

35c!

AUTOSPORT

NOVEMBER 11, 1960

1/6

EVERY FRIDAY
Vol. 21 No. 20

BRITAIN'S MOTOR SPORTING WEEKLY

Registered at the G.P.O. as a Newspaper



IN THIS ISSUE

CARS OF THE FUTURE AT THE TURIN SHOW

THE 1960 BRIGHTON RUN : A RARE BUGATTI ENGINE

A Car for the young — of all ages



LET'S TOSS FOR IT

LET ME DRIVE

**THE CAR THAT RECAPTURES
THE DESIRE TO DRIVE**

Look at the value in the Magnette:— a family or business car with great sporting performance (rest/50 m.p.h. in 13.5 seconds—'The Motor'); twin carburettors; sport-chosen gear ratios, firm road holding, stable cornering, precise light steering—the world-renowned 'safety fast' features; sporting grouped instruments, snug bucket seats, leather upholstery; the clean, crisp look of the Pininfarina line in gay duotone colours.



MAGNETTE
(MARK III)

Value for money was never more clearly demonstrated than in the Magnette—ask for a demonstration.

M.G. Magnette price £714.0.0 plus £298.12.6 P.T. Duotone colours extra. Also MGA 1600 open two-seater prices from £663.0.0 plus £277.7.6 P.T.

Safety Fast!

THE M.G. CAR COMPANY LIMITED, SALES DIVISION, COWLEY, OXFORD
London Showrooms: Stratton House, 80 Piccadilly, London, W.1
Overseas Business: Nuffield Exports Limited, Cowley, Oxford and 41 Piccadilly, London, W.1

Twelve Months' Warranty and backed by B.M.C. Service—the most comprehensive in Europe.





The M.G.A. 1600 CHOOSES

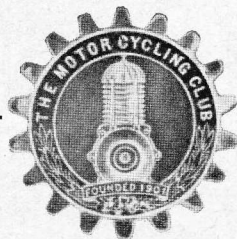


**DISC
BRAKE
PADS***

-SAFER STOPPING...TO BE SURE!

* Approved and fitted as original equipment

Small & Parkes Ltd., Hendham Vale Works, Manchester 9
London Office: 251 Kingston Road, SW19



36th EXETER TRIAL
6th-7th JANUARY, 1961

If you are not an M.C.C. member you may not know what an enjoyable and worthwhile week-end the 'Exeter' offers. Referred to by the motoring press as "the trial with an atmosphere all its own".

Starts Friday evening, 6th January, from Launceston, Kenilworth and London, and (after about 300 miles) finishes at Weymouth on Saturday, 7th January, with an informal dance and social evening at the Gloucester Hotel.

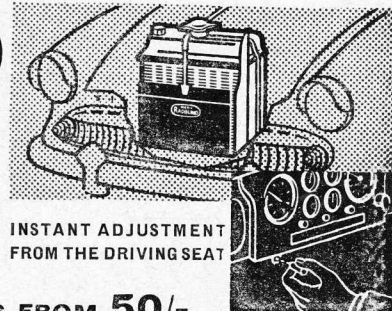
ENTRIES CLOSE
8th DECEMBER, 1960

Full details from J. A. Masters, Gen. Sec., M.C.C., 22 Norland Square, Kensington, London, W.11. Tel: Park 9665

Get-a-way...
from winter sluggishness
fit a **MORY RADBLIND**



- cut warm-up time
- increase engine power
- reduce engine wear
- save fuel
- improve heater performance



INSTANT ADJUSTMENT
FROM THE DRIVING SEAT

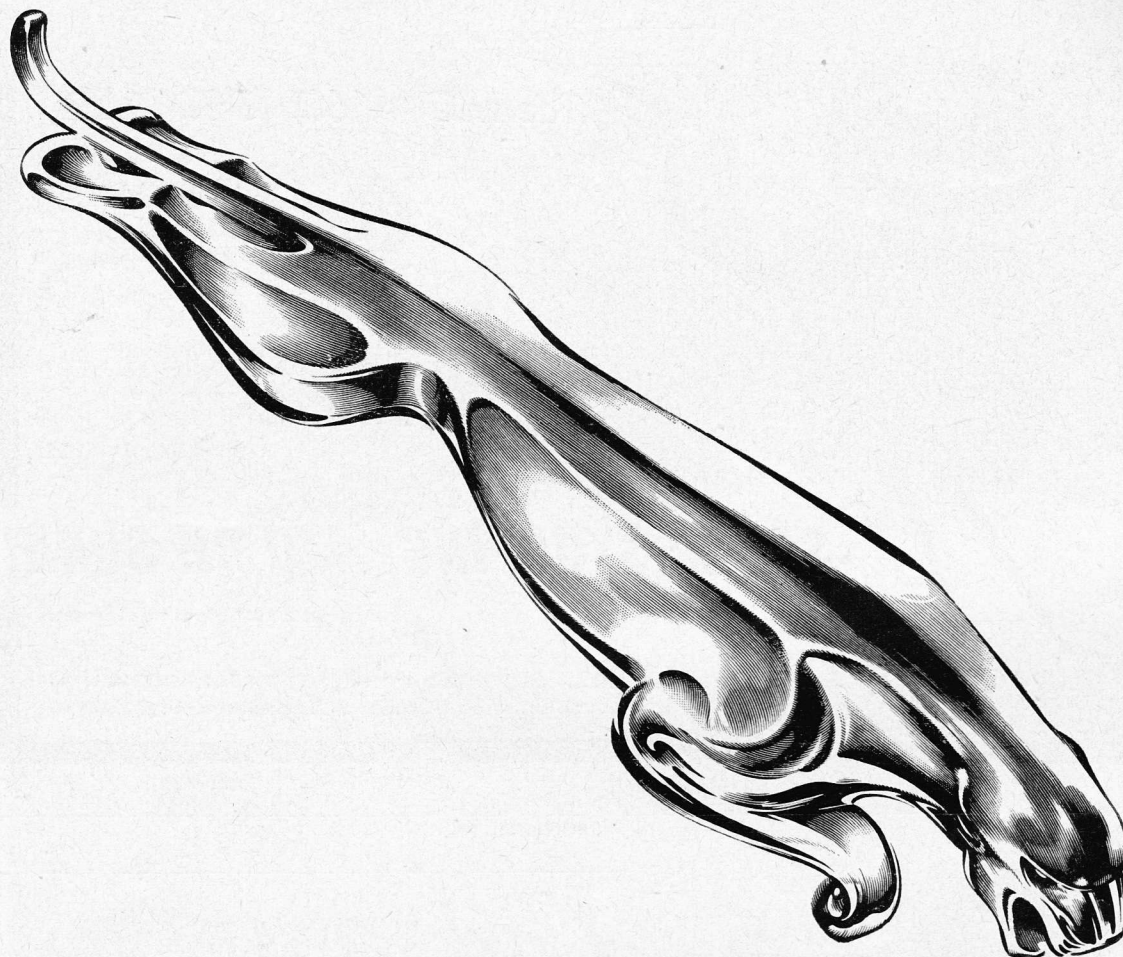
PRICES FROM 50/-

Please send me details of the Mory Radblind

Make of car.....
Model..... Year.....
Name.....
Address.....

A.S.3

Mory & Co. Ltd., 88 Leadenhall Street, London, E.C.3. AVE 3434



*A special kind of motoring which no
other car in the world can offer*

JAGUAR

Grace . . . Space . . . Pace

THE ENTIRE JAGUAR RANGE OF MARK IX, MARK 2 AND XK150 MODELS CONTINUES FOR 1961. *Optional extras available will be power-assisted steering on the 3.4 and 3.8 litre Mark 2 models and an additional range of metallic colours for all models.*

LONDON SHOWROOMS 88 PICCADILLY W.1.

AUTOSPORT

BRITAIN'S MOTOR SPORTING WEEKLY

Registered at the G.P.O. as a Newspaper

Vol. 21 No. 20

November 11, 1960

Managing Editor GREGOR GRANT

Assistant Editor MARTYN WATKINS

Technical Editor
JOHN V. BOLSTER

Art Editor
THEO PAGE

Northern Editor FRANCIS N. PENN

CORRESPONDENTS

Northern Ireland	BRIAN WADDELL
Eire	BRIAN FOLEY
Continental	GERARD CROMBAC
Western Germany	ALAN BRUCE
Scandinavia	HANS FRIES
U.S.A. Editor	RUTH SANDS BENTLEY
West Coast	GORDON H. MARTIN
Southwest	JIM HALL
South America	Dr. VICENTE ALVAREZ
Canada	BILL WORDHAM

PHOTOGRAPHIC SECTION

Chief Photographer	GEORGE PHILLIPS
Scotland	W. K. HENDERSON
Continental	MAURICE LOUIS ROSENTHAL
U.S.A.	OZZIE LYONS

CONTENTS

	Page
Sports News	668
Pit and Paddock	669
The Bugatti Engine—Type "King"	670
Northern Sport	673
The Turin Motor Show	674
The 1960 Veteran Run to Brighton	678
The Cult of the Car Cruiser	681
The Television Trophy Trial	683
The High Peak Trial	686
Club News	688

Published every Friday by AUTOSPORT
159 Praed Street, London, W.2

Editorial and General Office PADDington 7673
Advertising Department PADDington 7671-2

General Manager PETER BAYLEY

Advertisement Manager NORMAN H. BIGSBY

Annual Subscription £4 9s. 0d.
(U.S.A. and Canada \$13.00)

Direct from the Publishers or all Newsagents

Reprinting in whole or part, of any matter appearing in AUTOSPORT is forbidden, except by permission of the publishers. Unsolicited MSS., drawings, photographs, etc., should be addressed to the Editor. Un-suitable contributions will be returned if accompanied by a stamped addressed envelope, but the publishers accept no responsibility for their safe return. Payment for contributions will be made the month following publication, unless by special arrangement.

EDITORIAL

R.A.C. RALLY OF GREAT BRITAIN

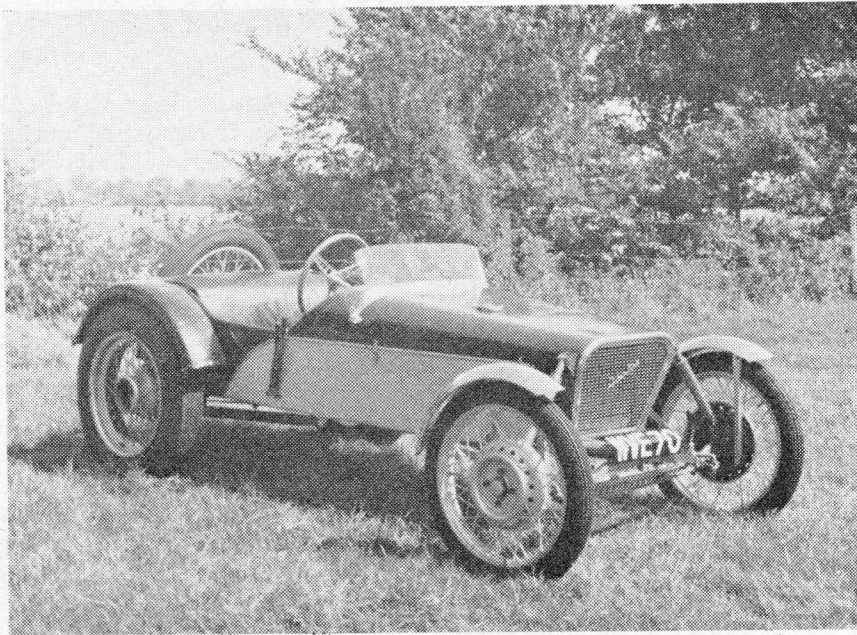
THIS month's International R.A.C. Rally promises to be the best of the series. By concentrating much of the competitive side in the Highlands of Scotland, the organizers have shown a true appreciation of sections which not only require a high degree of driving ability, but, being on little-used roads, need cause no offence to local inhabitants. Indeed, people in the Highlands are looking forward to the event, and all competitors can be assured of a fine welcome. Again, the Scottish counties police have shown all possible desire to co-operate, which is a tribute to the joint efforts of the R.S.A.C. and the R.A.C. Foreign participation is the largest ever in a British rally: the European Touring Championship will be settled, a fact that has produced official "works" teams from Citroën of France, and Mercedes-Benz of Western Germany. It adds prestige to Britain's premier road event that the United Kingdom should be the scene of a battle for the blue riband of the rally world.

RIVERSIDE

FOR the first time a World Championship Grand Prix event takes place on the West Coast of the U.S.A. At the fine Riverside Raceway, near Los Angeles, the world's top-line road racing drivers will compete in the second Grand Prix of the U.S.A., and bring a new type of motor racing to Californian enthusiasts. Although the Championships are not at stake, the event is of vital importance to the future of Formula 1 racing in the Western Hemisphere. Whilst no one can rob Indianapolis or Daytona of their significance as high-speed track events, there is an ever-increasing public in the Americas for the classic European-style of single-seater racing. It is beyond doubt that an enormous crowd will converge on Riverside on 20th November to make the occasion one of the most important in the history of American racing. Despite its drawbacks geographically, the credit for the new enthusiasm for G.P. racing must go to Alec Ulmann, Reg Smith and all the rest of the Sebring crowd for their enterprise in introducing European Formula 1 racing to the U.S.A. There is no doubt that, given sufficient encouragement, American racing car manufacturers have available the technical knowledge to build a car to the European Grand Prix formula that would be capable of matching anything that may come from British or Continental stables, and events such as Riverside, Sebring and so on will do much to provide the necessary encouragement. The lack of success achieved by the Reventlow Scarabs last season should not give cause for complacency in this direction, either, for Rome was not built in a day, and some of our own contenders in the 2½-litre formula showed no greater promise for several years.

OUR COVER PICTURE

MOMENT OF TRIUMPH: A happy smile crosses the face of Reg Parnell as he arrives at Madeira Drive, Brighton, at the end of the 1960 veteran run. His machine is a 6 h.p. De Dion Bouton of 1903, owned by the Montagu Motor Museum.



B.A.R.C. STAR FOR PAT MOSS/ANN WISDOM

THE Duke of Richmond and Gordon announced on 4th November at the annual dinner of the B.A.R.C. that the club's Gold Star award would be given to Pat Moss and Ann Wisdom, the first time this has been given to any women drivers.

As usual, John Morgan and his aides organized a superb party, with a really top-line cabaret. Raymond Baxter was in scintillating form when he replied for "The Guests".

The racing and rally world was well represented, the list including Jack Brabham, Stirling Moss, Bruce McLaren, Roy Salvadori, John Cooper, Colin Chapman, Graham Hill, Les Leston, Peter Jopp, Henry Taylor, Ken Tyrrell, Eric Haddon, Charles Vivian, Mike McKee, Ken Gregory, Peter Pilsworth, Reg Parnell, John Dalton, Tony Brooks, Sidney Allard, Richard Shepherd-Barron, Bob Staples, and others.

MALLORY PARK M.R.C. DINNER-DANCE

THE Grand Hotel, Leicester, was crowded on 2nd November for the annual dinner-dance of the Mallory Park M.R.C., with Clive Wormleighton in the chair, and John Dalton as toastmaster. Dickie Davies, Dunlop's motor-cycle expert, replied for "The Guests", and made several attempts to convey his "sinthere thanks to Cynthia", who is, of course, Miss Queensborough, known to all and sundry as Miss Mallory Park, who is responsible for most of the organization side.

The Club's Trophy for the best performance of the year went to Mike Hailwood, and Clive Wormleighton produced a handsome new trophy which has been presented to the club for car entrants, by president Bob Gerard.

THE British Racing Mechanics dinner is to be held at the Criterion Restaurant, Piccadilly, W.1, on Friday, 25th November. Anyone wishing to go should contact Eddie Bowler, 7 Douglas Avenue, Wembley, Middlesex, from whom tickets (32s. 6d.) may be obtained.

APPEAL FOR JAGUAR INFORMATION

LORD MONTAGU OF BEAULIEU has been commissioned to write the history of the Jaguar Company for publication next year. This will be the third of a new series of Montagu Motoring Books, first one of which is to appear shortly.

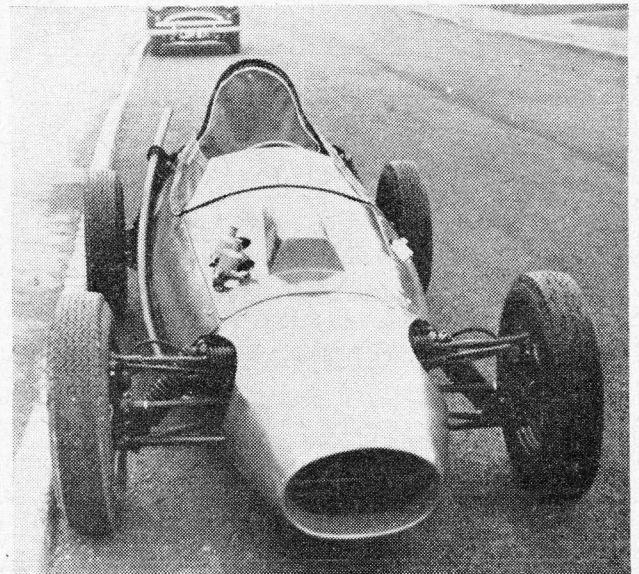
In order that this history should be as complete and objective as possible, Lord Montagu has appealed for anyone with any knowledge, especially of the earliest days of the Swallow sidecars and special bodies, and the S.S. cars, to contact him at the Montagu Motor Museum, Beaulieu, Hants. All letters will be acknowledged and all material loaned will be returned. This book has the blessing of both Jaguar Cars, Ltd., and the Jaguar Drivers' Club.

THE R.A.C. announce that the Segrave Trophy is not to be awarded for 1959. Donald Campbell received the Trophy in 1958 for his outstanding performance in raising his own Water Speed Record.

★

NEW FORMULA JUNIOR machine is the front-wheel drive Elfin produced by Peter Emery on the lines of his successful 250 c.c. racing car. B.M.C. or Ford engine is used, and the multi-tube space-frame has all-round independent suspension.

★



CHALLENGE to the all-conquering Cannons in the trials field may well come from this new machine designed and built by Bertie Sayers, of Gisborne Road, Cambridge. Called the Aberties, it is intended to build more of these machines.

SPORTS NEWS

HENRY TAYLOR will be driving a Ford Anglia in the Monte Carlo Rally; he has never competed in the event before.

GERMAN HILL-CLIMB CHAMPIONSHIP—SCHORNDORF

HANS HERRMANN, Porsche RSK 60, 2 mins. 01.1 secs. and average speed of 92.2 k.p.h., new record. This was the highlight, together with another win by the old champion Hans Stuck, winning the 700 c.c. class, driving a BMW at 77.6 k.p.h.

Sports cars up to 2 litres: Herrmann (Porsche RSK), 92.2 k.p.h. **Junior Formula:** Ahrens, Jun. (Cooper), 89.5 k.p.h. **Grand Tourisme, 850 c.c.:** Lohsträter (Fiat Abarth), 79.3 k.p.h. **1,000 c.c.:** Häring (DKW F 93), 76.7 k.p.h. **1,300 c.c.:** Geither (Alfa Romeo Zagato), 83 k.p.h. **1,600 c.c.:** Günther (Porsche Carrera), 84.2 k.p.h. **Over 1,600 c.c.** Mahle (Mercedes 300 SL), 85.4 k.p.h.

SPEEDWELL telescopic dampers are available for all cars originally fitted with telescopic type dampers and in the form of conversion kits for cars fitted with Lever type dampers. These kits now cover the following cars:

	Rear only
Riley 1.5
Wolseley 1500
Morris Minor
A.55 Mark II
Wolseley 15/60
Morris Oxford V
Riley 4/68
Ford Anglia 105E

The price of these conversion kits with mounting brackets is £12 complete. The price of the telescopic shock absorbers on their own is £8 15s. per pair. Speedwell telescopic dampers are guaranteed for two years against faulty workmanship or materials. For further information please contact Mr. L. Arnstein.

PIT and PADDOCK

THE Italian coachbuilding concern Ghia have been busy producing very stylish versions of current Chrysler models which will be exhibited at the Turin Motor Show. A Valiant appears with extremely attractive Gran Turismo bodywork and Borrani wire wheels with knock-off hubs.

The "300" has the very powerful Chrysler V8 engine with ram induction, and "dished" disc wheels. Lavishly equipped, the interior of this car is a joy to behold. Provision is also made for air-conditioning units to be installed in both cars.

Undoubtedly these new Ghia productions will find a ready market in U.S.A. amongst people who want something different, yet backed by an important manufacturer.

It is anticipated that there will also be a Ghia Lancer in the near future.



CANADA'S *Track & Traffic* magazine have awarded their car of the year prize to B.M.C. for the Mini-Minor and Austin Seven.

BOB MCINTYRE is the latest motor-cycle ace to be thinking in terms of four wheels, and will shortly be given trials by a prominent team manager.

WOLFGANG SEIDEL has entered for both the Cape Grand Prix at Killarney on 17th December and the Caltex sponsored seventh R.A.C. Grand Prix at East London on 27th December.

A STANDARD model Facel Vega HK 500 saloon has recently completed a flying kilometer at 147.354 m.p.h. with a best time of 149.436 m.p.h. The times being verified by the Belgian R.A.C.

COLIN DAVIS is virtually Formula Junior Champion of Italy, and has won the "Auto Italiana Sport" Trophy for best aggregate in Cuba, Vigorelli, Monte Carlo, Albi, Monza, Messina, Pescara, Austria, Modena and Syracuse. He drove for Osca, Taraschi and Stanguellini. New Zealander Denis Hulme (Cooper-Austin) was third, and Henry Taylor (Cooper-Austin) sixth.

VIEWS of the new Ghia versions of the Chrysler Valiant (top) and the "300" (above) show extremely neat and attractive bodywork, with unusual front-end treatment featured on the "300". This car has the powerful ram-induction engine.

SCUDERIA Ferrari have now signed Phil Hill, Taffy von Trips and Ritchie Ginther for 1961 Formula 1 races. Gendebien and Mairesse have not, so far, been offered terms.

GRAHAM HILL has rejoined B.R.M. for 1961, and is, of course, going to Riverside along with Bonnier and Gurney.

A SPECIAL body lightweight Aston Martin DB4 G.T. Zagato was sold on the opening day of the Earls Court Motor Show to the well-known patron of motor racing, Mr. R. S. Wilkins.

MORGAN-MINTEX, LTD., is the new concern formed by the Morgan Crucible Co., Ltd., and British Belting and Asbestos, Ltd. In addition to the well-known Mintex materials, the company will also manufacture Sinterlink equipment.

THE Auto Union Showrooms on the Great West Road, Brentford, will be open from 8 a.m. until 7 p.m. on weekdays and from 8 a.m. until 5 p.m. on Saturdays.

THE second Racing Car Show, organized by British Racing and Sports Car Club, will be held in both the Old and the New Halls of the Royal Horticultural Society, Westminster, London, S.W.1, and will be open from Saturday, 31st December, 1960, to Saturday, 7th January, 1961. The 22 exhibitors have risen to no less than 73 and there will be more racing cars on show than before. These will include all the 1960 champions, as well as a section of historic racing cars and many others, details of which will be released in due course.

JOHN DAVY CHAMPIONSHIP Latest Positions

THE latest positions in the John Davy Championship based on 1960 Formula Junior races at Brands Hatch are, after the meeting on 16th October, given below.

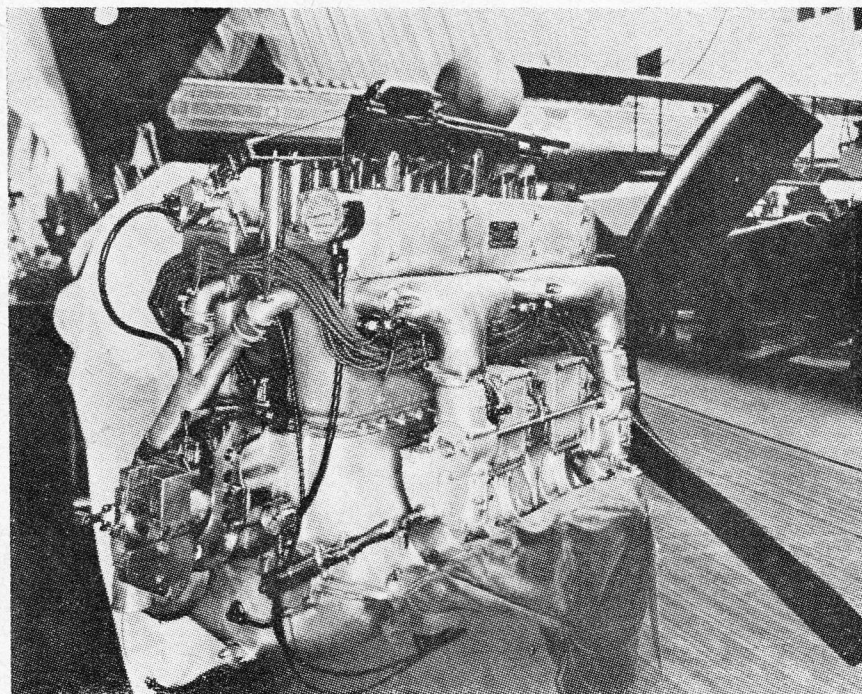
The final round is on Boxing Day when either Jimmy Clark or Peter Ellis can take the title.

1, Jimmy Clark (Lotus), 16 points; 2, Peter Ellis (Lotus), 13; 3, Peter Arundell (Lotus), 9; 4, Tony Maggs (Gemini), 7; Graham Warner (Gemini), 7; Trevor Taylor (Lotus), 7; John Brown (Lotus), 7; Chris Andrews (Lotus), 7; 9, Peter Ashdown (Lola), 6; Brian Hart (Terrier), 6; 11, D. G. Addicott (Elva), 5; John Surtees (Cooper), 5.

GRAND PRIX OF THE U.S.A.

IT is fairly definite that Ferrari will be non-starters at Riverside on 20th November, and Porsche will not race their present 1½-litre cars in a full-scale G.P. for 2½-litre machinery. Provisional list of entrants to date is:

B.R.M.: Hill, Bonnier, Gurney. **Lotus:** Ireland, Clark, Surtees. **Cooper-Climax:** Brabham, McLaren. **Cooper-Climax** (ind.): Salvadori, Rodger Ward, Henry Taylor, Gendebien. **Cooper-Maserati:** Trintignant, Gregory. **Cooper-Castellotti:** Scarlatti, Cabianca (or Munaron). **Lotus-Climax** (Walker): Moss. **Scarab:** Daigh. **J.B.W.-Maserati:** Naylor. **Lotus-Maserati:** X.



SHOWING the cannon at the rear and the Marlin automatic rifle on the cam cover. The side plate on the cam cover was the last change made to the King-Bugatti engine.

The Bugatti Engine — Type "King"

A Rarity which Led to Types 45 & 47: said to be the only Bugatti built outside France

OUR story begins in 1917. The United States of America had declared war on 6th April and on 16th May the Aircraft Production Board was organized. Entering the conflict with a most rudimentary aircraft industry, America's chief asset lay in the nation's automobile plants, in which the factories were keyed to mass production. The problem was to put that potential to its most effective use in the war effort.

The Bolling Commission, appointed by the APB and under the direction of Major Raynal C. Bolling, was sent to Europe in June. One of its missions was to find an aircraft engine that could be produced in quantity by the automobile plants—an engine, with adequate power available, to remain competitive into 1919. It was generally assumed that the war could very well last into the 1920s.

While the aircraft industry in Europe had, under development and test, some 80 different aero engines, it was the philosophy of the APB to concentrate efforts on the mass production of one or two standard types.

