

The Auto., June 4, 1914.

# The AUTO

- MOTOR JOURNAL

"The Times of Automobilmism."—*Press opinion.*

Founder and Editor: STANLEY SPOONER.

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RACING AT BROOKLANDS ON WHIT-MONDAY.—The fight for the Fifth 75 m.p.h. Short Handicap. Mr. A. B. Kensington on the Humber and Mr. E. Remington on the Bedford-Bulck leading the field on the home banking.

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**The AUTO** (YELLOW COVER).  
- MOTOR JOURNAL

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**Contributions.**

Articles on touring and technology, also communications of general interest to motorists, are especially invited from the Colonies.

Photographs of beauty, interest, or curiosity are also desired from all parts of the Kingdom and overseas.

All letters should be addressed to the Editor.

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**Advertisements.**

Advertisements for next Thursday's issue must reach this Office by first post on Monday of the same week. Small corrections can be accepted up to 6 p.m. on Tuesday. All communications must be addressed to the Manager.

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**Passing Events**

The Law of Libel. The law of newspaper libel, and the urgent necessity of its amendment, may appear to be subjects foreign to the purpose and policy of the AUTO., but we are certain our readers will pardon us for making a passing reference to a letter which appeared in the columns of the *Morning Post* recently from Mr. Walter Judd. There is at present awaiting a favourable turn of the Parliamentary ballot a private Bill, the purpose of which is to amend the law. When this Bill will reach the stage of a first reading we do not know, but in the meantime Mr. Judd points out that it is vitally necessary to the newspaper interest that his amendment to the present Act should be incorporated. This amendment reads as follows:—

"AN ACT to amend the Libel Acts in so far as they refer to libels by Newspapers:

"In any action hereafter brought against a Proprietor, Printer, or Publisher of a Newspaper in respect of any defamatory matter published therein, the Defendant shall be at liberty at any time, or from time to time, to apply to a Judge or Master of the Supreme Court for an Order that the Plaintiff do give security for costs of his said action, and if security be not given within a time named in such Order the action shall be dismissed.

"The Judge or Master shall make such order as aforesaid if it appears that the said defamatory matter was published in good faith and without express malice.

"'Newspaper' in this Act shall have the same meaning as in the Newspaper Libel and Registration Act, 1881."

We are most entirely in accord with the letter and the spirit of Mr. Judd's suggested amendment. By no means do we desire any alteration in the law which would assist in degenerating the liberty of the Press into license, but there is no gainsaying the fact that as the law stands to-day it is a case, so far as the newspaper is concerned, of "Heads I lose, tails you win." Even an Editor is not infallible, and however careful, however conscientious, however painstaking he may be, sooner or later the slip occurs which will bring him within the four corners of the law of libel. Now, if all people were reasonable and just, we might be content to let things stand as they are, because, in most cases, when the slip is made of which we have spoken, a little explanation and possibly an apology atones. In a large number of cases, however, the aggrieved party is a man of straw, and there are plenty of solicitors about who so long as the "aggrieved party" can find a few pounds to pay them their fees, will take a lot of chances contingent on the ultimate result of the case. He brings his action because he has nothing to lose, while he may easily gain materially, especially as the sympathies of juries do not seem to run on the side of the newspaper. If he wins, he collects a comfortable sum by way of damages in solatium of a wounded reputation, which often never existed to sustain injury, and his costs are paid. If he loses, then the unfortunate newspaper proprietor has to whistle for his costs, as we know from bitter experience.

**The Home Office and Police Traps.** In view of the great activity manifested of late on the part of the police in many localities in the trapping of motorists, it is interesting to note that the Home Office has it in contemplation to issue another circular to local police and magistrates in deprecation of trapping on unfrequented stretches of road. Apparently, the last circular letter issued by Mr. McKenna has had the reverse effect to that intended, and we can only hope that his next effort will not be taken to mean: "Don't nail his ears to the pump."

Decentralisation has a great deal to recommend it in very many cases, but in others it is detrimental to the interests involved. In the matter of the control of the police, this latter would seem to apply with considerable force. The Home Office has no power at all to interfere with police matters save in London, where the police are directly under its control. In other parts of the country the police are controlled either by the Standing Joint Committees in the case of county forces, or by the Cor-

poration in that of county boroughs. That means that within the four corners of the law the police authorities, or the committees which control them, have an absolutely free hand. In a way this is good, since it tends to fix responsibility and prevents the making of the well-worn excuse of hampering instructions from a central and perhaps remote Government department. But when that is said, all has been advanced that is possible in its favour. This question of the trapping of motorists is a case in point, which illustrates the need of some central control of the police which will prevent the improper exercise of a power, or the unduly harsh administration of a law, which experience has shown to be either obsolete or unnecessary to the public safety. When Parliament passed the Motor Car Act of 1903 the motor vehicle was practically an innovation. As a vehicle it was comparatively crude, while the public had not become used to its speed and had no knowledge of its controllability, which is synonymous with safety. Therefore, the legal limit of speed was fixed at twenty miles an hour. Since the passing of the Act, however, traffic has undergone an even greater revolution than the vehicle itself—so much so that the word "traffic" nowadays means motor traffic. One of the consequences of the revolution has been that the legal speed limit is now regarded as something utterly superfluous, since it has no real bearing on public safety, and the one offence of driving to the common danger has come to be recognised by all enlightened people as all that matters. Yet, under our decentralised police system, we still see the guardians of the public peace (save the mark!) occupied in lurking in ditches, armed with cheap stop-watches, intent upon the catching and conviction of motorists who may be committing a merely technical offence against a law which is recognised as useless and one which is disregarded by everyone, from the Prime Minister to the humblest motor cyclist. Good as the system is in some of its details, it is certainly most deplorably weak in others.

\* \* \*

**Trials and "Club Runs."** We are not in any sense spoil-sports, nor have we the slightest desire to put any curb on any legitimate form of competition, particularly when it is devised with the view of helping along the automobile movement. But we cannot help thinking that the time has come when the matter of long-distance road trials—or "club runs," as some are called—must be reconsidered in its entirety. In the early days of automobilism these runs or competitions undoubtedly had a great progressive value, since they enabled faults of design and construction to be diagnosed under the stress of what we may call extra arduous touring conditions. To this form of event we doubtless owe a great deal of the modern reliability of the motor vehicle. All these things have their day, however, and the one that was useful yesterday may become even undesirable to-day. We do not altogether like to say it, but in this category must be placed the events we have in mind—they are anachronistic and a nuisance, while their

only use is to afford opportunities to firms in the trade to advertise the fact that they have gained cups or gold medals, which have absolutely no real meaning to the purchasing public. We are thinking particularly now of the recent London-Edinburgh-London run of the Motor Cycling Club, an event in which no fewer than 270 motor cycles, cyclecars and cars took part. Now, this event has done its full share in the development of the motor vehicle. At the time it was first conceived by the Club, the motor cycle was a crude affair, and of the forty or fifty enthusiasts who at the time took part in it, not 50 per cent. ever saw the end of the journey between the capitals. Troubles of every kind were rife, and in the cure or elimination of these the participants learnt much that has been applied to practice, and has done probably as much as anything to bring the motor cycle into its present state of perfection. But since that state has been reached and the motor vehicle, cycle or car has become a machine which can be put into the hands of novices with a fair certainty that it will run the four hundred miles between London and Edinburgh without any particular attention, entries have increased until they reach well into the third hundred. That means a procession, as has been pointed out by a writer in one of the dailies, no less than forty-five miles long, strung out along the Great North Road. What the effect must be on residents by the roadside may be better imagined than described. It really means that over the Whitsun holidays the northern highway witnesses a veritable motor orgy. It would not be so bad if all the competitors would observe the amenities. We are quite aware that the club officials do all that is in their power to minimise the inconvenience which must be caused to the inhabitants by the noise of this vast procession, but they are not ubiquitous, and thus there are many abuses rampant which have no cure save in a complete reconsideration of the club's attitude towards such competitions. The motor cycle is not, generally speaking, the quietest thing on earth at the best of times, and by the working of some obscure law of psychology even the degree of noise inherent to the machine is not enough for the average motor cyclist, and to increase it he must needs ride with an open exhaust, thus increasing what is at best a nuisance to something bordering on the intolerable. If the police only did their duty, the open exhaust would soon vanish, not only from competitions but from the road entirely.

It is not, however, on the ground that some participants in these events are inclined to make road hogs of themselves that we feel the time has come for a drastic revision of the manner of conducting trials and competitions. Entry lists have swollen to a degree that makes it impossible to satisfactorily oversee and carry out these events. Further, it matters not how well these duties are carried out—and we will say that the M.C.C. has aptitude amounting to positive genius in this direction—these trials have become by their very nature a positive nuisance to the public, motoring as well as non-



motoring. If they proved anything we might find it possible to continue to extend our support to them. But they prove nothing, save, perhaps, that Carlyle's dictum relating to the population of the world is as true to-day as when he uttered it.

❖ ❖ ❖  
**"Taxicab Colds."**

In the ordinary way we have little patience with those individuals who are for ever engaged in the discovery of new diseases or new methods of catching the old ones. But there is a letter in the *Times* of the 30th ult., from Mr. Bernard Wilson, which is distinctly interesting to the users of taxicabs in particular and of motorists in general. For some time it has been noticed by medical men that people who habitually make use of the taxi as a means of rapid transit are peculiarly susceptible to colds, and in his letter Mr. Wilson advances a theory which certainly seems to "get there," as they say on the other side of the Atlantic. He says:—

"The ordinary speed of a taxicab, if unimpeded by other traffic, is 17 miles per hour. Travelling at this pace a considerable displacement of air takes place, which creates a strong following draught or suck back of wind, which covers the occupant of the cab with the fine London dust, which has such an inflammatory effect on the respiratory organs. In addition to the dust, which is sufficiently poisonous, the cold draughts caused by the motion of the cab is likely to produce a chill which may take any form from catarrh to pneumonia.

"Users of taxicabs in London should never have the hood at the back open. If sufficient air cannot be obtained with the hood up, and the side windows open, it is only necessary to lower the front windows behind the driver, and a cool breeze, free from all dust, is created, which will make travelling pleasant on the hottest day of an English summer."

Certainly there seems to be more in this suggestion than at first meets the eye. No average healthy person ever takes cold through swift passage through the air, provided proper attention is paid to dress, but it is a fact that much motoring in London does conduce to mysterious colds, and the theory advanced by the letter we have quoted in part seems to satisfactorily account for the phenomenon. The "tip" given may well be stored up in the minds of motorists who use their own cars for town work, as well as by those who have developed the taxi habit.

❖ ❖ ❖  
**The Lee Fatality.**

The coroner's jury appointed to enquire into the recent fatal accident to a cyclist at Lee, who was knocked down and killed by a motor car which did not stop after the accident, has returned a verdict of manslaughter against some person or persons unknown, a verdict in which we heartily concur. Unfortunately, it seems as though the "person or persons unknown" will continue to preserve their anonymity, since the most vigorous enquiries by the police, who have received all possible assistance from the A.A. in their efforts to trace the unfeeling occupants of the car have been fruitless. The police are not to blame for their failure to trace the dastardly miscreants who drove over the unfortunate deceased and went their way, leaving him to die by the roadside. The greaser which was picked up near the scene of the accident was not much in the way of a clue, seeing that it was a

pattern common to several thousand cars and could have easily been replaced within an hour of the occurrence. Even a house to house visitation of all owners of cars would probably have been abortive, even if it had not been out of court for other more obvious reasons. Therefore, it seems that the only punishment these cowardly road-hogs will receive is at the hands of the public opinion which rightly execrates them for their cowardice. That, we fear, will sit but lightly upon people of their class, who are much more concerned as to their own paltry hides and pockets than with the whole mass of a public opinion which rightly damns them. So long as nothing transpires to bring them to the bar of justice, they will doubtless continue to feel highly pleased with the cleverness (!) which has kept them out of the clutches of the law.

The case under notice has excited a good deal of comment, for the reason that, first, it occurred in London, and, second, that the circumstances were so tragical that opinion was aroused at once. Unfortunately, however, the driving off by motorists after they have been involved in accidents is becoming far too common for our liking. Scarcely a week goes by but we hear of a case of this kind of thing occurring in some part or other of the country. Sometimes, as in the recent Hampstead case, the driver is traced and brought to book, but in the greater number he succeeds in getting clear away. We fear that nothing can be done to stop the practice—for it has almost become a practice—and so long as all sorts of people affect the cult of the car, so long shall we get all sorts of conduct. We can only hope that the general mass of the public appreciates that conduct of the kind referred to is reprehended by the motoring community to an even greater degree than by non-motorists.



**Road Improvement in the Isle of Wight.**

TOWARDS a scheme involving an expenditure of £50,000 which has been adopted by the local rural council for the improvement of about 40 miles of roads radiating from Newport, Isle of Wight, the Road Board is making a grant of £10,000, and will also lend £30,000 free of interest.

**A North Country Toll-Bar To Go.**

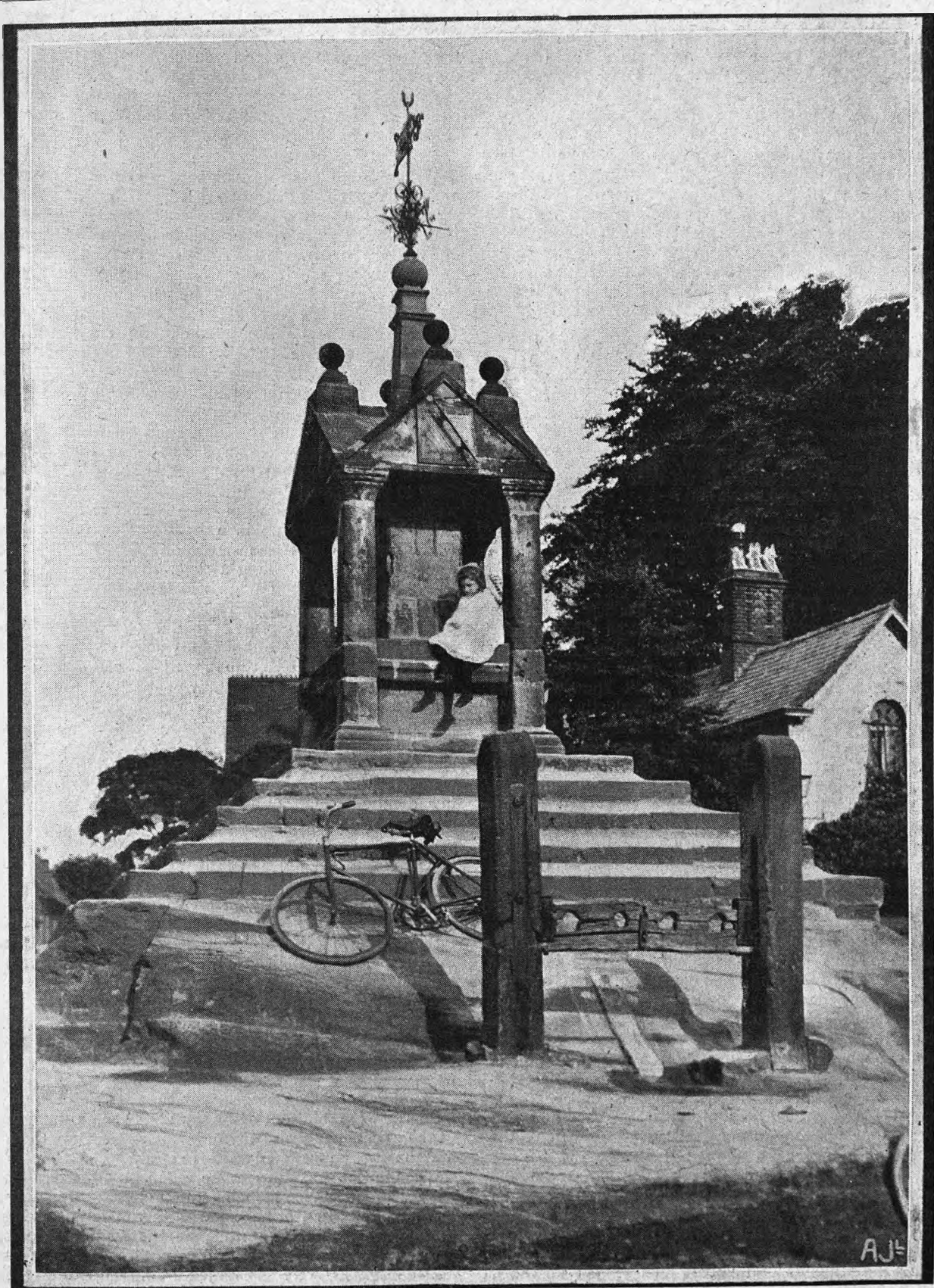
A MIDDLESBROUGH toll-bar is to be abolished. Marton Road, the main southern outlet from the town, is at present a private thoroughfare, and has a toll-bar. The Corporation have arranged reasonable terms with the land owners for the purchase of the toll-bar and the necessary land, and Marton Road is now to be widened from 35 ft. to 60 ft., which, when completed, will greatly benefit through as well as local traffic. At the recent Local Government Board inquiry at Middlesbrough, the R.I.A. supported the application of the Corporation to borrow £3,422 to carry through this work. There is another road, three miles out of Middlesbrough, which is also privately owned, and has three toll-bars; the Corporation are endeavouring to purchase and improve this.

**A Map Exhibition.**

In conjunction with the Ligue Internationale des Touristes, the A.A. and M.U. have organised a Map Exhibition at Earl's Court. It includes maps and guide books, ancient and modern, from all over the world.



**WITH THE CAMERA AND THE CAR.**



The Market Cross, Lynn.  
703

## THE PASSING SHOW.

I AM always in hot water. Everybody seems to run foul of me about something I have written or left unwritten, so that at times I feel very much like wee Jemmy Wallace, fra' Pollockshaws. I never knew Jemmy, but I believe he was at one time something of a character in Glasgow, where he used to sell bootlaces and matches and, if you asked him how he fared he had a whole formula of the things that were wrong, which he invariably ended by saying: "An' I dinna ken what to dae." I am in trouble again this week, for the Ford Co. has written to the Editor about me and I have had a narrow escape of getting the sack as a consequence. If it were not that they have coupled my colleague "Roundabout" in the complaint, I believe I should have got it right enough; only that the Chief wasn't feeling equal to resisting the almost tearful appeals for mercy from both of us, so the end of it has been that we have got off with the defaulters' sheet marked: "Admonished."

The letter which has brought about the trouble is as follows:—

"Sir,—Perhaps the best reply to the queer conceits of your contributor, 'Cynicus,' and the pathetically quaint comments occasionally expressed by 'Roundabout,' both upon the subject of Henry Ford, or in connection with the Ford Company, is to be found in the following well-known lines:—

... after all  
The noblest answer unto such  
Is perfect silence when they brawl."

"Yours faithfully,  
"FORD MOTOR CO. (ENGLAND), LTD."

I believe my friend and colleague has also quoted the text of this letter on his own page, but as the Ford Co. are whales on publicity I don't mind doing it again for them. I certainly don't intend to argue the point with them, because, for one thing, I don't know what the point of it all may happen to be. Evidently somebody connected with the company feels rather badly about something or other, and simply had to get his annoyance off his chest, so to say, and has let himself down rather badly in the doing of it. It is not for me to worry out the why and wherefore of the thing, so I shall content myself with just one remark. If "the noblest answer . . . is perfect silence," then why, in Heaven's name, break that silence? I don't think I have ever come across a more pathetic instance of self-stultification than this.

\* \* \* \*

I wonder whose life would be worth living if about half the cranks and faddists could have their way with us? We may be a long while dead, and therefore desire to put off the time of our demise for as long as possible, but I, for one, am inclined to agree that it would be better to be dead for a long time than alive for a month if all the "anti" suggestions made in the public prints were brought into active operation. However that may be so far as concerns our ordinary, everyday life, it is certainly true of the motorist. Fortunately for us and for the cause of progress, the restriction mongers are allowed their say, and it is forgotten in two days' time. It is as well that they should be allowed to let off steam by proposing all sorts of impossibilities. It probably keeps them from doing worse things than writing to *The Times*—even now that the price is only a penny. They might—probably would—join the Militants, and embark on a window-smashing, picture-hacking campaign, and give the police quite a lot of trouble. I know that Continentals are aghast at the

so-called liberty accorded to the British people to say exactly what is in their minds. Why, a German told me the other day that in Berlin you can't make faces at a policeman under three months hard labour, while it is anything up to three years for repeating the German equivalent of "Taffy was a Welshman" in relation to *Seine Excellenz der Herr Finanz-Minister*.

With all submission I think they are wrong. We all know what happens if you leave the safety-valve out of the design of a boiler, and there is no parallel more apt than the comparison between the feelings of the people and a steam boiler. Let them first talk and they will never kick over the traces. Compel them to bottle up their feelings and there will be an unholy row one day. But I have not got to the real point yet. I saw a statement made by the coroner in the Lee motor fatality case that he had received a letter from someone, advocating that outside the London area every motor driver should be compelled, between sunset and sunrise, to call at every police station he passes and lodge with the authorities an identification card, with his name, the official number of the car, and the time. It is not disclosed whether the driver would have to pay a fee for the privilege of doing all this, but as the official mind does not acknowledge the principle of entering anything up in a book without taking fees for it, I take it that if the suggestion ever bears fruit we shall have to pay a shilling a time. Then some of us will make money out of guide books and works on "How to get from London to John o' Groat's without passing a police-station." To my way of thinking, the idea does not go far enough, since its author seems never to have heard of the Bertillon system of anthropometric measurement, or of finger-print identification, or any of the modern aids to the detection of crime. It would be easy for every police-station to keep records of the finger-prints and measurements of every applicant for a driving license, and then, when we called to deposit our identification cards, the policeman in charge would be able to verify our identity beyond doubt, and there would be no chance for the man who was using a "stumer" card.

