

AUTOSPORT

DECEMBER 25, 1953

1/6

EVERY FRIDAY

Vol. 7 No. 26

BRITAIN'S MOTOR SPORTING WEEKLY



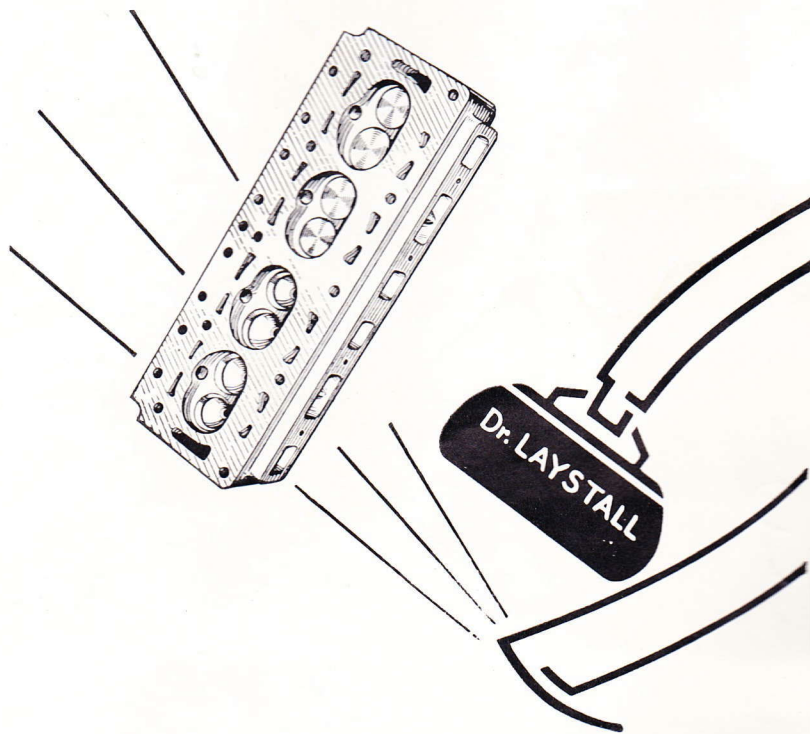
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AUTOSPORT

BRITAIN'S MOTOR SPORTING WEEKLY

Vol. 7 No. 26

December 25, 1953

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NOTICES

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EDITORIAL

WE are proud to notice that others are following AUTOSPORT'S example in publicizing the need to ensure that this country is adequately represented in Grand Prix racing. This magazine never ceases to emphasize the tremendous advantages to British automobile engineering generally if prestige could be gained in full-scale G.P. racing. However, something tangible can at least be done. If every reader in this country would write to his (or her) M.P., pointing out the reason for the return of Mercedes-Benz to Grand Prix racing and the increasing sales of low-priced German cars, together with the rapid expansion of the Italian motor industry which has coincided with a remarkable run of successes in post-war G.P. racing, then the Government might be persuaded to act. If an authoritative question could be raised in the House: "Would Her Majesty's Government consider setting aside a sum of money to be used solely for the furtherance of British automobile engineering prestige, by helping to finance Grand Prix racing cars?" then we could learn what is the attitude of the Government in the forthcoming battle of the export market. AUTOSPORT believes that both the main parties in the House realize the vital importance of maintaining the export of British-made cars, but little has been done to impress each individual right honourable member with the far-reaching results which would accompany successful participation in the most highly developed form of motoring—Grand Prix racing.

If, by some chance, the Government agreed to assist financially in supporting British efforts in Grand Prix racing, it would be necessary to form an advisory board consisting of knowledgeable persons whose duty it would be to see that the money is directed to quarters where it would be most usefully employed. AUTOSPORT ventures to suggest that the board should be headed by someone who has accomplished a great deal for British prestige—someone like Capt. George Eyston, for instance! The technical qualifications of Capt. Eyston are unquestioned—not to mention his vast experience of every aspect of competitive motoring—and he is held in the highest regard by all who are connected with the British motor industry. We are certain that he would give his services willingly if they were required.

* * *

WITH our next issue, dated 1st January, 1954, comes the new Grand Prix Formula 1, embracing cars of up to 750 c.c., supercharged, and 2,500 c.c., un-supercharged. The first major event organized for the new F1 machines will be at Buenos Aires on 17th January, for the Grand Prix of Argentina—first round in the World Championship. Already a strong entry has been received from Ferrari, Maserati and Gordini, but there are no British F1 cars as yet ready. No decision has been made as to the composition of a new Formula 2—but presumably it will be carried on unaltered for some time to come! In any case, the majority of organizers in this country will have to stage F2 events until such time as sufficient entries can be obtained from owners of F1 cars.

PIT & PADDOCK

MIKE HAWTHORN was at Modena recently to be "measured" for his 1954 Formula 1 Ferrari.

TONY ROLT will again drive for Rob Walker in both F1 and F2 races next season.

THE Duke of Edinburgh is reported to be taking delivery of a 3-litre Lagonda, on his return from the Royal Tour.

IAN STEWART, at present in U.S.A., will fly to Buenos Aires in January to join *Ecurie Ecosse* for the 1,000 Kilometres race.

GRAND PRIX OF EUROPE will be held in Germany next season on 1st August at Nürburgring, owing to promised participation of Mercedes-Benz.

JOHNNIE CLAES and J. Herzet will share the last-named's Ferrari in the Rio de Janeiro sports car race. Claes will drive a Lancia Aurelia in the Mille Miglia.

ROY SALVADORI took over from Peter Collins as co-driver in a DB3 Aston Martin in last Sunday's Casablanca 12 Hours Race. Collins is indisposed.



★
TV DATE: Joan Gilbert, well-known television personality, is taken for a run round Goodwood in an Aston Martin by Reg Parnell.

BOB GERARD and Don Truman have already tried out the 1954 F3 Cooper. Gerard will continue to race his Cooper-Bristol in next season's F2 and *Formule Libre* events.

THE 1955 rear-engined C-Type Connaught is designated the J2 for works purposes, not J3 as in our caption to the artist's impression in the 4th December issue. J3 is the works number for the 1954 F1 car.

PETER GAMMON'S lightweight, Lotus-based sports car will be seen in action early in 1954.

JACQMAR LTD., of 16 Grosvenor Street, London, W.1, have produced an attractive "Grand Prix" scarf in the form of a 36 in. silk square, available in various colours and depicting a variety of racing cars; price £4 9s. 6d.

MAN behind stock car racing, which will be introduced to this country next year, is Digger Pugh, one of the pioneers of speed-racing in Great Britain.

LATEST American sports car is a Kurtis-Kraft coupé with Lincoln engine giving 310 b.h.p., built to the order of a well-known New York sportsman.

DOUBTS about the staging of the Liège-Rome-Liège next year are dispelled by a communiqué from the organizers to the effect that it takes place from 18th to 22nd August, counting, as before, for the European Touring Championship.



BOB SAID will again be racing in Europe next season—possibly with a British competition licence.

IN our next issue we publish the first of our annual "Seasonal Survey" articles: number one will deal with Formula 1 races.

PORSCHEs sold to American buyers after the Carrera Pan-Americana were push-rod "Le Mans" type cars; the twin-o.h.c. machines have been retained by the factory.

LANCIAS are said to be: (a) bringing out a revised Aurelia model, and (b) developing an entirely new sports racer for Le Mans!

Fastest laps in R.A.C. T.T. 1953

Drivers	Car	Lap(s)	No. m. s.	Best Time
Moss/Walker	Jaguar	42	5	01
P. Whitehead/Stewart	Jaguar	37	5	09
Rolt/Hamilton	Jaguar	8	5	21
Kelly/Fairman	Jaguar	96	5	26
Collins/Griffith	Aston Martin	85	5	02
Salvadori/Poore	Aston Martin	38	5	09
Parnell/Thompson	Aston Martin	48-51	5	10
G. Whitehead/Gaze	Aston Martin	79	5	21
Dickson/Titterington	Aston Martin	71	5	22
Wharton/Robb	Frazer-Nash	38	5	23
Gerard/Clarke	Frazer-Nash	42:72:73	5	30
Fitch/Wilson	Frazer-Nash	38:39:41	5	34
Mitchell/Russell	Frazer-Nash	48:49	5	34
Peacock/Ruddock	Frazer-Nash	44:45	5	51
Burgess/Nurse	Kieft-Bristol	24:30	5	36
Hazlehurst/Thompson	Kieft-Bristol	17	5	42
Green/Calvert	Kieft-Bristol	16	5	50
Gallagher/ Cahill	Gordini	21:52	6	08
Jackson/Lane	Lester-M.G.	91	6	15
Gould/Lewis	Cooper-M.G.	15	6	38
McCaldin/Todd	M.G. TD	41	6	49
Flower/Phillips	M.G. TD	84	6	49
Trouis/Hitchings	D.B.-Panhard	45	6	51
Lund/Robinson	Jowett Jupiter	27	6	52
Reece/Tyler	Singer	45:58	6	53
Pousse/Sparrow	D.B.-Panhard	40	7	19

Length of the Dundrod circuit is 7 miles, 732 yards. The Moss/Walker fastest lap of 5 mins. 1 sec. therefore represents an average speed of 88.7 m.p.h., and the D.B.-Panhard's 7 mins. 19 secs., a speed of 60.81 m.p.h. The course record is 4 mins. 44 secs. (94.00 m.p.h.), established in the 1951 Ulster Trophy Race by Giuseppe Farina with a Type 159 Alfa Romeo.

SPORTS-NEWS

1954 WORLD CHAMPIONSHIP

SCORING for World Championship events in the 1954 season will be the following: first, 8 points; second, 6; third, 4; fourth, 3; and fifth, 2; with one point for the driver setting the fastest lap in any one event. When a car is shared by two or more drivers, marks will be divided equally amongst them.

The Championship will be judged on a driver's five best performances in qualifying events (listed in last week's issue), and any ties will be decided either by drivers' relative performances, other than their five best, or on the overall number of places, *i.e.* first, second, third, etc. scored in Championship events. Should neither of these methods serve to settle positions, the final decision will rest with the Sporting Commission of the F.I.A.

* * *

MORE ARGENTINE ENTRIES

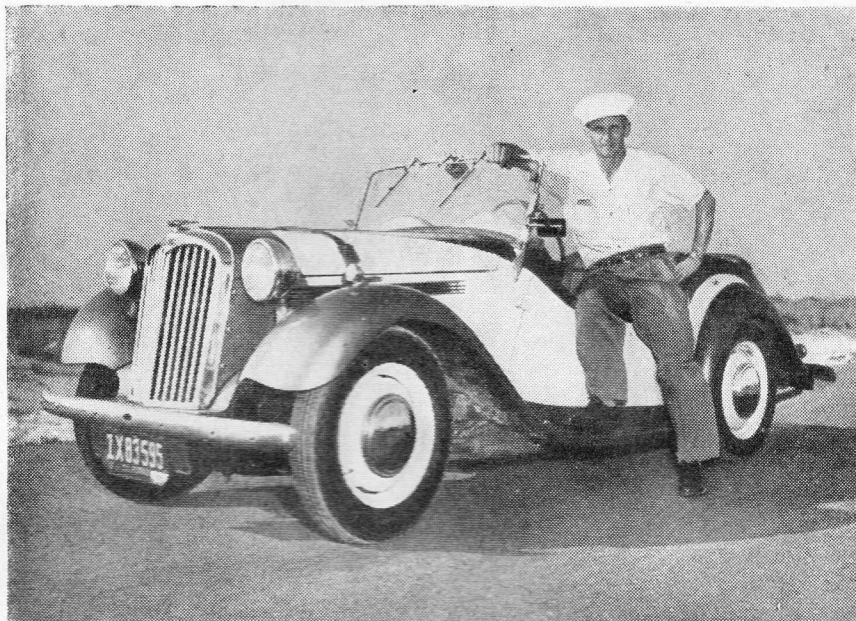
IN addition to the official Ferrari, Maserati and Gordini entries for the forthcoming Formula 1 and *Formule Libre* races in Argentina, Harry Schell is competing with his new F1 Maserati, and with a 3-litre Ferrari. B. Bira is to race his 4½-litre Osca, and may also drive a 2½-litre Ferrari in the Argentine G.P.

* * *

ZANDVOORT CIRCUIT DEVELOPMENTS

RENOWNED as the home of the annual Dutch G.P., one of the qualifying events for the World Drivers Championship, the Zandvoort circuit near Haarlem will also be the scene of two national sports car meetings and a sprint fixture next season. A further sports car-cum-motor-cycle date may be reserved in July, and stock car racing is also possible.

The circuit was recently inspected by officials of various Dutch clubs and pronounced satisfactory for constant and normal use next season; this is a sequel to the brief banning of the use of the course after the 1953 Grand Prix, when a newly applied top-dressing loosened considerably under the constant passage of fast cars. A proposal to erect a permanent restaurant seating about 250 is being considered.



SMART SINGER: Ex-speedway star "Lammy" Lamereaux with the fast Singer SM 1500 Roadster he has successfully raced in American airfield and road events during the past season.

INNOVATIONS IN THE LYONS-CHARBONNIERES RALLY

A "BEGINNERS" class for drivers taking part in their first rally should prove a welcome novelty in the International Lyons-Charbonnières Rally, which takes place from 18th to 21st March, 1954. The new class will be restricted to 20 entries, with strictly standard production type cars.

A new starting point, Barcelona, is added to the customary points at Paris, Nice, Lyons, St. Jean de Luz, Turin, Liège, Lausanne, Baden-Baden and London. Total entry is restricted to 150. Information and entry forms are available from the organizers, the Automobile Club du Rhône, 7, Rue Grolée, Lyons.

* * *

SCOTTISH INTERNATIONAL RALLY

DETAILS of the 1954 International Scottish Rally already issued by the Royal Scottish A.C. fix the dates of this popular event at 7th/11th June. The route will be entirely in Scotland, embracing the most beautiful and interesting districts of the Central and North-West Highlands. A night section is being included this time, but there will be no regularity tests, nor will the famous Amulree Hill be included.

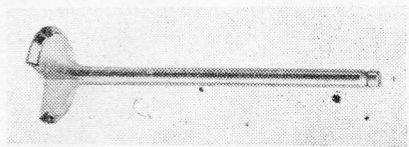
Regulations follow previous Scottish

Rallies basically, and total distance to be covered is approximately 1,400 miles, with night stops in Grantown-on-Spey. The first and second days' runs will total 760 miles, from Glasgow via Loch Lomond, Inveraray, Glencoe, Fort William, Berriedale, then to John O'Groats, Durness, Ullapool and Inverness to Grantown-on-Spey.

Third day takes competitors in a round-about run of 220 miles from Grantown back to Grantown, via Culloden Moor, Drumnadrochit, Invergarry, Fort Augustus and Inverfarigaig. A 250-mile run, again Grantown to Grantown, and taking in Banff, Fraserburgh, Aberdeen, Kirriemuir, Braemar and Balmoral, makes up the fourth day's motoring, and the fifth and final day of the Rally involves a 170-mile journey over a route which will remain undisclosed until the morning start.

The entry list opens on 1st March, 1954, and closes on 10th May. Regulations and entry forms will be available from the R.S.A.C. Secretary, Mr. A. K. Stevenson, Blythwood Square, Glasgow, C2, in February.

AN ARMoured SEAT VALVE



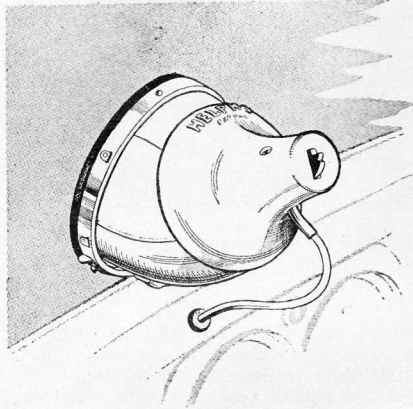
To combat the growing tendency for premature burning of exhaust valves on certain types of engine, the Farnborough Engineering Co., Ltd., have carried out much research on the production of a moderately priced valve which will overcome, or at least retard, valve seat burning. The result is the "Tranco" S.A.S. valve, with special armoured seat, which from tests the manufacturers have made is claimed to prolong valve life considerably, under hard conditions.

AUTOSPORT wishes all its readers a very Merry Christmas and the happiest possible motoring in the year 1954, coupled with the hope that it will prove a very successful season for the green cars.

"AUTOSPORT" MONTE CARLO RALLY INFORMATION SERVICE

Useful Rally Equipment

ONE of the many questions that is asked is "Where can I get it?" Often, useful and desirable rally equipment is not easily obtained owing to lack of information as to where the various items are available. Consequently, AUTOSPORT has been investigating the sources of many attractive components and fittings, and, from time to time, will list them—after test if possible—as part of our rally information service to readers.

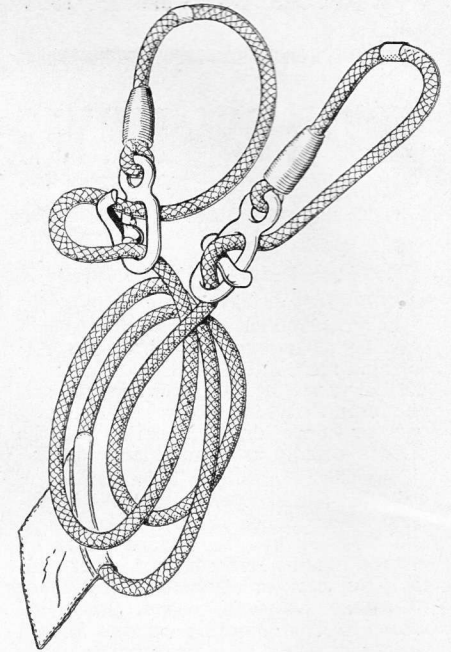


The Helphos interior-operated searchlight, which is attached to the screen by a rubber suction ring.

An interior-operated searchlight has long been a feature of Continental rally equipment. Earlier types required that the windscreen itself was pierced to permit interior operation of the swivelling portion. However, the Helphos, which is of German origin, is constructed to be held on to the lower part of the windscreen by a rubber suction ring. The lamp portion can be readily detached for hand use. The lamp unit itself is tremendously powerful—the beam being of true searchlight intensity. Complete with all fitting instructions, glycerine, adhesive, screwdriver and bulb unit, the Helphos costs 75s. from Aero Spares Ltd., High Holborn, London, E.C.1.

Another Aero Spares component is a special nylon towing-rope, made of similar materials to those used by many yachtsmen. These ropes are immensely strong, and have patent fixing clips which dispense with the need for special towing brackets, or of knotting arrangements. In waterproof case, the rope costs 35s. The same concern can also supply flashing type indicators for any make of car. A complete set of four, with two "flasher units" and remote-control switch, costs 45s. 9d.

There are several types of roof rack on the market, from simple twin-bar patterns to the latest Continental-style streamlined grids. Parr Equipment Co. Ltd., one of the pioneers of this component in the U.K., offer a complete



Tow-rope of nylon, with patent fixing clips, selling at 35s. with waterproof casing.

range of racks. Lowest-priced is the Portagridd at £4 7s. 6d. The telescopic Portarack costs £6 17s. 6d. in standard form, whilst the streamstyle chromium-plated pattern is £10 18s. All Parr products can be fitted on any make of closed car, without any drilling whatsoever. Address of the makers is 20 Avonmore Road, Kensington, London, W.14.

AWARE that this is the time for special-building, the 750 M.C. have already announced the formulæ which they will employ for 750 c.c. and 1,172 c.c. racing cars next season. In the light of previous experience, a few changes have been made, but none is so drastic as to involve a considerable amount of work on existing cars. It will be noted, for example, that the method of securing early-type Austin wheels must be modified; this is the direct result of several incidents which occurred last season, when wheels pulled over the securing nuts.

Another change is that whilst cars must be capable of being driven to a meeting under their own power, this is no longer an essential. In practice it was found impossible to enforce the original ruling, and inconvenience was often caused when a breakdown occurred during an event, necessitating a tow home.

Divided ports and reversed valve operation, previously barred for 1,172 cars, are now forbidden for 750 machines also, in the interests of bottom-end reliability. Pump fuels must be used for both categories, now that premium grades of fuel are available. For 1,172 cars, the use of the 1954 Ford engine (with integral water pump and adjustable tappets) has been banned until more is known of the design and availability of this power unit.

Special-builders who are in doubt about any of the requirements are asked to contact the 750 M.C.'s scrutineer, John Moon, of 21 The Grove, Addlestone, Weybridge, Surrey, who will be glad to assist them.

750 MOTOR CLUB FORMULÆ FOR 1954

750 FORMULA

(For competition cars based on the pre-war Austin Seven)

- The car must comply with the Road Traffic Act and must be capable of being driven to the meeting under its own power.
- The bodywork must comply with the 1949 R.A.C. Regulations for Cars for Trials and Rallies and in addition must not be less than 32 ins. wide inside the cockpit.
- The following parts must be from the standard range of Sports and Touring pre-war Austin Seven components:—
Cylinder block, crankcase, gearbox, rear axle complete, main chassis side members.
- The engine must have a stroke of 3 ins. and a bore not exceeding 2.26 ins. (i.e., .060 in. over-size). Overhead valves and superchargers are barred. Inlet and exhaust ports must not be reversed in function, nor must the slamed inlet ports be divided.
- The car must carry full electrical equipment including starter, battery, dynamo properly mounted, side and tail lamps and at least one headlamp. There must be at least one aero screen of effective size. Hoods, passenger seats and spare wheels need not be carried. (At meetings held by other clubs it may be necessary to vary these items in deference to the Regulations for these meetings.)
- When racing, one of the standard or premium grade fuels as supplied by roadside pumps must be used.
- This formula is devised for the benefit of the amateur constructor-tuner with very limited resources. The 750 M.C. Committee reserves the right at all times to reject any car which it considers represents an attempt to defeat the spirit of the regulations, even though it complies with the letter of them.

