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Vol. 4 No. 4
October
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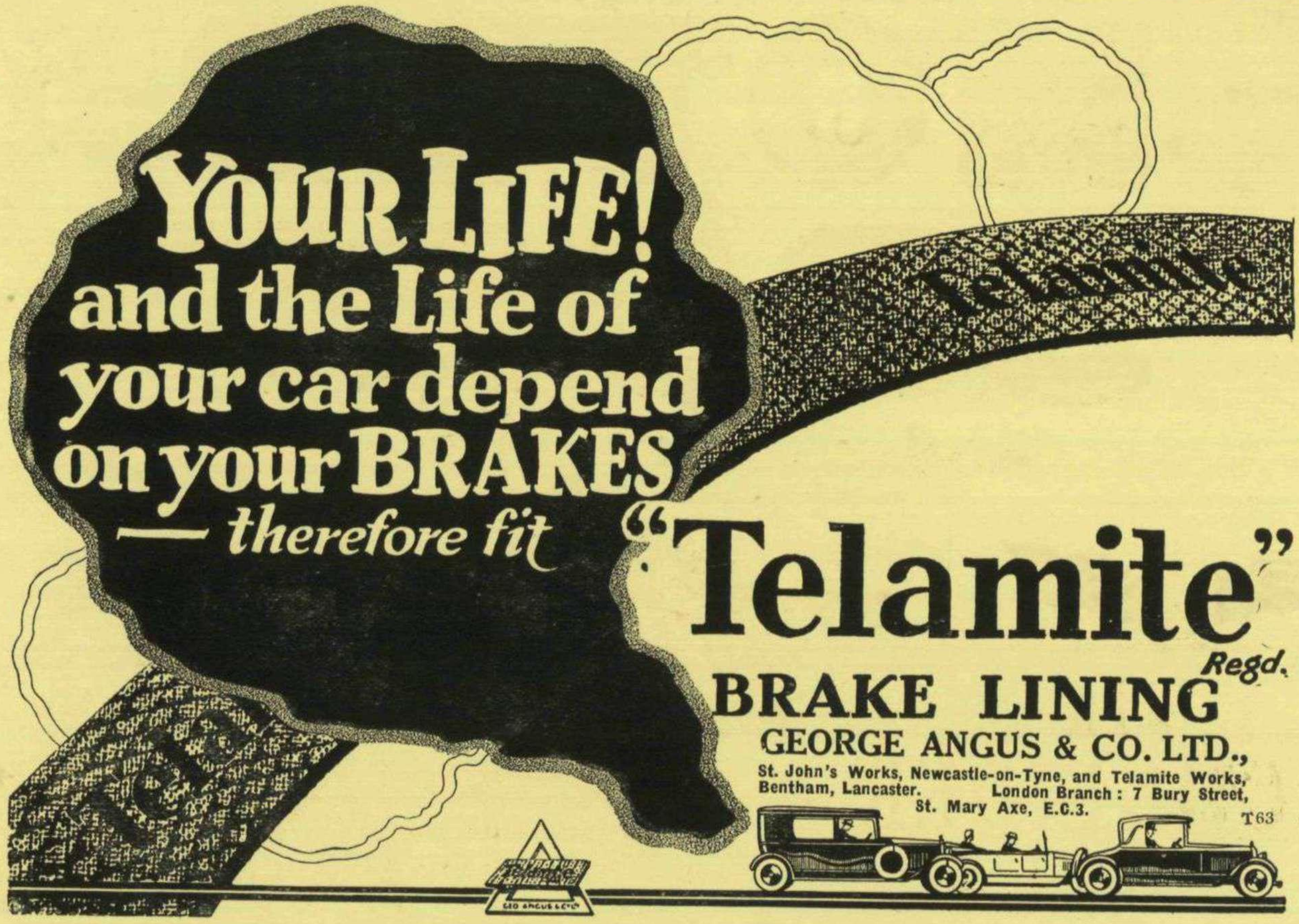
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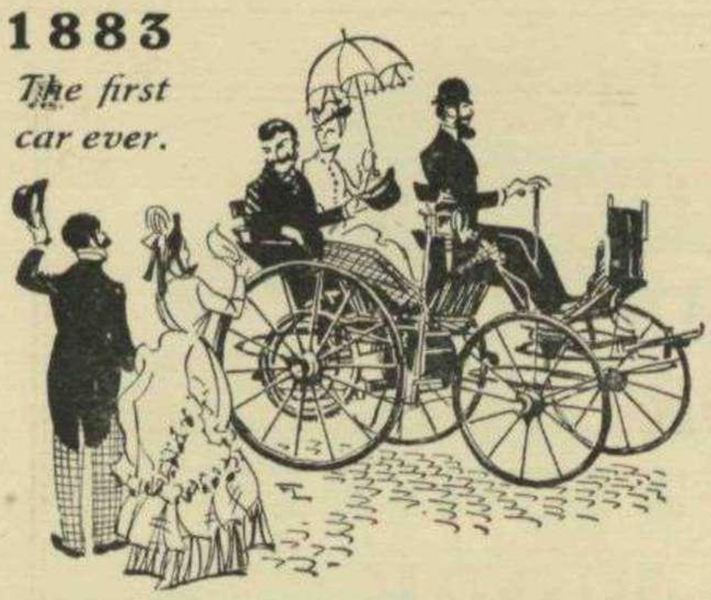
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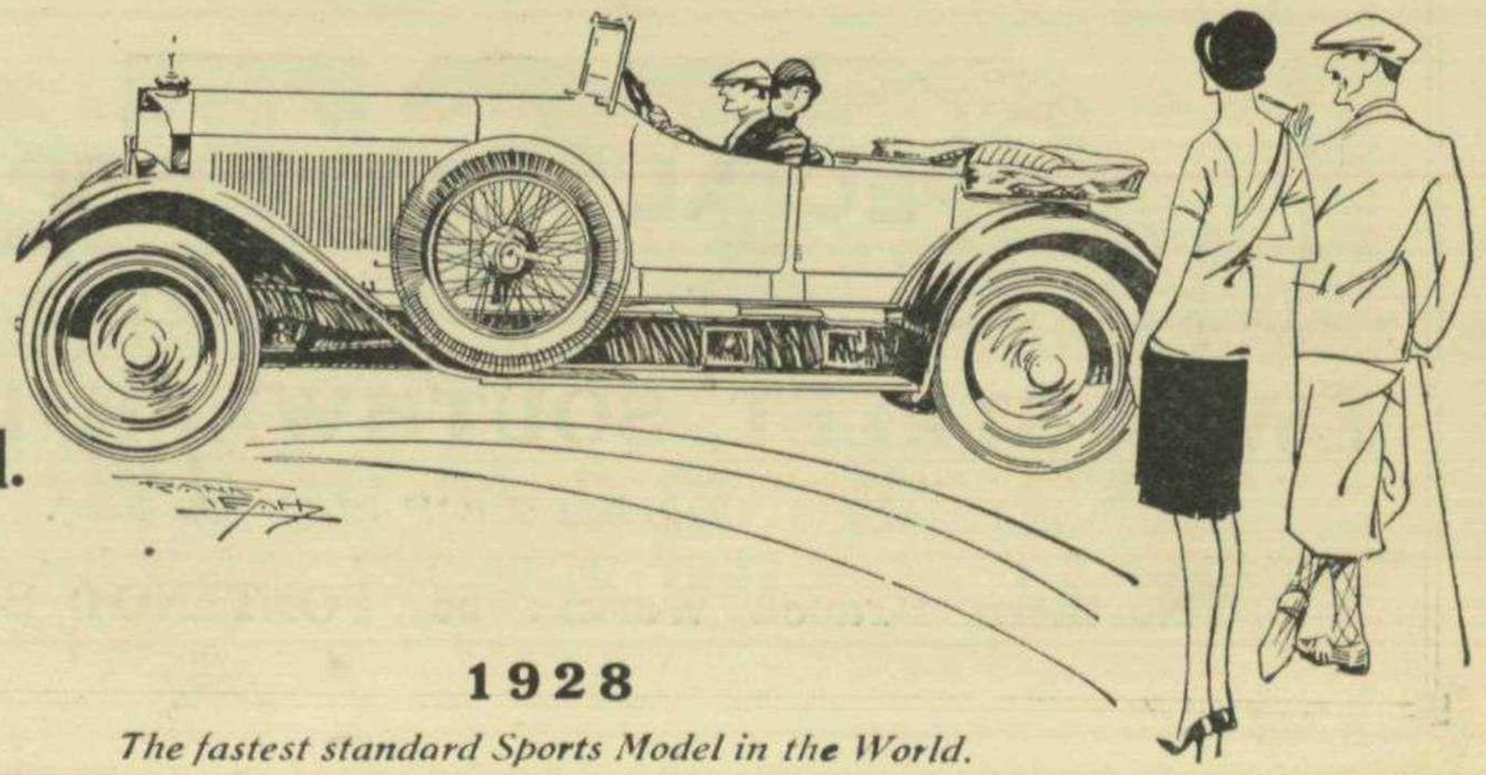
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No. 4.