Then there was the genial lunatic who wrote to one of the halfpenny papers the other day and made the brilliant suggestion that every motorist should be compelled to have the registration number of his car moulded on his tyres so that in the event of accident and the driver making off, all the police would have to do would be to look at the road surface, copy the number into their note-books, and immediately they would be in a position to lay the offender by the heels. There was also the gentleman, who is, so far as I know, still at large, and whose brain-wave took the shape of a suggestion that cars should have to carry a gross or so of metal discs stamped with the car's number on a string between the front dumb irons. Then, in the event of the car colliding with anything, the string would break and the discs be scattered on the roadway. The capture of the delinquent was thus to be made quite certain—he could take his choice of being run to earth through the incriminating discs, or he could elect to take his chance of a policeman arriving while he is trying to find the missing disc. It all sounds very silly, but if these amiable cranks were prevented from ventilating their ideas, they might, as I have said, join the Militants or even take to writing poetry.

CYNICUS.



## WHIT-MONDAY AT BROOKLANDS.

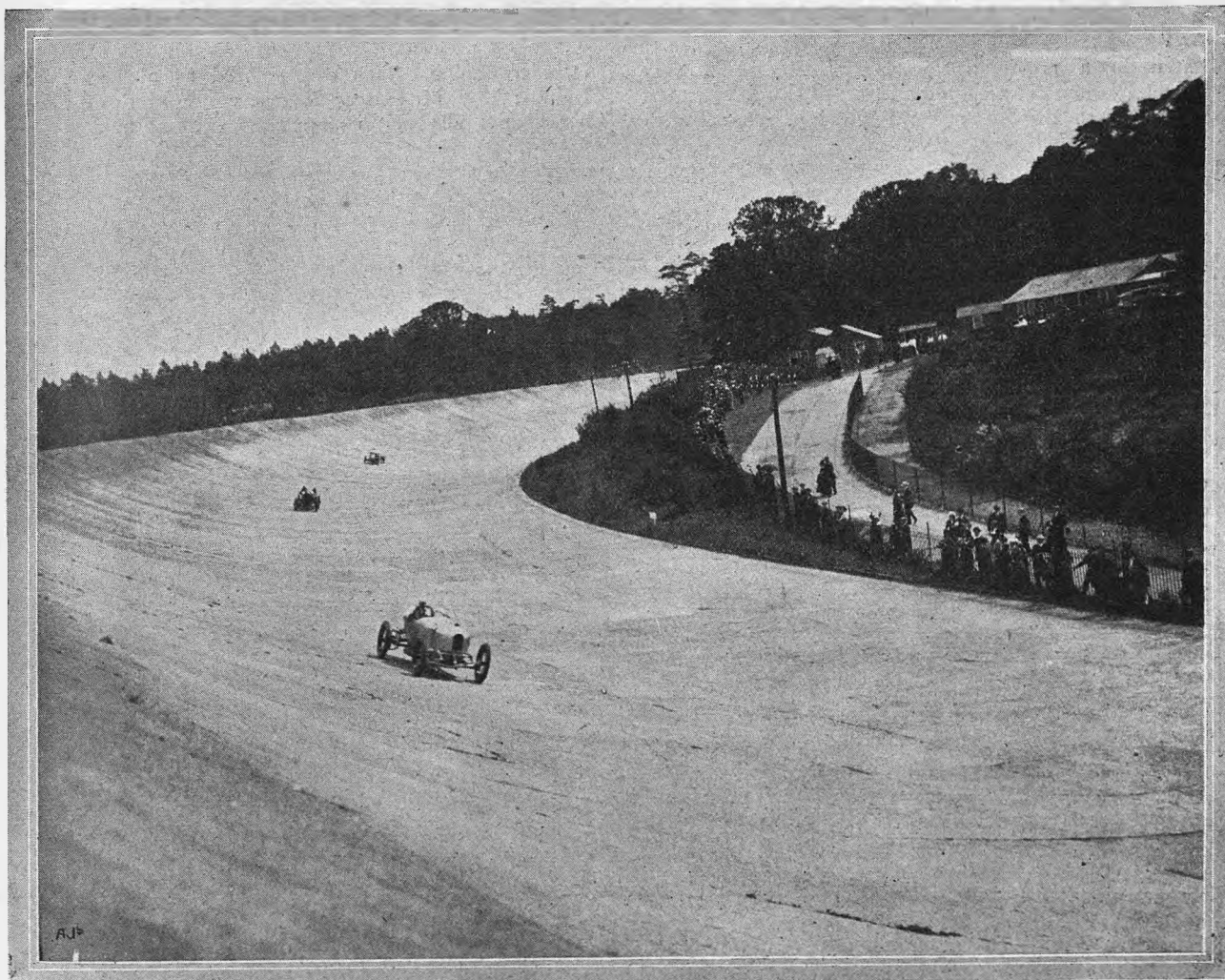
MOTOR racing as a sport is undoubtedly becoming more and more popular, if the size of the crowd attending the meetings at Brooklands is any indication. Again—as on Easter Monday—fine weather favoured the meeting on Monday last, and an enormous crowd filled the public enclosure. This latter formed a marked and pleasing contrast to the adjoining Members' Hill, which in comparison looked quite deserted. On this occasion the increase of public interest is all the more noteworthy, as it cannot be put down to the presence of any "crack" drivers or cars. Indeed, the professional element amongst the competitors was never so completely absent as last Monday, when all, or nearly all, the best-known men were away in the Isle of Man. The amateur element, therefore, predominated to an extent probably never seen before at a B.A.R.C. meeting. It must be admitted, however, that the driving was of an exceptionally high order; true, there were exceptions, but so few that they may safely be said to have proved the general rule.

Although the races produced somewhat better finishes than at the previous meeting, it cannot be said that the

handicappers have yet found their level. Indeed, there was a considerable amount of dissatisfaction on the part of several entrants, some of whom did not compete, simply because they maintained that the handicap did not give their cars even a sporting chance.

With fourteen events on the programme racing started punctually at 12 o'clock, and those who did not arrive in good time missed the best and most interesting sport of the day.

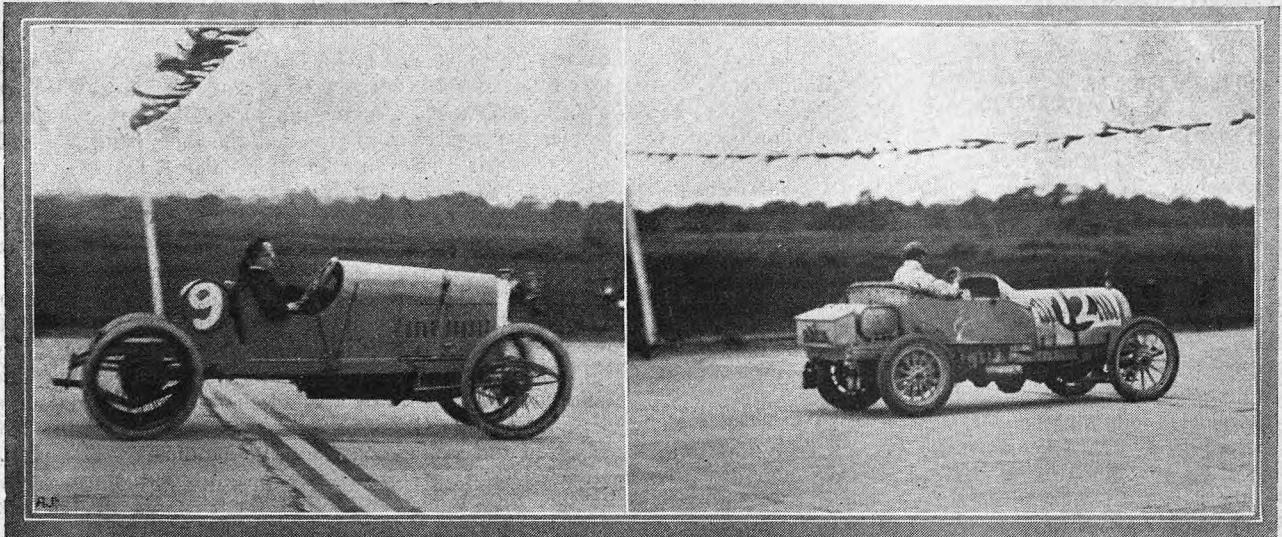
The first heat of the Private Competitors' handicap resolved itself into a fine race, the outstanding feature of which was the Itala's remarkable pace. At speeds close up to if at all short of 110 m.p.h., this car overtook the field, and ran second by a small margin to Mr. Malcolm Campbell's 15'9 Gregoire, a car that showed a fine turn of speed and made good use of its handicap. The Hon. R. Westenra's Hispano-Suiza was a good third. Mr. Read's fine Vauxhall did not seem to be in its best form. In the second heat Mr. O. D. Pollak's Gregoire, the same car that Mr. Campbell had driven on Easter Monday, was much fancied, but was handsomely



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**LEADING THE FIELD ON THE HOME BANKING AT BROOKLANDS ON WHIT-MONDAY.**—Mr. H. Darby on the 48.6 h.p. Mercedes, Mr. H. W. Cook on the 41.9 h.p. Isotta-Fraschini, and Mr. F. R. Samson on the 41.9 h.p. Mercedes in the order given, racing for the 16th 100 m.p.h. Short Handicap.



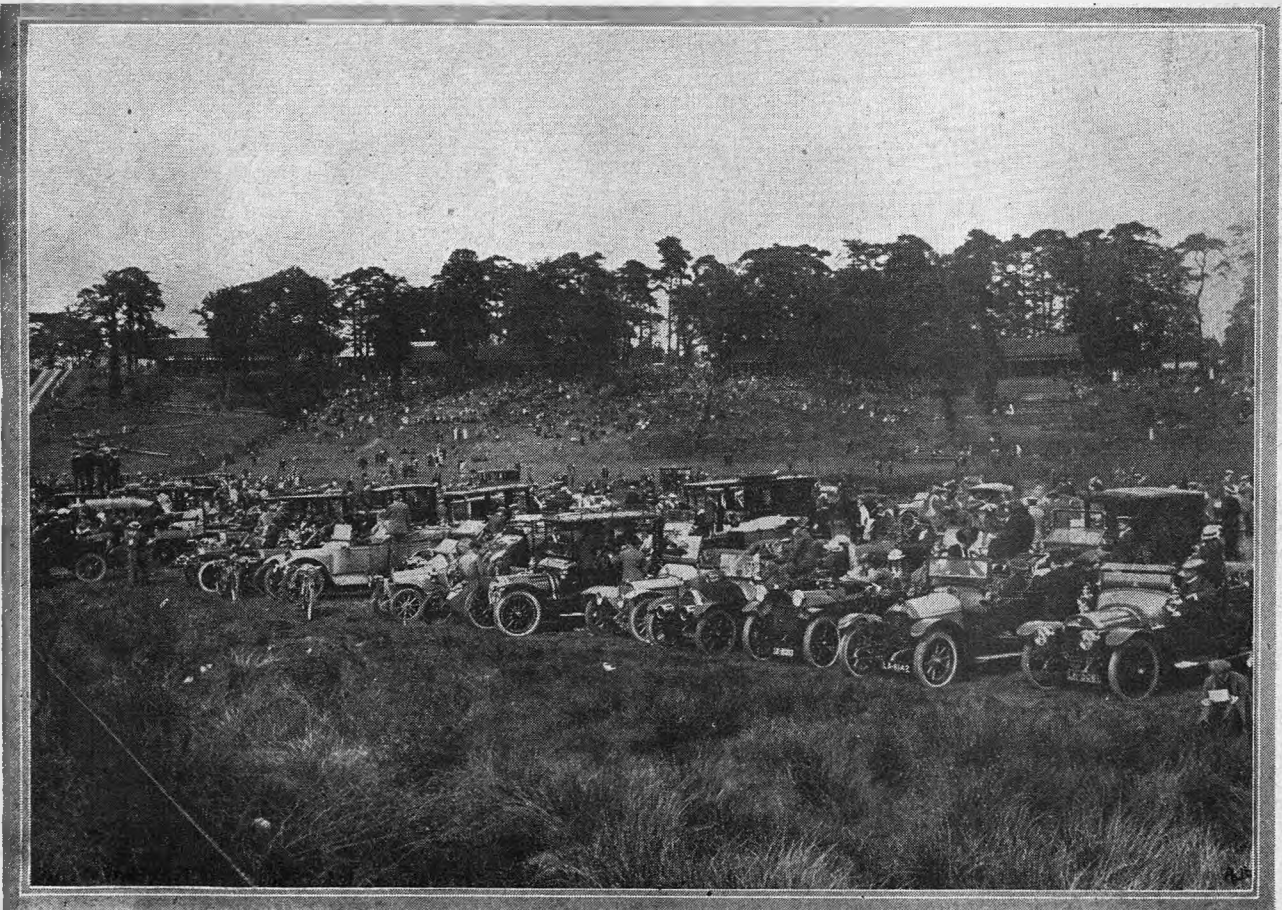


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**A COUPLE OF WHIT-MONDAY BROOKLANDS WINNERS PASSING THE FINISHING LINE.—On the left, Mr. Malcolm Campbell on the 15.9 h.p. Gregoire winning the first heat of the Whitsun Private Competitors' Handicap. On the right Mr. O. Morris on his 41.9 h.p. Daimler winning the second heat of the Whitsun Private Competitors' Handicap.**

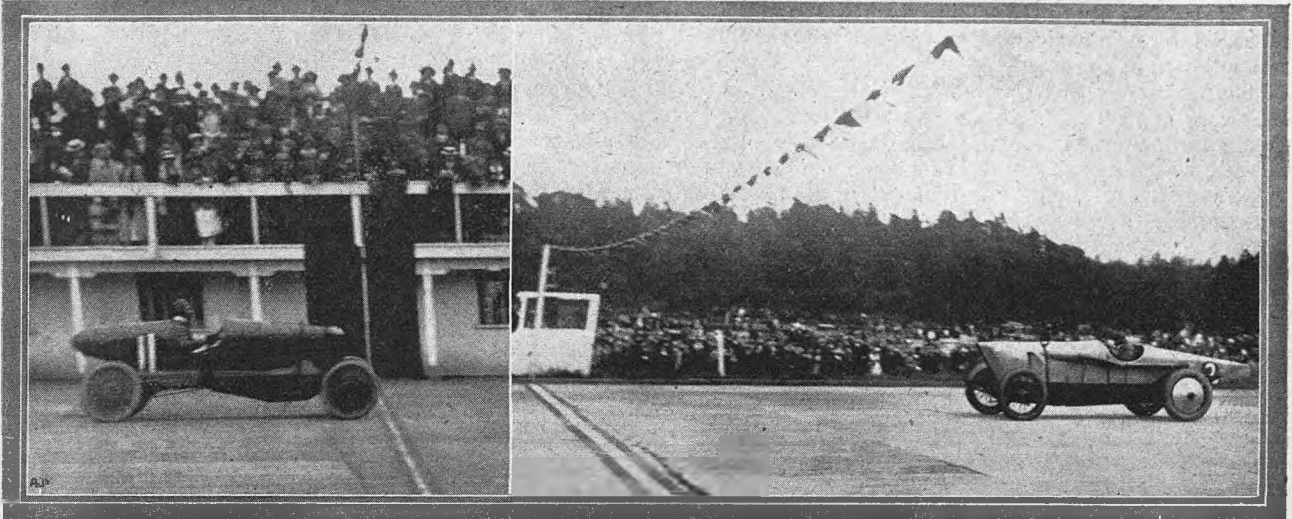
beaten by a nondescript car, consisting of a very ancient Darracq chassis—reminiscent of Gordon-Bennett days—equipped with an old 36 h.p. poppet-valve

Daimler engine. This car, entered as a "41.9 h.p. Daimler" by Mr. Oscar Morris, was a kind of "dark horse," and although its appearance by no means com-



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**From the back of the Judges' box at Brooklands Whit-Monday Race Meeting. Looking left towards the members' hill.**

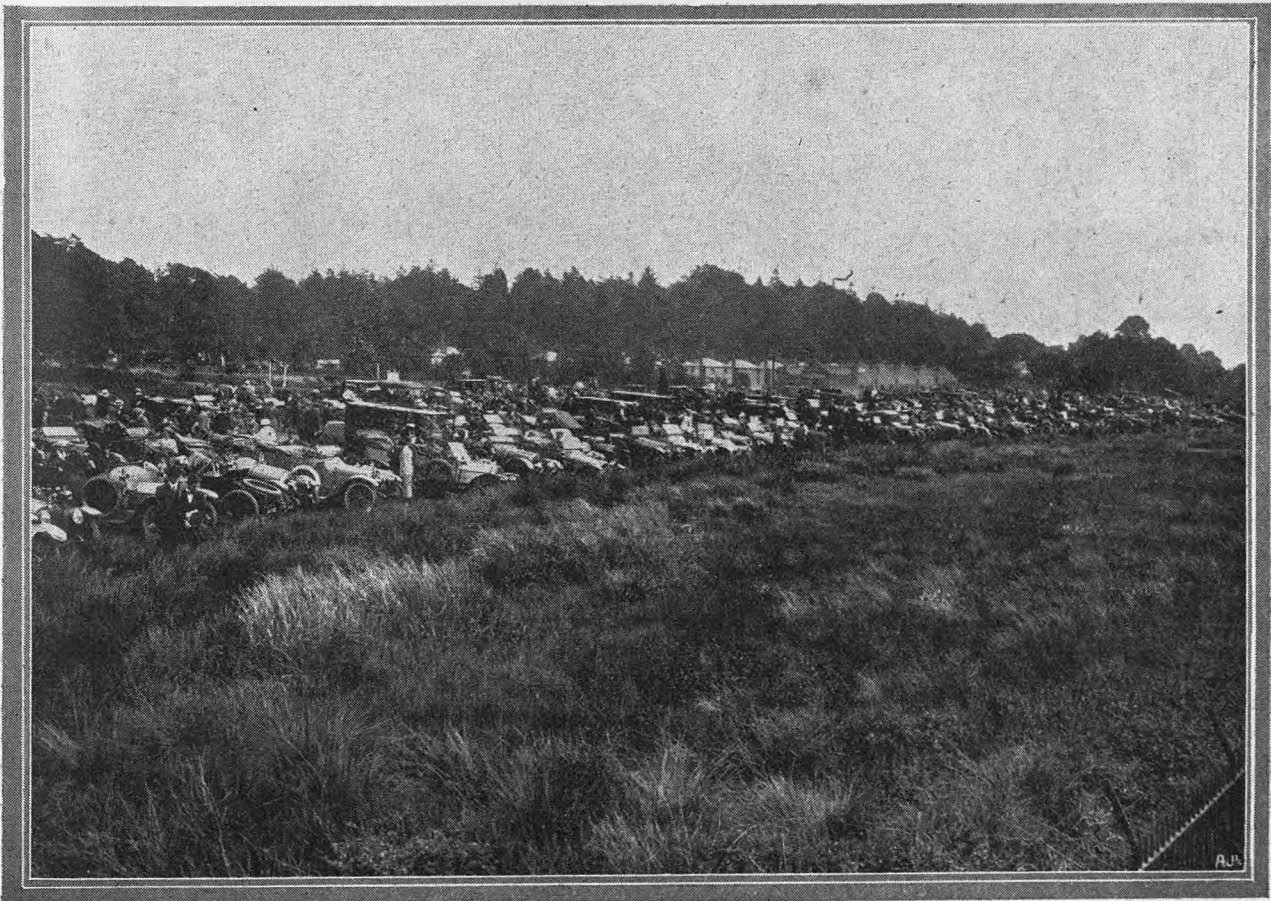


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**A COUPLE MORE WINNERS AT BROOKLANDS ON WHIT-MONDAY.**—On the left Mr. Geo. Bullock on the 9'1 h.p. Winco winning the Whitsun Light Car and Cyclecar Handicap. On the right Mr. R. Robertson-Shersby-Harvie finishing the Second Lightning Short Handicap on the 38'8 h.p. Itala.

pared favourably with that of any other car on the track, its pace in this heat left no doubt as to which car would win the final. Two Hispano-Suiza cars entered in this heat ran very consistently, and finished fourth and fifth close up to the third of Mr. A. B. Kensington's Humber.

No less than 33 runners started for the Short Motor Cycle race. As the machines could not be distinguished, it was impossible to follow the race intelligently; all the interest was therefore concentrated on the finish, which proved to be a fine tussle between Kickham's Douglas



"Auto." (Yellow Cover) Copyright.

From the back of the Judges' box at Brooklands Whit-Monday Race Meeting. Looking right towards the fork.