Major Bolling was a flying enthusiast of long standing. In the Spring of 1917, while serving at the age of 41 as the youngest general counsel in the history of United States Steel, he was instrumental in organizing the First National Guard Aero Squadron with headquarters at the Garden City, Long Island aerodrome. Strangely enough, by today's standards, the unit was equipped by means of private donations: \$59,000 from the Aero Club of America, \$10,000 from Mrs. William K. Bliss, and \$1,000 from William K. Vanderbilt. Lt. Bolling was promoted to Captain just before the

U.S.A. entry into the war, and was made a member of the APB.

Ettore Bugatti had been just as busy. With the Molsheim plant in German-occupied territory, Bugatti was operating

BY RICHARD POE

a new plant at 86 Rue Chaptal, Levallois-Perret, Seine. The efforts of the firm were being concentrated on the design and testing of an aircraft engine.

The first engine completed was a single overhead camshaft 742 cubic inch in-line 8, weighing 510 pounds. With a bore and stroke of 4.3 inches (110 mm.) and 6.3 inches (160 mm.), the cylinder block was one casting. Two shaft-driven magnetos were mounted on the right side with two up-draught carburettors on the left. The gear-driven prop shaft was above and to the right of the crankshaft centre line. His first "eight" for an automobile was the Type 30 of 1923.

Unfortunately, the horsepower rating of 220 was wholly inadequate to compete with the German Mercedes, or with Rolls-Royce, Hispano-Suiza, and Lorraine-Dietrich. The engine did, however, have two desirable features. The in-line design was quite free from vibration and would make fuselage streamlining a simple task.

Other European manufacturers were concentrating on the rather bulky 45 and 60 degree Vee designs and the Gnome and Le Rhone rotary types.

During the winter of 1916-17, Ettore Bugatti designed and built the prototype of the engine that would become known as the King-Bugatti. The engine included at least three more Bugatti firsts,

namely, his initial attempt at building a 16-cylinder engine; the first Bugatti to feature the now traditional square cut engine block; the first to use the cylinder castings in separate blocks of four cylinders, each with sheet steel water jacket.

Retaining the desirable features of the original in-line layout, Ettore took a direct approach to the horsepower problem. He mounted two parallel vertical rows of eight cylinders on a common crankcase, each row driving its own crankshaft. The two cranks turned the propeller shaft through reduction gears. If eight cylinders would put out 220 horses, 16 should, in theory, at least double the power.

Included in the design was the provision for a 37 mm. cannon barrel to pass through the crankcase above the shafts and fire through the hollow prop hub. The French air ace, Guynemer, had found that the heavy calibre cannon firing buckshot was a most effective air-to-air weapon. Glycerine, warmed by the crankcase oil, was used in the recoil mechanism. The slide fitting for the barrel in the crank webs was lubricated by the same oil.

Between 9th and 16th November, the first official tests of the engine were made with members of the French Technical Section and the Bolling Commission as observers. During those eight days, the engine ran a total of 37 hours. Failures were attributed to three fractures of the water pump shaft and a broken piston pin. The test came to a final halt at 10.10 p.m. on the 16th. An American sentry stepped or fell into the whirling propeller and was killed.

While no horsepower or fuel consumption curves were obtained in that initial run, the 1,067 pound engine developed a maximum of 420 h.p. at 1,980 r.p.m.

Members of the Bolling Commission, in spite of the incompleteness of the test and the problems encountered, felt that the 16-cylinder engine had definite possibilities. When the necessary licensing arrangements had been made to build the engine in the United States, the "16" and the "in-line 8" were shipped to the APB test and research centre at McCook Field (now the Wright-Patterson AFB), Dayton, Ohio. I can find no record of the smaller engine having been tested here, and no trace of its whereabouts now.

The chief of the APB engine section, Lt. Harold Emmons, decided to turn the further development of the "twin-8" over to the Duesenberg Motors Corporation in Elizabeth, New Jersey: this plant had been tooling up to make the Liberty aircraft engines. Mr. Charles B. King, an outstanding automobile engineer and reputedly the first man to drive an automobile on the streets of Detroit, was placed in charge of the project.

The French engine was shipped to Elizabeth and the first tests made on 23rd February, 1918. Three Bugatti representatives, Sgt. E. Fredericks and Messrs. Shepfer and Lucks, had been sent from France to assist the Duesenberg staff. During its 20 minutes' running time, 400 h.p. was developed at 1,800 r.p.m. with stops for an oil change and to extinguish a fire in one of the

A DIRECT cam driven distributor on the cast cam cover was one of the interesting features. This 16-cylinder (two eights on a common crankcase) was designed primarily as an aircraft engine.

carburetters. When torn down for inspection, three bearings were burned, two pistons were cracked, a cylinder block and a connecting rod broken, and one of the crankshafts sprung. The latter was probably the result of an accident in Paris.

By the time this test and inspection had been completed, the first of the re-designed engines was ready for the dynamometer. In all, nine King-Bugattis were to be tested by Duesenberg before the final 50-hour test run.

It was just prior to those tests, on 26th March, that the news that Colonel Bolling had been killed in action was confirmed. Taking a wrong turn not far from Estes, France, his staff car came under German machine gun fire. He died while returning the fire with his service revolver. A statue in memory of Colonel Bolling now stands on the main street of Greenwich, Connecticut. The Bolling Memorial Redwood Grove in Humboldt County, California, was named in his honour.

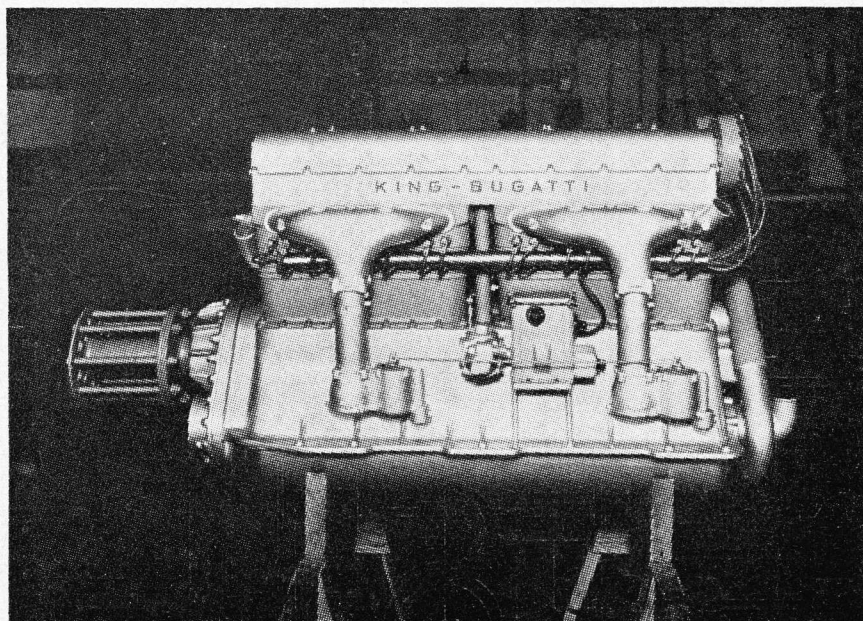
On the tenth try, the King-Bugatti finally got through a 50-hour test successfully. The test was run in 10 periods of five hours each. In each period, the first half-hour was at 410 h.p., the remaining four and a half hours at 380 h.p. Conducted under the personal supervision of Charles King, the only adjustment necessary was the replacement of 11 sparking plugs. When the engine was torn down, it was found that four or five valve springs were broken and two pistons cracked. They apparently had no effect on performance. The engine had developed 503 h.p. at 2,400 r.p.m. Prior to the test, the engine had been through a 10-hour running-in period and the prop drive through 30 hours.

In the previous series of tests, the King-Bugatti engine number five had been approved by a special French commission sent to Duesenberg. Although the magneto had been wrongly timed, and the oil pump had not fully emptied the sump due to an air leak, they considered the development of 410 h.p. at 2,130 r.p.m. as satisfactory. The engine was shipped to Lt. Emmon's headquarters in Detroit on their orders. Lt. Schupp, the Air Service representative at the test, objected—but to no avail. He felt that the test did not justify placing the engine in a service aircraft.

In July 1918, the APB had placed an order for 100 of the engines. They increased the order by an additional 100 in August. According to a report from Duesenberg, 40 of the engines had been accepted by the government by 7th October. A month later, the war was over.

The series of tests and examinations of the engines by Charles King and his staff, running from 14th May until 23rd September, had quite naturally led to changes in the production version of the King-Bugatti from its original French prototype.

The cast iron cylinder blocks were modified to allow a freer circulation of water and the valve seats were spaced farther apart. This eliminated the hot



spots around the exhaust valves that had cracked the valve seats in the original version. The centrifugal water pump was changed to prevent any leakage from entering the sump and to provide water cooling for the shaft. In addition, the sheet-steel water jacket that had been welded to the block was changed to screw fastened aluminium. On the French engine, water was fed into each jacket separately and between the rows of cylinders. Assembly was difficult and necessitated the removal of the exhaust system for repairs. In the U.S. version, water entered at the top rear of the block and flowed forward. Total capacity was 4.25 gallons. Toolled steel rocker arms replaced the chrome nickel ones and the necessary machining operations reduced from 14 to four. A considerable saving on an engine with 48 valves!

The French five ring pistons were dropped in favour of the more commercially available three ring slipper type. Piston pin diameter was increased by $\frac{1}{8}$ inch. The two corrected the problem of exhaust smoke and pin breakage.

The main bearing liners were changed from steel to bronze. The original engine did not use liners for the connecting rod .014 inch babbitt bearings. King added the bronze liners with .047 inch babbitt.

The tests had shown that Bugatti's non-pressure type oil system would not give uniform and reliable lubrication. On the production model, two rotary gear pumps were used, one to drain the forward end of the sump as the plane dived. In climbing, flow to the oil reservoir was by gravity with the line entering the rear of the tank to prevent flow back in diving. The second pump, at 30 p.s.i., forced oil from the reservoir to the crank and crank bearings, then to the hollow cam which sprayed the springs, rockers, valves and bearings. By gravity, the oil returned to the sump by passing over the prop shaft bushing. The cam and magneto drive gears were lubricated by spray from the crankcase, as were the crank-shaft and prop main bearing, cylinder walls, and so on.

After trying Zenith, Stromberg, and the original Bugatti carburetters, it was decided to standardize on four special

Millers with $1\frac{1}{8}$ ins. choke, and jets number 76, 76, 71, 68, 57 and 53. Number 76 was the idling jet with others opening progressively as the throttle was advanced. They were set low for gravity feed, there were no lefts or rights, and were synchronized by adjustable couplings. Each was equipped with a high altitude control that reduced the vacuum in the float chambers to allow faster fuel flow. On the original engine, one float was forward and one to the rear of the jets. In climbing or diving, the mixture was changed.

The separate magneto-distributor set up was changed with a saving in weight of 40 pounds. The King-Bugatti was equipped with four Dixie magneto-distributor combination units, cross-wired so that either side could operate the engine independently. A separate hand-operated mag was to be in the cockpit to facilitate starting. The drive shafts were changed in the gearing to make timing easier. In the U.S. test of the original engine, there was over four degrees difference in the timing of the two shafts.

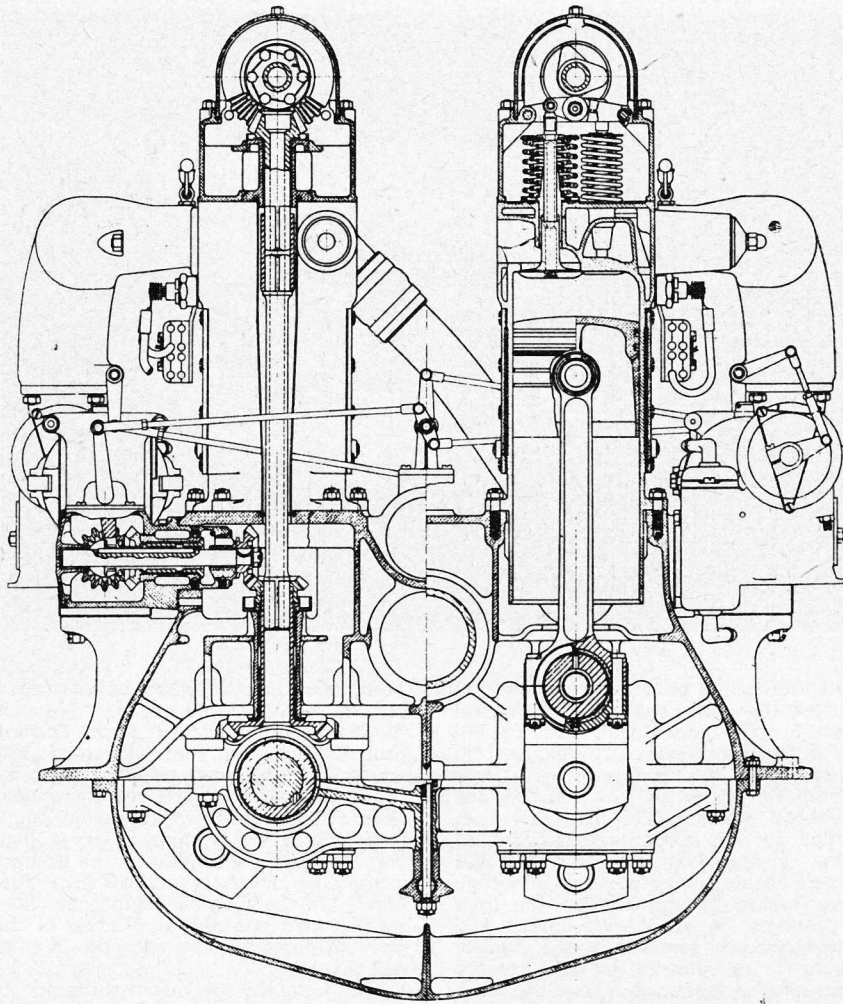
Hollow stem valves were used with cast iron guides pressed into place. It was felt that both changes would allow better cooling. The original guides were screwed into place. There were two concentric springs per valve.

The major defect found in all the engines was in the crankshafts. In two out of three runs, the crank broke between cylinders 7 and 8 left. Four causes were found. The cranks were made of carbon rather than chrome nickel steel; each had been improperly tempered. The forging and quenching temperatures had been too high.

Each crank was forged in two pieces and connected at the centre by a taper and key drawn tight by a nut. The throws of each half were on one plane (180 degrees) with assembly of the halves made at 90 degrees. When the engine was assembled, number 8 throw left was on TDC while number 8 right was 45 degrees past BDC.

The connecting rods were found to have the same defects and were corrected.

In January 1919, Duesenberg was continuing its experiments with a King-



Bugatti equipped with two carburetors and two special Dixie magnetos. The King-Bugatti project ended with the closing of the Elizabeth plant the following month.

Also after the war, Ettore Bugatti and the Societe Anonyme des D'Aviation Louis Breguet, Rue de la Pompe 115, Paris, combined their talents to develop the Breguet-Bugatti Multiple Power Plant. An extension of the King-Bugatti, the idea was to be competitive in the aircraft engine horsepower race of the 1920s.

Two of the vertical 16-cylinder engines were placed end to end. The forward of the two was mounted at a higher level. The four crankshafts were geared to a common prop-shaft carried on special bearings under the crankcase of the upper (forward) engine.

To synchronize the crankshaft the propeller shaft speed, an automatic clutch operated by axial thrust, was put between each crankshaft and its prop gear. If a crankshaft was being driven at a speed less than that of the prop-shaft, the device would declutch. After regaining the proper speed, the clutch would re-

engage the system. Breguet and Bugatti were also working on the further development of the vertical 16. The clutch system was also used on a Breguet-Bugatti made up of two of the 16s mounted bottom to bottom vertically.

The programmes were unsuccessful. By 1930, neither firm was listed by Janes as being in the aircraft business.

However, those years of work on aircraft engines was to prove of value to Ettore Bugatti. In 1929, the Molsheim firm brought out its Type 45 automobile engine. Using the same basic layout of the King-Bugatti and his original aircraft

engine with 16 cylinders, the bore and stroke were 2.36 ins. and 3.3 ins. Displacement totalled 231.8 cu. ins. Each row of eight cylinders was fed by a Roots-type blower and Zenith carburetors.

In 1930, came the Type 47. Bore, 2.36 ins. Stroke, 2.59 ins. Displacement, 180.13 cu. ins. The 1,850 lbs. engine was rated at 300 h.p. There were three vertical valves per cylinder, and nine roller bearings for each of the two crankshafts. The overhead cams were driven off the rear of the cranks. Each cam drove a blower with Zenith carburetor at engine speed. The two magnetos were driven by the cams via flexible shafts.

Perhaps it would have been good psychology to have retained the provision for the 37 mm. cannon!

Just how many of the King-Bugattis were built over and above the 40 accepted by the government is unknown. There is also no record of the engine having been actually used in an aircraft.

To my certain knowledge, there are just two of the engines in the United States. One is in the collection of the National Air Museum of the Smithsonian Institution in Washington, D.C. The other is in the United States Air Force Museum at Wright-Patterson Air Force Base, Fairborn, Ohio.

Acknowledgments. May I express my appreciation and gratitude to those whose co-operation and assistance have made this story possible: Mrs. Raynal C. Bolling, Mr. Royal Frey of the U.S.A.F. Museum, The staff of the National Air Museum. The publishers of *Janes all the World's Aircraft* for permission to use their photographs. The publishers of *Automotive Industries* for permission to use their photographs.

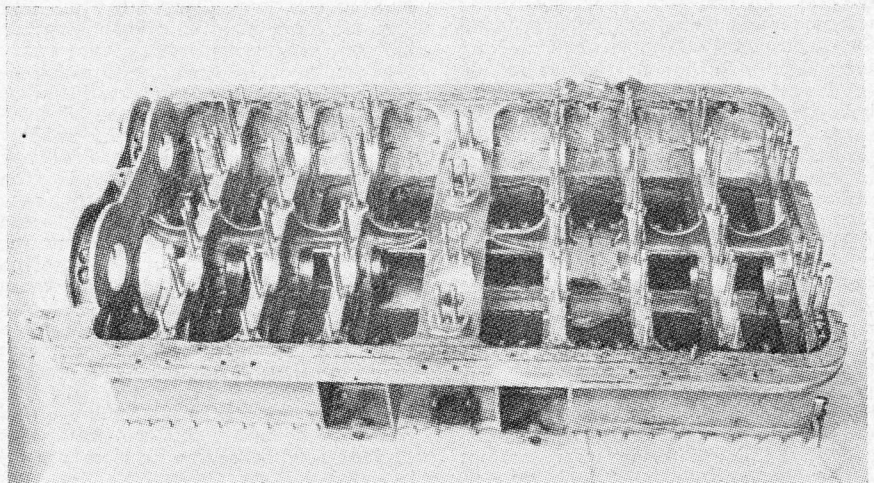
General Specifications—King-Bugatti Engine.

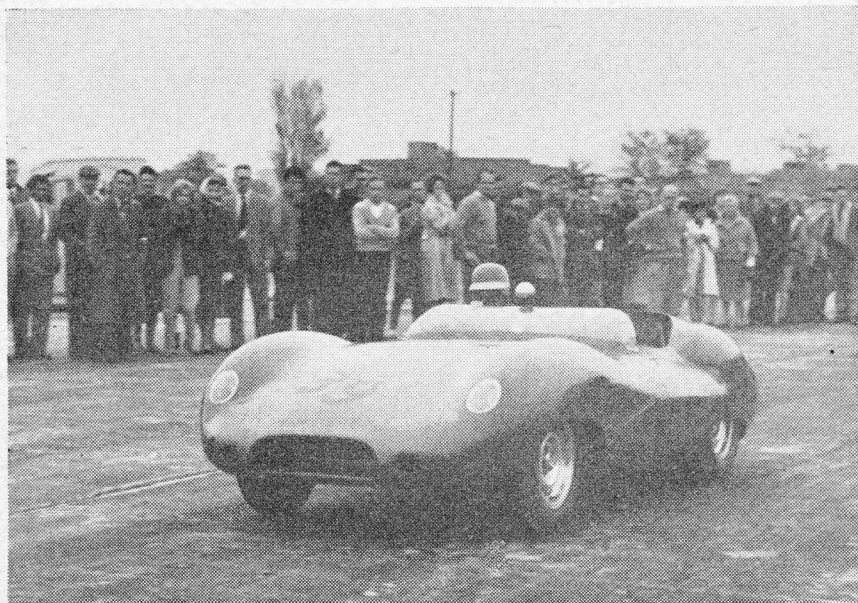
Type: In-line vertical 16, two rows of eight cylinders in blocks of four, cast iron, water cooled.
Weight: 1,170 lbs., dry, less exhaust stacks.
Length: 44.25 ins.
Width: 24.8 ins.
Height: 32.28 ins.
Bore: 4.33 ins. (110 mm.).
Stroke: 6.33 ins. (160 mm.).
Displacement: 1,484,288 cu. ins.
Normal b.h.p./r.p.m.: 410/2,000.
Pistons: Crowned aluminium.
Compression: 5 to 1.
Ignition: Four Dixie 800 magnetos, 38 deg. advance, clockwise rotation.
Plugs: AC Titan, two per cylinder.
Firing Order: 1L, 7R, 5L, 4R, 3L, 8R, 7L, 2R, 4L, 6R, 8L, 1R, 2L, 5R, 6L, 3R.
Carburetors: Four Miller Special.
Valves: Diameter: two inlet, 1.535 ins.; one exhaust, 2.263 ins. Seat angle, 10 deg. Lift (inlet), 0.653 in.; (exhaust) 0.700 in. Spring, two concentric per valve. Clearance (inlet and exhaust), 0.015 in. Actuation, single o.h.c. and rocker arms.
Crankshaft: Two-piece formed, eight throws at 90 deg., 96.5 lbs. each.
Camshaft: Two-piece shaft-driven.

ABOVE: Transverse section of the engine showing the camshaft and magneto drive. This clearly shows its advantage over the bulky V.8.

★

RIGHT: Top half of crankcase.





**CHESTER MOTOR CLUB CHANGE
VENUE OF QUEENSFERRY SPRINT
S. J. Diggory (Lister-Jaguar) Makes
B.T.D.**

THE Chester Motor Club's Queensferry Sprint meeting, one of the oldest events of the Northern calendar, for 1960 changed its venue. Since its inception this meeting was always held on the main driveway to John Summers Iron Works, but this road, always on the narrow side, has now been bisected by an island.

On Saturday, 22nd October, by very kind permission of the Officer Commanding R.A.F. Station Sealand, a long, disused runway was offered and gratefully accepted. The Chester Club, working like beavers, cleared a half-mile section of this to the tune of some 30 yards in width, the surface being of solid concrete, and apart from a breakdown of the electrical timing apparatus a successful afternoon's sport ensued.

Class 1, for sports cars up to 950 c.c. and 750 Formula cars, proved a fairly easy win for E. Carden (Berkeley) in a time of 29.2 secs. Second was G. B. Tofts (750 c.c. Austin). Class 2 was for sports cars up to 1,300 c.c. and allowed J. T. Butterworth (Lotus) to win with a run in 27 secs., his runner-up being D. S. Baldock (T.V.R.) in a time of 29.6 secs.

Class 3 (sports cars up to 2,000 c.c.) provided a first for J. R. Kennerley's TR3A when he clocked a time of 27.2 secs. Next came J. P. Hacking's very pretty Porsche Super 90 with a time of 28.6 secs. Class 4, for unlimited sports cars, went to S. J. Diggory driving his "second string" car, the space-frame Lister-Jaguar, with a run in 21.4 secs. Next came R. F. Parry, in an H.W.M.-Jaguar, with a run in 22.8 secs. Class 5, for racing cars up to 1,100 c.c., was taken by J. T. Butterworth (Lotus) in 27 secs. from K. Moore, in a Kieft-Norton, in 31.1 secs.

Class 8 (racing cars up to 2,001 c.c.) went to A. B. Bell's supercharged M.G.

RUNNER-UP Jim Berry, who was unfortunate enough to suffer from a fluffing motor on his best run, had to be content with second fastest time, 0.4 sec. behind Diggory.

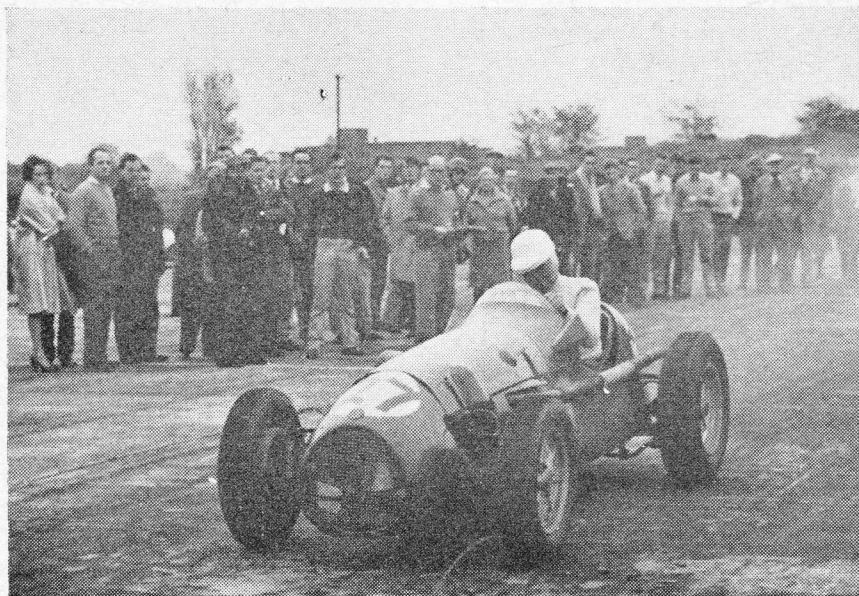
in 27.2 secs. The only other entrant in this class, namely, H. Clifford, was unfortunate enough to break a drive-shaft on his G.P. Alta.

Class 9, for unlimited capacity racing cars, provided B.T.D. when Diggory took his Lister-Jaguar over the line to the tune of 20.4 secs., beating J. H. Berry's E.R.A. by 0.4 sec. The latter, in his best run of 20.8 secs., suffered from a fluffing motor. Last but not least came a very large handicap class for production saloons worked on a rather complicated formula which seemed to be enjoyed by one and all!

FRANCIS PENN.

**NORTH WALES CAR CLUB,
CAMBRIAN RALLY**

THIS year's Cambrian was without doubt the toughest in the series to date. Out of 32 starters who set out on the 200-mile navigation section from that most obliging filling station, "The Lion", near Gobowen, only 18 were classified as finishers.



SETTING OFF to make B.T.D., Jim Diggory, driving the space-frame Lister-Jaguar, recorded 20.4 secs. at the Chester M.C.'s successful Queensferry Sprint.

This was another of the "no nonsense" rallies that are getting more popular. The route was given out an hour before the start and the order as the cars started.

A lot of hopes were dashed very early on between controls two and three, near Llyn Moelfre, where a very tempting white road petered out into a very muddy field. It took 45 minutes to extract six cars!

The half-way halt was at the Wynstay Arms, Wynstay, but previously to this the competitors had tackled the Hirnant, Bwlch y Groes, and some cunningly sited controls between them.

The second half started with a really tough section leading to a repeat of a Bolton section, looping round to Dylyfe. This proved another graveyard and many of the also-rans wished afterwards that they had had the courage not to have bothered with it at all. After this the route went north across country where the quickest way between controls was the "route". This part finished with a very tight section from Vyrnwy to the top of Bwlch y Groes and down to the Bala end of Bala Lake. From here the competitors had a non-timed route-card back to the Imperial Hotel, Llandudno, where the results (provisional) were announced.

