. in top gear, hood down. With the hood up we accomplished 3,000 to 4,500 r.p.m. in 19.6 sec., 3,500 to 4,500 r.p.m. in 14 sec. and 4,000 to 4,500 r.p.m. in 20.6 sec., using top gear, which, on this car, was equal to 21.8 m.p.h. per 1,000 r.p.m. 125 m.p.h. was reached easily in open form, which is the maximum with the large screen, but with the hood up this improved to just over 128 m.p.h. Obviously, higher speeds would be attained on the 3.4 to 1 axle ratio, given a long run, and even better acceleration on the 3.89 to 1 axle.

The roadholding along a splendidly winding road before reaching the autobahn showed up the splendid roadholding of the 507. It has a normal four-speed gearbox controlled by a very short, stiff, large-knobbed central lever, which tended to jump out of second and top gear. The car weighs 1,310 kg. empty, compared with 1,600 kg. for the 503, and its wheelbase measures 8 ft. 3½ in. We were unable to check fuel consumption but von Faulkenhausen produced the most comprehensive data sheets for the car, even to figures showing what percentage of power could be used on various road surfaces without spinning the wheels, the maximum gradients climbable in the gears (10 per cent. hill in top at nearly 100 m.p.h., to 32 per cent. hill in second at 50 m.p.h.), and speeds in gears. From this we read fuel consumption of 2,042 kg. per h.p. hour at 4,000 r.p.m. on the bench and 8 litres per 100 km. at 50 k.p.h. in open form on the road, or 10.1 litres at 100 k.p.h., 16.5 at 150 k.p.h. and 25.0 at 190 k.p.h. The engine peaks at 5,500 r.p.m. and is safe up to 5,800 r.p.m. The power/wt. ratio of the 507 was given as 8.4 kg. per h.p. and its average speed for a s.s. kilometre as 122.7 k.p.h., or roughly 77 m.p.h. Speeds in the gears were listed as:—

	3.4-to-1 axle	3.7-to-1 axle	3.89-to-1 axle
First ...	66 k.p.h.	61 k.p.h.	5.8 k.p.h.
Second ...	108 "	100 "	95 "
Third ...	165 "	152 "	145 "
Top ...	224 "	207 "	197 "

Porsche RS seats can be fitted to the 507 if required. It will sell for about £2,650, and a quickly-detachable aluminium hard-top will be available for approximately £150 extra. Although B.M.W. appreciate that the 507 is not sufficiently fast for sports-car racing, with its very good performance, excellent gear-change and outstandingly safe roadholding it constitutes a very handsome sports/tourer. Von Faulkenhausen hopes to drive one in the 1957 Alpine Rally.

Our few days in Southern Germany came to an end and soon we were being flown back in a comfortable B.E.A. Vickers Viscount. There were two interesting English links at the factories where we were so graciously received—John Cooper had spent 1½ days at Porsche's (your guess is as good as ours!) and B.M.W. have supplied a 2.6-litre two-carburettor 130-b.h.p. V8 engine to A.F.N. Ltd.

—W. B.

BIG PARADE OF VETERANS

The R.A.C. London to Brighton Run takes place on Sunday, November 4th, and this year's event is the Diamond Jubilee of the original Emancipation Day Run of 1896 which celebrated the motor car's newly-won freedom of the roads.

RUMBLINGS—continued from page 693

The F. II Lister has a new tubular space-frame, as distinct from the ladder-frame of the Lister-Bristol, tailored to be a snug fit round a 1½-litre Coventry-Climax engine, which next year it is hoped will be the twin-cam unit. The drive is through a TC M.G. gearbox to a de Dion back axle using an A30 final drive. This layout is now due for modification, the gearbox, which will probably be a Bristol, to go behind the axle, not in the centre of the chassis.

The frame is of 18-g. tubing, either 1 in. or ¾ in. dia., the weight being only 32 lb. Front and back suspension is by the simple and effective Girling struts, unequal-length wishbones being used in front to carry Standard Ten stub-axles on ball-bearings at the top and swivel links at the bottom. The universally-jointed steering column operates a Morris Minor rack-and-pinion unit ahead of the suspension assembly. Lister make their own disc brakes, using Girling light-alloy pads. The discs are 9 in. dia. in front, 8½ in. dia. at the back, the back ones being set inboard to aid cooling. The rear wheels have a 2-deg. negative camber. The radiator core came from a Morris-Oxford and a tiny 6-volt battery beneath the seat supplies the twin fuel pumps and ignition.

This very compact F. II Lister is shod with 5.00 by 15 tyres on centre-lock wire wheels and weighs about 6½ cwt. It is the prototype on which further F. II Listers, built by the long-established Cambridge firm of precision engineers, will be based.

A GOODWOOD CLASS J LAP RECORD

During the final Goodwood Members' Meeting John Webb established a Class J (up to 350 c.c.) sports-car lap record, driving a 322-c.c. British Anzani-engined Astra. His speed was 45.095 m.p.h. This record has been unclaimed for eight years. With German minicars selling like hot-x-buns it is as well that the Astra should be thus in the news. Incidentally, no Class J outer circuit record was recognised at Brooklands, although in 1925 the 350-c.c. Jappic lapped at 66.85 m.p.h.

HANTS & BERKS NIGHT NAVIGATION TRIAL (Sept. 29/30th)

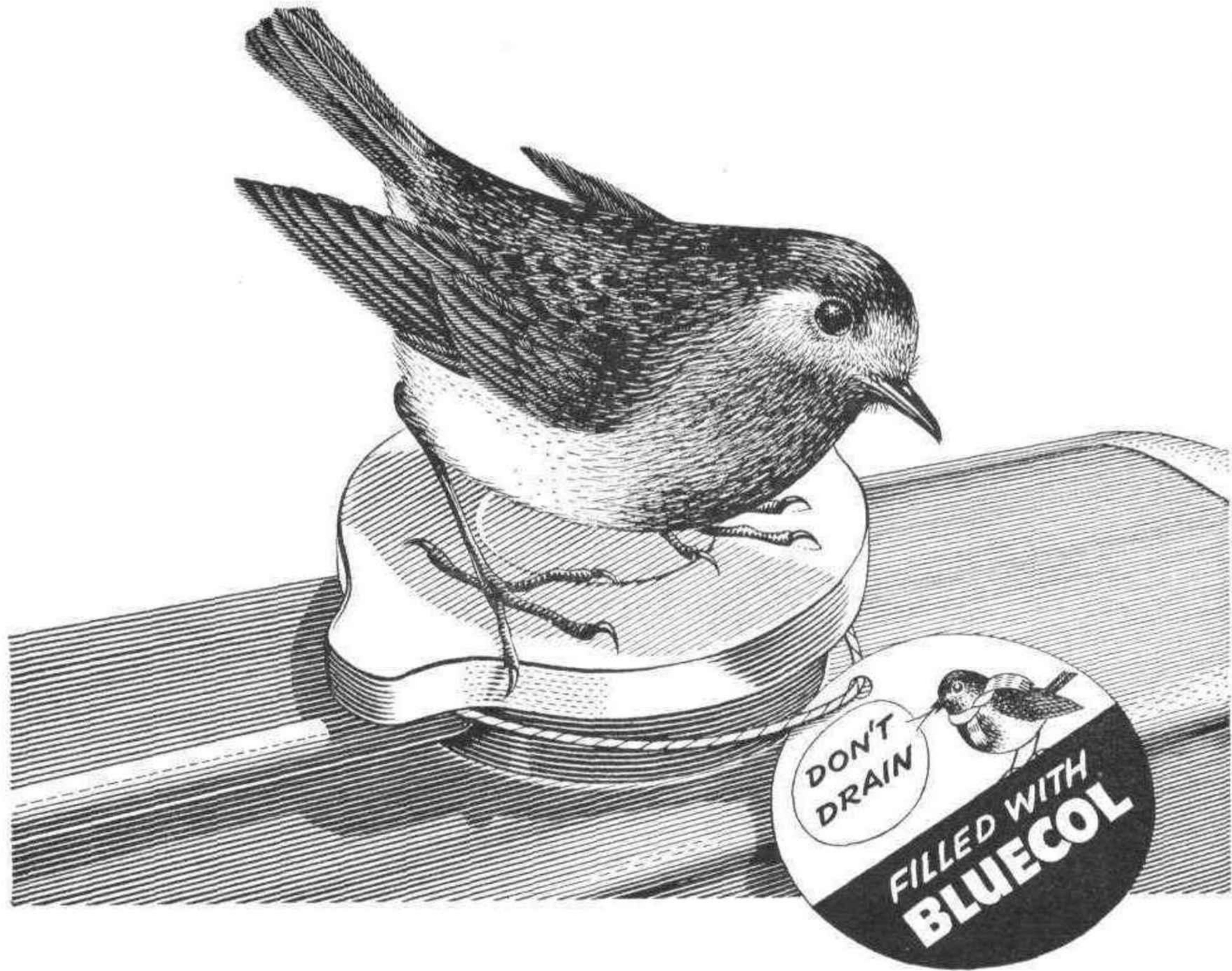
This traditional very tough test of skilled navigation took place around Oxfordshire on a pleasant enough night, with an excellent entry of mainly quiet cars.

We assisted for some 4½ hours in timing competitors in one of the expected original special tests, in this instance a timed row in a boat provided by the Club, with all crew aboard, across the Thames at Remenham (where the Squire car was made before the war) round a lighted buoy (consisting of a hurricane lantern floating on a Ford spare wheel!) and back. While we were present no crews funked this optional test, there were no immersions and one young lady rowed the rest of the male crew. Best time on our watch was 1 min. 58 sec. by Joe Lowrey's crew, who had arrived in a Singer Gazelle. Only one complaint about these splashing nocturnal activities was received and then only until an explanation was forthcoming of what it was all about—which emphasises once again how important it is to warn the locals of what is later to descend upon them—a matter over which this particular Club is usually punctilious. The marshals, too, had fun, for boats had to be rowed from Henley to the night's embarkation point and food and drink organised—so far as the former exercise was concerned, it is said that as one lady oarsman in a rudderless coracle met the current prior to shooting Henley bridge a window in the Leander Club went up and clearly over the evening twilight came a solicitous enquiry about the desirability of L-plates. Night trials usually are good entertainment. The trial was won by J. Lowrey (Singer Gazelle), navigated by J. Ballett.

BUCKLER GEARS

My old friend Derek Buckler has pointed out to me a piece of careless writing in my article "Lotus Salad" which might be construed as an unkind crack about his gears if the reader was unfamiliar with what went on inside a Ford gearbox.

I said that "The Buckler high second gear kept jumping out." What I should have said was that the synchromesh teeth actuating the Buckler high second gear kept jumping out. The synchromesh mechanism is standard Ford. When I pointed out to the Ford people that eight thousand five hundred miles, which was all the gearbox had done, was rather a short life for a synchromesh, they replied that they could accept no responsibility as we had fitted a non-standard second speed.—DAVID SCOTT MONCRIEFF.



You're safer with Bluecol

Perhaps you think that draining is the complete answer to the frost danger—but it isn't, you know. Assuming, for the sake of argument, you remember to drain night after night—there are still some facts to face. First, it's very difficult to drain a cooling system completely—almost impossible if there's a heater in the car. And during the daytime, what then? Your radiator can freeze up while you're parked in the street—on very cold days it can freeze up even while you're driving.

So you see, draining at night is not only a chancy

protection—but an inadequate protection. And who wants to be landed with a bill of at least £30 in cylinder block repairs?

Yet there is a simple safeguard. BLUECOL, the doubly-safe anti-freeze, gives your cooling system the complete protection it needs. Yes, BLUECOL is doubly-safe; safe (when used as a 25% solution) against 47 degrees of frost; and safe (because of the special inhibitors it contains) against rusting and similar chemical action. So get BLUECOL *now*—and have one less worry this winter!

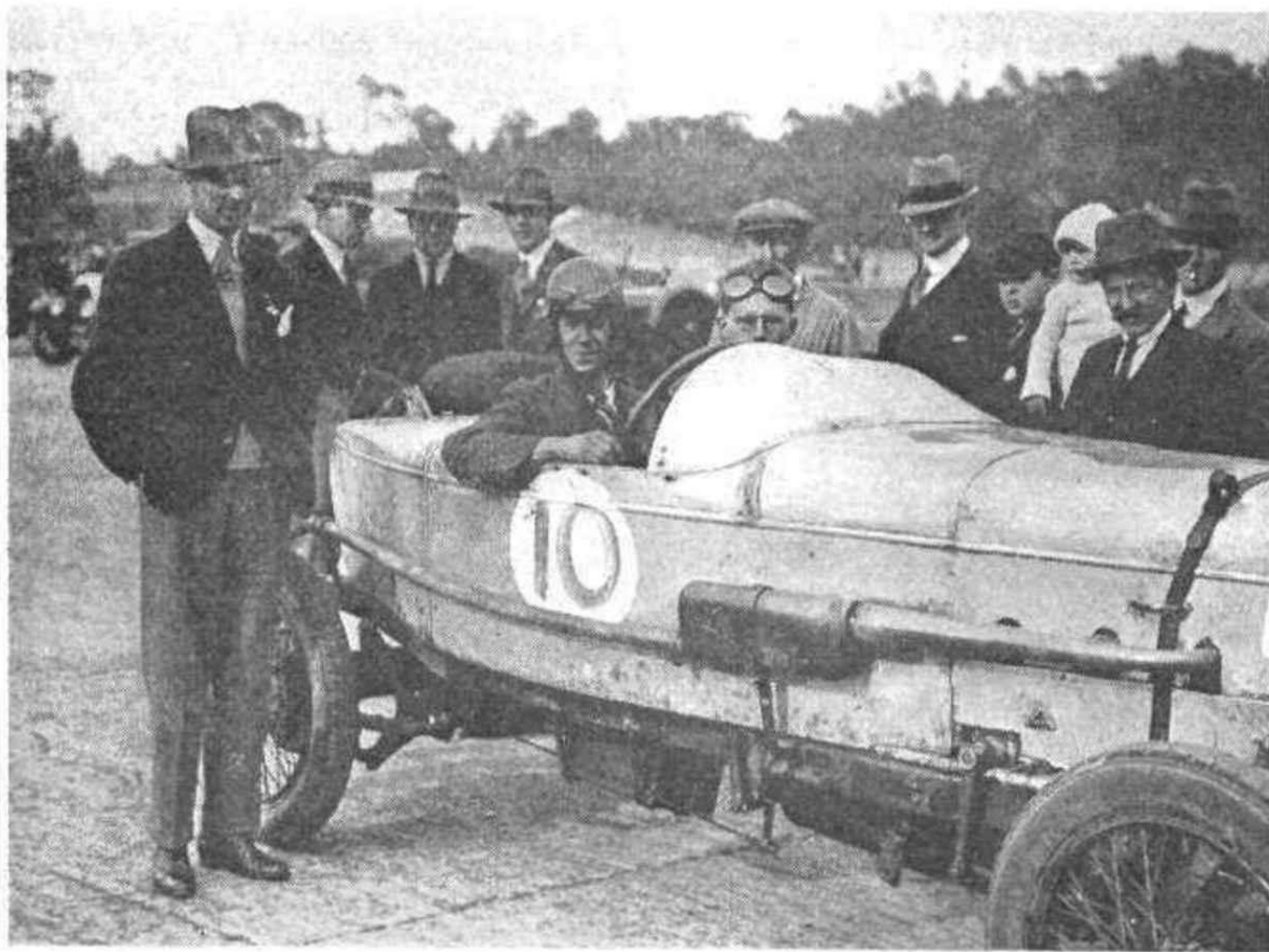
Available at all good garages and leading accessory suppliers

BLUECOL

THE DOUBLY SAFE ANTI-FREEZE

one of **SMITHS** accessories for better motoring

SMITHS MOTOR ACCESSORIES LIMITED, CRICKLEWOOD WORKS, LONDON, N.W.2
THE MOTOR ACCESSORY DIVISION OF S. SMITH & SONS (ENGLAND) LIMITED



VEHICLES I HAVE DRIVEN

[In this variant of our "Cars I Have Owned" series, R. M. V. Sutton, Chief Tester of Alvis Ltd., recalls his motoring experiences and reveals some hitherto unpublished facts relating to Alvis, Lea-Francis, Jaguar and other cars.—ED.]

THE AUTHOR in his 12/50 Alvis "duck's-back" after winning the 1926 Essex M.C. 100-Mile Handicap at Brooklands at a speed of 84.99 m.p.h. This car was prepared with works assistance. The late C. M. Harvey, who won the 1923 200-Mile Race for Alvis, is standing by the tail of the car and George Tattersall, the Alvis Racing Manager, is seen close to the bonnet on the right of the picture.

IN the course of 40 years' motoring, mostly in the capacity of a works tester, a vocation I still follow, many and diverse types, ranging from touring and racing cars to public service and armoured vehicles, have passed through my hands.

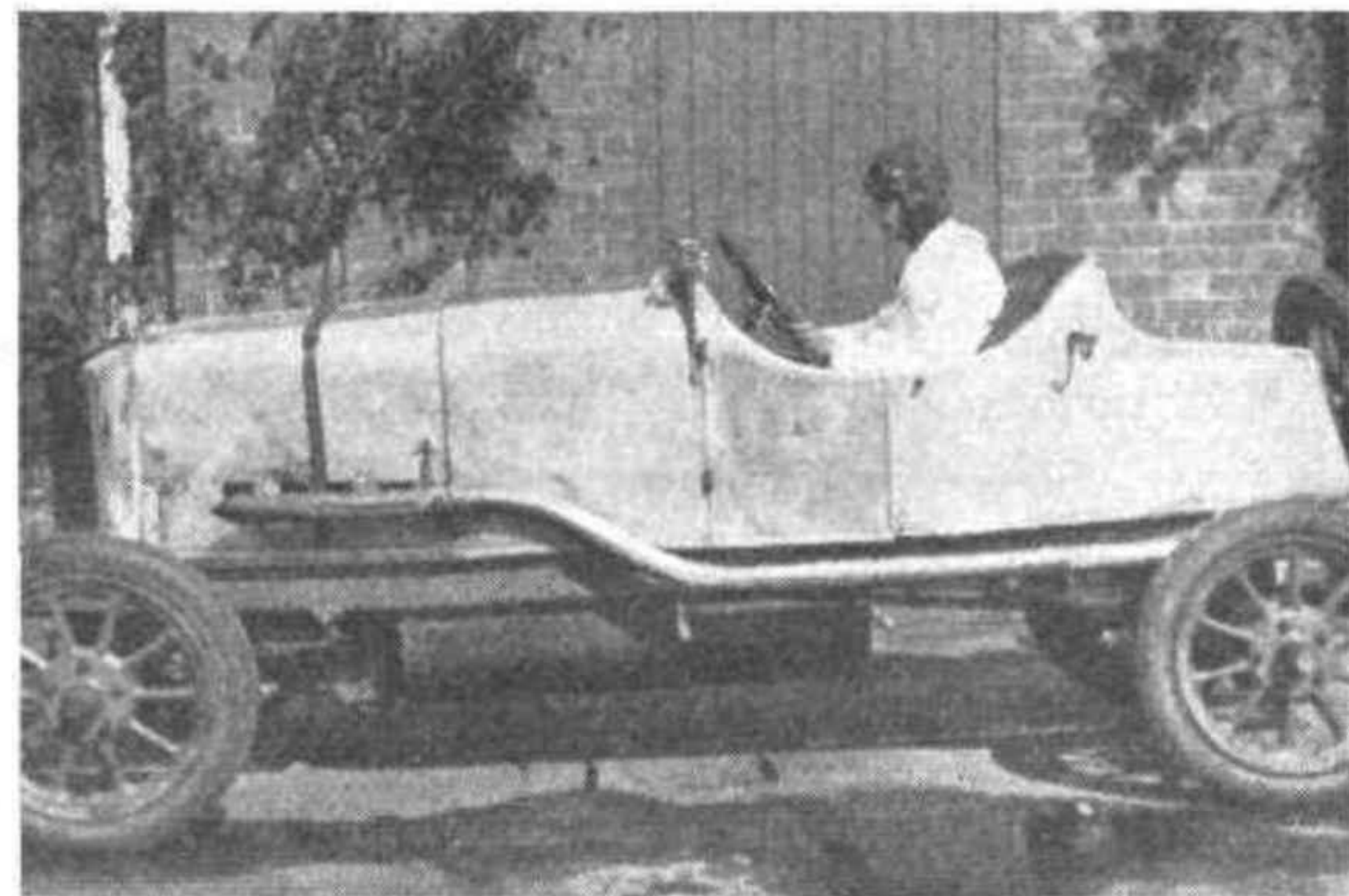
My introduction to motoring came about in 1915 when a friend occasionally lent me his Argyll, which even at that time was ancient, for shopping expeditions. Time, the Great Healer, has mellowed my recollections of this contraption, but I can remember that it was notoriously unreliable if driven over 15 m.p.h. and the gear-change left much to be desired, this operation being rendered all the more difficult because a separate lever was provided for reverse and, under certain conditions of "ham-handiness," both forward and reverse could be engaged at the same time, when progress in either direction became impossible. Two essential items of equipment were a bicycle and a dog, the former as a means of transport on which to seek aid, the latter to stand guard. "Angel Face," who, like the car, belonged to my friend, was a large shaggy dog of most repulsive appearance, but nevertheless a faithful hound, and anyone who approached the derelict did so at their peril. If my shopping list included any edibles they had to be transferred to the bicycle, and sometimes when I returned with some spare, which if lucky might slightly resemble the original, I found that the dog, possibly due to advancing years, had forgotten me, and it was necessary to placate him with the odd chop or two before he would allow repairs to commence.

It was in the same year that my father decided the family should forsake horses and become mechanised. We went into conference and, after turning down a Baby Peugeot as too small, he purchased a brand new 10-h.p. Alldays, manufactured by Alldays and Onions, of Birmingham.

This car proved to be robust, stolid and simple, and ever ready to respond to the first swing of the handle, a very necessary attribute as the specifications of those days did not include starters. Simplicity and accessibility were the keynotes of the design, and in the latter respect it could give points to many modern productions. The engine, a four-cylinder side-valve, relied on the splash system for lubrication, but the oil was evidently splashed into the right places as I never experienced bearing trouble or piston seizure. The gearbox gave a choice of three forward ratios, and the grease with which it was lubricated had the consistency of butter when cold. The rear-axle oil resembled treacle, and consequently these units were remarkably quiet. The brakes, on the rear wheels only, were smooth and quite capable of coping with a maximum speed of 40 m.p.h. This speed may not appear very exciting, but to me, who had never experienced anything faster than the Argyll or a push-cycle, it was indeed a thrill. When petrol became unobtainable I designed a very crude paraffin vapouriser, never expecting it to work, but the little engine took this change of diet in its stride and appeared to be quite happy on it.

At the end of the 1914-18 war we naturally reverted to petrol, and the car continued to give good service for another three years, when it came to a sudden and untimely end. The lighting system had hitherto given no trouble, but on this fateful occasion a defect developed in the tail-lamp and I decided to improvise with one borrowed from a cycle. A match carelessly struck too close to a leaking scuttle-tank union started a fire which quickly developed into a conflagration of the first magnitude, and the car was completely burnt out.

My thoughts now turned to something faster which would be suitable for entering in speed trials and hill-climbs. I had been much impressed with George Bedford's performances on the single-seater Hillman, and when the sports Hillman was introduced in 1921 decided that this was the car for me. It was, I think, the first serious attempt, in this country at any rate, to design a sports car from scratch, as distinct from a touring model with enlarged main jet and straight-through exhaust. It is strange that for many years I have never come across anyone who has even heard of the sports Hillman of that date, and I do not think that many could have been built as I only saw one or two at the time I was running mine, and none appear to have survived. Although rated at only 9.7 h.p., the car was capable of a genuine 65 m.p.h. in standard condition, which was quite good in those days for an engine of such small capacity.



ANOTHER EARLY ONE.—R. M. V. Sutton in his sports-model Hillman, here seen stripped in readiness to run in the Clipstone Speed Trial of 1922.

This side-valve engine, based on the unit installed in the single-seater, incorporated drilled H-section connecting-rods machined all over, polished ports and other refinements. The price (£620) was certainly very high for a primitive two-seater of that period with no starter, screen-wiper or other amenities which we take for granted today, and this probably accounts for the small number in circulation. The polished aluminium body, V-radiator, and large external copper exhaust pipe gave the car a very attractive appearance, but this was rather spoilt by a somewhat stubby tail. The clutch withdrawal consisted of a circular fibre block which wore very rapidly indeed and had to be turned at frequent intervals, becoming square, octagonal, hexagonal, and finally polygonal before it was discarded!

The ratios of the three-speed gearbox were quite suitable for sprint events and I entered for several speed trials and hill-climbs, with some success when the opposition was not too strong. It was at a speed trial that I first met Raymond Mays, who commenced his racing career in an identical car, aptly named "Quicksilver." When I say identical I mean externally, but judging by the difference in performance its innards must have been modified.

The 12/50 Alvis was now making a name for itself in the hands of the late Major C. M. Harvey, the works driver, who invariably won his class and frequently recorded fastest time in speed trials and hill-climbs. Incidentally, the prototype is still in existence, and it was only the other day that I had an opportunity to drive it.

It will be recalled that Harvey created a sensation by winning the 1923 200-Mile Race at Brooklands on a racing version of the 12/50. I was again impressed, sold the Hillman, and took delivery of the 12/50 exhibited at that year's Motor Show. The four-cylinder overhead-valve engine was a revelation to me, as was everything else about the car for that matter, and for the first time I realised the advantages of a four-speed gearbox.

The car as delivered, after careful running-in, was capable of 75 m.p.h., which, for a time, was all I desired or could cope with. I put up a fairly good show at the Aston Clinton hill-climb, this performance being duly noted by Major Harvey, who later became a very great friend. I took my car to the works, and the first of many modifications, spread over a period of three years, commenced. First of all the Hardy disc propeller-shaft was scrapped and replaced by an experimental one having spherical universals, this in turn being superseded by the needle-roller type, which later became standard. A cone clutch is never conducive to rapid standing starts, and a single-plate unit was substituted. Front-wheel brakes were added, and it was a proud day when I displayed a little red triangle on the rear wing, indicating to all and sundry that my powers of retardation were greater than theirs.

Alvis presented me with a higher-ratio solid axle complete with a set of Rudge-Whitworth wheels, but this was not an unmixed blessing, as although eminently suitable for Brooklands, appreciably increasing my lap speeds, it was ruinous on tyres, and I preferred a differential for hill-climbs. Lighter connecting-rods, higher-compression head and other modifications followed, and although no phenomenal increase in speed was achieved at one fell swoop, little by little performance improved until eventually the car was timed at 92 m.p.h. over a mile at Brooklands.

All the modifications were carried out at the Alvis works, but my pre-race preparations were simple in the extreme, consisting of a decoke at home and removal of wings and windscreen at the track. It says much for the car's reliability that on one occasion I drove it straight down from Leeds, arriving too late to put in more than one practice lap, but in spite of this managed to win the Essex 100-Mile Handicap.

I now decided to become really ambitious and risk blowing up my beloved car by entering for the 1926 Coupe Boillot at Boulogne. This was a real road race for sports cars run over a distance of 374 miles, and we were up against the French manufacturers' works entries. Two cars were allowed to constitute a team that year, and Harvey also entered a 12/50. The regulations stipulated that cars of 1½ litres and over should have four-seater bodies, a fact which we discovered very late in the day, but, thanks to the co-operation of the coachbuilders, they were finished on time. Space does not permit me to give an account of this race, and it will suffice to say that both cars ran faultlessly, our only trouble being a puncture in one of my tyres. Much to our surprise, and that of everyone else, we won the Team Award. On returning to the works my engine was stripped down and found to be in perfect condition, with the exception of one broken valve spring. Alvis had entered Harvey and Cottenham with front-wheel-drive cars for the 1926 200-Mile Race, and, much to my delight, offered me a works 12/50 with dry-sump lubrication and other modifications for this race. This was a very pleasant car to handle, and the first one on which I attained the magic figure of 100 m.p.h. Mechanical trouble supervened at half-distance, but until then I had a most enjoyable drive and was lying sixth.



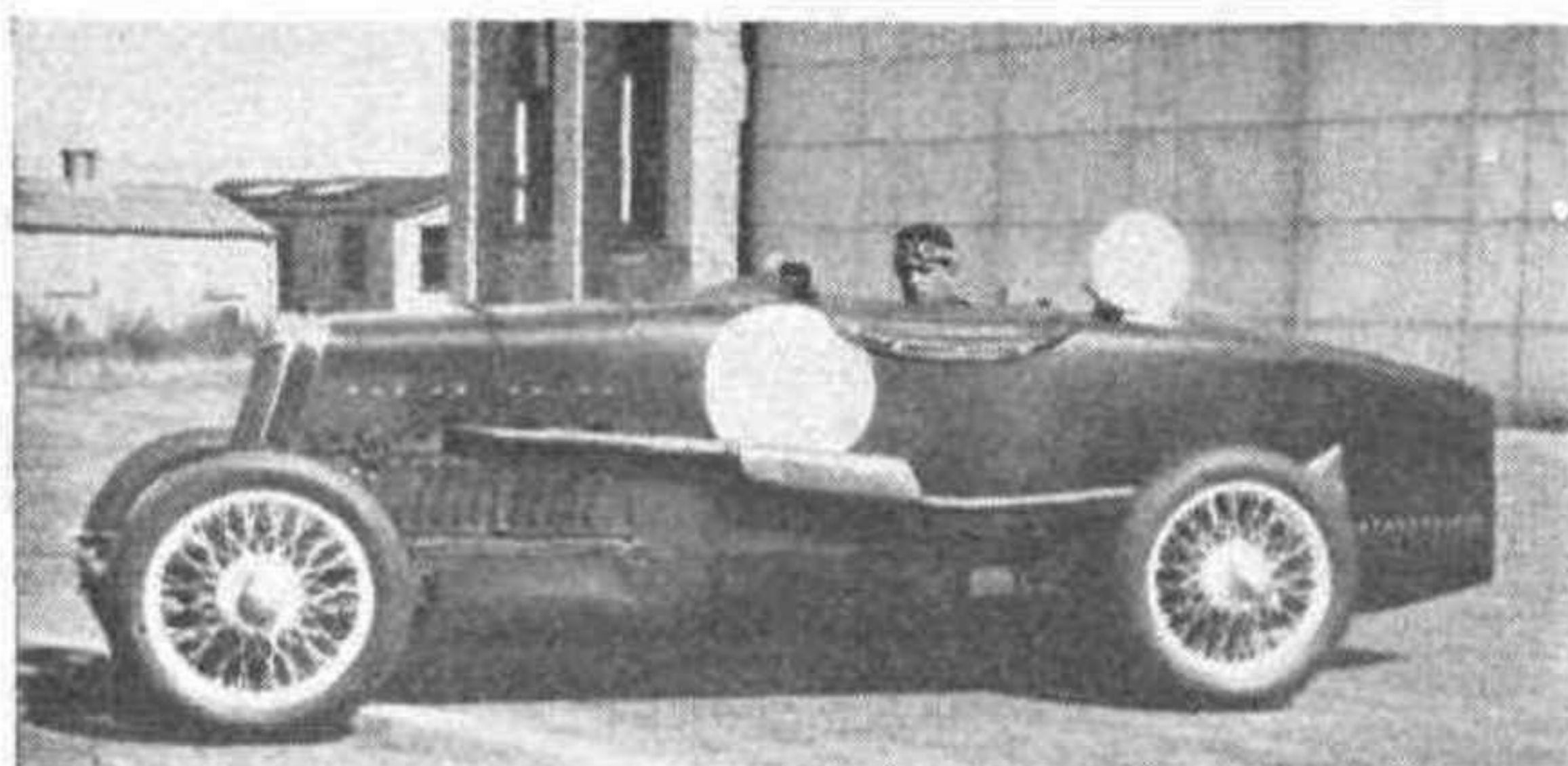
A RARE PICTURE of the works 12/50 Alvis which Sutton drove in the 1926 J.C.C. 200-Mile Race at Brooklands, backing up Harvey and Cottenham in the front-drive straight-eight Alvis cars. It had dry-sump lubrication and this, and the slightly-cowled radiator and streamlined oil tank adjacent to the rear side of the chassis, were reminiscent of the 1923 200-Mile Race winner and may have come from that car.

My own car continued to give trouble-free service, and on two occasions Alvis sent us to Ireland for hill-climbs when Harvey had commitments elsewhere. I had not been doing too badly as a Professional Scrounger, in other words a private owner who thrives on works assistance, but racing was becoming too expensive, and although I had been extremely fortunate in the help I received from the Alvis Co. (who, incidentally, are now my employers) and having such a reliable car, I realised that participation in worthwhile events was becoming beyond my means. However, it is a far, far, better thing to be paid for driving and have the backing of an organisation who will bear the entire cost of a season's racing, providing they agree to hand over any perquisites which may be forthcoming, either in cash or kind. It was with very real regret that I parted with my 12/50, that most reliable of cars, which had enabled me to gain sufficient experience to qualify as a works driver.

I was appointed competition driver to Lea-Francis in 1927, but had other and more menial tasks to perform besides racing, my principal sideline being testing and occasionally driving a Lea-Francis lorry of ancient lineage, known from its registration number as DU 40. The majority of Lea-Francis cars were, at that time, powered by a comprehensive range of Meadows four-cylinder engines having push-rod-operated overhead valves, namely a Ten, 12/22 and 12/40 for the tourers, 12/50 sports, and the 1½-litre supercharged sports, the last named being supplied either as a competition model or tourer. It was, in fact, the first British supercharged production car. There were also the 14/40 and 14/60 six-cylinder twin-overhead-camshaft engines built by Vulcan of Southport, a subsidiary company, in addition to our own "Ace of Spades," the latter being a 2-litre six-cylinder single-overhead-camshaft unit. It is impossible to give a detailed description of all these models, and I will therefore confine myself to the sports and racing types.

The 12/50 engine, very similar to the 12/40 with the exception of higher compression-ratio, high-lift camshaft, and two Solex carburetters, was installed in a chassis of conventional design, having semi-elliptic springs at the front and ¼-elliptic at the rear. This car, known as the Brooklands model, had a maximum in standard trim of approximately 75 m.p.h., the performance being comparable with that of the Alvis, but one entered by the works in sports-car races was capable of 90 m.p.h. Early in 1927 our Chief Engineer, Mr. Van Eugen, decided to supercharge the 12/40, this engine being more suitable for the purpose than the 12/50. At that time we knew little or nothing about supercharging and prior to laying out the scheme a 1,100-c.c. supercharged S.C.A.P. was imported direct from the Paris Motor Show. This interesting little vehicle, the only one I have come across, featured a vane-type Cozette supercharger driven off the front end of the crankshaft. On the rare occasions when all four cylinders fired in their correct sequence, I clocked 85 m.p.h., but the car must have been rushed through for the Show without adequate test, as performance was unpredictable and we learnt little from it, apart from the fact that the Cozette could be adapted to our design. A No. 8 Cozette supercharger had the effect of doubling the b.h.p. at peak r.p.m. and needless to say we were highly delighted.

After an all-too-short bench test the engine was installed in a short-wheelbase racing chassis and the first run on the road certainly surprised me, the top-gear acceleration being so amazing that I, unaccustomed to all this urge, could hardly believe that I was not in third gear! However, our jubilation was premature, and we went through many trials and tribulations before achieving any degree of



BUILT FOR BROOKLANDS.—The author at the wheel of one of the three Lea-Francis cars built for racing at Weybridge in 1928; they had Cozette-blown Meadows engines, from which were evolved that used in the production Hyper Lea-Francis sports car.

reliability. We were very much indebted to the Baer crankshaft, a German design, consisting of a built-up shaft incorporating tubular steel connecting-rods and needle-roller big-ends, but with plain journals. The prototype blown Lea-Francis proved rather difficult to hold by reason of the fact that the aerodynamic properties of the body induced a slight tendency to lift at the rear when travelling at over 100 m.p.h. and the weight distribution was not quite right unless additional unwanted weight in the shape of a mechanic or ballast was carried. A No. 9 Cozette blower gave us an additional 10 h.p. and two more cars with better streamlined bodies and improved roadholding were built, the original one also being brought up to date in these respects. We were now able to lap Brooklands at 105 m.p.h. and occasionally, with the wind in the right direction, 110 m.p.h. was recorded on the Railway Straight, which was not too bad for a 1½-litre twenty-eight years ago.

The cars were raced only in Brooklands events, handled by Kaye Don, myself and one or two others. They never came into the hands of the public and must not be confused with the Brooklands sports model. The engine had now proved itself and formed the basis of a new sports car known as the Hyper. The chassis was entirely redesigned, embodying a stiffer frame and semi-elliptic rear springs, among other modifications. This model came into prominence when Kaye Don, driving a magnificent race, won the Tourist Trophy on the Ards circuit. Later that year Frank Hallam and I made a successful attack on the Class F Twelve-Hour record, which we took at 80.06 m.p.h. Very light aluminium bodies replaced the fabric-cum-wood construction for the works cars entered at Dublin and Belfast in 1930, but unfortunately we were afflicted with mechanical troubles in both events.

No description of Lea-Francis cars would be complete without mention of the "Ace of Spades" (so named from the shape of the timing cover), particularly as the design was all our own work. The power unit consisted of a sturdy 2-litre six-cylinder overhead-camshaft engine fitted with a single Zenith or Stromberg carburetter. I found it fast, smooth and reliable, but one bad failing predominated, namely a disinclination to start from cold unless the hand-throttle was set exactly one-quarter open, and if the engine failed to fire in the first few seconds one had "had it," the only remedy being to remove all plugs and dry them, or enlist a tow. I still cannot recall without a shudder the opening day of a Scottish Show when a taxi engaged for starting purposes took an unexpected turning and towed me past the Grand Central Hotel entrance just as everyone was leaving for Kelvin Hall! The twin-top "duo" gearbox, although rather tricky when operated for the first time, enabled amazingly quick changes to be made when the knack had been acquired.

I next transferred my allegiance to Morris Motors (Engines Branch) for a short time in order to carry out road and track tests on the little-known M.G. Tigress, of which only five, inclusive of two prototypes, were built. The engine, based on the Isis, had a capacity of 2.6 litres and included many modifications, such as dry-sump lubrication and a high-compression head with two sparking plugs per cylinder. The brakes could be taken up from the driver's seat, and another desirable feature was the provision of an anti-theft device which locked the gear-lever. On the first test run the front brake drums could be seen slowly but surely working their way off and, pointing to the adjuster I innocently asked the designer whether this control was provided for the purpose of screwing the drums back into position, a remark which appeared to annoy him! The engine was remarkably smooth, and I once surprised a visitor to the works by taking him to a test-bench where an endurance run was being carried out at full throttle, and balancing a pencil on the valve cover. This feat amazed him; I do not think he noticed the blob of

plasticine. Unfortunately this car did not come up to expectations. We confidently expected to attain 100 m.p.h. but were never able to exceed 95 m.p.h., and although very pleasant to drive it was not fast enough to hold its own with more potent machinery in the 2½ or 3-litre classes and at £850 the price was considered too high, so very reluctantly the management decided to scrap this promising design.