VOL. 4.

Edited by L. A. HUTCHINGS.

OCTOBER, 1927.

EDITORIAL NOTES.

Wake Up England!

ANOTHER racing season is drawing to its doleful close. In the last International Race, counting for the world's championship, England has made one of her most feeble exhibitions.

Here in our own country, on our own course, not only do we fail to secure a place, but fail to finish at all. The R.A.C. Grand Prix from the point of view of British motor sport was a grand fiasco.

All this year cries of dismay have risen from the man in the street about the state of all British sport. And now must be added the cry " What *is* wrong with British cars ? "

That something radical is wrong is obvious, and we are forced to recognise the melancholy fact that British factories are not keen on racing ; and the few who make a show are not able alone to combat the energy and brilliance which the continental firms bring to motor-racing.

The recent Grand Prix is but a startling example of the general state of motor racing in this country.

Far be it from us to depreciate the triumph of the Delage in their victory, but we feel that England should at least be capable of a team finish, whereas, *not a single English car finished the course!*

Why is it left to one factory and a private owner to represent this country in an international race of the importance of the recent Grand Prix.

We have the drivers, we have the brains, we have the money. Surely we can run a team of cars adequately representative of the industry in this country.

To say that the result of the Grand Prix has disgusted English sportsmen is to put it mildly. At the conclusion of the race we heard but one sentiment expressed on every side—" What *is* wrong with England ? "

Why do not our big factories lay out an adequate expenditure for racing work ? They have the money to do it, but they completely lack the will.

If our big *marques* really think that they can rest on their laurels they are greatly mistaken. There can be no standing still, we either progress or fall back.

Apart from the intrinsic value of racing which has been a subject on which enough has already been said, something must be done for the honour of England. This journal has ever had the well being of motor sport at heart, and for months past has pointed out the steady decline in our racing activities, and the way we are drifting.

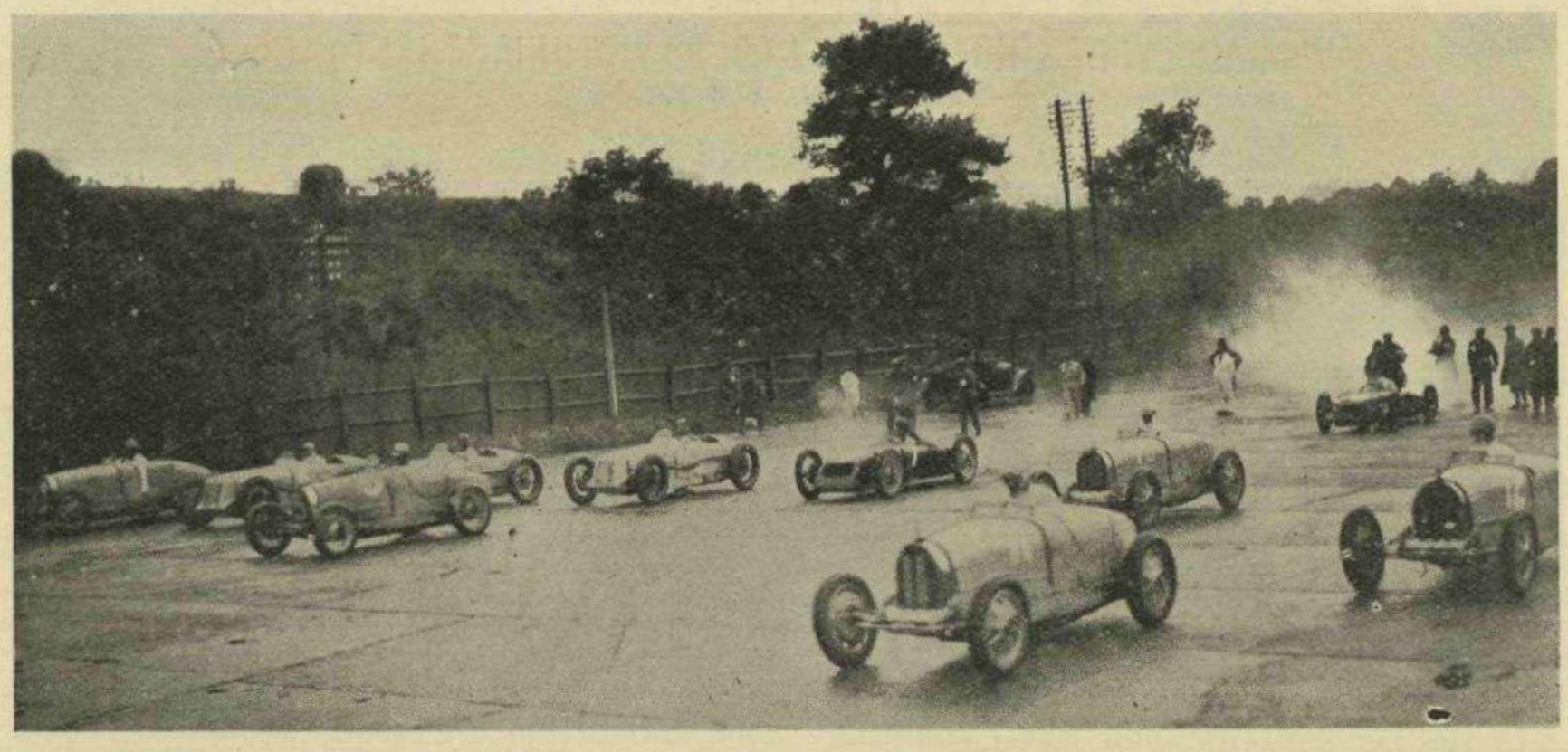
The time has come for a definite attempt to stop the rot, and to place the industry back on the pedestal from which it is slipping fast.

CONTENTS.

	PAGE
Editorial Notes	91
The British Grand Prix	92-94
Great Racing Marques (viii.)—Ballot	95-97
Some Impressions of a 1927 A.C.	98-99
Sporting Cars for 1928	100-101
Recent Sporting Events in Pictures	102-103
The Modern Motor Cycle	104-107
The 1927 Amateur Road Race	108-110
Racing News	112-113
" Rumblings "	114
Correspondence	115
Here and There	116

THE BRITISH GRAND PRIX.

A Triumph for Delage.



AT THE START, MATERASSI, NO. 11, DRIVING A BUGATTI, SHOT AHEAD, KEEPING HIS LEAD FOR ONE LAP.

CONTRARY to almost universal expectation the much vaunted R.A.C. Grand Prix went off in the manner of the proverbial wet squib—in more senses then one.

Preliminary disappointments included the early scratching of the new 12-cylinder Fiats and the American Duesenberg, while at the last minute a defective oil pump eliminated Harvey's Alvis—a car on which many British were relying, to uphold the national prestige. The reason given for the Fiat failure was that the works had been too occupied in preparing the Schneider Cup seaplanes to spend any time on the motor cars, while the Duesenberg gearbox was still suffering from the complaint developed at Monza.

These unfortunate occurrences at once robbed the race of much anticipated interest and a day of gloomy drizzling rain served to still further damp the ardour of " race-fans."

The Start.

