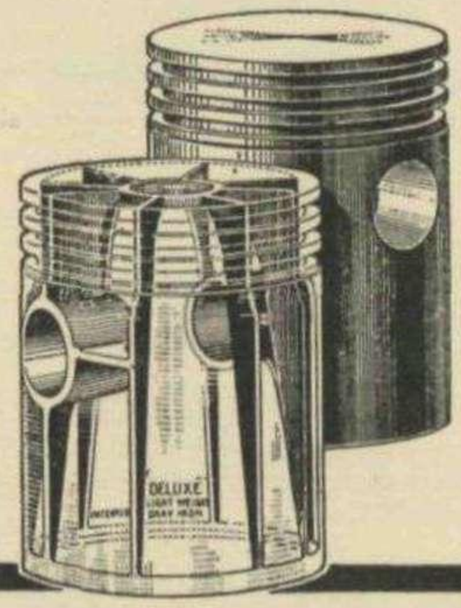
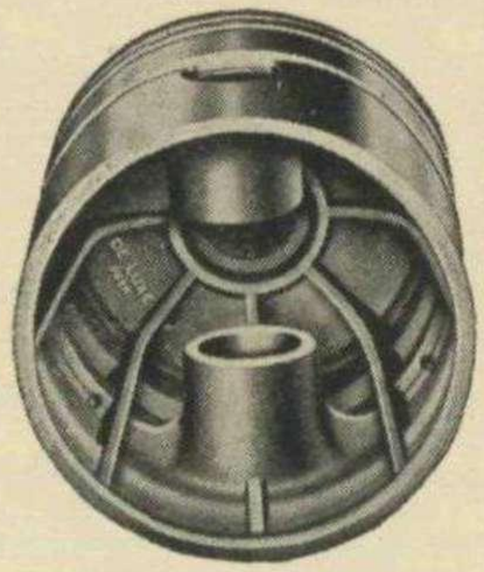
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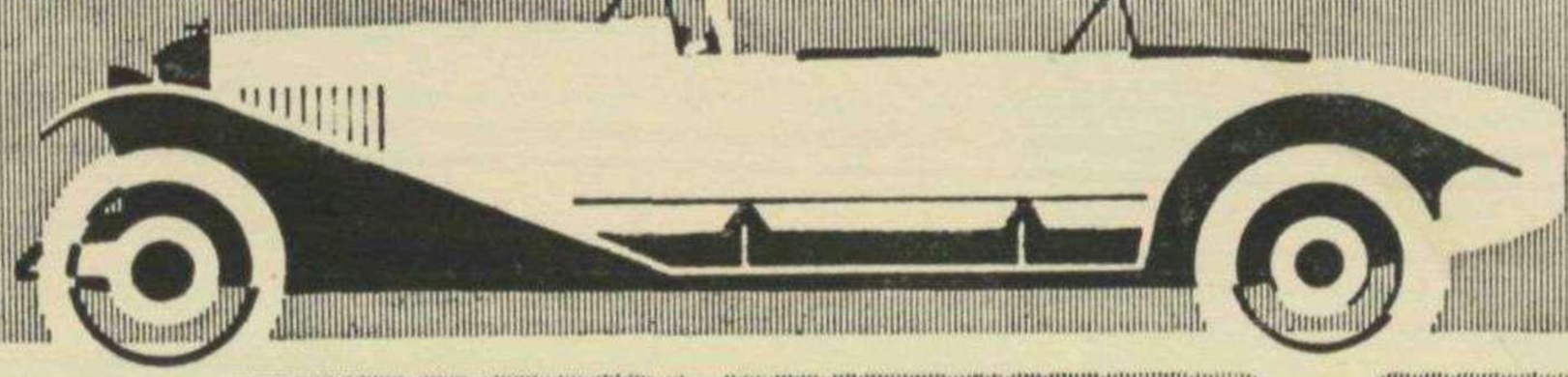
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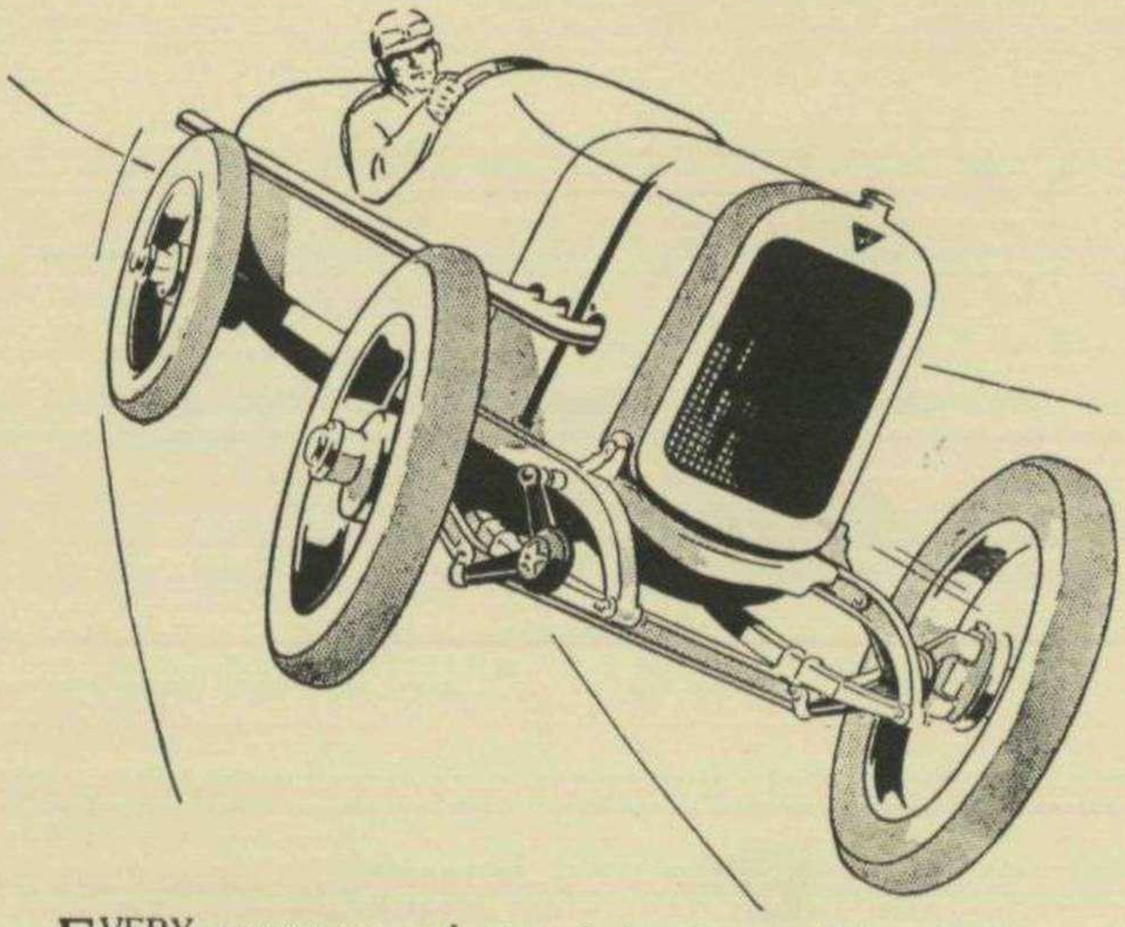
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Edited by RICHARD TWELVETREES, A.M.I. MECH. E., M.S.A.E., M. SOC. ING. CIV. (France)

SEPTEMBER, 1925.

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CONTENTS.

	PAGE
Editorial	79
The Problem of Efficient Carburation. By H. C. Gambell, A.M.I.A.E.	80–82
Choosing a Sports Mount at Olympia	83–85
International 200-Miles Race Entries	85
Sporting Cars on Road and Track. The 30/98 Vauxhall. By Richard Twelvetrees	86–88
Motoring Sportsmen.—Mr. E. C. Gordon England ...	89–91
Sporting Machines on Test. The Sports "Ner-a-Car." By Arnold Radclyffe	92, 93, 96
Recent Motor Car and Motor Cycle Events. (Illustrated)	94, 95
The Two Hundred Miles Motor Cycle Races... ...	98, 99
Notes on the A.C.U. International Six Days' Trial ...	100, 103
Touring on Punctured Tyres	104
Round the Clubs	107–112

EDITORIAL NOTES.

The Speedman and Olympia.

Owing to the scarcity of information concerning the exhibits at the forthcoming Motor Cycle Show at Olympia, as we are going to press, it is impossible to give any accurate forecast concerning the exhibition in this issue. We are informed, however, that manufacturers have many interesting machines to offer for the 1926 season, so that our motor-cycling readers may anticipate a very successful show.

For the benefit of those who always find a visit to the Show in search of a new machine for the coming season a somewhat perplexing problem, we publish an informative article contributed by one who has had a great deal of experience with various makes and types of motor-cycles; and who, incidentally, is a competition rider of no mean ability.

His advice and suggestions will be welcomed by the novice and expert alike, the subject being dealt with in its various aspects in a very enlightening manner.

* * * *

Readers will be gratified to learn of the successes of the British teams in the recent Six Days' Trial organised by the Auto-Cycle Union, which is generally admitted to be one of the most severe, if not the most severe, competition on record. Though foreign riders have attempted to compete with us in the motor-cycling field, they have had to admit that British supremacy has been unassailed, but we trust that this will not prevent further representative entries in various international events in the future.

* * * *

This issue also contains a review of the famous 30/98 Vauxhall, which, in accordance with our usual practice, has been submitted to a long and arduous test, details of which are described freely and without bias.

The PROBLEM of EFFICIENT CARBURATION.

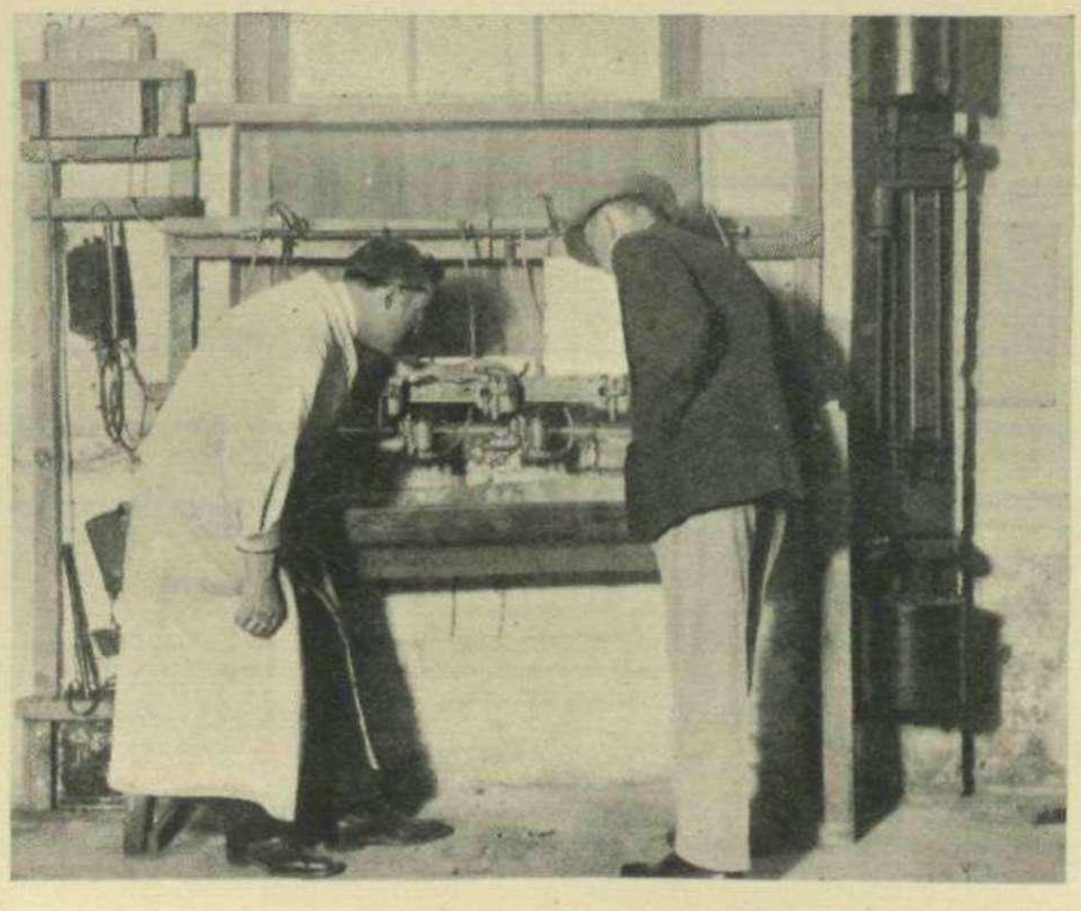
By H. C. GAMBELL, A.M.I.A.E.

(Director of The Memini Carburettor Company, Ltd.)

IT is a difficult matter enough to be confronted with the various practical problems of carburation, when one can worry out the solution by trying different methods until the desired result is gained, but these difficulties are increased enormously as soon as an attempt is made to commit one's practical experience to paper. Nevertheless, it is possible that this effort to place a few of my own experiences on record may be of interest to some of the readers of MOTOR SPORT, for, being in constant touch with the carburettor problem, especially in connection with sporting cars, I have been able to devote a good deal of thought to their specific requirements.

If carburation only consisted in providing means for giving the highest possible speed to a racing engine, the apparatus would only need to consist of something capable of completely filling the cylinder with mixture at maximum revs., but even with racing cars the problem of carburation is not so simple, whilst for sporting cars used for road work, as well as for speed events, the whole subject is absolutely shrouded by complexities. Sometimes during my own researches into the field of carburettor improvement, I have visited the Patent Office, where literally thousands of applications are filed for alleged improvements in or relating to carburettors ; and while it is perfectly obvious that more time and money has been spent in endeavouring to improve the apparatus, it remains to-day more or less of a compromise incapable of giving the best results without the attentions of an expert, at any rate until it has been fitted, and the final adjustments have been made.

As a carburettor manufacturer, I am fully aware that existing apparatus is far from perfect, not because the instruments cannot be turned out to give uniform results, but for the reason that so many different people have different ideas as to what constitutes perfection where carburation is concerned. For example, one man may require the highest ultimate speed from his car, not caring very much about slow running on top gear, whilst another, with a car of identical make and type, may demand different running conditions altogether. Thus, there is a difficulty in arriving at any definite standard setting that will suit the demands of a large public, and each carburettor has to be tuned with infinite care, not only to suit the car, but also to suit the temperament of the owner. Indeed, I would go so far as to say that on many occasions there has been more trouble over the temperament of clients than in controlling the principles of carburation to satisfy their needs. Up to a point, it is possible to provide all-round efficiency in a carburettor which has been scientifically designed, but my experience forces me to the conclusion that no single instrument can be relied upon to give a super performance in each and every direction. In other words, the carburettor is—as was mentioned before—a compromise.



TESTING CARBURETTORS FOR FLOAT LEVEL.

Difficult Engines.

Apart from the problems inseparable from producing a good carburettor on a commercial basis, manufacturers of these appliances are often blamed for failures, which by right should be laid at the door of the engine designers. The most efficient carburettor made will not give good results on an engine which offers obstructions to the free passage of the gases, owing to the design of the inlet ports. I have in mind a very well-known high efficiency sporting car engine of which the sparking plugs invariably show that two of the cylinders are running on a weak mixture and the other two on a rich mixture. Various attempts have been made to overcome the difficulty by fitting modified forms of induction manifolds, but the trouble lies with the inlet passages of the cylinders, which happen to deflect the gases unevenly, so as to disturb the equal distribution of the gases.

In such a case, perfect carburation can only be attained by streamlining certain bosses which cause the obstruction, thus deflecting the gases to the cylinders in the correct proportions.

As the process of carburation is not really completed by the carburettor, it follows that the design of the engine, especially with regard to the internal passages, must be such as to assist the process in every possible way.

Peculiarities of engine design are usually responsible for the difficulties experienced by manufacturers to find a carburettor that will effectively smother the engine designer's faults, and a great deal of time is often taken up in selecting one that will give a reasonable all-round efficiency.

Basic Principles of Carburation.

Whilst these notes are not intended as a treatise on the principles of carburation, some reference appears to be necessary to fundamental facts, and it may be safely said that all standard carburettors at present

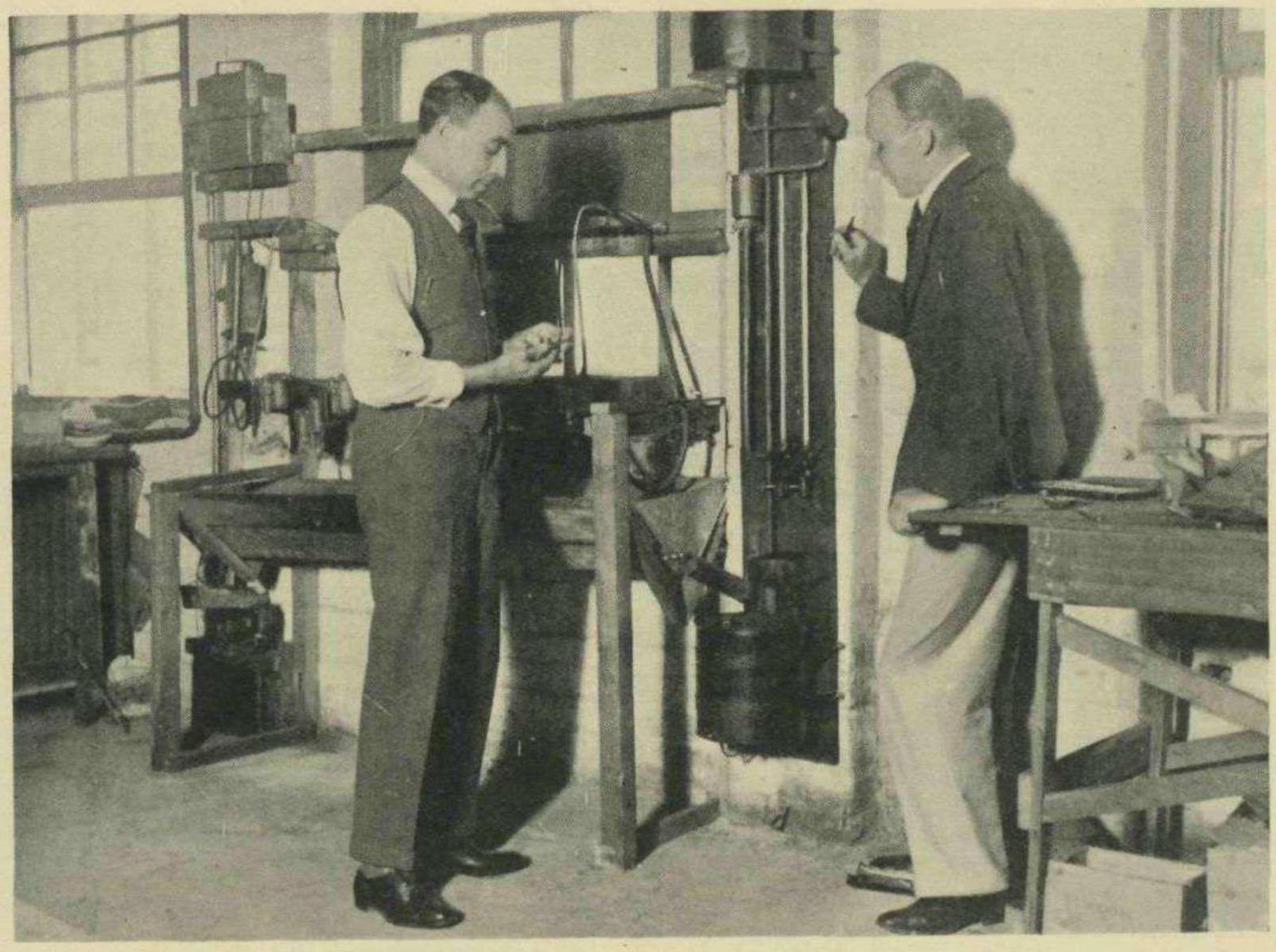
THE PROBLEM OF EFFICIENT CARBURATION—continued.

holding the market work on practically identical lines, namely the employment of a pilot jet for starting the engine, and for running it until the air velocity in the choke tube increases sufficiently to draw the petrol from the main jet.

In the early days of the jet carburettor, the main jet simply projected into the choke tube and supplied more and more gas as the air velocity increased ; but it was soon discovered that the ratio between the jet discharge and the air velocity did not remain constant, the first commercially produced carburettor to overcome the drawback being the Zenith, with its well-known compensator action.

until the main jet comes into action, and at this point of minimum weakness, what is known as a " flat spot " is liable to occur, more especially if a large choke tube is being used, as on engines where high maximum speeds are required.

The elimination of the " flat spot " is one of the most interesting operations connected with the tuning and adjusting of carburettors, but it depends to a very large extent upon the design adopted. The most scientific solution of the problem is that of maintaining a constant suction in the carburettor, and to-day we have several good examples of the constant vacuum type. In the latter arrangement, the air intake to the carburettor



Signor La Torre Explains the Action of the Flowmeter.

Since the introduction of the latter, other carburettors have been produced, some with submerged jets, some with retarding suctions to oppose the main suctions, others with air leaks to relieve the suction on the main jet ; all aiming at, and to a certain extent achieving, the same object.

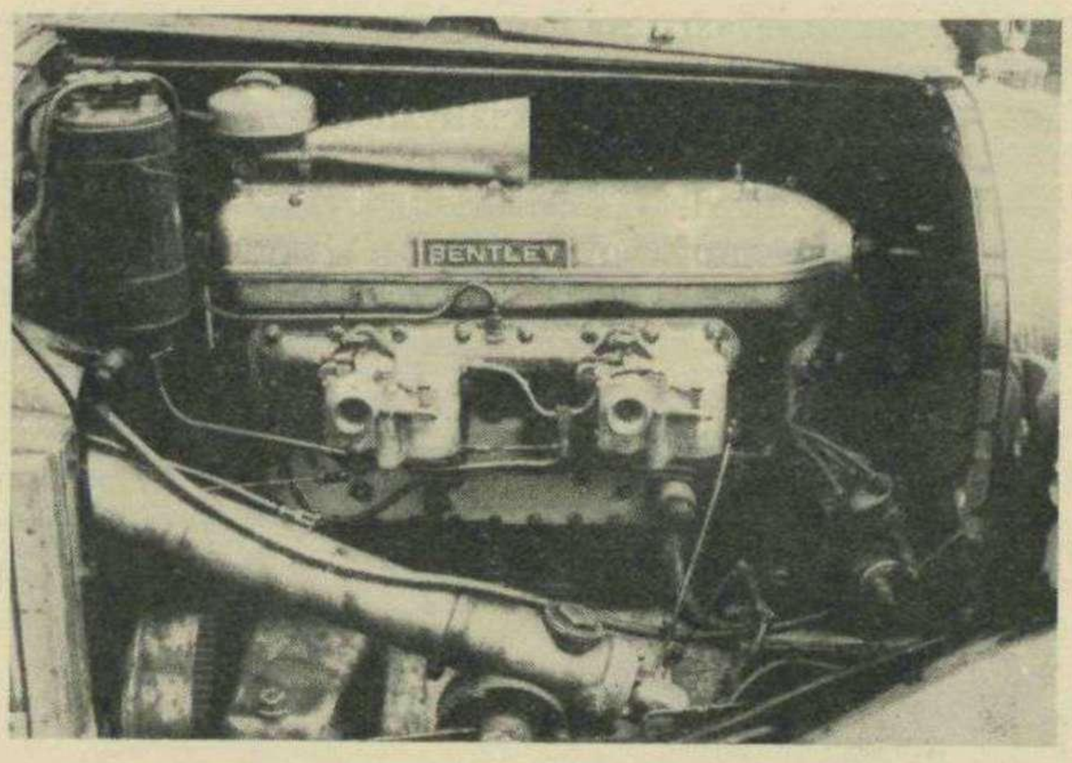
When we come to the slow running jet, there is practically no difference between all the well-known makes on the market. The most common method is to provide a by-pass hole, which will be partly exposed on the upper side of the butterfly, or throttle, when the latter is nearly closed. In this position a suction of from 8 to 10 lbs. per square inch is exerted on the pilot jet, thus providing a very rich mixture for starting purposes. As the throttle is opened, and the suction on the pilot jet decreases, the strength of the mixture falls rapidly

will only open in proportion to the suction exerted by the engine. In some of these carburettors, the opening of the air intake automatically increases the area of the main jet orifice and in others brings a series of jets into action progressively ; but, generally speaking, the results are achieved at the expense of mechanical complications, with corresponding risks of wear which are liable to render the carburettor inefficient with continued use. Springs, pistons, diaphragms and similar devices are capable of giving an extremely sensitive operation to a carburettor, but in my opinion, the greatest stability can only be obtained by eliminating moving parts wherever possible.