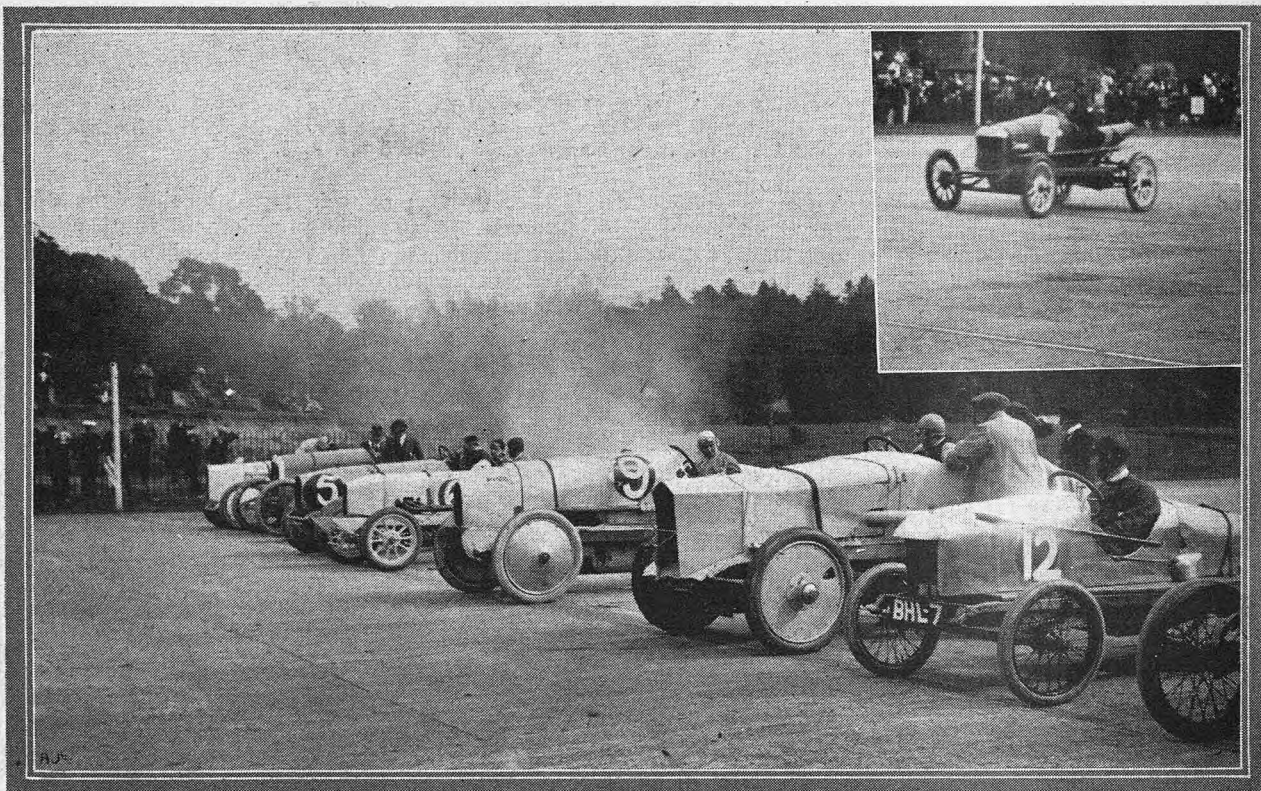
and Holzapfel's Regal Green, in which the former just managed to retain a slight lead of a yard or less. The rest followed in a procession.

The result of the Short 75 m.p.h. Handicap is not likely to escape the attention of stewards and handicappers. While the conditions for this race clearly stated that it was open for cars of a speed of 75 m.p.h. or less, Mr. Hind's 24.8 h.p. Berliet won the event from scratch with comparative ease at an average speed of 75 $\frac{3}{4}$  m.p.h. From the spectacular point of view it was certainly the best race of the afternoon, for it provided an exciting finish in which six cars came down the straight close upon each other. Mr. E. Remington's Buick was a good second, while Nicolson's Hispano-Suiza third, Pollak's Gregoire fourth, Haywood's little Singer and the four-cylinder Hillman all crossed the line inside one second.

come up to expectations. The same is true of the Hon. R. W. Beckett's 15.0 h.p. Lion Peugeot, driven by Mr. C. L. E. Geach.

Four only of the five entrants left the paddock for the Short Lightning Handicap, in which the scratch car, Mr. Holder's fine Vauxhall, was a non-starter. With four runners only the race was easy to follow. It resolved itself into a tussle between Mr. Malcolm Campbell's 3-litre Sunbeam and Mr. Read's Vauxhall, in which the latter had the best of it, and a match between Toop on Mr. Gordon Watney's 3-litre Peugeot and Mr. R. R. S. Harvie's Grand Prix Itala. After leading for over a lap, the Peugeot was overtaken by the Itala, and in turn beat the other pair. The cars crossed the line in this order about 60 yards apart.

Some "merriment" was caused by the competitors in



"Auto." (Yellow Cover) Copyright.

**THE LINE UP AT THE START FOR THE FIFTH 75 M.P.H. LONG HANDICAP AT THE WHIT-MONDAY BROOKLANDS MEETING.**—Inset above is the winner, Mr. B. Haywood, on the 9.8 h.p. Singer, passing the finishing line.

In the 100 m.p.h. Short Handicap, Mr. Morrison's Rolls-Royce—the car that competed in the first Alpine contest two years ago—was a notable absentee. The event proved another victory for Mr. Hind's 24.8 h.p. Berliet—this time at an average speed of 74 $\frac{1}{4}$  m.p.h.; Mr. Malcolm Campbell at the wheel of a very fine 15.9 h.p. Th. Schneider car was a good second; while H. Darby on Mr. Gordon Watney's veteran Mercedes—age 11 years—close up third. This latter is in one respect the most remarkable car at Brooklands; like good wine, it seems to improve with age, and it is now fully five miles an hour faster than last year. Another fine Mercedes that showed good pace—and was placed fourth—is Mr. Dewis' 41.9 h.p., a 30-80 h.p. chassis of modern design. Mr. H. W. Cook's huge Isotta-Fraschini misfired badly and did not

the next event, the Light Car and Cyclecar Race, by the "crawling" pace as compared with the speeds in the previous race. Bullock on the Winco had things all his own way, and was across the line before any of the others had entered the finishing straight. He had averaged no less a speed than 60 $\frac{3}{4}$  m.p.h., which is certainly not bad for a twin-cylinder 86 by 93 mm. engine. One of the drivers, Mr. Carden, on his queer-looking conveyance, finished with a rubber tube that led to his oil tank in his mouth—a convenient if somewhat unusual method of maintaining the pressure in the tank.

In the final of the Private Competitors' Handicap, the first four of the first and second heat went to the start, and, bar accidents, the race seemed a gift to Mr. Morris's "Daimler," which in the end romped home comfortably,



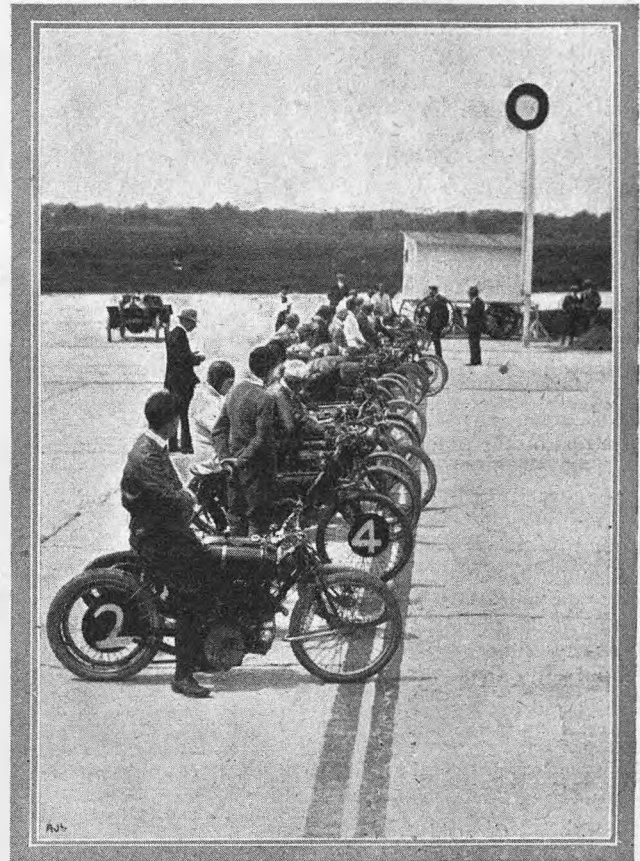
with nearly the length of the straight to spare. A remarkable feature of the race, and one that is a real valuable proof of the consistency of the running of these cars, was the performance of the three Hispano-Suiza cars. Not only had all three cars of this make qualified for the final, but they finished close together, second, third and fourth.

Of the 35 machines entered for the Long Motor Cycle Race, 24 faced the starter. Holzapfel, on the Regal Green, won by a quarter of a mile, the rest came in in the usual procession.

Mr. Geach's Peugeot, R. W. A. Brewer's Belsize, and the Hon. L. Bruce's Vauxhall were non-starters in the Long 75 m.p.h. handicap. After leading for over two laps, Mr. Keiller's G.W.K. was overtaken by Haywood's little Singer, which won at an average speed of  $72\frac{3}{4}$  m.p.h.—a fine performance for an engine of 63 by 88 mm. for  $8\frac{1}{2}$  miles—and Mr. Nicolson's Hispano-Suiza. The 4-cyl. Hillman was fourth, and Pollak's Gregoire fifth.

One of the best races of the afternoon was provided by the long 100 m.p.h. handicap. Mr. Campbell's Schneider and the Hon. R. Westenra's Hispano had a great fight, in which the former proved the winner by about 25 yards. Three Mercedes cars ran in this event, of which Mr. Gordon Watney's 48.6 h.p. was a good third with Mr. Dewis' 41.9 h.p. close up. Mr. Cook's Isotta-Fraschini had recovered from its misfiring fits and kept going well, just beating Mrs. Thekla Duncan's 35.7 h.p. Mercedes driven by Mr. S. Kilham. There is a rare fascination in watching four big fast cars as these just mentioned in a good field, and there was much cheering as the runners passed the line. The eight-cylinder Hillman, after going well, misfired badly on account of oiled up plugs and was last but one.

The highest speeds of the afternoon were obtained in the Lightning Long Handicap, which in spite of a



"Auto." (Yellow Cover) Copyright.  
Ready for the start in the 19th Short Motor Cycle Handicap at Brooklands on Whit-Monday.



"Auto." (Yellow Cover) Copyright.  
As seen from the finishing point in the Whitsun Sprint Race at Brooklands. ◉Mr. B. Haywood's 9.8 h.p. Singer, an easy winner.

penalty of 4 secs. was again won by Mr. Robertson-Shersby-Harvie's Grand Prix Itala at an average speed of 99½ m.p.h. Mr. Campbell had easily beaten Read's Vauxhall, and maintained his lead right up to the second half of the third lap, when he was overtaken by the Itala and the Peugeot. Being beaten Mr. Campbell slowed down and even allowed Read on his Vauxhall to finish third with Toop's Peugeot a good second. A protest against the rehandicapping of the Itala was entered by Mr. Gordon Watney, the owner of the Peugeot, but not before the race was run and won.

A sprint race as usual concluded the afternoon's events on the track, and once more proved an interesting spectacle, in which Haywood on the Singer—penalised 2 secs. for his previous win—managed to keep ahead of his competitors. The Hon. R. Westenra's 15'9 Hispano-Suiza again was second, and Remington's Buick third; the rest of the runners followed close up all in a bunch.

The scheme for the painting of the cars taking part in the races in bright colours, with the idea that they might be easily distinguishable at long range, was tried for the first time at this meeting, but the possibilities of the scheme do not appear to be sufficiently recognised by the competitors. Unless the colour was very bright, as the peculiar pink of the Grand Prix Itala, for instance, it was very difficult to recognise it, and many of the vehicles could still only be distinguished by their outline.

**RESULTS.**

**First Heat of the Whitsun Private Competitors' Handicap.**  
5½ miles.

For motor cars entered and driven by private competitors of the B.A.R.C.

Place.	Car and Driver.	Bore and Stroke.	Capacity.	Start.
		mm.	cc.	m. s.
1.	15'9 h.p. Gregoire (Malcolm Campbell)	80 × 160	3,217	1 8
2.	38'4 h.p. Itala (R. Robertson-Shersby-Harvie)	125 × 170	8,345	scr.
3.	15'9 h.p. Hispano-Suiza (Hon. R. Westenra)	80 × 180	3,619	1 8

Also ran: 22'4 h.p. Vauxhall (J. W. Read), 95 × 140 mm., 3,969 cc., 24 secs.; 20'1 h.p. Vauxhall (Hon. Lyndhurst Bruce), 90 × 120 mm., 3,014 cc., 1 min. 22 secs.; 33'4 h.p. Mercedes (T. Ingram Walker), 116 × 145 mm., 6,129 cc., 1 min. 8 secs.; 11'8 h.p. Calthorpe (E. E. Elwell), 69 × 130 mm., 1,949 cc., 1 min. 26 secs.

A good and sporting race to open the programme. Won by 60 yds., a slightly longer distance between second and third. Winner's speed, 74½ m.p.h. The fine pace of the Itala was the feature of the event.

**Second Heat of the Whitsun Private Competitors' Handicap.**  
5½ miles.

Place.	Car and Driver.	mm.	cc.	m.s.
1.	41'9 h.p. Daimler (F. Oscar Morris)	130 × 150	7,964	1 14
2.	15'9 h.p. Hispano-Suiza (Dr. A. F. da Costa)	80 × 180	3,619	1 8
3.	11'5 h.p. Gregoire (C. D. Pollak)	68 × 140	2,034	1 26

Also ran: 15'9 h.p. Hispano-Suiza (Leslie G. Nicolson), 80 × 180 mm., 3,619 cc., 1 min. 8 secs.; 24'8 h.p. Humber (A. Basic Kensington), 100 × 130 mm., 4,084 cc., 1 min. 34 secs.; 15'1 h.p. Lion Peugeot (Hon. R. Beckett), 78 × 156 mm., 2,982 cc., 56 secs.; 41'9 h.p. Isotta-Fraschini (H. W. Cook), 130 × 200 mm., 10,618 cc., 24 secs.

Although the cars were well matched the race proved to be very tame and resolved itself into a procession. The Daimler took the lead in the second lap and won easily by well over 100 yds.; 80 yds. separated second and third. Winner's speed 75 m.p.h.

**The Nineteenth Short Motor Cycle Race.** 5½ miles.

For all classes of motor bicycles.

Place.	Machine and Rider.	mm.	cc.	m. s.
1.	Douglas (twin) (E. Kickham)	60 × 60	339	1 30
2.	Regal Green (A. M. N. Holzapfel)	70 × 90	347	1 18
3.	Rudge (L. Hill)	85 × 88	499	0 34

33 out of the 42 entrants faced the starter, and after a good race the two leaders raced neck and neck together down the straight, Kickham, however, maintained his lead and won by barely a length at a speed of 58½ m.p.h.

**The Fifth 75 m.p.h. Short Handicap.** 5½ miles.

The winner to receive a cup, value £25; the second a cup, value £15; and the third a cup, value £7 10s. For motor cars the maximum observed speeds of which are about 75 m.p.h. or less for a Brooklands flying lap.

Place.	Car and Driver.	mm.	cc.	m. s.
1.	24'8 h.p. Berliet "White Beetle" (N. S. Hind)	100 × 140	4,398	scr.
2.	22'5 h.p. Bedford (E. Remington)	95 × 95	2,715	0 22
3.	15'9 h.p. Hispano-Suiza (L. G. Nicolson)	80 × 180	3,619	0 12

Also ran: 11'5 h.p. Gregoire "Mud III" (O. D. Pollak), 68 × 140 mm., 2,034 cc., 30 secs.; 9'8 h.p. Singer (B. Haywood), 63 × 88 mm., 1,097 cc., 16 secs.; 8'9 h.p. Hillman (H. Nelson Smith), 60 × 120 mm., 1,357 cc., 22 secs.; 15'9 h.p. Hispano-Suiza (Dr. A. F. da Costa), 80 × 180 mm., 3,619 cc., 12 secs.; 33'4 h.p. Mercedes (T. Ingram Walker), 116 × 145 mm., 6,129 cc., 12 secs.

From every point of view this was an excellent race, and it provided the most spectacular finish of the afternoon. Leading the field by about 50 yds., Hind's Berliet won with comparative ease, while the next five cars finished all within 2 secs. Winner's speed, 75½ m.p.h.

**The Sixteenth 100 m.p.h. Short Handicap.** 5½ miles.

The winner to receive a cup, value £30; the second a cup, value £15; and the third a cup, value £7 10s. For motor cars the observed speeds of which are about 70 m.p.h. or more for a Brooklands flying lap.

Place.	Car and Driver.	mm.	cc.	m. s.
1.	24'8 h.p. Berliet "White Beetle" (N. S. Hind)	100 × 140	4,398	0 12
2.	15'1 h.p. Schneider (Malcolm Campbell)	78 × 154	2,943	0 48
3.	48'6 h.p. Mercedes (H. Darby)	140 × 150	9,237	0 12

Also ran: 41'9 h.p. Mercedes (F. R. Samson), 130 × 180 mm., 9,557 cc., scratch; 41'9 h.p. Isotta Fraschini (H. W. Cook), 130 × 200 mm., 10,618 cc., 4 secs.; 15'9 h.p. Hispano-Suiza (Hon. R. Westenra), 80 × 180 mm., 3,619 cc., 48 secs.; 15'1 h.p. Lion Peugeot (C. L. E. Geach), 78 × 156 mm., 2,982 cc., 36 secs.; 20'1 h.p. Vauxhall (Hon. Lyndhurst Bruce), 90 × 120 mm., 3,054 cc., 1 min. 2 secs.

After a well fought out contest the Berliet won by about two lengths from the Schneider, which was followed by the two Mercedes only 30 and 50 yds. behind. Winner's speed, 74½ m.p.h.

**The Second Lightning Short Handicap.** 5½ miles.

The winner to receive 50 sovs., or cup at option; the second 15 sovs., or cup. For motor cars, the observed speeds of which are about 90 miles an hour or more for a Brooklands flying lap.

Place.	Car and Driver.	mm.	cc.	m. s.
1.	38'8 h.p. Itala (R. Robertson-Shersby-Harvie)	125 × 170	8,345	0 4
2.	15'1 h.p. Peugeot (J. A. Toop)	78 × 156	2,982	0 10
3.	15'9 h.p. Sunbeam (M. Campbell)	80 × 149	2,996	0 28
4.	22'4 h.p. Vauxhall (J. W. Read)	95 × 140	3,940	0 28

The race resolved itself into two matches, one between Campbell's Sunbeam and Read's Vauxhall, in which the former had the best of it, and another between the 3 litre Peugeot and the Grand Prix Itala, in which the former was beaten; in the end the latter pair overtook the former and the Itala won by some 50 yds. from the Peugeot. Winner's speed 94½ m.p.h.

**The Whitsun Light Car and Cyclecar Handicap.** 5½ miles.

The winner to receive a cup, value £10; the second a cup, value £5; and the third a cup, value £3. For light cars, the cubic capacity of which is not more than 1,400 cc., and for cyclecars.

Place.	Car and Driver.	mm.	cc.	m. s.
1.	9'1 h.p. Winco (2-cyl.) (Geo. Bullock)	86 × 93	1,080	1 38
2.	9'8 h.p. Singer (4-cyl.) (T. G. Coates)	63 × 88	1,097	1 12
3.	8'3 h.p. Baby Peugeot (4-cyl.) (J. Leno)	58 × 90	951	2 2
4.	9'8 h.p. Singer (4-cyl.) (B. Haywood)	63 × 88	1,097	scr.

Also ran: 9'1 h.p. G.W.K. (2-cyl.) (C. M. Keiller), 85 × 8 × 92 mm., 1,064 cc., 46 secs.; 8'9 Hillman (4-cyl.) (H. Nelson Smith), 60 × 120 mm., 1,357 cc., 6 secs.; 4'9 h.p. Buckingham (1-cyl.) (E. B. Tate), 89 × 120 mm., 747 cc., 1 min. 38 secs.; 6'1 h.p. Carden (2-cyl.) (J. V. Carden), 70 × 85 mm., 654 mm., 1 min. 12 secs.; 10'4 h.p. Bugatti (4 cyl.) (N. S. Hind), 65 × 100 mm., 1,327 cc., 14 secs.; 7'2 h.p. Morgan (2-cyl.) (E. B. Ware), 76 × 82 mm., 744 cc., 1 min. 12 secs.; 7'5 h.p. Tweenie (4-cyl.) (Henry Jones), 55 × 95 mm., 902 cc., 2 mins. 2 secs.; 7 h.p. Swift (2-cyl.) (H. K. Thomson), 75 × 110 mm., 972 cc., 1 min. 2 secs.

But for the runaway victory of Mr. Bullock's Winco, who won by more than half a mile, the race was well fought out. Less than 50 yds. separated second and third. Winner's speed, 60½ m.p.h.

**Final of the Whitsun Private Competitors' Handicap.**

5½ miles.

The winner to receive a cup, value £20; the second a cup, value £10; the third a cup, value £5.