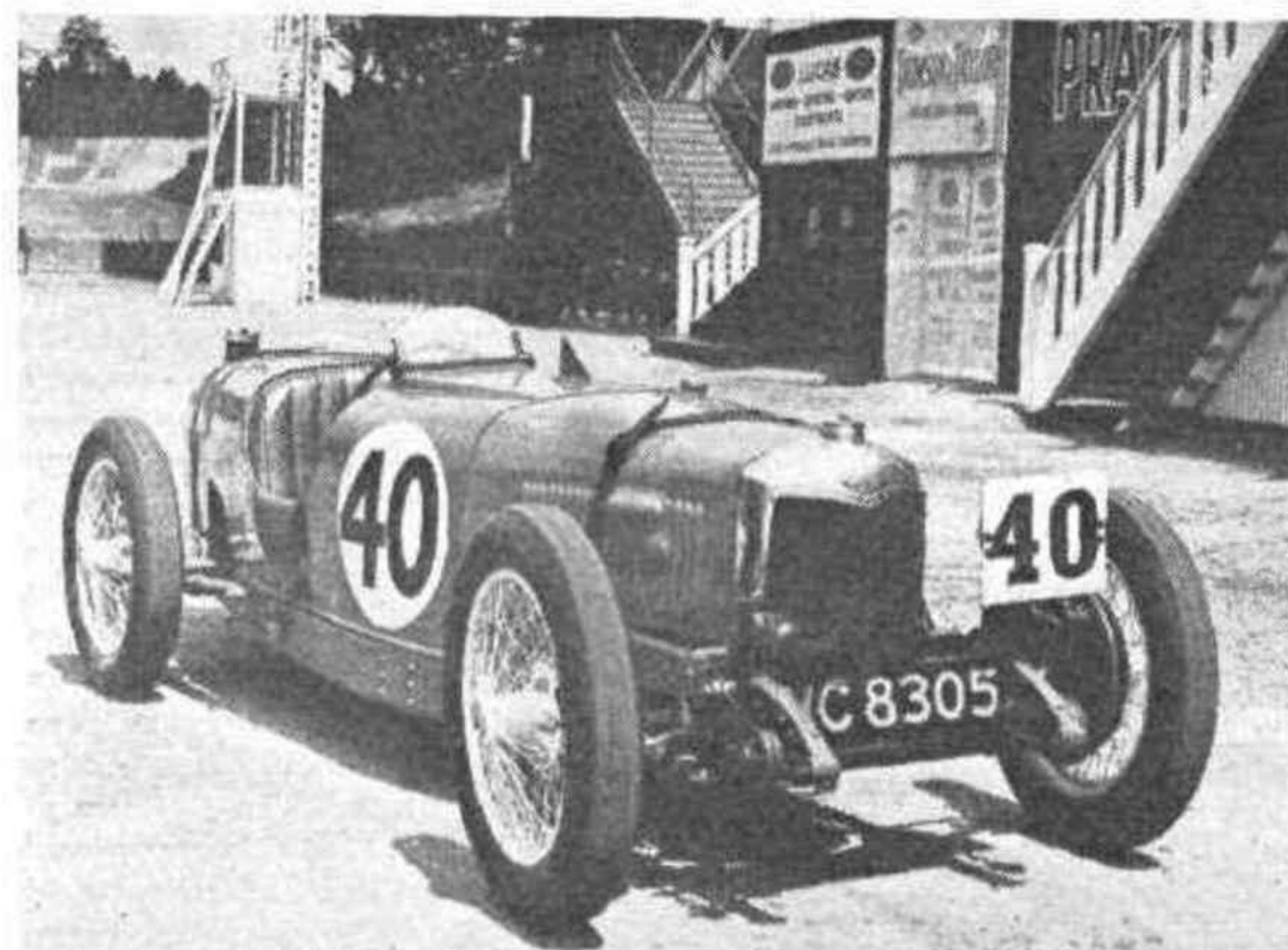
It was about this time that I invested £350 in a new Type 40 Bugatti. The Type 40, although only a poor relation in the Bugatti family, had many features in common with its very much more expensive brethren. The four-cylinder 1½-litre engine with gear-driven overhead camshaft operating two small inlet valves and one large exhaust valve per cylinder was a sound engineering job in every way. No paper gaskets were used, all joints being metal to metal, and shouldered nuts made locking washers superfluous. Incidentally, when dismantling, I never found a nut that was either slack or difficult to remove. Maximum speed did not exceed 70 m.p.h. but the car could be driven hard indefinitely without showing signs of distress and the steering, although very high-g geared, judged by present-day touring-car standards, was light and accurate. There were, however, several not so desirable features, the principal one, to my mind, being the necessity to remove the camshaft before adjusting the tappet clearances with "Hell's confetti," otherwise commonly known as shims, and then having to replace it to ascertain whether the said clearances were correct, which they never were at the first attempt. Brake adjustment, too, left much to be desired, as one had the choice of either shortening the cables or removing the drums and fitting packing pieces between the actuating cams and shoes. Silent gear-changes were a matter of some difficulty and the noise in the indirect ratios appalling. Nevertheless, it was a car of character, if not refinement.

The Brooklands Riley pleased me immensely, but my association with this most attractive car was all too short, being confined to the J.C.C. 1,000-Mile two-day race at Brooklands, in which the Riley Company invited me to drive, partnered by Major Harvey. I was much impressed with the handling qualities of these low little cars and their ability to hold 5,000 r.p.m. all day without a murmur. For this race a scuttle oil tank was fitted and the sump replenished at regular intervals by means of a hand pump. Succumbing to the entreaties of one of the inevitable "hangers-on," an immaculately-garbed gentleman, I took him on an extended test in the practice car, stressing beforehand the importance of operating the manual oil pump twice every two laps. He obeyed this instruction to the letter. However, unknown to us, a pipe had fractured and, on returning to the depot, it was found that the passenger had been religiously lubricating his trousers!

Our car ran consistently on the first day and was leading at an average of 84.9 m.p.h., but the clutch packed up on the following morning. However, Mrs. Wisdom with Joan Richmond, on another works car, ably stepped into the breach and won, averaging 84.4 m.p.h. for the total distance.

Morgan is another marque with which I had a very brief acquaintance. I borrowed a three-wheeler for a week, and found it quite

Continued on page 700



ONE OF A PAIR of Brooklands Riley Nines which ran in the J.C.C. 1,000-Mile Race of 1932, that driven by Joan Richmond and Elsie Wisdom winning this two-day race at an average speed of 84.41 m.p.h. Sutton shared the other car with Major Harvey.



A string of successes by Duncan Hamilton OKV 1 and SHELL X-100 motor oil

OKV 1 (a 3½ litre D-type Jaguar) and J. Duncan Hamilton (a native of Berkshire and an engineer with a 10-year record of high speed in the Fleet Air Arm and racing cars) first joined forces at Le Mans in 1954. OKV 1 was one of the works cars, and quite new to the circuit. Duncan Hamilton, on the other hand, had won the 1953 Grand Prix d'Endurance, sharing the wheel of a C-type with Tony Rolt, who was again his partner in 1954. They finished a close second to the 4.9 litre Ferrari, covering 2519.52 miles at a speed of 105.98 m.p.h.



The same drivers and car followed this up 3 weeks later with a second place in the Rheims 12 Hours at 100.90 m.p.h. Having led all the way, they were beaten by a similar works Jaguar 15 minutes from the finish after they had sustained damage to their rear axle through being run into from behind.

After the 1954 season, Duncan Hamilton bought OKV 1 for his own use and took her to North Africa to run in the sports car Grand Prix at Dakar. He was reaching a speed of 183 m.p.h. on the straight, but lost ground through having to make a pit-stop and finished 3rd. He then proceeded to win the Coupe de Paris and the Coupe du Salon at Montlhery and the Johnson Trophy at Goodwood.

He ran third at the G.P. of Portugal in 1955, and has won nearly all of the races he entered in this country during the past two years.

In OKV 1 and all his cars, touring and racing, Duncan Hamilton uses Shell X-100 motor oil (for OKV 1, grade 30 in Europe, 40 in Dakar). *This is the same oil as you get at your garage—no special racing brew.* Duncan Hamilton says "I've never had a moment's anxiety about the lubrication of my engines: in fact I've forgotten what it was like to worry about lubrication—even at 183 m.p.h. in the scorching African sun!"

SHELL
X-100
MOTOR OIL

**THE PROVED
DETERGENT OIL**

Obtainable in the following grades
20/20W, 30, 40, 50 and now 10W/30 (multigrade)

VEHICLES I HAVE DRIVEN—continued from page 698.

amusing when once accustomed to the very direct steering, but the correct technique for driving on wet tramlines eluded me. It was unfortunate that just as I was beginning to enjoy myself the frame broke and I shed the near-side wheel. The four-wheelers are in a different category altogether and I had the good fortune to drive one during the practice period for the T.T. at Donington in the capacity of spare driver to the late Henry Laird, who had been entered by the works. This car, to the best of my recollection, was powered by an Anzani engine and exceeded 90 m.p.h. down the back leg. The practice car had a Ford unit and, although not quite so fast, put up some creditable lap times, thanks to its steadiness on corners and excellent brakes. It was certainly a car which inspired me with confidence and I should very much like to try out one of their latest products.

Sleeve-valve engines were on their way out when I joined Daimlers, but I had the opportunity to test a few. These units were doubtless very smooth and quite lively when run-in, a process which takes time, but as I never drove one farther than its initial hundred miles I was disappointed, considering them rough and sluggish. However, it would be unfair to pass judgment under these circumstances, and as Daimlers persevered with them for so long, they must have been satisfactory. I consider the Daimler fluid flywheel in conjunction with a Wilson preselector gearbox the ideal form of transmission, and I prefer this arrangement to a fully-automatic gearbox.

I tested a Newton centrifugal clutch fitted to a Lanchester for experimental purposes and it took up the drive just as smoothly as a fluid flywheel, but the latter has the advantage that it requires no adjustment. The Daimler range in the early 1930s was what might be termed rather "stodgy." There were 10 and 18-h.p. Lanchesters, 15, 26 and 36-h.p. Daimlers, all living up to the firm's tradition as regards workmanship but, in my opinion, they were far too heavy and consequently not very exciting to drive. In the years immediately prior to the war considerable changes took place. Independent coil-spring front suspension was introduced and applied to a completely new range of models comprising 10-h.p. four-cylinder and 14-h.p. six-cylinder Lanchesters, 18-h.p. and 26-h.p. six-cylinder and 36-h.p. straight-eight Daimlers. All these engines were of rather similar basic design, incorporating push-rod-operated overhead valves. The little Lanchester I thought very attractive, but at about £900 it could hardly be considered good value for the man whose finances compel the use of a small car. It was the 18-h.p. Daimler which appealed to me most and the sports edition of this chassis with high-compression head and overdrive had a very good performance indeed. Roadholding was equally good on all models, the Lanchesters being as steady as the straight-eight, and the latter just as easy to handle, except in confined spaces. It was a most imposing machine, weighing 3½ tons and seating eight in comfort. On one occasion with one of these carriages fitted with an overdrive and loaded with pig iron to the full complement of passengers I attained 103 m.p.h. on a down-hill stretch. Shortly after the outbreak of war, when no one knew what emergency might arise, we supplied two armoured limousines on this chassis, V.I.P.s, for the use of. To all appearances they were perfectly normal and very handsome cars, but between the panels and trimming armour plate ensured that a .303 bullet would not penetrate, even if fired at close range. The windscreen and windows were of five-ply Triplex about 1½ in. thick, and these too were bullet-proof. I am unable to recollect the weight, but was surprised at the performance when I drove one down to London. In addition to their car output, Daimlers manufacture a very considerable number of 'buses. They were originally powered by Gardner or A.E.C. diesel engines but shortly after I joined them they commenced to fit their own six-cylinder unit. Diesels are most reliable, always start at the first push of the button, and identical performance figures can be reproduced day after day irrespective of weather conditions, but fuel oil has a nasty smell and tastes even worse, as those who have attempted to syphon it out of a barrel know full well.

Of all the awkward, unco-operative vehicles I think a double-decker 'bus takes a lot of beating and I never felt really at home on one, possibly because I only had occasion to drive them at infrequent intervals. First of all the length has to be taken into consideration and it does not necessarily follow that, just because the front has negotiated a corner safely, the rear will not leave a trail of devastation in its wake. I continually found myself leaving ample room on the off-side, but cutting things too fine on the near. Perhaps sitting right on the outside edge in my little cab, I was unconsciously afraid of being winkled out by some projection on a passing vehicle. Then there is the third dimension that must not be overlooked, and this was forcibly brought to my notice when proceeding along an avenue in the works down which no double-decker had ever gone

before. Although the road appeared perfectly clear a resounding crash indicated that all was not well, and I found that the top deck had come into violent contact with some overhead water pipes, necessitating the immediate attention of the maintenance department.

Throughout the war we were fully engaged in the manufacture of armaments, particularly fighting vehicles. These were of two types; a scout reconnaissance car and a much larger armoured car, the latter weighing 7½ tons and mounting a two-pounder gun. Our 18-h.p. and 26-h.p. engines were converted to dry-sump lubrication and governed to speeds of 58 m.p.h. and 48 m.p.h., respectively. In conjunction with the fluid flywheel and Wilson gearbox they performed satisfactorily in the armoured vehicles which gave a very good account of themselves in all theatres of war.

We also built the prototype of a 10-ton hybrid armoured car known as "The Coventry." It was supposed to embody all that was best in armoured vehicle construction, but this view was not universally shared. Briefly, the specification consisted of a 50-h.p. American Hercules side-valve engine, Daimler suspension, and Commer transmission. The brakes and steering were pneumatically-assisted. I have nothing against these units individually, but they did not live in harmony together.

I had now acquired an ex-works demonstrator 13-h.p. Triumph fitted with a six-cylinder Coventry-Climax engine. I rather favour the i.o.e. head, but it usually means that the inlet tappets are adjusted while the exhaust is not. This Triumph also featured a free-wheel, incidentally a fitment I detest and invariably keep locked. The Triumph, although not particularly fast, was reliable, in spite, I am ashamed to say, of being shockingly neglected. During frequent absences on fighting vehicle trials I left it in the works' yard exposed to the elements, and one bitter winter's night found the car completely buried under a heap of snow, but was amazed when, on a tentative turn of the starting handle, the engine burst into life and continued to run. It experienced two narrow escapes during the air raids on Coventry, when an incendiary rolled under the sump and was kicked away by a fire-watcher just in time, and, a few weeks later, when a five hundred pounder which fell alongside failed to explode. The third time, however, was lucky or unlucky, depending upon which way one looks at it. I arrived back from one of my trips just in time for the November blitz, to find the works in process of being reduced to a shambles. I had other things to think about besides my car that night, and did not look for it until the following morning. At first all I could see was the battered remnant of the spare wheel reposing in the bottom of a crater but later I discovered the remains of the chassis in the drawing office, about fifty yards away. I should perhaps explain that a previous bomb facilitated its entry into this department by removing the roof. Car prices were at rock bottom and I only received £75 compensation, but this was sufficient to buy a very secondhand 18-h.p. Talbot fitted with a Wilson gearbox. I have previously stated that I am all in favour of preselector gearboxes, but only in conjunction with a fluid flywheel, as I do not approve of using the bottom gear bands as a clutch. Petrol restrictions became more stringent and after running the car for a few weeks I laid it up to await a purchaser. As far as I could judge from the short time the Talbot was in my possession it was quite a nice motor car, but I should imagine most difficult to service, as apart from tappet adjustment any other attention appeared to necessitate a major strip.

I have never possessed another car of my own, the main reasons being that I have a surfeit of motoring in all its phases in working hours, a works car makes anything I could afford to run appear even worse than it is, and I am allergic to buying petrol, to say nothing of paying repair bills. I think I can claim to be among the first to drive a Volkswagen in this country, as in 1946 the Ministry of Supply lent the Daimler Co. a captured Type VW82 military conversion to try out. This vehicle, very different from the Volkswagen as we know it today, was powered by a four-cylinder horizontally-opposed engine mounted in the boot of a four-seater utterly devoid of trimming, but as it was only intended for carrying military personnel, the austerity could be excused. The axle-ratio was 4.9 to 1 and, in the case of military conversion, the hubs incorporated reduction gears. The complete car weighed only 13 cwt. and acceleration up to 40 m.p.h. was therefore quite good. I recorded a timed maximum of 56 m.p.h., at which speed periods were much in evidence and the noise from the cooling blower obtrusive, but at 50 m.p.h. the engine smoothed out considerably, although it never ran very sweetly. Petrol consumption was not too bad, working out at 32 m.p.g. over a distance of 70 miles fairly hard driving. Independent springing on all wheels provided a good ride over rough surfaces, but I found it rather on the hard side where the road surface was good. It was possible to indulge in fast cornering, but it was advisable to curb one's enthusiasm, and I gained the impression that the rear might break away without warning. There

was a tendency to oversteer and this, coupled with an entire absence of castor action, made the vehicle rather fatiguing to drive. After we had been running it for a few weeks I was rather disturbed to be shown a letter from the Ministry intimating that demolition charges were frequently discovered in captured vehicles, and advising us to make a thorough search before carrying out any further tests; an instruction which I obeyed to the letter. All units were most inaccessible, and as certain welding operations on the body appeared to have been carried out after their installation, any adjustments, even adjusting the tappets or removing a sparking plug, were difficult. I severely criticised the design in my report, but concluded with the words: "It is probable that a more refined version of this type might have possibilities"—and how right I was!

I have tried a few large American cars fitted with automatic gearboxes, such as the Packard, Hudson and Chrysler. They are all very fine conveyances in their way, but their ways are not mine. Possibly I am old-fashioned but I dislike featherbed suspension and low-geared steering. I like to make my own decisions, as when to change gear, even if my judgment may be at fault, and if I want to over-rev. the engine in the lower gears I think I am entitled to do so without being dictated to by a mechanical brain, which, in this case, would probably be right. I must add that automatic boxes can be designed with overriding controls, but this adds appreciably to the price of the component.

Unfortunately, I have had little experience at the wheel of Rolls-Royce products, although in the days of my youth I was employed by that company, albeit as a draughtsman, and the only representatives of this marque to pass through my hands have been a pre-war Rolls-Royce "Wraith" and a 1950 Bentley. In addition to being very fine motor cars there is an indefinable difference about anything that has emanated from Derby, and later from Crewe. I would not go so far as to say that they represent the acme of perfection (no car has or ever will deserve that tribute) and, as in every other piece of mechanism, faults can be found if one looks for them, but as an example of British engineering and craftsmanship they stand supreme. Acceleration is so smooth and rapid that one has to keep a wary eye on the speedometer, the indirect gears (with the exception of bottom) are unaudible, and the brakes something out of this world. I recorded a deceleration figure of 90 per cent. efficiency from 30 m.p.h., equal to a stopping distance of 33 ft., but there was no sign of judder or the slightest inclination to deviate from a straight line, and I can best describe the application as like driving into a silk cushion. Needless to say the "ride" was very good indeed, the self-adjusting shock-absorbers providing the correct amount of damping to suit all road conditions. Another feature which characterises Rolls-Royce products is the attention given to details. All the controls, for instance (including minor ones such as the dipper switch), function in a light and positive manner, while the doors shut with a satisfying "cluck" without any necessity to slam them. I think that Rolls-Royce are rather inclined to scratch about for "thous." where "thous." do not matter very much, but it is a policy which pays dividends when price is not of primary importance. I do not intend to convey that production costs are not considered very carefully by the company, but they can obviously afford to give the little extra time and thought to small matters, which in the aggregate means so much. Electric vehicles have to be driven to be believed, and to waft along in almost complete silence, and with no vibration whatsoever, is indeed a fascinating experience.

I was fortunate in being loaned one, together with the charging equipment by the Brush Co. and ran it for some months, at what I imagined was a negligible outlay, but received a shock of no mean voltage when my electricity bill arrived at the end of the quarter. Acceleration was fantastic up to 10 m.p.h. but beyond that it tailed off sadly, and the maximum of this particular vehicle did not exceed 20 m.p.h. Any gradient reduced speed to a crawl, but I was surprised to find that the rate of crawl never varied, no matter whether the hill was 1 in 40 or 1 in 8.

I had to be content with very short journeys, as the range was only 40 miles and if this was exceeded by even a slight margin it was necessary to make frequent stops, on one occasion at every telegraph pole in order to allow the battery to recuperate. If this failed to restore some of the lost energy the only alternative was to enlist a tow, but fortunately the manufacturers thoughtfully provided a special attachment to cope with these contingencies.

A few years ago a car of very different character was assigned to me for test, namely a 1939 Type 328 Frazer-Nash-B.M.W. Admittedly this is a car which would appeal only to the enthusiast, but I found it most fascinating to drive. It was certainly more at home on the open road than in traffic, as the flexibility of the 16-h.p. six-cylinder engine left much to be desired, it being impossible to run at less than 15 m.p.h. in top gear without snatch, but as the car in question was running on a methanol mixture it is possible that the

compression-ratio was higher than standard. The suspension, transverse-spring i.f.s. at the front and semi-elliptics at the rear, while very hard below 40 m.p.h., improved as the speed increased, and at 100 m.p.h. the car was rock steady. The car struck me as being eminently safe, as it was one of those benevolent vehicles which gives the driver a great deal of latitude, and it would require a very grave error of judgment indeed to "happen an accident." The steering, although perhaps too high-geared for some people's tastes (two turns of the wheel from lock-to-lock), proved light, positive and accurate. Unfortunately there was insufficient time to take the car to a suitable place for ascertaining the maximum speed, and the 104 m.p.h. at 5,200 r.p.m. which I clocked with screen lowered could have been exceeded on a longer straight.

I have always considered that Jaguars are the best value for money if considered on a price-performance-appearance basis, and I was very pleased to obtain a job with them as development-tester. At the time I joined the company they were concentrating on 2½- and 3½-litre models, both good-lookers and performers. The specifications of the two cars were very similar. Six-cylinder engines having push-rod-operated overhead valves were installed in light but rigid chassis incorporating semi-elliptic springs, Burman steering, and hypoid rear axle. Independent front suspension now became a "must" if we were to keep pace with our competitors, and, after trying out coil-springs and torsion-bars, the latter were standardised, semi-elliptics being retained at the rear. The 3½-litre engine was installed in the new chassis, on which was mounted a roomier and more attractive body, this model being known as the Mk. V. The Mk. VI, a purely experimental car, had an XK120 engine, which was later standardised for the Mk. VII. The Mk. VII created a sensation when it first appeared at the Motor Show, and there appears to be no sign of its popularity waning. The earlier Mk. V's retained the push-rod engine but the twin-overhead-camshaft XK unit is now standard. However, this car and the XK120 are so well known that no detailed description is necessary. Some of the early development work for the XK120 was carried out on a very attractive two-seater having a 1½-litre four-cylinder twin-overhead-camshaft engine and air-strut suspension. It was never the intention of the firm to market this car and only the one prototype was built. When the first XK120 was designed we assumed that it would be capable of 120 m.p.h., hence the name, but it was very necessary first to ascertain if it could do this and then let it manifestly be seen to do it.

I can now confess that I had a few secret misgivings, which I kept strictly to myself, regarding my own capabilities, bearing in mind the fact that my fastest-ever had been 110 m.p.h. on a Lea-Francis at Brooklands 21 years previously. In order to put these matters to the test, I set out alone in the very early hours of the morning to a five-mile straight situated near Coventry, and it was the car itself which put my mind at rest, as I found it delightful to handle. The first run seemed very fast indeed, but subsequent ones, although carried out at the same speed, appeared slower, and I had time to



FAST STUFF.—R. M. V. Sutton in the Jaguar XK120 at Jabbeke, breaking the tape of the timing apparatus on one of his runs when, in 1949, he established Belgian local records, the f.s. mile at 132.6 m.p.h., the f.s. kilometre at 132.36 m.p.h., the s.s. mile at 86.43 m.p.h., and the s.s. kilometre at 74.17 m.p.h. Fastest run was at 133.39 m.p.h. He was then 53 years of age. Today he is Chief Tester of Alvis Ltd. and has a 26-year-old daughter who is employed in the drawing office of Armstrong-Siddeley.



ALVIS SARACEN FIGHTING VEHICLE.—The type of driving Sutton has done since the war, leading to "bigger, better, heavier vehicles with more road wheels than anything of the kind I have handled before . . ."

TOUR DE FRANCE—continued from page 687

with no regulations causing a limit on speed, nor was there the worrying thought of 24 hours of such racing. Here the Ferraris of de Portago and Trintignant began to make headway, though the French driver's effort was forced to a stop when his engine suffered partial seizure, leaving the Spanish Marquis to defend Maranello honours. The other Ferraris, of Rosier and Gendebien, were proving too touring for words and both were hopelessly outclassed. The Mercedes-Benz triumphal tour received a severe setback at Le Mans, for Moss found his car suffering from an obscure ignition fault that lost him 700 r.p.m., Cotton had a tyre burst at high speed which both frightened him and slowed him down, and Mairesse had a piston break and finished the 12 laps in a cloud of smoke. The little Alfa-Romeos were going as well as ever, Schell once more doing prodigious things with his, though Guelfi had been forced out before arriving at Le Mans due to hitting a herd of cows. Storez was not only well up on handicap, but in General Classification as well, and was holding his own at Le Mans when engine trouble intervened and caused him to retire. Pollet, however, was still in fine form and finished the Le Mans race still as leader of the overall event. Having been motoring almost continuously since early Monday morning, by 5 p.m. Wednesday the competitors were happy to be able to put their cars away in a locked park and retire to bed. For those with trouble nothing could be done until they had clocked out of the control at 6 a.m. the following morning. Apart from the mechanical bothers most of the Mercedes-Benz cars were through to the canvas on their tyres and there was much organising and borrowing of wheels being arranged.

Since the start the weather had been superb and Thursday morning it continued as the 72 cars still left in made a leisurely run to Rouen, leisurely that is if they had no trouble to rectify or tyres to change, in which case some pretty fast motoring was done in order to arrive at the Rouen circuit in time. Here the Ferraris began to show some of their race breeding and they trounced the SLs pretty thoroughly, though it must be admitted that the Moss car was still misfiring pretty badly. Even so, Pollet, La Caze and Cotton were all beaten by de Portago and Trintignant, while Rosier managed to get his heavy touring model well placed. During this eight-lap test race there was much excitement and some pretty hectic driving, the Giuliettas doing some pretty hairy acrobatics. Behra was showing just how well a Carrera could be driven, and was running rings round Peron in a Europa Ferrari, while Mlle. Thirion lost only a minute to Behra during the eight laps. Although the little Panhards and D.B.s were outclassed on the scratch placings, they were beginning to dominate the handicap class of the modified group of cars, the leader being Hemard, accompanied not only by his regular Le Mans co-driver Flahaut, but in the actual Le Mans factory Panhard-Monopole coupé.

Leaving Rouen the competitors continued on their way round the north of France, through Berck and Cambrai, over the cobbles of the Pas de Calais country, and then descended to Reims, arriving there as darkness fell. The Champagne circuit was *en fete*, as for the French Grand Prix, and the wonderful lighting installations were going at full blast. Unfortunately there was something of a shambles on the approach to the circuit, for the competitors' time-control point was actually in the paddock and with entry to the

read the instruments, noting that the rev.-counter was indicating 5,200 r.p.m., equivalent to a speed of slightly over 130 m.p.h. I returned to the works feeling pleased with myself, but although everyone was very polite they were rather sceptical. However, later tests confirmed my findings, and I shall always be grateful to Jaguars for allowing me to drive in the official timed tests over a mile on the Jabbeke road in Belgium, where I recorded a mean speed of 132.6 m.p.h. High speed is of little use unless it is backed up by good brakes, and I was very interested to try out the disc type which had been fitted to an XK. They really were excellent, and on a perimeter circuit I estimated that they reduced my cut-off points by at least fifty yards. I had opportunities to test the XK120C but unfortunately I had left the company by the time the much more potent D-type came into production.

It was with many regrets that I left Jaguars and I did so because Alvis offered the inducement of reunion with my old love, to wit fighting vehicles, while still being able to test high-performance cars, for which Alvis have a world-wide reputation. It only remains for me to say that at the present time I am driving bigger, better, heavier vehicles with more road wheels than anything of the kind I have handled before, and circulating the M.I.R.A. High-Speed Circuit, which, incidentally, is faster than the late-lamented Brooklands, in our very excellent 3-litre saloons.

circuit being free for the public a big crowd turned up. The result was that competitors' and spectators' cars became rather badly tangled up and there was much shouting and confusion, together with a lot of motoring about over fields and ditches before everyone clocked in on time. Since the Rouen test de Portago had gone into the lead of the event, ahead of Pollet, Moss, La Caze, Gendebien, Rosier and Trintignant, so that although the Ferraris were now beginning to show a superiority over the Mercedes-Benz, the initial lead by the German cars was still keeping them well placed.

The Reims test consisted of 12 laps of the Grand Prix circuit and as it was now well and truly dark the electrics had to prove their worth, as well as the speed of the cars being tried to the utmost. Once again it was a Ferrari benefit, de Portago being the man of the night, followed by Pollet at a discreet distance, while Moss was dropping farther and farther back due to his recalcitrant engine. Behra was still keeping well ahead of the small cars and Schell and Frere were continuing their fierce Giulietta battle, with the American just keeping ahead. The result of this race kept de Portago still in the lead, and then after midnight the more interesting part of the route began.

Turning east towards the German border of France the route went to the Vosges mountains, made a pretty comprehensive tour of them and then descended over the Juras and down to Aix-les-Bains. Here was the seventh special test, a very simple standing-start over half a kilometre, though the marking was severe for every second counted for 10 points, so that it was real speed-trial stuff with split seconds affecting the general classification enormously. Pollet recorded a masterly 18.1 sec. and La Caze 18.3; de Portago was winding his Ferrari up in second but as he whipped the gear-lever into third his fist knocked the ignition off and he coasted over the line, recording 20.9 sec., a loss of 28 points over Pollet. This test proved a slight revival on the part of the Mercedes-Benz, though Moss and Cotton were not very well placed, but it put Pollet back into the lead of the whole event. Another to have trouble was Hemard with the Le Mans Panhard, for it went on to one cylinder as he left the start and it took him 63.2 sec. to cover the 500 metres, which meant a loss of 632 points.

Arriving at Grenoble as darkness began to fall, those that still remained in the rally had to tackle the most difficult part of the road section, for the route did a complete circuit of the Alpine passes between Grenoble and Briançon and the whole way was in darkness. Altogether 26 competitors fell out on this section due to mechanical failures, lateness, or, as in the case of Trintignant, accidents, the French driver and his co-pilot Picard running into a non-competing car that was descending the Col du Glandon while they were going up. This part of the Tour was pretty fatiguing but those teams that had a seasoned rally driver as co-pilot had an advantage which made things more comfortable for most French rally men know the Alps intimately.

By early morning the first man was arriving at St. Etienne and when the final check was made the total entry was sadly depleted. There followed a 20-lap race round a very simple circuit and at the start of this Pollet was still leading on General Classification, with de Portago second and Moss just holding on to third place. La Caze had retired with a broken gearbox during the mountain section and Rosier was delayed by a broken brake pipe, and though he and his co-pilot Estager repaired it another one split, and they arrived at

the Crest control too late to justify continuing. During the race at St. Etienne de Portago was dominating things when a stone from another competitor smashed his windscreen, which caused him to slow up. However, his close rival Pollet was also in trouble for a valve rocker broke and he finished the race on five cylinders. Having spent every spare moment in changing likely causes of the misfire and lack of power, Moss was beginning to get his Mercedes-Benz sorted out and during this race he was able to take second place, which regained some of his lost points.

By Saturday afternoon the control at Vichy was reached and another much-needed night's rest was allowed, while the cars remained in a closed park, and Sunday morning they set out once more at 6 a.m. for the final stage of the Tour. Although Pollet was able to repair his broken engine he could not get to the Vichy control in time and had to abandon, so that when the 37 remaining cars left on Sunday morning for a fairly easy drive to Montlhéry, the order was de Portago, Moss, Gendebien (who had worked his way up by consistency and the failures of others), Behra, Cotton, Schell, Frere and Mlle. Thirion, and here it might be opportune to give a mention to the poor suffering co-pilots who either had to navigate or drive the duller road sections, the above-named stars naturally doing all the "plums" such as the races and hill-climbs. The leader had with him a friend named Nelson, who was completely inexperienced and was suffering the ardours of night-and-day motoring philosophically, Moss was with George Houel, a Parisien rallyman whose Mercedes-Benz it was; Gendebien was likewise with the owner of his car Ringoir; Behra was in his own Porsche but had his young brother Jose with him, he being well experienced in French rally work; Cotton was with his regular rally passenger Leclere; Schell was with French racing-driver Jean Vidilles; Frere with a Belgian friend Andre Scheid, and Mlle. Thirion was with Inge Polensky, wife of the German Porsche driver.

The wonderful September heat-wave continued throughout the Sunday-morning run and the competitors arrived at the Montlhéry Autodrome in brilliant sunshine, with an hour or two to spare before the final race. This was over 10 laps of the long road circuit of 12.5 kilometres. By now Moss had got his car going something like normal but it was too late for him to have any chance of winning the Tour outright, so de Portago merely had to be sure of finishing in order to remain at the top of the General Category. After leaving Vichy he had had a sheet of Perspex screwed on to the Ferrari to replace the broken windscreen and so, barring accidents or break-downs, he was all set to carry off the Tour de France. Moss ran away with the race, lapping in fine style and giving a nice demonstration of high-speed 300SL motoring, while de Portago motored

swiftly but surely to final overall victory. Gilberte Thirion had the ladies' award assured, but had a worrying time when the Porsche went on to three cylinders, and she had to do most of the race at a crawl, endeavouring to keep going until Moss had completed the 12 laps. The Giulietta battle was continuing as strongly as at the beginning of the 6,000 kilometres, and Schell and Frere were a few feet apart until the American ran out of fuel and had to stop and pour some out of a can. Although this lost him the Montlhéry race against the Belgian driver, he did not lose enough points to drop from his lead over the whole rally.

With de Portago the outright winner, the 37 contestants remaining from the original 103 drove the last stretch into Paris to where the Tour de France finally wound up with the prize distribution.

It had certainly proved to be one of the better motoring events and if not to the liking of the hardened rally driver it was joy for the racing drivers. As a vindication of the Gran Turismo type of car it was a complete success and, similarly, it was a wonderful trial of the combination of stamina of man and machine, together with skill and suitability of the cars. As a pure motoring competition calculated to bring out all the best qualities of the higher forms of motoring and competitions it was excellent, and it is to be hoped that next year there will be a strong contingent of British competitors, though what they will use as cars to beat Ferrari, 300SL, Carrera and Giulietta is hard to visualise just at the moment.—

D. S. J.

TOUR OF FRANCE

Results :		Points lost
1st :	A. de Portago/E. Nelson (Ferrari Europa)	7,307.740
2nd :	S. Moss/G. Houel (Mercedes-Benz 300SL)	7,405.730
3rd :	O. Gendebien/A. Ringoir (Ferrari Europa)	7,771.945
4th :	R. Cotton/R. Leclere (Mercedes-Benz 300SL)	7,895.197
5th :	J. Behra/J. Behra (Porsche Carrera)	7,953.377
6th :	H. Schell/J. P. Vidilles (Alfa-Romeo Veloce)	8,331.699
7th :	P. Frere/A. Scheid (Alfa-Romeo Veloce)	8,342.218
8th :	J. Peron/R. Bertramnier (Ferrari Europa)	8,603.392
9th :	J. René/M. Bessey (Porsche Carrera)	8,615.046
10th :	M. Nicol/J. Maurin (Alfa-Romeo Veloce)	8,676.098
11th :	Mlle. Thirion/Frau. Polensky (Porsche Carrera)	8,689.677
12th :	R. Amy/P. Fredmesch (Alfa-Romeo Veloce)	8,690.869

37 finishers out of 103 starters.

Marking :	Points per second
Mont Ventoux ...	1 point per second
Comminges ...	0.35 point per second
Peyresoude ...	1.50 points per second
Le Mans ...	0.35 point per second
Rouen ...	0.50 point per second
Reims ...	0.50 point per second
Aix-les-Bains ...	10 points per second
St. Etienne ...	0.35 point per second
Montlhéry ...	0.50 point per second

**OULTON PARK
(SEPT. 22nd)**

In contrast with the previous big race meeting at Oulton Park the weather was fine for the September 22nd meeting. Generous prize money was offered. Coopers took the main event, Salvadori in the Formula II model being the winner of this Gold Cup race sponsored by the *Daily Herald*. This event resulted in a big contest between Lotus and Cooper cars, the Lotus exponents being very hard pressed by their Formula II rivals, four of these being entered in all. The *Autosport* Production Sports-Car Championship final went to R. Fitzwilliam and R. Carnegie in an M.G. MGA, with K. N. Rudd in an A.C.-Bristol in second place. This was a three-hour Le Mans-type start event. The Formula III race resulted in a fight between Stuart Lewis-Evans and Jim Russell, the latter finally making the winning post with a little in hand over his opponent. Finally came the saloon cars with a separate Gran Turismo class. Tony Brooks, driving Rob Walker's 300SL, led from start to finish, pursued by Ivor Bueb in an XK140 hard-top. Unusual entrant was Cordes' Plymouth, which rolled considerably on corners.

Results :

Formula II (40 laps) :	1st :	R. Salvadori (Cooper)	83.84 m.p.h.
Formula III (15 laps) :	1st :	J. Russell (Cooper)	80.63 m.p.h.
Saloon Cars (10 laps) :	1st :	C. A. S. Brooks (Mercedes-Benz)	74.39 m.p.h.
Production Sports Cars :	1st :	R. Fitzwilliam/R. Carnegie (M.G. MGA)	67.29 m.p.h.

MID-SURREY A.C.

Meetings to be held on the first Thursday and third Friday in future, at the club's new headquarters, "The Sugar Bowl," Brighton Road, Burgh Heath, Surrey, 8 p.m.

B.A.R.C. MEMBERS' MEETING (Sept. 22nd)

In this, the final meeting of the year, Graham Whitehead won the main event, the unlimited sports-car race of 10 laps duration. He succeeded in taking first place in his Aston Martin DB3S some way ahead of M. W. Head in a Cooper-Jaguar.

The MOTOR SPORT Brooklands Memorial Trophy goes to P. J. S. Lumsden (Lotus-Climax).

Scratch Races :	
Sports Cars up to 1,250 c.c. :	1st : A. Stacey (Lotus-Climax) ... 83.08 m.p.h.
Up to 1,500 c.c. :	1st : A. Stacey (Lotus-Climax) ... 83.72 m.p.h.
1,500-3,500 c.c. :	1st : A. G. Whitehead (Aston Martin DB3S) ... 84.19 m.p.h.
Handicap Races :	
Open Cars :	1st : N. N. Bentley (Triumph TR2).
Closed Cars :	1st : D. E. Howard (Aston Martin DB3).
Ladies' Race :	1st : Miss H. Dunham (M.G.).

SUNBEAM REGISTER SANDHURST RALLY (Oct. 7th)

The annual driving-tests and Concours d'Elegance of the Sunbeam S.T.D. Register were held in the beautiful grounds of the Royal Military Academy, by permission of the Commandant. The Concours d'Elegance was judged by Brig. D. S. Gordon, C.B.E., D.S.O., and the tests were marshalled by officer-cadets of the R.M.A. Motor Sports Club under Capt. Reynolds. Thirty-one cars competed, numbering 18 Sunbeams, of which two were twin-cam 3-litres, and 12 Talbots.

