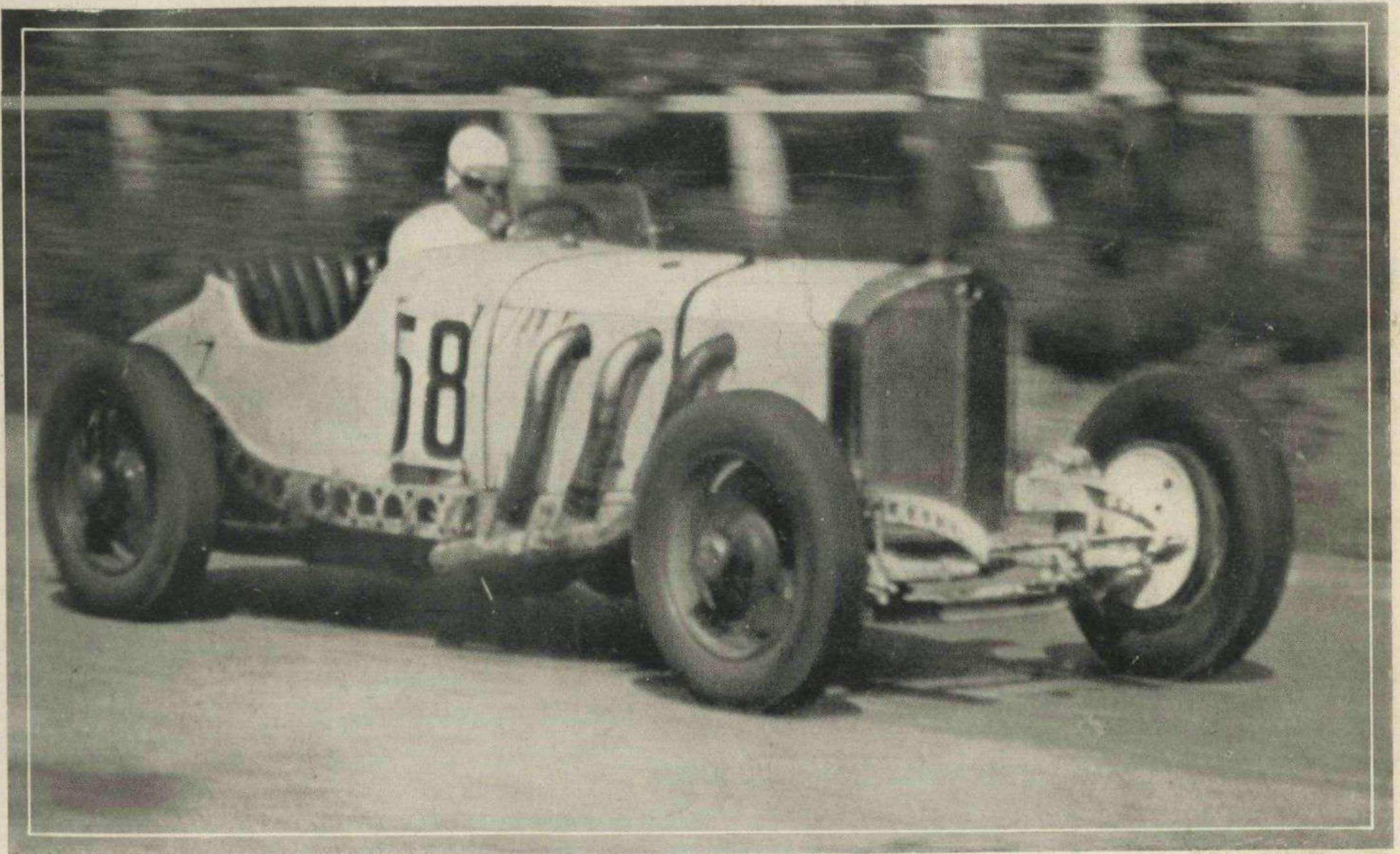


# MOTOR SPORT

LAND - AIR - WATER

SIXPENCE MONTHLY



CARACCIOLA PASSES BY.  
A 100 m.p.h. "shot" in the 1931 French Grand Prix.

[Motor Sport Photograph]



FOR SPEED WITH SAFETY fit

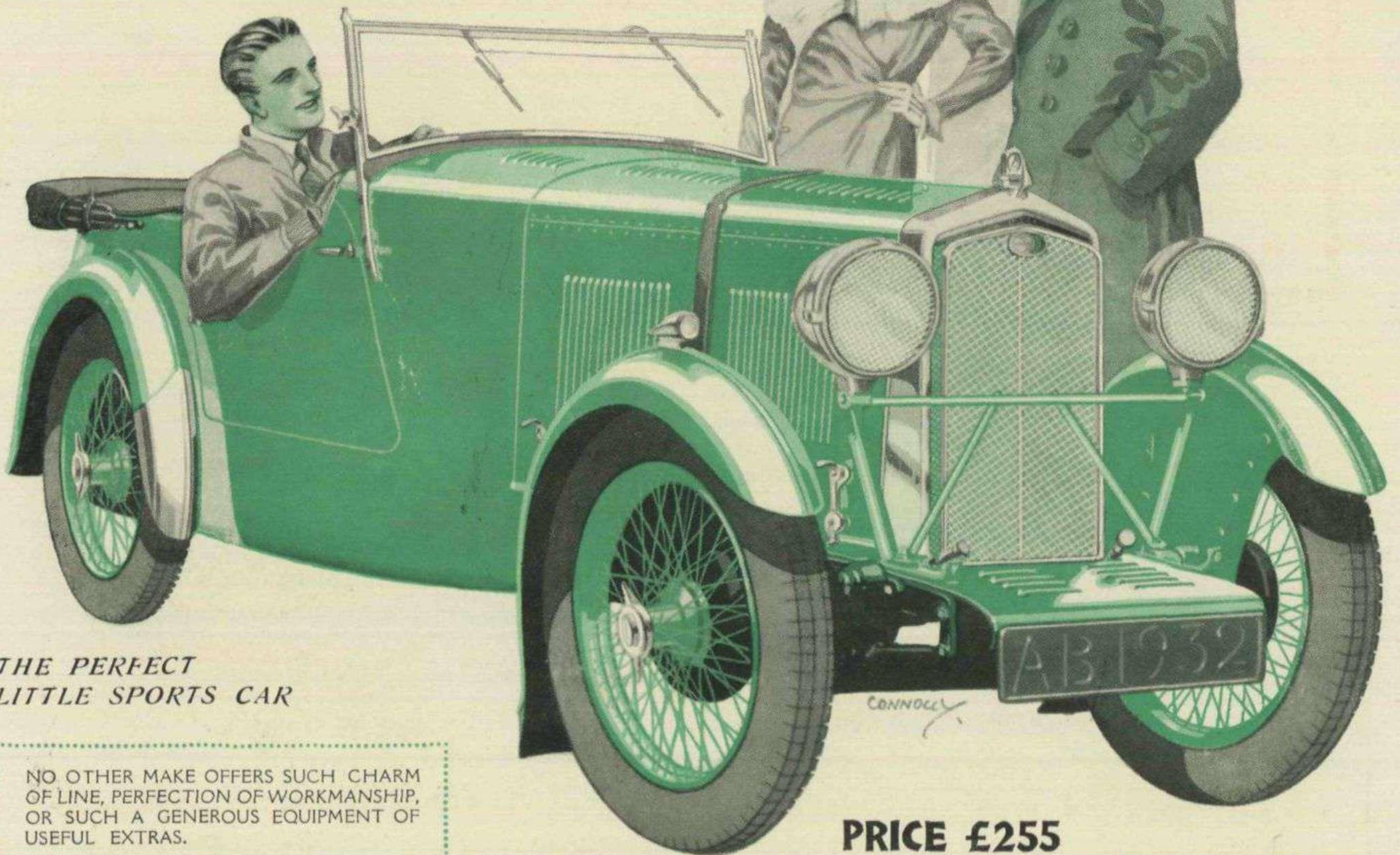
**FERODO**  
REGD. TRADE MARK  
**BRAKE LININGS**  
FERODO LIMITED · CHAPEL-EN-LE-FRITH

**HERE'S  
THE LATEST!**

**IN SPORTS HORNETS**

THE WOLSELEY HORNET

**"ABBEE SPECIAL"**



**THE PERFECT  
LITTLE SPORTS CAR**

NO OTHER MAKE OFFERS SUCH CHARM OF LINE, PERFECTION OF WORKMANSHIP, OR SUCH A GENEROUS EQUIPMENT OF USEFUL EXTRAS.

**PRICE £255**

SOLE LONDON DISTRIBUTORS FOR—



**E. C. STEARNS & CO.**

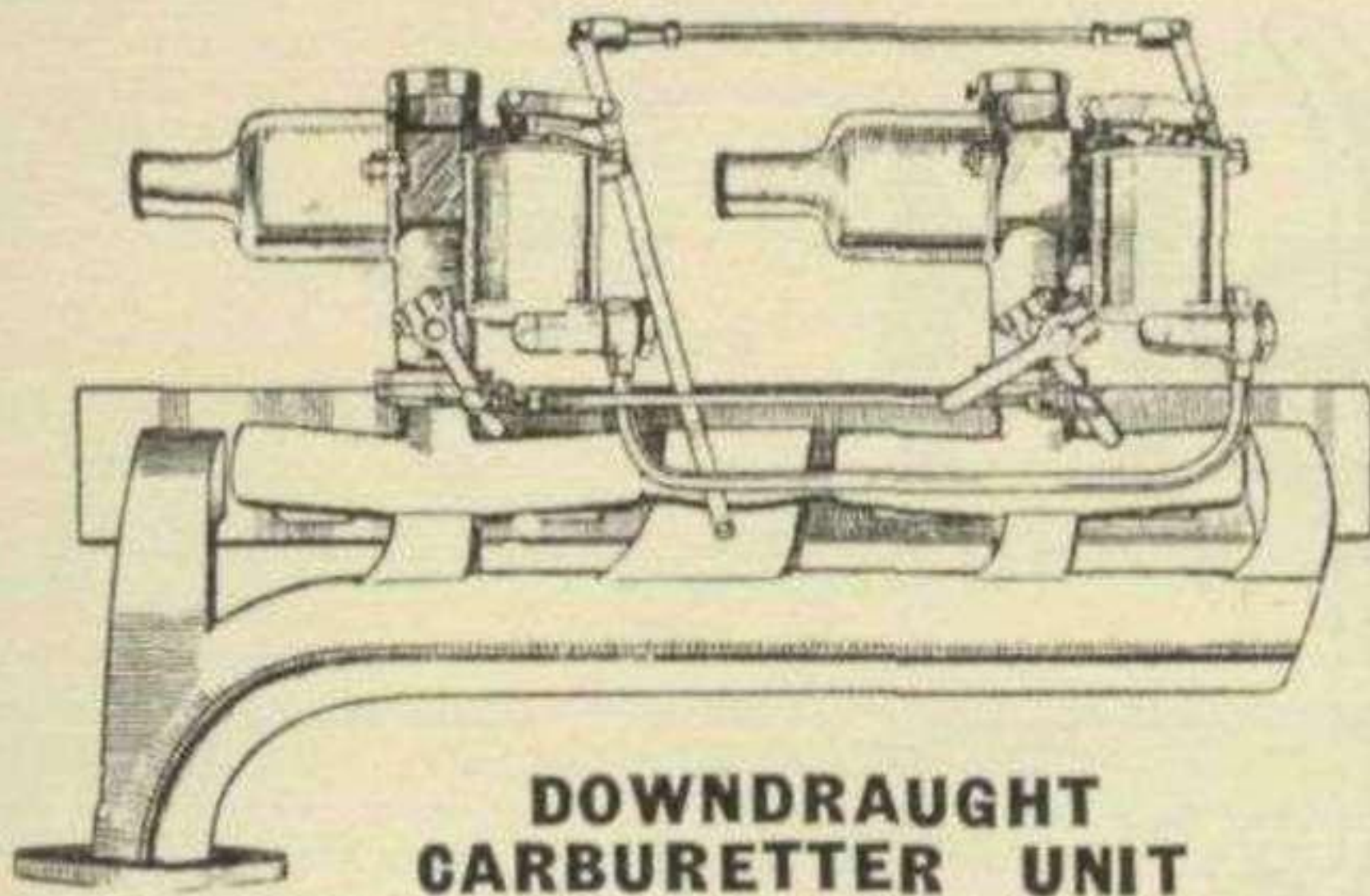
16 FULHAM ROAD, SOUTH KENSINGTON, S.W.3

TELEPHONE: KENSINGTON 0081/2

Equipment includes:—  
Stearns-Layton racing type Remo's Gear Control with 4-speed gate.  
Special bonnet with louvred top and strap.  
Rudge-Whitworth knock-off wire wheels.  
Lucas extra large long range chromium plated head lamps.  
Genuine cycle type wings fitted with stream-lined chromium plated side lamps.  
Racing type double-acting windscreen with Safety glass and dual electric wipers.  
8-gallon petrol tank with quick release filler cap and electric petrol gauge.  
"Brooklands" fully sprung steering wheel.  
Sliding pneumatic seats, upholstered in best hide.  
Special heavy stoneguards to lamps and radiator  
Battery Indicator, etc., etc.  
Any colour to choice.

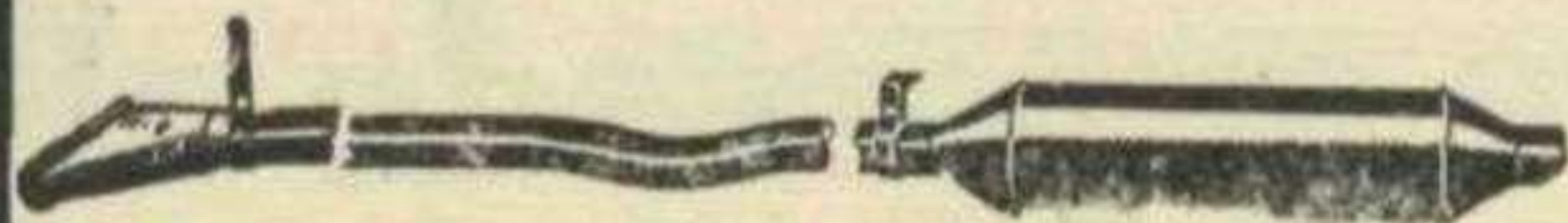
Please mention MOTOR SPORT when corresponding with advertisers.

# Greatly Increasing POWER . . . .



**DOWNDRAUGHT CARBURETTER UNIT**

Because the mixture is assisted by gravity in passing into the cylinders these Downdraught Carburetter Units enable far more power to be developed than by normal arrangements. Brake Tests on a Hornet engine show that at 3,500 r.p.m. 2 additional b.h.p. is developed, and at 4,000 revs. 4 additional, and progressively until there is a gain of 10 b.p.h. when running at 5,000 revs. Speed, acceleration and climbing power are all remarkably improved.



**DEEP NOTE EXHAUST**

Not only gives a most pleasing 'note,' but enhances power and keeps car interior cool. Special steel silencer with extractor baffle, 2 in. tail pipe, cast alum. 'Brooklands' Fishtail, all clips, etc., ready to fit. For all makes.

## V. W. DERRINGTON

159, LONDON ROAD, KINGSTON-ON-THAMES  
Nr. Norbiton Station. Kingston 3720

Unit comprises specially designed inlet & exhaust manifold, S. U. Downdraught Carburetters, S.U. Petrolift & all fittings

- Midget & Minor (single carb.)...£10 10
- Magna & Hornet (single carb.)...£13 10
- Ditto (twin carb.) £15 10
- Rover "6" (twin carb.) .....£19 10

**TERRY'S AERO**  
Dbl. Valve Springs

definitely prevent valve bounce; cure for broken springs.  
Midget Minor ... 9/6  
Hornet Magna 12/6  
Mark IV.....10/6

Specialists in Tuning  
**M.G. MINOR, HORNET, AUSTIN 7, etc.**

Send for Tuning and Fittings List.

- MINOR and MIDGET ... 36/-**
- HORNET & MAGNA 39/-**

## LOOK FOR THE YELLOW SIGN

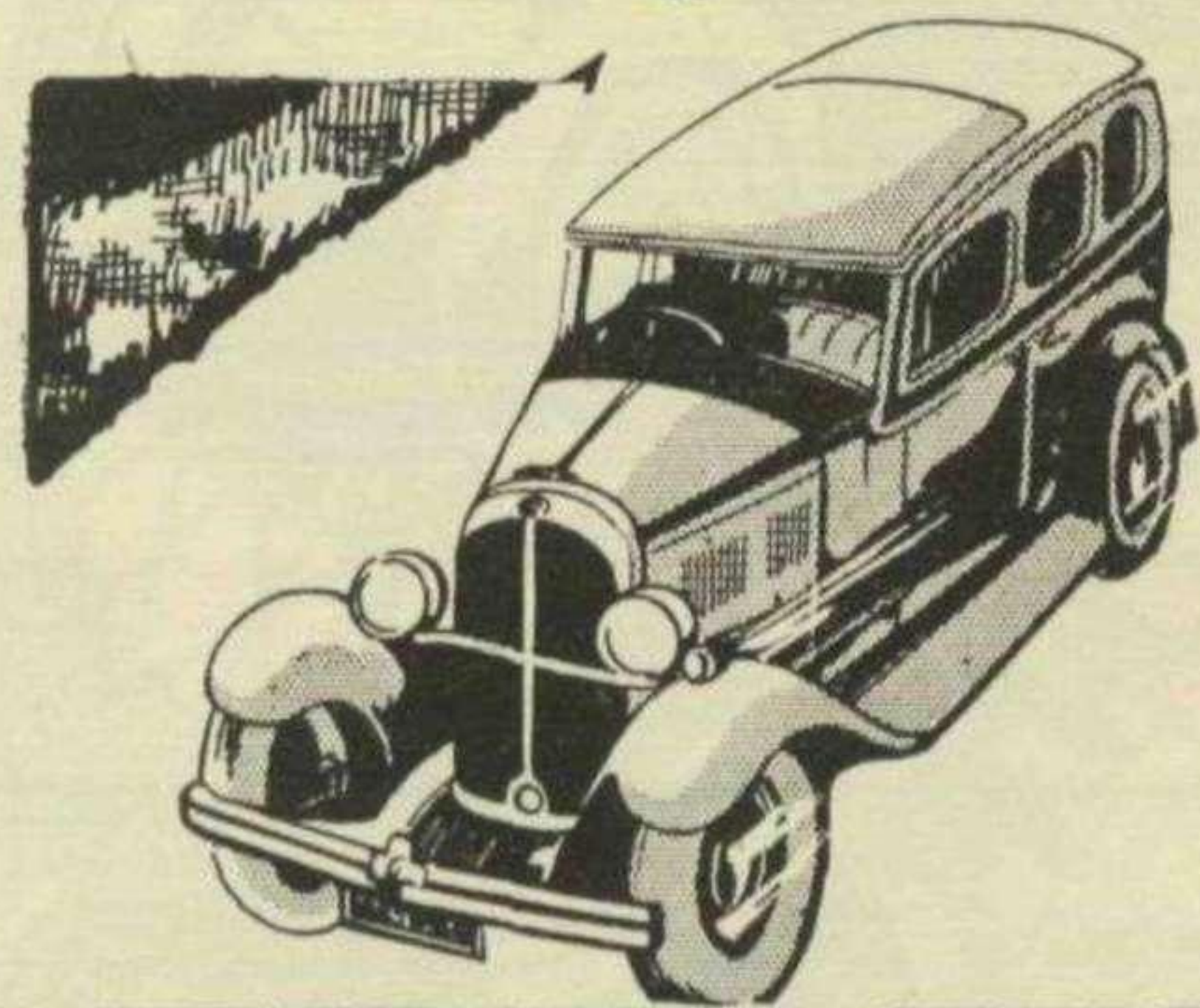
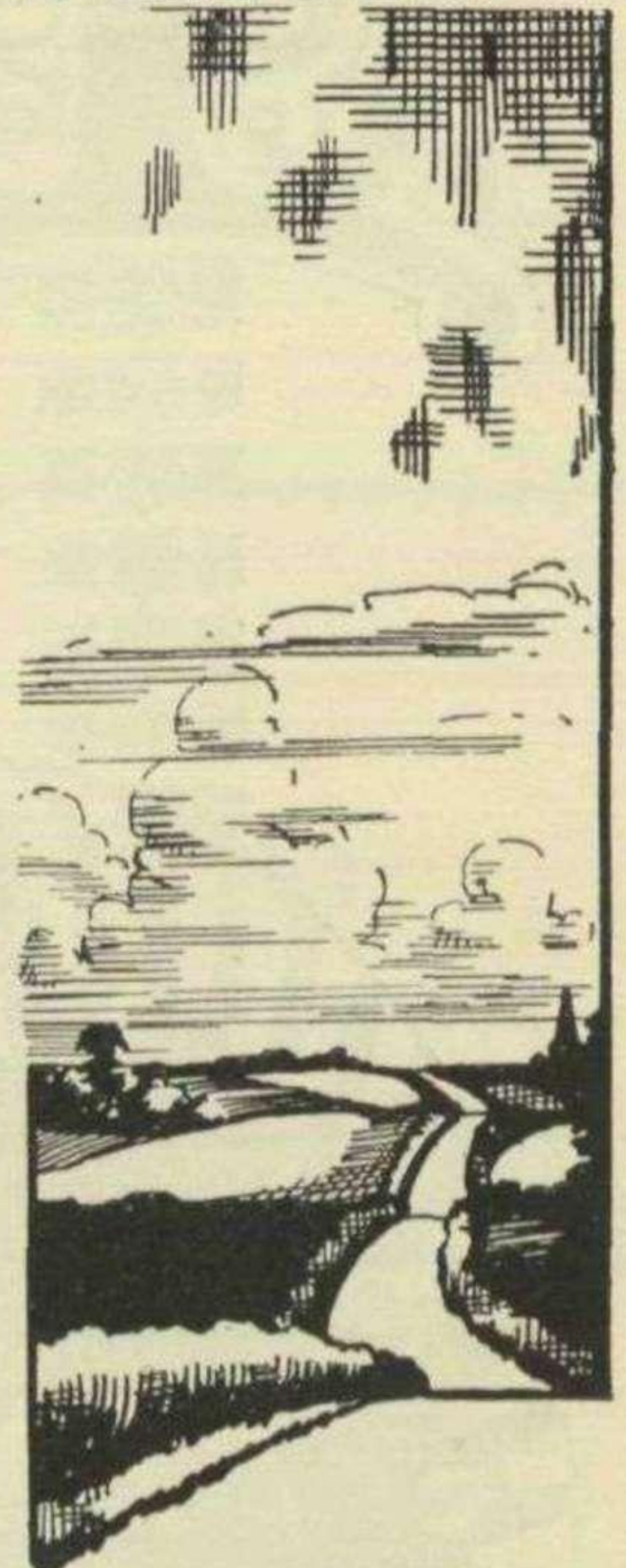
# MORE MILES PER BATTERY

A good tyre is judged by its mileage. So is good petrol—and oil.

Judge your battery by its mileage too, and if it's a Pertrix you will get miles more light—miles more easier starting—miles more faithful service.

Don't forget too, that behind each Pertrix Battery stands Pertrix service, and a service man, skilled in battery care, to safeguard the dependability and long life built-in by Pertrix at the factory.

Ask your Service Station or garage man—they will give you full details, or, if you prefer, write direct to us.



# PERTRIX BATTERIES

STARTING—LIGHTING—IGNITION

*"The Batteries you can trust"*

Divt. of Britannia Batteries Ltd., Britannia House, 233, Shaftesbury Avenue, London, W.C.2. Works: Redditch.  
Telephone: Temple Bar 7971 (5 lines).  
Telegrams: Britanicus, Westcent, London.

M111



### FIXTURES FOR 1932.

- April 17th. Monte-Honiton-Carlo Rally.
- May 21st. Speed Hill Climb.
- June 11th. Speed Trials.
- July 17th. Rag Gymkhana.
- Sept. 11th. Treasure Hunt
- Oct. 22nd. Afternoon Trial.
- Nov. 26th. Night Trial.
- Dec. 16th. Annual Dinner and Dance.

## The BUGATTI OWNERS CLUB LTD.

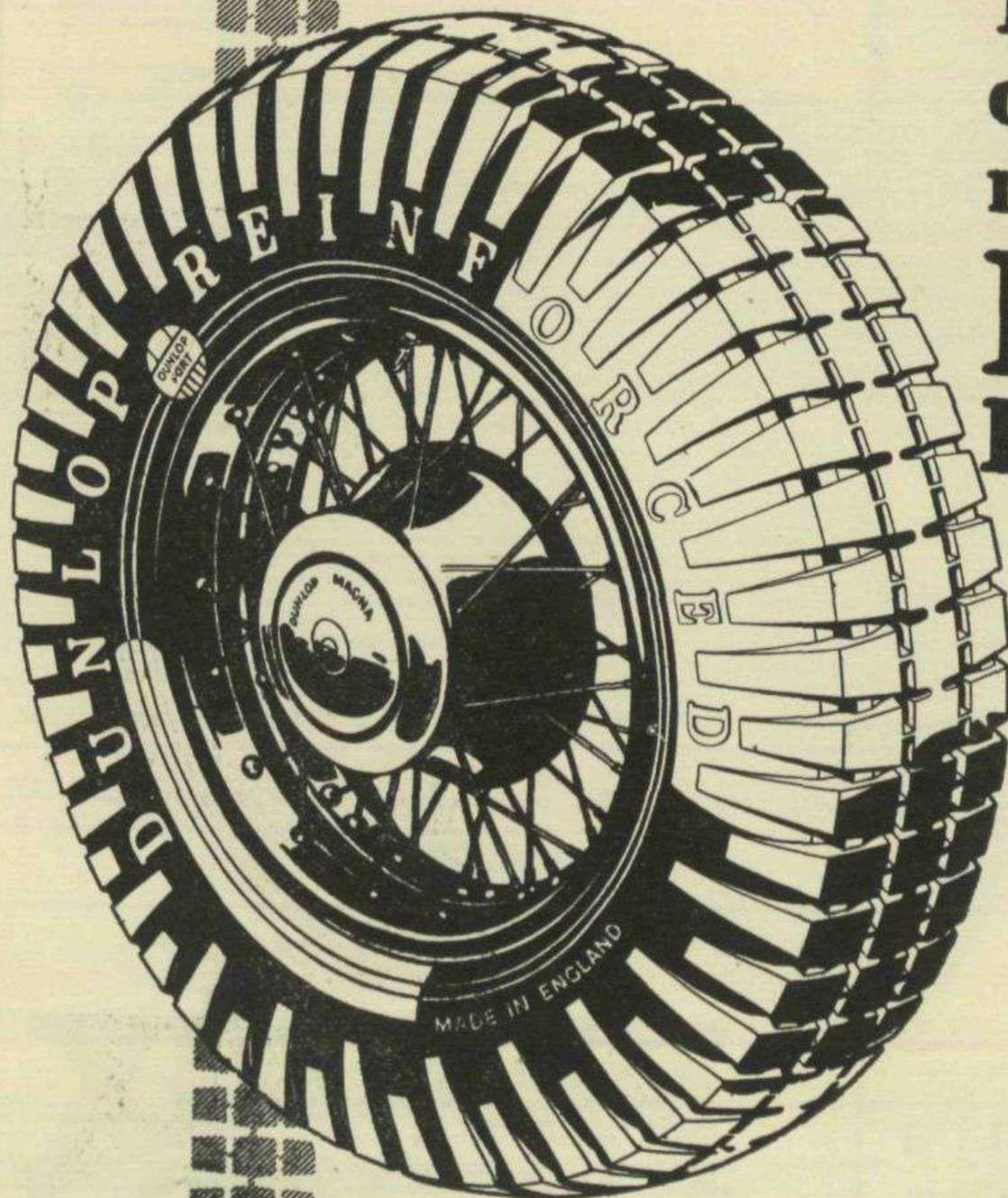
A GENUINE NON-TRADE CLUB RUN BY AMATEURS FOR AMATEURS.

THE CLUB MAGAZINE "BUGANTICS" IS SENT TO ALL MEMBERS BI-MONTHLY.

FULL PARTICULARS FROM  
E. L. GILES, Hon. Secretary,  
2, QUEEN STREET, MAYFAIR, W.1.

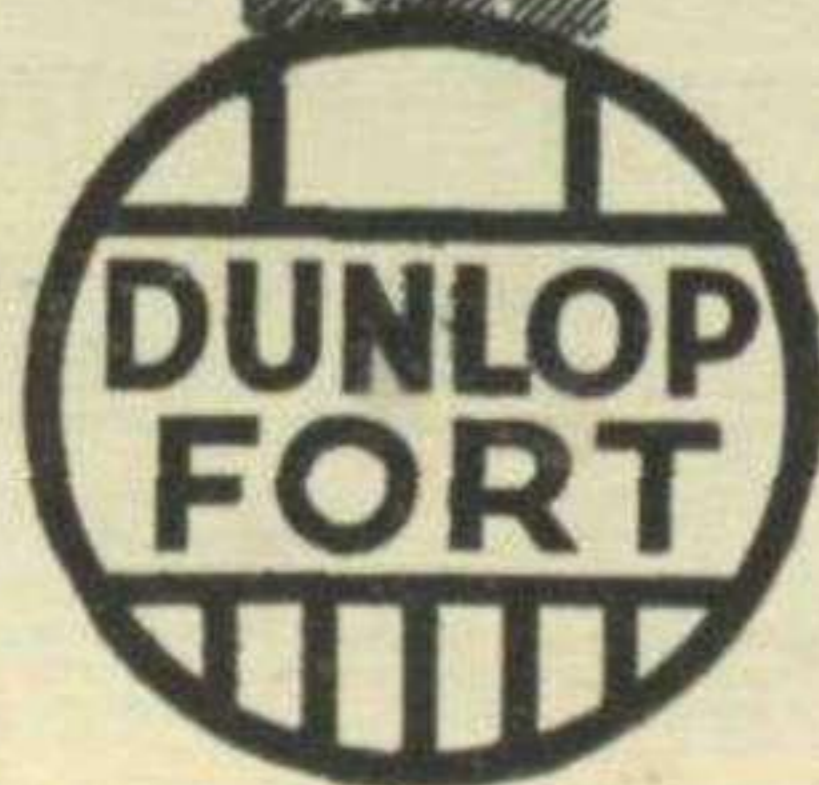
**OUTSTANDING**

# **Merit**



alone is making  
 the Dunlop Fort  
 Tyre supersede all  
 other tyres on the  
 roads of the world  
**DUNLOP  
 FORT TYRES**

should be  
 on *your*  
 car



**In a class  
 by itself**

2H/19

C.F.H.

# MOTOR SPORT

INCORPORATING THE BROOKLANDS GAZETTE

JOINT } GRENVILLE G. O. MANTON.  
 EDITORS } W. S. BRAIDWOOD, B.A. (Mech. Sc.) Cantab.

Editorial, Publishing & Advertising Offices  
 39, VICTORIA STREET, LONDON, S.W.1

Telephone: Victoria 5218.

## THE WAY OF THINGS.

# ROAD RACING IN ENGLAND.

THE insistent demand for a road race in this country has given added interest to the recent announcements that have appeared to the effect that country estates have been acquired for conversion to road racing courses. One of these is the Drakelowe Estate near Burton-on-Trent, a delightful old country mansion situated in heavily wooded country on the low-lying bank of the Trent.

Another is Gopsall Park, between Leicester and Coventry, where, as with Drakelowe, it is proposed to use the house as a club, and the stables as garages, while the suggested circuit is to consist of an eight-mile course round the boundaries of this 1,000 acre estate, and is estimated to cost £100,000.

Such is the enthusiasm among motorists for road-racing, that we are all inclined to give an unqualified welcome to any possibility of its introduction, and it would be as well to consider in a detached and practical manner the requirements of a road-racing circuit on a private estate.

The most obvious condition is that it shall be able to pay its way, and this depends on low cost of construction, economical upkeep, and both accessibility and attraction to the largest possible public. We also consider that this necessitates confining its activities to road racing and its essential accessories.

Plans for a gigantic country club at which every sport can be practiced are very pleasant in the abstract, but when the Automobile Racing Association, who are sponsoring the Drakelowe scheme, talk about having fishing and motor-boat racing on the same stretch of river, it provides an example of enthusiasm obscuring practical considerations! It must also be remembered that every sport except motor racing can equally well be practiced in hundreds of other places, and the upkeep of a large country estate is prohibitive.

Due consideration gives the following main essentials of a practicable scheme. The site should be within an hour of London by car, on a main line, and between London and the Midlands. The surface must allow of cheap

road construction without elaborate foundations (chalk being most suitable) and the circuit must include a climb of 300 to 400 feet to provide a real test for cars and drivers, and the greatest interest to spectators.

Trees, apart from being unpleasant to run into, obscure the view, and if spectators are to remain interested, they must have as nearly as possible a view of the whole course, with a minimum of "blind" points.

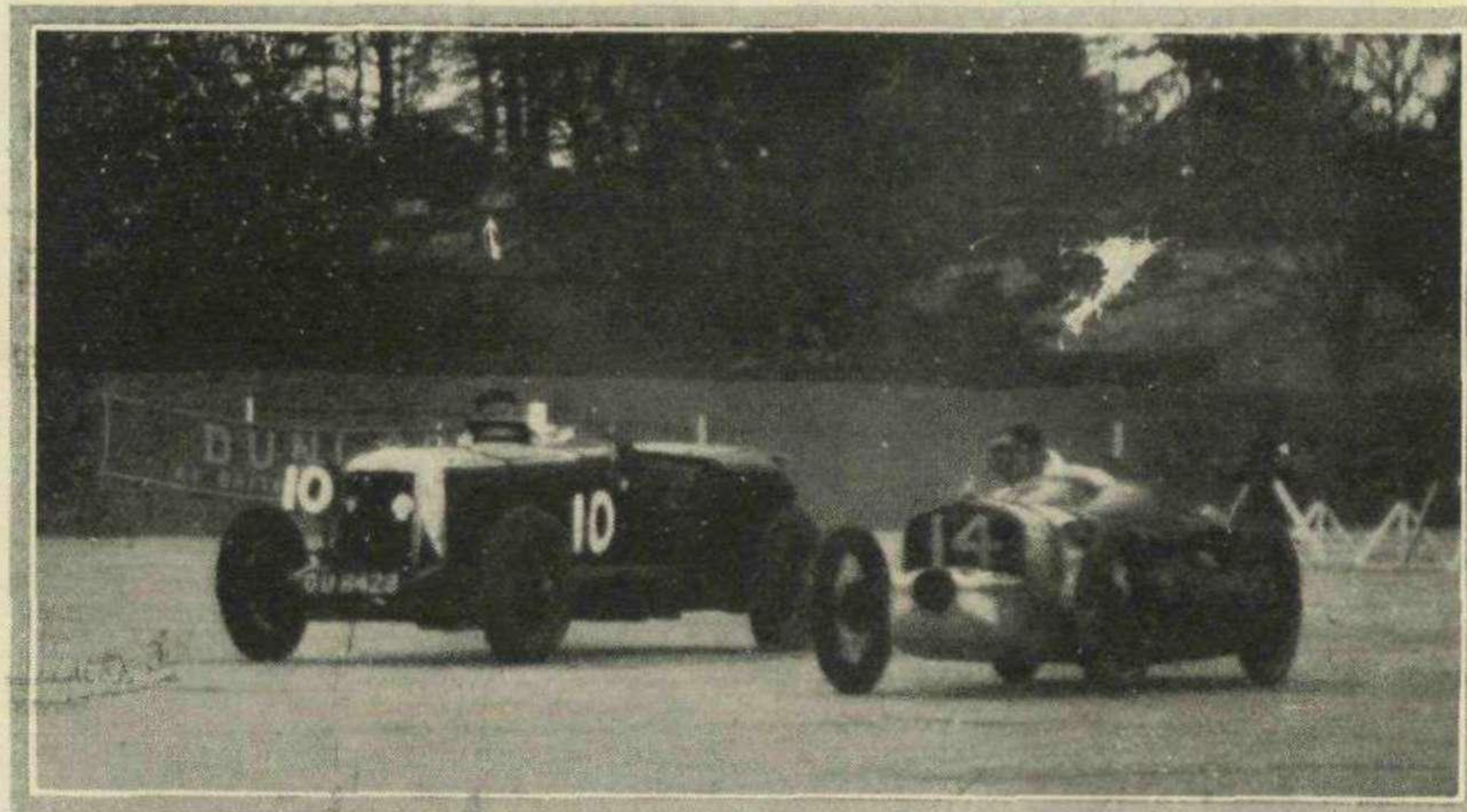
In case we should be accused of demanding too much, we can only state that a site with all the above qualifications exists, and a scheme for its development is in course of preparation.

## CONTENTS

|   | PAGE |
|---|------|
| <b>LAND.</b>                            |      |
| The Way of Things ... ..                | 243  |
| Brooklands Easter Meeting ... ..        | 244  |
| The "Land's End" ... ..                 | 428  |
| The J.C.C. Opens Brooklands ... ..      | 250  |
| Continental News ... ..                 | 252  |
| The New Small Crossley ... ..           | 254  |
| Round the Rally Route ... ..            | 257  |
| The R.A.C. Rally ... ..                 | 259  |
| Rumblings ... ..                        | 262  |
| Almost a Hill-Climb ... ..              | 264  |
| The "Continental" Rolls-Royce ... ..    | 266  |
| —And Now 253 m.p.h. ! ... ..            | 271  |
| In the Workshop ... ..                  | 272  |
| Club News ... ..                        | 274  |
| An Attractive Speed Six ... ..          | 275  |
| Another Abbey "Special" ... ..          | 276  |
| <b>AIR.</b>                             |      |
| The Home of the "Moth" ... ..           | 277  |
| Slipstreams ... ..                      | 279  |
| How Much to Fly? ... ..                 | 280  |
| Over the Andes by Light-Plane ... ..    | 281  |
| <b>WATER.</b>                           |      |
| The Sport Afloat—Paris This Time ... .. | 282  |
| The "Imp" and its Equipment ... ..      | 289  |

# BROOKLANDS EASTER MEETING

FINE PERFORMANCES ACHIEVED  
UNDER DIFFICULT CONDITIONS—  
AUSTIN'S HIGH SPEED



The second Mountain race. G. G. L. Willis (Austin), passing Mathieson's O.M. at the fork to take a temporary lead. The O.M. was the eventual winner.

**A**LTHOUGH this was not the first event held this year at the track, one never feels that the season has really started till the B.A.R.C. have held their first meeting, which in this case had the added attraction of being the Easter event, and drew a very good attendance.

The weather over the whole weekend was distinctly discouraging, and the B.A.R.C. were very lucky not to have their racing marred by rain. As it was the sky was content to threaten, and the few drops of rain which fell were not enough to have any effect on the track surface.

On the other hand, the wind was rather boisterous, and made extremely high speed a very ticklish business, as was fully demonstrated when Birkin's Bentley appeared from the Members' Bridge in a terrific skid, caused mainly by the gusty conditions, but happily controlled with superb skill. The Bentley has already distinguished itself this season by breaking the lap record in practice by 1/5th second. This now stands at 137.96 m.p.h.

Kaye Don, the previous holder of this honour, was to have appeared at this meeting in one of the new supercharged 4,900 c.c. racing Bugattis, but it was announced that owing to trouble with the supercharger drive in practice, he would not run. We hope that by Whitsun he will have had more time to get the car right, when we should see some interesting speeds. Sir Henry Birkin's Bentley has certainly found some more power during the winter, and Messrs. Birkin and Couper are not likely to slack off their efforts to make the car even quicker. All of which means that Kaye Don will have his work cut out to improve on Birkin's figures.

The opening event was the Senior Short Handicap with Widengren's O.M. on scratch, and Robinson's veteran Bugatti on the limit mark, also Capt. Waite's

Austin looking very smart, and driven by L. P. Driscoll.

The Bugatti got off well, but it was soon evident that the Austin was going very fast, as was R. J. Munday's Vauxhall. On the second lap Driscoll took the lead from Robinson, and Munday pulled up to third place and looked very much like catching the leaders when his motor passed away just after the fork, giving place to Ashby's Riley, which caught and passed the Bugatti to take second place, and they finished in that order.

Driscoll's fastest lap was at 102.08 m.p.h., which beat Major Gardner's previous best 750 c.c. lap of 100.61 m.p.h. on an M.G. and which he later improved upon.

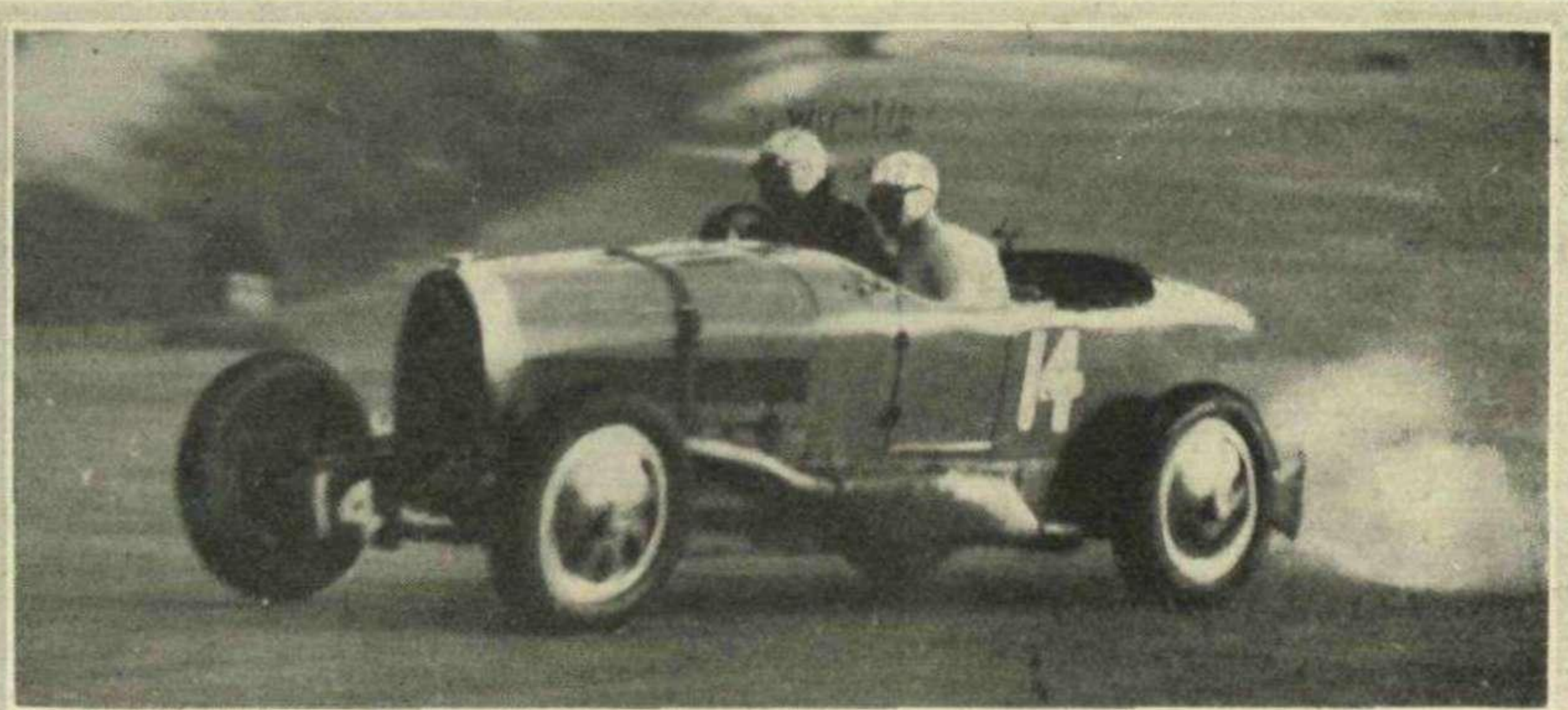
challenged, but had one anxious moment when he approached the banking corner rather too fast for his brakes, and shot straight up the track. However, he slowed successfully and continued. Second place fell to Cuthbert's supercharged Lagonda which went really well, and Eccle's Bugatti was third. A good tussle for fourth place went on between Victor Gillow (Riley) and Hamilton, the latter finally catching him.

Vernon Balls was out on one of the new Crossley racers but was evidently only using the event as a try-out and did not produce any fireworks.

Two short races followed, the first being without much interest as the order of the leaders remained nearly unchanged,

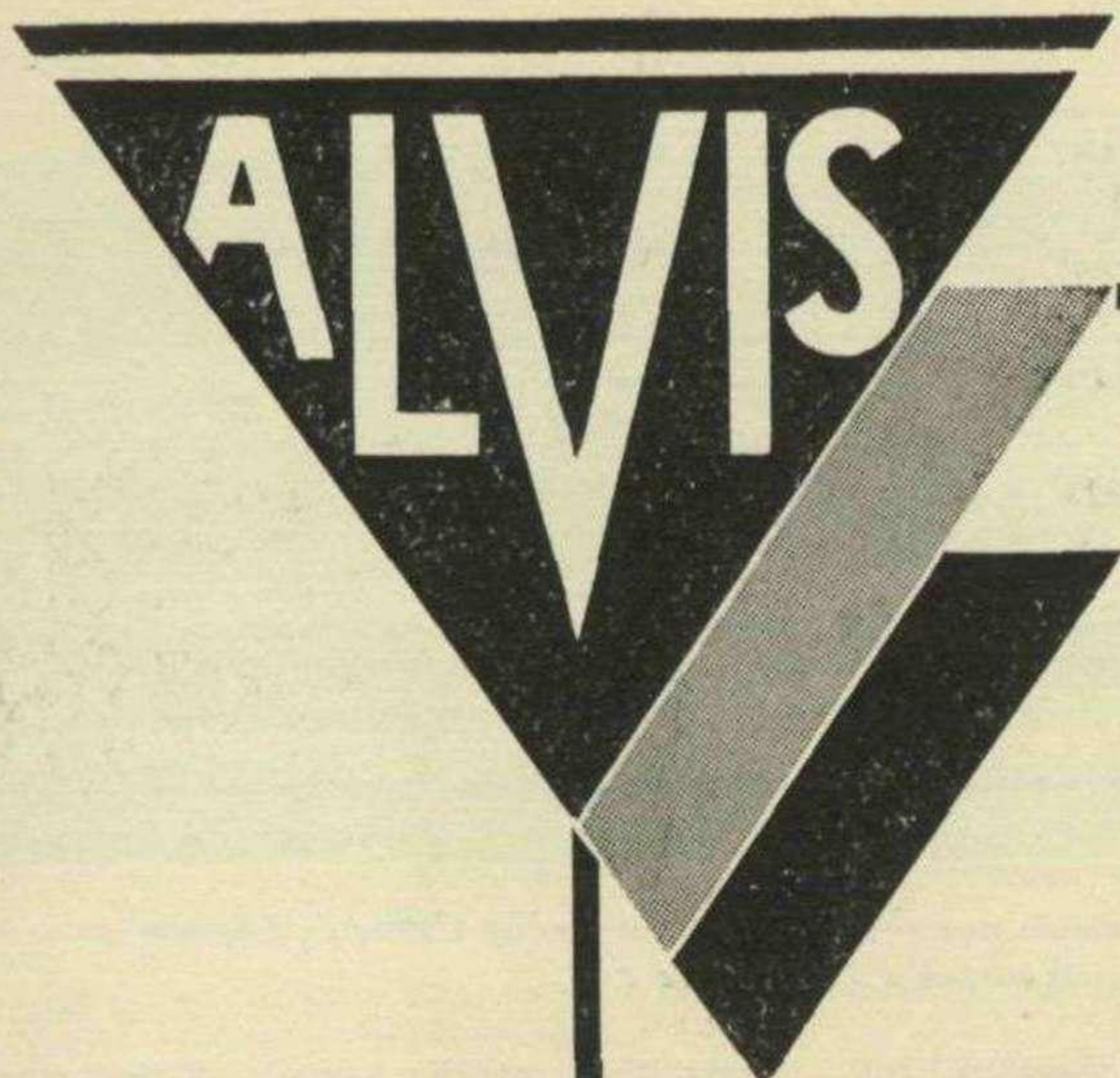
The second race was a "Mountain" event which produced some fast cornering by the ultimate winner, J. Robinson's Bugatti and also by the scratch man, Hamilton, on a "blown" M.G. Midget, who came fourth.