Results

Best Performance: 1, G. F. Flint/G. Kendal Jackson (VW), 0 fails, 35 m.; 2, P. A. R. Bernie/B. Hughes (Sprite), 0 fails, 38 m.; 3, M. Y. Day/I. Hall (VW), 0 fails, 52 m.; 4, C. Twigdon/L. Chilvers (Sprite), 2 fails, 33 m.; 5, D. R. Ledgaard/J. Williams (Dauphine), 3 fails, 32 m.
Best N.W.C.C. Member (otherwise unplaced): G. Edwards/K. Leckie (Mini-Minor), 8 fails, 45 m.
Best Invited Club Member (otherwise unplaced): R. Galpin/J. Owen (Austin Seven), 3 fails, 43 m.

THE British Racing and Sports Car Club announce that they will, once again, be holding their Midnight Film Shows at the Warner Theatre, Leicester Square, on successive Friday evenings, 25th November and 2nd December. Tickets for these performances are available to members of any R.A.C. recognized motoring club and application forms can be obtained from the B.R.S.C.C. at 6 Buckingham Street, London, W.C.2.



The Cars Of Tomorrow At Turin

The Lancia Flavia the Car of the Italian Show

ONE ought to be patriotic but the truth will out. Nobody can conceal the fact that the London show went off at half-cock this year, through lack of anything new to exhibit. Now, only days later, Turin has opened in a blaze of excitement, with people crowding in from all over the world to see what the cars of tomorrow will look like.

This is no exaggeration, for it would be absurd to deny that the Italian coach-builders dictate the fashions which will be followed in all countries. They may become a little blurred before they reach the giant presses of Birmingham, Billancourt or Bremen, but here is beauty in metal that will inspire designers for years to come.

This year a new and beautiful hall has been consecrated to the great names of coachbuilding alone. Before we enter this holy of holies, however, let us consider the cars in the main pavilion. Most of the models exhibited have been described in our Paris and London show reports, but now we are allowed to reveal a secret that has been trying to get out for some time. At last the new Lancia Flavia has been presented to the public.

The new Lancia is a 1.5-litre car, but it is a big, roomy vehicle which can fairly be called a six-seater. It may well be that more compact and sporting versions will be produced later on, but the basic model is large for its engine size

and is not, therefore, primarily a high-performance car.

The engine is a flat-four, with the cylinder block in aluminium alloy. The

BY JOHN BOLSTER

Photography by Theo Page

crankcase is split down the middle, and the counterbalanced crankshaft is on three bearings. The bore and stroke are 82 mm. x 71 mm. (1,500 c.c.). An aluminium alloy is also used for the detachable heads, and the valves are pushrod operated.

This very short engine is ahead of the wheel centres with its radiator mounted right in front. It drives, via a single dry plate clutch, to a four-speed, all-synchronized gearbox. The engine being ahead of the differential, the gearbox is behind it driving back again to the hypoid final drive. It would be easy to attach a central lever to the rear of the box, but the Italian preference for a column-type lever has taken precedence. The front wheels are driven by open shafts and constant-velocity universal joints.

The front suspension is by unequal length tubular wishbones and a transverse spring. There are long rubber distance pieces between the spring and the top wishbones, which presumably

play some part in the suspension as well as insulating road noise. Curiously enough there is an anti-roll bar, instead of the more usual anti-roll mounting of the transverse spring.

At the rear, a tubular dead axle is on semi-elliptic springs, again with an anti-roll bar. The brakes are Dunlop discs on all four wheels with hydraulic operation and a vacuum servo. The steering box operates through a three-piece track rod.

If the new Lancia is creating a furore, there is also much interest in the Innocenti. This great firm manufactures the Lambretta scooter, and so its factory and production methods are of the highest capacity. It is, therefore, most pleasing that the Innocenti saloon is the Austin A40, built under licence. The Innocenti spider is based on the Sprite, of which it uses the basic mechanical organs. However, the body of the Sprite is scarcely typical of Italian styling, and lacks the luxury that Continentals now demand from even an open car.

Thus, the Innocenti spider has an entirely new two-seater body designed by Ghia. It has that luxurious look that makes you want to sit in it which, if you are a girl, is probably the object of the exercise. Anyway, it's a really pretty little car and a great feather in the cap of B.M.C., for their mechanism has been chosen against all the claims of Italian engineering.

TREMENDOUS INTEREST has been shown in the new Innocenti 950, produced by the well-known scooter concern and based on the Austin-Healey Sprite, the chief mechanical components of which are employed.

Another new car is the Skyline Sport from Tokyo. Two chassis are fitted with Michelotti-designed bodies, about the size of an American "compact". They both have 80 b.h.p. four-cylinder engines, but a very charming lady in a beautiful kimono whispered in my ear that they are only prototypes. Entirely new is the Osca 1600 G.T. The engine is of the well-known twin-cam design, giving 115 b.h.p. in its untuned version and considerably more for the "hotted-up" model G.T.S. The chassis has an independent rear end by wishbones, and disc brakes, while the long, rounded body is by Zagato. There is also a convertible by Michelotti on the stand. Autobianchi have a de luxe station wagon based on the Fiat 500 with horizontal engine. It is a really attractive miniature.

All the other cars we have seen before except the new spider on the N.S.U. Sport Prinz by Bertone. N.S.U. also show their Wankel engine. The 5-litre Maserati awes us by its potential performance, the Ferraris are as seductive as ever, and one longs to get behind the



wheel of the Abarth 1000. Great Britain, France and Germany are well represented, but their wares have already been covered in the London and Paris reports. The brilliant American designs are here, but they too were fully described in our Paris number.

Let us, therefore, enter the pavilion

where the specialist coachbuilders display their exciting new models.

There can't be much doubt about it—Pininfarina has done it again! Let us ignore the "car of the future" on his stand. This has one wheel in front, one behind, and two in the middle, while the rest of the design stems from space literature. The Pininfarina design which steals the show is much more practical than that, in fact it is an ideal luxury touring car of the 175 m.p.h. variety.

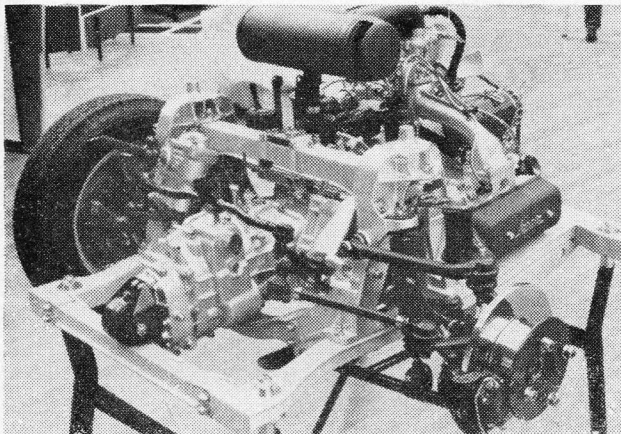
The car is the Ferrari 4-litre Superamerica and the body is a fixed head coupé which has an utterly smooth outline. There are no protruding lamps, the headlamps retracting when out of use and the tail lamps being almost concealed by hiding them in recesses in the bumpers. The flashing indicators are under small, curved glasses that are virtually invisible in the body panels. The bonnet has a very full curve and a rather Citroën-like nose, while the long tail slopes right down to an almost pointed end.

No car could be "cleaner", and one immediately sees that the new trend is away from edges, fins and clusters of lamps. Hitherto beautiful cars suddenly become untidy and over-decorated. The Bertone Alfa Romeo Sprint Speciale is seen to have too much chromium bumper and the flat end to the tail looks unfinished. The barrel-shaped sides contrast with a "conning tower" top section; yet this car was beautiful before one saw the Pininfarina! However, a very racy white coupé on a Ferrari 250 G.T. certainly restores one's faith in Bertone.

Boneschi breaks all the rules, but doesn't quite get away with it. He shows an open spider that is uncompromisingly square and razor-edged and calls it a "monolith". The driver's side of the bonnet is slightly higher than the passenger's, and the four headlights are set in a "meat safe" grille. Yet, by some curious Italian art, the effect is not unpleasing.

Canta affects dummy radiator grilles on his two- and four-door saloons, which

IDEAL TOURING CAR of the 175 m.p.h. variety is the utterly magnificent 4-litre Ferrari Superamerica with a fixed-head coupé body by Pininfarina. The headlamps retract when not in use, and the tail lamps are almost concealed in recesses in the bumpers.



★
FRONT END of the 1½-litre front wheel drive Lancia Flavia, the sensational new car unveiled at Turin after months of rumour.



NEW CAR is the Skyline Sport, from Tokyo. The body is Michelotti-designed and the power unit at the moment is a four-cylinder engine developing about 80 b.h.p. It is understood that these are prototypes.



adorn small rear-engined Fiats. Ellena shows a very clean fixed-head two-seater coupé on an Abarth 2200, with a long tail and just about infinite luggage space.

Fissore is almost alone in retaining tail fins on an otherwise very smooth Auto Union four-seater coupé. This firm shows a Fiat 1500 coupé with pronounced "tumble-home" of the windows towards a narrow roof. A feature of several cars on the stand is a very low air scoop with a slot only some $\frac{1}{8}$ in. deep. Indeed, the air-scoops on bonnet tops are generally becoming much lower than they were. The Fissore beach car, with water skis on its plank-width roof, makes one long for the sunshine.

The Ghia stand is the most spectacular of all. A "car of the future" has a



BEACH CAR: This appealing exhibit, with body by Fissore, includes water-skis mounted on the roof, and makes one long for the sunshine.



CAR of the future (1): This is the Pininfarina "X", which boasts a single front wheel (for steering), a single rear-wheel (for driving) and two at the sides (for balancing).

single front seat with handlebar steering, while the two rear passengers face away from the accident. They are very properly provided with built-in bottles of *Punt e Mes*, that delectable Italian apéritif. An astonishing Ghia exhibit is an American single-seater "hot rod" with a beautifully finished body. There is also a quite orthodox coupé, powered by a big Chrysler engine.

Francis Lombardi has some rather angular saloons, somewhat in Farina's mood of two years ago. There are two Fiats and a Studebaker Lark, and they each have four headlamps apiece. The Fiat 1500 with its twin-cam engine appears on many coachbuilders' stands, and Monterosa has a very nice coupé on this chassis.

Moretti also goes for the Fiat 1500,

SPORTS MODEL by Boneschi breaks all the rules. The body is uncompromisingly square and razor-edged, while the driver's side of the bonnet is slightly higher than the passenger's side.

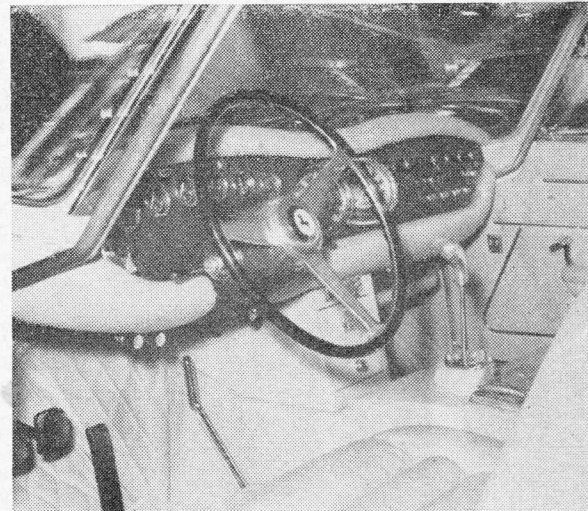
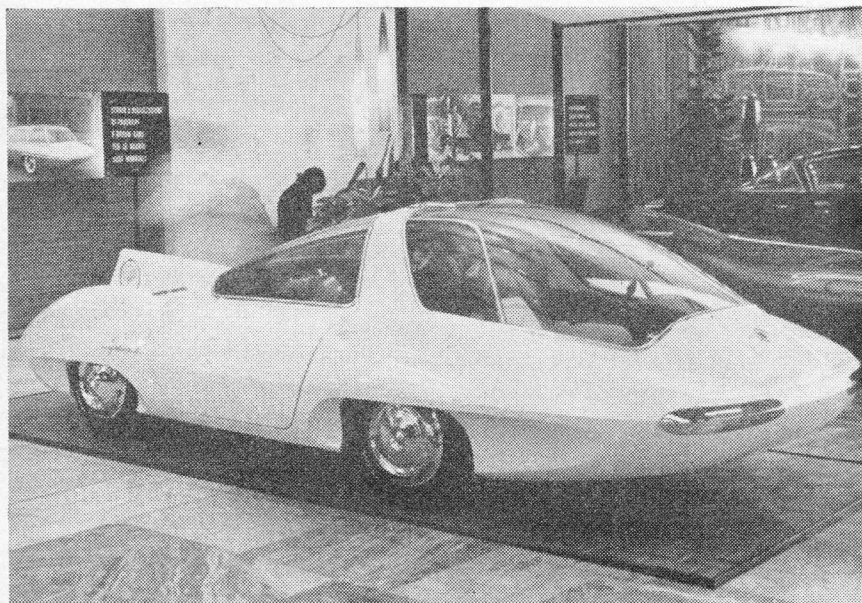


ZAGATO pioneered the smooth, finless tail form, and this treatment looks particularly well on his Lancia Flaminia coupé.

contriving a neat four-seater coupé on one. He even manages to seat four people in his open and closed 750 c.c. sports Fiats without too much loss of dignity. Savio makes those dear little beach cars with basketwork seats that most people secretly want to own. He also has an open body on the Fiat 600D that is supposed to take four people and looks more than a little like a Floride.

The touring stand contains some glorious Superleggera creations. Maseratis, Alfias and Lancias abound, all very clean and with lots of window area. There are no tail fins on the Touring bodies, but two curious little chromium-plated heads are placed where the fins would go on a Maserati 3500 G.T.

The Vignale stand is a large one, and all the cars have that patrician look which only perfect proportions can give. Once again a Maserati 3500 G.T. finds itself carrying a lovely body, an open spider in this case. An Alfa Romeo



SUPREMELY well laid-out is the cockpit and instrument panel of the Bertone Ferrari. Note the angled rev. counter and speedometer dials.

CAR of the future (2): The Ghia Selena is one of the most spectacular exhibits, featuring a single front seat and rear-facing passenger accommodation.

2000 sprint is endowed with an attractive coupé, and while one expects to find a sporting Fiat 1500, a Lancia Appia is a rare bird. The "Italia 2000" hides a Triumph TR3 chassis.

Zagato pioneered the modern smooth tail without fins, and this treatment particularly suits a Lancia Flaminia coupé. The Zagato Aston Martin DB4 G.T. is on the chassis manufacturers' stand.

Well, that is Turin 1960, and if we are all a bit out of breath after Paris and London it is still worth the considerable journey to see those lovely bodies. It is difficult to describe the sheer artistry displayed, but where the pen fails it is hoped that Theo Page's camera may catch some of the sheer poetry.

VERY CLEAN LINES are featured on this fixed-head two-seater coupé, based on the Abarth 2200 by Ellena.



JOURNEY'S END: Jack Kemsley, complete with satisfied smile, arrives at Madeira Drive after a successful run with Philip Fotheringham-Parker's 1901 4½ h.p. Renault.

perfect conditions. I dismantled my ignition system to cure an incipient misfire, while at least 10,000 spectators breathed down my neck.

Soon it was time to make for the starting area, and with Raymond Baxter and some television equipment beside me, we moved off with both cylinders firing cheerfully. The next car to us was the Oldsmobile of Ray Henry of the Antique Automobile Club of America. No less than 244 Americans had come over to drive, ride, or just watch the run. A private bus carried a large contingent of them down the route to the coast.

Soon we were off, and taking the new diversion in Hyde Park, we then joined the familiar route past Buckingham Palace and over Westminster Bridge.

At Birdcage Walk, F. H. Babcock had jacked up the left rear wheel of his Royal Enfield Quadricycle, and was watching

To Brighton in the Sun

BY JOHN BOLSTER

Blue Skies for the 1960 Veteran Car Run Photography by George Phillips

AMONG those of us who make the annual pilgrimage to Brighton, the weather is normally regarded as a rather grim joke. The occupants of veteran cars have so little protection that one can describe the sensation as "low flying on a garden seat", and so the personal sufferings of a really wet commemoration run are only equalled by the mechanical embarrassments caused by water in the wrong places.

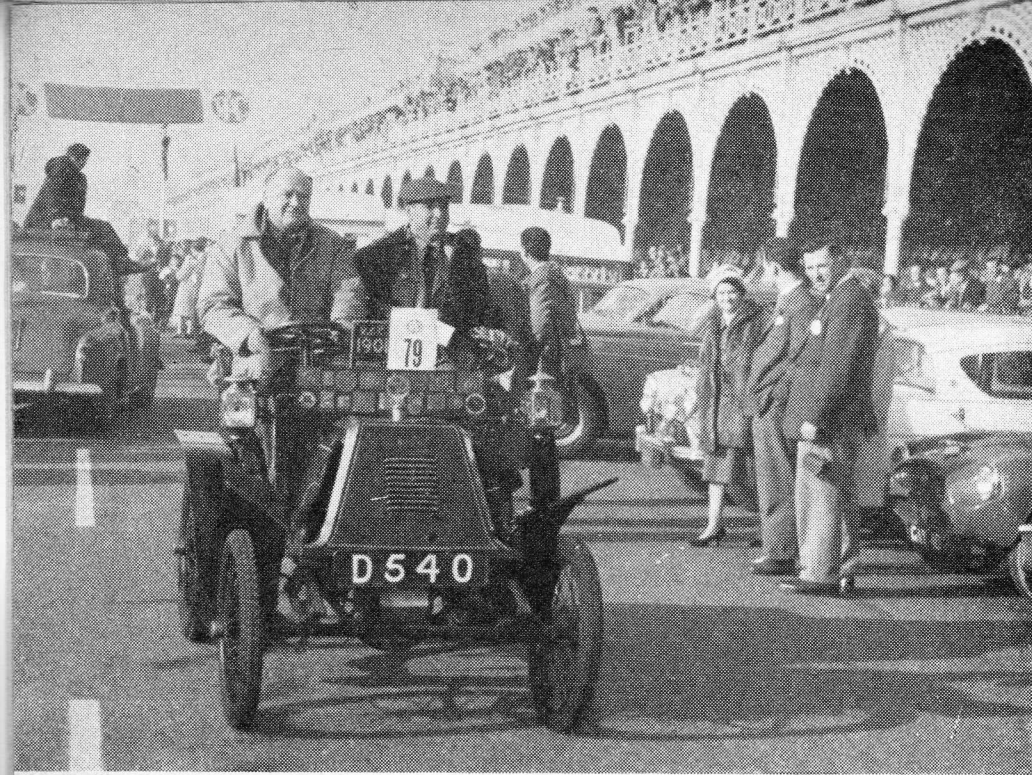
Thus, it was almost with disbelief that I awoke early on Sunday to see what looked like a pretty promising dawn. I

collected the 1903 Panhard from a garage and drove out to the start in Hyde Park, to find many friends gazing at the blue sky in amazement. "It's wonderful but it won't last," they said, but incredibly it did last, all day, and we performed our pre-start tuning operations under

HYDE PARK MIXTURE: Going down to the start are (left) Dennis Flather's 1897 Daimler, and (right) Cmdr. Sir Hugh Dawson's 1897 Benny Dogcart, just in front of E. D. Woolley's 1897 Daimler Phaeton.

it rotating with a worried look. By some curious coincidence, the left rear wheel seemed to exert a fascination on many drivers, and most of the early breakdowns centred round this component, though why the right wheel was immune from trouble one does not know.

On Westminster Bridge, Capt. Alcock had stopped with his De Dion, and the 1898 Panhard was also in trouble. Goodall was working on his Royal Enfield in Brixton Road, and James Tilling was suffering from overheating with the Sunbeam-Mabley; as will appear



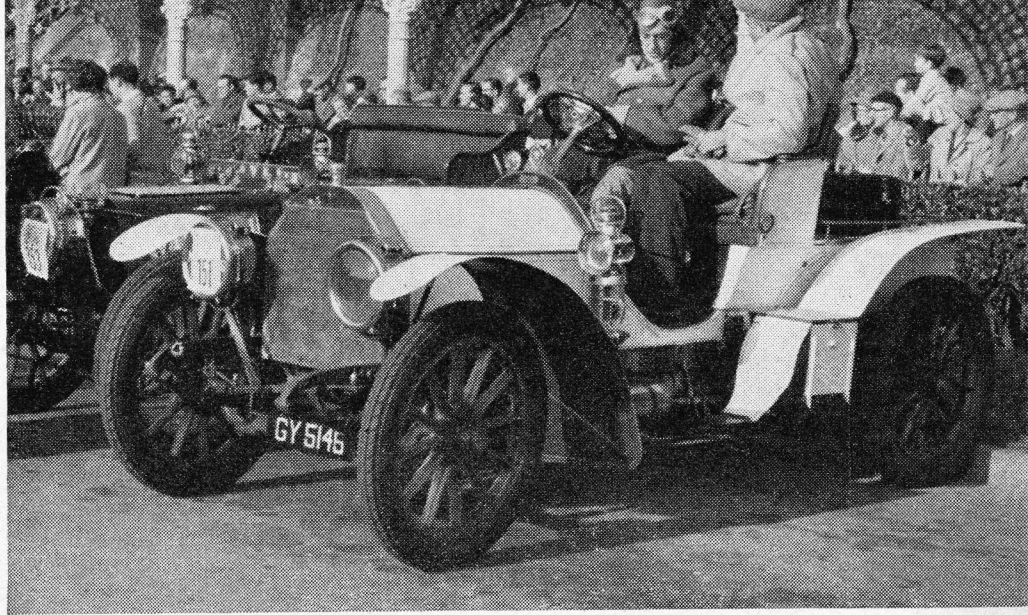
GIANT RACER: *In repose at Brighton is C. W. P. Hampton's 60 h.p. Mercedes, a two-seater dating from 1904. This car had to stop several times on the journey —purely to maintain schedule!*

later, it was not James's day. William Boddy had already come to a grinding halt with the Humberette.

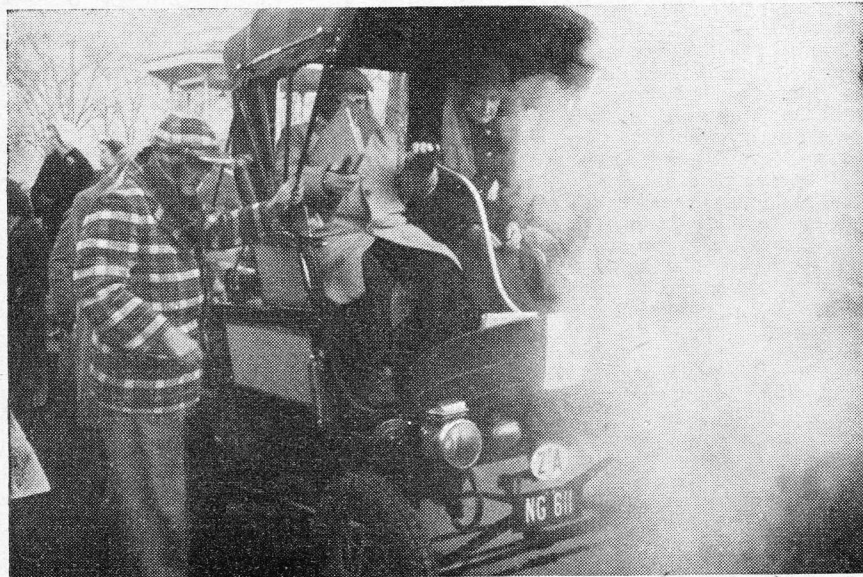
The number of cars in trouble early was unusually large. J. F. W. Howes was working hard on his 1902 Wolseley of the horizontal engine variety, and the 1901 Toledo Steamer from South Africa also needed attention. Capt. Benbough and Jack Twyford both had trouble with their 1896 Leon Bollée tricycles on Brixton Hill, and Baker's 1902 Hanzer was similarly indisposed. So was the 1898 Malvernia of Sir John Briscoe, who was gazing at (you've guessed it) his left rear wheel. Major Mills was titivating the Godiva, and even the 1903 Mercedes from the Allday collection had a short pause, but both these cars were seen going well thereafter. The Brushmobile from the Montagu Museum was in splendid form, the glorious hat of its lady passenger being much applauded. At Croydon, Betteridge's White Steamer was observed to have flames pouring out of its boiler, but in general the "steamers" were less temperamental than usual, for they are allergic to rain and gales.

I must, at this stage, comment on the appalling driving manners of many of the spectators. Some of them were so intent on watching the veterans that they paid no proper attention to their own driving. A typical manoeuvre was to overtake a veteran car at speed and then, suddenly noticing a tempting parking place, to brake violently and swerve across its bows. If these people have no respect for the old cars, why do they turn out in their thousands to watch? Francis Hutton-Stott was "carved up" several times by the same Jaguar, and the driver was so impressed by Francis's final rebuke that he stalled his engine in the middle of the road!

An even better incident concerned Thorpe's Darracq. A modern car cut in and braked, and though the Darracq has good anchors it cannot be expected to emulate a brand new set of hydraulics.



BRIXTON HILL: *At the top of the rise, R. K. N. Clarkson's 1902 Panhard-Levassor leads an older competitor.*



Thorpe very properly "borrowed" the brakes of his adversary, and the dumb iron of the veteran penetrated the coachwork of the modern, modifying its styling considerably before you could say "Pininfarina".

Meanwhile, another spectator, driving far too close to the veteran and paying too little attention, rammed it smartly up the rear and spread his radiator over his cylinder block. The total damage to the Darracq was a slightly bent number plate!

For many years we have implored spectators not to drive too close and menace the safety of our beloved old cars. Let us now warn them that a dumb iron through the middle of a body panel is no laughing matter. Keep away from

STEAM CAR! *J. S. Ferguson's 1901 Toledo Steamer disappears behind a white cloud as the driver works up pressure at the start.*



the veterans, for they can bite! Let me put it another way. The first time I drove the 1903 Panhard to Brighton was in 1934. The "modern" cars which were on the road on that day have now nearly all been scrapped, and when the 1960 models are just heaps of rust in junk yards, I shall still be driving the 1903 Panhard to Brighton.

Among the many clots, there were some superbly driven spectators' cars, quite a few of them of historical interest. It has become a tradition that Edwardian and vintage cars shall be polished up and brought out to welcome their forbears on the day of "the run". We are so glad to see these chaps every year, and we can rely implicitly on their driving ability. Nor do we quarrel with the ordinary travellers who are making proper use of the road. They pass us and are gone, but it is the cars full of laughing morons who have come out for a day's fun, and who thoughtlessly menace the safety of the very vehicles they have come to see.

If the week-end drivers were a pain in the neck, the police were really marvellous. The sheer skill with which they helped the veterans through difficult and crowded areas had to be seen to be believed. All the way to Brighton we had this wonderful assistance, and I am sure that every driver of a veteran would like me to say, "thank you, gentlemen!"

Let us return to the road. At Croydon, two Humberettes stopped for routine maintenance. Several of the later and faster cars had come up through the field, and at this point they had found it necessary to pause, purely to avoid disqualification for speeding. Gilbert's 1904 Quadrant Tricar was one of these, but Jack Twyford blew up the Leon Bollée of Murray Austin, unfortunately quite seriously. Tacon's 1903 Humber Olympia Tandem was overtaken, but he passed the Panhard uphill by dint of furious use of his pedalling gear. Miles's 1899 Benz had a shimmy on its front wheels that kept time with the palpitations of the engine.