B.R.S.C.C. SILVERSTONE MEETING

Concours d'Elegance :	Tie between C. S. South (1913 12/16 Sunbeam) and F. Joyce (1934 Sunbeam Speed Twenty).
Driving Tests :	Best Sunbeam : H. Tennant (1933 Speed Twenty). Best Talbot : T. J. Mockridge (1937 105).
Age/Distance Prize :	D. L. Purdy (1931 Sunbeam Twenty-five), from Milford Haven.
Pump Fuel Race :	1st : R. J. A. Petty (Petty-Norton).
1,200-1,500-c.c. Sports Cars :	1 : A. Stacey (Lotus-Climax).
J.A.P.-engine Formula III :	1st : W. E. Ford (Cooper).
Production Sports Cars :	1st : D. S. Shale (Austin-Healey).

LETTERS from READERS

N.B.—Opinions expressed are those of our Correspondents and "Motor Sport" does not necessarily associate itself with them.—Ed.

P.R.O.s versus ENGINEERS

Sir,

Oh dear! I see that you have incurred the displeasure of the Rootes Group Public Relations Department.

My personal opinion is that it is somewhat off-hand for a company to answer technical criticisms in a technical journal *via* their P.R.O. (a non-technical post), but I must admit that I dislike all P.R.O.s on principle, having a strong suspicion that they add to the cost of the product without improving either the quality thereof or the service that goes with it.

I am writing to you, however, because I think that this affair is a perfect example of the *malaise* affecting our British Motor Industry today. One might almost imagine their motto was "We've got to make two things, cars and excuses, and the excuses must be good"! It would appear that when faced with strong overseas competition the boardrooms can think of only three remedies:—

- (1) Step up the Press and stunt-advertisement allocation;
- (2) get a better P.R.O., and
- (3) fiddle about with the styling.

In their colossal complacency, it does not appear to have occurred to any of the large British manufacturers to allocate more to design and research, with the result that we are now left floundering far behind the French, Germans and Italians in technical development. What British car in production is as technically advanced in its class as the following?: Volkswagen (incidentally, a direct descendent of racing design): Citroën 2 c.v. and DS19; Mercedes 220, 190SL, and 300SL; Fiat 600 and 1,100; or any well-known American make.

It's an odds-on bet that the salary and expenses applicable to the post of P.R.O. to the Rootes Group total more than three times that of their chief qualified engineer, and that it is easier for the stylist to get a 50s. per car allocation than it is for the engineers to get 5s.; indicative of the relative importance placed on the respective posts. Small wonder that the number of really able engineers available to the Industry is dwindling each year due to emigration and change of occupation. (It would, incidentally, be interesting to know the gross emoluments of the chief qualified engineers at, say, Chevrolet, Mercedes and Citroën, as a sidelight on the point.)

The above remarks are critical but they stem from an honest desire to see this country in the lead in the world's automobile markets. Incidentally, the views expressed are not necessarily those of the companies with which I am associated.

I am, Yours, etc.,

Send.

RODNEY CLARKE.

[Mr. Rodney Clarke is, of course, the person who persuaded Mr. Kenneth McAlpine to build Connaughts and to whom goes most of the credit for putting up the best show by a British car in the important sphere of post-war Grand Prix racing—so his views do carry weight!—Ed.]

* * *

THE NEW ROAD TRAFFIC ACT

Sir,

I was most interested to read the letter from Mr. H. P. Wright, of Lewes. His feelings concerning the new Road Traffic Act entirely reflect my own. Quite apart from the British Motor Industry, who will never shift themselves to help the motorist so long as they are selling cars, what the devil are the A.A. and R.A.C. doing? I am a member of both organisations and, as far as I can see, the answer is absolutely nothing.

The Automobile Association was founded on civil disobedience and the deliberate frustration of police activities on the Brighton Road. However, now that their membership has passed the one million mark, complacency appears to have set in and, like our politicians, all they can do is talk. The combined membership of the A.A., R.A.C., R.S.A.C. and affiliated clubs must be around the three million mark and I am quite sure that, given a lead by the organisations which are supposed to assist and support them, the majority of the members would be quite prepared to refuse to pay for street parking, refuse to pay excessive road fund and to take part in other similar campaigns, until the Government was forced to give them the same consideration as is shown to the larger trade unions. It is too much to hope that at this late hour these organisations will find the courage and the energy to do their duty by their members?

I am, Yours, etc.,

Farnborough, Kent.

RICHARD M. LEGGATT.

TO THE RESCUE

Sir,

What an excellent journal yours is. Not only can one read it and re-read it and browse among the adverts, but on three occasions now it has got me out of a mess. The first two occasions were in connection with spares for an Alvis Firefly, and now it has led to getting me out of a predicament in connection with insuring my 1940 Alvis Speed Twenty-five.

Unfortunately the company with which I was insured recently packed up motor insurance and pushed me out on the market. I use my car for business and my firm insists on comprehensive insurance. Could I get comprehensive insurance? Could I blaze. A lorry had popped out of a side road and caught me amidsthips when I was cruising along at sixty minding my own business, and under a knock-for-knock agreement my insurance company had paid £160. Oh, no, it wasn't my fault but the money had been paid out, the car was sixteen years old, it was capable of over ninety miles an hour, etc., etc. My firm is a national one and not without influence but the best quotation it could get me was Third Party Risk with a 75 per cent. loading and a £25 excess on top of that. A broker friend in Glasgow said there was absolutely no hope so I fished out MOTOR SPORT, rang up Antony Hyde-East and, hey presto, comprehensive insurance for only 50s. more than I had been quoted for third party. MOTOR SPORT to the rescue once more.

The annoying thing is that if I had been in a modern car when the lorry clouted me it would almost certainly have turned over and the claim would probably have run to four figures by the time I had limped out of hospital. I hope that when the compulsory tests for cars over ten years old begin this nonsense of loading thoroughbred cars because of age will be dropped altogether. If a car is passed as roadworthy then it is roadworthy whether it is ten, fifteen or twenty years of age.

I am, Yours, etc.,

Glasgow.

JAMES BUCHAN.

* * *

"MOTOR SPORT" ROAD-TESTS

Sir,

I write as a reader of your magazine of 26 years' standing. Judging by what you have written from time to time, I gather that the manufacturers of certain British cars refuse to allow you to road-test their products because they fear that you will be truthfully critical in your published reports.

Now I have seen the other side of the picture because I have on several occasions bought cars largely on the untruthful and over-eulogistic reports published by some of your contemporaries, and to me it seems a crying shame that you should be boycotted because you tell the truth.

The remedy is in your readers' hands. They could, if they wished, demand a MOTOR SPORT report before buying a new car.

I am, Yours, etc.,

Crosby-on-Eden.

F. IVAN CARR.

* * *

PLEASE RETURN THAT SPANNER!

Sir,

Whilst returning through France in early July in my 1934 Aston Martin, I stopped to assist the owner of an M.G. TF in which the fan blades were fouling the radiator core owing to the failure of the water-pump bearings.

He showed me the set of bicycle spanners which constitutes the tool-kit with which the car is supplied and, as none of these were of the right size, I lent him a spanner so that he could subsequently remove the fan blades and thus avoid damage to the radiator.

This spanner has not been returned and although only worth a few shillings, this type of experience tends to discourage one from bothering to stop and assist people in difficulties on the roadside. Surely it is not too much trouble to return equipment loaned by a fellow enthusiast, especially as the incident occurred on foreign soil and the delinquent was many miles from the nearest B.M.C. agents?

Incidentally, it was interesting to read of David Scott-Moncrieff's experiences concerning his inability to obtain TF spares. The owner mentioned above had found it impossible to obtain new steering-arms for his car and eventually, after a delay of about three months, the near-side one had to be specially re-imported from South Africa.

I am, Yours, etc.,

London, S.W.10.

MARTIN GEORGE.

[A letter can be forwarded.—Ed.]

VOTE FOR FREEDOM

Sir,

You may be interested in this copy of a letter written today to the Motor Accessories Manufacturers Association, whose prepaid card you urged me to use in the October issue of your excellent magazine.

I am, Yours, etc.,

M. ROBERTSON.

Southport.

The letter referred to reads as follows:—

“ Sir,

“ In my copy of my favourite monthly magazine, MOTOR SPORT, I have today found the enclosed card, asking me to cast my vote for freedom.

“ As you can see, I consider the interests of the motorist are best served by the garages retailing the oils offered by the company whose petrol they sell. I am a commercial traveller, and cover some 25,000 miles per annum on business and pleasure. I am also a keen rally navigator. At present I have an A30, but I have also had an old Prefect, an Alvis 12/50 and a ‘bullnose’ Morris. So I am not without experience of buying petrol and oil.

“ Most of the garages I call at for refuelling are selling only the one brand of petrol, and nearly all of those are offering only oils made by that particular petrol company. But the selection is still most comprehensive. For example, at my favourite local garage (I have investigated this carefully) there are three grades of petrol available and made by the same company are four viscosities of the normal, top-grade engine oil, a fully detergent engine oil, two grades of commercial oil, four grades of gear oil, two grades of chassis grease, a special grease for wheel bearings, flushing oil, penetrating oil, etc. The top-grade engine oil and the gear oils can be had in cans. The same engine oil is offered from little racks, in bottles sealed (as milk bottles) by the oil company—thus the contents are guaranteed to be what it says on the bottle, as opposed to oils offered in screw-top bottles, which could contain anything. Now surely the above selection is sufficient? I cannot really understand anyone wanting the wretched garagist to stock more.

“ And surely the people best qualified to make and market oil are those with the widest experience—the petrol companies, with their international experience. I, as a lay motorist, don't know a great deal about the problems of lubrication, and I am quite certain most of my fellow motorists know even less, so I prefer to leave it to someone who does know—and the someone with the widest experience. The major oil and petrol companies have knowledge of the behaviour and effect of oils operating under every condition in the world—from the heat of the Sahara and the humidity of the Far Eastern Jungles to the freezing conditions in the Arctic and Antarctic.

“ Now, sir, having shown that the motorist is best served with one make of petrol and oil, let us be honest. I have followed the formation of your association in the Press, and I know that the prime movers are the makers of Castrol—indeed, you share the same address, I see. With the increasing popularity of the “ tied ” garage system it is obvious that Castrol is losing sales, and the formation of this association was to stop the rot. My garage friend tells me that Castrol offer the smallest margin of profit of any company selling oil, and suggests that if they want to stop the rot they should at least be competitive.

“ No, sir, this is not a vote for freedom—you are asking me for a vote for Castrol.

“ I have sent a copy of this letter to MOTOR SPORT, and I think both of us will be interested to see your reply—if any.

Yours faithfully,

M. ROBERTSON.”

We have received from the Secretary of M.A.M.A. their reply to Mr. Robertson, as follows:—

“ Sir,

“ May I touch upon a few points in the letter addressed to me by Mr. M. Robertson, a copy of which he has sent to you?

“ He does not understand why ‘the wretched garagist’ should have to stock a greater selection of motor oils than the ones he catalogues. Clearly Mr. Robertson has missed the point of our campaign. We are not seeking to compel the service station proprietor to stock any particular products, but to guard his freedom to stock what he likes and what his customers want. Fortunately not every motorist is like Mr. Robertson; most of us still take some interest in what goes into our sumps, and prefer to have the oils of our choice—whatever they may be—available on a basis of unrestricted competition.

“ Secondly, Mr. Robertson makes the somewhat incautious statement that the ‘people best qualified to make and market’ motor oils are the petrol companies. A moment's reflection would have made him qualify, if not withdraw, this statement. Motor oils made by independent companies specialising in lubricants have

always been among the more popular brands throughout the world—even in North America, where the system which Mr. Robertson is defending has been fully developed. May I sum this point up in a quotation from the American magazine *Fortune* referred to by the well-known oil economist P. H. Frankel in his book ‘Essentials of Petroleum’:

‘Certain small concerns are important, more important than the giants because their condition calls forth the phenomena of service and ingenuity. While the giants are sitting on inventions and coddling markets, these people encourage inventions and develop new markets.’

“ Thirdly, Mr. Robertson refers to the part played in the foundation of this association by C. C. Wakefield and Co., Ltd. It is true, and well known throughout the trade, that Wakefield's took a leading part in the foundation of M.A.M.A.; it is true, and equally well known, that Wakefield's have given the association certain facilities. But M.A.M.A. has attracted the support of every considerable independent manufacturer of motor oils in Great Britain, the manufacturers of many accessories, and the sympathy of an overwhelming majority of service station proprietors. Our ballot is designed to find out what the motorist thinks; so far as it has now gone, Mr. Robertson is in a minority of rather less than 1.5 per cent.

“ It is no direct concern of mine how sales of Castrol are proceeding, but I am told by Wakefield's that sales are now higher than ever before. That Mr. Robertson has probably been genuinely deceived by petrol company propaganda is shown by his reference to the ‘increasing popularity’ of the solus system. I would ask him: popular with whom?

I am, Yours, etc.,

BERNARD R. DAVIES,

Secretary, M.A.M.A.”

London, S.W.1.

* * *
NOT ON SUNDAY

Sir,

Nobody wants to compel the Sabbatarians to go motor-racing on Sunday, and it seems to me unreasonable for believers in a God “whose service is perfect freedom” to seek to compel those who have other religious beliefs, or none, to observe a religious law which has no meaning for them. A church which demands religious freedom for itself ought to respect the rights and beliefs of others. Furthermore, example is better than compulsion, which history has shown over and over again to produce inevitably the opposite result from that which was intended.

And have the Sabbatarians considered the position of devout Jews and Moslems, for instance, who, if the L.D.O.S. had its way, would be compelled to observe the Sabbath twice a week?

I observe that your Proprietor, among others, is opposed to the introduction of the “Continental Sunday” into this country. I respect his opinion, but cannot bring myself to sympathise with it. I believe the Continental Sunday to be in many respects more Christian than our own.

One final point: Christians are supposed to “do all to the glory of God.” Cannot motor-racing be carried on in this spirit by those who call themselves Christians?

I am, Yours, etc.,

J. O. STANSFIELD.

Liverpool 2.

Sir,

It is gratifying to learn from the correspondence in your columns that the L.D.O.S. has the support of keen motorists in its endeavour to preserve the Christian Sunday in our land. This must surely be an eye-opener to those who ignorantly suppose the Society and its supporters to be spoil-sports and kill-joys!

Your correspondent, J. O. Stansfield, thinks it unreasonable that those without religious beliefs should be compelled “to observe a religious law which has no meaning for them.” Does he apply this reasoning to the other nine of the Ten Commandments, which are all “religious laws”? Evidently, this friend has not considered the fact that the arrangement of one day's rest in seven is more than a purely ceremonial religious institution—it is a necessity of life. This has been proved beyond all doubt—doctors, psychologists, economists and sociologists admitting its vital importance to every human being.

Cannot Mr. Stansfield see that if, in the much-misused and ill-understood name of freedom, Sunday motor races are permitted, a serious wedge will have been driven into this vital institution of the Rest Day? Where will it end? As Mr. F. Parker points out, all forms of sport will follow, and why stop there? Sunday entertainments of every conceivable kind will claim like “Freedom,” and there will be no answer to Sunday trading demands from commercial enterprise. Thus, in the dear name of Freedom, abject

slavery will have been won for the people of Britain!

No one surely will maintain that the Creator of men is not interested in the social aspect of the subject, but there is a spiritual side to it also, which affects every person. We spend six days making a living—one day a week is provided that we might live. Motor racing may be excellent for the body and mind (if not taken in overdoses!), but it has nothing to offer the spirit. Let us keep Sunday free of it and remember God has given us an immortal soul, for which Christ died.

In the State of Israel, Saturday is kept as the Sabbath and Christians are rightly not allowed to interfere. In our own country, which is professedly Christian, Jews and Moslems are debarred from interfering with our Sabbath, kept on Sunday, while they are given complete freedom to observe their own days.

Mr. Stansfield favours the so-called "Continental Sunday." Does he also favour Continental instability, unrest and insecurity? We are not concerned with titles of this kind—they may mean anything. We visualise an utterly God-less, restless, secular Sunday, with a consequent pagan Britain, if the present trend continues. Let all true Britons guard our Sunday for worship, rest and works of mercy, and we shall again be the envy of the world.

I am, Yours, etc.,

H. J. W. LEGERTON,
General Secretary,
Lord's Day Observance Society,
55, Fleet Street, E.C.4.

[I. O. Stansfield's letter embodies most of the opinions expressed in the many letters received and with the reply from the L.D.O.S. this correspondence is closed.—ED.]

BRITAIN AND G. P. RACING—continued from page 668

I honestly believed last winter that we were going to see British Grand Prix cars get somewhere in first-line racing, for I could see that we had the potential to produce teams of good cars. Admittedly Connaught and Vanwall did not have drivers from the élite top flight, but B.R.M. had Hawthorn and they could not wish for better, yet 1956 proved to be a fruitless and wasted year for him. Vanwall had a car that at least proved itself worthy of standing up against all the opposition even when driven by lesser drivers than Fangio or Moss, but they achieved nothing in the way of results due in the main to little pettifogging troubles that should have been ironed out two years ago. Connaught were no better off for their car was just not quick enough, having made little progress over the 12 months, and apart from being slow was also unreliable.

At the beginning of this season the main opposition in Grand Prix racing, Maserati and Ferrari, were both in an undetermined state and it was a golden opportunity for a new British team to get on top and stay on top, but now it is too late. Ferrari took only a matter of weeks to get himself organised with his new Lancia/Ferrari cars and Maserati, although making some awful bloomers during the season, at least won two of the big races in a convincing manner and finished second in two more in an equally convincing way. The British teams did absolutely nothing in comparison and if we add up the efforts into figures they read like this: Vanwall started 12 cars, finished two; Connaught started seven cars, finished three; B.R.M. started three cars, finished none; these figures referring to the first-line Grand Prix events, not small national meetings or short races. It will be seen that Vanwall made the biggest attempt to get somewhere, but suffered the greatest percentage of failures. During the season Vanwall twice showed that their cars were capable of leading against all-comers and B.R.M. did so once, so that on the credit side we still have a ray of hope, but on the debit side we have nothing but a series of failures due to material failure or bad preparation and design of details, or in the case of B.R.M. failure before the starting line was even reached.

The whole season has been one of disappointment so far as British Grand Prix cars have been concerned; disappointment that is relative to the obvious possibilities. As with last year, both Vanwall and B.R.M. evoked excited cheers from me when they really "mixed-it" with the foreign opposition but the cheers had to turn to groans as both makes fell by the wayside. While it is all very well to moan and groan like this and complain of the pathetic exhibition that our cars have made over the season of racing, one should really try and offer constructive criticism and assistance to the teams concerned, in an attempt to make next year a far better one. Without being on the inside of any of the three teams it is difficult to know exactly the reasons for the failures and troubles involved. B.R.M. would appear to have difficulties in producing parts and obtaining the right materials, Connaught still suffer from lack of money sufficient to enable them to build a new engine, for they have little hope of improving much over 250 h.p. with their existing one, while Vanwall have all the money and facilities necessary for running a

NATIONAL BENZOLE versus SHELL

Sir,

I have been disturbed lately on calling at known petrol stations to buy my usual National Benzole, to find the globe has been changed to a Shell grade.

When the selected-site system began a few years ago I applauded Shell's wisdom on taking National Benzole into their scheme and thus adding variety to their sites.

I do hope you will be watching points on our behalf; that Benzole is not forced off the market by monopolistic tendencies.

If garage owners find Shell outsells Benzole, all well and good; a businessman must look to his best proposition. But I think the situation wants watching, don't you?

I am, Yours, etc.,

Leeds.

E. J. HIGGINS.

[We have also been concerned at the disappearance of National Benzole pumps from favourite sites and submitted Mr. Higgins' letter to National Benzole, who reply as follows:—

"The trend of retail marketing in this country is towards the development of solus sites retailing exclusively all the motor-fuel brands of one company.

"The National Benzole Co., Ltd., are pursuing a similar policy where they, in co-operation with their trade customers, can mutually arrange this."

We interpret this fatuous statement as meaning "when we're squeezed out of one site we'll try and squeeze into another."—ED.]

Grand Prix team and have more power from their engine than anyone else, yet their cars fail through detail faults or material faults. Surely there must be a reason somewhere for the continual inability of any of our three teams to get any success in real Grand Prix racing.

All I have done in the foregoing is to chronicle the events that have happened, and no doubt many of them have good reasons for happening, but I am not convinced that any of them need have happened. I would like to suggest that Mr. Vandervell or his technical men let us know just why their cars failed to win a Grand Prix race this year; and for Rodney Clarke to say why the Connaughts fell to bits; and Peter Berthon to explain why the B.R.M. has been such a failure after the initial excellent showing at Oulton Park last year, and why it has taken so much time to get them race-worthy, so long, in fact, that the season was finished before they re-appeared from Bourne. I know many of the reasons given for failures, but what of the reasons for bad workmanship, or the reasons for the supply of bad material, or, even more pertinent, the reasons for delay in supply of parts or materials. All three teams can offer explanations of delays and errors but they are never very convincing when the efforts of our sports-cars teams are compared. Jaguars, Aston Martins, Coopers and Lotus have all made efforts this past year that have been far more worthy of British engineering than have the efforts of our Grand Prix teams.

Can it be that the people behind our three Grand Prix cars are the wrong ones, or can it be that Grand Prix technicalities and brainwork is more exacting than in sports-car racing? I doubt it very much. Just what is wrong with British Grand Prix efforts is hard to say, but something is definitely wrong, for now, in November, 1956, we are in no better position in Grand Prix racing than we were in November, 1955. In 12 months we have made no visible progress, whereas Ferrari and Maserati have shared the spoils in all the big races of the year. Any suggestion that either of those firms has bigger or better facilities than the Vanwall team is nonsense, and equally it is nonsense to imagine that Ferrari or Maserati mechanics are better than British mechanics, for I am convinced they are not. As far as organisation goes neither Italian team has much ability and I have personally experienced some of the chaos that goes on in both factories, and every time it makes me wonder just how they ever manage to win a race. I think many times that a well-organised and efficient British team could wipe the floor with them, they are in such chaos, yet every time they win. Is it that Grand Prix racing is just too much for our technical ability, or is it that our standards of workmanship are just not high enough? Whatever it is something is still seriously wrong and much money is still being wasted. To spend a vast sum of money and get something back in return, namely first places in the important events, is worthwhile, but to spend all the time and effort in producing a result such as we have had this season really does seem a waste of time. The past season has been miserable, the only gratification was that at least there were some green cars on the starting grid, but I sincerely hope that 1957 will produce something a bit better.—D. S. J.

CLASSIFIED ADVERTISEMENT SECTION

PREPAID RATES

6d. per word (maximum number allowed 80)
Minimum Charge 6/-.

Box Numbers, for the convenience of
Private Advertisers only, 2/- extra.

Box No. Address: "Motor Sport"
15-17, City Road, London, E.C.1.

No insertion will be made unless
prepaid. Copy received after first post
on the 21st of the month will be held
over until the next issue unless can-
celled in writing before the 10th of the
following month. The publishers
reserve the right to refuse or withdraw
copy without notice and do not hold
themselves responsible for matters
arising from office or works errors.

FOR SALE

RILEY NINE, 1933. Engine needs overhaul. [25. Tel.: Sheffield 33755. [7769
ALVIS SPARES: heads and blocks for most models; gear-boxes, rads, chassis parts, new and reconditioned diff. units, exchange mags and dynos. Routledge, Station Road Garage, Scholes, Leeds. (7917
ALLARD 1949 D.H.C. 4-seater. Excellent condition throughout. Special modifications, many extras, new gear-box. £280. East Horsley (Surrey) 142. [7785
RAILTON 8-cyl. Stratton saloon by Coachcraft. Sound and impressive motor car in every respect. £175. Viewed Leyton. SHO 5340. [7786
VOLKSWAGEN De Luxe, black, 1955. £600. Reason for sale: need the money. Owen, 200, Lea Bridge Road, London, E.10. [7787
ROLLS-ROYCE Saloon body (post-war). Complete wings, bonnet, carpets, etc. Large boot. Offers. Rolls 25 h.p. spares; Chassis, wheels, axles (rear and front), engine, gear-box, starter-dynamo, radiators, 2 exhaust manifolds, prop-shafts, instruments. Number 25 h.p. Rolls limousines. £100-£400. Johnsons, 26, Egerton Road, Fallowfield, Manchester 14. Tel.: Rusholme 3009. [7788
1928 ALVIS 12/50 Beetleback in really exceptional condition, £100 or exchange 4-seater. 1934 Alvis Firefly saloon, crash-box, fair condition, £40. 1934 Morgan 2-seater, water-cooled o.h.v. JAP, in very good condition, £90. 1934 Triumph Gloria, £15. 1938 Austin 7 2-seater, very nice condition, new hood and screens, £90. 350 c.c. B.S.A. special m/c, very potent, £25. Four Ashes Garage, Dorridge, Solihull, Warwicks. Phone: Knowle 2033. [7789
WOLSELEY ENGINE, very special 1496 c.c. o.h.c. Laystall crank, rods, twin S.U.s, 6-branch exhaust, Scintilla. Terrific performance. Complete with 4-speed C.R. gear-box. £65. Sibbald, 164, Heaton Moor Road, Stockport [7790
HAMPTON 16.9, 1932, good running order. Offers. Young, 32, Learmonth Street, Falkirk. Tel.: 1982. [7791
S.S. AIRLINE, 1935. Dismantling. Most parts available. Offers. Welch, 13, Learmonth Terrace, Edinburgh. [7792
ALVIS 1937 Speed Twenty, 3 new tyres, Servais silencer. £95. Dismantled Speed Twenty, parts sold separately. Speed Twenty-five engine What offers? Barker, 34, Carfrae Gardens, Edinburgh 4. Phone: PEG 1118. [7793
FRAZER NASH Interceptor, 1930. Arzari engine, and dismantled spare. Presentable original body, new battery, chains, tyres, brake linings. Rewired. £100 o.n.o. Seen Hampshire. Box No. D.794. [7794
FRAZER-NASH/B.M.W., 1938, type 34, 1500 c.c., 4-seat drophead in very good order. £140 o.n.o. Write for demonstration. Barrett, 122, Birmingham Road, Walsall. [7795
1940 JAGUAR, 3 1/2 Saloon, black. Reconditioned throughout. 20 m.p.g. An immaculate car in showroom condition. £195. 364, Rochdale Road, Oldham [7796
AUSTIN 7 RUBY CHASSIS, rear springs, £7. Petrol tank £1: 1932 Minor front axle beam, springs, £1 10s. Wheel, 5s.; 2, Austin 1940 wheels, £2. Spartan horn 10s.; 2 Zenith Ford carbs., £3 pair. Ford 10 stub axles, Girling brakes, etc., £2. 2 185 x 400 Michelin, £2 each. Large Fram filter, £2. Wilson. "Woodlands," Gildersome, near Leeds. [7797
1935 FORD 10 SALOON with decayed body but otherwise sound. Good basis for special. Taxed, insured, drive away. What offers? Froggatt, Deacons, Burnham-on-Crouch, Essex. Phone 2108 before 9.45 a.m. [7798

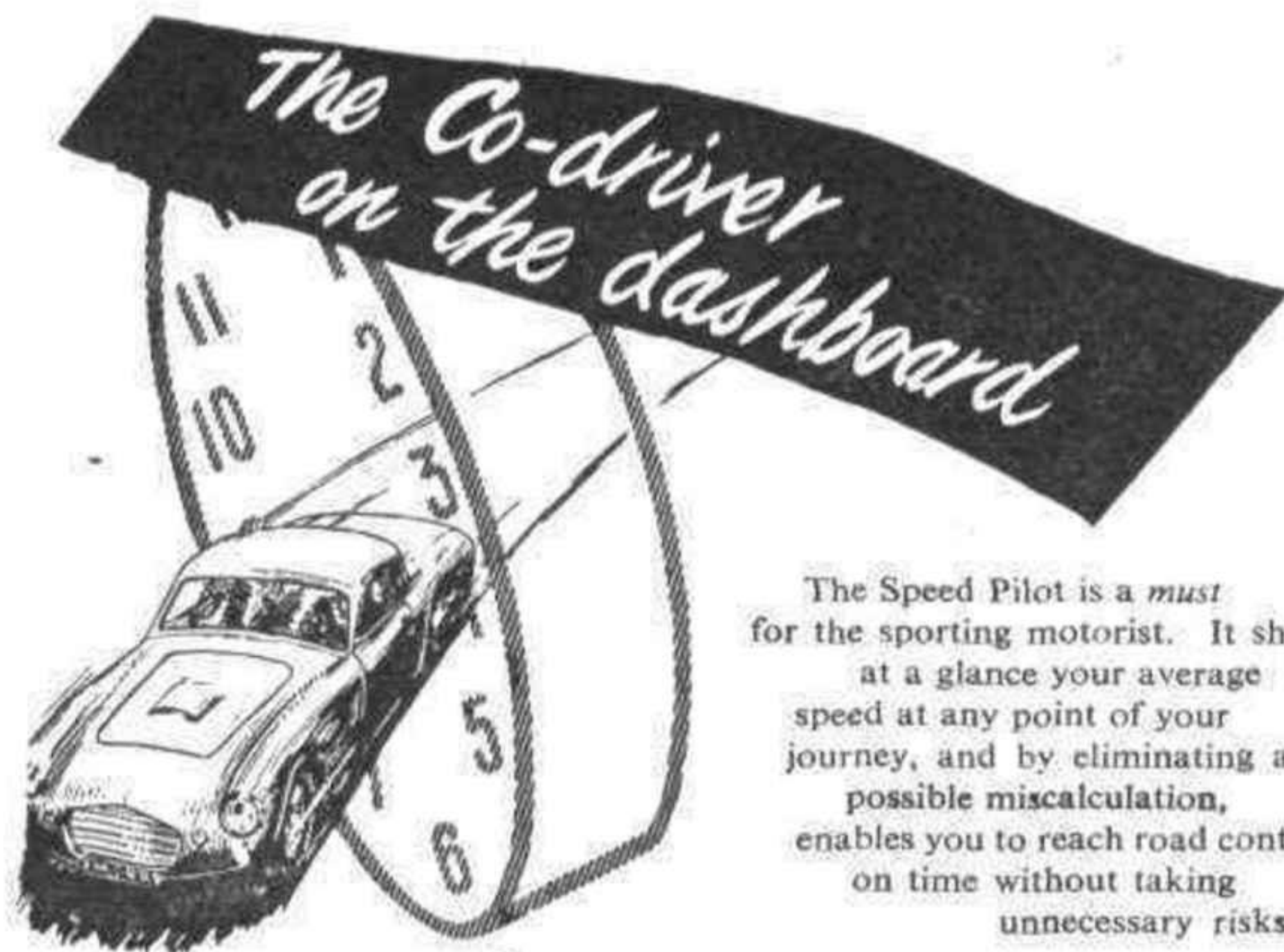
FOR SALE—continued

RALLY MEN: Ex works racing mechanic now available for car preparation for rally and competition work. Tuning and overhauling. First class work. Also breaking for spares or sell complete: 1935 Type 315 Frazer-Nash/B.M.W. Sports. Only gearbox "done for". D. P. Sugden, 520, Halifax Road, Bradford 6, Yorks. [7799
"VINTAGE AND THOROUGHbred CAR", Nos. 8 to 19; "Motor Sport", August 1952—October 1953; all complete and as new; offers. Hudson, 35, Timothy Lane, Batley, Yorkshire. [7800
LEA FRANCIS Shooting Brake, 1950, 14 h.p. Maroon/oak, immaculate. 28 m.p.g. 1,000 miles since engine reconditioned. 40,000 miles total mileage. £385. 1, Argyle St., Tynemouth, Northumberland. Phone: North Shields 3226. [7801
DELLOW MK. V (lightweight), 1955, complete with all weather equipment, twin S.U.'s, 4 branch exhaust. All in immaculate concourse condition. J. & T. Taylor, Park Hill St., Bolton, Lancs. [7802
1950 J.2 ALLARD. Fitted full width body, similar Ferrari. £250 or exchange Saloon. Cash either way. Partington, 294, Manchester Road, Bolton, Lancs. Phone 6107. [7803
AUSTIN 7 SPARES. Largest stockist in the North for new and used spares. Lists free. S.A.E. Austin 7 Services, Kirby Wiske, Thirsk, York. Tel.: Kirby Wiske 201. [7804
LEA FRANCIS 12/40, 1928 2-seater. Immaculate vintage specimen, 58,000 only. Completely original except for new hood. Offered with wide range of spares for 100 gns. or thereabouts. Photo and details from Venning, 82, Woodside Green, Gt. Hallingbury, Bishops Stortford. [7805
1955 VOLKSWAGEN. De-luxe. Strato Silver. 7,600 miles. Unmarked. Extras include radio, covers, mirrors, badge bar, underseated. Extremely careful owner. 40 m.p.g. £635. Weybridge 3512. [7806
BOWN'S MOTORS (C. C. Bown), the Sports and Vintage Specialist in the West. I buy, sell and exchange, Sports, Vintage and pre-war thoroughbred cars. Particulars of interesting cars for sale will receive personal attention. Distance no object. Bown's Motors, Othry, Bridgwater. Telephone: Burrowbridge (Somerset) 275. [7807
S.S.1, 1933. Considerable development potential. Now 2-seater sports. Cycle type wings. Some spares. Used daily. £50. New big-ends and mains, Birmingham Highbury 4347. [7808
750 SPECIAL, fully modified engine, including balancing, 8 to 1 head, choice of carburetors, 5.00 x 15 West London wheels, low rate springs, telescopic shockers, Bowdenex brakes, alloy body, new Lucas headlights, just run in. £112. Phone: ELMbridge (Surrey) 5589. [7810
1930 BUICK 8. Excellent condition. £25 o.n.o. 46, Marshall Avenue, Bognor Regis. [7811
FRAZER-NASH, 1932 Meadows T.T. replica. Excellent original condition. £220. Teague, 1, Rosemont Road, Richmond. RIC 0495 evenings. [7812
1938 M.G. V.A. TOURER. Good condition. Haggle from £180. Accept Austin/Ford Special part exchange. West, Shop, Hammer, Lane, Grayshott, Hindhead, Surrey. [7815
HEADLAMP STONEGUARDS, chromium plated mesh, easily fitted, prevent glass breakages and improve appearance. 27s. 6d. pair. Judge, 234, Tullibardine Road, Sheffield 11. [7817
ALVIS, 1935, Speed 20. Vanden Plas body D.H.C. Engine and tyres very good. £130. Tel.: New Cross 3337. [7818
JAGUAR MK. VII, very badly crashed, good unit, etc., £200. Austin A90 Drophead. Taxed. Radio and heater. Good mechanically, needs small amount of body repairs and new hood. £225. Hardwick House, Studley, Warks. Studley 521. [7819
SPARES, reasonable prices. Over 200 cars dismantled. Alvis, Daimler, Lanchester, M.G., Riley, etc. Morda Garage, Oswestry, Shropshire. [7820
1939 B.M.W. 328, £300; 1938 Lancia Aprilia, £185; 1929 Rolls-Royce 20 F.H. Sports Coupé, £150. Terms, exchanges. 31, Newcastle Road, Liverpool 15. Telephone: Seftonpark 4722. [7821
SUNBEAM 16, 1930. Close coupled sportsmans saloon. Good condition £40. Farmer, 30, Tame St. East, Fullbrook, Walsall, Staffs. [7822
DISMANTLING. Triumph Dolomites, "Glorias, Vitese. All parts for 10, 14 and 16 h.p. models. Paris, 6, Fort Road, Halstead, Kent. Telephone: Sevenoaks 3769, evenings, weekends. [7823
DISMANTLING 2 1/2 litre Jaguar. Paris, 6, Fort Road, Halstead, Kent. Telephone: Sevenoaks 3769 evenings, weekends. [7824
1936 MORGAN SPORTS, a/c. Matchless o.h.v. twin, red, cream. Recent rebore. Brakes re-lined Windtones, Lucas double-dippers. Re-upholstered '54. Excellent condition. Nearest £150 or part exchange '54/'55 T.R.2. Smith, 28, Mount Vernon Road, Barnsley. Tel. 3443. [7825

FOR SALE—continued

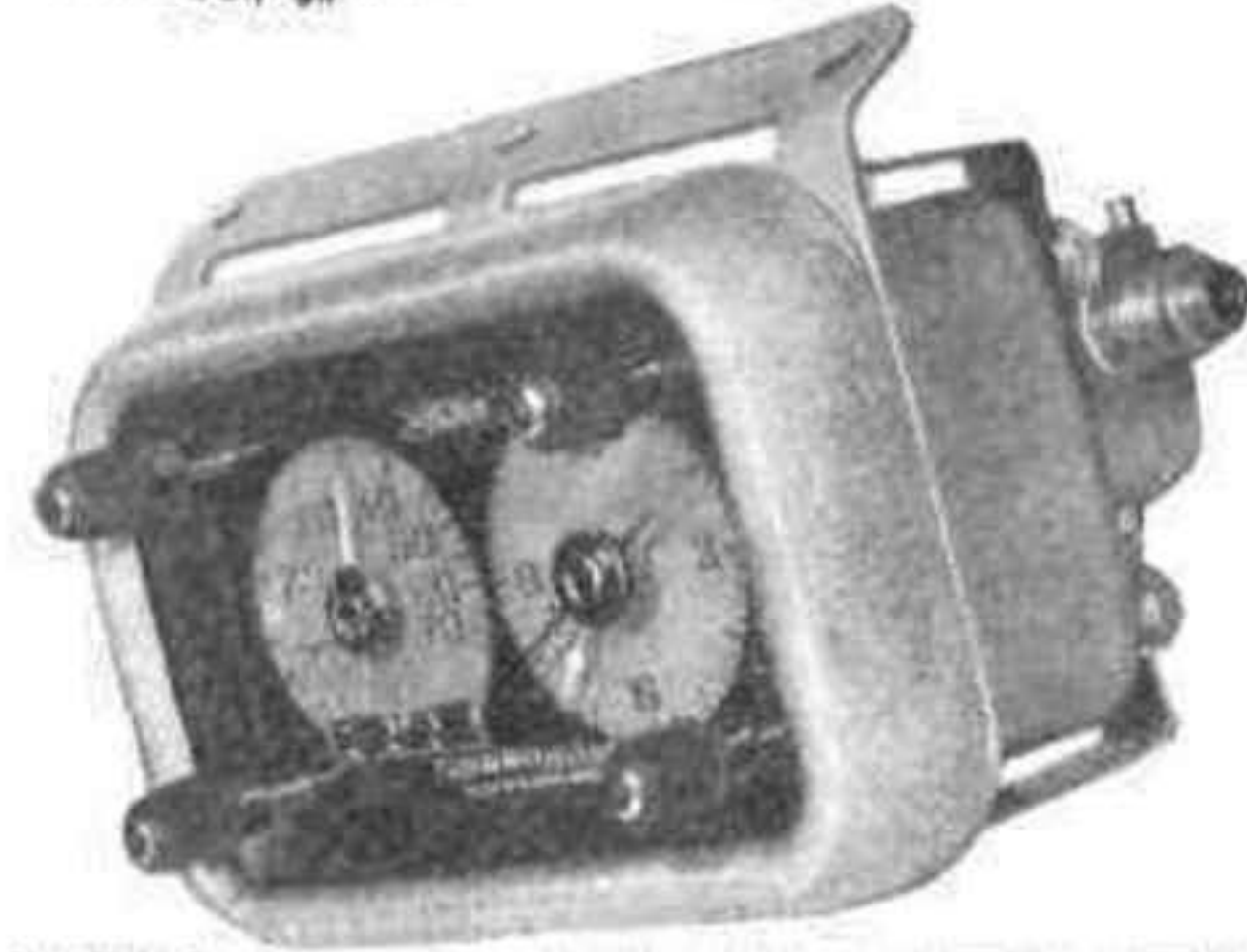
A7 SPECIAL, lively engine, twin S.U.'s New tyres, battery, transmission couplings, magneto core. Rewired, insured. £65 o.n.o. Burgh Heath 3780. [7826
MAGNIFICENT red aluminium, all enveloping bodied, 1939 Steyr Continental 2-seater sports. I.F.S., I.R.S. One-shot lubrication, hydraulic brakes. Original condition. Wonderful roadholding and performance. Spares obtainable. £165. WEM 3892. [7827
1936 GRAHAM, 34 h.p. Supercharged, D.H.C. £75. "Hilltop", Fencepiece Road, Chigwell. Hainault 6035. [7830
2 1/2-LITRE S.S.100 JAGUAR, 1937, less body. Good basis for very fast special. £75. Buckle, 106, Thorold Road, Ilford, Essex. [7831
RILEY 9 M.L. Rotary Magnet magneto, solid copper head gasket, S.U. pump. Sign post lamp. Parts as new. 66, Salford Rd., Streatham Hill, S.W.2. [7832
MORRIS-OXFORD, 1927. £20. Insured March 1957. F. Roberts, P & H, Littleton, Polegate, Sussex. [7834
AUSTIN 12/4, 1929. Very good condition, thoroughly reliable. First reasonable offer. Imperial 4899. [7836
1936 NIPPY MOTOR, with all accessories. Nearest offer to £20. 5, Austin 7 wheels, 19 in., £7 10s. or separate. P. S. Campion, 2, Elvendon Rd., London, N.13. [7837
DELAGE D.8, 1932. 29 h.p., 8 cyl. Attractive 4 Light Saloon. Mostly original condition. Fitted luggage trunk, 2 spare wheels, P.100 headlamps and spotlight. Klaxon warning device. Quiet, effortless. Imposing sports viture in everyday use. £145, deposit £75 or equivalent. James Fleet, 15, Sheep Street, Winslow, Bucks. Tel. 259. [7838
1936 1 1/2-LITRE RILEY ADELPHI. Over £200 spent on rebuilding, fitted radio. Must sell. £140 o.n.o. Box No. D.840. [7840
£225! 1939 T.A. Tickford coupé. Sound mechanically. Good tyres. Extras, telescopic shockers. Excellent body, clean leather. A crackerjack! Matthew's Garage, Windlesham. Tel.: Bagshot 2158. [7841
1 1/2-LITRE FRAZER-NASH/B.M.W. Aerodynamic aluminium all enveloping sports saloon 2/3-seater. Registered 1937. Body fitted 1952. Type 40 sports engine, 3 Solex, 8.5:1 C.R. I.F.S. Rack and pinion steering, 16 in. wire wheels. An attractive car in very good condition. £265. Photographs available. Woods, 37, Windsor Drive, Dartford, Kent. Dartford 2301 (business hours). [7844
£235! 1947 series Hillman Minx drophead. Excellent mechanically. New tyres. Dark blue, matching leather. Spotlessly clean. Taxed. Matthew's Garage, Windlesham. Tel.: Bagshot 2158. [7842
TWO SEATS insufficient so must sell Morgan T.R.2, 1955. Red. Excellent condition, with extras. £650 o.n.o. 371, Uppingham Road, Leicester. [7845
B.S.A. 1938 "SCOUT." R.B.G. Excellent mechanical condition. Body needs attention. £95 o.n.o. Robson, Hunters Cottage, Lower St., Harnham, Salisbury. [7929
MINOR BONNET, wings, grilles, bumpers, £10. Huge Mercury 'brake, new engine, recellulosed, hydraulics, column change, mouthorgan, 1947, sealed beams, £80. V.8 30 engine, £5. New 4-speed box, £5. Clutch, 50s. Five 17in. discs, 30s. Wanted: Windtones, Alvis hub caps. "Oakbrook," Senna Lane, Comberbach, Cheshire. [7930
1935 LEAF SPECIAL 2-seater. 4ED Meadows, just run in after complete engine-clutch overhaul. Fast, economical, fair condition. Matrimony forces sale. £135 o.n.o. Box No. E.931. [7931
LANCIA LAMBDA 8th series short chassis tourer. Good mechanical condition. £125. Dr. Mirrey, Botleys Park Hospital, Chertsey, Surrey. [7932
1939 1 1/2-LITRE TRIUMPH Dolomite Roadster. Engine reconditioned 2,000 miles ago, including rebore, new mains, big-ends, valves and springs, crank regrind. Hood rather shabby but weather-proof. Heater. Good appearance. £145 o.n.o. Terms may be arranged. London. Box No. E.933. [7933
THE "SIDMOUTH SPECIAL" is (most reluctantly) offered for sale owing to my heavy college expenses. Most unusual vehicle consisting of 1922 open-sided 15-seater "toast rack" body of exceptionally antique appearance mounted on good old 1927 Austin 20 "slogger" 4-cyl. chassis. Will pull away with ease, fully loaded, on 1 in 3 1/2 gradient. Taxed private, V.S.C.C. registered. Very reasonable order throughout and fitted several extras. All further particulars from: C. T. Shears, 2, Hillcrest Park, Exeter, Devon. [7934

Box No. Address: "Motor Sport," 15-17, City Road, London, E.C.1.