The Calibration of Jets.

Until the introduction of the Brown & Barlow Flowmeter, which is now used all over the world for the

THE PROBLEM OF EFFICIENT CARBURATION—continued.



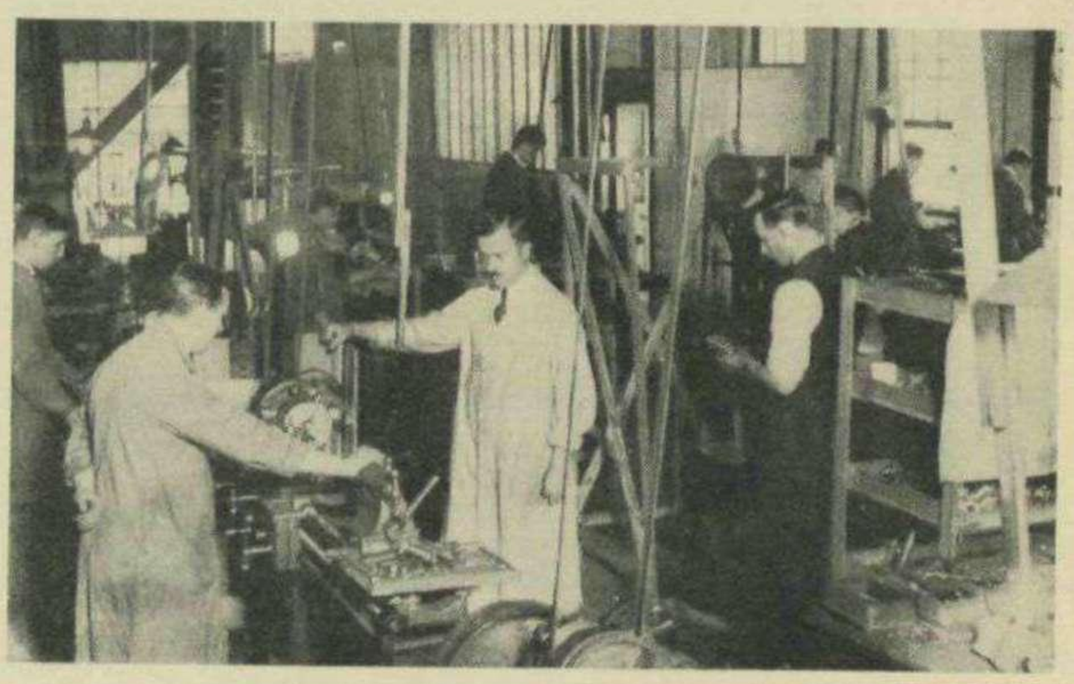
A "MEMINI" EQUIPPED SPORTS BENTLEY.

calibration of carburettor jets, there was the greatest difficulty in creating any standard for jet sizes, for the most minute variations in the sizes of the orifices had the most disturbing effects when attempts were made at accurate tuning. The instrument is shown in one of the accompanying illustrations, and the jet to be calibrated is fitted to one of two adapters, situated at the lower end of one of two vertical glass tubes. One of these tubes is graduated from 20 to 100 cubic centimetres and the other from 100 to 400 cubic centimetres, thus covering all sizes of jets likely to be required for any type of carburettor. The most common practice is to mark the jets with their drill sizes in millimetres. The standard flow is fixed for our drill size, and all jets are flowed before being passed into stock. A few makers stamp their jets in cubic centimetres of flow per minute, it is therefore advisable when tuning to find out what the number on the jet actually means. By the aid of this ingenious instrument it is possible to make the most accurate comparisons of different jets, and all carburettor manufacturers employ it to check the accuracy of the jets made on their machine tools.

Another device, also shown in the illustrations, is a simple bench upon which the level of the carburettors is checked, this being one of the tests imposed on all the instruments before they are passed out of the factory.

The photographs accompanying this article were taken at the London factory of the firm of which I am a director, and as many people have questioned me as to the origin of the Memini carburettor, this may be a fitting opportunity to mention that the appliance is the invention of Signor Memini, who was originally a mechanic in the Isotta Fraschini factory at Milan. He became absorbed in the fascinating subject of carburation and began to develop ideas of his own, making the first carburettor entirely by hand, and without any financial resources. Encouraged by successes in a small way, he decided to start manufacturing the "Memini" carburettor, and after several years hard work started a factory. The history of his racing successes is now well known to readers of this journal, the most recent being 1st and 2nd in the Grand Prix of Europe of 1925, and in the year 1923 Signor Ferdinand la Torre introduced the carburettor in this country, with the result that the British manufacturing rights were taken up, and production was started on a commercial basis.

In conclusion I should like to acknowledge the valuable assistance given to me in compiling this article by my co-director, Mr. S. Gresty, and to state that it is largely through his skill and knowledge that the Memini carburettor has had such a large measure of success in this country.



A CORNER OF THE "MEMINI" FACTORY AT WILLESDEN.

FOUR-WHEEL BRAKES.

The R.A.C. desires to urge upon drivers of cars fitted with four-wheel brakes, the need for extreme caution in their use, and the necessity for giving adequate warning to following traffic when about to apply them. The R.A.C. is of opinion that whilst the meaning of a red triangle or the letters "F.W.B." on the rear of a car is understood by other road users, the majority have no experience of four-wheel brakes, and therefore do not appreciate their remarkable retarding effect. As a result, a new driving danger has sprung into existence. Until four-wheel brakes are universally adopted, the R.A.C. trusts that in the interests of other road users, drivers of cars so equipped will use their brakes with the utmost consideration.

MESSRS. GORDON ENGLAND (SALES), LTD.

We are informed that Messrs. George England (Sales), Ltd., of 28, South Molton Street, W.1, have now changed their name and title to Messrs. Gordon England, Ltd., and that the firm is amalgamating with Messrs. George England (Motor Bodies) Ltd., of 45, Horseferry Road, S.W.1, and Messrs. A1 Motors, Ltd., of 47, West End Lane, Hampstead.

Messrs. Gordon England, Ltd., have taken the Palladium Works, at Felsham Road, Putney, S.W.15, and the Brooklands Model Austin Seven is now being prepared at that address. The construction of the Gordon England patent body now being made at Horseferry Road will, in due course, be moved to the Putney works.

CHOOSING A SPORTS MOUNT AT OLYMPIA.

By A MOTOR CYCLING CORRESPONDENT.

THE majority of motor cyclists, speedmen in particular, have their own ideas as to what constitute the cardinal virtues of sporting machines, for which reason it is somewhat difficult to offer any real advice upon such a subject as "The Selection of a Sports Mount at Olympia." At this period of the year, however, the topic is one which demands a certain amount of close attention, and therefore, for the benefit of many readers who may be more or less in the novice class, I will endeavour to enumerate the principal factors which should govern the selection of such a machine.

The Value of the Motor Cycle Show.

Though to many hundreds of the visitors to Olympia the Show is regarded as something of a gigantic annual rendezvous for trade and amateur interests alike, others journey from near and far with the earnest intention of picking out from the wide variety of makes displayed, a mount which will carry them to the top of their club honours list, besides giving them the pleasures of the great pastime of motor cycling all the year round.

On the other hand, there are riders who attend the Show religiously year after year to carefully scrutinize every new model and make, note the improvements in the old models, then go straight back to Yorkshire, Somerset, or wherever they hail from, to forget the Exhibition entirely, and then when the spring comes again go to their local agent to buy the latest model of their last year's machine.

Whatever they gain by sticking irrevocably to one make of machine, they certainly miss the experience of something new, which, after all, is one of the satisfactions to be gained by changes. To some extent I should class enthusiasts of these descriptions as a relic of our so-called good old English conservatism, the spirit which abhors changes and tends to limit the experience of its possessor.

Time after time I have endeavoured to reason with the rider who is wedded to one make of machine that there may be others just as good, or even better, than the one he holds so rigidly in his affection, but generally with but little success. At the same time one should weigh carefully the pros and cons of various types of mount before blindly placing an order for the sake of a favoured name.

The Show gives all enthusiasts an opportunity of examining the different makes at one time, of gleaning valuable information on such matters as technical excellence, road and track performance, service and the like. Indeed, the person who goes to the Show with the fixed determination to buy a machine of the make he has previously owned gains but little benefit from a visit to Olympia. An open mind is a valuable asset with which to visit the Show, and in many ways is preferable to a fixed idea which will effectively smother any appeals for a hitherto untried model.

Types of Mount for Different Duties.

It is, of course, an established fact that certain machines are more suitable for one kind of duty than others, a point which is of the greatest importance to the prospective purchaser. Let us take, for example, the case of a rider who is in business in London, but whose home is in Devonshire. What type of machine will best suit the needs of such an individual? He may learn with interest of a certain two-stroke which crossed and recrossed a continent, or gained distinction by making a long journey across the trackless desert; such performances, however spectacular, fail to make a great impression, for as he has only about eight hours to spare out of his week-end for road work, he will probably turn his eyes in the direction of a big twin to take him from town to the West and back in the time at his disposal.

Perhaps I may be somewhat prejudiced in favour of the big twin for such work, but one cannot do better than to fall back on personal experience; for at one time I used to journey regularly between Lincoln and the south, and of several mounts, including a fast two-seater car, I always preferred to make the run on a 7/9 twin, which had 28 inch wheels and big tyres combined with rigid back forks.

On this type of machine the run of some 160 odd miles was always accomplished with a minimum of fatigue and a maximum of average speed. In the car during the winter one was a victim of cold, and on smaller capacity motor cycles the incessant reviving of the engine produced a mental fatigue, which, with the physical discomfort, generally resulted in a state of collapse at the end of the journey.

As far as actual speed is concerned, those of the car and the smaller motor cycles were not so high as that of the big twin, so taking it all round, my personal selection of a mount for regular long distance work would be a big twin.

But as readers will realise from a study of their own personal requirements, the type of mount I have just been discussing does not provide everything they may need. There is the very important question of housing to be considered, which is a far more important factor in influencing selection than one is apt to imagine. The extraordinary performances put up by machines of the 350 c.c. class make one wonder if big models are necessary at all, for the small bikes appear to promise all that one might need. Even though the mechanical parts are reduced to such microscopic dimensions, reliability and speed never seem to suffer, and for the suburban dweller, where garages are an expensive item and side entrances small, the little machine makes an undoubted appeal.

From these two extreme views it will be seen that the prospective purchaser gains but little help from any Show literature in making his final selection. In the Show somewhere there is a machine to meet all his requirements, but first of all he should determine very

CHOOSING A SPORTS MOUNT AT OLYMPIA—continued.

definitely what those requirements are so that the whole proposition may be cut and dried before the turnstiles are reached. It is the business of the attendants on the various stands to sell their products irrespective of whether they actually meet your needs or not, and even though these gentlemen may be quite willing to help in every conceivable way they cannot be fully conversant with the personal requirements of every enquirer.

The Would-be Competition Rider.

Let us now assume the prospective purchaser to have his eye upon laurels to be gained in open competitions, hill climbs and freak riding, such as the events organised by the Camberley and other clubs. To such a one the Show opens out as a huge problem, and he may possibly find himself greatly perplexed before deciding on his final choice. When reviewing performances of the closing season he is mindful of the gyrations executed by Sparks on his Scott, of Budd charging madly up hills and down precipices on his A.J.S. Again, he will remember Heath overcoming all obstacles whilst seated in state on his Henderson. The feats of various riders will flash through his memory and every type of machine appears in a minor or major degree to have succeeded in such strenuous trials as have been held during the past season. Shall he choose a powerful machine? Well, then how about the little Francis-Barnetts which have climbed incredible impasses, apparently with power in hand?

I remember how one of my friends finding himself in a similar predicament and the factor finally deciding him was the four-speed gear box provided in a popular make. Soon after purchasing his machine he began annexing various prizes, though hitherto he has had but little experience in competition work. The gear box was quite standard, but the four speeds soon proved their value, the emergency bottom gear enabling him to extricate the machine out of the worst positions a stunt course could provide, and although only having a 12 to 1 ratio, it proved more than sufficient on any hill. To explain things, he told me that Alms Hill could be taken on second gear and acceleration was possible up to and after the redoubtable Cannons—so well known to aspirants to hill climbing honours. So much for the four speed gear box as a factor in selecting a machine for stunt riding; which, incidentally, appears to be becoming more and more popular amongst motor cycle sportsmen.

Mechanical Details for Stunt Riding.

Apart from the question of the number of speeds provided in the gear box, there are a number of mechanical details calling for attention when selecting a mount for a special class of riding. If we review the number of avoidable crashes which have taken place in stunt events, it will be observed that the position of the silencer has been responsible for many lost marks. For rough going events it is desirable to avoid designs in which the silencer or any other protuberance exists in front of the crankcase. Neither should the exhaust pipe be carried too low down in front.

The design and construction of the front forks call for the closest scrutiny as well as the lay-out of the steering head, which is called upon to resist enormous stresses when the machine is ridden over rough country. The incorporation of shock absorbers with the forks is an advantage so well known as not to be overlooked by the discriminating sports rider. A further constructional detail is that of the handlebar fixing, and I prefer to see a good stout lug at this point, even if it should mitigate against adjustable handlebars. Where speed is not the greatest factor, a certain amount of latitude can be permitted with regard to ease of steering, for in some instances a fork rake which is perfect for high speeds will not give the best results for continual pot-hole work.

Provided one sticks to proved makes, the choice of engine is largely a matter of choice, for it depends upon the rider as to the results obtained, whatever power the engine may develop or whatever the design happens to be. One cannot go far wrong in using one or other of the proprietary engines which have been adopted by motor cycle manufacturers all the world over. The great point to observe in getting the maximum efficiency from a machine is the judicious selection of gear ratios in relation to the capacity of the engine. I have seen small machines driven up the famous Wild and Woolly with a bottom gear as high as 10 to 1, but such a performance is not possible unless the rider possesses exceptional skill. For small engine capacities 12 to 1 should be the highest bottom gear ratio. Over-gearing the engine with a high top gear is a fatal mistake where sports riding is concerned, and, as a matter of fact, one should use a top gear slightly lower than the average top gear for sidecar work. Where close gear ratios are offered as an alternative by the makers this will invariably be taken advantage of by the rider who intends to try his luck at stunt events.

Tyres and Wheel Spin.

No matter how great the reserve of power available at the rim of the back wheel, the bugbear of wheel spin robs many a rider of success when all appears to be going well. The tractive effort of the rear wheel is practically determined by the pattern of the tyre tread, and readers are recommended to study the various types of tread now on the market. My own experience is that the new Dunlop three square tread is excellent in giving a good grip on surfaces where wheel spin has marred clean climbs with other patterns. Balloon tyres certainly enable a rider to take all kinds of surfaces in a stride and render chances of wheel slip very remote, but, on the other hand, they have the disadvantage of making a machine very heavy to push out of deep mud or sand.

Choice of Riding Position.

The question of riding position, again, is a matter of individual taste, though many riders adapt themselves to certain positions without either realising the exact style they adopt or the influence of the different styles upon successes in competition work. The arguments for and against " pull or push " bars again come up for

CHOOSING A SPORTS MOUNT AT OLYMPIA—continued.

discussion, and it may be stated that American exponents advise pulling on the bars for everything except for sheer speed, where wind resistance becomes too great a factor to be neglected; when they find they must " get down to it."

For competition work, the great thing is to get the weight as low as possible and to adopt a riding position that gives not only complete control of the machine, but one which also inspires confidence. With confidence it is nearly impossible to skid, greasy surfaces become happy playgrounds and soft sand even assumes a less terrifying aspect. Personally, I am coming to the opinion that skidding, except on some extraordinary surfaces, is largely a matter of nerves or the condition of fitness on the part of the rider.

Reliability and Service.

Before taking up a serious programme of competition work, the matter of reliability of one's mount has to be considered, for the continual tinkering to keep a machine up to competition pitch involves a very considerable item of expense. It is well known that certain machines are quite as fast as other makes, but at the same time they may not be capable of standing up to the hard racket of repeated trials without much mechanical attention. Machines of the latter class are known to agents and expert riders, who should be consulted about their suitability for stunt work and hill climbs before the purchase is actually completed.

Even with the most reliable types of mount breakages are liable to occur during trials and competitions by reason of the severe nature of the routes, and, therefore, it becomes a matter of vital importance that a competitor should be able to get a replacement part at a moment's notice. Some manufacturers are very good in respect of after sales service, whilst with others there often are unaccountable delays in obtaining spare parts. I remember a case not long ago where on obtaining delivery of a new piston ring for a 350 c.c. engine, it was necessary to grind several thousandths off to make it fit into the groove, which makes one wonder if the word Standardisation was recognised in the factory at all!

Many riders will be on the look out for machines on which they will take part in winter trials, such as the M.C.C. London-Exeter-London run and to such the matter of weather protection is an important matter. The motor cycling sportsman is usually hardened to the elements, and is often more concerned in keeping the mud from his magneto than from himself, but many makers do not appear to realise this and maintain the practice of locating the magneto in front of the engine in a most exposed position. This and other similar details will undoubtedly occupy the attention of the sporting rider at the Show, and if all his requirements are clearly held in mind the selection of a suitable mount for next season's programme will be less difficult than it appears to be at first sight.

DON'T LEAVE LITTER.

An R.A C. Appeal.

The closing of one of the Surrey beauty spots to the public—St. George's Hill—because of the trouble to which the owners were put in clearing up litter and in extinguishing heath fires, again attracts attention to the need for the public at large to exercise the utmost consideration and care when picnicking. Whilst private motorists are by no means solely to blame in this matter, there is no doubt that they are sometimes guilty of thoughtlessness in disfiguring the country with unsightly litter.

The R.A.C. wishes to emphasise most strongly the need for every car owner and motor cyclist who takes an *al fresco* meal by the roadside or in some secluded country spot to destroy any waste paper, cardboard boxes, etc., which may be left after the meal. The simplest method is to collect all debris into a small heap and burn it—extreme caution being taken to ensure that the fire does not spread to surrounding herbage. Empty bottles or tins should not be left lying about, but buried in a convenient spot, or, failing this, packed away in an empty basket and carried home to the dustbin.

As it is mainly through thoughtlessness that refuse is left about, the R.A.C. is instructing its Road Guides in every part of the country to point out to motorists, where necessary, how best to dispose of waste paper and other litter. It would be a thousand pities if the authorities were compelled to take action which might lead to the closing of favourite picnicking grounds.

ILLUMINATED DIRECTION SIGNS.

Realising the difficulty motorists experience in deciphering direction signs, either on lamp-posts, or situated near them, the Automobile Association has introduced a new type of reflector and signs, so as to throw the light downwards and render the wording on the arms clearly readable by road users after dark.

One of the first sets of these A.A. illuminated direction signs has been erected on the Great West Road, 10½ miles out from London.

GOOD ENTRY FOR THE 200 MILES RACE.

The present list of entries for the International 200 Miles Race, to be held at Brooklands on September 26, is very representative, and rumour has it that it will be swelled by the addition of a few more Continental entries before the final closing date on August 27.

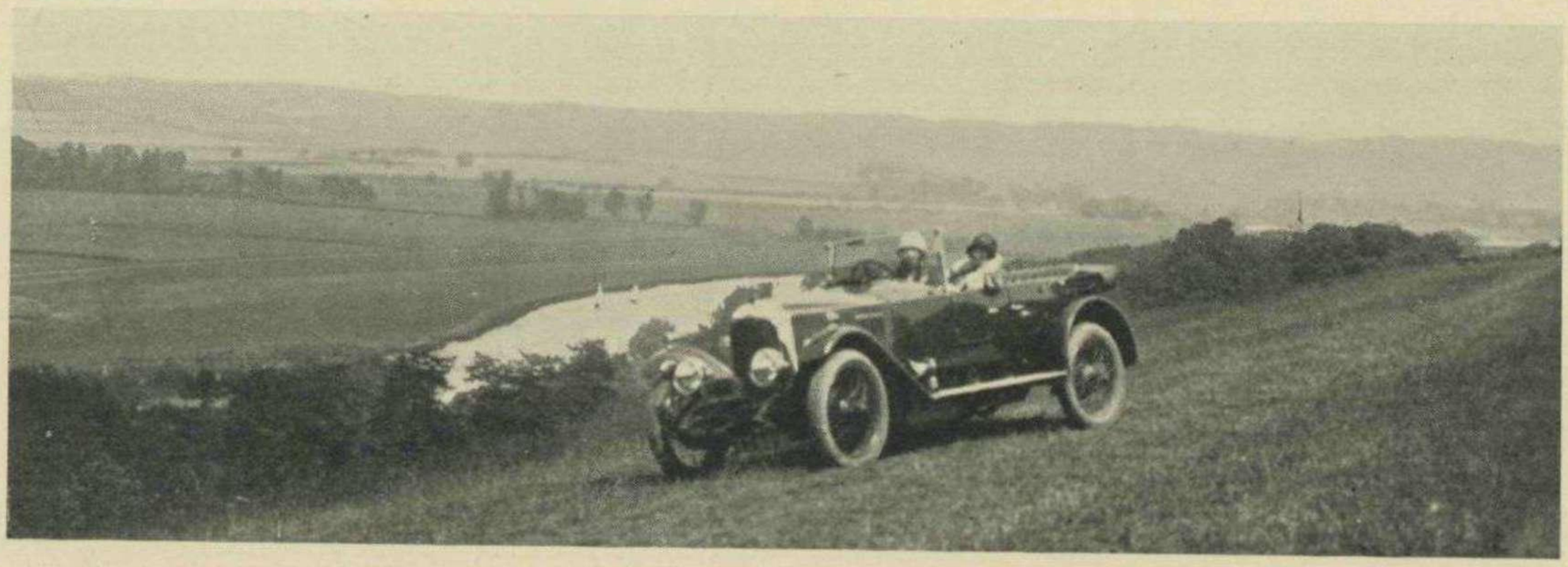
The following are the cars entered at the moment :— 3 Darracq Specials, 5 Salmson Specials, 3 Aston Martin Specials, 1 A.C. Special, 1 E.H.P. Special, 2 Frazer-Nash Specials, 1 Bugatti Brescia Special, 1 Thomas Special, 6 Austin Specials, 5 Amilcar Specials, 2 Alvis Specials, 1 Malcolm Campbell Special, 1 Eldridge Special.

In one case the entrant has not yet nominated the make of car he will drive, the regulations making it possible for the actual car to be decided upon any time before the final closing date for entries.

SPORTING CARS ON ROAD AND TRACK.

SOME IMPRESSIONS OF THE 30/98 VAUXHALL.

By RICHARD TWELVETREES.



THE 30/98 VAUXHALL IN A PICTURESQUE SETTING: OVERLOOKING THE THAMES VALLEY.

SINCE becoming closely interested in sporting cars of various makes, I have often been questioned as to my opinion of the 30/98 Vauxhall, and have always felt rather feeble in confessing my lack of first-hand knowledge of this famous make until recently, when Messrs. Vauxhall Motors, Ltd., placed one at my disposal for a "M.S." test. On arriving at the show-rooms in Great Portland Street the other day, there was the car waiting, and, without any preliminary instructions, cautions, or anything of the kind, she was handed over for a week-end trip. I was immediately impressed with the idea that this car had the complete confidence of the makers, who placed absolutely no restrictions as to the kind of test one should impose, which is an ideal condition under which to start out on a real road trial. Now, I do not propose to rake up any past history about the excellence of the Vauxhall, and many readers of this journal have had far more experience of its performance than I shall ever have; but, at the same time, there are others for whom the possession of a "30/98" exists only as a remote possibility, and who may welcome a few remarks as to its behaviour under ordinary test conditions.