At Purley, Wellingham was winding frantically at his de Dion, and Forster was working on the right rear wheel of his similar car—a very rare complaint, for left rear wheels were the usual cause of trouble. At Coulsdon J. E. Crossman's Georges Richard smelt terribly hot, while G. B. Corser was adding water to the 1900 de Dion. Occasionally, Peter

Hampton or Eric Sears would flash past in their respective Mercedes, only to stop and waste time afterwards to keep within their schedule. Actually, Hampton's great 9-litre racing car did come to an unscheduled halt on a hill, due to dirt in the petrol filter. Basil Davenport was going great guns on the 1902 Century Tandem, with the Mayor of Macclesfield in the exposed front seat (the Mayor of Macclesfield is his wife!)

Philip Fotheringham Parker broke a chain on the 1896 Lutzmann, but a temporary weld did the trick, and he was able to finish with this most spectacular horseless carriage. The similar machine of Berry also paused by the wayside, but the work appeared to be of a routine nature. Capt. Colver stopped with the Arnold, car No. 1 which took part in the emancipation run of 1896, but he was making a good average and seemed not to be having any unusual difficulties.

The traffic was very heavy as far as Redhill, but after that the various diversions kept casual traffic away, and we had a wonderfully fast run. Redhill, as its name implies, contains a formidable gradient, and there was much trouble for the crews of some of the smaller cars before the top was reached. McCrea's Argyle, North's de Dion, and Pottier's Georges Richard from Belgium all stopped for petrol here. Dr. Gilbertson's Oldsmobile appeared to have retired, Wilson's 1900 Pieper came to a halt and received police assistance on the gradient, while Sir John Briscoe again had trouble with the Malvernian. Capt. Benbough was stationary with the Bollée, probably cooling down after making the grade, and some terrible bangs from the Sunbeam Mabley indicated that James Tilling was in trouble. After various vicissitudes, the exhaust valve broke, but James actually managed to find a garage with an excellent machine shop, and another valve was adapted to fit; the Sunbeam Mabley was back on the road again.

Then I had a most imperial dice with Reg Parnell. Reg was driving Lord Montagu's de Dion and we raced neck and neck past Gatwick before his faster revving engine triumphed over the Panhard's slow-running power unit. However, he had to make a momentary stop for water which put us on an equality. By this point, Cole's 1900 Benz had one of its solid tyres attached with lashings of rope.

I am sorry to have to record that at

TRAFFIC JAM—well, almost! L. Murray Austin's 1896 Leon Bollée voiturette has stopped with mechanical trouble (right) while the 1901 de Dion Bouton (owned by the same man) has paused to offer help. On the left, A. W. F. Smith's 22 h.p. 1902 Daimler thunders past the pair of them.

Bolney Hill, James Tilling was the victim of a nasty accident. The Sunbeam Mabley is a curious little car, with one front wheel, one at the back, and two half-way along. The tiller steering is not of the best, but the tiny de Dion engine cannot propel it fast enough to cause any trouble. Unfortunately, the gradient caught James unawares and the speed rose a little higher than he had intended. The mechanic jumped and somersaulted on the grass at the side of the road, but Tilling stuck to his ship and almost regained control. Then, he was unable to avoid touching the kerb and the little machine swerved and overturned. James was badly knocked about and unfortunately broke his arm. The latest news from the nursing home is that an operation has been performed on the arm and now everything is progressing satisfactorily. Hard luck indeed!

On the run into Brighton, Reg Parnell ran out of petrol and I won our private Grand Prix. Jack Brabham had cured his Sunbeam of misfiring—it was only a loose plug lead—while Maurice Smith was delighted with the big Fiat after an excellent run. Jack Fairman also enthused about his ride in a 1903 Tony Huber, while Jack Kemsley was equally pleased with the little Renault, and Tony Brooks had enjoyed Bob Gregory's Darraq.

Perhaps the most astonishing success was that of M. Scoupe from France in the Lacroix de Laville. This car has a long wooden chassis with a single tiller-steered front wheel. The engine is a large 8 h.p. de Dion single-cylinder, and it drives one back wheel by a flat belt. The driver has a lever which pushes a jockey pulley on to the belt to tighten it, and that is all the transmission which the machine possesses. Yet, with no gears at all, this one-speed vehicle finished the run. It needed some pushing on three of the hills, but it made excellent time and showed a good turn of speed. It is doubtful whether the exposed belt drive would have worked in wet weather, but we hope that the intrepid M. Scoupe will test this point in a later event.

Another most interesting car to finish was Stothert's 1904 British Duryea. This machine has a horizontal three-cylinder overhead valve engine, a two-speed epicyclic gear and single chain drive; the body styling is extraordinary. Alec Hodsdon had a good run in the Turner-Miesse Steamer, and Sam Clutton went well in that famous Cadillac with which the late F. S. Bennett made so many records. Alas! Sammy Davis broke the crankshaft of his Leon Bollée.

So ended another Brighton Run, and what a good one! Two hundred and sixty-five cars were entered, and 243 actually started, ranging from 1896 to 1904 in date of manufacture. Of these, 223 finished by the four o'clock deadline, so most of the trouble which we saw on the road must have been fairly trivial. The weather and the police helped to make it a wonderful occasion.



The Cult of the Car Cruiser

Modern Motor Caravans make for Easier
Race-going and Uninhibited Holiday-making

ONE sees them everywhere nowadays; in Devonshire lanes, in the Scottish Highlands, on the routes nationales of France, making light work of Alpine Passes, in every conceivable Continental camping sight—and, of course, at motor racing meetings all over Europe. They attracted tremendous interest at Earls Court in October, particularly amongst people who do like the idea of caravanning, but dislike hauling any form of trailer. In short, the motor caravan has become a most important form of personal transport, and in its latest form offers exceptional value.

Motor racing enthusiasts are often faced with long journeys to circuits, the inevitable crowded hotels (often miles away from the scene of operations), and the problem of food. The motor caravan simply loads up with the things required, drives to the circuit and takes his own accommodation and restaurant along. Again, journalists find them ideal to cover meetings, for within a few minutes they can be converted into

mobile offices, with table to hold the typewriter and freedom from interruptions.

Recently I was lent a Calthorpe Cruiser on a Bedford chassis, and took it over to the Continent. This was a completely equipped vehicle selling at £825 and had the now-famous Calthorpe elevating roof. Unlike many other motor caravans, the Bedford Calthorpe is low enough to go on Silver City aircraft, thus cutting out the necessity to travel by sea which normal trailer folk have to bear.

The interior is extremely well thought out, and conversion from seats to beds can be accomplished within a few minutes. When arranged for sleeping, the rear becomes a double-bed, and the back of the front bench-type seat can be folded flat to form another fairly wide bed. In our case, it was thought best to use the rear compartment as a "double", and leave our small daughter in the front. The two boys, both fairly hefty, preferred to use their Dutch tent and

A COMPLETELY equipped vehicle which is ideal for holiday-making. The Calthorpe Cruiser is low enough to go on Silver City aircraft, cutting out the necessity of travelling by sea.

"safari" beds. Although the type we used could be regarded as sleeping four, I should say that from a comfort point of view, three should be taken as ideal.

Anyway, when everything was packed away there was any amount of room inside, either with all seats facing forward, or placing the folding table between two benches at the rear. When used like this, not only can passengers play cards or even write letters whilst travelling, but the caravan is immediately ready to use as a dining car. Calor gas provides the cooking and main interior lighting; the cooker has two burners and a separate grill, the gas cylinder being carried beneath the floorboards. Lighting is via a normal gas mantle, and provides surprisingly good illumination. There is, in addition, an electric lamp above the driving compartment.

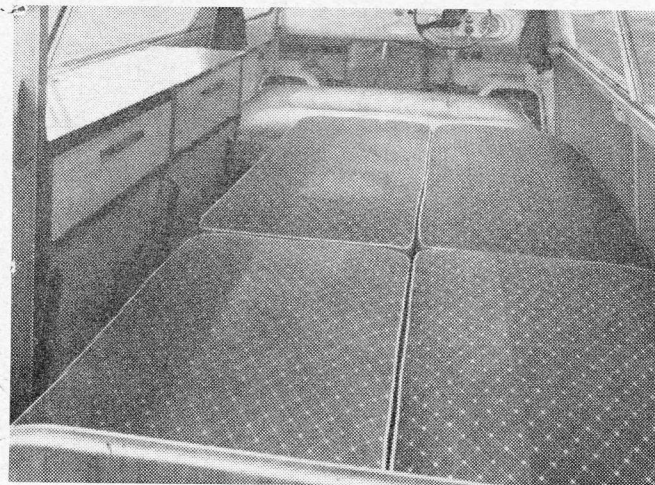
Alongside the cooker is a washhand basin with running water, drawn from an exterior container and filled through a cap on the body panel. We carried an extra five-gallon polythene carrier, to conserve the running water supply. Beneath these fittings are commodious storage cupboards, and alongside at the rear is a hanging wardrobe, fitted with runners. More storage space is available under the seats, and can be used for blankets, sheets and so on. There are also shelves running along the roof-top, useful for carrying small items.

Privacy is ensured by fitted curtains, which can be drawn to conceal the interior. The rear door has a separate cupboard designed to carry plates, cups, saucers, forks, knives, spoons and so on.

Nothing could be easier to operate than the elevating roof, which is invaluable for permitting occupants to stand up in the van, and also provides adequate ventilation during the night. It is completely waterproof as we discovered, when we had to spend the night in an Italian camping site during a cloudburst.

BELOW: FOLDED FLAT: the back of the front bench type seat can be folded flat to form a fairly wide bed.

LEFT: CONVERSION: This comfortable looking little "dining room" can be easily converted into a double bed—as can be seen in the right hand picture.





The Bedford Calthorpe Cruiser performs remarkably well, although a three-speed gearbox is something of a drawback in the Alps. Brakes are excellent and showed no sign of fade during the steepest of descents. Steering is light and positive, the motor caravan handling well under all conditions. Perhaps the most surprising aspect is the general economy, for we found that the vehicle did something over 25 m.p.g. under average road conditions, cruising wherever possible at 55 m.p.h. Oil consumption was negligible, about one pint being added in over 1,500 miles.

When making a Continental trip we, as tyros, took far too much unnecessary gear and clothing. In conversation with more experienced motor caravanners I discovered that this is a common fault, and that clothing should be kept to the barest minimum. In point of fact, I did not see any advantage in the interior washhand basin, as polythene basins are all that are necessary, and full facilities are available in the majority of camping sites. I would have preferred the space to be occupied by a small fridge, or even an ice-box. However that is a matter of opinion, and I am sure the Calthorpe people would make any alterations that are deemed necessary!

Although sheets and blankets look nice, there is nothing to beat a sleeping bag. The former are apt to slip off during the night—and it can be pretty sharp in the mountains, even during the hottest of summers!

Several motor caravanners met *en route* had most attractive bivouacs which they could arrange at the rear of the van, thus providing a useful "lounge", kitchen or even additional bedroom. We met one family of seven who had been on the Continent for three months, had lived, eaten and slept in their van and "bivvy", and their only regret was the fact that they were homewards bound. We praised the Swiss camping sites, but they said that they were n thing compared to the majority of the West German ones.

REAR VIEW showing the washhand basin with running water drawn from an exterior container and filled through a cap on the body panel. There is quite a lot of space for storage under the seats as can be seen.

The camping sites range from the overnight variety with few facilities to luxurious affairs with swimming pools, restaurants and dance halls. All are fairly cheap, some as little as 2s. 6d. per night per person, with no charge for children. To take full advantage of lower rates, one is advised to be in possession of an International Camping Carnet, which can be obtained on application from the R.A.C. On many sites, carnet holders are also given free access to swimming pools and other facilities. On the majority, long-term parking is available, for which special rates are quoted.

For officials in rallies and trials, a motor caravan is a wonderful asset, and their use is increasing to man those inaccessible control points in which organizers delight. It also solves the problem of what to do with the family—a thing which faces many people who devote their energies to motoring sport.

The professional man also finds the motor caravan a useful investment, and several prominent photographers have had theirs converted to mobile dark rooms. One Scottish doctor became so fed up with irregular meals that he uses his as a dining room between visits to

ALPINE HALT. Mrs. Eba Grant and her daughter Simone take advantage of the stop to stretch their legs during their holiday in Italy earlier this year.

patients. Passers-by are startled to be regaled with the appetizing odour of bacon and eggs and coffee emanating from his parked van—off some busy Glasgow street!

It also is a boon to people who have to take numerous children to school, serving as a general utility vehicle with immense carrying capacity.

For competitors, the motor caravan means an excellent changing-room and an invaluable centre for his operations. For long-distance events such as Le Mans, the vehicle can be used as a first-rate H.Q., with all possible facilities laid on.

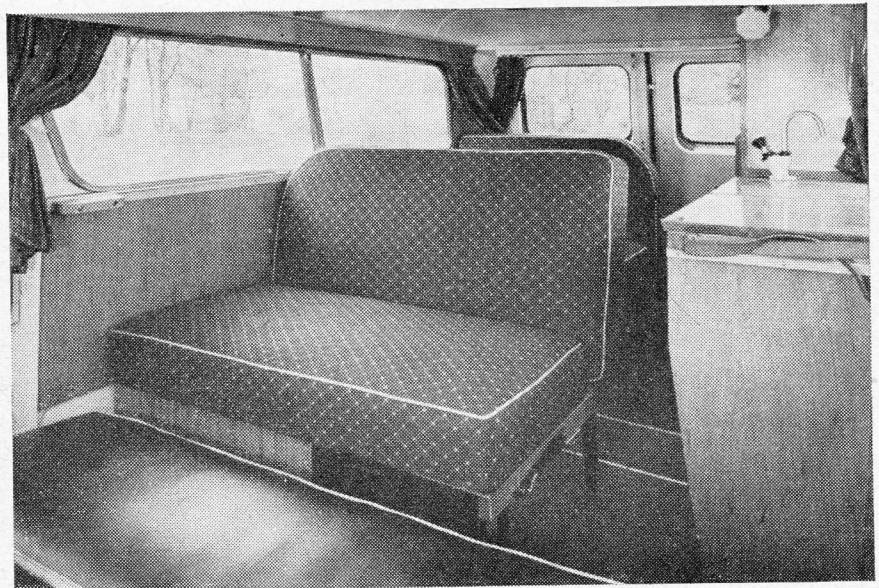
Indeed this form of transport has come to stay, and it is to be hoped that all race promoters will realize that full camping facilities are required at all major meetings. Encouraging the motor caravanners will benefit all concerned, and special rates could quite well be quoted for parties using them.

GREGOR GRANT.

BRIGHTON TO HAVE MOTOR MUSEUM

As a record entry of 265 Veteran cars took part in their Annual Run to Brighton, plans were announced for Brighton to have its own Motor Museum. If the plans which are now before the Council are approved, it will be situated in the Aquarium buildings on Madeira Drive (on the sea front) and is being organized by the Aquarium's board of directors in conjunction with Lord Montagu.

The Montagu Motor Museum and the one at Brighton will work together in close association, and Lord Montagu will be responsible for providing most of the exhibits—cars, motor-cycles and other items of motoring history. As a matter of policy, exhibits will be exchanged between the two Museums and many vehicles which, due to lack of space at Beaulieu and other places, are at the moment in store, will in future be on show to the public at one Museum or the other.





The Midlands Win The TV Trophy Final

**Frank Lewis Makes Best Individual Performance
in Popular Annual London M.C./B.B.C. Event**

STAGED exclusively for B.B.C. Television by the London M.C., the annual Television Trophy Trial at Aston Hill, Wendover, went to the Midlands team comprising Charles Pollard, Frank Lewis and Ron Kemp, with a total of 130 points for the seven observed hills. Runners-up were the South (Rex Chappell, Peter Highwood and Geoff Newman) with 115 points; the North (Edward Harrison, Eric Jackson and R. C. Needham) collected 100 points, and have yet to win the Trophy. This was the eighth event in the series, and best individual

performance was put up by Frank Lewis, with three clean climbs.

The TV side of the business was in the hands of John Vernon, who had arranged three fixed cameras, and a portable outfit, which, by reason of the sound equipment, required two men to operate it. The familiar voice of Raymond Baxter described the event for viewers.

Edward Harrison kicked off for the North on Hill 1, and just failed to reach the top. The Midlands captain Charles Pollard failed literally a couple of inches

from the end, but the Southern skipper, Rex Chappell, sailed up to make the first clean climb. Sole remaining 100 per center was Ron Kemp in his Simca-powered device, which put the Midlands ahead.

Section No. 2 was extremely tricky, and not a single member of the Southern team scored points. Frank Lewis was the only one to get past the first marker for the Midlands, but both Harrison and Jackson scored for the North. On the third section, none achieved maximum points, and poor Needham scored a great big "zero".

Although the fourth hill looked difficult, owing to a hump followed by a swing round over and up a steep bank, all scored maximum points with the exception of Newman, whose engine suddenly died on him near the top. Hill No. 5 was a triumph for Frank Lewis, whose 10 points gave the Midlands a useful lead. Needham and Newman both failed, and the remainder each scored five points. The position then was: Midlands, 90; North, 75; South, 70.

The Southerners made a great comeback on Hill 6, all three taking maximum points to bring their tally up to 100. However, even this wasn't good enough to wrest the lead from the Midlands, for both Kemp and Lewis made clean climbs, and Pollard, his engine sounding just like a Formula Junior unit, failed by about a centimetre. Anyway, this raised the team's total to 115. The North had faded right out of the picture, their total



ABOVE: The teams line up, the cars brightly glossy—before the start. LEFT: Best individual performance was made by Frank Lewis, right on top of his form and a member of the victorious Midlands team.

PRESSING ON for the Northern team is Eric Jackson, who tackles a hill with a television camera trained on him (left). BELOW: As Rex Chappell negotiates a tight corner, his wife Renée demonstrates one of the uses of rubber rear wings!

the South, and was used along with Stan Jenkins and Ivor Portlock to try out the various sections for size. Only regret is that neither Northern Ireland nor Scotland seem to be able to field strong enough teams to compete in this attractive event.

GREGOR GRANT.



for this section being 15 points, to give them an aggregate of 90.

The final section defeated all nine drivers, each taking five points with the exception of Needham who was unlucky enough to stop right by the marker. Thus the Midlands recaptured the Trophy from the South, and each have now been victorious on four occasions.

Organization was particularly slick,

and the weather remained very kind. Once again Air Commodore Coslett, O.B.E., gave invaluable help with men from the R.A.F. Halton Camp, whilst Ron Carradine had mustered an enthusiastic bunch of marshals from the London M.C.

As in the majority of events, the marque Cannon was dominant, and Michael Cannon himself was reserve for

BOOKS REVIEWED

Title: "Touch Wood".

Author: Duncan Hamilton.

Size: 229 pp., 57 illustrations.

Publishers: Barrie and Rockcliff, London.

Price: 25s. net.

DUNCAN HAMILTON has chosen a highly appropriate title for his book, for one cannot recall any other driver who has been so candid concerning prangs and phenomenal avoidances. Duncan was certainly one of the most spectacular of all drivers, but took his accidents as they came, philosophically, and back behind the wheel as soon as humanly possible.

He drove for the fun of it, but always went out with a determination to win. Behind that playboy attitude were bags of guts and any amount of genuine driving skill. Although Duncan describes many of his races, the charm of *Touch Wood* is that it is a motor-racing book with a difference. Many of the classic parties are described in detail, including that fantastic affair at the M— Hotel, Isle of Man, when somehow or other a paddling of ducks appeared inside the hotel.

He was continually getting into trouble; at Casablanca the customs people called the police when Duncan said jokingly that he only had a few guns, bombs and so on to declare. His visit to the Sphinx at Fedala is described with refreshing detail, and I am sure that all who have gone motor-racing in North Africa have seen that film, *The New Secretary*.

Both Duncan and Tony Rolt were suffering from classic hangovers the morning of the Le Mans race in 1953. Believing they had been disqualified for practising in an unauthorized car, they tried to drown their disappointment. Their frantic efforts to become "more healthy", when they found that they were driving after all, make amusing reading. Sufficient to say that they won, which was a perfect excuse for anything!

Duncan also recalls the time he was sacked from the Jaguar team, for winning at Rheims in the 12 hours race. Anyway, he maintains that although Lofty England was perfectly justified in firing him for disobeying pit signals, his own arguments are also pretty convincing.

He also relates a remarkable incident in the Waldorf Astoria, New York City, when Mike Hawthorn, mistaken by a woman for a convention official, started to direct all the other women to the 11th floor. As a large all-male convention was already in progress there, one can quite well imagine the scenes of chaos which ensued.

All through the book run authentic motor-racing tales, interspersed with uproariously comical anecdotes. From his wartime flying days, to the time of his retirement from motor-racing, Duncan Hamilton led a highly exciting life, in which motor-racing became his chief outlet for a boundless energy. His kind are not so numerous these days; like others of the immediate post-war period and afterwards, he preferred big and powerful cars, and never took kindly to modern, lightweight machines. At any

rate, one will never forget Hamilton in a Jaguar—surely the finest value spectators at motor race meetings will ever have.

G.G.

Title: "The Motorist's Weekend Book".

Editors: Michael Frostick and Anthony Harding.

Size: 304 pp. Numerous illustrations and cartoons.

Publishers: B. T. Batsford, Ltd., London.

Price: 25s. net.

THIS is a sort of "Bedside Esquire", or "Saturday Book", devoted to the sport of motoring and containing a selection of stories and articles by prominent contributors. Amongst these are Paul Frere, John Wyer, Ron (Steady) Barker, Cyril Posthumus, David Scott-Moncrieff, Robin (B.B.C.) Richards, D. B. Tubbs, Sir Henry Birkin, Sammy Davis, Rodney Walkerley, W. Boddy, Denis Jenkinson, Lord Montagu, Laurence Pomeroy, Gregor Grant, John Eason Gibson, George Monkhouse, etc., etc.

Many of the "page fills" are gems of motoring wit, and the book is one that can be read many times. Walkerley's "Tribune de la Presse" is a little masterpiece of its kind, and does show what really happens in Continental press boxes.

Every possible aspect of motoring is covered in this book. Many magnificent photographs are reproduced, and the inimitable Brockbank has contributed some delightful cartoons.

Batsford's have done a grand job in producing this miscellany, which, at 25s., offers exceptional value and is an important addition to worthwhile motoring literature.

G.G.

In the cold chamber at the Motor Industry Research Association's headquarters at Nuneaton, BP scientists make a cold start test. Observing is David Pratt—who is an expert on the low temperature operation of engines and who was Senior Engineer to the Trans-Antarctic Expedition.



Start easily at 16° below freezing with **BP 'Visco-static'**

Cold chamber tests prove BP 'Visco-static' allows starter to turn engine faster and that means easier starting

LEAVE YOUR CAR out on the road all night at 16°F below freezing and in a biting wind. Could you be certain of an easy start?

These are conditions your car may well have to withstand this winter. So these were the temperatures chosen in recent cold start tests. They proved that winter starting is much easier with BP 'Visco-static' than with ordinary winter grade motor oils. The results were observed by independent witness David Pratt who was Senior Engineer to the Trans-Antarctic Expedition, and is an expert on the operation of engines at low temperatures.

To make these tests. The British Petroleum Company made use of the cold

chambers of the Motor Industry Research Association at Nuneaton. Here in huge refrigerated rooms a range of popular cars was subjected for approximately 12 hours at a stretch to very low temperatures.

Scientists then pressed the starter button and measured the speed at which the engine rotated.

They did these tests with ordinary winter grade oil then repeated them with BP 'Visco-static'. In each car the engine turned over considerably faster with BP 'Visco-static'. The average difference was 30% faster. This means quicker easier starting.

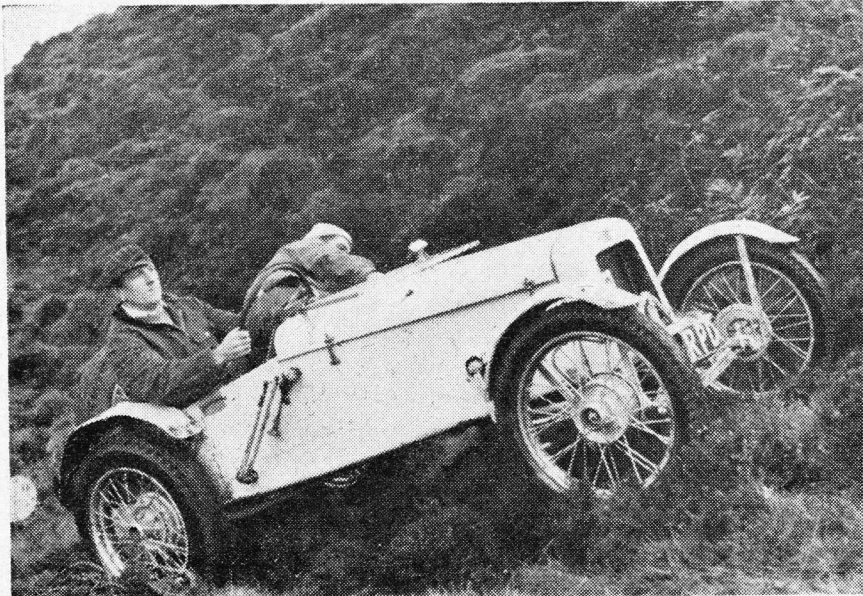
Less strain on battery. As each starter was operated, scientists also measured the electrical drain on the battery. In every case

results showed a saving of current between 7-11% with BP 'Visco-static'. This proves scientifically what so many motorists know for themselves — that BP 'Visco-static' gives longer battery life.

Beats start-up wear. BP 'Visco-static' not only gives easier winter starting it also reduces the heaviest engine wear of all — start-up wear. So you get thousands of extra miles from your engine before it needs overhaul.

Change NOW! BP 'Visco-static' saves in so many ways that you cannot afford not to change to it. But remember you must make a complete change — drain out the old oil and replace with BP 'Visco-static'.





SHEFFIELD & HALLAMSHIRE M.C.

HIGH PEAK TRIAL

Fine Win for Eric Jackson

A DAY of low cloud, mist and threatening rain (which fortunately never arrived) greeted the Sheffield and Hallamshire M.C. High Peak trial on Sunday last week. This classic event, which attracted an entry of nearly 50 cars, was extremely well run, as befits a trial of this stature, and resulted in a 10-mark win for Eric Jackson, who seems to have regained his shining form of a couple of seasons ago. Second was Rex Chappell and Geoff Newman took third place: on present form it seems likely that next month's trials championship will be fought out between these three, for all of them are now on top of their form, and only Charles Pollard (who is, after all, reigning champion) seems likely to challenge them on recent showings.

The ground used was the first-class area on top of the hills around Sheffield, in the Bradfield district to the north-east of the city. It was used, it will be remembered, for last year's R.A.C. Championship trial. Obviously no event is perfect, and competitors had one or two criticisms of this one, the most repeated being that the major obstacles on many of the hills were too near the start, and too much ground had to be covered to gain a mark.

The first hill of the day set the fashion, for it was of great length and provided changes of surface, gradient and camber. A steep gradient took cars to the "9" marker, where the course turned left and ran level before shooting downhill to the "6" board. Here there was a hairpin left-hander, with sharp adverse camber, before a steep, uphill rush to the finish. Frank Lewis and Bernard Dees, first men to tackle it, failed at the "5" board, as did T. A. Marshall, Eric Jackson, and others. Best climb we saw was that of John Harrison, but even he made only the "4" marker before stopping.

GOING DOWN! Negotiating the downward slope on Hill No. 9 is Rex Chappell who made second best performance to win the Beaston Trophy.

CONCENTRATION: Eric Jackson, the eventual winner, has matters well under control—his passenger is using all his weight in the right place to keep it that way.

Highwood. Hill No. 4 was even longer than most, starting with a long run up an adverse-cambered gradient on grass and heather to swing left into a narrow, muddy channel. Then came a right turn leading out of the mud before a steep climb on wet clay. This right turn, an extremely tight one, was the undoing of many, while those who navigated it successfully found that the necessary reduction in speed caused them to lose sufficient momentum for the steep, final section. A fair average performance seemed to be to reach the "5" marker, but John Harrison went well for "3", and Ron Kemp did even better to reach "2".