Place.	Driver and Car.	mm.	cc.	m. s.
1.	41'9 h.p. Daimler (F. Oscar Morris)	130×150	7,964	1 14
2.	15'9 h.p. Hispano-Suiza (Dr. A. F. da Costa)	80×180	3,619	1 8
3.	15'9 h.p. Hispano-Suiza (Hon. R. Westenra)	80×180	3,619	1 8

Also ran: 15'9 h.p. Hispano-Suiza (Leslie G. Nicolson), 80×180 mm., 3,619 cc., 1 min. 8 secs.; 11'5 h.p. Gregoire (O. D. Pollak), 68×140 mm., 2,034 cc., 1 min. 26 secs.; 22'4 h.p. Vauxhall (J. W. Read), 95×140 mm., 3,969 cc., 24 secs.; 38'8 h.p. Itala (R. Robertson-Shersby-Harvie), 125×170 mm., 8,345 cc., scratch; 15'9 h.p. Gregoire (Malcolm Campbell), 80×160 mm., 3,217 cc., 1 min. 8 secs.

Won by nearly the length of the straight. A fine tussle between the three Hispanos and Pollak's Gregoire, all of which finished in a bunch. Winner's speed, 77½ m.p.h.

**The Fifteenth Long Motor Cycle Handicap.** 8½ miles.

The winner to receive 10 sovs., or cup; the second 5 sovs., or cup; and the third 3 sovs., or cup. For all classes of motor bicycles.

Place.	Machine and Rider.	mm.	cc.	m. s.
1.	Regal Green (A. M. N. Holzapfel)	70×90	347	1 57
2.	Matchless (twin) (O. M. Baldwin)	90×77½	986	0 24
3.	Singer (J. P. Le Grand)	75×79	349	2 15
4.	Rudge (L. Hill)	85×88	499	0 51
5.	Indian (twin) (J. A. B. Hellaby)	82½×93	994	0 15

24 of the 35 entrants started. Won by about a quarter of a mile,

half that distance between second and third. Winner's speed, 60½ m.p.h.

**The Fifth 75 m.p.h. Long Handicap.** 8½ miles.

The winner to receive a cup, value £25; the second to receive a cup, value £12 10s.; and the third to receive a cup, value £5. For motor cars, the maximum observed speeds of which are about 75 miles an hour or less for a Brooklands flying lap.

Place.	Car and Driver.	mm.	cc.	m. s.
1.	9'8 h.p. Singer (B. Haywood)	63×88	1,097	0 24
2.	15'9 h.p. Hispano-Suiza (L. Nicolson)	80×180	3,619	0 18
3.	9'1 h.p. G.W.K. (C. M. Keiller)	85'8×92	1,064	1 33

Also ran: 8'9 h.p. Hillman (H. Nelson Smith), 60×120 mm., 1,357 cc., 33 secs.; 11'5 h.p. Gregoire "Mud III" (O. D. Pollak), 68×140 mm., 2,034 cc., 45 secs.; 15'9 h.p. Gregoire (Malcolm Campbell), 80×160 mm., 3,217 cc., 18 secs.; 22'5 h.p. Buick-Bedford (E. Remington), 95×95 mm., 2,715 cc., 33 secs.; 10'4 h.p. Bugatti (Harold Lambert), 65×100 mm., 1,327 cc., 45 secs.; 24'8 h.p. Humber (A. B. Kensington), 100×130 mm., 4,084 cc., 57 secs.; 8'9 h.p. Universal-Turner (F. Cracknell), 60×100 mm., 1,131 cc., 2 mins. 6 secs.

The G.W.K. led for two laps, but was overtaken in the last lap by the Singer and the Hispano. The former won by about 100 yds., while about 60 yds. were between second and third. The Hillman and the two Gregoires followed close up in a bunch. Winner's speed, 72½ m.p.h.

**The Fifteenth 100 m.p.h. Long Handicap.** 8½ miles.

The winner to receive a cup, value £30; the second a cup, value £15; and the third a cup, value £7 10s. For motor cars the observed speeds of which are about 70 m.p.h. or more for a Brooklands flying lap.



"Auto" (Yellow Cover) Copyright.

Entering the home banking in the 19th Short Motor Cycle Handicap at Brooklands Meeting on Whit-Monday.



Place.	Car and Driver.	mm.	cc.	m. s.
1.	15.1 h.p. Schneider (Malcolm Campbell)...	78×154	2,943	1 12
2.	15.9 h.p. Hispano-Suiza (Hon. R. Westenra) ...	80×180	3,619	1 12
3.	48.6 h.p. Mercedes (H. Darby) ...	140×150	9,237	0 18
4.	41.9 h.p. Mercedes (F. R. Samson) ...	130×180	9,557	scr.

Also ran: 41.9 h.p. Isotta Fraschini (H. W. Cook), 130×200 mm., 10,618 cc., 6 secs.; 35.7 h.p. Mercedes (S. Kilham), 120×150 mm., 6,786 cc., 54 secs.; 17.8 h.p. Hillman (F. H. Bennett), 60×120 mm., 2,714 cc., 24 secs.; 20.1 h.p. Vauxhall (Hon. Lyndhurst Bruce), 90×120 mm., 3,054 cc., 1 min. 33 secs.

The feature of the race was the running of the Schneider and the Hispano, which had a fine sporting tussle with one another. Mr. Watney's veteran Mercedes, driven by H. Darby, and another Mercedes also were seen to good advantage. Thirty yards between first and second, two lengths only between second and third. Winner's speed 74½ m.p.h.

**The Second Lightning Long Handicap.**

The winner to receive 60 sovs., or cup at option; and the second to receive 25 sovs., or cup at option. For motor cars, the observed speeds of which are about 90 m.p.h. or more for a Brooklands flying lap.

Place.	Car and Driver.	mm.	cc.	m. s.
1.	38.8 h.p. Itala (R. Robertson-Shersby-Harvie) ...	125×170	8,345	0 2
2.	15.1 h.p. Peugeot (J. A. Toop) ...	78×156	2,982	0 15
3.	22.4 h.p. Vauxhall (J. W. Read) ...	95×140	3,940	0 42
4.	15.9 h.p. Sunbeam (Malcolm Campbell) ...	80×149	2,996	0 42

Although penalised for its previous victory, the Itala again won with ease by over 100 yds. from Toop's Peugeot. Campbell, who looked like winning, slowed down after being overtaken. Winner's speed, 99½ m.p.h.

**The Whitsun Sprint Race (a Handicap). 2 miles.**

The winner to receive a cup, value £20; the second a cup, value £12 10s.; and the third a cup, value £7 10s. For cars which have been timed to do flying laps at Brooklands at about 70 m.p.h.

Place.	Car and Driver.	mm.	cc.	m. s.
1.	9.8 h.p. Singer (B. Haywood) ...	63×88	1,097	0 16
2.	15.9 h.p. Hispano-Suiza (Hon. R. Westenra) ...	80×180	3,619	0 14
3.	22.5 h.p. Bedford-Buick (E. Remington) ...	95×95	2,715	0 16

Also ran: 15.9 h.p. Hispano-Suiza (Leslie G. Nicolson), 80×180 mm., 3,619 cc., 14 secs.; 48.6 h.p. Mercedes (H. Darby), 140×150 mm., 9,237 cc., scratch; 11.5 h.p. Gregoire "Mud III" (O. D. Pollak), 68×140 mm., 2,034 cc., 22 secs.; 24.8 h.p. Berliet "White Beetle" (N. S. Hind), 100×140 mm., 4,398 cc. scratch; 17.8 h.p. Hillman (8-cyl.) (F. H. Bennett), 60×120 mm., 2,714 cc., 4 secs.; 15.1 h.p. Schneider (Malcolm Campbell), 78×154 mm., 2,943 cc., 6 secs.; 15.9 h.p. Hispano-Suiza (Dr. A. F. da Costa), 80×180 mm., 3,619 cc., 14 secs.; 10.4 h.p. Bugatti (Harold Lambert), 65×100 mm., 1,328 cc., 22 secs.

As usual this race provided a close finish, for the whole field came down the straight practically in one bunch. Winner's speed, 66½ m.p.h.



THE "MOTOR 'BUS" DERBY, 1914.—On the road. / As will be seen above every type of vehicle is still requisitioned for the people's great racing day.



our readers will remember, takes the form of a bronze reproduction of a racing motor car of 1902, and was designed and executed by Herr Gustav Gurschner, the well-known Viennese sculptor, was presented in that year by Mr. Henry Edmunds, a member of the Committee of the Royal Automobile Club.

Previous results of the competition for this trophy are as under:—

Date.	Place.	Car.	Driver.
July 7, 1903	Castlewellan, Ireland	h.p. 60 Mercedes	Mr. E. Campbell Muir (for Mr. Harmsworth)
1904	...	No competition ...	
Sep. 27, 1905	Blackdown House	38 Daimler ...	Mr. C. Grinham (for Rev. F. A. Potts)
July 14, 1906	Blackdown House	30 Daimler ...	Mr. Geo. S. Barwick
July 8, 1907	Underriver, Sevenoaks	30 Daimler ...	Mr. Geo. S. Barwick
1908	...	No competition ...	
July 17, 1909	Shelsley Walsh ...	20.5 Vauxhall	Mr. A. J. Hancock (for Mr. P. Kidner)
July 2, 1910	Shelsley Walsh ...	15.9 Star ...	Mr. R. Lisle

Each lap of the course, of which we publish a map, is 37½ miles in length, and eight circuits of this will be made on each day, or a total distance for the two days of 600 miles. The contour of the whole of the course is also shown, together with a table giving the figures for the severe gradients.

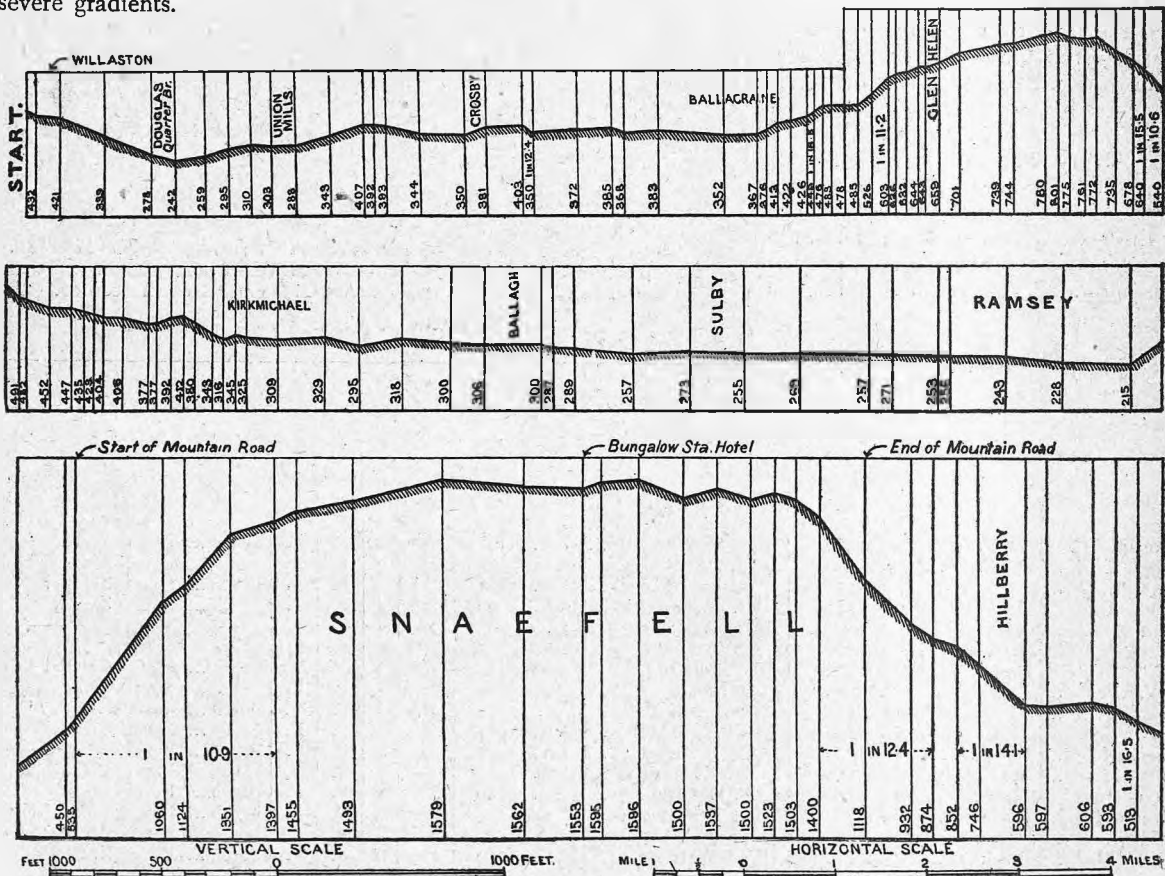
Our table gives the list of the competing cars, their number, distinguishing colours, the names of their drivers and a few important particulars.

**Resumé of Rules.**

The competition is international and is open to cars with not less than four cylinders, and a maximum cc. of 3,310. A minimum weight of 21½ cwt. is imposed, this figure including driver, mechanic, and all spares and tools, but without fuel; any deficiency in weight, however, may be made up by ballast. The loss of weight during the race must not exceed 50 lbs.

The chassis must comply with the requirements of the British law; it must also have a minimum width of track of 4 ft. 6 ins., and minimum wheelbase of 9 ft. The body must be not less than 34 ins. in width, but the mechanic's seat may be set back on the same level not more than 8 ins. All replenishments of oil, fuel, water, also replacement spares must be obtained during the race from the one official depôt, and no outside assistance will be allowed between the start and finish of the race. Two spare tyres or two spare detachable rims or wheels, with tyres, must be carried throughout.

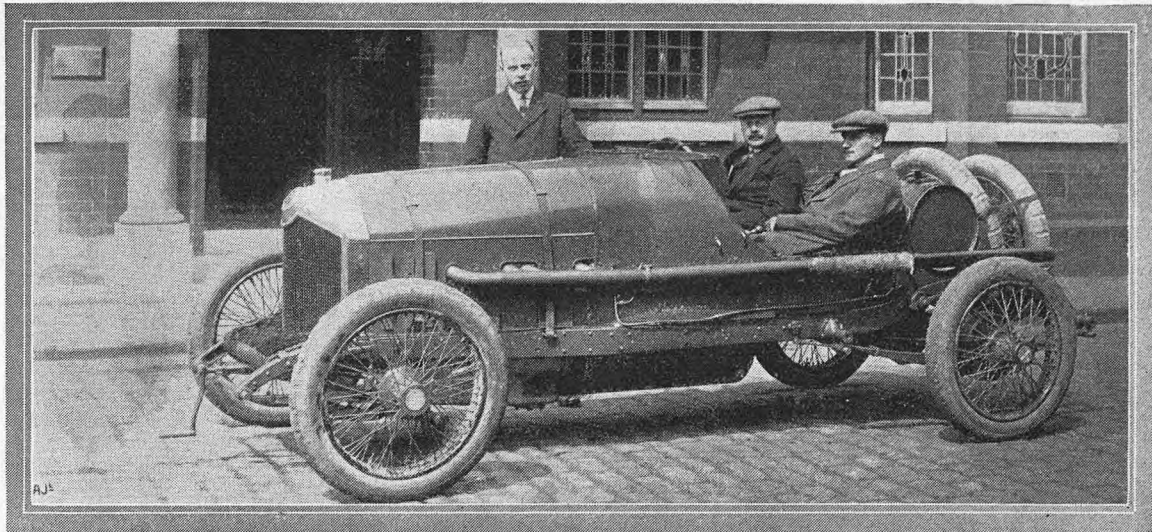
Open exhausts will not be allowed, the Brooklands silencing regulations being enforced, nor must the exhaust be so directed as to raise dust.



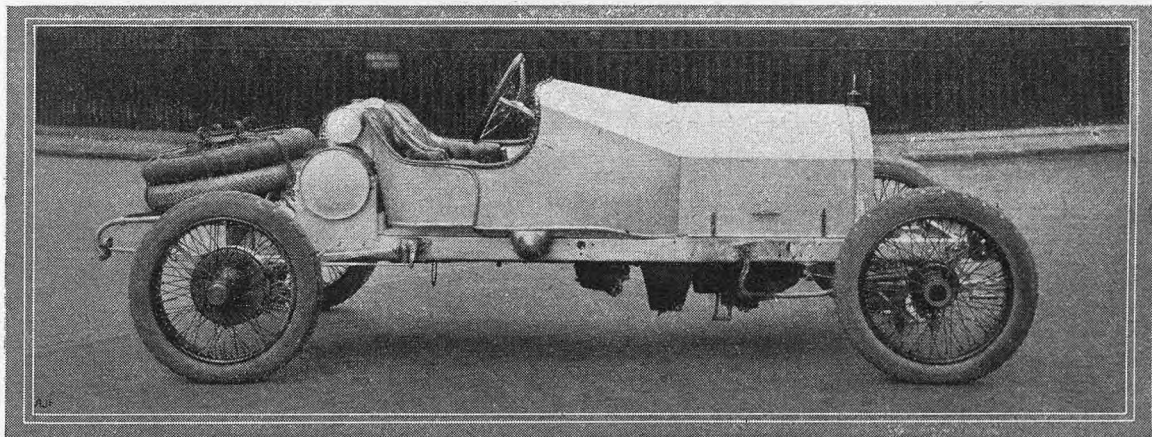
CONTOUR OF THE T.T. COURSE IN THE ISLE OF MAN.

Distances.	Miles.	Fur.	Severe Gradients.
Quarter Bridge to Union Mills ...	1	4	660 yards of 1 in 12.4
Union Mills ,, Ballacraine ...	5	1	2 miles 1 furlong ,, 1 ,, 10.9
Ballacraine ,, Kirkmichael ...	6	2	1 mile ,, 1 ,, 12.4
Kirkmichael ,, Ramsey ...	9	3	1 ,, ,, 14.1
Ramsey ,, Quarter Bridge ...	15	2	1 ,, ,, 16.5
	37	4	





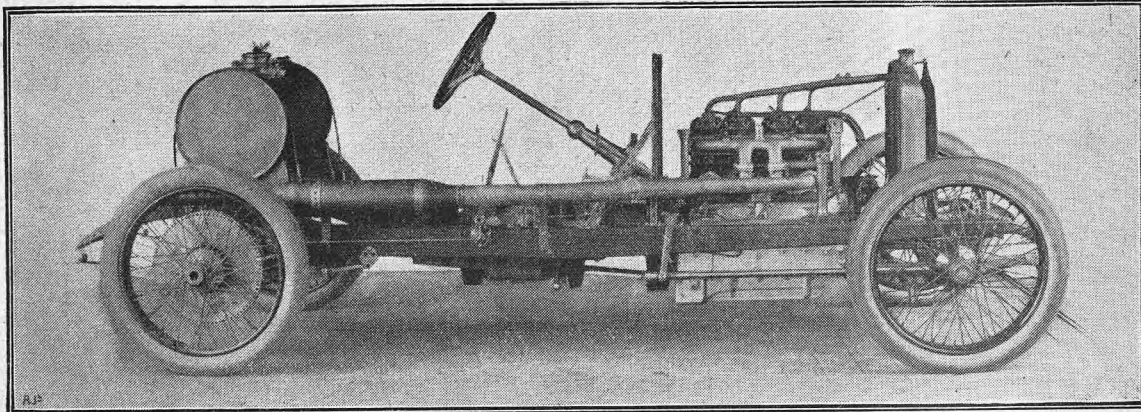
THE CROSSLEY CAR IN THE T.T. RACE.—At the wheel is Mr. Bianchi, the driver, with Taft, his mechanic, by his side, and standing behind is the designer of the car, Mr. A. W. Reeves.



The Hudson entered for the T.T. Races, the only American car competing. The chassis is an ordinary 25 h.p. model, but it will be evident from the photograph that a redistribution of weight has been effected, presumably to equalise the difference in the load represented by the usual complement of passengers.



The Humber Tourist Trophy Team leaving the Coventry works for the Isle of Man.—Mr. Burgess, the designer of the car, is in the centre, with Mr. Wright on his right and Mr. Tuck on his left (No. 13).



The Minerva T.T. car, minus the body.

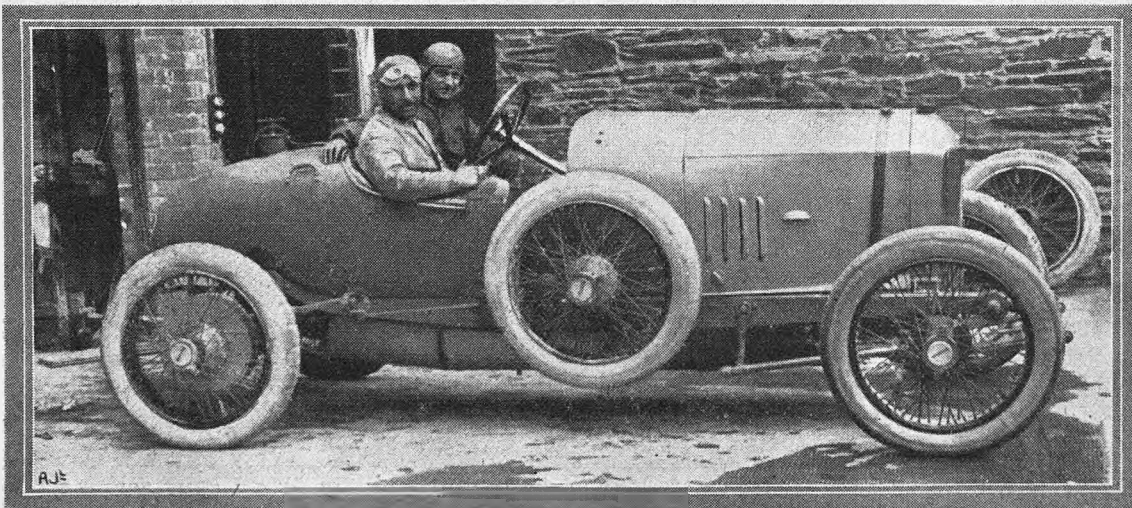
**A Few Notes on the Cars and their Drivers.**

The Crossley T.T. car is quite conventional in design, and is not freakish in any respect. The engine has not been specially designed for race purposes, but is the ordinary Crossley touring car engine with a few minor modifications in details. A single cam-shaft

operates the valves, which are arranged all on one side. There is one interesting detail of the car that deserves special mention, and that is the provision made for cooling the lubricating oil. Between the dumb irons on the front of the chassis is a tank fitted with gilled cooling ribs, and from this oil is drawn by a pump to the engine bearings.