Unlike so many sporting cars of to-day, the Vauxhall combines real touring comfort with high speed driving, which is particularly emphasised by the skilful arrangement of the controls in relation to the bodywork. For instance, one's feet fall automatically upon the pedals, a perfectly easy and natural movement of the right hand finds the change speed lever, and the outside brake lever is admirably situated for those who prefer to drive principally on the side brakes. Personally, I always find that quicker driving is possible by keeping the foot brake for emergency use only, though the interconnection of the front wheel brakes, and the countershaft brake with the pedal, on the Vauxhall, is quite sufficient to give good retardation for all ordinary purposes.

By virtue of the adjustable front seats, one can regulate the driving position as desired, and there is just enough tilt to the back of the driver's seat to give the happy medium between the bolt upright posture for fast driving and a comfortable inclination of the back. In other words, the Vauxhall is not a chassis with a sporting body added by an unappreciative coachbuilder, but is designed throughout with an intimate knowledge of the sporting driver's requirements.

With the possible exception of the compensating gear for the front wheel brakes, the "30/98" is a very beautiful car, the graceful lines from the bonnet to the rear being extremely attractive when viewed from above. These lines give a very good streamline effect, without emphasising the fact that the car is capable of very high speeds, thus protecting the owner from the attentions attracted by cars of "ultra-sporty" appearance.

One of the great charms of the "30/98" is that it can be driven with absolute comfort for ordinary touring purposes, and does not necessarily compel one to drive hard all the time, but even when ambling along at low speeds, there is that suggestion of power which is so fascinating for the man who likes to put his foot down occasionally.

Speaking of the latter diversion, I made an acceleration test on a clear piece of road, and by starting from a standstill on second gear, changing into third at "forty," and engaging the top gear at "sixty," a speed of seventy miles per hour was reached in the incredibly short time of twenty-six seconds! "Nuff said" about acceleration!

My impression is that usually the Vauxhall steering is very light, and, as far as my recollection goes of one of the early 25-h.p. models, it called for no criticism, but it seemed as if this particular car was a little heavier to handle than one would wish, though at the same

SPORTING CARS ON ROAD AND TRACK—continued.

time I found no difficulty in taking corners quite fast, and the castoring effect was excellent. Perhaps the joints had been taken up recently, which is the impression I gained by the feel of the steering. Compared with some gear changes, the movement of the lever appeared a wee bit heavy, and, unless one waited for the top gear, quite a pull was necessary to engage the dogs. These, however, are things to which one becomes accustomed, so must not be taken as criticism. I am not quite decided as to the brakes, and, whilst they gave me no anxiety, even at maximum speeds, it seemed as though a slightly quicker action would have been desirable.

With regard to brake adjustment, I would respectfully suggest that the turnbuckles might be arranged in more accessible positions, so that it would be possible to take up any wear without the need for lying under the running boards.

Perhaps, when one becomes accustomed to the car. the speed can be gauged by the rev.-counter, for it is difficult to read the speedometer, situated as it is on the left of the instrument board. These are my only criticisms, so, having performed my duty, let me pass on to give a few experiences of this wonderful car on the road.

A quiet run from London to Tunbridge Wells and back with four up on the Friday evening convinced me that all the praise I had heard of the "30/98" was well merited, my passengers being enthusiastic about the comfort of the body and the gliding motion of the car, which was equally noticeable at high and low speeds. With many sporting cars, the sensation when rounding corners at fairly good speeds is more agreeable to the driver than to the passengers, but the Vauxhall is so beautifully balanced, and sits down so comfortably that manoeuvres round acute bends can be performed without causing any consternation among the crew. Hills? Well, there are none on that particular road to be noticed by the Vauxhall, but on one or two occasions we astonished the natives by a little bit of third gear work which gave the engine a chance of showing what it could do in the way of turning over. After a run of eighty miles, most of it in the dark, we all fell in love with the Vauxhall, and looked forward to the chance of letting it go on a really good road in the daylight.



THE 30/98 VAUXHALL ON A LITTLE KNOWN TEST HILL NEAR MAIDENHEAD.

The next day, Saturday, was devoted to jogging peacefully around the Maidenhead district, partly in search of unclimbable hills and quiet roads for a few speed tests. None of the little known stunt hills in the neighbourhood proved stiff enough to worry the engine, nor did the negotiation of a very steep grass bank with a gradient of 1 in 2 prove too severe a test, so, giving up the task of trying to beat the Vauxhall, we proceeded to Brooklands to watch the racing.

As everyone knows that the standard "30/98" is capable of between 80 and 85 miles per hour with full equipment on Brooklands track, there was no particular

SPORTING CARS ON ROAD AND TRACK—continued.

point in wasting time with a track test, besides, the powers that be have placed the sporting motorist's playground out of bounds on Sundays. (Cries of "Shame!")

However, as a "M.S." test is not complete without a run of 300 or so in one day, we decided to take a trip to the Malvern Hills and back to see if a bit of hard driving would create any call for minor attentions or adjustments to the car.

Dawdling painfully along the Great West Road at a well-disguised 40 miles per hour, we eventually got rid of the procession of "popular" cars. We made for Beaconsfield and passed on to High Wycombe, where, from the porch of the Red Lion Hotel, Disraeli made his first political speech in 1832. Even if one happens to be engaged in the business of testing a Vauxhall, it is impossible to pass the strange-looking mausoleum near the village, which was built by an eccentric nobleman, Lord le Despenser, in 1763. The same gentleman was responsible for the curious-looking ball, capable of holding nine persons, surmounting the tower of the church.

Between High Wycombe and Chipping Norton the road was clear enough to allow us to gain some slight idea of the speed of the "30/98," and, though there were but few straight stretches, the car accelerated up to 80 m.p.h. on several occasions without being fully extended. At this point I must qualify my previous remarks about the steering, as I found it quite possible to hold the car with one hand when travelling very fast, the nature of the road rendering frequent application of the side brake necessary.

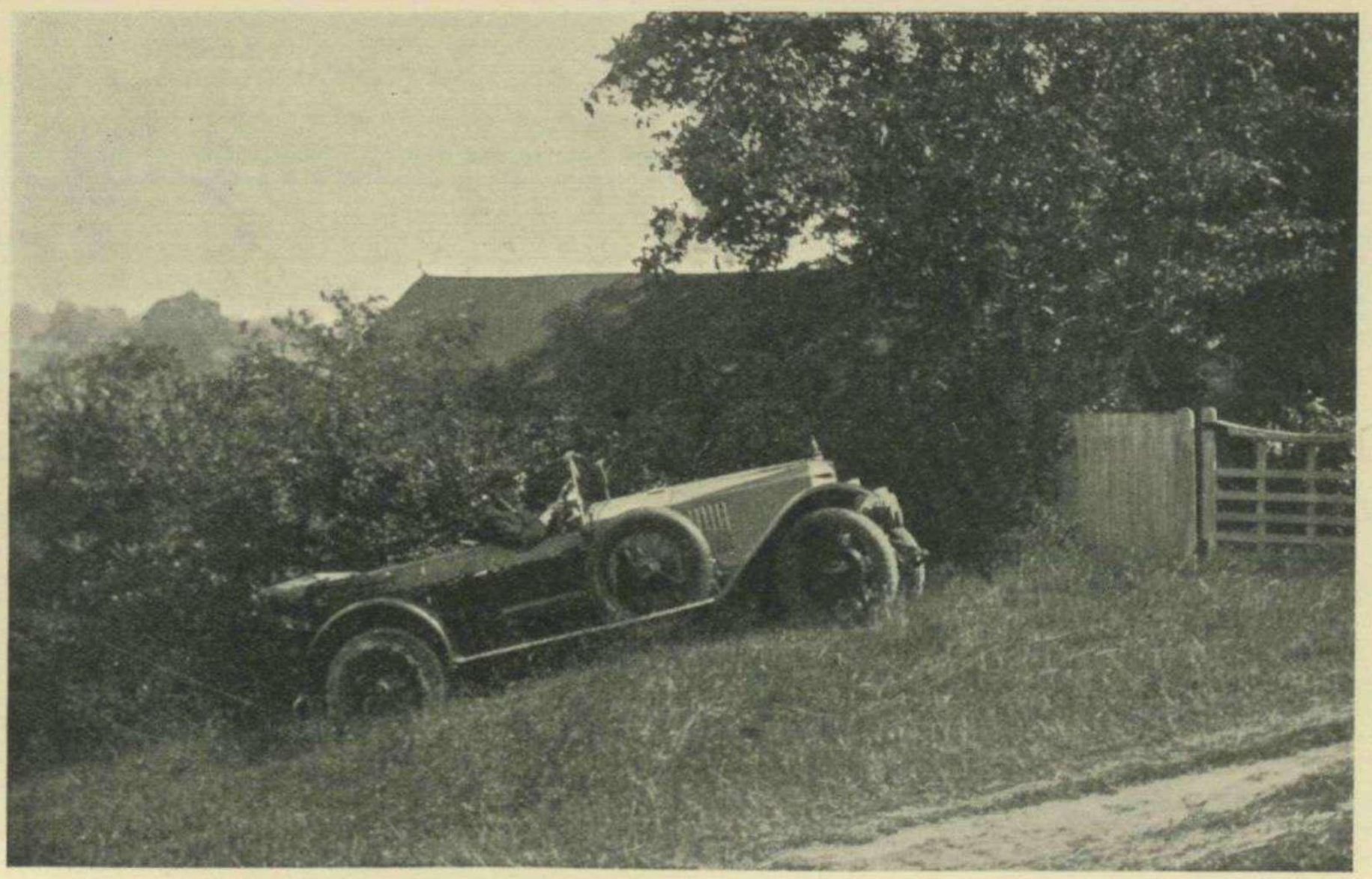
Another fine run brought us to Morteon-in-the-Marsh, and a little later the picturesque village of Broadway was reached, this place being quite one of the show places of the country, though perhaps rendered a little artificial by endeavours to add to its natural beauties. Passing Pershore and Worcester, we completed the outward journey by climbing up to the Roman Camp on the remarkable range of hills just outside Malvern, and then, turning sharp to the left, took a narrow track, which brought us to a wonderful point of vantage from which the whole of the surrounding country stretched out before us like a gigantic panorama.

A short climb on foot brought us to the top of the Worcestershire Beacon, which, rising to a height of 1,444 feet, is the loftiest of the Malvern Hills.

The return journey home was broken at Worcester to listen to the organ at the Cathedral, one of the finest in the country, having a sixty-four foot pedal stop, and a note which literally shakes the entire edifice. A few minutes pause at Woodstock gave us a chance to look into Blenheim Park and get a glimpse of the delightful castle, Chaucer's house and the cottage where Edward the Black Prince was born being additional points of interest at this place.

Then, as the evening was approaching, we settled down in the car for a quick run home, only making one detour at Henley to climb Alms Hill, which was taken in a stride from the bottom in second gear. There is a very good tool kit in the Vauxhall, and all the articles are arranged in convenient positions, but I am sure these things are very seldom needed. If asked for an opinion of this car, I should say, "Well, it is a '30/98' Vauxhall," which is sufficient to indicate the closest approach to mechanical perfection in modern automobile design and constructoin as applied to sporting car practice.

The principal dealers for Vauxhall cars are Messrs. Barclay & Wyse, Ltd., of Great Portland Street, W. 1.



THE 30/98 VAUXHALL TAKES A GRASS INCLINE OF 1 IN 2.



MOTORING SPORTSMEN.

Mr. E. C. Gordon England.

By THE EDITOR.

WITHIN 14 days of the Boulogne Meeting we found Mr. Gordon England busy on the first stages of rebuilding the two Austin Seven racers which will participate in the next 200 miles race and his Sports Austin Seven for the Georges Boillot Cup at Boulogne, but whereas most persons in such a position would consider themselves almost too busy to breathe, Mr. England spared us enough of his time to relate a few incidents of his interesting career.

From the days of his boyhood, Gordon England had a deep rooted ambition to become an aviator, and though flying machines were imperfectly developed at the time, he followed the feats of the early pioneers with great keenness. Whilst still at school, he experimented with man-lifting kites, and though he claims no remarkable achievements in this direction, he gained experience which in later years was turned to good account.

Leaving school at the age of 15½ years, he became apprenticed in the Great Northern Railway shops at Doncaster, where his training included courses in practical machine shop and fitting work, drawing office routine and work on the footplate of locomotives. On completing his course at Doncaster in 1908, he became associated with Mr. Pemberton Billing in the development of early aeroplanes, then joined with the late Mr. José Weiss, the well-known artist, who forsook his brush in order to conduct research work in connection with aviation. With Gordon England's aid, José Weiss produced the Weiss inherently stable glider, and in 1909 England set up a glider record by remaining in the air for 58 seconds. This achievement took place at Amberley, on the Sussex Downs, and during the record flight the Weiss glider rose 100 feet above the starting point. This performance remaining unequalled for several years.

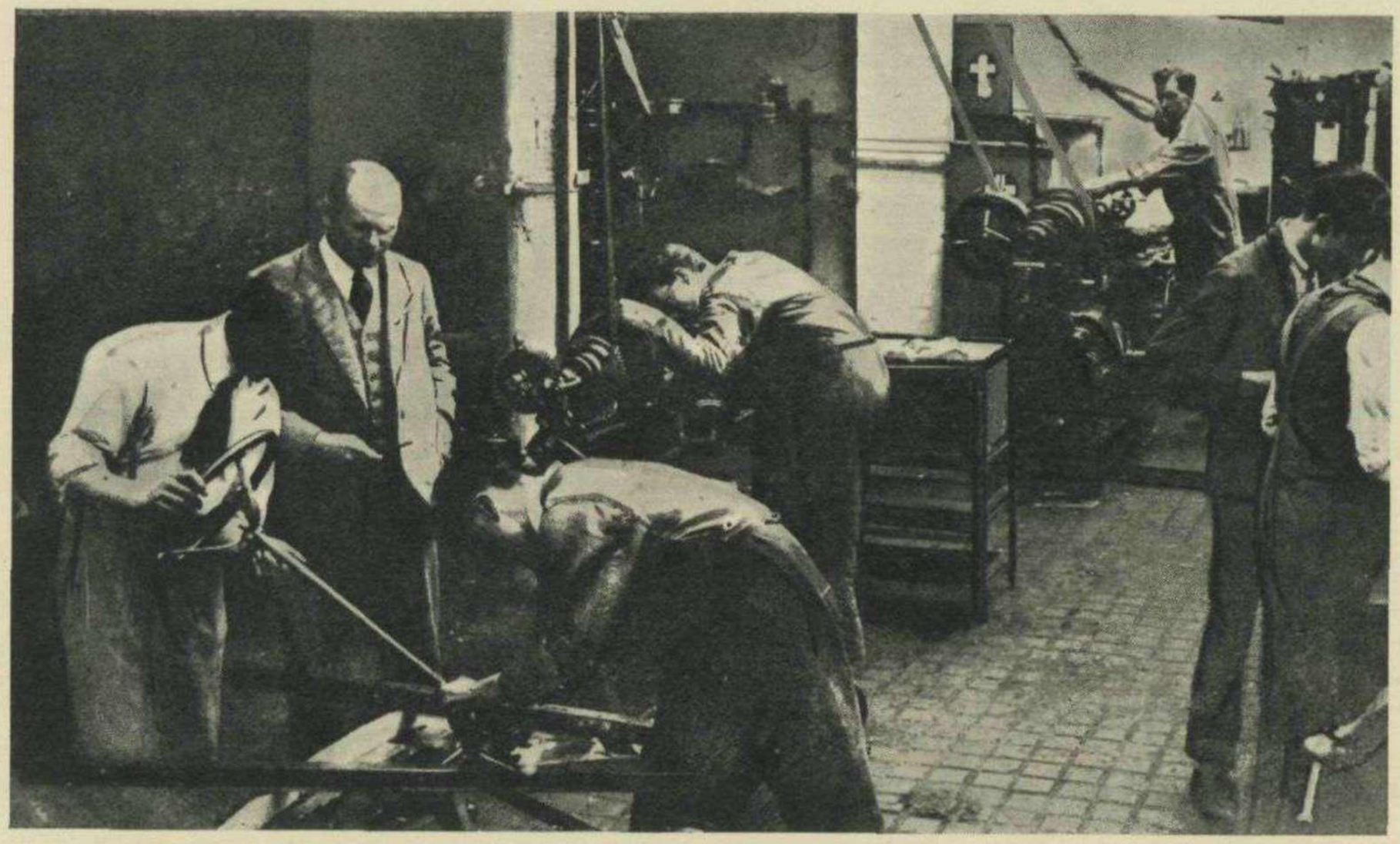
Following the experiments with motorless gliders, these two enthusiastic pioneers produced two or three power driven aeroplanes equipped with Anzani and E.N.V. motors of from 25 h.p. to 40 h.p. Had Weiss and England possessed sufficient funds for enabling them to pursue the costly experimental work, it is probable that greater successes would have rewarded their efforts, but the lack of funds caused them to abandon further attempts, and shortly afterwards Gordon England realised his long cherished ambition by becoming the owner of a Hanriot aeroplane.

His initial attempt at flying this machine was very remarkable for taking delivery of the machine he got up at 3 a.m. and at 3.30 a.m. was taxi-ing up and down Brooklands preparatory to taking the air. Then feeling his way, without any tuition, he made a few short hops, and three hours after taking the pilot's seat successfully manœuvred the Hanriot through several circular flights. This would appear to be a record time for learning to fly, at all events, Gordon England soon became recognised as a pilot of great promise, though, unfortunately, his engine was not sufficiently reliable to keep him in the air for the 15 minutes necessary as the qualification of a pilot. Incidentally, the pilot's certificate he eventually gained was Number 68, proving that he ranks with the earliest of flying men in this country.

Impressed by the early flights on his own aeroplane, the directors of the Bristol Aeroplane Company offered Gordon England a post first as test pilot, then as designer, and when engaged with this firm he designed several of the successful Bristol types used for military purposes.

Whilst with this firm he took part in the military trials on Salisbury Plain, piloting a British machine; this was the occasion when Cody gained the premier awards with his own aeroplane, facetiously termed "The Flying Cathedral" by his rivals. On leaving the Bristol concern, Mr. Gordon England went into business with Mr. James Radley, another early pilot, and produced the first triple engined seaplane built in this country. Perhaps one of the most amusing episodes in Gordon England's aviation career was when he undertook the construction of a very unorthodox machine known as the Cedric Lee Secret Circle Plane. Space does not permit any reference to the unusual features of this weird aeroplane, but it was considered so secret that most of the officials of the firm went about armed with automatic pistols to prevent their ideas being stolen. Gordon England relates how he went about his work in continual fear of being shot and was much relieved when the machine was found to fly well

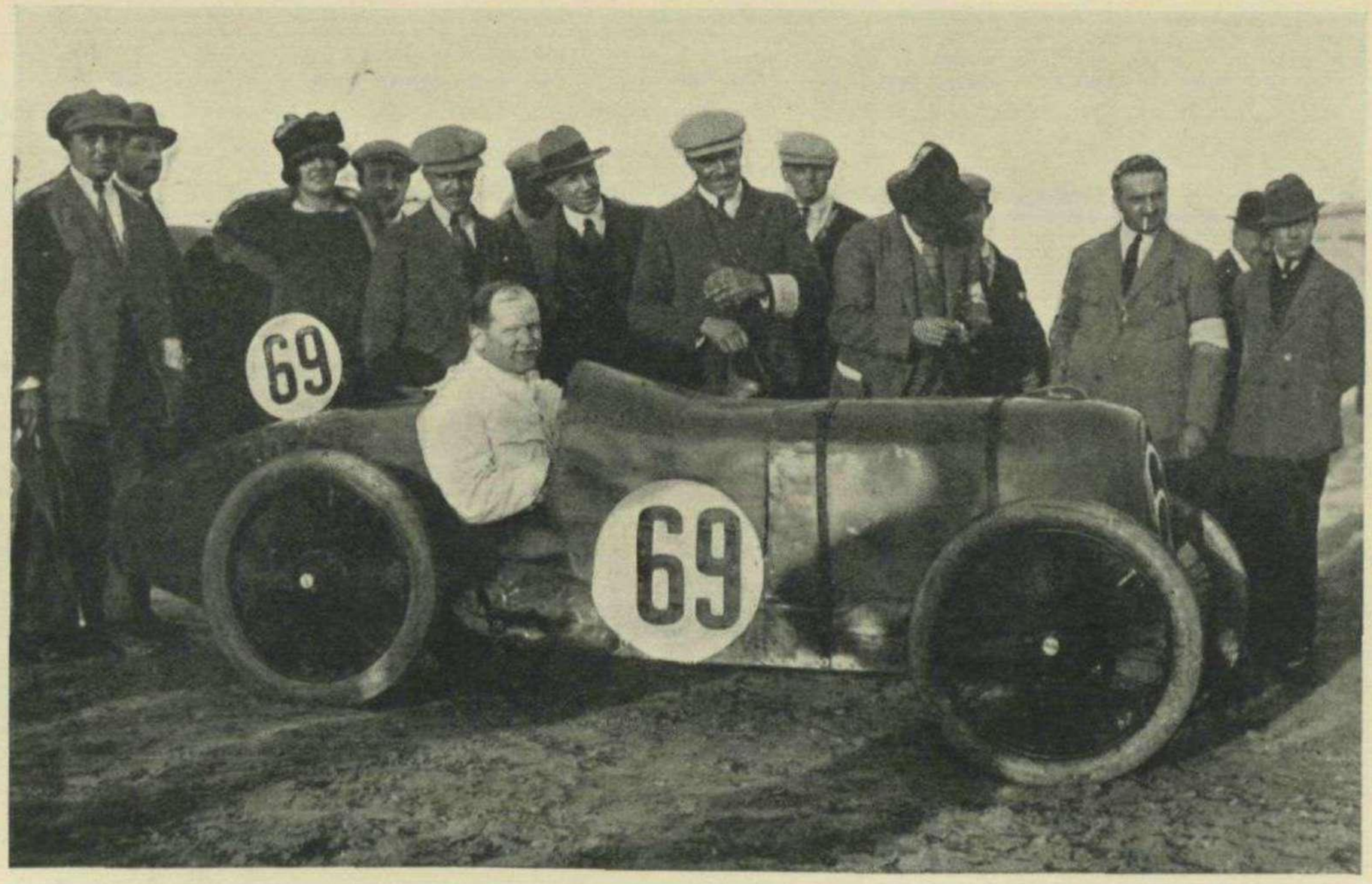
MOTORING SPORTSMEN—continued.



MR. GORDON ENGLAND SUPERVISING THE ASSEMBLY OF HIS AUSTIN SEVEN RACER.

on its first trial. During the test he accidentally looped the loop with the Cedric Lee, but eventually nobody thought very much of the Cedric Lee secret and it consequently faded away.

Immediately prior to the outbreak of war, Gordon England narrowly escaped being interned in Germany, for he had to deliver one of the latest White seaplanes to the German Naval Air Station at Kiel. On this trip he had the distinction of flying over a Zeppelin and also over the Kaiser on the occasion of the opening of the Kiel Canal. He was due to deliver a second machine, but fortunately learned of the state



THE AUSTIN SEVEN WITH WHICH GORDON ENGLAND SURPRISED FRENCH RACING MEN.

MOTORING SPORTSMEN—continued.

of affairs, thus escaping internment as the first prisoner from the air.

From 1916 to 1919 he was responsible for the organisation of an important aircraft factory established in the business of Messrs. Frederick Sage and Co., of London, and produced many aeroplanes for military purposes when so engaged.