The fifth hill started gently enough, but very soon ran into an awkward, adverse-camber right-hander before carrying on upwards over rocks and bracken to turn right before a steep climb on the sticky, wet clay. The first right-hander stopped most people, but John Harrison received a loud burst of applause for the first of a very few clean climbs. Next came another awkward one, kinking to the right after an initial bump before a gentle gradient which led to a deceptively difficult hump in the ground. Then came a swing to the left and a final climb to the top. Particularly good climbs were made here by Eric Jackson and T. A. Marshall.

The seventh hill yet again caught out virtually the whole field. Starting on a level patch of grass, the course ran through a small pond before turning left and steeply upwards on a mixture of grass and bracken. The "small pond" quickly became a morass, and most failed on the turn. Eric Jackson tried a new tack, running as wide as the course would permit to reach "4" while the rest stopped at "7" or "8", and Marshall tried on similar lines, but could only manage "5". Charles Pollard was another of the shrewd ones who saw the possibilities of this line of approach, but was unlucky to stop at "5".

Hill No. 8 started in a narrow gully before plunging down into a hole, up



REIGNING trials champion Charles Pollard goes through the swamp which formed part of the early stages of Hill No. 7, to win a special award.

and out again and on uphill, over a surface of wet grass and bracken. This was found to be either easy or impossible, the experts mostly going through with ease while the less experienced stayed in the crater.

Hill No. 9 was another very long one, starting with a gentle, bracken-covered slope to turn right and plunge steeply downhill. Then came a hairpin left turn on sharp adverse camber and a steep uphill climb to turn right at the top, followed by a left turn which was again on an unwholesome adverse camber. Surface varied between bracken, wet, dead leaves, grass and wet, bare rock to make the hill a really searching test of skill. Several drivers failed on the initial slope, and many more were foiled by the bottom hairpin, but Eric Jackson, John Harrison, Geoff Newman, Peter Highwood, Charles Pollard and Rex Chappell all made it look relatively simple.

The tenth hill disappeared from sight into the far distance when viewed from the start line. The first 50 yards or so comprised a rock-strewn path, rising on a gentle gradient and falling away steeply to one side. Then came a blind left-hander, a short, steep straight and a right-angled right-hander leading to a bracken-covered final section which went up like the side of a house. Eric Jackson made one of the best climbs here, arriving round the blind corner at a high rate of knots shouting "Where now?" He quickly discovered, took a wide line on the right-hander and climbed to "3", while the majority of the field failed to reach the blind corner. The usual experts made good climbs here, including a hectic but effective approach from Ernie Chandler's VW-powered car.

The 11th hill stopped the entire field, as might have been expected. It started in a hub-deep swamp, leading to a left turn on ground still soggy to curve right and up-hill on adverse camber before reaching a left turn which led to the steep finish. No one got past the first left-hander, while only a handful managed to extricate themselves from the swamp under their own steam. These few included Pollard, Chappell and Jackson, the rest practically sinking.



Hill No. 12 started in a "dried-up" pond-bed, the course then turning right to climb steeply on grass and bracken, a surface which quickly cut up into a sort of black, peaty mixture providing almost no grip at all. At least so far as the early numbers were concerned, no one bettered "9", failing early after (or even at) the right-hander. Next came an interesting hill which, in fact, was more difficult than it looked. The start led on to a short, steep hill, over a high bank, and then down into a hollow. At the end of the downhill section came a tight left turn, after which came a steep, right-hand curving climb to the finish. Alec Francis and Ron Kemp both did well here, but each clipped a marker lower down. John Harrison started a vogue for running wide between two markers to get a good run at the last section, but on this the marshals frowned. As the event went on, succeeding cars cut up the surface of the initial climb, and but for the very skilled this was definitely an "early numbers" hill.

The 14th hill started in a pond. Then came a right turn, after which the course ran on up the edge of a ridge over a gentle gradient. This was a hill for the "tricklers", but even so it presented little difficulty, and only a few cars incurred penalties here.

Last hill of the morning started with a run through a narrow gully, steeper than it looked and with a very sticky surface. Then came a right turn up and over a steep bank, down into a shallow pit and out again to a steep finish. This last was climbable, but of those who succeeded almost all clipped a marker on the way.

By this time Eric Jackson was already the holder of a five-mark lead, having incurred 65 penalties compared with Rex Chappell's 70. In third place was John Harrison, with 73, then came Geoff Newman (76), Charles Pollard (77) and Peter Highwood (78).

For the afternoon 10 of the morning's hills were used, those cut out including the now totally impossible 11th hill. Those retained were modified to some degree to make the impossible climbs merely difficult, and the easy climbs difficult as well, and by and large this worked well. But Eric Jackson was not to be beaten, and by the end of the day he had incurred only 93 penalty marks, while Rex Chappell lost a further 33 marks, five more than Jackson, to finish second with a total of 103. Geoff Newman moved up to third place with a total of 112, while John Harrison, third at lunch, lost another 46 marks to drop to sixth place.

The most amazing feature of the final results, however, was this: Charles Pollard and Peter Highwood tied for fourth place with a total of 114 marks each. At last year's trials championship event, held on the same ground and using many of the same hills, these two drivers had also tied—for the championship! Quite what this proves we are not prepared to say, but at least it is the most incredible coincidence!

MARTYN WATKINS.

Results

High Peak Trophy (Best Performance): Eric Jackson, 93 marks lost. **Beaston Trophy (Second Best Performance):** Rex Chappell, 103. **Needham Trophy (Third Best Performance):** Geoff Newman, 112. **Best Sheffield and Hallamshire Member:** Jackson. **Special Awards:** Charles Pollard and Peter Highwood, 114; John Harrison, 119; Ron Kemp and T. A. Marshall, 139. **Team Award:** The Highwaymen (Highwood, Pollard and Newman).



ALL HANDS rush to help Faulker out of trouble. Very few got through this difficult section without sinking into the mire.

Club News

By MICHAEL DURNIN

REGS are now available for Swansea M.C.'s national Rally of the Vales, 3rd-4th December. This 350-mile event counts towards the Welsh Rally Championship and starts from Swansea, Cardiff and Gloucester. Secretary of the event is A. E. Dryden, "Rochester", 6 Wimmerfield Avenue, Killay, Swansea, Glam, and all entries must reach him by 28th November. . . . Sunoac will have their Airline Rally on 19th-20th November, co-promoting with B.A.R.C. (Yorks). This is something out of the ordinary in rallies. Within the limits of the area in which it is held and the following provisos as to time and distance, competitors may choose their own journey and route. They must call at the compulsory night stop and any other control which the organizers may think fit to specify within certain time limits. Distances are measured in a straight line, not on the road, and are known as air miles. They are ascertained from the $\frac{1}{4}$ in. to the mile O.S. Map and airline distances officially notified must be taken as accurate for the purpose of this event. Similarly speeds are quoted as air miles per hour (a.m.p.h.) and for this purpose an air mile is taken as the equivalent of $1\frac{1}{4}$ road miles. There will be starts at Buxton and at Boroughbridge and this 15-hour event is open to members of M.M.E.C., London M.C., M.G.C.C., Hagley and D.L.C.C., Shenstone and D.M.C., Bugatti O.C., Sheffield and Hallamshire M.C., Airedale and Pennine M.C. and the De Lacy M.C. Regs are available from J. D. Woodhouse, 106 Jockey Road, Sutton Coldfield, who must have all entries by 14th November. . . . Farnborough and D.M.C. are to have their Winter Mixture Rally, a 300-mile event run on map references only, on 3rd-4th December. There will be starting points at London and Farnham and the event will finish at Hindhead. The event is open to B.A.R.C., Brighton and Hove M.C., Cemian M.C., East Surrey M.C., Guildford M.C., Haslemere M.C., London M.C., Sevenoaks and D.M.C., B.P.A.C. and Verulam A.C. Secretary of the event is H. W. Greenwood, "Forestin", Rectory Road, Farnborough, Hants. . . . Full details of Club Peugeot may be had from M. D. G. Wainwright, 1B Artillery Mansions, London, S.W.1. . . . Verulam A.C., North London E.C.C. and Herts A. and Ae. C. are to have a closed 100-mile rally on 27th November. Details from C. J. Bayley, 11 Palfrey Close, St. Albans. . . . The Moonlight Rally will be promoted on 10th-11th December by North Midland M.C., Sheffield and Hallamshire M.C. and Rotherham and D.M.C. and will cover some 200 miles in the Peak District. The event is open to B.A.R.C., Lincs and Ches C.C., Liverpool M.C., Nottingham S.C.C., Bolton-le-Moors C.C., B.R.S.C.C., De Lacy M.C., Eastwood and D.M.C., M.G.C.C., and 750 M.C. and regs are available from C. L. Smith, 22 Edge Hill Road, Sheffield 7, who must have all entries by 30th November. . . . M.G.C.C. are to have their annual dinner and dance on 25th November in the Kent Suite, Bellevue, Manchester. Tickets from Arthur Sherratt, 1 Birley Street, Bury. . . . W. T.



ON THE TELLY! Before the slightly inhospitable scrutiny of a B.B.C. television camera, Ron Kemp sets off to tackle one of the hills in Saturday's London M.C./B.B.C. Television Trophy Trial, won by the Midlands team by a margin of 15 points over the South.

Coming Attractions

- 12th November.** Bristol M.C. and L.C.C. Fedden Trophy Trial, Bristol Airport, Lulsgate. Start, 10.30 a.m.
- 19th-20th November.** Sunbac Airline Rally. Starts from Buxton, Derbyshire, and Boroughbridge, Yorks.
- Birmingham Y.C.M.C. Midland Rally. Starts Birmingham Civic Centre, 8 p.m.
- 20th November.** Leicestershire C.C., John Bull Trial. Starts from the Fox and Hounds, Skeffington, near Uppingham, at 11 a.m.
- 21st-26th November.** R.A.C. British Rally. Starts Blackpool at 6 p.m.
- 3rd-4th December.** Swansea M.C. National Rally of the Vales. Starts from Swansea, Cardiff and Gloucester.
- Farnborough and D.M.C. Winter Mixture Rally. Starts Farnham and London.

Flett, Secretary of the Otago S.C.C. of P.O. Box 299, Dunedin, New Zealand, would like to correspond with British club officials about competitions. . . . Birmingham Y.C.M.C. Midland Rally will be on 19th-20th November and will start from Birmingham Civic Centre on a 300-mile route. The event is open to Linden C.C., Stafford and D.C.C., Walsall and D.C.C., Hagley and D.L.C.C., Morgan 4/4 C., Worcestershire M.C., 432 M.C. and Wolverhampton and South Staffs C.C. and regs may be had from Mrs. J. M. Lawrence, 90 Croftdown Road, Birmingham 17, who must have all entries by 16th November. . . .

THAMES ESTUARY A.C. KITTENS' EYES RALLY Provisional Overall Results

1, E. Hatchett (Triumph Herald), 40 marks lost; 2, R. A. Clift (Triumph TR3), 50; 3, P. B. Keridge (M.G.A.), 130; 4, R. Michalkiewicz (Triumph TR3), 130.

NORTHALLERTON AND DISTRICT MOTOR CLUB

President's Trophy Rally

THE Northallerton and D.M.C.'s last rally of the season, for the President's Trophy, was run recently over a tough, but well laid course. Map references were used throughout the rally, the first half of which was straightforward, with no penalty for being early at the seven section controls. Each competitor was allocated an average speed depending on the crew's experience and the type of their car, the speeds being 26, 27 or 28 m.p.h., but all crews managed to find complications where none existed, the last map reference being a case in point.

The second half after the tea halt was a very well devised regularity section, with undisclosed time controls at many of the map references, which were given for each mile of the route, so as to help competitors without trip mileage recorders in their cars. Competitors were also supplied with simplified average speed tables, but as only a few of them seemed to read the enclosed comprehensive instructions, more penalties were collected.

Once again complications were found, the flyover at map reference 91/335810 caused trouble for more than one competitor. Another competitor, after finding himself up the wrong road, attempted to turn round by reversing into a gateway to a field—he emerged triumphant after 45 minutes mud plugging to find that the rest of the checkers had retired to the finish in the Harewood Arms, Northallerton.

Within minutes of the last crew finishing, full results were available for inspection, thanks to weeks of preparation by the organizer, J. Waller and his band of willing helpers. The results of the event, which was unanimously voted a great success, were as follows:

President's Trophy for Best Driver: J. B. Wigston. Easthope Cup for Best Navigator: B. W. Crosbie. M. Blewitt Trophy for Second Driver: M. Durkin. D. Gamble Trophy for Second Navigator: L. Fraas. M. Blewitt Cup for Best Novice Driver: B. W. Cuming. D. Gamble Cup for Best Novice Navigator: M. J. R. Lannig.

AUTOSPORT

CLASSIFIED ADVERTISEMENTS

PRESS TIME: Tuesday 12 noon

Telephone: PADDington 7671-2

Advertisements which are received too late for a particular issue will be automatically inserted in the following issue unless accompanied by instructions to the contrary.

RATES: 7d. per word, 4s. 6d. per line. Semi-displayed setting £2 10s. per single column inch. Minimum charge 7s. Display setting £24 per column and *pro rata*, minimum size quarter column.

Series discounts are allowed, to trade advertisers, of 5% for 13, 10% for 26, and 15% for 52 consecutive insertions.

BOX NUMBERS: Facilities are available to private advertisers at an additional charge for two words (Box 0000), plus 1s. to defray the cost of booking and postage. Replies should be addressed to Box 0000, c/o AUTOSPORT, 159 Praed Street, London, W.2.

TERMS: Strictly net and prepayable. Monthly accounts for settlement by the end of the month following insertion are allowed to trade advertisers, if satisfactory references are provided.

The publishers reserve the right to refuse or withdraw advertisements at their discretion and do not accept liability for printers' or clerical errors although every care is taken to avoid mistakes.

USED CARS FOR SALE

A.C.

- 1959 A.C. Aceca-Bristol. Princess blue. B-type engine. Superb car. ... £1,850
 1953 A.C. Five-seater saloon. Blue. Overhauled. ... £395
 1953 A.C. Five-seater saloon. Black. ... £325
HEELEY BRIDGE GARAGE, LTD.,
 Broadfield Road, Sheffield 8.
 South Yorkshire Distributors for A.C. Cars.
 Tel.: 52404/5.

S. H. RICHARDSON & SONS, LTD.—Wanted A.C. Ace-Bristol/Aceca-Bristol.—Tel.: Colnbrook (CN8) 2258.

1957 SERIES A.C. Ace-Bristol. B.R.G., black hood, 33,000 miles. Good history and extremely well maintained. £845.—J. A. Gregory, Bath Road, London Airport. Tel.: SKYport 1621/1818/1819, evenings 9 p.m. Open Saturday and Sunday.

1955 A.C. Ace. Front part of body damaged. Engine, chassis and suspension sound. £350.—Smith, Flower Lilies, Windley, Derbyshire.

ALLARD

1951 ALLARD PI saloon. Spotless body, excellent engine. 200 gns. o.n.o. View Chislehurst, Kent.—Imperial 5602.

ASTON MARTIN

Here is a Clubman's "opportunity" to acquire a fabulous machine at a nebulous price ... £1,495 The famous 62 E.M.U. ex works—Whitehead DB3S awaits a new owner. This Aston, which has been maintained by Arthur Birks, is in mint condition. Full specifications including discs, twin-plug head, Appendix "C" modifications, etc., etc. Part exchanges are no problem. All details from

ROY BLOXAM,
 Austin House, Gerrards Cross, Bucks.
 Gerrards Cross 2077/8.

ASTON MARTIN DB2/4 saloon. First registered 1955. Fitted works reconditioned engine, with big valve head, and twin exhaust throughout. 1959. Finished in metallic grey with red upholstery. Radio, heater, twin lamps, windscreen washers, etc. £1,250.—Motorway Sales (Derby), Ltd., Station Approach, Friargate, Derby. Tel.: Derby 42083.

ASTON MARTIN DB3 G.T. Second Tourist A Trophy. Goodwood lap record holder (Salvadori, 1 min. 36.2 secs., 89.91 m.p.h.), sixth Montlhéry. Works maintained. Four spare wheels. £4,150.—Enquiries to: J. L. E. Ogier, The Mill Garage, East Hammingfield, Chelmsford, Essex. Hammingfield 387.

AUSTIN

A35 (1958). This fabulous car is fitted with Speedwell Stage II and complete dashboard, special shockers, roll-bar, and has only covered 50 miles on new engine. Fitted every conceivable extra for rallying. £475 or terms.—Gordon and Glyn, 73 Cadogan Lane, Sloane Street, S.W.1. Sloane 4017.

PRODUCTION racing A35 saloon. Formula Junior engine, including special cylinder head, crankshaft, flywheel, pistons and con. rods, Iskenderian camshafts, twin SU carbs, on Speedwell manifold. Close-ratio gearbox, modified brakes and suspension, lightened body. Numerous successes this season. Silverstone club circuit, 1.24; Mallory Park, 1.09. Offered with £100 of spares. £485.—C. Toten, 37 Bourne End Road, Northwood, Middx. Northwood 3171.

A35, WHITE, radio, heater, Speedwell Stage A35, III, excellent condition, spare unused. £500 o.n.o.—Heal, Highlands, Runcorn (2312), Cheshire.

AUSTIN-HEALEY

THE CHEQUERED FLAG (SPORTS CAR SPECIALISTS), LTD.

- 3000, April 1960. Two-seater, one owner, 6,000 miles only, unmarked ice blue, with disc brakes, radio, heater, tonneau, twin spots £995
 100/6, 1957-59. Four superb examples in red and black, white/black or blue/white. All many extras and attractively priced from ... £665
 100/4, 1954/55. Choice 3 hand-picked cars in grey, red or ice blue, all with wire wheels, heater, overdrive, and various other extras, from ... £445
 Sprite, 1958. Two-seaters. An unrivalled selection of four cars in cherry red, pale blue, white or primrose yellow, all fitted every listed extra, from ... £465
High Road, Chiswick, W.4. Tel.: CHI 7871/2/3

DONALD HEALEY MOTOR COMPANY

offer

1960, May, SPRITE. Red. Wire wheels, twin exhaust, wooden steering wheel, heater, tonneau, rev., washers, etc. Unmarked. £615.

1959, April, SPRITE. Beige. Heater, tonneau, rev., washers, fog, etc. Lady owner. 13,000 miles. £495.

We guarantee all our used cars, including labour.

New Sprites and 3000s to Any Specification, for Early Delivery.

64 Grosvenor Street, London W.1. MAYfair 3507.

THE LONDON HEALEY CENTRE.

AUSTIN-HEALEY B.N.2., registered 1957, red/red interior, radio, heater, spot, fog, new "X" tyres, four-speed box, overdrive, unsealed. Superb condition mechanically and structurally. £650.—74 Westwick Crescent, Sheffield, 8. Tel. 365666.

SPRITE, 1958. Green. Full Healey engine mods., 1½ ins. carbs., twin exhausts, Team Sprite streamlined bonnet, anti-roll bar, heater, rev. counter, tonneau. Perfectly sound, fast and economical. £425.—Williams. Tel.: Oakengates (Salop) 311.

100/4, OCTOBER, 1955. Excellent condition. 26,000 miles, tuned.—G. Phillips, MONarch 7011 or Leigh-on-Sea 73020.

1959 SPRITE, lavishly equipped, complete with hard top and sliding screens, finished immaculate white with red upholstery. Special equipment includes push button radio, heater, rev. counter, twin spot lights. Offered at very low price. £495.—Lawrance Bond Cars, Ltd., Loxwood, Sussex. Tel.: Loxwood 479.

1959 SPRITE. Red. Low mileage, rev. counter and other extras including competition steering wheel. Excellent condition. £495.—J. A. Gregory, Bath Road, London Airport. Tel.: SKYport 1621/1818/1819, evenings 9 p.m. Open Saturday and Sunday.

1959 SPRITE. Rytune 65 b.h.p. engine. Modified suspension, 8 ins. front brakes. Hardtop, new X tyres, Lapped Brands Hatch 68.8. Very good competition history. £525.—Ramus, Baron's Grange, Iden, Rye, Sussex. Iden 233.

1954 AUSTIN-HEALEY 100. Le Mans modified engine, all new tyres, hard top, soft top, wing mirrors, spot lamps. Red with white hard top. In very good condition. Taxed to end of year. Must be right at £375.—Venture Garage, Ltd., Belper Road, Holbrook, Derbyshire. Phone: Horsley 400.

1954 AUSTIN-HEALEY 100, red, overdrive, new tyres and hood, second engine, body damaged but in daily use. £295.—L.P. Cars, Hornsey Rise, London, N.8. Phone: ARChway 4716.

£445. AUSTIN-HEALEY 100, 1954. Outstanding in B.R.G., spotless upholstery and carpets. A really exceptional example. Terms, exchanges.—Baker & Roger, Ltd., Hudson's Garage, Darkes Lane (opp. Ritz), Potters Bar, Middlesex. Potters Bar 6181, or Hatfield (Herts) 3861, evenings and weekends.

THE CHEQUERED FLAG (MIDLANDS), LTD.
 100/6, 1957. 2/4-seater in dual ice blue and ivory, hard and soft-tops, overdrive, heater, washers, tonneau ... £675
 BN2, 1956. Two-seater in ice blue, hard and soft tops, wire wheels, overdrive, heater, etc. £585
Arkwright Street, Nottingham. Tel. 89282/3.

AUTO UNION

1960 AUTO UNION 1000S coupé. Pale yellow, 5,000 miles only, one owner, taxed. £795. Exchanges and deferred terms welcomed.—Saunders Abbott, Ltd., 1 Wickham Road, Beckenham, Kent. Beckenham 7276.

£275 O.N.O. Two-owner Sonderklasse, 1954. Resprayed, new covers, heater, washers, new spares, workshop manual, spares list, metric tools, etc.—Ironside, R.A.F. Heatishead, Norwich.

BENTLEY

BENTLEY, 1949, Mark VI S.S. saloon. Grey. Radio, etc., etc. Perfect. £750. Terms, exchange.—BRixton 6872/3. Royal Motors, 17 Acree Lane, S.W.2.

BENTLEY, 1952. Big bore, full-flow engine. Two-tone grey. Carefully maintained. Radio, etc. £985. Terms.—BRixton 6872/3. Royal Motors, 17 Acree Lane, S.W.2.

1930 41-LITRE BENTLEY, estate body excellent or ideal for rebuilding. £250.—Mike Bradley, Shipton-u-Wychwood, Oxon.

BERKELEY

BERKELEY B105, 1960 model. Red. 110 m.p.h. Twin spots, reversing light, larger fuel tank, etc. Special works tuned engine, oil cooler. 3,700 miles. 0-100, 29.2 secs. Fantastic performance, 50 m.p.g. £495 o.n.o.—Carden, Trinity College, Cambridge.

(Continued on page 691)

AUSTIN MG AUSTIN HEALEY OFFICIAL STOCKISTS PARADE MOTORS (MITCHAM) LIMITED OFFER

New Cars for immediate delivery:—
 M.G. Magnette III. Duo-tone green.
 M.G.A 1600. Dove grey/red upholstery.
 Austin A55. Grey/horizon blue.
 Austin A40. Countryman. grey/black roof.
 Austin-Healey Sprite. Leaf green.

After sales service, repairs and spares. B.M.C. exchange engines, gearboxes, etc. High-pressure lubrication at our new Service Station.

- 1956 M.G.A. Black and red, the most immaculate car we have handled for a long time. £565
 1954 M.G. TF. Black, red upholstery, in specimen condition. £485
 1952 M.G. TD. B.R.G., engine reconditioned, new hood, immaculate. £370
 1951 M.G. TD. Red/beige. £335
 1949 M.G. TC. Blue/beige, fitted many extras, original car. £295
 1947 (Oct.) M.G. IC. Red. Immaculate. £285
 1947 M.G. TC. Red/beige. £275
 M.G./Ford Special, rebuilt 1955. Four-branch manifold, etc., excellent throughout. £215

M.G.A., TF, TD MODELS URGENTLY REQUIRED FOR CASH

Part exchanges welcomed. Hire purchase and insurance facilities available. Self drive Hire—late models.

66/67 Monarch Parade, Mitcham

Phone: 3392-7188

THE FIRST AND ONLY JAGUAR XK CENTRE
OF GREAT BRITAIN

FIELDS OF CRAWLEY

offer a selection of cars from their stock of used Sports and Performance cars, all cars having been tested and approved by Jack Fairman.

1960 (July) JAGUAR XK 150. 3.8 litre, 'S' type Cornish grey with red upholstery. Car cost new £2,500 four months ago. Extras include Webasto sliding sun roof, H.M.V. radio, seat covers, chrome wire wheels, Avon turbo speed white wall tyres, badge bar, wing mirrors, trafficator control, special dipping arrangements for a long range driving lamp, mascot, and towing attachment. Genuine reason for sale and an excellent opportunity to acquire a delightful car. Only 2,500 miles. **£1,895**

1958 JAGUAR 2.4. British Racing Green. Green interior. One owner. This car is in spotless condition. **£975**

JAGUAR Mark VIII saloons. Choice of two. Both one owner vehicles, nominal mileages, and both in immaculate condition.

AVAILABLE SHORTLY

1959 3.4 Mk. I automatic saloon. 3,100 miles only. Genuine reason for sale. Please write for particulars.

JAGUAR XK 150. Choice of several, all engine sizes and bodywork types available. Please write for details.

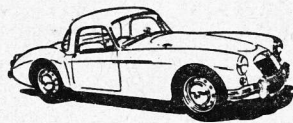
FIELDS ENGINEERING COMPANY (CRAWLEY) LIMITED

First in the Field with XK

86-92, HIGH STREET, CRAWLEY, SUSSEX
Telephone 25533 (Five lines)

See separate advertisement for new car availability

Grand Touring Cars



RUDDS

ACE-BRISTOL 1958. Immaculate two-seater sports in dark grey with unblemished light grey upholstery and carpets. Fitted disc brakes, heater, bumpers, spot lamps, etc. Supplied by us to its one owner, it has been maintained as new and has covered a relatively tiny mileage. Six months' guarantee. **£1,450**

ACECA-BRISTOL 1960. The last of the three coupes we advertised in the last two weeks, this immaculate unworn specimen has just arrived in part exchange. Supplied and maintained by us, it is fitted with overdrive, heater and other extras. Offered taxed and with 6 months' guarantee at a considerable saving on list. **£2,150**

ASTON MARTIN Mark III 1959 unblemished light metallic blue occasional four-seater maintained by wealthy enthusiast who has just taken delivery of a DB4. Genuine low mileage specimen, fitted radio, heater, 'X' tyres. Offered taxed and with 6 months' guarantee at **£2,250**

AUSTIN-HEALEY RUDDSPED 3000 two-seater fitted with our triple inlet manifold and gas flowed head, sports camshaft, giving 178 h.p. Modified suspension with competition shock absorbers, Michelin 'X' tyres, heater, overdrive, wire wheels, hardtop. Perfectly maintained, uncrashed, low mileage car. Cost over £1,400 a few months ago, **£1,150**

TERMS AND EXCHANGES

41 HIGH ST., WORTHING 7773/4

GOLD SEAL CAR CO. LTD.