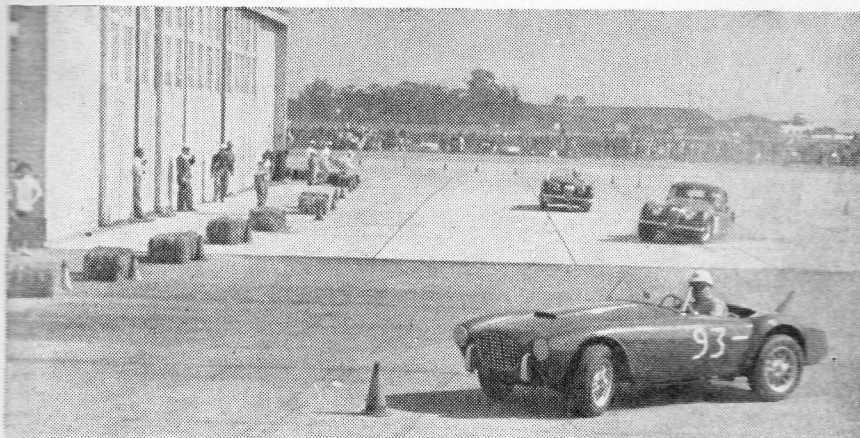
NOTE.—It has been found that the early type of Austin wire wheel hub with a solid centre (i.e., without a plated hub centre) is liable to fail without warning under racing conditions if secured by the normal taper seating wheel nuts. Therefore wheels of this type are only acceptable if they are secured by stout, plain washers at least 1 in. diameter with suitable proprietary lock nuts (such as Simmonds, Pinnacle, or Philidas) on the normal wheel studs.

1172 FORMULA

(For competition cars with Ford 8 or Ford 10 engines)

- The car must comply with the Road Traffic Act and must be capable of being driven to the meeting under its own power.
- The bodywork must comply with the 1949 R.A.C. Regulations for Cars for Trials and Rallies and in addition must not be less than 32 ins. wide inside the cockpit.
- The power unit is to be based on the standard Ford 8 or 10 engine castings of the type prior to those of the 1954 Anglia and Prefect cars. Engines based on those of the 1954 Anglia and Prefect are not acceptable. Modifications must not include supercharging, conversion to o.h.v., reversal in function of the inlet and exhaust ports or the dividing of the slamed inlet ports. The standard stroke of 92.5 mm. must not be exceeded and the bore must not be greater than the Ford 10 standard of 63.5 mm. plus 0.060 in. rebore allowance. Standard camshafts must be used unaltered.
- The car must carry full electrical equipment including starter, battery, dynamo properly mounted, side and tail lamps and at least one headlamp. There must be at least one aero screen of effective size. Hoods, passenger seats and spare wheels need not be carried. (At meetings held by other clubs it may be necessary to vary these items in deference to the Regulations for these meetings.)
- The complete vehicle, as presented for competition, without occupants, is to weigh not less than 8 cwt.
- When racing, one of the standard or premium grade fuels as supplied by roadside pumps must be used.
- This formula is devised for the benefit of the amateur constructor-tuner with very limited resources. The 750 M.C. Committee reserves the right at all times to reject any car which it considers represents an attempt to defeat the spirit of the regulations, even though it complies with the letter of them.

NOTE.—While it is not a requirement of the Formula, warning is given that it is inadvisable to lighten the standard Ford cast flywheel.



FAR FROM HOME: Yes, the leading car is a Ferrari, and it looks as if it is about to knock a course marker down—but in what country is it racing? There is more than one clue in this photo.

A WIN FOR MANCINI

DRIVING a sports Ferrari, Guido Mancini won the Carrera Jalisco in Mexico on Sunday, 13th December, from his team-mate Maglioli, Braniff (Ferrari) and Johnny Mantz in one of the fast new Kurtis-Kraft sports cars entered for the Pan-American race. J. Peron (Osca 1100) won his class. The race was run over a circuit at Guadalajara, in the state of Jalisco.

* * *

A.G.M. OF THE B.R.M.A.

THE third A.G.M. of the British Racing Motors Association will be held at the Waldorf Hotel, Aldwych, London, W.C.2, at 6.30 p.m. on Wednesday, 20th January, 1954, for the transaction of the following business:—

- (1) To receive accounts for the year ending 31st December, 1953, and to hear the committee's report.
- (2) To propose the winding-up of the B.R.M.A. organization and to appoint Mr. G. Pykett, chartered accountant, of College Hill Chambers, London, E.C.4, as liquidator.
- (3) To propose to the members present the formation of a new association to be known as the O.R.M.A. (Owen Racing Motors Association).

* * *

FERRARI—YES!

FERRARI will race officially next year, in Formula 1 and sports car events. That was Sig. Enzo Ferrari's announcement at a reunion of team drivers and successful independents staged recently at Modena. Ascari, Farina, Villoresi and Hawthorn were presented with gold medals for their efforts in the works team, and other recipients were Umberto Maglioli, Franco Cornacchia and the Marzotto brothers Gianni and Paolo. Following the Casablanca 12 Hours race, in which Ascari, Villoresi and Farina are down to run, the Ferrari team's first official engagement in 1954 is the Argentine Formula 1 G.P. on 17th January.

CHRISTMAS QUIZ

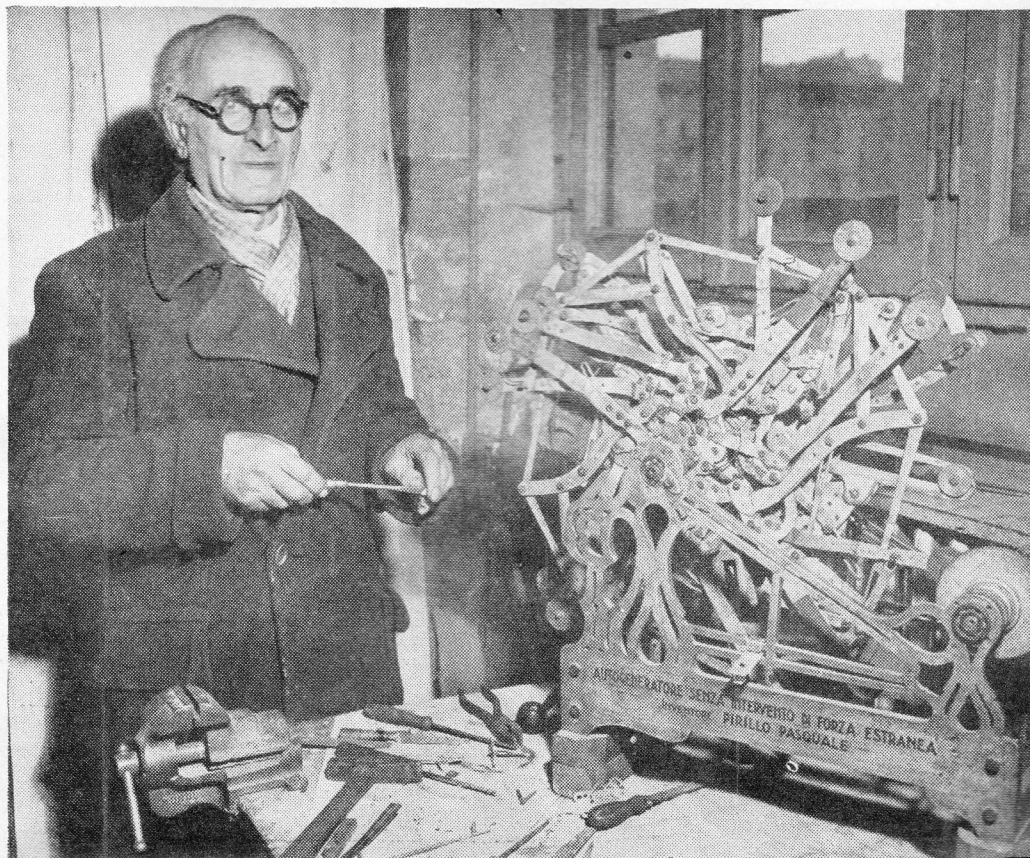
These questions are for readers' amusement only. Answers will be published in next week's issue of Autosport.

1. Name any two brothers who have raced at the same time within the last 20 years from (a) Great Britain, (b) France, (c) Italy, (d) Argentina.
2. What is generally acknowledged to be the oldest petrol-driven car in existence which actually ran under its own power?
3. Who won the fastest motor race ever run and what was his speed?
4. In one Continental race within recent years, the front row of the starting grid was occupied entirely by British F2 cars. Where and when was it?
5. Supply the missing words:—After winning the in 1951, with the, went to and won at 72.2 m.p.h. with the F2 car. However, he fell victim to tyre troubles which afflicted the entire team at The race went to with an
6. Where did the first post-Hitler War motor race in Europe take place and who won it?
7. What car names are suggested by the following? (a) Crossing, and a gentle breeze; (b) River estuary; (c) Victory; (d) Avoid; (e) Ruth or Dick; (f) Acclivity and Isle; (g) One of Bolton's footballers; (h) Cream; (i) Aviating equine; (j) News reel; (k) Tra-la-la.
8. What racing personalities are suggested by the following? (a) Paid Paul a bleached napper; (b) Gateway to the Highlands with non-gatherer; (c) Get-your-gun it's a four-four; (d) Spanish grandee trying to get his car into a public garage; (e) The Russian quoth; (f) "The Meek" Emma; (g) Apostle of the grinding wheel.

ANAGRAMS

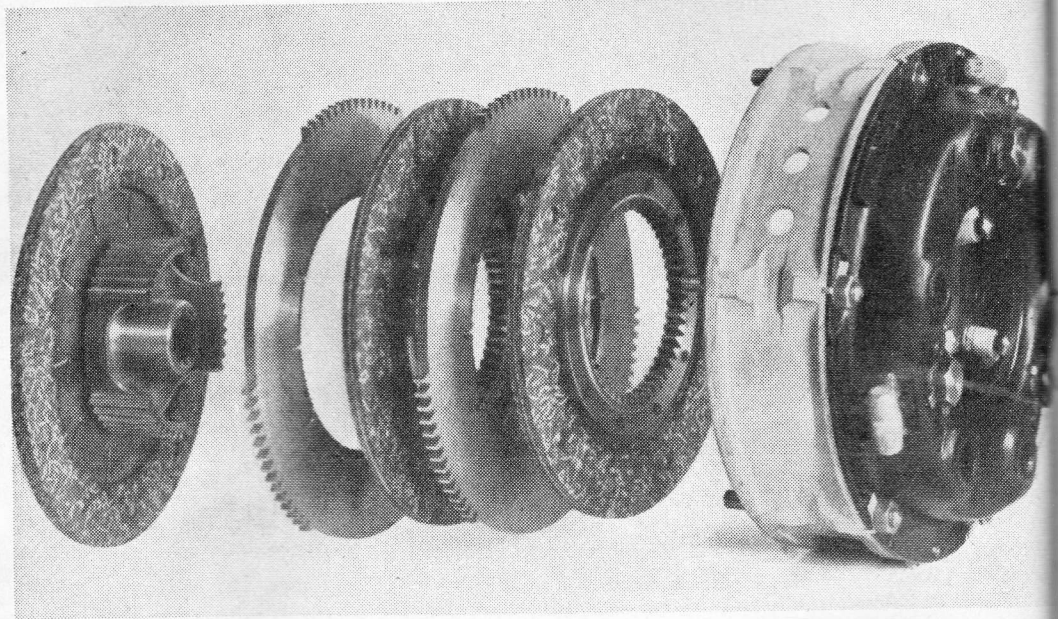
The following are all names of cars:—

1. PROSCRIBE LOOT.
2. R.I. DOING.
3. RAISE MAT.
4. BOLT AT GOAL.
5. SEND BEEZER M.C.
6. CHOPS PURSER.
7. PA MARBLE HALL CAD
8. ED IMPERILS STRANGE RHAPSODY.
9. YEA UNLEASH IT.
10. SMART NATION.
11. MORE A LOAF.
12. CANNOT HUG.
13. BUSTED RAKE.
14. TRIPS OR THUMPS.
15. MILES BLOOD.
16. GROW DRAB.



CLIMAX: of 30 years' work! Not a new hush-hush Grand Prix engine but a "perpetual motion" machine invented by Signor Pasquale Pirillo of Milan. So far, this extraordinary device has resisted all efforts to set it in motion!

THE BORG and BECK TRIPLE-PLATE RACING CLUTCH



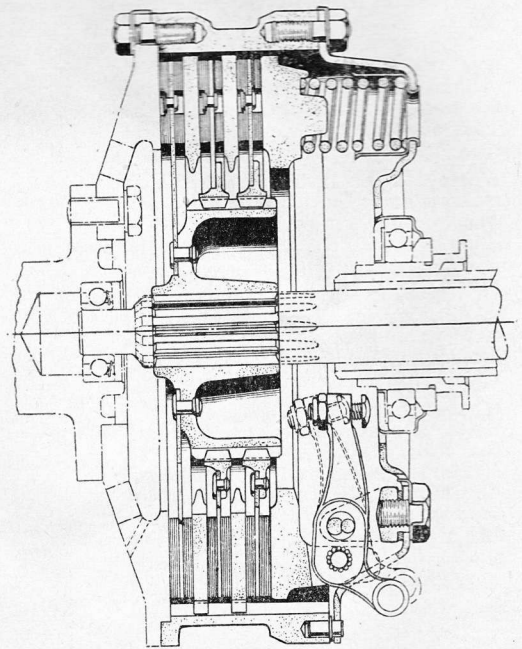
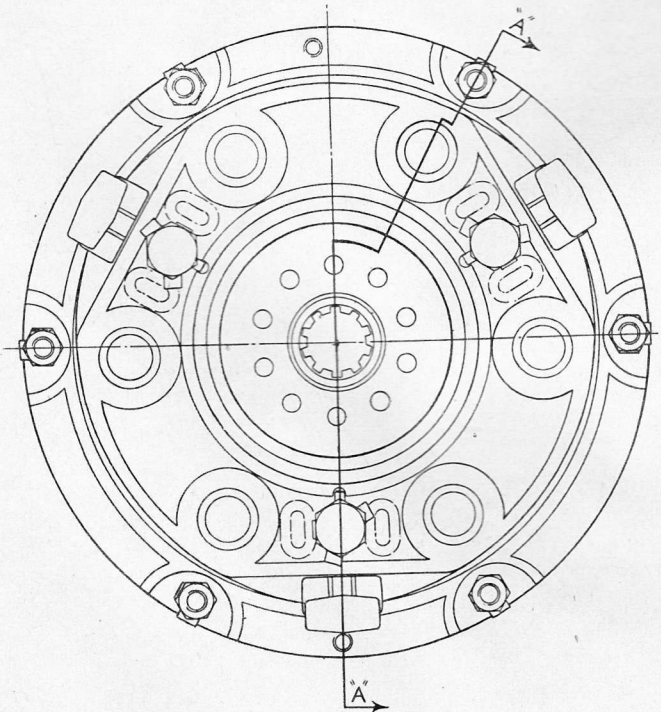
MANY years ago, the clutch was the weakest part of the motor-car. It required constant attention if it were to operate satisfactorily, and usually oscillated between a fierceness of engagement which made traffic driving a nightmare, and a tendency to slip, which rendered the ascent of steep hills hazardous. Watch the Veterans going to Brighton, and you'll see what I mean.

More recently, the situation has been entirely reversed, and the clutch has become one of the most satisfactory and trouble-free components of the modern car. It is built-in where nobody can get at it, and it stands up to

FOR HIGH SPEED WORK: Exploded view of the Borg and Beck three-plate clutch used on the 1953 Le Mans Jaguar and the Bristol 450.

continuous abuse as a matter of course. The single dry-plate clutch, as fitted to the vast majority of the cars on the road today, is smooth enough for the most incompetent driver to operate, and yet it will never slip when the going is tough.

As a result of its very excellence, the standard production clutch has been used for a purpose for which it was never intended. This humble component, costing



SECTION "A" "A"

Plan and sectioned elevation of the new clutch.

only a few pounds, has been fitted to racing cars of which every other part was specially made. It has stood up magnificently to ultra-high rotational speeds, fierce starts, and snatch gear-changes, in a manner that is beyond all praise, but the time has now come when the limit is being approached.

During 1953, a number of clutch failures have actually occurred in races, and the reason is not far to seek. The crankshaft speeds of the current short-stroke engine are rising higher and higher, and so the centrifugal loading is enormously much greater than the normal clutch was built to stand. To fit a smaller size would immediately get over that trouble, but the reduced diameter would then allow insufficient lining area to cope with the full-bore racing start or the straight-through gear-change.

It would certainly not be impossible to redesign the single-plate clutch for this work, but fundamentally a multi-plate model of smaller diameter is the correct answer. Accordingly, the Borg & Beck Co., Ltd., who make more clutches than anybody else, have produced a three-plate job for racing and ultra-fast sports cars. It is history that the victorious Jaguars at Le Mans had this new device, and so did the Bristol that took class records at Montlhéry. It will appear on many racing cars in 1954, and the Coventry-Climax engine will carry it. I therefore decided to take a trip to Leamington Spa to find out all about this interesting component.

The new Borg and Beck 7½-in. triple-plate racing clutch is designed, first and foremost, to be positive in action. Thus, the three driven plates are of the rigid type, with no cushioning to stop Aunt Fanny from stalling her engine. The linings are of special racing material, and are riveted as well as cemented to ensure that they cannot break away. The front driven plate is riveted to a splined hub, which has an enlarged rearward extension with gear teeth machined upon it. These engage with the internal teeth of the other two driven plates.

Between the first and second driven plates, and also between the second and third, two intermediate pressure plates are sandwiched. These are of high quality steel, and have gear teeth upon their external diameter. They slide within an internally toothed steel outer casing, which is bolted to the engine flywheel.

A cover assembly of typical Borg and Beck design

is attached to the rear of the outer casing. It contains the main pressure plate, of malleable iron, which is applied by six thrust springs. The springs are located in cups to keep them from lateral distortion due to centrifugal force, a fruitful source of clutch slip at very high revolutions. In addition, the forged steel withdrawal levers carry bob weights, to give increasing centrifugal assistance as the speed goes up.

It will be understood that the flywheel, the two intermediate pressure plates, and the main pressure plate, form the driving members of the clutch. When the main pressure plate is withdrawn, by depression of the pedal, the other plates, driving and driven, are free to slide out of engagement. In practice, the clutch frees completely, and no difficulty is experienced in meshing the first speed pinions silently.

In order that the clutch shall be constant in action, it is necessary that the heat generated shall be readily dissipated. Reference to the illustration will show that the heat path from the working surfaces to outer casing is exceptionally short and direct, and the latter part is pierced for ventilation. The small diameter allows the size of the flywheel and bell-housing to be reduced if desired, and so the new clutch gives opportunities for weight reduction, quite apart from its own lightness.

Few people realize quite how much the acceleration of a car may be marred by the failure of the clutch to grip instantly and firmly after a gear-change. As a consequence, the triple-plate type will, in many cases, confer a surprising improvement in lap times. On the other hand, some gearboxes which have been adapted for racing are barely adequate for the power which they have to transmit, and only owe their survival to incipient clutch slip. Without this "cushion", the teeth are unlikely to survive, so manufacturers would be well advised to check the rest of the transmission line when they install the racing clutch.

As is only too well known, the difficulties which face the would-be builder of racing cars in this country are enormous. It is, therefore, excellent that, at least in the clutch department, he need have no more worries. Here is a component that is built for the job, and which will operate safely at far higher speeds than any current engine can attain.

SUCCESS FOR 20-YEAR OLD

H. N. Astley (1933 Alvis) Wins Lanes A.C. Night Rally

THE Lancashire A.C.'s Night Rally, held on 5th/6th December, attracted a fine entry of 85, of which 77 were sent on their 200-mile route from the Rialto Car Park, Blackburn, by Mr. H. Porter-Hargreaves. This route, given on a detailed sheet, took competitors over main and secondary roads and, to quote the foreword of an excellently-produced programme, "There will not, however, be any rough stuff or chassis-breaking sections, metalled roads being the order of the night throughout the rally".

Competitors were called upon to maintain various averages over different sections and three time checks were taken *en route*, roughly at 30, 100, and 150 miles. The fastest average was given between the start and the first time check, when 28 miles per hour was stipulated, this also being the speed to be maintained between Bainbridge, where a time check was taken, and

Thoraby. Two periods of 24 miles an hour were imposed, while extra care was necessary by competitors when map references were given as locations.

Altogether a very interesting route which, although it had to be studied, nevertheless could be followed, as is proved by the number of people who negotiated it!

The L.A.C. officials had telephone messages coming in all the night with results as they were known, and it was not long before the news arrived that K. Brunton had damaged his Triumph in collision with a non-competing vehicle. Fortunately no one was hurt. Then it was known that J. D. Waddell had broken a front axle on his Morgan. It was not a good night for J. Wishart either, for he, too, met trouble at Lothersdale, some 55 miles out, and the Bristol was in no condition to continue. Apart from these incidents a fairly

trouble-free night was experienced (except, of course, for all those little things that always happen in even the best-regulated events!).

With results being sent in by phone and a staff of officials waiting to receive them, the final results were known very soon after the last man came home (and here the programme might be quoted again) "... to enjoy the ham and eggs, etc., which will be awaiting them at breakfast time".

WILSON ROGERS.

Results

J. H. Whittaker Perpetual Challenge Trophy: H. N. Astley (1933 Alvis); 2, J. W. Waddington (Jowett); 3, Mrs. Ann Hall (M.G.). **First Class Awards:** C. L. Kims (Ford); W. G. B. Allen (Morris); R. Hebden (M.G.); G. Bradley (Vanguard); E. S. Sneath (Morgan); R. H. Pickles (M.G.); R. White (M.G.); J. R. Hall (Morris). **Second Class Awards:** J. Beardsworth (Citroën); J. A. Roberts (M.G.); K. H. James (Morris); J. R. Hindle (Sunbeam-Talbot); A. C. Spencer (Vauxhall); Mrs. R. Beaumont (M.G.); J. H. Davies (Triumph); J. S. Marples (Vanguard). **Coupe des Dames:** Mrs. Ann Hall (M.G.). **Novice's Award:** R. H. Pickles (M.G.). **Old Favourite's Award:** H. N. Astley (Alvis). **Team Award:** Roberts, James and Waddington.