The three drivers of Minerva cars for the T.T. Race.



The Sava T.T. car with Mr. R. Berger, the driver, at the wheel.



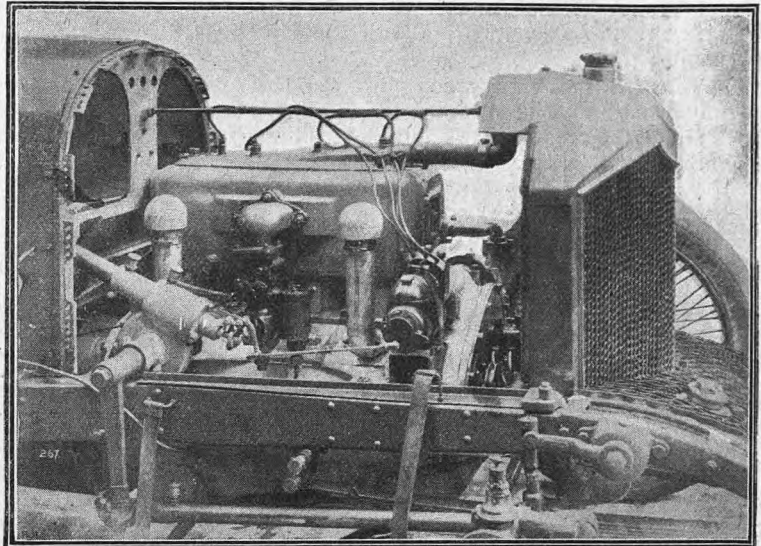
Both the gear-box and the back axle are ordinary Crossley practice.

The D.F.P. car, besides being the only car of French origin competing, is further noteworthy inasmuch as it is the smallest of the competitors and a standard 12-15 h.p. speed model. It has a four-cylinder engine of 70 by 130 mm. bore and stroke, forced lubrication to the crank-shaft bearings and splash by dippers on the end of the connecting-rods to the rest of the engine, leather cone clutch, enclosed propeller-shaft jointed at both ends, that in rear being of the plunging type. The car is fitted with the model "Z" Claudel carburettor, which has been a standard fitting to all D.F.P. cars for the last two years.

The car will be driven by Mr. W. O. Bentley, who has entered it in order to show the capabilities of the standard speed model D.F.P.

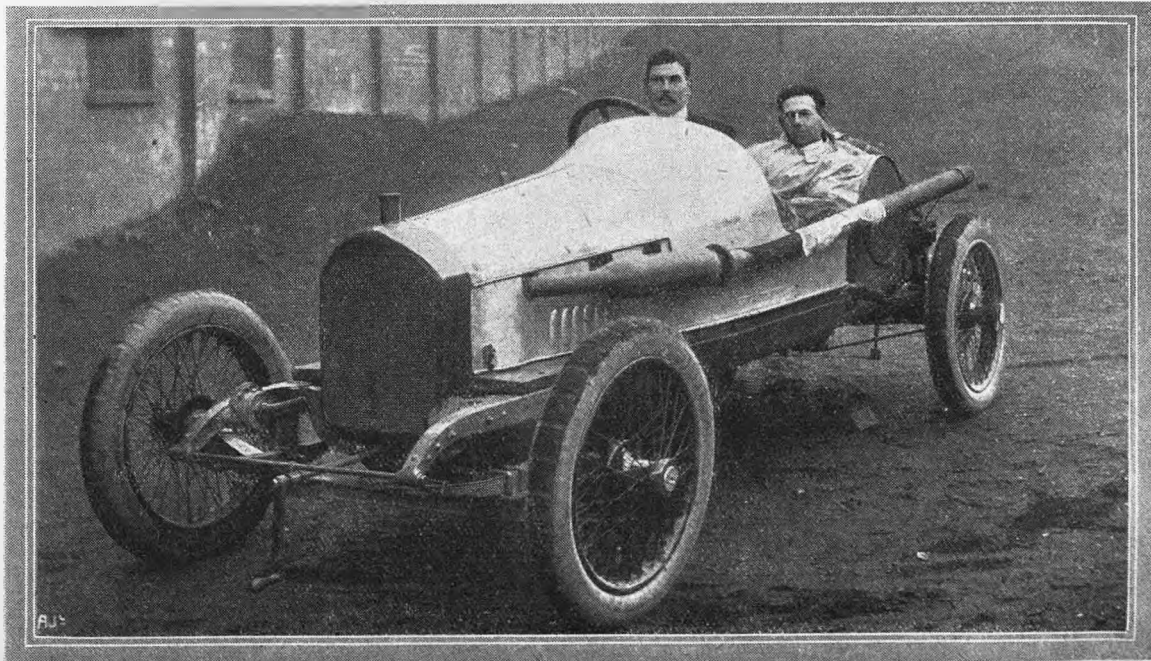
The Hudson car entered for the T.T. race by the Rawlinson-Hudson Co., is we believe a standard model in all details. Like most cars hailing from the U.S.A., the engine has a very small stroke-bore ratio, in this case the dimensions being 114.3 mm. stroke to 96 mm. bore. This car is further remarkable in that it has a gear-box giving three forward speeds only, and is the single example of this practice among the competing vehicles. It will be driven in the race by Mr. Rawlinson himself.

The Humber cars taking part are of special design, but with the exception of the carburettor, magneto, wheels and tyres were manufactured entirely in the Humber Works at Coventry. Three cars have been entered by this firm, the drivers being Mr. F. T. Burgess—who, by the way, is responsible for their design—Mr. Sam Wright and Mr. W. G. Tuck.



Off-side view of the engine of the Crossley T.T. car.—This photograph is of special interest, as it illustrates an entirely new departure in oil cooling arrangements. It will be noticed that between the dumb-irons is a tank with gilled cooling ribs, and having the appearance of an extension to the radiator. From this tank oil is drawn by means of a pump to the engine bearings. The object of placing the tank in this position instead of the more conventional place underneath the crank-case, is to ensure that the lubricating oil has every opportunity of keeping perfectly cool, and in practice it has been found to answer the purpose admirably.

The latter has won many a record and trophy for the Humber Co., and possesses an experience of racing methods that should stand him in good stead in the present instance. In fact, although burdened with the unlucky number 13, we understand that a well-known member of motor racing circles has backed him to run home a winner. Mr. Sam Wright is perhaps better known to motor cyclists and followers of the light car movement, for he at one time held the Motor Cycle



One of the Star cars for the Tourist Trophy Race, with its driver, Mr. C. G. Cathie, at the wheel.

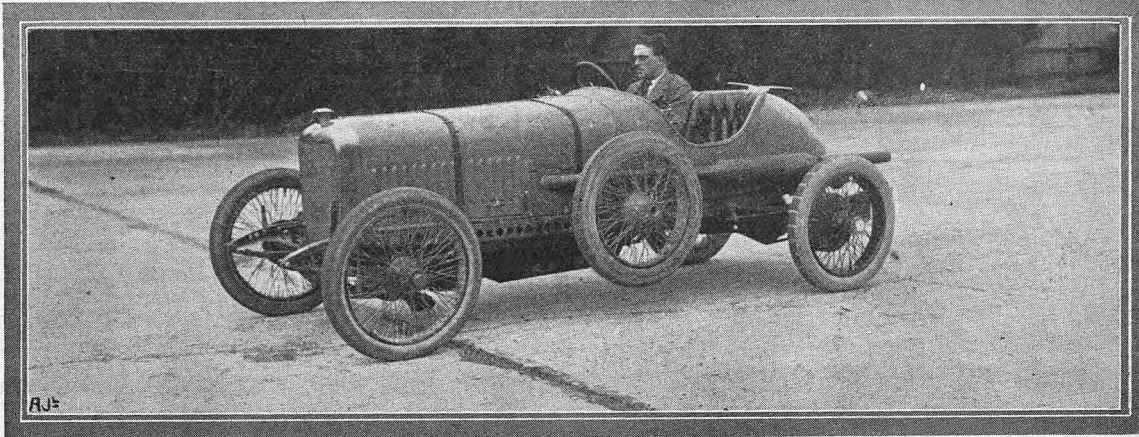


Tourist Trophy for the Humber Co., while more lately he has been doing splendid work with the Humberette in reliability trials.

The S.A.V.A. T.T. car is practically a standard model, the only departure being in regard to the exhaust valves, which are of the overhead type and situated immediately above the inlet valves.

high compression used; and the crank-shaft runs in five plain bearings. The clutch is of special design in order to economise space, and a very light flywheel is employed. Gear-box and back axle present no unusual features, except that exceptionally large brakes are fitted to the back wheels, while the third speed is lower than usual.

It is said that on the bench test the engines have



One of the T.T. Straker-Squires, with Mr. R. S. Witchell, the driver, at the wheel.

Ignition is by a Bosch two-spark magneto, each cylinder having two plugs. Except for the gudgeon pins every part of the engine is lubricated under pressure by means of a positive pump. Between the metal cone clutch and the gear-box is a double universal joint, which is entirely enclosed and runs in oil. Rudge-Whitworth wire wheels and Dunlop tyres of 820 x 120 are provided, while other important particulars are a wheelbase of 10 ft., and a track of 4 ft. 6 ins.

This car will be driven in the race by René Berger.

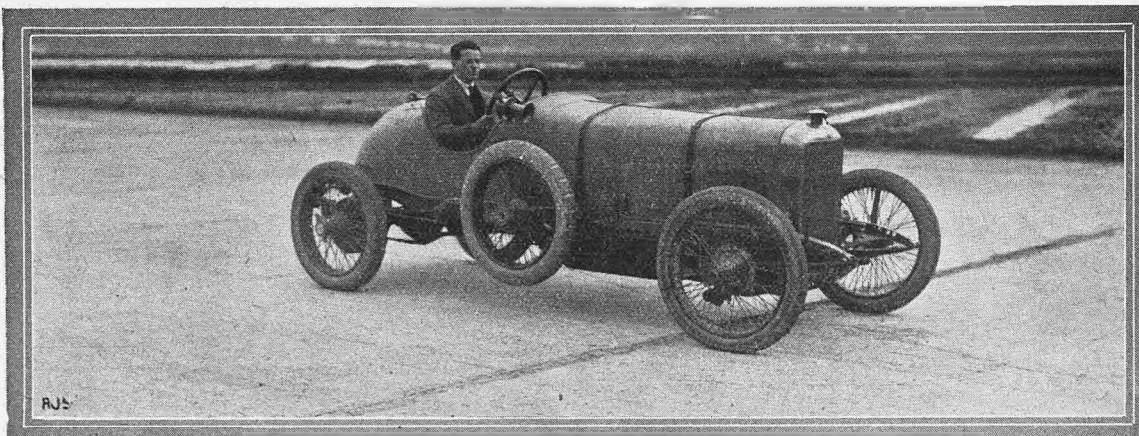
The two Star cars are designed upon strictly standard lines, though, of course, every effort has been made to produce a car light enough not to be handicapped when

proved very satisfactory, speeds of 3,300 r.p.m. being reached without a falling off in power.

The drivers are Messrs. R. Lisle and C. G. Cathie. Mr. Lisle is well known, and has put up many fine performances at Brooklands and elsewhere, while Mr. Cathie will be remembered as the winner of the first standard car race in 1911.

Straker-Squire T.T. cars, of which there are two, are expected to do great things in this race, especially if the engines, which are at the time of writing in more or less an experimental stage, can be got ready in time. Otherwise the usual type of engine will be employed.

The special engine has overhead valves, of which there



One of the T.T. Straker-Squires, with Mr. F. C. Clement, the driver, at the wheel.

climbing or accelerating. Other than their light weight the principle features are a low build and short wheelbase. The latter is 9 ft. 2 ins., or 2 ins. only outside the minimum, which should make the cars handy on corners.

Ordinary side by side valves are employed in the engine; the valve caps are water-cooled in view of the

are sixteen, two inlets and two exhausts to each cylinder. It will be noticed from our table of competing cars that, with the exception of the Hudson car, the Straker-Squire engine has the shortest stroke of any, and this should make for quick accelerative powers, an important feature on such a course. The transmission is more or less standard, except that a multiple disc clutch is used in

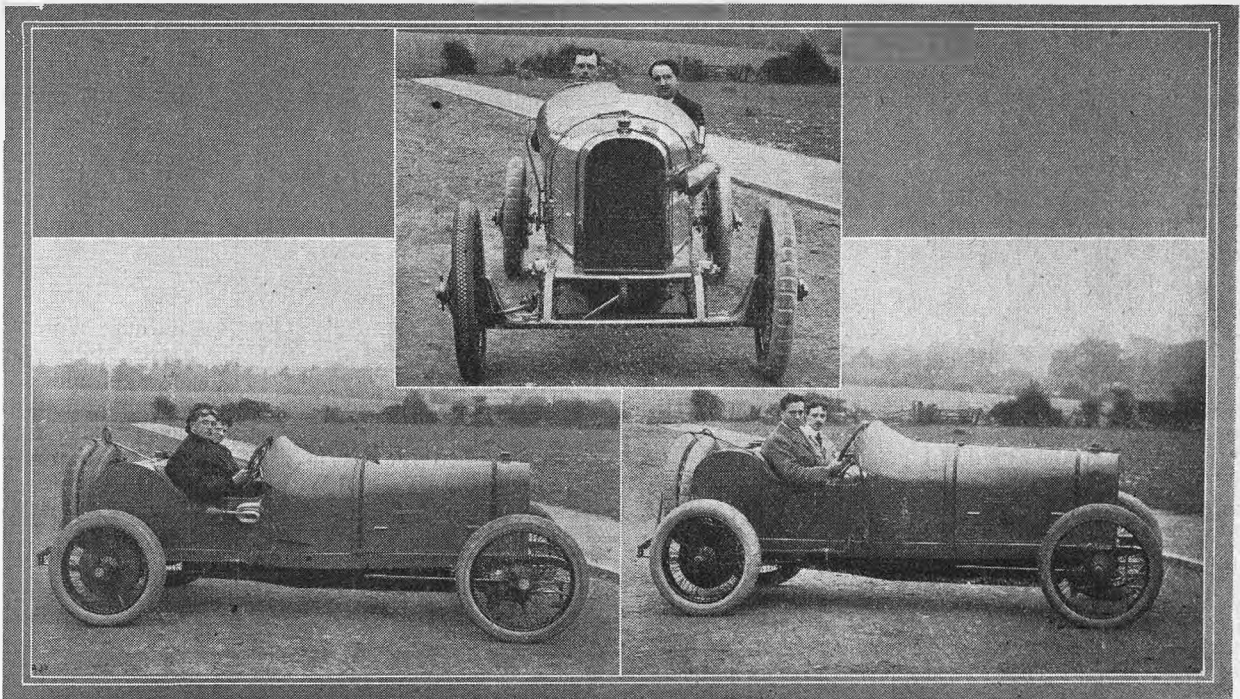
place of the leather cone type, while the gear-box has special ratios for the two intermediate speeds. Rudge-Whitworth wire wheels with 820 by 120 mm. tyres are fitted. The drivers are R. S. Witchell and F. C. Clement, the former of whom will be familiar to all Brooklands habitués.

Sunbeam cars may be relied upon to give a good account of themselves in this event, especially in view of the combination of cars and drivers. The latter are K. Lee-Guinness, A. Lee-Guinness, and D. Resta, than whom there will probably be none better in the race. The engines, it will be noticed from the particulars given in our table, have a particularly large stroke-bore ratio, the

counterbalanced by weights riveted thereto. Shock absorbers are fitted to both front and rear axles, and the suspension in rear is by cantilever springs. The four speed gear-box is a unit with the torque tube, a spherical head forming the anchorage to the clutch-shaft.

The three Vauxhall drivers are A. J. Hancock, Wm. Watson and J. Higginson.

The Minerva team are the only cars with engines other than of the ordinary poppet-valve type. In these cars for the T.T. the engine is a Minerva-Knight with its four cylinders cast *en bloc*. A Bosch dual magneto is used for ignition purposes, while the transmission system



**SUNBEAM CARS AND THEIR DRIVERS FOR THE T.T.—Top; Mr. K. Lee-Guinness, the driver, and Cook. Left; Mr. A. Lee-Guinness at the wheel; and on the right; M. Resta.**

largest, in fact, of any of the cars entered—viz., practically 2 to 1. The cars are light, and the power developed by their engines enormous; consequently, the chances of one of the Sunbeams proving the winner is not considered at all unlikely by those interested.

Vauxhall T.T. cars are remarkable for their many uncommon features. The cylinders are cast monobloc, and there are four overhead valves to each cylinder, placed diagonally. Every valve pocket is completely surrounded by water. Two cam-shafts along the top of the casting operate the valves, and both shafts are worm-driven by one vertical shaft.

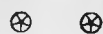
Steel pistons are employed, and each is fitted with two rings, both in the same groove, and the crank webs are



THE annual hill-climb of the Midland A.C. is to take place at Shelsley Walsh on Saturday, August 22nd, and besides the open and closed and team events there will be a special class for light cars.

THE Cyclecar Club is arranging to hold a rally on the Madeira Road, Brighton, on Sunday, June 14th, at 3 p.m. A special prize will be given for the machine having the best appearance, due allowance being made for age.

comprises a leather cone clutch, four speed gear-box and bevel driven back axle. Universal joints are fitted between the clutch and gear-box. Dunlop detachable wire wheels will be used, shod with 875 x 105 mm. tyres in front and 880 x 120 mm. in rear. The drivers are C. Riecken, Jean Porporate, and Leon Molon. M. Porporate will be remembered as the winner of the Targa Bologne race in September, 1908, while other performances to his credit are:—First of the Rally St. Sebastian, 1912; and first, Coupe de la Sarthe, August, 1913. Leon Molon's performances on road and track include world's record for the standing mile; second at the meeting de Dauville; first, in the general classification Paris-Monte Carlo and back in November, 1906.



THE course for the half-day trial of the Cyclecar Club has been shortened by leaving out the portion from High Wycombe through Henley, &c., so that it is now about 60 miles in length. The ascent of Dashwood will not be timed, but one of the hills will be observed.

TEN-MILE speed limits are now in force at Wendover, Bucks; Bramber and Upper Beeding, West Sussex; and in the Borough of Huntingdon.

## THE IRISH LIGHT CAR TRIALS.

On Friday last, the 29th May, the Irish four days' Reliability Trial came to a conclusion. This competition, held under the auspices of the Irish Automobile Club, was of a similar nature to the R.A.C. Light Car Trials of last month, held in the Harrogate district.

In the trials we are now considering, however, the maximum cylinder capacity was 1,800 cc., the limit as to weight being 1,500 lbs. complete and ready to start, but without driver and passenger. The price classification also differs, there being in the present case three classes only—Class A, not exceeding 150 guineas; Class B, not exceeding 200 guineas; Class C, not exceeding 250 guineas, these prices including hood, wind-screen, three lamps, jack, spare wheel or rim with tyre, and usual kit of tools, all of which accessories had to be carried throughout the competition.

It is in the matter of the qualification for awards that the Irish trial differs mostly from the R.A.C. competition, for whereas in connection with the last mentioned it was a case of either complete success or complete failure, in this just concluded every competing car was placed in the table of results according to the merit of its performance. To this end 225 marks were awarded each day for reliability; 25 marks to the vehicle in each class making the fastest ascent in the timed hill-climb, the others obtaining marks in proportion to their performance; while marks were also awarded for fuel consumption on a ton-mile basis for one of the days' runs, 50 to the car with the lowest consumption, and a proportionate number of marks to the remainder.

In addition to the award of a gold and silver medal in each class, the Goff Challenge Cup was offered for the most meritorious performance irrespective of class, regard being had to the price of the car and any other circumstance which in the opinion of the committee should be taken into consideration.

Twenty-three entries were received by the Irish Automobile Club, and of these there were twenty actual starters, none of which came within the Class C classification, *i.e.*, exceeding 200 guineas and below 250 guineas. As may be seen from our table the majority of those makes of light car that took part in this trial also competed in the R.A.C. trials; in fact, the Nardini, Stellite, Marlborough, Mathis and Calcott are the only exceptions.