After the war he appears to have drifted into the motor business and became associated with his father in the firm of George England, Ltd., whereupon he decided to take up motor racing. Readers will remember his performances on his A.B.C. racer, which, after being duly hotted up, made its maiden appearance in the first 200 miles race, and to everybody's astonishment, gained a gold medal. The same car was driven in the two succeeding 200 miles races, gaining gold medals on each occasion, a record which shows that Gordon England's careful tuning was amply rewarded.

As soon as rumours of the Austin Seven began to filter through the trade, Gordon England became interested, but in the meantime he returned to his old love and constructed a glider in his spare time with the help of Mr. Compton. This machine was entered for the *Daily Mail* Glider Competition, but its pilot, Mr. England, unfortunately crashed on the last day of the trials; due, he admits, to an error of judgment owing to his long absence from the air.

When he had recovered sufficiently to hobble about on crutches, Gordon England interviewed Sir Herbert Austin with a proposition to race the Austin Seven. The appearance of a would-be Austin crack on crutches must have been somewhat startling to Sir Herbert, but he nevertheless agreed to support England's proposal, with the result that he drove one of these remarkable little machines to the second place in the 1,100 class of the third 200 miles race at an average speed of over 75 m.p.h., this being the only car to make a non-stop run in the smaller class.

The achievements put up by Gordon England on the Austin Seven racer are now a matter of history, but we were told the exact truth of how England finished the last 200 miles race minus one piston and connecting rod. Towards the end of the race one cylinder cut out and as he had sufficient time in hand to win the race on three cylinders he did not stop to change the plug he judged to be at fault. It was not until the head was removed the next morning that a piston and rod were found to be absentees, and they were eventually discovered in fragments in the base chamber!

In last year's Cyclecar Grand Prix de France, the Austin team of four cars finished first, second, third and fourth, all within a few seconds of each other and the Frenchmen gasped with astonishment at this massed formation procession. This race left England as champion of France, and he will defend the title on the 6th of this month. Among his other distinctions, Gordon England is the only driver to gain awards in all the 200 miles races.

Concurrently with his racing achievements he has been working steadily on the development of a patent system of motor bodywork, and though this occupies a considerable amount of his time he intends to continue racing the well-known Brooklands model Austin, which owes its success largely to the great amount of care he has devoted to its special tuning.

NEW RECORDS BY C. F. TEMPLE.

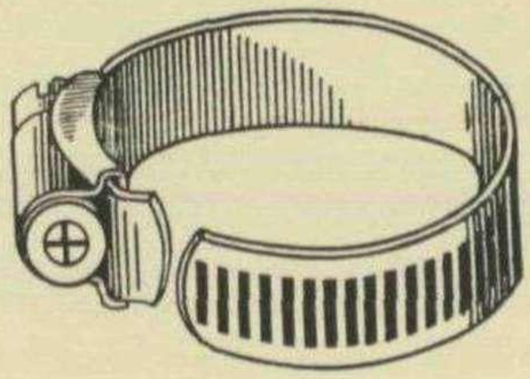
Mr. C. F. Temple has recently broken the following World's Records at Montlhery:—

50 Kilos	...	18 min. 29 sec.
100 ,,	...	36 ,, 36 ,,
One Hour	...	160 kilos, 118 metres.
50 Miles	...	29 mins. 28 secs.
100 ,,	...	61 ,, 17 ,,

It is interesting to note that after 89 miles he was delayed for 2 min. 25 sec., owing to having to refill with petrol. The machine used by Mr. Temple was an O.E.C. Temple, a completely new machine which will be shown at the Motor Cycle Show at Olympia.

WORM DRIVE CLIPS.

Known as the "Jubilee" Worm Drive Clip, a new form of water pipe connection clip has been marketed by Engineer Lieut. L. Robinson, R.N., and possesses advantages which should appeal to sporting motorists who do their own engine repairs. In place of the usual form of bolt tightened clip, the "Jubilee" has an ingenious worm mechanism, the heavy steel worm secured at one end of the clip engaging with diagonal slots cut on the other end of the steel ribbon. Not only does this simple mechanism give accurate adjustment, but the gearing effect of the worm produces an extraordinarily tight grip on the hose, thus preventing all chances of leakage from the rubber hose.



THE "JUBILEE" WORM DRIVE CLIP.

SHOWING METHOD OF OPERATION.

BOOKS.

AUSTIN TWELVE, The Book of the, A guide for owner-drivers. By Burgess Garbutt, with special articles by Richard Twelvetrees, and sketches by H. M. Bateman. Fully illustrated, cloth gilt binding, price 5s. Remarkably interesting to owners of Austin and similar cars. Of booksellers or Pitman's, Parker St., Kingsway, W.C.2.

SPORTING MACHINES ON TEST.

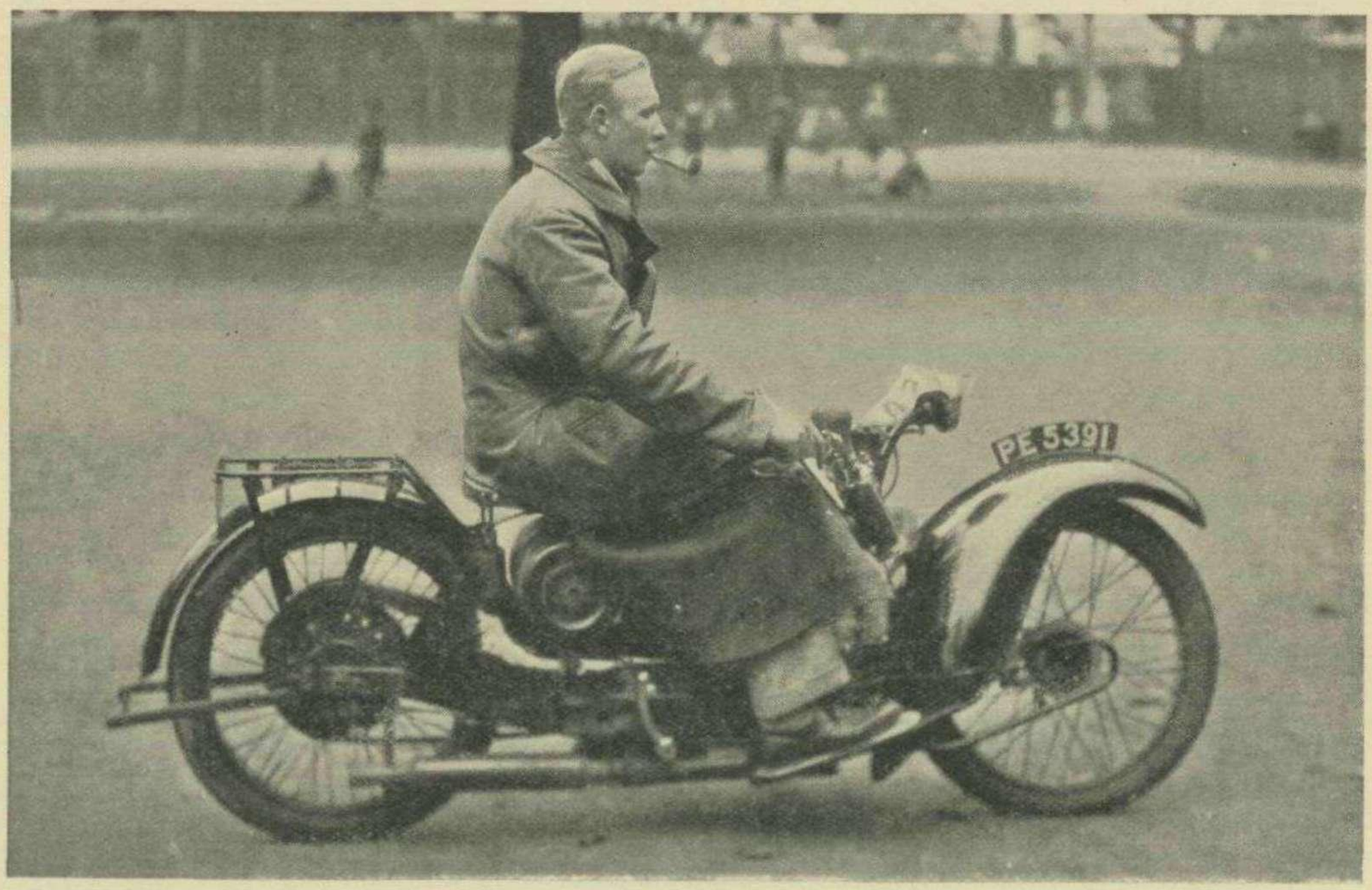
THE SPORTS MODEL "NER-A-CAR."

By ARNOLD RADCLYFFE.

WHEN it was suggested that we should review the Ner-a-Car for the Sporting Machines on Test series, I was tempted to offer a remark to the effect that "scooters" hardly came within the province of this journal, but am now very glad that my tongue was not permitted to express the thought.

Now, after riding the Ner-a-Car for 800 miles over a course only to be compared with the "Scottish," there is no doubt whatever in my mind that this unorthodox machine is one which deserves the closest consideration from our readers. As the time chosen for this test coincided with the period of the A.C.U. International Six Days' Trial, the machine was used to follow the competitors for the first three days, as this would provide an opportunity of bringing out any weak points whilst driving it over a far more strenuous course than would ever be encountered in ordinary competition work. Let me say, at the outset, the manufacturer had no indication whatever as to the nature of the test I intended to carry out, and whilst placing no restrictions in this direction made no special preparations—the machine, in fact, being a new one from stock.

The Sports Model Ner-a-Car is now fitted with the 348 c.c. O.H.V. Blackburne engine, a Sturmey-Archer three-speed gear box, the other mechanical features remaining unaltered; so without wasting space on technical details, I will proceed to give my impressions of its performance.



THE SPORTS "NER-A-CAR" RIDDEN BY THE WRITER OVER THE A.C.U. SIX DAYS' COURSE.

Remarkable Steering Qualities.

One hears various comments concerning the indirect steering of this machine, and whilst the experience of turning the front wheel without a corresponding movement of the mudguard is perplexing for the first few miles, the objection quickly disappears when one finds the steering becomes entirely automatic, except when hairpin bends are encountered.

Time after time during the test I produced pipe, tobacco and matches, the process of filling being accomplished at a speed of about 40 miles an hour, without fear of wheel wobble. When actually lighting up, the machine could be slowed down and then it would look after itself, irrespective of rough surfaces, until called upon to accelerate.

When driving the Ner-a-Car it would be almost possible to knit jumpers or improve the shining hour in various other ways, so steady is the steering, an imperceptible movement of the body alone being necessary to take it round most main road bends. Here at least is one machine in which the steering problem has been solved, for vanished is the fear of speed wobble or any other of the disconcerting effects known to those who drive fast.

A Front Wheel Brake Suggestion.

During the course of my test I came to the conclusion that the provision of a front wheel brake would be an

SPORTING MACHINES ON TEST—continued.

improvement, but a casual inspection of the front wheel design shows that the addition of a brake would not only cause the designer many sleepless nights, but also add to the cost of the machine. Nevertheless, there is little doubt that the brain which produced the Ner-a-Car would not be baffled by any difficulty, and before long we may expect to see a design in which an F.W.B. is incorporated.

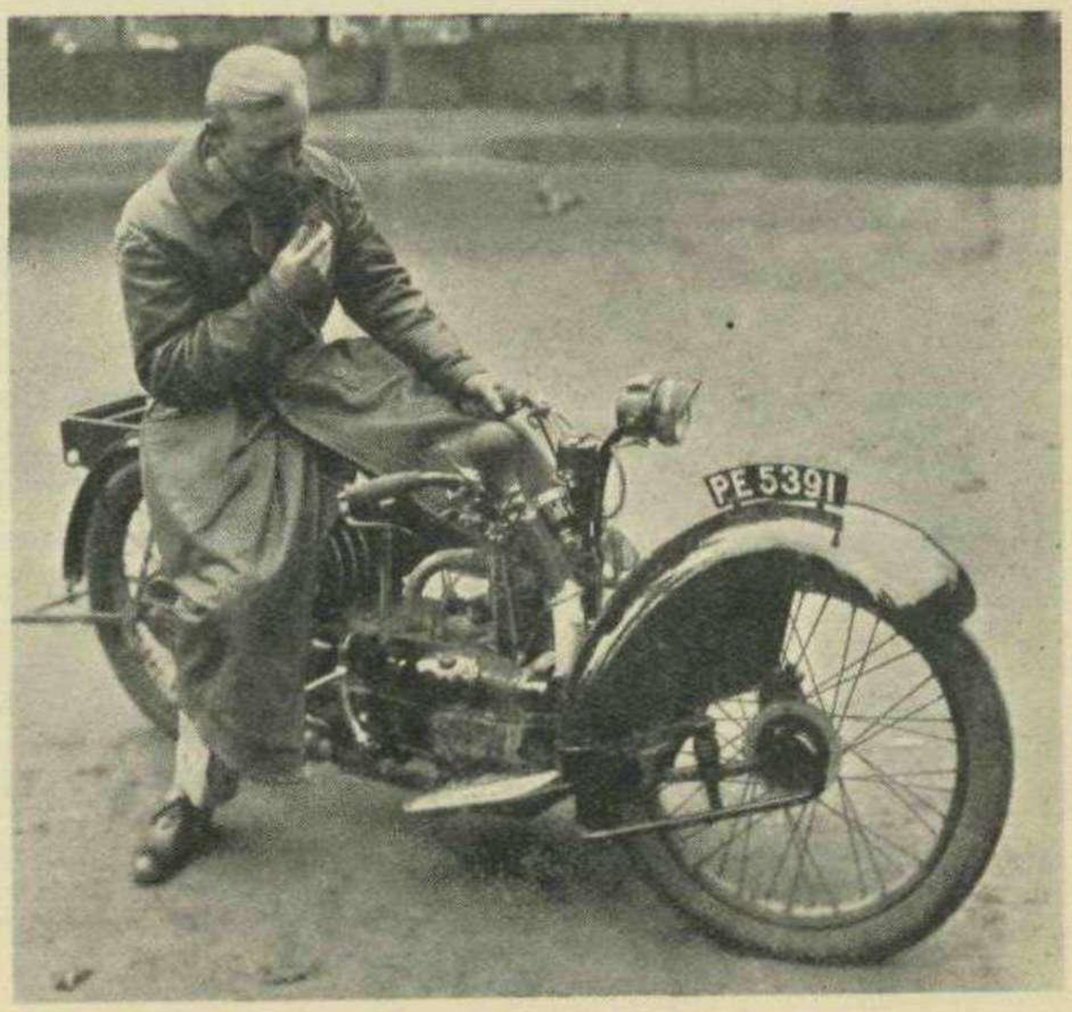
Two internally expanding brakes operate on the rear wheel and are adequate for all ordinary purposes. For touring, the pedal operated brake need not be used at all, the conveniently situated hand lever operating one set of shoes, which can be applied hard without risk of locking the wheel. The other brake actuated by the foot is thus kept for emergency purposes and can be applied hard without causing skidding, even on a wet surface.

My opinions as to the desirability of a front brake arose when descending the rougher gradients with inclines comparable with that of Alms Hill and strewn with young rocks. On such routes a front brake would have been very welcome, for the greatest care was necessary, and back wheel lock could only be prevented by using the second gear. As it happened, with careful management, there was only one occasion when the machine tried to go astray, the tendency being checked by violent acceleration on a down grade of 1 in 3. Fortunately, the road was clear, but one could not always steady the machine by accelerating as on this particular course, little streams with stone banks have the habit of crossing at the foot of small hills.

The only real criticism I have to offer of the Ner-a-Car concerns its lack of silence, not that I paid much attention to the whine of the second speed, this being rightly attributed to the newness of the gears, but the disposition of the engine, without any tank to act as a deadener for the sound seems to amplify every noise to about three stages of L.F. It takes quite a time to become accustomed to the sound of the engine, but at speeds above 40 miles an hour it merges into the general hum and is carried astern by the rush of air. It would, of course, be possible to damp down some of the sound by enclosing the valve gear, but this would be a pity, as the rider would be deprived of the pleasure of watching the valves whilst travelling along uninteresting roads. I expect most Ner-a-Car riders have discovered the need for fitting an anti-shock terminal to the sparking plug, for having occasion to move the flap of my coat on several occasions, I can testify as to the strength of the magneto current. The prospects of receiving shocks from the plug terminal when one's clothes are thoroughly wet are not at all comforting to people with sensitive susceptibilities. I must, however, pay my respects to that plug before continuing. It was an H.S.3 and never misfired once during the whole journey, in spite of a little oil being used with the petrol with the object of lubricating the valve guides.

Starting from Cold.

Owing to the location of the petrol tank beneath the saddle, the carburettor has to be arranged on a level



ILLUSTRATING THE UNIQUE LAY-OUT OF THE "NER-A-CAR."

with the base of the cylinder and in consequence the induction pipe as well as the hot air intake pipe is rather long. This may have something to do with a slight difficulty when starting from cold, but as soon as one becomes acquainted with the setting of the B. and B. carburettor there is no trouble in getting the engine to start on the second or third kick every time.

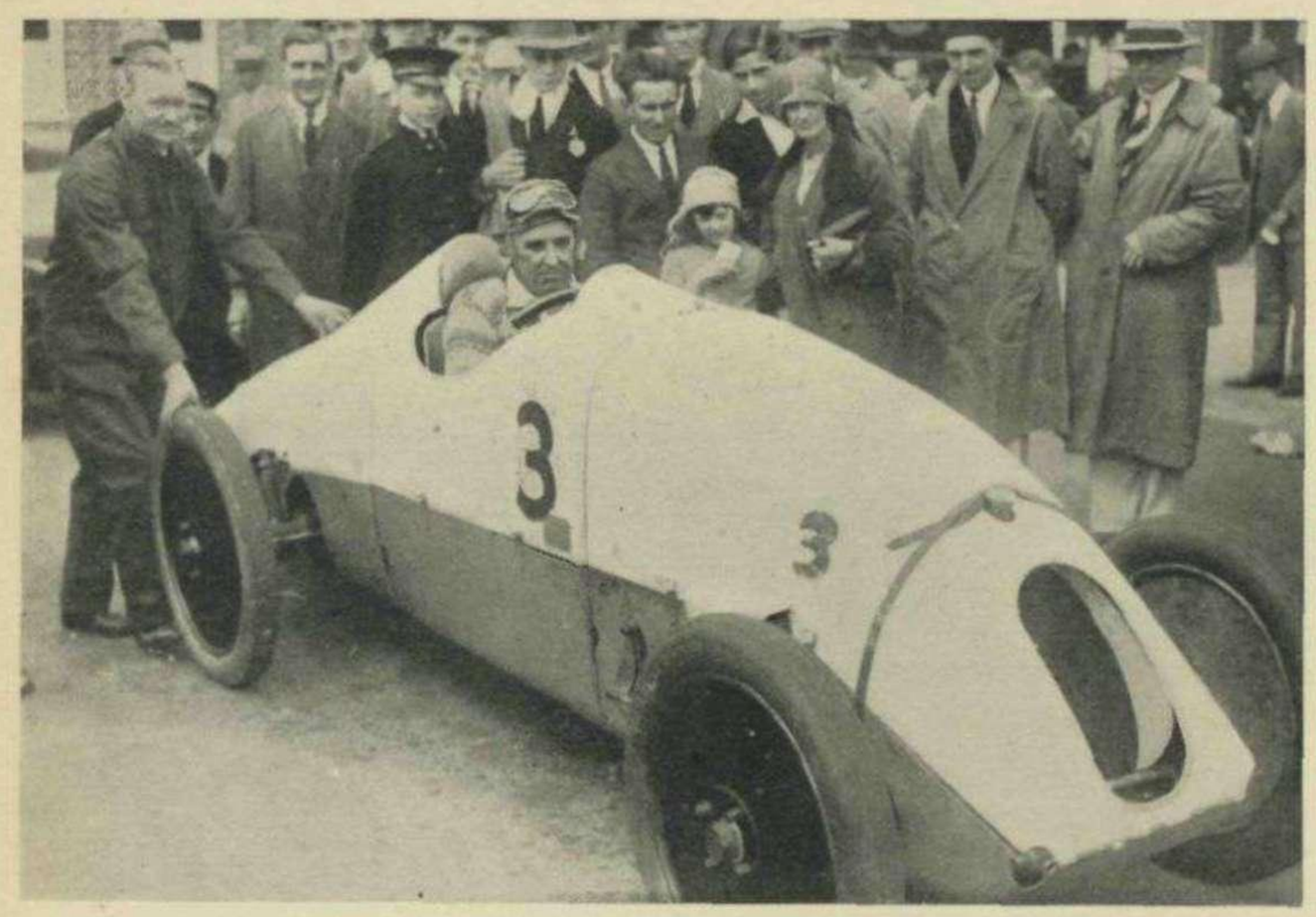
One suggested modification would be the fitting of rubbing streaks to the sides of the footboards, or, alternatively, they should be made to fold up, for they certainly scrape when a sharp turn is taken. Not that they are of weak construction, but something to take the inevitable wear would appeal to competition riders.

The Speed of the "Ner-a-Car."

With regard to the matter of maximum speed, which naturally interests our readers, I regret that it is impossible for me to give any definite figures, for when I had this machine it was fitted with a speedometer which failed to behave itself properly (I believe another pressman fell foul of that same instrument). Throughout the whole journey it lied in the most unashamed fashion, and finally packed up at the top of Porlock Hill by getting its gear wheel adrift. Happily the machine was going slowly at the time, or this article might never have been written, for the drive became well and truly entangled with the spokes thus terminating its unuseful career. I should mention that this instrument had not been fitted at the Ner-a-Car works, so readers will not assume that this defect will be found in connection with the standard fitting. I have to report the matter, however, in order to explain why accurate speed records are not given.

Over the Six Days' International Route.