THE FLY

Aston Martins Prepare Their

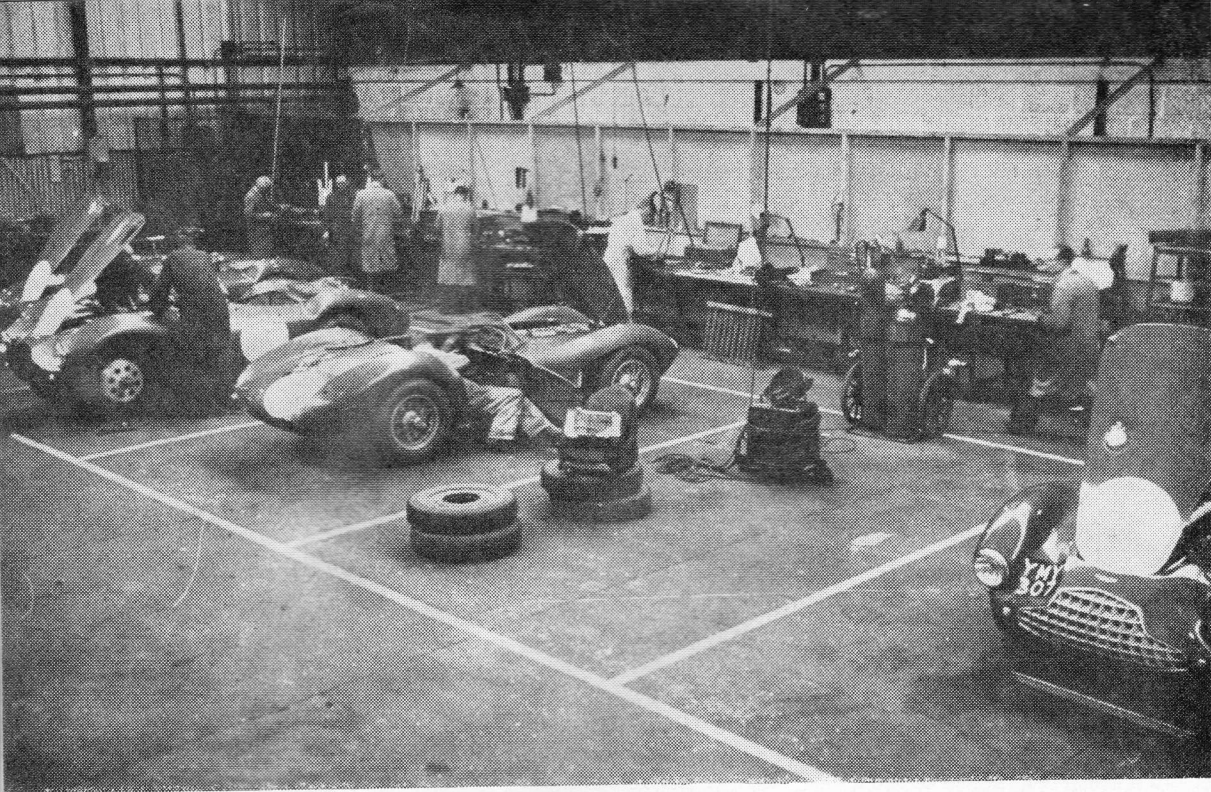
By

GREGOR GRANT

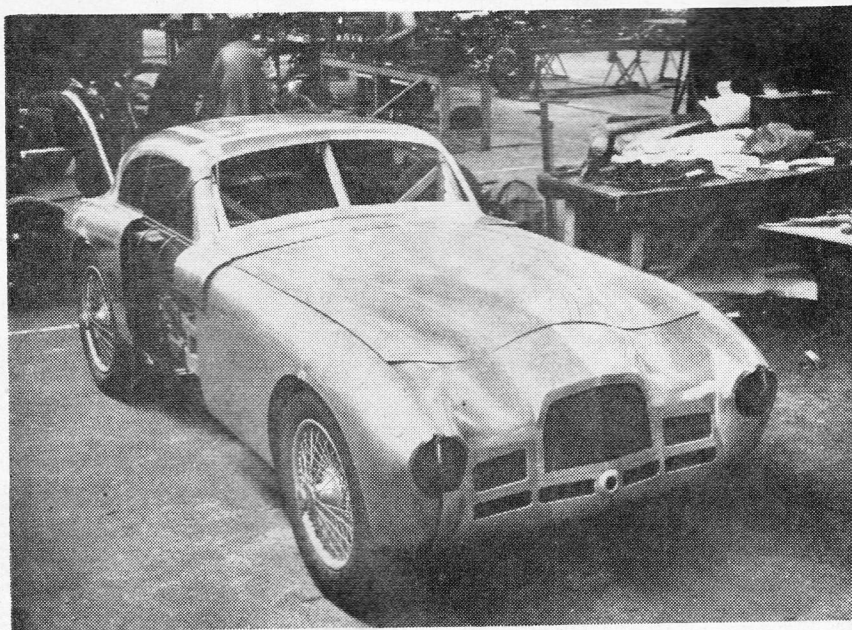
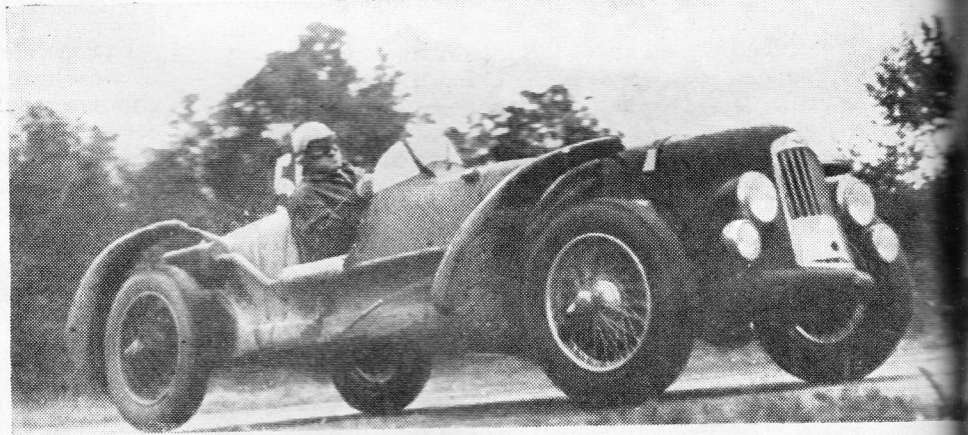
1953: (Left) Final touches being given to the team of DB3S Aston Martins just before being shipped to South America.

★

1948: (Below) Leslie Johnson at Spa with the winning 2-litre car, from which the DB series was evolved.



ON what used to be Hanworth aerodrome is a group of buildings which house some very important machines. For at Feltham, Middlesex, are the works of the Aston Martin and Lagonda divisions of the big David Brown group of companies. The very fast DB3S sports racing two-seaters are challengers for the World's Sports Car Championship in 1954, and the programme of International races for the factory cars starts in January with the 1,000 Kilometres event at Buenos Aires, and then the 12 Hours race at Sebring, Florida, in March.



1949: First of the DB cars in course of construction for Le Mans. The body shell and panelling has just been fitted to the light-gauge steel superstructure. This machine had a 4-cylinder push-rod engine of 2-litres, but a third car was fitted with a 2.6-litre "six".

When one sees these handsome cars, whose appearance does not resemble any of the widely-copied Italian makes, one feels that the late Lionel Martin would wholeheartedly approve of the modern bearers of that famous name. Martin believed implicitly in racing as a means of developing production cars—just as David Brown does today.

It was in 1913 that Lionel Martin built his 1½-litre car, using a Coventry-Simplex engine in an Isotta-Fraschini chassis. This little machine was very prominent at the early Aston Clinton hill-climbs, and when the Bamford and Martin concern began building cars in the early 1920's, Lionel named the first car the Aston Martin—a name that has never ceased to be associated with motor racing.

In 1947 Mr. David Brown took control of Lagonda Ltd., having already acquired Aston Martins. This was to have an interesting sequel. The late "Jock" Horsfall had a great

WYERS FROM FELTHAM

DB3S Sports-Racing Cars for a Strenuous Programme of Races in 1954

deal to do with the development of the earlier 2-litre cars, and, indeed, the line of very successful DB cars sprang from the machine with which Horsfall and Leslie Johnson won the 24 Hours Race at Spa in 1948.

It is said that, after this race, Johnson and John Eason Gibson sketched the outline of a "hard-top" Aston Martin on the back of a lap chart, and showed it to David Brown as a suggestion for a new car!

It will be recalled that the modern-style Aston Martins made their first appearance at Le Mans, in 1949,

remarkable road-holding by running away with a sports car race. The marque was less fortunate at Le Mans, when none of the three team cars finished—a great turn-up from 1951, when all five of the DB2s entered ran like clockwork till the end.

Since Le Mans, the DB3S has been outstandingly successful. Reg Parnell won the B.R.D.C. British Empire Trophy Race; Parnell and Eric Thompson repeated the Collins/Griffith Goodwood victory in 1952 with the DB3; the last-named

pair also won the Tourist Trophy, and Parnell led a 1-2-3 victory at Silverstone in the International sports car race.

The cars are carefully assembled at Feltham from components made within the David Brown group; Chief Development Engineer and Competitions Manager is John Wyer, whose assistant is Brian Clayton. Wyer controls a team of skilled mechanics and fitters whose passion is—Aston Martin. The main racing and experimental section is contained in a converted aircraft hangar, and near the service department is a well-equipped test house, with a couple of Heenan and Froude dynamometers and all the paraphernalia essential to the building up of racing power units. It is here that Jack Sopp and his men attempt to disprove the theories of the drawing office staff—or vice versa.

To cope with an extended racing programme, the test shop is being considerably altered, and the dynamometers are being contained in separate bays. With two engines being revved in an open shop, it is a trifle difficult for operatives to hear their own particular units—hence the separation of the test-beds.

All testing is carried out under John Wyer's supervision. Normally, Snetterton is the venue, but the Avon tyre people often arrange for tests to be done at Castle Combe.

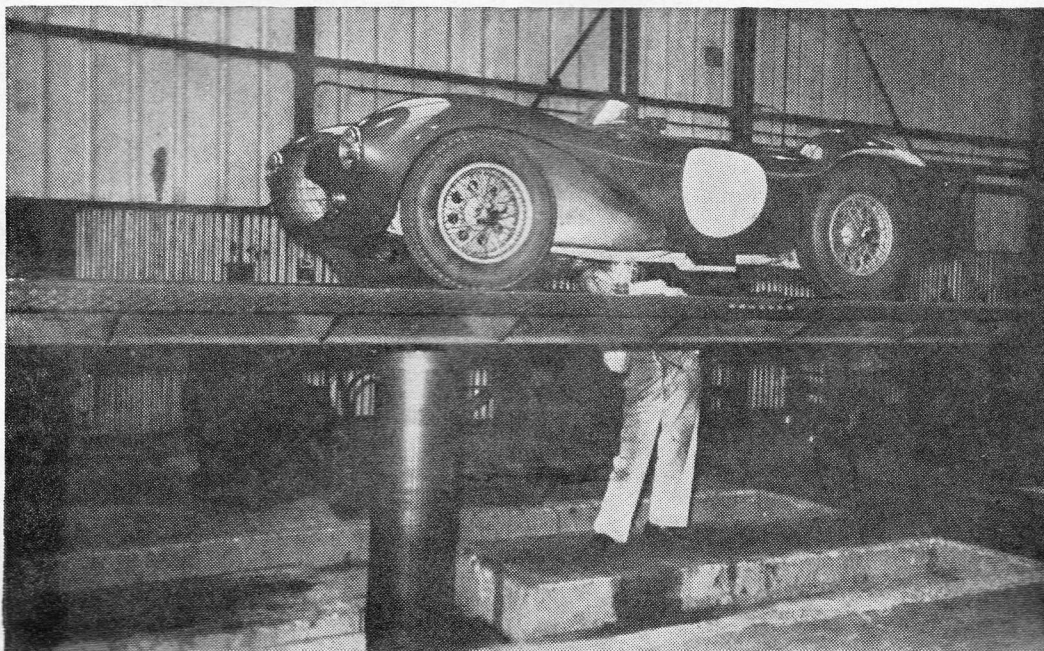
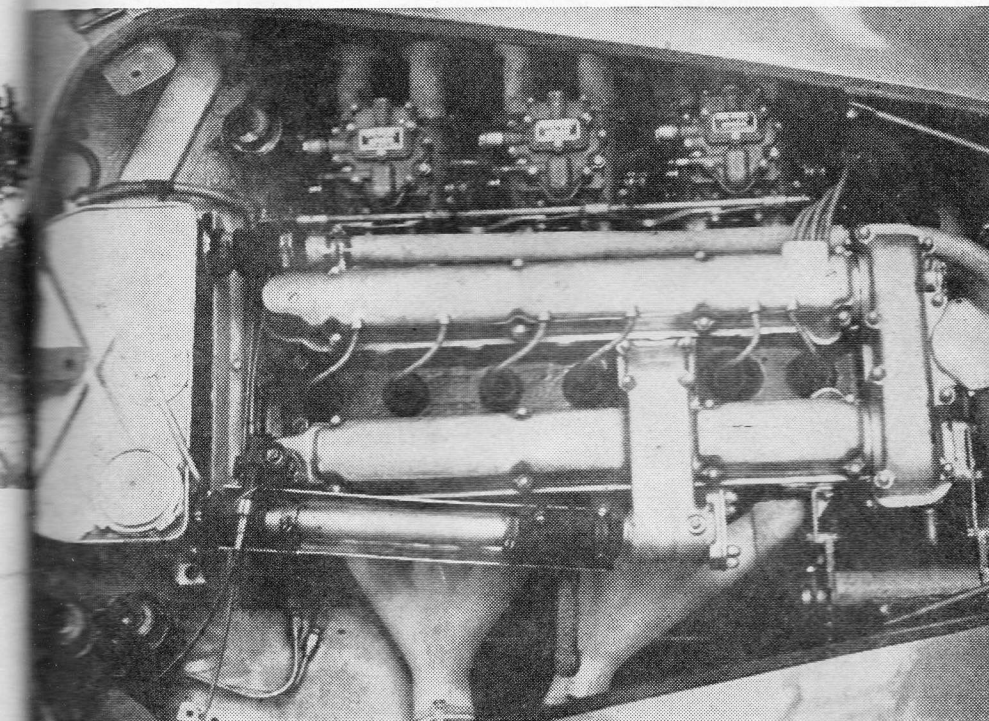
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POWER PLANT: (Left) Latest version of the twin-o.h.c., DB3S Aston Martin engine with double-choke Weber carburetters. The two supply tanks on the offside are for the hydraulic brakes, whilst the nearside one is for clutch operation.

RAMP VIEW: (Below) Fred Stattock gives a car a final look-over before it goes out on a short test run.

with two cars powered by four-cylinder, 2-litre, push-rod engines, and the third having a new twin-o.h.c. six-cylinder unit of 2.6 litres, developed from an engine designed originally by W. O. Bentley for the post-war Lagonda. It is this power unit, considerably modified and enlarged to 2.9 litres, which is used in the very rapid DB3S cars of the present time.

The DB3S was, of course, developed from the DB3 which Lance Macklin drove in prototype form in the 1951 T.T. First appearance of the "S" was at Charterhall, Scotland, in May, 1953, when Reg Parnell demonstrated its speed and

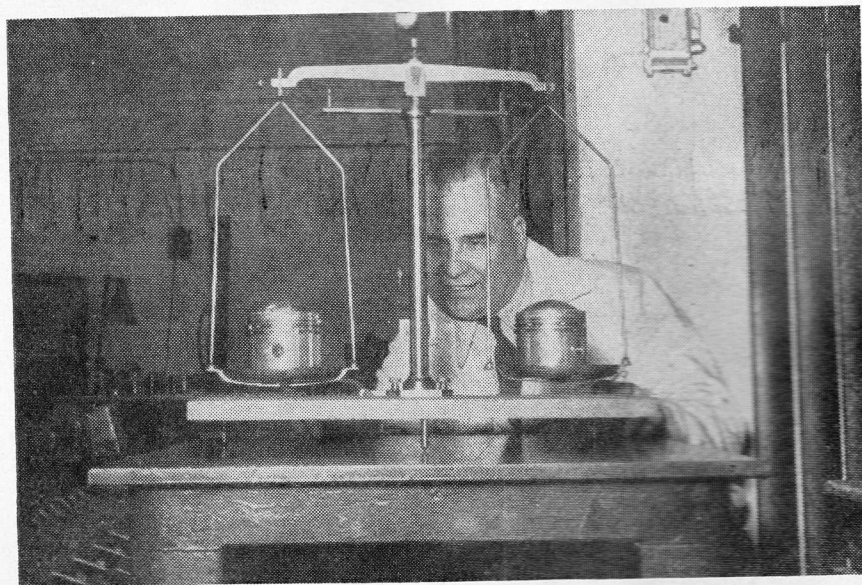




Eric Hind "miking-up" a ball-race housing on a de Dion tube from a DB3S.



Tug Wilson balancing a Borrani light-alloy racing wheel and Avon tyre.



(Above) Engine-tuning expert Jack Sopp carefully balancing a pair of Hepolite racing pistons.

Much of the actual testing is carried out by Roy Parnell, who is on the staff at Feltham; he is, of course, Reg's nephew. However, Peter Collins does a great deal of proving under racing conditions, and Reg Parnell is also often consulted.

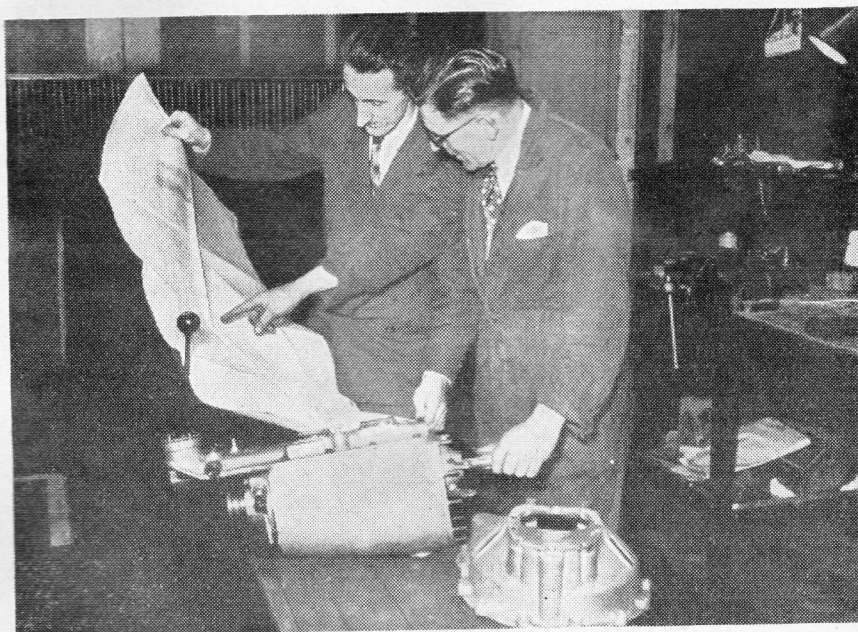
Now, as regards the cars themselves; naturally there are many minor modifications from the 1953 machines, but the chief difference is the use of outboard brakes at the rear on all cars, unlike the prototype which had "inboards". These brakes are Girling hydraulic, and two leading shoes are used at the front; Mintex brake linings are fitted as standard.

The chassis frame is very similar to that of the DB3, but, at the front the tubular side members are slightly "kinked", and entirely different engine mountings are utilized. Piston-type Armstrong dampers control the trailing-link front suspension, and telescopic units are used at the rear. Transmission is taken

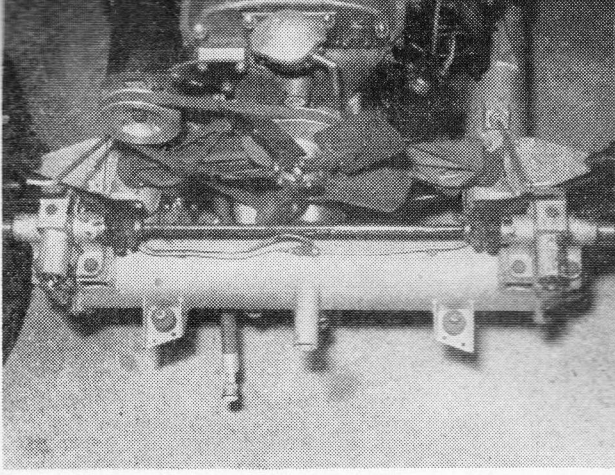
through a four-speed David Brown gearbox via the latest-pattern, hydraulically-operated Borg and Beck three-plate clutch. The 32-gallon rear tank is of Delaney-Galley manufacture, as also are the oil and radiator header tanks. Electrical equipment is by Lucas, and the centre-lock Rudge wire wheels are of Borrani manufacture.

Dimensions of the six-cylinder engine are 83 mm. and 90 mm. (2,922 c.c.). Apart from valve springs, timing chains, and the Hepolite pistons, the entire engine unit is built by the David Brown group. Carburation is supplied by three double-choke Weber instruments; the two, three-branch exhaust manifolds converge to a Servais, straight-through silencer.