Robinson took the lead early and was not seriously



W. F. Faulkner (Bugatti) winning the last Mountain Handicap.

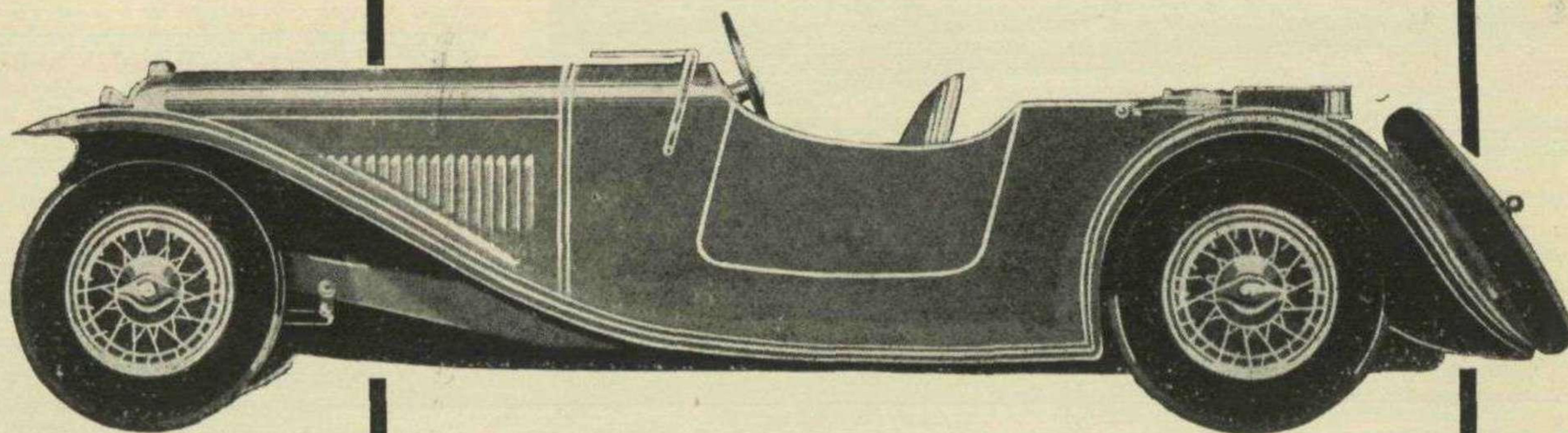
[Motor Sport Photographs



**THE NEW  
100 M.P.H. Chassis  
SPEED - TWENTY  
with 4-Seater Body**

by

**VANDEN - PLAS**



**PRICE COMPLETE £725**

**Obtainable only from the  
Sole ALVIS Distributors  
for LONDON & DISRICT**

Deferred Terms.  
Part Exchange.  
Service after Sale.

**Charles Follett Ltd.  
18, Berkeley Street**

LONDON, W.1.

Mayfair 6266.

## BROOKLANDS EASTER MEETING—continued.

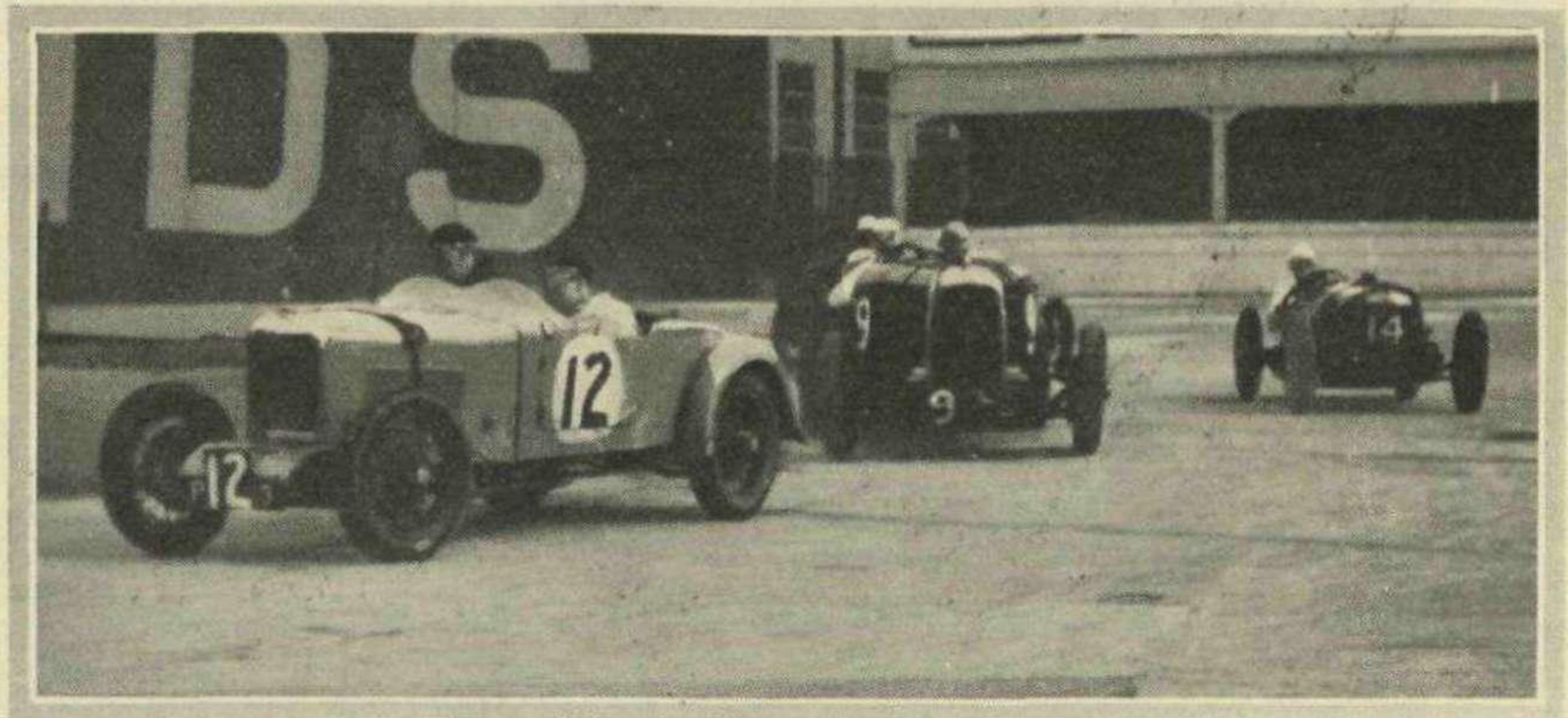
being Stonard (Riley), G. C. L. Willis (Austin) and A. H. Eccles (Bugatti), the latter just getting his place from Westbrook's Alvis.

The second was an excellent race, the chief interest centering on John Cobb's big Delage and Sir Henry Birkin's Bentley on scratch, Kaye Don being unable to start. Jack Dunfee's Ballot was limit man, and on the first lap led from Penn-Hughes (Bugatti), Lewis (Talbot) and Bouts (Sunbeam).

Hard on their heels came Cobb, who by virtue of his car's acceleration had a considerable initial lead from Birkin, who then proceeded to reduce the gap. The Delage came up rapidly to third, and on the Byfleet banking on the last lap took the lead, Birkin coming through the field to second place just before the fork and chasing Cobb over the line a few yards behind, the official difference between them being given as 1/5th of a second. Penn-Hughes was third.

Birkin's best lap was at 134.24 m.p.h. and the winner's average speed 119.24 m.p.h.

The second Mountain race of the meeting followed, the entry consisting chiefly



A group in the first Mountain race. Ripley's Riley leading Cuthbert's Lagonda and Waterfield's Riley at the Fork.

Gardner had to give third place to Froy.

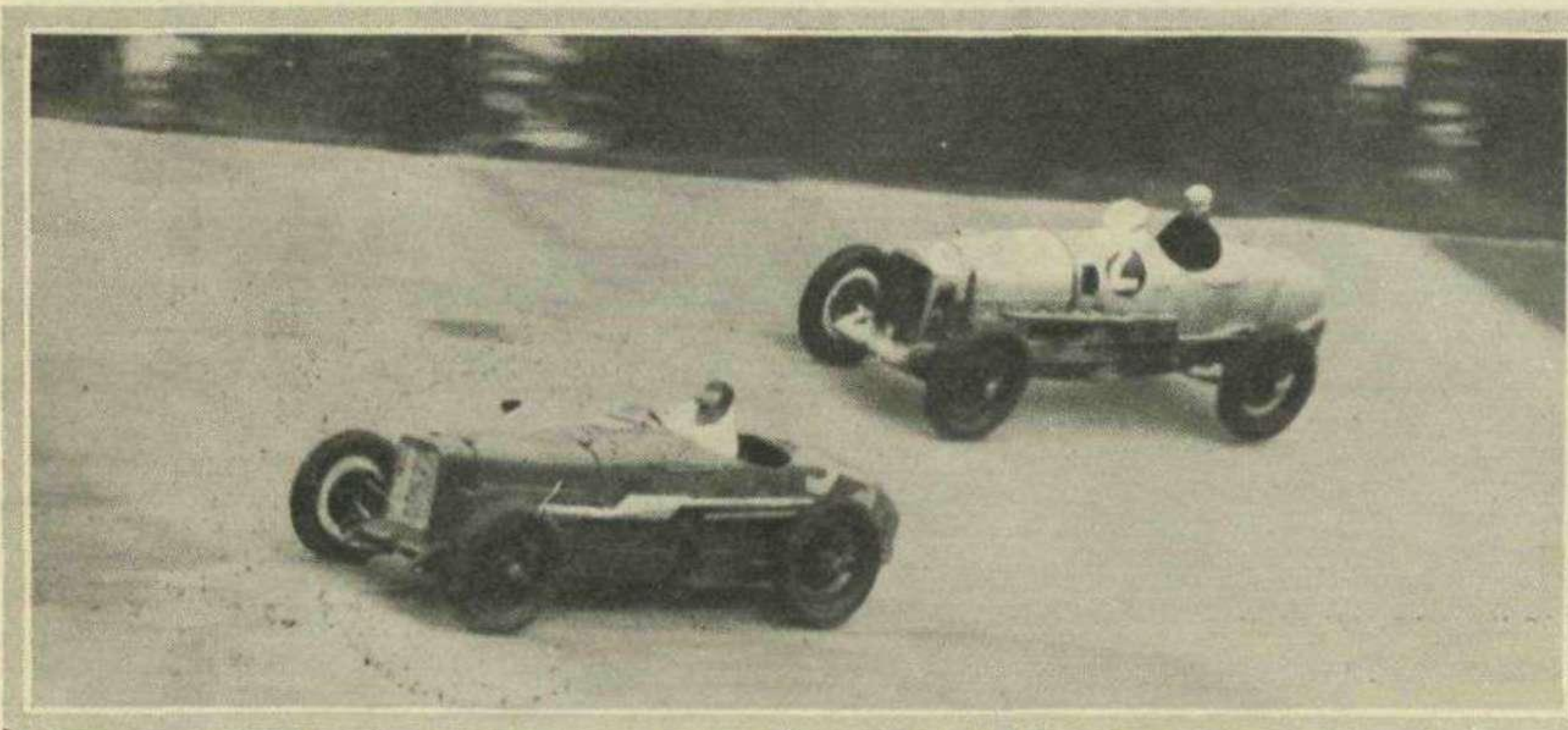
The Junior Long saw Driscoll re-handicapped 15 seconds on account of his previous win, and Westbrook, on an old Sports Alvis, soon overtook Horsman's Triumph and held the lead to the end.

At this meeting small entries often meant specially good races, and though Kaye Don, Dunfee, and Penn-Hughes were non-starters, the Lightning Long Handicap was the finest straightaway race of the meeting.

Widengren (1½-litre O.M.) was limit man, and Cobb this time had 3 secs. start from Birkin, as his fast standing lap would not be of such advantage in a 3-lap race. Widengren held his lead till the fork on the last lap when he was passed by Birkin, who had caught and passed Cobb half way round the Byfleet banking. On his second lap Birkin had a most hair-raising skid as he came out of the lee of the Members' Hill and the wind caught his Bentley. For a fraction of a second it looked as if the car would shoot right down the banking, but he held the skid perfectly without any sign of over-correcting, and the car straightened out. He kept his foot hard down and went on to win—a most magnificent, but very terrifying piece of driving.

The meeting closed with a further Mountain Handicap with Penn-Hughes as virtual scratch man in the absence of Kaye Don, and Morris-Goodall on a T.T. Aston Martin as limit man.

From the start it was a fast race with everyone doing all they knew on the corners. Penn-Hughes was driving extremely well, and his Bugatti engine sounded delightful. Faulkner on another Bugatti



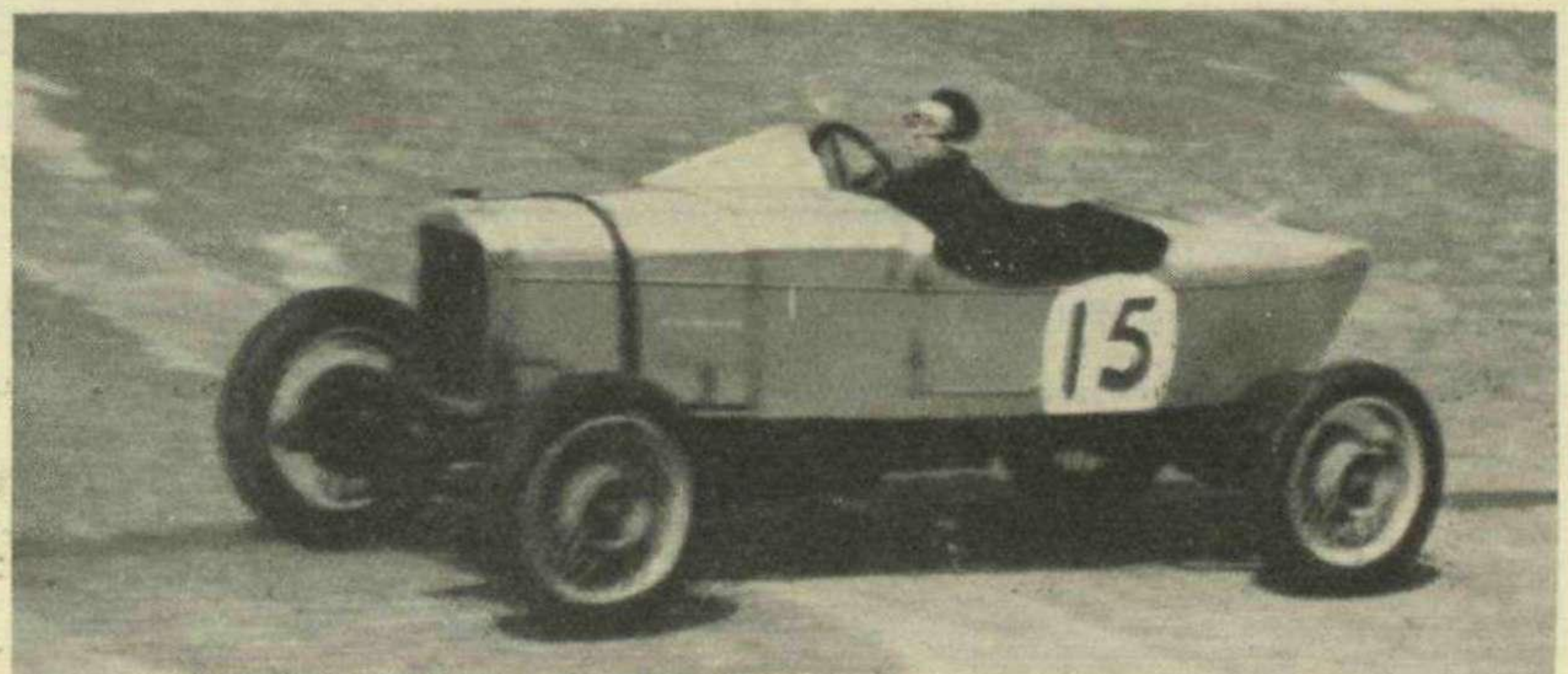
John Cobb overtaking Boults' Sunbeam to win the Lightning Short Handicap.

of a swarm of "blown" Austins, with Sadlier-Jackson's Bugatti on scratch, and W. S. Braidwood in W. R. Nimmo's Frazer-Nash (just through the Lands' End) at the limit mark with one of the Austins. Incidentally this "all-round motoring" week-end seems to be getting quite popular, as Bellamy drove his Frazer-Nash in both events as did W. K. Faulkner, whose Bugatti tied for first place in the last Mountain race of the day.

T. A. S. Mathieson (O.M.) proved the most consistent driver of the race and won fairly easily. Taking the lead from the Frazer-Nash on the fourth lap, followed by Elwes and Willis on Austins, he was only challenged by Willis, who led him on the sixth lap but had the hard luck to retire almost within sight of the finish, leaving the O.M. to win from Elwes, with Gilbert's Talbot third.

The Senior Long Handicap fell to Brackenbury's Bugatti, which on the second lap began to overhaul the limit man, Major Gardner (M.G. Midget), and took the lead. Meeson's Vauxhall then took second place, and near the finish

The Austin came through the field to eclipse his previous efforts and put up two new records for laps in a race, the standing lap at 89.74 m.p.h. and the flying lap at 103.11 m.p.h. E. F. Rayson, on a Riley, was third.



H. Westbrook's veteran Alvis won the "Junior Long" at 82.68 m.p.h.

[Motor Sport Photographs



BROOKLANDS EASTER MEETING—continued.

was obviously going well, as was Straight (also on a Bug) though he was rather wild on two or three occasions. At the end of a thoroughly entertaining scrap, Straight drew level at the Fork, and together they shot over the finish to provide the third dead-heat in the history of Brooklands. So ended the first meeting of the season, and one on which the organisers are to be congratulated.

RESULTS.

THE NORFOLK SENIOR SHORT HANDICAP.  
(Distance: About 6½ miles.)

1. L. P. Driscoll (749 c.c. Austin, S.), 42 secs.
  2. A. F. Ashby (1,089 c.c. Riley), 36 secs.
  3. J. Robinson (1,496 c.c. Bugatti), 1 min. 1 sec.
- Twelve ran. Won by 10 secs. (500 yds.) 2 2-5 secs. (100 yds.) between second and third. Winner's speed: 95.97 m.p.h.

NORFOLK JUNIOR MOUNTAIN HANDICAP.  
(Distance: About 12 miles.)

1. J. Robinson (1,496 c.c. Bugatti), 50 secs.
2. W. A. Cuthbert (1,954 c.c. Lagonda, S.), 45 secs.
3. A. H. L. Eccles (1,496 c.c. Bugatti), 30 secs.

Fourteen ran. Won by 23 secs. (800 yds.); 6 secs. (250 yds.) between second and third. Winner's speed: 61.94 m.p.h.

THE NORFOLK JUNIOR SHORT HANDICAP.  
(Distance: About 6½ miles.)

1. H. W. Stonard (1,089 c.c. Riley), 1 min. 21 secs.

2. G. G. L. Willis (749 c.c. Austin, S.), 1 min. 10 secs.
3. A. H. L. Eccles (1,496 c.c. Bugatti), 55 secs.

Fourteen ran. Won by 8 secs. (350' yds.); Winner's average speed: 84.32 m.p.h.

THE NORFOLK LIGHTNING SHORT HANDICAP.

(Distance: About 6½ miles.)

1. J. R. Cobb (10,688 c.c. Delage), scr.
2. Sir Henry Birkin (4,442 c.c. Bentley, S.), scr.
3. C. Penn-Hughes (2,263 c.c. Bugatti, S.), 16 secs.

Six ran. Won by 1-5 sec. (12 yds.); 4 secs. (240 yds.) between second and third. Winner's average speed: 119.24 m.p.h.

THE NORFOLK SENIOR MOUNTAIN HANDICAP.

(Distance: About 12 miles.)

1. T. A. S. O. Mathieson (2,350 c.c. O.M., S.), 20 secs.
2. J. C. Elwes (749 c.c. Austin, S.), 24 secs.
3. A. B. Gilbert (2,276 c.c. Talbot), 11 secs.

Sixteen ran. Won by 7 secs. (250 yds.); 1-5 sec. (10 yds.) between second and third. Winner's average speed: 59.66 m.p.h.

THE NORFOLK SENIOR LONG HANDICAP.  
(Distance: About 9 miles.)

1. C. Brackenbury (1,496 c.c. Bugatti), 1 min. 8 secs.
2. E. L. Meeson (3,234 c.c. Vauxhall), 1 min. 1 sec.

3. D. Froy (4,467 c.c. Invicta), 44 secs
- Seven ran. Won by 2.5 sec. (20 yds.); 3 2-5 secs. (180 yds.) between second and third. Winner's speed: 97.31 m.p.h.

THE NORFOLK JUNIOR LONG HANDICAP.  
(Distance: About 9 miles.)

1. H. Westbrook (1,496 c.c. Alvis), 56 secs.
2. L. P. Driscoll (749 c.c. Austin, S.), owes 15 secs.
3. E. K. Rayson (1,089 c.c. Riley), 29 secs.

Nine ran. Won by 5 3-5 secs. (200 yds.); 3 secs. (125 yds.) between second and third. Winner's speed: 82.68 m.p.h.

THE NORFOLK LIGHTNING LONG HANDICAP.

(Distance: About 9 miles.)

1. Sir Henry Birkin (4,442 c.c. Bentley, S.), owes 6 secs.
2. J. R. Cobb (10,688 c.c. Delage), owes 3 secs.
3. H. Widengren (1,491 c.c. O.M., S.), 29 secs.

Five ran. Won by 3 2-5 secs. (180 yds.); 4 2-5 secs. between second and third. Winner's speed: 122.07 m.p.h.

THE NORFOLK LIGHTNING MOUNTAIN HANDICAP.

(Distance: About 12 miles.)

1. W. Straight (1,990 c.c. Bugatti), 1 min.; W. K. Faulkner (2,263 c.c. Bugatti), 1 min.
  - 3rd. D. Froy (4,467 c.c. Invicta), 1 min.
- Straight's average speed, 66.30 m.p.h. Faulkner's average speed 63.25 m.p.h.



A tense moment in the Lightning Long Handicap. Sir Henry Birkin experienced a colossal skid near the Members Hill, but by superb handling disaster was averted—and he went on to win at 122 m.p.h. [Drawing by R. A. Nockolds].

# THE "LAND'S END"

EASTERTIDE CLASSIC AS POPULAR AS EVER.

A FEW weeks ago I was asked if I would like to take note of the performance in the "Land's End" of a car which for the last two years has been the owner's means of fast transport all over Great Britain, to say nothing of Ireland.

The result was that about midnight on Good Friday I found myself in the passenger's seat of W. R. Nimmo's Frazer-Nash, en route for Virginia Water, after a hurried grease-up of the chassis and a filling of the tanks which was all the preparation this car's busy existence allowed for.

Arrived at the start the usual scene was being enacted, this time in perfect weather, and as we had occupied rather more than schedule time over a meal we were hardly there before we were due out on the 347 mile run to Land's End.

The first part of the run being over main roads and the first check being at Deptford 10 miles beyond Amesbury, everyone soon found themselves well ahead of the 24 m.p.h. schedule, and a few miles outside the check we found a cheerful group of drivers gathered round a roaring fire in a field. Shortly after the check, fuel and hot drinks were available, and by the time we had waited here, dawn had arrived, and with it the drizzling rain which was to continue till about mid-day. Further good roads followed to Taunton to the breakfast stop, the devious nature of the same being forcibly demonstrated to us when we found that we had wasted a little more time than we intended, and had to hurry in to breakfast.

After all this preliminary canter, and fortified against the weather by a good meal, we proceeded to the more serious work of the trial, and began to encounter the mist-shrouded lanes which led to Grabhurst, the first hill. The conditions gave us admirable opportunity of noting the efficacy of our "Dryslve," that admirable garment which consists of a shoulder length waterproof glove which, worn on the "weather" arm, protects the open car driver or passenger from the shower of mud and spray from the wheels, and which we noted in use by several others in the trial.

Grabhurst, although wet, was not a serious obstacle if treated with care. The two hairpins at the top caused a certain amount of trouble with some, including Elliot's Austin, but most of this marque, and also the M.G.'s were good, and among the larger cars the Frazer-Nashes and Rileys were consistently good, the latter's lock being helpful. The Hornets were also effortless. Good restarts after being baulked were made by H. J. Stroud (Alvis) Tyler (Hornet) and Robinson (Frazer-Nash).

Followed a run over lanes where those who were behind schedule had great difficulty in catching up, led to the back of Minehead, whence after a short spell



At the top of Bluehills Mine—H. J. Stroud (Alvis) successfully negotiates the famous incline.

of main road, more lanes led to Dunkery Beacon. Here a timed ascent of two miles was held, over which it was necessary to average a speed not more than 10% below the average for the class, and not faster than 30 m.p.h. average.

Judgment was not easy of one's speed, but we gathered that by overtaking any vehicles we could we should be above the average and by being held up once or twice by other cars the average would not be too high.

From here the course came onto the main road near the top of Porlock and proceeded to the check at County Gate, and thence down Countesbury. Here a marshal stopped the cars on the bridge and made them take off non-stop for Lynton Hill, presumably to catch anyone

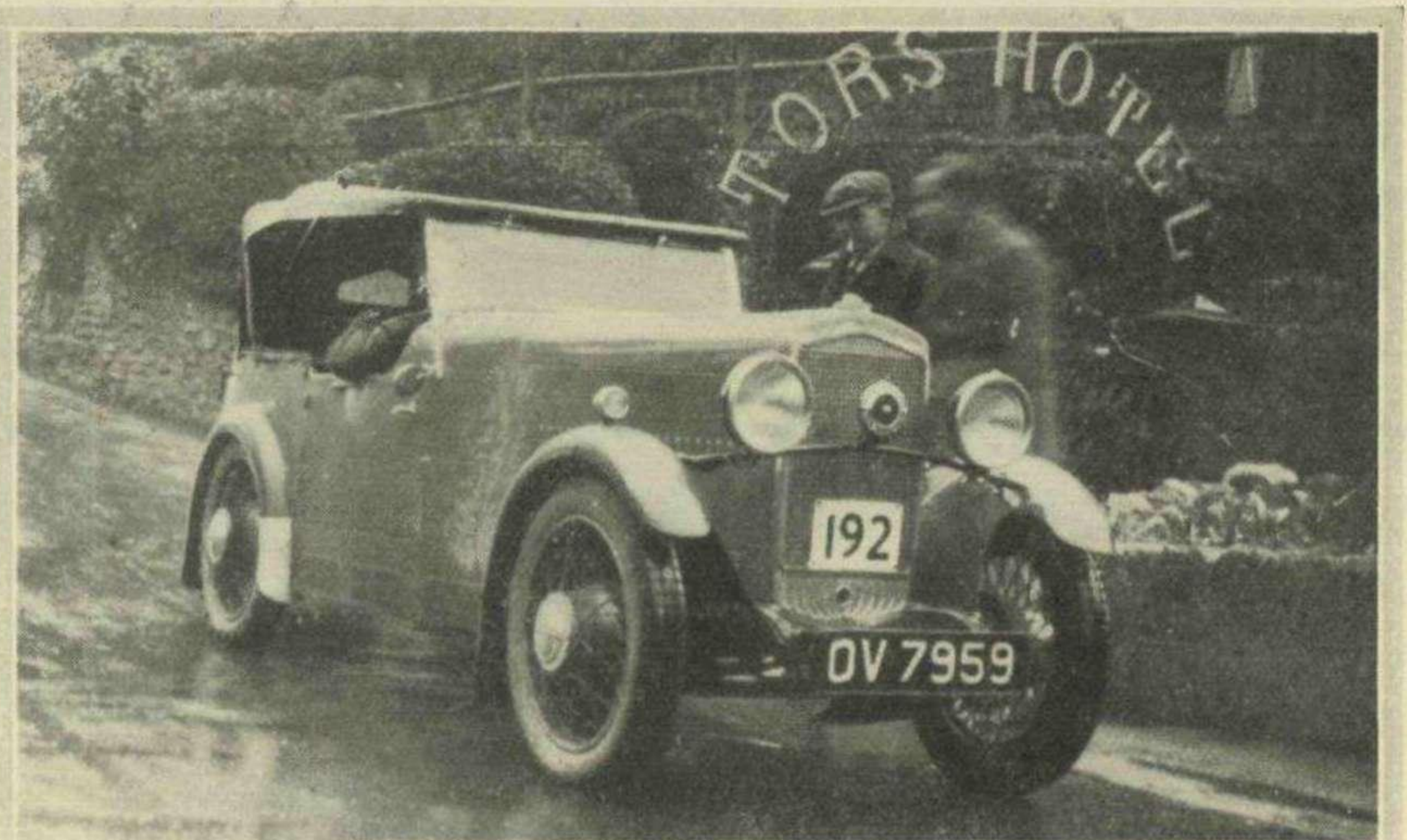
who had oiled up plugs descending Countesbury.

Having excellent brakes, Nimmo had taken the Frazer-Nash down it in neutral, and the next stop was in the queue of cars at the bottom of Beggars Roost, where we were greeted with terrible tales of the condition of the hill and the number of failures. There was no doubt that the Roost was in remarkably bad condition owing to the rain, and the small cars were generally overcome by the surface and died peacefully.

A notable exception was R. A. Brown in an Ulster type Austin, who came at a terrific speed, making not only the best small car climb, but one of the fastest of the day. The M.G. Magnas were good and seemed to climb without effort, and the Frazer-Nashes were very good except for a few failures caused by bad driving. Aldington and Hopkins were the fastest of these, while Patrick's Wolseley Hornet was very good, and the Rileys consistently efficient.

Far the best climbs came at the end, when Faulkner, Bear, and some other Bugatti drivers came up as if it was a speed hill-climb. Symons got his Crossley up by skilful handling, but only just.

Further devious routes led to the new hill, Grass Park, which was interesting but by no means difficult, and all whose cars functioned reasonably and who drove correctly had no trouble. The sharp right corner was the only obstacle and this surmounted the course led by more hectic lanes (which caused much more trouble to many than the hill) to the main road and thence to the lunch stop at Launces-



A halt at the foot of Lynton. J. A. Patrick (Triumph) waits a while.

[Motor Sport Photographs

THE "LAND'S END"—continued.

ton, where a welcome meal was available in the Town Hall.

Ruses Mill came next after lunch, with its series of sharp hairpins, a most entertaining hill, requiring a certain amount of discretion but otherwise perfectly straightforward. As by now the sun was shining once more, we were beginning to have a very pleasant run, and as the car behaved perfectly there was nothing to do but play safe and keep an eye on the time.

Marvyoni's Salmson was one of the few failures, being caused by engine trouble, while good climbs were made by the Rileys, M.G.'s, Hornets, Frazer-Nashes and the "Southern Cross" Triumph in the hands of W. M. Couper, who seemed very pleased indeed with the car on this, his first experience of it.

Hustyn Hill, which caused such chaos last year, was now quite easy, and the M.C.C. had taken elaborate precautions against any hold up. The start was made on some specially laid gravel after the water splash, and horses were waiting to deal with any failures. The surface had dried rapidly in the sun and the majority climbed easily, the usual makes standing out as particularly good.



F. Sforza's Magna comes to grief on the first bend of Grabhurst.

At Perranporth tea was kindly provided by Mrs. Donald Healey, and feeling

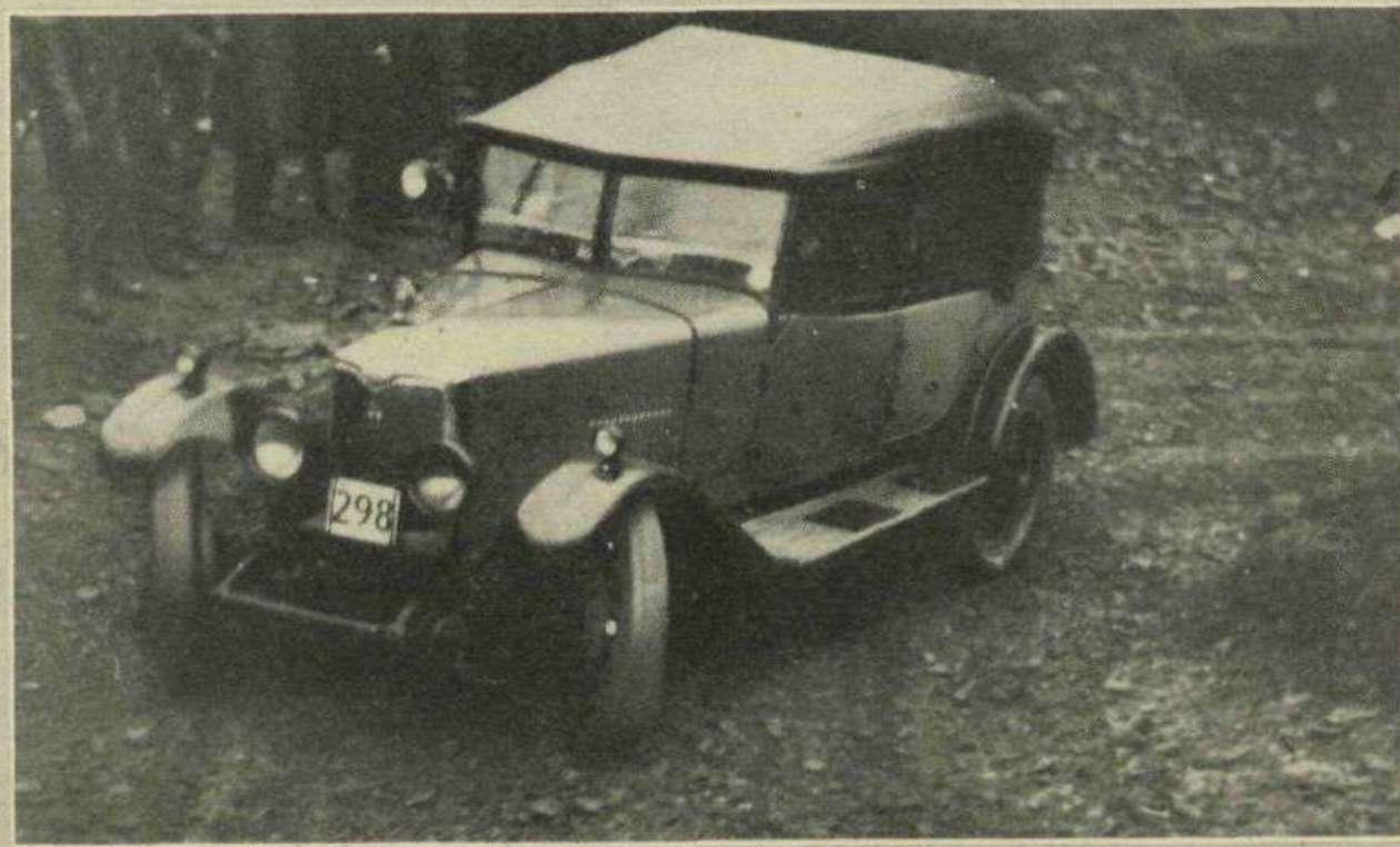
that the finish was near we all set off again with renewed optimism. There was yet, however, the very definite obstacle of Bluehills Mine, with its wicked left hand hairpin, and a huge crowd awaited to cheer on the competitors.

The surface gave excellent grip, and practically all failures were due to misjudgment of the corner. Squillario (McEvoy Morris Minor) was one of the best of the small cars, while Tenbosch on an Austin was very wild but just got away with it.

Impacts with the rock on the outside of the bend were common, but not always fatal, though Symons' Crossley broke its steering and had to be abandoned.

This hill duly accounted for, we had a simple run via Penzance to Lands End, the last part of the run into the setting sun being particularly pleasant.

So finished another Lands End, well organised as usual and very enjoyable. The Frazer-Nash had given no trouble, and we returned to Penzance for a night's rest, preparatory to returning on the Sunday evening for the B.A.R.C. meeting on Bank Holiday. W.S.B.



Where a good steering lock proves useful. R. H. Roe's Riley swinging round the first turn at Grabhurst.

FOR DRIVING COMFORT.

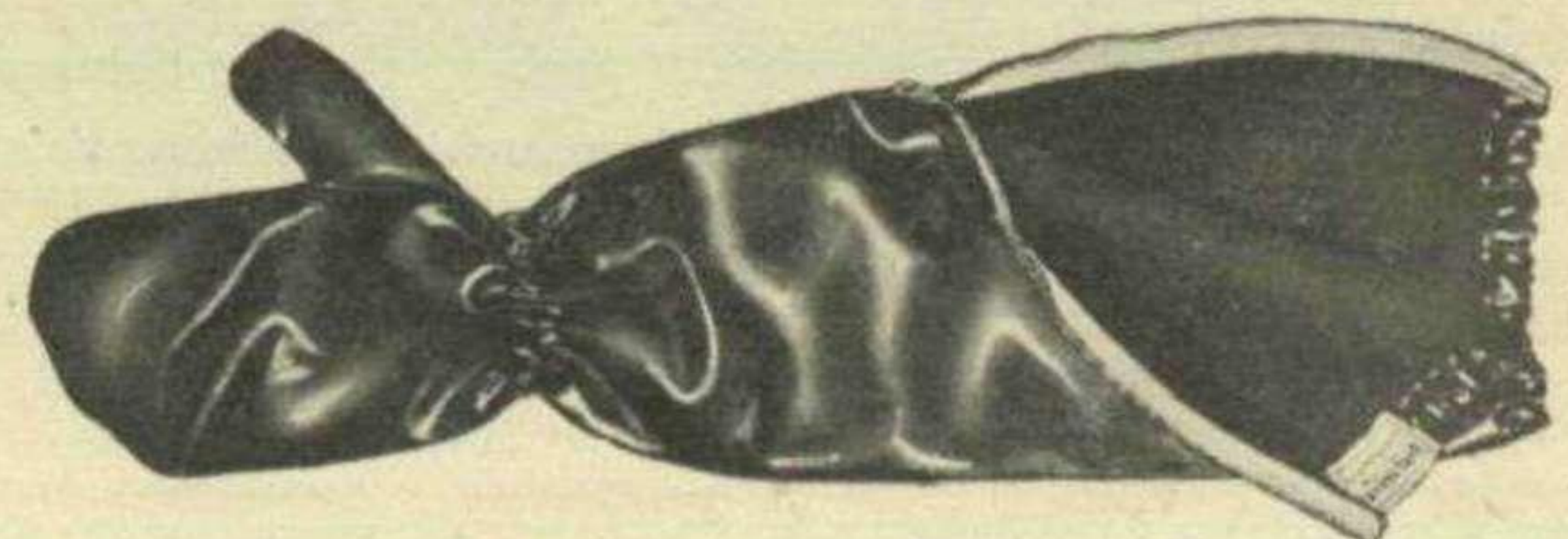
RACING and trials drivers are, as a whole, a hardy set, and bad weather conditions do not disconcert them to any extent. Nevertheless, they are the first to appreciate any device which will sensibly increase their comfort while at the wheel.

For this reason the "Dryslve" will undoubtedly interest readers, since it has been produced especially for owners and users of open sports vehicles to overcome an unpleasantness which all such must have experienced at some time or another.

This is the dampening of the right sleeve at the point where it projects over the side of the body, when the normal

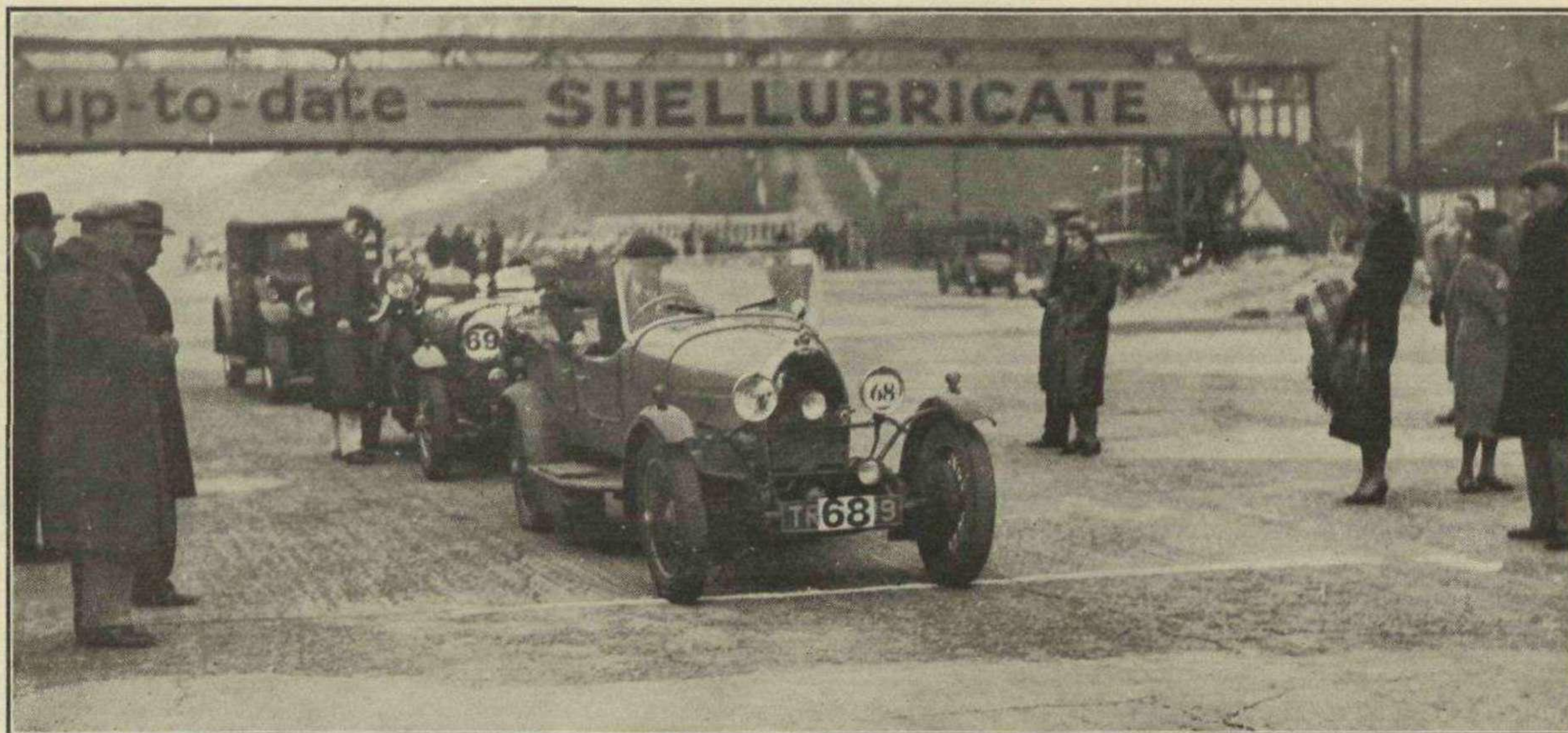
attitude is assumed in driving. The "Dryslve," as will be readily grasped from the accompanying illustration, is a sort of elongated gauntlet glove which is slipped over one's ordinary outer garment and, being waterproof, it completely protects the arm from wet, mud and cold. It is made in two patterns — with and without a "lightning" fastener, and the prices are 7s. 6d. and 4s. 6d. respectively.

The manufacturers of this thoroughly practical and useful device are:—The Dryslve Co., Jervis Road Garage, Lillie Road, London, S.W.6.



## THE J.C.C. OPENS BROOKLANDS.

GOOD ENTRY FOR NEW-SEASON EVENT.



Competitors in the easy starting test. Over 100 cars took part in the event.

**T**AKE a large crowd of enthusiasts, and an assortment of cars ranging from old "30-98's" to modern touring saloons, apply a series of original tests of skill in the handling of the said cars by the said enthusiasts, and the result is a thoroughly entertaining afternoon for drivers and spectators alike. At least that is what the J.C.C. found when they held their Rally on the 12th of last month, and showed further that the above combination is proof against a biting wind.

A large number of friends and relations made up for the lack of "public," and the entries exceeded 100 vehicles, which is no mean achievement. The events consisted of a series of driving tests none of which were difficult, and in fact should all have been possible to any normal car and driver.

However, the general excitement of the event seemed to overcome some drivers, who proceeded to display a lack of knowledge of their car's capabilities, especially in the braking tests, that would land them in serious trouble under normal traffic conditions if it were permanent.

A further cause of considerable variety was the evident omission of many to find out what the tests were before attempting them. This of course made them much more difficult!

The organisation was excellently planned, as the tests followed on steadily from each other and kept drivers on the go and spectators interested for the afternoon.

The first test was for easy starting, and here the car was drawn up with the engine stopped and the driver standing at the near side of the car. At the starter's word he scrambled, leaped, ascended or descended into his vehicle according to its build, and having started it proceeded

over a line 10 yards away. The whole operation had to be concluded in 15 seconds.

Most of the cars started well, while the agility of the drivers was considerable, though some of them appeared to get rather involved in the ratios, and tried to get away in anything but first gear. This test merged into an acceleration cum brake test, in which "Ebby" gave the word and cars shot away to stop with their front wheels between two further lines, and immediately continued over a further line as quickly as possible.

The chief point about this braking test was the extremely poor faith many seemed to have in their brakes, applying them vigorously about 40 yards too soon and having to accelerate again to reach the braking area. To vary the proceedings one or two competitors ignored the braking altogether. Miss K. Brunell overshot badly in her Triumph, while Gardner in a Speed Model Rover was very neat, as was Fotheringham, Parker (Alvis) and T. C. Mann (Lagonda).

The next tests consisted of reversing and parking. Cars had to be reversed into a space and placed with their off-side wheels on a 9 inch wide line, and then had to park with the near side wheels within 6 inches of, but not touching, a "kerb" represented by a baulk of timber. There was a surprising number of failures but some very neat exhibitions of this everyday manoeuvre, H. J. Aldington (Frazer-Nash) being very quick.

When this test was completed cars proceeded to the test hill, and did stop and re-start tests first on the 1 in 8 and secondly on the 1 in 5. Rolling back up to 6 inches in the first case and 12 inches in the second was allowed, this being measured by a highly ingenious instru-

ment like a T-square, the rear portion of which showed the marks of erring rear wheels on its fresh whitewash in the case of those who ran back. K. P. Evans' Alfa-Romeo failed, as did Ward's Brooklands Riley, which seemed overgeared. There were many other failures, but neat performances were made by Major Gardner (Rover), Fotheringham Parker (Alvis), A. H. Oxenford (Standard) and Alan Hess (Wolseley Hornet). The star turn was H. J. Aldington's Frazer-Nash, which in marked contrast to some of the laboured ascents, took off with such verve on the 1 in 5 that he changed up before the top.

Following a series of timed half mile runs, the test hill was attacked once more, this time at speed in top, when drivers had to run down through all gears on the way up. Here the general standard of manipulation was high, and brought a good afternoon's fun to a close.

### RESULTS.

**FIRST-CLASS AWARDS** (under 1,100 c.c.).—G. H. Goodson (Austin), V. Soper (Riley), R. C. Player (Riley), R. L. Burnet (Riley), W. Busby (Riley).