### First Day. Tuesday.

*Route.*—From Dublin to Balbriggan, Drogheda, Dunleer, Dundalk, Cullaville, Castleblaney, Carrickmacross, Ardee, Collon, Slane, Dublin. Distance, 133 $\frac{3}{4}$  miles.

Had it not been for a faulty sparking-plug in one of the G.W.K. cars (No. 7), a complete non-stop day would have to be recorded. One or two competitors suffered from minor tyre troubles it is true, but as stoppages from this cause go unpenalised they may be neglected by us.

The course has been easy and the weather gloriously fine, but the roads for the most part have been dusty enough to make driving not altogether pleasant for the rearmost competitors.

### Second Day. Wednesday.

*Route.*—Glendhu, Sally Gap, Rathdrum, Woodenbridge, Arklow, Wicklow, Wicklow Gap, Hollywood, Blessington, Tullaght, Dublin. Distance, 120 $\frac{1}{2}$  miles.

The second day's run was considered to be the most severe that the competing cars would have to experience, for it included the ascent of three mountain passes, Glendhu, Sally Gap, and Wicklow Gap. On the first of these, the cars were timed over a distance of about seven-eighths of a mile. This timed ascent was in the nature of a surprise, as the decision was not made known to the competitors till starting time this morning, and

IRISH LIGHT CAR TRIAL.—Table of Marks, &c.

No.	Car.	Driver.	Price.	Weight.	Cyls.	Bore and Stroke.	Hill-Climb Times.		Marks.							
							Glendhu.	Ballinas-corney.	Reliability.				Petrol Consumption.	Hill-Climbs.		Total Marks.
									Tues.	Wed.	Th.	Fri.		Glendhu.	Ballinas-corney.	
<b>CLASS A.—Not exceeding 150 guineas.</b>																
3	8 G.W.K.	J. T. Wood	157	10 0 21	2	85'8 × 92	2 33	3 4	225	225	225	225	44'48	25'0	25'0	994'48
4	7 Swift	H. Collyer	145	0 10 0 7	2	75 × 110	3 11	3 44	225	213	225	225	44'92	20'0	20'5	973'42
5	7 "	J. G. Pauling	145	0 9 3 0	2	75 × 110	2 53	3 25	225	225	225	225	50'00	22'1	22'4	994'50
6	7 "	S. G. Gliksten	145	0 10 0 14	2	75 × 110	3 24	3 48	225	222	225	225	44'59	18'7	20'2	980'49
7	8 G.W.K.	J. B. Freeman	157	10 9 3 14	2	85'8 × 92	2 51	3 34	213	219	225	225	29'53	22'4	21'5	955'43
9	8 Alldays	C. L. Foxwell	145	10 10 2 21	2	—	3 18	4 24	225	225	225	225	41'68	19'3	17'4	978'38
<b>CLASS B.—Not exceeding 200 guineas.</b>																
10	10-15 Nardini	J. Nardini	210	0 13 1 14	4	66 × 130	2 5	2 39	225	225	225	225	32'86	25'0	21'9	979'76
11	9'5 Stellite	E. W. Booth	166	11 11 2 21	4	62 × 89	3 49	—	225	—	—	—	—	13'6	—	—
12	10 A.C.	T. J. Woods	175	0 11 0 0	4	56 × 100	4 12	3 30	225	225	223	225	46'38	12'4	16'5	973'28
14	8-10 Marlborough	S. T. Robinson	199	0 12 0 14	4	62 × 100	3 28	3 48	225	225	225	212	48'97	15'0	15'2	966'17
15	10 Mathis	J. Harpur	199	10 10 1 0	4	58 × 100	2 12	2 43	225	225	225	225	40'16	23'7	21'3	985'16
16	10 Singer	F. Rollason	204	15 11 1 0	4	63 × 88	2 6	2 38	225	225	222	222	44'52	24'8	22'0	985'32
17	10 "	E. J. Roberts	204	15 11 1 0	4	63 × 88	2 14	2 19	225	195	221	225	40'74	23'3	25'0	955'04
18	9'5 Standard	S. Wilson	202	8 12 3 14	4	62 × 90	2 22	3 13	225	225	225	225	50'00	22'0	18'0	990'00
19	9'5 "	G. Hutton	202	8 12 3 0	4	62 × 90	2 33	3 18	225	225	225	225	47'75	20'4	17'6	985'75
20	10 Singer	C. D. Ingleby	204	15 11 2 14	4	63 × 88	2 16	3 2	225	225	225	210	44'72	23'0	19'1	971'82
21	Alldays	J. J. Chance	175	14 12 1 0	4	59 × 100	2 53	4 0	225	225	225	225	44'56	18'1	14'5	977'16
22	9'5 Standard	J. Robertson	195	0 12 3 21	4	62 × 90	2 22	2 56	225	225	225	225	45'15	22'0	19'7	986'85
23	9'5 "	F. Spence	195	0 12 3 7	4	62 × 90	3 42	3 16	225	225	225	225	40'86	14'1	17'7	972'66
24	10'5 Calcott	F. A. Wallen	185	0 12 0 7	4	65 × 110	2 27	2 48	225	225	225	224	40'05	21'3	20'7	981'05



this has been done with the object of preventing previous practising on the hill.

Several competitors experienced stops during the day, Freeman's G.W.K. again had plug trouble; Singer No. 17 (E. J. Roberts) had something wrong with its magneto at the foot of Glendhu, it also had other stops to change plugs (twice), to clear a choked jet and to make adjustment to the magneto; the Stellite broke down at Rathdrum and was withdrawn from the competition, a joint in the water pipe having failed; and Swift No. 4 (H. Collyer) had plug trouble, and was considerably delayed on the road in consequence.

**Third Day. Thursday.**

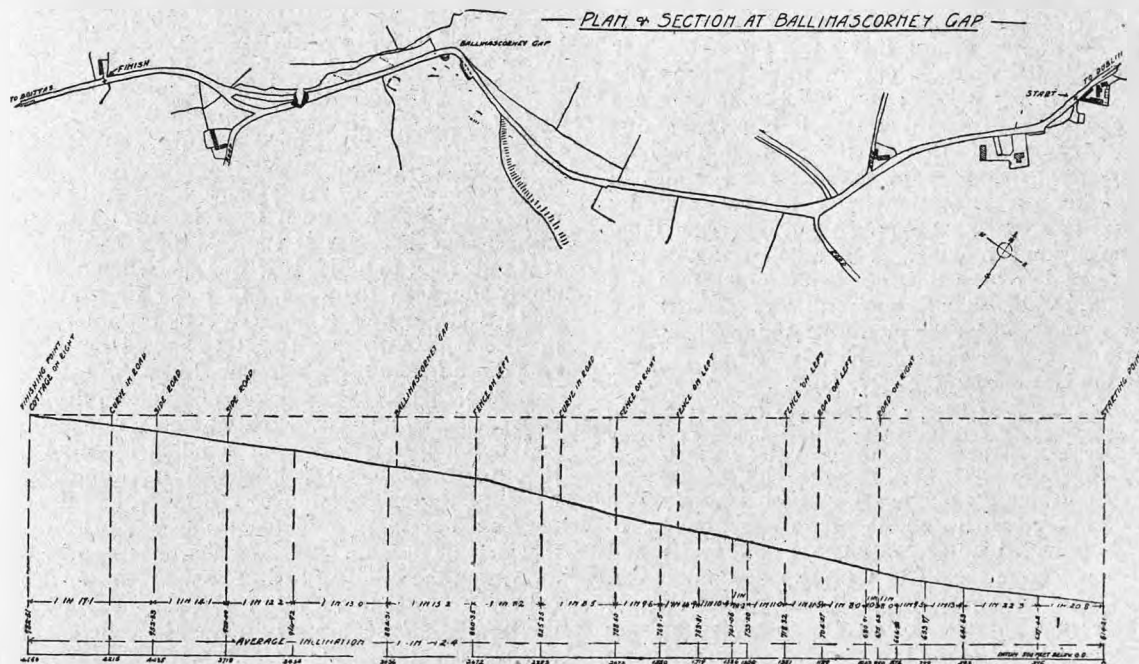
*Route.*—Templeogue, Ballinascooney Gap, Blessington, Baltinglass, Grany, Carlow, Athy, Maryborough, Kildare, Naas, Dublin. Distance, 128½ miles.

A much easier day than yesterday. All the nineteen cars completed the journey and fifteen made non-stop runs. Collyer's Swift (No. 4) had to replenish the

Edenderry, Lucan, Dublin. Distance, 158 miles. Besides being the longest and last of the daily runs in the Trial, especial interest attached to this day's proceedings because the petrol consumption of each car was measured, and marks awarded accordingly.

Three cars only experienced trouble to-day, all of which are of the more expensive class, viz., Mr. Ingleby's Singer, which had an air lock in the petrol supply, ran out of petrol toward the end of the journey, and also broke its wind-screen; Mr. Rollason's Singer stopped to replenish with water owing to its cracked radiator; while the Marlborough when almost in sight of home and with a clear sheet to its account stopped through an air lock in the petrol pipe. In Class A all the cars reached the Irish Automobile Club garage without a stoppage recorded against them.

It must be confessed that the course was an easy one, the roads were good generally and there was nothing worthy of the name of a hill to be met with; in fact many of the drivers state that except for getting away



THE IRISH LIGHT CAR TRIAL.—Plan and section at Ballinascooney Gap.

radiator, the A.C. had carburettor trouble twice, losing 12 mins. and 2 mins., Roberts's Singer suffered with a choked jet, while Rollason's Singer cracked the top of radiator and he had to replenish it with water. There has also arisen a question as to whether the Nardini was not disqualified. This car, in order to get within the weight limit, had to reduce the amount of petrol carried to one-half, and was only allowed to start on this understanding. Doubt being felt that it was complying with the terms, its tank was examined at Carlow, the result apparently being satisfactory to the car, for it has been allowed to continue.

On this day took place the second of the timed hill-climbs, being the ascent of Ballinascooney Gap. Though long, the gradient is not severe, one in eight perhaps being the maximum.

**Fourth Day. Friday.**

*Route.*—Leixlip, Enfield, Kinnegad, Tyrrellspass, Moate, Athlone, Moate, Clara, Tullamore, Philipstown,

from rest, the gear lever had not been touched from start to finish of the day's run. Indeed, taking the whole of the Trial it cannot be compared for arduousness with that promoted by the R.A.C., which accounts for the large percentage of successes. Of the twenty cars that left Dublin on the first day all completed the Trial except one, and of these three in Class A and eight in Class B made non-stop runs on every day.

**Awards.**

The Goff Challenge Cup, the chief award, fell to the Swift driven by Mr. Pauling (No. 5), this car also winning the Class A gold medal. In Class B the gold medal was secured by Mr. S. Wilson's Standard (No. 18), and a special prize went to the Standard team for their consistent running. Other recipients of special prizes were the A.C. and Marlborough for low petrol consumption, Mr. Wood's G.W.K. for fastest time on both hills in its class, and Mr. Roberts's Singer for fastest time on Ballinascooney.

## QUESTIONS AND ANSWERS.

THIS section of the AUTO. is devoted to the consideration of mechanical and technical problems connected with the motor car; and we invite owner-drivers, students, and others to submit questions to us for investigation and solution, should they be unable to answer them with any degree of satisfaction.

A selected number of questions from those received will appear each week, with replies thereto, and our readers, for the benefit of their fellow motorists, are invited to offer their opinions on the questions submitted, or to criticise the answers given. These communications will be heartily welcomed, and such as are suitable for publication will be inserted. When referring to previous questions or answers, reference should always be made by the number of the question.

Questions arriving at this Office on Monday morning will, where possible, be replied to in our issue published on the following Thursday.

Correspondents are requested to write distinctly, on one side of the paper only, and should forward their names and addresses, which will not be published except by request.

63. *Question.*—**Engine will not Run Slowly.** I should be glad if you could inform me why I cannot throttle my engine down as much as formerly. At one time she was extremely quiet (when standing you could only hear the rush of air into the carburettor); but now (after overhauling) although still quiet, I have to let her run at a fairly high speed, otherwise she either stops, or runs irregularly, the speed rising and falling alternately. This latter action is very pronounced when the engine is warmed up. No alterations have been made in the adjustment of the carburettor.—C.L.W.

*Answer.*—It would appear that either the carburettor is wrongly adjusted, or there are air leaks between the carburettor and the engine; and as this trouble has recently asserted itself, we think that it is probably due to the latter cause. See that all the joints in the inlet piping are properly made, and examine the bearings in which the throttle is supported for leakage of air by wiping over these parts with paraffin and observing them whilst the engine is running. You might also ascertain whether there has been a large amount of wear on the valve stems, as this may be a contributory factor to the irregular running, especially if, during the overhaul, any scale or rust was cleaned off the valve stems, thus increasing the clearance in the valve guides.

64. *Question.*—**Gap at Plug and Magneto Contact Break.** What should be the distance between the points of a sparking plug, and how much should the contacts on the contact breaker of a magneto open?—H.J.C.

*Answer.*—About 0.5 millimetre at both places. You cannot do better than to adjust your contact-breaker to the gauge provided by the magneto manufacturer and which is included in the set of tools supplied with a car. A greater width of gap at the plug may render starting up difficult; and a smaller break at the contact-breaker will contribute to misfiring, especially at low speeds.

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### Speed Trials at Southend.

FULL particulars are now available regarding the speed trials which the Essex Motor Club is arranging to hold on the Western Esplanade at Westcliff-on-Sea on Thursday, June 25th. Altogether 28 classes are being arranged: 8 for cars, 4 for cyclecars, 7 for side-cars, and 9 for motor cycles, and the classification will be by cylinder capacity. The cars will be timed over the half mile from flying start and the kilom. from standing start, the latter event being a handicap. In the cyclecar and cycle classes the competitors will be timed over the kilom. from flying and standing starts. The car classes will include one for cars complying with T.T. conditions. The length of the course is approximately one mile, while its width is 40 ft.; the surface is tarred and in good condition. If possible the programme will also include a match between two Grand Prix cars and another between a car and a motor cycle. Entry forms can be obtained from Mr. E. J. Bass, Bishop's Stortford, Herts.

65. *Question.*—**Density of Acid for Accumulators.** Can you inform me as to what should be the correct density of the acid in my accumulators and how I should renew same, as there is a considerable amount of muddy sediment in the case?—F.A.

*Answer.*—The electrolyte should have a density of (say) 1.20 when fully charged; but you will find that different makers recommend slightly different strengths of acid, which are largely based on their experience and the constituents of and construction embodied in the plates. When nearly discharged—*i.e.*, when the voltage is down to about 1.8 per cell—the density will fall to about 1.18 or 1.175. If four parts of sulphuric acid be added to twenty-one parts of distilled water, the dilute acid will have a density of approximately that indicated, but it is well to check this by means of a hydrometer or densimeter, of which a special form for use in connection with storage batteries is supplied by accessory dealers. It is important to notice that the acid should always be slowly added to the water and never the water to the acid; while, as heat is generated by the inter-action of the two liquids when mixing they should be allowed to cool down before being introduced into the battery.

Before changing the electrolytic solution, the accumulator should be fully charged at as slow a rate as possible, and if the battery has been standing for any length of time partly discharged, it should be discharged after charging, through a lamp or resistance, and then slowly re-charged again, in order to decompose any lead sulphate that may be present. The old acid may now be drained away, and the cells washed out several times with clean cold water, so as to get rid of any sediment, after which the fresh dilute acid may be added in sufficient quantity to cover the tops of the plates.

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### The A.C.U. Annual Trials.

THE annual six-days trial of the Auto-Cycle Union will be held this year from July 5th to the 11th. The centre has not been decided upon, but officials are at present surveying routes in the North-West of England. Owing to the difficulties of obtaining motor cyclist observers the Auto-Cycle Union has decided to employ a corps of 25 motor cyclists to do the work. The Union is prepared to consider applications from gentlemen who would be willing to act for the six days; a grant of three guineas will be made towards each rider's expenses.

### C.M.U.A. Parades in the Provinces.

At the lunch given at the R.A.C. in connection with the Annual Whit Monday Parade of Commercial Vehicles, organised by the Commercial Motor Users' Association, it was announced that it was probably the last parade which would be held in London for some years. It was proposed for the next few years to hold the parade at different important industrial centres in various parts of the country.

## FRANCE WINS INDIANAPOLIS RACE.

NOT only did a French car again win the 500 mile race on the Indianapolis track on Saturday last, but, whereas last year American cars finished second and third, this year they could not get nearer than fifth place, which was filled by Barney Oldfield on a Stutz. Delage and Peugeot shared the first four places, Thomas on a Palmer-tyred Delage winning at a speed of 80 miles an hour, with Duray on a Peugeot second, Guyot on another Delage third, and Goux, who won last year, on a Peugeot fourth. Christiaens, on a Belgian Excelsior, was sixth.

The full field of thirty started, and the favourite, no doubt in view of last year's result, was Goux, although the fast times made by Boillot in his practice spins led many to think that he was most likely to win. At the end of the first one hundred miles Thomas had a good lead, having made the distance in the record time of 1 hr. 13 mins. 54 secs. He was followed by Duray, Guyot, Christiaens, Goux and Boillot. By this time it was seen that the American cars were outpaced, although a game fight was being made by the two Mercer cars driven by Caleb Bragg and Wishart and the three Stutz cars handled by Anderson, Cooper and Oldfield respectively. Soon after 125 miles had been covered by the leaders Dawson's Marmon car was overturned through a tyre bursting, and in trying to avoid the wreck an Isotta Fraschini driven by Gilhooley was also overturned. Drivers and mechanics of both cars were taken to hospital, where it was found that Dawson was the most seriously injured with a broken collar bone. When 200 miles had been covered, Thomas was still leading, and although Duray had to give up the second place to Guyot for a few miles

he regained the position when the latter was delayed by a leaking petrol tank. Wishart on a Mercer had crept up into third place, while Boillot was lying fourth. When half the distance, 250 miles, of the race had been completed, Thomas was still leading at 2 h. 54 m. 58 s., but Boillot, who had covered 50 miles at a speed of 85½ m.p.h., had advanced to second place, with Wishart third, Duray fourth and Bragg fifth. By dint of increasing his average speed to 87½ m.p.h., Boillot, during the next 50 miles was able to secure the lead. At the end of 300 miles there was less than one minute separating the leader and the sixth man, as shown in the following table, and this will show how keenly the race was contested :—

Times for 300 miles.

h. m. s.			h. m. s.		
1. Boillot (Peugeot) ...	3	31	27	4. Caleb Bragg (Mercer) ...	3 32 18
2. Thomas (Delage) ...	3	32	6	5. Wishart (Mercer) ...	3 32 23
3. Duray (Peugeot) ...	3	32	17	6. Guyot (Delage) ...	3 32 29

Boillot's success was short-lived, however, as when he was travelling at full speed one of the tyres flew off the rim, and the bumping which the car received before it could be pulled up, caused the frame to fracture, and Boillot had to retire. The two Mercer cars were also in trouble, and had to give up. At the end of 400 miles Thomas was leading again with Duray second, Guyot third, Goux fourth, and Christiaens fifth. This order underwent no change during the last hundred miles, and the result was :—

h. m. s.			h. m. s.		
Thomas (Delage) ...	6	3	45	Goux (Peugeot) ...	6 17 24
Duray (Peugeot) ...	6	10	24	Oldfield (Stutz) ...	6 23 51
Guyot (Delage) ...	6	14	1	Christiaens (Excelsior) ...	6 25 30



## RACES, RECORDS, AND TRIALS.

### The Florio Cup Race.

AFTER being in abeyance since 1908, when it was won by Nazzaro on a Fiat, the Florio Cup race was run off in Sicily on Sunday last over what is known as the Madonie circuit, which is 150 kiloms. round and had to be covered three times. The winner was again Nazzaro, this time driving a car bearing his own name. At the end of the first round Ceirano, on a Scat, was leading with Franchini, on an Alfa second, and Nazzaro third. At the end of the second round, however, Ceirano and Nazzaro changed places, while the next and final round Ceirano got to the second place. The times of the first six were :—

h. m. s.			h. m. s.		
1. Nazzaro (Nazzaro) ...	8	11	22½	4. Campari (Alfa) ...	8 46 43
2. Ceirano (S.C.A.T.) ...	8	15	57	5. Sivocci (de Vecchi) ...	8 51 22
3. Franchini (Alfa) ...	8	25	19	6. Lopez (Fiat) ...	8 57 30

### Brooklands Next Race Meeting.

FROM the following summary it will be seen that the programme proposed for the next meeting at Brooklands on Saturday, June 27th, is on the same lines as those for the Easter and Whitsun meetings, except that there is to be no events for motor cycles or cyclecars. Not more than six cars will be permitted to start in the Lightning Handicaps, and preference will be given to those cars which are judged by the handicappers to be the fastest. Cars entered and accepted for the Lightning Handicaps will not be accepted for the 75 m.p.h. and 100 m.p.h. and the Sprint Handicaps. Entries close on June 9th. There will also be the usual aeroplane handicap.

### Car Events.

1. **The Third Lightning Short Handicap.**—For cars the minimum speeds of which are about 90 miles an hour or more. Distance : about 5¼ miles.

2. **The Third Lightning Long Handicap.**—For cars the minimum speeds of which are about 90 miles an hour or more. Distance : about 8½ miles.