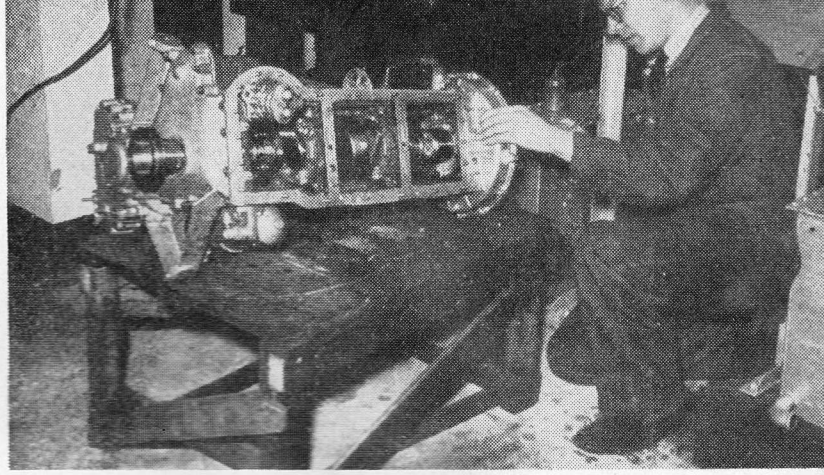
The three team cars, plus the prototype which will be used as a practice machine, were loaded on board ship last Monday morning for



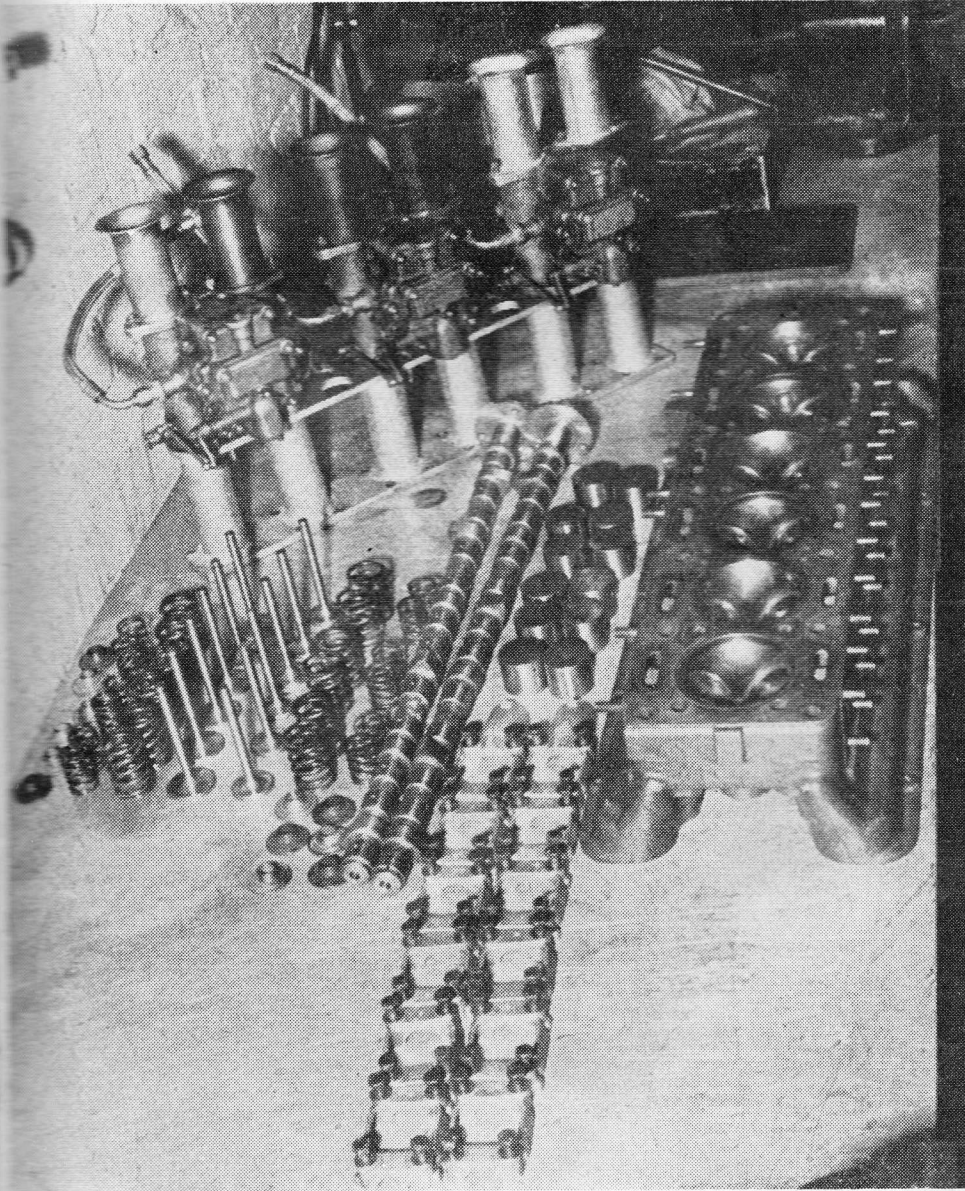
Brian Clayton, John Wyer's assistant (left), discussing a clutch modification with Fred Lown. Wyer was on his way to Casablanca when these pictures were taken.



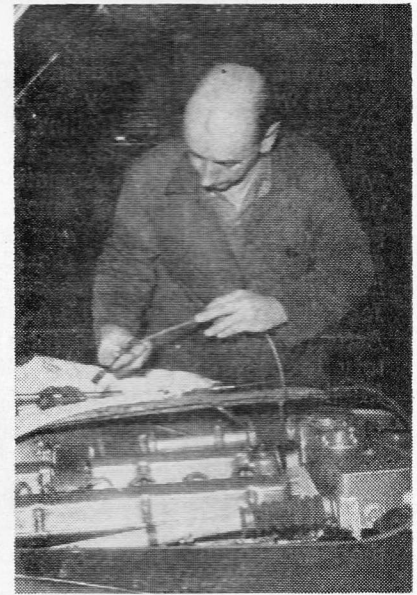
Front suspension of the DB3 series is the well-tried trailing-link system used successfully for several years.



George Evans building up a new engine ready for testing on the dynamometer. The circular main bearing supporting housings are clearly seen.

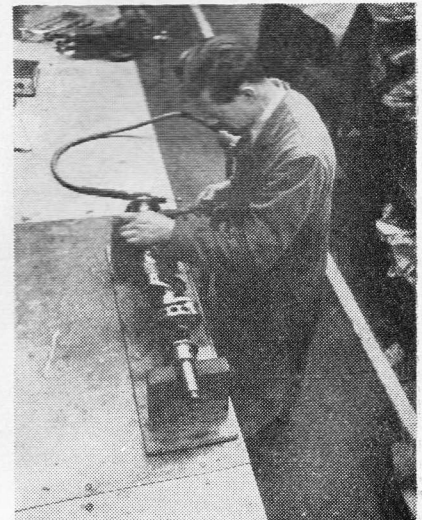


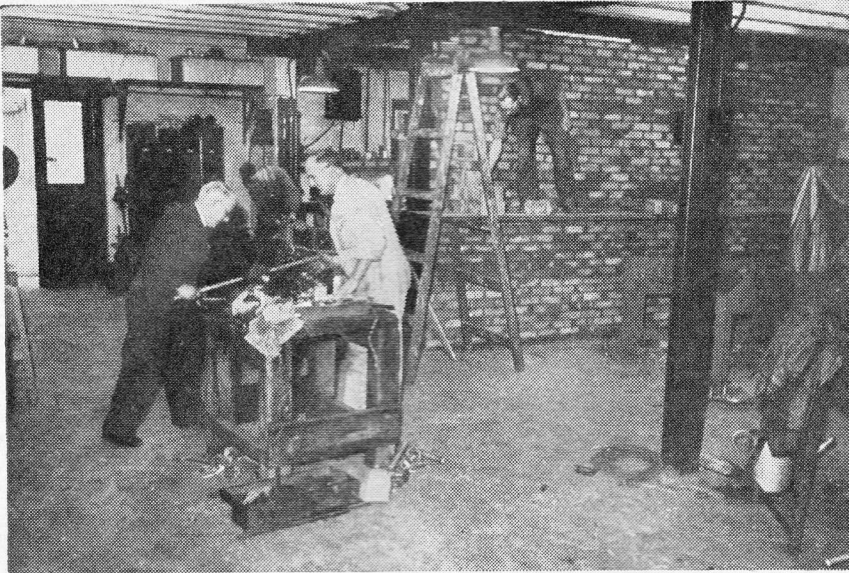
Top-end: Cylinder head, camshafts, valves, springs, tappets, bearings and Weber carburettors on the bench ready for assembling in a new DB3S engine. A great many man-hours by skilled technicians go into all Aston Martin components.



(Above) Jack King carrying out a throttle control modification.

(Below) Tony Findlater polishing a crankshaft prior to crack-testing.





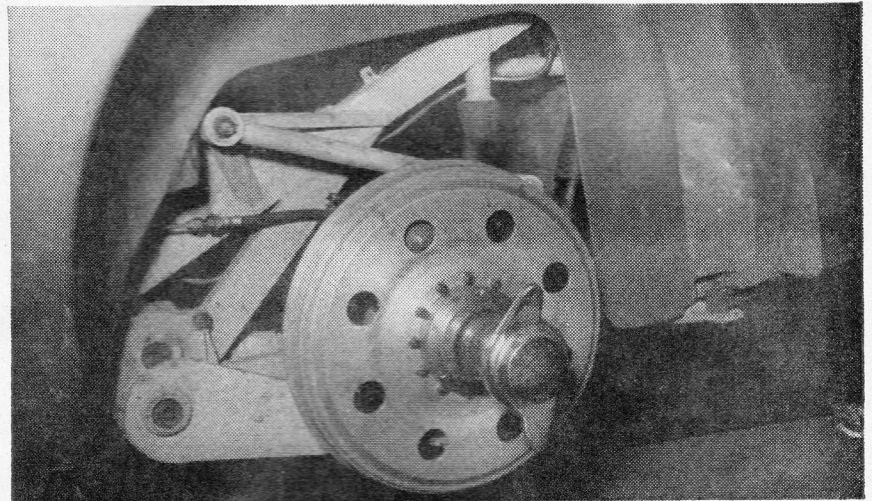
Extensive alterations are being carried out to the engine test-house at Feltham, ready for a busy racing programme in 1954.

bered that last year the DB3 cars put up a wonderful show at Sebring. Undoubtedly the Feltham folk are out to maintain the prestige of British automobile engineering with those very workmanlike examples of the DB3S.

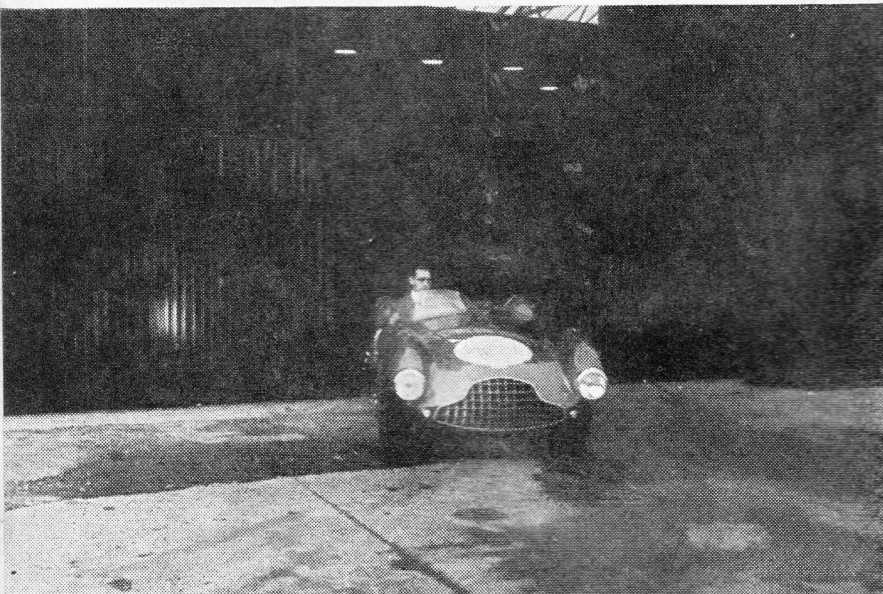
However, Aston Martins are progressive people, and even their very attractive DB3S is by no means the last word in Feltham sports racing car development. Things are happening behind closed doors, and the results will be produced as and when considered necessary to the maintenance of a fine motor racing tradition!

transportation to the Argentine. The drivers will follow later by air; these are Reg Parnell, Peter Collins, Roy Salvadori and Pat Griffith; car No. 3 will be handled by two Argentinian drivers, and probably by American pilots at Sebring. John Wyer will, as usual, be in charge of the team assisted by mechanics headed by Jack Sopp. After the U.S.A., the Astons will be returned to the factory to be prepared for the Mille Miglia—and then Le Mans, where it is expected that Eric Thompson will rejoin the team.

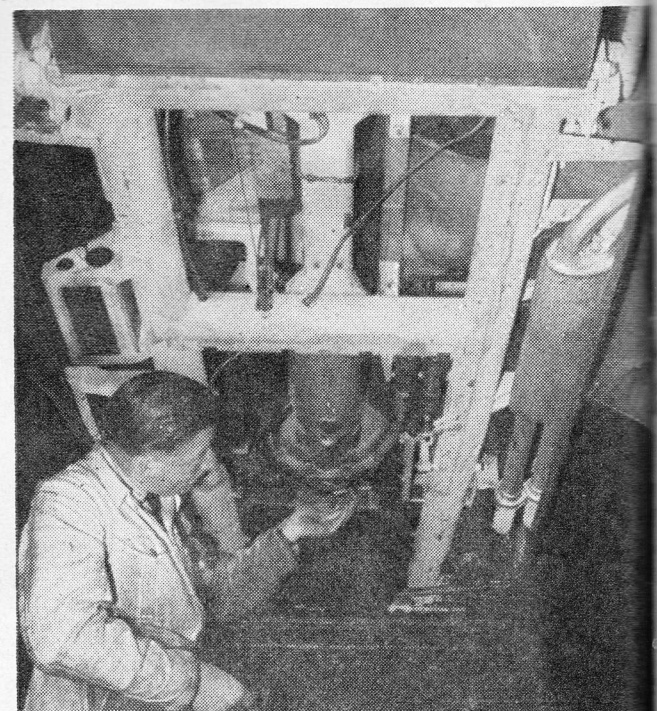
Naturally the good wishes of all British enthusiasts go with Aston Martins on their second venture in the New World. It will be remem-



Latest-type outboard rear brakes on the DB3S, as used by Reg Parnell in the 1953 T.T.



(Above) Roy Parnell taking a DB3S out for a short test-run.



(Right) Dick Green checking up with a car on the ramp.

FROM F2 TO SPORTS-RACER

Nuckey's Engine from Crashed Single-seater Used in Attractive Two-seater

DESIGNED and built by Bernie Rodgers, a sleek-looking sports racing machine will be raced next season by Rodney Nuckey. A feature is its light weight which (dry) is said to be 11 cwt. Performance should not be lacking, for the car is powered by the racing Bristol 2-litre unit salvaged from the car which Nuckey unfortunately crashed at the end-of-season Snetterton meeting. A replica of this very attractive car is planned for R. D. Biss, the F3 driver.

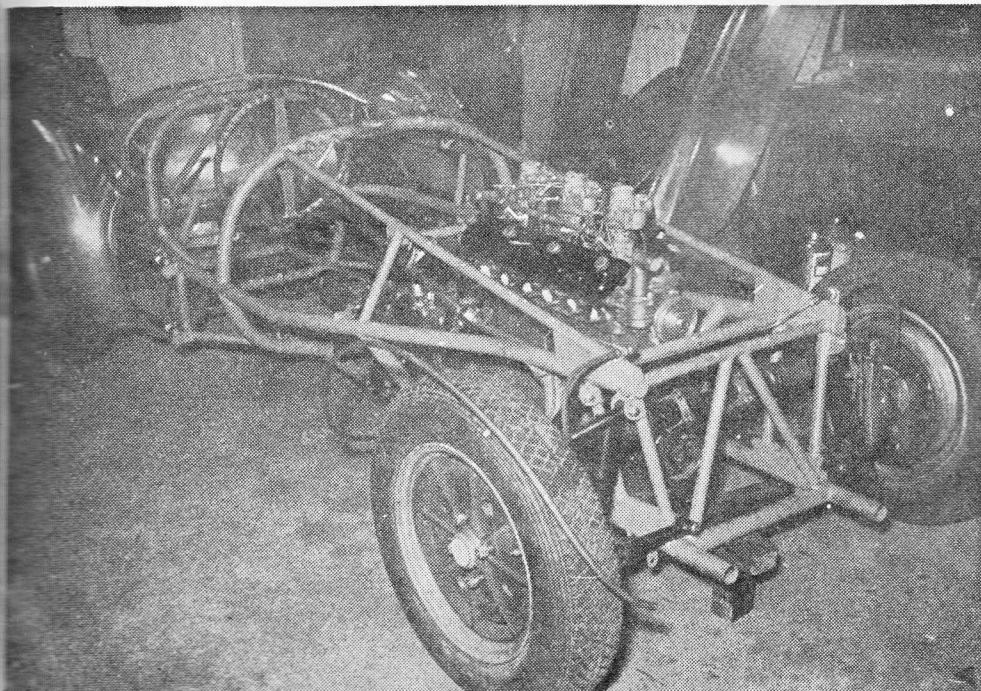
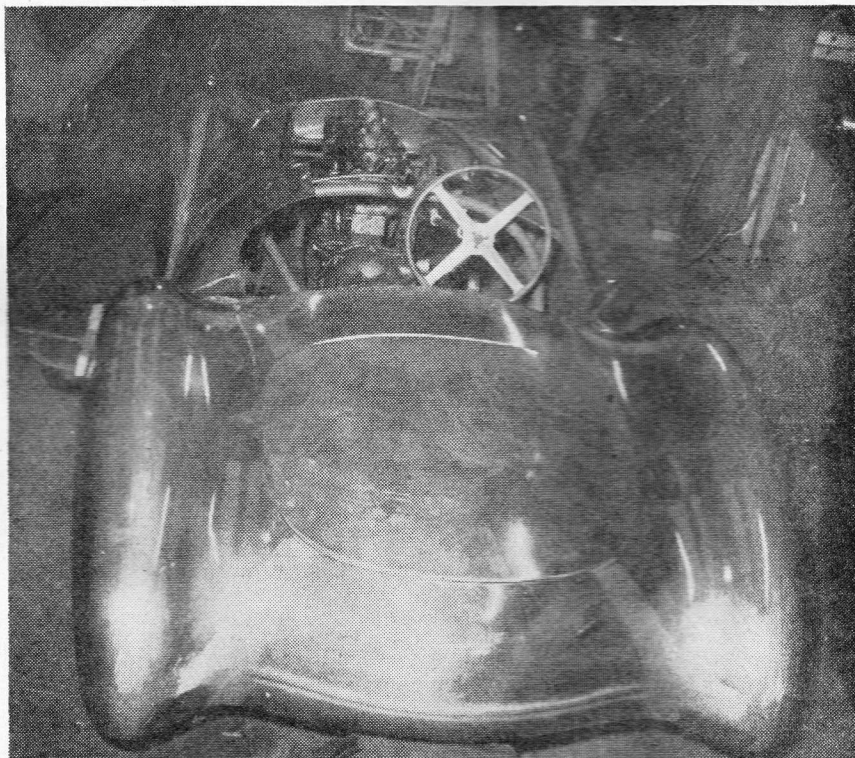
Rodgers has cleverly made use of the main frame tubes to act as a superstructure for the light-alloy body. Front suspension is by a low-placed transverse leaf loosely-shackled spring and double wishbones, controlled by telescopic dampers. At the rear a de Dion axle is used, with twin-tube radius rods. In this case, torsion bars are employed. The hydraulic brakes are practically identical to those used on the Cooper F2 car, with two leading shoes. Cooper-type alloy wheels are fitted temporarily. Transmission is via the normal close-ratio Bristol gearbox.

Workmanship throughout is of the highest class—particularly in the welding of the multi-tube chassis frame. To ensure a good-fitting body, Rodgers constructed a wire mock-up which was used

(Top) Partially-completed Bristol-powered sports-racer being built for Rodney Nuckey.

(Right) Handsome treatment of the rear, with wings merging into the body-shell.

(Below) The chassis frame is constructed entirely from welded-up steel tubes, which also determine the actual body shape.



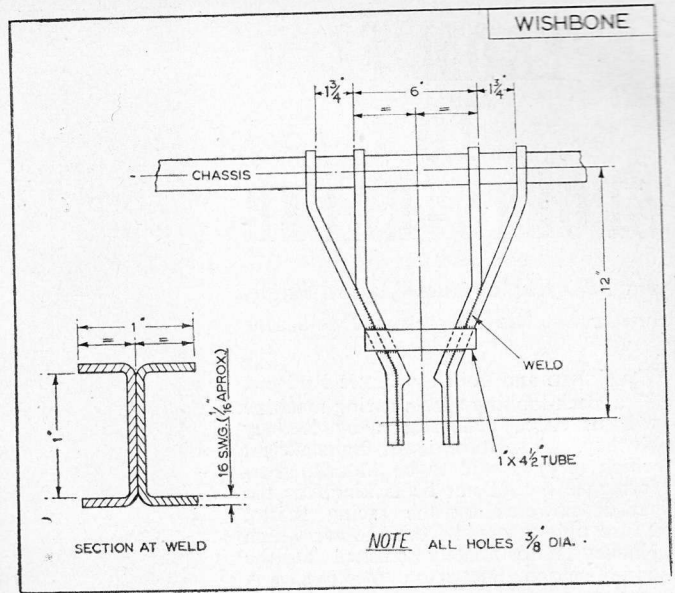
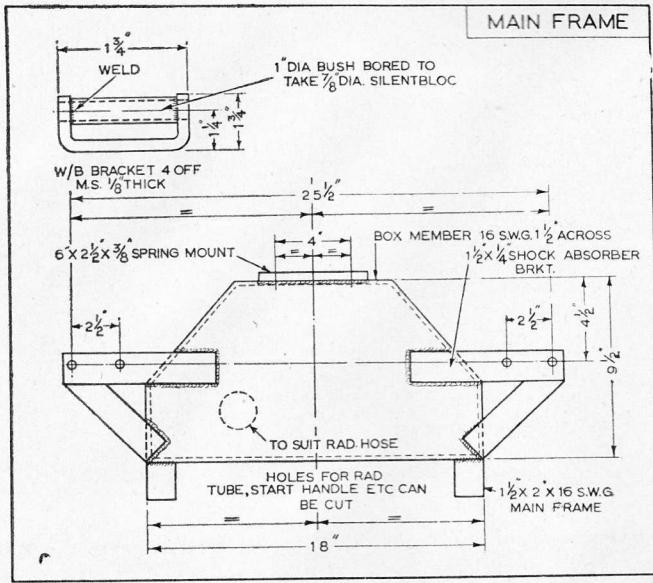
by the coachbuilder to "tailor" the finished shell and panels. A 17-gallon fuel tank is located amidships, and there is a detachable rear tank for long-distance racing.

126 M.P.H. IN RUSSIA

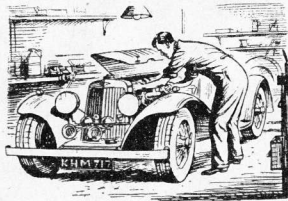
AMBROSENKOV's recent 350 c.c. Russian record with a Svesda car was reported broken recently by a Kharkov-built GMTS driven by Lorent, at a claimed speed of 126.38 m.p.h. This figure was achieved over a timed 5 km. stretch of the Kharkov-Simferopol highway.

ARGENTINE 1,000 KMS.