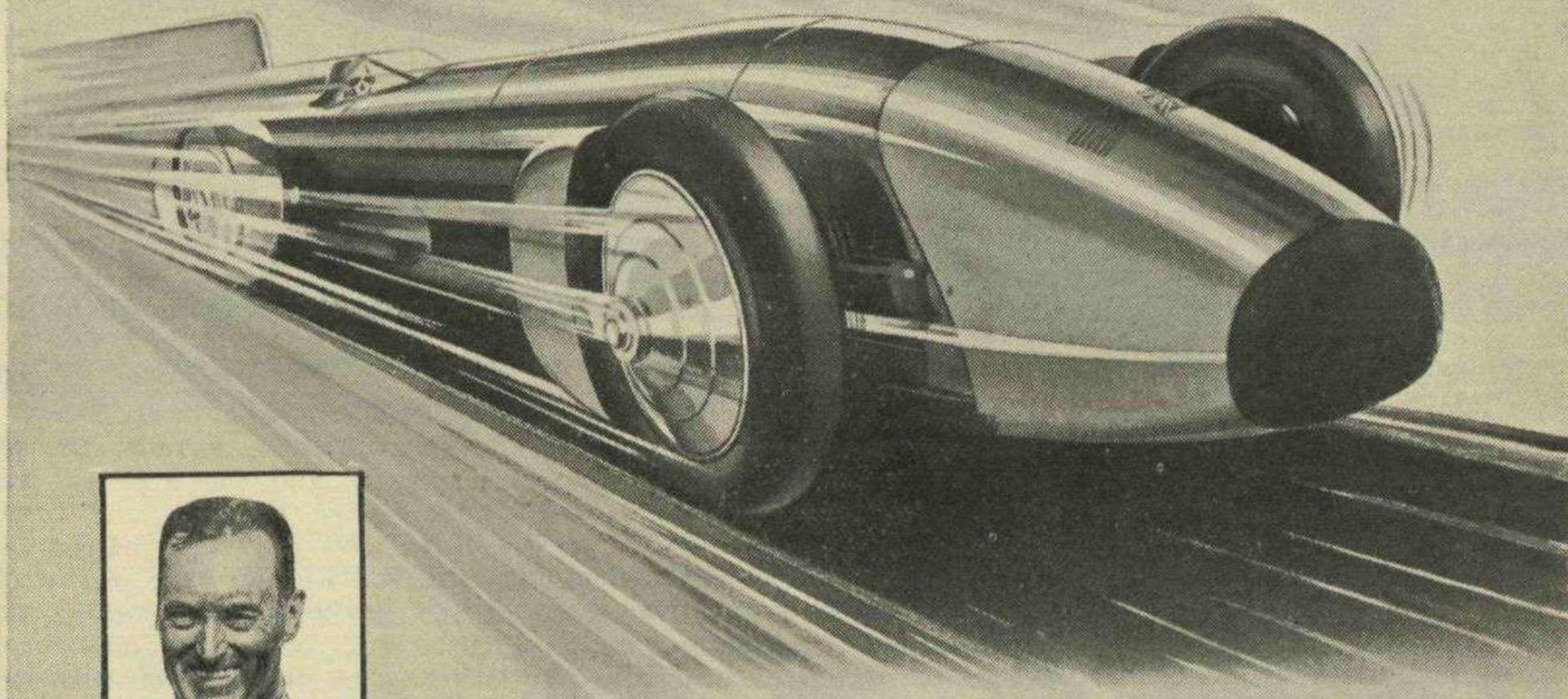
Over 1,100 c.c.—P. Fotheringham Parker (Alvis), H. Ryan (Armstrong Siddeley), A. L. Baker (Graham-Paige), A. Negal (Morris Major).

**SECOND-CLASS AWARDS** (under 1,100 c.c.).—N. E. Bracey (Austin), E. Gillett (Austin), G. E. Taylor (M.G. Midget), M. T. U. Collier (M.G. Midget), L. L. Schofield (M.G. Midget), J. B. Carver (M.G. Midget), N. C. Killick (M.G. Midget), H. A. Jenkins (M.G. Midget), Miss P. McOstrich (M.G. Midget), W. E. Kendrick (M.G. Midget), Mrs. S. Edmondson (Morris Minor), C. E. Wood (Morris Minor), F. W. J. Bolton (Morris Minor),

(continued on page 275)



# SHATTERED!



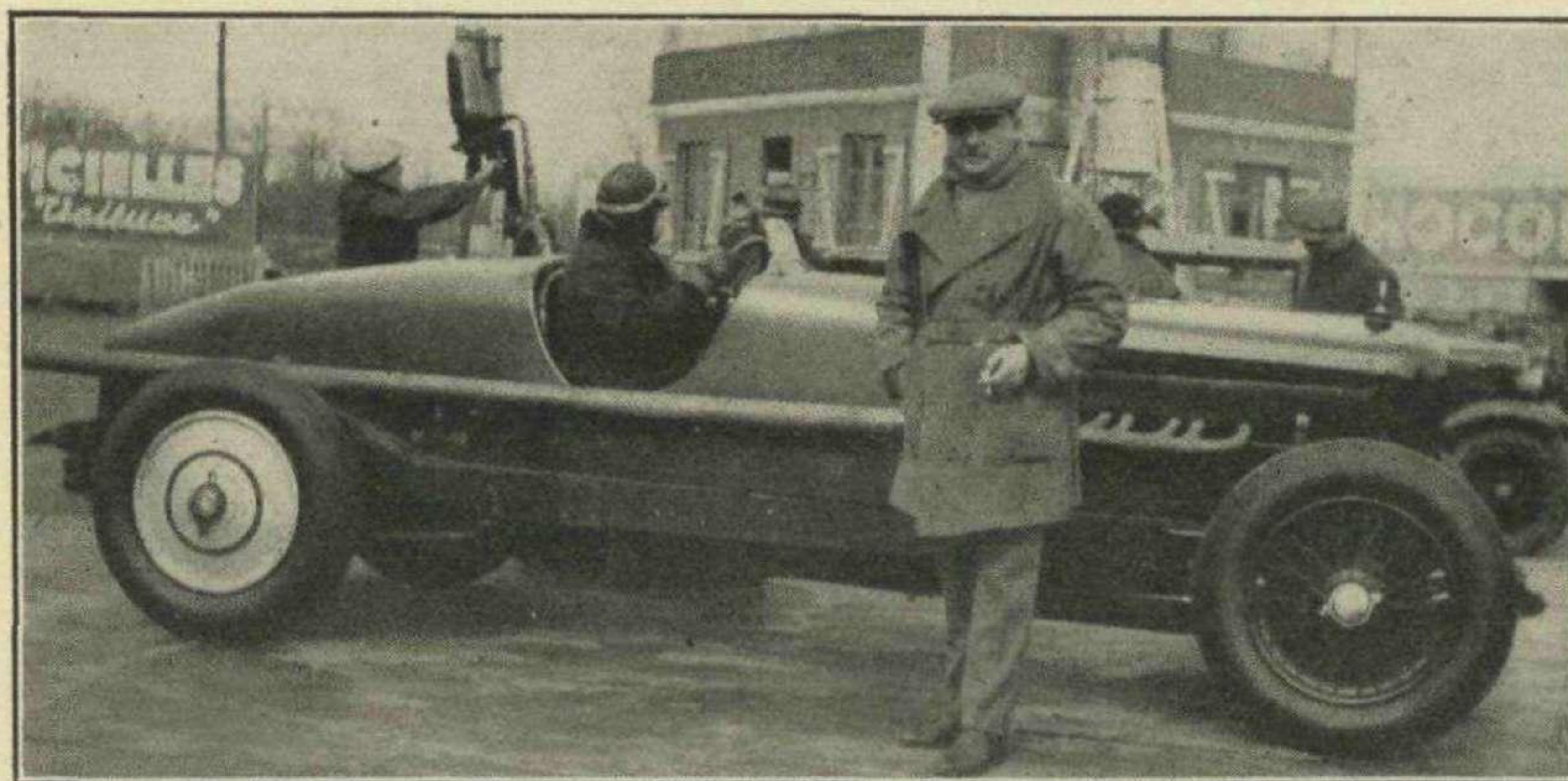
**The World's Land Speed Record  
again falls to Sir Malcolm Campbell  
again using**

**WAKEFIELD**  
**Castrol**  
**MOTOR OIL**

Bluebird IV fitted with NAPIER engine attained 253 m.p.h. on Daytona Beach February 24

200 M.P.H. ON LAND HAS NEVER BEEN EXCEEDED WITHOUT CASTROL

## CONTINENTAL NEWS.

*THE DELAGE AT MONTLHERY.*

*On native soil. The Delage at Montlhery (Eyston up) with Divo standing alongside.*

ON February 28th the famous French track was the scene of a combined Anglo-French triumph, when a straight-8 Delage sports model, stripped and fitted with a streamlined body, but otherwise in practically normal trim, not only broke records in its class but also accounted for six World's records. When a chassis which is available to the public proves itself capable of such a performance, it speaks volumes for the design and quality of the make in question. Delage speed is no special mystery to followers of motor racing, who will all remember the way the 1½ litre Delage racing team, in the hands of Benoist, Divo, Senechal, Wagner, Bourlier, Dubonnet, and others, swept the board in the years

when the Grand Prix were confined to this size, and the lessons learnt in this intensive school have proved invaluable in developing the standard production which has so distinguished itself.

In this case the team of drivers was English, being Kaye Don, Eyston, Eldridge and Denby, who put up a wonderful show under extremely uncomfortable conditions. The biting cold was their greatest handicap, and the physical endurance required to keep going in relays for twelve hours can only be imagined.

Kaye Don was actually confined to bed with a temperature, but when preparations were complete for the record, he defied all orders to the contrary and immediately flew over

to Le Bourget and reported for duty.

Talking to him about the record on his return he spoke as if it was all simple, but when one realises the difficulty of maintaining some 120 m.p.h. all day in a temperature below freezing, it is easy to see that it was actually very different. Fortunately he appeared none the worse for his disregard of medical advice, so we presume that fresh air is good for 'flu!

The actual World's records taken were 500 kilometres, 3 hours, 1,000 kilometres, 6 hours, 1,000 miles and 2,000 kilometres, the speeds being 117.8 m.p.h., 117.83 m.p.h., 117.0 m.p.h., 117.12 m.p.h., 116.36 m.p.h. and 116.08 m.p.h.

In addition to the above World's records, class records were taken, being the 200 miles at 117.47 m.p.h., 500 miles at 116.74 m.p.h. and 12 hours at 112.03 m.p.h. Dunlop tyres also took their indispensable share in the British side of the achievement; we heartily congratulate all concerned on the results.

Two of these records, the 500 kilometres and the 3 hours, were later beaten by Divo and Chiron on a 2,300 c.c. supercharged Bugatti, but we may take it that the game has only just started, and there will be plenty more record activity on the part of both concerns before long.

#### British Entries for Alpine Trial.

LAST year showed that British cars could compete successfully in this event, the Invicta and Talbot performances being particularly good. The Riley team also gained much valuable experience, and will probably enter in force, while the new small Crossley is stated to be a candidate. The value of such an event to British overseas trade, as well as the useful lessons learnt which cannot be provided in this country, make it particularly desirable that we should compete with as many makes as possible.

#### Death of Alfieri Maserati.

A GREAT loss to the Italian industry as well as to the sport of motor racing was occasioned by the recent death of Alfieri Maserati, the Bologna motor car manufacturer who in a few short seasons sprang into prominence

in direct competition with the leading racing cars of the day. Only forty-five years of age, he fell ill suddenly and died under an operation.

The marque which bore his name was the result of his individual efforts, and was steadily developed by him. He was a fine engineer, and the name of Maserati soon became one which increased the interest of all the classic races, and more than once seriously disturbed the Bugatti and Alfa-Romeo teams by their fine performance.

In September 1929, attention was suddenly focussed on Maserati as a racing marque, when Borzacchini, on a 4-litre car of this make lowered the existing World's record for 10 kilometres at a speed of 153 m.p.h. This was followed up in 1930 by Varzi's victory in the San Sebastian Grand Prix on a 2,300 c.c. model, and in 1931 a team consisting of Ernesto

Maserati, the designer's brother, Fagioli and Dreyfus met with considerable success. The first named won the 1500 c.c. class at Tunis, and the Prix Royal of Rome, while Fagioli secured the Monza Grand Prix.

All followers of the sport will join us in offering his brother and those who have worked with him very sincere sympathy.

#### The Swedish Grand Prix.

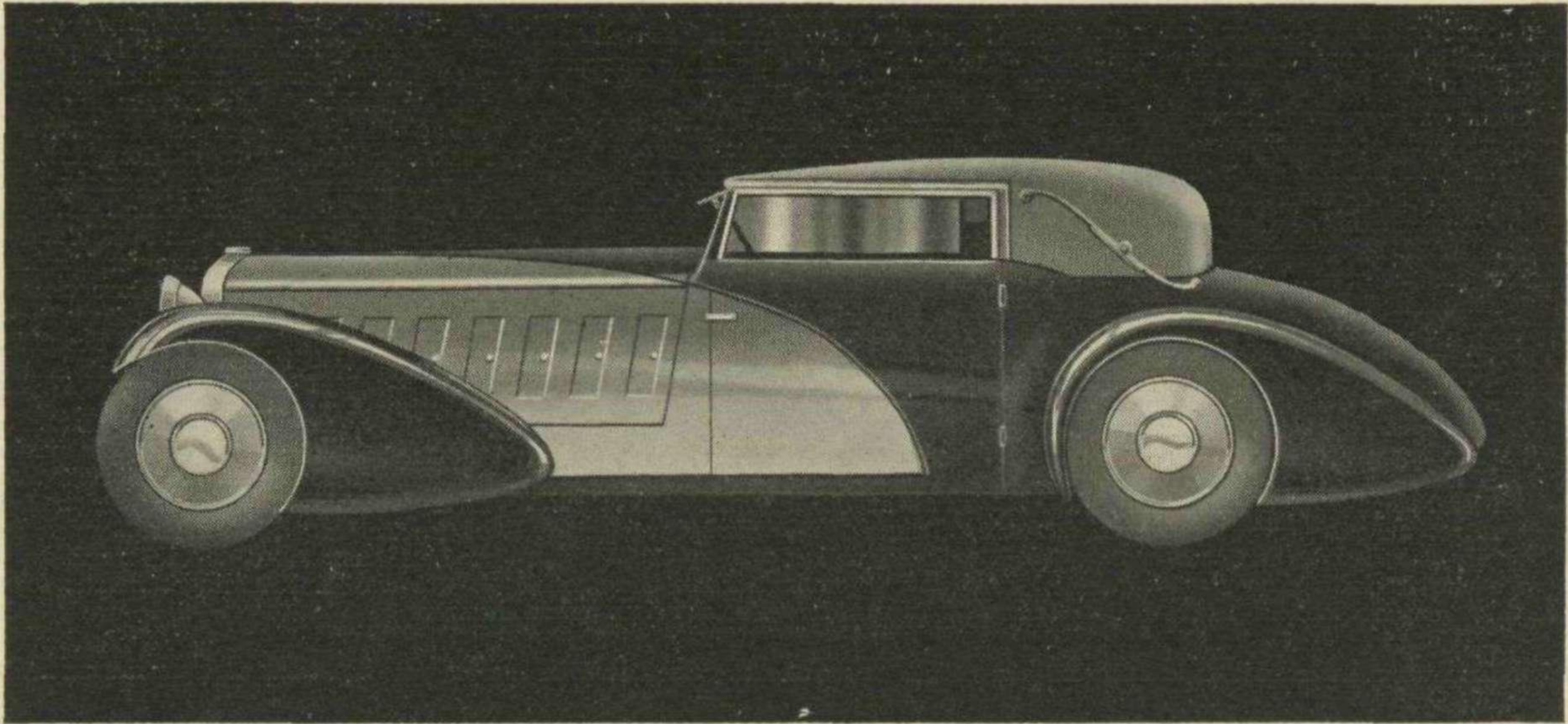
THIS event was this year more hazardous than usual owing to the lack of the usual amount of snow on the course. This may sound somewhat contradictory, but the reason lies in the fact that the course, which is 8 laps of a 29 mile circuit, is chiefly bordered by ditches with large boulders therein, and in the absence of snow this means that a car leaving the road is likely to be written off.

# WORLD'S RECORDS

## ON A DELAGE STRAIGHT 8

### SUPER SPORTS MODEL

(NON-SUPERCHARGED)



Driven by MESSRS. KAYE DON, EYSTON, ELDRIDGE and DENLY, the following World's Records were obtained on February 28, at MONTLHERY track — PARIS. (Subject to official confirmation.)

**AVERAGE SPEED:**

200 miles — 117.47 m.p.h. — *International Record*

500 kilometres — 117.80 m.p.h. — *World's Record*

3 hours — 117.83 m.p.h. — *World's Record*

500 miles — 116.74 m.p.h. — *International Record*

1000 kilometres — 117 m.p.h. — *World's Record*

6 hours — 117.12 m.p.h. — *World's Record*

1000 miles — 116.36 m.p.h. — *World's Record*

2000 kilometres — 116.08 m.p.h. — *World's Record*

12 hours — 112.03 m.p.h. — *International Record*

The car which obtained these records was a Super-Sports chassis equipped with Dunlop Tyres, and identical to those available for delivery to the Public.

The first of the above models has now arrived and is available for inspection and trial.

Delage complete cars from **£675**

WRITE FOR CATALOGUES AND LEAFLETS OF THIS MODEL TO—

# DELAGÉ

28 ALBEMARLE STREET PICCADILLY W.1 REGENT 1038/9

*Please mention MOTOR SPORT when corresponding with advertisers.*

## CONTINENTAL NEWS—continued.

The likelihood of a car leaving the road was much increased by the fact that the route was mainly covered with ice. This made cornering dangerous and hard braking suicidal, the only relief from the ice being in patches where the sun had melted it and formed young watersplashes instead.

A competitor with whom we discussed the event afterwards said he considered the conditions much harder than usual, especially as he was unable to use the special steel studded tyres which are made up for use on snow, but which naturally wear down immediately on the hard surface. These are not the normal steel studded tyres as once worn on taxicabs, but tyres with long points sticking right out of the tread.

The event was won by Bennstronini on a very hot Ford, at an average of 51.28 m.p.h. He took the lead near the start and was never seriously challenged. Second place provided a good race between Bake's Buick and Keinanen's Chrysler, the latter just getting away with it. P. W. Widengren (Mercedès) was fourth, while H. Widengren who is well known in this country, drove an Aston Martin into ninth place.

## Eight Records for Bugatti.

MONTHLY track is already busy with record-breaking activities and recently the firm of Bugatti, more usually associated with road work than with the track, effectively demonstrated the terrific speed of their 2,300

double overhead camshaft car by breaking a number of records.

For the first time one mile and kilometre strips approved by the international body had been laid down, and Albert Divo took his Bugatti over these, and also attacked many other class D records with the following results:—

On Thursday, March 10th, he put up 1 mile at 131.22 m.p.h., 1 kilometre at 211.18 k.p.h., 5 kilometres at 131.03 m.p.h., 50 kilometres at 124.32 m.p.h., 50 miles at 124.48 m.p.h., 100 kilometres at 124.47 m.p.h., 100 miles at 124.15 m.p.h., 200 kilometres at 124.67 m.p.h., this being a World's record as well as a class D record. The class D hours record also went at 124.68 m.p.h.

On Saturday, March 12th, Divo and Chiron both appeared, and set out for longer distances. After just over 4 hours running, 4 World's records were beaten, as follows.

200 miles at 118.0 m.p.h. (previously held by Dunfee and Bamber, and set up in August of last year).

500 kilometres at 120 m.p.h. (previously held by Eyston, Kaye Don, Eldridge and Denby on the Delage and set up only February 21st last.

3 hours at 117.9 m.p.h., also taken from the Delage.

500 miles at 119.2 m.p.h. This record has stood since 1927, when it was set up by Marchand and Morel in the Voisin.

It is certain enough that these and many other records will be attacked again

by the Delage, and the Bugatti has only just started, so that, to quote the B.B.C. parliamentary bulletins "the debate continues."

## Good Monaco Entry.

THE short town circuit of the Monaco Grand Prix provides one of the most thrilling spectacles, as well as one of the finest driving tests one could wish to see, and it has rapidly sprung to fame as a classic. Entries are by invitation only, and this year contain some formidable names. Louis Chiron, a native of Monaco will form a Bugatti team with Varzi, Bouriet and Albert Divo, so that a Bugatti victory in highly probably, though Nuvolari, Borzacchini, and Campari on Alfas will make them hurry.

Fagioli, the Maserati ace, will be backed up by Dreyfus and Ruggieri, while private entries show prospects of a secondary Bugatti-Alfa-Romeo battle, as Earl Howe, Penn-Hughes, and Williams on Bugattis will come up against Etanceiln, Zehender, and Rudolph Caracciola on Alfas, while a lone entry is Zanelli on a Nacional Pescara, a complete description of which appeared in the last issue of MOTOR SPORT.

English entries in foreign events are strengthened by the decision of Fox and Nicholls to continue to enter Talbots, their programme including Brian Lewis in the Italian "1,000 miles" and a team at Le Mans. Lord de Clifford is driving a "blown" M.G. Midget in the former event.

Ashmore Villa  
Stocktop Road,  
Sunderland

Messrs. Ed. Joy & Sons Ltd., 26th January 1932.  
Filtrate Works,  
LEEDS.

Dear Sirs,

"Prior to the purchase of my Wolseley sports car in May last, I had never had experience with your "Filtrate" oil, and must admit that I was very sceptical regarding the claim of a "Hornet" owner to have obtained 2800 m.p.g.

My own experience covering a period of nine months and 10,000 miles with this car, and using your oil exclusively, has shown me that the claims made were very modest.

The oil consumption on my car, which is usually driven at fairly high speeds, has been carefully measured and has been as good as 41.2 m.p.g. (four thousand one hundred and twelve miles)!!

Economy is not the only feature as may be gathered from the fact that my engine has not yet been decarbonised, and is still running so well that there appears to be no necessity to dismantle it for this purpose.

My reason for writing to you is to let you know how satisfied I am with your product, and to assure you that I shall continue to use it as I have found it so excellent; since I have no connection with the Motor Trade I give you permission to publish this entirely unsolicited testimonial.

Yours faithfully,  
*Cruckshank*

**THE**

**SECRET**

**IS**

**THE**

**QUALITY**



# THE NEW SMALL CROSSLEY

A LIVELY AND INTERESTING ADDITION TO THE LIGHT CAR CLASS

**L**IKE most pioneer firms in the automobile industry, Crossley Motors Ltd., have in the past taken an active part in the world of motor racing.

More recently, however, to the regret of many, they have figured less conspicuously in the sport, and it was, consequently, welcome news that the famous Manchester concern has plans for staging a "come-back" during the season now at hand.

This imminent re-entry of the Crossley into the racing field naturally gave us an extra interest in testing an example of one of their new standard 10 h.p. models, especially as it is this type which will be used—in modified form, of course.

The most pleasing feature of this new "ten" is the fact that it is not "just another small car," but has a real character of its own, and although one can find some points to criticise out of the many individual features, it is far preferable to be able to do this than to have a car which is merely mediocre on all points, and which one forgets almost as soon as one leaves it.

The engine is unusual in appearance as well as in design, having a special patented combustion head, using overhead push-rod operated inlet valves, and side exhaust valves. Mixture is supplied by a down-

### Specification.

*Engine: 4 cyl., 63 x 90 m.m. bore and stroke, capacity 1122 c.c., 3-bearing balanced crankshaft, 3-bearing camshaft, overhead inlet valves, side exhaust valves, pressure lubrication throughout. Cooling by thermo-syphon.*

*Gear-box: 4 speeds, 21, 13, 7.5 and 5.5. to 1. Central gear lever.*

*Steering: worm and nut.*

*Suspension: Semi-elliptic springs with shock absorbers. Magna type wire wheels with 27 x 4.40 Dunlop tyres.*

*Brakes: Self-servo shoes on all wheels operated by pedal. Hand-brake operates on transmission.*

*Dimensions: Wheelbase, 9ft. 0½in. Track 4ft. Turning circles, right 40ft., left 36ft. 6in.*

*Price: £295.*

draught S.U. carburettor centrally mounted above the head, to which fuel is supplied by an electric Petro-lift pump from the rear tank.

A balanced three-bearing crankshaft with all bearings pressure fed contribute largely to the exceptional

smoothness of running which we noted at all speeds. The valve-gear is well arranged for accessibility, and items such as the dynamo chain adjustment are also well thought out.

The drive is through a single-plate clutch with fabric friction disc to a very easily operated four-speed gearbox with silent third, and thence to a semi-floating spiral bevel rear axle.

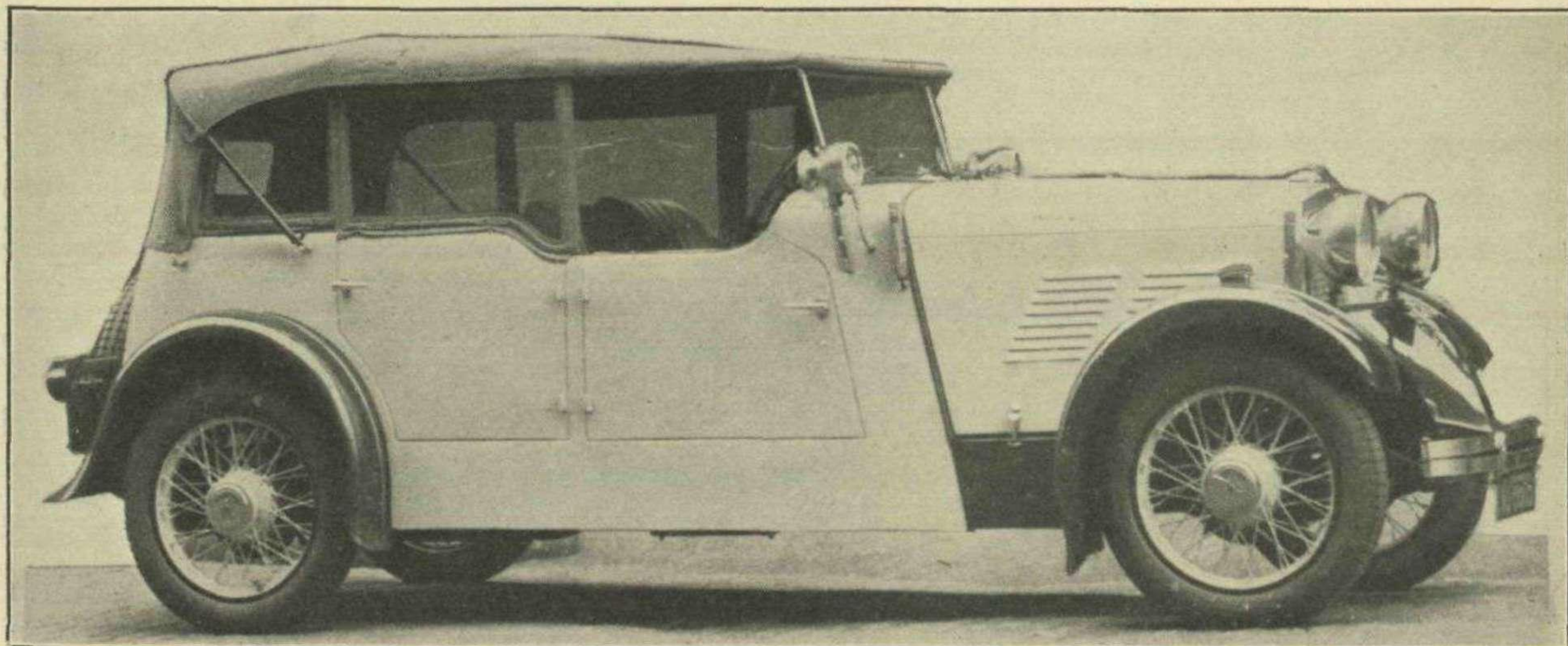
On the road the outstanding impressions were exceptional liveliness and a very fine performance on the gears. Time and again when encountering much more pretentious vehicles we slipped into third and left them on acceleration, changing up at over 50 m.p.h. and humming along without a sign of effort at over 60 m.p.h. on top.

The maximum speed on the level was 68 m.p.h. at which speed there was no engine vibration whatever.

This gives some indication that the sports model now in course of construction should be a very remarkable job.

The engine is fairly sensitive to the ignition control, which, being by coil, gives a very wide range. This gives added interest to driving, and enables an intelligent driver to make really full use of the very lively engine.

The steering is characteristic of



Both in mechanical design and outward appearance the Crossley "Ten" is distinctive.

[Motor Sport photograph]

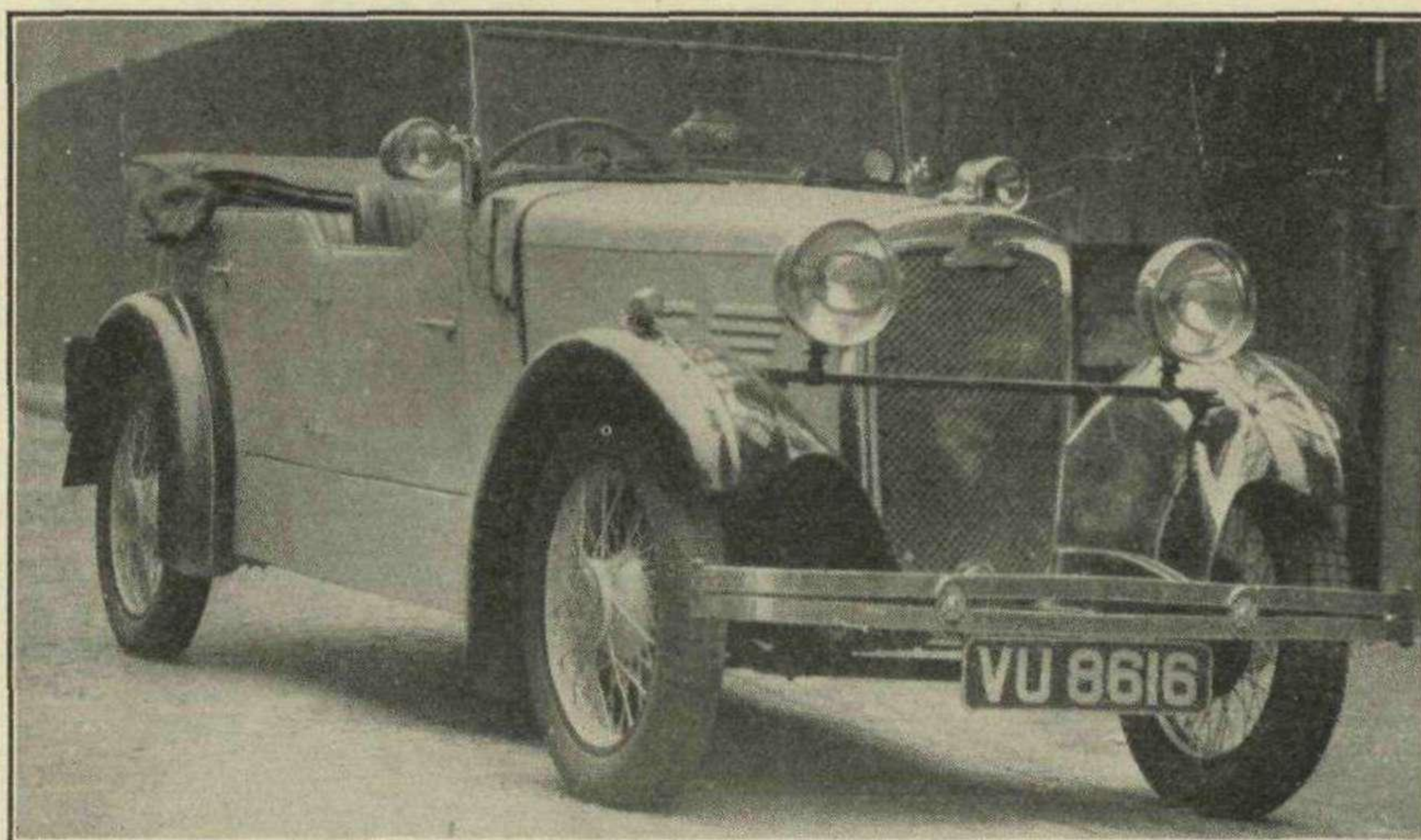
## THE NEW SMALL CROSSLEY—continued

the car, having plenty of life, and ample caster action, and is pleasantly high geared. The result is that the driver can always feel just what is happening, and cornering is safe on indifferent or greasy surfaces.

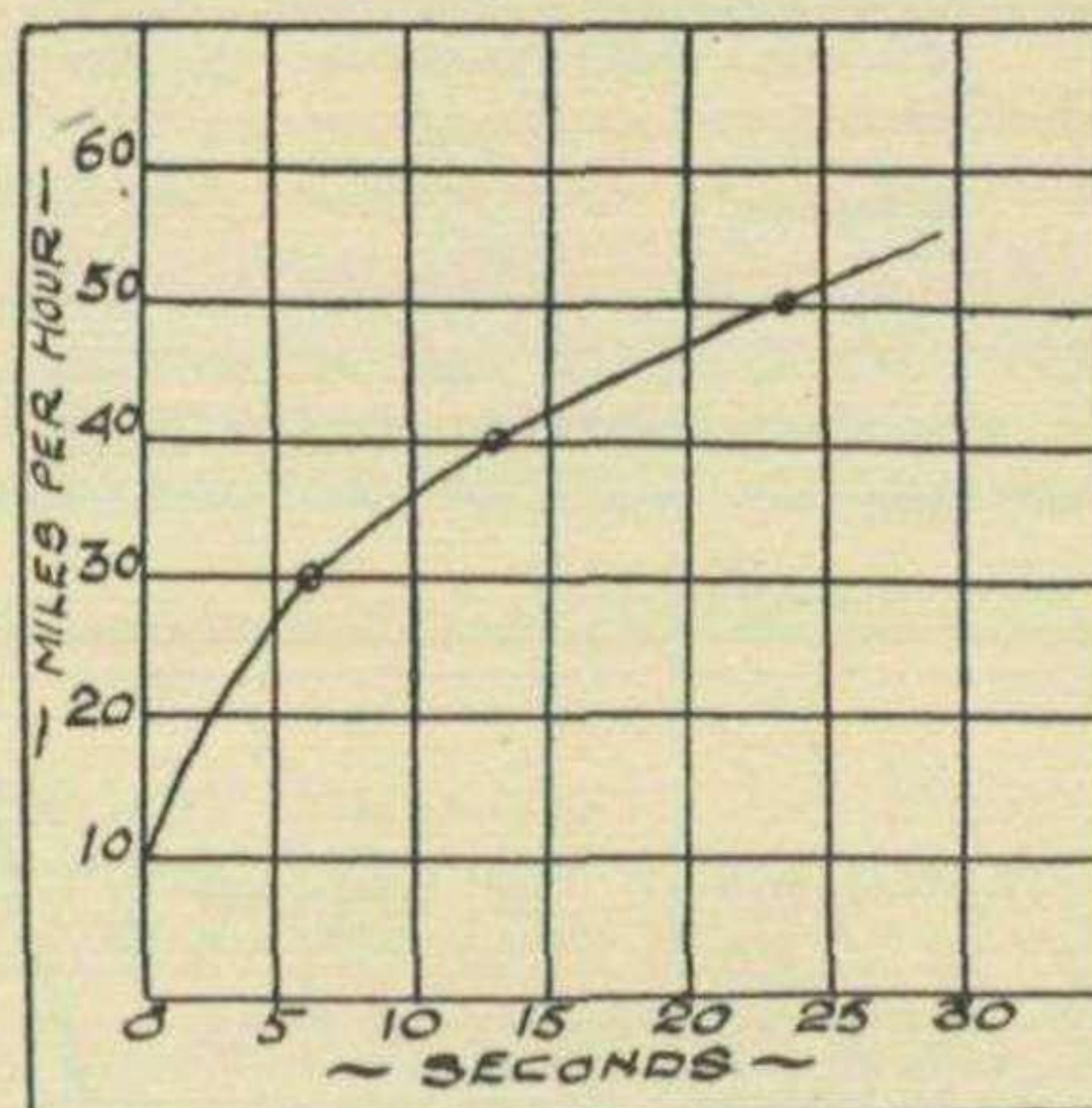
We should have preferred a rather "harder" feel about this, as it was inclined to be too springy, but this was chiefly due to the fact that the suspension of the car we tried was rather too lively for the best results. For fast driving a considerably tighter setting of the spring dampers would have improved the road-holding, though the degree of comfort was above the average for this type of car.

The brakes, which give the excellent stopping distance of 51 ft. from 40 m.p.h., are extremely powerful, having self energising servo type brake shoes. The only criticism we have of this particular braking system was the rather high initial effort required to bring the brakes into operation, which, combined with the small pressure actually required to attain the maximum retarding effort, made the brakes none too easy to operate really smoothly. A little attention to the return spring pressures and initial friction of the operating mechanism would effect a marked improvement in this respect.

The chassis feels extremely rigid, the finish is good, all parts are of robust design, and the car is evidently intended for really hard work



For a small car the Crossley "Ten" is unusually robust and roomy. The absence of running boards is in keeping with modern ideas.



Acceleration curve of the new Crossley.

in the true Crossley tradition.

The marked economy of running of this type of car—the engine is just over the 1100 c.c. mark—has made it extremely popular, and the entry into this market of a firm with such a fine engineering record should ensure a big demand from all who want a lively vehicle which will stand hard driving.

The price of the open sports-tourer is £295, and the makers are Crossley Motors Ltd., Gorton, Manchester, their London service station being at 50, Page Street, Westminster, S.W.1.

## FORTHCOMING EVENTS

## INTERNATIONAL FIXTURES—1932

## APRIL

- 9-10th. Italy—Coupe des Mille Milles.
- 17th. Monaco—Grand Prix de Monaco.
- 23rd. Great Britain—British Racing Drivers' Club Race Meeting (Brooklands).
- 23rd-24th. France—Grand Prix de l'Oranie.
- 24th. Italy—Prix de Rome.
- 30th-5th May. Germany—Internationales Wiesbadener Automobilturnier.

## MAY.

- 1st. Hungary—Grand Prix de Hongrie.
- 1st-3rd. Czecho-Slovakia—Carlsbad Rally.
- 8th. Hungary—Record Meeting.
- 8th. Italy—Targa Florio.
- 15th. Italy—Coupe Messina.
- 15th. Spain—Course de cote de la Rabassada.
- 16th. Great Britain—B.A.R.C. Race Meeting (Brooklands).
- 22nd. France—Grand Prix Automobile de Casablanca.
- 22nd. Germany—Avusrennen fur Kraftwagen.
- 29th. Italy—Circuit de Mugello.

## MAY.

- 30th. United States—Indianapolis 500 Miles Race.

## JUNE.

- 1-8th. Roumania—Concours International de Tourisme.
- 3rd-4th. Great Britain—Junior Car Club's 1,000 Miles Race.
- 5th. Italy—Gran Premio of Italy.
- 12th. Germany—Internationales Kesselbergrennen.
- 12th. Poland—Grand Prix de Lubow.
- 18th-19th. France—Le Mans 24-hour Race.
- 19th-26th. Poland—Concours International de Tourisme.
- 19th. Italy—Course de Pontedecimo-Giovi.
- 26th. Italy—Coupe Sila.
- 29th-3rd July. Germany—Internationales Baden-Badener Automobilturnier.

## JULY.

- 3rd. France—Grand Prix de L'A.C.F.
- 9th-10th. Belgium—Grand Prix de Belgique.
- 11th. France—Course de Vieil Armand.
- 17th. Germany—Grosser Preis of Germany.

# ROUND THE RALLY ROUTE

WITH THE NEW "65" TALBOT

IF any of the entrants in the R.A.C. Rally believed at the start that the event would prove to be rather dull, rather slow and a little uninteresting, it is safe to say that their views were changed very considerably by the time the affair had drawn to a close, and they were wending their way homewards from the finish at Torquay.

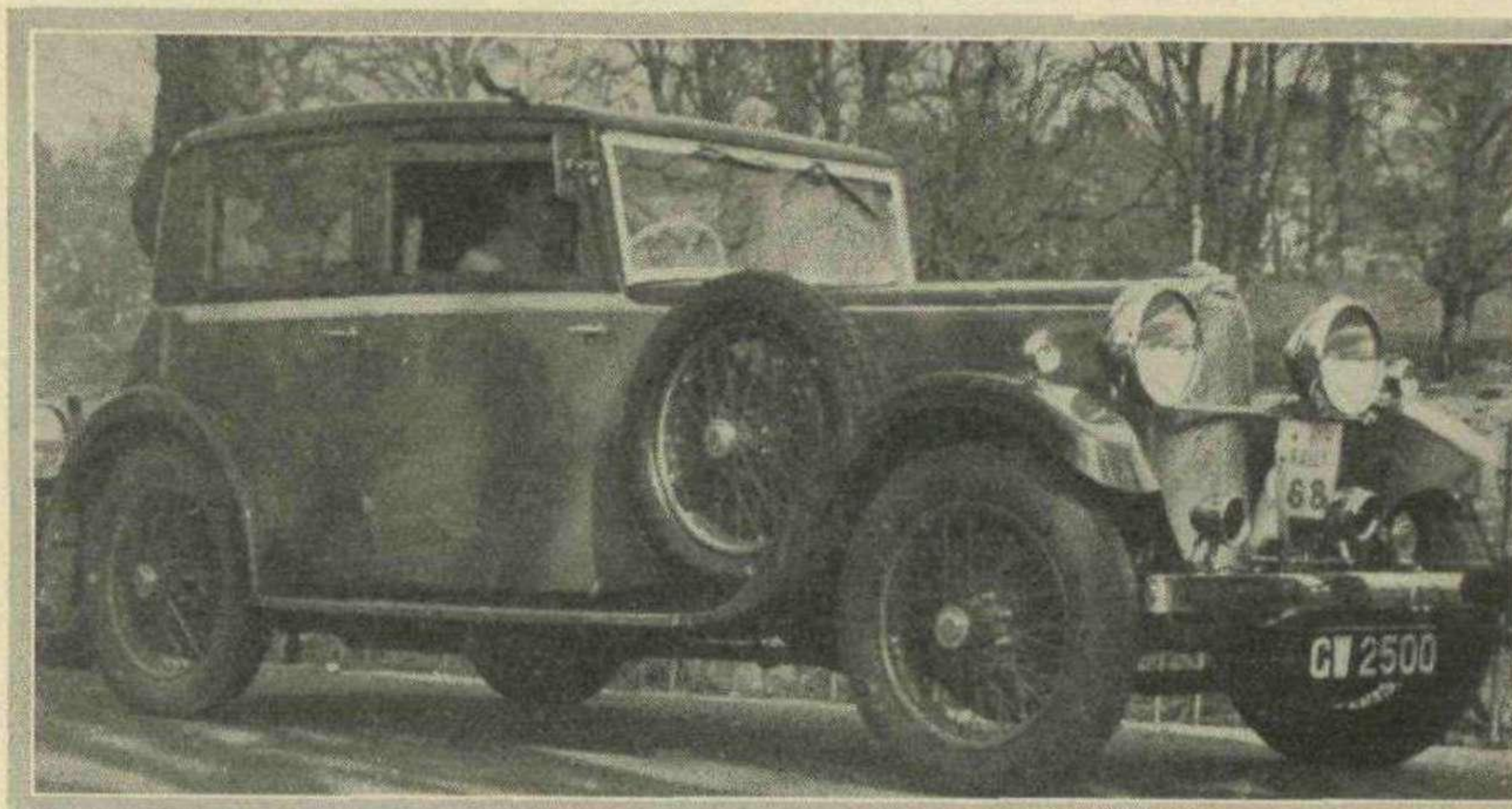
In the first place the organisation was excellent. And with so wide an itinerary as was arranged, and with an entry list containing no less than 341 cars, any little mismanagement or lack of foresight could have reduced the Rally to a fiasco. As it was, things went off at the start, the intermediate controls and the finish without a hitch.

Moreover, the event being a rally and not a reliability trial, the rule regarding average speed allowed of plenty of latitude; one was only called upon to maintain for the total distance not less than 25 m.p.h. or 22 m.p.h., according to one's class, and to report at the intermediate controls during the hours when these were open. Thus, drivers could please themselves whether they disposed of the 1,000 odd miles at a fairly sedate pace or made the event a prolonged blind. Judging by what one saw and heard, the latter method was the more popular. For one thing by "hitting it up" between controls, drivers and passengers accumulated sufficient time to comfortably partake of meals and a little sleep. On the other hand, a good number preferred to dispense with such luxuries and complete the run without indulging in any high m.p.h. But whichever way one took it, by the time Torquay had been reached, sleep—real sleep in a bed became the primary need.

## The Start.

As one of the crew of J. E. Scott's "65" sports saloon Talbot, we left the London starting control (Rootes' service station at St. John's Wood) on Tuesday, 1st March, at 6.40 p.m.

Conditions, save for a fairly strong wind, were very nearly ideal for a long night drive—clear air, and with no moon to make confusing shadows.



[Motor Sport Photograph

The "65" is a new addition to the Talbot range of models.

The "65" which is a new addition to the Talbot range, soon induced a feeling of restfulness, and one felt at once that the long journey would prove to be no ordeal.

With an eye to possible heavy-going with this erratic weather of ours, and also with hopes of awards in the coachwork competition on the Saturday, the car had been well and sensibly equipped. In addition to the standard equipment we had, for example, a powerful spotlight mounted on the roof, and two fog lamps fitted low in front; one of these was ingeniously fitted on an extensible arm so that it could be projected forward several feet ahead of the car. We had interior sun visors, Parsons chains, Jackall jacks, a complete tool kit arranged most accessibly in the lid of the rear locker, and—we reveal it with blushes of shame—an electric foot warmer!

It was Scott's intention to take things fairly quietly at first, but to progressively increase our average on our northward journey so that we could have a few hours sleep at Edinburgh. On the Great North Road we found ourselves in a straggling formation of rallyists, and it was pleasing to see that the event was by no means a 100 per cent. closed-car affair, and that there were plenty of sportsmen who were prepared to face whatever weather was in store

for them in open sports machines.

The 94 miles to Stamford passed incredibly quickly, and we appeared to have hardly settled in our seats, when we swung into the yard of "The George" at the entrance to the town. In point of fact we had averaged 40 m.p.h. Here with one or two other competitors we partook of a little refreshment, purchased a stock of cigarettes and a bottle of Scotch, and sped off again for Harrogate. Scott now gave the "65" a shade more throttle, and with good visibility, good headlights and good roads we completed the next step to the first control—"The Majestic" at Harrogate—in effortless style. Without, the night was made lively with arriving and departing cars, and within, the hotel was agog with animated conversation. One heard such remarks as "How are you guarding against falling asleep?" and the answer—"The acute discomfort of our vehicle will see to that." There seemed to be few adventures or misadventures during the 209 miles between London and Harrogate, though one or two cars had inadvertently and strangely deviated from the normal route. For ourselves, our average from Stamford worked out at 50.75 m.p.h.

A post-midnight supper of bacon and eggs, a wash, and we were on our way again. As we emerged from the warm interior of "The Majes-

## ROUND THE RALLY ROUTE—continued.

tic," Brigadier-General Sadlier-Jackson set off in his Bugatti, with the inimitable, snarling exhaust note of that marque reverberating through the deserted streets of the spa. Ten miles further on we passed him and his muffled companions, going great guns. At this distance competitors were spacing out considerably, and the Talbot went for miles passing few other cars, and passed by none. The miles swept by. One grew drowsy, eyelids drooped. The perfect smoothness of the engine, and the warm comfort of the "65" induced, against one's will, a natural languor. One sank gradually into an easy half-sleep to awake suddenly and startled. Road, trees, posts, telegraph poles, walls and wayside dwellings flashed by in streaking, endless procession. Conversation lagged; only the motor's drone and the rush of wind were heard. One's eyes rested dully on the driver's alert silhouetted figure, his glowing cigarette, the gleaming fascia board.

**Over the Border.**

Sweeping along the sombre, bleak route towards the Scottish capital, countless small animals scurried from our path. Time passed, and presently Scott, who knows every yard of the course, announced that Edinburgh was half-an-hour's run away. Actually, in less than that time we entered the city, traversing the inevitable tramlines, to arrive, a little stiff, a little sleepy, but warm

and well pleased with life at the North British Hotel, having averaged from Harrogate 44 m.p.h.

We had no sooner disembarked outside the control, than we were met by several members of the staff of Messrs. Hutchinson, the Edinburgh Talbot agents, and our car was whisked off to their service garage, while we ourselves lost no time in going to bed to enjoy four splendid hours of slumber.

With 613 miles to go, we turned southward at mid-day, and were soon sailing back over the winding roads through the mountains, now cloaked in a clammy mist. At Lockerbie a brief halt was made for a snack, and we continued without incident via Carlisle, Kendal, Warrington and Macclesfield up the long twirling climb, and down the equally lengthy and winding descent to Buxton. Here outside the "Palace" hotel, our third intermediate control, we found a great assembly of cars, many of which had started from Norwich. As at the other controls, the work of checking and signing our "road books" was carried out in a few moments by the officials, and having taken on a further supply of fuel, we were soon off again, heading for Cambridge.

All this time the "65" had been pursuing her effortless, unobtrusive way, and it was hard to believe that we had covered some 760 miles.

In the early hours of Thursday, there was a distinct nip in the air, which must have been felt keenly

by the open car contingent. But those we passed after leaving Cambridge had apparently lost none of the enthusiasm which had been noticeable in the earlier stages of the event. After a brief conference, we had decided to go via Royston, Hatfield, Stanmore, Uxbridge, and Staines to the south, rather than follow the official route through Aylesbury and Oxford.