253, NEW CROSS ROAD, S.E.14

Telephone New Cross 7433 and 3980

South London's Leading Sports Car Specialists

- £865 Aston Martin DB2** drophead coupe. Vantage engine completely reconditioned. Ivory with blue hide interior.
- £865 TR3A, 1960.** B.R.G. Leather upholstery. Three-speed overdrive, 'X' tyres. Nominal mileage.
- £795 Aston Martin DB2,** bodywork in Alfa red, fitted with chrome wire wheels, 'X' tyres, radio and heater, engine recently overhauled. This car is a truly magnificent example. 3 owners from new.
- £715 1958 TR3A,** overdrive, heater, luggage rack, twin spots, primrose with black interior, unmarked throughout.
- £595 M.G.A. Roadster,** 1958 model. Black with red hide. Two owners, various extras, specimen condition throughout.
- £595 TR3 1957,** disc brakes, overdrive, white with black hard top.
- £515 Austin-Healey Sprite Nov. 1959.** One owner. Low mileage. White with red interior. Radio, heater and tonneau cover.
- £495 B95 Berkeley,** fixed head coupe, late 1959.
- £445 Austin-Healey, 1955.** B.N.I. Extras include overdrive, wire wheels, heater, extra instruments, wood rimmed steering wheel.
- £395 Cooper 2-seater sports,** similar to AC Ace, B.R.G., hard top.
- £395 M.G. TD.** Metallic green, fitted with tuned 1500 unit; numerous extras, extremely rapid and in outstanding condition throughout.
- £395 Morgan Plus Four,** Vanguard unit, 4-seater, excellent condition.
- £345 Turner.** 1956. Standard 10 engine, twin Marchals, heater, very fast and economical.
- £315 M.G. TD 1950.** Heater, B.R.G.
- £295 Jowett Jupiter.** Phase III crankshaft, radio, heater, detachable hard top, exceptional.
- £295 Lotus Mk. VI 1955.** Aquaplane engine. Buckler gears.
- £295 1955 TR2,** requires some attention.
- £195 Healey-Elliott 1947,** 4-seater, roadster, 100 m.p.h. plus, very economical.
- £195 M.G. TC 1947.** Works recond. engine.
- £75 M.G. PA 2-seater.**

GOOD SPORTS CARS WANTED FOR CASH
Hire purchase as low as 1/5th deposit.
Special low insurance rates available. Motor Cycles, 3-wheelers and all cars taken in part exchange.
Open weekdays 10 a.m. to 9 p.m.
Saturdays 9 a.m. to 7 p.m.
Sunday 10 a.m. to 1 p.m. (for inspection).

LOTUS and T.V.R. DISTRIBUTORS

David Buxton Limited

Telephone Derby 40526/7/8

MASERATI 3,500 G.T. First registered November 24th, 1959. Finished in dark grey with white leather interior, fitted radio, heater, screen washers, etc. This fabulous car both in design and performance is offered guaranteed at **£4,250.** Demonstrations by appointment.

SKODA "OCTAVIA." First registered March 18th, 1960. Finished in red with tan interior. 4,000 miles only, one owner, fitted heater, screen washers, etc., independently suspended on all four wheels. An interesting and delightful saloon.

SUNBEAM RAPIER CONVERTIBLE. Registered 1960. One owner, only 3,000 miles. Fitted heater, overdrive, etc., as new throughout.

ASTON MARTIN D.B. Mk. III. First registered late 1958. Finished in Alfa red with leather interior. Very low mileage, fitted radio, overdrive, new tyres, etc., as new throughout.

JAGUAR XK 140 DROP HEAD COUPE. Registered 1955. Fitted with wire wheels, Dunlop racing tyres, "C" type head, at least 130 m.p.h. Hood in good condition. Finished in black with green interior.

AUSTIN-HEALEY SIX. First registered April, 1957. Finished in red and black with 2/4 seating accommodation. Two owners, fitted radio, heater, overdrive, screen washers, spot lights, etc.

M.G. "A" 1,500 and 1,600 SPORTS and fixed head coupes. Models white, red, blue and green, most fitted radios, all heaters, hard tops, etc.

LOTUS NINE. Fitted with Connaught 1½ litre engine. De Dion and in-board brakes at rear, swing axles at front, first class condition throughout.

T.V.R. We are distributors or this amazing all independently sprung Grantura sports car. Available with Ford 100E, 105E, M.G. "A" 1,600. Terms from 20% deposit and four years. Exchanges arranged. Demonstrations by appointment.

T.V.R. M.G. "A" 1,600. Registered May, 1960. Finished in British Racing Green. One owner, 3,000 miles only, taxed, fully guaranteed.

COOPER F.11. Built 1957. Fitted Coventry-Climax twin-cam engine, just overhauled, also fitted new gearbox and tyres.

AUSTIN-HEALEY ex works. Completely rebuilt to near 100 S specification. Light alloy body, four-speed gearbox with close ratio manual overdrive, modified suspension, front and rear, works tuned engine balanced with fully modified head, twin side exhausts, 9.1 compression, high lift camshaft, H.6 carburettors, rambox wet weather Dunlop R.5s. Perspex sliding screens, removable rear window.

SUNBEAM RAPIER SALOON. First registered 1958. Finished in ivory and chocolate, fitted overdrive, heater, screen washers, one owner, only 13,000 miles, taxed and as new throughout.

RILEY I.5. First registered late 1959. Finished in dark red, with tan trim, etc., fitted alloy cross flow head, Dunlop Dureband tyres, heater, etc. Two owners, only 10,000 miles, at least 10 m.p.h. faster than standard.

AUSTIN-HEALEY SPRITE. First registered 1959. One owner from new. Finished in green, fitted heater, rev. counter, overriders, etc., 6,000 miles.

TRIUMPH T.R.3 and 3A. Green, white/red, blue, fitted heaters, hardtops, radios, "X" tyres, etc. If you require a Triumph we probably have it in stock.

LOTUS ELITE. Latest new and used models for immediate delivery. Your present car taken in part exchange. All tuning and servicing facilities available. Our workshops can provide stage I, II or III at competitive cost.

LOTUS SEVEN Mk. II. New Ford and B.M.C. "A", also Climax kits in stock for immediate delivery, all tuning mods. carried in stock. Show and demonstration cars available.

LOTUS FIFTEEN, almost brand new, finished in red, very latest specification, mag. wheels, four speed gearbox, new Dunlop R.5s.

CONNAUGHT 2½ LITRE. Ex Archie Scott-Brown, this car has been completely overhauled and in "ready to race" condition. Many spares, including eight wheels. Ideal for Formula Libre, sprints, hill-climb events, full specification and history available.

AUSTIN HEALEY 3,000. Registered three months only, finished in Healey Blue, fitted overdrive and "Ruddspeer" three carb. conversion; approx. 127 m.p.h. This car is immaculate having covered only 3,500 miles.

LOTUS F.11. Chassis/body complete with mag. wheels, tyres, front and rear suspension, final drive, brakes, etc.

T.R.2. Crashed engine/gearbox, brakes, wire wheels, etc., "O.K.", not expensive, ideal replacement units.

LOTUS ELEVEN Mk. II Wishbone fitted Climax 1,100 c.c. engine, disc brakes, De Dion back axle, twin plate clutch, close ratio gearbox, mag. wheels, finished in British Racing Green.

The above cars, which are all subject to our written guarantee covering labour and materials, are only a representative selection of our stock of over 30 sports and performance cars. Exchanges are welcome; terms and insurance are available on all models. Please write, phone or call for details, or see classified list.

59-61 London Road Derby

Classified Advertisements—continued**BERKELEY—continued****YOU HAVE READ ABOUT THE BERKELEY BANDIT.**

Enquiries are invited from the
SURREY CAR CO., LTD.,
44 Richmond Road, Kingston-upon-Thames.
KINGSTON 7660 and 6340.
BERKELEY DISTRIBUTORS FOR SURREY.

SUSSEX DISTRIBUTORS. Sales, Tuning and Service.—St. James' Motors, Brighton, 37-38 Upper St. James' Street, Brighton, Sussex. Telephone: Brighton 61414-5.

THE MIDLANDS AND SOUTH-WEST BERKELEY CENTRE offer all Berkeley models for early delivery. Demonstration cars available. Very competitive insurance terms available.—Kingscote & Stephens, Ltd., London Road, Gloucester. Phone 21278-9.

B105. Carpets, bucket seats, oil cooler, tonneau, luggage grid. Modified clutch and flywheel. Rev. counter, woodrim wheel. £520 o.n.o.—"Eastcote", Blakedown, Kidderminster. Blakedown 380.

B.S.A.

BASIL ROY, LTD., B.S.A. (Scout models) spares. Comprehensive stock wholesale and retail.—161 Gt. Portland Street, W.1. LANGHAM 7733.

CONTINENTAL CARS

RICHARDS AND CARR, LTD., for new and used Renault, Simca, Peugeot, Fiat, Citroën.—132 Sloane Street, S.W.1. SLOANE 6165.

COOPER

AT last for sale. What must be one of the most successful and fastest F2 Coopers ever built. Its list of successes being too long for an advertisement, amongst them being the 1959 British Empire Trophy, 1st; Silverstone G.P., 1st F2 and lap record; 1960 Vanwall Trophy, 1st; and 1960 Aintree Trophy, 1st. This car has always been maintained completely regardless of cost from new by Jim Russell and has undergone a complete "end of season" routine rebuild since its last race on 17th September, 1960. Now it is prepared for another season's racing and offered for sale at the realistic price of £1,750. Any one interested around this figure should contact Peter Russell, Downham Market 3398. Part exchanges considered.

COOPER Mk. XI. Built to order in 1957. 760 miles from new (one owner). Fitted 52 b.h.p. Norton short-stroke engine on petrol. Undoubtedly the most immaculate 500 c.c. car in existence. Maintained regardless of cost. Many successes. Genuine enquiries only. £475.—Box 3747.

1960 COOPER-CLIMAX, numerous successes, completely overhauled since the end of season. £1,500 or £850 less engine.—Tim Parnell, Hall Pastures, Littleover, Derby. Tel.: Derby 23691.

DELLOW

DELLOW, 1952. £220 o.n.o.—122 Howard's Road, London, E.11.

ELVA

1960 ELVA Formula Junior. Fitted new Auto Union engine. Handles beautifully under all conditions. Ready to race. Any trial. Original cost £1,250. Accept £595. Exchanges and deferred terms welcomed.—Saunders Abbott, Ltd., 1 Wickham Road, Beckenham, Kent. Beckenham 7276.

FAIRTHORPE

BUTT'S MOTORS, Fairthorpe, Daimler and fibreglass repairs. Specialists in overhauls and used cars.—9 Pindock Mews, Warwick Avenue, W.9. CUNNINGHAM 2843.

FIAT

FIAT 600 saloon, 1960. 5,000 miles only. White with blue interior. Condition equal to new. £495.—Walton-on-Thames 21790.

FORD

FORD Zodiac. Mays conversion. Extremely fast and in excellent order. £650.—Harborough Motor Co., Market Harborough 2207.

GOGGOMOBIL

BUY your Goggo from Main Distributor, London and Middlesex. New and used Goggomobils for immediate delivery. Spares and Service.—Mansell & Fisher, 93-95 Old Brompton Road, London, S.W.7. KNIGHTSBRIDGE 7705.

HEALEY

1950 E-TYPE Silverstone. Slight damage to front of body, nearside wing and radiator. Suspension, steering and chassis O.K. 4,000 since rebore +0.020. Xs all round, weather equipment N.B.G. £275.—Catt, 86b Cambridge Road, West Wimbledon, S.W.20.

JAGUAR

JAGUAR XK 140, 1956, fixed-head coupé. Grey. Very carefully used. Very moderate mileage, faultless. £575. Terms.—Royal Motors, 17 Acre Lane, S.W.2. BRISTON 6872/3.

LATE 1957 2.4 JAGUAR, special equipment, loose covers, special carbs. and head, racing tyres £750. 1946 Bedford Utlecon. £30. One set Britool sockets. £8. 12 volt Pye radio. £10. Any vehicle in part exchange.—201 Hady Hill, Chesterfield. Phone 3621.

THE CHEQUERED FLAG (SPORTS CAR SPECIALISTS), LTD.
XK 140, 1955. Roadster in midnight blue with matching interior and tonneau, with heater, X tyres, washers ... £495
XK 120, 1952. Roadster in metallic dark blue, modified unit with twin exhaust, wire wheels, heater, etc. ... £395
High Road, Chiswick, W.4. Tel.: CHI 7871/2/3

S.S. 100 JAGUAR 2½-litre, 1936 (Nov.). Bronze head, 8 to 1 compression, six-branch exhaust manifold, recent respray. Well shod and with new, unused spare. Excellent performance and appearance. New hood, spot and fog lamps. Recently decarbonized, new exhaust valves and reconditioned (factory) differential unit about 10,000 miles ago.—P. Haylor, 18 Cecil Road, West Croydon, Surrey. Evenings or weekends.

3.4 GREY saloon, 1958. Superb condition. Heater, radio and overdrive. New car forces sale. £850 or near offer.—3 Hays Walk, Cheam, Surrey. Vigilant 3410.

1956 JAGUAR XK 140 (F.H.C.). Special equipment (wire wheels, etc.), new Michelin Xs. £610 o.n.o.—Box 3750.

1958 (May) JAGUAR 2.4. B.R.G., green leather upholstery. Disc brakes and overdrive, 14,000 miles. One very careful owner from new. £895.—Below.

1960 (February) JAGUAR 2.4 Mk. II. Blue, 6,000 miles, disc brakes and overdrive. Condition as new. £1,495.—Below.

1959 (August) XK 150 F./H. coupé. Blue with blue leather interior, disc brakes and overdrive, 17,000 miles. One owner and in faultless condition throughout. £1,085.—J. A. Gregory, Bath Road, London Airport. Tel.: SKYport 1621/1818/1819, evenings 9 p.m. Open Saturday and Sunday.

THE CHEQUERED FLAG (MIDLANDS), LTD.
XK 140, 1955. Roadster, unmarked white with dark blue interior, 21,000 miles only since new and fitted overdrive, wire wheels, heater, twin spots, tonneau ... £615
Arkwright Street, Nottingham. Tel. 89282/3.

LAGONDA

1952 LAGONDA coupé. Coachwork by Lagonda. Blue colour, blue leather interior. Heater, demister, screenwashers, and new tyres. Very good condition throughout. £425 o.n.o.—18 Hollydale Road, Nottingham. Phone: 248648.

LANCIA

APRILIA 38, good condition. £95.—9 Devonshire Road, Chiswick, CHIswick 9631 daytime.
LANCIA Appia. Perfect condition, fast and economical. £525. Terms arranged.—31 Longbeach Road, London, S.W.11

1960 REGISTERED LANCIA Aurelia GT. Superb car, specially built for the Mille Miglia. Radio, heater, most delightful appearance. Superb roadholding (all independent). Four Abarth exhausts, aluminium body. Terms. £695.—SHEPHERDS Bush 8866 (London).

LEA-FRANCIS

1951 LEA-FRANCIS, four-door saloon, 1½ litres, excellent condition. £350 o.n.o.—Coppice, Little Aston Park, Sutton Coldfield. Streetly 7468.

LOLA

F.J. LOLA. Works modified suspension. Engine and chassis rebuilt. Fastest F.J. Lola built. Offers to.—Dick Prior, "Crete", Ray Mill Road East, Maidenhead.

LOTUS

THE CHEQUERED FLAG (SPORTS CAR SPECIALISTS), LTD.
Mk. XI, Series I Club. Superb car, fully equipped and upholstered for road use, finished in metallic green with hard top, close ratio gears, wire wheels, 1172 unit ... £695
Mk. VII. Choice of two 1960 cars. Seven "F" and "Super" Seven. Both one owner, only nominal mileages and tuned Ford and Climax units respectively, from ... £495
Mk. VI, 1954. Two-seater in polished alloy, fitted highly tuned Consul unit, M.G. gearbox, etc. ... £365
High Road, Chiswick, W.4. Tel.: CHI 7871/2/3

ROUPE WOODYATT for your LOTUS Seven, Elite or Formula Junior. Distributors for the South Midlands and South Wales. Demonstrators available.—Portland Road, Malvern. Tel. 391.

LOTUS-CLIMAX, discs, de Dion, fast and very reliable. Must be sold.—Riverside 3665 day.

LOTUS ELITE, midnight blue, Stage II, 2,400 miles only. Never been used in any competitions. One owner. Part exchange and hire purchase arranged.—Bolton of Leeds, Ltd. Tel. 36036.

LOTUS 7 "F", July, 1960. Immaculate and unused. Quick sale due to change of plans. £495. H.P. arranged.—Tel.: LIVINGSTONE 2268.

LOTUS 7. The Official Centre for Greater Birmingham area. Components for home construction, engines and gearboxes in stock or on early delivery.—Monkspath Garage, Ltd., 824-826 Stratford Road, Shirley, Solihull, Warwicks. Telephone: Shirley 1645.

Roy Bloxam offers**TWO "DELICIOUS" CARS**

1959 Elite. Blue with red upholstery. Full Stage III mods. Willy Griffiths prepared for racing but not used. Now converted for road use, and a magnificent performer. All the necessary equipment is fitted, 10,000 miles. One owner only. Completely immaculate. Part exchange. ... £1,599

1959 "Seventeen". B.R.G./red. This is the consistently fastest Kerrison car and is without doubt the success extant. Fully modified to 1960 specifications, impeccably maintained, and ready for next season. Open to suitable offers. Part exchange under special circumstances.

Austin House,**Gerrards Cross, Bucks.****Gerrards Cross 2077/8.**

MARK VII, 1960 model. Tuned 100E engine. 6,000 r.p.m. in top (95 m.p.h.). Colour green. All weather equipment. Electric r.p.m. Oil cooling. Many spares. Eight places at 12 meetings. Cost over £1,000. Accept £500 o.n.o. H.P. available. Apply.—Robinson, 76 Mytton Oak Road, Shrewsbury. Telephone No.: 52753.

MARK VII, very little used, 4,000 miles only, never damaged. Offered less engine and gearbox. £285.—Chapman, 19 The Chase, Kingswood, Surrey.

1960 LOTUS XVII. As raced by G. R. Eden. 1,100 c.c. Climax. Whitehouse tuned, very fast, lap recordholder Silverstone club, Weber 38 DCO3. Special close ratio, trouble-free gearbox, wishbone suspension (front and rear), oil cooler, new discs, hood and sticks. Full Appendix C. All electric. New tyres (R5). Blue and silver. Whole car ready to race in 100 per cent. condition. £950.—Gerald Ashmore, 59 Temple Meadow Road, West Bromwich.

£365 MK. VI LOTUS, 100E engine, c/r gears, 4.1 back axle, hood and tonneau. First-class condition.—Candy, 41 Emmanuel Road, Wylde Green, Sutton Coldfield. Tel.: Erdington 1085.

MERCEDES

1956 300SL coupé. Lightweight body, knock-on wheels, high-lift cam, sports suspension. One owner. Genuine 12,000 miles, £2,950.—Box 3722.

MESSERSCHMITT

1959 K.G. 500, four-wheel Messerschmitt. 90 m.p.h., 0-70 in 19 secs., 55-60 m.p.g. 13,000 miles. Immaculate condition, engineer owned. Cost £660, valued £500. Offers, please. H.P. available.—"The Gables", Nightingale Avenue, Langdon Hills, near Laindon, Essex.

M.G.

U.M. HAVE the largest stock of M.G. spares in the country outside of the M.G. factory.—University Motors, Ltd., 7 Hertford Street, London, W.1. GROSvenor 4141.

THE CHEQUERED FLAG (SPORTS CAR SPECIALISTS), LTD.
M.G.A 1600, 1960. Fixed head coupé, a one owner, very low mileage example in Old English white with red interior, with disc brakes, rack, etc. ... £795
M.G.A 1600, 1959-60. Roadsters, choice two in birch grey or pale blue, both disc brakes, radios, mirrors, etc., and one owner only from ... £765
M.G.A, 1956/59. An unrivalled selection of six examples in cream, red, blue or pale green, all are equipped with many extras and competitively priced from ... £495
M.G. TF, 1954. Two-seaters. Choice of two in dark red or racing green, both comprehensively equipped, from ... £425
M.G. TD/TC, 1947/49/52. Four far-above-average and attractively priced examples of this popular marque, all with extras: TCs from £235 TDs from £385
High Road, Chiswick, W.4. Tel.: CHI 7871/2/3

S. H. RICHARDSON & SONS, LTD.,**The M.G. Specialists offer—**

M.G.A 1960 F/H. coupé, ivory ... £845
M.G.A 1957 Roadster, two-tone green ... £550
M.G.A 1956-60. Choice of seven.
M.G.s 1930-60. Choice of over 100.
M.G.s all models wanted. Part exchanges.
H.P. terms. Immediate insurance.

Moore Lane, Staines.**Tel.: Colnbrook (CN8) 2258.**

M.G.A. EX WORKS car. All comp. mods. B.R.G. Detachable hardtop. Heater. Racing wheels, 4.3 and 4.55 ratios. £550.—Chris Tooley, Tewin (Herts) 488.

M.G. TC, 1946. Immaculate. Black/red, richly chromed. Extras. £210. H.P. available.—17 Herrick Road, Highbury, London, N.5.

M.G. SPARES.—Most parts in stock for all models 1930 onwards, including valves, guides, springs, rockers, dynamos, road springs, wheels, hubs, vertical drive assemblies, prompt postal service, c.o.d., and guaranteed workmanship in all our repairs.—A. E. Witham, 3 Kingston Road, Wimbledon, S.W.19. LIBerty 3083.

(Continued on page 693)

Due to an entry into formula racing next season S. J. Diggory offers the following cars for sale, all of which have been prepared regardless of expense.

SPECIAL LIGHTWEIGHT TVR fitted 1220 Climax racing engine, full stage three. M.G. gearbox. This is the lightest and fastest TVR in the country (Oulton Park 2 min. 4 sec.). It was built regardless of expense to win its class on any circuit and this it can do. Don't confuse this car with the normal home built car **PRICE £1,150. Guaranteed ready to race.**

1960 LISTER JAGUAR. This is the fabulous space frame chassis car built by Frank Costin for Brian Lister. Fitted with Don Moore 3.8 D Type engine and gearbox and special ZF diff. Magnesium electron body. Dunlop disc brakes. Weight under 16 cwt. wet. This is the fastest Jaguar engined sports car ever produced. Has won three of four races outright and holds lap record at Brands Hatch. Spares include diff., wheels, etc. **PRICE £2,000**

1960 MARCOS G.T. This car was specially built by Frank Costin for S. J. Diggory on the basis of "don't send it until it's the fastest in the world". It has full formula junior 105E engine (76 b.h.p.), special close ratio gears and special brakes. Holds class lap record at Snetterton. Taxed for the road. **PRICE £875**

**S. J. DIGGORY
(MOTORS) LTD.,
IMPERIAL GARAGE,
RHOSTYLLLEN, WREXHAM,
DENBIGHSHIRE.
Telephone: Wrexham 2154**

**WEYBRIDGE
automobiles**

1959 AUSTIN-HEALEY SPRITE. Maroon. Red interior. Fitted hard and soft tops. Tonneau cover, special side screens, wheel discs, heater and wing mirrors. One owner. Immaculate. **£575**

1956 MERCEDES BENZ 220A SALOON. Beige with grey interior. Fitted radio, wing mirrors, wheel trims, leopard skin seat covers. One owner. 27,000 miles only, immaculate example. **£1,195**

1960 RENAULT GORDINI. Sevigne, Green, Grey interior. Fitted sun-roof. Windscreens washers, heater. One owner. 1,500 miles only. Immaculate. **£735**

1959 STANDARD VANGUARD VIGNALE SALOON. Duo Grey/Green. Grey interior, fitted radio. 5,000 miles only. Immaculate condition. **£725**

**WEYBRIDGE AUTOMOBILES, LTD.,
Queen's Road, Weybridge.
Phone: Weybridge 2233, Ext. 19.**

**COLIN MURRAY
LIMITED**

Sole
IMPORTERS & CONCESSIONAIRES

FOR THE NEW
Maserati
3500 G.T.



**BEACH ROAD
FLEETWOOD
LANCASHIRE
TEL: 2752**

FIELDS OF CRAWLEY
THE FIRST AND ONLY JAGUAR XK CENTRE

have great pleasure in announcing that
JACK FAIRMAN

the well-known JAGUAR driver and tester has joined the staff of the XK Centre.

Enquiries are invited for the following cars, upon which a better delivery can be given as the result of our advance order position.

XK.150 3.8 litre "S" type fixed head coupe. Indigo blue with blue upholstery.	XK.150 3.4 litre "S" type fixed head coupe. White with red upholstery.
XK.150 3.8 litre "S" type drophead coupe. Carmen red with black upholstery and a black hood.	

Please telephone Crawley 25533 to arrange for Jack Fairman to test your existing car and to discuss with you your requirements for the future.

FIELDS ENGINEERING COMPANY (CRAWLEY) LTD.
"First in the FIELD with XK"
86-92 HIGH STREET, CRAWLEY, SUSSEX Telephone: 25533-7

THE CHEQUERED FLAG Tel: EDGware 6171/2

Open 9.30-7.30 (COMPETITION CARS) LTD.

<p>Fiat 1500 Convertible. One of the most exciting sports cars ever to come from Italy. A few weeks old only, with a purely nominal mileage, and in mint condition in white with black interior. One owner only. Offered at a saving of nearly £150 off list. £1,685</p> <p>Aston Martin DB35. 1956. An original and meticulously maintained example of this superb marque. Finished in Aston green, full Appx. "C" screen, Webers, etc. A potent, tractable car suitable for road or track use. £1,265</p> <p>Alfa Romeo Giulietta Sprint. A particularly desirable example in Italian red with matching cream and red interior. Fitted heater, new Pirellis all round, etc. Attractively priced at £1,165</p> <p>Mercedes-Benz 300SL Roadster. A low mileage and faultless example in dove grey with red leather interior. In perfect condition both bodily and mechanically, this must be the best available specimen anywhere. Now offered at a saving of nearly £2,000 off list price. £3,485</p> <p>Lancia 2500 GT Spyder. Unblemished in red with black interior trim, and fitted twin exhausts, "X" tyres, floor change, screen-washers, etc. A very fast and beautiful car. £1,185</p>	<p>Lotus Elite GT. As London Lotus Distributors we can offer immediate delivery of the fabulous Series 2 Elite Coupe at £1,949, or early delivery of the Special Equipment Series 2 Coupe, at £2,120, in a variety of attractive pastel shades.</p> <p>NSU "Sport Prinz". 1959 GT two-seater, one owner since new, and a nominal mileage only. Spotless condition in pearl grey with matching interior, and equipped with various extras. £735</p> <p>Lotus Elite GT. The very rapid and successful ex-Jimmy Clark car in B.R.G. with tan interior trim. Wire wheels, disc brakes, Stage 3 unit, etc. An exciting road car. £1,585</p> <p>Facel Vega HK500. 1958. Two-door 4-seater GT saloon, unblemished in silver grey with black top, and pale grey leather interior and carpeting. Disc brakes all round, chrome wire wheels, all synchromesh gearbox; electric windows, radio, heater, air conditioning, "X" tyres, etc. A fast, luxurious and beautifully finished car. £3,250</p> <p>Alfa Romeo 1900 Super Sprint. Incomparable sky blue coachwork with matching interior trim. Equipment includes five speed gearbox, radio, heater, chrome Borrani wire wheels, "X" tyres, Webers, etc. £1,285</p>	<p>C-type Jaguar. 1953/2. A choice of two of these potent machines, in red or dark blue, both fitted with Webers, screen and weather equipment, and suitable for road or track use. £765</p> <p>Jaguar XK 150 Roadster. July, 1960. 3.4 litre two-seater. One owner and 1,700 miles only since new. Literally as new in Carmen red with specially fitted black leather interior. Disc brakes, tonneau cover, heater, etc. £1,685</p> <p>Lancia 2500 GT Aurelia. Finished in Italian red with white interior, this car is the best example of this marque we have seen for a very considerable time. "X" tyres, floor change, all independent suspension, etc., highly polished unit. £1,335</p> <p>Austin A105. This is the very fast and extensively modified ex-Jack Sears car. Specification includes 2.6 litre 6-port head unit, competition suspension and steering, brakes, etc. Finished in pale green with tan interior. £695</p> <p>Jaguar XK 150 Fixed Head Coupe. 3.4 litre 1958 series. Gleaming black, with red leather interior and wire wheels; also disc brakes, overdrive, heater, twin spots, etc. 27,000 miles only, and one owner since new. Perfectly maintained throughout. £1,025</p>
---	---	--

**GEMINI HOUSE,
HIGH STREET, EDGWARE, MIDDX.**

Classified Advertisements—continued

M.G.—continued

M.G. TD, 1952, black/red, radio, heater, two new Michelin X, new hood, luggage rack. Full tonneau. Taxed. Immaculate condition. £385 o.n.o.—Phone: FOREST Hill 8528.