BESIDES Ferrari and Ecurie Ecosse Jaguar participation, official Porsche and Borgward entries from Germany are expected for the Buenos Aires 1,000 km. race in January. Works Lancias may also compete.



WORKSHOP CORNER



THE need for a practical but simple independent front suspension system is one felt by many Austin Seven special exponents. The snags to be encountered in evolving i.f.s. are numerous—and the builder impatient to get his car on the road may find himself having to put up with over- or under-steer, or a roll centre too high or too low. The system I have used, and describe herewith has, in fact, been in daily use for some time, over a considerable mileage and has achieved all I expected from it. I am an engineer by profession but, when building the car, bore in mind the need to make the parts as simple and straightforward as possible.

I.F.S. FOR A "750" SPECIAL
By N. LOCKWOOD

The dimensions in the accompanying sketches of components are not, of course, hard and fast, and may be altered to suit the chassis of the constructor, but provided the basic layout is maintained the result will be worthwhile. My chassis is, in fact, 1 1/2 ins. wide x 2 ins. deep, of 16 s.w.g. mild steel, made in two angles and welded on opposite corners. First the frame for supporting the transverse spring—this is made from 16 s.w.g. steel to the dimensions shown (Fig. 1; above, left), bent and welded in runs of 2 ins. (arc or gas weld). The four brackets, welded from the chassis as shown, are made from 1/8 in. mild steel and incorporate Silent-bloc bushes throughout.

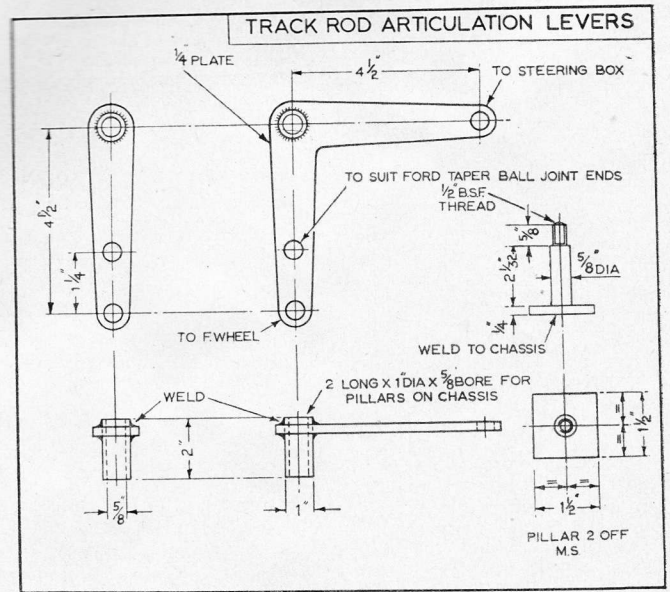
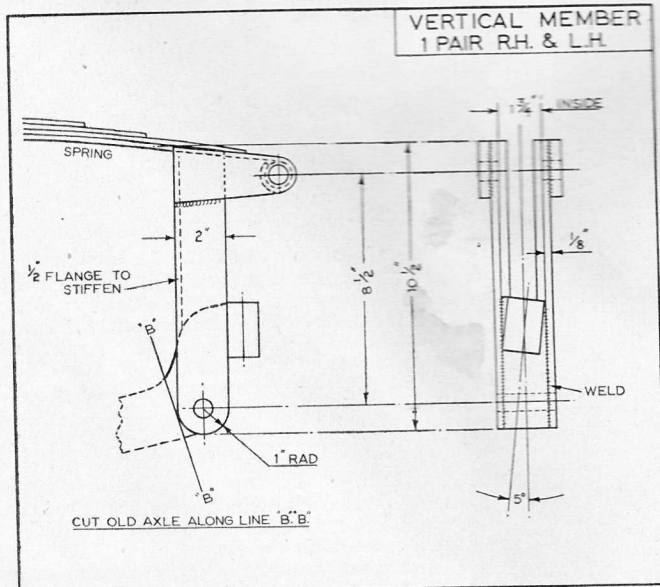
For the wishbones (Fig. 2; above, right) we again use 16 s.w.g. mild steel, guillotined to strips 1/2 in. wide and bent or folded into channels. The profile of the wishbone in plan form should be drawn on a smooth, flat surface, and the four lengths of channel bent to this, two each

side, back to back. After welding (or brazing) in runs to fasten together, braze or weld on a length of 1 in. o/d tube, to the dimensions shown. This tube is used for the rubber bush for the Luvax or Girling-type shock-absorber used. The spring in my car actually started life on the rear axle of an Opel, alternate leaves being removed.

Now the vertical members; the original Austin axle was stripped and the ends cut off (Fig. 3); from 1/4 in. mild steel plate four members were cut, and the axle ends welded in place. It is most important to give the axle end a 5 deg. castor angle in relation to the vertical member (Fig. 3, r/h.).

We now have the wheels suspended on the spring and w/b assembly, so the question of steering next arises. I used the original Austin steering box and by means of a bell crank and articulated track rod (Fig 4; below) evolved a layout which, unlike many systems used by

(Continued on opposite page)





(Left) D. J. Ashford, who was placed sixth in the Torbay M.C.'s Torbay Rally on 5th December, takes his Jowett Javelin between two pylons in Test 5, on the sea-front.

TORBAY MOTOR CLUB RALLY

LAST year the Torbay Motor Club held its first Torbay Rally as a closed-to-club event; the rally was a success, and it was decided to hold a closed invitation event in 1953. This duly took place on Saturday, 5th December, with two starting points, Torquay and Taunton, the first cars leaving Torquay at 8.31 a.m. and Taunton at 9.09 a.m.

The organizers of the event decided to have manned and unmanned controls, due to the marshal problem. Each competitor was given a rally card on which the controls, both manned and unmanned, were numbered and lettered respectively. Both starting points were given, converging on Broadclyst. No competitor was aware of the route to follow until he checked in at the preceding control, where he was given the map reference of the next. At unmanned controls the map reference with code word was attached to a stake, giving details of the next reference.

There were 51 entrants, eight of which were non-starters. After converging at Broadclyst, the competitors were directed to an unmanned control at Labbets Cross, whence they went to Winkleigh, a time control. From Winkleigh they drove to Chagford, where Test 1 was held; this consisted of a stop-and-restart test. Some of the better times recorded here were: E. H. Dennis (H.R.G.), 11.4 secs. Dr. J. T. Spare (Plus Four Morgan), 12. R. Davis (Ford Zephyr), 12.4. T. G. Cunane (Jowett Jupiter), 12.8.

From Test 1 the route took competitors to Hexworthy, where the regularity test was held in two parts. This consisted of two half-mile sections of road, the first fairly level and straightforward, and the second very steep and twisty, the maximum time allowed being 120 secs. on each section. Many competitors fell into the usual trap of putting their foot down on the first section and then finding they were unable to equal the time on the second section. After taking the first part of this test, competitors went via Drumbridges, Haytor, Postbridges and Twobridges back to Hexworthy time control, for the second part. The

difference in seconds between the two times on this test was added on to the total time of each competitor. The best performance was made by B. W. Fursdon (Renault), who took 120 secs. exactly on each run. Other scores were: J. K. Morris (Morris Minor), 0.8. S. R. G. Jeffreys (Standard 8), 0.8. M. P. W. Britton (M.G.), 1. Dr. J. T. Spare, 1.2. K. D. Evans (Dellow), 1.9.

From here competitors proceeded via Huxham Cross to Totnes, Paignton, and the final control at Torquay. After the final control, they went through three eliminating tests on Torquay sea-front. One consisted of reversing into two garages closely spaced, and then stopping astride the finishing line. The smaller cars managed this with considerable ease, but the larger ones had difficulty in avoiding the numerous drums marking the garages. Best times were: E. H. Dennis (H.R.G.), 24 secs. M. P. W. Britton, 24.6. Dr. J. T. Spare, 24.8. K. D. Evans, 25.2.

The second manoeuvring test gave Dr. J. T. Spare 17 secs., E. H. Dennis, 19 and K. D. Evans, 20.8. It produced some of the most amusing incidents seen on the rally, as the committee, in their zealous effort to make things difficult, had left very little margin for error on the part of the larger cars. Test 5 consisted of a fairly lengthy run between two pylons involving stopping astride a line, reversing along another line, and proceeding at speed to stop astride the finishing line. This was definitely the most interesting test from the spectators' point of view, and quite a large crowd was assembled on the sea-front to watch the proceedings. Many of the entrants had not digested the test correctly, and were heavily penalized. The best efforts were: M. P. W. Britton, 24.2 secs. G. W. Best (Ford), 25. J. K. Morris, 26.4. B. H. Halford (Aston Martin), 26.8.

Results

Premier Award: Dr. J. T. Spare (Morgan); 2, R. Davis (Ford); 3, K. D. Evans (Dellow); 4, S. R. G. Jeffreys (Standard); 5, D. J. Hall (Austin); 6, D. J. Ashford (Jowett).

Team Award: D. J. Hall, M. P. W. Britton and B. J. Gosling.

B.O.C. WELSH RALLY

ONCE again, the Bugatti O.C. chose to go to Tenby for their two-day Welsh Rally on 12th/13th December. Fortunately, the fog which lay over much of the route the previous day cleared in time for the start, at 10.30 a.m. from Evesbatch Court, near Worcester. Each of the 31 competitors was on time at the second control, to enjoy a one-hour lunch stop at the Crown Hotel, Hay-on-Wye, where they and the marshals reinforced themselves with roast beef before proceeding to four special tests on the Eppynt Mountain circuit.

These were a regularity test over three laps of the circuit, the Monte Carlo acceleration and braking test, a reversing manoeuvre, and a hair-raising downhill rolling test on a tortuous one-mile course. C. Tyrer (Jaguar XK 120) and J. W. E. Banks (Bristol) were outstanding in all, but J. Moore (Morgan Plus Four) came close to Tyrer's best time in the acceleration/braking test. E. Wooding (Sunbeam-Talbot) was runner-up to Banks in the rolling test.

The overnight stop, at the Royal Gate House Hotel, Tenby, gave competitors a chance to forget the rally for a while, and to enjoy a dinner and dance, followed by a showing of the latest Esso and Rootes Group films.

Next morning, there were two more special tests at Pendine. First there was a flat-out sprint over a 2,000-yard, dead straight asphalt course, the times being taken at quarter, half-mile and one-kilometre distances. Tyrer again made an excellent showing, as did T. Wright (Austin-Healey) and Shuttler with his remarkable old 4½-litre Invicta saloon. This was followed by an amusing parking test which gave the small cars a chance to get their own back on the big stuff, and the times of Bryant (M.G.) and Cox (Ford Anglia) were as much as 30 secs. below those of the heavy metal.

In the afternoon the entry headed for the finish, by way of a difficult cross-country route which included the rather "Alpine" pass between Brynammon and Llangadock. All but one competitor safely reached the Worcester Brine Bath Hotel, Droitwich, in unpleasantly wet weather.

(Results were published in last week's issue.)

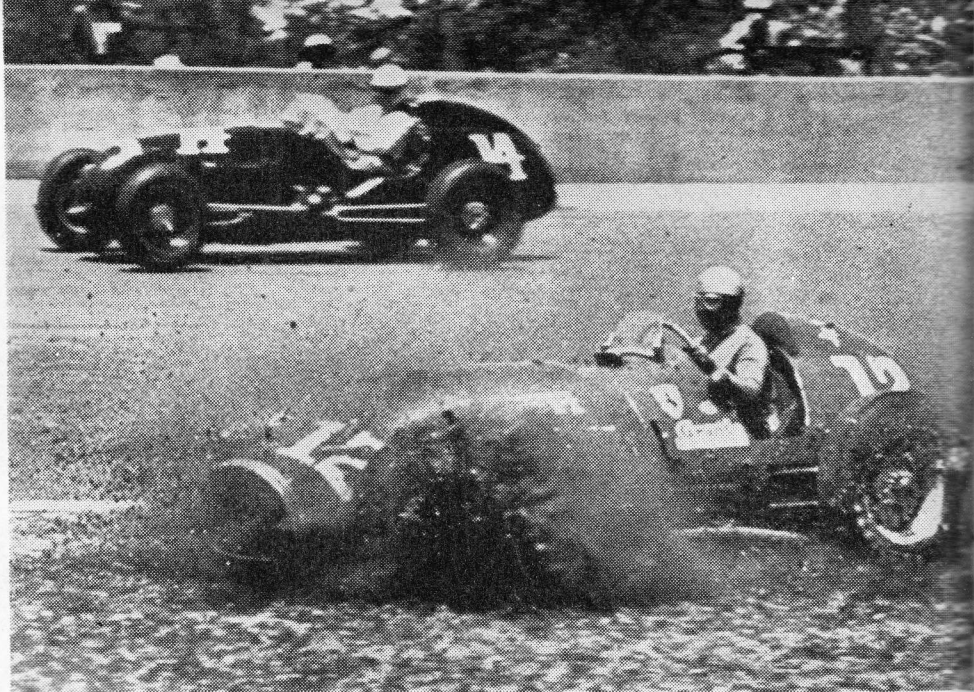
I.F.S. for a "750"—continued

people who should know better, manages to follow the suspension and not to steer the wheels independently of the driver.

It is most important to have a line passing through the centre of the ball joints on the outer track rods parallel with the wishbone. I used Ford 8 drag links for mine, cutting the middle out and welding the joint, thus having right-hand and left-hand thread adjustment for the centre portion of the articulated track rod. To make the track rod follow the rise and fall of the wishbone the Austin steering arms were bent down so that the track rod end portions were parallel to the wishbone centres.



LAST FAILURE: Alberto Ascari's 1952 run in the Formula 1 Ferrari ends in a cloud of dust when a wire wheel broke up under the strain of incessant left-hand cornering.



O! my sons, give heed to the gods of speed,
When they call on you today;
There's a race to run from the starting gun,
'Til the nuts and bolts give way;
And the call to fight is a challenge old,
From the men who dare to the men who're bold.

The exhausts pop impatiently and alien engines roar
A bold defi that you and I have seldom heard before,
A challenge from a land that once on paths of progress led:
The boasting Gaul has heard the call and yearns for vict'ry red.

INDIANA IMPASSE

Seventeen Attempts, Two Wins, is Europe's Modest Score in the Classic Indianapolis 500 Miles Race through the Years

The sturdy Belgian seeks the wreath which you are proud to wear,
The stake is great, he leers at Fate and mocks Death's hidden snare;
The stoic Briton, triumph-bred, by heritage is fit,
To match his strength against your strength, his grit against your grit.

THE above impassioned verses are from a poem "To America's Defenders", published in the journal *Motor Age* in 1913, just prior to the third Indianapolis 500 Miles Race. The poet's efforts did not prevent the "boasting Gaul" from taking the honours, however, for Jules Goux, a singularly modest driver, won in fine style with a 7.4-litre Grand Prix Peugeot, although "America's sons" did their best by taking second and third places, ahead of two more Europeans.

Goux's win for Peugeot, aided, it was said, by six pints of "bubbly" en route, marked the first occasion on which European competitors made the long transatlantic trip to take part in the U.S.A.'s great race. It was the call of the dollar which drew them there; the dollar plus the considerable prestige which went with an Indianapolis victory, and the long history of the "500" from the third race in 1913 to the 36th in 1952 is studded with the efforts of French, German, Belgian, Italian and British makers to get "into the money".

When the Peugeot *équipe* sailed home after Goux's 1913 win, they were some \$25,000—over £5,000 at contemporary value—to the good in prize and accessory moneys. For winning the French Grand Prix—blue riband of racing—at Amiens the same year it is doubtful if they won an eighth of this sum. Since then the prize fund has steadily risen, and with

innumerable cash bonuses from accessory, fuel and oil suppliers, and additional sums for leading the race at set intervals, a victory at the unique 2½-mile brick-paved oblong that is Indianapolis means a fortune for the winning stable. Billy Vukovich, first home in this year's

with Goux and Boillot, plus a smaller, independently entered car driven by Arthur Duray. That other great French manufacturer Delage sent René Thomas and Albert Guyot; two Sunbeams from England went too, drivers Chassagne and the American Grant; Friedrich went with a white Bugatti—in those days a car of German nationality—and Christiaens with a Belgian Excelsior.

That 1914 race proved a bad one for America—and a second triumph for the *tricolore* of France. Thomas (Delage) was the winner, collecting \$39,750 for his six hours' hard labour; Duray's Peugeot was second, Guyot's Delage third. Goux's Peugeot fourth, an American Stutz fifth, the Excelsior sixth and a Sunbeam seventh—six Europeans in the first seven places!

There was a European war on by the time the 1915 race came round, but several Americans had European cars, while Sunbeam managed to get three cars over. Again an *auslander* marque—a

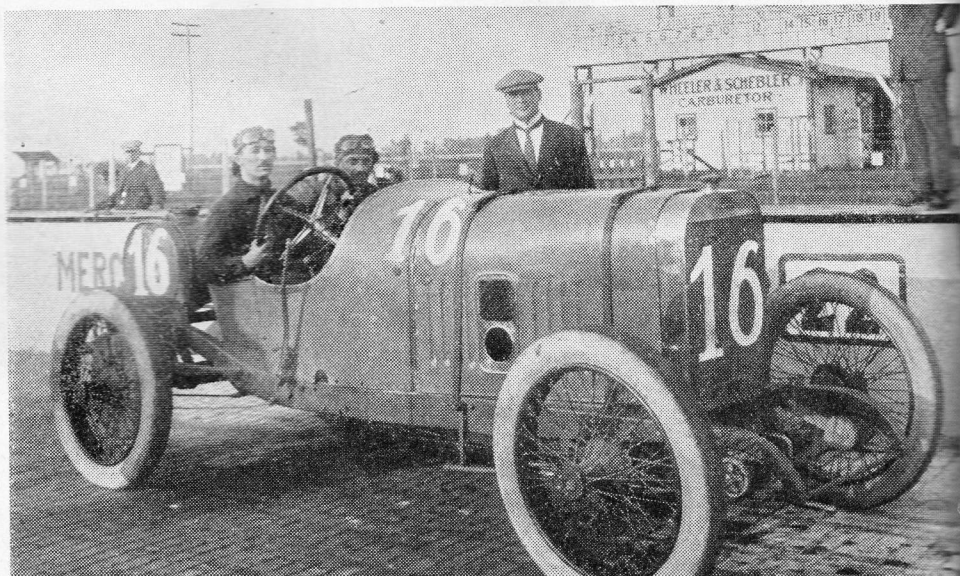
By

C. POSTHUMUS

Photographs by courtesy of Charles Lytle

event, won a sum total of £31,000; placemen right the way down the list do well, too.

Small wonder, then, that all through the years European eyes have been cast longingly at Indiana. Peugeot's pioneer trip in 1913 precipitated a fine rush westward in seasons to follow. They went themselves a second time, in 1914,

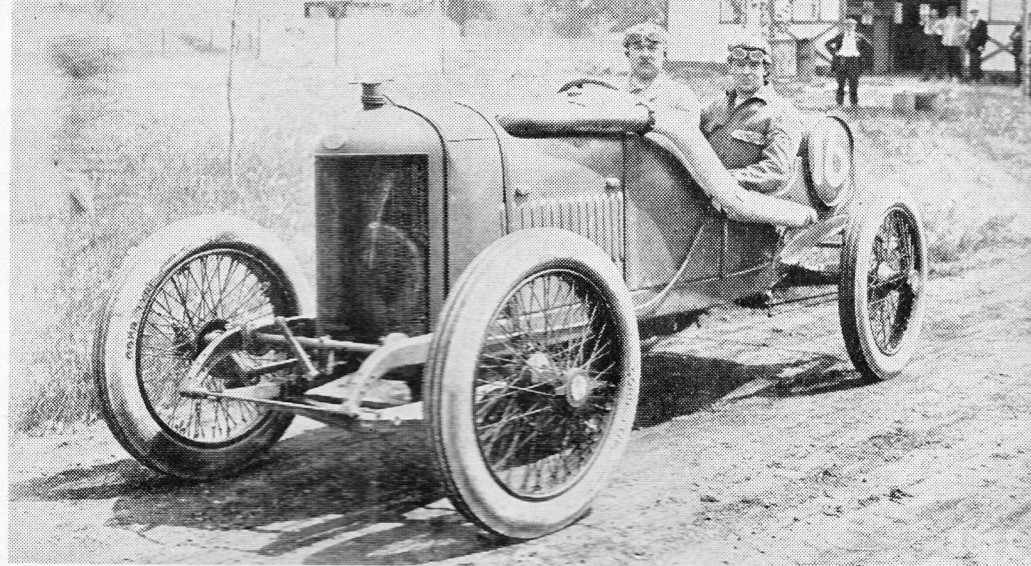


FIRST SUCCESS: The 7.6-litre Grand Prix Peugeot of Jules Goux, winner of the 500-mile race in 1913.

SECOND SUCCESS: René Thomas in the Grand Prix Delage with which he won the 1914 event.

German Mercedes this time—won, but with a home driver, Ralph de Palma, who at last overcame his traditional ill-luck at the "Hoosier Bowl" to take first spot with one of the 1914 4½-litre Grand Prix cars, followed in by Dario Resta (Peugeot). The latter combination proved unassailable the following year, the Italian-born driver scoring a second race win for Peugeot, reinforced by Mulford's third in a similar car. The Belgian Christiaens (Sunbeam) was fourth and Oldfield in one of the 1914 Delages fifth.