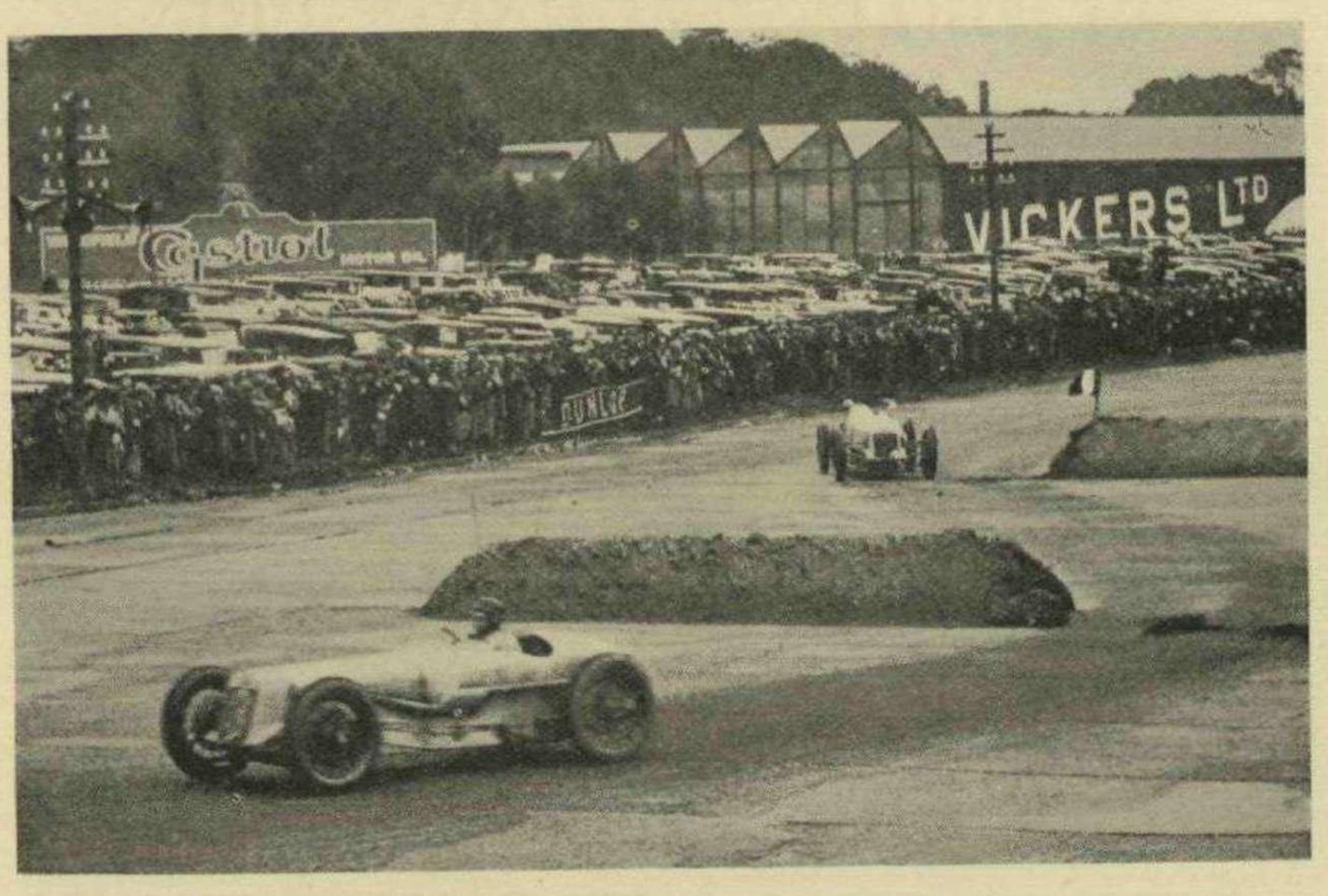
At 12 o'clock sharply, the eleven competing cars, which had previously been lined up at the beginning of the railway straight, were dispatched on their 325 mile journey. The actual start was difficult to see from the paddock, but at the end of lap one no little interest was aroused when Emilio Materassi brought his Bugatti round in the lead, being followed by Bourlier's Delage and Campbell's Bugatti. However it was not expected that this order was to be maintained, as the Delage team were known to be considerably faster than their rivals ; it was not surprising therefore when the three low built French cars appeared in the lead, Divo, borrowed from Talbots being followed by Bourlier and Benoist.

A mild thrill occurred quite early when Purdy, driving the Thomas Special, executed the most lurid skid of the race. Unfortunately this car, which might have put up a really good show suffered severe trouble through oiled plugs—it belched smoke continuously and stopped three times in the first nine laps for new plugs, and then retired with transmission trouble. This was particularly disappointing in view of the fine performance of this car in recent straight-away races at Brooklands. The other Thomas Special, driven by W. B. Scott was also withdrawn at about the same time, the driver complaining of insufficient speed. His car was unsupercharged. Thus British hopes were completely dashed before even



CHIRON (BUGATTI) FOLLOWED BY DIVO (DELAGE) ON THE LAST BEND.

THE BRITISH GRAND PRIX—continued.



BOURLIER AND BENOIST TAKE THE FIRST TURN IN COMPANY.

the leaders had been announced for the first ten laps. The order for the first 30 laps—approximately quarter distance—remained fairly constant, the first six at 30 laps being :—

1 Divo (Delage) 4 Count Conelli (Bugatti)
2 Bourlier (Delage) 5 Chiron (Bugatti)
3 Benoist (Delage) 6 Campbell (Bugatti)

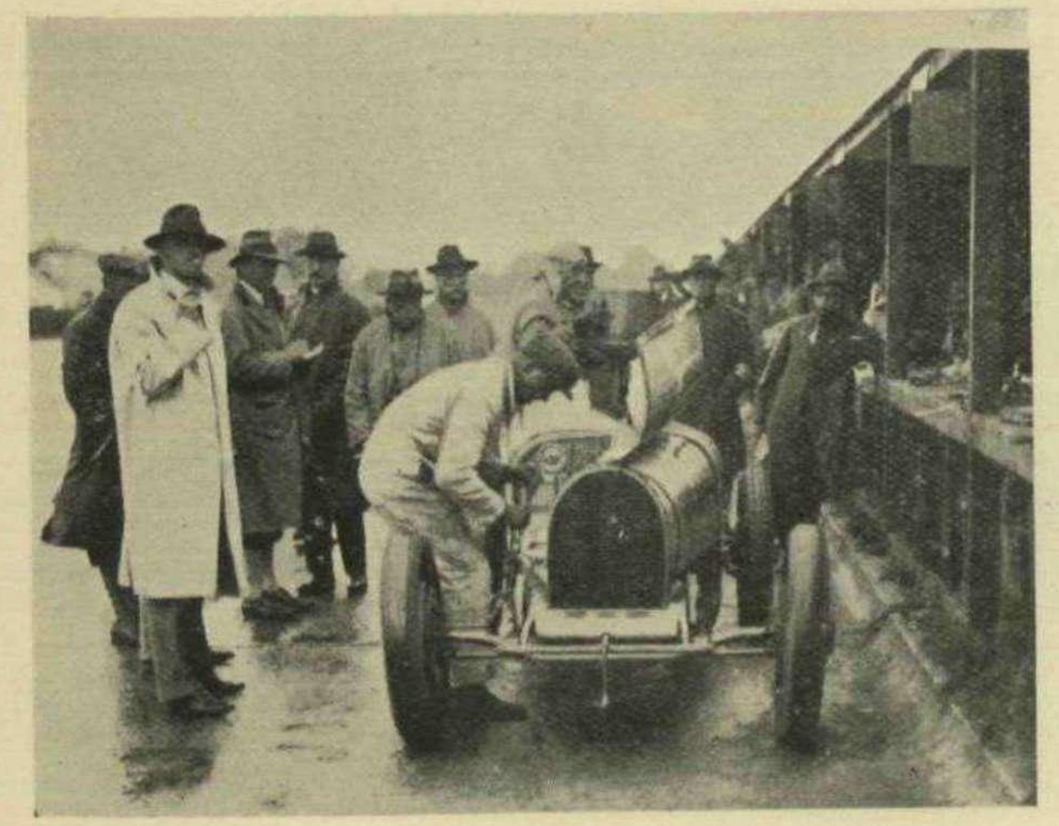
Divo had averaged 86.08 m.p.h.