We must confess here that the crew of the "65" were at this juncture feeling a shade off colour, and the road to Torquay even in the Talbot seemed a long, long trek. Nevertheless Scott made the most of the long stretches of highway, and the car sang along at fifty-five, sixty-five, and seventy for many a mile. At Hartford Flats we ran suddenly into a patch of dense fog, but with the aid of our various extra lamps we groped along to emerge again in clear air. Then on to Salisbury and Shaftesbury. Hereabouts we got somewhat off our course, which entailed a stop, a fumbling with the map, much scrutiny of same with sleepy eyes, and finally the retracing of our tracks.

A little later, in our headlight beams we saw an owl. Struggling frantically to gain height, it tried to clear us, but as it held a rabbit in its claws its rate of climb was poor, and with a shower of feathers both hunter and hunted were demolished by our front bumper at 60 m.p.h.

Dawn came, and with it a general revival of spirits. And then a few miles from Exeter we saw Miss D. Champney's Riley pressed well and truly against a telegraph pole.

With several hours to spare before passing our final check, we ran into Messrs. Maude's garage at Exeter, where in a rest room we were most thoroughly revived with breakfast.

When we finally passed "Ebbly" on the tick of 10.40 a.m. rain was falling fitfully—for the first time in six whole weeks, so the Torquay inhabitants assured us. But rain, snow, sleet or what you will, it was all the same to us. Through the flag-bedecked streets we went our way to Timpson's Garage, where the Talbot was quickly parked. Brief intermittent conversations with numerous friends, a lift to our hotel, a penning of a letter or two, an early lunch. And so to bed—at two-thirty in the afternoon.



[Motor Sport Photograph]

Scott's Talbot in the flexibility test. Adjudged the finest car over 1,100 c.c. irrespective of class it won "The Motor" Cup and was also first in the class for four-door sports saloons.

## THE R.A.C. RALLY

FIRST EVENT OF ITS KIND A GREAT SUCCESS

PEOPLE with knowledge and experience of the Monte Carlo Rally may, perhaps, have regarded the R.A.C. event of last month as a meek and mediocre counterpart of the former, but as a preliminary effort there can be no denying the fact that it was a great success.

It may not have proved anything of great value in regard to the speed, stamina or reliability of the modern motor-car, nor revealed anything exceptional in the driving ability of the participants. But it did show that British motorists are really keen to indulge in motoring fixtures when the opportunity occurs provided they are organised by a competent body.

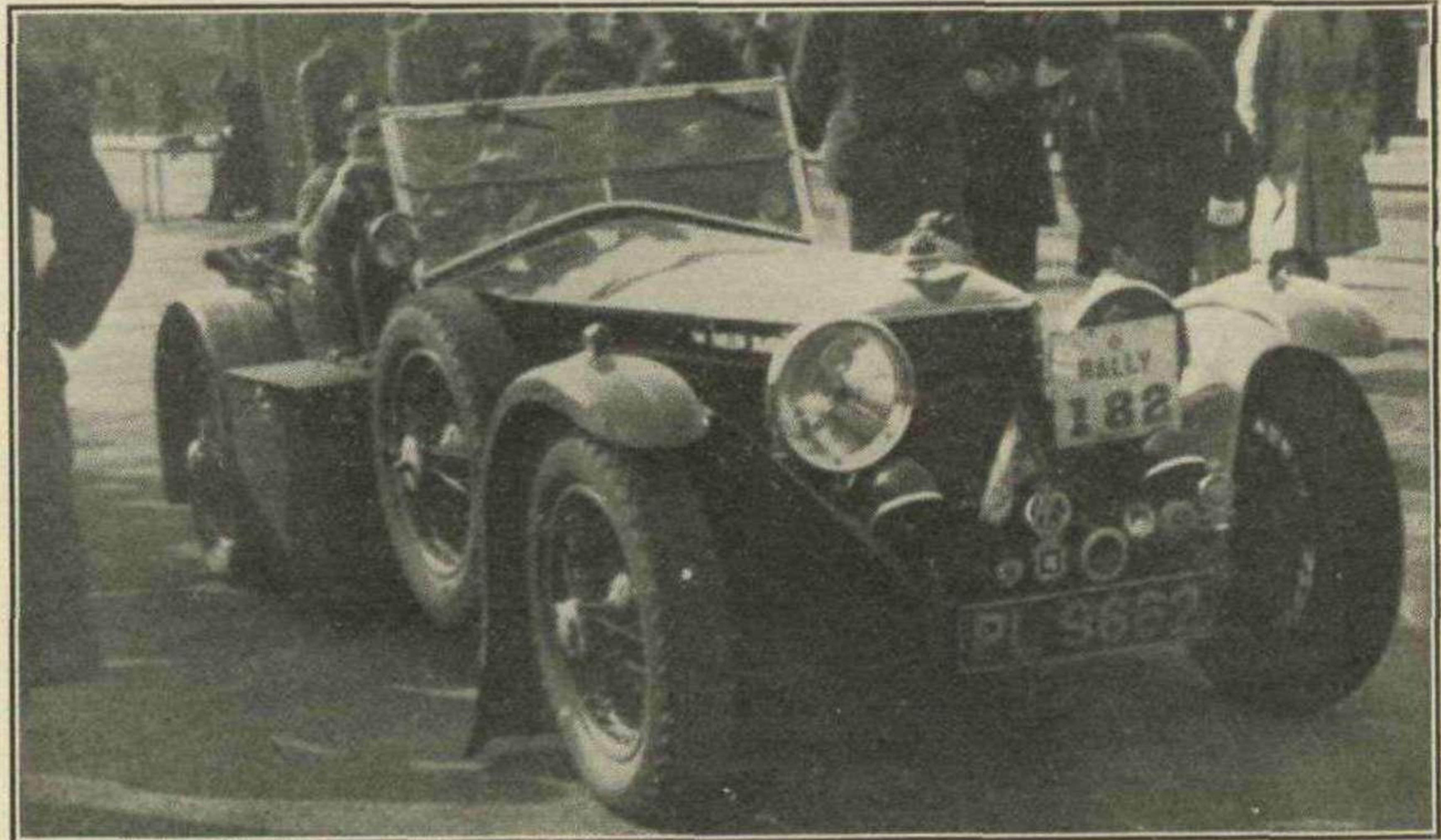
The entry list totalled 367, and of this number 342 were starters. Many of the entrants had never before taken part in any form of motoring event, but on the other hand, a not insignificant number of familiar names also appeared in the programme. There were nine starting points—London, Bath, Norwich, Leamington, Buxton, Harrogate, Liverpool, Newcastle, and Edinburgh. The mileage from these various points, according to the official route cards, differed somewhat; for the London contingent, for instance, it was 1,002½ miles, for Bath it was 1,006½, Norwich 1,003, Leamington 995, Buxton 1,002½, Harrogate 990½, Liverpool 1,004½, Newcastle 994, and Edinburgh 999.

Fortunately or unfortunately, according to whether one wished for a straightforward run or desired to show one's mettle under adverse conditions, the weather was good. In spite of this, competitors found that averaging 22 m.p.h. and 25 m.p.h. for the entire distance was not entirely child's play. For one thing in the early hours of the morning it was very easy to lose one's way in certain towns and badly-marked areas with no local informants at hand. Few drivers

had any proper sleep, and the majority, on reaching the finish wasted no time in regaining the rest they had lost en route.

On the day of the rallyists' arrival (Thursday, 3rd March), the weather broke up temporarily, and it was a dismal Torquay that met their gaze. On the following day, however, the sun shone, and the flexibility and braking tests were

mission system. For the spectators, the slow-running tests provided plenty of fun; it was entertaining to witness the jerky progress of some of the older sports cars outpacing the official observers who pursued them breathlessly on foot, while to unsympathetic eyes the tense, anguished expressions of the drivers as they tried to get their machines to per-



Motor Sport Photograph

Healey's Invicta, "The Roller Skate" in the slow running test at Torquay.

held before vast crowds of interested on-lookers. To the surprise of most people, those cars which were fitted with fluid flywheels, were not the only machines to demonstrate ability to go really slowly; the unpretentious Trojans were extraordinarily good in this respect, as were those Rileys which incorporated the Salerni torque converter in their trans-

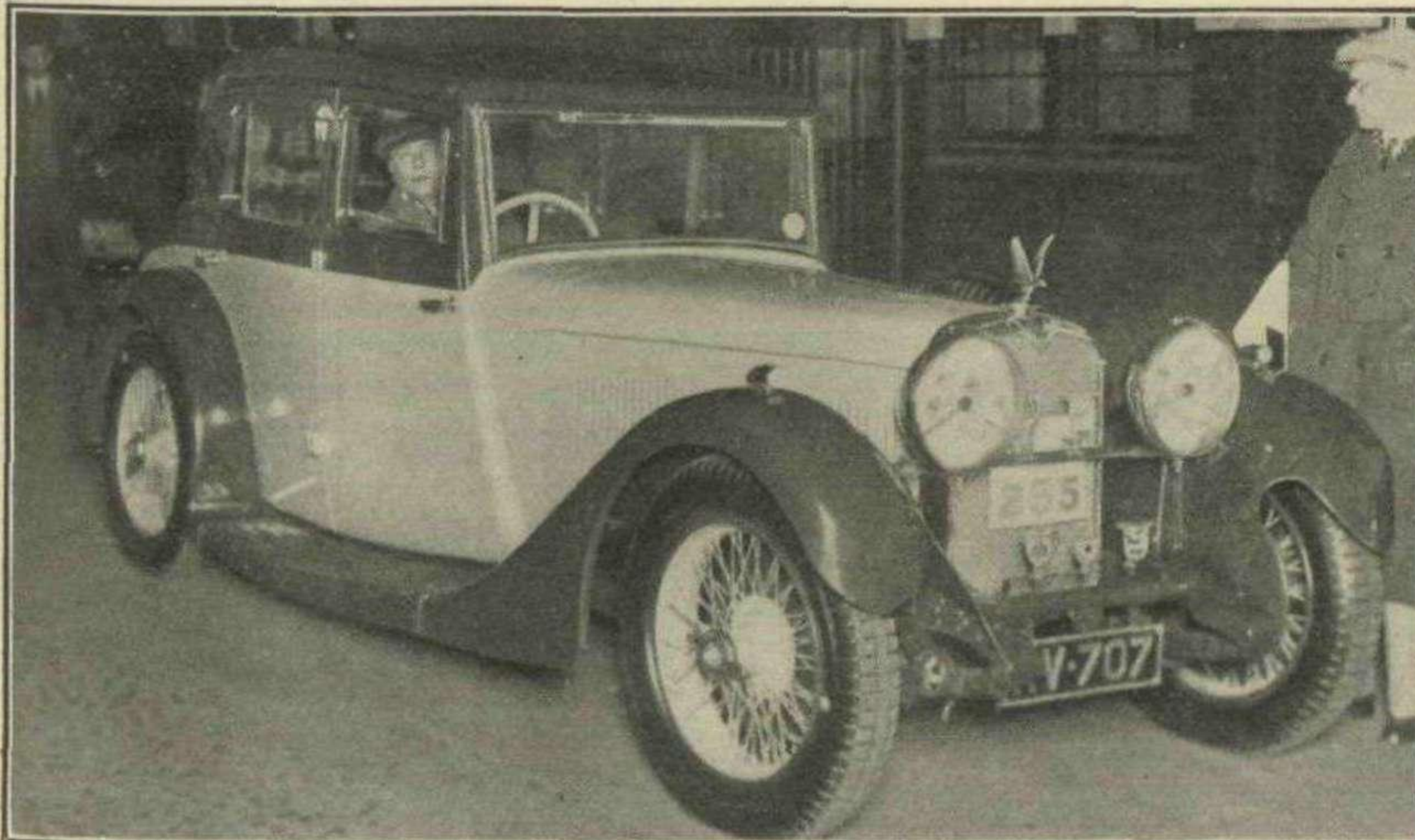
form at a low speed provoked much amusement. Many overdid things, and stalled their engines.

After the slow-running test, the cars had to demonstrate their powers of acceleration and braking. As with the former, the latter was carried out over a stretch of road for a distance of 100 yards, with a 10 feet rolling start.

The standard of driving in this was generally low, many of the drivers not even speeding up their engines, while others seemed to start on too high a gear. Any gear or gears could be used, and the self-changing boxes were noticeably helpful.

At the end of the 100 yards boards were erected giving warning of the brake test. Competitors had to cross a line painted across the road, and then stop as quickly as possible, and the stopping distance was then quickly determined by lines painted at intervals of a foot across the road. The cars had to be stopped within lines ten feet apart, otherwise a failure was recorded, and most of them seemed to pull up pretty squarely. Water thrown out of the radiators made the test more difficult for later competitors, while there was rather more camber on one side of the road than the other.

The average performance, on the whole, demonstrated the advances in brake design which have been made in the last few years.



Frank Hallam leaving the Leamington control in his very smart "Speed Twenty" Alvis.

## THE R.A.C. RALLY—continued.

The tests continued until about noon, and the remainder after lunch until late in the afternoon. The organisation was carried out without a hitch, as it always is in events arranged by the Royal Automobile Club, but one cannot help hoping that another year some less prolonged substitute for the slow running test may be found.

The winners of the Rally in the two classes (under 1,100 c.c. and over 1,100 c.c.) were those which obtained the highest aggregate number of marks in the road section—which included the final inspection—and in the flexibility and braking tests. Prizes were also awarded to the second, third, fourth, fifth and sixth competitor in each class. There were, in addition, a number of special awards in the coachwork competition.

## THE AWARDS.

## CLASS I.—CARS EXCEEDING 1,100 C.C.

First: "The Autocar" Trophy and £25, Col. A. H. Loughborough (Lanchester, with fluid flywheel).

Second: R.A.C. Trophy and £15, J. Mercer (Daimler, with fluid flywheel).

Third: R.A.C. Trophy and £10, G. F. Dennison (Riley, with Salerni torque converter).

Fourth: R.A.C. Trophy and £5, H. P. Henry (Armstrong Siddeley, with fluid flywheel).

Fifth: R.A.C. Trophy and £5, D. Healey (Invicta, with servo clutch).

Sixth: R.A.C. Trophy and £5, J. D. Siddeley (Armstrong Siddeley, with fluid flywheel).

## CLASS II.—CARS NOT EXCEEDING 1,100 C.C.

First: "Light Car and Cycle Car" Trophy and £25, V. E. Leverett (Riley, with Salerni torque converter).

Second: R.A.C. Trophy and £15, R. St. G. Riley (Riley).

Third: R.A.C. Trophy and £10, G. H. Strong (Standard).

Fourth: R.A.C. Trophy and £5, Mrs. M. M. Riley (Riley).

Fifth: R.A.C. Trophy and £5, Mrs. C. S. Staniland (Riley).

Sixth: R.A.C. Trophy and £5, G. W. Olive (Avon Standard).

LADIES' PRIZES.—To the woman driver in each class who, without a male passenger or driver on the car, obtained the highest number of marks. Presented by the "Daily Mirror." Class I.: Lady de Clifford (Lagonda). Class II.: Mrs. M. M. Riley (Riley).

## IRRESPECTIVE OF CLASS.

Club Team Prize.—Col. A. H. Loughborough (Lanchester), D. Healey (Invicta), and R. Way (Rover), M.C.C. D. Team.

"The Daily Telegraph" Cup (London).—J. Mercer (Daimler, with fluid flywheel).

The Norwich Cup.—G. F. Dennison (Riley, with Salerni torque converter).

The Leamington Cup.—V. E. Leverett (Riley, with Salerni torque converter).

## COACHWORK COMPETITION.

"The Motor" Cup for the best car in Class I.—J. E. Scott (Talbot).

"The Autocar" Trophy for the best car in Class II.—C. J. Joyce (Crossley Ten).

First prizes in each of the following twelve classes. Second prizes where the entry includes five or more cars.

1. Open two-seaters under 1,100 c.c.—1, W. Wadlicor (Riley); 2, A. H. Wilkinson (Riley).

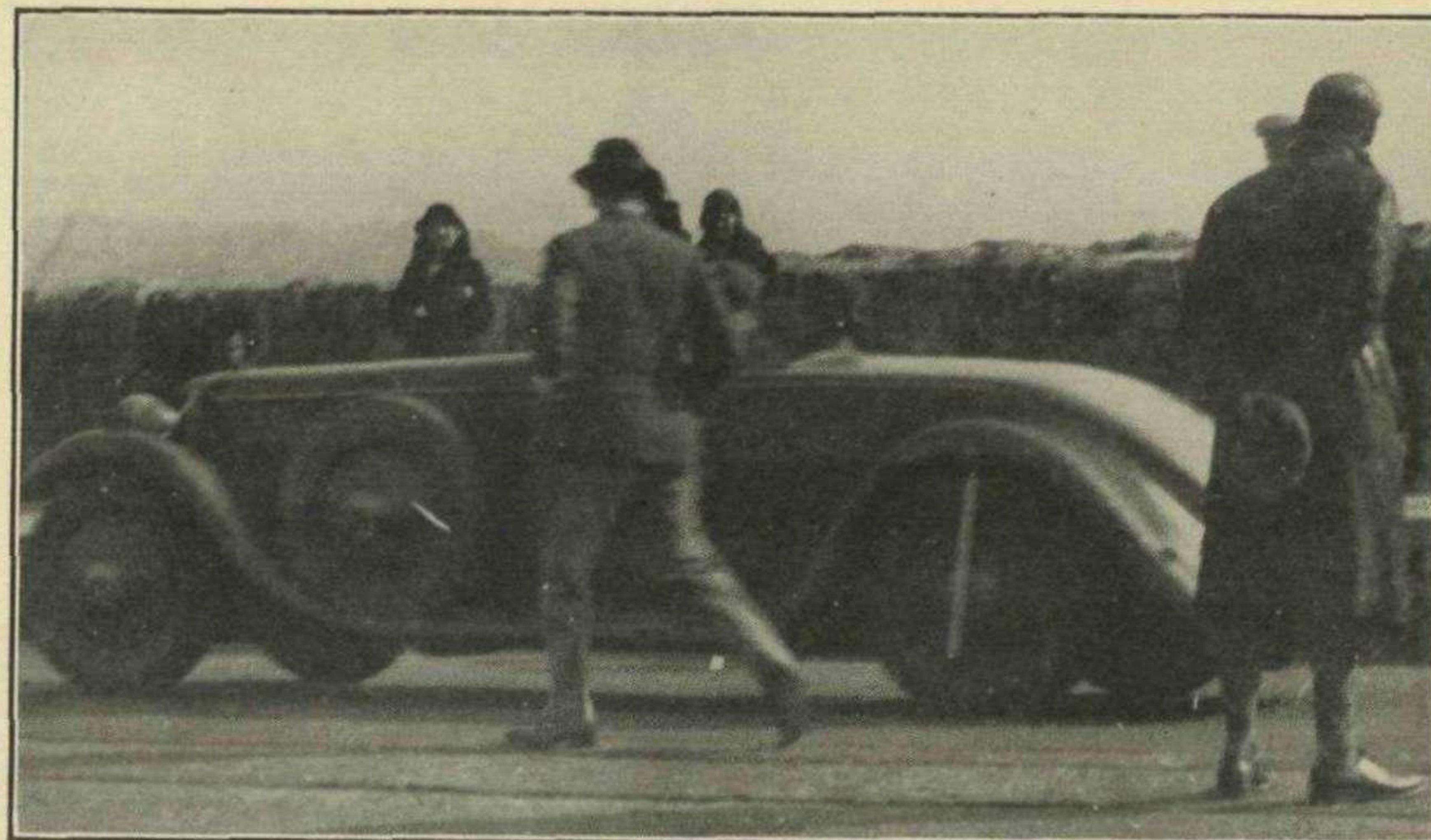
Open two-seaters above 1,100 c.c.—1, J. A. Mackle (Daimler); 2, T. R. Mallen (Talbot).

2. Open four-seaters under 1,100 c.c.—1, S. Holbrook (Crossley); 2, F. H. Beer (Crossley).

## Renewed Police Activity.

THE Automobile Association warns motorists of the importance of keeping their number plates "clearly distinguishable" as required by law. In certain parts of the country, the matter is receiving close attention by the police, and numerous prosecutions have been instituted.

The stopping of motor vehicles by the



[Motor Sport Photograph

A two-seater sports Daimler endeavours to emulate the snail in the slow-running test.

Open four-seaters above 1,100 c.c.—1, C. D. Siddeley (Armstrong Siddeley); 2, Lt.-Col. D. Willoughby-Osborne (Lancia).

3. Two-door two-seater coupés, 1,100 c.c.—1, B. Roy (Triumph); 2, no award.

Two-door two-seater coupés over 1,100 c.c.—1, M. Newnham (Armstrong Siddeley); 2, J. Harrop (Chrysler).

4. Occasional four-seaters and two-door sports saloons, 1,100 c.c.—1, Miss P. Naismith (Standard Avon); 2, G. W. Olive (Standard Avon).

Occasional four-seaters and two-door sports saloons above 1,100 c.c.—1, A. Harrington-Harvard (Talbot); 2, A. H. Pass (Sunbeam).

5. Four-door sports saloons under 1,100 c.c.—1, C. J. Joyce (Crossley); 2, Mrs. M. M. Riley (Riley).

Four-door sports saloons above 1,100 c.c.—1, J. E. Scott (Talbot); 2, H. P. Henry (Armstrong Siddeley).

6. Full saloons, limousines, landaulets, and coupe de ville under 1,100 c.c.—1, G. H. Strong (Standard); 2, A. H. Oxenford (Standard).

Full saloons, limousines, landaulet, and coupés de ville, over 1,100 c.c.—1, D. H. Simmons (Rolls-Royce); 2, T. Thistlewayte (Rolls-Royce).

## RALLY INCIDENTS.

One of the cheeriest crews was that in the Armstrong-Saurer coach, who announced their approach at controls, and to other competitors with a fanfare on an elaborate coaching horn.

Who was the unfortunate driver who could not add? He drove over the finishing line, stopwatch in hand, and as he thought, exact to the minute. He had made, however, an hour's error in his reckoning.

Kensington Moir when approaching Buxton, was persuaded to take a "short cut" at the bidding of one of his passen-

gers. He finished up at about 3,000 feet on a by-road, and miles from anywhere.

A hairdresser in Exeter complained that he had great difficulty in shaving his numerous Rally customers, as they persisted in falling asleep in the chair.

Another Exeter incident was when a particularly tired driver, on leaving his car, walked straight into a post. He explained that he was not short sighted—just sleepy.

One lady driver deserved a special medal. She drove single-handed throughout, had no rest, no meals, and smoked only seven cigarettes. She also had trouble with her lights, but continued, and arrived at Torquay two hours late.

Not a few spare drivers while dozing en route, had mild nightmare and awoke from dreams of crashes and other disasters. Others confessed to "seeing the road go by" when they closed their eyes, hours after the finish.

J. Fuller's Riley Nine coupe was the lowest built closed car in the Rally. The body was the work of Reading of Portsmouth.

A Morris van, driven by a woman, and which checked in at the finish made a strange contrast alongside the many luxurious vehicles at Torquay.

police, so that the latter may ascertain the condition of brakes, is also becoming more frequent.

The usual procedure is for the driver to be asked to apply the brakes, and if they do not hold, the sequel may be a police court prosecution.

The maximum penalty for these various infringements is £20.

## "About George."

UNDER the intriguing title of 'About George' one hardly expects to find a car catalogue. Yet the story of George as told and illustrated in an amusing booklet issued by the M.G. Car Co. is a catalogue in disguise, for it sets forth in a very diverting manner a list of the most appealing points of the Midget.

## A CHAMPION CAR FOR £395

### *Premier Awards in the Rally*

"THE MOTOR" CUP.

For the finest car over 1,100 c.c.,  
irrespective of class,  
TALBOT "SIXTY-FIVE."

1st. Class IV, for occasional 4-seater  
and 2-door Sports Saloons,  
"105" TALBOT.

1st. Class V, for 4-door Sports Saloons,  
TALBOT "SIXTY-FIVE."

You are SAFE in  
choosing  
THE INVINCIBLE

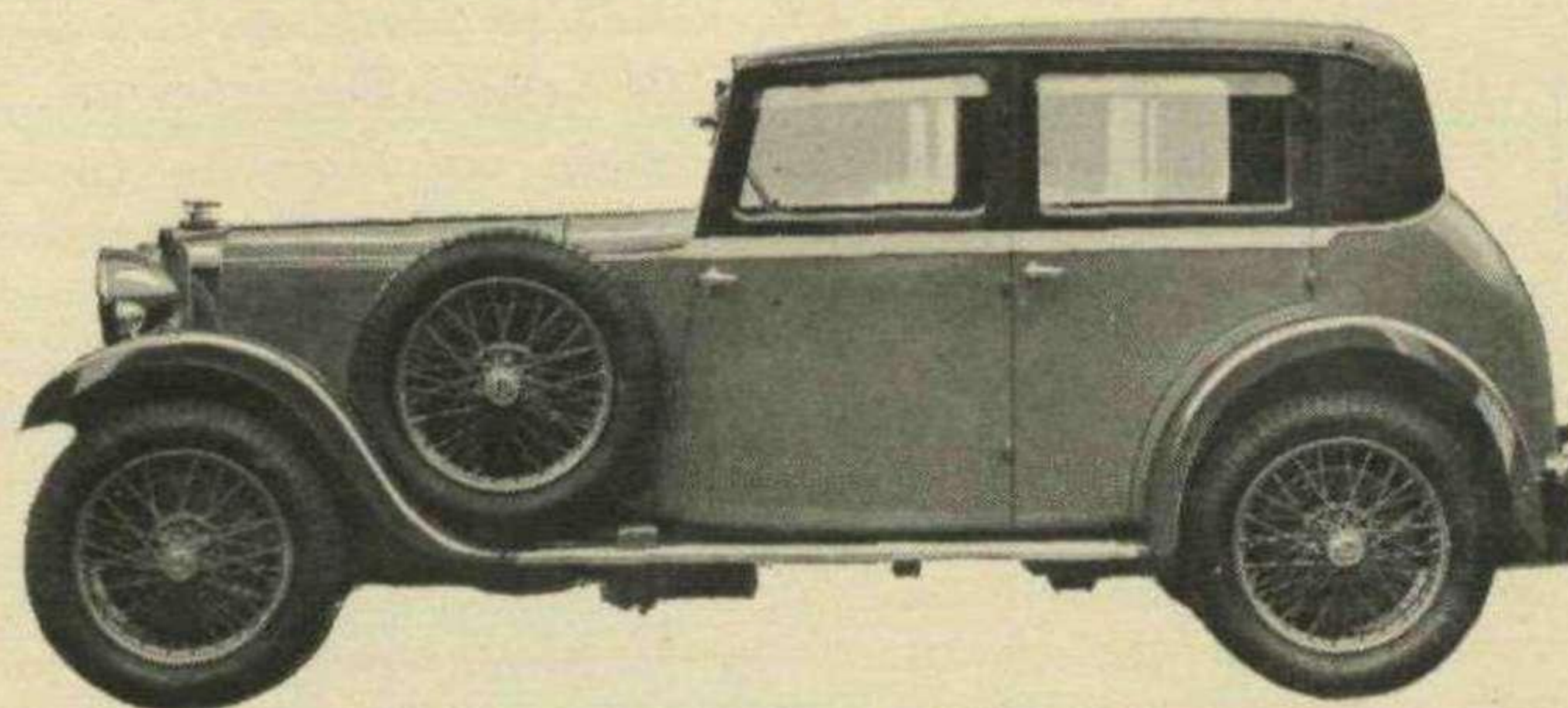
# TALBOT

Clement Talbot Ltd., 12 Princes St., Hanover Square, London, W.1.

Talbot's latest production proved itself a winner and consolidated the fine reputation of Talbot cars in the Rally—its first public outing. The

### TALBOT "SIXTY-FIVE"

is the subject of an article in this issue by the Editor of "Motor Sport," who was a passenger in the car and who tells of its splendid behaviour.



TALBOT "SIXTY-FIVE" £395

Works and Service: Barlby Road, Ladbrook Grove, London, W.10

## ALVIS BENTLEY MERCEDES

*The World's Best Fast Cars  
are always in stock  
at*

### CHARLES FOLLETT L<sup>td.</sup>

*Sole Alvis Distributors London & District*

18, BERKELEY ST., W.1

*Mayfair 6266.*

### The Club that leads.

The J.C.C. held the First General Efficiency Trial in 1913 and pioneered long distance racing in England with the first 200 miles race in 1921. "Road racing" on Brooklands was a J.C.C. innovation in 1926, and the Club ran the first "Mountain" race for cars in 1927. In 1928 Brit in's first dirt track meeting for cars was run by the J.C.C. at Greenford. The J.C.C. brought England her first Endurance contest in 1929, and in 1932 will lead once again with the First British 1,000 Miles Race.

To-day the J.C.C. is England's largest  
Associated Club.

Annual Subscription 35/- (including full Associate  
Membership of the R.A.C.)

### It is worth joining the J.C.C.

(JUNIOR CAR CLUB)

Empire House, Brompton Road,  
LONDON, S.W.7.

Telephones : Kensington 1294 & 2756.

LIVERPOOL. — LEEDS. — SOUTHAMPTON

# Rumblings



## BOANERGES



**N**OW that the much-discussed R.A.C. Rally is over we can consider the results and see what they mean. The first and most obvious point is that in future, cars with normal transmission need not apply as far as awards are concerned, and it will be interesting to see what effect this will have on sports cars. For the moment, I should say, precious little, partly because of the widespread attitude among such owners that they would rather continue to operate a mechanism that calls for some skill, and—much more important, the weight of preselective gear boxes definitely goes against performance.

### A Wise Decision.

On the other hand the R.A.C. are to be congratulated on refraining from restricting the type of transmission, as it has been proved that the new developments are really reliable and practical, and for many motorists highly desirable. Most sports car owners like a car on which the gear box has to be used to get the best results, but this does not mean they like a gear box which is difficult to use. Most normal gear changes today are fairly easy, but there are still one or two high-class sports cars on which it is the reverse.

The skill in using a gear box should be as far as possible confined to knowing when and how to use engine revs. to the best advantage, and not so much to the actual engaging of the cogs!

The ideal for sports cars, and for all road vehicles for that matter, is the perfect, automatic, infinitely variable gear which will adjust the engine revolutions exactly to correspond with power requirements,

so that normally the gear will remain as high as consistent with maintaining the speed reached at the throttle opening in use, but which when full throttle is given will immediately reach the maximum power r.p.m. and maintain this until the car has reached the maximum possible road speed under the prevailing wind and gradient conditions.

How such a car would simplify driving at an event like Shelsley Walsh, or in a road race, where only the throttle and brakes would be used, and the acceleration would be far better than at present, owing to the fact that maximum power output would be constantly available.

As yet, such a system is no more than a dream, as those torque converters as have appeared have not been capable of dealing with the order of power required, and have also been too cumbersome for practical use. However, more difficult things than this have been accomplished in engineering, and if the internal combustion engine retains its present character, which seems likely at present, the perfect transmission should follow. The results of the R.A.C. Rally show that makers are no longer slaves to the conventional transmission, and this will give increased encouragement to inventors.

### Go-as-you-please Competitions.

To return to more immediate interests, those who braved the bleakness of the elements, and waited till the Oxford club had decided to start their recent speed trials, optimistically termed a hill-climb, had some apt comments to make on the event. An account of this affair appears on another page, and I hope

the organisers (sic!) will pull their socks up if they elect to attempt any further events. There are few enough speed trials in this country now, and they have always been one of the greatest attractions to the amateur driver, the cheerful atmosphere of the varsity events making them specially pleasant.

All the same, the line has got to be drawn somewhere, and the delightful informality can easily develop into complete chaos. The general idea of the last event is well illustrated by the experience of a friend of mine, not a very particular person himself who, knowing these events, did not enter but turned up with his motor during the proceedings. After a stroll of inspection he located someone who appeared to have an interest in the event, and requested of him a number. Having murmured his name, he was presented with some numbers which he duly affixed.

After a spot of work on his steed he observed that the motors gathered at the starting line included a few of his own size, so he proceeded thereto and said "What ho! when is it?" to which someone replied "When you like," or words to that effect, and he went.

After a spot more adjustment, finding the air biting chill, he varied the monotony by drifting down and helping himself to another run, and so on. Apparently all were welcome to run, provided they took the initiative, and he was not worried who missed anything as he duly won—well we won't say what or someone might locate him and suggest an entry fee! However, if you get me, that is the sort of event, and taken all round it seems just a little too vague.



RUMBLINGS—continued.

Racing Cars Again.

Among more serious items of news is the more than welcome fact that some of our manufacturers are at last awaking to the idea, so long harped on in this journal, that the building of real racing cars is really a good idea, and plans for this season show that we should soon be able to put something worth while into Continental racing. As this is not in most cases run on handicap, successful applicants must be able to travel indecently quickly irrespective of size, and several makes have interesting models simmering in the pot.

The M.G. Company, following their astounding performances on small cars are planning larger metal. In addition to the 1100 c.c. racing Magnas, which although they will not have reached the production stage this season, will probably appear in events where the types are not restricted, there is a real unlimited racer on the board. This will be about 2½ litres and intended to attack the Italians at their own game. Good luck to them!

Rileys are also producing a team of 1½ litre sixes, which are rather like larger "Brooklands" nines. They uphold the Riley policy of not using superchargers, and it will be interesting to see how they perform. Judging by the speeds obtained last season from their 1100 c.c. cars the latest effort should be very useful.

130 m.p.h. is glibly mentioned in connection with the new car, but—well, we can only wait and see.

The new Rolls-Bentley or whatever the car is to be called, is hardly likely to see active service for another season, for there is much to be done in building such a car, and Rolls-Royce are not the sort of people to let anything go out till they have got it right. When it is released we can be sure that it will be a remarkable vehicle.

No official announcements as to its design are yet available, but I gather that it will be a 2½ litre straight-eight supercharged racer, and as the firm already have evidence of the value of racing in the aircraft world, it is more than likely that official entries for the classic events will materialise. Here again, however, we must possess ourselves in patience and hope for the best.

Some particulars of the new small Crossley racers appeared in our last issue, and if Vernon Balls' enthusiasm is any criterion they should do well, and all honour to them for entering the racing field, and so helping to give a lead to less enterprising firms.

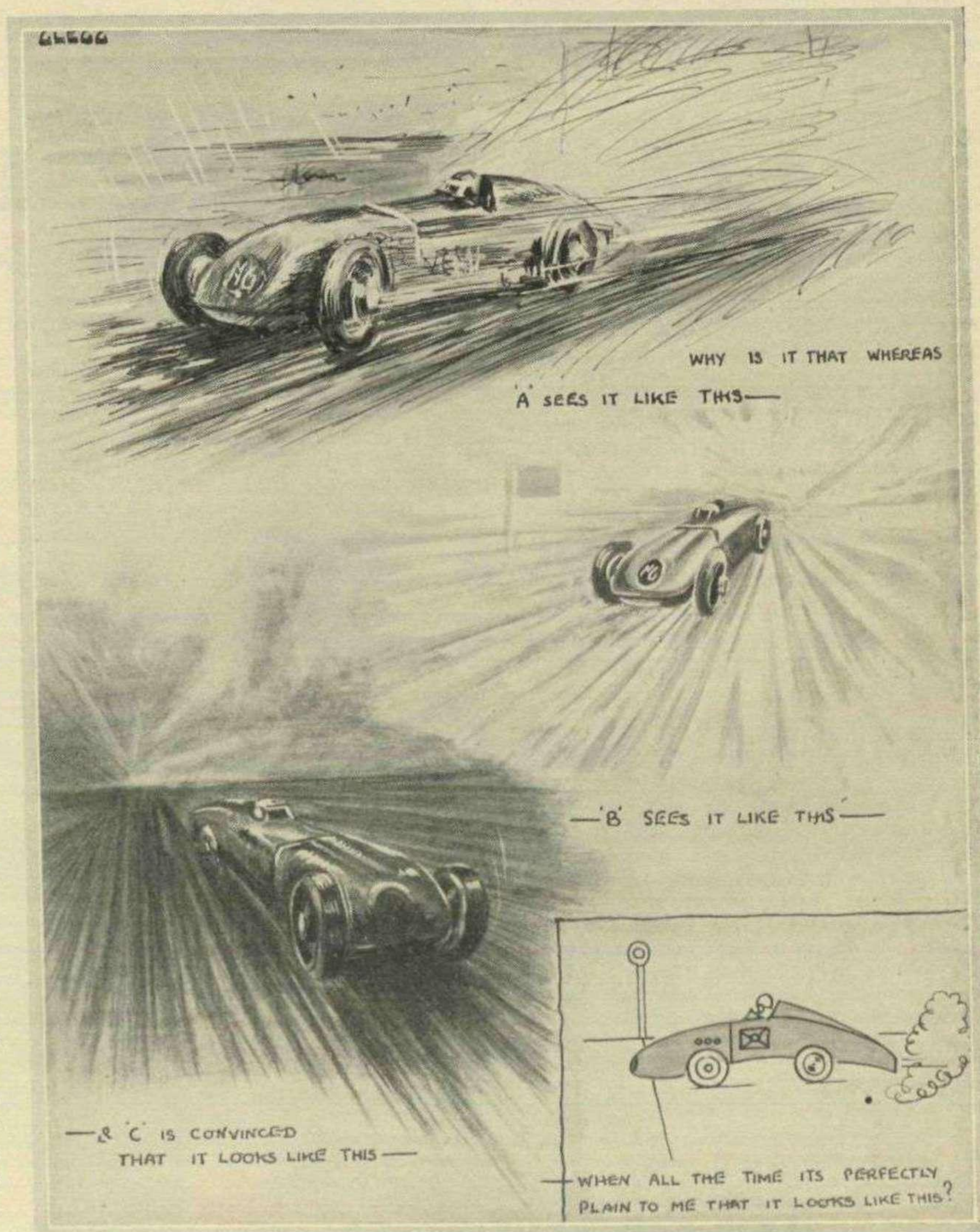
New Season Experiments.

The high efficiency of the modern motorcycle has been giving motor-car designers something to think about, and A. F. Ashby of Riley fame has been making a close study of this. As a result, he has made some very

interesting modifications to the induction system of his car. He has also been trying the new Bowden double float-chamber carburettors, which are beautifully finished, with the thinnest possible butterfly valves, giving an almost unobstructed flow of gas, and he says he is quite satisfied with results, thank you.

In addition Ashby has made various other special parts for his engine including a new design of tappet. When I visited his premises some time ago he was also busy with a new form of crankshaft—a massive and beautifully finished piece of work.

THOSE ARTISTS' IMPRESSIONS.



The horrid truth revealed.

## ALMOST A HILL-CLIMB.

## ANOTHER INTER-VARSITY AFFAIR.

THE annual hill-climb held by the Oxford and Cambridge clubs is always an occasion to be welcomed, held as it is at the beginning of a new season, and characterised by a pleasant lack of formality. It has taken place now for several years at Ewelme near Henley, but this year the organisers were unable to get the use of the old course. The O.U. Car Club was fortunate in being allowed to have the use this year of a stretch of the Eynsham by-pass, a new road which, when completed, will convey South Wales traffic to the High Wycombe road without passing through Oxford.

The course was a road some thirty feet wide, partly covered with chippings, and was crossed by a minor road half-way along its length, causing a bump which proved most unpleasant to the competitors on two and three wheels. The start was arranged at the far end of the completed section of the by-pass, and after a rolling start of about 40 yards, there was a straight run of a kilometre to the finish. A slope of about 1 in 80 was the only excuse for the title of the meeting, but as the road was quite safe for high speeds, this made up to some extent for the lack of gradient and corners.

Inter-varsity events, as we have said, are noted for their lack of formality, but the 1932 hill climb surpassed any previous event in its lack of organisation. The first machine was supposed to start at 10.30, whereas it actually went off two hours later, and the first car did not make its run until half past one. Much delay took place between the running of the various heats and matters were not made better by having the competitors' paddock half-a-mile beyond the finish. A biting wind blowing up the course made it almost impossible to keep cars warm, with a consequent crop of oiled plugs.

## A Varied Entry.

The entries were very similar to those which put in an appearance at Hexton a week before, but the G.N. brigade did not turn up on this occasion. A very welcome addition to the list of competitors was Earl Howe, who had entered both his T.T. Mercedes and his eight-cylinder Alfa-Romeo. The latter had only just been re-erected, and was not running sufficiently well to take part in the speed trial. R. J. Nash brought along the "Terror" which now has a new body.

After the delays already mentioned, the proceedings opened, and it was evident that some fast times would be made. Fernihough on an Excelsior-Jap leapt high in the air over the bump, but quite unperturbed, he went on to clock 25 seconds, or 89 m.p.h. Darbishire and Muir were also fast, but the latter had trouble of varying sorts, and could only manage two third positions.

Mavrogadato, still faithful to his Scott, did well in the unlimited class, though he locked his back wheel on his second run. Fell (Douglas) in his second run put up a really good show. The three-wheeler

class was supported by only five entrants. C. Collett (Norton) was excellent with R. R. Jackson (Morgan) second.

## The Car Classes.

The small cars were not particularly fast, one of them in fact being overhauled on its run by a left hand drive Ford sedan, but Wood on a Brooklands Riley made a better show, his speed causing him to "take off" when crossing the bump.

L. A. Hutchings on a 1926 Fraser Nash improved on his performance of the previous week and won the 1100-1500 c.c. class, actually at a better speed than that of the unlimited sports class, which was won by C. H. Fairtlough on an M.G. Six.

The super-sports class, 850-1100 c.c., was won by R. O. Mitchell on a supercharged B.N.C. in just over 36 seconds, but he was prevented from taking part in the All-comers' class by a fractured oil pipe.

The next class promised better sport, the two special Fraser Nashes "Slug" and "Terror" being entered, but the former toured along in a cloud of steam, while Nash's machine stopped a few yards over the line through a failure in the fuel system. Nash also drove a supercharged Ulster car, and with this was able to win the class. Robinson's famous Brescia Bugatti, which is now said to have a compression of 12 to 1, got going well after rather a woolly start, and gained second place.

The super sports unlimited class produced a mixed bag. A. Conan Doyle in the Austro-Daimler which caused all the trouble the week before, Scott Moncrieff in a monster 2-seater Hispano, and Burrows in a Lagonda were uninspiring. Lord Howe made a magnificent run in the T.T. Mercedes, the blower screaming on each gear, while the dust from the loose chippings blew up behind the car like a cloud of smoke. His time was missed on his first run, but on a later attempt he clocked fastest time of the day.

Samson on a two-litre Bugatti, was obviously going very fast, but Fotheringham on a similar machine, had sooted his plugs through the long delay in the starting line, and took some time to get going.

The last event was the All-comers class, which appears from the results to have been a handicap event, though no mention was made of this fact in the programme. As all but two of the cars entered had already run in other classes, one would have thought that the times recorded in them could have been used, but instead of doing this and getting on with things, all the cars ran again. The two competitors who had not already run were S. H. Murray (who endeavoured to provide comic relief in an old Buick) with three passengers all refreshing themselves from bottles; the other machine was an old Vauxhall.

The rest of the afternoon was taken up with proceedings which were a repetition of the first part, cars and motorcycles running when they could be found, and

everyone getting colder and colder. The only bright moments were when the Mercedes reappeared, and when Fotheringham made a superb run near the termination of the meeting. One noticed that he wisely refrained from using his special racing plugs until he was actually on the starting line.

Cambridge repeated its success of the previous week, and won comfortably.

## Results.

## MOTORCYCLES.

250 c.c. class.—1st, J. A. H. Sargeant (O), O.K.-Jap (34 secs.); 2nd, A. L. Jones (O), O.K. Supreme (36.75 secs.).

350 c.c. class.—1st, J. Dimcock (C) Cotton (30.05 secs.); 2nd, J. M. Muir and J. Jeffe, Velocettes (32.00 secs.).

500 c.c. class.—E. C. Fernihough, Excelsior-Jap (24.9 secs.); 2nd, S. B. Darbishire (C), Norton (27.7 secs.); 3rd, J. M. Muir (C), Norton (28.15 secs.).

Unlimited class.—1st, J. H. Fell (C), Douglas (25.65 secs.); 2nd, S. B. Darbishire (C), Norton (27.7 secs.).

Fastest time of the day—E. C. Fernihough, 24.9 secs. (89.9 m.p.h.).

Fastest time of the day (undergraduate)—J. H. Fell, 25.65 secs. (87.04 m.p.h.).

## CARS.

Sports Cars up to 850 c.c.—1st, R. M. Mere (O), M.G. (42.55 secs.); 2nd, G. W. J. Wright (C), M.G. (50.4 secs.); 3rd, Hon. A. D. Chetwynd (O), M.G. (51.3 secs.).

Sports Class, 1100 c.c.—1500 c.c.—1st, L. A. Hutchings (C), Frazer Nash (38.8 secs.); 2nd, N. S. L. Falkner (C), Alvis (41.5 secs.); 3rd, H. L. Watson (O), Wolseley (42.5 secs.).

Sports Class Unlimited.—1st, A. T. Fairtlough (C), M.G. Six (40.3 secs.); 2nd, N. A. Watson (O), Frazer Nash (49.5 secs.).

Super-Sports Class up to 850 c.c.—1st, H. C. Hamilton (C), M.G. (36.15 secs.); 2nd, R. M. Mere (O), M.G. (42.5 secs.); 3rd, Hon. A. D. Chetwynd (O), M.G. (51.3 secs.).

Super Sports Class, 850 c.c.—1100 c.c.—1st, R. A. Mitchell (O), B.N.C. (36.1 secs.); 2nd, T. B. Wood (C), Riley (36.6 secs.).

Super Sports Class, 1100—1500 c.c.—1st, R. J. G. Nash (C), Frazer Nash (31.3 secs.); 2nd, J. Robinson (C), Bugatti (32.6 secs.); 3rd, J. Fane (C), Frazer Nash (32.4 secs.).

Super-Sports Unlimited.—1st, Earl Howe (C), Mercedes (29.7 secs.); 2nd, T. S. Fotheringham (C), Bugatti (29.8 secs.); 3rd, E. H. M. Samson (O), Bugatti (31.6 secs.).

All-Comers' Class (handicap).—1st, K. D. D. Evans (O), Alfa-Romeo; 2nd, T. G. Moore (O), Bentley; 3rd, J. Robinson (C), Bugatti.

Fastest car of the day.—Earl Howe, Mercedes, 29.7 secs. (75.1 m.p.h.).

Fastest Undergraduate.—T. S. Fotheringham, Bugatti, 29.8 secs. (74.9 m.p.h.).

# "Can Climb Anything and Go Anywhere!"

THE AUTOCAR—

—JULY 18, 1930

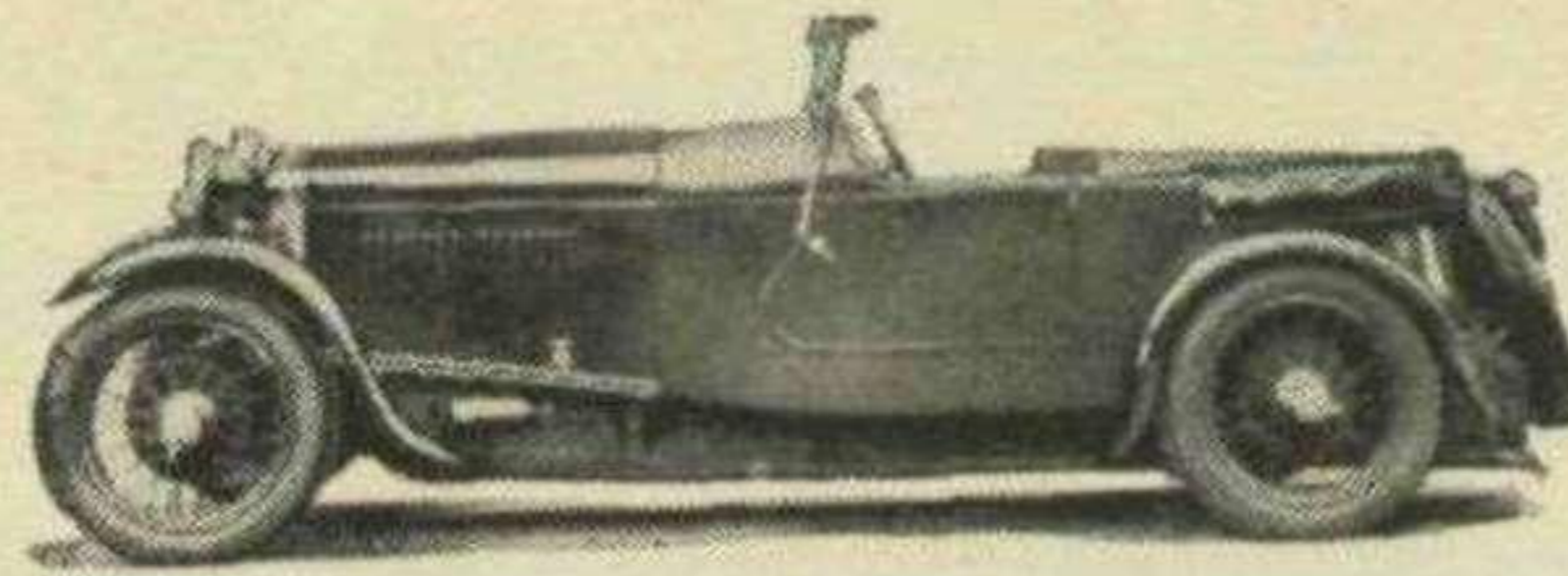
"Torrential rain at frequent intervals, a course water-logged after days of rain, hills deep in sodden leaves and covered with a surface of slimy chalk, 'colonial' sections composed of liquid mud—in short, Chiltern country at its wettest and worst!"