*The Co-driver
on the dashboard*

The Speed Pilot is a *must* for the sporting motorist. It shows at a glance your average speed at any point of your journey, and by eliminating any possible miscalculation, enables you to reach road controls on time without taking unnecessary risks.



The Halda Speed Pilot is a precision instrument manufactured to rigid standards of workmanship and accuracy. It will last a lifetime and is quickly and easily fitted to any make of car.

Price £19. 19. 0. Terms available.

HALDA
Speedpilot

Please send me details of the Halda Speed Pilot.

NAME

ADDRESS

HALDA LTD., Brandon Rd., York Way, London N.7. Tel: NORth 1207



HOODS **£6**

READY TO FIT FROM

Best quality Double Duck. Flexible plastic rear window. For most makes, including M.G., Morris, Austin, Hillman, B.S.A., Singer, Standard, Land Rover, etc. Also tonneau covers, sidescreens, spare-wheel covers. Plastic hoods also available, prices on request.

● SENT BY POST OR FITTED SAME DAY

Trimming Materials

Send for sample. State colour.

- Hooding, d/text., various colours, from yd. 18/-
- L/cloth, all colours, 52 in., from yd. 6/6 to 11/-
- Topping, heavy quality, 52 in., yd. 11/6
- Head Lining, 54 in., Cotton Suede, yd. 6/6
- Flexible Plastic, sq. ft. 2/6
- Rigid Plastic, sq. ft. 3/6
- Dunlopillo Cushions, from 10/6
- Rubber-backed Carpet, 40 in. wide, yd. 26/6
- Hood Rear Windows. Ready-to-fit replacements, 14/6
- Ready-to-fit Carpets. For most popular makes. Heavy pile, fitted with heel mat. Complete sets from 5 gns.

BUCKET SEATS
Fluted backs ... 58/6

LOOSE COVERS
All leading makes. Take your pick from over 300 patterns. Duck, Tartan, Bedford Cord, Leopard-skin, etc., from only **75/-**

Also the new **Transparent Seat and Door Panel Covers**. Write for details.

Rubber Mouldings for windows from stock. **Side Panels** ready-to-fit.

REPAIR SERVICES
Fabric and sliding roofs repaired and re-covered. Seats and door panels repaired and renewed.

Postal Service if required. Write to Dept. M.S.

THE LONDON TRIMMING CO.

Sales: 436 King's Road, Chelsea, London, S.W.10

Works: 40 Queen's Gate Mews, Kensington, S.W.7

Sales Dept., open SATS. until 5.30 p.m.

Telephone (all Depts.): FLAxman 3192.

MIDLAND BRANCH: 72 Cambridge Street, Birmingham 1

Phone: MIDland 1747



Send for **FREE BOOKLET** and Price List



IMMEDIATE DELIVERY

MGA MODELS — EARLY DELIVERY ZA



Whether you are contemplating a major overhaul on your car, or just a decoke and general tune-up, why not consult the Specialists in this field. We have a highly skilled staff, strictly supervised, working solely on M.G.s, to give you the most efficient service; also special jigs and tools. We have clients coming from north, south, east and west who hand us their cars and let us get on with the work.

If you are thinking of overhauling your M.G., you'll be interested in the following representative list of spares available from stock:

- Reconditioned engines, all models—Priced Specifications sent free on request.
- Our modified oil seal and hood to protect your dynamo.
- Vertical drive gears, rockers, camshafts, brake shoes, drums, cables, linings, etc.
- Reconditioned gearboxes, all models.
- 15, 16, 17, 18 and 19-in. road wheels.
- Steering boxes, shock absorbers, road springs.

- Type TA/B/C/D/F, PA, PB, J2, M, Magnette and Magna—crankshafts, with rods and mains; cylinder blocks; either exchange service or outright sale. Also cylinder heads with or without overhead gear.
- Back axles, half-shafts, tyres. J2 clutch toggles. Chromium luggage carriers. **Special Bargains:** new carburettors, £8 10s. per pair; S.A. carburettors, £8 10s. per pair; TC/D speedo. heads, £3 5s. each; N. rev.-counter, £3 5s. each; S.A. shock absorbers, £1. Full Model Y.T. tonneau, £1 each. Two 1,100-c.c. racing crank and rods for T.C., T.D. M.G. engines, £100 each.

All these special articles offered for sale are for callers only.

Why not call and see us—we are open all day Saturday and Sunday mornings from 10.30 a.m. to 1 p.m. Alternatively, order your spares by telephone or letter—the fastest C.O.D. service is available to you.

TOULMIN MOTORS, Official M.G. retail dealer
343 STAINES ROAD, HOUNSLOW, MIDDLESEX
Telephone: HOUNslow 2238/3456

HALL OF BALHAM LTD.

SPECIALISE IN ALL

REPLACEMENT ENGINE
EXCHANGE
40, 45, 55, 326, 328

B.M.W.

TRY OUR REPLACEMENT
RADIATOR EXCHANGE
SERVICE — ALL MODELS

SEVERAL GOOD USED MODELS ALWAYS IN STOCK

— BOSCH —

Points.
Rotors.
Condensers.
Distributors.
Plugs . . . all types.
Windscreen Motors
Coils.
Regulators.
Winker Set.
Fuses.
Fuse Boxes.
Starter Springs.
Starter Ratchets.
Dynamo Starter Brushes.
Starter Pinions.
Reconditioned Starters and Dynamos.

Lamps, Spot and Fog.
Head Lamp Glasses.
Yellow Continental Bulbs.
Push-Pull Switches.
Trafficator or Winker Switches.
Windscreen Wiper Tandem Assemblies.

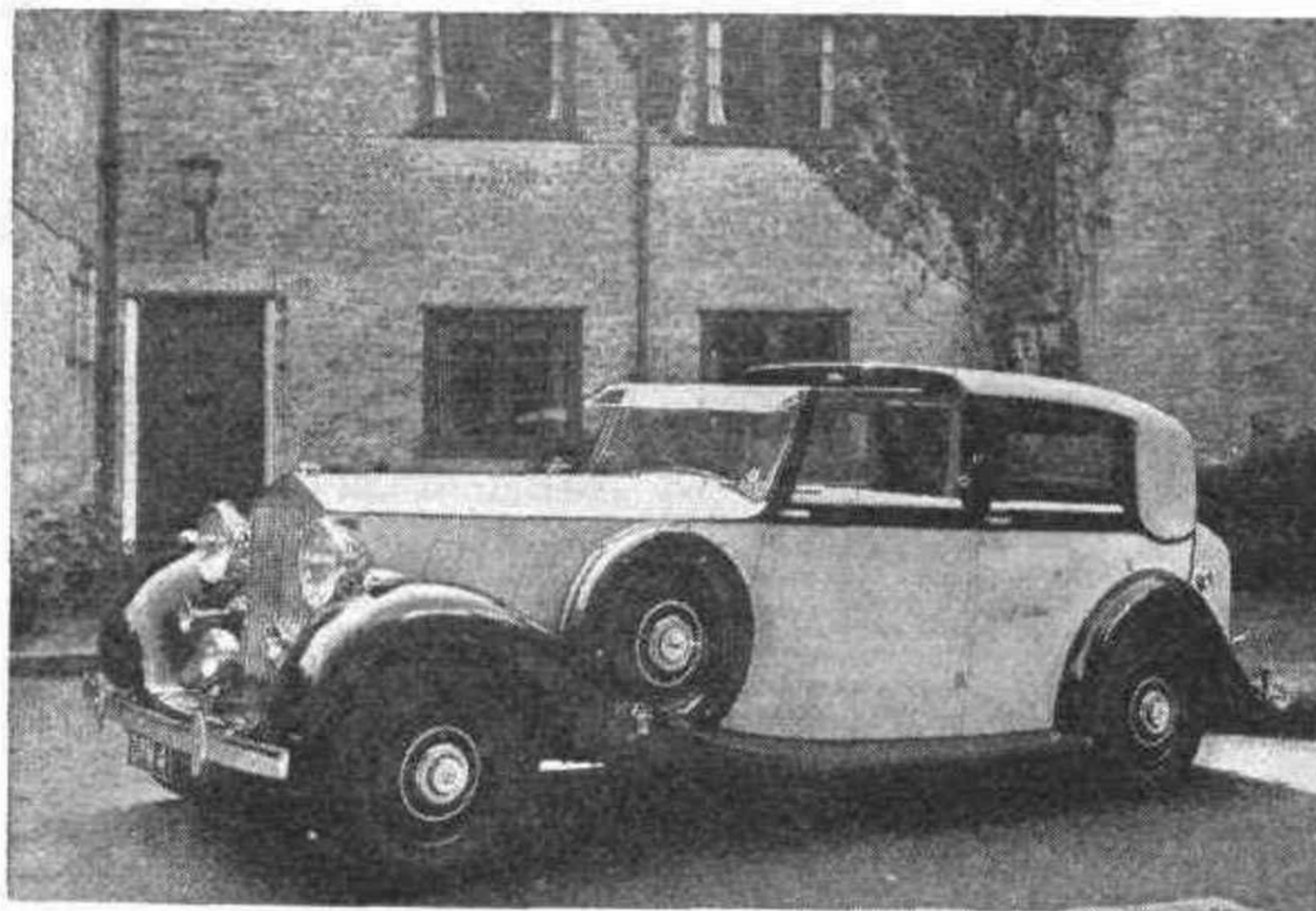
— SPARES B.M.W. —

Solid Copper Gaskets for Type 328.
Complete sets of Gaskets (copper-asbestos) for all models.
Valve Springs.
Valve Guides.
Cylinder Heads.
Cylinder Blocks.
Rocker Shafts.

Manifolds.
Reconditioned Water Pumps.
Valve Cover Plates and Rocker Covers (chrome or black).
New King Pins and Bushes.
Shackle Pins and Bushes.
Road Springs.
Shock-Absorbers.
Half-Shafts.
Prop.-Shafts.
Gearbox Spares.
Complete Gearboxes.
Exchange Brake Shoes.
Brake Drums.
Ball Races.
Crown Wheels and Pinions.
Various body fittings Windows, Doors, etc. or most types.

189-199 High Street, Tooting, S.W.17 Balham 7855

A
Change of Plans
Places the Following
Cars Upon the
Market



ROLLS-ROYCE, 1937, Phantom III brougham-de-ville saloon. One owner; total mileage 36,000 only. Ivory and black, French-grey roof, West of England upholstery. Virtually unmarked. A car strictly for an individualist who appreciates "travel in the grand manner." Offered at a tithe of its present-day cost. **£700.**

1950 M.G. 1½-litre saloon, ideal ladies' car. Used by my wife. Heater, link mats, etc. A very loyal little car. **£425.**

GREGOIRE, 1912, 2-seater (and dicky) sports. Bolt dynamo lighting. Original condition, but requires some attention. V.C.C. dated, and I believe this is the only one in captivity. I have not the time to devote to the car. **Offers wanted.**

1950 LAGONDA 2.6-litre saloon, B.R.G. Heater, etc. In very good condition. Highly suitable for fast family use. **£725.**

LIONEL S. EVANS, The House in the Wood, Chaldon, Nr. Caterham, Surrey. Caterham 3522

FOR SALE—continued

RAILTON TEN D/H Coupé in excellent condition and of quite outstanding appearance. £265. SPE 2564, daytime, or COL 6679. [8168]

TUBULAR CHASSIS, built on Austin 7 frame, suitable for cheap 750 or 1172 special, I.F.S., £18, or exchange good camera, etc. London Area. Box No. E.169. [8169]

THE RILEY SPECIALISTS, Wesbell Motors, Balfour Road, Hounslow 9359, offer: Exchange road springs, clutch plates, brake shoes, starters, dynamos and magnetos for all models. New and second-hand spares in stock, 1928 to 1956. Complete and dismantled engines, 9 h.p. 12-4, 12-6, 15-6. Half-shafts and hubs for all models, including 16-4. Road wheels of all types, from 10s. each. Front and rear axle units, steering boxes, etc. Free technical service. [8170]

FRAZER-NASH, 1930, completely rebuilt. In perfect condition in every way. Box No. E.174. [8174]

SINGER 1½ litre 1934 Le Mans. £145 o.n.o. Findell, 147, Chancerybury Way, Finchley, N.12. Hillside 6932. [8175]

1934 LAGONDA 4½ Tourer, really excellent condition. £115. 1924 Rolls 20 chassis and cab in good condition, including four 32 x 4½ wheels, discs, tyres, etc. £30. One 32 x 4½ wheel, tyre (new) and tube, £5. 1932 Austin 7 Tourer, good sound condition, £45. 2, Manor Drive, Mill Hill, London. [8037]

FAIRSMITH SPORTS CARS LTD.

1939 Morgan 3-wheeler 4-seater, Ford Ten engine. Green £169

1949 Morgan 4/4. Red £295

1954 Ford Anglia, new type, one owner. Wonderful performance £335

1948 M.G. TC. Maroon, Fast £295

1950 Morris Minor tourer, 100 per cent. ... £310

1949 M.G. TC. Cream, tuned. As new ... £365

1950 Paramount, Ford twin-carb. engine. Red £275

1939 M.G. TA 10-h.p. Tickford drophead. Terrific performance £265

SPORTS CARS URGENTLY WANTED and SOLD ON COMMISSION
Motor-cycles welcomed in part-exchange.
762, ROMFORD ROAD, MANOR PARK, LONDON, E.12 ILF 1402

FOR SALE—continued

GOOD LITTLE BANGER, Morris 8 h.p. 4-door, 1935, Saloon, Excellent order, £48. Christopher, FLA 7303. 228, Fulham Road, S.W.10. [8053]

M.G. J2. Looks good. Goes bomblike. Sounds super-sonic. Taxed. Seen London. £90. Box N.3, E.187. [8187]

ROLLS ROYCE 20/25, 1930, black with green leather, 4-light owner-driver Saloon by Hooper, complete with mascot. Similar picture in "The Vintage Car." Taxed. £95 o.n.o. Consider exchange, cash either way. 16, Preston Avenue, Eccles, Lancs. Tel.: ECC 1027. [8188]

1926 12/25 HUMBER Tourer, Excellent and original condition. £100. Lambert, 157, Mayfield Ave., London, N.12. Hillside 9862. [8189]

S.S.1 9 H.P. Part fitted stark 2-seater. Lot of other stuff. £30 o.n.o. Wilson, Woodhall Park, Herford. [8190]

LANCIA LAMBDA 1929 Drophead Coupé, Taxed. Good general condition, body rough. £100 o.n.o. Purser, 237a, Park Road, Peterborough. [8191]

1927 AUSTIN 20, suitable for spares. £15. One pair Rotax sidelamps, ex 1926 Daimler, 45s. T. B. Ash, Rocfield, St. Johns Road, Buxton. [8192]

1934 RILEY KESTREL 9 h.p., cracked block, crash box, k.o.s, spare engine, gearbox and other parts available. £70 o.n.o. Knight, 10, Wellcroft Road, Ivryhoe, Bucks. [8193]

RILEY 9 KESTREL, Two S.U.s, Scintilla, above average condition; spares. £140. 93, Amberley Road, Abbey Wood, S.E.2. [8194]

2-LITRE LAGONDA, fitted 2/4-seater 2-door aluminium body in 1939. 1,000 miles since rebore, new chains, etc. New tyres, new tonneau, spare engine, back axle, etc. £150. Hill, 45, Highfield Drive, Fenton, Stoke-on-Trent, Staffs. [8195]

J2 AND M type engines with crankshafts. All parts, cheap. Offers. 386, Foxhill Road, Carlton, Nottingham. [8196]

FORD EIGHT SPECIAL, built 1952; many new parts. Hydraulic brakes, attractive body, hood. £75. Tel.: Hornchurch 8782. [8197]

VOLKSWAGEN

The full range of vehicles and a few good used cars usually available for immediate delivery.

We specialise in VW Accessories.

Please send for list.

PRESTWICH (HOVE) LTD.,
ST. JOHN'S RD., HOVE (34037), SUSSEX
Distributors for the County

FOR SALE—continued

SUNBEAM 16 H.P. Tourer, 1928. Excellent condition and appearance. £75 o.n.o. Smith, 67, Suffolk Road, Maidenhead, Berks. [8198]

LAGONDA 16/80 Saloon, 1933. Mechanically perfect, body and chrome faultless, well looked after, above average condition, sporty appearance. £100. Tel.: Ravensbourne 9072. [8199]

ASTON-MARTIN Le Mans S/C 1½-litre. Really immaculate, recent respray, new hood, etc. 85 m.p.h., 28 m.p.g. Excellent mechanical condition. National Service reason for very reluctant sale. £275. Haggle or come to terms. Simpson-Reid, 35, West Hill Court, Highgate, N.6. Museum 1147 during office hours. [8200]

FRAZER-NASH-B.M.W. SPARES. Moved house. No room for 1937 329 cabriolet, 2-litre. Block cracked, hood poor, remainder good. Sell lot cheap, or break for sensible offers. Write Haigh, 17, Court Lane, Halifax. [8201]

RILEY NINE, 1932. Breaking. All spares available. 4.50/5.00 x 19 tyres. 7, St. Mark's Road, Enfield, Middx. Enfield 4904. [8202]

MORGAN 4/4 2-seater, 1947. Immaculate. £285. 23a, Park View Gardens, Ilford, Wanstead 6427. [8203]

ALVIS SPEED 20 4-seater Coupé, 1932. Mechanically and bodily excellent, new hood. Offers: Dr. Gilmour, Killingbeck Hospital, Leeds. Tel.: 648164. [8204]

OFFORD & SONS LTD.

(Established over 160 years)

We are pleased to offer the following for the discerning fan.

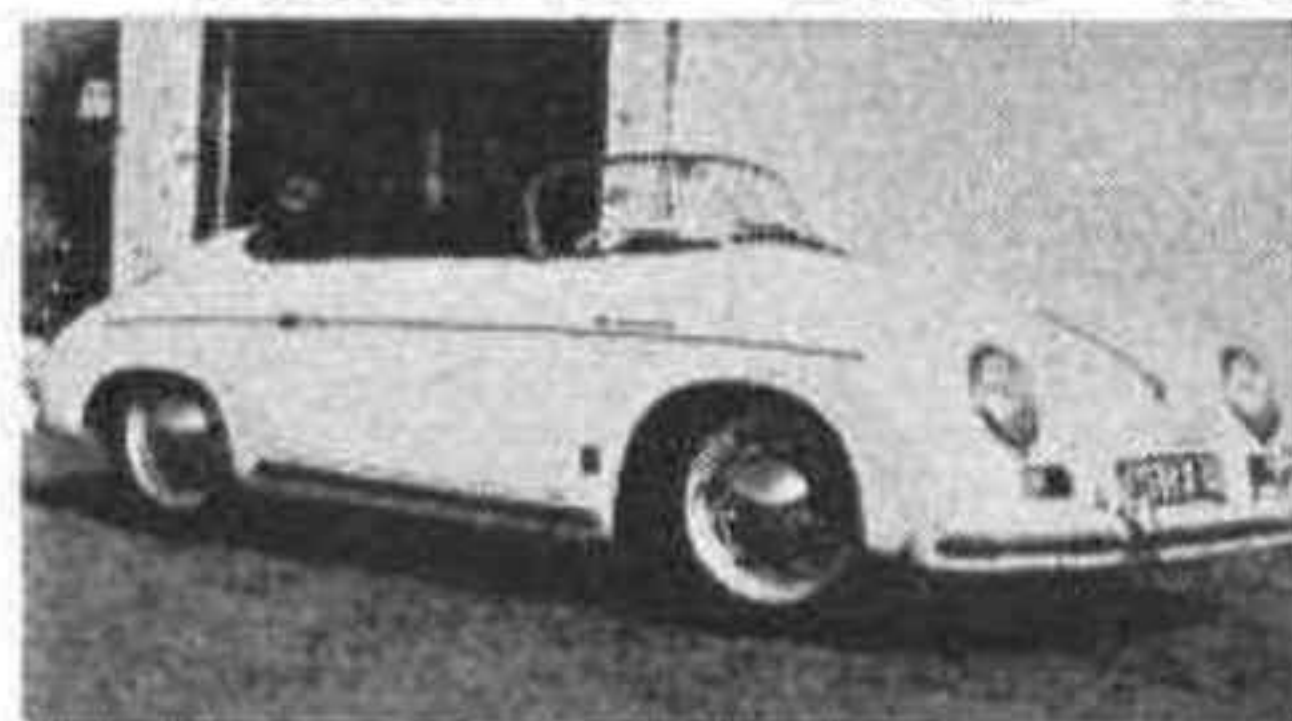
1948 M.G. TC 2-seat sports finished in red, with chrome luggage carrier, twin fog-lamps, wind-screen sprays, full length tonneau cover and panoramic mirror £340

1951 M.G. TD 2-seat sports finished in blue, with chrome luggage carrier, twin horns and chromed headlamps £445

154, GLOUCESTER RD., LONDON, S.W.7.
Tel.: FREmantle 3388.

THE HALFWAY GARAGES (PADWORTH) LTD.

AGENTS FOR BORGWARD AND PORSCHE — DEMONSTRATIONS



1955 PORSCHE Super Speedster. This wonderful little car is a very rare example of the sports 2-seater version of the Porsche. It has covered some 8,000 miles, and is in new condition throughout. Bodywork in white, upholstery, hood, tyres, etc., are all as new, and the mechanical condition is superlative. The all-weather equipment is beyond reproach and these cars, being lighter than the coupes, have considerably improved acceleration, and return 35 m.p.g. £1,595.

Also

The **J.A.G. SPECIAL**. Tubular chassis, with i.f.s. and hydraulic brakes. Ford V8 engine and transmission. This well-designed car has tremendous acceleration, and was constructed in 1949. The engine and gearbox are in good condition, but the bodywork has been hand-painted and does not do the car justice, so the price of £195 allows for this.

PORSCHE 1,500 SUPER drophead coupe. This car is also white, with red leather and black hood. Telefunken-searcher automatic radio fitted (£120). Recent complete overhaul. £1,575

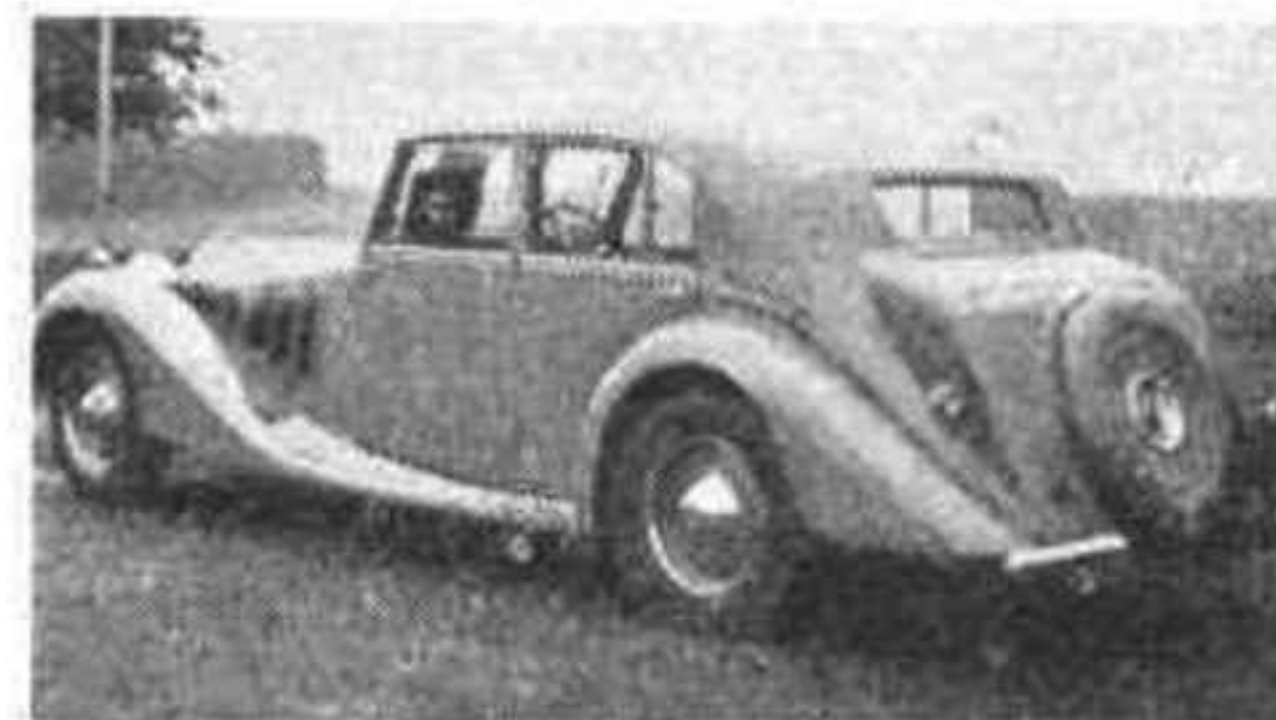
DEFERRED TERMS

PART EXCHANGES

BATH ROAD, PADWORTH, NR. READING, BERKS.



PORSCHE 1,300 drophead coupe. This splendid machine is finished in white with blue leather and hood. It has covered a very reasonable mileage and is in first class order throughout. It has always been carefully maintained, and has received any attention necessary without delay. It is capable of over 90 m.p.h. and 40 m.p.g. and must be one of the smartest and most economical sports cars ever produced in the 1,300 c.c. category. £975



1945 (Reg.) DARRACQ semi-razor edge saloon. Very fine quality English coachwork and leather on this very fast 4-litre chassis. This car is capable of close on 100 m.p.h., but will give reasonable petrol economy. Manual gearbox. Numerous Jaeger instruments, Marchal lamps, twin spot-lamps. Beige cellulose. In very good condition throughout and extremely reasonably priced at £295



This **RAILTON Straight Eight 2/4-seater** tourer has been restored regardless of expense. It is finished in immaculate cream cellulose with new red leather upholstery and carpets, and new black hood, sidescreens and tonneau cover. The engine is a works reconditioned Hudson unit, and the transmission, tyres, brakes, etc., are in perfect order. All bright parts have been newly chromium plated, and the car runs quite faultlessly in complete mechanical and bodily silence. The price of £295 is a fraction of the money recently spent on the car.

Also

1955 LANCIA Gran Turismo coupe. Unmarked. £2,100.

1930 ALVIS Silver Eagle beetleback 2-seater. Most exceptional condition throughout. New hood, tonneau, etc., etc. £195.

1937 BENTLEY 4½-litre Park Ward drophead coupe. Excellent. £495.

1949 AERO drophead coupe. Very smart car; 50 m.p.g. Engine, etc., like D.K.W. £195

1936 ALVIS Speed Twenty drophead coupe. £175.

1936 Mercedes-Benz drophead coupe. £165.

1933 LAGONDA 4½-litre tourer. Heater. £195.

1938 LAGONDA L.G.6 saloon. Bargain. £295.

1937 B.M.W. cabriolet. Excellent. £165.

Many other interesting cars always in stock.
OPEN AT WEEK-ENDS

Telephone: WOOLHAMPTON 505/6

10th DECEMBER, 1956

is the Publishing Date of the

1957

"MOTOR SPORT" RACING CAR REVIEW

by

DENIS JENKINSON

MOTOR SPORT'S

CONTINENTAL CORRESPONDENT

who knows more about the racing cars, drivers and backstage boys than any other correspondent.

He spends the whole of the Racing Season with the Grand Prix "circus," so this book is a **MUST** if you would be in the know.

Obtainable from your newsagent (Trade Agents: Messrs. Horace Marshall & Son, Ltd., Temple House, Tallis Street, E.C.4).

for 9s. 6d. copy

or direct from

"MOTOR SPORT," 15-17, CITY ROAD, E.C.1

Price 10s. post free



GATEHOUSE



MOTORS LTD.

1, HAMPSTEAD LANE, LONDON, N.6
MOUNTVIEW 4444-5-6

Have been selling Alvis cars for twenty-five years. An average of one hundred pounds spent on most vehicles before sale. **Guaranteed After Sales Service.**

LIST OF VEHICLES FOR SALE

1939 Alvis Speed/Twenty-five saloon, Charlesworth body in first-class condition	£325
1948 Alvis 14/75 saloon. Choice of two	£450
1949 Alvis 14/75 saloon. Black. Radio, heater. Immaculate	£525
1950 A.C. 2-litre 2-door saloon. Black. Choice of two	£495
1950 A.C. 2-litre 2-door saloon. Blue. Two owners. Radio. 28,000 miles	£525

Selection of 12/70 and Speed Twenties always in stock.

EXCHANGES

H.P. AND INSURANCES

H.P. TERMS ARRANGED

FOR SALE—continued

- £5 REWARD** for information leading to sale of 1937 Rover 14, exceptional condition, at £150 or near. Buying house, Tilbury, 589 Davidson Road, Croydon. [8205]
- VINTAGE 8.3 RENAULT**, 1927. Excellent mechanically, bodywork. Good tyres. Spares. Taxed, insured. Two owners only. Seen London, Brighton. £60 o.n.o. Lyon-Maris, 65, Preston Street, Brighton. [8206]
- RILEY NINE MONACO** Saloon, 1934. Aluminium body, preselector. Good all-round fettle, new battery, rewired, well shod. Seen Woking or Guildford area. £65 or haggle. Phone: Forest Green 239 evenings or write Oak Tree, Forest Green, near Dorking. [8207]
- M.G. 1½-LITRE V.A. D.H. Coupé**. Reconditioned engine, good tyres, brakes relined, good hood. £160. T. J. Fogarty, 12, Weirall Road, London, S.E.12. LEE 9439. [8208]
- JAGUAR "100" 2½-litre**, 1938. In excellent condition. Practically new all-weather equipment and new battery. £360 or reasonable offer. 77, Great Thrift, Petts Wood, Kent. Tel. Orpington 21247. [8209]
- BENTLEY 3-LITRE** 1926 Speed Model, Shark 2-eater. Slight engine adjustment required. £100. Offers wanted for BM1800 camshaft complete with tachometer drive. Other spares available. Glenney, HYDe Park 3879 business, Write 98, Woodside Road, N.22. [8210]
- FIAT 500 COUPE**, 1937. 40 m.p.g. in London, uses no oil. Since last October has had—reconditioned engine, clutch, carburettor, starter-motor, relined brakes and hydraulics renewed, reconditioned steering box; new Scintilla distributor, new hood and window fittings. £185. Phone Paynting, Epsom 5953. [8211]
- OUR RANGE OF MODIFICATION SERVICES** for the Austin/Ford Special builder. I.F.S. 3-4, £8; 3-9, £9; saloon or special. Lowering two rear springs, £1. Lowered suspension, complete, £3 10s. Lightening flywheel, 10s. Fitting new starter ring (post 33), £2. Machining cylinder head, 15s. Enlarged inlet valve conversion, £2 10s. Austin 7 d.v. springs, 12s. Ford-M.G. gearbox conversion, £6 10s. Carr. extra on all items. Your queries invited. Bowden Engineering Co., Ottery St. Mary, Devon. Tel. 391. [8212]
- A PARTLY-BUILT SPECIAL** designed for sports car racing is reluctantly offered for sale. Most of the essentials are available and the whole is ideally suited to the fitting of a fibreglass body. For full details, ring Riverside 2116 after 7 p.m. [8213]

DUFFLE COATS



Ideal for WINTER MOTORING

Showerproof Woollen Fabric. Cut in Admiralty style, with hood, two deep pockets, wooden toggles. Double thickness on shoulders and back. Warm and comfortable. **Navy or Black.** (State 2nd choice, Chest & Height Measurements.)

59/11

ALL-WOOL CAMEL SHADE 69/6

Post/Packing 2/-. C.O.D. 1/6 extra.

MONEY BACK GUARANTEE

*Phone orders accepted—ADY 3195. Callers welcomed.
MANUFACTURERS (MAIL ORDER) LTD.
(Dept. M.S.) 461, Roman Road, London, E.3

FOR SALE—continued

- A COMPLETELY REBUILT** Short Chassis 1100 c.c. Riley for sale. This car has given the advertiser endless joy competing in circuit racing but is fully equipped for fast driving on the roads. Offers around £250 to Riverside 2116 after 7 p.m. [8214]
- MORGAN 4/4 D.H.**, 1939, Ivory, Coventry Cl max. New batteries. Tyres, chrome, guts, body, good. 34 m.p.g. £185 o.n.o. Photo. Brandon, 322, Luton Road, Dunstable. [8215]
- AUSTIN HEAVY 12/4**, 1929. Complete chassis, dismantled, including unused reconditioned engine. £20 the lot. Hunter, Lotherton, Aberford, Leeds. [8216]
- RILEY NINE** Cylinder Block wanted urgently—8-web type; complete engine or car considered, buy (top price), or exchange 1 31/32in. crank, rods, etc. Box No. E219. [8219]

FOR SALE—continued

- MARENDAZ SPECIAL**, 1935 12/50. Broken prop. shaft, c.w.p. Otherwise sound. £45 o.n.o. Geldart, Langford House, Bristol. [8217]
- RILEY 12/4 FALCON**, 1936. Sound alloy body, good mechanical condition. £95. Dobinson, 30, Longwood Road, Rugby. [8218]
- SALMSON G.P.** Genuine Vintage, in daily use. Good condition, potent, very many spares. £120 o.n.o. Parker, Ivy Cottage, Walton-le-Dale, Preston. [8220]
- LOTUS VI**, 3,000 miles only since assembly from new parts throughout. 1172 Formula full Acquaplane equipment. Extremely well finished mechanically and externally. Uncrashed, unused competition, complete all-weather equipment. Definitely one of the best Mk. VIs on the road. Photographs available to genuine enquiries. £500. Tel. Rickmansworth Herts 4562. [8221]
- ROLLS ROYCE 20**, 1927. Cabriolet De Ville. New hood, tyres. Taxed for year. First class mechanical and bodily condition. £195. Apply Abbeydale Autos, 117, Wolseley Road, Sheffield 8. [8222]
- EX-WORKS TEAM CAR**, M.G. Magnette type N.E. Excellent original condition. Very fast, reliable. 35 m.p.g. Four new tyres. £290. Brown, Lochview Terrace, Gartcosh, Glasgow. [8223]
- FOR SALE: Austin Racing Transporter**. Extension in chassis. Fitted out regardless of cost. Work benches, air compressor. 240 volt lighting and power plant installed. Just completed two seasons attendance at race meetings. Original cost £2,000. £995. Apply Beverley Motors, Coombe Road, New Malden, Surrey. Malden 3232. [8176]
- 1954 LAGONDA 3-LITRE** Tickford saloon, duogrey, red upholstery. Wonderful condition. £1,650. London. Box No. E.177. [8177]
- A.B.C. MOTORCYCLE**, 1921, 4-speed, flat twin, spring frame, re-stoved and running perfectly, but not original wheels and brakes. £45, or will give £10 for original wheels. Tutt, Albany House, Weybridge. [8232]
- WOLSELEY HORNET SPECIAL**, 1934, in fair condition, fitted with very good Ford 8 engine and gearbox. £55. Also considerable stock of spares, including International Aston Martin cylinder head and man-folds, engine spares for 4½ Meadows, K-type M.G., Riley 9, etc., and a quantity of knock-on wheels, including a set of very good 16in. E.R.A. wheels; also special M.G. chassis complete. Cheap to clear. Chiltern Cars, 11a, Water Lane, Leighton Buzzard, Bedfordshire. Telephone: Leighton Buzzard 20 0. [8235]

Box No. Address: "Motor Sport," 15-17, City Road, London, E.C.1.