### The Short Handicaps.

3. (a) **The Sixth 75 m.p.h. Short Handicap.**—For cars the maximum speeds of which are about 75 miles an hour or less. Distance : about 5¼ miles.

(b) **The Seventeenth 100 m.p.h. Short Handicap.**—For cars the speeds of which are about 70 miles an hour or more. Distance : about 5¼ miles.

### The Long Handicaps.

4. (a) **The Sixth 75 m.p.h. Long Handicap.**—For cars the maximum speeds of which are about 75 miles an hour or less. Distance : about 8½ miles.

(b) **The Sixteenth 100 m.p.h. Long Handicap.**—For cars the speeds of which are about 70 miles an hour or more. Distance : about 8½ miles.

5. **The June Sprint Race (a handicap).**—For cars which have done flying laps at about 70 miles an hour. Distance : about 2 miles.

6. **The June Private Competitors' Handicap.**—Distance : about 5¼ miles.

### London-Glasgow Trial of American Lorry.

A CERTIFICATE has been issued by the R.A.C. regarding the trial from London to Glasgow which was made with a 25-30 h.p. (27.3 R.A.C. rating) Whiting-Federal lorry entered by Messrs. Whiting, Ltd., of 334, Euston Road, London, N.W. The certificate states :—

The trial was held between London and Glasgow, the route followed being Doncaster (via Great North Road), Leeds, Settle, Kendal, Shap, Penrith, Carlisle, and Abington.



The total distance run was 402 $\frac{3}{4}$  miles, which was covered without any involuntary stop. The trial was run at an average speed (running time only) of 12.0 miles per hour.

No work of any kind was done upon the lorry. When descending hills the engine was not stopped, nor was the gear lever put into neutral.

The petrol consumed was 37.87 gallons, being a consumption of 10.63 miles per gallon. The ton-miles per gallon calculated on gross weight were 35.72, and calculated on net load carried, 12.73. The lubricating oil consumed was 1.22 gallons, being a consumption of 330.5 miles per gallon. The consumption of cooling water was 1.9 gallons.

During the trial the roads were in good condition, and the weather was fine with a few showers.

The lorry, which was built in the U.S.A., was fitted with a 4-cyl. engine, 105 mm. bore by 130 mm. stroke. It weighed 4,844 lbs. and carried a touring car weighing 2,352 lbs. and passengers weighing 329 lbs.

### Tests with Clincher Tyres.

FROM March 9th to April 17th a set of four Clincher tyres, entered by the North British Rubber Co., Ltd., of Great Portland Street, underwent a 5,000 miles trial under R.A.C. auspices. The following information is taken from the R.A.C. certificate regarding the performance of the tyres:—

The tyres were described as "New Clincher Cross all-rubber, non-skid tyres manufactured entirely from Hevea Plantation Para, and sold at the ordinary list price of steel studded tyres. The nominal size of the tyres was 895 mm. by 135 mm. The average weight of the tyres was 27 $\frac{1}{2}$  lbs. The thickness of the tread, including the thickness of the raised pattern (6 mm.), was 24 mm. The following are the measurements of the tyres after they had run 638 miles:—

Cover No.	Circumference.	Diameter.	Cross Section.
5,626...	2,715 mm.	864 mm.	129 mm.
" 5,858...	2,708 "	862 "	127 "
" 6,001...	2,711 "	863 "	130 "
" 5,558...	2,706 "	862 "	129 "

The tyres were fitted to a 60 h.p. (R.A.C. Rating) Napier car, having six cylinders and live axle. The car weighed 4,449 lbs.



## MOTOR BOATING.

### Motor Boat Racing at Southampton.

For the Whitsuntide holidays the Royal Motor Yacht Club arranged a two-day regatta, with races from the "Enchantress" off Netley, in Southampton Water. On Saturday, the opening day, there were four events for motor-driven craft. The first was a sealed handicap for cabin cruisers over an 11 $\frac{1}{4}$ -mile course down to Calshot and back. Four boats took part, and the result was a win for Mr. A. H. Ramsden-Tagore's "Mildred," with Mr. H. W. Hutchinson's "Dranoel" second. Four also started in the handicap for the over 20 knot boats. The course set was about 12 $\frac{3}{4}$  miles, made up of three laps, Mr. S. D. Begbie's "Doonie," the limit boat, being sent off at 3.30 p.m. She was followed 4 mins. later by Mr. H. Austin's "Irene," and, as it proved, the result of the race rested between these two, "Irene" eventually arriving in by the narrow margin of 1 sec. ahead of "Doonie." Mr. J. A. Holder's "Toto" on the first round showed excellent form, completing it at the rate of 36 knots, thereby accomplishing the fastest round of the race. She did not, however, repeat her performance on the subsequent rounds.

A Handicap Sweepstakes for All-comers brought out six boats, but three retired in the first round. It was left to Capt. A. H. Wright's "Beaver," Mr. A. W. Tate's "Batboat II," and Mr. S. T. Dobson's "Peterkin" to fight out the issue, and the result was in that order.

The last race of the day was for motor dinghies not exceeding 16 ft. length, and 5 h.p. makers' rating, which

(39 $\frac{3}{4}$  cwts. approx., front axle 2,213 lbs., back axle 2,236 lbs.). The passenger load carried was 343 lbs., making a total running weight of 4,792 lbs. (42 $\frac{3}{4}$  cwts. approx.). The car was fitted with wire wheels and the tyres were kept inflated to approximately 85 lbs. per sq. in.

The trial was held upon the Club's six standard routes, and the average speed (running time only) was 19.5 miles per hour. For the greater part of the trial the weather was wet and the roads in poor condition, metalling operations being in progress in a large number of places.

The following are particulars of the performance of each cover. Where the reason for deflation is not given the cause appeared to be a faulty tube or valve:—

Wheel...	6,001.	5,858.	5,558.	5,626.
Off front...	4,142 miles	958 miles	—	—
Near "...	—	—	3,307 $\frac{1}{4}$ miles	1,260 $\frac{3}{4}$ miles
Off back...	—	—	1,693 $\frac{1}{2}$ "	3,272 "
Near "...	1,066 $\frac{3}{4}$ "	4,142 "	—	—
Total ...	5,208 $\frac{3}{4}$ "	5,100 "	5,000 $\frac{3}{4}$ "	4,532 $\frac{3}{4}$ "

Cover 6,001.—No work of any kind was done upon this cover. After the trial the casing was found to be sound, with the exception of one bad cut which had entered the canvas.

Cover 5,858.—At 4,536 miles the tyre deflated through the tube becoming nipped in a crack in the canvas lining of the cover. A loose patch (10 ins. by 10 $\frac{1}{2}$  ins.) was placed within the cover and a new tube fitted. The cover was running at the conclusion of the trial.

Cover 5,558.—At 3,409 miles the tyre deflated and a new inner tube was fitted, and this occurred again at 3,474 miles. At 4,859 miles the tyre was punctured. A loose patch (10 in. by 10 $\frac{1}{2}$  in.) was placed within the cover and a new tube fitted. The cover was running at the conclusion of the trial.

Cover 5,626.—At 1,949 miles the tyre deflated and a new inner tube was fitted. At 3,272 miles the tyre deflated and a new inner tube was fitted. The casing was found cracked owing to the tyre having been run deflated for a short distance. At 3,971 miles the tyre deflated through the tube becoming nipped in one of the cracks mentioned above, and a loose patch (10 in. by 10 $\frac{1}{2}$  in.) was placed within the cover and a new tube was fitted. At 4,304 miles the tyre was punctured by a flint, and a second loose patch (10 in. by 10 $\frac{1}{2}$  in.) was placed within the cover and a new tube was fitted. At 4,532.75 miles the tyre burst and was withdrawn.

was won by Mr. Brickwood's dinghy, Mr. Dobson's "Peterkin" being second, 1 min. 36 secs. astern.

There was also an interesting series of races on Monday. An event for cabin cruisers was won by Mr. Kenneth Dry's "Neva" with "Dranoel" second. "Dranoel" was also the winner of the flexibility race, in which the competitors had to go out as slowly as possible, and then at a given signal return at their best speed. Mr. G. J. F. Knowles's Wolseley-engined "Maia" was second. In the afternoon there was a handicap for the over 20 knot boats, and although there was only three starters the finish was a very fine one. The allowances were given at the start, "Doonie II," the limit boat, held her lead for the great part of the distance, but on the last leg of the race she was passed by "Batboat II" and beaten by 10 secs., "Irene" taking the third place.

### Motor Boats at Lowestoft.

FIVE races were arranged by the British Motor Boat Club at Lowestoft on Saturday. In the first event for cabin cruisers there were only two starters, and Mr. G. I. Woolley's "Ptarmigan" won from Mr. A. J. Wilson's "Splash." The handicap for the over 10 knot boats brought out eight starters, including Mr. Hollingsworth's "Crusader," which, although of course it was the fastest boat, was treated too severely by the handicapper to secure a place. Mr. Hollingsworth's boats secured the first and third prizes, however, "Mouse" being the winner, and "Cordon Rouge V" third, while Mr. M. Brooke's

"Baby V" was second. A handicap for boats under 10 knots was won by Mr. M. Brooke's "Betepete," with "Splash" second. "Splash" also secured the second prize in the All-Comers Sweepstakes, which was won by "Cordon Rouge" by something less than a second with "Betepete" third. A race for the 21-footers only drew Mr. E. Morris's "Vixen," which sailed over for the prize.

The racing was continued on Monday, when "Splash" turned the tables on "Ptarmigan" in the cabin cruiser race. A race for the 21-ft. class was practically a gift for "Babs V," as "Vixen," the only other starter, was delayed after the gun fired. A handicap for under 10 knot boats fell to "Betepete," with "Splash" again second, while

in the over 10 knot event Mr. Brooke was successful with "Babs II." The All-Comers event was secured by "Mouse," with Mr. F. Clayton's "Hikibido" second, and "Babs V" third.

**Cross-Channel Race for Motor Cruisers.**

THE Marine Committee of the Society of Motor Manufacturers and Traders, Ltd., and the representatives of the R.M.Y.C. and the B.M.B.C. have now settled all details relating to the Cruiser Competition, which is being organised by these two Clubs jointly, and for which the Society is presenting a 50 guinea cup. The Competition will take the form of a race from Southampton across the Channel and back, on July 24th.



Notes from New York

It has now been decided that both the Vanderbilt and Grand Prize races shall be run off next year over a course in the grounds of the Panama-Pacific Exposition at San Francisco. The date has not been settled, but there will be an interval of two weeks between the races so that those who run in the Vanderbilt, the first race, will have time to repair their cars and get them in good order for the Grand Prize event.

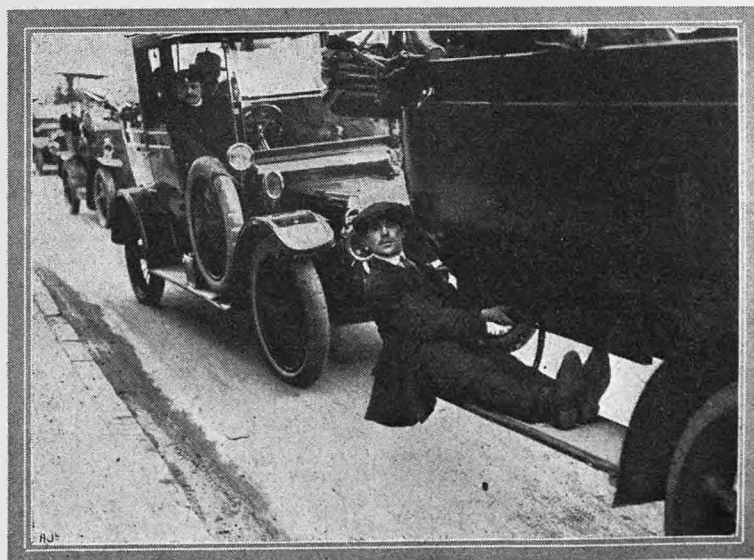
The idea of putting current issues of the leading papers under the foundation stones of prominent public buildings is evidently out of date judging from the following extract from a long account in the local paper of the ceremony of laying the corner stone of a new garage at Watertown, Wis.: "The corner stone of the new garage was laid this week, and in it were placed phonographic records of the voices of the president of the company, the secretary, the sales manager, superintendent and the members of the office force and factory foremen."

The system instituted by the Goodyear Tyre and Rubber Co., under which every prospective employee has to submit to a physical examination is said to be giving very good results. The examination is not very formidable, and should it reveal any ailments it does not necessarily bar the candidate from employment. On the other hand, it is stated that the information thus obtained enables the men to be placed where they will be most efficient. Throughout the factory of this Co. at Akron there is installed a bubble-fountain system of drinking water: the water is sterilised by being brought to boiling point, while in the hot weather it is passed through a refrigerator.

A somewhat unique competition has been organised by the Lozier Motor Co., with a view to encouraging salesmen employed by the various Lozier agents and sub-agents to do their best. Between May 15th and September 1st each competitor will be credited with a certain number of marks for each sale effected, the marks varying according to the conditions prevailing in the

territory concerned. Each of the twelve salesmen who have the most marks at the close of the competition will make a trip to Detroit with all expenses paid, and in addition the winner will have his expenses paid for a trip of one month to study automobile conditions in London and Paris. There will also be second and third prizes of \$200 and \$100 in gold.

Some interesting figures have recently been obtained by the National Commercial Gas Association regarding the economy of using city gas instead of gasoline for testing motor car engines. In one test in Detroit it was found that when the engine was developing 19.04 h.p., the gas consumption was 458 cubic feet per hour, which at 45 cents per 1,000 cubic feet amounted to 20.61 cents per hour whereas with gasoline, when developing the same horse-power under the same conditions, the consumption was 2.24 gallons per hour, which at 15 cents per gallon, amounted to 33.6 cents per hour. The cost of the gas was therefore only 61.3 per cent of the cost of the gasoline. In another test, the engine, when developing 35.7 h.p. at 1,200 r.p.m., consumed 1,060 cubic feet of gas per hour, which at the same rate as before amounted to 47.7 cents per hour, while with gasoline the consumption was 3.9 gallons per hour, so that the cost was 58.5 cents.



An "outside" fare on a char-a-banc, en route for the Derby.

# The National Society of Chauffeurs

OFFICIAL NOTICE'S

President.

The Hon. RUPERT GUINNESS, C.M.G., M.P.

Vice-Presidents.—Hon. ARTHUR STANLEY, M.V.O., M.P.;  
LORD MONTAGU OF BEAULIEU; JOHN CATES, ESQ.

Trustees.

Messrs. P. L. H. DODSON, W. M. LETTS, A. F. EASTON, H. PYE,  
J. H. CURSON, C. W. NAIRNE.

Chairman of Committee.—Mr. C. W. NAIRNE.

Deputy.—Mr. A. HOLMES.

General Secretary.

ARTHUR SEXTON, Halkin Street, S.W. Kensington 4220.

AFFILIATED SOCIETIES.

The Nottingham and Notts Chauffeurs' Association,  
Headquarters: 177, Wollaton Street.

Sheffield Chauffeurs' Society, Headquarters: Milk Street.  
Birmingham and District Chauffeurs' Association.

Temporary Headquarters: Crown Hotel, Edgbaston Street.

Club Internationaler Kraftwagenführer, Unterbaumstrasse 2,  
Berlin N.W. 6.

Federation Mutuelle et Professionnelle des Conducteurs d'Automobiles  
de Belgique, 23, Rue de l'Industrie, 23, Bruxelles.

The Motor Drivers' Approved Society for the purposes of the  
National Health Act.

Objects.

To endeavour by all constitutional methods to procure the  
following amendments to the Motor Car Act:—

1. That driving licences shall only be endorsed on conviction of an offence involving actual and wilful damage or injury to the public.
2. That endorsements shall lapse after a reasonable period.
3. That the owner of a car shall be held responsible for all excesses of speed committed by his servant unless (a) the driver is the sole occupant of the car, in which case the owner shall cease to be responsible, and (b) when the car is lent or hired, in which case the person under whose directions the chauffeur is driving shall be held responsible.
4. That fines shall be imposed in accordance with the earnings of the defendant, and not those of his employer.
5. That licences to drive motor vehicles shall only be granted to applicants who have satisfied the authorities of their competence to drive to the safety of the public.
6. To protect the interests of chauffeurs generally.
7. To promote amicable relations between employers and employees.
8. To provide legal assistance for members.
9. To assist members to find employment.
10. Benevolent fund, relief by loans, gifts, pensions for widows and orphans or other dependent relatives, convalescent homes, &c.
11. Clubhouse for members: Billiards, Dining Rooms, Bedrooms, &c. Country members note: "A Home from Home."

Official Notes.

Owing to the Bank Holiday, the usual meeting of the Committee was not held. We will therefore use the space at our disposal to give useful information to the members.

Representatives.

The following are the names and addresses of members acting as representatives:—

Mr. N. Darnaros, International Representative. Due at Headquarters on June 3rd, when he will be pleased to meet all friends.

Mr. G. Oliver, Reading, Berks. 62, Pitcroft Avenue.

Mr. G. Randall, Maidenhead and district. Stubbings Manor, Maidenhead.

Mr. J. Cormack, Romford and district. 30, Princes Road.

Mr. F. Hanson, Clitheroe and district. 13, Montague Street.

Mr. F. Pledger, 11, Lees Mews, Park Street, W., for Western district of London.

Mr. S. Henderson, Cork and district. 17 Company, Army Service Corps, Cork City.

Mr. F. Rogers, Macclesfield and district. 71, West Bond Street.

Mr. W. Hamshere, Guildford and district. Alderbrook, Cranleigh, Surrey.

Mr. A. Ashby, Beckenham and district. 15, Wickham Road.

Mr. W. Wright, Redhill and district. 6, Osborne Road.

Mr. G. Cady, Palace Garage, Bridge Place, S.W., for South Western district of London.

Mr. C. Fisher, Oxfordshire. Fringsford, Bicester, Oxon.

Mr. A. Caddy, Bristol and district. Oakleigh Cottage, Leigh Woods, Bristol.

The Committee would be pleased to hear from members willing to act as representatives.

N.S.C. Garages.

Members Please Note.—The following are garages appointed since the printing of the handbook. Members should cut out this list and paste in the end of the handbook.

ENGLAND.

Dunstable.—Hicks Temperance Hotel, The Square.

Hereford.—County Motor Garage, 206 Commercial Road.

Southsea.—Aspinall and Gurney, Old Southsea Railway Station.

WALES.

Aberystwyth.—K.A.R. Garage, North Parade.

SCOTLAND.

Brechin.—A. Simpson and Sons.

FRANCE.

Grasse, A.M.—E. Engilberge, Grasse Garage, 15 Avenue Thiers.

Menton, A.M.—J. Mironneau, International Garage, 25 Avenue de la Gare.

Monte Carlo.—Stephano Chizzola, Sporting Garage.

Clubroom.

The Editor of the *Austin Advocate* has kindly placed the society upon his mailing list, therefore a copy of this bright and useful book will always be found in the clubroom. Any member wishing to obtain any information with reference to the Austin car can do so by addressing the secretary.

The Entertainment Committee would be pleased to receive any suggestions for the winter programme.

Review of Events.

The appeal made to the Commissioner of the Police with regard to the regulation of stopping places for omnibuses other than at places where the trams stop has had no effect. On Bank Holiday, when crowds collected at these dangerous spots, it was simply marvellous that serious accidents were not frequent. The drivers of the 'buses ran great risks by dashing up at a speed beyond all reason for the safety of the public. Every day it becomes with the increased number of 'buses more apparent that new regulations are required. As usual, we must suppose that only when some casualty occurs to some prominent person the official in question will brush the cobwebs from his eyes to find that the man in the street has been neglected.

The remarks under the heading of "In Memoriam to the Professional Chauffeur" have caused considerable comment, and many are wondering what will be the result of this serious endeavour to make the chauffeur in private service a maid of all work. My advice is stop wondering and work with might and main to combat the growing evil. Nowadays many owners allow their wives to consider the chauffeur her especial property, and to this cause we place the creation of the chauffeur-housemaid. Ten years hence no doubt we shall see advertisements in the following style:—

"Man required to manipulate knifeboard, and clean boots with a flourish, help the cook carry coals, assist the parlour maid to clean the silver, and make himself generally useful. Must be a willing worker, used to horses and washing bulldogs, also to act as caddy on golf course, assist in garden, &c. Man with good tenor voice for church choir, and able to play the organ preferred. Advertiser has two high-powered motor cars. Must be careful driver, thorough mechanic, and able to keep cars out of repair shop. Cars not used on Sundays. Applicants must be honest and trustworthy, and live up to strictly Christian principles. Clean licence and highest personal reference essential. State wages, which must be moderate, the advertiser offering a comfortable home in return for services rendered."

Wake up, Chauffeurs, and by combination and business methods strike at the root of this growing evil.

ARTHUR SEXTON, General Secretary.

Accepted to Membership.

George R. Jordan, Trowbridge	W. J. Brooks, Camden Town, N.W.
C. W. Whitton, Earlsfield, S.W.	Charles Backinsell, Ealing
E. J. W. Gilding, Maidenhead	John W. Newman, London, S.W.
Robert E. Fenner, Walthamstow	Harry Airey, Manchester

Applications for Membership.

Charles V. Roberts, Darlington	Alfred W. Holmes, Sunderland
Edward J. Childs, Alresford	Frank Scott, Aldershot

Any member wishing to raise an objection to the election of the applicant for membership is requested to communicate with the secretary without delay.