"The Frazer Nash contingent streaked up the hills in their usual effortless fashion." "Again the outstanding performances were by the Frazer Nashes."

"Alms Hill—practically unclimbable by anything on four wheels—was in a shocking condition . . . the section of 1 in 3½ by the 'Cannons' was coated with glutinous chalk deep in leaves, and the ruts seemed deeper than ever."

"Of the seven clean climbs, five were Frazer Nashes." "The Frazer Nash drivers excelled."

"Blacker Mill—its surface when wet is such that wheel grip



Illustrated catalogue sent on request.  
Demonstration runs at any time, anywhere.

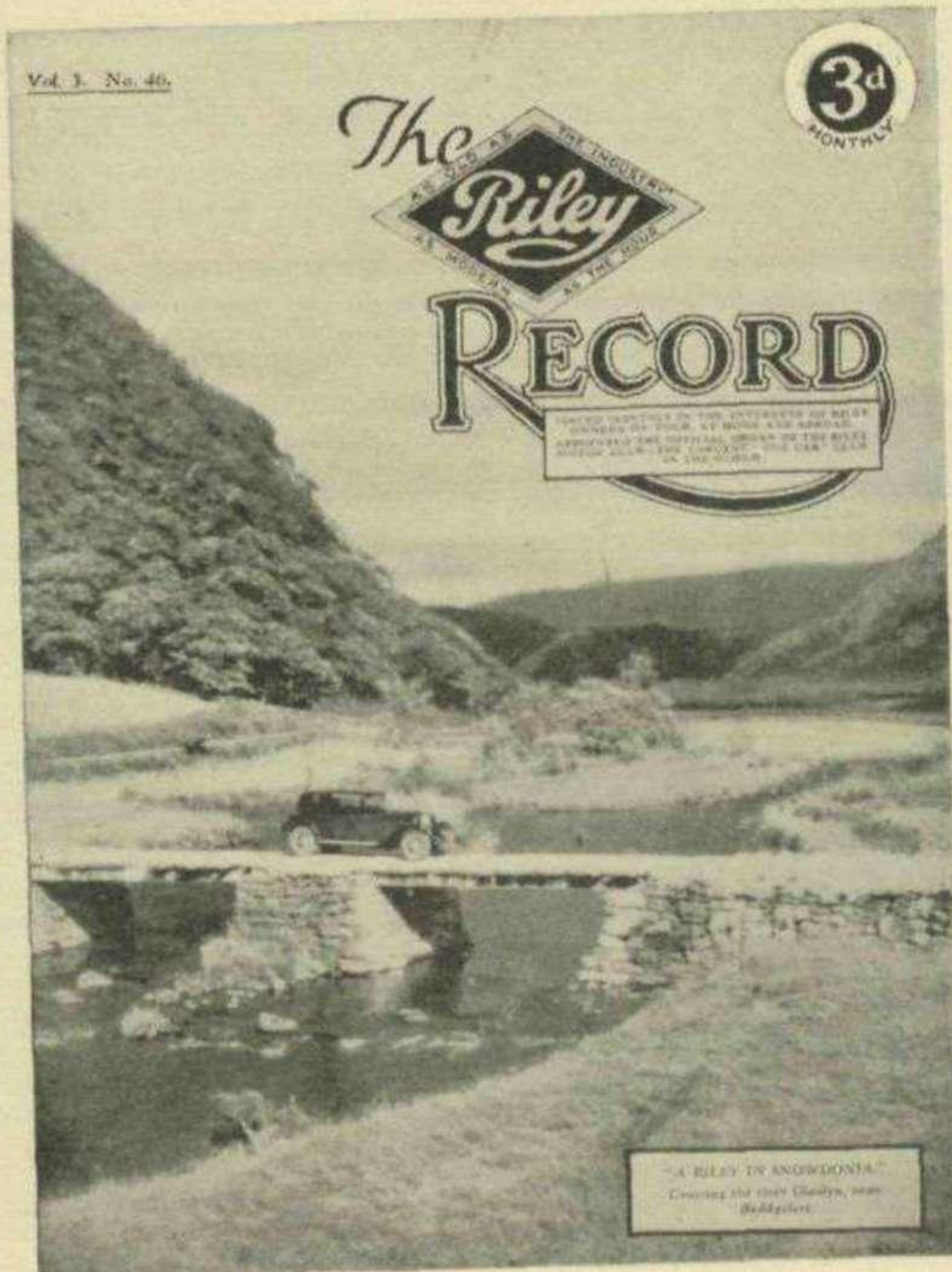
is almost an impossibility—probably the best ascent of the day was that of W. R. Nimmo, driving a Frazer Nash."

M.C.C. One Day Sporting Trial, 1930. Only Premier Award (out of 72 entries). London-Exeter, 1930. Five Gold Medals. A Frazer Nash was awarded the Special Prize for Acceleration against 183 cars. London-Land's End, 1930. Eight Gold Medals.

London-Land's End, 1931. Nine Gold Medals. London-Exeter, 1931. Twelve Gold Medals. Colmore Cup Trial, 1931. Four Premier Awards. Inter-Varsity Trial, 1931. Awards for Best Performance of the Day, best Cambridge car, best Oxford car, best Veteran's performance and best 1,500 c.c. car—all gained by Frazer Nash entries. Etc., etc.

## FRAZER NASH CARS

Falcon Works, London Road, Isleworth. Telephone: Hounslow 3171-3172



Do you appreciate

TECHNICAL ADVICE — TALES OF TRAVEL  
RECORDS OF ACHIEVEMENT — A SPOT  
OF HUMOUR? All these appear in

### The Riley Record

the official journal for those whose bond of union is that of ENTHUSIASTIC OWNERSHIP.

Have Your Name On The  
Mailing List

Subscription - - 4/- per annum  
(post free)

THE RILEY RECORD (DEPT. RR 2),  
RILEY (COVENTRY) LIMITED,  
Foleshill, COVENTRY



*Brief Specification.*

*Engine: Six cylinders in line cast in two groups of three, with one piece detachable aluminium head carrying overhead valves in bronze seatings. Valves operated by push rods. 108 x 140 m.m. bore and stroke, capacity 7.7 litres approx. Seven-bearing nickel-chrome steel crankshaft. Single dry-plate clutch and 4 speed gearbox in unit with engine.*

*Rear axle: Fully floating with offset hypoid bevel drive.*

*Brakes: Servo assisted brakes on all wheels operated by pedal. Separate system operating independent shoes in rear drums controlled by hand brake.*

*Steering: Worm and nut.*

*Suspension: Long semi-elliptic springs with dampers. Spring leaves and all chassis parts including steering pivots and brake mechanism lubricated by foot pump on dash.*

*Tyres: 32" x 6.75" Dunlop reinforced.*

*Petrol tank: 20 gallons carried at rear of chassis.*

*Ignition: Two independent systems by magneto and battery, synchronised and automatically controlled.*

*Electrical installation: 12 volt system of Rolls-Royce design and manufacture. Dynamo with automatically variable output.*

*Dimensions (short chassis):—Wheelbase 12ft. Track (front) 4ft. 10½ins., rear 5ft.*

*Price: Phantom II Continental touring saloon £2,542.*

ALL adjectives and expressions used in the normal description of motor cars have to be based on some suitable standard, and owing to the inexorable law of averages, this standard is the normal good quality sound car which forms the backbone of the industry.

It is this fact which grossly handicaps the poor scribe who starts out to convey the details and performance of such a production as the latest Rolls-Royce to those used to the normal standard of motoring, and makes ordinary language quite inadequate in attempting to convey what can only be obtained by first-hand experience.

The tradition of Rolls-Royce has grown with the motoring era till it has become a legend, but the wonder of this production is none the less

true for all its legendary qualities, and to those who sometimes ask, "Is a Rolls Royce all that it is said to be—it seems impossible?" one can only quote the Queen of Sheba's remark about Solomon, "The half was not told"—or in normal English—"Try it for yourself and you'll learn something."

The last trip we had in a Rolls-Royce was in one of the famous "Phantom" models, which was the forerunner of the "Phantom II," and when the opportunity arose of trying a "Continental" edition of this latest model we duly repaired to Conduit Street at the appointed hour to meet Mr. Northey, with whom we were to learn what can be done to make motoring worth while.

While waiting, so to speak, for

the car to appear at the door, it will be interesting to note some of the points about the new car and the policy which has caused its creation. As its designation implies, this model has been developed largely as a result of experience of fast touring on Continental roads, where the conditions are so vastly more strenuous and infinitely more varied than those obtaining in this country.

Rolls-Royce Ltd. have never attempted to produce what is generally termed a "sports car," and they are emphatic that the "Continental" model is a fast touring car, intended to combine the height of luxurious travel with a performance over any type of road which will satisfy anyone who does not actually wish to compete in a race.

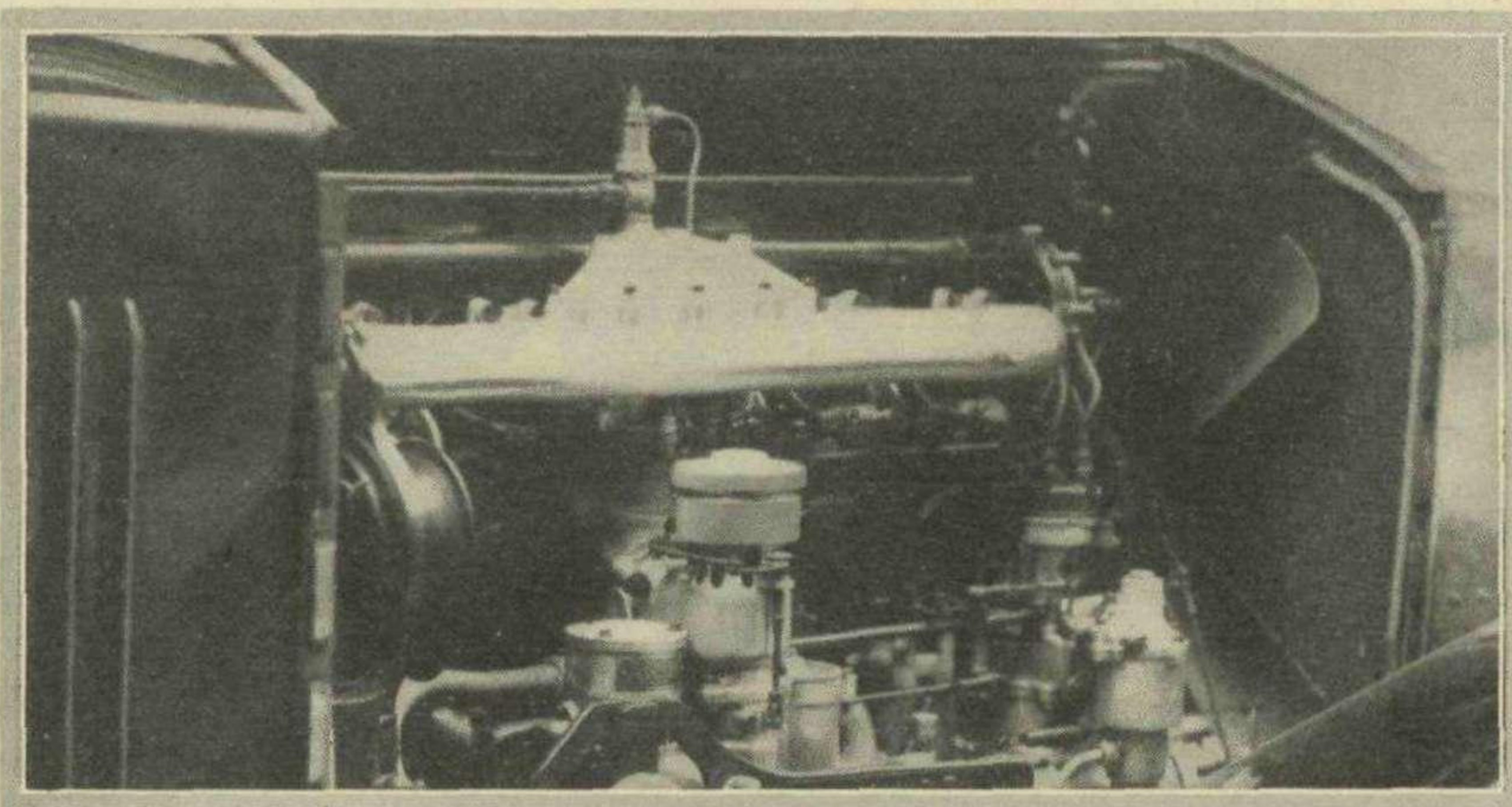
The fact that so many owners of

## THE "CONTINENTAL" ROLLS-ROYCE—continued.

these cars use them all over the world, with a specially large proportion in Europe, has given them a vast amount of useful knowledge. In addition to this a great deal of experimental work is carried out on the Continent by Rolls-Royce testers, any new feature, after preliminary tests in England, being put through a period of strenuous testing over many thousands of miles of Alpine roads before it is finally accepted for production.

Such problems as cooling, while simple enough to arrange for under normal English road conditions, are far from easy when required to cope equally well with gentle gliding through traffic at one end of the scale, and a full speed ascent, of the Col du Galibier, 8,450 feet high, at the other.

The Continental model differs from the normal Phantom II in having a rather higher compression engine, while the chassis is the result of the most rigorous tests to ensure perfect suspension at speed over all surfaces without interfering with the comfort in any way.



Wherever one looks in the Rolls chassis, individuality and perfection of detail are found to a most marked degree. Here is the offside of the power unit of the "Continental" model. A slightly higher compression ratio is used than with the "Phantom II."

After due inspection of the separate engine units mounted in the showroom we boarded the car, and with Mr. Northey at the wheel we moved silently through the London traffic bound for the Great North road.

The first points that strike one about this amazing motor car are the comfort, which is unsurpassed by the most luxurious furniture, and the uncanny silence, which enables everyone in the car (we carried a load of four) to converse in normal tones at all speeds as easily as if seated round a smoking room fire.

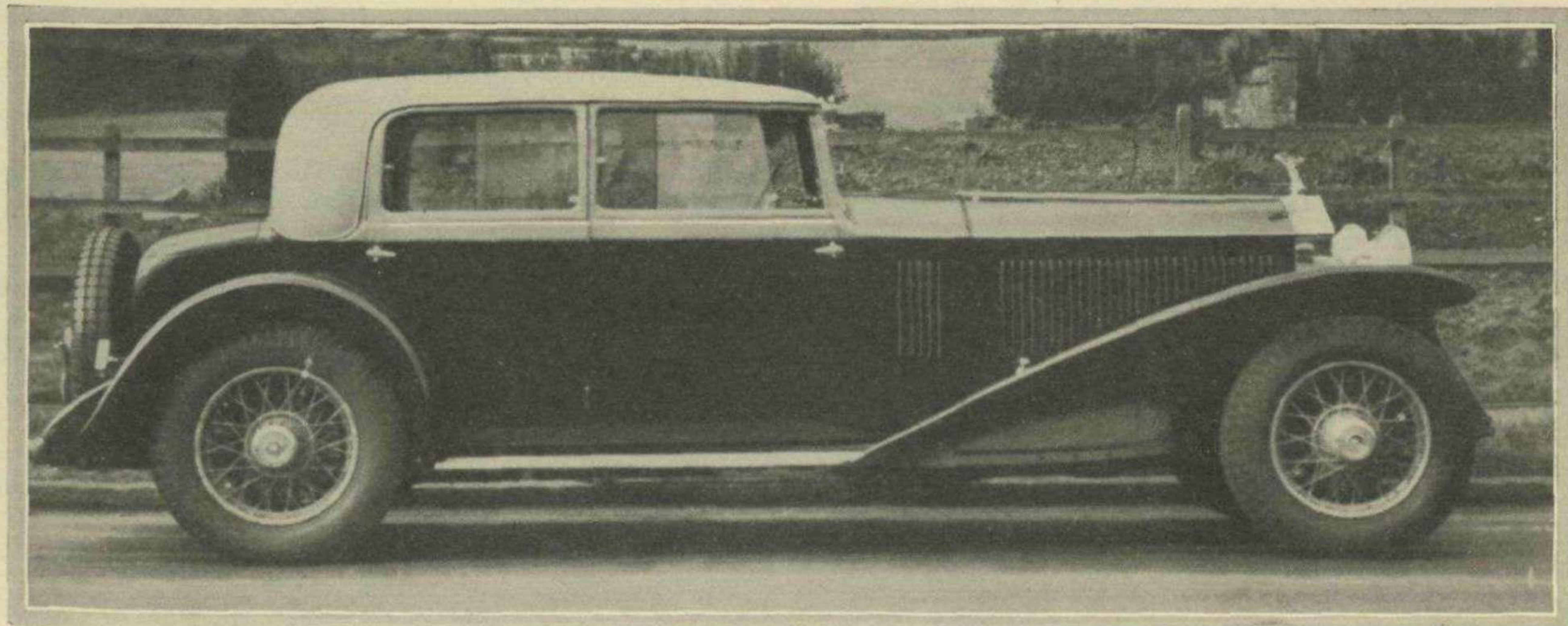
We very soon realised that in addition to providing this delightful mode of travel, the car was capable of the most astounding performance

without visible or audible effort. Once out of town Mr. Northey, remarking quietly, "Of course, if we wished to put real power in this engine we could," put his foot down and the car went straight up to 90 m.p.h. without a falter, still with no sound but that of the wind past the windows.

Having given some glimpses of what the car

could do, Mr. Northey then changed places, and we were able to try for ourselves the handling of this twentieth century magic carpet. The first thing that is evident when driving is that it is probably the easiest car to handle ever built. The lower two gears are practically never used for main road work, though when negotiating Alpine hairpins their use would be called into play.

Starting is normally effected in third gear, which gives as good an acceleration from a crawl as any screaming small sports car, but without any demonstration of power. The engine torque at low speeds is terrific to give such acceleration, and one would naturally expect to



A side view of the Rolls-Royce saloon which was placed at our disposal for test.

[Motor Sport Photographs]

## THE "CONTINENTAL" ROLLS-ROYCE—continued.

feel the "punch" of the individual cylinders when picking up from a low speed. Actually one feels nothing, so cleverly has the engine mounting and vibration damping been arranged, and the flow of power can only be compared to that of an electric motor.

In ordinary use even third gear is but little used, although 70 m.p.h. can be reached on it, as owing to the amazing power available, top gear does nearly everything required. To give a full idea of this power the acceleration curve from 10 m.p.h. was taken entirely on top gear, instead of the usual MOTOR SPORT practice of using full revs. on each gear to show the maximum acceleration obtainable. The result is extremely interesting as it shows a performance, using a single gear which is only surpassed by a racing car, and then only by full use of the gears.

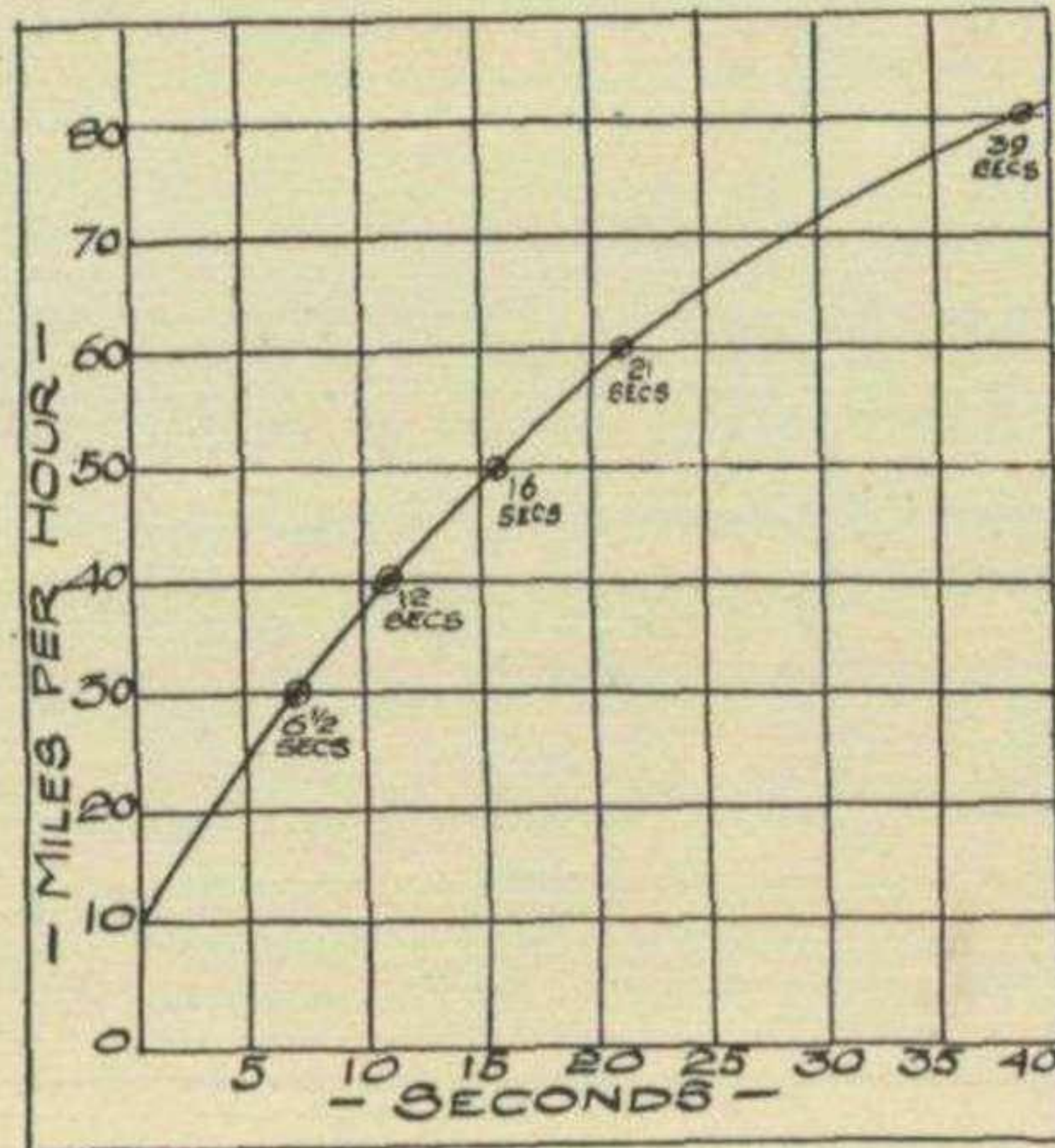
From the first moment of taking control of the car, the driver feels absolutely at home. Although it is a large car, it feels small to drive owing to the perfect balance of the controls and steering. The latter is absolutely effortless, free from road shocks, and yet not too low geared, and with a live feel which makes accurate driving and cornering really simple.

The road holding is remarkable in its adaption to varying surfaces and speeds, and in its complete freedom from rolling or tail-heaviness when cornering fast. It can be seen from the photographs that the body, which is incidentally mounted on a special subframe, is kept well within the wheelbase, which has a great deal to do with the car's extreme steadiness.

*The superlative elegance of the Rolls-Royce saloon is particularly noticeable in this photograph. Complete freedom from rolling and tailheaviness when cornering at high speeds are among the many remarkable features of the car. 80 m.p.h. was attained in a matter of seconds, and a maximum of 93 m.p.h. was reached without effort.*

[Motor Sport Photograph]

The brakes also contribute to the ease of fast driving, being so light to operate that the longest run would never tire the driver, yet without



Acceleration curve of the "Continental" Rolls-Royce.

any sign of fierceness. The pedal actually controls a servo motor mounted on the gearbox which applies the brakes on all wheels, and is equally effective either forwards or backwards.

Unlike so many servo systems there is no feeling that the servo is taking charge of the proceedings, and either the fiercest or the most gradual braking can be obtained at will without any particular delicacy or skill on the part of the driver.

In open country a speed of 80 m.p.h. is reached in a few seconds and is maintained without any seeming effort on the merest fraction of the full throttle opening. The miles slip by with less fuss than in any other mode of travel we have

experienced. Trains rock about, and aircraft, either open or closed, are definitely noisy, but the Rolls wafts one along without either defect. In fact, such a means of transport would soon completely spoil one's taste for any other, except on the water!

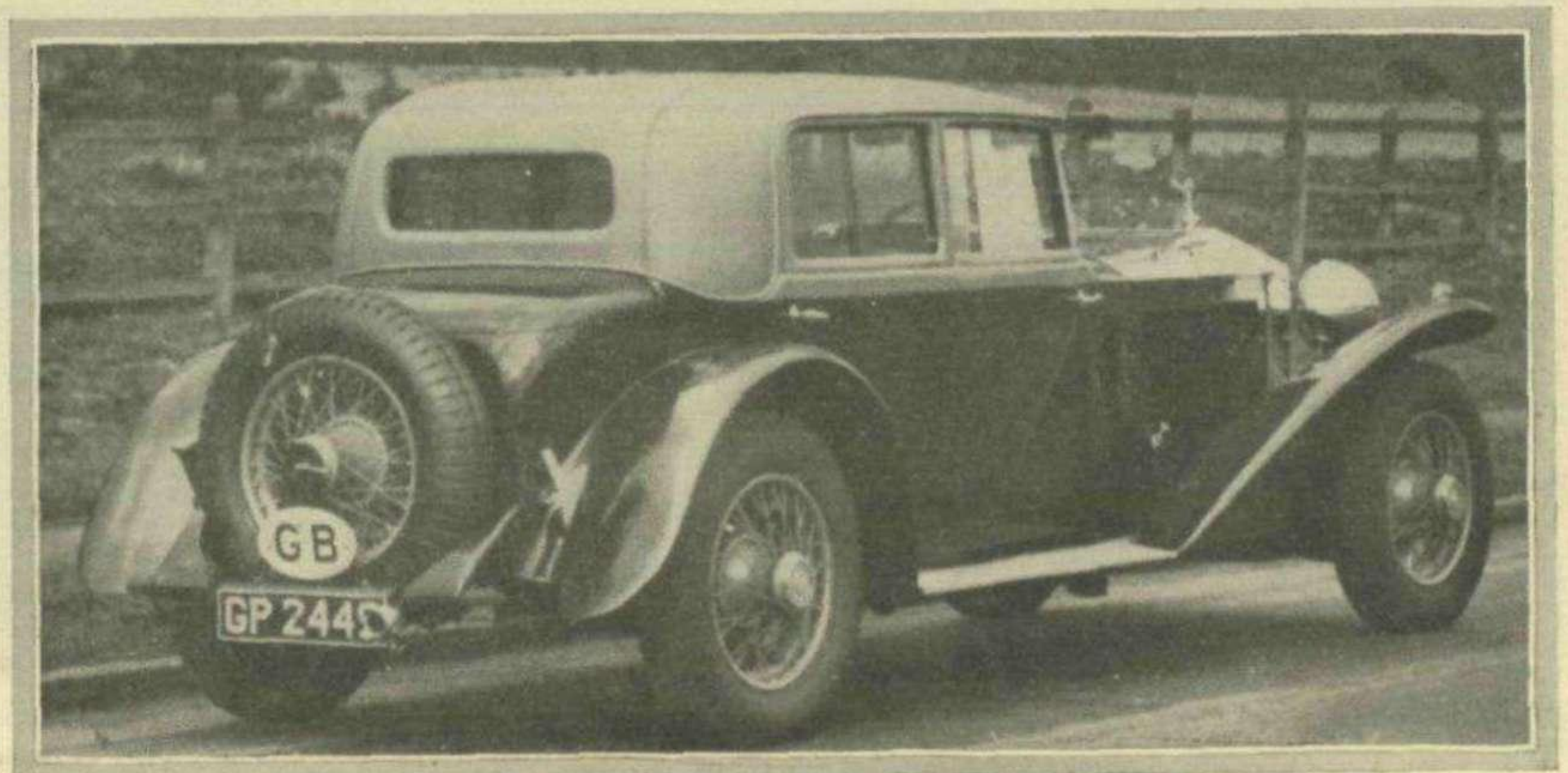
The maximum speed was 93 m.p.h. and 90 m.p.h. can be obtained on any reasonable road in perfect comfort and safety.

An interesting feature is the engine governor which is controlled by what on a normal car is the hand throttle lever. This is a useful fitting for getting away from a standstill on a steep mountain climb, obviating if required, the necessity for any cunning with the throttle pedal and hand brake.

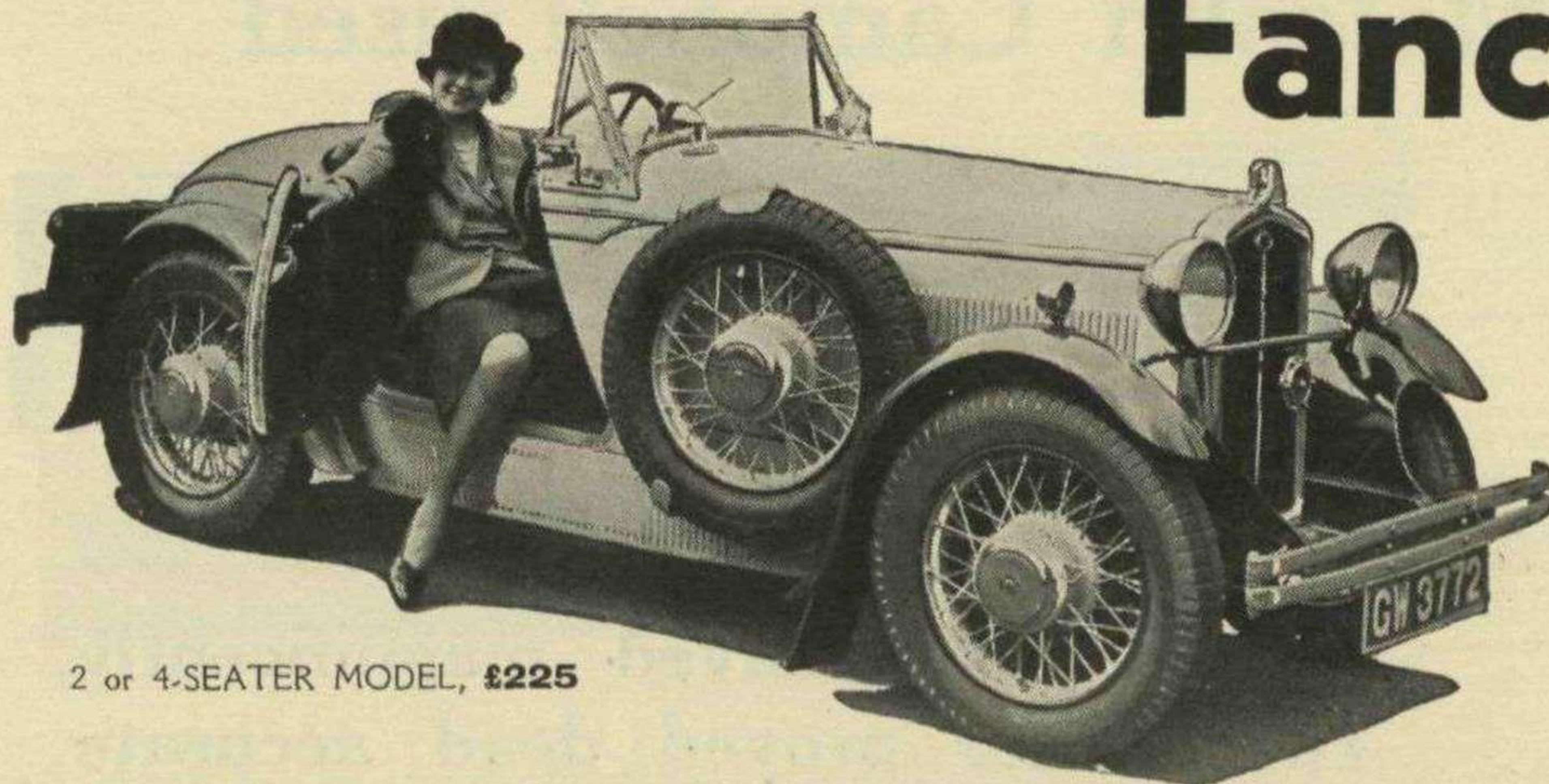
The conditions of getting away under load were reproduced artificially by applying the hand-brake and engaging third gear. The governor throttle control was then opened till the engine was running at a fast tickover and the clutch let in without touching any other control. Immediately the car surged forward as the governor automatically opened the throttle, and on declutching the engine was ticking over once more.

Such a fitting is not essential, but it is just an example of the way this car is fitted with everything that can possibly make motoring more convenient, safe, or enjoyable.

It is a cheering thought in these rather pessimistic times to feel that this country can produce such a masterpiece, and there is no doubt that anyone to whom money is not a primary consideration need waste no time considering how to spend his money as far as motoring is concerned.



# ● The Young Man's Fancy!



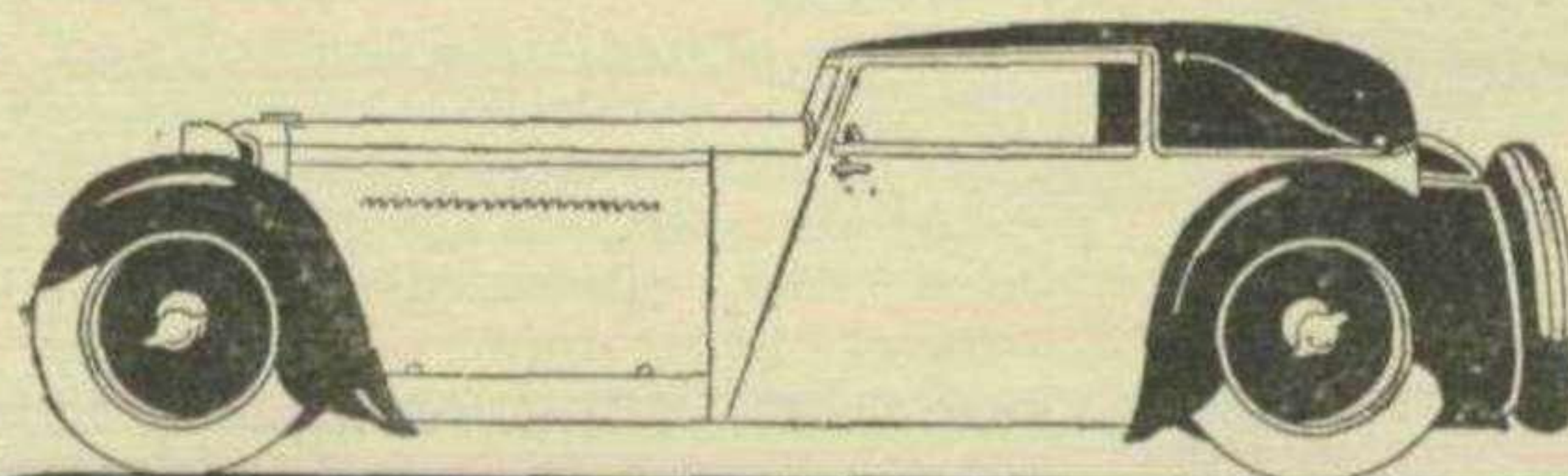
2 or 4-SEATER MODEL, £225

## ● The Wolseley **HORNET SWALLOW**

A car that multiplies your pleasure with every mile you drive . . . speedy as big powerful cars, and with a beauty and character all its own. Lots of room too; separate adjustable seats and pneumatic upholstery; long semi-elliptic springs; hydraulic brakes; four-speed gear box; exceptionally smooth engine, spring steering wheel and finger light controls. No wonder so many wise young men fancy such a unique car

Special exchange allowances; easy payment terms and after sales service at Henlys, where an attractive range of models and colour schemes are now on view

● **LIKE THE SS  
IT IS MADE  
BY SWALLOW**



**AND THE DISTRIBUTORS FOR SOUTHERN COUNTIES ARE**

# **HENLYS**

385/7, EUSTON ROAD, LONDON, N.W.1 Museum 7734 (20 lines)

DEVONSHIRE HOUSE, PICCADILLY, W.1 Grosvenor 2271.

And at MANCHESTER, BRISTOL and BOURNEMOUTH.

# Once again!

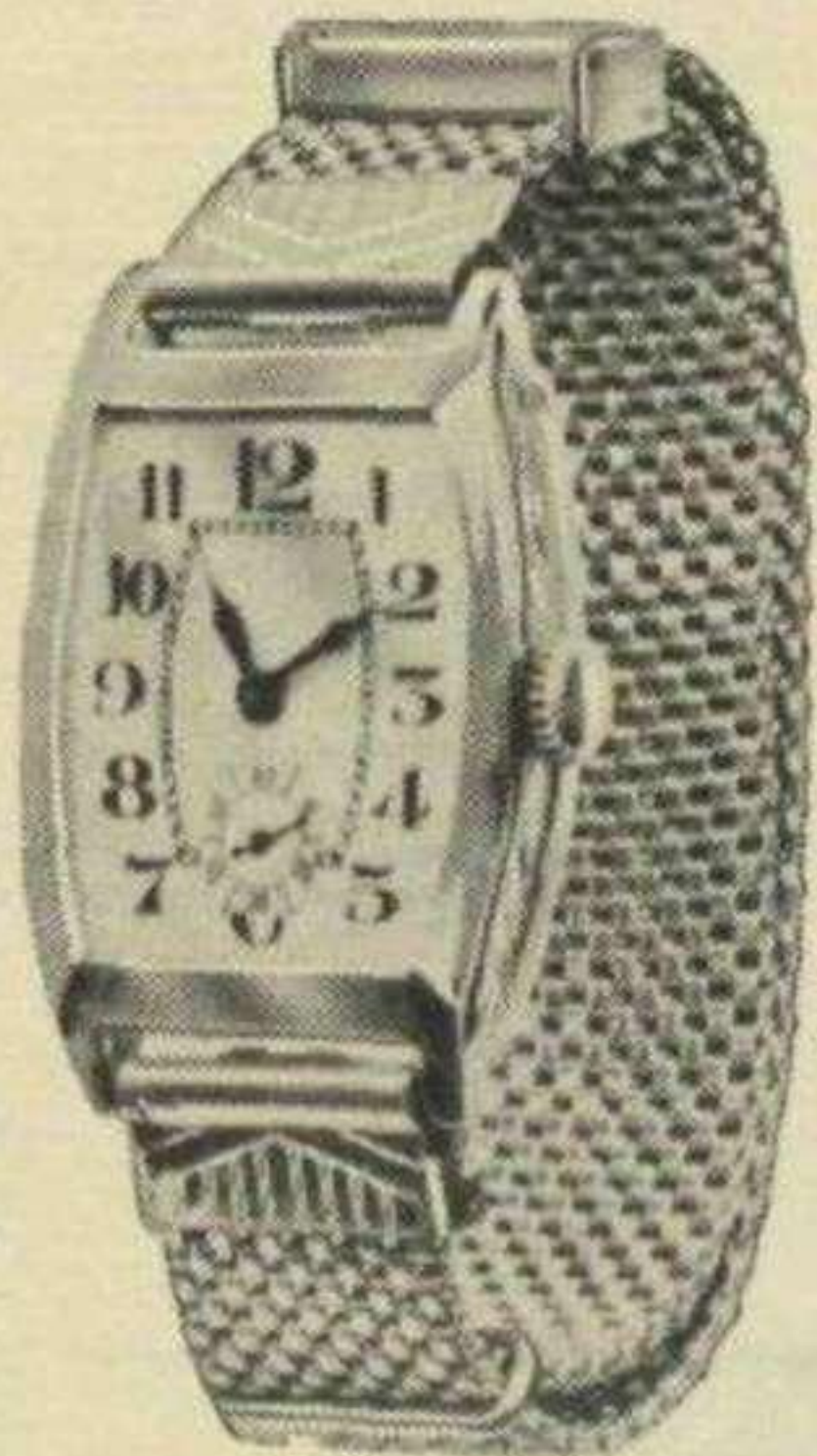
Sir Malcolm Campbell used

# SMITH'S INSTRUMENTS

He cabled us as follows—

Instruments behaved magnificently,  
Tachometer proved dead accurate.  
Bluebird now holds all records up  
to 10 Kilometres.

S. SMITH & SONS (Motor Accessories) LTD., CRICKLEWOOD, LONDON, N.W.2



**De Luxe Model No. S.P. 55.** Cash price 55/- C.O.D. or 5/- with order. Leather straps fitted if preferred.  
**Rolled Gold** (10 years case guaranteed) **Super Schneider**, with leather strap. Cash 85/6 C.O.D. or 10/- with order and 7/6 per month. All models 5/- extra Radium Dials.

## THE SCHNEIDER WATCH

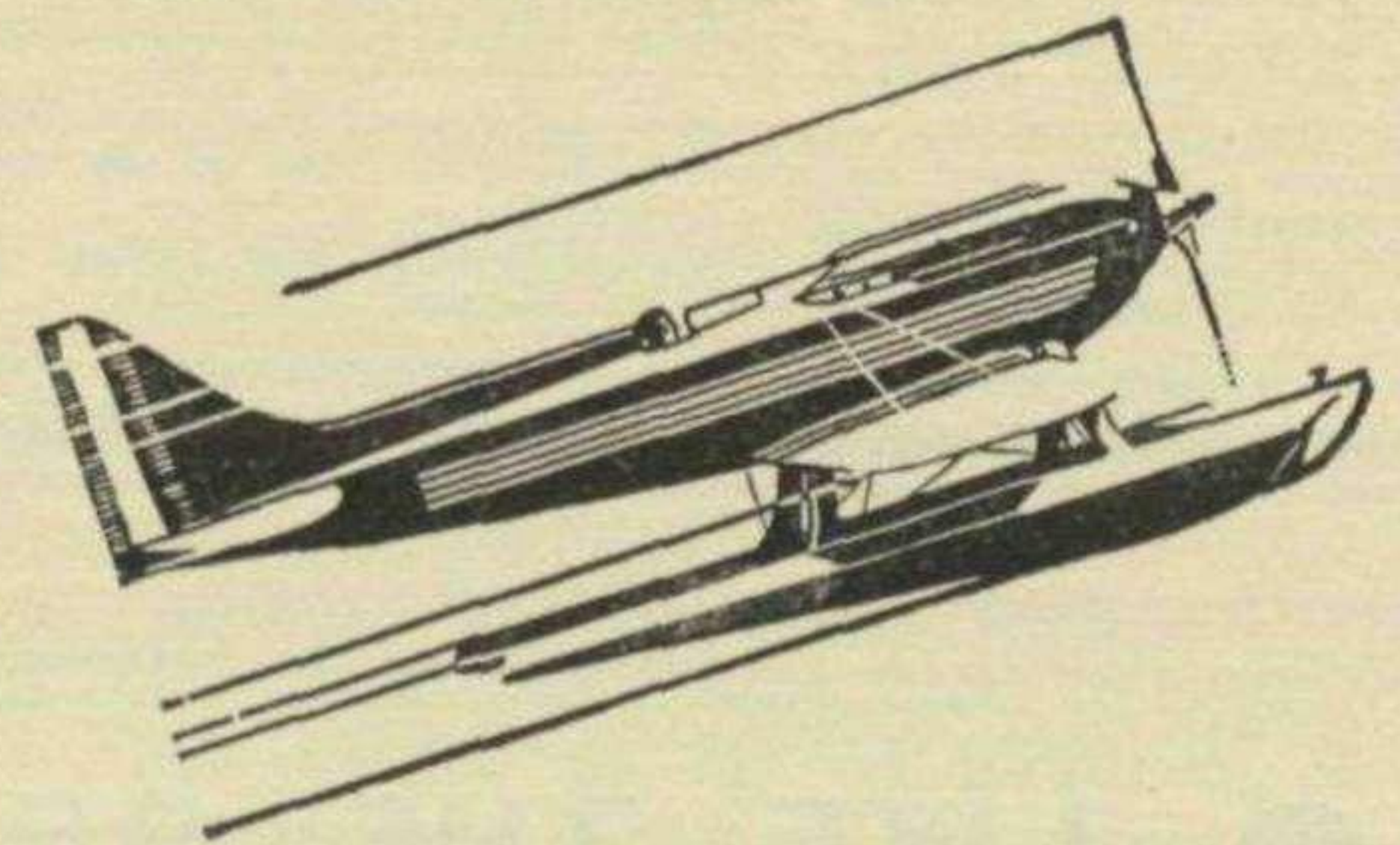
**BUILT WITH THE ACCURACY OF AIRCRAFT INSTRUMENTS YOURS FOR 5/- WITH ORDER**

Built with the accuracy of flying instruments on which the Pilot's life often depends—instruments that are Government tested.

This craftsmanship in every Schneider Watch makes them ideal for Motorists and Sports wear—they are shock and vibration proof and impervious to weather.

Super Grade Fully Jewelled lever movement incorporating a shock absorber in heavy Chromium hinged case. Patented colourless unbreakable glass. 24 hours dials.

**SPECIAL FEATURE.** Armoured Chromium broad wrist-band with universal adjustment. Indestructible. Smart appearance.



READ WHAT

**FLT.-LIEUT. SCHOFIELD THE FAMOUS SCHNEIDER PILOT SAYS OF THE SCHNEIDER WATCH!**

Messrs. Roberts and Co. Croydon Aerodrome, 59-61, New Oxford Street, London, W.C.1. 20.11.1931.

Gentlemen,—I have much pleasure in informing you that I am very satisfied with the performance and reliability of the Schneider Watch.

In flying many types, including the Schneider Racing Aircraft, Service types and Commercial Craft, I have found that your watch functions accurately under most arduous flying conditions.

In test flying, when performance figures have to be carefully recorded, I have found that its unfailing reliability is of the greatest assistance in securing accurate data.

I heartily congratulate you on the production of this excellent watch.  
Yours truly, H. M. Schofield.

**COUPON POST THIS TO-DAY**

Please forward to me Gent's Wrist Watch **De Luxe Model No. S.P.55** at 55/- or **Rolled Gold Super Schneider 85/6**. Radium Dial 5/- extra all models. Armour or Leather. **Strike out all not required when ordering.** For which I enclose P.O. for 5/- and the balance I agree to pay 5/- per month or 10/- and 7/6 monthly if Rolled Gold model chosen.

Name .....  
Address .....

PLEASE WRITE IN BLOCK LETTERS.  
**ROBERTS & Co., Albion House, 59/61, New Oxford Street, London, W.C1.**  
Dept. M.S.5. Obtainable from All Good Garages.

**GUARANTEED FOR 2 YEARS.**

Please mention MOTOR SPORT when corresponding with advertisers.



## —AND NOW 253 M.P.H.!

CAMPBELL WITH "BLUE BIRD" LOWERS LAND SPEED RECORD  
ONCE AGAIN.



**T**HE most remarkable feature of the recent history of the World's Records for the mile and kilometre has been Sir Malcolm Campbell's consistent progress in steadily increasing the speeds with his veteran car.

From the time that he finally decided that the old Sunbeam had reached its practical limit, he concentrated on building a special car to capture the coveted land speed record, and although the car which has just recorded a further triumph, has been redesigned and modified in detail, shape, and layout since its first successful effort at Pendine in 1927, it is basically the same vehicle. Which speaks volumes for the quality of the materials in the transmission and chassis generally.

Soon after the first edition (with a body closely resembling the normal racing car of that time), had succeeded in raising the record to 174.88 m.p.h. Campbell had to suffer the disappointment of seeing his speed eclipsed by Segrave's wonderful achievement on the big twin-engined Sunbeam, which by putting up a mean speed of 203.79 m.p.h. for the mile, set him a formidable task.