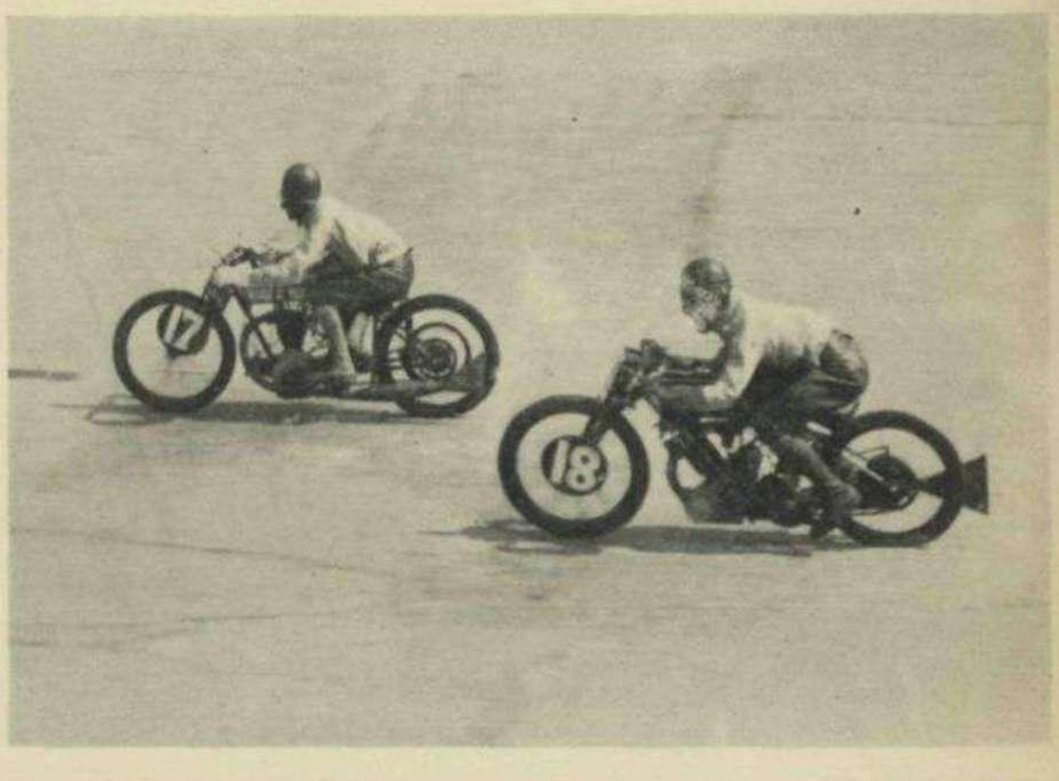
Having relieved myself of the duties of recording preliminary impressions, let me now invite you to occupy a place on the carrier in order to observe how



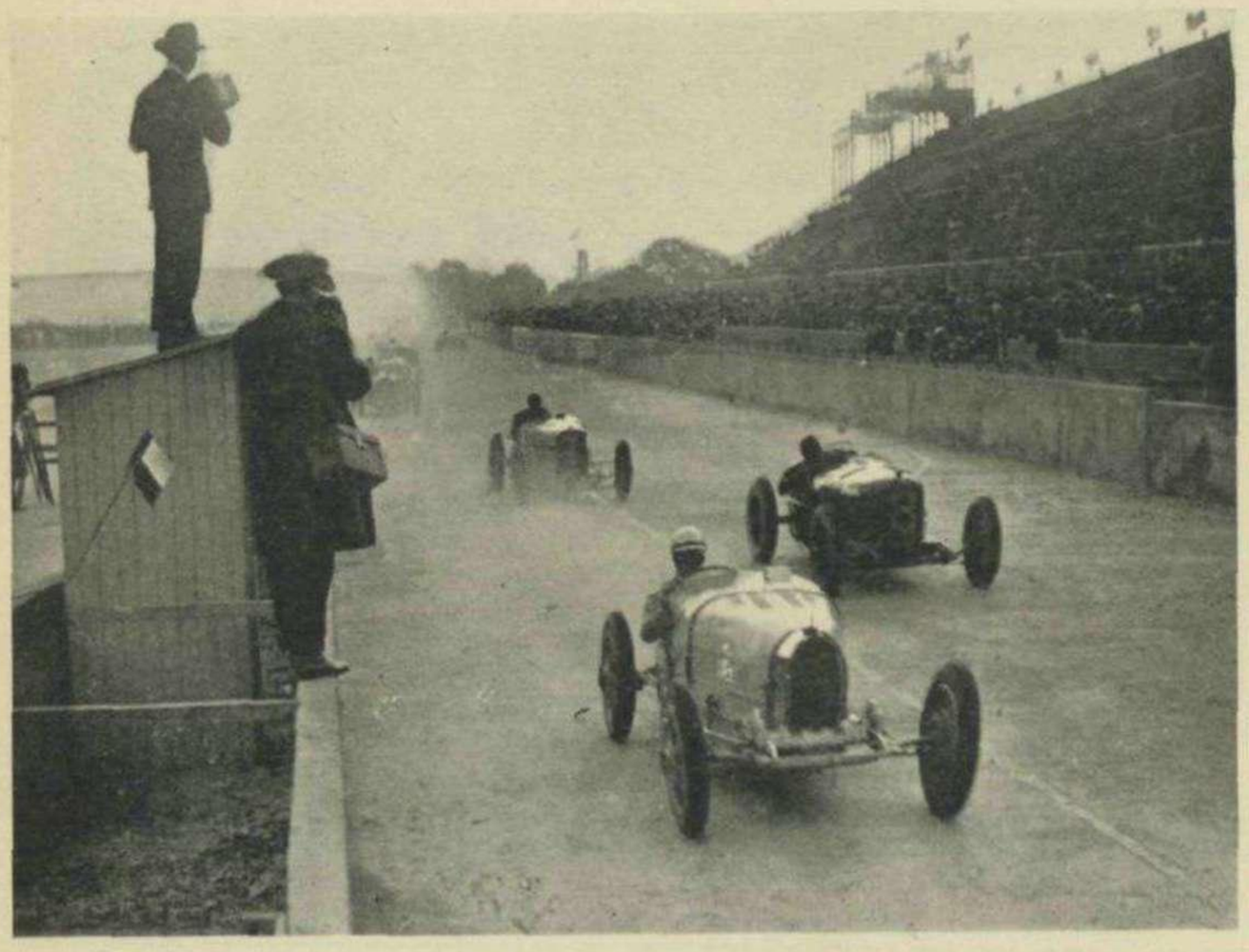
J. G. Parry Thomas on his Speedy Thomas Special.

Recent Motor Car an

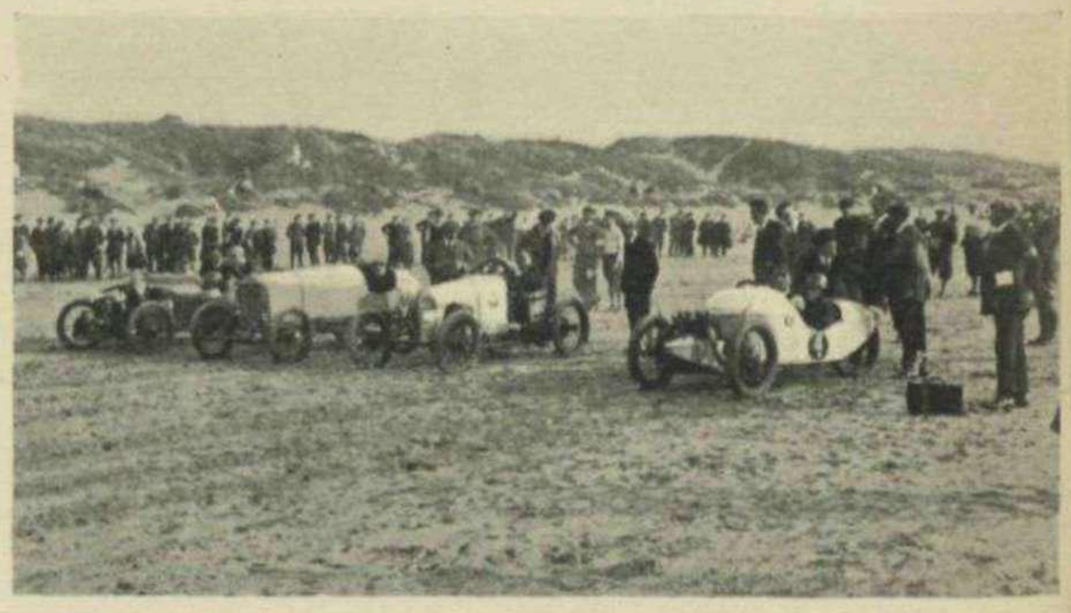
AUGUST RACING AT BROOKLAN



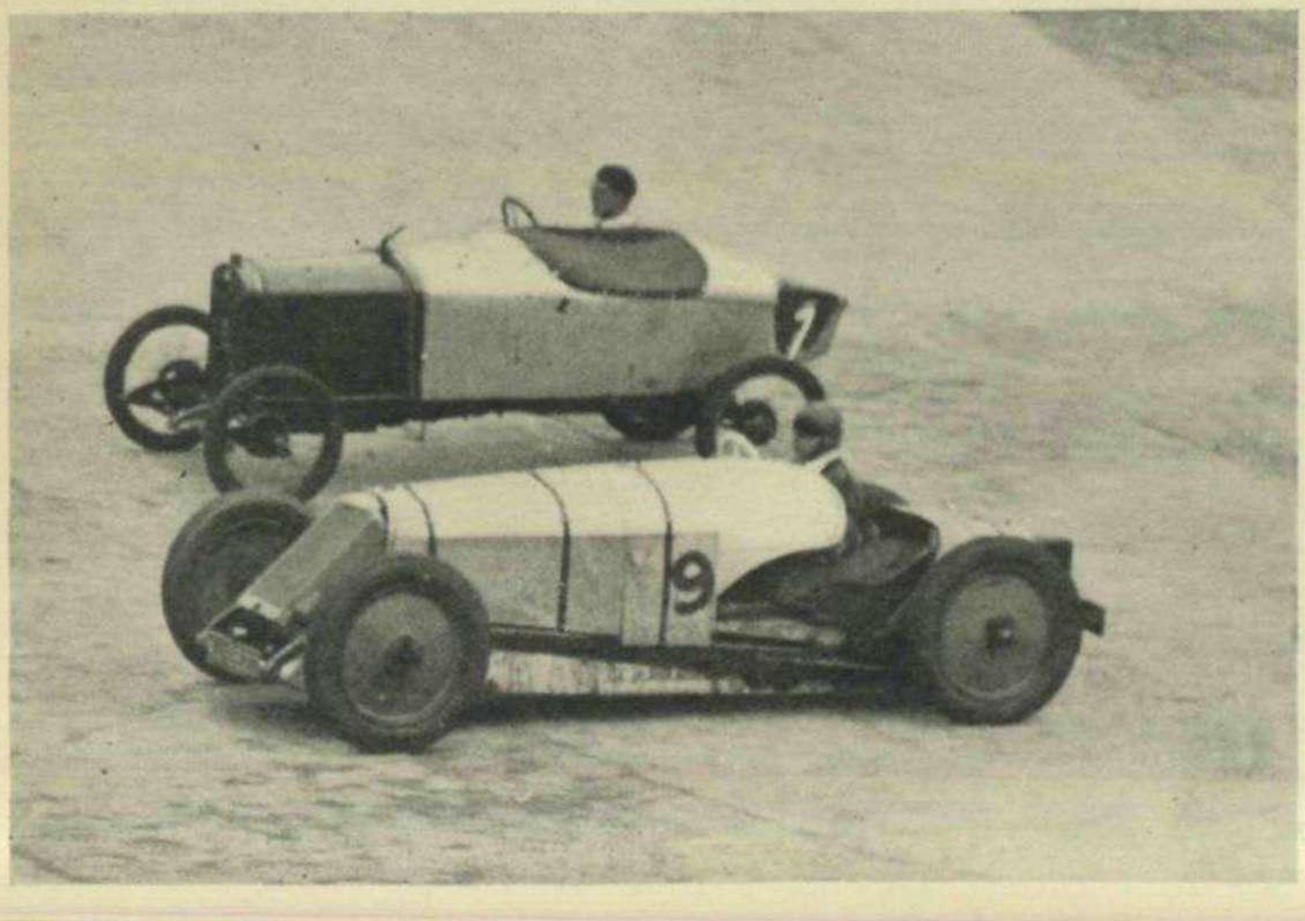
B M.C.R.C. "200." Lt. Grogan (Norton and Ashby (P. & M.)



The Grand Prix A.C.F.: Scene at the Start.



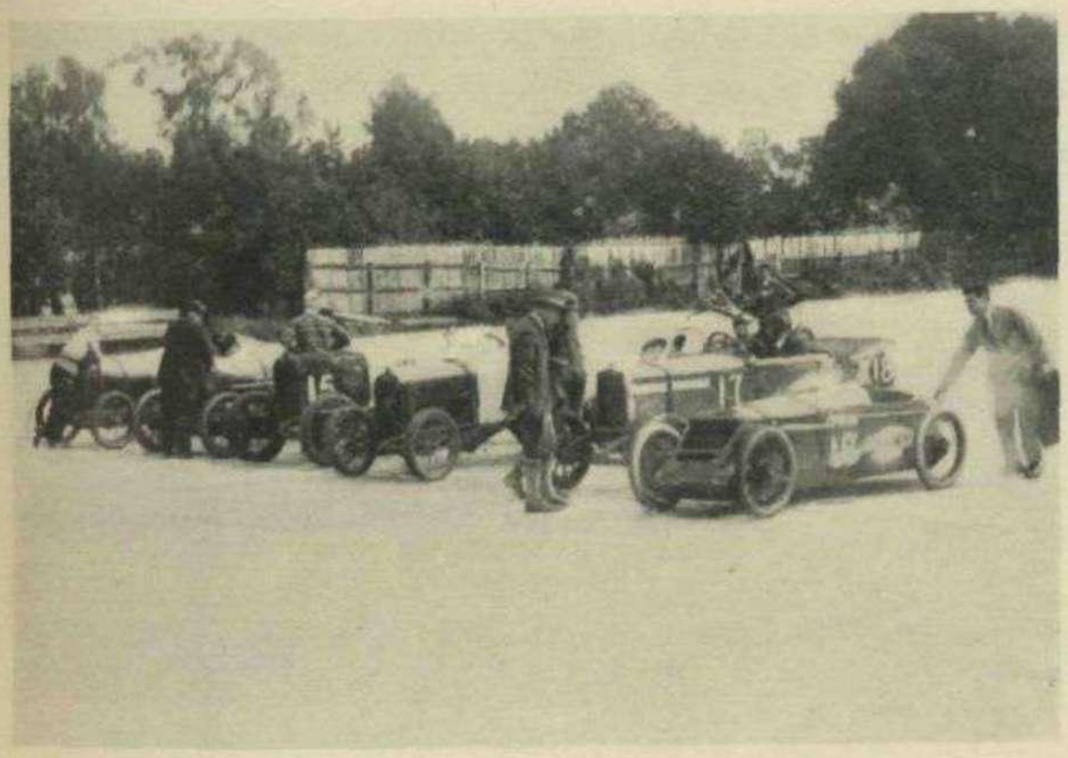
Southport M.C.: Start of Single-Seater Race.



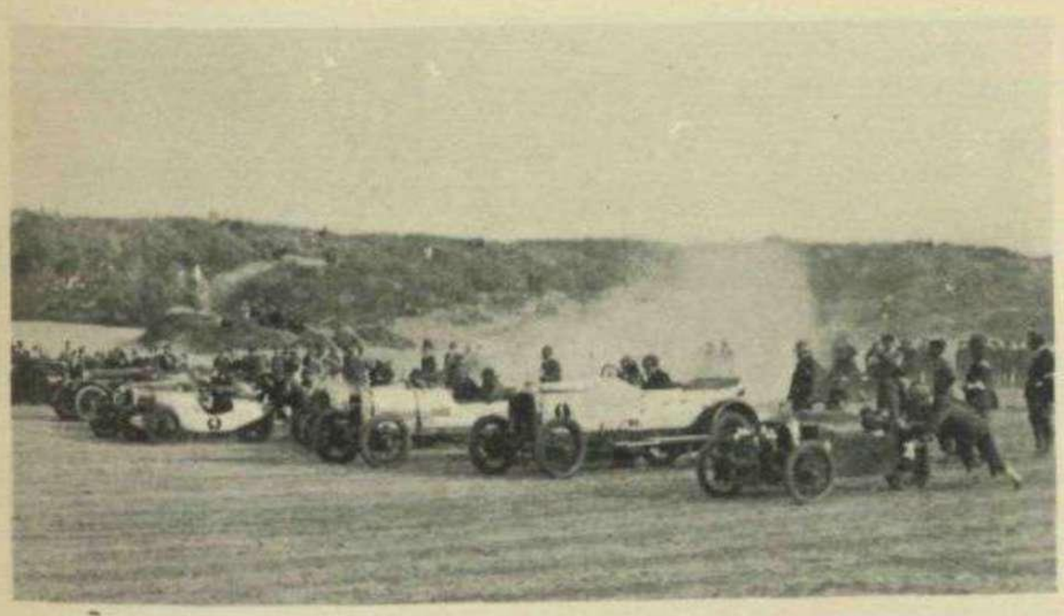


d Motor Cycle Events

OS, MONTLHERY AND SOUTHPORT



START OF THE "NEWS OF THE WORLD" 100 MILES HANDICAP.



SOUTHPORT M.C. START OF UNLIMITED CAR CLASS.

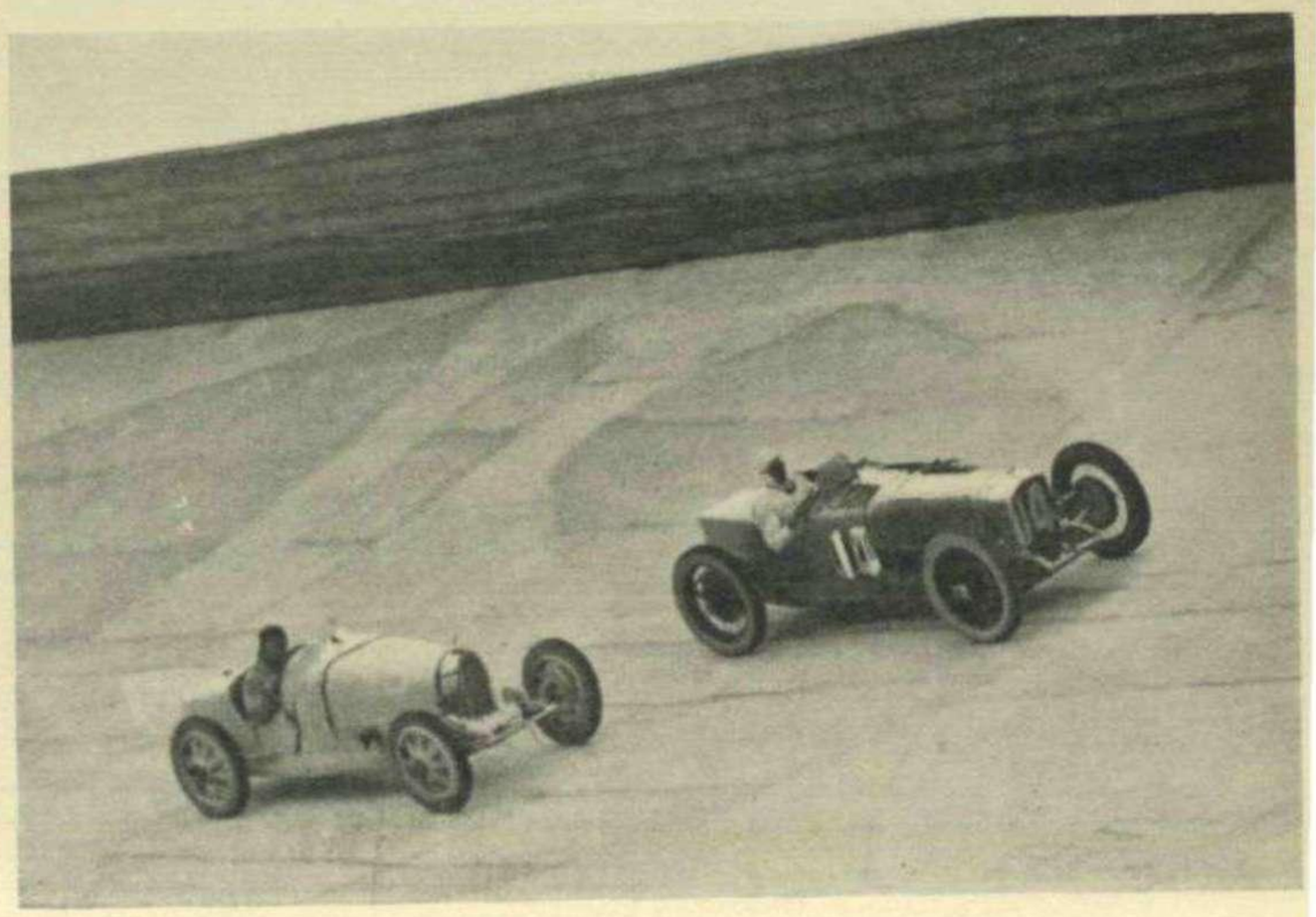


J. G. PARRY THOMAS RECEIVES THE "NEWS OF THE WORLD" TROPHY.



THE GRAND PRIX A.C.F.: COMPETITORS NEARING MONTLHÉRY.

M. BENOIST, WINNER OF THE A.C.F. GRAND PRIX.



THE GRAND PRIX: A BUGATTI-DELAGE DUEL.

SPORTING MACHINES ON TEST—continued.

the sturdy little engine makes play with some of the tit-bits served up by the A.C.U. for the amusement of the six days' competitors.

Having noted the departure of some 70 riders from Southampton we decide to follow on ourselves and for the first few miles keep alongside the heavy weights, but soon tiring of the slow pace accelerate until we are in the wake of No. 47, but owing to the narrowness of the lanes and the dust which forms an impenetrable cloud we stay behind to watch the ascent of Broughton, a hill only calling for a touch of second gear on the Ner-a-Car.

Our next observations are made with the leaders, and following No. 5 up what appears to be a ticklish climb find him disappearing in a haze of smoke. Spectators appear dimly on both sides of the route and dropping into first gear we take a turn to the left, only to find we have picked out the worst part of the surface and the steepest gradient. This climb is finished over vile ground, which does not prevent us from changing up into second and plenty of revs. to spare. At the top we discover that the hill was Middle Down, which unseated at least three riders within the few minutes of our observation.

From that point onwards our confidence in the machine is unbounded, the stability and ease of control on the difficult hill assuring us that nothing short of a volcanic eruption will be able to make us part company.

At Salisbury we make the acquaintance of a hobnail, the delay in fitting a new tube making it necessary for us to cut across country to Hindon, where we pick up with No. 37 and soon go to the front in order to witness a few ascents of Kings Settle. Here the second gear suffices to give us a clean ascent and we carry on to Bruton, where the short rise out of the main street reduces us to first gear for a little way, the remainder being done on second.

Notes on Gear Ratios.

These examples of what the Ner-a-Car can do in the way of hill climbing seem to call for a few remarks on the gear ratios. The top gear is 5½ to 1 and whilst for main road work this could well be higher, it might spoil the all round efficiency of the machine. Between top and second there is a big drop, the latter being 8.96 to 1 and the first gear—14.6 to 1—enables the Ner-a-Car rider to tackle any gradient with the greatest confidence. The latter ratio may seem rather on the low side, but then many of the competitors on solo machines of similar engine capacity were using bottom gears of 18.5 to 1. In my opinion, the Ner-a-Car could have climbed any of the hills on the six days' course with a bottom gear of 12 to 1.

Leading the Field up Draycott.

The next hill to be climbed is at Draycott, a new discovery on the part of the A.C.U. On this occasion we are preceding the first competitor and the ascent is made under greater difficulty than he experiences, for the spectators are straggling over the sides of the route, driving us over the vilest part of the vile surface. Notwithstanding this fact and the extraordinary length of the hill, the Ner-a-Car surmounts it merrily with only a suspicion of wheel spin in one or two places owing to our over-acceleration.

On stopping to observe how the competitors fared, we notice that all who followed our exact course made very shaky climbs or else failed altogether, so we feel very elated with the machine, and proceed to Taunton in high spirits.

Rough Stuff in North Devon.

Tuesday brings its quota of hills, many of which prove very discomforting to the Continental riders. The selection includes Porlock, Lynton, Liddiat Lane, Pool Farm, Beggars Roost and Pennycombe. This was my first experience of Beggars Roost, which proved very disappointing as an obstacle for the Ner-a-Car, so to make a better test I rode up on the inside of all the hairpins without worrying the engine in the least. Further down on the list is Fingle Bridge, an unknown hill spoken of in subdued whispers by many of the competitors and comparing in severity only with one or two of the worst Scottish hills. There are so many bends that one loses count of them; the boulders are so numerous that one finds difficulty in picking out the royal road for a good climb. We need bottom gear for the ascent and, apart from a side slip off a big stone, a perfect climb ensues.

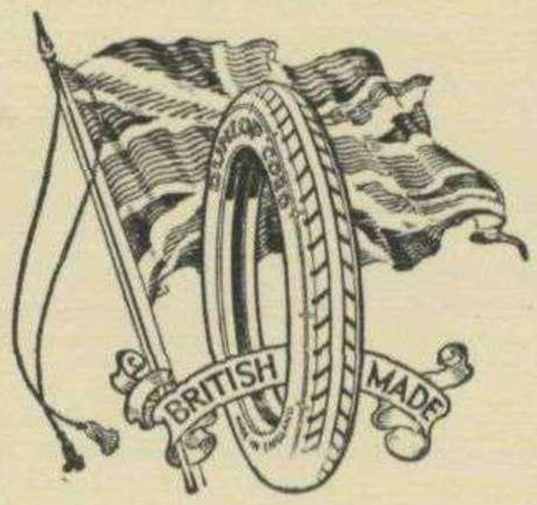
With these remarks on its performance on the hills I will leave readers to form their own conclusions as to the performance of the O.H.V. Blackburne engined Ner-a-Car. With a maximum speed in the region of 60 m.p.h. and a stability that is unequalled, it should (in spite of its "sit up and beg" handlebars) appeal to every motor cycle sportsman as a mount for all occasions, except, perhaps, when abnormal ground clearance is needed. With its 3 in. tyres and excellent springing one can ride gullies, pot-holes and bumps at all speeds without discomfort. When the machine is bounced off the ground it can be relied upon to land firmly on both feet and then to take up its course again as steadily as ever.