Many new American racing machines were now appearing, and the resemblance of some of them to successful European models was most marked. "Howdy" Wilcox won the first post-war "500" in a 1914 4½-litre Peugeot, and third came our old friend Jules Goux, who blew his Peugeot engine up in practice and thereupon installed a Premier unit of very similar design. That year a new make from France appeared, Ballot, who constructed four 4.9-litre straight-eights within the astounding period of 17 weeks. Their efforts were ill-rewarded, for



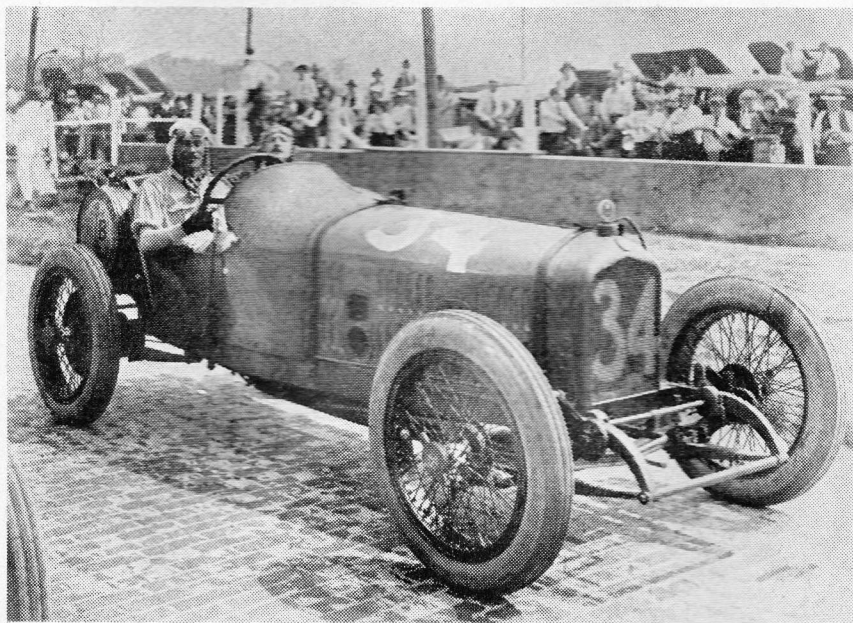
the American wheels they were obliged to use to obtain correct drive ratios collapsed on two of the cars; Guyot, however, secured fourth position and René Thomas tenth, which netted them \$3,500 and \$1,400 respectively.

Ralph de Palma, driving a white 3-litre Ballot, led the 1920 race from 300 to 450 miles, then ran into his

"Indianapolis luck" again and dropped to fifth with magneto trouble. So an American car, Gaston Chevrolet's Monroe, won the "Stakes" from Thomas in another Ballot, two Duesenbergs, de Palma, another "Duesy" and Chassagne's Ballot.

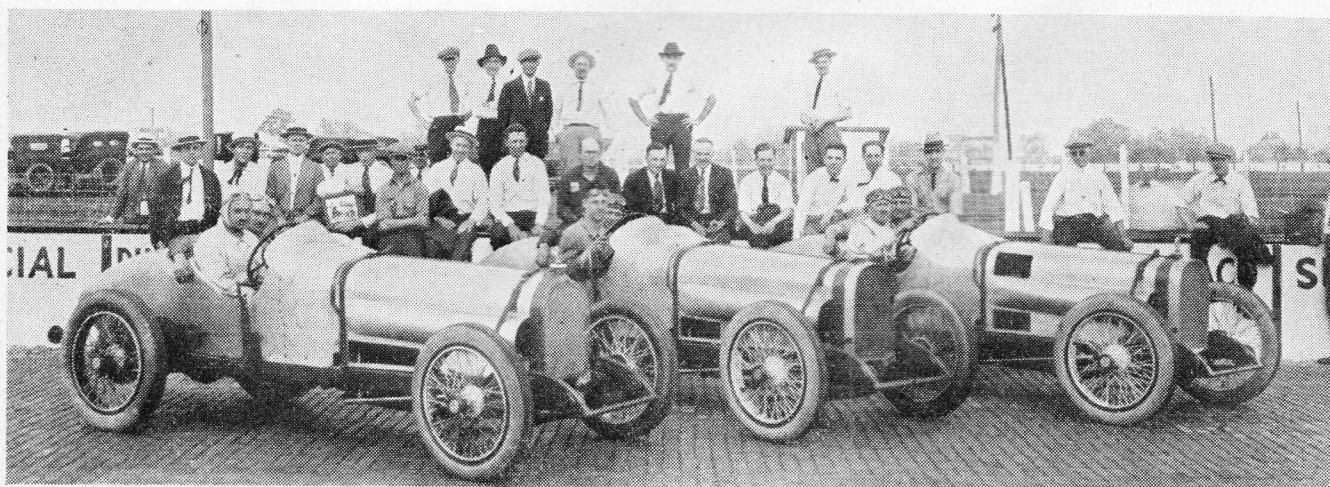
1921, and again de Palma in a Ballot made the running—and again failed to win, this time when a con rod broke after 111 laps. René Thomas and Ora Haibe had 3-litre, 8-cylinder G.P. Sunbeams and André Boillot a Talbot-Darracq, identical save for the radiator. Both the Frenchmen retired and Haibe's fifth was the highest—and only—place occupied by a car from Europe. Clearly the Americans had the technical "know-how" now, and were getting harder to beat every year. Indeed, it was no longer a question of *beating* them, but of keeping up with them, for the Duesenbergs, Frontenacs and other straight-eights were very tough opposition indeed.

Jimmy Murphy, who amazed and horrified the French by winning their great Grand Prix in 1921 with a Duesenberg, used the same car, but with a Miller engine, to win at Indianapolis



BALLOT: (Left) The 1919 4.9-litre Ballots suffered wheel troubles, Wagner's, shown here, crashing when one collapsed.

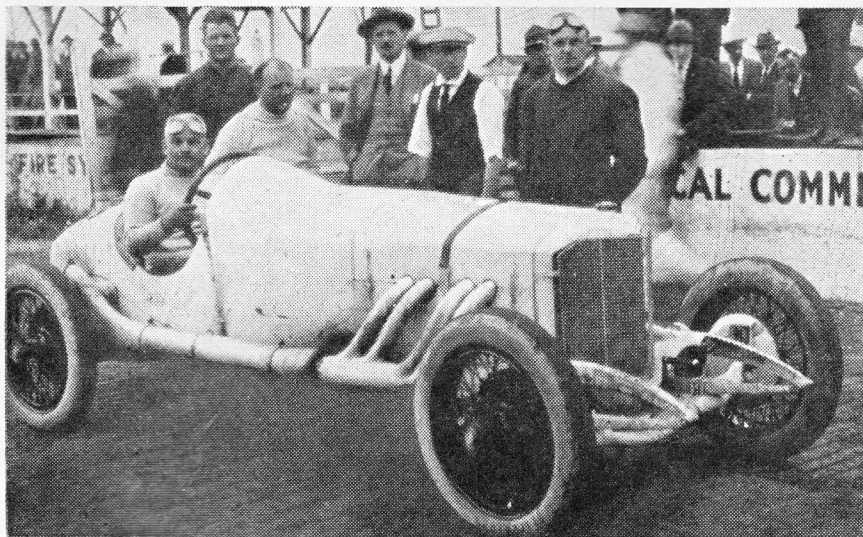
S.T.D.: (Below) Two Sunbeams and one Talbot-Darracq, all basically identical straight-eight 3-litre machines, had little luck in 1921, the only car to finish gaining fifth place.





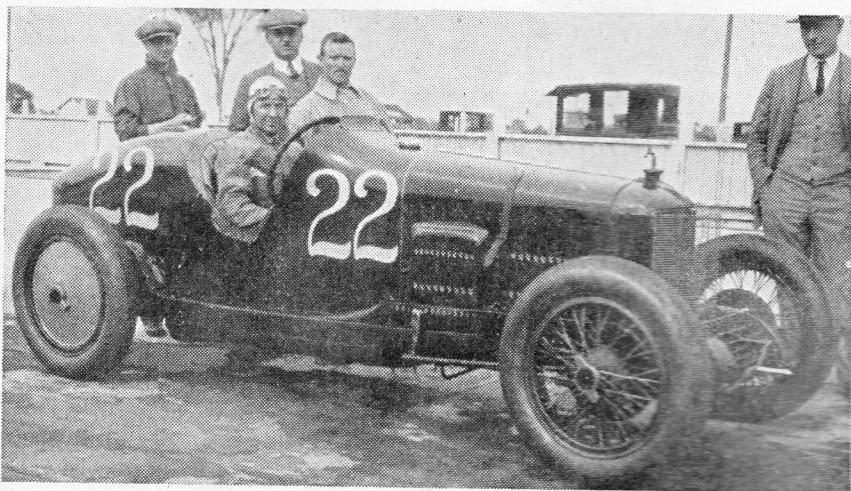
American cartoonist's comment on the Mercedes and Bugatti showing in the 1923 race.

in 1922. Ballot was again the best placed foreign car, Eddie Hearne taking third; Duesenbergs were second, fourth, fifth, sixth, seventh, eighth and tenth; Goux (Ballot) retired, and Douglas Hawkes, who made a sporting lone effort with a



FROM GERMANY: Lautenschlager in the 4-cylinder blown 2-litre Mercedes with which he crashed in 1923. Two other "Meracs" were eighth and 11th.

FROM ITALY: Tenth place was the best Pietro Bordino could manage in 1925 with this supercharged 2-litre Fiat.



—Alfred E. Moss, father of Stirling, and a member of the Barber-Warnock team of special Fords, which had Frontenac heads and a most un-Model-T-like performance. What is more, "Pa" Moss was still running, in 15th place, when Boyer's record-breaking blown Duesenberg crossed the line the winner.

The following year one of Italy's greatest road racing drivers of all time, Pietro Bordino, tried his luck. Prior to Indianapolis he had spent a moderately successful session on the American board tracks with a 2-litre blown G.P. Fiat, fitted with a single-seater body. With this car he achieved 10th place in the "500", despite a break to seek hospital treatment for an injured hand, during which an American driver named Mourre took over the Fiat. Yet even had Bordino been fully fit, he would have been hard put to match the scorching pace of De Paolo's winning

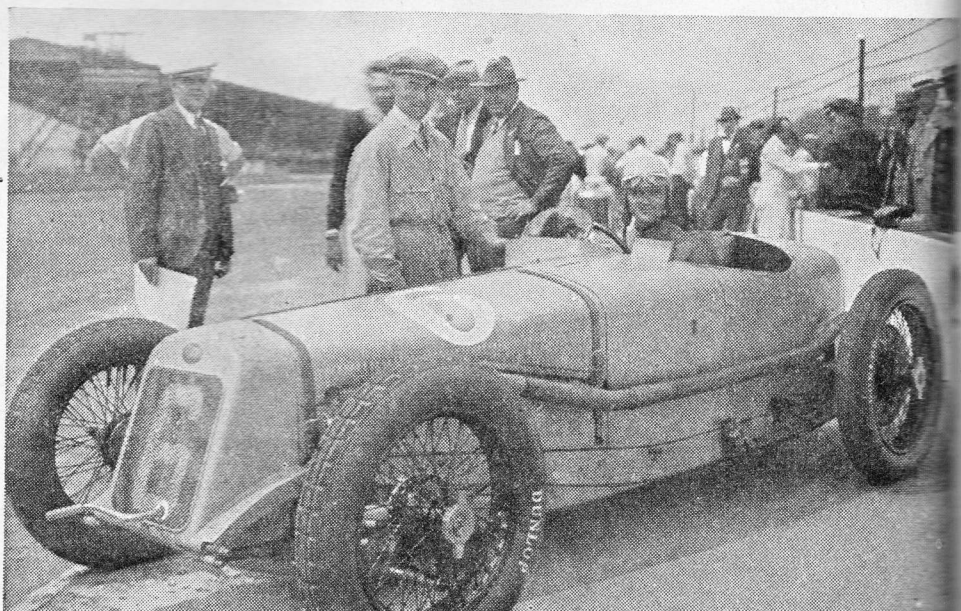
T.T. type, flat-radiator 3-litre Bentley, was still running at the end.

1923 was the first of many Miller years, Tommy Milton winning on one, termed an H.C.S.—the craze for "special" nomenclature, still rife today, had started. Continental interest that year centred on the Mercedes and Bugatti teams. The Germans, introducing the supercharger to Indianapolis, nominated Lautenschlager (1908 and 1914 Grand Prix winner), Sailer and Werner with 2-litre 4-cylinder cars. Five Bugattis ran, drivers Zborowski, de Vizcaya, de Cystria, d'Alzaga and Riganti, with Clive Gallop as team manager to the Europeans. Only one "Bug", de Cystria's, survived, in ninth place; of the rest, three broke con. rods and one had fuel tank bothers. The "Meracs" did better, Sailer finishing eighth and Werner 11th, though veteran Lautenschlager, all at sea on the brick course with its four banked left-handers, hit a wall and was out.

That marked the last occasion on which full works teams from this side of the Atlantic tackled the U.S. classic. Indianapolis was becoming very specialized, and the home based cars,

developed specifically for the peculiar conditions of the track, were far too fast to give the *auslanders* a look-in. Foreign interest diminished considerably, but for some years yet there were gallants ready to make the attempt.

1924 was the first year of the race lacking a European car, but at least there was a European driver competing



FRENCH EFFORT: The 1½-litre Grand Prix Delage driven into seventh position in 1929 by Louis Chiron.

Duesenberg. Clearly the home defence was far too strong now, yet still the rich stakes drew fresh contenders from Europe.

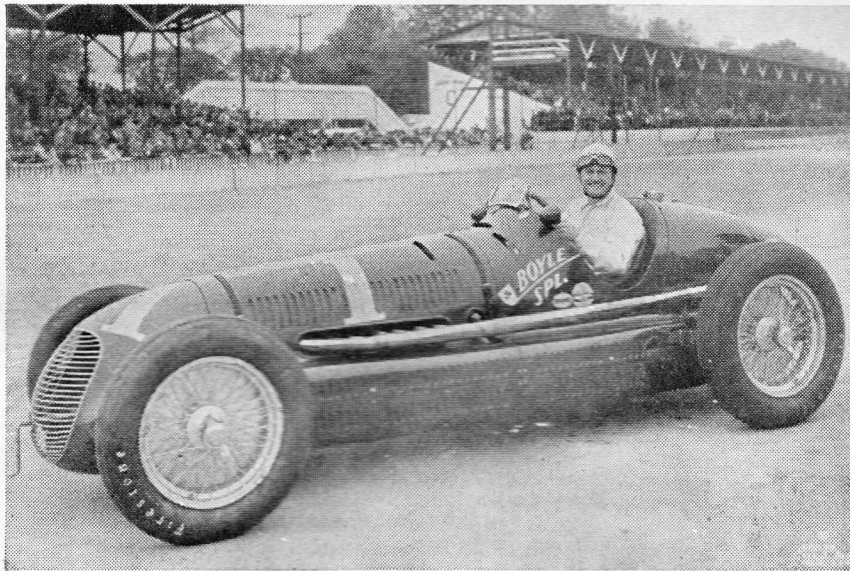
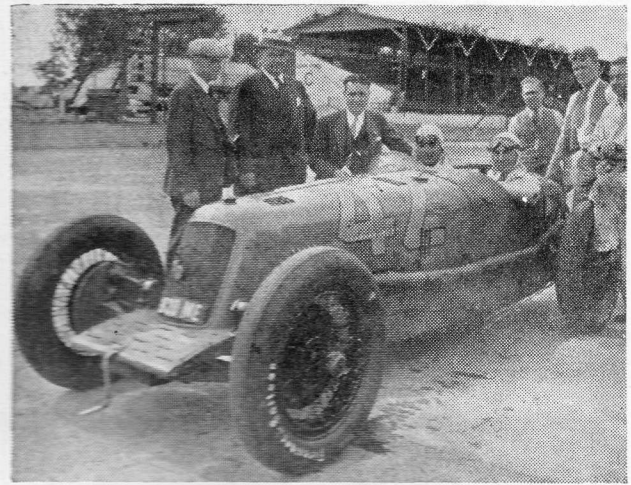
Amongst 1926 "foreigners" were two from Britain, Ernest Eldridge, famed for his Brooklands exploits with a giant Fiat, and Douglas Hawkes. Their mounts were two 1,500 c.c. 4-cylinder Roots-blown Eldridge Specials, one a very low, well streamlined, but temperamental machine, the other older, higher, more reliable. Both retired, however, Hawkes with a seized camshaft, Eldridge with a broken steering knuckle. Theirs was the last occasion on which British cars actually raced at Indianapolis. Equally fruitless journeys for the same race, won by Frank Lockhart (Miller 91) were made by three cuff-valve Schmid "sixes", one driven by Guyot (and bearing his name) and two by Americans. All retired.

TWO MASERATIS:

(Right) *Piccolo Cucinotta's 2-litre, eight-cylinder car which was flagged off 12th in 1930.*



(Below) *Highly successful was the 3-litre 8CTF Maserati, imported by Mike Boyle, and driven to victory by Wilbur Shaw both in 1939 and 1940. Shaw is now President of Indianapolis Speedway.*



In 1929 Europe tried again. The 1,500 c.c. ruling, begun in 1926, was still in force, so Louis Chiron, Champion of Europe in 1928, went out with one of the famous 1927 Grand Prix Delages. Accompanying him was Jean Moriceau, who was to drive—of all things—an 1,100 c.c. Amilcar. In voiturette events this superb little blown "six" was unbeatable, but the American track was very different, even though the car masqueraded as a Thompson Products Spl. Chiron drove a calm, canny race to run out seventh, but poor Moriceau, far behind, had his steering break, hit a wall four times and wrecked his nice little Amilcar. An interesting non-arrival in 1929, incidentally, was Gianfranco Comotti (Talbot), a combination we were to see in action at Silverstone over twenty years later.

Bigger engines came back by 1930, and the Americans rubbed their eyes at the next European contestant. It was the big 5-litre 16-cylinder Maserati, very "blood and sand", very fast, very *Formule Libre*, and driven by that skilled Italian Bacconin Borzacchini, with Ernesto Maserati himself as mechanic. Their race was a regrettably brief one, for the car quickly developed an overwhelming appetite for plugs, and was out with serious magneto ailments after seven laps only. Another Maserati entry, a 2-litre 8-cylinder car, was handled by

Piccolo Cucinotta, who was promptly dubbed "Piccolo Pete" by the Indianapolisans, and who struggled round to the end despite sundry mechanical maladies. He was 12th when flagged, and even that modest placing earned him about £125, plus odd bonuses.

The Europeans took a long, long rest after this, and the race was left to the multifarious Indianapolis specials, with slight Continental dash to the menu in the shape of various obsolescent G.P. machines. The promotion of the Vanderbilt Cup race on Long Island in late 1936 provided one or two stables with the opportunity to dispose of ageing equipment, and the Scuderia Ferrari sold their spare Vanderbilt car, a 3.8-litre 8-cylinder "Dennis Poore" model Alfa Romeo, to Rex Mays. This fine American driver evolved an unsightly *biposto* conversion and raced it in the 1937 "500" as a Bowes Seal Fast Special, whilst Etancelin's 4.4-litre V8 Maserati reappeared as the Topping Spl., manned by an American. Neither stood the pace, the Alfa boiling itself into the dead car park after 24 rounds, the Maser's clutch declining too after 36 laps.

1938 drew Tazio Nuvolari, not as a driver, unfortunately, but as an interested and much fêted spectator. He beheld Rex Mays, his Alfa now gracefully rebodied and centrifugally blown, running well until the blower seized; and Mauri

Rose in a most unsuitable 1,500 c.c. 6C Maserati running badly until his blower seized. Superchargers had a poor look in that year, for the unblown Offenhauser "big four" was even then doing all the winning.

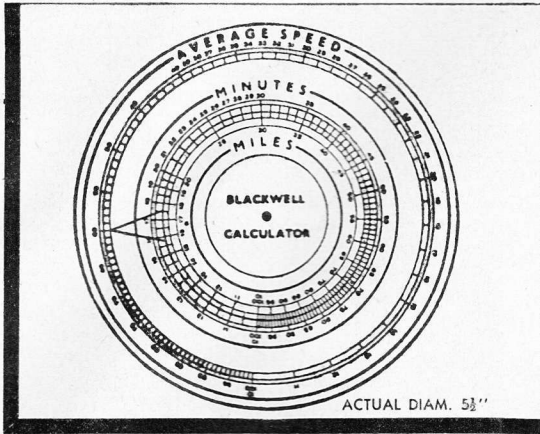
Then Mike Boyle, industrialist, and Cotton Henning, ace mechanic, decided to do something about it all, and imported a brand new 8-cylinder 3-litre Type 8CTF Maserati from Bo'ogna. This was the model with which Trossi and Villosesi were stirring up the Mercedes-Benz and Auto Union teams in European G.P.s, albeit unreliability always ended their runs prematurely. A superb looking machine, the Maserati caused a great stir at Indianapolis when it appeared under Boyle colours, with 1937 winner Wilbur Shaw as the driver. On a sizzling hot day, he drove it to a clearcut victory, recording the first "500" victory for a foreign car since 1919. Just to give the knife a twist, the Mays Alfa finished fifth, handled by Babe Stapp, and another Alfa, Louis Tomei's, was still running when Shaw took the chequered flag.

Encouraged by the Boyle performance, three more 8-cylinder Maseratis joined him for 1940; two from the Ecurie Lucy O'Reilly Schell, a French stable run by Laury Schell, father of present-day G.P. driver Harry Schell; and one, the very latest 32 valve job, from Raoul Riganti of the Argentine, the same who had raced a Bugatti in 1923. René Dreyfus and René Le Begue were to drive the Schell cars, but practice troubles eliminated one car. The outcome of the race was a second victory for Shaw, 10th for Dreyfus and Le Begue, sharing one car, and a smack into a wall and a double somersault for Riganti, with scratches and a bent car to show for it.

Shaw nearly managed the hat trick for Maserati, but his luck—and a wheel—broke in 1941 after leading at 375 miles. An Alfa was seventh, the ex-Schell Maserati in American hands retired, and two 4-litre G.P. Talbots, miraculously brought across the Atlantic from Vichy France by Le Begue and Jean Trevoux, did not qualify.

The war reached America a few months after that, and no more "500s" were held until 1946. That year Rudi Caracciola entered a 1½-litre Mercedes-Benz but couldn't get possession of it, leave alone take it to America; having made the journey, and acquiring the nickname of "Coca Cola" on arrival, he

(Continued on page 840)



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CORRESP

East Anglian Autoscramble

I HOPE that you can spare me a little space to say a few more words on Autocross.

The London Motor Club are joining us in what I like to call "our type" of event in Chalkney Wood on 3rd January next. This should be a very interesting affair. The bowl which proved to be a stumbling block when Mr. McComb visited us is receiving treatment and should be surmounted as easily as at the previous meetings; the few ruts and an adverse camber are also being dealt with.

Jointly we are calling this event Motocourse but my Committee have decided, in future, to call ours Autoscramble. They consider this name to be more descriptive of this type of event.