### First Daytona visit.

Campbell's racing career has contained a host of disappointments, and he was far too set on this record to be deterred by anything. The "Blue Bird" was accordingly modified, one of the successful Napier engines of the type which had won the Schneider Trophy in 1927 was installed, the streamlining was completely redesigned, and Campbell went to Daytona and increased the record speed to 206.95 m.p.h. only to see Ray Keech on the 3-engined White "Triplex" beat his record by less than one mile an hour.

Again his car was modified and this time he went to South Africa, where his difficulties at Verneuk Pan gave him a further chance to demonstrate his amazing tenacity of purpose. Space forbids any recounting of this great adventure, but while he was there the wonderful "Golden Arrow," designed by Captain Irving and driven by the late Sir Henry Segrave, put up the terrific speed of 231.44 m.p.h. at Daytona.

In reply Campbell, although knowing his car could not reach this speed, attacked and secured other records, notably the

5 miles and 5 kilometres, at over 211 m.p.h., and returned to England to prepare for yet another attempt to secure his ambition of being the fastest man on earth.

### More modifications.

It was evident that more than detail modifications were required if the record was to be secured, and the car was placed with Messrs. Thompson and Taylors, and under the genius of Mr. Railton, began to take on the form we know to-day.

In this form, criticised by many, with another Napier engine of the best this famous firm could provide, Campbell once more left for Daytona.

It was now four years since the record had been his, but those years had not been wasted, and the result of the work that had been put in was the new speed of 246.09 m.p.h. which was recorded last year, as a result of which His Majesty was pleased to confer the honour of knighthood upon Campbell, and many of us began to hope that Sir Malcolm would rest content with his achievements.

Such, however, was not his idea, and to those who suggested that a further attack was foolhardy, there was presented a very strong argument in favour of another attempt. Hitherto every attempt had been a great and hazardous step into the unknown, and all who essayed it took their lives in their hands, more completely than any driver in any other attempt on record.

Thanks to the untiring and successful research of the engineers at Fort Dunlop, the all-important question of tyres had been faithfully attended to until they had become one of the most reliable factors of the whole adventure.

Now, therefore, a new stage had been reached. For the first time in the recent history of the record, a proved and fully tried car was available, which was known to be capable, with only detail improvements, of a comparatively small but very

definite improvement over its previous best.

Once more Mr. Railton took a hand, but this time it was to overhaul and not to redesign. Practically the only visible sign of difference was the slightly smaller radiator, which the experience

gained in the previous attempt had shown to be permissible.

Just before the car left for America for the recent successful attack on the record, we asked Mr. Railton what increase he expected, and he replied, "About 8 m.p.h. most probably." All of which, when the new record mean speed of 253.97 m.p.h. was achieved on February 24th of this year, shows that the unknown is steadily becoming known, and that the science of ultimate speed on land is, thanks to the pioneers, becoming much more exact.

The actual occasion of the lowering of the record was really intended for a trial run, but was so successful that the record was taken, and as favourable conditions did not recur, still remains. The highest speed one way was 267.45 m.p.h. with the wind, and two days later attempts were made on the five miles, five kilometres, and ten kilometres, with the result that these records now stand at the wonderful figures of 242.75 m.p.h., 247.94 m.p.h. and 238.66 m.p.h. Surely, proof indeed that there is at least one aspect of fast motoring in which this country has no rival.

### Accessories before the fact.

The following are some of the products which helped to make this record possible.

Pratts' Ethyl, special, Dunlop wheels and tyres, Napier engine, K.L.G. plugs, Castrol oil, Petroflex piping, Claudel-Hobson carburettors, Woodhead road springs, Terry valve springs, Ferodo clutch linings, Smith's instruments, Duron Brake Linings, Watford magnetos, Serck radiator, Gallay tanks, Alford and Alder front brakes, David Brown gears, E.N.V. axle bevels, Triplex windscreen, Moseley air cushions, André shock absorbers, Bluemel steering wheel, Hoffman bearings, and Gurney Nutting body. The car was built and prepared by Thompson and Taylors of Brooklands.

## IN THE WORKSHOP.

## TUNING NOTES FOR THE AMATEUR MECHANIC.

**T**HIS being the beginning of another racing season, many engines are dismantled undergoing modifications to get more speed and power, and are therefore in a ripe state for special work on the internals which will be impossible when assembled.

A very important point in the preparation of any high speed engine is the matter of polishing of the various parts. Most owners are familiar with the need for polishing all valve ports and gas passages to ensure an unrestricted flow, but there is another and equally important side to the polishing question which is not so well attended to, and even when done, is often done without anyone being very clear about the reason.

What I am referring to is the polishing of all moving parts which are subject to stress. Many readers who have acquired ex-racing machines may have noted the fact that all con-rods, crankshafts, flywheels, and other moving parts shine like silver on every surface, and may imagine that this has merely been done for appearance and to find work for idle mechanics.

This, however, is not the case, the real reason being that this work has a very important bearing on the reliability of the engine. All crankwebs and other parts which are found left in the rough forged state, or even if machined but not finished, should be buffed to a high state of polish, and all sharp corners, lines, and surface cracks removed.

This is not, as many believe, to eliminate "oil-drag," though it may have some beneficial effect in this direction, but to increase the factor of safety against breakage.

The reasons for this effect are two-fold. The primary object of polishing out all surface marks and scratches is to make sure that they really are surface scratches, and not cracks going into the metal and materially reducing the cross section, and therefore the initial strength of the part in question. These will be liable to cause failure even if the crack is small enough not to affect seriously the actual strength of the part, and the failure may not occur until very much later.

To understand this it is necessary to grasp what happens to a piece of steel under repeated stresses. Steel, like most metals, is elastic, that is to say, when the shape is altered under stress, it will return to its original shape when the stress is removed. This is all, provided that the alteration of shape is kept within certain bounds. If the stress is increased, the "yield point" is reached, when the change becomes permanent, and if increased still further will finally break. Neither of these last two occurrences should take place in an engine, but there is a further unfortunate phenomenon in steel, known as fatigue. In fact if it is repeatedly

stressed and released within the elastic limit, the nature of the material—which is crystalline—changes, the change taking the form of coarsening of the crystal structure. This hardens the metal but unfortunately reduces the elastic limit to the point where the metal becomes brittle.

In any engine under load, all shafts, connecting rods, etc., must flex to a definite though small extent, and the question of fatigue is very important.

#### Resisting Fatigue.

The resistance of steel to fatigue can be enormously increased by the addition of various elements, such as nickel, chromium, and vanadium, forming the alloy steels which are used in high class automobile construction. At the same time the tendency to fatigue remains, and the greater the stress at any point, and the strain (which means change of size and not the load) at that point, the more liable is the part to fracture.

In the case of a part with smooth polished surfaces and small or only gradual change of section, the strain will be spread fairly evenly over the whole, whereas a sudden change of section caused by a small fissure will cause a greatly increased local strain at that section which may result in local fatigue at that point and consequent breakage, without the rest of the metal being affected. By careful polishing out of all marks and small cracks such local fatigue can be almost eliminated.

The logical development of this idea is to avoid all sudden changes of section in the designed shape, as well as the accidental. I was recently assisting a friend to dismantle the engine of his competition-cum-touring vehicle, the act being rendered necessary by the crankshaft having broken, and an inspection of the accident gave a practical illustration to the foregoing remarks.

The shaft had broken across one of the webs adjacent to the centre main

bearing, which is where one would expect it in the type, 4 cylinder, 3-bearing without balance weights. An interesting point was that the break had started at the join of the journal and the web where there was a sharp corner. Careful examination of the rest of the shaft showed that cracks were started in similar places on several of the other journals, showing that if it had not broken where it did it would have very soon broken somewhere else. The shaft was old, having been in use for some five years, but the greatest factor in its undoing was, I should think, the fact that all the webs were rough, as forged, and the radii on the meeting of webs and journals were extremely small.

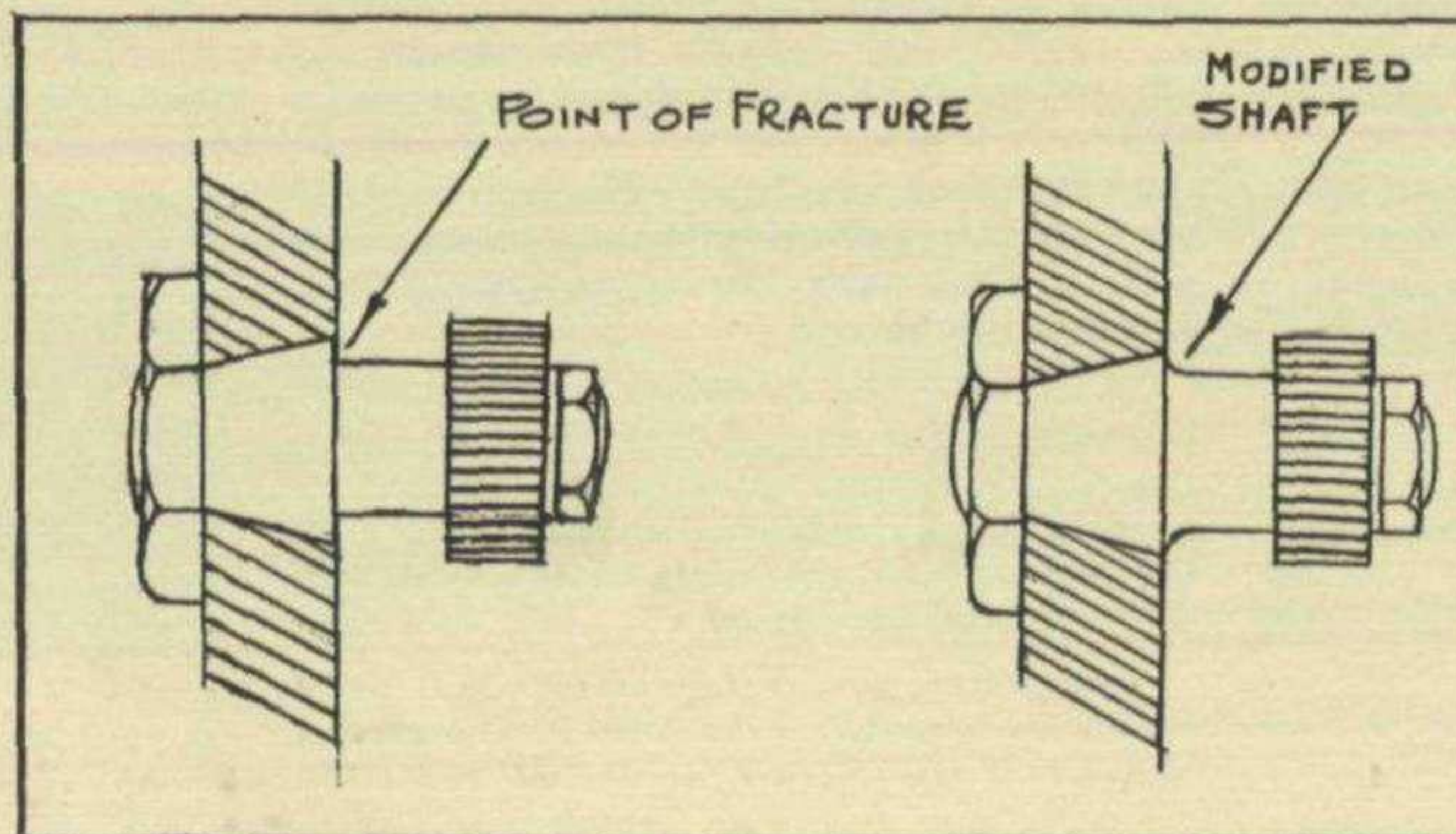
Fortunately no other damage was caused to the engine, and a new shaft, incidentally with slightly different webs, has now been fitted. If the shaft had been polished all over and the radii increased, it would probably have been running to-day and not unduly fatigued.

I had very marked proof of the importance of gradual changes of section in an engine I was working with some years ago. It was a special edition for racing purposes, and we had made it slightly more special, which probably caused the trouble.

It had a built up shaft, and we had trouble with breakage at the main journal at the timing gear end, due presumably to the whipping of the shaft which always occurs. This was fitted into the web by a taper, and owing to the congestion in the timing gear due to this all running in ball bearings for the first time, there was no room for an adequate size main roller race, and consequently for a large enough shaft to cure the trouble. The shaft was made of first class nickel chrome steel, and therefore when it broke just before an event, some thinking was required. The normal material was not available, so we made the new shaft from a piece of Model T Ford axle.

The break occurred at the change of section between the journal and the tapered part, as shown in the figure, which was very sharply radiused. It was found that with a certain amount of wangling the main roller race could be drawn slightly to give room for a larger radius on the change, and this was accordingly done. No further trouble was experienced with the shaft, and now, its competition days over, this machine is still giving good service, though the present owner does not know on what a trifle his engine depends!

All of which goes to show that careful attention to such minor details although, rather a bother at the time, is often well repaid.—B.



Sketch showing how tendency to fracture in a shaft was overcome.

*We have a limited number of*

**BOUND VOLUMES**

OF

**MOTOR SPORT**

VOLS. I, II, III and IV

*These are obtainable at One Guinea each*

---

**VOL. VI - 15/-**

**VOL. VII - 12/6**

(Postage 9d. extra)

---

We can supply many single copies of the "Brooklands Gazette" and "Motor Sport" from the first issue, July, 1924, to the present date at an exclusive charge of **6d.** to **2/-** according to year of issue.

---

**MOTOR SPORT (1929) LTD., 39, VICTORIA STREET, LONDON, S.W.1**

# Club News

## B.R.D.C.

FOR the convenience of members, the B.R.D.C. now have a number of copies of the regulations governing such events as the Monaco Grand Prix, Le Mans Grand Prix and the Belgian Grand Prix. The majority of leading foreign clubs have been communicated with for the supply of regulations of other events and it is hoped that these will be to hand at an early date.

The Secretary invites members to use the club's office—at Bangalore House, Newton Street, London, W.C.2.—for correspondence purposes, and he also points out that they may arrange to meet friends there during ordinary business hours, while telephonic messages will be dealt with. If necessary, box numbers can be arranged.

## LIGHT CAR CLUB.

The Light Car Club have now issued a preliminary announcement regarding the second International Relay Race which is to take place at Brooklands on 16th July.

Other events which figure in the club's fixture list are as follow:—

30th April, Reliability trial; 18th June, Inter-club meeting at Brooklands; 16th-

17th September, long distance trial; 8th October, Dussek trial; 4th November, annual dinner and dance. The secretary of the Light Car Club is Mr. John Yule, of "Kirkney," High Road, Whetstone, N.20.

## RILEY MOTOR CLUB.

In the Torquay trial, held by the Riley Club, some time ago, all starters (62) checked in at the finish.

A course measuring 145 miles was selected, and several well-known test hills, such as Ibberton, Marl pits, Pepperdon and Simms Hill, were included.

The best performance of a lady driver was made by Miss Jean Robertson, who had previously driven her 9 h.p. car overland from Australia to compete in the Monte Carlo Rally. The private owner's award was won by Mr. S. H. Roe, who drove an old type 12 h.p. model, the "trade" award being won by Mr. H. V. Phippen, with a two-seater "Gamecock." Prizes were also given to the runners-up in each class, and in addition there were 31 first class awards, 19 second class and 4 third class, and a special novice's prize. The premier awards took the form of silver salvers engraved with a map of the course.

## ROYAL SCOTTISH AUTOMOBILE CLUB.

The Royal Scottish Automobile Club intend to hold a rally in Scotland during the last week in June or the first week in July.

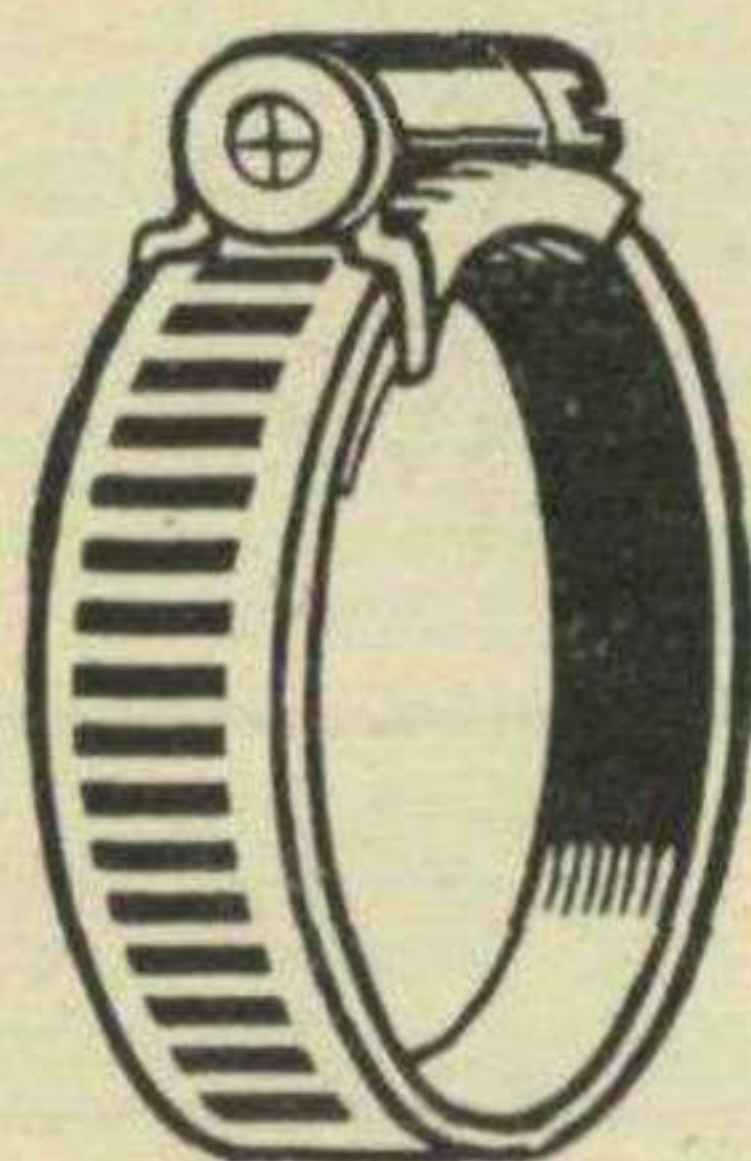
It is meantime suggested that cars may start from one of three centres in England, viz., London, Droitwich, and Harrogate, from which places distances will be reckoned, and in Scotland from Edinburgh, Glasgow and Aberdeen.

The routes to be traversed will extend to about 1,200 miles and will embrace the principal touring centres in Scotland and the finest and most picturesque scenery in the Highlands.

A preliminary programme and print of rules and conditions will be available early this month.

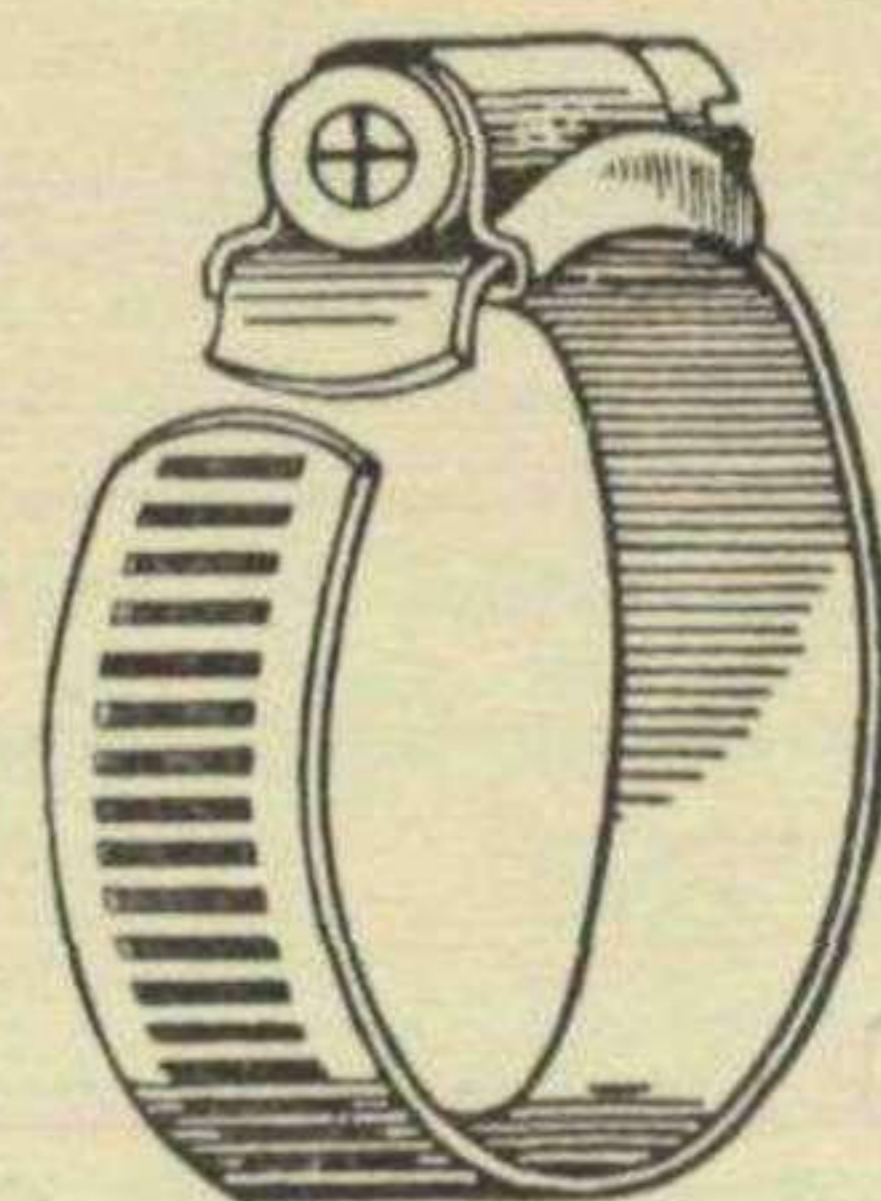
*The Editor invites Club Secretaries to send details of their fixtures, sporting and social, for publication in these columns. These items should be sent to reach this office not later than the 16th of the month.*

# Jubilee Worm-Drive Clips



**THE BEST POSSIBLE TO GET.**

**MAKE SURE YOU HAVE THEM  
FITTED ON YOUR RADIATOR  
JOINTS, LEATHER COVERS, ON  
UNIVERSAL JOINTS, AIR, OIL  
AND WATER HOSE JOINTS.**



**ALL IN ONE PIECE.  
EASY TO FIT.**

**NO PARTS TO LOSE.  
GUARANTEED NEVER TO LEAK.**

A KEEN MOTORIST WRITES: "I cannot understand anyone using any other pattern, as yours are the last word in satisfaction and efficiency."

STOCKED BY ALL GARAGES  
& ACCESSORY DEALERS.

MANUFACTURERS:

**L. ROBINSON & Co.,**

**2, London Chambers,  
GILLINGHAM, KENT.**

*THE J.C.C. OPENS BROOKLANDS—continued from page 250.*

H. C. Hunter (Riley), E. J. Jack (Riley), A. P. Squire (Riley), L. S. Fisher (Riley), E. N. Ward (Riley), H. J. Turner (Riley), A. H. Oxenford (Standard).

Over 1,100 c.c.—Capt. E. Jervis (Alvis), W. H. Porter (Alvis), Sir A. W. MacRobert (Aston Martin), L. Baynes (Austin), J. D. Firth (Bentley), Capt. D. K. Kirk (Bugatti), D. G. Evans (supercharged Bugatti), K. G. Gwynn (Buick), W. A. G. Beck (Chrysler), T. C. Mann (supercharged Lagonda), M. H. Selby (Lagonda), T. W. F. Windrum (Lea-Francis), J. W. Drewett (Lea-Francis), B. S. Clavering (M.G. Magna), L. H. Ashcroft Thompson (M.G. Magna), Miss A. Auterac (Morris-Oxford), G. L. Baker (Minerva), Major A. T. G.

Gardner (Rover), W. A. V. Davis (Standard), J. E. Williams (Standard), J. A. Peacock (Sunbeam), D. McNeil (Vauxhall), A. C. Hess (Wolseley Hornet).

THIRD-CLASS AWARDS (under 1,100 c.c.)—H. Metchim (Austin), M. P. Tenbosch (Austin), E. A. Denton (M.G. Midget), F. D. Cooper (M.G. Midget), E. Brooks (Riley), J. H. Fuller (Riley), T. A. Boardman (Riley), Miss K. Brunell (Triumph), J. A. Driskell (supercharged B.N.C.).

Over 1,100 c.c.—K. D. Evans (Alfa-Romeo), J. Reville (Alvis), M. H. Falkner (Alvis), M. H. Morris Goodall (Aston-Martin), Capt. W. L. Bain (Aston-Martin), J. Pollitzer (Bentley), Lt. P. Richards

Brown (Chrysler), R. G. J. Nash (supercharged Frazer-Nash), E. H. Dean (Hillman), Mrs. L. Garstin (supercharged Lagonda), W. G. Battersby (O.M.), D. Monro (Talbot).

NO AWARDS (under 1,100 c.c.)—M. H. Sprague (Austin), R. Froy (Austin), R. H. Warnes (M.G. Midget), A. J. Bochaton (Triumph), P. W. Sherrin (Vernon-Derby).

Over 1,100 c.c.—L. E. Marshall (Alvis), Rev. J. Hall Yarr (Alvis), C. E. Child-Freeman (Bentley), H. J. Aldington (supercharged Frazer-Nash), A. S. Martin Pratt (Frazer-Nash), A. W. Smith (M.G. Magna), E. L. Clarke (Rover).

*A Midlands Sports Depot.*

IN all parts of the country the cult of the sports car has been noticeably on the upward trend during the past few years, and in no area is it more popular nowadays than in the Midlands.

In consequence a great number of motor trading concerns are devoting increasing attention to the sales and service of types which find favour with the sporting enthusiast.

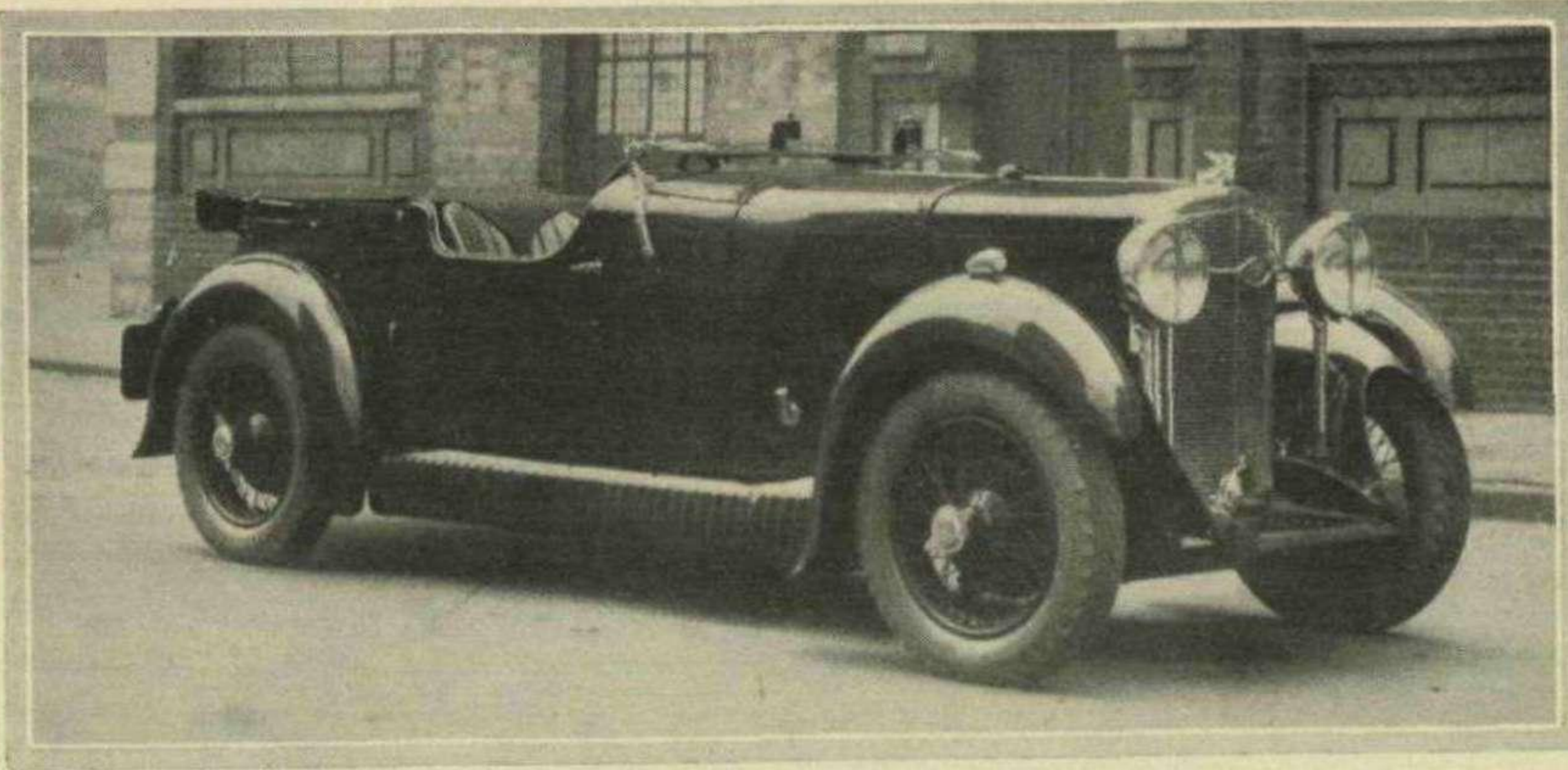
"Recently," writes a MOTOR SPORT representative, "I paid a visit to the premises of Patrick Motors Ltd., at 479-481, Bristol Road, Bournebrook, Birmingham. This firm are the Midland distributors for such thoroughbreds as Aston-Martin, Alfa-Romeo and Lanchester cars, and I found their showrooms un-

usually interesting in having an extraordinarily full range of sports cars on view. Here the visitor will find various examples of the Wolseley Hornet-Patrick Special, sports Triumphs and a number of other attractive models of various types and power."

Patrick Motors Ltd., are primarily sports body specialists, and an inspection of their works is well worth while. They are, at present, extremely busy turning out a large batch of bodies for the new Triumph sports model, the "Southern Cross," and a number of special jobs are in hand for individual orders.

The principal of the concern, Mr. Patrick, is himself a great enthusiast for the sporting side of motoring, and is a frequent participant in trials and other events.

## AN ATTRACTIVE SPEED SIX.



MANY of the best things in this world are quite sudden and unexpected, and the advent of the speed model Rover was one of these. Without any particular warning an edition of the 20 h.p. chassis suddenly appeared last season and proceeded to show that it was a really fast motor car, and at the same time extremely pleasant and quiet. In these days of hopeful speedometers it was pleasing to find such a car whose speed was no myth, and when one of these

models in the M.C.C. high speed trial covered over 84 miles in the level hour, motorists began to realise that here was a chassis worth looking into. Its development has been due to the energy and foresight of Mr. Sydney Cummings, and his firm have now produced a further model of this car with very attractive Abbey coachwork.

We had an opportunity of closely examining one of these cars recently in their showrooms in the Fulham Road, and were greatly impressed

by the high finish and attention to detail.

The price of £495 for the four-seater is the same as the standard model, and the arrangement of seating and equipment is very generous. Pneumatic upholstery is fitted throughout with good room in the rear seat, and deep foot wells. The very wide doors opening at the front give easy access to the instantly adjustable front seats, and the weather protection is very complete. The screens and tool locker are neatly fitted behind the rear squab, while items of equipment include a Blue-mel spring steering wheel, large door pockets, and twin electric windscreen wipers. The screen, as on other Abbey bodies, can either fold flat on the scuttle or open from the top when the hood is up, a very good point in foggy weather.

With its proved excellent performance this luxurious yet not expensive car should be in great demand among those who wish to travel fast in comfort, and without fuss and noise, and we have no doubt that the season will see many of them on the road.

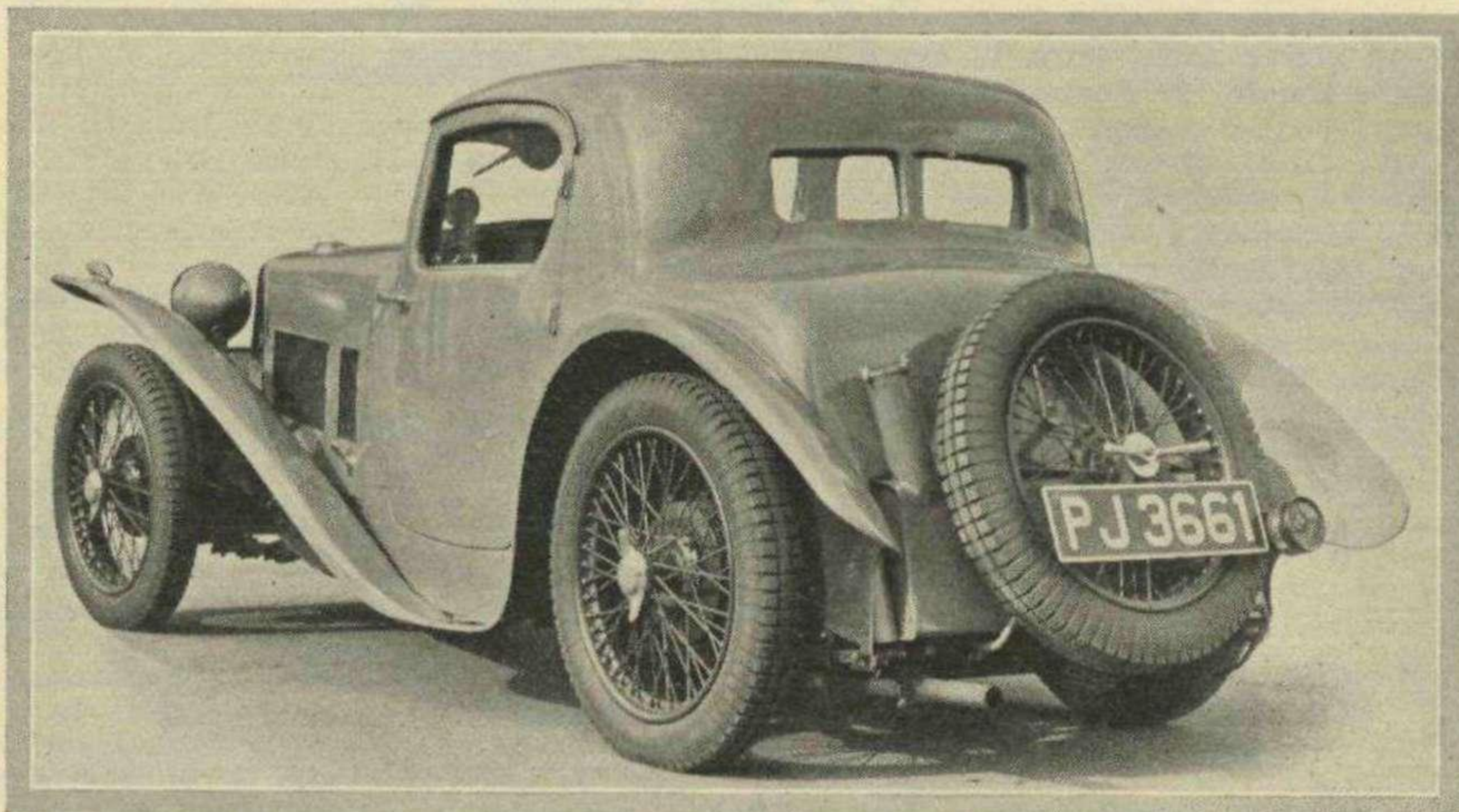
# ANOTHER ABBEY "SPECIAL"

DISTINCTIVE SPORTS COUPE ON MAGNA CHASSIS.

WE have on more than one occasion made reference to the special models turned out by Abbey Coachworks, Ltd., of Minerva Road, Chase Estate, North Acton, London, N.W.10. All these models, whether open or closed, have an individual stamp about them, and are notably smart and well finished, but in their latest model, which is illustrated herewith, Mr. Terry who is responsible for Abbey designs, has, we think, eclipsed all his previous efforts.

As will be seen, it is mounted on an M.G. Magna chassis, and takes the form of a two-seater fixed head coupé. Without being grotesque or garish, the treatment of the wings and the contour of the body in general are unusual, and the effect as a whole is exceptionally smart and rakish.

In spite of the fact that the total height is only 4 feet 1½ inches, entry and egress is made without any difficulty whatever, and—another important feature—there is ample head room. There is also plenty of



A very pleasing combination. The Abbey-M.G. Magna Coupé.

elbow room, and indeed, while the designer has obviously been at great pains to produce an ultra-smart vehicle, he has at the same time devoted much care in making it really comfortable and road-worthy.

The two seats are of the bucket type and are adjustable; behind them space is provided for the

"parking" of three large suitcases.

A single-piece windscreen is used, and this is fitted with twin wipers which operate over a wide area of the glass. A special tank is installed at the rear of the car, and this has an 8-gallon capacity.

The price of this very distinctive little car, with complete equipment, is £345.

## FOR MAGNA OWNERS.

THE majority of sports car owners are, as a rule, amateur mechanics and the retention of tune in their machines forms part of "the game."

Too often, however, one finds a tendency to "tinker"—with results which are the opposite to those desired. And even when certain operations are really necessary, a good number of motorists undertake the work without being properly equipped either with the right tools or the necessary knowledge as to how to set about the job.

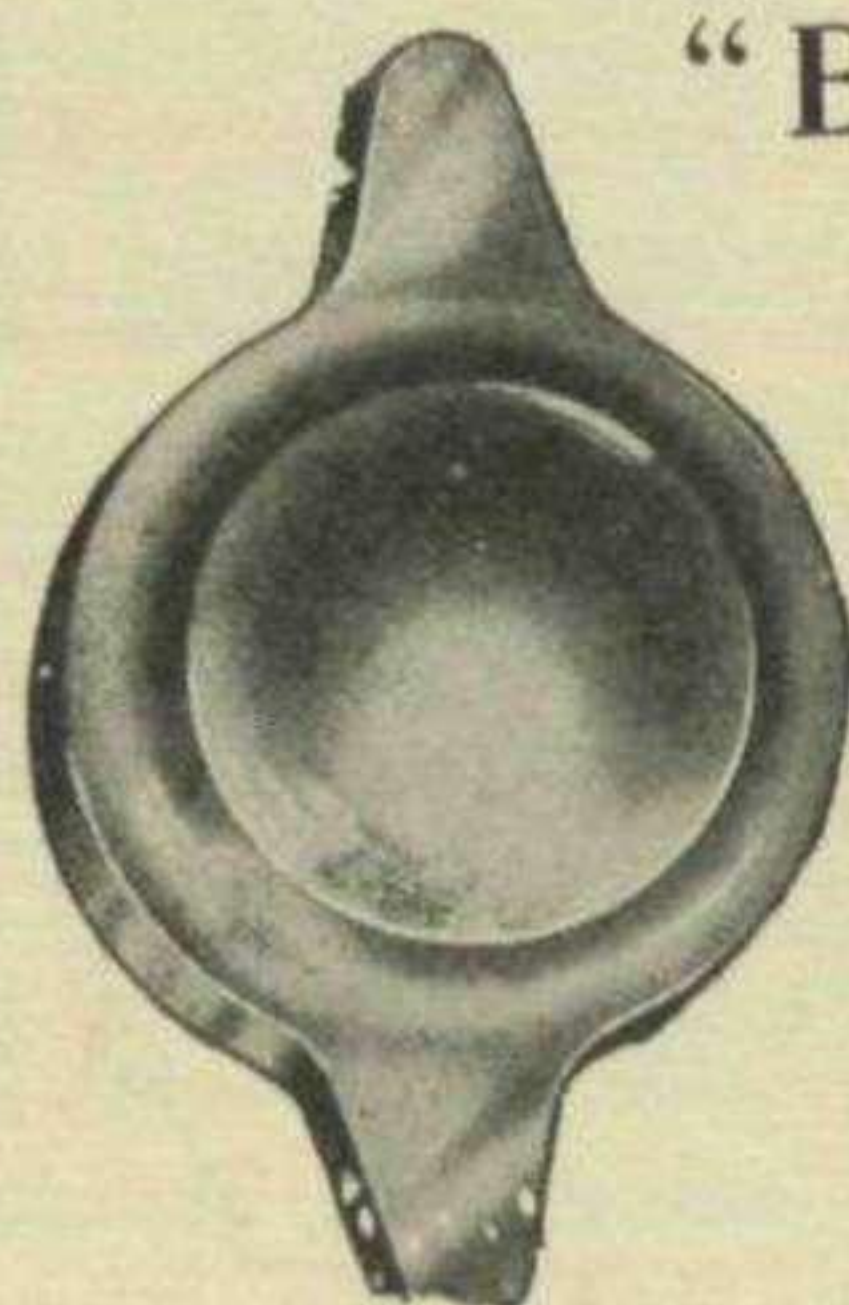
Magna owners have no excuse in transgressing in this manner, however, for the M.G. Car Company have recently issued a very

fine and very complete instruction manual, with the express purpose of placing in their possession as much detailed information concerning this model, so that when the time arises for dismantling, the correct method of procedure will be known.

Completely illustrated, and written in a style which anyone except the veriest tyro can understand, it deals with every detail of the engine, transmission and chassis, and, for ourselves, it is one of the finest publications of its kind which we have so far seen.

The manual is obtainable from the M.G. Company for 10s.

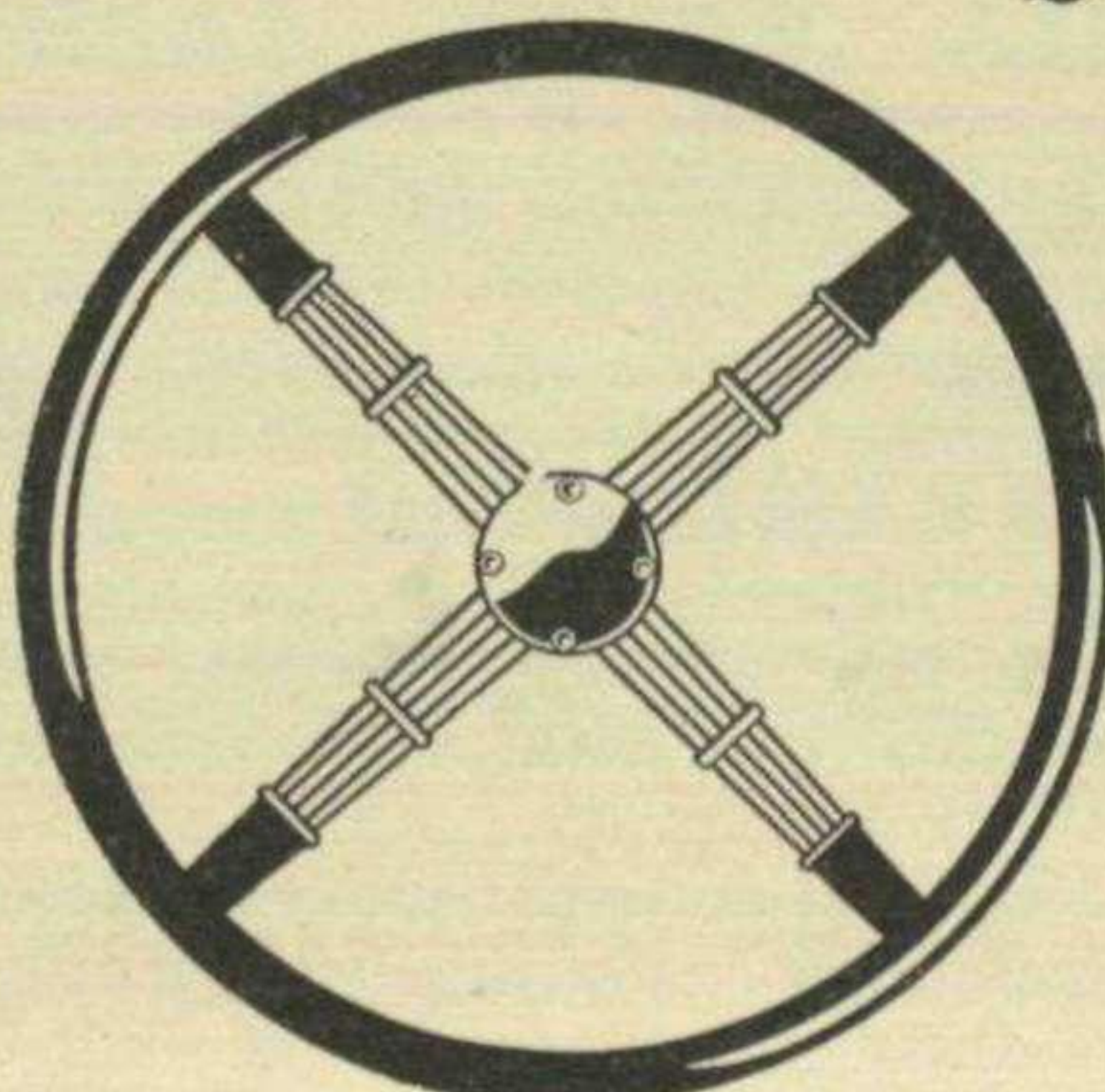
## "BROOKLANDS" SPORT EQUIPMENT



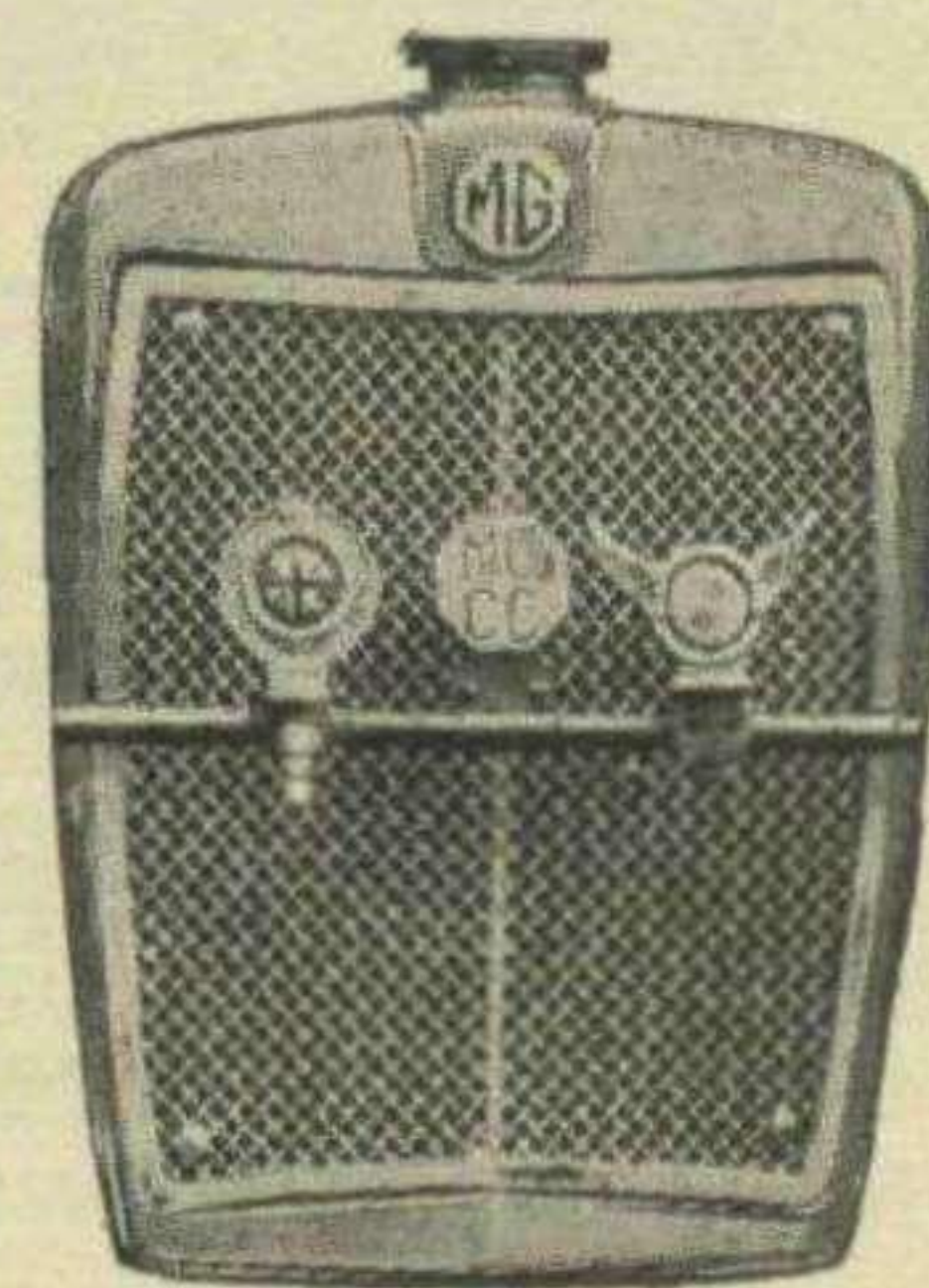
"Brooklands" Hub Caps fitted to your existing bolt on wire wheels give the effect of knock-on-Racing Hubs. Beautifully proportioned, easily fitted and finished in Chromium Plate. Also "Brooklands." Fully Flexible Steering Wheel, embodying an entirely new principle, positively the best looking and easiest handling wheel on the market.