TD (1953). B.R.G. Fine condition, fully maintained. Heater, washers, foglight, etc. £395 o.n.o. H.P. available.—Gray, 74 Somerset Avenue, Westcliff, Essex, or Staines 53321 (Sat., Sun.).

THOMSON'S hard surface rockers, 6s. each exchange, other exchange spares, new bushes, shafts, valves, guides, springs, gaskets, timing chains, brake and clutch linings, wheels, springs, carburettors, half-shafts, crown-pinion sets and many other spares. Excellent c.o.d. service.—106 Kingston Road, Wimbledon, S.W.19. LIBerty 8498.

THOULMIN MOTORS.—The most comprehensive range of M.G. spares in the country for every model M.G. Order your new car or spares from the Specialists.—343 Staines Road, Hounslow, Middx. HOUnslow 2238-3456.

£3,000 SPENT since 1946 on TC. Now able to beat Continental two-strokes from lights. £225.—WORDsworth 6642.

£555. M.G.A. 1956. A superb one owner from new specimen, in positively unmarked red with equally immaculate upholstery and carpets, and brand new manufacturer's hood. Faultless mechanical condition having covered very nominal mileage in the most careful hands. Yet another outstanding M.G. from Baker and Roger, Ltd.—See below.

£245. M.G. TC, 1946 model. Beautiful mechanical reconditioning, new zip tonneau, twin spares. Superb performance. M.O.T. test certificate. Another of our hand-picked TCs. Terms, exchanges.—Baker and Roger, Ltd., Hudson's Garage, Darkes Lane (opp. Ritz), Potters Bar, Middlesex. Potters Bar 6181, or Hatfield (Herts) 3861, evenings and weekends.

THE CHEQUERED FLAG (MIDLANDS), LTD.

M.G.A. 1600, 1960. Fixed head coupé, spotless in birch grey, red leather interior, disc brakes, heater, etc. One owner only ... **£795**

M.G.A., 1959. Two-seater, an unblemished one-owner car in pale green and fitted heater, tonneau, X tyres ... **£765**

M.G. TF, 1954. Two-seater in dark red with matching leather interior, fitted radio, heater, etc. ... **£445**

Arkwright Street, Nottingham. Tel. 89282/3.

MORGAN

BASIL ROY, LTD., main London Distributors. Official spare parts stockists. Service and repairs. Sales enquiries for overseas visitors or purchasers invited.—161 Gt. Portland Street, W.1. LANgham 7733.

EAST AND MID SUSSEX DISTRIBUTORS. Sales, Tuning and Service.—St. James' Motors, Brighton, 37-38 Upper St. James' Street, Brighton, Sussex. Telephone: Brighton 61414-5.

MORGAN PLUS 4 cars. Prompt delivery of these cars. Spares for the same, huge stocks of 4/4 and three-wheeler spares.—F. H. Douglass, Morgan Specialists, 14 South Ealing Road, Ealing, W.5. EALing 0570.

MORGAN PLUS FOUR, 1959, blue, 13,000. Fastest TR engine car in class, 28.01 secs. standing half-mile Weston Speed Trial. Immaculate. Three spare wheels and tyres. Offers over £690.—Jones, 16 Broad Street, Wells.

MORGAN Plus 4 (1952). Engine 14,000, Stage II. Spot, washers, reversing light, tonneau. Taxed January. Best over £300.—Udall, 136 Avon Road, Chelmsford, Essex. Office: Wembley 8991.

1958 MORGAN PLUS 4, TR3 engine, new tyres all round, colour blue, red trim, heater and luggage grid, flashers, etc. £575.—Harvey Lane Garage, Ltd., 34/36 Harvey Lane, Norwich. Telephones: Norwich 33960, 45403.

1956 PLUS FOUR, Barwell head, H6s, special wheels, tonneau, spot, Brooklands wheel, Xs. £495.—Gibbs, EUSton 8071 (day), FREmantle 4310 (evenings).

MORRIS

ALTA-MINOR, 1953. 43,000 miles only. Excellent condition. Detuned since Suez. New tyres, vynide hood, heater. Full history available. £240.—Yardley, 15 The Close, Lichfield, Staffs. Lichfield 2588.

1959 MINI-MINOR de luxe. Red. Low mileage, unmodified and in first-class order throughout. £485.—J. A. Gregory, Bath Road, London Airport. Tel.: SKYport 1621/1818/1819, evenings 9 p.m. Open Saturday and Sunday.

NSU

1960 (AUGUST) NSU Sports Prinz in white. One owner, low mileage, garage maintained. 80 m.p.h. at 45 m.p.g. Bodywork and engine as new. Interior unmarked. Hire purchase available. £750.—Andre Baldet, 30 Campbell Street, Northampton.

PANHARD

PANHARD DYNA, late 1957. Blue, one owner, 20,000 miles. Undersealed, X tyres, new spare, new h.d. battery, dynamo, Arbarth exhaust, spot, fog, parking, reversing lamps, extras, spares, 40 m.p.g., 80 m.p.h. Nearest £450. Leaving England January.—Nye, 8 Ploughley Road, Ambrosden, Oxfordshire.

RACING CARS

THE CHEQUERED FLAG (Engineering), LTD.

GEMINI Mk. II. We now offer the three very special works cars, as raced by Geoff Duke, Graham Warner and Tony Maggs.

Every conceivable modification and extra including 80 b.h.p. Cosworth Ford 105E engine, close-ratio gears, adjustable shock absorbers, left-hand gear change, long range tanks, Alfins, oil cooler and fully instrumented cockpit. Maintained regardless and finished in pale green. These cars will provide safe, fast and reliable racing at negligible cost. **£1,095.**

Also a large quantity of Mk. II components and spares (drop boxes, mag, wheels, diff, houses, tuned and standard B.M.C. engines).

All enquiries please to:

High Road, Chiswick, W.4. Tel.: CHI 7871/2/3.

1959 ex-works, Vanwall-type, Formula 1 Lotus 2½-litre Climax. Engine unrun after complete works rebuild.

1959-60 Cooper-Climax Formula 2, 200 miles only. As brand new.

1959 Vanwall-type 1½-litre Formula 2 Lotus-Climax. Five-speed engine as new.

1959-60 ex-Jacky Lewis Championship-winning Cooper, Formula 2 with the only five-speed needle roller full ZF diff, transmission in the country, less engine.

1959-60 Cooper Formula 2, less engine and gear- box, as brand new.

1½-litre Coventry Climax, 1,500 c.c. twin-cam engine, with bell-housing and gearbox.

Ex-B.R.M. Transporter in beautiful condition. Radio, heater, overdrive.

Cooper bellhousing and transmission, as brand new.

Offers considered for the above, would separate or export.

FRED TUCK CARS,

1 Alexandra Parade, Weston-super-Mare.

Telephone: Weston 1655.

Evenings, 2526.

LOTUS FORMULA JUNIOR

Built May, 1960. This car has had many successes this season both in this country and abroad. Highly tuned Cosworth Ford engine.

Maintained regardless of cost and is in as new condition. Trailer available.

£1,100 o.n.o.

Chris Andrews,

South Lodge, Burgess Hill, Sussex.

Tel.: Burgess Hill 2317.

COOPER-AUSTIN Junior for sale, hardly used. Latest type B.M.C. engine, £950 o.n.o., or would take Mini-Minor or Baby Austin in part exchange.—Box 3749.

COOPER MK, VIII, short stroke Norton engine, good condition, ready to race, £250 o.n.o.—R. Burn, Tanglewood, Sycamore Road, Amersham, Bucks. Amersham 1808.

IAN RABY supplies all makes of racing sports cars, F.J., F2, F1—1100, 1500, 2-litre, Hire Purchase, Exporting.—Empire Cars (Brighton), Ltd., 85 Preston Road, Brighton 21713.

LOTUS JUNIOR, Cosworth engine, semi-works car, six races only, many spares, £1,100, 1958 Lotus Formula 2, ex-Allison, shares Silverstone lap record, most reliable and fastest of this model ever. £1,050, 1956 Fiat 600, Barwell conversion, engine just overhauled, 70 m.p.h., 45 m.p.g. £310. Four-wheel Trailer with hydraulic brakes and detachable top tier, built for Lister-Jaguar, tractable and strong. £85. Pair Weber 38 DCO3, virtually unused, suit Elite or TR, Ford, etc. £60.—Ring Farnborough, Hants, 1708 after 7 p.m.

LOTUS JUNIOR in very good position. First privately entered Lotus to finish in 100-mile race, and 75-mile race.—Romanes, Edinburgh 78367.

TERRIER Mk. 1 for sale. Only one sprint (6th November) since complete overhaul of steering and bodywork including respray. Specification includes racing tyres, brake linings, special 1172 Formula engine, c.r./r. gears, tuned exhaust. Weight 7½ cwt. Brands Hatch, 68 secs.; Silverstone, 1.21. Will accept best offer for complete car or car less engine.—Harvey, St. Helens, Nazeing, Essex. Phone: 3158.

TOJEIRO-HILLMAN, 1959, unraced, i.s. all round. Suitable 2-litre, prepared sell without engine. Spares, Offers £700.—White, 8 Jullians Road, Stevenage 332.

500 C.C. JP J.A.P. Largely Cooper. Many new parts including new racing tyres and body. Full details and photograph. Perfect. Part exchange and terms. £145.—Arthur Prince's Garages, Ltd, Swan Street, Loughborough.

1959 COOPER-CLIMAX Formula 2, latest type, in as new magnificent condition, engine maintained and completely overhauled last month. Webers fitted. Cost over £2,700, will accept nearest to £1,750. Terms can be arranged.—John Fisher, 201 New Road, Portsmouth 63143.

1960 COOPER Formula Junior, fitted with Cosworth Ford 105E engine developing 77 b.h.p. Superb condition. Finished in dark blue and white. £1,050.—Wood, Oakwood Hall, Bingley, Yorkshire. Tel.: Bingley 2986.

WANTED. Crashed or incomplete Terrier, Lotus 7, 1,172 or similar.—Box 3754.

RILEY

2½-LITRE drophead five-seater. Recellulosed and fitted new vynide hood. Impeccable appearance and performance. Ministry certificate, of course. This really distinguished car cost £1,875 in 1950 and is now offered at only £235. Good pre-war tourer for teenager son considered in part exchange.—Tel.: Windsor 669 (evenings).

ROCHDALE

ROCHDALE G.T., 1960, Stage IV 1172. Morris box, Speedex chassis, i.f.s., Minor steering, hydraulic brakes, clutch, 15 ins. wheels with R.l.s. Fully instrumented and trimmed.—184 Papplewick Lane, Linby, Notts.

SINGER

1951 4AB roadster, 50,000. Very good condition. £145 for quick sale.—Box 3748.

SPECIALS

FOR SALE.—Almost completed special based on Austin-Healey Sprite. X tyres. Business commitments prevent completion, £200 o.n.o.—Phone: Potters Bar 3182.

LOTUS 17 body, 15 fuel tank, F2 rad., Elite windscreen, sidescreens, space frame, i.f.s., very highly tuned, E93A c.r. gears, 4.7 c.w.p., all instruments, aluminium, wire, tubing, etc. Almost complete kit for superb special. Changed circumstances force sale at around £230.—Tomkinson, Cranborne Road, Hatfield 2872.

M.G. J2/FORD, aly body, well shod, two SU, W.P., H.C. head, taxed, etc. £100 or less to young enthusiast. Also 18/80 recon, eng-gearbox.—ORPington (Kent) 23151.

TRIALS Special, built 1958, R.A.C. formula, multi-tubular frame, 1,172, twin SUs, branch exhaust, taxed and ready for season. £175.—Phone, after 7 p.m., Wythall 2010 (Nr. Birmingham).

VAUXHALL Special 1500, Marshall nordex blower, Scintilla-Vertex magneto, aluminium, ash 2/3-seater body, hood tonneau, side screens, mechanically, bodily excellent. Nearest £100.—10 Hillary Crescent, Luton, Beds.

750 AUSTIN (first registered 1956). Race winner 1956-57 admittedly but still very fast in present road and fully waterproofed trim. £20 deposit, remaining £100 over two years.—Box 3752.

1172 SPORTS/RACING SPECIAL. Road-worthy, requires finishing. Space frame, tuned E93A, SUs, hydraulics, c/rs, Xs. Taxed, insured. £220.—ORPington 27305, evenings, weekends.

SPORTS CARS

THE CHEQUERED FLAG (SPORTS CAR SPECIALISTS), LTD.

Sunbeam Alpine, 1959. Two/four-seater, unmarked moonstone with red interior, discs, radio, heater, overdrive ... **£835**

Elva Courier Spyder, 1959. Two-seater in dual B.R.G. and red, highly tuned M.G.A. engine, close ratio gears, mag. wheels, Alfins, etc. **£695**

Parson-M.G., 1955. Two-seater, tuned M.G. unit and gearbox, tubular chassis, wire wheels, Alfins, etc. ... **£565**

Morgan 4/4 Plus Four. Choice two excellent examples in white or maroon, both with various extras, from ... **£395**

High Road, Chiswick, W.4. Tel.: CHI 7871/2/3

MIRFIELD MOTORS

offer

1960 M.G.A. 1600, chariot red and black interior, Michelin "X", as new ... **£795**

1957 M.G.A., old English white, fitted "X", radio, heater, immaculate. ... **£550**

1958 Ford Convertible, ivory, immaculate order, taxed, any trial ... **£585**

1953 Hillman Convertible, black, immaculate, original paint ... **£275**

1951 Minor Convertible, green, exceptional car, heater ... **£275**

1952 Austin A40 Sports, very sound car through- out ... **£275**

1953 Bond £55

1955 Gordon £70

Open Every Day.

Terms, Exchanges and Insurance Immediately.

MIRFIELD MOTORS,

Battleyford, Mirfield, Yorkshire.

Phone 3459.

Mk. 1 ELVA-CLIMAX, 1,100 c.c. FWA Climax Stage II. Falcon body, only 10,000 miles. Ideal road/competition car. £490.—Banbury, Iddesleigh, Devon.

SUNBEAM

1957 SUNBEAM Mk. III. Maroon/off white, radio, heater, overdrive. This car has covered only 23,000 miles and is offered subject to any trial or examination. £655.—J. A. Gregory, Bath Road, London Airport. Tel.: SKYport 1621/1818/1819, evenings 9 p.m. Open Saturday and Sunday.

(Continued on page 695)

AITCHISON-HOPTON

(ENGINEERS) LTD

LOTUS MAIN AGENTS T.V.R.

OFFER

1960 M.G.A. 1600 c.c. Two-seater Sports. Iris blue with black interior. Fitted disc front brakes. Wire wheels, heater, competition seats, woodrim s/wheel, twin spots, anti-roll bar, etc. 7,000 miles. Guaranteed unraced, etc. Perfect throughout. **£850**

1955 JAGUAR XK 140 Fixed head Coupé. Chinese white with maroon interior. Fitted radio, heater, etc. Coachwork almost perfect but has two small blemishes, otherwise excellent. **£500**

1957 M.G.A. 1500 c.c. Two-seater Sports. Turquoise blue with grey interior. 23,000 miles. Fitted heater, luggage grid, tonneau, reversing light, w/screen washers, etc. Just completed overhaul in our workshops. Mentally and physically perfect. **£545**

1960 T.V.R. Grantura Mark II. Fitted Ford 105E engine. Salvador blue with a rather sexy royal blue and grey interior. 500 miles only as owner has realised he cannot maintain H.P. payments. Show-room condition, new throughout. **£775**

1960 T.V.R. Grantura Mark II. B.R.G. with lime green interior. Fitted full Formula Junior Ford 105E engine by Brockholes Conversion Engineering, but with S.U. carbs. Brand new and unregistered. Immediate delivery in kit form as a result of a cancelled order. **£875**

We also have available for immediate delivery one Mark II T.V.R. Grantura with M.G.A. 1600 c.c. engine. Finished in white with red interior. List price **£880**.

Exchanges are welcomed and we would be pleased to arrange hire purchase and insurance

AS MAIN AGENTS FOR
LOTUS AND T.V.R.

we can offer immediate or early delivery on all models. Our demonstrators are available by appointment anywhere in the country. Export facilities are also readily available.

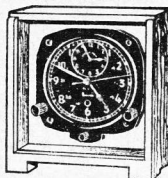
Full workshop facilities are available for Repairs and Conversion fitting, together with full Castrol lubrication service and Crypton electronic engine tuning. We also carry stocks of all Race and Rally Equipment.

16 CANAL SIDE
SELLER STREET, CHESTER

Telephone : CHESTER 26100

SPECIAL NOTICE TO RALLY ORGANISERS

★ We are pleased to announce that we can now supply **Jaeger - le - Coultre** ACCURACY TESTED TIME CONTROL CLOCKS ON HIRE @ 15/- per clock per event. These clocks can be synchronised to the second and will maintain EXACT TIME over long periods (8 days).



★ CLUB SECRETARIES are invited to write for full particulars of this long awaited scheme.

★ Reserve clocks NOW for your next event. All types of STOP WATCHES also available.

Write for catalogue

LES LESTON LTD.

314 High Holborn, London, W.C.1. CHAncery 8655

BASIL ROY LTD

Morgan Distributors—PERSONAL EXPORT FACILITIES

AVAILABLE. NEW MODELS—IMMEDIATE DELIVERY

- 1958 Morgan Plus 4.** Two-seater. Pearl grey, black interior. One owner. 10,000 miles. Immaculate ... **£595**
- 1958 Morgan 4/4.** Two-seater. Red with black interior, fitted Aquaplane head, Buckler gears. A car for the specialist ... **£475**
- 1954 Morgan Plus 4.** Four-seater. White with green leather interior, fitted heater, full length tonneau cover, rad. blind. The sports car for the family ... **£455**

All vehicles have been passed through our works and are now guaranteed for 3 months.

USED MORGANS FROM 1950 URGENTLY REQUIRED

161 GT. PORTLAND ST., W.1 LAN. 7733/4/5

JARVIS

OF WIMBLEDON



DEALERS FOR 33 YEARS

USED

1931 M.G. Mark 1 and M.G. 'M' type Midgets.

NEW

- M.G.A 1600 in Red. **£940 7 6**
- M.G.A 1600 Coupe in Iris Blue. **£1,026 15 10**
- M.G.A Magnette in Yukon and Birch Grey. **£1,030 6 8**
- (Also in Pearl Grey and Connaught Green)
- Austin-Healey 'Sprite' in Spruce Green. **£631 10 10**
- Austin-Healey '3000' in Blue and Ivory White, heater and wire wheels. **£1,225 16 0**

MORDEN RD., S.W.19 57, HILL RD., S.W.19
LIBERTY 8221/8 WIMBLEDON 2526

SELF ADHESIVE NUMBERS FOR ALL CARS

Easily fixed white index registration letters and numbers 8d. each. Black background, 1/3 each.



Complete set of numbers, letters and background, front and rear 10/6.

RACING NUMBERS

Black or White, 11" x 2" 1/6 each. Complete Sets, 6 of each numeral, 52/6. (P/p 2/-). Background Circles 18" dia., Black or White 3/6 each.



"COLOURFLASH" TAPE

in strong, durable colours. Red, White or Blue, 1 1/2" wide, per yard in any length, 9d. (P/p 6d.).

BLACK AND WHITE "CHECKBAND"

One-inch Black and White chequers on band 2" wide, per 5 yard roll 6/- (P/p 6d.).

LES LESTON LTD.

314 HIGH HOLBORN, LONDON, W.C.1

Tel: CHAncery 8655/0

EXPORT

USA - CANADA - EUROPEAN COUNTRIES

Any make of sports or racing car can be supplied, and export facilities arranged by :

DAVID BUXTON LIMITED

Telephone DERBY 40526/7/8

59 - 61 LONDON ROAD DERBY

DOVE'S

STANDARD TRIUMPH

OF WIMBLEDON

LIBerty 3456-8

THE FIRST OFFICIAL

TR Centre

SAVE £100. We have licensed a new 1961 series TR3A, but owing to unforeseen circumstances our client was unable to take delivery. It has not moved from our Showroom, and will be fully guaranteed. **£945**

TRIUMPH HERALD BARGAINS

1959 TRIUMPH HERALD Saloon. In Blue with Grey inside. This car has done only 13,000 by one owner, and is in beautiful condition. Heater and washers built in, excellent tyres. **£535**

1960 TRIUMPH HERALD Saloon. In two-tone White/Green. Only 6,120 miles. Spare unused, taxed December. One of our own company cars, in almost new condition. **£625**

1959 TRIUMPH HERALD COUPE. Total mileage 6,074. Monaco Blue and White with Grey trim. Occasional seat, loose covers. Cost new £757 13s. **£575**

1957 TRIUMPH TR3 with discs. Red with Black hard top and soft top. Sliding screens, heater and many other extras. Not a mark on it. **£585**

1957 TR3. Discs, Beige and Red with Black Hood, etc. Overdrive, radio, heater, etc. **£595**

1958 TR3. Red with Stone leather. This is a most attractive car beautifully kept by the original owner. Genuine 20,000 only. **£695**

1958 TR3A. Black with Stone leather. Overdrive and wire wheels. Almost new set of five Michelin "X" tyres. Heater. **£750**

THREE MONTHS' GUARANTEE WITH EACH CAR.

PART EXCHANGE. H.P. INSURANCE. A Club for TR Owners. Dove's of Wimbledon is the headquarters of the London Section T.S.O.A. Full Club facilities, Driving Tests, Rallies, Hill-Climbs, all for £1 0s. 0d. a year.

Write for full details.

44/48 Kingston Road, S.W.19

(150 yards South Wimbledon Underground)

Classified Advertisements—continued

TALBOT
1933 105 V.D.P. TOURER B.R.G. Wilson. £85 o.n.o.—9 Devonshire Road, Chiswick, CH1swick 9631 daytime.

TRAILERS

RACING CAR TRAILERS, £39.



HALSON TRADING CO., NEWHAVEN 237.

LIGHTWEIGHT trailer suitable for F2, FJ or sports racing car. Tows smoothly up to 60 m.p.h. £25.—Phone: CLerkenwell 4651 (9.30 to 5.30).

TRAILERS for Go-Karts, trials and racing cars. New and second-hand, from £25.—See "Engineering Services", Don Parker.

TRIUMPH

THE CHEQUERED FLAG (SPORTS CAR SPECIALISTS), LTD.

TR3A, 1959. Two-seater, unblemished in signal red with black interior, one owner, 14,000 miles, with disc brakes, washers, tonneau, etc. ... £795

TR2, 1955/56. Two excellent examples in B.R.G. with black hard tops, both with various extras and very competitively priced from ... £485
High Road, Chiswick, W.4. Tel.: CH1 7871/2/3.

TRIPMUP TR3A, May, 1958. One owner, 18,000. B.R.G. Discs, etc. Exceptional condition throughout. £650. Terms and exchanges.—St. Mary's Motor Co., Market Harborough 2206.

TR3A, WHITE 3,700 miles. Fully modified head and suspension. Roadspeeds. Owner abroad. Faultless condition. £850.—Bradbury, Gerrards Cross 3930.

1959 TRIPMUP TR3, 12,000 miles only. White with red trim, discs, fog and spot, in first class condition. £735.—Harvey Lane Garage, Ltd., 34/36 Harvey Lane, Norwich. Telephone: Norwich 33960, 45403.

1958 TRIPMUP TR3A, silver-grey with white hood and tonneau. Luggage rack, rear seat. One owner. Immaculate in every way. £650.—Ray Powell, Ltd., Rootes Main Dealers, Fairlop Road, Leytonstone, E.11. LEYtonstone 5533.

THE CHEQUERED FLAG (MIDLANDS), LTD.

TR3, 1957. Two-seaters. Choice two in beige, with discs, overdrive, X tyres, tonneau, or olive green with discs, heater, twin spots, tonneau, from ... £635

TR3, 1956. Two-seaters. Choice two, both B.R.G. and both overdrive, X tyres, from ... £525

1800 Roadster, 1948. 2/4-seater in blue, a particularly neat and well-finished example £195
Arkwright Street, Nottingham. Tel.: 89282/3.

TURNER

1960 TURNER. Hard top, disc brakes, wire wheels, Dunlop R5s, close ratio gears, oil cooler, full undershield, engine to F.J. specification, fully balanced, special crankshaft, camshaft bearings, clutch, distributor, Iskenderian camshaft, Barwell head, twin H4 SUs. Trailer and spare engine also available. £795.—R. R. Bryant, 103 Tattenham Crescent, Epsom Downs, Surrey. Tel.: Burgh Heath 7459.

T.V.R.

SUSSEX AND KENT DISTRIBUTORS. Sales, Tuning and Service.—St. James' Motors, Brighton, 37-38 Upper St. James' Street, Brighton, Sussex. Telephone: Brighton 61414-5.

T.V.R. GRANTURA. Stage III Coventry interior, wire wheels. Very rapid performance. £850, part exchange considered. H.P. arranged.—Ebborn, 122 London Road, Gloucester. Phone: Glos, 21278, after 7 p.m.

1960 T.V.R. Grantura, fitted with Coventry-Climax 1,216 c.c. engine and power assisted brakes, 6,000 miles only. Specimen condition.—C. & E. Motors, Ltd., 200 Fletcherstead Highway, Coventry. Phone: Coventry 7233 (3 lines).

VINTAGE

BULLNOSE tourer. V.S.C.C. registered. Superb. Bills for £180. Details.—Humphreys, 50 Marlborough Road, Rugby.

VOLKSWAGEN

1958 (September) KARMANN GHIA convertible. l.h.d. Lilac fawn top and upholstery. Motorola radio, 18,000 miles. One careful owner from new. £825.—J. A. Gregory, Bath Road, London Airport. Tel.: SKYport 1621/1818/1819, evenings 9 p.m. Open Saturday and Sunday.

1955. RESPRAYED Dorchester red. Engine rebuilt 10,000 miles. anti-roll bar. £390.—Barnard, 125 Lode Lane, Solihull, Warwickshire.

VOLVO

1959 VOLVO 122S. Blue/white, radio, heater, seat belts, twin spots, reversing lights. Radiator blind, two-tone upholstery. Completely unblemished. £895.—SHEpherds Bush 5224 (London).

E.C.L. A.C. ACECA A.C.

with Bristol engine, overdrive, disc brakes and a host of other extras.

This unique motor car is in an immaculate condition, comparable only with a new car.

The complete factory history of this exceptional motor car is known to us, and we guarantee the extremely low mileage.

This rare enthusiasts motor car can now be offered for sale at £1,750

EUROPEAN CARS LTD.