FOR SALE—continued

1921 WILTON 11.9 h.p. 2-seater open tourer. Very impressive appearance and in excellent condition throughout. £150. 52, Greyhound Hill, Hendon, N.W.4. SUN 2555. [7935]

1950: 3/4 BENTLEY. Over £200 spent on it during last three years. Rogers, The Hollies, Booton, nr. Reepham, Norfolk. [7936]

2-LITRE LAGONDA, 1931, speed tourer, extensively overhauled. Good weather equipment, tyres and battery. £165. Phone: Romford 5041. [7937]

ROVER 16 SPORTS Saloon, 1939. Overhauled and in excellent condition. Good tyres and battery. Brakes refined, new hardy spacer and shockers. £230. Phone: Romford 5041. [7937]

RILEY KESTREL bargain, 1935 12/4. Impressive cream coachwork, mechanically excellent. Accept £135 quickly. Details: Upminster 2978. [7938]

ALVIS SILVER EAGLE, 1932. Given a new Bendix spring this car would go. Present owner off to sea, has enjoyed many thousand miles carefree motoring. Engine quite sound. Renewed magneto 1956. Battery £10 new. 1955. Any offers. Box No. E.939. [7939]

M.G. "MAGNETTE" 4-seater tourer, 1934. Excellent mechanical condition. £115 o.n.o. Phone: Bicknell, Richmond 0010. [7940]

B.S.A. 3-WHEELER, 1932. V-Twin air-cooled. F.W.O. £35. Heaps, 95, Rectory Road, Worthing. [7941]

FORD 8 & 10 CHASSIS, both nearly comp. One log book. £30. 50, Temple Sheen Road, S.W.14. PRO 2814. [7942]

ALVIS 12/60 Saloon. Liners, new tyres, load of spares. £70 or offers. Daves, 39, Robins Court, Chisbrook Road, London, S.E.12. Eltham 7904. [7943]

RILEY 9, 1932, 4-seater tourer, good condition throughout. £65. Ashtead (Surrey) 3909 evenings. [7944]

1932 RILEY NINE. Starter motor £2. Magneto £2. Engine £5. Gearbox £3. Radiator £2. Back axle £4. Front axle, new king pins, £4. Heaps (literally) of other bits. Ashtead (Surrey) 3961. [7945]

LAGONDA 2-litre tourer, 1928. Splendid performance, beautiful condition, engine a show-piece. A bargain at £110. London area. Box No. E.946. [7946]

FRAZER-NASH T.T. Replica, Dec. 1935. Ex-Apne Meadows Brooklands engine, Martlets, new bearings, S.U.s, radiator, wheels, windscreen tonneau, etc. Chromed front axle with 14"n. Shelby brakes. £250. Exchange 3-4) Bentley preferred. Eversley 3117. 24, Barkham Ride, Wokingham. [7949]

M.G. T.A. GEARBOX, close ratio, complete with remote control, excellent condition. "Auto-sport" from No. 1 to present date. "Motor Sport" from 1949 to present issue. Offers, buyers collect. 5, Stoops Road, Bessacarr, Doncaster. [7952]

BRITISH SALMON, 1938, 12 h.p. Saloon, with quantity of spares. £100 o.n.o. 11a, Cumberland Road, London, W.3. ACO 7304. [7953]

A.40 SPORTS, 1953. Good condition. Available late October. Inspect and try by appointment in Surrey. Hate to sell, but going abroad. Haggle from £475. Box No. E.954. [7954]

1172 FORMULA CAR. Aquaplaned, two S.U.s, Lockwoods, i.f.s., etc. £165. 104, Hazelwood Lane, Abbo's Langley, Herts. [7956]

CITROEN LIGHT FIFTEEN Roadster, 1938, good overall condition. Reluctant seller quitting shores. £190. Box No. E.957. [7957]

LAGONDA 16/80, 1933, Saloon. Daily use, rough but worth attention. £45. Irvine, Dept. of Forestry, Oxford. [7958]

VINTAGE NER-A-CAR Motor Cycle, 1925. 350 cc. Blackburn. Astonishingly good condition. £30. Parker, Yewlands, Yewtree Lane, Wergs, Wolverhampton 51804. [7959]

FOR SALE—continued

1947 TRIUMPH Roadster 1800. Very good condition. Rad'io, spot lights, etc. McCowan, Tall Trees, Theddington, Rugby. (Lutterworth 322.) [7960]

RILEY LYNX-SPRITE, 1937. Excellent condition throughout. £200. Taxed December by Riley owner 25 years. Stewart, 11, Barnet Road, Sheffield 11. Sheffield 33340 after 6 p.m. [7961]

RILEY 1 1/2 LITRE ADELPHI Saloon, 1937. Pre-selector gear-box. Good condition. £175. Rendell, 24a, Kendrick Street, Stroud, Glos. [7962]

M.G. J2 GEARBOX, £5. R/control £1. Dynamo 30s. Starter 30s. "M" blocks £1. Heads £1. Other engine parts available. 11, Hall Road, Smallshaw, Ashton-under-Lyne, Lancs. [7963]

RILEY 9 GAMECOCK, 1932, 2-seater, twin S.U.s, 8:1 c.r., hydraulic front brakes, Marchal headlamps. £65 o.n.o. Taylor, Glebe Farm, Great Carlton, Louth, Lincs. Tel.: Withern 254. [7964]

BENTLEY 4 1/2 SPARES, 1929 chassis complete but practically stripped. Axles in place and could be towed. All parts very good. Also spare engine complete, less water pump. C box and various other bits. Harrison, 35, Sutton Road, Southend, Phone 68090. [7965]

VINTAGE BENTLEY DRUMS, ribbed, four steel, one all, approx. dimensions 15 1/2 in. x 2 in., 6 1/2 spigot hole, 10 bolt holes. Backplate, various shoes. Offers. Box No. E.967. [7967]

MORGAN 1935 O.H.V. w/c. J.A.P. New hood, seats, battery, carburettor, silencers. Repainted. Excellent tyres. £95. 28, Grange Road, Halesowen, Birmingham. [7968]

ANDRE-HARTFORD
SHOCK-ABSORBER REPAIRS, SPARES
AND NEW UNITS SUPPLIED

SORBER ACCESSORIES LTD.
16a, OSTEN MEWS, EMPERORS GATE,
SOUTH KENSINGTON, S.W.7.
Tel.: FRE 9323

AUSTIN SPECIAL COMPONENTS



Get your "Special" on the road QUICKLY with this neat ash and aluminium bodyshell. Weight 43 lb. 6' 3" and 6' 9" chassis models, £23.10.0

Ulster-type axle beams (exchange) ...	19/6
Steering wedges to rake column ...	14/6
Oversize inlet valve conversion, complete with new inlet valves ...	50/-
4-branch outside Ulster-type exhaust manifolds ...	59/6
4-branch "Banana" type, ditto ...	72/6

15-in. and 16-in. "Special" wheels, telescopic shockers, double valve springs, aluminium sheets, mouldings, Latex cushions, lamps etc. S.A.E. for list.
All Goods Carriage Extra.

"750" SPECIALS BOUGHT AND SOLD

SUPER ACCESSORIES, Weekdays 9-5
1, SOUTHLANDS RD., Sat./Sun. 9.30-1
BROMLEY, KENT RAV 1665

FOR SALE—continued

RILEY 9 SALOON. Runner, £25, or swap Moggy. Austin 7 engine, large crank. £54. 12in. Rotax headlamps, £2. 12v. Lucas dynamo. Box No. E.969. [7969]

M.G. J2. Red, spotlight, weather equip. Good condition. £120 o.n.o. Parker, 21, Woodlands Road, Hertford. [7970]

MORRIS COWLEY Coupé, 1929. Excellent running condition. Good brakes, steering, tyres. £60 o.n.o. Pope, Liss., Hants. [7971]

FORD 10 ENGINE, 1940, complete with dynamo, starter, carb., etc. Good condition. Offers. Maunder, 191, Rosebery Avenue, Yeovil, Som. [7972]

B.M.W. 319 ENGINE. Complete with electrics bored 326. Requires assembling. Numerous spares available. Consider disposing 319 cabriolet fitted 326 engine. Resprayed. New hood, hydraulic brakes, new Michelins. Sensible offers. Exchange? Box No. E.973. [7973]

RILEY, 1938 VICTOR Saloon. Excellent condition throughout. £200. Phone: Beaconsfield 657. [7974]

EX W.A. CUTHBERT Brooklands 500 mile race 2-seater Riley (4th, 1932), 1089 c.c., power plus supercharged, 2in. Laystall crank, chrome axle and steering assembly, little used and quite perfect. Equipped for occasional road use. Yew Tree Garage, Woodyates, Nr. Salisbury, Wilts. Handle 334. [7975]

ALLARD M2X d.h. coupé. Recent makers' overhaul. £275 o.n.o. Barratt, 27, Manor Road, Beckenham. [7976]

ATALANTA, 1951 (new) coachbuilt 4-seat tourer. Metallic grey. Ford Pilot engine and gear-box. 22 m.p.g., 90 m.p.h. Very low mileage. Excellent order throughout. Only available because business commitments restrict use. A bargain at £275. Marsh, 13, Dragon Street, Petersfield. Tel.: 151. [7977]

JAGUAR 2 1/2 LITRE, mechanically quite good. In daily use, but woodwork gone in body. To clear, £35 or break. Poyser, 6, Church Terrace, Warslow, Nr. Buxton, Hartington 276. [7978]

AUSTIN SEVEN, 2-seater, special, excellent condition. £75, offers. 3, Greenhill Avenue, Luton, Phone: Luton 1818. [7979]

FRAZER-NASH, 1952, Le Mans Replica, B.R.G. Bristol B.S.1 Mk.3 engine, giving 131 b.h.p. Fitted Michelin X tyres, two spares unused; spare crown wheel and pinion. Immaculate. 19,000 miles. £1,075. Any trial to genuine enquiries. Hugh Denton, Belmore Cottage, Wellborough Road, Rushden, Northants. Phone 2653 or 3156 (business). [7980]

ANTONY HYDE-EAST
International Insurance Broker

Has never been guilty of "catch-penny" advertising making extravagant promises impossible to fulfil. Motorists will find, however, that his facilities for quoting rates are invariably better than those firms offering something for (apparently) nothing.

All classes of Insurance
Personal Service in every instance

**8b WOOD STREET,
KINGSTON-ON-THAMES**
Kingston 8866 (3 lines)

SPORTS AND RACING **VINTAGE AND CONTEMPORARY**

S. H. RICHARDSON
Sports Car Enthusiasts

I am always interested in adding to my collection all types of vintage and contemporary sports and racing cars which are in first-class condition. Also any of the above which are suitable for reconditioning, rebuilding, or the salvage of spares.

Particular interest for all M.G. models and parts, i.e., engines, supercharger kits, conversion sets, etc., etc.

OFFERS INVITED FOR THE FOLLOWING

The ex-Evans M.G. Magnette. Rebuilt by Raymond Mays. One J2 and one PA. I have rebuilt the engine in each car.
The ex-D. C. Pitt Lester-M.G. Winning car '47 Empire Trophy. One TC, 1949, in very nice condition.

Exchange and cash adjustment either way on above.

"THE MEADS," 33, CHURCH ROAD, COWLEY, MIDDX - UXBRIDGE 2062 (ANY TIME)

FOR SALE—continued

RILEY FALCON, 1935. Reconditioned special series engine fitted last year, along with new springs, brake linings and transmission overhaul. Bodywork fair and receiving face lift. £75. Inspect, Prescot, Lancs, or London. Box No. E.981. [7981]

MORGAN PLUS FOUR, 4-seater, Vanguard engine, 1951, with modified steering, suspension and radiator shell fitted 1953. Blue/red. Excellent condition. £390. Box No. E.982. [7982]

M.G., F MAGNA Series, blocks, heads, cranks, axles. Centric blower and all fittings suitable 1500 c.c. Cheap. Write, Moss, 54, Acerington Road, Blackburn, Lancs. [7983]

SINGER LE MANS, 1934. New crownwheel and pinion, chassis, springs, valve gear, saloon doors, etc. Toms, 21, Glover Street, Redditch, Worcs. [7984]

1946 T.C. M.G. Recon. engine, clutch, king pins, steering. Brakes relined. Aluminum dash, luggage grid, Windtones, reverse light, spot, flashers. £385. Flucker, 30, Curtis Road, Hornchurch. Phone: Hornchurch 4298. [7985]

£250 O.N.O. 1934 ASTON MARTIN Le Mans, completely overhauled at cost of £240. Cole, 32, Wickham Road, Beckenham. BECKENHAM 6120. [7986]

1172 SPECIAL. Austin Seven chassis strengthened. Ballamy I.L.S. Good tyres and hood. £150. Martin, Flat 3, 65, Widmore Road, Bromley. RAV 8150. [7987]

1947 J.A.6 V.8 SPECIAL, 2-seater. Cheap. Stuart, 12, Homestead Road, Basingstoke, Hants. [7988]

WOLSELEY HORNET SPECIAL. All in very good order. £75. Phone: Winchester 4746. [7989]

MAGNETTE, Lagonda, Morris 8 Tourers, 38 Salomon D.H. £95, 39 Ford 8 Special £135, 38 Alvis 14 Tourer £175, 38 Riley Victor, manual box, immac., £225, 47 Volkswagen R.H.D. £325, Several Javelins from £350, 50 Lea Francis, 50 Citroen £350, 49 M.G. T.C. £365, 52 Simca £435, 51 Mk.V Jag., all extras, £495. Part exchange, hire purchase, sports cars bought for cash. Open every day inc. Sunday until 8. M. E. Motors, High Street, Berkhamsted. Phone: 823. [7990]

1939 MORGAN 4/4 2-seater coupé, Green. Well shod. £220 o.n.o. Dawson, 11, Park Crescent, Abingdon. Phone 268. [7991]

RILEY NINE LYNX, 1933. Four door. Black body, red wheels. All these new: P.V.C. hood, upholstery, batteries, exhaust system, twin S.U.s. Mechanics completely overhauled. Engine polished and painted red and black, exhibition job. Three new spare tyres. Genuinely excellent throughout. Taxed, insured till December. £130 o.n.o. 185, Tentelow Lane, Southall, Middx. [7992]

TALBOT
JOHN BLAND
 27, Southfields Road, S.W.18
 Tel.: Vandyke 1612
 REPAIR AND SPARES SPECIALIST
 Offers the following Talbots:

1935 "105" Airline saloon. Very clean. £150.
1934 Model 110 Airline saloon. Requires recellulosing, but very good mechanically. £75.
1937 3½-litre saloon. Requires attention. £40.
 Spares Service on all pre-war Talbot models except side valve 20.9-h.p.

FOR SALE—continued

M.G. P.A. Black, engine rebuilt, new battery, new hood, re-upholstered grey, instruction book. Excellent example. £200 o.n.o. Week-ends only. Hyde, 46, Denbigh Street, Victoria, S.W.1. [7993]

ASTON MARTIN LE MANS 2-seater, 1933, fitted V.8 engine and gearbox. New batteries, new hood and tonneau, re-upholstered, re-chromed, re everything. Just had decoke, valve grind, and Crypton tune. This is one pre-war Aston which does accelerate and gives 23 m.p.g. £240. Cameron, 172, Longdale Lane, Newstead Abbey Gates, Notts. [7994]

1933 4-SEATER M.G., 1951 Vanguard engine. Bright red. £125 or near offer. PAD 3786 evenings. [7995]

AUSTIN SWALLOW. Immaculate. Gadget-laden. £85, haggle, exchange? Austin spares, tyres, cheap. 1935 Ariel combination. £15. Barnes, Gorseglade, Common, Penn, Bucks. [7996]

M.G. P.B. 2-seater. Recent spray, trim, overhaul, hood, battery, tyres. Well above average. Good looks, performance, economy. £195 o.n.o. Phone Bexleyheath 4510, 4.30-6.30. [7997]

1936 RILEY KESTREL SPRITE. Recent engine and gearbox overhaul, good tyres and battery. Interior shabby. £145. Balcombe, Uplands 6349. [7998]

ALLARD DROPHEAD, 1948/9, column change, seat covers, washers, blinkers. Well shod. £185, 2, Woodlands Drive, Knutsford, Cheshire. [7999]

FOR SALE—continued

1925 ROLLS 20 Saloon. Vintage condition. £120 or any offer. Redfern, 35, Worthing Road, Horsham. [8000]

A.C., 1925, 4-cyl. 2-seater. Recent complete rebuild including rebore, crankgrind, relined brakes, all new gears. Excellent coachwork, good tyres. £95 o.n.o. Robson, 11, St. Michael's Street, Oxford. [8001]

RILEY IMP SPECIAL, fibreglass body, hydraulic shock absorbers, E.N.V. pre-selector gearbox. £200 o.n.o. Riley 9 engine and gearbox, good condition. £20. Telephone: Kings Langley (Herts) 2343. [8002]

ALVIS F.W.D. 12/75, blown, new valves, guides, brake linings. Minor attention required on gearbox. Seen Midlands. Cheap for quick sale. Box No. E.003. [8003]

ALFA ROMEOs, 1939. 2.9 litre supercharged eight cylinder, all independently sprung, Superleggera 2-seater in excellent condition. 10,500 kilometres only. £1,400. 1934 1750 Zagato 2-seater fitted with 2.3 litre six cylinder unsupercharged triple Weber carburetted engine and matching gearbox, which have covered under 20,000 kilometres. Immaculate in all details and finish. £400. Box No. E.004. [8004]

CROSSLEY SPORTS Saloon, 1935, 13 h.p. 6-cylinder Climax, 26 m.p.g. Wilson box. Exceptional appearance. Two new tyresoles, headlining, re-spray. £110 o.n.o. Graves, 160, King's Road, Harrow, Middlesex. Elgar 7641, Ex. 12. [8005]

BLOWN 25 H.P. LAMMAS GRAHAM. New hood, repaint, very good condition throughout. All tyres good. 21 m.p.g. at 65. Nearest £100 secures. 150, Saxon Drive, W.3. [8006]

1930 ROLLS-ROYCE 20/25 Weymann Saloon. Excellent order throughout. History known. £265. Also 1938 Siddeley Special engine. Sound condition. 51,000 miles only. £30. Gillingham, Werrington Hall, Peterborough. [8007]

CITROEN BODY, L.15, including trim, doors, seats, tank, silencer, glass. Fair condition. £35 o.n.o. Tooley, Cuddington, Bucks. [8008]

JAGUAR XK.120, 1951, 2-seater. Ivory with red and fawn trim. Beautiful condition for year, unmodified, unraced. Terms and exchanges. Motomiles, 1143, Ringwood Road, Bear Cross, Bournemouth, Hants. Northbourne 567. [8019]

M.G. MAGNETTE, 1935, 4-seater. Runs very well, noisy bevel gear, good hood and curtains. Does need little bodywork trim up. £60. Terms and exchanges. Motomiles, 1143 Ringwood Road, Bear Cross, Bournemouth, Hants. Northbourne 567. [8020]

1939 CITROEN Light 15, good condition. Windtones, Notek, reverser. Must sell, emigrating December. £125. 215, Colne Road, Burnley, Lancs. [8021]

CRANK, Head, Box, for Singer Le Mans. Williams, 4, Rutland Crescent, Luton. [8022]

M.G. T.A. £265. Recon. eng., back axle, steering. Respray. £200 has been spent on this car in the past year. Callers after 7 p.m. 23, Harcourt Avenue, Manor Park, E.12. [8023]

ALVIS 12/70 Firebird Saloon, 1938. Grey. Heater, loose covers. £150. Dodgson, Woodgreen, Hants. [8024]

MERCEDES BENZ, 1935. K type 500 coupé. Cream and red. Excellent cond. Reconditioned engine by Laystall and complete rowire. £275. Albert E. Chatfield (Crewe), Ltd., 41, Hightown, Crewe. Phone: 4381. [8025]

THE INCREDIBLE SPEED of this car resulted in the owner taking second best in a dispute with the police, making him a pedestrian for two years! Therefore, forced sale of 1951 Allard coupé, 17,000 miles new engine, immaculate condition, leopard-skin upholstery and four new tyres. New Motorola wireless, two demisters, fog light and flame thrower. £395. Please apply: J. E. Chisnell, Leigh Hill Farm, Cobham, Surrey. Telephone: Cobham 2241. [8026]

Continental TYRES

Original equipment on Volkswagen and Mercedes

5.20 x 13	£4 7 3	Dispatched	5.60 x 15	£5 13 0
5.60 x 13	£5 0 9	by return	5.00 x 16	£5 1 6
5.90 x 13	£5 7 6	Carriage free	5.25 x 16	£5 8 1
5.00 x 14	£4 19 9	Cash with order	6.00 x 16	£7 10 6
5.50 x 15	£6 3 4		4.50 x 17	£4 14 9

Other sizes available. Further details from:
ARSENAL GARAGE LTD., 2 CHESTER CLOSE, CHESTER STREET, S.W.1 SLOane 8943

The Sports Car Garage
COLIN CAMPBELL MOTORS LIMITED
PLECKGATE, BLACKBURN
 Phone: Blackburn 48321

CRYPTON TEST-TUNE STATION

*Is your Pierce Arrow getting blunted?
 And is your Auburn going grey?
 Why was your Locomobile* shunted?
 Why does your Star not shine by day?*

**We are specialists in engine tuning.
 Why not see us about your particular
 problem? Perhaps we can help.**

* No, we've never tuned a Locomobile, but you could try increasing the boiler pressure—and your insurance cover!

● RILEY SPECIALISTS ● RILEY SPECIALISTS ● RILEY SPECIALISTS ● RILEY SPECIALISTS ● RILEY SPECIALISTS ●

1936 Kestrel 1½-litre saloon. The very attractive six light model in light grey with blue upholstery. Tyres are almost unused, there are twin fog lamps and horns fitted, and the whole car bears every sign of a careful owner. £265.

1932 Gamecock 9-h.p. 2-seater sports. Red with green interior. Single S.U. carburettor, coil ignition, and manual gearbox. The carpets, hood and sidescreens are virtually new, and it is a smart little car. Two spotlamps and reversing light. £155.

1936 Adelphi 1½-litre saloon in dark green. We are overhauling the engine ourselves and the interior is very clean and original. There is a K.L. heater for the winter, two wing mirrors and a spotlamp, etc. This is the roomiest of all the Riley models and very soothing to drive. £195.

GORDON & GLYNN
THE RILEY CENTRE

★ We deal exclusively in pre-war Rileys, and we are always interested in purchasing really good examples of this make.

★ We can also offer a specialised repair service for pre-war Rileys. We shall be pleased to give you an estimate.

**OPEN EVERY WEEKDAY 9.30 a.m. to 6 p.m.
 SATURDAYS until 1p.m.**

A Kestrel Sprite sports saloon in fabulous condition. A pity that you didn't see it before, since it is almost bound to be sold by now. Give us a ring on the off chance however. Built in 1936 and from all appearances only the driver's seat has ever been sat in. The exterior is unmarked and presents a sleek expanse of gleaming black cellulose and glittering chromium. The engine was overhauled at a cost of £120 only 10,000 miles ago and the performance is exciting. A faultless car which we cannot possibly sell at less than £325.

1934 Kestrel 9-h.p. saloon. Lively, and in very good condition but overshadowed by its bigger brother. £155.

1931 Monaco 9-h.p. saloon. Fabric body in good state of preservation and a very pleasant engine. Manual gearbox. Heater. £95.

79, CADOGAN LANE, SLOANE STREET, LONDON, S.W.1 ● Telephone: SLO 8326
 (2 mins. from Sloane Square Tube Station)

MEMBERS
OF M.A.A.

Performance Cars Limited

MEMBERS
OF B.M.T.A.

Official M.G., Morris, Riley and Wolseley Agents

Official Renault Distributors

Over 150 Guaranteed Cars in Stock

NEW CARS IN STOCK

M.G. MGA, white, with red upholstery and black hood	£961	Riley Pathfinder, overdrive, cedar green	£1,475
M.G. Magnette, maroon, with biscuit upholstery	£1,040	Fiat 600 saloon, blue, 65 m.p.h., 50 m.p.g.	£620
Renault Dauphine, imperial red	£769		

A SELECTION FROM OUR STOCK OF SPORTS CARS, SALOONS AND COUPES

1953 Allard Palm Beach, low mileage, red	£425	1948 M.G. TC. Choice of two	From £355
1950 Allard 91P saloon, heater, black	£295	1946/7 M.G. TC. Choice of four	From £295
1948 Allard 81M drophead foursome, grey	£265	1939 M.G. TA. Choice of two	From £265
1948 Allard 61L 4-seater tourer, red	£265	1937/8 M.G. TA. Choice of four	From £215
1948 Allard 71K 2-seater sports, red, spotlights	£275	1935 M.G. PA. Choice of three	From £145
1954 A.C. Ace, red, many extras	£815	1935/6 M.G. PB. Choice of two	From £115
1947 Alvis TA 14-h.p. saloon, grey	£355	1937/9 M.G. VA tourers, coupes and saloons. Four	From £195
1938 Alvis 12/70 saloon, heater, green	£145	1936/9 M.G. SA 2-litre saloons and coupes. Two	From £175
1935 Alvis 4.3-litre saloon, black	£195		
1932 Alfa-Romeo 17/50 drophead foursome, grey	£215	1949 Riley 2½-litre roadster, red, immaculate	£445
1939 Atalanta V12 fixed-head coupe, black	£295	1949 Riley 2½-litre saloon, maroon	£365
1950 Aston Martin DB2, radio, heater	£795	1946 Riley 1½-litre saloon, black	£325
1932 Aston Martin 11.9 International, red	£325	1935 Riley Lynx tourer, cream, full tonneau	£215
1932 Aston Martin 11.9 International, recon. unit	£175	1936 Riley Lynx tourer, black, full tonneau	£175
1937 Aston Martin 2-litre saloon, red	£245	1939 Railton saloon, 21-h.p. "Cobham," black	£195
1955 Austin-Healey 100, 9,000 miles, many extras	£765	1939 Rover saloon, 14 h.p., heater, green	£145
1954 Austin-Healey 100, ice blue, radio, heater	£645	1933 Rolls-Royce 20/25 limousine, black	£125
1951 Austin A90 Atlantic drophead coupe, radio	£345	1929 Rolls-Royce Twenty owner-driver saloon, black	£95
1951 Austin A40 sports, blue, radio	£365	1932 Rolls-Royce Twenty-five saloon, black	£225
1937 Austin Norfolk 7-seater saloon	£165	1932 Rolls-Royce Phantom II limousine, black	£485
		1955 Standard Ten saloon, heater, blue	£195
1928 Bentley 4½-litre tourer. Specimen	£345	1939 Singer Nine roadster, black	£95
1929 Bentley Speed Six saloon, black and ivory	£295	1937 Singer Nine sports saloon, silver grey	£795
1935 Bentley 3½-litre Park Ward drophead coupe	£345	1954 Sunbeam Alpine supercharged coupe, grey	£795
1949 Bristol 400 2-litre saloon, heater, black	£675	1954 Sunbeam Alpine coupe, radio, red	£765
1949 Citroen Light Fifteen de luxe saloon, black	£295		
1939 Citroen Fifteen 2/3-seater coupe, black	£145	1948 Triumph 1,800 roadster. Absolutely immaculate	£375
1954 C.S.M.-Ford 1,100-c.c. 2-seater, sports/racing	£395	1951 Triumph Renown saloon, radio, heater	£375
1951 Cooper-M.G. 2-seater sports/racing, ex-Reece	£395	1954 Triumph TR2, green, full tonneau, heater, etc.	£595
		1955 Triumph TR2, white, one owner, low mileage	£665
1954 Dellow sports 2-seater	£380	1955 Triumph TR2, green, full tonneau, heater, extras	£685
1938 Delahaye 27-h.p. sports saloon, black	£225	1955 Triumph TR2, red, one owner, low mileage, full tonneau	£695
1935 Delage D8/100 2-seater coupe, blue/cream	£150	1955 Triumph TR2, white, one owner, 11,000 miles, heater	£695
		1955 Triumph TR2, red, one owner, heater, tonneau	£745
1954 Ford Zephyr convertible, radio, heater	£565	1955 Triumph TR2, blue/white, o/drive, one owner, every extra	£755
1954 Ford Anglia, blue, heater	£455	1955 Triumph TR2, ex-works car, o/drive, wire wheels, etc.	£765
1951 Ford Pilot saloon, two owners. Black	£255		
1952 Frazer-Nash Le Mans Replica (£900 bills)	£995	1939 Vauxhall Fourteen saloon, heater, black	£175
1939 Frazer-Nash-B.M.W. 328, specimen	£395	1953 Volkswagen de luxe saloon, metallic blue	£455
1948 Fiat 1,100 sports saloon, beige/green	£355	1952 Wolseley 6/80 saloon, one owner	£395
1952 Hillman Minx saloon, green, heater	£365		
1951 Humber Super Snipe, radio, beige	£335		
1950 Healey Silverstone 2-seater, red	£455		
1953 Jaguar XK120C, chassis No. 49, Weber carburettors, Weslake head. Very low mileage	£1,395		
1953 Jaguar XK120 fixed-head coupe, one owner. Black	£795		
1952 Jaguar XK120, blue, radio, heater, low mileage	£645		
1953 Jaguar Mk. VII, maroon, heater	£645		
1951 Jaguar Mk. V saloon, radio, heater, black	£475		
1948 Jaguar 2½-litre drophead coupe, grey	£345		
1946 Jaguar 3½-litre saloon, radio, heater	£225		
1939 Jaguar 3½-litre drophead foursome, heater, black	£165		
1938 Jaguar 1½-litre drophead foursome, grey	£175		
1938 Jaguar S.S.100 3½-litre, white, very fast	£295		
1937 Jaguar S.S.100 2½-litre, white, fitted with extras	£245		
1953 Jowett Jupiter 2-seater sports, heater, green	£525		
1949 Lea-Francis saloon, radio. Specimen	£315		
1954 Lotus Mk. VI 1,172-c.c. 2-seater, green	£345		
1937 Lancia Aprilia Eagle drophead, maroon	£255		
1939 Lagonda V12 drophead coupe, red. Specimen	£495		
1936 Mercedes-Benz 500K cabriolet, cream	£295		
1952 Morris Minor saloon, immaculate condition	£395		
1938 Morris Eight tourer, black. Excellent condition	£115		
1956 M.G. MGA, red, one owner, 4,000 miles. Many extras	£895		
1954 M.G. TF, red, full tonneau, low mileage	£595		
1954 M.G. TF, cream, full tonneau, spotlights, etc.	£625		
1953 M.G. TD, red, heater, full tonneau	£475		
1952 M.G. TD, blue, tuned Stage II, many extras	£445		
1952 M.G. TD, green, one owner, heater	£425		
1950 M.G. TD, black, full tonneau, heater	£395		
1949 M.G. Y-type, reconditioned engine. Specimen	£345		
1949 M.G. Y-type tourer, black	£395		
1949 M.G. TC, ivory, full tonneau, excellent	£385		
1949 M.G. TC. Choice of another two	From £375		

BIG CLEAROUT!

TO MAKE ROOM FOR NUFFIELD AND RENAULT SPARES AND ALSO DUE TO IMMINENT REBUILDING; WE OFFER TO CALLERS ONLY (PLEASE DO NOT WRITE):

Four Turner/Tojeiro elektron 16-in. wheels, Alfa drums, with back-plates and brakes, etc. £25. (Cost £130.) ¼-ton Lagonda 4½-litre spares, £5. Ford V8 engines, running, £5 each. Eight Morris Ten series "M" o.h.v. engines, complete, suitable TA, TC, etc., £16 each. Reconditioned Stuart-Turner engines, singles £15, twins £24. 400 13-ft. span tubular roof trusses (four needed for a 13 ft. by 18 ft. garage), £2 each. 800 12-gallon Bedford petrol tanks, new, 17s. 6d. each. Good used Dunlop racing tyres, from £2 each. Serviceable car radios from £5. Twin carb. Allard manifold, £2. Two 3-litre Bentley S.U. slopers, £2. Three-speed automatic feed 1-in. pillar drill, £15. Cast iron surface table, 3 ft. by 6 ft., weight 1 ton, £20. Other items too numerous to mention.

AGAIN—PLEASE DO NOT WRITE

CARS URGENTLY WANTED FOR CASH

PLEASE WRITE FOR DESCRIPTIVE LIST

GREAT WEST ROAD, BRENTFORD, MIDDLESEX. Tel.: EALing 8841

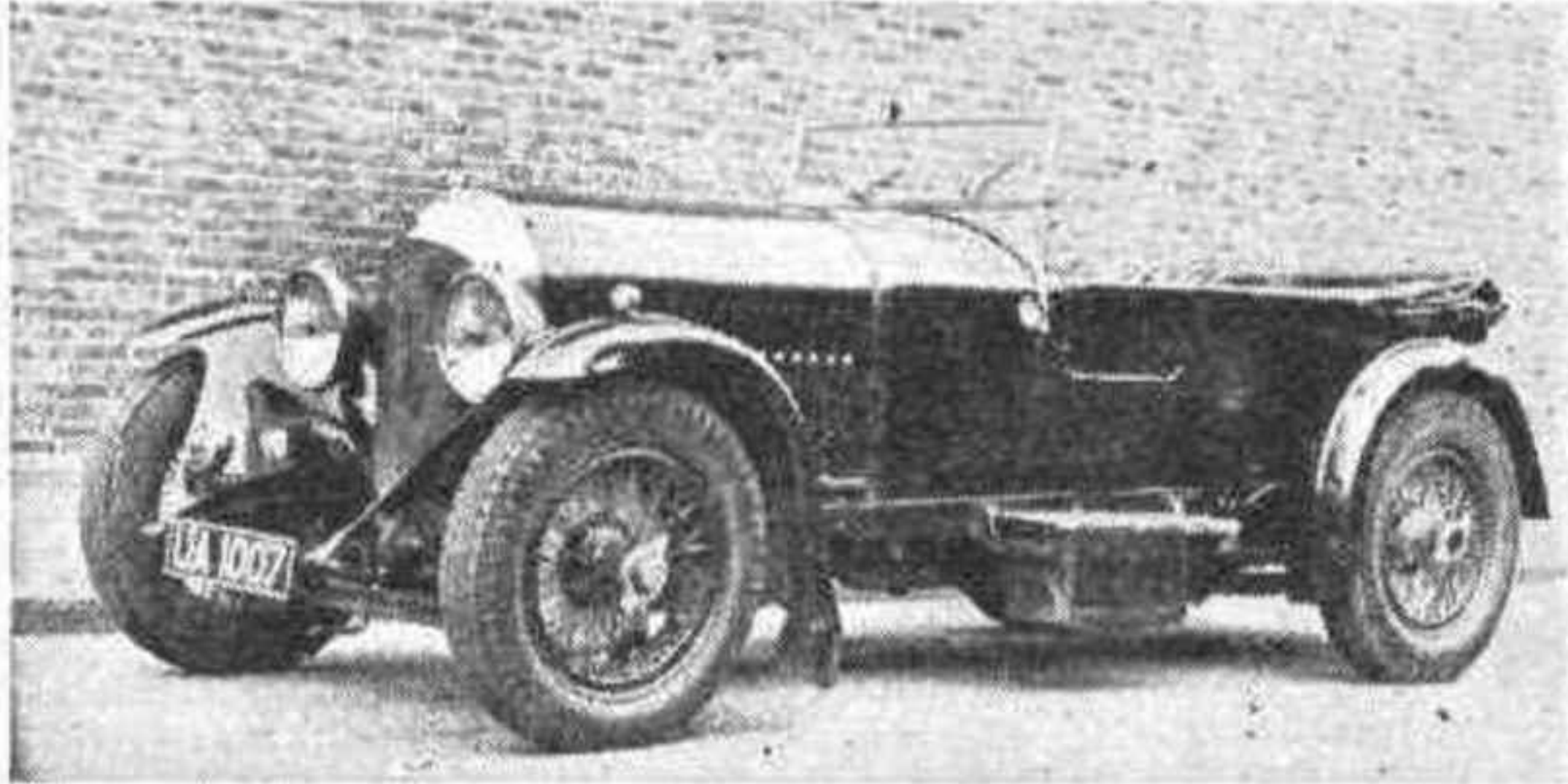
3 minutes from Northfields Tube Station (Piccadilly or District Line). Buses Nos. 97 and 91 and Green Line pass our door

A U T O M O L T D.

229, WEST END LANE,
LONDON, N.W.6

HAMPstead 3430 (Nr. West Hamp. Stn.)

A selection from our fast-moving stock . . .