Prince John Ghica was driving very well but his car seemed to be lacking in maximum speed and after 28 laps he was forced to retire with a faulty induction pipe washer.

After a similar number of laps Materassi who was perhaps the most dashing driver in the race was delayed by a leaky radiator and subsequently had to stop frequently to replenish his water supply. After 44 laps Divo stopped to fill up with petrol and oil, thus dropping to third place so that at half distance the leaders were :—

1 Bourlier (Delage) 4 Conelli (Bugatti)
2 Benoist (Delage) 5 Chiron (Bugatti)
3 Divo (Delage) 6 Campbell (Bugatti)

The leaders' average speed had now risen to 87.05 m.p.h., while it was reported that the Delages were covering the flying kilometre at about 102 m.p.h. and the Bugattis at 90-95 m.p.h. These figures, however, do not represent the maximum speeds of which the cars were capable as the timed section was entered comparatively slowly.



COUNT CONELLI IS RELIEVED BY WILLIAMS AT THE WHEEL OF BUGATTI NO. 11.

Depot Stops.

Just after half distance most drivers stopped for replenishments, Bourlier shed his mackintosh at 69 laps, thus giving the lead to the Delage "Ace" Benoist, but still keeping ahead of Divo. The float needle on Conelli's Bugatti stuck, causing the car to run out of petrol on the 65th lap. The unfortunate count, who was running 4th, pushed the car two-thirds of a lap ; it was then refuelled and Williams, the reserve driver, continued.

Chiron refilled at 63 laps but as a result of Conelli's trouble moved up a place, as did Malcolm Campbell.

Eyston had approximately 8 stops for plugs in the first half of the race, after which S. C. H. Davis relieved him at the wheel and seemed to continue with less trouble than Eyston, though he stalled his engine for a few moments at the first sandbank turn on his first lap.

Benoist refuelled, changed tyres and adjusted brakes after 72 laps, and in so doing was passed by Divo and Bourlier once more.

The race continued monotonously, without any thrills, if we except Materassi's rather violent braking for the first bend with locked front wheels and a very occasional slight error of judgment on the part of one or another driver. Divo stopped to examine his tyres at 89 laps but at three quarter distance the order was :—

THE BRITISH GRAND PRIX—continued.



A QUARTET OF BUGATTIS, LED BY CONELLI AND CHIRON AT THE FINAL SANDBANKS TURN.

1 Divo (Delage)
2 Bourlier (Delage)
3 Benoist (Delage)
4 Chiron (Bugatti)
5 Campbell (Bugatti)
6 Materassi (Bugatti)

The leader's speed was 85½ m.p.h.

As previously mentioned the cars of Materassi, Williams and Davis had all been delayed earlier in the race, but were now being driven in very fine style in the hopes of retrieving lost ground. That their hopes were vain was due entirely to the superb reliability of the Delage team, none of whom suffered any involuntary stops throughout, but the three Bugatti men were able to pull up a place when Campbell's car of the same make began to require more than the usual number of plugs. Campbell finally disappeared on his 98th lap, and Davis was unfortunately delayed by a temporary engine seizure at about the same time though he was still many laps behind.

At 120 laps, with 5 laps to go the order was :

1 Benoist (Delage)
2 Bourlier (Delage)
3 Divo (Delage)
4 Chiron (Bugatti)
5 Materassi (Bugatti)

Benoist, evidently according to plan had now taken the lead and very soon finished first at an average speed of 85.59 m.p.h. for 325 miles in drizzling rain, the other two Delages finishing just behind.

The first four to finish were therefore :—

2 R. Benoist (Delage).
2 E. Bourlier (Delage).
3 A. Divo (Delage).
4 L. Chiron (Bugatti).

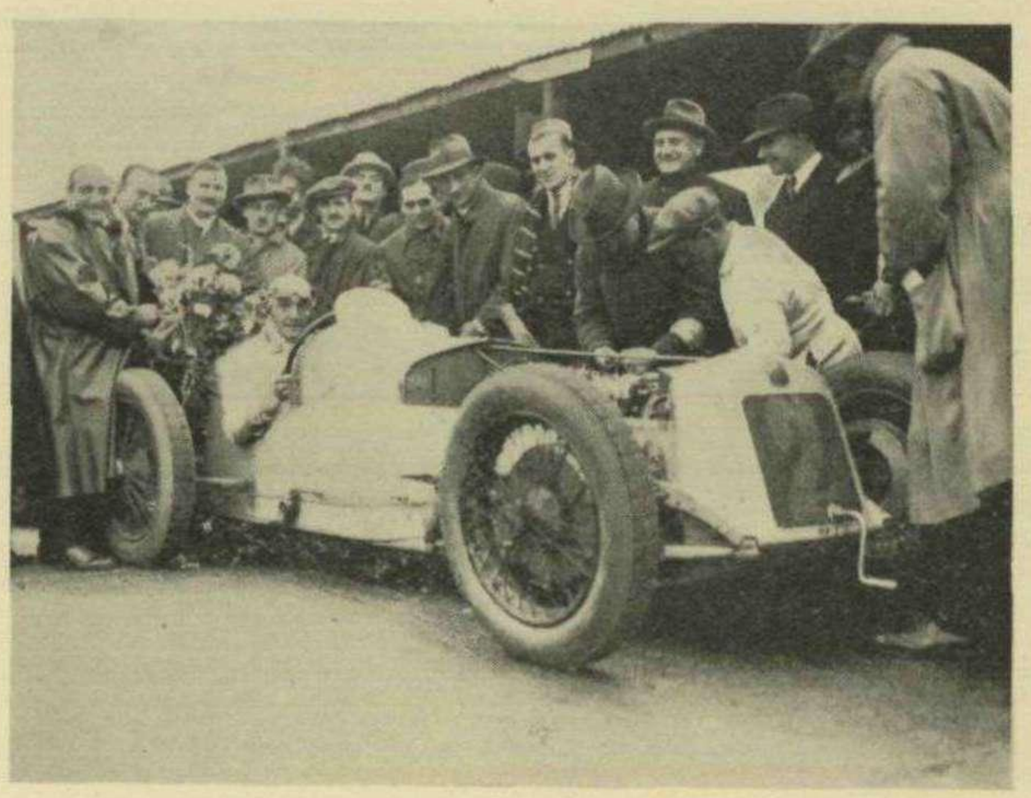
E. Materassi, the car driven by Count Conelli and Williams and that driven by G. E. T. Eyston and S. C. H. Davis, all Bugattis were still running in the order named but were flagged to stop after the first four had finished.

Benoist thus won his fourth big race this season, a remarkable tribute to his own skill as a driver and to the technical ability of the Delage racing staff.

GRAND PRIX NOTES.

At about one quarter distance it was remarkable to notice that for lap after lap the three Delages came round in a group, while separated from them by about half a lap a covey of five Bugattis were lapping in close formation.

Divo on the Delage was probably the neatest and fastest cornerist in the race, though Materassi and Conelli in a more spectacular style were very fast. Materassi appeared to stop his engine accidentally several times when negotiating the paddock turn while Eyston overshot once the mark and had to reverse, at this spot. Benoist nearly missed the turn, sliding up to it sideways with locked rear wheels towards the end of the race.