The committee trust that members will do their utmost to assist the Editor by sending to him any item they may consider of interest to motorists and chauffeurs generally.

For officially appointed N.S.C. garages, please refer to page xix.

**Particulars of Membership.**

Applicants must have at least 12 months' experience as paid drivers of motor vehicles, and must be men of undoubted good character.

First month's subscription (including entrance fee), 2s. 6d. Subsequent subscriptions, 2s. per month. Payable in advance on the 1st of each month. Badges, 1s. 1d., post free. Members may pay yearly 21s., or half-yearly 10s. 6d., payable in advance. A copy of the AUTO. is posted weekly to all members whose subscriptions are not in arrears, in order that they may be kept well posted in the progress made by the Society.



MR. J. R. NISBET has been elected Chairman of the General Committee of the Auto-Cycle Union for the ensuing year, while Messrs. G. Stanley Carter, B. Marians, Otto Thomas, and Major Lindsay Lloyd have been elected vice-chairmen.

A WARNING has been issued by the Chief Constable of Birmingham that the regulations with regard to the exhibition of number plates on motor cars and motor cycles will be more strictly enforced in future.

THE Bournemouth Corporation has started motor 'bus services to link up the districts which are not served by the existing tramways system.

THE bridge over the River Wandle in Hackbridge Road, Croydon, will be closed to vehicular traffic for a period of about four months owing to rebuilding.

**APPLICATION FORM.**

TO THE SECRETARY OF THE NATIONAL SOCIETY OF CHAUFFEURS.

Halkin Street,  
Hyde Park Corner, S.W.

Sir,—Please send me a form of application for membership of the above Society. I enclose herewith P.O. 2s. 6d. (entrance fee and one month's subscription), same to be returned to me in the event of my application not being accepted.

Signed  
Address

NOTE.—Only bona fide Chauffeurs who have had at least one year's experience as paid drivers, and whose references will stand strict investigation, are eligible for membership.



THE Middlesex County Council has applied to the Local Government Board for a 10-mile speed limit at Roxeth Hill, Harrow. Objections have to be lodged by June 18th.

THE motor ambulance at Northampton, which has just completed one year of service, during that period removed 311 cases as compared with 183 journeys by horse ambulance. The total distance covered in the year was 2,212 miles.

A SUMMONS against a motor cyclist for riding a noisy machine was dismissed by the Newport (Mon.) justices after they had, at the invitation of the defendant, heard the machine running.

ONE day recently fourteen motor cyclists were fined at Preston for using cut-outs on their motor cycles.



THE "MOTOR 'BUS" DERBY, 1914.—Showing how the remarkable development in this direction has taken place, and the enormous convenience this type of vehicle is both for viewing the races and for comfortable picnicking.

## BY THE WAY.

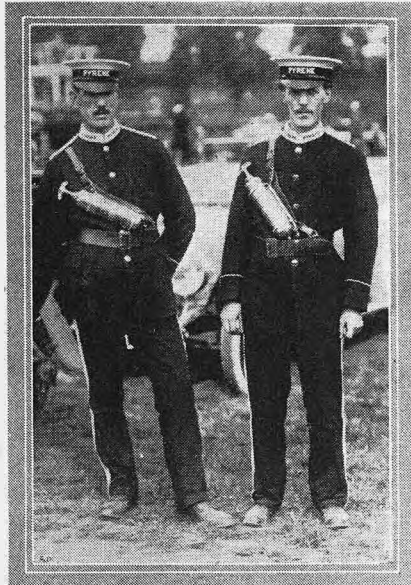
THE following letter has been addressed to the Editor of the AUTO, by the Ford Motor Co., Ltd., Trafford Park, Manchester:—

"Sir, Perhaps the best reply to the queer conceits of your contributor 'Cynicus' and the pathetically quaint comments occasionally expressed by 'Roundabout' both upon the subject of Henry Ford or in connection with the Ford Motor Co., is to be found in the following well-known lines:—

..... after all  
The noblest answer unto such,  
Is perfect silence when they brawl.  
Yours faithfully,

Ford Motor Co. (England), Ltd."

As far as I am concerned my "pathetically quaint comments" have been induced by the Ford Motor Co. themselves, who have from time to time sent news items to this office for publication "either wholly or in part." It is recognised as being perfectly legitimate for a newspaper to comment on such items in addition to their actual publication. Apparently the Ford Co. have taken exception to this accepted rule owing to the fact that the comments have not always been favourable. The public will of course draw its own conclusions from this remarkable attitude on the part of the Ford Co. For the rest, I leave the matter in the hands of our tame ballad-writer who expresses himself in the following terms:—



Two of the Pyrene fire guards who were on duty at Brooklands on Monday.

### DOLLARS OR HALOS?

When you've boosted your goods in a manner adroit,  
With the claim they're the best that come out of Detroit,  
And persuading the public has met SOME success,  
By the aid of stray scribes of the ha'penny press,  
In their Greater London Edition,

A benevolent purpose consumes you in turn,  
To do good to your fellows in what they may earn,  
Whilst press agents "get busy," send "pars" far and wide,  
As news to the papers, who haven't applied,  
Some wishing the stuff to perdition.

Next you tell your employees "fer sure" you'll advance  
All their wages and hopes here, there, also in France,  
And the beggars go home to their wives and their kids  
Taking count of their prospects of spending more quids,  
Whilst the office boys smoke their Manillas.

Now you warn them they must not stay out late at night,  
If they do then "fer sure" all their prospects you'll blight,  
They must rise with the lark, go early to rest, sir,  
There's no time in the day to waste on siesta,  
Or loll up against handy pillars.

You assemble your many score autos a day,  
Your yard sweeper gets most exceptional pay;  
And you speak impure English as "more motor car,"  
With a twang, mixed with brogue which you learnt from your Ma;  
And you call car refinements "embroidery."

When the "stunt's" had its run, your benevolent smile  
Takes a twist, due, they say, to developing bile,  
With a brand new Corona stuck into your face  
You walk into your works and sack men at a pace  
That makes everyday hustling look tawdry.

Write again to the papers and ask them to puff  
Items sent them—quote wholly or part's quite enough—  
And when they comply and their comments seem hard,  
Your retort is translated from some well-known bard.

Had you taken his "tip" you'd been wiser.

Then you raise both your hands, the palms outwardly turned,  
With expression benign, which you somehow have learn'd,  
And you feel for the Halo you fancy you wear,  
Though it's made up of Dollars—of that I will swear,  
While you murmur "Gee! SOME Advertiser!!"

MESSRS. FLUID PRESSURE PUMPS, LTD., of Clifton Street Works, Latimer Road, W., have just completed arrangements with one of the largest Continental houses for the supply of Pioneer pumps throughout Europe.

I HEAR that Mr. Harry Ferguson, of Harry Ferguson, Ltd., the well-known motor agents of Belfast and Dublin, has ordered a Mathis Babyette for his personal use in the Isle of Man.



**"The best result  
I have had  
from any tyre."**

4, Swan Road,  
Harrogate,  
May 2nd, 1914.

The 880 x 120 White Tread GAULOIS TYRE, bought from you on December 20th last, has done 6,053 miles on the back wheel of my car, including a tour of 960 miles at a stretch. Kindly wire for another White Tread same size, as this is the best result I have had from any tyre used on my car.

Yours truly,  
(Sgd.) Percy Exley.

The above is only one  
of many similar letters  
we receive daily.

**Fit GAULOIS  
if you want the  
greatest value.**

6, BATH STREET, CITY ROAD,  
LONDON, E.C.

Telegrams: "Goalwase, London."  
Telephone: 7275 London Wall.

MANCHESTER	229, Deansgate.
BRISTOL ...	35, Victoria Street
LEEDS ...	78, North Street.
GLASGOW ...	15, Clyde Place.
SKIPTON ...	High Street.
HARROGATE ...	Albert Street.

**Gaulois Tyres**  
( GOAL - WAH )

C. & Co.



Miles of Smiles

The talk of the whole  
Motoring World

# VANADIUM PUNCTURE-PROOF PNEUMATIC TYRES

**Puncture-Proof  
BUT  
Pneumatic**

**T**HE ideal tyre at last.  
No special tubes required. No  
fillings. Fits any standard rims.

**A**BSOLUTE and entire  
security against punctures and  
vexatious road stops caused by  
punctures and other tyre troubles.

**V**ANADIUM Puncture-Proof  
Pneumatic Tyres are the only  
tyres that give satisfactory service on  
commercial vans—a proof that they  
are far stronger and more lasting than  
any other tyre on the market.

**F**IT your Car with Vanadium  
Tyres and eliminate the last  
remaining trouble in motoring.

### PRICES

More expensive to buy, but cheaper to  
use. All tyres are 12½ per cent. Oversize,  
and guaranteed Burst and Puncture Proof  
for 3,500 miles.

Size.	Plain.	Non-Skid.
760 × 90 ...	£5 8 7	£6 14 10
810 × 90 ...	5 18 5	7 7 5
815 × 105 ...	8 0 0	9 4 0
880 × 120 ...	10 3 0	12 14 3
935 × 135 ...	15 3 6	18 11 5

Can be seen at our Show-  
rooms, or further information  
on request to A.O. ATLAS  
SYND., Ltd., 14, WOOD-  
STOCK STREET (Off  
Bond Street), London, W



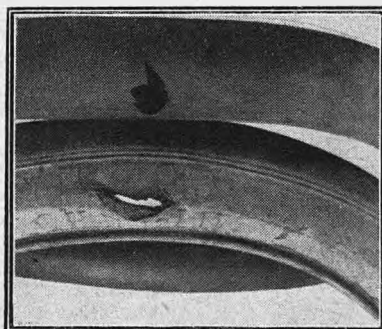
Roy Hardy

THE value of any article can readily be gauged from the popularity it enjoys. Therefore it is interesting to note the satisfactory increase in the sales of the Atlas Vanadium Puncture-Proof Pneumatic Tyre in America. In January, 1911, only ten tyres were sold, but during that year the sales jumped up to 203 in one month, and at the end of 1911, 1,254 had been purchased. In 1912, one month showed a sale of 420, while altogether 3,230 tyres were sold. A still bigger jump was made last year, when 12,333 sales were recorded, the best month having 1,619 to its credit. This year promises to eclipse these records. January showed that 1,022 tyres had been disposed of, February 1,188, and March 2,223, an increase that demonstrates public appreciation. In regard to the new Company which I understand is being formed to run these tyres on a big scale in this country, it is stated that capital to the extent of £200,000 will be provided for instead of £100,000 as originally proposed. The address of the English Company is 14, Woodstock Street, Oxford Street, W.

INQUIRIES are invited from manufacturers of electrically-propelled motor ambulances by a public Corporation. Letters will be forwarded, and they should be addressed in the first place to Corporation, care of this office.

SPEAKING of ambulances it is interesting to observe that the Metropolitan Asylums Board have recently placed an order for three 18-24 h.p. Siddeley-Deasy chassis to be fitted for the purpose mentioned.

THE story of a burst illustrated by the accompanying photograph. The upper portion shows the punctured tube and underneath the cover with a huge gash. The tube had been treated with the Puncture Seal compound, the first public demonstration of which was carried out by this journal. The tyre in question was fitted to a landaulette which completed its journey with the driver



totally ignorant of the damage, and which in fact was not found out until the following morning when the car was undergoing its "toilet."

FOR the fourth year in succession the Senior T.T. race has been won on machines using Wakefield's "Castrol" motor oil. Well, it was to be expected. Castrol was also used by the two machines that tied for second place.

THOSE of my readers who are following the Tourist Trophy Race should make a point of getting a copy of the folder which is issued by the Dunlop Co. Besides comprising a scoring sheet, there is a list of

**C.A.V.**

**CAR LIGHTING**

**TAKE THE DAYLIGHT WITH YOU**

Extract from —  
SUNDAY TIMES

"A quarter of a mile ahead and almost 'round the corner.' With its mellow rays not only flooding the road but the sides of the highway and the tree tops, the C.A.V. system is not merely the most powerful, it is also the most pleasant method of lighting that the market has to offer us to-day"

FOWLER DIXON

The one car lighting system which is simply perfect because it is perfectly simple

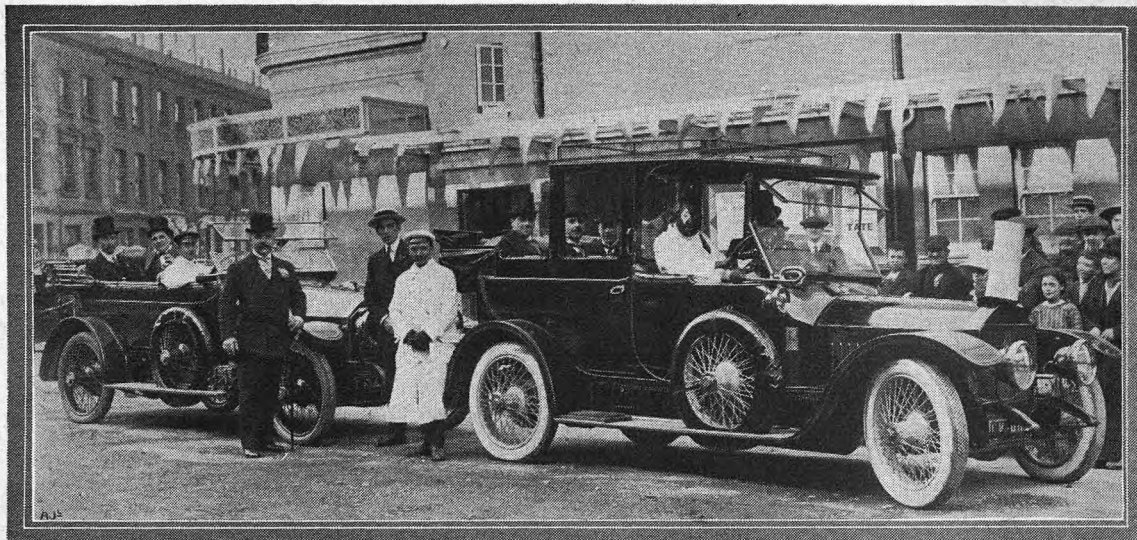
BLUE BOOK of Car Lighting post free from  
C. A. VANDERVELL & CO.,  
ACTON, LONDON, W.

the cars and drivers, together with a number of items regarding the forthcoming and the previous races. Incidentally it may be noted that with the exception of one team all the competing cars will be mounted on Dunlops, on which the trophy was won the last three times in succession.

AN order of the Court has been granted to Messrs. Wm. Cole and Sons, Ltd., the well-known coachbuilders of Kensington and Hammersmith, dispensing with the receiver and liquidator appointed last November. Arrangements have been made under which the creditors at November 20th, 1912, have been paid and funds have been provided for the discharge of all outstanding liabilities incurred during the carrying on of the business by the receiver.

"ROUNDABOUT."





**HELPING THE BLIND.**—A photograph outside the Finsbury Park Empire in connection with a special matinee held in aid of Mr. C. A. Pearson's fund for the blind, when a whole host of well-known artistes gave their services. In the 6-cyl. Napier car, at the wheel, is Mr. C. H. Chirgwin in his "war-paint," by his side is Mr. A. C. Hicks, and at the back is Mr. Maurice Harvey of "Hullo Ragtime!" the Mayor of Islington, and Mr. Tom Clare. In the second car are two members of the Committee who are aiding Mr. Pearson's campaign. The adornment on the Napier bonnet is not the ordinary filler but Mr. Chirgwin's temporary hat-peg.

**CORRESPONDENCE.**

**Petrol Leakage and Can Caps.**

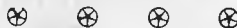
SIR,—I have noticed that the leading petrol monopolists are complaining that their cans get badly treated by the public and that they lose some £50,000 a year on this item alone—to say nothing of the loss by evaporation. (Does petrol evaporate also when the cans are sealed?)

Well, there is no doubt that the cans do get badly treated, but why the companies still continue to use such ridiculously designed stoppers is a source of mystery to me. At present, the bottom ridge of another can is about the only handy thing that will move a cap. Why don't they cast the stoppers with a hexagon edge or a hexagon top, so that any shifting wrench will open it—and it won't cost them any more.

If the companies want to send me a handsome cheque in recognition of this marvellous idea they should address it to

THEO. B. ANDRE.

5, Dering Street, New Bond Street, W.



**NEW COMPANIES REGISTERED.**

**Elma Gear Box Co., Ltd.**, Basildon House, Moorgate Street, E.C.—Capital £200,000, in £1 shares. Acquiring certain patents in relation to speed changing, reversing and braking gear, under agreement with the Menco-Elma Syndicate, Ltd. First directors, F. Everest and C. I. Beavis.

**North Wales Silver Motors, Ltd.**, Mostyn Broadway, Llandudno.—Capital £35,000, in £1 shares. Acquiring the business of the Llandudno Automobile Touring Co., Ltd. First directors, J. Dickin, S. Homer, G. W. Browne, W. M. Letts and W. R. Nicol.

**Private Companies.**

**Beaconsfield Motor Co., Ltd.**—Capital £3,000, in £1 shares (1,950 pref.). Acquiring business of an electrician, motor and general engineer, &c., carried on by W. Evans at Beaconsfield. First directors, G. Cuthbert, T. C. J. Williams, R. A. Hobbs and E. Clarke-Cohen.

**Boarland, Ltd.**, Granby Place, Leicester.—Capital £2,000, in £1 shares (1,000 pref.). Acquiring business of a coach, carriage and motor-body builder carried on by J. Boarland (successor to H. Kinder) at Granby Place, Leicester. First directors, J. Boarland and G. J. Telbutt.

**Depford Co., Ltd.**—Capital £10,000, in £1 shares. Acquiring business carried on at 2, Evelyn Street, Deptford, S.E., as the Depford Co. of manufacturers and repairers of motor cars, &c., under agreement with L. F. De Peyrecave and H. F. Burford.

**W. and G. Lambert, Ltd.**, Castle Street, Thetford, Norfolk.—Capital £4,000, in £1 shares. Coachbuilders, motor engineers, &c. First directors, G. E. Lambert, Mrs. F. H. Lambert and William Lambert.

**PUBLICATIONS RECEIVED.**

*Electricity in the Home and Workshop.* London: The A.E.G. Electric Co., Ltd., 133-135, Oxford Street, W.

*"Where Shall We Live?"* London: The Homeland Association, Chandos Chambers, 15, Bedford Street, Strand, W.C. Price 3d. net.

*Annuaire de Route de l'Automobile Club de France, 1914.* Paris: Automobile Club de France, 8, Place de la Concorde.

*Gearing: a Practical Treatise.* By A. E. Ingham. London: Methuen and Co., Ltd., 36, Essex Street, Strand. Price 5s. net.

*The "Autocar" Imperial Year Book, 1914.* London: Iliffe and Sons, Ltd., 20, Tudor Street. Price 2s. 6d. net.

**Catalogues.**

*Castolin Auto-Chemical Welding of Metals.* The Castolin Co. of Great Britain, Clock House, Arundel Street, Strand, W.C.

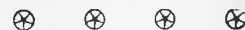
*The Victor Cyclecar.* Victor Motors, Eynsford, Kent.

*Austin Pleasure Car Chassis.* The Austin Motor Co., Ltd., Longbridge Works, Northfield, Birmingham.

*Austin Marine Motors.* The Austin Motor Co., Ltd., Longbridge Works, Northfield, Birmingham.

*Some Interesting Details of Longbridge Works.* The Austin Motor Co., Ltd., Longbridge Works, Northfield, Birmingham.

*Austin Cars for Doctors.* The Austin Motor Co., Ltd., Longbridge Works, Northfield, Birmingham.



**Patent Specifications Published.**

Abbreviations:—cyl. = cylinder; I.C. = internal-combustion; m = motors.

Applied for in 1913.

Published May 28th, 1914.

- 15,961. F. FEVENS. I.C. engines.
- 16,399. ALLEGEMEINE ELEKTRICITATS GES. I.C. engines.
- 17,181. R. ESNAULT-PELTERIE. I.C. engines.
- 17,189. H. LEITNER. Starting gear.
- 18,147. J. AND R. BRIDGE AND E. BRADSHAW. Friction clutches.
- 18,829. G. D. BAILEY. Self-propelled vehicles.
- 19,355. J. H. LAUBENBURG. Carburetors.
- 20,166. E. L. ROWE. Starting I.C. engines.
- 20,205. F. F. GANLY. Elastic wheels.
- 23,064. L. H. HOUNSFIELD. Transmission gear.
- 24,053. L. HERBERT. Rims for wheels.
- 24,292. TRIUMPH CYCLE CO. AND A. S. BAVLIS. I.C. engines.
- 26,022. A. O. LORD. Transmission gearing.
- 27,834. F. ILSEMAN. Wheel-hubs.
- 28,878. M. PAZOS. Elastic wheels.

Applied for in 1914.

Published May 28th, 1914.

- 1,832. H. SPURRIER. Driving-gear.
- 2,405. LUDWIG KATHE AND SOHN. Motor vehicles.
- 3,082. J. V. PUGH, W. BLAIR AND RUDGE-WHITWORTH, LTD. Detachable wheels.
- 4,126. FAHRNEY WHEEL CORPORATION. Resilient wheels.
- 6,074. C. F. KETTERING AND W. A. CHRYS. Starting and ignition systems.