1927 BENTLEY R.L. SPEED MODEL Vanden Plas 4-seater body in original condition, radiator stoneguards, A-type gearbox, fold-flat screen, full new all-weather equipment, spare wheel at rear. £265

1929 BENTLEY short chassis 3-litre d.h. coupe in unbelievably fine condition, lovely chrome radiator, built in stoneguard, leather interior, and a fine condition hood. £250

1934 M.G. PA MIDGET 2-seater sports, in sound body condition, and a very recent overhaul to both engine and steering which cost over £65, makes this a most interesting car for the impecunious. £135

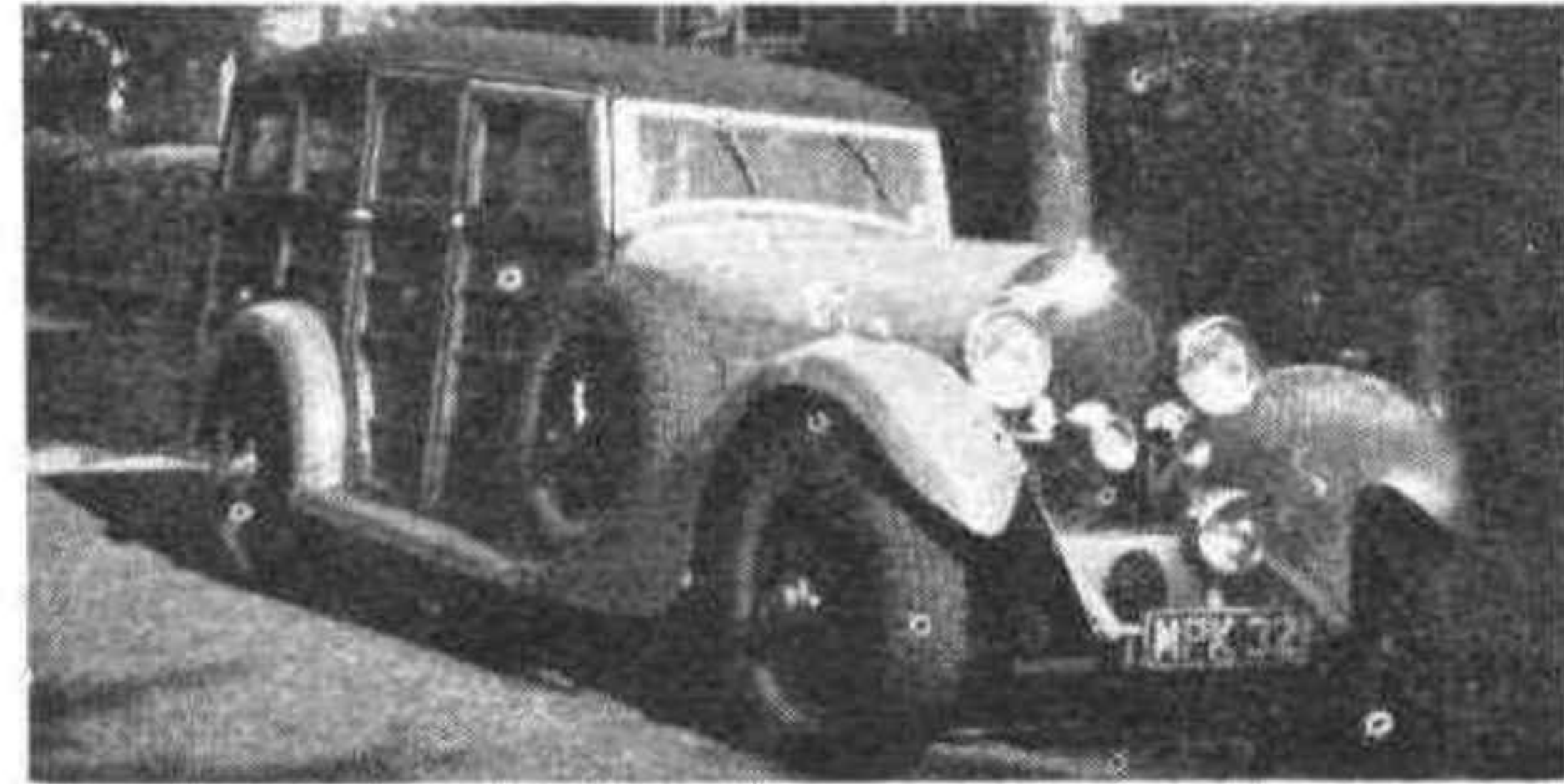
1953 M.G. TD in concours condition right throughout, finished in green and fitted with a radio, luggage rack, loose covers, twin fog and reverse lights. This car represents excellent value at £525

1936 SINGER 11-h.p. 4-door saloon, fairly low mileage for its year, the bodywork is in exceedingly nice condition, finished in blue and black, with almost unmarked blue leather interior. £95

1950 M.G. 1½-litre Y-type open 4-seater with 2 doors, black with red leather interior. This is one of the rare open Y models, and has had quite a recent top overhaul, new exhaust valves and gearbox just fitted. A very pretty car at the right price. £445

1937 ALVIS SPEED TWENTY-FIVE d.h. coupé by Charlesworth, finished in black with brown leather interior, almost new hood and tyres. £175

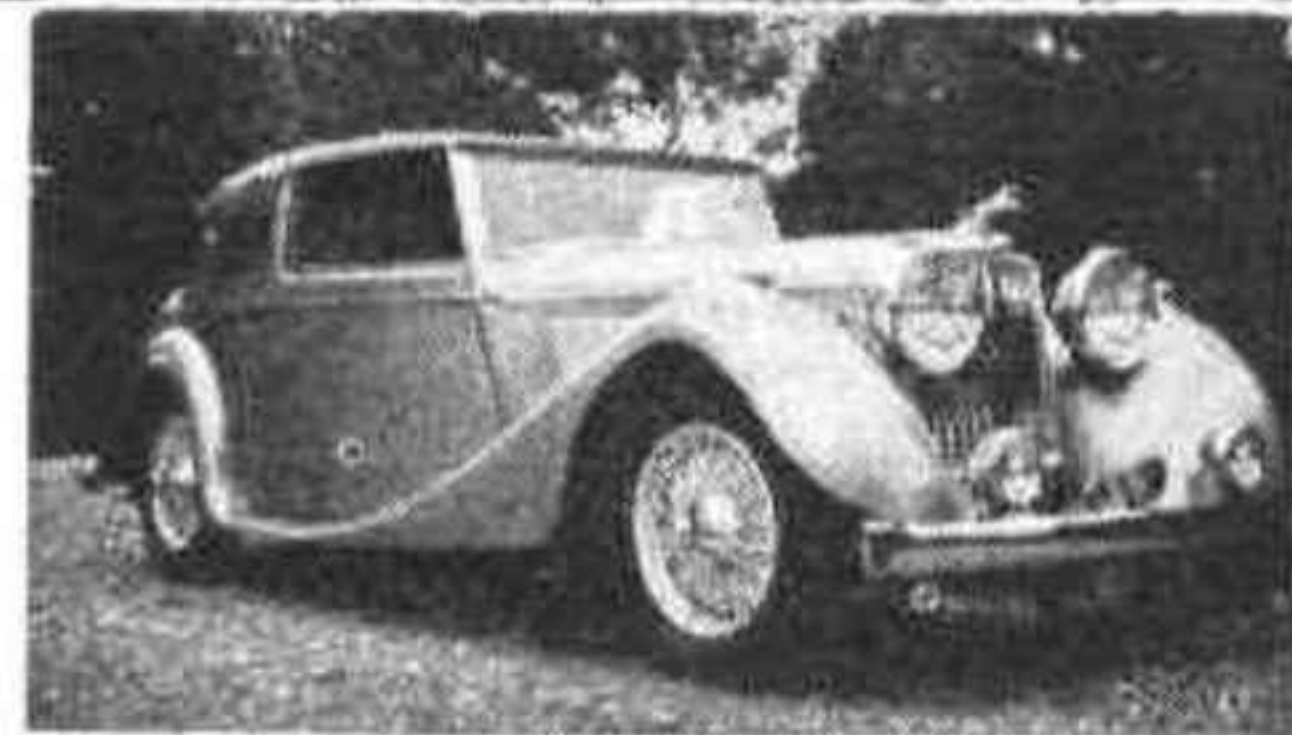
1937 DAIMLER sportsman's saloon, 26 h.p., in far above average condition (see previous copies of MOTOR SPORT), a genuine and utterly reliable car in first rate order throughout. £195



1925 BENTLEY 3-LITRE, fitted with a professionally-built oak panelled estate car body in 1948 which will seat 6 in comfort, fold-flat rear seats to accommodate luggage, etc. This extremely useful and attractive car combines with the usual Bentley virtues, excellent chrome radiator, lamps, twin windtones, spotlight, 19 in. wheels, etc. This vehicle must be seen to be appreciated at the attractive price of £255.

By the time this advert. appears we shall probably have in stock the following cars, so 'phone for further details: 1933 Rolls-Royce 20/25, Bentley R.L. Speed Model, A.C. 16/90, Alvis Speed Twenty saloon, Lagonda 16/80 tourer.

WE ARE, OF COURSE, ABLE TO OFFER H.P. TERMS ON ALL CARS AS WELL AS EXCELLENT AND VERY REASONABLE INSURANCE COVER WITH FIRST CLASS COMPANIES.



£ 250

1938 2½ JAGUAR, grey/red. Fitted Servais dual exhaust, new tyres, heater, washers, rad. blind, oil-coil, etc. Nothing has been spared in maintaining this car, which is in superb condition. Cheaper pre-war Jaguars can be found, but none better than this.

ELLIS,
"SAXONBURY," LEWES, SUSSEX

BRADDEX

CHLORO-JET EXTINGUISHER



MODEL
T.50
39/6
Complete

BRADDEX Extinguishers, filled with the latest aircraft fire-fighting gas—CHLOROBROMO-METHANE—deal immediately with any fire—petrol, electrical, oil, etc. Chrome plate on solid brass. Size 5½" long by 1½" diameter.

Ask your garage or accessory dealer for a BRADDEX today.

DOUBLE CAPACITY
MODEL T.54-55/-
Write for illustrated leaflet to:—

BRADVILLE TRADING CO. LTD.
6 Stratton St., London, W.1 Tel.: GROsvenor 7807/8
Available through all leading wholesalers.

THE SPORTING MOTORIST'S AGENCY

—A Unique Service
for the Enthusiast

Racing, sports and character cars supplied at home and abroad. We can sell your car for a small fee. Send for particulars of other services, which include shipping, car delivery, inspection, insurance, hire-purchase, etc. We conduct a Postal Tuning Service and can arrange any modifications or repairs at exceptionally low cost. Spare parts can be quickly supplied for most makes of car—Try us for your wants.

Sole suppliers of the DANTE range of speed equipment, at present available only to 750 Special Builders, but shortly in production for other makes.

Soon to become available—DANTE Competition Cars—look for announcement.

Whatever the problem,

CONSULT THE S.M.A. FIRST

76b, AMHURST PARK, LONDON, N.16
STAmford Hill 3271
Box 333, Ann Arbor, Michigan, U.S.A.

FOR SALE—continued

1954 T.R.2. 30,000 miles. First class condition. £580. Box No. E.236. [8236

WOLSELEY HORNET SPECIAL, 1933, sound, original, but stored 4½ years. £25. S.A.E. 25, Woodlands Avenue, Harrogate. [8237

ROVER SPEED PILOT, 1933, Sports Saloon. Two owners. Reconditioned throughout; new tyres. Car for the enthusiast. Ring Oldham MAI 3086. [8238

1937 MORRIS SUPER SIX Cab, excellent condition. £45. H. Nutt & Son, Station Road Garage, East Grinstead. Phone: 12. [8239

M.G. MAGNA "F." Red; well shod; engine, body good; several parts almost new. £60. Box No. E.240. [8240

A.C. D/H, 1937. Mechanically sound; good body and hood. No snags, but needs tidying, hence only £75. 9, Sea View Gardens, Roker, Sunderland. [8241

B.S.A. SCOUT, Series 5, 1938, Red, 2-seater. Good condition, £130 o.n.o. Thwaites, 15, Lodge Road, Bedhampton, Havant, Hants. Hayant 1301. [8242

PARAMOUNT CHASSIS AND SPARES. Barton Townley, Ltd., Lancaster, have purchased complete stock. Chassis kits available to builders of Specials. Attractive prices. Inspection invited. [8243

FOR SALE—continued

AUSTIN HEAVY 12/4, 1931. Exceptional condition. Tickford body. Faultless chassis. £50. Box No. E.244. [8244

MULLINER DROP-HEAD ALVIS Speed Twenty. P.100 headlamps. Excellent throughout. Photos. £145. 161, West End Road, Bitterne, Southampton. [8245

1936 FRASER-NASH-B.M.W., Type 45, saloon. Nearest £55. 46, Henlow Road, Birmingham 14. [8246

RILEYS—MUST SELL ONE. 1933 Monaco, scound metal body and fabric top, good mechanics, batteries, tyres; 35 m.p.g., negligible oil; £60. 1936 Adelphi, perfect body, exterior and interior, and mechanically, but tyres 75% worn; £120. Briggs, 38, Bell Mount View, Leeds 13. [8247

RILEY NINE CHASSIS, complete, engine, transmission, suspension, wheels, etc. Ideal basis alloy/fibreglass special. Offers lot or separate. Seen Sussex. Box No. E.248. [8248

1939 2.6 LITRE M.G. Tickford Salomon Coupé. Engine overhauled, rewired, body good, paint fair. Pye radio. £170 o.n.o. 43, Grays Road, Stockton-on-Tees. [8251

"MOTORS." "Autocars." "Light Cars." 1,000. Reasonable. Carey, Hewell Kennels, Redditch, Worcs. [8250

Box No. Address: "Motor Sport," 15-17, City Road, London, E.C.1.

FOR SALE—continued

"MOTOR SPORT," bound copies, Vols. 3, 4 & 6; 1926-1930. Offers. Box No. E.249. [8249

LANCIA LAMBDA, 5th series. Three unused remoulds. Four new big ends. Body rather tatty. £30 o.n.o. P. J. A. Evans, Highfield Avenue, Sale, Cheshire. [8252

LEA-FRANCIS 12/40, 1929, 2-3-seater. Excellent, as original condition. Known history. Recent engine overhaul. Nearest £95. Jackson, 18, Milton Road, Cheltenham, Glos. [8253

PACKARD SPORTS COUPE, 1936. Engine, tyres, hood, bodywork in excellent condition. Modern appearance. £150. Reeves, 5 High Street, Neston Wirral, Ches. [8254

FOR SALE—continued

M.G. T.A., 1938. Very good cond. Lon. Windtones, oversize rears, excellent tyres, reconditioned engine 3,000 mles, screenjets, twin spots, tele-draulics, other extras. Taxed, insured. £250 o.n.o. Silk, 8, Earlsthorpe Road, London, S.E.26, SYD 6759. [8255]

LAGONDA 2 Litre, 1928. Mechanically excellent, good hood, tyres, coachwork. As a point of interest has just been used in Grade A British film. £100 o.n.o. To enthusiast only. J. G. Fisher-White, 16, Upper Addison Gardens, London, W.14. [8256]

SINGER LE MANS 9 Speed 2-seater. Mint condition. Rebuilt 1955. Insurance company assessed value £450. Will accept £275 o.n.o. WORDSWORTH 6608. [8257]

1954 T.F. M.G., 2-seater. Excellent condition. Extras. £585 or £292 10s. deposit. Part exchange. Stage II Head for T.C., T.D., T.F. Sodium Valves. Cost £60, accept £30. Kennedy, 7, Hillborough Road, Luton 4216. [8258]

LAGONDA D.H.C., 16-80 S, type, 1934. Recent engine recondition, good chrome and appearance. Cheap at £125. Deliver. Details and photo. Box No. E.261. [8261]

1936 "F" TYPE MAGNA. Bodyless. Excellent chassis, fitted Ford 8 engine. Perfect for Special. £25 o.n.o. Monnington House, Credenhill, Hereford. [8263]

ROVER SPEED 14 Sports Saloon, 1935. Royal blue. 100% roadworthy, excellent condition, pleasure to own. Insured, taxed. Seen London or Godalming. £130 o.n.o. Gysin, 3, Farncombe Hall, Godalming. Tel.: 1858. [8264]

ULSTER AUSTIN, supercharged 750 c.c. Original body in very good condition, appearance similar to Nippy sports 2-seater, except for pointed tail and outside exhaust. Genuine blown Ulster engine. Oil pressure 50lb. hot. Whamough Hewitt head, close ratio 3-speed box, i.f.s. Engine and blower overhaul by Laystalls 5,000 miles ago. Good tyres: fronts 17in., rears 15in. New battery, starts on button. Taxed and ready for immediate use. £140. Lloyd-Davies, Green Acres, Five Ashes, Nr. Mayfield, Sussex. Tel.: Hadlow Down 381. [8265]

Keep warm and comfortable with the Sheepskin Lined

"AVIAKIT"

½ length
MOTORING COAT
No. 902

Warm and comfortable
lovat shade gaberdine
coat, lined through-
out body with soft
sheepskin. Deep luxuri-
ous beaver-lamb collar.
Waterproof interlined
throughout.

Sizes 34 in. to 44 in. POST **£6. 19. 6**
chest. Weight 6½ lb. FREE

MOTORING BOOTS, No. 203. Sheepskin lined throughout in black or brown grain leather. Pull-on tabs either side. Warmth without excessive weight. Sizes 6 to 11.

Post Free **£4 10s. 0d.**
(Dept. MS) 124 Gt. Portland St., London, W.1.
Tel. Museum 4314. Grams: Aviakit, Wesdo, London.
Lewis LIMITED
THE OLDEST NAME IN MOTOR RACING CLOTHING



FOR SALE—continued

SINGER 9 LE MANS, 1935. Sportsman Coupé occasional 4. Silver/maroon. All new Michelins, superb brakes, delightful gearbox, 6in. rev. counter, speedo, 30 m.p.g., 70 m.p.h. Present owner six years. Spare engine, gearbox, etc. £100. Ruck, Russells Nurseries, Watford 6968. [8266]

TRIUMPH GLORIA, 12.9/6c/34. Mechanically, tyres, battery, 100%. Spare engine, gearbox, free-wheel, Carburettors, radiator, four knock-ons, axles, etc. £85. Would separate. 134, Headcorn Road, Thornton Heath. [8267]

M.G. J.2, 1933. Red. £70 overhaul 1956. Body rebuilt, new hood, dynamo, etc., four good tyres. £115. Ablitt, 11a Walberton Avenue, Cosham, Portsmouth. Cosham 77582. [8268]

DELLOW MK.II, 1951. Excellent condition. Twin S.U.s, 4.7 c.w.p., 4-branch exhaust. Many extras. £310 o.n.o. Box No. E.270. [8270]

B.S.A. SCOUT, 1936. Body re-upholstered superior to standard. Repainted, all metal work re-chromed. Engine overhauled, new bearings; new battery, completely rewired. Good tyres. £140. Evans, 7, Beechwood Road, Sanderstead, Surrey. [8271]

MORRIS MINOR, 1929. Good goer, good condition. £20. Oliver, 18, Cole Green, Hertford. [8272]

IMMACULATE 1929 "CHUMMY." 1,000 miles to the pint (S.A.E. 30). 60 m.p.h. on the flat. Any trial or inspection to satisfy prospective owner who must have £33. Barden, 31b, Goldstone Villas, Hove 3, Sussex. [8273]

RILEY LYNX Tourer. Mechanically perfect engine. Five new tyres. £100. Crumplin, 37, Bennetts Way, Shirley, Croydon. [8274]

MARLEY
Concrete
GARAGE

Attractive designs, easy to erect or dismantle. Fireproof. Free delivery over wide area, erection service available.



FROM
£55
COMPLETE
cash or terms



Marley MULTIPLE GARAGES for where two or more garages are required.
Write to your nearest works for illustrated brochure.
SURREY CONCRETE LTD.
Peasmarsh, Guildford, Surrey
MARLEY CONCRETE LTD.
South Ockendon, Nr. Romford, Essex
MARLEY CONCRETE LTD.
Shurdington, Nr. Cheltenham
MARLEY CONCRETE LTD.
Waterloo, Poole, Dorset

FOR SALE—continued

ALVIS FIREFLY 12 h.p. Shooting Brake, 1933. Bargain at £45. Streatham 8238. [8275]

RILEY NINE, 1931. Mechanically perfect, bodywork good. Including spares. £65 or offer. 46, Devon Road, Cheam, Surrey. [8276]

HILLMAN MINX, 1948, breaking up. All parts available. Let us have your enquiries, complete car for sale. £57 10s. Overstrand Motors, Ltd., 62, Cottage Grove, Stockwell, London. Brixton 2330. [8277]

CURATE'S EGG: GLORIA 10.8 saloon. Requires attention. £50. Harding, 79, Windermere, N.3. [8278]

1938 FRAZER-NASH. One of the finest examples of a "Chain Gang" ever made. Good throughout. £250 o.n.o. Edmonds, "Monk's Lantern," Ruxbury Road, Chertsey, Surrey. Tel.: Chertsey 2155 after 8 p.m. [8279]

M.G. 8 h.p. Bills £80. Good tyres, 40 m.p.g. £75. 425, Upminster Road, Rainham 2973, Essex. [8280]

RILEY MERLIN 1½ litre, 1936, in excellent condition and well kept. Bargain. £165. Riley Merlin 1½ litre, sale or exchange for open Riley. Cash either way. Box No. E.282. [8282]

AUSTIN 12 windscreen and wiper. Two trafficators. Good condition and working order. £5 o.n.o. Weekday evenings. 26, Wrentham Avenue, N.W.10. [8283]

CARR BROS
GARAGES LTD

HIGH ST. **PURLEY** SURREY

End of Croydon By-Pass. UPLANDS 4812-5

OPEN TILL 9 p.m. AND ALL WEEK-ENDS

SPORTS CAR DEPT.

YOUR LIFE'S DREAMS CAN BECOME REALITY AT LAST!!

New revised HIRE OWNERSHIP plan WILL PROVIDE YOU WITH ANY NEW SPORTS CAR FOR ONLY 31% DEPOSIT WITH LOWEST MONTHLY REPAYMENTS—FULL INCOME TAX RELIEF—FREE SERVICING "ON THE SPOT."
Call, write or phone for particulars.

A FEW EXAMPLES FROM OUR USED SPORTS-CAR BARGAIN LIST:

1954 AUSTIN-HEALEY 100 roadster. Only 18,000. Really fast. Heater and extras. **£725**
1954 and 1955 TRIUMPH TR2. Low-mileage specimens. Very attractive. **£610**
1953 M.G. Two superlative TD roadsters, tip-top order. Many extras. **£450**
1950 MORGAN 4/4 d/h. coupe. Excellent mechanically and appearance. **£325**
1947 M.G. Model TC roadster. Excellent performance and condition, clean. **£325**
1950 SUNBEAM-TALBOT 80 d/h. coupe. Radio, heater. Eyefull and potent. **£440**

Also seen by arrangement at:
SOHO GARAGE, rear "Astoria" Cinema, Charing Cross Road, W.1 GER 6678/9

GOOD SPORTS CARS WANTED FOR CASH
Buyers will call anywhere—UPLANDS 4815, till 8 p.m. and Saturdays.

THE PROGRESS SUPREME CO.,
852, BRIGHTON RD., PURLEY, SURREY
Phone: UPLANDS 8293/4

YOU MUST SEE THE THREE-WHEELERS AND SCOOTERS—WITH EXCITING SPORTS CHARACTERISTICS—ON
Stand 78, **MOTOR CYCLE & CYCLE SHOW**
November 10th—17th, 1956

JOHN EWER MOTORS

OFFER THE FOLLOWING COMPETITIVELY PRICED CARS

Lagonda V12, '38, saloon. £600 spent during the last two years. Fitted water injection giving vast improvement in economy. Probably the finest V12 available anywhere. A car for the connoisseur. **£315**

Triumph 1,800 roadster, 1948. Recon. engine, brakes and steering. Bodywork, cellulose and interior in excellent condition. A very distinctive car with delightful handling qualities, brisk performance and fuel consumption of approx. 25-28 m.p.g. **£325**

M.G. TC, '47 2-seater, finished in red, with a new black hood, five new tyres, recon. engine, brakes; new steering-box, king-pins and bushes. Excellent example. **£318**

WE URGENTLY REQUIRE

Popular Sports Cars and will pay top prices. Mechanical condition immaterial.

M.G. TA, '38, 2-seater, finished in green. A well-above-average example both mechanically and in appearance, good tyres. Very reasonable price. **£195**

Jaguar, 1938, 3½-litre saloon, in beautiful condition, superior to many post-war examples. Mechanically first class. Tuned for economy and giving a genuine 20 m.p.g. on a long run. Fitted radio. **£165**

Ford V8 Mercury saloon, reg. '48. Excellent bodywork and cellulose, clean interior, good tyres. Mechanically A1. Effortless touring car. **£145**

28, ROSSLYN HILL, HAMPSTEAD, N.W.3 • Tel.: SW1 2020 • 9 a.m.—9 p.m

FOR SALE—continued

HEALEY SPARES AND UNITS: Complete Silverstone engine in racing trim, special Barlow head, £120. Close ratio gearbox, £55. Rear axle complete, 3.5/1, £40. Also available, stroked Cadillac crankshaft and overbore pistons. Several 1 1/2 in. S.U. carburetors, and Lucas 4-cyl. distributors. D. Postma, 34, Boundary Road, Norwich. [8100]

SALE: 1953 MORGAN +4 Sports 4-seater. '55 steering. Red. £400. Sidoli, Ebbw Vale. Tel.: 2323. [8102]

AUSTIN 7 SPECIAL, built Cambridge Engineering 1952. £60 o.n.o. Snell, 38, Redwing Lane, Norton, Stockton-on-Tees. [8103]

DELAGÉ D.M.S., 1927, 3 litre 4-seater Tourer. Mechanics and electrics good, but worn timing chain. Body fair. Taxed and insured. £50. Campion, 14, Greenwood Close, Petts Wood, Kent. Orpington 26031 evenings. [8104]

MERCEDES BENZ Type 200 Saloon, 1935. Excellent mechanical condition. Taxed, insured. Owner leaving England. £100 or reasonable offer. Dr. Richmond, Dreadnought Seamen's Hospital, Greenwich. Telephone: GRE 3433. [8106]

1933 WOLSELEY HORNET d/h coupé. Excellent condition. £80. Rider, 85, Haywards Road, Haywards Heath, Sussex. [8107]

RESTORABLE AUSTIN CHUMMY, 1927. Sound mechanically. One owner 1927-1955. £25. WIM 2344. [8108]

VOLKSWAGEN, 1946, right hand drive. Recent £100 overhaul. £260. Phone: Yeovil 316 evenings. [8109]

1956 T.R.3 (June) as new; tonneau cover, luggage grid, etc. £875. United Service Garages, Portsmouth 2341. [8110]

ROLLS ROYCE 20 h.p. 1928 Saloon. Excellent running order. £115. 46, Shirehall Lane. HEN 6648. [8111]

MORGAN 3-wheeler Matchless twin, o.h.v. a/c, 1934. Many new parts, including chain and brake cables. Over 50 m.p.g. £85. 190, Galp's Road, Thornton Heath, Surrey. Tel.: THO 7662. [8112]

FIVE R.W. WHEELS, 5.50-20, £8 10s. Buckle, Erlestoke, Devizes. Phone: Bratton 262. [8113]

JAGUAR X.L.120, 1951. Low mileage. White, leopard-skin upholstery. H.M.V. radio. Many other extras. £700 or offers. G. Stratton, White House, Plough Lane, Christleton, Chester. Phone: Chester 35720. [8114]

F.N.-B.M.W. 1937 329 four-seater cabriolet. Good condition. £125. Phone: MAL 4521. [8115]

Crosscars

Alan Baker offers

M.G. TA, 1937. A particularly nice one in red, beige interior, chrome luggage grid, twin "flame-throwers." Really excellent performance. £225

AUSTIN A90 Atlantic power-operated convertible. Performance almost in the 3-figure category and a high standard of comfort; with a petrol consumption of 25 m.p.g. Finished in red, beige interior with extras, including rim embellishers, screen-washers, etc. Particularly good order throughout. £365

FORD Ten sports tourer, 1938, quite outstanding. One loving owner from new has maintained this car in first-rate condition. Excellent maroon and chrome coachwork, with grey interior. Beautiful mechanical condition, giving faultless road performance. All original literature, including maker's handbook, etc. £165

SUNBEAM-TALBOT 2-litre sports tourer, 1940. Immaculate in grey, with grey interior. Quite first class in all respects. £198

BRITISH SALMON 1 1/2-litre sports 4-seater, 1936. It pleases us to offer one of these quality sports cars built to stringent aircraft standards. Capable of an excellent performance and a fuel consumption in the regions of 30 m.p.g. Fitted with four almost new tyres, new batteries, good hood and screens. Very attractive in blue cellulose, well maintained and in very good all-round condition. £119

RILEY Nine Merlin, 1936. Very nice mechanical order. Grey coachwork, with blue leather interior. £145

- MANY OTHER INTERESTING CARS
- HIRE PURCHASE AND INSURANCE
- ALL CARS THOROUGHLY CHECKED AND SERVICED BEFORE SALE
- GOOD SPORTS CARS WANTED
- OPEN TILL 7.30 p.m., 10.00 to 1.30 Sundays, or any time by appointment—midnight, if you like!

**156, HIGH ROAD,
FINCHLEY, N.2**

TUD 9272

2 minutes East Finchley Station.

FOR SALE—continued

1929 SPEED SIX BENTLEY Shooting Brake. Good tyres, new battery and exhaust system. P.100s. Box No. E.116. [8116]

RILEY 15/6 Adelphi, 1937. Exceptional bodywork. £195. Dickinson, 21, Bullhead Road, Boreham Wood, Herts. [8117]

ROLLS PHANTOM I, 1928. Smart Sedan by Hall-Lewis. New carburettor and exhaust give 14-15 m.p.g. Engineer maintained. £145. Any trial. Might exchange. Photo. Also 40/50 chassis, 1925. £55. Needham, 220, Ongar Road, Writtle, Chelmsford. [8118]

S.S.2 10 H.P., 1934. Excellent engine, remote control gearbox, k.o. wheels, body poor. Make good base for special. £35 o.n.o. Paris, 6, Fort Road, Halstead, Kent. Phone: Sevenoaks 3769 evenings, weekends. [8119]

MINERVA 30 h.p. Limousine, 1926, £120. A.C. 12 h.p. 2-seater, 1924, £80. Both licensed and insured. Excellent original condition throughout. Any offer considered. Lieut. Stone, H.M.S. Raleigh, Torpoint, Cornwall. [8120]

PEUGEOT 203 Saloon. Mileage 8,000 mainly stored. Leather upholstery, sliding roof overdrive giving 35 m.p.g. Outstanding roadholding, brakes, and steering. Immaculate condition throughout. £525. Box No. E.121. [8121]

1930; 1934 AUSTIN 10. Poor brakes and bodywork, good engine. Evenings, 27, Warfield Street, S.W.11. [8122]

INTERESTED IN AUSTIN 7s? Have you read the book "Building a 750 Special"? Inside "gen" on mods., rebuilding, body construction, etc. 5s. post free from J. Haynes, Ripple Lodge, Ripple, Nr. Deal, Kent. [8123]

ALVIS SPEED TWENTY, 1934. Re-lined brakes, new cables, new batteries. Engine excellent. Taxed. £85. Cooper, 184, Lynmouth Avenue, Morden. [8124]

RAILTON STRAIGHT EIGHT, 1935. 1954 Hudson engine. Two-door sports saloon. Performance unimpaired. Must sell—no space. £95 o.n.o. Lace, 8, Mayfield Road, Blacon, Chester. [8125]

IMMACULATE ALVIS 1950 T.B.14 Sports two-seater. Beautiful A.P.M. aluminium special coachwork in B.R.G., real white hide upholstery, stowaway hood, large boot. 90 m.p.h. 30 m.p.g. £495. The catch?—left hand drive. Phone: WOO 2983 evenings. [8126]

SUNBEAM TALBOT (Sept., 1947), 2 litre de luxe saloon. Well above average. £150 recently spent. S.A.E. particulars, Lancashire. Bargain for someone. Best over £250. Box No. E.127. [8127]

CHARLES SIMPSON

THE HOUSE OF QUALITY
SPORTS-CAR DIVISION

A Selection from our Stock of Sports Cars, Fast Touring Cars and Coupes

1955 TR2, black/red, l'ther/htr., etc., X tyres, 12,000 miles	£719	1953 Ford Zephyr, green, one owner, 22,000 miles	£509
1952 TR2, B.R.Grn., num. extras, spare unused, 13,000 miles only	£719	1953 Zephyr, grey—leather. R./htr., hosts of extras	£499
1954 Austin-Healey 100, overdrive, htr., blue	£689	1955 Zodiac, grey/blue. R./htr., etc. 11,000 miles	£679
1953 M.G. TD, red, low mileage, sup. cond., htr.	£499	1955 Consul convertible, d/grey, R./htr., very low mileage	£669
1953 M.G. TD, ivory, 22,000 miles, specimen car	£489	1953 Consul, blue, one owner, 32,000 miles. Htr., etc.	£499
1949 M.G. TD, red/red, hosts of extras, magnificent car	£419	1954 Consul 2-tone, R./htr., specimen car	£529
1949 M.G. TC, ivory, recon. engine, plastic hood, etc. Radio	£399	1947 Lea-Francis saloon, maroon, R./htr.	£289
1949 M.G. TC, red/red, new hood and tyres	£389	1951 Ford Pilot, R./htr., unmarked throughout	£319
1949 M.G. TC, red/beige, new hood, htr., etc.	£379	1954 Zephyr convertible power, R./htr., R. Mays' conv'n.	£599
1948 M.G. TC, white, in very fair cond., bargain	£339	1948 Sunbeam-Talbot Ten saloon, black, htr., etc. Ex. cond.	£349
1947 M.G. TC, black, very low mileage, an opportunity	£349	1951 Sunbeam-Talbot 90 saloon, 2-tone, beautiful car	£439
1946/7 M.G. TC, choice of four, from	£309	1948 Armstrong Hurricane coupé, one owner, R./htr.	£279
1950 M.G. 1 1/2 saloon, green/green. R./htr. One owner	£439	1955 Vauxhall Velox, blue, R./htr., one owner, 9,000 miles	£599
1938 M.G. VA tourer, black, engine overhauled	£169	1956 Ford Prefect de-luxe, 4,000 miles, grey, htr., etc.	£599
1949 Triumph Roadster 2,000, red, very low mileage	£439	1955 Ford Prefect, black/red, one owner, 17,000 miles	£529
1948 Triumph Roadster 1,800, ivory, low mileage	£399	1950 Austin A70, grey, R./htr., two owners	£349
1951 Jaguar XK120 roadster, two owners, low mileage	£589	1950 Austin A70, black, htr., etc.	£289

Always 20-30 Convertibles and Tourers on the premises—Hillman, Morris Minors, etc.
We are London's Premier Centre for Estate Cars, Uteicons and Light Vans.
OVER 300 GUARANTEED VEHICLES IN STOCK FOR YOUR INSPECTION.

Vehicles of all types in good condition very urgently required.

IMMEDIATE HIRE PURCHASE TERMS — NO GUARANTORS OR REFERENCES REQUIRED.

It is our proud boast that you pay your deposit and drive away in ten minutes.

250 Motorcycles, Scooters and Combinations also for your perusal.

CHARLES SIMPSON MOTORS LTD.

STAPLES CORNER, HENDON, N.W.2

Tel.: GLAdstone 1921 and 1246

Open every day from 9 a.m. to 8 p.m. and on Sundays.

LAMBS

of WOOD GREEN

OVER 100 CARS IN STOCK

FINCHLEY

6222

ROLLS-ROYCE, 1938, with magnificent Hooper bodywork, 30 h.p. only, semi-razor-edged sports saloon with electric division and sedanca top in open position. A magnificent vehicle in impeccable condition. Outstanding value at **£799**

LEA-FRANCIS 4-door sports saloon, 1½-litre model, ideal for enthusiast, excellent bodywork; although 1946 still looks in 1954 condition. Choice also 1947 model. **£295**

SUNBEAM-TALBOT 80 sports saloon, 1950 model in spotless condition throughout, choice two, from **£425**

BENTLEY 4½-litre Park Ward sports saloon, 1937 but in 1954 condition. If you want a beauty this is it; try it, drive it, see it; it's magnificent. **£499**

AUSTIN A90 convertible, 1950 model in good condition throughout, ideal value. Also choice another in superb mint condition. **£365**

LEA-FRANCIS 1½-litre special super sports roadster, 1950 but so modern in looks would pass for 1955 vehicle. Cost nearly £2,000 new and excellent value at **£444**

BENTLEY 3½-litre, 1934/5, Park Ward sports coupe, immaculate condition. Outstanding value and bargain price at **£333**

SUNBEAM-TALBOT 90 convertible, 1952 Mk. II model but in such beautiful condition that you could believe it is 1955. Only two owners, about 28,000 miles. Choice two. **£525**

ALLARD sports saloon, two owners only, carefully-used 1950 model but in 1954 condition. Black, with red leather. Excellent chassis. **£288**

BROUGH Special sportsman 4-seater drophead coupe, 21-h.p. Hudson engine, tremendous performance and flexibility, excellent economy. Costing over £700 pre-war, still looks worth it, really mint and original condition. **£279**

ALVIS 14-h.p. convertible, 1948 but what a specimen. Original bodywork faultless, interior unmarked, new leathercloth hood, 100 per cent. chassis. Irreplaceable bargain at **£449**

M.G. TD sports 2-seater, vivid red, in immaculate condition. Not the usual run of M.G.s but a magnificent specimen most carefully used. **£465**

JAGUAR XK140 drophead coupe, 1955 vehicle and still in 1956 condition, 10,000 miles only. Many extras. Carefully tuned and used. **£1350**

Best possible Hire Purchase facilities and Part Exchange

FREE OF CHARGE - £50 (average) **OVERHAUL** on all cars over £150 — See the Workshops — See the cars, every one a specimen, overhauled with **WRITTEN THREE MONTHS' GUARANTEE**

421-423, HIGH ROAD, FINCHLEY, N.12

FOR SALE—continued

F.N.-B.M.W. 328, 1940. Good specimen, well maintained and unmodified. Brand new Michelin "S" all round. £345. Baker, 109, Breeze Hill, Liverpool 9. Aintree 1671. [8128]

F. W. (FREDDIE) DIXON clearing surplus stocks. Pair Armstrong shockers £2 10s.; various steering wheels; new 6v. S.U. petrol lift £2 5s.; 6-stud Riley wheels, sprayed silver, £2 10s. each or accept £10 five; Riley 6 head gaskets 10s.; Riley 9 camshafts from £5; 6-cylinder camshafts £8; 3-range Jones tachometer for testing 300 to 12,000 revs., as new, in case with instructions and accessories, a gift at £20. "Ardverness," Wray Common Road, Reigate. [8129]

GOOD MISCELLANEOUS SPARES; Lockheed hydraulic brakes, complete set-up, suitable M.G., perfect, £8. Fold flat screen, 40in. wide, £4. 18in. knock on wheels, 35s. each. Twin S.U. sets, 1½in., £5 10s. Perfect 1½in., only 500 miles use, £8 10s. Another 1½in. set £3 10s. S.A.E. 73, Bakers Lane, Sutton Coldfield, Warwickshire. [8137]

HANDBOOKS, Workshop Manuals, Motoring Books. Catalogue Is. Enquiries, stamp. Gray, Hurstpierpoint, Sussex. [8138]

AUSTIN A70, 16 h.p. o.h.v. engines used, from £22 10s. Ideal for special or replacement unit. Overstrand Motors, Ltd., 62, Cottage Grove, London, S.W.9, Brixton 2330. [8139]

BENTLEY 6½, Thrupp and Maberly Limousine, 1930. "C" type gearbox, 3.78 axle, twin S.U.s, latest Mackenzie manifold, radiator and headlamp stoneguards, spotlights. Coachwork, steering, brakes, electrical and mechanical condition excellent. £125. Lay, River Cottage, Ellington Road, Taplow. Tel.: Maidenhead 2348. [8140]

1948 TRIUMPH 1800 Roadster. Rear damaged, otherwise good mechanically. Drive away. £185. RIVERSIDE 4347. [8141]

SPEED 25 ALVIS, 1939 tourer. Nicely resprayed black/maroon last year. Most impressive appearance and performance. Owner emigrating new year. £190. Consider £45 worth of tired 12/50 in part exchange. Must last six months though. Reeves, 51, FURNIVAL AVENUE, Slough Bucks. Tel.: 25749. [8142]

1929 ROVER 2 litre genuine 32,000 miles Weymann Sportsman's Coupé. Immaculate throughout. Distinctive and beautiful carriage. £150. Also Riley Blue Streak Kestrel well above average. One must go. 93, The Crescent, Davenport, Stockport. Stepping Hill 2741. [8143]

ALVIS T.J. 12/50 Shooting Brake. Well shod. Newly painted. Taxed. £65. Wilson, Swinside Inn, Newlands, Keswick. [8144]

SPECIALIST ENGINEERING SERVICE

For Veteran, Vintage, and Modern sports cars. Complete overhauls, decarbonising, tuning, chassis rebuilding. Highest grade workmanship assured. We are at your service, and welcome your inquiries.