I also had the opportunity of trying the all-weather qualities of the Ner-a-Car during a run of some 60 miles in the pouring rain and found that, thanks to the ample dimensions of the front mudguard, waders or leggings were quite unnecessary. As a matter of fact, I drove through the whole test in flannel slacks.

I tired of making attempts at skidding the Ner-a-Car, nor tramlines, nor grease would upset its stability, the only surface upon which one could engineer a skid was wet grass and then a very sharp turn had to be taken at speed before the back wheel went sideways.

The consumption throughout the trial worked out as follows:—Petrol: 110 miles per gallon; oil: 850 miles per gallon. The above figures would naturally be considerably improved in cases where ordinary conditions of road surfaces and conditions prevailed. In conclusion, I think we should tender our thanks to the Sheffield Simplex Company for having included in their range of machines a mount which any sportsman should be proud to own.

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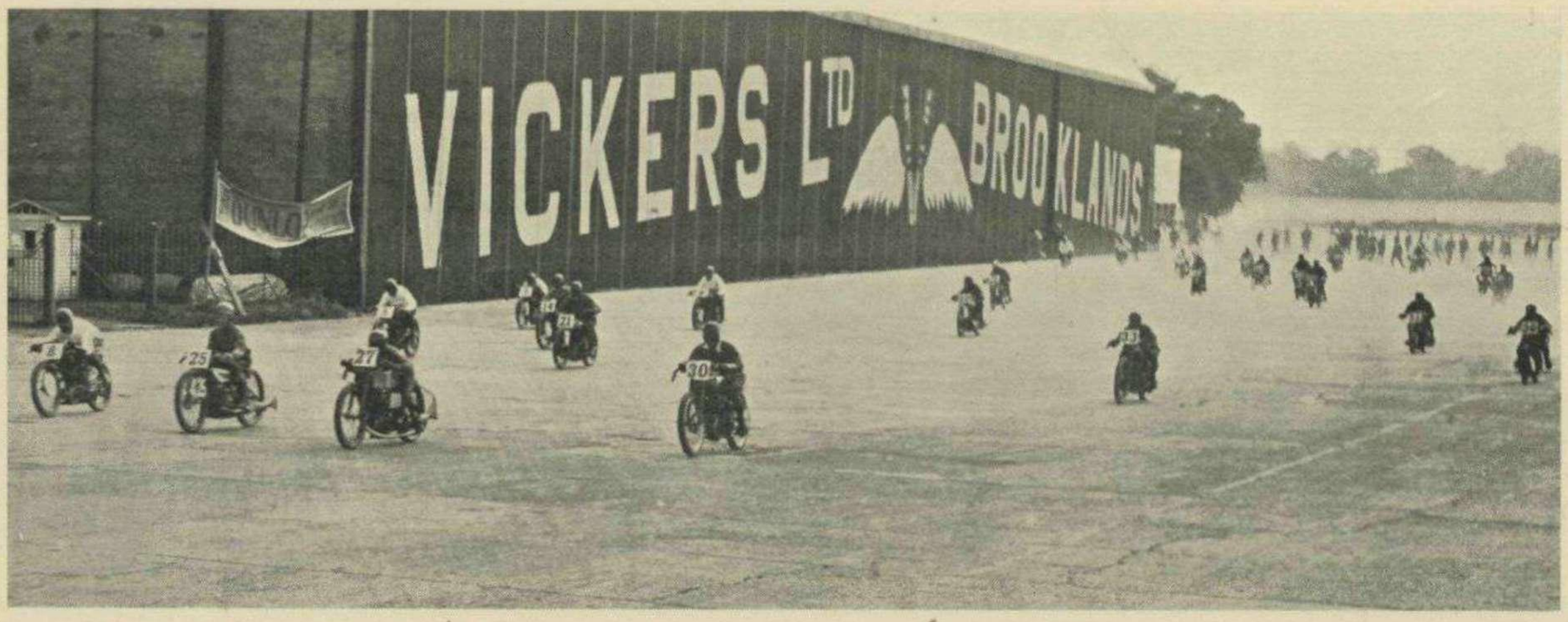
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THE TWO HUNDRED MILES MOTOR CYCLE RACES.



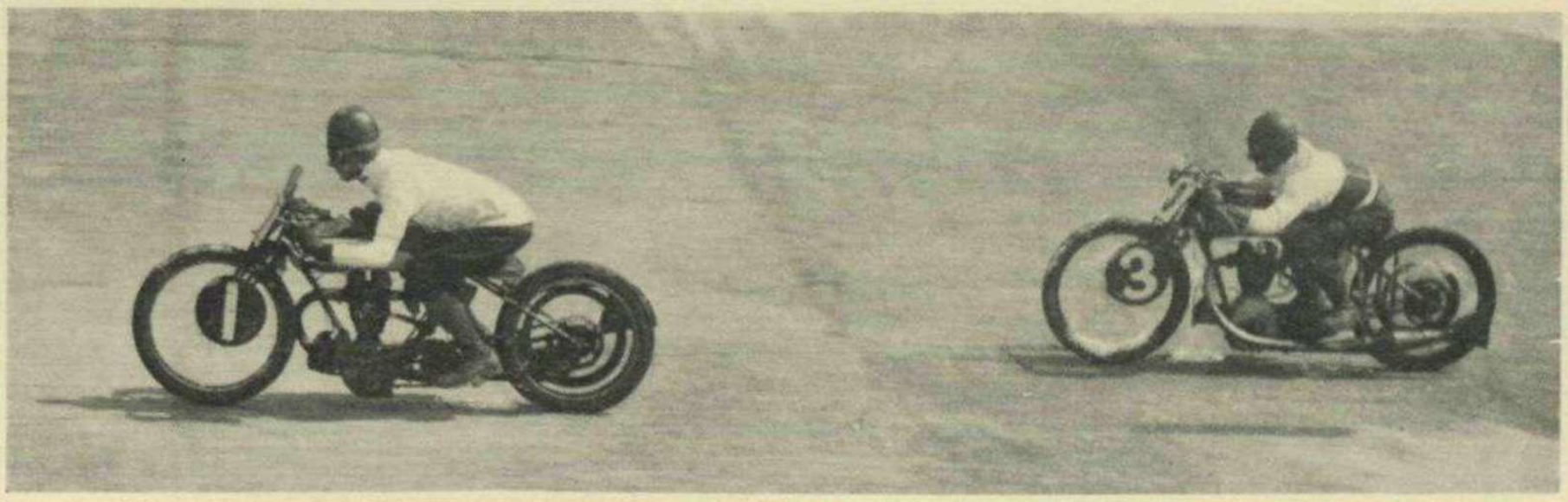
THE COMPETITORS BUNCHED TOGETHER IMMEDIATELY AFTER THE START.

In addition to substantial cash prizes, several handsome gold cups were offered as awards to the winners of the long distance races held at Brooklands on August 15th. Most of the prizes were contributed by the *News of the World*, Lord Riddell being present to distribute them to the winners.

The A and B classes, for 250 c.c. and 350 c.c. machines respectively, were started at 10 a.m., the total field consisting in 30 entries, the larger machines soon taking the lead. As is frequently the case with these massed starts, including more than one category, the race became rather difficult to follow; but, nevertheless, it was perfectly obvious that J. S. Worters (Cotton) and W. L. Handley (Rex Acme) were out to set up a really fast pace. Le Vack was in trouble, and this left Worters an easy task of completing the necessary 73 laps and finishing nearly half a minute in front of C. R. Briggs (O.K.). W. Colgan (Cotton) also put up a very good show and came in third, some three minutes behind Briggs.

In the 350 c.c. race, W. L. Handley (Rex Acme) added still another laurel to his already large collection by winning at 78.37 m.p.h. from Hopkins (Chater-Lea) and Kaye Don (Zenith). Kaye Don's mount was to have been ridden by Stanley Woods, the Irish crack, but a last minute swop was made as Don had injured his ankle and felt unable to drive his own mount in the larger class. Marchant was unfortunate in receiving a blow on the chin owing to a bump on the track and was forced to retire, when nearly at the end of the race. The race exacted a heavy toll of the competitors, but Handley's performance was one of outstanding merit.

In the 500 c.c. class George Dance appeared with a new Sunbeam, and Le Vack was mounted on a 490 c.c. H.R.D., who were included with the 24 starters. Eight big twins of Class E also faced the starter, making a very imposing array. After a very hot race with many incidents, L. P. Driscoll (Norton) came in first; C. W. Hough (A.J.S.), second, and E. W. Guyler (490 Dot-Jap), third. Run concurrently with the 500 c.c. class, the results of the 1,000 c.c. class are as follows:—1, Longman (989 Harley-Davidson); 2, J. S. Wright (980 Zenith).



HORSMAN (TRIUMPH) LEADING DENLY (NORTON) IN THE "C" CLASS.

THE TWO HUNDRED MILES MOTOR CYCLE RACES—continued.



VAN HORNE AND HIS NORTON TAKE A DRINK.



C. S. STANILAND (BROUGH) HAS A WHEEL CHANGED AT THE PITS.

BLACKPOOL AND FYLDE MOTOR CLUB.

The President, Mr. Jacob Parkinson, presided over a good meeting of the Executive on Monday, and the all important question of the Blackpool autumn season was discussed, that of the motor races in October.

The Trials Committee are now getting busy and every week brings us nearer to what is anticipated as being one of the biggest things we have seen in Blackpool.

Everything possible is being done to make a huge success of the event, and every precaution will be taken to ensure both the safety of the public and the competitors.

Blackpool, with the opening of the New Club House, is to rank as one of the finest seaside motoring rendezvous in the country, and this autumn a bold bid for supremacy is being made.

The New Club House should prove a great attraction to visiting motorists, and special subscriptions have been adopted so that the visitor can make the Club House a real home from home where a pleasant company is always to be found and plenty of recreation can be found amongst brother motorists.

The town itself has now realised that the Club's activities are such that the commercial value to the town is far greater than the sporting side.

The trophies for competition at the autumn trials are stupendous, and all that is required is the ready and quick response when the schedules are sent out, for by so doing the work of organisation will be greatly reduced, and the success of the event will be assured.

SOUTHPORT MOTOR CLUB.

The Championship Meeting will be held on the Southport Beach on Saturday, September 12th, when valuable cups and medals will be offered as prizes. One open permit has been granted for motor cycles, side cars and three-wheelers, and one closed permit for light cars, touring cars, single-seaters and racing cars. The races include a wide selection of class events, as well as kilometre, one mile and 50 mile races. Full particulars can be obtained from T. H. Halsall, Hon. Secretary, The Southport Motor Club, 55, Hoghton Street, Southport.

THE D'YRSAN CYCLE CAR.

Among the models of the D'Yrsan cycle-car on view at the Motor Cycle Show will be a Shell Racer with a guaranteed speed of 70 m.p.h. and a Wing Model guaranteed to do 85 m.p.h.

The latest models have been designed by Captain Raymond Siran, who has a distinguished military record as a French artillery officer. He is now in charge of the London office at 33, Kinnerton Street, S.W.1, and attends personally to all inquiries.

We hope to review the latest model D'Yrsan in an early issue, as it appears to be a three-wheeler of exceptional merit.

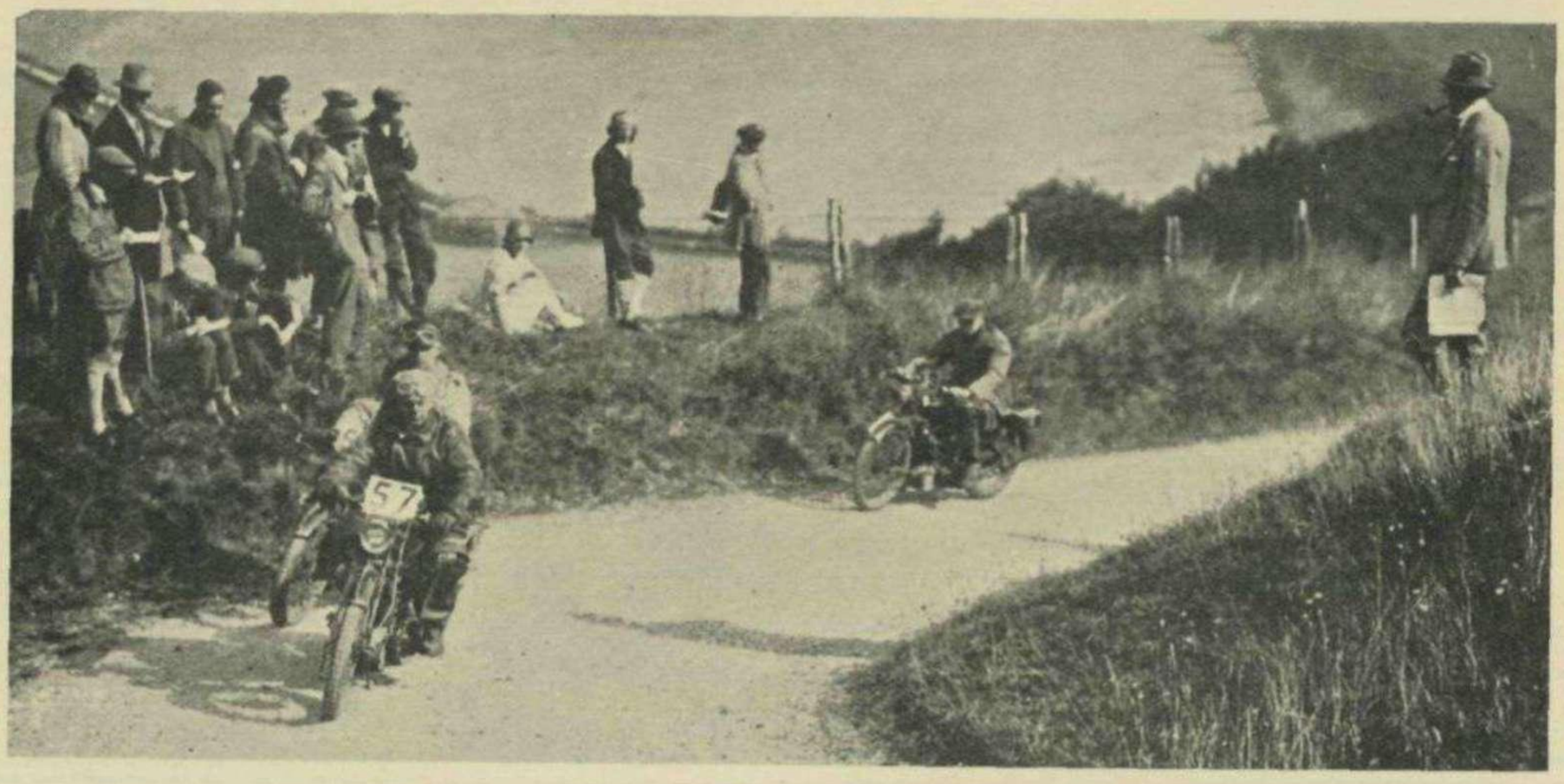
MOTOR SPORT, OCTOBER ISSUE.—The next issue of this Journal will appear on OCTOBER 7th, in order to include a report on the Two Hundred Miles Race and information on the Motor Show.

NOTES ON THE A.C.U. INTERNATIONAL SIX DAYS' TRIAL.

ALTHOUGH not a "sporting event" in the strict interpretation of the term, the International Six Days' Trial calls for more than passing comment as being one of the most strenuous events organised up to the present time.

Eliminating the trade element, which naturally forms the greater part of the entries for such a trial as this, we find it becomes an ultra sporting event for private competitors, the severity of which may be judged by frequent remarks as to the danger of fixing the average speed at 20 m.p.h.

In fact, for sheer continuous excitement nothing could have surpassed Tuesday's run when, with practically no main roads upon which to make up time, the route went along narrow winding lanes, up and down alarming gradients to say nothing of other baulks in the shape of cattle, lorries and occasional steam rollers. The Solo riders were the more fortunate, for they always had the chance of turning into a hedge or ditch, but the lot of the sidecar drivers was often very hard and extremely cautious driving was the order of the day, which left little or no margin for maintaining the average speed.



MIDDLE DOWN HILL. THE FIRST SEVERE HILL OF THE A.C.U. SIX DAYS' TRIAL.

Last Minute Alterations.

The Trial commenced from Andrews' Garage, situated at Southampton Docks, which was perhaps just as well for some of the foreign competitors who decided to do a little more tuning before the actual start. The air was filled with the bark of the Villiers' engines fitted to some of the German machines, and all the riders appeared to be very excited and anxious. When J. Herzogenrath arrived late with an O.E.C. Blackburne complete with open exhaust and no front stand, he soon discovered it would be necessary to do some very quick thinking in order to get ready for the start. The night was a very busy one for the German team and after much telephoning the required parts arrived next morning in time to be fitted. Considering this rider knew no English at all, it is surprising how he managed to get through the first two days. He got absolutely lost at the top of King's Settle, thinking he was much further on the course. It is to be recorded that he and all other Continental visitors rode throughout in a very sporting spirit, and the writer who had to pass and re-pass continually was always given plenty of road, even by Moldenhaver, who was handicapped by his right-handed sidecar. This Norwegian was riding a Harley-Davidson with a flexible sidecar, and though some efforts were made to discourage him to attempt Lynton, he was quite optimistic, but nevertheless his machine proved very difficult to handle in the rough. Of the eleven German entrants, six at least had retired by Tuesday, which was unfortunate, but, as their Press representative remarked: "We do not have such hills in our country." That is to say, they choose easier courses for their trials. Other foreign entries of interest were the D-rad machines and the Neanders, both of German origin. The former were very well driven and only one was observed to fail their sturdy construction appearing to be ideal for the conditions of the course. A Viktoria sidecar, a Solo N.S.U. and a Gillet completed the German entries.

Australia pinned its faith to the A.J.S. machines, the Dutchmen rode B.S.A.'s and the Norwegians had two Harley-Davidsons and an Indian Chief.

Sunday turned out as a day of surprises, for who would have expected to find Heath astride an S.S. 100, Longman on a Panther, or Belfield on a two-speed Scott? Miss Cottle, Miss Foley and Miss Ball were all on their usual mounts, but Hugh Gibson was riding a solo o.h.v. Raleigh, and with Cathrick (Dunelt) was unfortunate in having to retire by reason of indisposition on Tuesday.

Monday's run started off fairly mildly, nothing of any consequence being noticed until Middle Down Hill was reached. Here there was some first-class team work, the Panthers, James and Royal Enfields going up in single file and only a yard or so apart.

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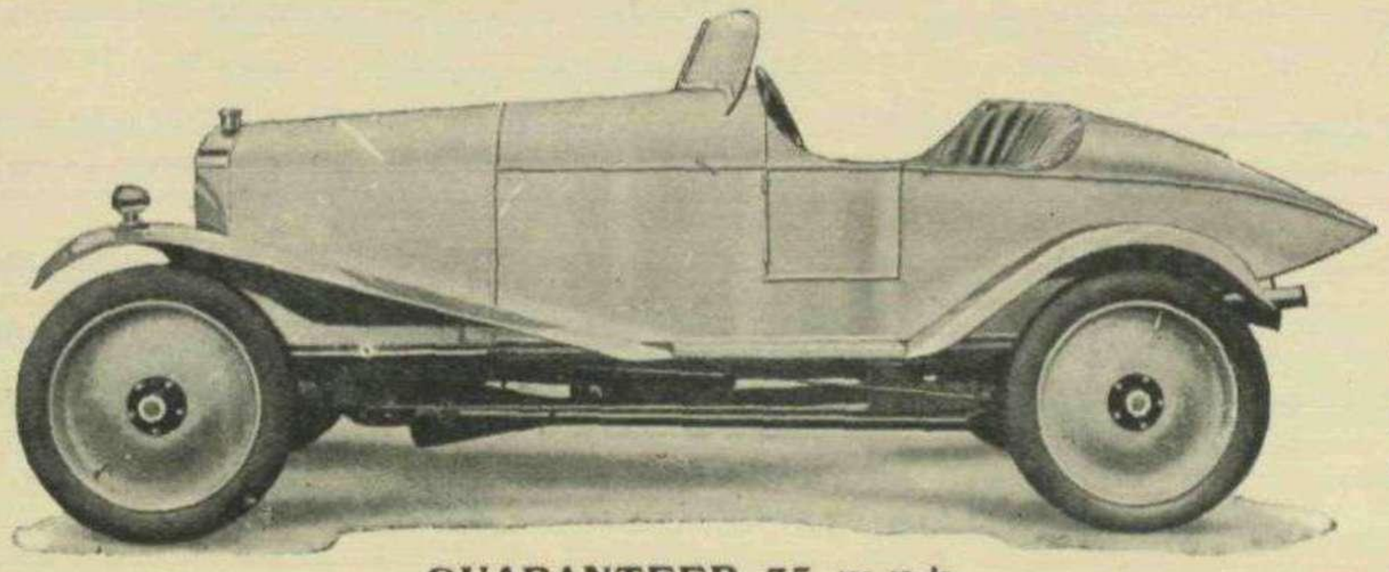
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1922, A.B.C., Cloverleaf, 3-seater, self-starter, many extras, special car, new condition **£88**

1922/23, BELSIZE-BRADSHAW, self-starter, speedometer, etc., taxed, excellent condition .. .. **£65 10s.**

1921, G.N., dynamo lighting, speedometer, in first-class condition, new tyres, bargain **£32**