Mr. Aley suggests a supercharged Bren gun carrier as most suitable but a plain or blown Dellow does very well. Doug Price of the T.E.A.C. has entered each time and I don't believe he has hurt his car in spite of putting up B.T.D. in March and again in October. In practice for the March event, several failed either at the watersplash or the bowl, but this was due to inexperience. During the timed runs only one competitor had to be helped. Each time, at the close of these two meetings, competitors have asked when the next one is to be, because they want to come again, so the course cannot be very terrible and if our Autoscramble continues to attract competitors and public, and it becomes essential to run two cars together, the difficulties are not insurmountable. Surely we are asking very little more of cars than was to be met with on colonial sections in the old days?

I think that there are ample events for the everyday motorist, Rallies (N, CI, and C), Driving Tests, Club Hill-Climbs and Club Sprints. We ran one last year on Wormingford Airfield and very enjoyable it was. Several of our members use Dellowes every day and enter them for these meetings and for Autoscramble. I hope that Mr. Aley and some of the other doubters will come along to see for themselves.

C. U. M. WALTHER.

EARLS COLNE, ESSEX.

[The word "moto" means motor-cycle in France and Italy. Motocross is an event for motor-cycles.—Ed.]

* * *

In Quest of Performance

I HAVE read with interest the article "In Quest of Performance", under the heading of Workshop Corner.

Most of the article is very sound sense, but I cannot agree with the author's comments regarding the fitting of two or more carburetters in place of one as being a waste of time.

It is common knowledge amongst enthusiasts that the fitting of correctly designed inlet and exhaust manifolds, plus two S.U. carburetters, will add considerably to the performance of several eight and 10 horse, four-cylinder units, by far the most popular and agreeable unit being the 1,172 Ford motor. The main reason for the increase in power is the fact that the standard manifold was never designed for maximum performance, irrespective of the condition and tune of its single carburetter and therefore gets very short of breath as the revs. increase. The twin carburetter set-up, although not correct in theory when each carburetter feeds two cylinders via a siamesed inlet port, can and does prove very effective in practice, proving again that theory is not always right.

In spite of all that John Bolster has to say in his article on Carburation and the Four-Cylinder Engine, I notice that he was very pleasantly surprised and impressed when he road-tested the Lotus/Ford and had to have another look under the bonnet to convince himself that the motor was only a s.v. Ford 10.

He surely must have noticed also that it was fitted with twin S.U.s, etc. And, surely, if Colin Chapman thought it would have performed as well with the standard manifold and one Zenith, he would not have gone to all that trouble of fitting two carburetters on a very well made and scientific manifold.

Again, if one were to inspect most of the 1,172 specials at trials, sprints and 1,172 formula race meetings, one would

OPINIONS

invariably find this same set-up, and amongst the competitors one would find many knowledgeable types who don't fit this just because it looks impressive, but because it works, and very successfully, too, in some cases.

Again, if this set-up was a catch-penny article, the many small firms who manufacture special manifolds and accessories for specials would soon be out of business as they could not kid their customers for very long if their products were not of sound value.

I am therefore of the opinion that twin carburettors and properly designed manifolds are a definite aid to power and performance, at least as far as Ford 10 motors are concerned.

I would also state that I am in no way connected with this particular business.

1172 ENTHUSIAST.

READING, BERKS.

* * *

ALLOW me to congratulate Messrs. "Crown Wheel" and "Pinion" on their eminently sensible article on tuning.

On one point, however, they are not quite in mesh. It is not necessary to pack the rocker bar assembly when altering the gasket thickness on an o.h.v. engine. This would alter the rocker-valve stem relationship. Allowance will have to be made on the push rods, if they are fitted, or on the drive if the engine is o.h.c.

To illustrate, let me pose the problem of the ship on the side of which there is a ladder with rungs one foot apart.

When the tide rises three feet, how many rungs will be submerged?

D. CAMERON SMALL.

CARLISLE.

* * *

Query from "Daily Mail" Readers

WITH regard to his really amazing success in the recent International sports car race, we would be very interested to know if any of your readers can confirm the rumour that Rip Kirby has been signed up by a famous Continental stable.

H. E. McNALLY.

BELFAST.

D. H. McWHIR.

* * *

Streamlining—Theory and Practice

AS a reader of your very interesting magazine, and an "aerodynamics" engineer by profession, I would like to point out an error in the article "Streamlining—Theory and Practice, Part I", in your 11th December issue.

In his illustrations (9) and (10), the author refers to the compression (9), and compression reduced (10). This completely disregards the theories of Bernoulli, perhaps the most fundamental expert in these matters. If one admits that the flow is shown in plan (surely indicated by the author), the drawing (9) suggests a much greater speed than the rate of displacement by the body. Bernoulli has demonstrated effectively that this results in a depression, and not a compression.

As a result, the body shown in (10) is less efficient than that seen in (9), because its depression of "intrados" is nil (speed equal to rate of displacement) and also because its depression at the "extrados" is probably increased—since the curve is more pronounced.

JEAN DUPUIS.

PARIS, 16.

We are delighted to receive letters intended for publication. We do not insist on typewritten copy, but please write in a hand we can decipher and on one side of the notepaper. The Editor is not, of course, bound to be in agreement with opinions expressed by readers, but this does not mean that subjects will be excluded on these grounds.

*A Merry Christmas
to our many friends*

A Happy New Year with the

★ **NEW**
★ **BUCKLER**
NINETY

MULTI-TUBE FRAME FOR YOUR

Sports Racing

AND AUTOCROSS

FORD TEN SPECIAL

★ **90 m.p.h.**

**75 m.p.h. in Second Gear—30-40 m.p.g.—0-60
in 12 seconds—Amazing Stability—Grand Prix
Car Handling—No Pitch—No Roll—Hands Off
Steering—One Piece Feel—Lightweight—
Modern Appearance**

Complies with International Sports Car Regulations including provisions for doors—minimum modifications required to Ford Ten components—lighter and lower than previous models—only 9½ sq. ft. frontal area. Comfortable full 2-seater—readily accepts all weather equipment.

Buy a Buckler Ninety and build your own Buckler Special. Tuned in accordance with our recommendations the above performance is obtainable with comfort, which is a revelation to pre-war sports car owners. Where else can you obtain a sports car which will give real racing car handling at even lower running costs than a baby saloon? A car in which you can successfully enter Club Races, Hill-climbs, Sprints and Rallies, etc., at week-ends and at the same time obtain 30-40 m.p.g. on your daily journey. Buckler's were first in 1947 to offer multi-tubular frames for the home constructor. In the following six years firms large and small have found it essential for success to base their really fast racing and sports cars on multi-tubular frames—AS EVER

BUCKLER'S LEAD—OTHERS FOLLOW

Write for particulars of the New Buckler Ninety deliveries of which will commence next month.

Main Distributors:
Campbell Sports Car
Company
122 Willowdale Street,
Willowdale,
Toronto

•
Dublin Service
New Westminster,
British Columbia

I.F.S. conversions also
fit Ford 8 and 10 h.p.
and Popular Saloons—
Close Ratio Gears—
4-7-1 Crownwheel and
Pinions—Four Branch/
Twin S.U.'s. Racing
Camshafts—Double
Valve Springs. Goldtop
high comp. Cyl. Heads.
Remote Gear Controls.

Main Distributors.
Arthur W. Harris
290 Khyber Pass Rd.,
Auckland, S.E.1,
New Zealand

•
Donald Jorringe Pty.
Ltd.
72 Argyle Street,
Hobart, Tasmania

BUCKLER'S
67 CAVERSHAM ROAD, READING
Phone: 3227 and 4903

Indiana Impasse—continued

tried a Thorne Special instead. Practice proved disastrous, for he was struck by a bird when travelling at over 100 m.p.h., crashed and was seriously injured. Luigi Villoresi, accompanied by Varzi and Count Lurani, made the trip from Italy with a works 8-cylinder, 3-litre Maserati, and did well as a stranger to the tricky course in finishing seventh. The original Boyle Maserati, handled by Ted Horn, came third, a similar car was fourth as an "Elgin Piston Pin Spl.", and an Alfa Romeo was sixth. An unexpected British entrant who unfortunately non-started was Robert Arbutnot with a 1939 4½-litre 12-cylinder Lagonda.

1947 brought a surprise contender from Britain, a brand new E-Type E.R.A. entered by Leslie Brooke. To race an untried and notoriously touchy machine of only 1½-litres against the expert local boys with cars of twice and thrice the capacity, may seem the wildest optimism, but can be put down to "Brookie's" unquenchable enthusiasm. He had serious gearbox trouble during training, and did not qualify. The other non-American entry was no less than a 3-litre G.P. Mercedes-Benz of 1939 type, brought to the States via Czechoslovakia and England, for Don Lee of California. Its complexities baffled the Americans, but Mal Ord got it running well enough for

forceful Duke Nalon to occupy sixth place until a piston broke. Older Alfas and Maseratis in U.S. hands were betraying their age by now, but Ted Horn again finished third and Walt Brown (Alfa) was seventh.

The Horn Maserati, alias Bennett Bros. Spl., was fourth in 1948, while the Merc. ran again, handled by Chet Miller, until they "put it away" with dire lubrication troubles. 1949, and Lee Wallard in the Bennett Bros. Maserati led at 50 laps. Then a fuel line broke, and Meyer-Drake Offenhausers took the first ten places. Rumours of Ferrari entries for 1950 proved unfounded, while Farina and Rol, down to race Maseratis, failed to do so, so once again it was Offenhauser all the way.

1951, too, was all-American, but in 1952 came a European manufacturer's last effort to date in the Indianapolis 500 miles race, when Alberto Ascari journeyed over with a 4½-litre Formula 1 Ferrari. Three other "4½'s" came as well, being promptly "sawed off" to American drivers. None qualified for the race; nor, alarmingly, did Ascari at first, until Lampredi breathed hard on his car. The Italian then lapped at 134.3 m.p.h. and was "in". Taking things calmly, and getting "in the groove" as the race progressed, Ascari had worked up to ninth position when the spokes in a rear wheel

cried "enough", the wheel collapsed, the big Ferrari spun off, and what one report termed "a flawless drive by a master of racing" came to an end in a flurry of cinders on the infield.

So there it is. Seventeen attempts by European drivers with European cars, and only two wins, plus five more to U.S. or U.S.-domiciled drivers of European cars. Quite definitely America's 500 Miles Race, and her Meyer-Drake powered Kurtis-Krafts and other specialist machines of today are tough nuts to crack. What Goux and Thomas managed to do prior to the Great War has never been done since.

Rumours circulated of a special 3-litre blown Ferrari with magnesium wheels and other Indianapolis track specialities for 1953, but nothing came of it, and Ascari went to Albi instead. But the Italian Champion and the firm he drives for are probably Europe's greatest hope in many years for another outright win in the great 500 Miles Race, should he run next year as reported. There are rich plums to pick for those who succeed; first place in 1953 brought over £30,000, second man took over £8,500, third over £5,000; even non-finishers earn something; the 33rd place man this year, although he covered only three laps, then crashed, came out about £300 to the good in cash.

Snakes in the Grass or Don't Let the B.R.D.C.

A fantasy in one swift movement

Dramatis Personæ (in order of appearance).

FRAD }
FRENK } German spies in disguise.
RUDLEY HARKE }
SHAUN CLEATH }
RON MOOPER } Racing car designers.
JAY CARTIN }
ROGER G. TARNG: An editor.
SIGMUND FLANNEL: A secretary.

The scene is the "Gear Lever", a club in London. The walls are decorated with club badges and pictures of racing cars. On one wall hangs a gear lever, with a wristwatch set into the knob. FRENK is behind the bar. FRAD lingers at the door. The time is 4.55 p.m.

FRAD: "Der bromide in der gin hev you, Frenk?"

FRENK: "Ja. In der gin der bromide is."

FRAD: "Der espin in der viskey hev you, Frenk?"

FRENK: "Ja. In der viskey der espin is."

FRAD: "All ze drinks gerfiddled are, Frenk?"

FRENK: "Ja. Gerfiddled all ze drinks are."

FRAD: "Zen ve are ready. Heil Neubauer!"

FRENK: "Heil Neubauer!"

The door opens. Enter HARKE and CLEATH. FRAD hurries to take their coats.

FRAD: "Good afternoon, gentlemen. How are you, gentlemen? I trust you are keeping well, gentlemen?"

HARKE: "I connaught complain."

CLEATH: "Hwm very well, thank you."

FRENK: "What would you like to drink, gentlemen?"

HARKE: "Gin and tonic for me."

CLEATH: "I'll have a small Scotch."

HARKE and CLEATH drink. They collapse. FRENK and FRAD rifle their pockets with quick, practised movements.

TOGETHER: "Ah, ze plens we haf!"

FRENK: (studying blue print) "Look, Frad, ze new V.7 Formula 1 engine! Heil Neubauer!"

FRAD: (waving diagram) "And I haf ze plens for ze revolutionary semi-elliptic suspension! Heil Neubauer!"

They stuff the plans into their pockets, and hide the bodies behind the bar. The door opens again. Enter MOOPER, CARTIN and TARNG.

FRAD: "Good afternoon, gentlemen. How are you, gentlemen? I trust you are keeping well, gentlemen?"

MOOPER: "Transversely, by your leave."

CARTIN: "Swingly, thanks."

TARNG: "Och, aye."

FRENK: "What would you like to drink, gentlemen?"

MOOPER: "Gin and Italian for me."

CARTIN: "I'll have a small Irish."

TARNG: "Orange squash."

They drink. MOOPER and CARTIN collapse. TARNG stares at them in amazement.

FRENK: "Ach! In der orange sqvash strychnine I forgot to put!"

TARNG whips out a revolver, and covers both FRENK and FRAD.

TARNG: "So, that's your wee game, is it? I've aye thoct there was somethin' funny about the pair o' ye!" (He produces a police whistle, and blows a piercing blast.)

FRAD: "Donner und blitzten! Agley our scheme has ganged!"

Enter FLANNEL.

FLANNEL: "Sowl and begorragh! My trusted servants!"

TARNG: "Look at those wee plans they hae swipit, the rascals." (He finds the bodies of HARKE and CLEATH behind the bar.) "Och, these Sassenachs are ower easy fooled."

FLANNEL: "Bedad, 'tis you has saved British motor racing!"

Offstage, a band strikes up the B.R.D.C. song, "Red and Yellow Stripes." FLANNEL and TARNG rip club badges off the walls, and pelt FRENK and FRAD until they are battered to death.

FINIS.

F.W.McC.

BOOK REVIEWS

Title: "Grand Prix Driver".

Author: Hermann Lang.

Size: 8½ ins. x 5½ ins.; 141 pp.; 14 photographs.

Price: 15s.

Publishers: G. T. Foulis & Co., Ltd., 7 Milford Lane, Strand, W.C.2.

To rise from driving a Diesel locomotive in a gravel pit to becoming Racing Champion of Europe within a period of seven years is a remarkable and unique feat. *Grand Prix Driver* is the wonderful story of how Hermann Lang achieved it.

Lang's youth was a difficult one; he wanted desperately to race, but racing in Germany, as anywhere, cost money. He persevered, and by dint of hard scraping managed to procure a racing motor-cycle on the "never-never", then proceeded to win his very first race, a novice event on the Solitude circuit near Stuttgart. This brought him the offer from the German Standard company of a works machine, which he accepted with alacrity, and eventually he took up sidecar racing, to become 1931 German Champion in this class.

When the 1932 economic crisis descended, purses were drastically tightened, Standard's gave up racing and Lang found himself on the dole. A job of any kind was vital, and Hermann worked for a stonemason for a while, then took on the driving of a light Diesel loco at a local gravel pit. The Daimler-Benz factory was nearby, and each day as Lang cycled past, he looked longingly inside, yearning for a real mechanic's job there.

Nothing venture, nothing have, so he wrote for one. No luck; his letter strayed to the wrong department and they thought he was seeking a job as driver of the new Formula racing cars they were building for 1934. Then an acquaintance pulled a few strings, and, miracle of miracles, Lang was engaged as an engine fitter in the racing department!

Proving himself efficient and conscientious, Lang went to Monza for the first tests of the new car, and when the team got going in Grands Prix, accompanied them on their European forays as a mechanic charge hand. Attached to Luigi Fagioli's car, he developed a deep admiration for the fearless Italian. Then came the desire to drive, soon developing into fervent ambition, and with Teuton thoroughness, Lang began a close study of the technique of different drivers, marking how some, like Caracciola, cornered smoothly and without fuss, while others fought their cars through. Occasionally the opportunity came to bring up the cars from garage to circuit, or to bed-in brakes along some straight, and Hermann never missed the chance to drive.

Soon Mercedes-Benz inaugurated their drivers' training school, and Lang was nominated, together with Kohlrausch and Soenius. Knowing something of Neubauer's tactics, he took care not to perpetrate any of the faults the burly team chief disliked, and eventually was accepted as reserve team driver.

Thus did he achieve the cockpit, and by 1936 was driving in Grands Prix. To elaborate on his feats would spoil the reading of the book, but Lang soon earned renown as a very fast but sensible driver. Dividends for Neubauer's skill as a talent spotter, and Lang's determination, came in 1937, when he won the Tripoli G.P. from all the established stars at record speed. He followed up with that fabulous 162 m.p.h.

win in the Avus G.P.—the fastest race ever run.

Nineteen-thirty-eight brought his second Tripoli win, another at Leghorn, other high placings and a tense adventure in England during the Munich crisis when over for the Donington G.P. Nineteen-thirty-nine was Lang all the way, with victories at Pau, Eifel, Tripoli, the Vienna and Grossglockner Hill-Climbs, Spa and Berne, after which the proud title of European Champion was indisputably his.

War followed, and after it a defeated Germany had no resources for reviving motor racing. However, the French Occupation authorities permitted the promotion of a hill-climb at Ruhstein in July, 1946, which Lang promptly won with a Mille Miglia BMW. Four lean racing years followed, then Mercedes took their now 12-years-old 3-litre G.P. cars to Argentina, with Lang amongst the drivers. None could beat Gonzalez in the Ferrari, but Lang gained a second and a third in the two races.

Nineteen-fifty-two marked the return of Mercedes-Benz to European racing; not in Grands Prix as yet, but in sports car events. The story of their achievements is still fresh in mind, and Lang's part in them was a joint first with Riess at Le Mans, second at Berne, first at Nürburgring and second in the Pan-American race.

Lang tells his absorbing story with pleasant forthrightness and no false modesty. If he thinks he made a good start in a race, or drove well, he says so, and in his writing one reads the spirit which animated the Mercedes team—success at all costs. His fidelity to the marque is striking, and should his team-mates show similar *esprit de corps* the German team will prove very formidable indeed when they join the Formula 1 battle this coming season.

Charles Meisl took on the formidable task of translating this book, and has captured the German idiom admirably; the pictures are superb, but have a familiar touch about them, some having appeared in George Monkhouse's well-known works. This is in every way a truly magnificent book.

C. P.

* * *

Title: *British Industries—Oil.*

Size: 9 ins. x 7 ins.; 120 pp.; over 60 illustrations.

Price: 8s. 6d. net. (cloth binding, 9s. 6d.).

Publishers: Cassell & Co., Ltd., 37/38 St. Andrew's Hill, London, E.C.4.

FOUR gallons, please—and just check the oil." Commonplace words, uttered, with variations, of course, at any filling station, anywhere, at any time of day. We take a great deal for granted in these days, and it takes the reading of a book like Cassell's "Oil" to bring home to one just what lies behind the production of the fuels and lubricants so vital to the car engine, and to practically every other mechanical device ever thought up by man.

This excellent book, written with the full co-operation of Shell-Mex, tells in non-technical language, aided by many fine photographs and drawings, of the origin, discovery, extraction, refining and distribution of petroleum products. From prehistoric sea bed to filling station, in fact—except that the filling station is merely one of an infinite variety of destinations for the fluid which literally constitutes the life-blood of this mechanical age.

C. P.

NEWS FROM THE CLUBS

By Wilson McComb

TONIGHT, 25th December, the little Burberry and District M.C. will hold their Grand Coronation Year Christmas Night Navigational and Map-Reading Point-to-Point, starting from the Battered Strawbale, Tottering, at one minute before midnight. No acceptances having been received from the invited clubs (B.R.D.C., A.C. de l'Ouest and S.C.C.A.), it is expected that the usual hard core of active club members will make up the entry; they are, of course, the Vice-President, Sir Wellington Boot, and the Assistant Bulletin Editor, Bill Dogworthy, both of whom have cars.

Last year, it will be remembered, the *pièce de résistance* of this annual event was the underwater search for a control marshal at the bottom of Loch Lomond, in which all but one competitor was drowned, and the winner found without recourse to a special test. Determined, as always, that the fixture will be won on the road, the organizers have this year planned a stiff route which will take competitors south, and set a 53 m.p.h. average for the section from Hyde Park Corner to Trafalgar Square. Special arrangements have been made, we understand, with the Metropolitan Police.

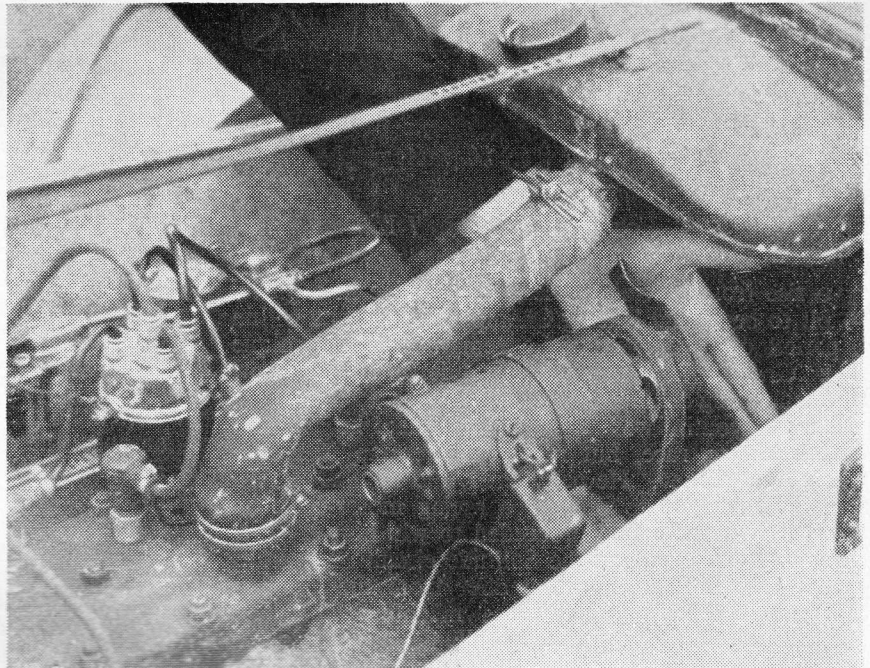
* * *

EAST ANGLIAN "MOTOCOURSE"

THE East Anglian M.C.s next "rough" Autocross meeting, to be known as a "Motocourse", will be run jointly by the East Anglian and London Motor Club's on Sunday, 3rd January. The event will start at 11 a.m., at Chalkney Mill, Earls Colne, Essex, and there will be classes for cars of up to and over 1,200 c.c., and Jeeps and Land Rovers. Invited clubs are the Chiltern C.C., Eastern Counties M.C., Falcon M.C., Sheffield and Hallamshire M.C., Thames Estuary A.C. and West Essex C.C. The Secretary of the Meeting is C. U. M. Walther, Chalkney Mill, Earls Colne, Essex, and entries close on Tuesday, 29th December.