Midget, Hornet, etc.  
36/-

50 other stock models from 36/-



"Brooklands" Radiator Stoneguards effect a wonderful improvement in the frontal appearance of your car. Constructed from brass throughout and Chromium plated. Easily fitted in a few minutes by the owner-driver. Also "Brooklands" Brake Drums, Headlamp Grilles and Mudguard Grilles, etc. Improve the appearance of your car with "Brooklands" Sport Equipment.



Send for Two Colour Illustrated Folder.

London Sales and Service—

**A. F. ASHBY & CO.**  
WATFORD WAY, HENDON CENTRAL

**F. ASHBY & SONS, Ltd., Stirchley, Birmingham**

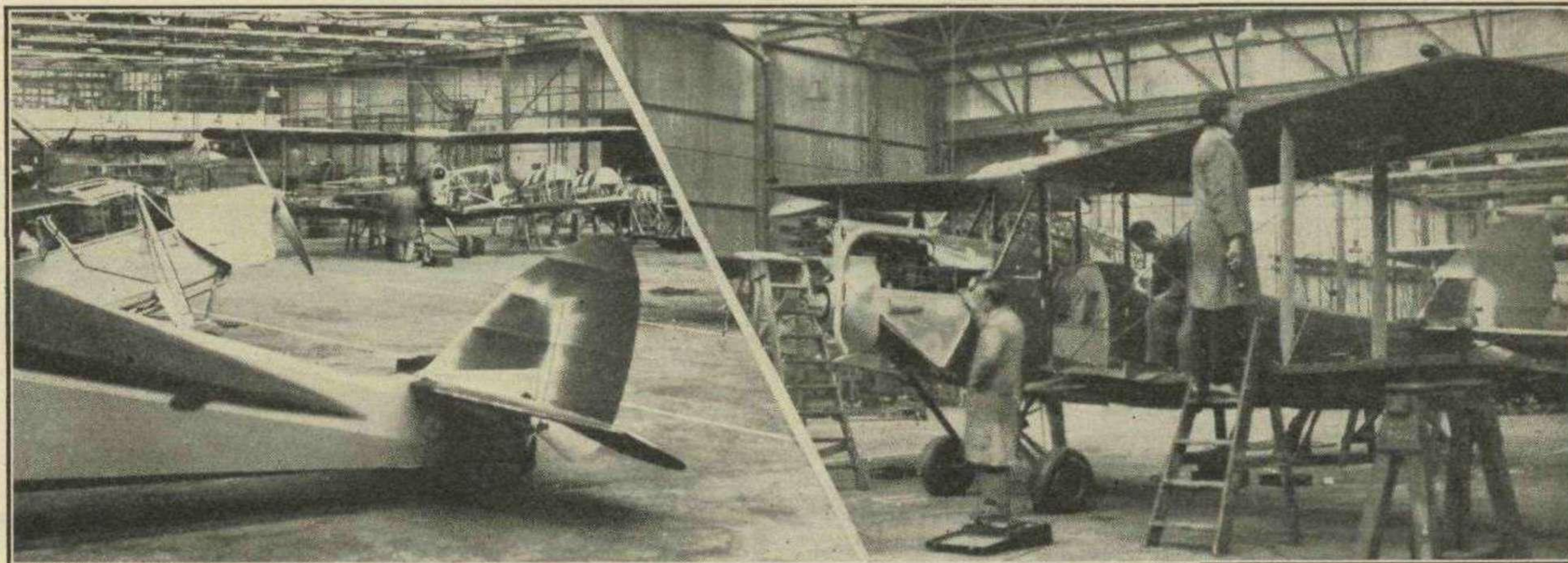
Please mention *MOTOR SPORT* when corresponding with advertisers.

MARK I. 21/- Set.  
MARK II. 22/6 Set.

AIR.

## THE HOME OF THE "MOTH"

ROUND THE WORKS OF THE DE HAVILLAND CO.



Two views in the main erecting shop. The machine on the right is a "Moth" trainer.

TO really appreciate a visit to the factory of the De Havilland Aircraft Co., Ltd., at Stag Lane, Edgware, one must in the first place know something of the career of Captain Geoffrey de Havilland, of the history of the firm which bears his name, and of the long line of aircraft which are known as D.H. machines.

Without being aware of these facts one fails to grasp the significance of all that is to be seen there, and the visitor, ignorant of the past, may feel that it is "just a factory where aircraft are made." But to anyone conversant with aviation history, and who is not devoid of all imagination, a tour through the departments and shops of the D.H. establishment brings something more than interest. One realises the meaning of the phrase "the romance of industry," and it strikes one that "romantic" is not too fanciful a word to use in connection with this business of aeroplane building.

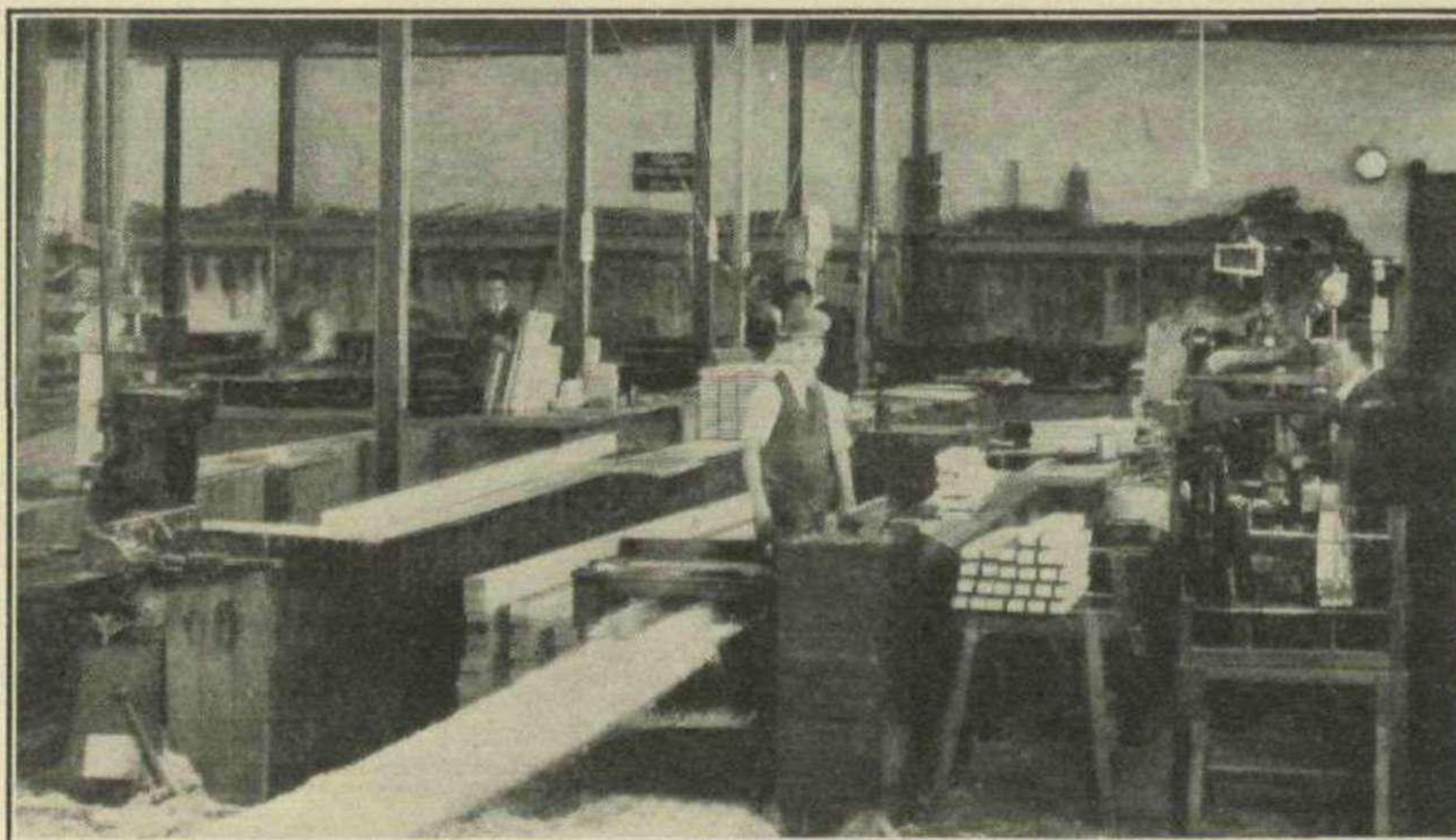
Go back to the far-off days of 1909. There was a D.H. machine even then—the very first. And it was not only designed and built by Captain de Havilland, but flown by him also. It was, in fact, the aeroplane on which he taught himself to fly. Twenty-three years ago! One can picture him struggling with the many problems which beset all those early pioneers of flight, and striving to overcome them. Disappointments, triumphs, hazards—all must have come his way.

And then the War which forced to such an astounding extent the development of aircraft. From the start among the most successful

machines were those designed by de Havilland—the famous B.E., for example. The initials, it may be mentioned here, stood for Bleriot Experimental because the Bleriot was regarded as the prototype of all tractor aeroplanes.

Then when Captain de Havilland joined the Aircraft Manufacturing Co., the series of D.H. craft began. The D.H.1 was a two-seater pusher, the "2" was a single-seater pusher scout, the "4" a two-seater general purpose machine of remarkable performance, and the D.H.5, a rotary engined tractor scout. All in their time made history in the Service. The D.H.9 was also

a famous war-time production, of course, and while many readers may be too young to remember the "9" as it was in 1918, it will not be unknown to them since examples survive to this day. To a lesser degree the same may be said of the D.H.6, a trainer and submarine-spotter of 1917-1918. So much for the D.H.



In the D.H. wood mill. Here the wing spars, ribs and other wooden component parts are made.

[Motor Sport Photographs

THE HOME OF THE "MOTH"—continued.

machines of pre-War and Wartime years.

In 1919 when commercial aviation was fighting for an existence, the machines which paved the way were De Havilland designed. There was the D.H.16—a modified 9a—which operated on the first London-Paris service; there was the D.H.18 cabin machine, the D.H.34 and 37. In 1921, with all this wealth of experience behind it, the De Havilland Aircraft Co., Ltd., was formed. It started modestly with a small group of buildings in the seclusion of Stag Lane aerodrome—a place which was then practically unknown. Working through those difficult early post-War years its output was small, its development gradual. But progress was being made, nevertheless. Captain de Havilland gathered around him some able assistants, and such pilots as Cobham, Broad and Barnard combined in building up the reputation of the firm and its products. Stag Lane was definitely placed on the map, and with the corner turned in commercial aviation the De Havilland Company was well to the fore. When the early light aeroplane trials were held at Lympne in 1923, the little D.H. 53 monoplane appeared, and it is significant that while all other machines of its class are now extinct, there are still a few "53's" in use to-day.

Two years later the first "Moth" was produced. To state that it was the forerunner of the most famous of all the Company's productions is



A famous D.H. aircraft and an ancestor of the "Moth"—the D.H. 2 "pusher" scout of 1915-1916.

not enough. Its introduction opened up a new era in flying; it made the formation of the flying clubs a practical proposition, and hastened on the private flying movement in a way that few people had previously thought possible.

Of the subsequent progress which the De Havilland Company have made in improving the "Moth," and of the many records which have been achieved with it, everyone who is interested in flying is fully aware. "Moths" are to be found in operation in nearly every part of the world, and they are not only sold abroad but built abroad under licence.

These historic facts dating from 1909 are things which one does well to remember, which one cannot fail to remember when going round the works at Stag Lane. One enters the "mill" and sees the wing spars being made. Swiftly and with in-

finite accuracy the wood is shaped, and drilled, and checked, to emerge presently in its familiar form. It is just one part of the whole machine, and its manufacture is apparently, a simple operation. But behind it is the experience of years and years.

One visits the engine test department, where the D.H. "Gipsy" engines are roaring on

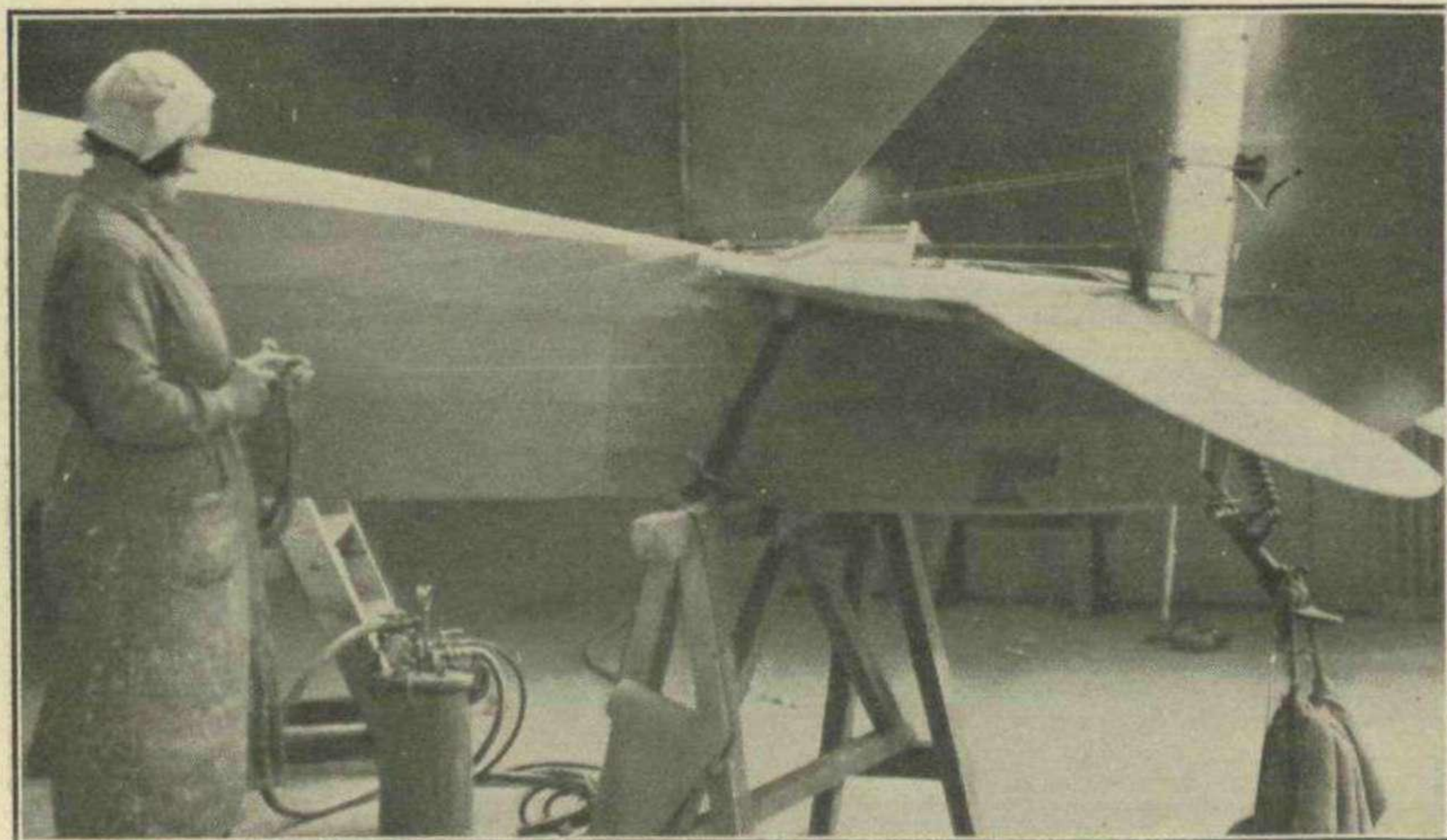
the brake. And one recalls that the first De Havilland machine was powered, like its descendant, with a De Havilland engine. Then in the erecting shop stand "Puss Moths" and "Tiger Moths" and standard "Moths" in various stages of assembly. There is an atmosphere of efficiency and concentration. A completed machine is nearby with folded wings, and one is told that it has been specially fitted up for a forthcoming record attempt to the Cape. Twenty-two years ago a flip of ten minutes would have been considered no mean achievement.

Yet to-day the men who are responsible for the design, and making and erecting of these machines, which are capable of phenomenal performances, seemingly regard their craftsmanship with complete equanimity, and one wonders if they are conscious of the part they are playing in the ceaseless move forward in the world of flight.

So one's tour of inspection continues, through the rough stores, the tinsmiths' shop, drawing office, dope shop and so forth, till finally the aerodrome itself is reached. On the tarmac a new machine is seen, looking dull and drab in its rough "works finish." A pilot clambers into the cockpit; a moment or two and he takes off, climbing steeply into the haze of the bleak, March afternoon air.

The crisp note of the brand-new "Gipsy" rises, falls and rises again as the craft sweeps round in a series of aerobatic evolutions. Then the haze enshrouds it, and it is lost to view.

Another "Moth" has gone on test, and another machine has joined the great D.H. family.



[Motor Sport Photograph

The finishing touch. An operator spraying a machine with a cellulose paint, after being passed O.K.





### "G.-W." Comes Back.

**M**ANY stories have been written round the "call of sea" and the "call of the wild" in which the seafaring man and the globe-trotter, after enduring hardship and dangers, retire only to find that they must return to the ocean or the wide open spaces, drawn thither by an irresistible attraction.

I have always held that some such lure exists in the air, for few old timers will state that they are content to remain on terra firma even though circumstances demand their doing so. Once a man has been bitten by the aviation bug he does not easily lose the desire to fly. Even a bunch of full sized crashes will not eradicate the disease, and I can point to a very concrete example. A friend of mine, after over thirteen years, has started to fly again. He is, of course, a War-time pilot, and as such he flew—apart from balloons, airships and flying boats—some of the most deadly aircraft that man ever devised. He also received his full share of "hate" when flying overseas. His career in the Service ended, as he states, with a descent in flames from 2,000 feet, during which he stood and clung on the wings for a considerable time. Needless to say, after this affair he remained for long in hospital, and he carries ominous scars as souvenirs of his terrible experience, and vivid memories of it. Yet this and many other ordeals now passed have failed to quench his keenness for flying, and to-day he is at it again.

A secretary of one of the leading flying clubs told me recently that there is a distinct influx of erstwhile pilots nowadays, so conceivably, the example I have just quoted may not be unique by any means. And this reminds me that no less a pioneer than Claude Grahame-White is to be seen quite frequently at Heston. Last month he had his first flight for ten years in a "Moth" with Captain V. H. Baker, and he confessed to being immensely impressed by the enormous advance made in aircraft design and construction.

The second aeroplane I ever saw in flight was piloted by Grahame-White. It was when he was competing with Paulhan for the prize of £10,000 in the London-Manchester flight in April, 1910. What a sensation it caused! Thousands waited all along the route to get a glimpse of those two old box-kites.

"G.-W." is a pioneer in several ways; he started the first British flying school at Pau in 1909, and he is the first Englishman to be granted a certificate of proficiency as an aviator. In addition he owned one of the first petrol-driven cars in England.

### Innovation at Lympne.

A scheme recently adopted by the Cinque Ports Flying Club, which has headquarters at Lympne, should prove attractive.

For the sum of £1 1s. any owner of an aircraft living more than 30 miles from Lympne can join the club, and obtain full privileges of a full flying member. These are not insignificant, for they include free landings, and housing in the club's hangar at very low rates. Already, the secretary has received many applications for membership.

### A Club in the Making.

The new flying club at Watford which I mentioned some time ago is progressing well. They have completed the reconditioning of the Sopwith "Swallow," and very smart it looks. Meanwhile the roll of membership is expanding, and a determined effort is to be made to start instructional flying. For the present, however, the site for their aerodrome has yet to be decided, but I am told that when this has been settled the inaugural meeting will not be long delayed.

### A New Air Race.

Promoted by the "*Morning Post*," a new flying race is due to take place next month, the provisional date being 21st May. This should be an interesting event in which ability to navigate and course-plot as well as pilot will be called for. The race will be a handicap, cross-country affair, and the itinerary will not be divulged to competitors until they are due to start. When the time arrives, they will be handed a ten-mile-to-the-inch Civil Air Edition map of Great Britain; on this will be marked the numerous places where they must go, but apart from this, no other indications, lines and so forth will be shown. Instructions will be given as to the order in which the places on the map are to be visited as far as the first control, and in addition, a daily weather report will be issued.

Competitors will then have to find the bearings and work out their course without any outside assistance. The total distance for the race will be about 500 miles, and there will be sundry turning points and controls on the route. Machines will be required to land at the intermediate controls, and after standing by for 50 minutes, the pilots will be handed a slip giving further instructions for the next stage of the race. No passengers are to be carried in the aircraft.

The main prize (which will be competed for annually) will be a cup valued at £50, and there will be sundry additional awards.

"The *Morning Post* Cross Country Air Race" as it is to be known as, will be welcomed by all enthusiasts who have been lamenting the fact that the calendar holds so few sporting aviation fixtures in this country, and it is to be hoped that it will be, in the near future, just one of many events of a like nature.

"RUDDERBAR."

## HOW MUCH TO FLY?

### SOME NOTES FOR THE WOULD-BE PILOT

SINCE the inauguration of the subsidised flying club movement seven years ago, some 6,000 people have been trained as pilots.

Each season sees more and more adherents to the sport of flying, and for every one who becomes a pupil, either at a school or as a club member, there are hundreds who feel "the urge." Many of these latter hesitate to follow their inclinations, however, because being ignorant of the facts, and probably misinformed, they imagine that sundry difficulties lie in the path which leads to an "A" licence. That such an impression exists is proved by a number of letters received by MOTOR SPORT from readers seeking information on various points concerning flying tuition.

There is the matter of cost, and the length of time required, of the type of machine on which to learn, the medical examination, and so forth.

Two courses are open to the flying aspirant in the choice of where to undergo his training. He can either join a club as a flying member or become a pupil at an aviation school. In the case of the former he will be called upon to pay, as an initial step, an entry fee and an annual subscription, which normally amount to £3 3s. each. Flying charges vary slightly, but in the usual way an hour's "dual" costs £2 and an hour's solo £1 10s.

With a school of flying, there is, of course, no subscription or entry fee, but the flying rates are somewhat higher, varying from £2 10s. to £5 per hour. The reason for the differ-

ence is that the clubs work under a subsidy while the schools are self-supporting, and therefore on this score the former can offer an advantage. On the other hand, one certainly receives more "individual treatment" at a school. One does not have to wait one's turn among a large group of fellow pupils, which is sometimes the case at a club aerodrome during holiday time and weekends for instance, and similarly the instructor is able to concentrate on each pupil to a greater extent. Summed up, for the man who has a limited amount of time but the necessary funds—a school of flying; for the man with limited funds but time to spare—a club.

The number of hours which will be occupied in instruction is dependent, obviously, on the degree of aptitude of the pupil. Some people are extraordinarily quick at mastering the elementary principles of piloting an aeroplane. Others are appallingly slow. There are cases on record where pupils have been sent solo after only a hour's instruction, and even less. But these were War-time accomplishments, when the urgencies of the period compelled the use of the "fly or bust" method.

Nowadays such barbarism is unheard of, and even if a pupil appears to be fully competent for his first solo after, perhaps, 5 hours with an instructor, he is compelled, by a rule insisted upon in several clubs, to complete a minimum of eight hours dual. It is also sometimes stipulated that three hours of solo flying shall be completed before the tests for the "A" licence be undergone.

Based on an average total flying time, comprising 9 hours' dual and 4 hour's solo flying, the cost of qualifying for one's "ticket" may be taken as from £30 to £48, according to whether one learns at a club or a school. The Royal Aero Club's certificate costs £1 1s. and the Air Ministry licence 5s.

In addition to the practical test, the *ab initio* has to pass an oral examination concerning the rules of the air. These are contained in the "Air Navigation (Consolidation) Order, 1923 and Amendments," a publication which is obtainable from H.M. Stationery Office, Adastral House, Kingsway, price 1s. 3d.

The usual procedure is that the pupil qualifies for his Aero Club Certificate, which he submits to the Air Ministry, together with a certificate of physical fitness, and the "A" licence is then issued. The medical examination may be carried out by the applicant's own doctor, and while it is fairly comprehensive it is not severe.

The results of the medical examination must be entered on C.A. form 61, and application for the "A" licence must be made on form C.A. 2.A. The latter should be accompanied by three 1½ ins. x ¾ ins. photographs of the applicant.

As far as facilities for learning to fly are concerned, there should be little difficulty nowadays since there are between thirty and forty instructional establishments in various parts of the country. The majority of these are clubs, the remainder of course, being schools.

Arranged under separate headings these are as follow:—

*Clubs.* The London Aeroplane Club, Stag Lane, Edgware, Middlesex,—Hanworth Flying Club, London Air Park, Feltham, Middlesex,—Brooklands Aero Club, Weybridge, Surrey,—The Reading Aero Club, Woodley Aerodrome, Near Reading,—Bucks Berks & Oxon Aero Club, Woodley Aerodrome, near Reading,—West Kent Aero Club, West Malling, Kent,—The Cinque Ports Flying Club, Lympne Aerodrome, Kent,—The Hampshire Aeroplane Club, Hamble, Southampton,—The Isle of Wight Flying Club, Shanklin, I.O.W.,—The Bristol & Wessex Aeroplane Club, Bristol Air Port, Bristol,—The Northamptonshire Aero Club, Sywell Aerodrome, Northampton,—The Norfolk and Norwich Aero Club, Mousehold Aerodrome, Norwich,—The Eastern Counties Aero Club, Blue Barns Aerodrome, near Colchester,—The Herts & Essex Aero Club, Broxbourne, Herts,—

The Midland Aero Club, Castle Bromwich Aerodrome, near Birmingham,—The Leicestershire Aero Club, Desford Aerodrome, Leicester,—Nottingham Aero Club, Tollerton Aerodrome, Nottingham,—The Liverpool & District Aero Club, Hooton Aerodrome, Cheshire,—The Lancashire Aero Club, Woodford Aerodrome, Lancashire,—Blackpool & Fylde Aero Club, Stanley Park Aerodrome, Blackpool,—Southport & District Aero Club, Southport, Lancs,—The Southern Aero Club, Shoreham, Sussex,—Hull Aero Club, Hedon, near Hull,—The Scarborough Aero Club, Scarborough,—Yorkshire Aero Club, Sherburn-in-Elmet, Yorks,—The Newcastle-on-Tyne Aero Club, Cramlington, Newcastle,—The Scottish Flying Club, Renfrew Aerodrome, Glasgow,—The Irish Aero Club, Baldonnell, near Dublin.

*Schools.* Airwork Flying School, Heston Air Park, Hounslow,

(Continued at foot of following page.)

# OVER THE ANDES BY LIGHT-PLANE

## FURTHER COMPER-POBJOY ACHEIVEMENTS

**P**ROBABLY no newcomer to the light aeroplane market has achieved so much success in so short a space of time as the Comper "Swift" single-seater monoplane.

Prior to July, 1931, it had not appeared very much in public, except in demonstration flights, and when it was known that a "Swift" was entered for the King's Cup Race last year, considerable interest was aroused. It will be recalled that the little machine put up an excellent show; piloted by Squadron-Leader Robb, it completed the course of 990 miles at an average speed of 118 m.p.h. Squadron-Leader Robb started 34th, and finished 6th, although his engine was by far the smallest in the race.

Later on in the year Flight-Lieut. Comper carried out a 3,000 miles tour of Europe on a "Swift," and amongst other things, he crossed the Alps. During his journey he had no trouble whatever.

About the same time that Comper was flying around Europe, Lieut. Byas set off from England on a "Swift" en route for South Africa. Leaving on 21st August, he arrived at Johannesburg ten days later, having averaged 103 m.p.h. His petrol consumption worked out at only 4.2 gallons per hour.

Then in October last a "Swift" once more came into the limelight when Mr. C. A. Butler broke the England-Australia record.

Now comes news from South America of another notable flight made with this 24-foot span light aeroplane.

Piloted by Mr. Taylor, a Pobjoy-engined Swift has crossed that continent and set up yet another record for this combination of engine and aircraft by crossing the Andes from Mendoza to Santiago, Chile, at a height of 18,000 feet in 1 hour

50 minutes. Apart from the speed, this is the first time any light aeroplane has ever attempted the crossing of these mountains.

The Pobjoy engine is the product of an associated concern of the Comper Co.—Pobjoy Airmotors Ltd. Several firms are now adopting this remarkable power unit, and notably

the Monospar Co. A Klemm monoplane has also been tried out with a Pobjoy—with excellent results as the following will prove:—

Take off in still air, with pilot only, 10 yards, with two up and full load, 25 yards, cruising speed 100 m.p.h., climb to 19,000 feet, 46 minutes.

## MORE "CATERPILLER CLUB" MEMBERS

**A**MONG the many devices connected with aviation which have been brought to a high state of efficiency, during the past decade is the parachute,

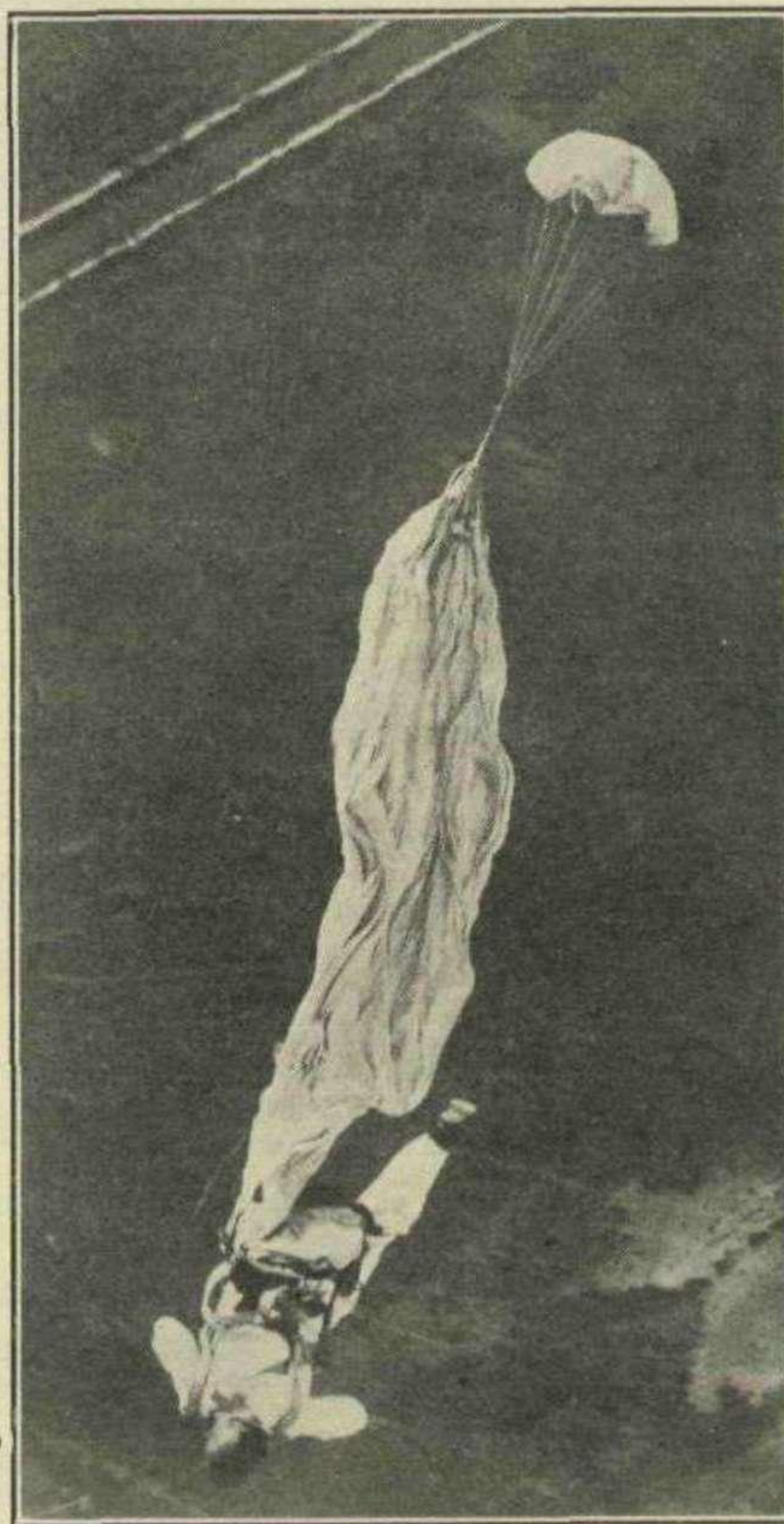
and from being an apparatus which was looked upon at one time with distrust, it is now recognised as an infallible and highly-important part of the aerial wayfarer's equipment. For several years the Irvin air chute has been used exclusively in the Royal Air Force, and to date over 80 members of the Service have saved their lives by means of Irvin chutes. By so doing they have become automatically members of that most distinguished body, the Caterpillar Club. This club was conceived by Mr. L. Irvin, and membership is open to all; there is one stipulation however, and that is that those who are enrolled must have saved their lives by means of an Irvin. And now well over 500 fortunates are "Caterpillars" and possessors of the club's emblem—a caterpillar tiepin.

Hitherto parachutes have been used almost exclusively for military aviation, and while the emergency, fortunately, seldom arises in private flying in which a jump is vitally necessary, amateur pilots are coming round to the view that to live up to the slogan "be prepared" they must carry a parachute.

To meet the requirements of the light aeroplane user, a new type has been placed on the market by the Irvin Company. Technically, this is almost identical with the Standard Irvin Pack model; its rate of descent is 21 feet per second, and it opens in one and three-fifths seconds. The price is £60.

*A remarkable photograph of a parachutist taking a header. The action of the pilot chute in extracting the main chute from the Irvin Pack is clearly revealed.*

[Photo Courtesy of Melbourne 'Argus.']



## HOW MUCH TO FLY?—continued.

Middlesex,—British Air Transport Ltd.,—Croydon Aerodrome, Surrey,—The Brooklands School of Flying, Brooklands, Weybridge, Surrey,—The De Havilland School of Flying, Hatfield Aerodrome, Hatfield Herts,—The Haldon School of Flying, Little Haldon, Devon,—The Lancashire School of Aviation,

Squires Gate, Aerodrome, Blackpool,—Marshall's Flying School Newmarket Road Aerodrome, Cambridge,—Northern Air Lines School of Flying, Barton, Manchester,—Phillips & Powis School of Flying, Woodley Aerodrome, near Reading,—The Rollason, Muir & Rickard Aviation Co., Croydon Aerodrome, Surrey.

## THE SPORT AFLOAT.

## PARIS THIS TIME



*"And, all around the Quiet, deep and wide."  
An impression of the "Imp" en route for Paris.*

**T**HIS is the third occasion on which I have found myself at Westminster Pier preparing for my departure by outboard for a cross-Channel trip.

Big Ben booms out, and I set off with shouts and waves of farewell from a group of friends. The river is beautifully smooth and there is no driftwood about. A grimy tug toots upon its siren in salute. But is it a salute? No. It is merely turning round. The drab scene at Woolwich is momentarily brightened by the sun which, upon second thoughts, goes in again.

At Gravesend the water becomes rather rough, and my thoughts turn to the lunch that I might have partaken in smooth water. A veal-and-ham pie seems to make a good start and I wonder, vaguely, whether I prefer the taste of Shell or Duckhams oil.

Off the Isle of Sheppey the sea becomes really rough, necessitating a decrease in speed. As I progress, the sea becomes worse and even unpleasant. Before long, however, Margate comes into sight with a line of enormous breakers right across its harbour. There is nothing for it but a charge, which means getting very wet. Open comes the throttle, and we promptly take off. Bump after bump is followed by crash upon crash and here we are. The Harbour master wishes me "Good afternoon," and some apologetic reference to a sixpence comes forth.

### RICHARD COLE CHRONICLES HIS EXPERIENCES ON HIS LONDON-PARIS TRIP.

After two days of fruitless waiting for weather at Margate, my patience becomes exhausted and out we go into a very unpleasant sea. With the engine just ticking over, the long nose buoy draws nearer and nearer. Right off the North Foreland the sea is really dangerous due to the tide being against the wind. As the foreland gradually drops astern, the sea becomes a little less severe, but is still rough. For some time I have had a feeling that there is something round the gear housing, so at Ramsgate we enter the harbour and remove a small piece of straw. The harbour master demands 2s. for the use of the harbour, and points with great pride to the fact that this is the most expensive harbour in England.

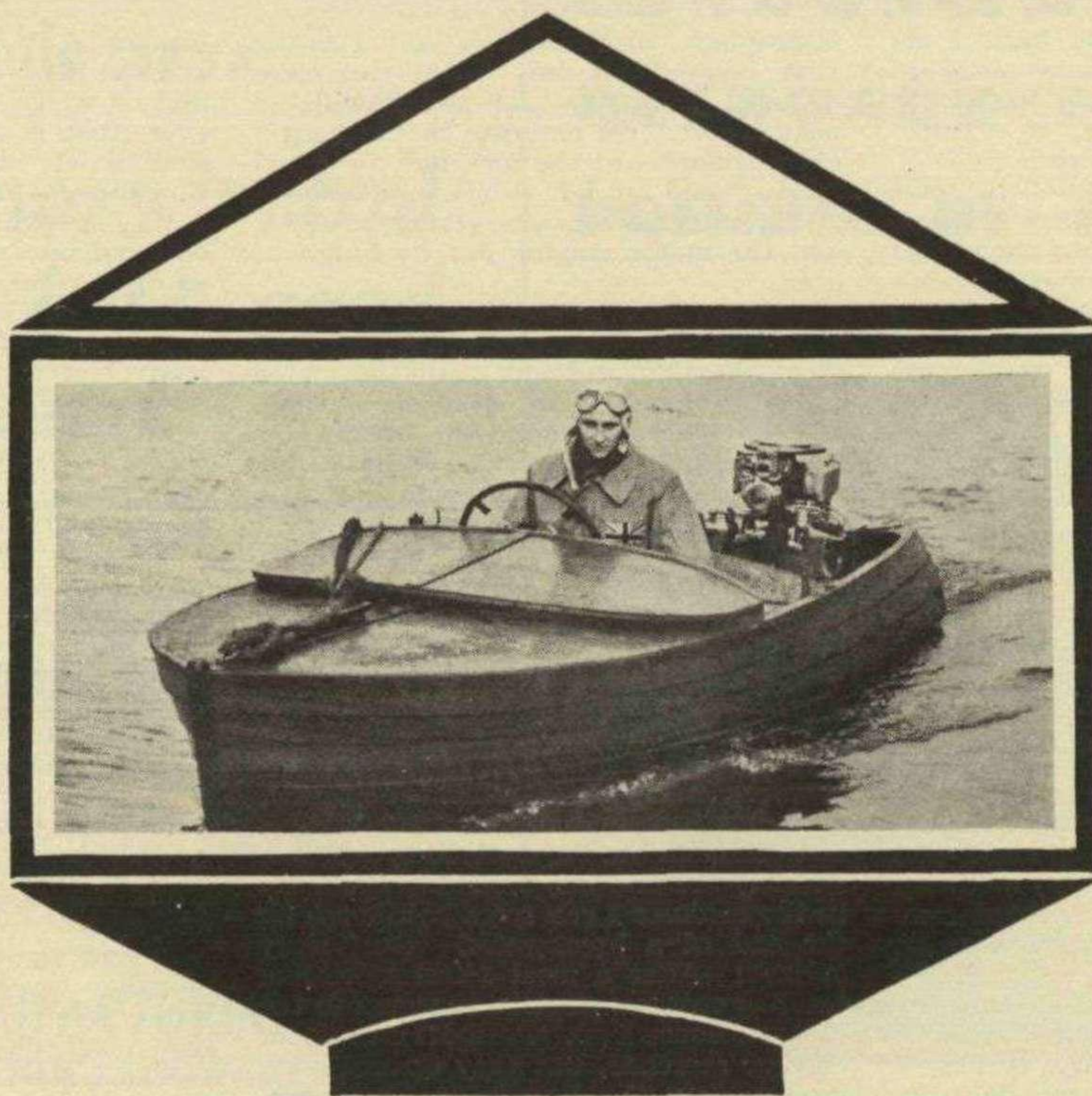
Once under weigh again the sea is not so bad, and half throttle can be used. A word about throttles. For a motor to be practical for this sort of thing, it must be capable of propelling the boat at a maximum speed of anything from 16-25 m.p.h. It must also be able to throttle down to a speed of about 2-4 miles per hour for any amount of time without oiling plugs or stopping for any other reason. I wonder how many motors will do this.

Off Deal the sea again becomes rough and again the motor is called upon to run dead slow for half an hour or so.

About a mile ahead is Dover, forming a background to a horrible sight. For about half a mile the sea is a mass of leaping foam. It is certainly the most terrifying piece of water I have ever seen. The pillar-like waves are about six to eight feet high with a space of about three feet between them. It is, of course, impossible to go straight through them, so you have to tack backwards and forwards, gradually getting nearer your objective. About forty-five minutes of this brings us to within one hundred yards of the eastern arm. I shall not forget this run in a hurry.

Two more runs up and down, and I enter the harbour and switch off to ascertain the extent of the damage. The boat builders have every reason to be proud of themselves, for the boat has only shipped about a gallon of water, all of which was spray, blown on board by the wind.

Once in the inner harbour, I notice a familiar figure on the keyside. This is the man who tells you what course to steer when going across the Channel, but as he gives you the same course for Ostend as he does for Calais and Boulogne, it is advisable to consult a second authority, or you may find yourself a point or two out. I also notice that he is wearing a scarf of mine. I often wondered where that had got to.



**FOR HIS TRIP  
BY OUTBOARD MOTOR BOAT FROM  
LONDON TO PARIS ON FEBRUARY 15<sup>th</sup>**

Mr. R. C. COLE  
**CHOSE**

**DOMINION**  
**MOTOR SPIRIT**

THE DOMINION MOTOR SPIRIT CO. LTD. 34 BISHOPSGATE, E.C.2 (Central 3381)

*Please mention MOTOR SPORT when corresponding with advertisers.*

## PARIS THIS TIME—continued.

Once inside the Hotel de Paris I am handed a letter from a lady outboard enthusiast who says that she wishes she were seated at the wheel of "Imp" "steering N.N.E. for Calais."

There would be a tendency in some quarters to condemn this piece of navigation as unsound, so I discuss the matter with some of the cross-Channel captains. They agree that this course might be suitable for an outboard motor boat, but they, themselves, had always steered in a south easterly direction, due probably, to the fact that their fathers had done so before them. They are, they state, always willing to learn. In fact, one of them says that he had actually seen a little man in an outboard, steering a similar course for Calais some years ago.

\* \* \*

At last a reasonably calm morning dawns and I decide that, as the weather report is still unfavourable, it would be safer to follow a steamer. This means a run to Folkestone as there are no cargo boats leaving Dover at this time of year. The *S.S. Maidstone* appears to be the boat in commission at the moment, and I ask the captain if he minds my following him. He doesn't, so in due course we depart for Boulogne. A beautifully calm sea makes the run very pleasant. Half-throttle is sufficient to keep up with the *Maidstone* which does about 12 knots. I note he is steering S.S.W., in case I should lose him. The Varne lightship passes on the right, and I notice that the sea is getting a little choppy. The wind is also rising. Cape Gris Nez at last appears a little to the left of the Cape Gris Nez I had been imagining for some half hour past. The tide must now be against the wind, judging by the "white horses" visible everywhere. Once inside the alleged shelter of the cape the sea becomes really rough, and I find it difficult to keep up with the steamer. Gradually, the *Maidstone* draws ahead, leaving me in some short, steep waves. Once again dead slow. I wonder why the wind is always on the carburettor side. Twice the engine nearly stops through water washing over the intake. It begins to dawn upon me that I am not making headway, as the tide is running at some four knots.

**A tense moment.**

Finally a large wave finds its way right into the motor, and she is silent. Immediately waves wash over the stern and the position becomes serious. Much as it goes against the grain I wave to the *Maidstone*. Somebody on board gleefully waves back and she proceeds on her way. This won't do. I hoist my helmet on the end of an oar, and, of course, away go the goggles. The *Maidstone* turns round, so I may concentrate upon keeping afloat. To turn her head into the wind requires some considerable strength as the bow is higher than the stern, thereby catching the wind, which blowing the tops off the waves, causes a terrifying hiss.

The *Maidstone* is manoeuvred alongside with incredible skill and in a very short space of time. I am ordered out of the boat, a steel hawser hurtles through the

atmosphere, and away we go. I notice that Boulogne is only about two miles distant. A pity to get into trouble so near a port. On entering the harbour I once again board the now half swamped "Imp" and am left to my own devices. Thirty minutes sees everything in order, and the motor singing out its hymn of hate.

\* \* \*

At last the wind veers round to an off shore direction, and once again the engine is called upon to run dead slow, while the choppy water round the breakwater is negotiated. Slowly I creep past the spot where I was wrecked some two years ago. A horrible looking place. The sea now being a little calmer the throttle comes open, and the villages go by in quick succession. A ridge of sand banks ahead necessitate a long detour through rough water, after which more villages pass. At the corner of a bay ahead I can see a town which I think must be St. Valery. There is no sign of a lock here, however, so on I go. Another town passes, also sans lock or harbour. The time is now 2.30 and St. Valery is long overdue. Possibly the tide has turned. Presently in the distance I can see a lighthouse on the end of a breakwater. St. Valery at last! After a meal I feel more like tackling customs officials, so round to the customs house I go. Passport examined, luggage searched, but they do not seem interested in the *Permis de Navigation* or the *tryptique*. Tactfully I ask if I might now be allowed to enter the canal. Canal? They are very sorry but the nearest canal is at St. Valery. A ghastly moment, this. Where then, am I? At Le Treport, apparently, which means that I have done 25 kilometres too much. Very depressing; and the customs house rocked with the sound of laughter.

**Local information.**

A local pilot, however, has some interesting facts to relate about St. Valery. It is, apparently, unapproachable except at high water. The channel is buoyed, and the entrance is in the middle of the last mass of sand banks that I had passed. Also, anyone missing the channel, and getting stuck on the sand banks would stay there for twelve hours, as he would be surrounded by quicksands. This means fiddling about in the dark at 5 a.m. the next morning, and getting away by 6 a.m.

\* \* \*

Wearily, I heave upon the starting cord and bang gently across the harbour. A young lady clad in a dressing gown, runs to the quay and waves. Have I misjudged this town? The slight chop just outside the harbour gradually develops into a gentle swell, and a most impressive dawn breaks, closely followed by the sun. Glorious. I have never seen anything like it. The motor, roaring over at nearly full throttle, shoots the boat over the ripples with that gentle clatter so beloved by all those who outboard.

I have strict instructions to keep red buoys to the right and black ones to the left. As usual the first buoy I come across is green. However, further on the buoys are as stated. The water about half a mile ahead looks like a sheet of ice. Great

Snakes! It is ice! With the motor running dead slow, the boat breaks it up and on we go. It dawns upon me, however, that if I proceed at this speed, I shall be left stranded in about an hour which means I shall not refloat until after dark. A lightning examination of the bow and sides reveals no signs of damage, so open comes the throttle. With ear-splitting shrieks and cracks the ice breaks up, throwing hundreds of little splinters many feet into the air. An impressive sight.