A.C. DISTRIBUTORS, LONDON & MIDDLESEX

129 OLD BROMPTON ROAD

SOUTH KENSINGTON, S.W.7 Tel. FREmantle 7711

VOLVO.—The fastest 1,600 saloon car in the world. 85 B.H.P. in standard form. Immediate deliveries, demonstrator available. We also specialize in Robert Bodle high-speed conversions for rallies, speed events or racing.—The Oxfordshire Distributors are Dorchester Service Station (Robert Bodle, Ltd.), Dorchester-on-Thames, Oxon. Tel.: Warborough 285 or 353. We will be pleased to forward you catalogues and tuning leaflets by return.

BOOKS

AUTOBOOKS OF BRIGHTON, motorist's book-sellers. Largest stock in U.K. Workshop manuals, handbooks, tuning books, everything in print on cars. By return postal service. Catalogue 1s. 6d.—Autobooks, 104 Islington Road, Brighton. "AUTOSPORT", 1957 and 1958, plus 50 assorted monthlies. £6.—R. Holt, 14 Hillcrest Road, Parkstone, Dorset.

CONVERSION UNITS

S. A. H. ACCESSORIES TR2/3 SPECIALISTS

Complete servicing, repair and tuning, etc., Cooler Kits, High-Lift Camshafts, Torsion Anti-Roll Bar Kits, Fibreglass Body Parts, etc., etc. 4d. for catalogue.

Large Stocks of TR Spares.

Complete Servicing, repair and timing, etc., undertaken.

Vimy Drive, Leighton Buzzard 3022.

ARDEN CONVERSIONS for improved road-holding, anti-roll bars, practically all B.M.C. range, Nash Met., TRs., new 105E Anglia, early Anglia, £7. Torque arms for rear axle location, B.M.C. Fords, Armstrong shock absorber settings, from 12s. each.—Arden Conversions, Tanworth-in-Arden, Solihull, Warks. 3d. stamp for illustrated list. Wythall 3368.

A.V.C. VOLKSWAGEN conversion kits, The world's best. Single carb., 65s. Twin carbs., £35 15s. We are exclusively VW and carry the full range of accessories. Details.—Adams Conversions, Ltd., 379 Milkwood Road, S.E.24. BR1xton 9891.

ENGINEERING SERVICES

LONDON ROAD GARAGE (ROB WALKER), LONDON ROAD, DORKING.

Phone 3891-2-3.

Owing to the expansion of Mr. Rob Walker's Racing Department at the above address, we are now able to offer unrivalled facilities for the preparation of competition engines. We also have a large stock of high performance conversions for popular cars fitted at a moderate cost. B.M.C. and Ford engines to Formula Junior specification. Use the experience we have gained by successfully racing Lotus, Cooper, Porsche and Ferrari cars driven by Stirling Moss. Prepared by Alf Francis.

Quotations by return post.

New cars supplied in any stage of tune. Agents for Lotus, Aston Martin, Austin-Healey, Renault.

FOR SALE.—One D.P.X.3 Heenan & Froude dynamometer, complete with water tank, new rev. counter and temperature gauge, fitted on bed, all bearings, etc., in good condition. Will accept for quick sale £220. Delivered to any main goods station.—Apply by letter or phone to Cordingley & Sons, Ltd., Main Austin Agents and Distributors, Haslingden, Lancs. Phone: Rossendale 1741.

FORMULA JUNIOR

H.G.M. Speed Equipment for B.M.C. "A" Series. Special high quality oversize racing valves, valve springs, camshafts, Lightweight push rods and cam followers. Cylinder heads gas flowed and polished. Balancing.

84a Fellows Road, London, N.W.3. Tel. PRIMrose 8594.

JACK BRABHAM (MOTORS) LTD., now offer

COMPLETE ELECTRONIC CRANKSHAFT BALANCING SERVICE

All types of crankshaft, clutch and flywheel assemblies, tail shafts, con rods and pistons can now be balanced to perfection.

248 Hook Road, Chessington, Surrey. ELMbridge 4808.

DON MOORE

Race-modified B.M.C. engines as prepared for:—

DR. G. C. SHEPHERD (A40 Supatura, Austin 7, Appendix "J").

J. RICHARD-ALEY (Mini-Minor, Appendix "J").

We are now able to undertake to prepare Silverstone replica engines for Mini-Minors and Austin 7s. Stage I—£48. Stage II—£90.

Cambridge Place, Hills Road,

Cambridge.

Phone: 54695.

B.M.C. FORMULA JUNIOR camshafts, £15. —John Sprinzel, Ltd., 64 Grosvenor Street, W.1. MAYfair 1280.

DON PARKER MOTORS for—racing car jacks, trailers, rack and pinion steering, 43-tooth clutch sprockets. Hubs resplined, machining, welding, chassis and engine overhauls.—1A Sangora Road, S.W.11. BAUtersea 7377.

ENGINES

FWA CLIMAX Stage III. New and unused, fitted twin-plate clutch and close-ratio M.G. gearbox, £425. B.M.C. "A"-type, brand new and crated, £60. Ford 100E, all ancillaries, less gearbox, £60. Ford 100E fully modified, large sump, filter, c.r. gears, very low mileage and as new, £75.—Equipe Woodyatt, Malvern. Tel.: 391.

NORTON d.o.h.c. long-stroke 500 c.c. dope engine. Complete G.P. carb., sprockets, etc. Used twice since rebuild, won both events. £65.—P. Hughes. Phone: Sutton Coldfield 2347 (business hours).

SPEEDWELL Austin A-type engine. Fully tuned, CS2 camshaft, h.c. pistons, with twin Amal carburetors. Small mileage. £130.—Motoquip, 88 Coventry Street, Kidderminster 5140.

1172 DOWNTON, fully modified formula engine, with water pump, starter, oil cooler. Seen running. £45.—Bunce, 145 Stoke Road, Slough 23380.

EXCHANGES

DOBSON BROS. ENGINEERING have for exchange two Lotus Elites, Stage III, and absolutely "The Lot". One 1958 Zephyr Zodiac. One 1957 Porsche 1600. One 1957 Mark VIII Jaguar Automatic. We require two 3.4, 3.8 Jaguars, two good Austons or Mercedes or light vans, Bentleys or anything exclusive and distinctive considered. Our cars are good. Replacements should be better.—Dobson Bros. Engineering, Ltd., Truro Works, Matilda Street, Sheffield 1. Tel.: 28096.

MISCELLANEOUS

A BUYERS' Guide to beautifully tailored loose covers, together with 40 patterns and quotation, showing 50 per cent. saving on all models from £2 14s. per set for M.G., A.H. Sprite, etc., in genuine clan tartan, can be obtained free by sending or telephoning to S.C.S. (London), Ltd., A.S. Showroom, 52-56 Fitzroy Street, London, W.1. EUSton 7838-9.

FOR SALE.—Racing spares: Magnesium wheels, Junior-type hub carriers, diff. unit carriers, 8 ins. alloy drums, also 10 ins. and 12 ins. Alfin drums with brakes, H.W.M. pistons, drive shafts and C.W.P. units, Junior radiators, oil coolers, steering wheels.—The Grosvenor Garage, Worplesdon, Guildford. Telephone: Worplesdon 2747.

M.G. SPARES. New, reconditioned or second-hand for all models 1932 onwards. C.o.d. service. Let us know your requirements.—Archway Engineering, Ltd., Bridgewater Street, Knott Mill, Manchester, 3. Tel.: BLACKfriars 6455.

STEEL TUBES, round and square, for all types of construction. List on application.—C. S. Harbour, Ltd., 322A London Road, Isleworth, Middx. ISLeworth 6613.

(Continued overleaf)

Classified Advertisements—continued**MISCELLANEOUS—continued**

M.G. TC, 1947. Red. Heater, new hood. 16 ins. rears, seat covers. Any trial, £225. Fiat 508S two-seater. Ex Brooklands car. hydraulic brakes. K.O. wheels, £165. "Speedex" A.7. sports car. Full screen. Modded brakes. £80 spent on engine! £125. Austin 7 de luxe saloon, 1932. Beautiful condition, £25. Spares: Derrington 3 SU kit, Mk. 1 Zephyr, £15. Derrington Herald, four-branch and twin SUs, £17 10s. E93A Ford 10 blower kit. Marshall c/w four-branch manifold, £20. M.G. TA body spares. S.a.e. requirements.—Lido Garage, Papplewick, Notts. Hucknall 2898.

WALLPAPER for the enthusiast. Six different Grand Prix cars faithfully reproduced in attractive design, 16s. per roll plus 1s. 6d. p. and p. or send for free sample to S.P.M. (5), 205 Hook Road, Chessington, Surrey. Tel.: ELMbridge 0044.

PERSONAL

PRIVATE H.P. and insurance facilities. Efficient service. SHEPHERDS Bush 5224-8866.

SPRITE OWNERS interested in superb new bonnet should write for photographs to G. A. Glassfibration, Ltd. (A), Carr Mills, Busingthorpe Lane, Leeds, 7. Tel.: 44544.

PHOTOGRAPHS

VETERAN Car Run to Brighton. Photographs most competitors available from Michael E. Ware, Studio 750, 460 Surbiton Road, Kingston. Kingston 0604.

RADIATORS AND FUEL TANKS

GALLAY, LTD., give immediate service in repair and rebuilding of radiators, oil coolers, fuel tanks and wings, etc. New radiators supplied or built to specification.—103-109 Scrubs Lane, Willesden, London, N.W.10. Phone: LADbroke 3644.

RALLY EQUIPMENT**FOLLOW THE EXPERTS!**

Come along and browse around the World's foremost Rally shop. We stock all your needs! Garford Romer 4s. Rally Navigation Booklet 4s. Blackwell Calculator, Mk. 1, 14s. 6d. Map Eye Navigation Light, 37s. 6d. Halda Speedpilot 19 gns. Protractor 6s. Pencil Clip 2s. 6d., etc., etc. Send 6d. stamp for fully illustrated catalogue to

RALLY EQUIPMENT, LTD. (AS),
295 Edgware Road, Colindale, N.W.9.
COLindale 3633/3840.

INTERNATIONAL R.A.C. RALLY**SAVE US ULCERS . . .**

by ordering your 1 in. O.S. Maps now. The complete set, which includes all the English and Scottish sections, £8 8s. 6d.

We will be pleased to advise you on your requirements.

Send 6d. stamp for our fully illustrated catalogue.
RALLY EQUIPMENT, LIMITED (AS),
295 Edgware Road, Colindale, N.W.9.
COLindale 3633/3840.

AUTO-RALLY "Master-Time" and "Monte-Carlo" Swiss precision timers. Navigators' "Chronomat" wrist watches with circular slide-rule (just set and read off). Over 20 uses. Halda Speedpilots. Cash or terms. Send for brochure.—W. French, F.B.H.I., 25 Watnall Road, Hucknall, Nottingham.

CLUB Secretaries please note, we shall be pleased to attend any rallies in the Midlands with our mobile display shop of Rally Equipment, just send a P.C. to Roadsport Equipment, see below.

ROADSPORT EQUIPMENT will be pleased to supply your R.A.C. Rally Kit by return of post: Map Markers, 4 doz. assorted 2s. 6d.; Chrome Flexi-lights, 42s. 6d.; Rally Driving Gloves, 25s.; Touring Gloves, 30s.; Helphos Lamps, 69s. 6d.; Marchal Lamps, 105s. and 82s. 6d.; Halda Speedpilot, stand, 19 gns.; Sports Special, £26 6s.; Blackwell Mk. 1, 14s. 6d.; Average Speed Computers, 31 Tables, 5s. 3d.; 106 Tables, 15s.; Garford Romers, 4s.; Navvies Mate Romers, 6s.; Rallying Book by Stuart Turner, 21s.; Masco G Belts, £6 12s. 6d.; Britax Safety Belts, 4 gns.; Trip Magnifiers, 8s. 6d.; Nylon Tow Ropes, 42s.; Yellow Dusters, 10s. 6d. doz.; Best Quality Pencils FREE with every Order, see below.

ROADSPORT EQUIPMENT. The only Midlands Rally Accessory Specialists. Write for free illustrated catalogue.—Roadsport Equipment, Old Dalby, Melton Mowbray, Grid Ref. 122/654222.

NAVIGATORS.—For "spot-on" navigation the **GARFORD TRIPLITE** is essential—it gives extra illumination to speedo mileage counter for clear reading of distance travelled in miles and tenths. Price 10s. post free . . . and, incidentally, the **GARFORD ROMER** is still only 4s.—From Garford Romers, 1 Peterborough Road, Harrow, Middx.

SAFETY GLASS

SAFETY GLASS fitted to any car while you wait including curved windcreens.—D. W. Price, 490 Neasden Lane, London, N.W.10. Dollis Hill 7222.

SHOCK ABSORBERS

DAMPERS. The best in the world are Telfado. Obtainable at most garages. In case of difficulty write to Telfado, Ltd., Radway Road, Solihull, Warwickshire.

Continental

SUPER RECORD TYRES

Original equipment on Mercedes-Benz, Porsche. A high speed SPORTS TYRE for use on high performance cars. Safe at all speeds up to 160 m.p.h. Sizes from stock for most cars.

Full particulars sent on request.

'MONZA' RACING TYRES—from stock. FITTING and BALANCING.

Official Distributors:—

CONTINENTAL TYRE SALES

West London

2 CHESTER CLOSE, CHESTER STREET, S.W.1. SL0ane 8943

North London

306 SEVEN SISTERS RD., FINSBURY PARK, N.4. CANonbury 1131

KONI, the long life telescopic shock absorber. Fully adjustable for comfort. Standard equipment in Porsche, Ferrari, Frazer-Nash, etc. Models available for all cars.—Department 14, Postland Engineering & Trading Co., Ltd., Crowland, Nr. Peterborough, Northants. Tel.: Crowland 316.

SITUATIONS WANTED

BOY (16), keen, strong, year's garage experience, wants work with cars, bikes concerned racing.—Box 3741.

FITTER (23), lately with tuning department of engineering concern, seeks similar post.—Box 3751.

SPARES & ACCESSORIES**PARAGON GARAGE.**

One new 105E Cosworth modified cylinder head (cost over £40 as new), now £25. Two new 105E Cosworth camshafts at £12 10s. each, £25. One set 105E gears, complete, new, £9 10s. Four new 5.00 x 14 Dunlop Racing tyres at £4 10s. each, £18. One pair H.D. 4 SUs with manifold for Stage III Climax, £25. One set brake drums for F.J. Lotus (new), £12. One 105E alloy flywheel as new, used in one race only, £9 10s. One 1955 TR2 in white, in excellent condition, £365. One Ruskat Go-Kart as new, cost £80, will take £50. One new A35 engine block and cylinder head, £20. One new A35 gearbox case, £7 10s. Two 1100 Coventry Climax crankshafts, Stage III (both require regrinding) £5 each, £10. One set Coventry Climax Stage II con. rods, £4. One F.J. racing car complete, less engine and gearbox, £200. Five nearly new wire wheels (72 spoke) for 2.4, 3.4 or 3.8 Jaguar. Used once, £30. Five nearly new disc wheels for the above. Used for two weeks only, £15. Elm High Road, Wisbech, Cambs. Tel.: Wisbech 592, 1516, 1927.

A LIMITED number of 0-10,000 r.p.m. electronic rev. counters for sale, £10 10s. each. As used successfully on many racing and sports cars.—The Chequered Flag, Ltd., High Road, Chiswick, W.4. Tel.: CHiswick 7871/2/3.

AUSTIN, Fiat, Standard, Triumph spares sent c.o.d.—Premier Motors, 295 Lewisham High Street, S.E.13. LEE Green 1051.

BELLAMY I.P.S., unused, complete with back plates, drums and linings 4.7 to 1 axle complete suitable Ford 8/10s. £25. Two carburettor exhaust and inlet manifolds complete, suitable Standard 10. £12 10s.—Sturry Motor Co., Ltd., Sturry Road, Canterbury. Tel.: Canterbury 5624.

MG enthusiasts!

IN STOCK NOW

M.G.A 1600 COUPES

AND 2-SEATERS

M.G. MAGNETTE MK. III

ALSO A SELECTION OF EXCELLENT MAGNETTES



SPECIALISTS

W. JACOBS & SON LTD.

MILL GARAGE, CHIGWELL RD., LONDON, E.18

Tele.: WAN 7783-4-5

BRAKE linings at lowest prices for any car, also Mintex M.20 competition linings on exchange shoes.—Automec, 328-330 St. Albans Road, Watford 21776.

LUCAS 576 roof light, £10. Competition Halda Speedpilot, unused, £18.—H. Stone, Stoneleigh, Bouverie Road West, Folkestone, Kent.

NEW Laycock "D"-type O/D, £22. Twin Zenith carbs. (Rapier III), £7. Four-speed gearbox, 5,000 mls., £12. Five 15 ins. wheels, two with tyres, £6. Above suitable Minx, Husky, Rapier, Gazelle.—Stevens, 154 Montrose Avenue, Luton, Beds.

100E AQUAPLANE head, both manifolds with 1½ SUs and pancake filters. £20.—Lulworth Motor Co., 1A Asbury Road, London, S.E.15. Telephone: NEW Cross 9354.

SUPERCHARGERS

CREAMER for Shorrock Superchargers and Healey Speed Equipment. Sales, service and tuning.—R. A. Creamer and Sons, Drayson Mews, Holland Street, Kensington. WEStern 1275.

SHORROCK Superchargers for Fords.—Full details from sole distributors: Allard Motor Co., 26 High Street, Clapham, London, S.W.4. MACaulay 3201.

TUNING SERVICE**TUNING**

A fully comprehensive specialist tuning and modification service for all marques is now offered by

WARNELL MOTORS, LTD.

242/248 Wood Street, London, E.17.

Ring COPpermill 3345/6 for appointment. Sunbeam Specialists.

SPEED CONVERSIONS announce a new conversion for Mini-Minor and all B.M.C. Also repairs and complete overhauls. Collection and delivery to all parts of London.—32A Lancaster Mews, W.2. Tel.: PADddington 2108.

SUPERTUNE, LTD. Tuning, race and rally preparations, service, repairs, performance conversions.—2A Pindock Mews, Warwick Avenue, London, W.9. CUNningham 9040/8314.

WANTED

ADVERTISER wishes to purchase a Mark XI Lotus. Car with superficial damage considered. £400 maximum.—Box 3735.

BASIL ROY, LTD., require Morgan Plus Four models for cash or part-exchange for any make. 161 Gt. Portland Street, W.1. LANGham 7733.

COOPER Mk. V chassis, wishbones, Norton L.S. engine mountings, dope piston, T.T.10 carb. Good condition essential.—"Wascana", Caedmon Avenue, Whitby, Yorks.

COVENTRY-CLIMAX 1100 or 1500 engine wanted complete or in pieces. State number and full details.—Box 3716.

DUNLOP racing tubes for 14 ins. wheels.—Box 3753.

HARDTOP for A.C. ACE.—Box 3746.

ROWLAND SMITH'S the car buyers. Highest cash prices for all makes. Open Monday/Saturdays 9-8. Sundays (for viewing) 10-1.—Hampstead High Street (Hampstead Tube), N.W.3. HAMpstead 6041.

SUPERCHARGER for Series III Minx.—121 Allevy Park, S.E.21. Gipsy Hill 0490.

TWIN SUs and manifold for Ford 100E.—45 Moorside South, Newcastle-upon-Tyne 4.

TWO 3.4 or 3.8 Jaguars, Astons or Mercedes.—Dobson Bros. Engineering. Please see "Exchange" column.

15 INS. WIRE WHEELS and 5.50 x 15 Racing tyres required.—Carden, 53 Priestnall Road, Heaton Mersey, Stockport.

WANTED.—Acc hardtop only.—Grosvenor Garage, Worplesdon, Guildford, Surrey. Telephone: Worplesdon 2747.

WANTED.—Lotus XI Series II or Lola-Climax. Please contact Mr. Dickinson, Venture Garage, Ltd., Belper Road, Holbrook, Derbyshire. Phone: Horsley 400

NEW CARS FOR SALE

FORD

ADLARD MOTORS, LTD., Acre Lane, S.W.2. Main Ford Distributors. Consult us for delivery of all Ford models. Overseas residents' enquiries welcomed.—Export Dept., BR1xton 6431-2-3-4-5-6.

GOGGOMOBIL

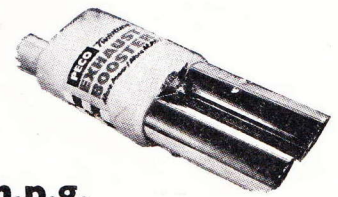
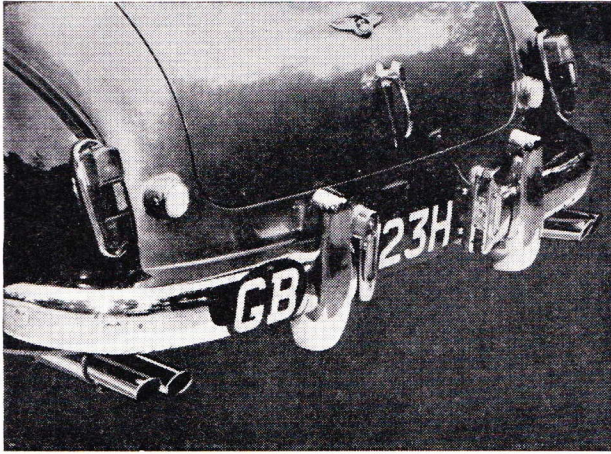
CONCESSIONAIRES for U.K.: Goggomobil Limited, 93-95 Old Brompton Road, London, S.W.7. KNightsbridge 7705.

RENAULT

TRY the amazing DAUPHINE. Gordon King Motors, Ltd., Renault Distributors, South London's Centre for Renault. Floride and Dauphine demonstrations without obligation. Most models in stock. Alexander twin carburettor conversions and Mangoletsi manifolds supplied from stock.—Gordon King Motors, Ltd., Mitcham Lane, Streatham, S.W.16. STReamtham 3133-5.

TRIUMPH

TRIUMPH TR3. Berkeley Square Garages, Ltd., London area dealers. TR3 specialists, cash or H.P. Special repurchase terms for overseas visitors.—Berkeley Square, London, W.1. GROsvenor 4343.

PECO**EXHAUST BOOSTER
TUNING UNIT**for **EXTRA** power and **EXTRA** m.p.g.

The Peco Twintune Exhaust Booster Unit is not merely a powerful looking accessory, extractor or ejector. The unit was in fact patented and developed purely by the engineers of the group of industrial companies of which Performance Equipment Co. Ltd., is a member. Extensive research was involved, using the latest oscillograph and electronic equipment and the unit is fully protected against ANY imitations involving the working principle or any essential part of the design by BRITISH PATENT No. 798774 and Foreign Patents pending.

By neutralising the pulsatory back pressure which occurs in every exhaust pipe and which affects performance and fuel consumption, the Peco Tuning Unit enables the engine to give the best performance of which it is capable.

Write now for fully illustrated colour leaflet

LOOK FOR THE PECO WINGS

**PERFORMANCE EQUIPMENT COMPANY LTD**

TOWER BUILDING · WATER STREET · LIVERPOOL 3

· Tel: **CENTRAL 9626** (4 lines)**NOW ON SALE**

The 1960/61 Edition of

**HIGH PERFORMANCE
CARS**

EDITED BY GREGOR GRANT & JOHN BOLSTER

80 Pages Containing

- ★ Numerous Road Test Reports
- ★ Feature articles by Gregor Grant, John Bolster, John Cooper, etc., etc.
- ★ Over 150 Photographs
- ★ Many technical illustrations and cutaway drawings by Theo Page

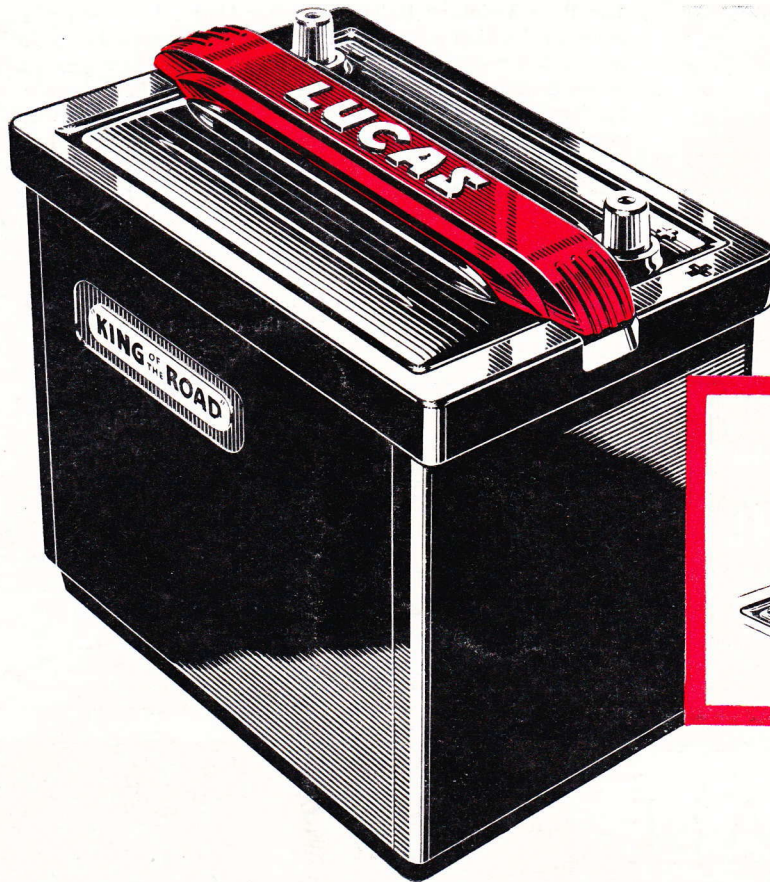
Outstanding Value at 4/6d. (5/3d. by post)**DEMAND IS SURE TO BE GREAT****AN AUTOSPORT PUBLICATION · 159 PRAED STREET · LONDON · W.2****HIGH PERFORMANCE
CARS 1960-61**

Stirling Moss out front, in the Aintree '200' -- and 200 laps later still! Stirling Moss drove Mr. R. C. Walker's Cooper to victory on the 1960 Aintree '200' in his BT3 and BT4. Walker's Motor Oil -- the British oil that's on the track -- is the only oil that produces a winner!

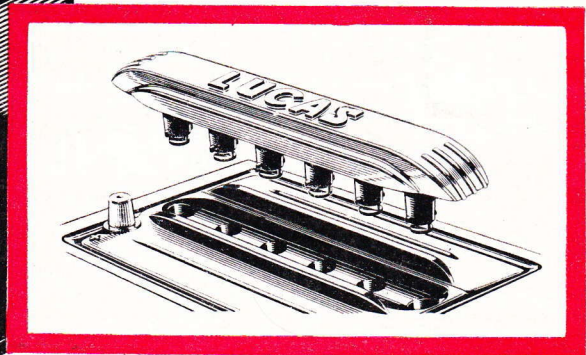
an AUTOSPORT publication price four shillings and sixpence

Order your copy from your Newsagent or Bookseller now

NO MORE ACID SURGE!



All Lucas "S" range of batteries have anti-splash guards that positively eliminate acid surge and act as an acid-level register.



Patented streamlined top with one-piece manifold venting system. Moulded plastic cover with built-in rubber vent plugs can be removed or replaced in seconds. Makes for easier servicing and no lost plugs.

NO MORE LOST PLUGS!

Lucas are proud to manufacture the most advanced range of batteries in the world to-day The "S" range tested under gruelling conditions in the laboratory and on the road. Available for all cars and light commercial vehicles using 12 volt 7 or 9 plate batteries. Lucas "S" range Batteries have Two Years Insured Life including Twelve Months Guarantee at no extra cost.

The 2 Years Battery Renewal Scheme operates in the British Isles only.

LUCAS

"S" RANGE OF BATTERIES

TOP VALUE-TOP PERFORMANCE!

J O S E P H L U C A S L T D B I R M I N G H A M 1 9