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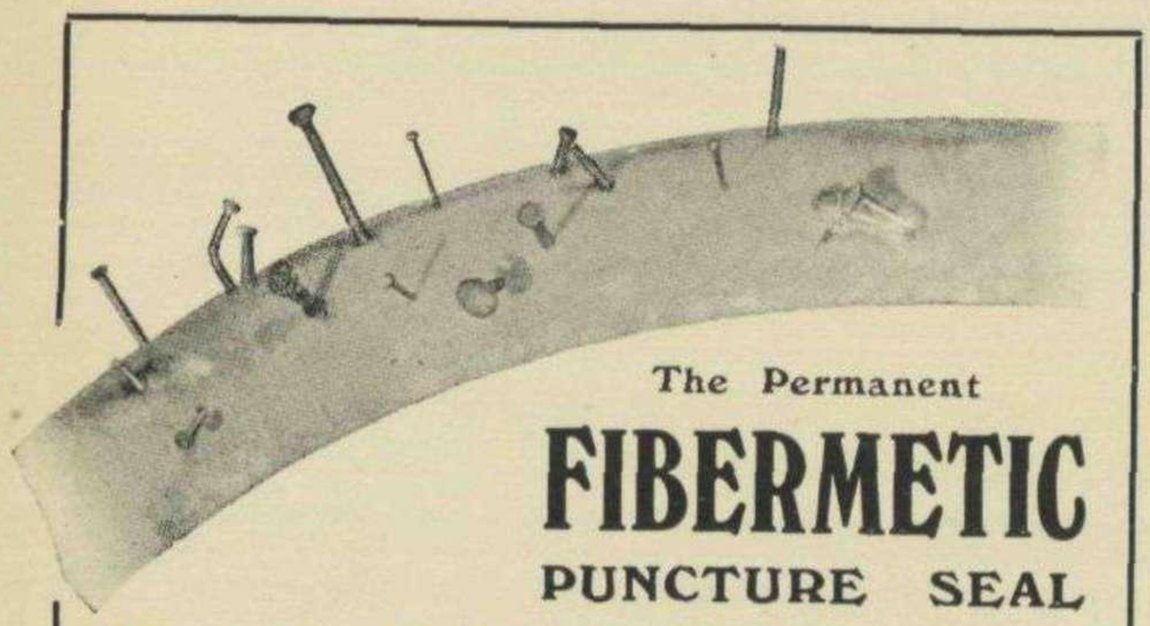
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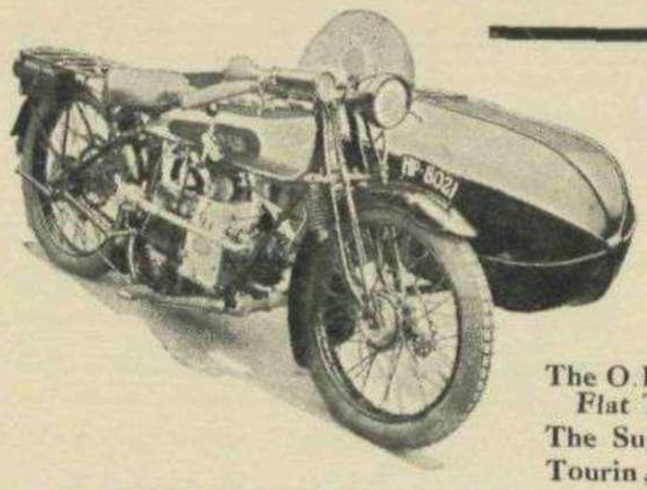
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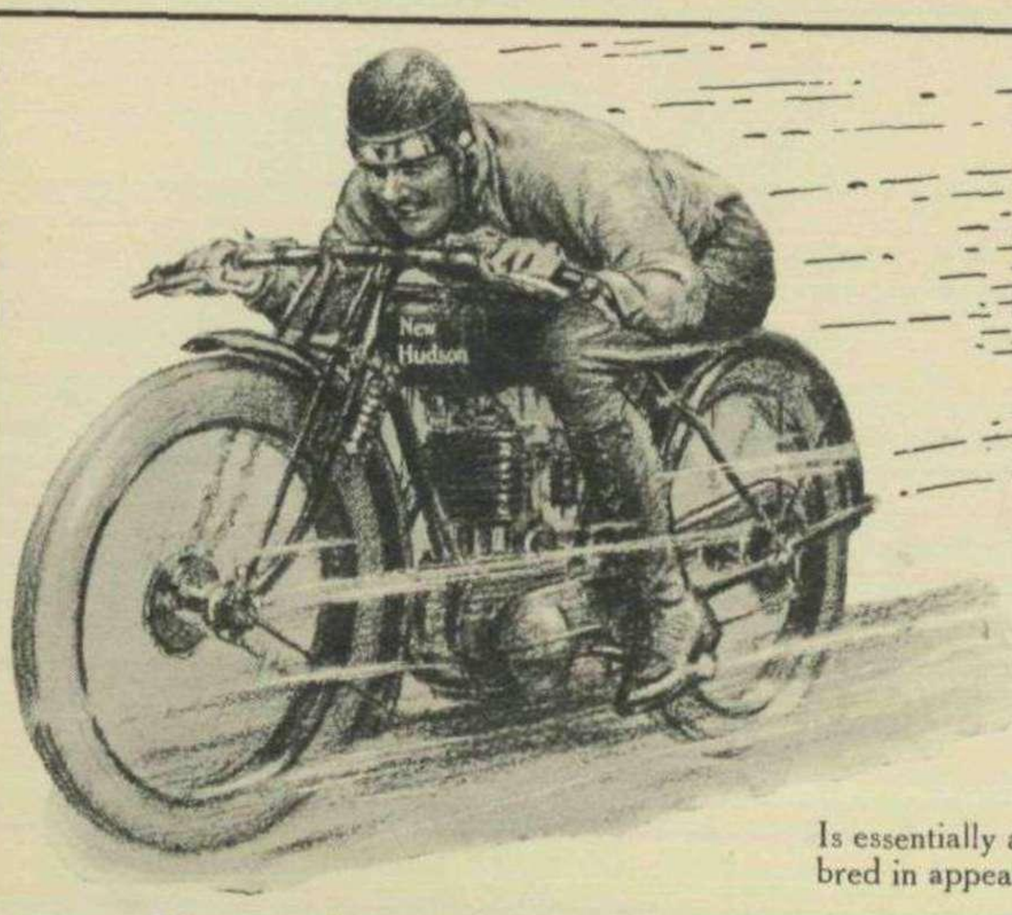
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NOTES ON THE A.C.U. INTERNATIONAL SIX DAYS' TRIAL—continued.

The cloud of smoke raised by Himberg (Neander) was rather distressing to some of the early competitors, as it obscured the hairpin bend entirely for a while. King's Settle Hill, a picturesque landmark crowned by Alfred's Tower, proved the undoing of three competitors, and the next hill—a sharp rise out of Bruton village for 50 yards—meant a quick change into bottom gear if failure was to be avoided. After lunch at Shepton Mallet everyone had checked in except No. 1, Bahr (Neander), who had crashed. Another crash was reported, but this turned out to be a non-competitor who had rammed an official car.

In the afternoon Draycott Hill proved a long and trying climb, the gradient of 1 in 5 combined with a vile surface accounting for many failures; none of the British machines failed, however, which was partly due



MISS COTTLE WITH HER RALEIGH AND SMILE.

to correct judgment in selecting the best ascent and skilfully avoiding the loose portions.

Draycott proved an excellent test for the machines, as after some 30 miles running in intense heat, the engines had a stiff job in front of them.

Wedmore, the next climb, proved very deceptive, and though the percentage of bad failures was small, good driving was essential if the turn at the top was to be taken in correct style. At the summit a regrettable incident, when Bullus (Panther) unaccountably upset the veteran Raleigh rider, G. J. Hamer, of Holland. He was severely injured in the thigh, but first aid was immediately forthcoming from a nearby cottage.

Tuesday's run began in almost tropical heat and the entire day was spent in traversing endless lanes, grass-grown tracks, steep ascents and alarmingly sudden descents arranged in quick succession. In the morning the famous hills of the past were climbed and here failures were few and far between, Porlock, Lynton and Beggars' Roost all seeming quite simple for modern engines when the surface is dry. The ascent of Dunkery Beacon, the top of which was veiled in mist, was long and tortuous, small gullies and large stones helping the gradient to call forth great skill.

A hundred cars and odd vehicles were assembled at Beggars' Roost and an enthusiastic audience cheered again and again as the famous hill was conquered by most of the riders, but it was not until Tuesday afternoon that the real *piece de resistance* of the whole trial came into view. Rising approximately 800 ft. in about half a mile, completely bestrewn with small boulders, Fingle Bridge is undoubtedly an excellent test for the modern motor cycle. The bends and twists are so numerous as to cause one to lose count, all one's attention being needed to manoeuvre one's machine over the surface, which only compared with the rocky bed of some mountain stream.

Here some of the most experienced riders were seen to throw out a tentative leg and the banks were struck by several riders who bounced off large pieces of rock. When this happened there was little chance of recovering as frantic wheel spin ensued and the unfortunate riders would find it impossible to continue the climb. It is good to observe that the majority effected good ascents, the performance of Sibley, on the Rudge, deserving particular praise, for, in spite of one stop, he managed to reach the summit with plenty of revs., if not too much wheel adhesion.

Those who fancied Fingle Bridge to be the conclusion of the day's entertainment were mistaken, for the course continued over miles of rough ground until the main road was eventually reached at Wellington. Near the latter place a Matchless sidecar collided with a lorry, thus blocking the lane, so that for a long period all the sidecars were delayed, thus causing them to be caught in a violent thunderstorm, which certainly had the effect of washing away some of the dust the riders had collected during the day.

At the conclusion of the day's run the absence of W. A. Bouette was discovered, and it appeared that he had crashed near South Molton.

On Wednesday the weather broke entirely and what should have been a delightful journey turned out as a " London-Exeter " over the Welsh mountains. At the moment of going to press the trial is still in progress.



W. CARR (MORGAN) DOES WELL ON DRAYCOTT.

TOURING ON PUNCTURED TYRES.

A Test with "Fibermetic" Treated Inner Tubes.

THE mere mention of claims for puncture sealing compounds is usually sufficient to arouse all the latent scepticism in the minds of motorists, but whatever may have been the results of experiments in the past, there seems to be no real reason why such a sealing compound should fail to justify the claims made by the manufacturers.

Everyone is familiar with demonstrations consisting in piercing tyres with nails after certain preparations have been introduced into the inner tubes; but, after all, this does not constitute an adequate test. It is the road experience which counts, followed by observations on the condition of the tube after it has been filled for months, for it is obviously futile to stop small punctures if the treated tube suffers rapid deterioration in consequence.

With the object of submitting the "Fibermetic" Puncture Seal to a thorough test, we have had a cycle tube, which was fitted with the preparation over 12 months ago, under observation. Callers at the office have punctured it in dozens of places, but on each occasion a small blob of "Fibermetic" has formed to prevent any escape of air. This appearing to be satisfactory, the manufacturers, the Fibrine Sales, Ltd., of 20, Carlisle Rd., Romford, Essex, undertook to treat two car tubes for a road test, and after having punctured one front and one rear tyre with six holes each varying in diameter from one-sixty-fourth to one-eighth inches, the puncture seal was tested on the road during a holiday trip to Devonshire and back.

After running the car for a fortnight, the pressure was found to be the same as after the original inflation. The covers were removed for an examination of the tubes. Each of the intentional punctures was permanently sealed by the small quantity of "Fibermetic" which had percolated through the hole and the preparation had set in a semi-plastic condition. There appeared to be a slight tendency for the tyre valves to clog, but by giving one or two vigorous strokes of the pump the passage became quite clear for reinflation.

We may mention, that to introduce the "Fibermetic" preparation, it is necessary to remove the tube valve and insert the prescribed quantity into the tube with a grease pump, for it is argued any preparation capable of passing through the orifice of a Schrader valve cannot seal a moderate sized hole.

It is not necessary to fill the tubes completely, as the preparation is in a semi-liquid form and penetrates into any holes as the wheel revolves, which, of course, removes the objection of deadening the tyre.

In view of the fact that one may easily risk losing awards in competitons by untimely punctures, the "Fibermetic" Puncture Seal is worth trying, and from our own experience we are of the opinion that it is a satisfactory solution of the puncture bugbear.

CLEARING A CHOKED OIL PUMP.

One of the most perplexing things that can occur on a long run is a complete blockage of the oil supply to the engine pump, and in most cases the driver is confronted with the prospect of getting to the nearest garage somehow, in order to have the base removed to clear the obstruction.

There is, however, an alternative, which we recently put to good effect and which may interest some of our readers. The oil pump was absolutely blocked and suspecting the presence of some matter in the oil the car was stopped on an up-grade, when the engine was switched off and then the car was allowed to run down backwards, with the first gear engaged. This, of course, had the effect of driving the engine backwards and the oil pump, by going the reverse way round, pumped the obstruction out of the inlet side and thereupon it resumed duty when the engine was restarted. Afterwards the journey of 50 miles was completed, after which the base was removed and the offending obstruction—a small piece of waste—was taken out.

CHANGE OF ADDRESS.

On and after 31st August, Messrs. R. S. Inglis, of 29, Upper Marylebone Street, W.1., will carry on their business from larger premises situated at 26, Upper Marylebone Street, from which address they will conduct operations on a more extensive scale. Besides developing the Spare Parts and Service Business, Messrs. R. S. Inglis will be extending the Motor Cycle Sales Department.

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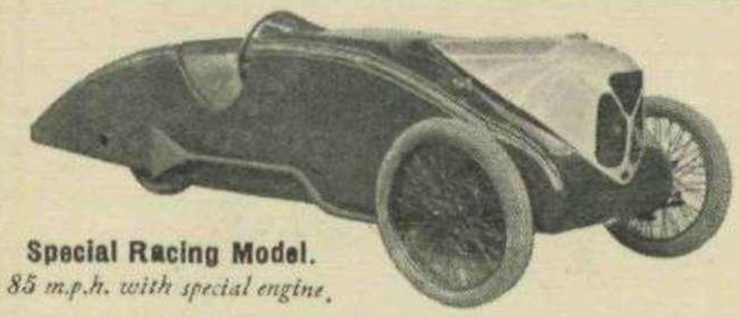
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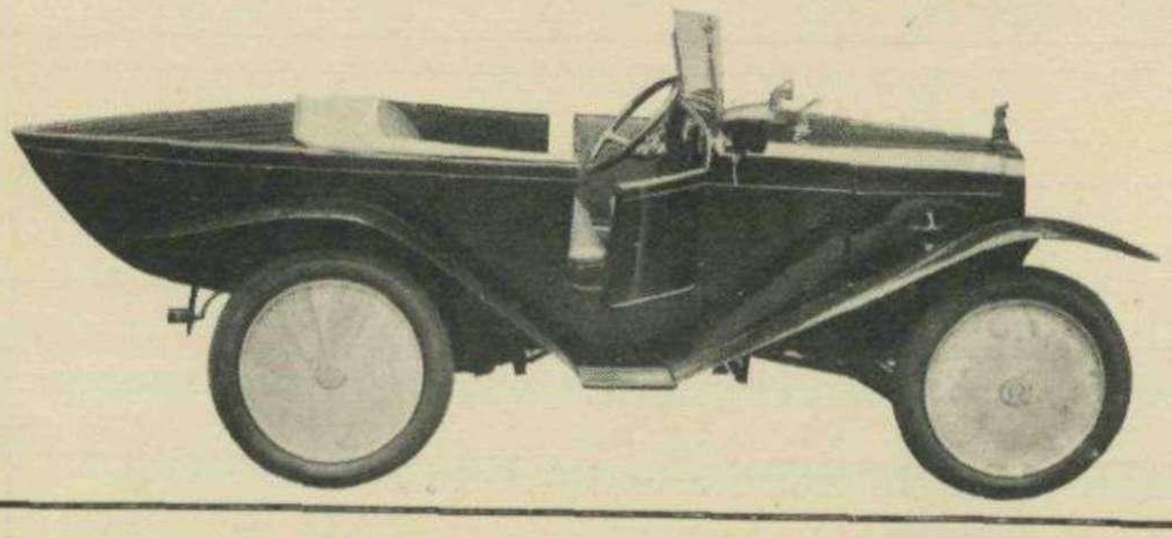
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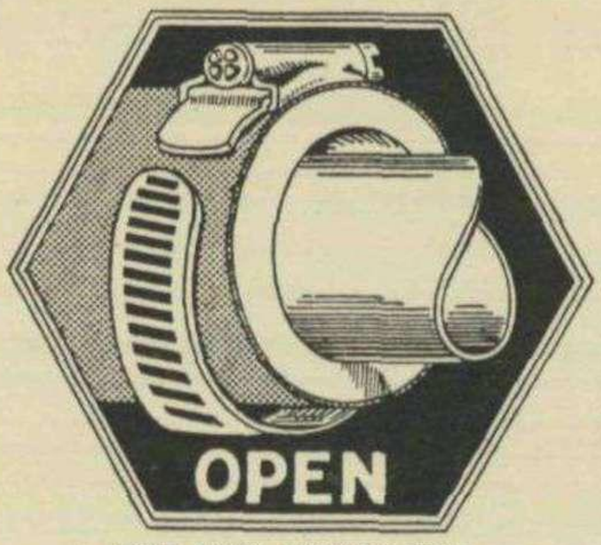
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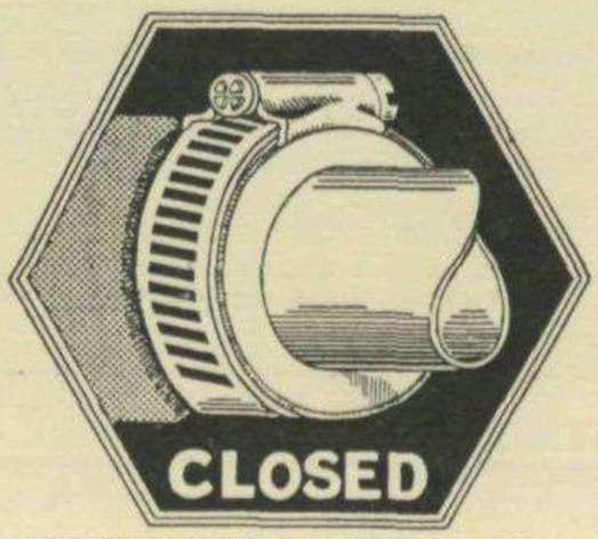
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Round the Clubs



SHEFFIELD AND HALLAMSHIRE MOTOR CYCLE AND CAR CLUB.

The Club's annual 24-hour trial to Holyhead and back was held on July 11 and 12. The route was Buxton, Knutsford, Chester, Colwyn Bay, Conway, Carnarvon and Holyhead. On the return journey secret checks were taken in the following four zones :— Holyhead to Conway, Holywell to Hawarden, Tarvin to Northwich, and Buxton to Fox House Inn.

The results were :—

Solo.—Hutton Shield, J. Wildblood (349 Douglas).

Sidecar.—Dickinson and Darwin Cup, Bovill (980 Brough Superior s.c.).

Car.—Townroe Bowl, C. C. New (14 h.p. Austin).

Silver medals.—G. Beeden (Matchless s.c.), and J. Jenkins (350 Zenith).

Bronze medals.—T. Artindale (Studebaker), Johnson (350 Rudge), Morritt (Ariel Ten), A. Bond (350 Ivy), J. May (499 Dunelt), and M. Parkes (490 Ariel).

Belgian Riders Visit a Sheffield Club.

A team of Liege riders paid a visit to Sheffield from July 17-20, this being a return visit to that paid by a team of Sheffielders last year.

The Belgians were met at Harwich by several members of the Sheffield and Hallamshire Motor Cycle and Car Club, who escorted them to Sheffield, and were later entertained to dinner at the Grand Hotel.

The following day, Saturday, a trial was held over two circuits of a 50-mile course, the riders starting in pairs, *viz.*:—

Valliant (Triumph) and G. Sawer (A.J.S.).
Arnoldy (Triumph) and G. Beeden (Sunbeam).
Morhay (Sphynx) and R. May (Dunelt).
Collears (Triumph) and J. Wildblood (Douglas).
Weerens (F.N.) and J. Cowley (Sheffield Henderson).
Geminick (P.A.) and F. James (Royal Enfield).
Bertrand (Sarolea) and R. L. B. Taylor (Scott).
Drion (Sphynx) and J. May (Dunelt).

There were one or two crashes : Arnoldy, a boy of 17, had a bad skid, but in spite of severe cuts to his face and right hand he continued and finished. The visitors were somewhat hampered by close ratio gears and several burnt clutches resulted (two riders carried spare sets of clutch plates), and also by their lack of knowledge of the district and the language. In spite of these handicaps the Belgians lost only 2,490 marks to Sheffield's 1,420.

A dinner-dance was held at the George, Hathersage, in the evening, when Mr. Turner, the club president, presented the cup and medals to the winners and souvenirs to the visitors. M. Blocouse, the Belgian captain, replied and invited a Sheffield team to visit Liege on July 21 next year, when he promised them a severe trial. He concluded by presenting an illuminated address commemorating the Sheffielders' visit in 1924.

NORTH LONDON M.C.C.

Known as " The Bloater Trial," a 12-hour reliability test from London to Yarmouth and back will be held under the auspices of the North London M.C.C. on September 12. Starting from the Alexandra Palace at 7 a.m., competitors will proceed to their destination over roads free from freak hills or colonial sections, but non-stop sections will be included. The main objects of the event are to further the sport of motoring in the Eastern Counties and to provide a long distance reliability trial without freak hills or colonial sections. One of the most interesting sections of the 260 miles course will be quite close to the finish, and spectators may obtain full particulars from Mr. Alan W. Day, " Claremont," Ballards Lane, Finchley, N.3.

THE LIVERPOOL MOTOR CLUB.

The Liverpool Motor Club will hold their speed trials at Colwyn Bay on September 5, when a large number of trophies are offered for competition and a large entry list is expected.

THE SOUTHPORT MOTOR CLUB.

On August 15 the Southport Motor Club promoted a very successful race meeting on the sands at Southport, very large fields being attracted. Some of the events were open to cars, motor cycles and three-wheelers, the comparisons in speed and cornering being most interesting. Driving a 10.8 h.p. Riley, Mr. N. S. Walsh won the Sporting Speed Event, which was the termination of a reliability trial organised by the Southport Club in conjunction with others in the north country. Mr. G. Pemberton, on a Vauxhall, gained the second place after an exciting contest.

Two Morgans, a Frazer-Nash and a Marendaz Special lined up for the race for unlimited single-seater racing cars, which was won by B. H. Davenport on his Frazer-Nash. A novelty was introduced in the Class 27 race over a kilometre course, a stipulation being that each car should only run in top gear, 15 yards being allowed to get into top gear. None of the competitors complied with the rule. Mr. V. Motion, on an Amilcar, succeeded, however,in engaging top gear when reaching a few yards past the limit line.

A very closely contested race took place between S. H. Taylor on an Alvis and D. M. K. Marendaz on his Marendaz Special, the former winning only by a matter of inches.

ROUND THE CLUBS—continued.

The star turn of the meeting was Mr. D. Higgins, who with his Miller Straight Eight won all classes open to him. Not only was the car extremely fast, but the driver handled it with masterly skill. Unfortunately the engine caught fire when Higgins was leading in the last race, which deprived him of another victory, but the flames were extinguished before any serious damage resulted.

In the cycle races E. Searle (490 c.c. Norton), E. S. Jones (493 c.c. Sunbeam) and S. Hughes (O.E.C. Blackburne), the latter winning the 20 mile event.

The 50 mile race was won by J. H. S. Gardner (Norton) from a field including E. Twemlow (H.R.D.), Simister (Norton) and Spaun (Sunbeam).



SOUTHPORT M.C.: A GOOD FIELD FOR THE MILE RACE FOR LIGHT CARS.

THE WEST OF ENGLAND MOTOR CLUB.

On Saturday, July 25th, the West of England Club held a half-day Trial over a sporting course from Taunton, through Milverton, Wiveliscombe, Dulverton, Tiverton and back to Taunton. The first observed hill was Bulland, which caused little trouble, though a formidable water splash had to be negotiated at the foot of this hill. The chief obstacle was Hangman's Hill, the surface of which was very rough. Especially good climbs were made by L. W. Pearce (Brough Superior), P. V. Hare (Douglas), G. Pettinger (Dunelt) and F. H. Knill (Raleigh). Several solos failed through taking the right hand bend too fast and the two side-car outfits through wheelspin. All the cars made clean climbs, W. O. Thompson (Salmson), and A. E. Walters (Clyno) deserving especial mention. A secret check at the Exeter Inn caused many competitors to lose marks. Pearce found his rear tyre flat and consequently was 12 minutes late at the Tiverton check. Bad luck thus spoiling an otherwise excellent performance. Nearly 50 per cent. of the competitiors failed in the brake test on Buckland Hill, but the solo machines did very well on the whole, Douglas and Raleigh machines being particularly good. Although the entry was somewhat disappointing, it was quite representative and the Trial was voted the best attended and the best organised that had been held in this district.

RESULTS.

THE SOUTH-WESTERN TROPHY (presented by H. T. Kite, Esq.), to be held for one year only. For the best performance by a Motor Cycle, Sidecar Machine or Three-wheeled Cycle Car.

Knill, F. H.	348 c.c. Raleigh.	No Error

A SILVER CUP (presented by Messrs. Standfield and White, Ltd.). For the best performance by a Four-wheeled Car.

Eddy, J.	747 c.c. Austin.	No Error.

SILVER MEDALS.

2.	Hare, P. V.	348 c.c. Douglas.
3.	Illingworth, J. H.	248 c.c. Velocette.
8.	Swabey, B.W.	499 c.c. James.
11.	Croydon-Hawkey, W.	348 c.c. Raleigh.
12.	Knill, F. H.	348 c.c. Raleigh.
20.	Eddy, J.	747 c.c. Austin.

OXFORD MOTOR CLUB.