★
CHAMPION, 195—?: Ted Harrison, son of the 1952 R.A.C. Trials Champion, Cuth Harrison, is seen here during this year's Championship event, driving his Harford. He drove extremely well to finish fourth, his father being runner-up to Reg Phillips, the winner.
 ★



BABY BOILER: This minute device (in front of the McComb hand) is what does duty as a fan on Norman Overton's Ford Special. Yes, the radiator does boil!

C.U.A.C. RALLY

MEMBERS of the Combined Universities' M.C., B.A.R.C., Yorkshire S.C.C., Vintage S.C.C., London M.C., Sunbac, and Lancs and Ches. C.C. are invited to take part in the Cambridge U.A.C.'s Fourth Lent Term Rally, on 30th/31st January, 1954. This will be a 500-mile event, starting from Huddersfield and St. Neots, with three capacity classes. Entries close on Saturday, 23rd January, 1954, and should be sent to E. H. G. Bradley, Trinity College, Cambridge.

CORNWALL V.C.C. DANCE

TICKETS will shortly be available from club members for the Cornwall Vintage Car Club's Annual Dance, to be held at the Headland Hotel, Newquay, at 9 p.m. on 15th January.

The next meeting of the club will be held at the Red Lion Hotel, Newquay, at 8 p.m. on Friday, 8th January, when H. Batten will give a talk on the Austin Seven; the committee will meet at 7.30 p.m.

HANTS AND BERKS "PAIRS" POINT-TO-POINT

ON Sunday, 10th January, the Hants and Berks M.C. will stage a map-reading point-to-point designed for pairs of cars, hunting as a team; collaboration between crews, other than team-mates, is, however, forbidden, and the organizers have banned "radio transmitters, spiritualist mediums and navigators called Piddington." The event will start at 12 noon from the Links Hotel, Liphook, Hants, and is primarily intended for members of the organizing club, although entries from other clubs will be welcomed if the entry list is not too full. They should be sent to J. Lowrey, Green Shutters, Avenue Road, Farnborough, by Tuesday, 5th January.

ALLARD O.C. DINNER/DANCE

FRASCATI RESTAURANT, Oxford Street, London, will be the venue for the Allard Owners' Club's annual Dinner and Dance on Tuesday, 12th January, after which the awards for the year's events will be presented. Tickets should be obtained without delay from Pat Downey, 24-28 Clapham High Street, S.W.4.

N.L.E.C.C. FUNCTIONS

MRS. JOHN EASON GIBSON will present the awards at the annual Dinner/Dance and Prizegiving of the North London Enthusiasts' C.C., which will take place at the Hendon Hall Hotel, Hendon, N.W.4, on Friday, 8th January; the time is 6.30 for 7 p.m. Tickets will shortly be available from G. Bance, 11 Bath Road, Reading.

On Tuesday, 19th January, at 8 p.m., the club's Annual General Meeting will be held at the Green Man, 168 Hale Lane, Edgware, Middlesex. Nominations should be sent to G. Bance at the above address.

C. and A. DINNER

STRONG contingents from the South Caernarvonshire and Rhyl and District Motor Clubs were among the 90 who attended the annual dinner and prize-giving of the Caernarvonshire and Anglesey Motor Club at the Royal Victoria Hotel, Llanberis, on Wednesday, 9th December. The visitors figured prominently in the award list, and an imposing array of trophies was distributed by the club's secretary, Mrs. Vera McNair.

Chairman W. Norman Owen presided, and announced that a telegram of good wishes had been sent to the President, Mr. J. J. Brown, M.B.E., and Mrs. Brown, who were then on their way to Trinidad on the s.s. *Antilles*.

A two-hour film show, staged by club treasurer H. D. Pritchard, and including the 1953 Mille Miglia film, lent by the Shell-B.P. concern, ended the most successful evening function yet held by the club.

* * *

LOUGHBOROUGH COLLEGE NIGHT RALLY

ON 12th/13th December, the Loughborough College Motor Club staged their closed invitation Night Rally. Twenty-two competitors from the Leicestershire Car Club, Pathfinders and Derby Motor Club, Oxford University Motor Club and Loughborough College Motor Club assembled at Loughborough at 11 p.m. on the Saturday night, ready to do battle with the elements and the clock over a two hundred mile course which extended through Leicestershire.

COMING ATTRACTIONS

December 26th. *M.G. Car Club (S.W.) Cecil Kimber Trophy Trial. Start, Mile 3 Road House, nr. Bristol, 11.30 a.m.*

Caernarvonshire and Anglesey M.C. President's Trophy Rally. Start, The Look-Out, Bangor, 6 p.m.

Ulster A.C. Boxing Day Trial, N. Ireland.

Leinster M.C. Boxing Day Trial, Eire.

Omagh M.C. Boxing Day Trial, N. Ireland.

December 27th. *Rio de Janeiro G.P. (S.), Gavea Circuit, Brazil.*

Warwickshire, Derbyshire and Staffordshire. During the night, fog and rain did their best to hamper the competitors, and navigators and drivers alike were kept at a keen pitch to maintain a steady progress over the tricky route. The subsequent winner was J. Goddard-Watts (Loughborough College Motor Club) driving a Land-Rover, which mastered the conditions exceedingly well. He was the first to arrive at the finish in Leicester with a penalty of only four marks—a remarkable achievement, considering that only 11 competitors finished the course, and a tribute to the capabilities of his navigator, R. Utley. Second and third were C. B. Taylor (M.G.T.C.) and H. C. Burrows (Standard Vanguard) both of the Pathfinders and Derby Motor Club. The rally was a great success.

YORKS AND LANCS AREA FOR W.H.S.C.

THANKS to the efforts of J. Duffell, of Doncaster, the inaugural meeting of the new Yorks and Lancs Area of the Wolseley Hornet Special Club will take place on Saturday, 2nd January, 1954, at the King George Hotel, Doncaster, commencing at 7 p.m. It is hoped that a large number will attend. J. Duffell's address is 2 Lichfield Road, Wheatley Park, Doncaster.

* * *

HALF-LITRE MIDLANDS FUNCTIONS

THE recently formed Midland Centre of the Half-Litre C.C. will hold a New Year Dance on Tuesday, 5th January, at the Old Crown and Cushion Hotel, Perry Barr, Birmingham. Tickets may be had from R. Trevellick, 84 Goodrest Avenue, Quinton, Birmingham 32. On Saturday, 30th January, a dinner and film show will be held at the Royal Oak Hotel, Quinton.

CLUB FIXTURES

Bentley D.C.—Meeting, 26th December, Castle and Ball, High Street, Marlborough, Wilts, 7 p.m.

B.A.R.C. (S.W.)—Meeting, 30th December, Little Testwood Club, Totton, nr. Southampton.

750 M.C.—Meetings, 30th December: **Midland**, Forest Hotel, Dorridge; **Southern**, Gascoignes, Lyndhurst.

Chiltern C.C.—Meeting, 30th December, George Hotel, Beaconsfield, 7.30 p.m.

Vintage S.C.C.—Meetings, 31st December: Jolly Farmers, Enfield Road, Enfield; Smoker Inn, Plumley, nr. Northwich; Crescent Hotel, Ilkley.

Stock Car RACING

Stock Car Racing has arrived and will be in operation all over England in 1954. The Stock Car Racing Company is now open to receive applications from would-be drivers

**THE STOCK CAR RACING COMPANY
THE OLD HOUSE, ALEXANDRA ROAD
HOUNSLOW, MIDDLESEX**

DICK NASH WINS THE "WINTER"

Heavy Rain in Munster M.C. Trial

WE in Ireland generally seem to have good weather for trials, but when it decides to rain it really comes down in stair-roads, and more often than not lasts from the time the first car leaves the start until the last one arrives at the finish; none of your "showers and bright intervals". This was the case with the Munster M.C.'s Open Winter Trial on Sunday, 13th December, and perhaps the date had something to do with it.

It rained as the cars drove away from the starting control at Parnell Place, Cork, at lunch time, and it hardly let up for a minute until they arrived back in the city about 4.30 p.m., the specials drivers in particular very damp, dishevelled and bedraggled, but everyone having had a good afternoon's motoring in spite of everything, and having done their best in some new, unusual, and skilfully conceived tests.

Leaving the city by way of the Lower Road, the first test came at Lover's Walk, a steep, concrete-covered corkscrew, which used to be a favourite and ideal observed section before it was surfaced by the local corporation. Cars had to drive up a stretch of the hill, over a line, reverse halfway down and drive up again. It was rather reminiscent of the dawn test at Downhill on this year's Circuit of Ireland, for which the Ulster Club were severely criticized, but this time nobody burned up their clutch, or anything like it, and D. O'Leary's (Ford Spl.) time of 31½ secs. was the best, with Dick Nash (Dellow) and D. Swanton (Ford Spl.) tying for second place ½ sec. behind.

Four or five miles out of Cork, on the hill at Glounthaune above Cobh Junction station, the second and third tests consisted of driving in a figure-of-eight around two grass islands, and then hurrying once around the larger of them. Nash won the first, but hit a marker flag in the second, while Swanton overshot the finish, giving J. O'Mahoney (Volks-wagen) the lead.

Then it was inland a few miles to Annacartan Bridge on the main Dublin-Cork road, where a length of the main road, left behind by a recent diversion to cut out a dangerous bend, provided an ideal location for the next four tests. In the first the cars drove from tar on to grass, half-way round a pile of stones, on to tar again, through a channel of flags only eight inches wider than the vehicle, and then went through the performance in reverse back to the beginning. The second was a variation on the fast forward-and-reverse theme, while the third was a very tight parking test which involved the driver's ability to stop with first his nearside and then his offside within an extremely small allowance of inches of a line, and stop in reverse too. Dick Nash, in the Dellow, made the best time in all three; O'Leary came second in one of them in spite of hitting a flag, while others who carried away markers included Canty,

O'Mahoney and T. Liston (Ford Spl.); he, disheartened and very, very wet, retired himself, and went back home to dry clothes.

The seventh test was the only one where nobody collected any penalties, and, of course, it was still raining when the entry drove back along the main road towards Cork, to the final one at Glanmire. At Upper Glanmire Bridge was a fast "blind" from one line to another and back again, round a sharp curve followed by an S-bend, with two sets of flags to be negotiated on the way. The wet road added a little bit of spice to the proceedings, but there were no mishaps, and the only one to be penalized was O'Mahoney, who overshot a line.

Later in the evening the results were announced at the Rob Roy Restaurant, and the award winners received their cups on the spot, a most praiseworthy arrangement since waiting anything up to a year for your silverware does detract a little from the pleasure of winning it.

MAXWELL BOYD.

Results

Premier Award: R. Nash (Dellow), 29½ marks.

First Class Award: D. O'Leary (Ford Spl.), 25.

Saloon Award: A. Canty (Singer Le Mans), 17.

* * *

MARGATE WING CUP RALLY

FOURTEEN competitors took part in the Margate and D.C.C.'s Wing Cup Rally on Sunday, 13th December, starting from the Chez Laurie Restaurant at 10 a.m. Most of the morning section was through wooded areas, with many check-points to locate and, in addition, a sprig of holly with berries and a chicken feather; the holly proved particularly difficult to find. After a lunch break at the Roebuck Inn, Harrietsham, the field made their way back to the starting point for tea, having covered a total mileage of 90.

Results

Wing Cup: 1, D. Bones (Austin); 2, R. Bass (Ford); 3, S. Ingram (Vauxhall).

HARROW "PETIT RALLY"

Handicap Event for Experts and Novices

THE 39 entrants for the Harrow C.C.'s "Petit Rally" on Sunday, 13th December, started from Beaconsfield, on the relatively easy task of obtaining the numbers from telephone boxes in each of three villages. Marking was on the basis of mileage covered, the event being timed for the "experts" class. Good performances in the novices' class were made by F. Tricklebank (Hillman) and A. Turney (Riley). Only two experts broke "bogey" time; they were F. Still (Healey Hundred) and Miss Kenny (M.G. saloon).

After a short lunch break, competitors went off to locate four grid references and a moving control. The latter caused a certain amount of confusion, entrants being told that a 'bus was due to leave High Wycombe at 1.44 p.m. and arrive at 2.48 p.m.; they were asked to intercept the 'bus and obtain the signature of a marshal travelling on it. The conductor had been briefed, to ensure that all navigators were carried for at least one stage, and the driver instructed to stop only at official stops; it is confidently expected that London Transport will pay a dividend after this exercise!

Code words collected at the four grid references directed the field to the first test, after which the route led to a second test which most of them performed in darkness, before continuing to the finish at the Spade Oak Hotel, Bourne End. The afternoon section proved more difficult, and the undoing of the experts, whose runs were once again timed. Two competitors tied for the premier award, so the results of the driving tests were taken into consideration. The handicapping of the experts turned out to be a little harsh, but as four of them were included in the first 10 places, the organizers felt that the experiment was a partial success.

Provisional Results

Dryden Cup: A. Turney (Riley 9 Spl.), 92 marks.

Experts' Class: 1, F. Still (Healey Hundred), 110; 2, Miss Kenny (M.G. saloon), 118.

Novices' Class: 1, F. Tricklebank (Hillman), 92; 2, M. Delingpole (Dellow), 96.



ATTACK! Bill Wykes sets his teeth as he makes a determined onslaught on Slawston II, during the Leicestershire C.C.'s recent L.C.C. and John Bull Trophies Trial.



OFFICIAL CIRCLES

Ronnie Wilson (Ford Prefect) Wins Annual Driving Test Event for Ulster A.C. Officials

THERE can be few better ways of saying "Thank you" to hard-working club officials than that adopted four years ago by the regular competitors in Ulster A.C. events. The method is for the regular competitors to organize, once each year, a special trial in which the competitors are those who have served throughout the year as officials. As well as manning the stop-watches on these occasions, the regular competitors, in many cases, also provide competition cars for the regular officials to drive.

This year's trial took place at Kirkistown Airfield on Saturday, 12th December, and was contested by 20 entrants. Weather conditions were dismal but the fun good, as the competitors attempted the five driving tests held on each of two laps covered.

Quite early in the proceedings it was clear that those who had succeeded in borrowing the most potent competition cars extant in Ulster were not going to have matters to their dictation, some of the best performances being recorded by drivers using their everyday plebian saloons.

The first test called for "garaging" the car in four bays, set in the formation of a cross and with their entrances at north, south, east and west. The "garages" could be entered in any order, save that one entrance had to be effected in reverse gear.

Honours in this test were shared by E. F. M. Kirk (Archibald's Nufor) and Arnold Bell (McNally's Dellow) who completed the test in 47 secs. Ronnie Wilson (Ford Prefect) made best closed car time in 48.6 secs.; George Alton (Dowling's Ford Utility) took 50 secs., Rollo McClure (Morris Minor) 50.8 secs. and Denis Boyd (Todd's Todd Spl.) 52.6 secs. U.A.C. Secretary, Gordon Neill (Titterington's Dellow), took 54.8 secs., while his Assistant Secretary, Jack Kirkwood (Morris Minor), beat this with a run in 54.6 secs.

Wilson moved into the lead at the second test—a movement between two barriers followed by a "garaging" at an awkward angle. Wilson's time was 24 secs., with Boyd next best in 24.2 secs. Hugh Bryson (McKinney's Dellow) made a fine run in 26.4 secs., while

Kirk took 26.8 secs. Neill and Wallace Henderson (Austin Seven) each collected penalties.

Kirk made a splendid recovery at the third test—straddling three lines strategically disposed so as to prevent a straight run at any—by recording the best time in 17.4 secs. As Wilson took 18.6 secs. this put both equal on points. George Alton's 17.6 secs. was another extremely good time. Jack Harrison (Robb's Spl.) came into the picture with a run in 17.8 secs., and just behind him came his wife, Margot (Ford Anglia), who was having a battle royal for ladies' honours with Emily Dowling (A40 Sports). Mrs. Harrison completed the test in 21.2 secs. as compared with Mrs. Dowling's 21.8 secs., but the latter had still nine points in hand from performances in the first two tests.

The fourth test consisted of a drive through four channels, once in each direction. Here Bryson was fastest in 29.2 secs. with Bell next best in 31.6 secs., followed by Alton (33.2 secs.), McClure (33.8 secs.) and Mrs. Harrison (34.4 secs.). The order at this stage was 1, Wilson; 2, Kirk; 3, Bell; 4, McClure; 5, Alton; and 6, Bryson, with Mesdames Dowling and Harrison holding off the other males. The Todd Special demolished sufficient tins to put Boyd out of the running.

Test 5 was a blind round a tight circle and between three barriers three times. Here the Todd Special came into its

A cheerful gathering at the end of the Ulster A.C.'s Officials' Trial. They are (L. to R.) Mrs. Dermot Johnson, who presented the awards, Ronnie Wilson (the winner), Hugh Bryson (third), Mrs. Emily Dowling (ladies' prize), George Alton (runner-up) and the chairman of the organizing committee, Ernie Robb.

own, Boyd hurtling it around in 23 secs. Next best was Neill in 23.6 secs., then Alton (24.8 secs.) and Wilson (25 secs.). Bell retired with a horrible crunching noise from the rear axle.

So, at the end of the first round, Wilson held a lead of five points over Alton and 11 over Kirk. The order behind the leaders was—Bryson, McClure, Mrs. Dowling, Mrs. Harrison, Reid, Neill and Kirkwood.

On the second round, for a time, Alton looked like getting ahead of Wilson, as he had better times in the first two tests. Bryson and Kirk alternated for third place with each test. At the third test, however, Wilson's 20 secs. was 7.6 secs. better than Alton, while Kirk put in a magnificent 16.6 secs., as compared with Bryson's 18.4 secs., to increase his hold on third place. On test 4, however, Bryson was again the fastest in 28 secs., while Kirk took 35.6 secs. Wilson concentrated on a neat test devoid of fireworks and although he took 34 secs. as compared with Alton's 32 secs., this was enough to maintain his advantage.

There was no room for error in the last test, so close together were the leaders. Denis Boyd, with no hope of a major award, again established best time in 22.2 secs., while Kirk, with a run in 23.6 secs., almost retrieved third place from Bryson, who took 26.2 secs. Alton's 23.8 secs. was better than Wilson's 24.4 secs. but not enough to change the leaderboard.

So ended another Officials' Trial, with competitors and timekeepers alike all streaming to Bangor's Pickie Hotel, there to be astonished by being presented, almost upon arrival, with duplicated copies of the results—showing that when competitors become officials they are not above turning wishful thoughts into concrete action. After tea Mrs. D. P. Johnson presented the awards.

W. A. McMASTER.

Results

Best performance: Ronnie Wilson (Ford Prefect), 307.2 marks lost; 2, George Alton (Ford Utility), 310.4; 3 and best open car: Hugh Bryson (Dellow), 318.2. Ladies' Prize: Mrs. J. L. Dowling (A40 Sports), 353.6.



REID RUNS RIOT: In one of the driving tests at Kirkistown, Austin dealer Hugh Reid lifts a rear wheel of his A30.

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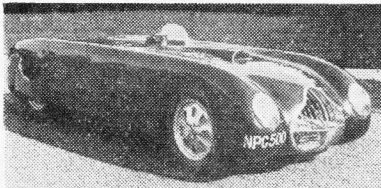
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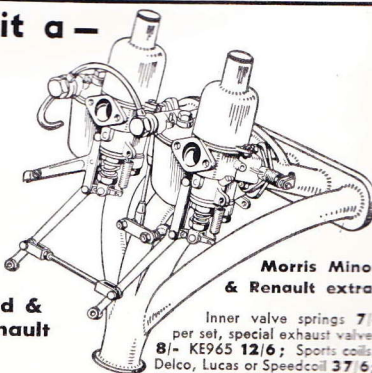
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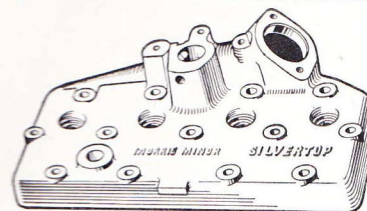


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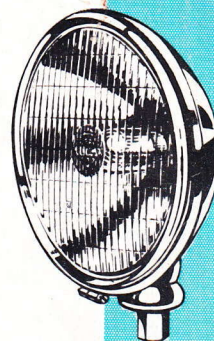
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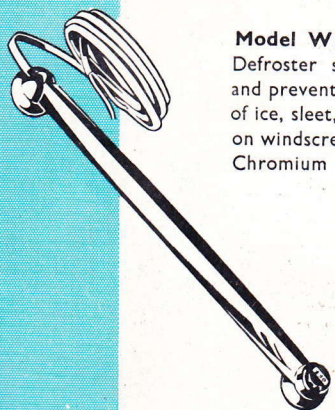


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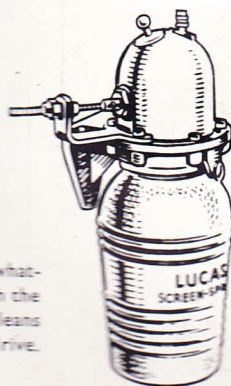
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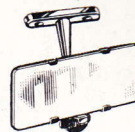
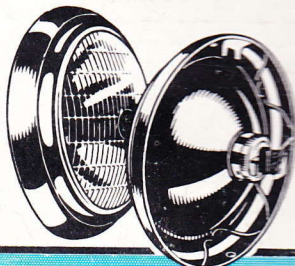


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