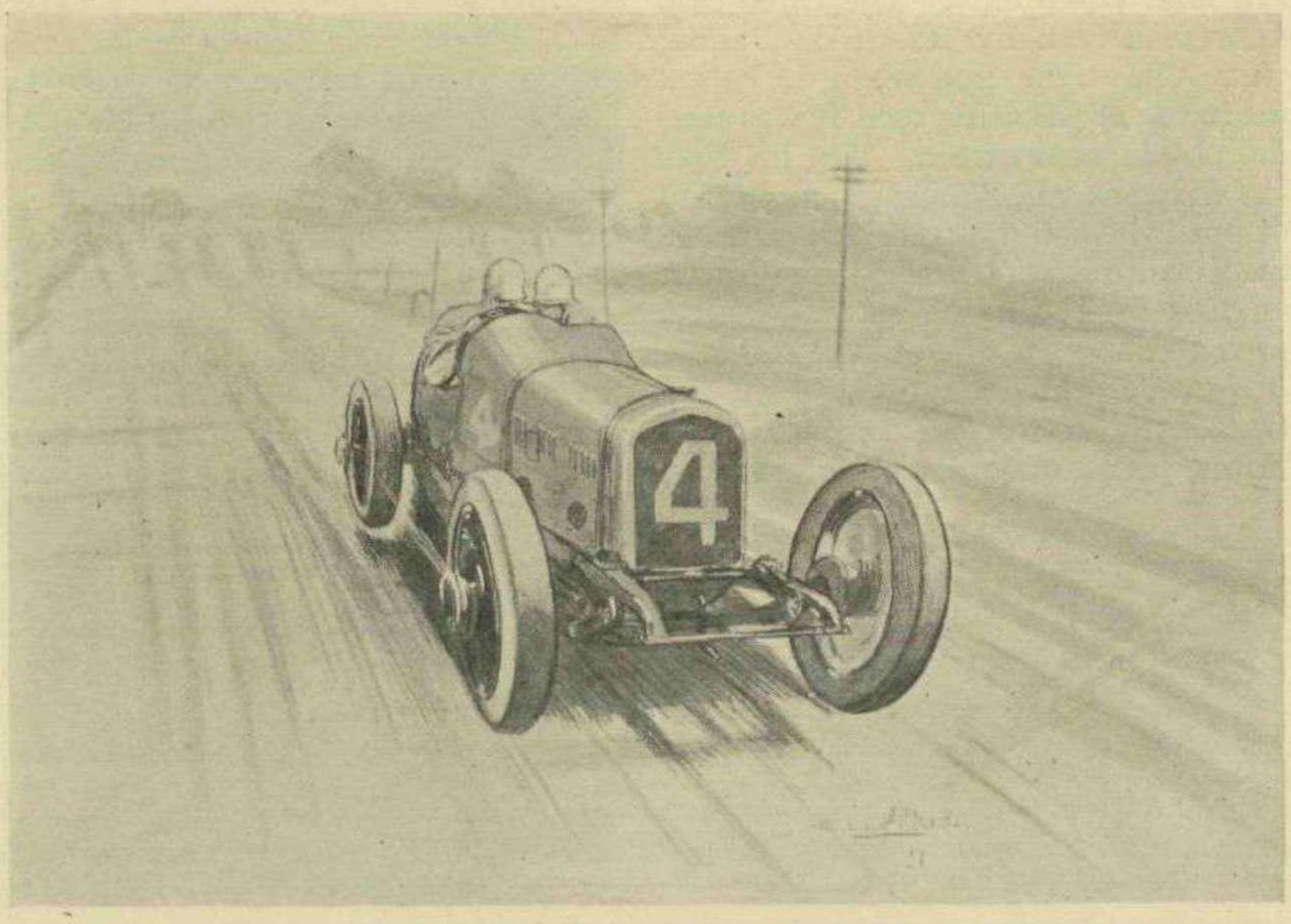


ROBERT BENOIST SURROUNDED BY DELAGE ENTHUSIASTS AFTER HIS WIN.

GREAT RACING MARQUES.

VIII.—BALLOT.

By E. K. H. KARSLAKE.



BALLOT CARS ARE WELL KNOWN AT BROOKLANDS, AN IMPRESSION OF DUNFEE ON HIS CAR OF THIS MARQUE.

ALTHOUGH Ballot engines had been well-known for many years, it was not until after the war that the Ballot came into prominence as a racing car. After the close of hostilities, however, the company was joined by the eminent Swiss engineer, M. Henry, who had been responsible for the design of the Peugeot racing cars which had carried all before them in the years just before the war. During the war he had been engaged by the French government on the construction of a straight-eight aeroplane engine, which had been designed by M. Bugatti and which has now been used in a very slightly modified form for the new "Golden Bug." It was not surprising therefore that when Ballot had decided to enter for the 1919 Indianapolis race, the engine which M. Henry designed for the race was a straight-eight.

The race was limited to cars with engines up to 300 cubic inches (4.9 litres), and the Ballot engine therefore had a bore and stroke of 74 x 140 mms. (4817 c.c.), with the crankshaft arranged on the 4-4 principle—like two four-cylinder crankshafts in line. The engines, like the pre-war Peugeots, had two overhead camshafts and two carburettors.

The war ended in November, 1918, and work was begun on the designing of the cars at the end of January, 1919. In spite of this four cars were shipped to America and arrived at Indianapolis in time for the race on 30th May. The drivers selected for them were Albert Guyot, Ballot, Réné Thomas and Louis Wagner, but at the last moment Ballot was replaced by Jean Chassagne. It was not surprising if in the race these cars which had been prepared so hurriedly were unable to show their best form; but in spite of this Guyot finished very creditably in fourth place, and averaged 84 m.p.h. for the 500 miles, while Réné Thomas was eleventh. Of the other two Ballots, Chassagne's overturned, and Wagner had the misfortune to break a wheel and damage its axle.

During the race, however, the Ballots proved themselves to be tremendously fast, as one of them attained a speed of 104 m.p.h. in the race. That this was nothing approaching their maximum however was proved when René Thomas' did 103 m.p.h. up Gaillon Hill. The actual maximum speed of the cars was probably in the neighbourhood of 125 m.p.h., a really remarkable figure when it is considered that at that time the short distance records only stood at about 121 m.p.h., and were only raised to just over 122 m.p.h. by the big Sunbeam at Brooklands three years later.

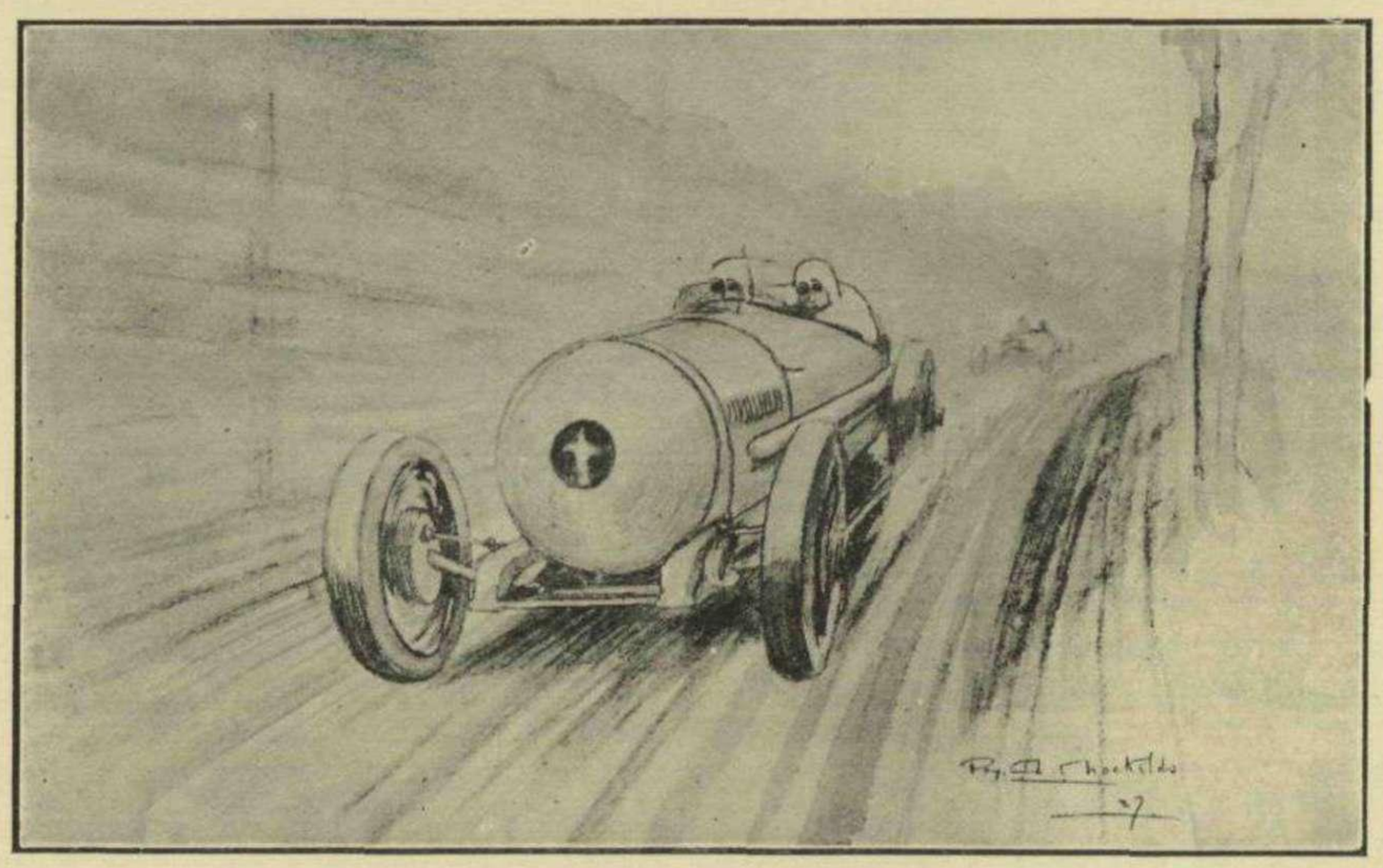
Réné Thomas' Ballot was entered for the 1919 Targa Florio, which was held in November of that year, and the car was fitted with front wheel brakes for the event. It was considerably the fastest car in the race, but Thomas soon found that his chief competitor was going to be André Boillot, who was driving like a demon on the little 2½-litre Peugeot. On the first lap the Ballot lost water, and none being in readiness at the pits, eight minutes were wasted while it was being procured. As Thomas entered his fourth and last lap, Boillot was eleven minutes ahead of him on time, and in his desperate endeavours to overtake the Peugeot, Thomas skidded at a corner, his car hit a kilometre stone and damaged the back axle too badly for him to continue.