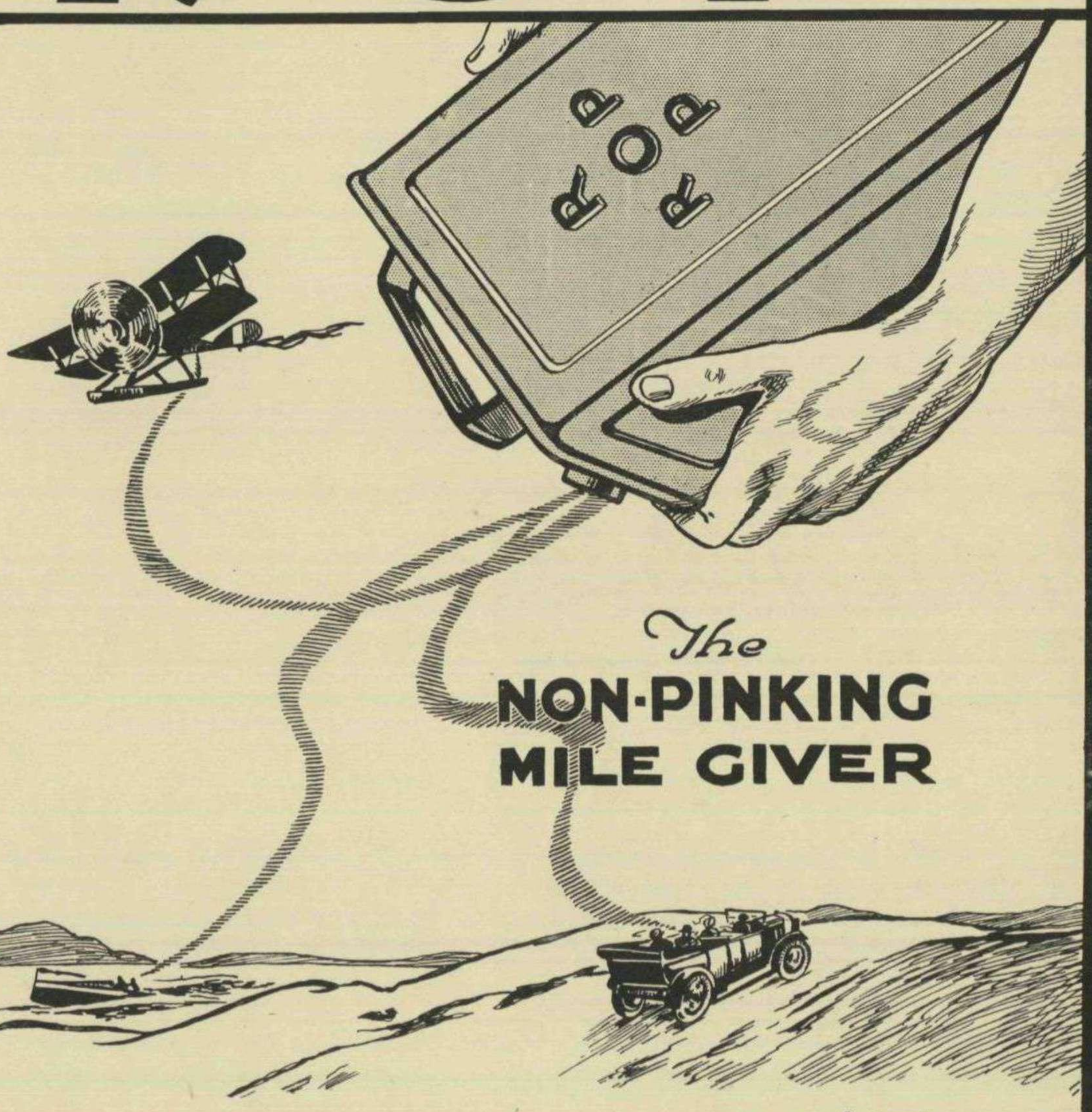
The Club assisted the Oxford Floral Festival Week, August 10th—15th, by contributing to the programme on three evenings during the week. On Monday by giving an exhibition Motor Cycle Football Match between members of the Club; Wednesday, by a Gymkhana; and on Saturday by a Football and Polo Match, also a Trick Riding Competition against members of the Camberley M.C.

The results of the events are as follows:—

Monday.—CLUB FOOTBALL MATCH.—S. Hancox's team beat F. Walker's, 8—0. The losers were greatly handicapped during the first part of the game by playing one short.

Wednesday.—CLUB GYMKHANA.—This event was marred by the weather which was rather showery. However, there was a large entry and a carefully

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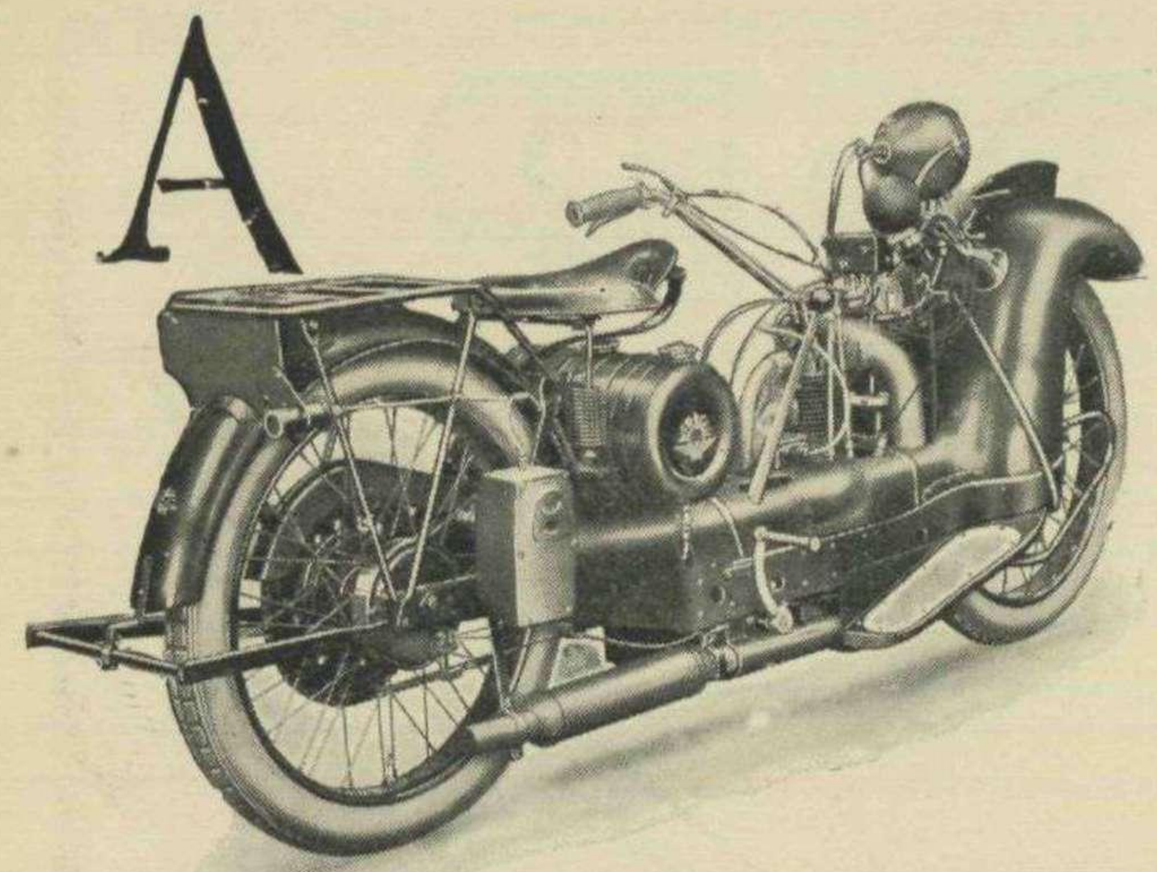
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No other machine at equal price will give you anything like the performance that this new model Ner-a-Car offers you, and every mile you cover will increase your pleasure.

SPECIFICATION:

"C" Model Ner-a-Car, fitted with 348 c.c. O.H.V. Blackburne Engine, All Chain Drive. 3 Speeds, Carb-jector Silencer, M-L Electric Lighting Equipment, Cowey Trip Recording Speedometer.

Price £72 15 0 Complete

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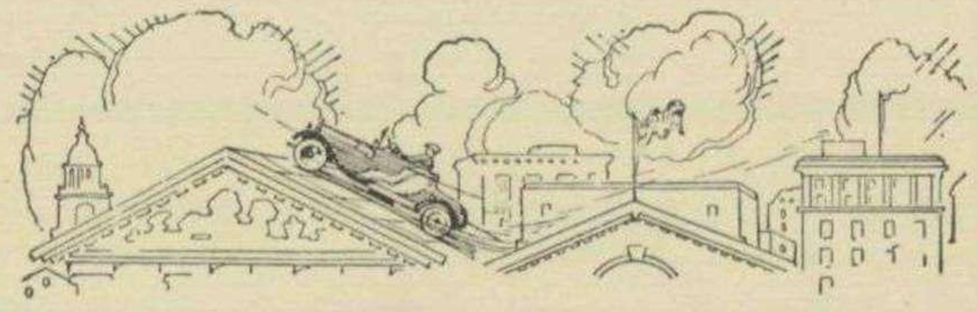
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ADVENTURES OF TELAMITE TEDDY

No. 4.



Touring the Roofs

Telamite Teddy, the motoring crack,
Was asked to meet and have a snack
At the Ritz with the Board of Frill and Pleat
(Rue de la Paix and Oxford Street),
Who said to Ted, as they reached dessert,
"We want your help with a new advert."

"The roof of our store has the sort of slope
To bring tears to the eyes of the antelope.
If you'll drive your car there up and down
It'll make our place the talk of Town."

Teddy agreed, and an early date
Saw a breathless throng watch him tour the slate,
While the cables flashed the latest scoop
"The Law of Gravity's in the soup!"

* * * *

The Motoring World was all amaze!
But Teddy said "I want no praise!
I did what any schoolgirl might;
My brakes were lined with Telamite!"

"TELAMITE" Regd.

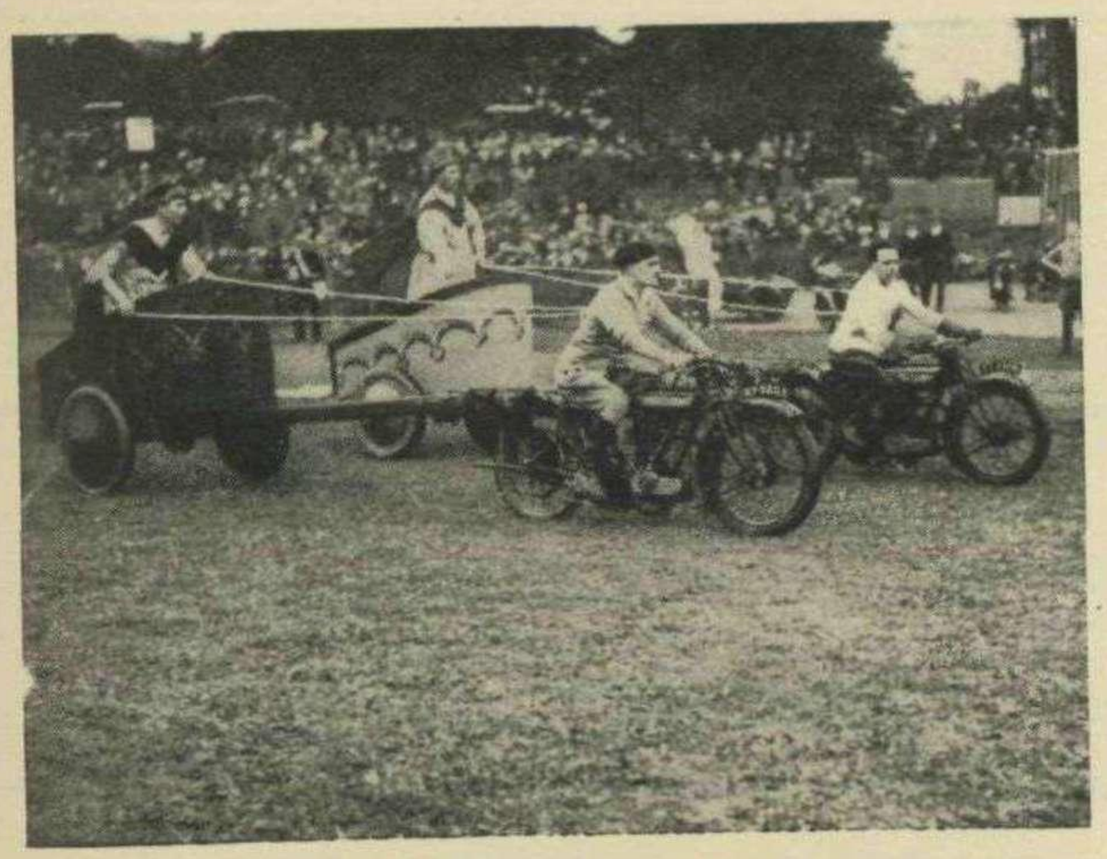
BRAKE LINING

T.25

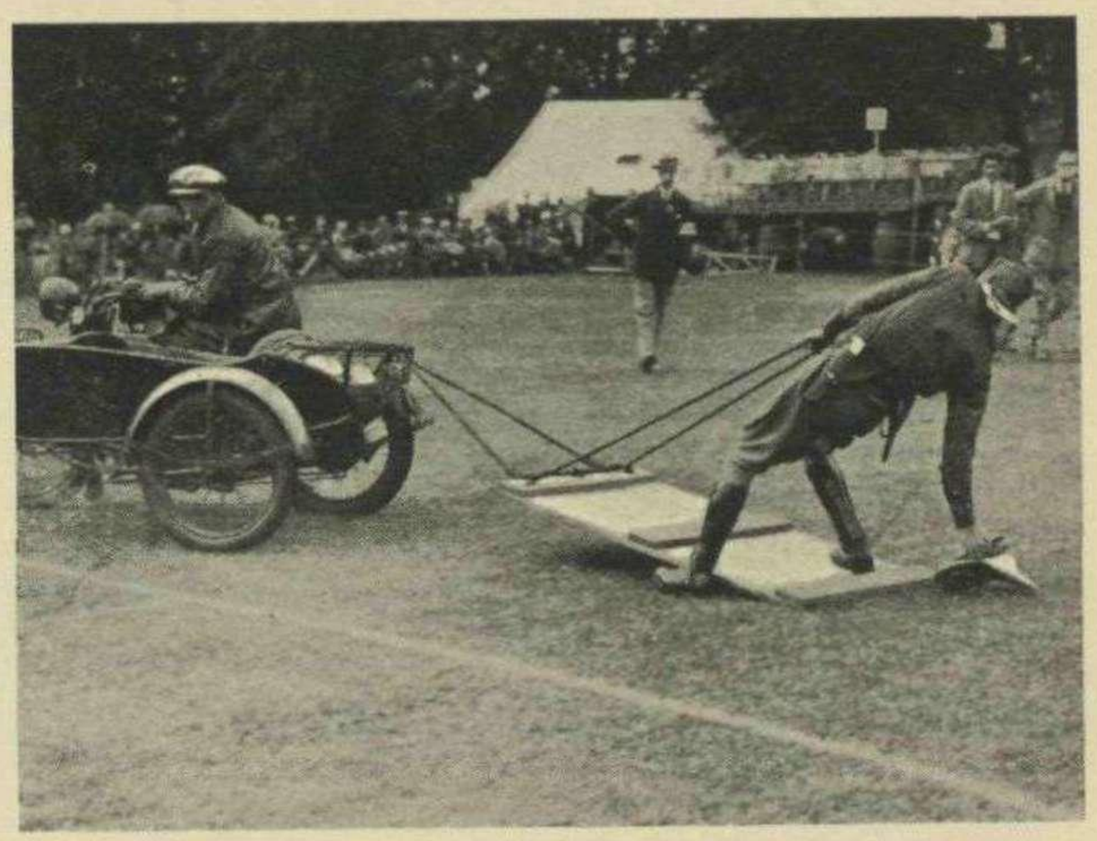
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CLUB NEWS IN PICTURES.

NOTE.—The Editor will be pleased to receive photos of events from Club Secretaries.



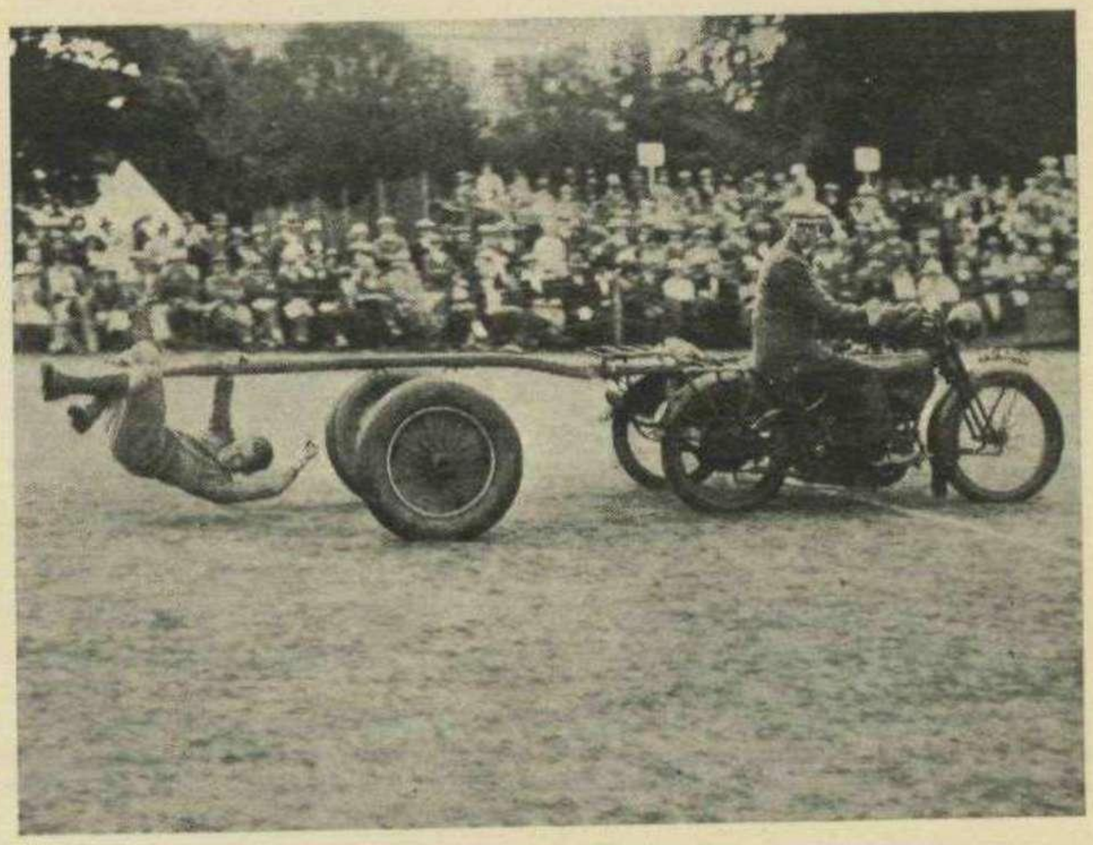
SYDENHAM M.C.C.: CHARIOT RACING AT THE CRYSTAL PALACE.



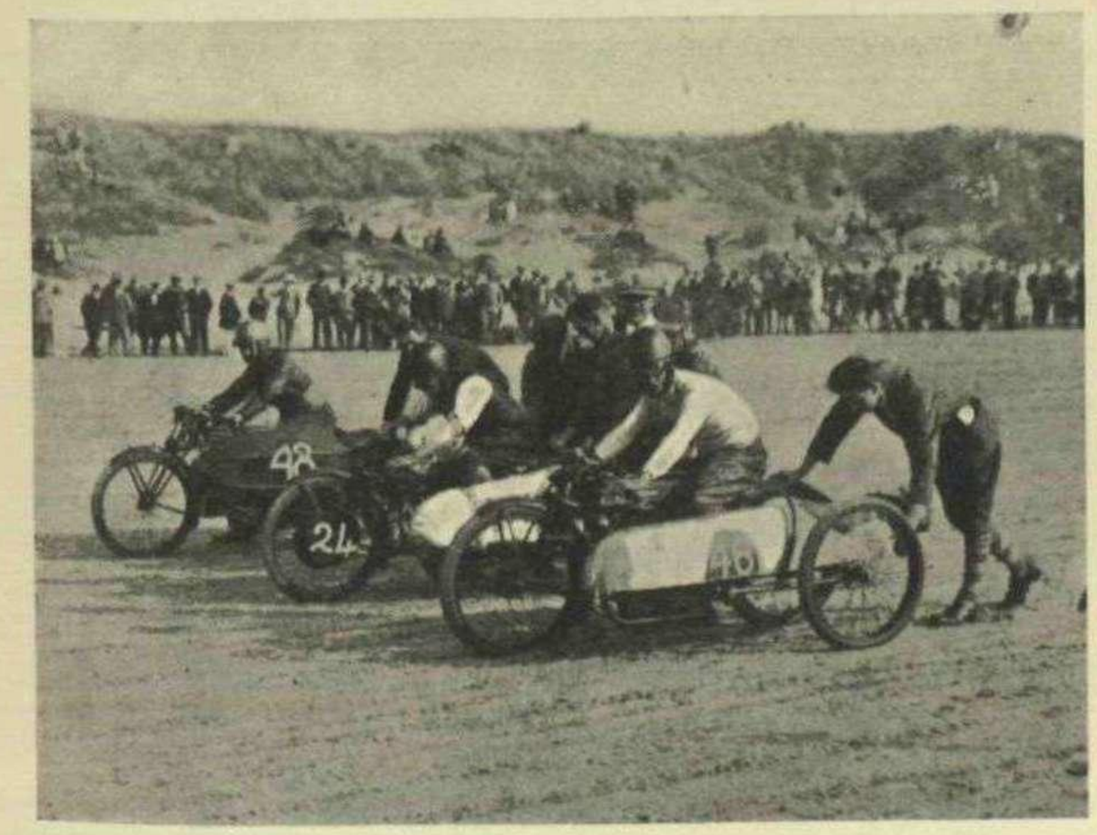
CAMBERLEY RODEO: A SURF-RIDER ABOUT TO FALL.



BASINGSTOKE *v.* CAMBERLEY M.C. FOOTBALL MATCH.



CAMBERLEY RODEO: ONE OF THE NOVEL THRILLS OF THE MEETING.



SOUTHPORT M.C.: 500 C.C. SIDECAR RACE.



SOUTHPORT M.C.: UNLIMITED SINGLE-SEATER RACE.

ROUND THE CLUBS—continued.

selected programme, which proved most amusing to the spectators.

Turk's Head: G. Fletcher (Bradshaw). Blondin Race: A. F. Gordon (Enfield). Obstacle Race: L. A. Welch (O.K.). Scalp Hunting: T. A. Barrett (Cotton). Potato Race: E. A. P. Dawson (Sports Morris). Musical Chairs (Cars): A. Barrett (Humber). Musical Chairs (Cycles): S. Hancox (Cotton).

Saturday.—FOOTBALL MATCH.—Camberley M.C. *v.* Oxford M.C. This proved to be a very keen and even game and was watched by a large crowd of spectators. After a hard struggle in which T. A. Barrett (Cotton) made an outstanding performance, the Oxford M.C. won 2—0, T. A. Barrett and F. Smith each scoring a goal. The winning team were as follows:—S. Hancox, T. A. Barrett, A. C. Read, F. Smith, H. Pigou, G. Heavens. A demonstration of Trick Riding next took place. The S/cr. Class being won by — Harley, Coventry Eagle (Camberley). In the Solo Class the judges had a most difficult task to pick the winner, it being a toss up between T. A. Barrett, A. C. Read and G. Fletcher. These three riders were called upon for a further demonstration, A. C. Read (Cotton) proving the winner. In the Polo Match which followed, Camberley beat Oxford 3—1. This was Oxford's first attempt at this game, during which two of the team came to grief, H. Plaister and T. A. Barrett (A.J.S.) capsized, Barrett being slightly cut; later the frame of F. Smith's and S. Hancox's new Hudson Sidecar broke, which put them out of the game.

The Club wish to take this opportunty to thank those members of the Camberley M.C. who so kindly took part in these events.

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