STANLEY V. LIPSCOMBE,
Motor and Marine Engineers,
VICTORIA ROAD, BOVENEY, WINDSOR
Telephone: 2413

FOR SALE—continued

ASTON MARTIN, Oct., 1938, 2 litre Saloon. Black and chrome. Wonderful performance. Any trial or exam. £195 or exchange two-seater sports, cash either way. 4, Spa Grove, Lupset, Wakefield, Yorks. [8145]

ROLLS 20/25, G.H.W.50 Hooper Limousine, requires retrim. Cannot cope with two cars. Box No. E.146. [8146]

1939 A.C. Competition 2-seater. New paint, hood, screens, carpet. Good mechanical condition. Fast. 22/25 m.p.g., no oil. £250. Box No. E.147. [8147]

K.I. M.G. in good all round condition. Sell £145 or exchange professionally built special, Robinson, 18, Tregelles Road, Hoddesdon, Herts. [8148]

LEA-FRANCIS, 1927, 9.8 h.p., 2/3-seater with Thrupp & Maberly body. £70 o.n.o. Cable, 45, Hawthorn Hill, Leichworth, Herts. [8149]

RILEY 12, springs, c.w.p., covers, wheels, 9 mag, dynamo, etc. S.A.E., 81, Broomleaf Road, Farnham, Surrey. [8150]

JOWETT JUPITER tubular chassis, new, ideal special, £25. Pr. 10in. Marchal's glass reflectors £2 10s. Cigar lighter, new, 12s. 6d. Two wheels, 7½in. x 800, also spare tyre, ideal low trailer, £2 10s. Pr. chrome new Lucas 12v. Windtones £5. Alloy bucket seat £1; also pr. sports car bucket seats 15s. Large streamlined perspex canopy, 2ft. x 4ft. 6in., £2 10s. Philco 6v. radio, working, needs slight attention, £3. Harlow, Essex, 25566. [8151]

M.G. V.A. 1½ litre Tourer, 1937-8. Mech. sound. £120. Howard, 27, Lorne Park Road, Bourne-mouth. Tel.: 6243. [8152]

LAGONDA M.45 RAPIDE, 4½ litre sports tourer. Bodywork and mechanism excellent. £250 o.n.o. Lyon, 14, Green Street, Stevenage, Herts. Phone: 480. [8153]

GOOD HOME WANTED! 1935 Sunbeam 20 saloon. Reborn, new tyres, brakes relined. Good condition. Offers. Ferguson, Swanston Avenue, Edinburgh. [8154]

FOR SALE—continued

RILEY 9 E.N.V. 75. Box requires input shaft, otherwise sound, £6. Dynamo £3. Starter £3. Dudley, Fay Cottages, Faygate, Horsham. [8156]

RILEY KESTREL 1½ litre Sports Saloon, 1935. Reliable motor, bodywork sound, interior tidy. Door needs attention. Genuine reason for sale. New front tyres, wing mirrors, exhaust. £90. Apply evenings, 231, Summer Lane, Wombwell, Yorks. [8157]

ALVIS SPORTS SALOON, 1939. Mechanically sound. £110 or near offer. Viewed at H. Spann, Sandiway, Northwich, Cheshire. Tel.: Sandiway 2219. [8158]

RENAULT AIRSPORT 1216 c.c. Saloon. Good condition. 34 m.p.g. £75. Would exchange Ford 10 or similar. Urry, 24, Stratton Avenue, Wallington, Surrey. [8159]

1930 SWIFT 9.7. Running, taxed, insured. Good condition. Spare engine dismantled, gearbox, £40. Denham 2682. [8160]

MORGAN PLUS-FOUR, 1952. Special body built for well-known driver by Connaughts. T.R.2 conversion in 1955. Dry weight 11 cwt. Truly outstanding performance. Suit enthusiast. £400. Woodlands Lodge, Woodlands, Southampton. [8161]

DOVER, Busy dock area. Established garage and petrol station, fully equipped. Main building three floors, each average 100ft. x 30ft. with drive-up ramp and hydraulic lift. Self-contained flat. Seventeen lock-up garages. Car storage depot. Petrol sales over 90,000 gallons. Diesel fuel, etc. 25,000 gallons from six electric pumps. Excellent turnover. Goodwill, equipment, Freehold and Leasehold premises. £15,000; part could remain on mortgage. Full details. Flashman & Co., Ltd., Auctioneers, Dover. (Tel.: 1806/7.) [8163]

BULLNOSE COWLEY, 1923 vintage, 4-seater tourer. Open to sensible offers. Colton, 20, Walford Way, Coggeshall, Essex. [8164]

ALL AUSTIN SEVEN spares. Chassis, axles, springs, radiators, engines, gearboxes. Neat little 2-seater seven special. New hood, slab tank. £60. Bull Garage, Boreham, Hailsham, Sussex. [8165]

SUNBEAM-TALBOT D/H COUPE, 1952. Faultless condition. Radio, heater, etc. Engine recently overhauled. £525 o.n.o. Dr. J. D. Crabtree, 14, Brierley Road, Bessacarr, Doncaster. [8166]

TALBOT 18/55 2-seater and dickey, 1926. This very rare car is in perfect and original condition. £150 o.n.o. Dr. J. D. Crabtree, 14, Brierley Road, Bessacarr, Doncaster. [8167]

Box No. Address: "Motor Sport," 15-17, City Road, London, E.C.1.

FOR SALE—continued

1950 ALLARD, brake body, steering column change, 20 m.p.g. £165. Or exchange Bond Minicar or similar. 14, Llwyniedw Road, Whitechurch, Cardiff. [8284]

1955 MORGAN PLUS-FOUR 2-seater d/h, 8,000 miles, one owner. £575 or exchange P.3 Rover 75. IMPERIAL 1231 (after 7.30). [8285]

1926 VAUXHALL 14/40 Tourer. Perfect original condition. Sell or exchange vintage d/h with dickey. IMPERIAL 1231 (after 7.30). [8286]

TALBOT 10, 1937, model saloon. Grey. Excellent running condition. Tel.: Arnold 9407 after 26th October, 1956. [8287]

ALVIS SEVENTEEN, 1937, Silver Crest Tourer. Very fine condition. Somewhat thirsty. £200 plus; Connon, 22, Hosefield Avenue, Aberdeen. [8288]

RILEY ODDMENTS: Twin S.U.s and linkage for Nine, £5. Radmull for Kestrel 12/6, 15s. Two 19in. tyres, one almost unused, one suitable spare, £2 10s. the two. 15, Slades Rise, Enfield. [8289]

AUSTIN SEVEN RUBY SPECIAL. Attractive 2-seat tourer, generously maintained. Full weather equipment. £75. Patrick, 26, Turmore Dale, Welwyn Garden City. [8290]

ALVIS SPEED 20 Sports Saloon, 1935. Body by Charlesworth. Black/cream. Exceptional condition throughout. Excellent performance and very smart. £170. Woodlands Lodge, Woodlands, Southampton. [8162]

750 SPECIAL BUILDERS. A7 Textbook, 4s. S.A.E. lists Dante Speed Equipment. Sporting Motorist's Agency, 76b, Amhurst Park, London, N.16. [8092]

1936 RILEY 9 h.p. Merlin Saloon, preselect gearbox. Very sound. £145, or £73 dep. Phone: Hayes, Middx., 2121. [8298]

JILTED LADY seeks new lover. My beautiful Riley 12/6 tourer is looking for a new boy-friend. Rebuilt professionally and re-registered 1948. Seats two men, two mice. Crash box, triple S.U.s, Scintilla, new paintwork in grey/maroon. Haggle starts £150. Stewart, 47, Grange Park Road, Leyton, E.10. [8269]

LAGONDA SPARES for 2 litre 16/80 and 4½ litre. Also some Rapier parts available. We can also supply many parts for Alvis, Bentley, A.C., Singer, Sunbeam, Rover, Riley, Wolseley, Daimler, Hillman, Standard, etc. Lerry Garage, Talybont, Cards. Tel.: 79. [8136]

SPEED SIX BENTLEY (1939, young body). See August MS advert. Regret was not available due to engine being out for overhaul. May now be seen London or Edenbridge, Kent. Kensington 4942. [7951]

"32" RILEY 9. £50 o.n.o. In genuine £180 cond. Everything new. Marchal spots, sports coil and much more. Body sides damaged. Make terrific sports or utility. 15, Rossdale Drive, N.W.9. [8301]

ASAI, Riley built, Mulliner bodied, 1938 Autov'a with 2.8 litre 99 h.p. Riley V.8 engine. Rattle-free 5-seater aluminium body in exceptional condition. Doors shut with the carriage "click." Attractive low and wide appearance with good chromium on P.100 headlamps, etc. Present owner for four years of trouble-free, enjoyable motoring. Recently overhauled. Good tyres. 18-22 m.p.g. Original list price £975. Bargain at £215. Todd, 27, Couchmore Avenue, Esher, Surrey. Emberbrook 4983. [8302]

CN.3333 LEA-FRANCIS 12/40 4-seater Tourer. Meadows 4 E.D., 1928. Mechanically excellent. Tyres good. Quantity spares, £60 o.n.o. Partridge, Pound Cottage, Upton Didcot, Berks. Blewbury 387. [8304]

RILEY 9 KESTREL, 1935. Special series engine, new battery, reconditioned dynamo, rewired. £70. o.n.o. Wilkinson, Y.M.C.A., Coventry. [8305]

RILEY 9 SPARES. Breaking 1934 Monaco. Also Merlin crank and bearings, rod brake front axle, reconditioned rockers, etc. Enquiries, Wilkinson, Y.M.C.A., Coventry. [8306]

1949 CITROEN Light Fifteen. £325. Possibly exchange. Howard, Okle Pitcher, Newent, Glos. Newent 394. [8307]

1935 LAGONDA RAPIER, 1100 c.c., twin camshaft Tourer. Recent extensive overhaul (approx. £150). New Exide. White with red upholstery. Fine example of thoroughbred. Genuine reason for sale. £210. 52, Edinburgh Court, Grand Drive, S.W.20. [8308]

S.U. ELECTRIC PETROL PUMPS. Ten 12 volt, seven 6 volt. First class condition, £2 each, postage 1s. 6d.; or C.O.D. Box E.309. [8309]

ALVIS 12/60, 1932. All spares available; engine, gearbox, axles, wheels, etc. Enquiries: Box No. E.310. [8310]

RILEY 9 MONACO Saloon, 1937. Twin S.U.s, Scintilla magneto, 600 x 16 wheels, etc. Two owners only, 60,000 miles. Good condition. £185 o.n.o. Steels, 37, Bainbridge Road, Leeds 6. [8311]

M.G. P.A. in B.R.G. Body good, engine reasonable. Dynamo overhauled. Taxed. £135 o.n.o. Holdaway, Rosecroft Cottage, Hambledon, Portsmouth. [8312]

M.G. M TYPE. 8 h.p. Complete rebuild alloy body, cycle-wings, stab tank. Re-sprayed. New hood. Re-trimmed. Engine and chassis 100% overhaul. Remote gear change. Tyres good (two new). Stop lights. All bills available. 37 m.p.g., 70 m.p.h. Domestic reasons necessitate reluctant sale. £90 o.n.o. Hinton, 4, Longden Gardens, Coleham, Shrewsbury. [8313]

THE CHEQUERED FLAG

(Sports Car Specialists) Ltd.
669, Fulham Road, S.W.6
RENOWN 6105

MORGAN Super Sports 2-str., red, 1,100 w/c. J.A.P., three speeds and reverse. 1933. £75

SINGER 9-h.p. 4-str. sports tourer, green, new tyres and battery. 1934. £95

M.G. PB 9-h.p. 4-str. tourer, maroon, cycle wings, new plastic hood. 1936. £145

ASTON MARTIN 1½-litre International sports tourer, B.R.G., really sound. 1931. £155

M.G. J2 8-h.p. 2-str., repainted cream, swept wings, good mechanically. 1933. £165

SINGER 9-h.p. Le Mans 2-str., red, re-upholstered grey. Exceptional. 1935. £175

M.G. PA 8-h.p. 2-str., green, engine recently overhauled. 1935. £185

M.G. VA 12-h.p. 4-str. tourer, black. New hood, loose covers, etc. 1938. £185

M.G. J2 8-h.p. 2-str., red. Fantastic car, bills for £213 this year reconditioning. £225

M.G. K3 1,087-c.c. sports 2-str., red. Blown or unblown, 15-in. brakes, new tyres, etc. 1935. £225

M.G. TA 10-h.p. 2-str., black/green leather. In post-war condition. 1937. £225

MORGAN 4/4 1,267-c.c. 2-str., Oxford blue/black leather, rebuilt gearbox. 1947. £295

H.R.G. 1,500 2-str., smart in white with black wings. Excellent performance. 1947. £325

M.G. TC 2-strs., choice two fine 1948 cars; red (16-in. rears) or B.R.G., at £345

BUCKLER 90 streamlined 2-str., red. Tuned 1,172, fully equipped, one owner. 1955. £385

ROVER 12-h.p. sports tourer. Rare model, immaculate in black with red leather. 1947. £385

H.R.G. 1,100 2-str., recellulosed green, new hood, etc. First-class car. 1948. £385

M.G. TD 2-str., spotless in green, twin spots, grid, demisters, etc. 1953. £465

LOTUS Mk. VI. Tuned 1,172 unit, wire wheels, Alfin brakes, M.G. box, blue. 1955. £465

JUPITER roadster Ivory, with red lthr., recon. S.111 unit not yet run-in. 1953. £475

M.G. TF 1,500 2-str. Attractive in heather-grey/green lthr., grid, tonneau, etc. 1955. £615

TR2. Unblemished in black, with blue trim. Overdrive, radio, heater, etc. One careful owner, 10,000 miles. 1955. £745

AUSTIN-HEALEY 100. Unscratched in green, genuine 8,000 miles; radio, heater, overdrive, etc. 1955. £765

RILEY Pathfinder sports saloon, resplendent in maroon, with red leather, one careful owner. Cost £1,400 in Feb., 1955. £895

NASH-HEALEY. Superb 3.8-litre 3-str. convertible. Beautiful mist-grey, with maroon hide. Overdrive, free-wheel, radio, heater, etc., etc. Registered May, 1956; 2,000 miles only. Offers are invited for this certain "concours" winner.

GRAHAM A. WARNER

will be pleased to give details of the above (if still unsold) and of others available since the insertion of this advertisement. Confidential Deferred Terms (12, 18 or 24 months), competitive insurance, specific Written Guarantee, fair part-exchange allowances, etc., are offered with pleasure.

Best prices paid for sporting cars in first-class condition, including competition cars.

THE CHEQUERED FLAG
(Sports Car Specialists) Ltd.
669, Fulham Road, S.W.6
RENOWN 6105

FOR SALE—continued

CITROEN Big 15, 1940. All sound. Excellent tyres. Wants whiff of spray gun. £175. Selby, 79, Roundwood Way, Banstead, Surrey. Burgh Heath 1853. [8314]

FRAZER-NASH B.M.W., 1938, type 320 Cabriolet. In running order. £165 o.n.o. Davies, Highfield, Sandford Avenue East, Church Stretton, Salop. [8315]

MORGAN 4/4, Nov., 1949. Two new tyres, reconditioned gearbox, beautiful royal blue. Gentle. Haggle begins £315. Sgt. Reeks, Headley Court, Epsom. Leatherhead 4161. [8316]

RILEY NINE, 1934, Kestrel. Fully T & I. New batts., engine sound, coachwork fair. £80 o.n.o. Hester, 87, Wetherby Road, York. Tel.: 78989. [8317]

RILEY LYNX. Really nice 1935 1½ litre. £145 o.n.o. Bizzell, Rhiwlas, Bangor, North Wales. [8318]

RILEY NINE engine, gearbox, tank, autovac, headlamps. 21, Elm Drive, St. Albans. [8319]

TRY ANY OFFER. Must sell 1928 Fiat 509A Tourer of real character. Continental tour 1956. 36 m.p.g. Every spare. Streeley 7256 (Staffs). [8320]

D.K.W. 1938 Cabriolet Master, German 2-cyl. 2-stroke, 40 m.p.g. 4-seater. Recent £200 trade overhaul. Sacrifice for £125. Robinson, Timmins, Bayston Hill, Shrewsbury. Phone Uplands 7252 (Surrey) for London demonstration appointment. [8321]

1928 20 H.P. ROLLS. Good all round condition. Decoke within last 1,000 miles. Uses no oil. £100. D. M. Flanagan, Brianston, Merrilocks Road, Liverpool 23. [8322]

BREAKING FORD 10 (Girlings). S.A.E. please. A. D. Buckley, University Union, Burlington Street, Manchester. [8323]

BENTLEY 4½ V.D.P. Tourer, 1937. Black with blue upholstery. Extensive work includes rebore and new pistons, rechroming and new screens. £395 o.n.o. Box No. E.324. [8324]

1930 BROOKLANDS RILEY. Mainly original bodywork with cycle mudguards, ivory and red. All weather equipment and tonneau. Close ratio box, 4.87:1 axle, 7:1 c.r., 1-11/16in. crank, two S.U.s, re-sleeved, exhaust cams, reconditioned dynamo. £155. Evans, 4, Alma House Alma Square, N.W.8. CUN 1747 (even ngs). [8325]

TRIUMPH, 1940, DOLOMITE Roadster. Reconditioned engine 2,000 miles. Radio. Cruise 65, maximum 85. Exceptional specimen of rare model. Owner going abroad. £260. 3, Woodcote Court, Weybridge. Tel.: 2545. [8326]

ALVIS 12/50 Beetleback, 1930. Looks and goes well. £100. Or exchange 750, 1172. D. P. Smith, "Updown," Eclibroughton, Stourbridge, Worcs. [8328]

RILEY 1½ ADELPHI, 1936. Sports Saloon. Excellent all round. £140. HOUnslow 9599. [8329]

£90. M.G. 18/80 Mark II 4-seater drophead coupé, March, 1931. New tyres. Excellent condition. Taxed. Phillips, 18, Belsize Park Gardens, N.W.3. Primrose 6263. [8330]

LAGONDA 16/80 2 litre 2/4-seater sports. Engine, gearbox complete overhaul. Good mechanically. £85 o.n.o. Flaxman 5954. 31, Jubilee Place, S.W.3. [8330]

ROLLS ROYCE 20/25 Sports Saloon. History, one previous owner. Excellent condition. Grey Mulliner body. Particularly attractive modern looking body. Seen Bedford. Box No. E.332. [8332]

ASTON-MARTIN 1½ short chassis Le Mans 2/4. Good hood, bodywork. Oil 40lb. hot. Friary type rods, spare gearbox. Offers around £230. Box No. E.333. [8333]

MORRIS MINOR SALOONS, 1934. Good runners, bodys require attention. £27 10s. each. 56, Irwin Road, Bedford. Phone 5606. [8334]

LEA-FRANCIS 11.9, 1930, reg. 1932, 2-seater. One owner. Original paint. Four new tyres. original on spare. Nearly new hood and side-screens. North Wales. Box No. E.335. [8335]

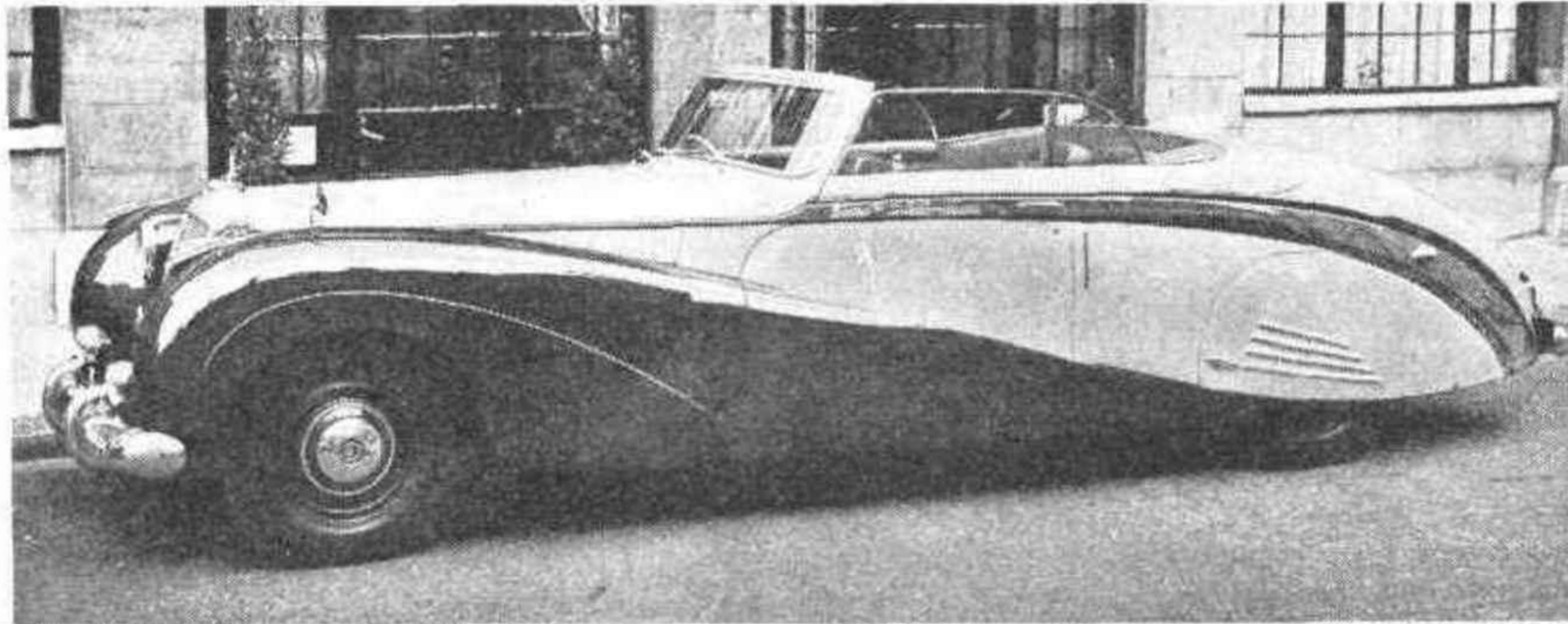
VINTAGE 21 H.P. CHRYSLER Drop Head Coupé. In excellent condition throughout. Local car. History known from new. Two owners. Taxed. 1927 model. £100. Russells Garages, 260, Liverpool Road, Southport. Phone 68656. [8336]

MORGAN 4/4, 1938. Black. Re-upholstered red. New batteries, almost new hood s/screens. Mechanically good. Disposal by private owner. £190 o.n.o. Seen Merton Street Garage, Oxford. [8337]

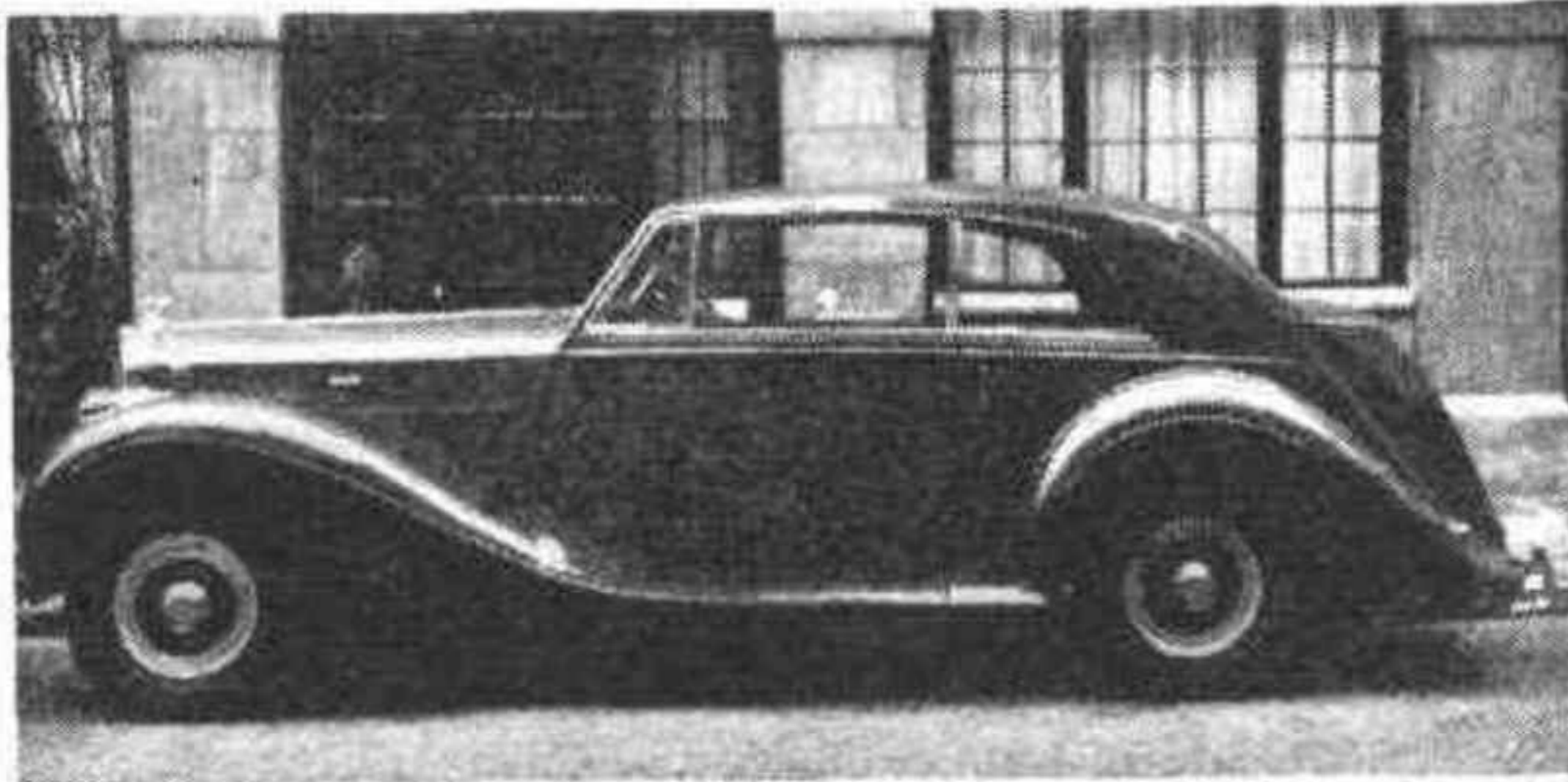
ALVIS FIREFLY, 1933. Excellent mechanical condition. Body good. New hood, good tyres, battery, lights, etc. £85. 8, Tyne Way, West End, Southampton. [8339]

BENTLEY—GUARANTEED 5 YEARS! An unequalled declaration of confidence, proved justified by the percentage of roadworthy vintage Bentleys still giving reliable, exhilarating service. V.B.S. has helped scores of owners to greater enjoyment, introduced hosts of newcomers to the thrill of Bentley motoring. Climb on the wagon—the "know how" costs 20s. for three instruction books (3 litre, 4½ litre, Speed Six). 7s. 6d. Buyers' Guide, model identification/technical data tables included free! Overhaul instructions, spares sources. Details supplied. Vintage Bentley Service. Box E.359. [8359]

Box No. Address: "Motor Sport," 15-17, City Road, London, E.C.1.



Illustrated under the heading of "Dream Cars" in the late August issue of "The Motor," we take great pleasure in offering for the delectation of the Motor Sporting fraternity the internationally-famed ex Sir Bernard Docker "Green Goddess" all-electric Continental Coupe. This is one of the three fabulous Daimler Show Models by Hooper & Co., on the 36-h.p. chassis, which have received such extensive publicity. Of the finest procurable craftsmanship and styling, the decor and appointments of this unique carriage have been sufficiently commented upon elsewhere to need no further introduction. Built by Hooper & Co. during 1951 and re-styled quite regardless of monetary consideration in 1953, the recorded mileage is slightly under 10,000. To the individual who seeks to acquire a contemporary carriage of rare distinction, the opportunity is now presented to do so at a figure completely disproportionate to the actual value, and at a fraction of the original cost. **£3,500** or thereabouts



BENTLEY MARK VI (1950), with fully razor-edged two-door sports saloon coachwork by James Young. Two-toned grey/blue, with grey trim. 48,000 miles. All mods. to date. One owner. Detailed history. Rolls-Royce Ltd. schedule maintained. Unmarked and in mint order. **£1,425**

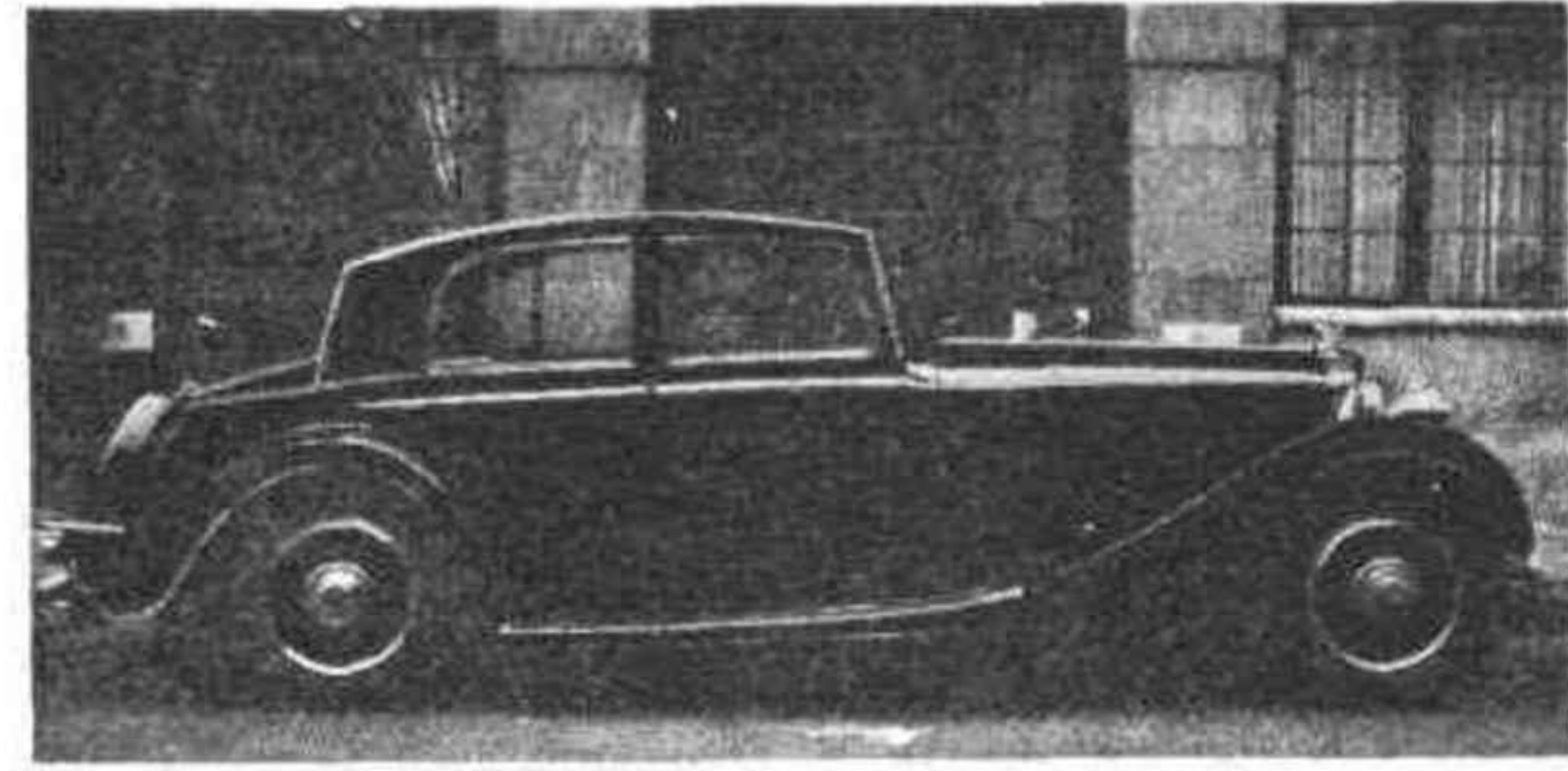
BENTLEY MARK VI (1949), 61,000 miles. Special town and country brake coachwork to the order of the previous owner. A new engine, supplied by Bentley Motors Ltd., was fitted 1,500 miles back, with full-flow filter and all modifications to date. In very fine order and a serviceable vehicle of individual distinction. **£1,250**

ROLLS-ROYCE (1936) 20/25 h.p., GTK Ch. Series owner-driver sports saloon by Gurney Nutting. Sliding head. Dove grey, grey trim. Two owners. Detailed works maintenance history. Impeccable. **£525**

AUSTIN PRINCESS (1950) A135 sliding-head saloon by Vanden Plas. Black, with tan calf. 58,000 miles. One owner. Single-carburettor manifold giving 19 m.p.g. Elegant and luxurious to the most exacting degree and representing, in our considered view, excellent value for a comparatively modest outlay. Comprehensive equipment, including radio, heater, etc. **£535**

DAIMLER (1954) CONQUEST sliding-head saloon. Midnight blue, blue trim. 23,000 miles. Works maintained. Radio, heater, etc. First decarbonisation this month to our order. **£775**

ROVER 75 (1953), one owner. 42,000 miles from delivery. Black, with red trim. Radio, heater, etc. A specimen vehicle. **£700**



ROLLS-BENTLEY (1937) 4½-litre, JY Ch. Series, razor-edged saloon by Freestone & Webb. Black, crimson trim. Appointments include heavily silver-plated bright-work throughout, exterior and interior. Ex-Maharajah of Baroda. An extensive mechanical rebuild has been carried out by Bentley specialists during the last six months at a cost of £250. Fitted heater, etc. Schedule serviced to our order this month. **£625**

ROLLS-ROYCE REPLICA (1946), GUJ Ch. Series, 2/3-str. Continental drop-head by Windover. Ivory and black, black trim. Outstanding continental coachwork on the later 21.6 chassis. Comfortable and dependable and in excellent order. **£350**

BENTLEY (1930) 4½-litre open sports tourer by Corsica. B.R. green, green trim. Comprehensively equipped. Detailed and excellent post-war history includes a £350 mechanical rebuild by McKenzie in 1950, and remaining rebuild to extent of £600 inclusive. 8-in. clocks, P100s, complete all weather equipment. A redoubtable specimen of the marque, being all that a 4½ should and can be. **£325**

TATRA (1950) TATRAPLANE 3-litre rear-engined, air-cooled, V8 sliding-head saloon. Dark blue, with plaid trim. L.H.D. Futuristic coachwork of fantastic appearance, having enormous stabiliser fin at rear. A highly respected performer. Re-offered by us on behalf of the present Service owner on the expiry of his f.r.ough. **£250**

At the time of going to press we are negotiating the purchase of a further 4½-litre vintage Bentley with Vanden Plas coachwork, a Mercedes-Benz 540K cabriolet "A," a Rolls-Royce 25/30 Gurney Nutting Owen sedanca, and a resplendent Rolls Ghost tourer, circa 1916.

We shall be pleased to assist readers seeking specific models of any particular marque, and will undertake to advise them of the whereabouts and price of those that may be found.

WE SHALL BE GRATEFUL FOR DETAILS OF ANY WELL-CONDITIONED MARK VI BENTLEY, ROLLS-ROYCE OR ROLLS-BENTLEY MODELS, PREFERABLY WITH A KNOWN HISTORY, OF WHICH READERS WISH TO DISPOSE. MR. SIMMONS WILL BE PLEASED TO ATTEND ANYWHERE IN GREAT BRITAIN BY PRIOR APPOINTMENT

AS A RESULT OF SELECTIVE BUYING WE ARE ABLE, BY ARRANGEMENT WITH A PRIVATE BANKING HOUSE, TO OFFER QUITE EXCEPTIONAL HIRE PURCHASE FACILITIES ON EACH AND EVERY VEHICLE WE ADVERTISE.

IN RESPONSE TO THE VERY LARGE NUMBER OF INQUIRIES RECEIVED FROM THE UNITED STATES, WE HAVE DECIDED TO UNDERTAKE THE EXPORT OF ROLLS-ROYCE AND BENTLEY MODELS AS A REGULAR PART OF OUR BUSINESS, AND NOT ONLY IN INDIVIDUAL CASES AS HERETOFORE. INQUIRIES ARE WELCOMED AND CHEQUES FOR IRREVOCABLE CREDITS SHOULD BE MADE TO SIMMONS OF MAYFAIR, BARCLAYS BANK LTD., MOUNT STREET, LONDON, W.1, AND SHOULD PLEASE BE ACCOMPANIED BY THE NECESSARY DOCUMENTATION.

GROSVENOR 1188

12, REX PLACE, W.1

GROSVENOR 2635

Immediate insurance effected with Lloyd's Brokers. Export and Shipping. All vehicles and accessories are offered subject to being unsold unless otherwise stated.

Engineers' reports and examination. E. & O.E.

...and now
the **NEW**
exciting **BUCKLER**
SPORTS



THE UNIVERSAL MODEL FOR THE HOME CONSTRUCTOR

- ★ MULTI-TUBE SPACE-FRAME—LIGHT AND RIGID
- ★ BUCKLER RACE-PROVED I.F.S.
- ★ COIL SPRING—TELESCOPIC DAMPER STRUTS
- ★ SPACIOUS DRIVING COMPARTMENT—2-SEATER
- ★ FOLD-FLAT SCREEN—HOOD OR HARD TOP
- ★ BUCKLER LIGHT ALLOY STREAMLINED BODY OR MISTRAL GLASS-FIBRE AS ILLUSTRATED
- ★ ACCEPTS ANY ENGINE UP TO 2 LITRES
- ★ MOST REAR AXLES OR BUCKLER DE DION
- ★ WHEELBASE—CHOICE 7 ft. 3 in., 7 ft. 6 in. or 7 ft. 10 in.
- ★ TRACK—Up to 4 ft. 2 in. GROUND CLEARANCE—6 in. or 7 in.
- ★ 18-in. SEAT WIDTH—40-48 in. LEG LENGTH

**AND OF COURSE BUCKLER ROADHOLDING AND CORNERING
NO ROLL — HANDS-OFF STEERING — NO PITCH**

1,172 Formula Engine
Fully tuned—90 m.p.h. and 35-45 m.p.g.
Partially tuned—85 m.p.h. and 40-50 m.p.g.
Fitted o.h.v. head—110 m.p.h.

Agents:
BUCKLERS (N.Z.) LTD., P.O. Box 9159 AUCKLAND
D. GORRINGE (PTY) LTD., HOBART
AUTOSPORT, COOKSVILLE, ONTARIO
DUBLIN SERVICE, NEW WESTMINSTER, B.C.

EASY TO ASSEMBLE
A REAL SPORTS CAR AT LOW COST

BUCKLERS

67, CAVERSHAM RD., READING
'Phone: Reading 54031

With Coventry-Climax 1,500, 130+ m.p.h.
With Coventry-Climax 1,100, 120+ m.p.h.
With untuned Consul 100 m.p.h.
With untuned MGA 110 m.p.h.