GREAT RACING MARQUES—continued.

The 1920 Indianapolis race was for 3-litre cars, and some new Ballot racers were therefore built for it. These new cars had straight-eight engines, but their bore and stroke were 65 x 112 mm. (2973 c.c.). The three cars entered in the race were driven by Ralph de Palma, René Thomas and Jean Chassagne, and when de Palma made the fastest time in the eliminating race, it was seen that they were redoubtable competitors. On his first lap however he had to change a wheel owing to a pinched tube, and it was not until the 300 mile mark that he got into the lead. In the meantime a terrific duel had been fought out between Chassagne on the second Ballot and Joe Boyer on a Frontenac. Just before the 400 mile mark an incident happened which finally decided the issue of the race. One of the Monroe cars broke a steering knuckle, and after performing several gyrations, finally ended up a complete wreck. Chassagne, who was following was forced to choose between hitting the wreckage or the grass on the inside of the track. He chose the latter, and although he and his car survived their 100 m.p.h. bumping, poor Chassagne was considerably shaken. Fifty miles from the finish, the Ballots were running 1st, 3rd and 4th, and the two more backward ones were rapidly overhauling Chevrolet on the Monroe who was in second place. Then, however, fate stepped in. One of the magnetos on de Palma's car failed, and he finally finished on the four cylinders which the other instrument fed, but in fifth instead of first place. As soon as he had dropped back the danger signal was hung out for Chassagne, who was now running second ; but the unfortunate driver was still suffering from his narrow escape 100 miles ago, and when he tried to speed up, he misjudged one of the turns and struck the outer retaining wall, and by the time he had made the consequent repairs, could only finish seventh. There now remained only Thomas who was lapping at 103 m.p.h. in second place, while Chevrolet, who held the lead, was only averaging 90 m.p.h. It was too late, however, for him to catch the American car, and he finally finished second, some six minutes behind the winner.

The next year Ralph de Palma started alone on his 3-litre Ballot, but he soon showed that the French car had lost none of its speed. He got the lead on the first lap, and there he stayed for 200 miles, in spite of concerted efforts on the part of the field to wear him down. After 100 miles he was a full lap to the good, but finally on the 112 circuit, he was put out of the race by a broken connecting rod.

The big effort which was made by the Ballot firm in 1921 was in the French Grand Prix. Three of the 8-cylinder cars were entered in this race which was for 3-litre machines, while Jules Goux started on a 2-litre

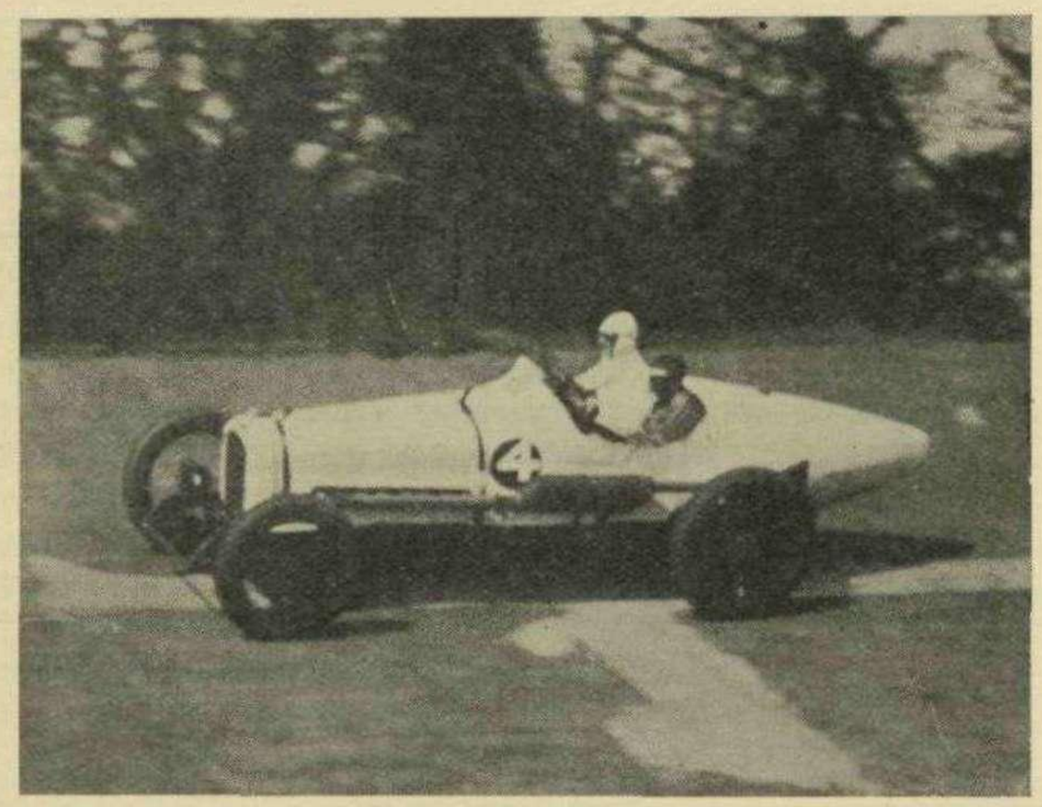


THE CURIOUSLY SHAPED 1922 GRAND PRIX 2-LITRE BALLOT.

4-cylinder Ballot of 69.9 x 130 mm. (1986 c.c.). The big Ballots were driven by Ralph de Palma, Louis Wagner and Jean Chassagne, and their chief rivals in the race at le Mans were the American Duesenberg cars. The lead changed many times between the members of these two teams, but at half distance Chassagne had the lead, and looked a likely winner. At that point, however, his petrol tank fell down on to the cardan shaft and was too badly damaged for him to continue. In the end the race was won by Murphy's Duesenberg, with Ralph de Palma a good second. The American car finished with no water in the radiator and a flat tyre, so that if the race had been but a few miles longer de Palma would have won. The real sensation of the day, however, was scored by Jules Goux, who succeeded in bringing his little 2-litre Ballot into third place at 71.8 m.p.h. Louis Wagner drove a steady race and succeeded in finishing seventh.

Though beaten in the French Grand Prix, the Ballots won an important victory later on in the year in the Italian Grand Prix on the Brescia circuit. The three

GREAT RACING MARQUES—continued.