After some two miles, the solid ice gives way to little icebergs which can easily be negotiated. A little to port I notice some fishing boats outside a small town—and a lock. So this is St. Valery. With an air of finality I tie up and approach a local resident, asking him what time the lock will be open. He seems a little offended at my calling it a lock, and points out that it is the gate of a new irrigation scheme. He is of the opinion that the town I require is St. Valery.

**Among the ice.**

Back again to the iceberg region where I left the channel, and once more the buoys shoot by in an orderly procession. Now and again the motor slows as the propeller touches the sand, but as the water goes down, the channel becomes clear, and all is plain motor boating. The real St. Valery is a welcome sight. There ahead is the enormous double gated lock, surrounded by little buildings rather reminiscent of Holland, one of which is held in place by a customs official. Presenting my papers, I ask him when I may be able to pass the lock, and am told that these are neap tides and, therefore, unsuitable for this lock. However (brightening), I may be able to get through next Tuesday. With difficulty I retain my balance. Why, dammit, that is nearly a week. An interview with the lock keeper seems desirable, so I wend my way to his house. Five minutes pass, and I emerge with the assurance that I may go through the next morning at 8.

\* \* \*

The lock at St. Valery is large and almost English in its inefficiency. Eventually, however, the gates open. At the end of the long straight canal that leads to Abbeville, a gentleman in a small boat signals his desire for conversation, during the course of which he mentions a 12 kilometre per hour speed limit. Humbly I thump into the nearby lock, and await the arrival of the lock keeper. There are 48 of these locks to pass, but I am glad to note that they are very efficient and rapid. Lock after lock is negotiated and such villages as Long and Picquigny are passed before reaching Amiens. From here onwards there are still traces of the War, and dotted along the route are the graves of some millions of Englishmen. They are simple and infinitely impressive. Among those whose identity is known, their average age seems to be between 19 and 22.

The village of Corbie passes and darkness begins to fall. A lock looms up in the half light and with it a building which I find is a café. The proprietress remarks that she knew immediately I

Richard Cole says—

*“ Ordinary petrol tubing isn't good enough ”*

So he fitted his motor with

**Titeflex**

TIGHT-FLEXIBLE

**THE ONLY ALL METAL FLEXIBLE TUBING**

**GABRIEL MANUFACTURING Co., Ltd.**  
COLUMBIA AVENUE, EDGWARE, Middx.

**LONDON-AMSTERDAM  
OUTBOARD FEAT MADE  
POSSIBLE BY EVER READY  
'SPOTLIGHT' TORCHES!**



**Read Miss Thomson's letter**

Miss E. L. Thomson, whose recent Outboard night Channel crossing was the first of its kind, attributes her success very largely to the use of Ever Ready 'Spotlight' Torches. Here is her letter:

*“ I am very pleased to say that our London to Amsterdam Outboard stunt was successful, and that, thanks to your wonderful Ever Ready 'Spotlight' Torches, we were able to make the first night Outboard Channel crossing.*

*“ They were invaluable for examining the engine and gauges, and also saved us from being run down by a steamer in Calais Harbour.*

*“ I would not think of attempting a similar enterprise without one or more of these torches.*

*Yours faithfully,  
(signed) E. L. Thomson.”*

● The 'Spotlight' is only one of many Ever Ready torches invaluable to yachtsmen and motor boat owners. Ask to see the Ever Ready range and the long-lasting Ever Ready starting battery at any dealer—every torch guaranteed satisfactory by the Company that has been making batteries for over 29 years; every torch manned by a famous Ever Ready battery and bulb.  
From 1/-.



**TEN YEARS of MOTORS  
and  
MOTOR RACING**

BY  
**LT.-COL. CHARLES JARROTT**  
*(The famous Pioneer Racing Motorist)*

“ . . . A book which everybody who is the least interested in motor racing should obtain at once. It is a revival of that old, famous and well illustrated book, practically the first of its kind, by Charles Jarrott, which remains one of the finest books on motor racing that has ever been written.”

—THE AUTOCAR.

**Price 3/6 (Post Free 6d. extra).**

**MOTOR SPORT (1929) LTD.**  
39, VICTORIA STREET, LONDON, S.W.1.

## PARIS THIS TIME—continued.

came in, which country I belonged to by the Union Jack upon the life saving suit; and asks how things are in America.

\* \* \*

On approaching the boat, I am dismayed to find ice everywhere: solid. No running through it this time. However, there comes the syncopated thump that denotes a semi-diesel, and round the bend sails a barge.

There is now a channel, so off I go, with great care, however.

Once past the village of Bray, the ice gradually disperses, and once more the boat skims over the water instead of going through it. From Peronne the locks start again in earnest, and it is long after dark when I arrive at St. Simon, where the canalised river Somme joins the Canal de St. Quentin. Here there is a first class cafe-hotel that has a radio which will receive anything but British stations. The London they had been listening to for the past four years turned out to be Oslo.

\* \* \*

As I have been warned of the amount of traffic on this canal, I turn out long before it is light to avoid the crush. Three-quarters of the barges in France seem to have turned out early for the same reason. Delay seems inevitable. This, however, is France, a country where the noisiest

man has right of way, so I roar into the locks right under the noses of the barges. This usually causes the lock keeper to leave his control house, and utter words which I store in my memory for future use.

Chauny passes with its inevitable lock, and I begin to enjoy myself. The arrival of an outboard motor boat is something of an event to these towns, and at the first sound of approach they decant their inhabitants along the quayside. As the roar of the Watermota gradually dwindles to a staccato stutter I notice the lock keepers feverishly preparing their locks. I suppose they think that if they don't open them quickly anything might happen.

At Janville the canal terminates, and the route lies along the river Oise. A glorious wide river with long straights and gentle bends. Oh, for a hydroplane and a 1,000 c.c. motor! What a waterway for a summer holiday, winding in and out along a glorious valley, dotted here and there with picturesque little towns.

Soon I realise that evening approaches, and I must find a village for the night. Verberie passes, and I make all possible speed for Pt. St. Maxene. Twenty-five minutes and I am there, giving an average speed of 25 kilometres per hour.

\* \* \*

As I drink my coffee which is the French

for breakfast, I allow my thoughts to dwell upon a long and uninterrupted sleep. To-night, if all goes well. This new impulse starter is a blessing when you are sleepy. So simple has been the departure that Meriel passes before I am fully conscious. A glance at the map reveals that there are only two more towns to pass before reaching the Seine.

The town of Pontoise is, apparently, a pleasure resort. Several riverside cafés with swimming equipment and so forth adorn the banks, whilst on the right I notice another outboard, a hard chine boat, Evinrude powered.

At last the town of Conflans appears with its mass of traffic, and just ahead—the Seine. To the right is the famous nudists' colony at Villennes and to the left is Paris. Nearer and nearer draws the great city, its proximity indicated by an occasional tram. Two locks are passed, and then—there is the Eiffel Tower.

The race course at Auteuil passes on the left, and I keep a look out for the Concorde Bridge where I am supposed to stop. I am a little early, and the Concorde water bus station is deserted. Those people who are feeding the swans continue to feed, and those who are fishing continue to fish. Peace, perfect peace. Coming down the slope is a friend who has been patiently awaiting my arrival. So this is Paris.—R. COLE.

## U.S. TO BE REPRESENTED AT POOLE.

MISS LORETTA TURNBULL, the popular girl motorboat pilot of America, will be competing at Poole this year. She will use her own Johnson engine and will probably be accompanied by her father, Judge Turnbull, and at least one of her two brothers. It is to be hoped that enthusiasts in this country will attempt to extend a little hospitality towards these visitors. We can improve in this respect.

## HARRISON AT MIAMI.

ALTHOUGH official confirmation is not to hand at the time of writing, it is understood that the Colonel Green Trophy has been won by Crawford, an American.

Harrison, apparently, came second in the two preliminary heats, losing one of them to Collins, another American driver; while in the final he was first home, but disqualified for crossing the line before the gun.

Although another "incident" is unlikely in this case, it is rather remarkable that some six other drivers are reported to have been disqualified for the same reason.

It will be interesting to hear the full details of this race as Harrison is one of the very few drivers who can be trusted not to rush over the line at the slightest provocation.

## WHY NOT RACE AT PARIS?

READERS who have shunned the idea of racing abroad on the score of expense, will be interested to know that G. T. Symons and Co., 4, Lloyds Avenue, E.C., are prepared to transport boats, engines and equipment, and so forth, from London to

Paris at an inclusive charge of not more than four guineas each way.

At Paris the boats can be lowered into the water and run under their own power to Herblay where the forthcoming meeting is to be held.

There are one or two simple formalities to be observed when taking a boat to France, including a Permis de Navigation for the run down the Seine. The Herblay meeting takes place on July 14th-17th, and we shall be pleased to give readers full particulars of all regulations and so forth upon application to this office.

## FLEET STREET AND THE OUTBOARD.

THE first close-up pictures of the boat race crews after the race were taken from, and delivered by, a Watermota-powered speed dinghy.

The photographer was run down the Thames at full speed and the complete camera thrown to a motor cyclist on the embankment. The latter completed the journey to Fleet Street. There has always been great rivalry over the boat race pictures, and it will be interesting to see if the outboard motorboat will become a regular feature of this classic Mortlake—Fleet Street marathon.

## RACING PREPARATIONS.

THE long sleep, which seems to envelop London's motorboating enthusiasts during the winter, at last shows signs of being cast off. Suggestions for further complicating the racing rules have appeared, and discussions are taking place among those who do not race, upon the question of silencers and various other methods of restricting speed. It has even been reported that the time keeper's house at the Welsh Harp has been painted on the side farthest from the wind.



**Mr. R. C. COLE**

chose

**LODGE**

**PLUGS**

for his

**London - Paris Trip**



The Lodge sports plug (illustrated) alone possesses just those special qualities that make it the finest plug in the world for high-efficiency sports engines.

LODGE HD

**6/-**

everywhere  
in sealed metal box  
(bronze)

LODGE PLUGS LTD., RUGBY

*Please mention MOTOR SPORT when corresponding with advertisers.*

# START ON THE FIRST SWING!

*The heart of an engine*

The cold doesn't matter, it gives a hot powerful spark in any weather at any speed

## WICO TROUBLE-PROOF MAGNETO

SNOW, FROST, RAIN, MUD, WATER OR OIL ARE ALIKE POWERLESS TO CHECK THE SMOOTH UNFAILING EFFICIENCY OF THIS IMPULSE MACHINE

R. C. COLE used a **WICO** magneto on his trip to Paris because it was essential that he had ignition with an initial spark that would start his engine every time on the first turn, thus obviating any danger of losing time and the necessity of inspecting and cleaning plugs.

THE **WICO** "L D" IS FURNISHED IN 1, 2, & 4 CYLINDER MODELS AND DUE TO ITS SIMPLE AND STURDY CONSTRUCTION IS SOLD AT A PRICE RIDICULOUSLY LOWER THAN ANY OTHER MAGNETO ON THE MARKET TODAY

100% BRITISH MACHINES

**Wico Electric Company :: CHASE ESTATE NORTH ACTON, N.W.10**

R. C. COLE says—

"THE ONLY REALLY PRACTICAL EXTINGUISHER."

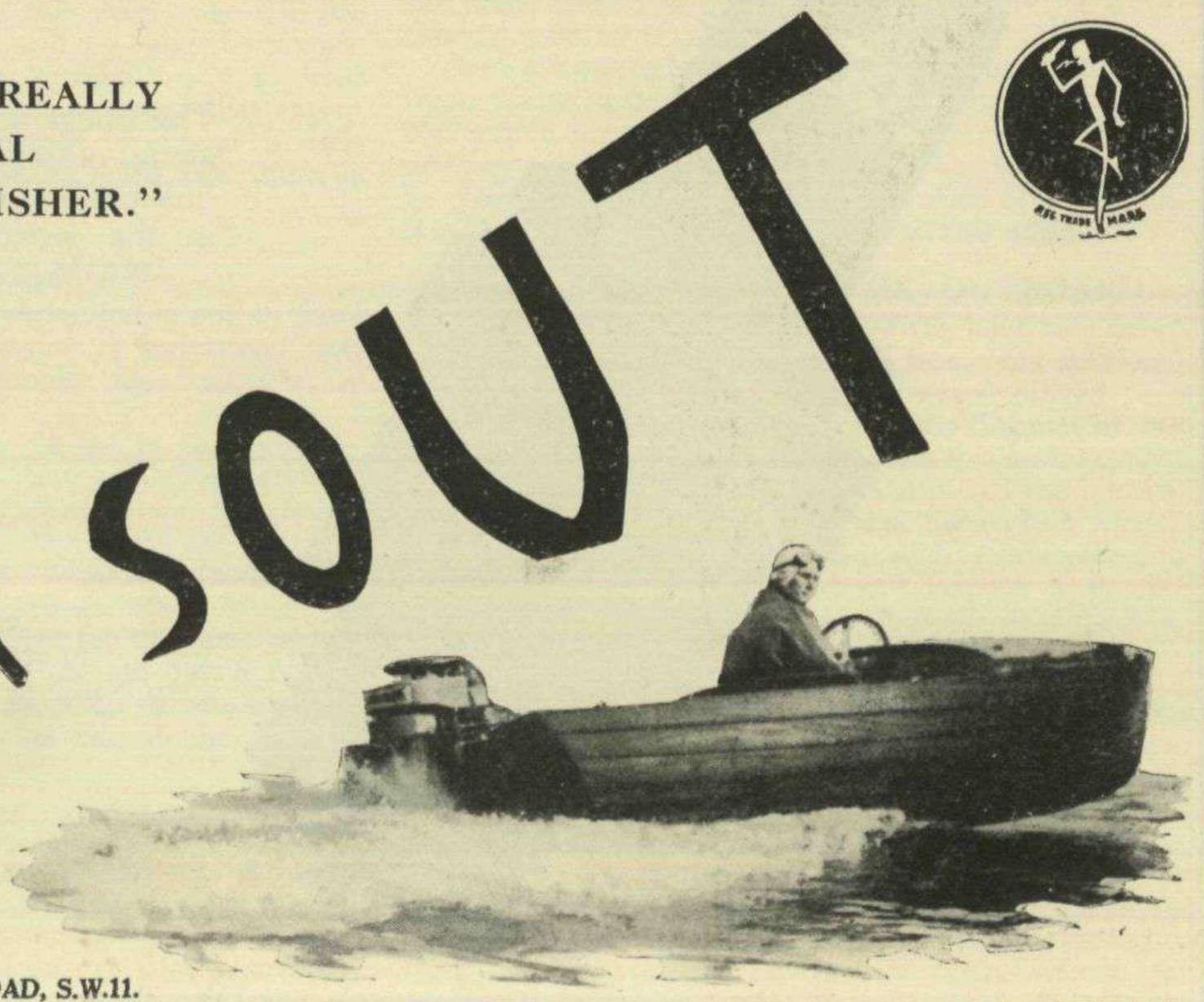


AS USED BY  
R. C. COLE on his  
record run to Paris

PRICES  
12/6 and 19/6

SOUT FIRE EXTINGUISHERS

Made at  
417/419 BATTERSEA PARK ROAD, S.W.11.



Please mention MOTOR SPORT when corresponding with advertisers.

# THE "IMP" and ITS EQUIPMENT:

## SOME DETAILS OF COLE'S CROSS-CHANNEL CRAFT

**B**EFORE actually touching on the preparation and equipment of a craft for a long-distance venture of this type, it would be as well to state, very briefly, the object and use of such trips as R. C. Cole has successfully carried out from London to Brussels, to Amsterdam, and on this occasion, to Paris.

In the search for new types of motor sport, further encouraged by the increasing congestion of road traffic, the sporting motorist will turn firstly to the water. Being a motorist he demands a certain measure of speed, a high standard of reliability in every detail, reasonable economy, and a completely equipped craft.

This combination of speed and economy is only made possible by the use of an outboard motor, for larger fast runabouts and cruisers are definitely a much more expensive type of water transport, and though some may later afford them, the majority will first experience motor boating by means of the outboard.

There has long existed a notion, an outworn relic of earlier conditions, that the outboard engine is inher-

ently unreliable, and the boats suitable for their use, frail and unseaworthy.

Sales talk and pretty catalogues will never alone dispel such prejudices, and the only way to do so, and at the same time to develop a sound and useful type, is by exacting tests and practical demonstration of what can be done.

Thus the aim of such a trip as has just been concluded is to develop a fast, economical, reliable, and seaworthy craft, which can be sold to the motoring public at a low price, complete and ready for all normal work to which an open runabout can be put.

Though racing experience has been of vast assistance in the development of hulls and engines, such a craft as "Imp" is in no way a racing boat. It bears the same relation to such as the fully equipped sports car bears to the stripped "sprint" vehicle. This boat is the



All set. Cole aboard the "Imp" just before his Paris trip.

Below—The power-unit of the "Imp."

It is the "Colonial" model Watermota with special Bowden carburettor.

same as that used by Mr. Cole on his trip to Amsterdam, but it was fitted this time with a Watermota engine of 350 c.c. It is the same engine that he used for his London-Brussels trip, and for such minor voyages as a cruise in a single day from Southampton—Burlington—Lymington—Cowes—Burlington—Southampton.

It has, however, been converted to one of the new Colonial model Watermotas which it helped to develop. These are fitted with a Wico impulse starter magneto, which combines the certain starting of coil ignition with perfect waterproofing and compact layout.

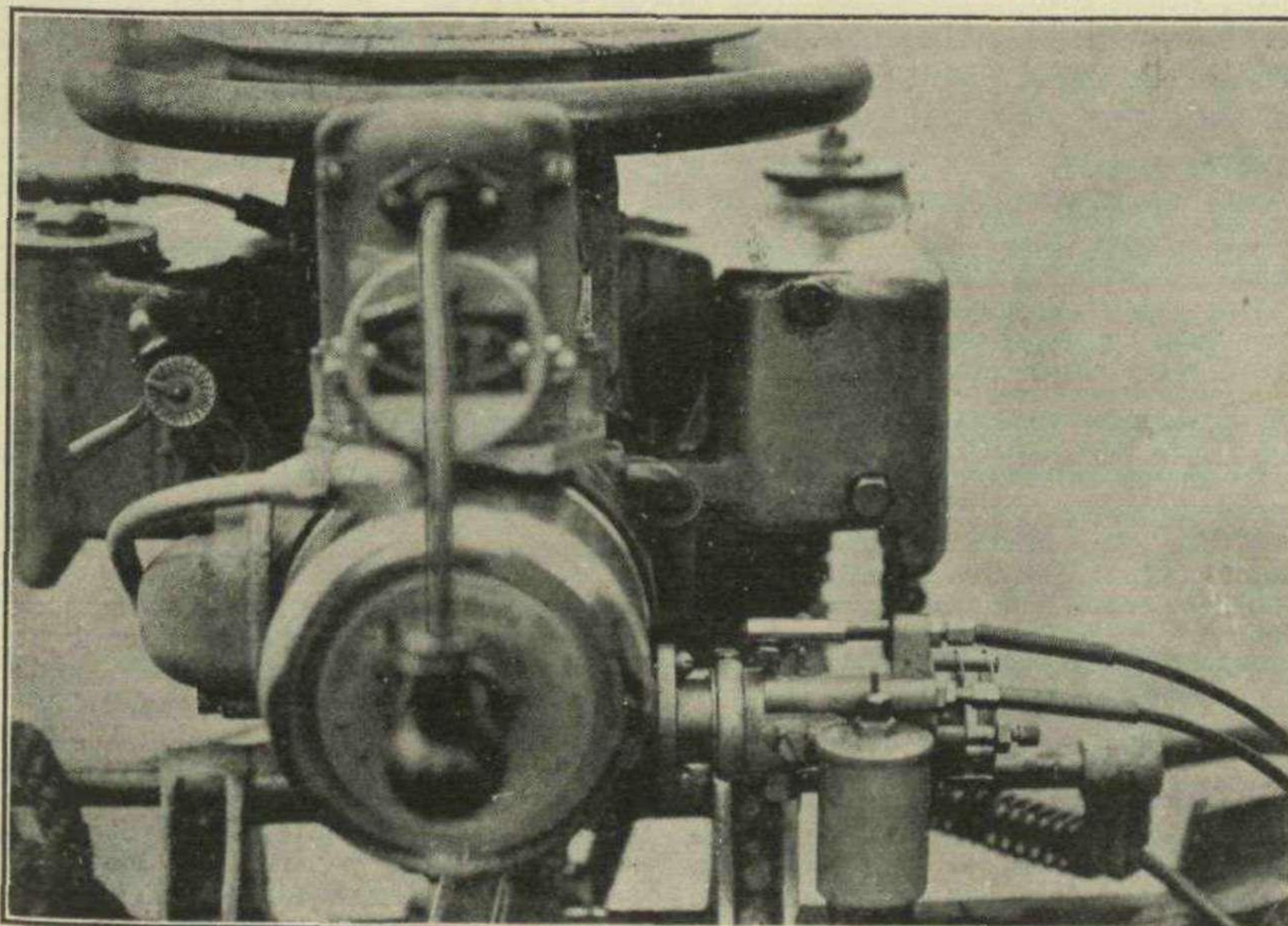
After careful tests for power and fuel consumption a Bowden carburettor was chosen and fitted, the feed to this being by means of "Titeflex" all-metal flexible tubing, as described in the last issue of MOTOR SPORT.

The steering gear is the Watermota detachable unit operating through heavy Bowden cables. The wheel, however, is one of A. F. Ashby and Co.'s "Brooklands" spring wheels which considerably eases the strain on the wrists caused by many hours driving. The 14ft. dinghy, built by Percy See, of Fareham, was left exactly as it returned from its trip to Amsterdam.

No repairs or alterations were required, as it had proved easy to control, and dry in broken water.

The fuel tank and instruments were untouched.

Before the Amsterdam trip the boat was varnished with "Rylard,"



## THE "IMP" AND ITS EQUIPMENT—continued.

and this still being in perfect condition, it was not revarnished.

The fuel system is simple and reliable. A thirteen gallon tank is set amidships, with a hand pressure pump on the instrument board, and by this, fuel can be fed to the engine tank as required.

The compass is a small areoplane type with which most people find difficulty in reading, but which Cole maintains is entirely satisfactory!

Emergency items include a large Ever-Ready torch, and a "Sout"

fire extinguisher, which has the great advantage for this class of work that it can be entirely operated by one hand, leaving the other for the controls and steering.

In the engine, Dominion petrol was used while the lubrication was attended to by Shell oil, pressure fed to the bearings, assisted by Filtrate upper cylinder lubricant mixed with the fuel. Lodge plugs completed the equipment of the engine.

It is interesting to note that Cole

reports that while several spares were carried as a precautionary measure, only one plug was used throughout the whole trip—a type H.46.

Dunlop moulded sponge rubber seats which are very light and comfortable, and with their low price should create a big demand in boats, cars and aircraft were also used.

The reliable performance of all components under by no means ideal conditions was a great factor in the successful outcome of the venture.

## WHY NOT USE THAT DINGHY?

CONSIDERING the Englishman's traditional love of the sea, it is rather surprising that more of them do not travel abroad under their own power.

I refer, chiefly, to the outboard dinghy owner. Will they never forget that cross channel race? After all, it is not essential to use a flimsy hydroplane with an unreliable motor. Nor is there any real objection to a compass. In all seriousness, I suggest that you call upon Uncle George, or whoever is the particular member of your family who has "been to sea and knows," make a rude and pointed remark to him, and set off upon an adventure you will not forget in a hurry.

Imagine yourself arriving at Dover and informing the customs officials that you are bound for France and you don't know when you will be back.

You are now a master of craft, and command just as much respect as the captain of the *Europa*. A fast and smooth run across the Channel, and you drop into Calais to send a defiant telegram to Uncle George. Now where? Boulogne, with its smell of fish? Ostend? Or right down the French coast to the beautiful little port of St. Valery? Right. Round Cape Gris Nez, and past Wimereux into Boulogne for a drink. Out again, and

round the breakwater, passing numerous little French seaside villages. Past the first bay, and then more villages, followed by another bay. Now you must look out for a large green buoy. When you reach it, turn left and follow the buoyed channel to St. Valery. What? Didn't know that St. Valery is one of the finest duck shooting centres in the world? Well, it is.

You are now restored to health, and have some energy to spare? Very well. Down the buoyed channel again, keeping to the left this time.

Round the corner, keeping fairly near the green buoy, and on past more villages. Not many minutes, and there ahead is le Tréport. Life here; plenty of it. Golf, tennis and various other amusements. Probably, plenty of English people too.

Still, all good things must end, so back you go to Boulogne. Possibly it doesn't seem sensible to go to Calais, so off across the Channel again. That depression in the cliffs is Dover. You can't see the town at first. Once again the customs people, who will this time give you a piece of paper; then out to sea again, to wherever it is you wish to go. Waiting on the quay will be Uncle George. He will probably have remembered some hair-raising stunt he did in his youth with a sailing boat.—R.

## ADDITIONAL JOHNSON MODELS.

MESSRS. VANADIUM LTD., announce the introduction of two new models to their range of outboard motors.

These will be known as the "Light Twin" and the "Standard Twin." The former is of 154 c.c. and is priced at £30; the latter is of 326 c.c. capacity and costs £41.

Sundry improvements have been embodied in these new types, which include a redesigned exhaust system, a different type of fuel tank, and a modified water-circulating pump having no valves.

A full description of these motors will be given in next month's issue of MOTOR SPORT.

## THE VENICE MEETING.

AFTER some uncertainty, the organisers have decided that the Venice meeting will be held this year.

The Italian government, it appears, has taken a sudden interest in the sport of motor boating, and there is every reason to believe that Italian meetings will be a great success this season.

## SEAGULL MOTORS.

WE understand that the "Seagull" twin-cylinder motor, with reverse gear, has been discontinued, but all other Seagull models are still available. These include a 350 c.c. model with or without clutch, and, of course, the lightweight.

## AN AMERICAN AWARD.

M. R. HARRISON has been presented with a cup for the best performance at Miami by Mrs. James Walker, the Mayoress of New York.

## NON SEQUITUR X.

NON SEQUITUR X, which attempted to set up a World's record at Cowes some weeks ago, in the hands of Charles Harrison, has been sold, complete with its rather interesting Watermota steering unit. It will be remembered that a twist-grip throttle control was incorporated in the wheel. Steering units with twist-grip control are now being marketed by Messrs. W. D. Fair & Co. of Hampton Wick.

# Motor Sport Classified Advertisement Section

**HEAD OFFICES :**

39, VICTORIA STREET,  
LONDON, S.W.1

Telephone: VICTORIA 5218

Rates (prepaid) - 1/- per line  
(minimum 3 lines).

CLOSING DATE first post on  
the **23rd** of the month, for  
publication on the 1st of the  
following month.

**USED SPORTS CARS  
FOR SALE.**

**ALFA-ROMEO.**

1930 ALFA-ROMEO 1½-litre supercharged sports 2-seater, black and chromium, small mileage. £500. Bruton Garages, Ltd., 4, Blenheim St., New Bond St., W.1. Mayfair 4737.

**ALVIS**

ALVIS F.W.D. supercharged sportsman's 4-seater coupé, black and green, 85 m.p.h., definitely as new (1929), 12 months' guarantee; terms, exchanges.—Albert (Mews) Motors, 192-194, Belsize Rd., N.W.6. Maida Vale 5204.

12/50 Alvis. Late '27 overhauled, fast, £90.—Denmans, 132/3, Long Acre, W.C. Temple Bar 8135-6-7.

1931 12-60 Sports Alvis, only 4,000 miles. Guarantee transferable. Perfect. Dunham, 46, Castle St., Luton.

**AMILCAR.**

PARK GARAGE, AMILCAR Specialists. Below.

1927 Grand Sports 3-seater, repainted, o.h.v. engine, good tyres, very fast, £45. Below.

EXCHANGES, deferred. Skelton's Lane, Leyton. Leytonstone 1437.

**USED SPORTS CARS  
FOR SALE (continued).**

**AUSTIN**

1932 Austin 7, special sports 2-seater. Taxed to December. Mileage 2,000. Many extras. £155. Bruton Garages, Ltd., 4, Blenheim St., New Bond St., W.1. Mayfair 4737.

**AUSTRO-DAIMLER.**

BARTLETT for Guaranteed Sports Cars.—Austro-Daimler 1928 20-70 h.p. tubular chassis, 6-cyl., o.h.v., 4 speeds, low black fabric 4-door saloon body, superb condition, 80 m.p.h.; cost £900, my price £165; exchanges, deferred.—27, Pembroke Villas, Notting Hill Gate.

**A. J. GUPPY LTD.**

**For High Class Sports Cars**

1932 WOLSELEY HORNET fitted with Patrick 2 4 seater Sports body. Finished in Black and Green. Only done 600 miles. £210.

1930 M.G. Mark II Coachbuilt Sports 4-seater, 4-speed Gear Box. Mileage 7,000. Wonderful Road performance. Appearance as new. £325.

1931 STANDARD NINE Avon Swallow Sports 2-seater. Finished in Black and Red. 4-speed Gear Box. Car in faultless condition. £ 65

1930 CROSSLEY 15.9 h.p. Super Sports 4-seater. Black and Red. Exceptionally fast and good chassis. Very smart. £175.

1931 WOLSELEY HORNET E.W. 2 4 seater. Finished in Cream and Green. Fitted many extras. As new. £165.

1932 RILEY NINE Semi-panelled Monaco Saloon. Ultra Plus series. Finished in Grey with Sliding Roof. Only done 1,100 miles. Cost a few weeks ago £310. Our price £265.

**WANTED. WANTED. WANTED.  
FOR CASH**

**ANY NUMBER OF  
HIGH CLASS USED CARS.**

**A. J. GUPPY LTD.**

314 Euston Road, N.W.1  
and  
111 Great Portland Street,  
W.1.

**USED SPORTS CARS  
FOR SALE (continued).**

**BENTLEY.**

1931 BENTLEY supercharged 4½ litre. Open 4-seater body, Vanden Plas, painted Le Mans green, Lucas P 80 headlamps, Zeiss spotlight. Unscratched. Only driven 9,000 miles. Cost £1,450. Will accept £850. Apply, H.65, c/o MOTOR SPORT (1929) Ltd., 39, Victoria Street, London, S.W.1.

**BUGATTI.**

TYPE 40 special 2-seater Bugatti. Flared wings, excellent condition, very fast. Definitely does not oil up.—S. D. C. Taylor & Co., Ltd., 6, Kendrick Place, near South Ken. Stn. Kensington 8965.

**FRAZER NASH.**

FRAZER NASH cars, Falcon Works, London Rd. Isleworth (Hounslow 3172) always have for disposal reconditioned and guaranteed cars, fitted with new tyres and F.W.B. Prices from £125.

**HADFIELD BEAN.**

1929-30 14-60 h.p. super sports Vanden Plas tourer. Perfect condition throughout £75. Park Garage, Skelton's Lane, Leyton. Leytonstone 1437.

**H.E.**

SPECIAL short chassis Speed Model, 13 h.p. fitted very low Vanden Plas type body. Original 1924 chassis but re-conditioned throughout recently. Re-cellulosed and chromium plated. Bentley performance and appearance at low upkeep. 30 miles per gal. Oil consumption negligible. Park Garage, Skelton's Lane, Leyton. Leytonstone 1437.

**HISPANO-SUIZA.**

HISPANO-SUIZA 15.9 h.p. "Alfonso" type (80 mm. x 180 mm.), 3-4-seater sports body, Rudge-Whitworth wire wheels, Bosch Z.R.4 magneto, S.U. carburettor, brand new hood and sidescreens, latest type Ashby "Brooklands" fully sprung steering wheel, finished in white and black. This car is a really distinctive veteran of smart and up-to-date appearance, solid and reliable with a good all-round performance. Petrol consumption averages 24 miles per gal. Taxed till end of June. For further particulars see MOTOR SPORT, July, 1931 issue, page 429. Price £37. Write c/o MOTOR SPORT, Box N.K.1030.

**LEA FRANCIS.**

£245.—1931 Lea-Francis 12-90 h.p. saloon, supercharged Hyper sports, black and red, wire wheels, 4 doors, chromium, sloping wind-screen, luggage trunk, sloping radiator, only had occasional usage, unscratched, every accessory.—Box No. Y619, c/o MOTOR SPORT.

55 Pounds.—Lea-Francis 1927-28 10 h.p. special sports 2-seater, concealed dickey, excellent tyres, morocco leather interior and bodywork excellent throughout, V screen, good hood and equipment, perfect mechanically, fast, unusually attractive.—Box No. B610 c/o MOTOR SPORT.

## Motor Sport Classified Advertisement Section—continued.

### SECOND-HAND SPORTS CARS (continued).

#### MERCEDES-BENZ.

**SUPER SPORTS** 24-100 h.p. Mercedes, close-coupled saloon. Recently overhauled. Exceedingly fast. A Bargain, £57 10s.—S. D. C. Taylor & Co., Ltd., 6, Kendrick Place, near South Ken. Station. Kensington 8965.

#### O.M.

£87/10.—O.M. 1927 sports, English body 4-seater, 2 carburettors, taxed, repainted, super condition.—Box No. 4600, c/o MOTOR SPORT.

**VERY** Late 1925 O.M. 4-seater Sports, cut away body by Cadogan Motors, 2 carburettors, wire wheels, flared wings, black and red, 70 m.p.h.: £77/10.—Box No. A621, c/o MOTOR SPORT.

#### RALLY

**10** H.P. sports 2-seater, specially tuned for Double 12. Mechanical condition perfect, tyres new. Very fast. £100. Watkins & Doncaster, Ltd., Petty France, S.W.1. Victoria 6220.

#### RATIER.

**1931** Ratier 9/50 h.p. supercharged sports two-seater. Cozette blower, outside exhaust. 100 m.p.h. Ball bearing engine. Cost over £300. Bargain £125. S. D. C. Taylor & Co., Ltd., 6, Kendrick Place, near South Kensington Station. Kensington 8965.

#### RILEY.

**MARK IV** Riley Nine special 2-carburettor sports 4-seater, moderate mileage, 5 new India tyres, tax paid to 1933, rev. counter, tonneau cover, chromium plating, really exceptional car; £120.—Box No. R620, c/o MOTOR SPORT.

#### ROVER.

**ROVER** Ten Sportsman's 4-seater coupé. Engine just overhauled. Excellent condition throughout. Bargain, £75.—Apply Box N.C.Z.140, MOTOR SPORT.

## BELLEVUE GARAGE

AND SERVICE STATIONS LTD.

18 & 19 BELLEVUE ROAD, WANDSWORTH COMMON, S.W.17.

Manager: Mr. D. G. EVANS

*Planned, constructed and fitted with every modern equipment in order to ensure efficient service for Sports car owners*

Large Showroom. Breakdown Ambulance. Repairs, and High Efficiency Tuning  
Any make of Sports Car supplied. Inspection invited. Telephone: BATTERSEA 0479

### SECOND-HAND SPORTS CARS (continued).

#### SALMSON.

**1927** GRAND PRIX 3-seater. Completely re-conditioned throughout. F.W.B. £37 10s. Park Garage, Skelton's Lane, Leyton. Leytonstone 1437.

#### STUTZ.

**90** m.p.h. Stutz 37 h.p. 1930 series. Weyman sports saloon, delivered 1929. Cost £1,400. Excellent condition. £365 or offer.—Denmans, 132-3, Long Acre, W.C. Temple Bar 8135-6-7. Open week-ends.

#### TALBOT.

**1924** 10-23 h.p. 4-seater tourer. New tyres, recently overhauled, re-bored and fitted with new pistons. Perfect mechanical condition. £20. Apply Box 4434, MOTOR SPORT.

#### VERNON DERBY.

**1929** Special Vernon-Derby 6-cyl. Super Sports 2-seater, underslung, fitted with special high compression head, 4-speed close ratio gear box, twin Solex carburettors, lavishly equipped, including rev. counter, new hood, etc., fitted with magneto and coil ignition, new tyres, this car has just had a genuine overhaul, any trial, taxed; £95, or exchange for M.G. Midget.—"Heatham House," Twickenham. Popesgrove 1163.

#### WOLSELEY HORNET.

**HORNET** two seater special black-green semi-sports. Hood, Sidescreens, Commodious Boot, Pneumatic Upholstery Leather, Fine Condition. Nearest offer to £100. View, Ripley Motor Works, Ripley, Surrey.

#### CHASSIS.

**INTERESTING** chassis worth reconstruction from £20 to £50, including Lancia-Lambda, 3-litre Bentley, Vauxhall, Austro Daimler, etc. Kirton, Honiton, Devon.

#### ENGINES.

**BRISTOL** CHERUB 2 cylinder aero engine Only 40 hours running Very light, high efficiency, high revving unit, ideal for G.N. or similar chassis for hill climb work. £18. Box No. H100 c/o MOTOR SPORT.

Your used Sports

Car will appeal to

our readers

ADVERTISE IT IN

OUR CLASSIFIED

SMALLS SECTION

AT 1/- PER LINE

(minimum 3 lines)

## D. GEORGE COLLINS, LTD.,

118 NEWGATE STREET, LONDON, E.C.1.

Works: Birmingham and Sheffield.

Manufacturers of Silver and Gold Trophies, Presentation Caskets  
- - and Keys, Cups, Medals, Spoons and Badges. - -

Coloured Artist's Sketches sent on request with quotations. :: Makers to the A.C.U. and many well-known Motor Associations and Outboard Motor Boat Clubs.

Telegrams: "WOR 11 FUL, LONDON."

Telephone: NATIONAL 1163

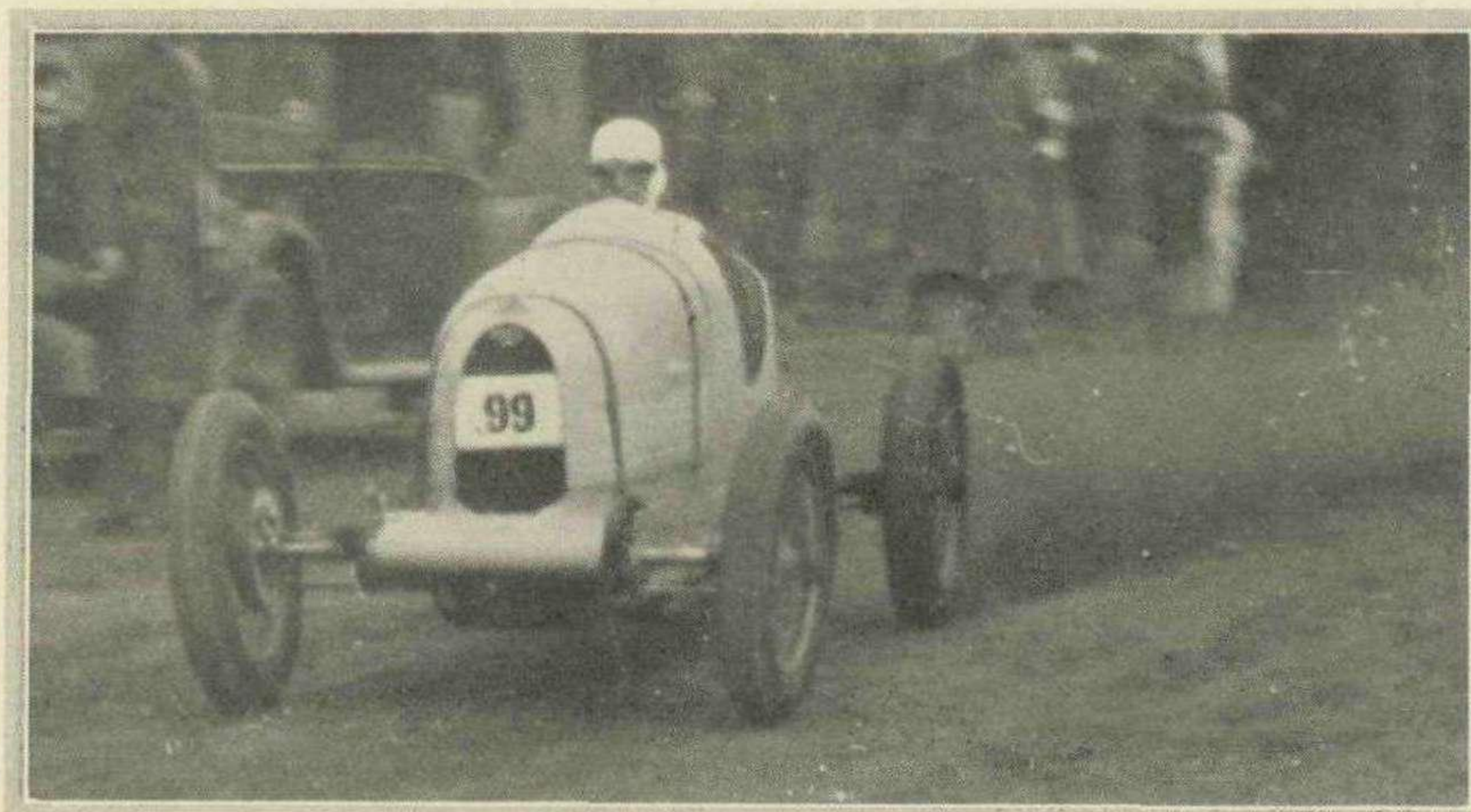
# MOTOR SPORT PHOTOGRAPHS

THE INTER VARSITY SPEED TRIALS, 1932

PRINTS ARE AVAILABLE OF ALL PHOTOGRAPHS PUBLISHED IN "MOTOR SPORT."

|                   |         |
|-------------------|---------|
| Sizes:            | Prices: |
| 8in. x 6in. - -   | 2/-     |
| 10in. x 8in. - -  | 3/-     |
| OR                |         |
| 15in. x 12in. - - | 7/6     |

CASH WITH ORDER



The single Seater 2,300 c.c. Bugatti driven by Bertram.

We have many photographs taken throughout the year at the various meetings at Brooklands, Trials, etc., which owing to pressure of space we are unable to reproduce in "MOTOR SPORT." Particulars will gladly be sent to anyone interested in these photographs. Details of requirements should be stated, and a stamped addressed envelope enclosed.

## MOTOR SPORT (1929) LTD.,

39, Victoria Street, London, S.W.1.

### INDEX TO ADVERTISERS

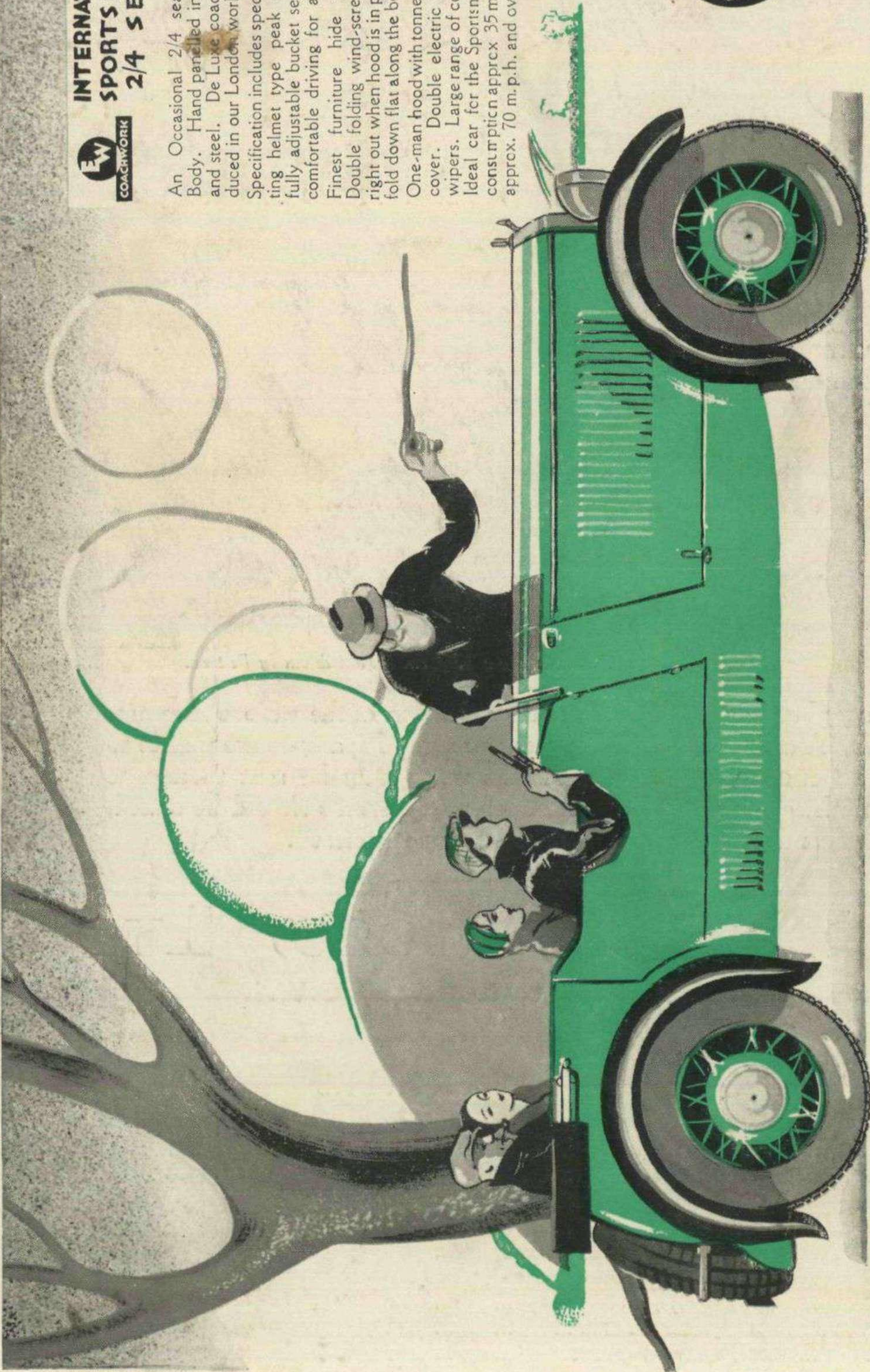
|                                 | PAGE |                                    | PAGE |                                  | PAGE |
|---------------------------------|------|------------------------------------|------|----------------------------------|------|
| A.F.N. Ltd. ... ..              | 265  | E. D. Joy & Sons, Ltd. ...         | 254  | Riley Record ... ..              | 265  |
| Britannia Batteries, Ltd. ...   | 241  | Eveready (Great Britain) Co., Ltd. | 285  | Roberts & Co., Ltd. ... ..       | 270  |
| Bugatti Owners' Club ... ..     | 241  | Eustace Watkins, Ltd. back cover   |      | Robinson & Co., Ltd. ... ..      | 274  |
| C. C. Wakefield & Co., Ltd. ... | 251  | Ferodo, Ltd. ... .. front cover    |      | E. C. Stearns & Co. ... ..       | ii   |
| Charles Follett, Ltd. ... 245 & | 261  | Frank Ashby & Sons, Ltd. ...       | 276  | S. Smith & Sons (M.A.), Ltd. ... | 270  |
| Clement-Talbot, Ltd. ... ..     | 261  | Gabriel Manufacturing Co., Ltd.    | 285  | Sout Fire Appliances, Ltd. ...   | 288  |
| Delage (Automobiles) ... ..     | 253  | Henlys, Ltd. ... ..                | 269  | V. W. Derrington ... ..          | 241  |
| Dominion Motor Spirit Co., Ltd. | 283  | Junior Car Club ... ..             | 261  | Wico Electric Co. ... ..         | 288  |
| Dunlop Rubber Co., Ltd. ... ..  | 242  | Lodge Plugs, Ltd. ... ..           | 287  |                                  |      |

**INTERNATIONAL SPORTS HORNET 2/4 SEATER**



An Occasional 2/4 seater-Touring Body. Hand panelled in Aluminium and steel. De Luxe coachwork produced in our London work shops. Specification includes special close fitting helmet type peak wings; two fully adjustable bucket seats allowing comfortable driving for a 6 ft. adult. Finest furniture hide throughout. Double folding wind-screen to open right out when hood is in position or to fold down flat along the bonnet. One-man hood with tonneau and hood cover. Double electric wind-screen wipers. Large range of colours. The ideal car for the Sportsman. Petrol consumption approx 35 m.p.g. Speed approx. 70 m.p.h. and over.

**£225**



# EDUSTACE WATKINS LTD

Sole London Wolseley Distributors,  
Specialists in Part Exchange and Hire Purchase.  
**12, BERKELEY STREET, W.1. (Phone: Mayfair 5084).**

*Full 4-seater Sports as illustrated £5 0 0 extra.*