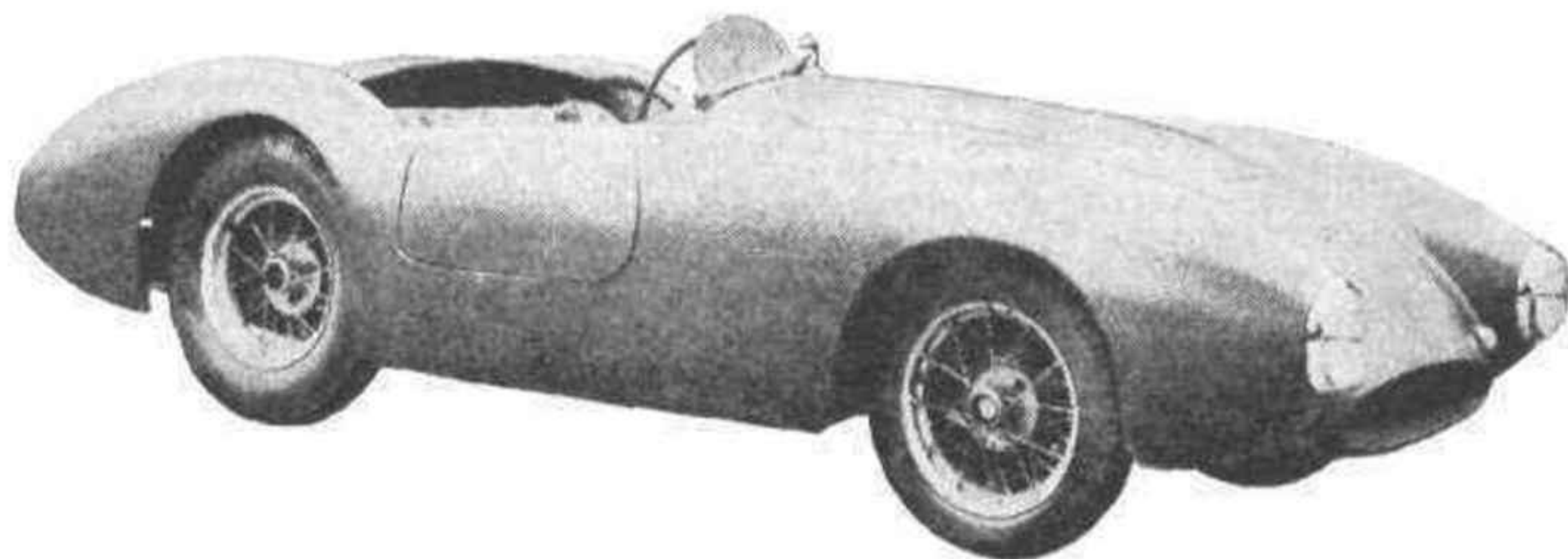
I.F.S. Units—1,172 Populars & Specials, Ex. £26 10 0
Close-ratio Gears—New Anglias & Specials £12 10 0
4.7-1 Crownwheel/Pinions—1,172 Specials £8 8 0
Thin C/A Cyl. H'd G'k'ts—Pop'l'rs, New Angl's 10 0
Gold Cyl. H'd—Populars & New Anglias £5 2 0

**ASHLEY
LAMINATES**

BODY SHELLS

FOR

AUSTIN 7 SPECIALS



Manufactured of fibre-glass reinforced plastic, these shells have been designed specifically for Austin Seven chassis, both long (post-'31) and short (pre-'32).

The main shell is moulded in one piece complete with weather-proof receiving channels around all openings. Boot and bonnet lids and the two doors are moulded separately and with flanges on all edges, thus ensuring rigidity and an excellent fit in the main shell, to which they are attached with hidden tubular mild-steel hinges.

A MOUNTING FRAME OF 1-INCH DIAMETER TUBULAR STEEL COMPLETE WITH EIGHT LUGS is bonded to the inside of the shell during manufacture. These lugs are

placed opposite chassis cross-members, above chassis nose-piece and 18 inches behind rear axle line. Attachment is by means of eight nuts and bolts to simple angle-iron chassis extensions.

Provision is made for standard Lucas headlamps to be fitted. All edges are flanged, strengthened and trimmed.

Colour of customer's choice is incorporated.

Total weight: 90 lb. approximately. Height at scuttle: 2 ft. 3 in.
Overall length: 11 ft. 4 in. Cockpit width: 3 ft. 2 in.
Overall width (front axle): 4 ft. 6 in. Cockpit length: 3 ft.
Overall width (rear axle): 4 ft. 5 in.

Rear of cockpit 3 in. in front of rear axle line.

PRICE COMPLETE ex works £78 0s. 0d.

Waiting period is approximately four weeks from date of order, when £10 0s. 0d. deposit is required.

INSPECTION WELCOMED DURING NORMAL WORKING HOURS AT

ROBIN HOOD ROUNDABOUT, EPPING NEW ROAD, LOUGHTON, ESSEX

"MOTOR BOOKS"

(F. & E. Stoneham)

79 Cheapside, London, E.C.2
CITY 5314

NEW MAGAZINE!

THE SPORTS CAR AND LOTUS OWNER
Single Copies ... 1/9, Subscription 20/-

NEW BOOKS

THE RACING CAR—Development and Design by Clutton, Posthumus and Jenkinson 26/3
MOTOR RACING MANAGEMENT, by John Wyr 19/-
HOT ROD 1957 ANNUAL 6/9
CLASSIC CARS AND SPECIALS, by Gottlieb 6/9
MOTORING ANNUAL, edited by Albert Douglas 11/3
POPULAR MECHANICS HOT ROD HANDBOOK 1956 5/3
"THE MOTOR" ROAD TESTS 1956 8/3
"THE AUTOCAR" ROAD TESTS 1956 8/3
HIGH PERFORMANCE CARS 1956/57 5/9
MOTOR RACING SKETCHBOOK 1895/1955, by Carlo Demand 18/6
PRACTICAL CAR-OWNER ILLUSTRATED—Edited by Frank Preston 26/3

SOMETHING NEW!

BUGATTI TYPE 35 Scale Model (1/24) All Metal Construction Kit, 61/-; in the U.S.A. \$8.00

RECENT TITLES AND REPRINTS

MOTORING ENTENTE. The story of Sunbeam, Talbot, Darracq and Sunbeam-Talbot cars 37/6

MAINTAINING THE BREED—The Saga of M.G. Racing Cars, by John Thornley... 21/9

CUSTOM CARS 1957 ANNUAL 6/9

RACING SPORTS CARS, by Klemantaski and Frostick 15/9

SPORTS CARS, by Jim Poster 6/9

PLASTIC CAR BODY DESIGN AND CONSTRUCTION FOR THE AMATEUR 10/-

THE GRAND PRIX CAR, Vol. 2, by Pomeroy 85/9

MISCELLANEOUS

THE HIGH SPEED INTERNAL COMBUSTION ENGINE, by Sir Harry Ricardo 51/6

SPORTS AND CLASSIC CARS, by Borgeson and Jaderquist 97/-

HOW TO HOT UP FORD AND MERCURY V8 ENGINES 16/3

ABC'S OF CUSTOM HOW 24/-

AUTOMOBILE DESIGN, by R. H. Gurr 24/-

HENRY'S WONDERFUL MODEL "T" 46/6

TIN LIZZIE, by Philip Van Doren Stern 31/3

BEST WHEEL FORWARD, by J. A. Gregoire 15/9

COMING SHORTLY

TEN YEARS OF MOTORS AND MOTOR RACING (1896/1906), by Charles Jarrott (Nov.) 26/3

MOTOR RACING DIARY 1957 (Nov. 15th) 6/6

THE ANTIQUE AUTOMOBILE, by St. John Nixon (Nov.) 26/3

RILEY MAINTENANCE MANUAL 1930/1956 (a definite date for Dec. 8th) 36/3

GET YOUR RALLY MAPS FROM US

One-inch Ordnance Survey in paper flat, 7th edition or latest, each 3s., plus 6d. postage on 1 to 3 maps, 9d. on 4 to 6 and 1d. for each additional. 1/2 in. O.S. and BARTHOLOMEWS 1/2 in. maps also available, in fact any map you want.

RALLY BOOKS AIDS, ETC.

RALLY NAVIGATION, by Needham 4/3

BLACKWELL CALCULATORS Mk. I 13/-

BLACKWELL CALCULATORS Mk. IV 48/6

(Special terms for quantities for clubs, for Blackwell Calculators.)

Sorry, no C.O.D.s, etc.



THE RACING CAR DEVELOPMENT AND DESIGN

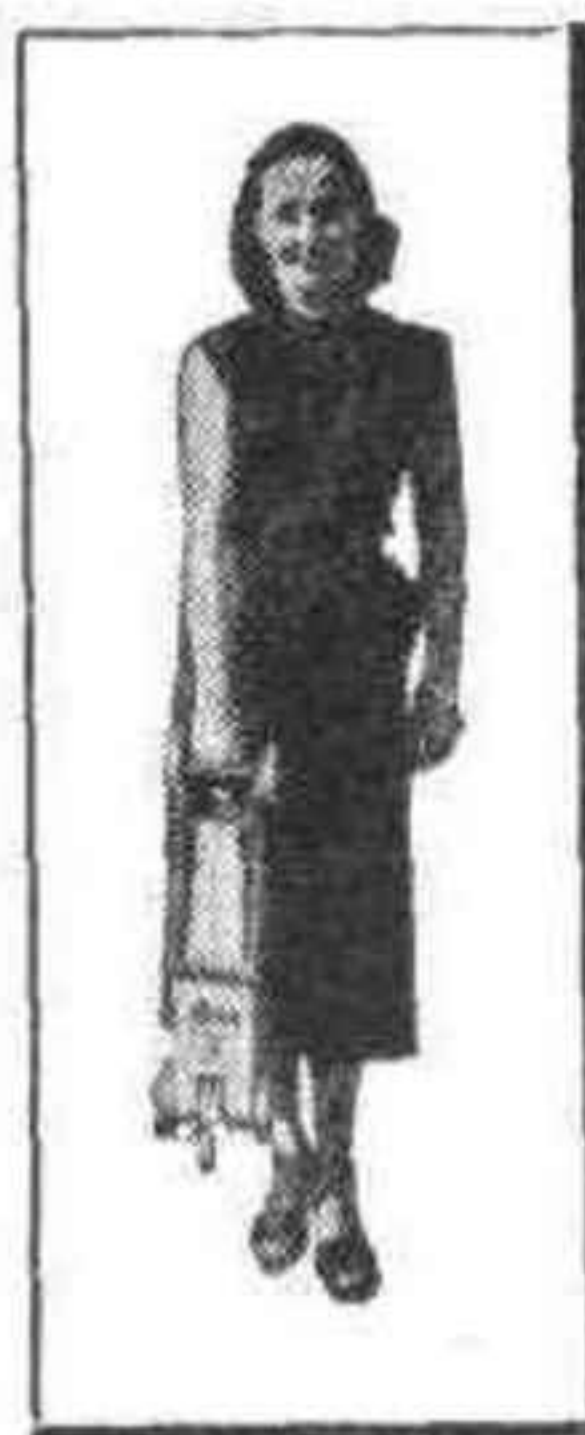
by
CECIL CLUTTON
CYRIL POSTHUMUS
DENIS JENKINSON

The full story from 1895 to 1956. The 105 illustrations include 39 whole page drawings of the outstanding designs by George A. Oliver.

A BATSFORD CLASSIC CAR BOOK

"JUST THE JACK FOR JILL"

Lifts 15 cwt. with ease, speed and safety. A must for every enthusiastic owner-driver or light van owner, either on the road or in the garage. Price £11.11.0



THE EPCO minor

See it at your local garage or write direct to
EPCO LTD., STAR WORKS, LEEDS 7, ENGLAND
Telephone: Leeds 32461/2 (ndk) 767

Hard-Surfaced Rockers

M.G., 6s. each exchange; rocker bushes 5s.; shafts, 12s. 6d. to 22s. 6d. pair; valves from 7s. 10d. each; guides, 3s. 3d. to 4s. each. Gaskets—all models, oil-seals, grommets, king-pin sets, crown/pinion sets, half-shafts, V/D races, brake cables, etc. Many other spares from stock.
WOLSELEY rockers, 6s. each exchange; rocker bushes, 5s.; single shafts, 11s. 6d., 13s. 6d.; twin, 22s. 6d. pair; valves from 7s. 10d.; guides, 3s. 3d. to 4s. Gaskets all models, king-pin sets, half-shafts, brake and clutch linings, and many other spares.

S.U. Exchange Service, carburetters, pumps, spares, Engine reconditioning.

WANTED—Secondhand M.G. spares

C.O.D. SERVICE. S.A.E. LIST

THOMSON'S
102, KINGSTON ROAD,
WIMBLEDON, S.W.19

Tel.: Liberty 8498

MARTLET PISTONS

The acknowledged best for sports and racing engines

MARTLET PISTONS AND KE 965 HAND-FORGED VALVES TO PATTERN OR SKETCH

BORING, SLEEVING, PORT POLISHING

THE
BROOKLANDS
ENGINEERING CO., LTD.

Founded 1911

Portsmouth Road, Cobham, Surrey
Phone: COBHAM 3303

For All Your Insurances...

CONSULT

HYDE-EAST, BALSTON & PARTNERS LTD.

Insurance Brokers

26, MARTIN LANE,
LONDON, E.C.4

Tel.: MANSion House 2335 (3 lines)

CAR HOODS TEMPLATE TAILORED READY TO FIT



MOST PRE-WAR AND POST-WAR MODELS

CARPETS, UPHOLSTERY
Send for price list and samples

SIDESCREENS
TONNEAU COVERS

CONNELL BROS. 693 HIGH RD., LEYTON, E.10. Phone LEY. 7223

REBORING & SLEEVING

Engines rebored on your own premises without removal from chassis. Price 12s. 6d. per bore. Also rod metalling, line boring, valve seat inserts fitted. All pistons stocked. Prompt C.O.D. Service.

HOMEBORE SERVICE

46, SHIREHALL LANE, HENDON, N.W.4
Telephone: HENDON 6648
also, 7, PARK STREET SLOUGH

STEAM CARS

1956 Claydon Steam Car is described in "Light Steam Power." Your copy and lists of engineering drawings, castings, books, for 3s. 6d.

LIGHT STEAM POWER, M.S.,
KIRK MICHAEL - ISLE OF MAN - U.K.

SPECIALIST REPAIRS

BEARINGS REMETALLED
CYLINDER BLOCKS REBORED AND SLEEVED
STARTER GEAR RINGS FITTED
BRAKE DRUMS SKIMMED
VALVE SEAT INSERTS FITTED ETC.

HEPOLITE AND WELLWORTHY PISTONS AND PISTON RINGS
ALSO VALVES AND VALVE GUIDES

Please forward pattern when ordering parts and pattern piston when ordering rings. This will avoid delay and ensure

PROMPT C.O.D. SERVICE
CHARLTON KINGS ENGINEERING CO.
CIRENCESTER ROAD,
CHELTENHAM, GLOS.
Tel.: CHELT. 2437

FOR SALE—continued

- SPECIAL: BASIC RILEY 9.** Excellent condition. All weather equipment. First £70. Redhill 3912. [8327]
- BRISTOL, 1950, 401.** Radio, heaters; washers. Excellent throughout. Genuine private cash bargain. £685. Company car forces sale. Rickmansworth 3820. [8387]

WANTED

- DELLOW or R.A.G.** trials car. Must be in good condition. Letters to: 10, Birchfield Road, Wednesfield, Staffs. [7955]
- SCRAP CARS WANTED,** any year, make, h.p. or age. Collected anywhere. Get my price first. I am also interested in purchasing thoroughbred cars which are damaged, have parts missing or in need of repair. Jaques, 135, St. Walburga's Road, Blackpool, Lancs. [7948]
- M.G. 18/80 BLOCK** or engine. Grant, 15, Bromley Road, Beckenham 1731 evenings. [8009]
- WANTED: ALVIS SPEED 25** Cylinder Head. Box No. E.010. [8010]
- INTERESTING,** economical and reliable car wanted, under £50. Pomeroy Lodge, Wingfield, Nr. Trowbridge. [8011]
- WANTED: M.G. T.C. Gearbox.** Howard, 236, St. Ann's Road, Tottenham, London, N.15. [8012]
- VOLKSWAGEN GEARBOX** with D/Shafts. State model, mileage, condition, Box No. E.013. [8013]
- CAR WITH A GOOD PERFORMANCE** wanted (B.M.W., Riley, Alvis, etc.). Reasonable. Stones, Dee House, Faradon, Nr. Chester, Cheshire. [8014]
- INVICTA 4½ litre** gearboxes and rear axles required, also new or reconditioned 4½ litre Meadows engines or spares. Box No. E.029. [8029]
- FOR "K" TYPE M.G.:** Complete engine and clutch, E.N.V. Wilson pre-selector gearbox, supercharger, three carb.-manifold, magneto (drive and mag.). Bailey, Park Brow Farm, Manchester 21. [8034]
- CRASHED VOLKSWAGEN** car or commercial. Lomas's, King Street, Knutsford, Ches. [8035]
- WANTED: AUSTIN 7 Sports Special.** Details to Dr. Waterfield, The Royal Hospital, Sheffield. [8038]
- POOR BUT HONEST** young lady enthusiast wishes to own pre-war coupé, in running order. Capital £15. Offers to Box No. E.057. [8057]
- I WANT THE BEST** vintage or sports car (1922-39) drophead coupé that £300 cash can buy. No white elephants, please (20 m.p.h. at 70 m.p.h. cruising essential), and don't waste my time with old ironmongery; must pass engineer's and Hendon tests 100% and be potential concours winner. Photos appreciated and returned promptly. Box No. E.058. [8058]
- RILEY 15 h.p.** 6-cylinder engine post-1935 with gear-driven oil pump on off-side of block. Complete engine required less carburettor and exhaust manifold. Full particulars of condition and price to Quayle, "Towncroft," Great Churchway, Plymstock, Devon. [8059]
- HOOD IRONS** or frame for 1936 Riley Lynx. Complete hood considered. Lt. Preston, Ranby Camp, Retford. [8074]
- MORRIS MINOR ENGINE, 1949-52.** Also hard-top. Detail please, to Box No. E.075. [8075]
- WANTED: DILAPIDATED M.G.** or other car. Smashed or engineless considered. Phone: SHE 6126. [8087]
- FODEN STEAM WAGON** or tractor. Whereabouts of any standing appreciated. J. Swindeshurst, Ashbourne Road, Leek, Staffs. [8088]
- ULSTER AUSTIN gearbox.** 76b, Amhurst Park, London, N.16. [8096]
- ROLLS ROYCE 1932 Phantom 2;** cylinder head with valves, guides and springs, etc., required. Robert Thwaites, Playing Place Garage, Truro, Cornwall. Feock 238. [8105]
- HARD-UP COLONIAL** with £60, or less, to spend, seeks early 4-seater, w.h.y., appearance immaterial but must be reliable, weatherproof and legal. Consider ex taxi. View London or Norwich area on or about 7th December. Write air mail, please, full details and photo to T. Bannerman, Box 77, Limbe, Nyasaland, Central Africa. [8130]
- FORD V.8** speed equipment. Price and details to Box No. E.131. [8131]
- WANTED: FORD CONSUL 1951** Workshop Manual. Emmerson, 18, Hawes Terrace, Bradford 5, Yorkshire. Phone: 65461. [8132]
- AUSTIN OR FORD SPECIAL.** Weatherproof hydraulics. Details. Heath, 30, Colworth Road, E.11. [8133]
- WOLSELEY HORNET** Special, with worn or broken engine or gearbox. Must be runner, or towable, and about £20 to £25. 34 type preferred. Full details please. Box No. E.134. [8134]
- CYLINDER BLOCK** for 1937 Austin 15.9 or s/hand engine considered. L. Hamblin, 88a, High Street, Eton, Windsor, Berks. [8135]
- SINGER LE MANS 9 h.p.** block to take counter-balanced crank. Complete engine considered. Paris, 6, Fort Road, Halstead, Kent. Tel.: Sevenoaks 3769 evenings, weekends. [8171]

WANTED—continued

- P.A./P.B. ENGINE** complete. Black, rods, crank, etc., considered separately. Condition and price. Cooper, 13, Higham Station Avenue, E.4. [8172]
- WANTED: M.G. J.4** exhaust manifold, good condition. Cope, 22, Highland Road, Southsea, Hants. Phone: Portsmouth 31825. [8173]
- ENGINE** for Armstrong Siddeley, 1937, 14 h.p. Letters with details, please, Dempsey, 55, Loom Lane, Radlett. [8178]
- CARS WANTED** for cash. Smiths, 86, Chalk Farm Road, N.W.1. Tel.: GUL 2767. [8179]
- VETERAN CARS** urgently wanted. Sporting Motorist's Agency, 76b, Amhurst Park, London, N.16. [8095]
- WORKING LAD** offers life savings (£100) for lovingly preserved 6/10 h.p. tourer. Photo, history, please. Dealers, charitarians unentertained. Box No. E.180. [8180]
- SQUIRE CAR** and spares. 76b, Amhurst Park, London, N.16. [8093]
- ALVIS SPEED TWENTY** Sports Tourer. 100% condition necessary. M.G. 2-litre sports tourer. 100% condition necessary. Details, photo, etc., to D. Clements, Shipham, Somerset. [8224]
- TALBOT 105 open 4-seater,** must have very good mechanics and body. Details and photo if possible to Gregory, 18, Rutland Crescent, Bilston, Staffs. [8225]
- BENTLEYS,** Rolls, Lags 4½, M.G.s, Astons, Alfas, etc. Booth, 55, Headingley Lane, Leeds. Tel.: 54795. [8227]
- WILSON GEARBOX** wanted in first class working order for 1935 Talbot 1933. Box No. E.228. [8228]
- UP TO £450** for good sports car. M.G. T.D., H.R.G., Jupiter, etc. Sheffield. Box No. E.229. [8229]
- WANTED: S.U. CARBS,** 1½ in. D.D. or S.D., one or a pair. Quartermaine, Frithsden End, Berkhamsted, Herts. [8230]
- GEARBOX** for 1948 Model J. Vauxhall. Must be in first class order. Aridge, Shrubbery Cottage, Jordans, Ilminster, Somerset. [8231]
- £10 OFFERED** for pair of wheels and brakes for 1921 A.B.C. motorcycle. See For Sale column. "Tutt." [8233]
- M.G., ROVER,** or similar saloon, pre-war, sound. Full details, Harrison, 2, Woodlands Way, Barton, Preston, Lancs. [8262]
- WANTED: RILEY MARCH** Special, or Riley Imp, or similar. Box No. E.281. [8281]
- ALVIS 12/50,** first class all-round condition. History and details, please. Box No. E.291. [8291]
- RILEY IMP,** Sprite, etc., M.G. P.B., Le Mans Aston, or similar. Private buyer offers cash for good specimen. Price and photo if possible, please. Box No. E.292. [8292]
- ROOMY,** oldish but low mileage. Immaculate saloon or utility. 21, Ford Road, Ashford, Middx, 3435. [8293]
- SINGER 1939 Roadster,** good condition. Terms if possible. Daly, 11, Valley Road, Middleton, Lancashire. [8294]
- WANTED: A.C. BUCKLAND** Tourer, 1951-1953. Cash. Box No. E.295. [8295]
- RILEY 1½ litre,** complete chassis, 1947/54. Neherlea, Goldrings Road, Oxshott, Oxshott 2501. [8296]
- SPORTS CARS,** specials, urgently wanted. Sporting Motorist's Agency, 76b, Amhurst Park, London, N.16. [8034]
- WANTED: HAYES SELF-SELECTOR GEARBOX** as fitted to 1933/1935 Austin 16 and 18 h.p. saloons. Good price given for good rust-free condition and all considered. Write Cockfield House, Chailey, Nr. Lewes, Sussex. [8299]
- 1,172 750 SPECIAL** or Nippy; mechanically sound, body immaterial. Details, photo: Champriss, 9, Fortis Green, East Finchley, N.2. [8300]
- DETACHABLE HARDTOP** urgently required for T.D. M.G. D. Cavender, Harefield Hall, Willsbridge, Bristol. [8338]
- X.K.120** C-type cylinder head wanted; also high lift cams and 8 or 9/1 standard size pistons; must be in good condition. Any other X.K. speed equipment. Wilcock, c/o Swandean Garage, Ltd., Arundel Road, Worthing, Sussex. [8353]
- PHOTOGRAPHS** of racing and racing cars between 1921-1939. Will purchase complete collections. No sports cars, Ben? Box No. E.374. [8374]
- S.S.100 JAGUAR.** Top price awaits really good example. Barry Curtis, 257a, Croydon Road, Beckenham, Kent. Tel.: BEC 1000. [8375]
- ALTA O.H.V. HEAD** for Morris Minor S.V. Bailey, 88, Connaught Road, Teddington. [8376]
- INVICTA 1927/8** 3-litre chassis/transmission parts required. Consider entire vehicle. Thurgood, Castle Hedingham, Essex. [8377]
- RILEY 12/4** Engine wanted (pre-war 1½ litre). Must be in good condition. F. Drake-Briscoe, Shunt House, Bubbenhall, Coventry. [8378]
- VOLKSWAGEN** or Renault 750 wanted. £150 down, plus £12 monthly. Full particulars to Box No. E.379. [8379]
- M.G. T.A.** Engine, good condition. Innes, Thurston, Uplyme, Lyme Regis, Dorset. [8380]
- FORD SPECIAL** or post-war Morgan wanted. D. Cohen, Redroofs, Valencia Road, Stanmore, Middlesex. [8383]

MISCELLANEOUS

- THREE VOLUMES** (808 pages) of "Modern Motor Cars," printed in 1924. Absolute mint condition. Price £2 10s. 135, St. Walburga's Road, Blackpool, Lancs. [7947]
- M.G. J.2 BODYWORK** complete, inc. windscreen, lamps, etc. Excellent condit. £15. Gleave, Medina House, Stone Grove, Edgware, Middx. STO 9944. [8015]
- INTERNATIONAL BADGES,** most continental clubs, 30s. each. Apply K. James, 77, Evans Street, Wolverhampton. [8016]
- 3 LITRE ROLLS-BENTLEY** engine required by private owner. Must be excellent except for head. Box No. E.011. [8017]
- ENTRANT MONTE-CARLO RALLY** wishes to contact person wishing to crew, share expenses. Box No. E.090. [8090]
- SYNTHETIC ENAMEL** in all post-war car colours, 1946-56. Touch-up tins 3s. and 5s. 6d. post free U.K. Cash with order. Jares Synthetics, 8, Victoria Street, Leeds 7. Tel.: 684020. [8181]
- TEST YOUR OWN** cylinder compressions with the "Dubtest" (Combined Cylinder Compression tester and Tyre Gauge). Simply screw into spark plug hole. Fits both 14 and 18 mm. threads. Highly accurate. Will also test tyre pressures. From Halfords and all Garages. 15s. [8182]
- YOUR SPEEDOMETER OR REV. COUNTER** reconditioned, from 18s., according to type and condition. Guaranteed for six months. Bristol Instrument (J. Bradshaw), 120, Victoria Street, Bristol 1. [8183]
- TRIPLEX EXPRESS REPLACEMENT SERVICE.** Any pattern suppl.ed. Balmers (Glass Merchants), Ltd., Derby Road, Watford. Tel.: Watford 4268. [8184]
- HOODS FROM £5.** Tonneau covers, upholstery, roofs, sliders, linings, carpets; seat conversions. Personal attention given to all vehicles. Estimates free on request. Personal callers only. Maltby, Triangle Garage, 2, Bishops Road, Fulham. Tel.: FUL 1193. [8185]
- THE PEEL P.1000** Glassfibre Sports Body bolts direct to your chassis. Beautiful appearance and finish. £75. S.a.e. details. Peel Engineering, I.O.M. [8186]
- BUYING A CAR.** Selling a car. Use our H.P. scheme. Insurance £2 d/p cover by return. I. D. & S. M. Kennedy, 7, Hillborough Road, Luton 4216. [8259]
- SLEEK WOODCARVINGS** created to order, especially Mascots. Moe Woods, 1a, Hawarden Grove, Liverpool 21. [8384]
- SPEEDOMETER, Rev. Counter** and car clock repairs. Cheaper than maker's replacements. Send for price list. "Speedometer Service," A. S. Dunning, C.M.B.H.L., 24, Queen Street, Huddersfield. [8385]

EXCHANGES

- T.T. FRAZER-NASH, 1935/6,** larger car, Bentley preferred. See under For Sale. [7950]
- AERODYNAMIC MISTRAL SPECIAL.** Wire wheels. Tonneau. Very econ. Twin carb. 1100 c.c. Riley unit. A very good looker for £300 o.n.o. or will part exchange for '39 Ford 10 Sal. Phone: EDM 1935, or evenings ENT 4047. [8030]
- SPORTS CAR SPECIAL** 10.5 h.p. Le Mans Singer Base 100%, for S.S.100 engine shot, w.h.y. 69, Wakegreen Road, Birmingham 13, South 1138. [8043]
- SUNBEAM 1935 20 saloon,** for similar tourer — or anything! Ferguson, Swanston Avenue, Edinburgh. [8155]
- X.K.120 D.H.C.** 1954. Radio. 1956 condition as not used for long period. For D.H.C. with bench-type front seat or four-seater. Cash either way. Northwood 1385. [8234]
- UNUSED 6 VOLT LUCAS WIPER,** against perfect 650 x 19, cash adjustment. 282, Thornton Road, Thornton, Bradford, Yorkshire. [8297]
- RILEY 1933 Monaco,** Concours d'Elegance condition, for Lagonda 2 litre tourer, reasonable condition, Box No. E.386. [8386]

SITUATIONS WANTED

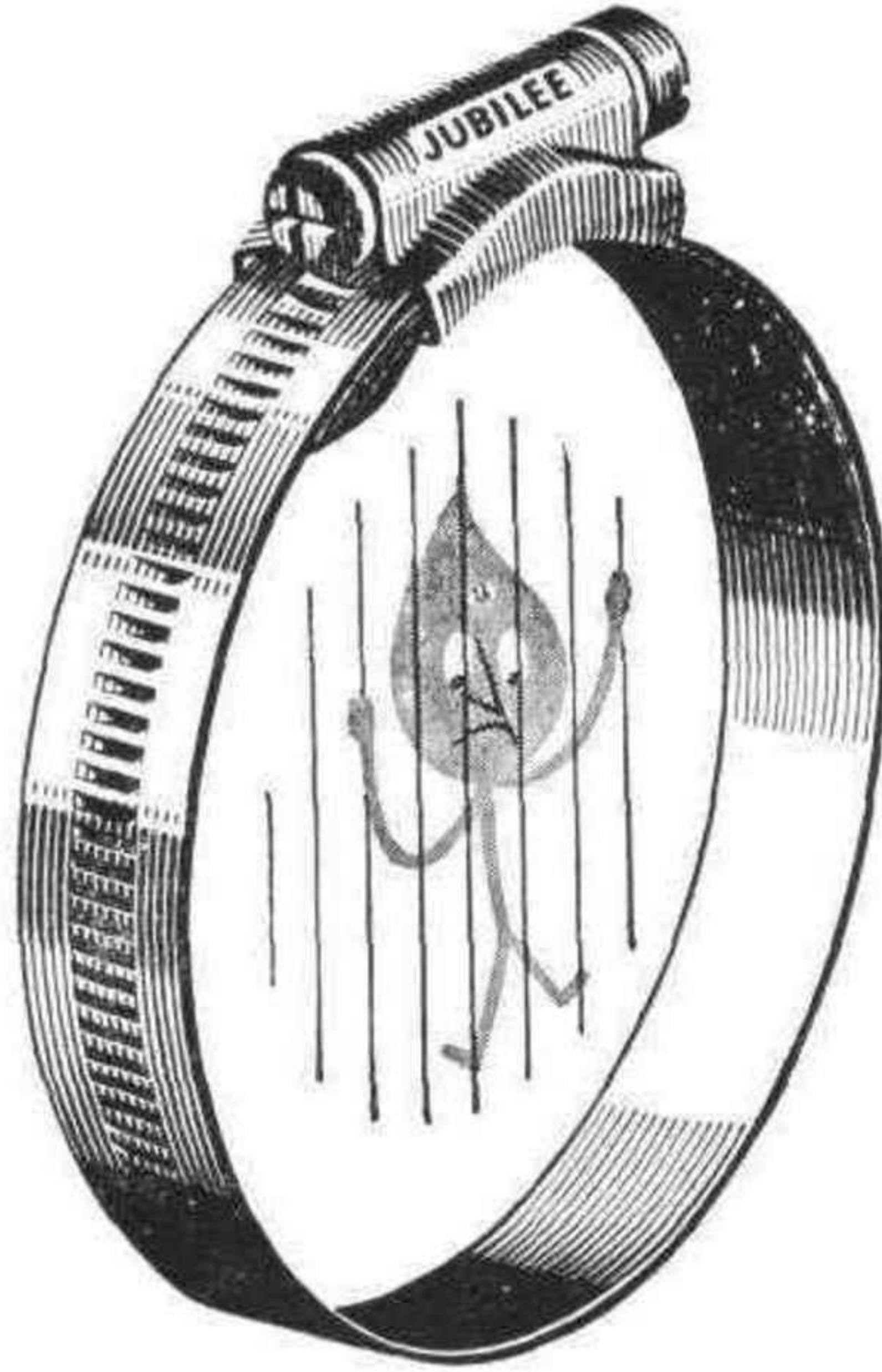
- ENTHUSIAST WISHING TO RALLY** for sporting rather than award hunting reasons, desires to contact driver seeking navigator. Willing share reasonable expenses. Leeds area, Ring Stroud, Flockton 319 or Dewsbury 3333 (daytime). [8018]
- ENTHUSIAST, 28,** single, good education, requires position in any capacity with private or works racing stable. Box No. E.089. [8089]
- RACING MOTORCYCLIST,** many international successes, works and private, good team man, seeks tryout on four wheels. Offers please to Box No. E.226. [8226]

SITUATIONS VACANT

- PRIVATE H.P. FINANCE AGENCY** offering H.P. terms to private individuals require part time or full time agents in large towns. I. D. & S. M. Kennedy, 7, Hillborough Road, Luton 4216. [8260]

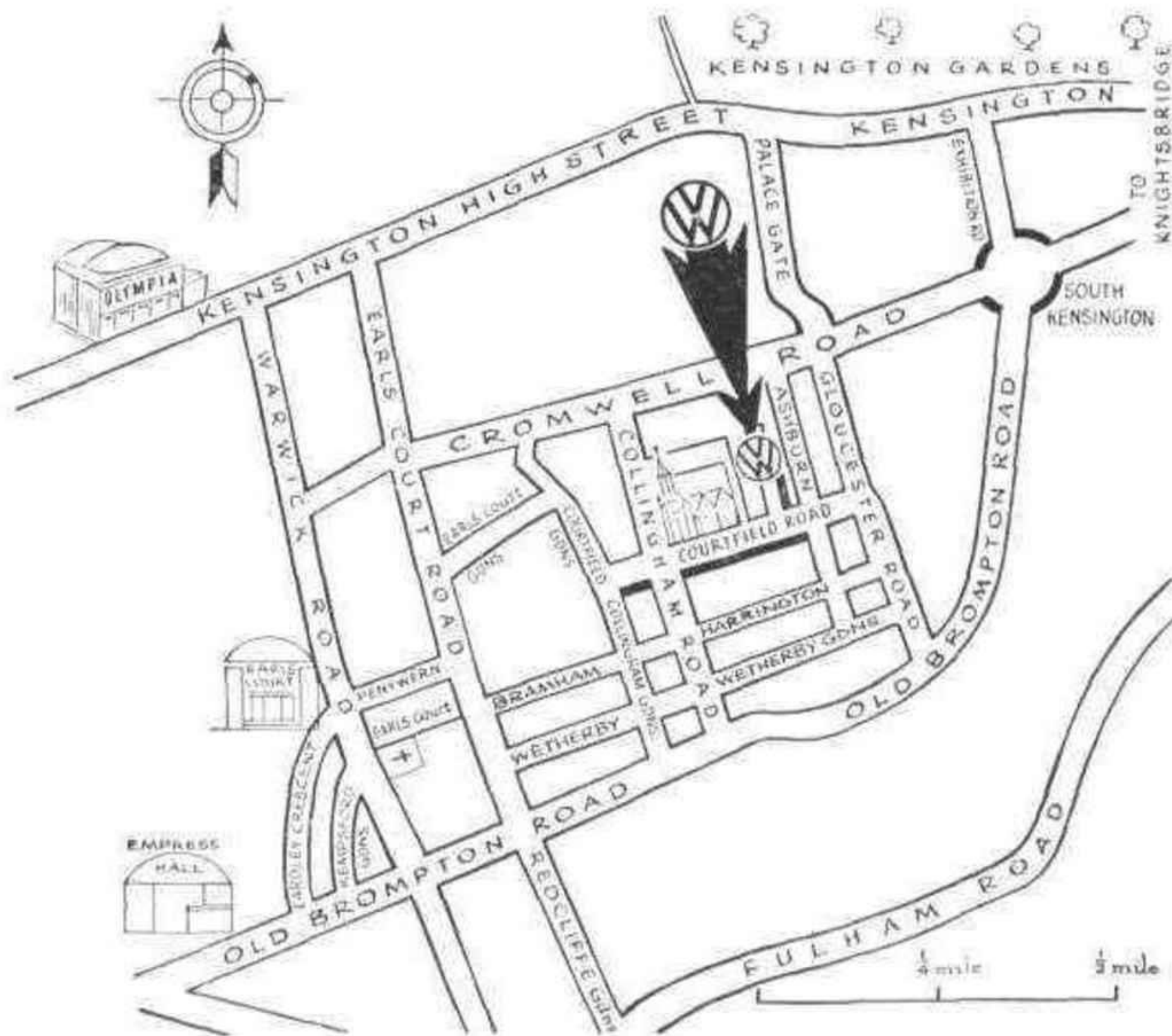
Box No. Address: "Motor Sport," 15-17, City Road, London, E.C.1.

there's
 never a
 drip
 through a



genuine *Jubilee* clip
 Regd. Trade Mark

L. ROBINSON & CO. (GILLINGHAM) LTD. London Chambers, Gillingham, Kent Phone 5282



V & F MONACO MOTORS
the
VOLKSWAGEN
specialists

OFFER EARLY DELIVERY OF ALL
 NEW VOLKSWAGEN MODELS

We are also Britain's largest retailers of used VW's and offer the services of one of the most specialised VW maintenance organisations in the country, which first began concentrating on the Volkswagen in 1950.



V & F MONACO MOTORS
 VOLKSWAGEN SPECIALISTS AND OFFICIAL AGENTS
 6, ASTWOOD MEWS, COURTFIELD ROAD, LONDON, S.W.7
 Telephone: FREmantle 4414 (near GLOUCESTER ROAD UNDERGROUND STATION)

START WITH SOMETHING EXTRA



2 YEARS
INSURED LIFE
MANY EXCLUSIVE FEATURES
AND TWELVE MONTHS GUARANTEE
AT NO EXTRA COST!

LUCAS

CAR BATTERIES

MOTOR SHOW Stand No. 253

JOSEPH LUCAS LTD . BIRMINGHAM . ENGLAND