THE LATE R. B. HOWEY DRIVING HIS BALLOT AT BROOKLANDS.

cars were driven by de Palma, Chassagne and Goux and had as their only adversaries the new 3-litre straight-eight Fiats. The reputation of the Torinese firm, however, meant that these racers were treated with considerable respect. The pace was terrific, and in the end the race was won by Jules Goux, who averaged 89.9 m.p.h.—an amazing speed for a road race. Chassagne was second, averaging 88.9 m.p.h., while de Palma dropped out during the race.

After this victory, two cars of the 2-litre type with two overhead camshafts which Goux had driven in the Grand Prix, were entered in the next big Italian race, the 1922 Targa Florio, and were driven by Goux and Foresti. At the end of the first lap, Goux was second behind Masetti on the 1914 Grand Prix Mercédès, but on the next lap he gained the lead. He held it for the third lap, but on the fourth and final circuit, he was held back by tyre trouble, and finally finished 1 min. 47 secs. behind Masetti, with Foresti on the other Ballot third.

The 1922 Indianapolis race was again for 3-litre cars, and marked the last appearance of the 8-cylinder Ballots, one of which in the hands of Eddie Hearne finished third. The Grand Prix limit, however, was now brought down to 2-litres, so that three of the 4-cylinder cars started in the hands of Goux, Foresti and Masetti. These racers had very curious shaped barrel-like streamlined bodies, an idea which was also used that year by Bugatti; they were not, however, blessed with good luck. Masetti went out with a broken connecting rod and Goux crashed at a corner after a difference of opinion with Nazzaro's Fiat. Foresti, however, got into third place on the thirty-sixth lap, and stayed there until the forty-fifth, when he was put out by a broken piston.

The 2-litre Ballot made another appearance later on in the year, when one was entered by the Spanish amateur Haimovici in the San Sebastian Grand Prix. He held the lead with it for a time, but finally finished third behind the two Grand Prix Rolland-Pilains.

This driver appeared again at the wheel of a 2-litre Ballot in the 1924 Coppa Florio, the other member of the Ballot équipe being Goux on a 3-litre machine. Goux had originally been going to drive a Peugeot, and had transferred at the last minute to a Ballot, for which he was paid out when the Peugeot men started borrowing the Ballot's tyres during the race! He did not have occasion to miss them, however, as his throttle stuck open at a corner, and the Ballot was crashed. Haimcovici, too, was put out of the running half way through the race.

The last successful appearance of the 2-litre Ballot was when one was piloted by de Buck which won the 1925 touring Grand Prix at San Sebastian. Of late, however, the Ballot firm have rather retired from racing, but everyone must wish that the cars which proved themselves by far the best of the European racers just after the war might be seen once more in the big races.

Several New Enfields.

The Enfield Cycle Co. Ltd., of Redditch has added several new models to its already comprehensive range and it may well be said that there is now an Enfield to suit every purpose. The new machines include a $2\frac{1}{4}$ h.p. four-stroke, a sports "350" and a redesigned 9.76 h.p. sporting machine.

The latter will doubtless appeal to a large number of riders who appreciate the joys of a "big-twin" but have hitherto been unable to enjoy them on account of the high initial cost. Its price is £70 only—a sum which is asked for many machines of but half the horse-power. It is fitted with an Enfield four-speed gear-box with gate change control in a forward position on the petrol tank. The latter is of the saddle type, handsomely finished in the usual two shades of green. The silencing system is very attractive, two large silencers lying one above the other on the off-side of the machine. With a polished aluminium sports sidecar this model is sold at £86 and, either solo or as a combination, it has a most attractive appearance. The bore and stroke are 85.5 x 85 mm. and the engine is of the side-valve type, as in the past. Mechanical lubrication is used.

Of the smaller machines, the new sports overhead 3.46 h.p. machine is particularly interesting. The frame of this gives a very low position in that the top tube is in a straight line with the back forks, the former being neatly covered by a saddle tank. Specially strong valve springs, a large carburetter and a high compression piston are fitted to this engine, so that the machine is capable of over 70 miles per hour without difficulty.

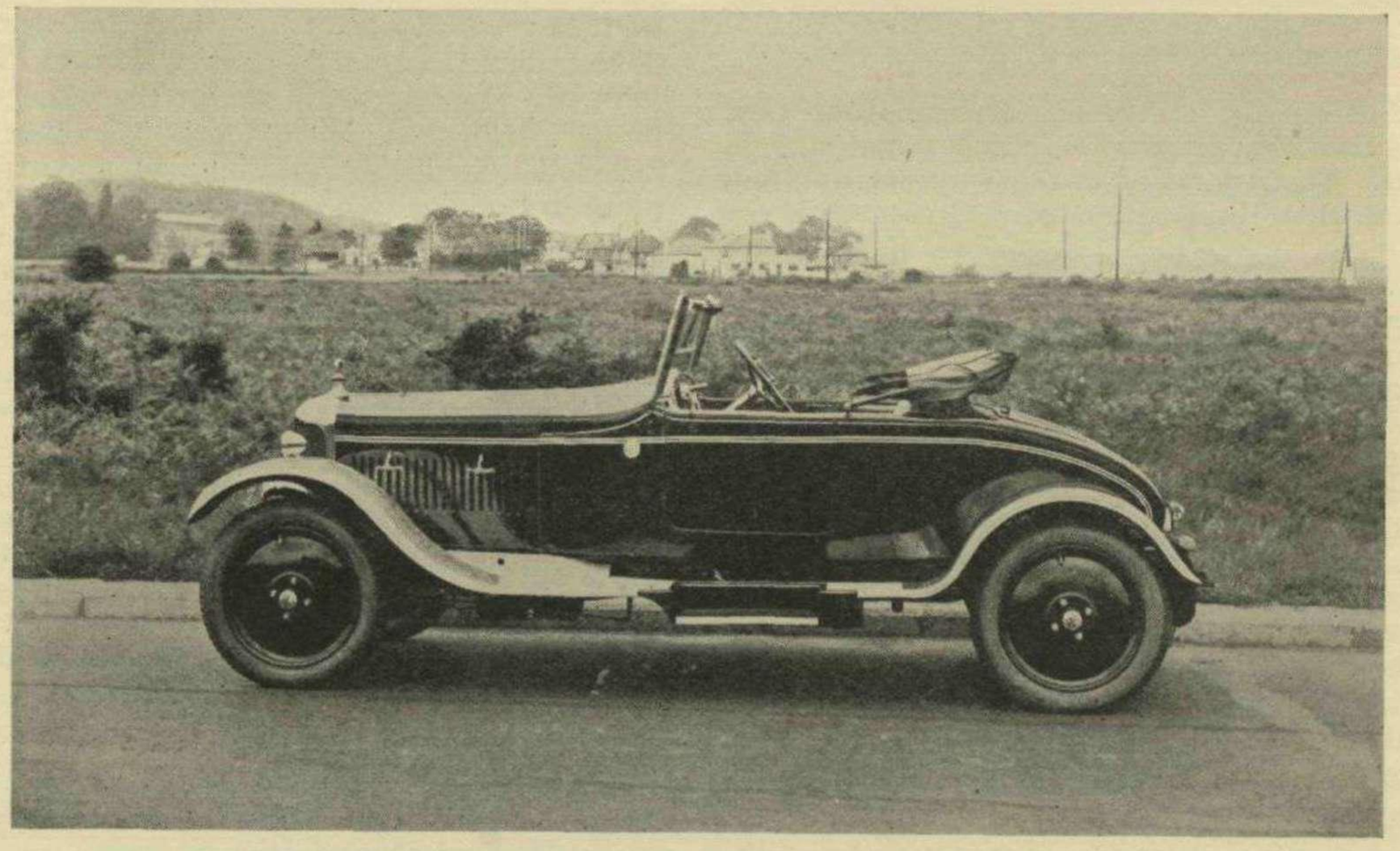
It might be thought that the new 2.25 h.p. four-stroke machine was intended to replace the two-stroke of similar power, but actually two new two-strokes have been added to the range, so that there are now five in all. The three models which embody a two-speed gear cost £31, whilst the new three-speeds with detachable aluminium cylinder heads, cost £33 10s. The four-stroke is listed at £37 10s. and the specification includes a side-valve engine, three-speed gear-box with gate change control, separate oil-tank, spring seat saddle and 27 x 2.75 in. Dunlop tyres.

SOME IMPRESSIONS OF A 1927 A.C. (ACEDES).

By THE EDITOR.

BY the courtesy of the manufacturers we recently enjoyed a very pleasant week end on a 16-40 h.p. 6-cylinder A.C., fitted with a commodious three-seater body.

Needless to say the A.C. could not possibly be described as a sports model, as the photograph shows, but we suggest that by virtue of its performance, this 2-litre car deserves consideration from the sporting driver who desires to indulge in fast and unostentatious driving. As we took over the A.C. at Thames Ditton we could not suppress a feeling of secret amusement at the thought of *Motor Sport* purring about in such an eminently respectable and comfortable vehicle. We were immediately impressed by the air of quality embodied in the



THE SMART COACHWORK AND ATTRACTIVE FINISH GIVE AN AIR OF QUALITY TO THE A.C. SIX.

A.C., a feature which one expects at the price payable for this model. This air of quality originates from the superlative finish, the attractive lines of the coachwork and the high class upholstery and detail work throughout. Other items of information gleaned from a preliminary inspection were that balloon tyres were fitted, while strange to say no front wheel brakes feature on this model, save as an extra. This latter may appear to be a serious defect in these advanced days but our experience, as will appear below, showed that the brakes left little to be desired.

The A.C.-Six chassis combines some extremely advanced points of design on lines which are acknowledged to be sound, and some unorthodox features, which are apt to involve the A.C. enthusiast in fierce argument with rival owners.

In the first place the six cylinder engine has hemispherical shaped combustion spaces with inclined valves, the latter being operated by a chain driven overhead camshaft. The chain drive for the camshaft is provided with a patent automatic tensioning device which effectually prevents any variation of the valve timing when the chain becomes worn.

Another interesting feature is the method of mounting the valve guides in the cylinder head on seatings having a hemispherical contact surface. The guides are a loose fit on these seatings, being held in position by the tension of the valve springs; the advantage of this system is that if any distortion takes place as a result of the temperature of the engine, the valves are still able to seat themselves correctly, and are not forced to remain in one position, as they are with fixed valve guides.

The point on which the A.C. defies modern practise is the use of a 3-speed gearbox incorporated in the back axle. Whatever theoretical disadvantage there may be in the back axle-cum-gearbox lay-out, it is only fair to the A.C. exponents, to admit that so far as our own experience goes, no evil effects of the arrangement could be detected.

With regard to the lack of a fourth speed forward, the A.C. gear ratios are so admirably chosen that the car has a road performance at least equal to, if not better than, many more expensive 4-speed cars, with less happily chosen ratios. It is just conceivable, however, that the rather high bottom gear of the A.C. might cause trouble if some really frightful hill of the motorcycle

SOME IMPRESSIONS OF A 1927 A.C.—continued.

trial type were to be attempted. However, this contingency is so remote that the simplicity of the 3-speed gear is amply justified.

Remarks on the gearbox, such as the above, require qualification in the case of the 6-cylinder A.C., since undoubtedly much of the success of this car, with three speeds, is due to the extraordinary flexibility *and* liveliness of the engine. Many engines are capable of high revolutions while others can develope great power at slow speeds, but few, if any, combine both qualities to such a degree as does the A.C. To descend to actual flexibility figures, a mere snail's pace could be indulged in on top gear, say about 3 m.p.h., and from this speed, still on top gear, 40 m.p.h. could be reached in 20 seconds. This phenomenal top gear acceleration is doubtless aided by the comparatively light weight of the whole car, and is quite the equal of many cars of a similar engine capacity, using the gears.

If the gearbox of the A.C. was used, a similar change in velocity could be accomplished in exactly half the time, i.e., 10 seconds.

These figures prompt one to believe that it would be possible to show a clean pair of rear mudguards to many real sports cars, provided road conditions did not permit sustained speeds of more than 65 m.p.h. The last named figure was attained several times on arterial roads, during our test, but when driven on the track at this speed the front wheels tended to develop a slight shimmy.

This fault was very slight and never occurred on the road, but was probably caused by the tyre pressures being unsuitable for the bumps of the track. On second gear 45 m.p.h. was easily attained, though the engine performance did not necessitate this style of driving to any extent. On 1st gear 25 m.p.h. was possible, and the same remark applies again.

At engine speeds corresponding to half a mile an hour each side of the 41 m.p.h. mark, on top gear a very definite engine vibration was felt—causing a noise somewhat reminiscent of a supercharger. It must be emphasised, however, that owing to this period being kept so closely to one speed, it could not be described as a nuisance, as it was quickly passed through when accelerating or decelerating.

The clutch was extremely light and smooth, being designed to prevent any possible damage to the transmission by even the most careless driver. As a result a certain amount of care had to be applied to the operation of the accelerator pedal at times to prevent clutch slip. This only occurred when the car was driven in an exuberant manner on the gearbox and could easily be overcome with a little care.

As previously mentioned, only rear wheel brakes were fitted to the car under review. A certain amount of force was required to operate the foot brake but we found that, descending a slight slope at 30 m.p.h., on a wet tarmac surface, we could bring the car to rest in 35 yards. The wheels we locked part of the time but the figures are distinctly good and compare favourably with some of the cheaper F.W.B. systems. The car was remarkably comfortable, both from the point of seating position and upholstery and as to ease of driving. Steering was light and reasonably certain, while the gear change was easy though the actual gate was inclined to be noisy.

Petrol consumption during a week end of fast driving was approximately 20 m.p.g.

Nothing more remains to be said of this car, which is undoubtedly near the top of its class for reliability, comfort and elegance, combined with a performance which is by no means despicable.

For the driver who requires something faster, the engine design allows certain modifications to be easily carried out, such as a racing camshaft and specially balanced crankshaft with high compression pistons. Engines incorporating one or both of these modifications are obtainable at a higher price, known as the 16-56 h.p. and the 16-66 h.p. models respectively, the latter being capable of some 85 m.p.h.

Dunelts Redesigned.

Dunelt machines which, as most riders know, are supercharged by means of their truncated pistons, are being produced for 1928 in new forms, although the prices remain unchanged. The new " sports K," (249 c.c.) has many improvements and is now capable of 60 m.p.h. The frame has been entirely redesigned and has wider forks and chain-lines so that $3\frac{1}{2}$ in. tyres can be fitted. This point will be much appreciated by those who desire comfort—the humour, perhaps, lies in the fact that a $2\frac{1}{4}$ h.p. two-stroke can be equipped with tyres of the same section as those of many Ford cars!

Mechanical lubrication is now adopted, a sight feed, which is part and parcel of the oil-tank filler-cap, being incorporated. The specification includes wider hubs, larger mudguards, shock absorbers built into the forks, a two-plate clutch and, over and above all, a saddle tank of very smart design. The standard " K " costs £35 10s. and the " Sports K " £38 10s., and electric lighting set with a head and tail lamp and a separate generator being supplied for £5 extra. The 500 c.c. Dunelt machines remain unchanged both as regard price and specification.

1928 Levis Machines.

One of the most interesting of the Levis range of machines for 1928 is the All-Weather Model " M de Luxe," which will be one of the few machines at the Motor Cycle Show wherein serious attempts to provide efficient weather-proofing have been made. The specification includes a dynamo lighting set, horn, licence holder, spring seat saddle, footboards and leg-shields and its retail price is but £38 15s. The engine, which has a bore and stroke of 67 x 70 mm. and cubic capacity of 247 c.c. is an air-cooled two-stroke, of which type the mannfacturers are the pioneers.

The standard Model " M " with various improvements over the 1927 pattern is now listed at £32, the well-known model " K " which is now in an entirely new form and is known as the " K2 " costing a few pounds more. The sports model " O " shows little change, the price of £39 10s. remaining the same.

The only machine of the Levis range which is not a two-stroke is the overhead valve model " A ". The engine of this has a capacity of 346 c.c. and the push-rods and valve gear are enclosed and lubricated by an oil mist from the timing case.

SPORTING CARS FOR 1928.

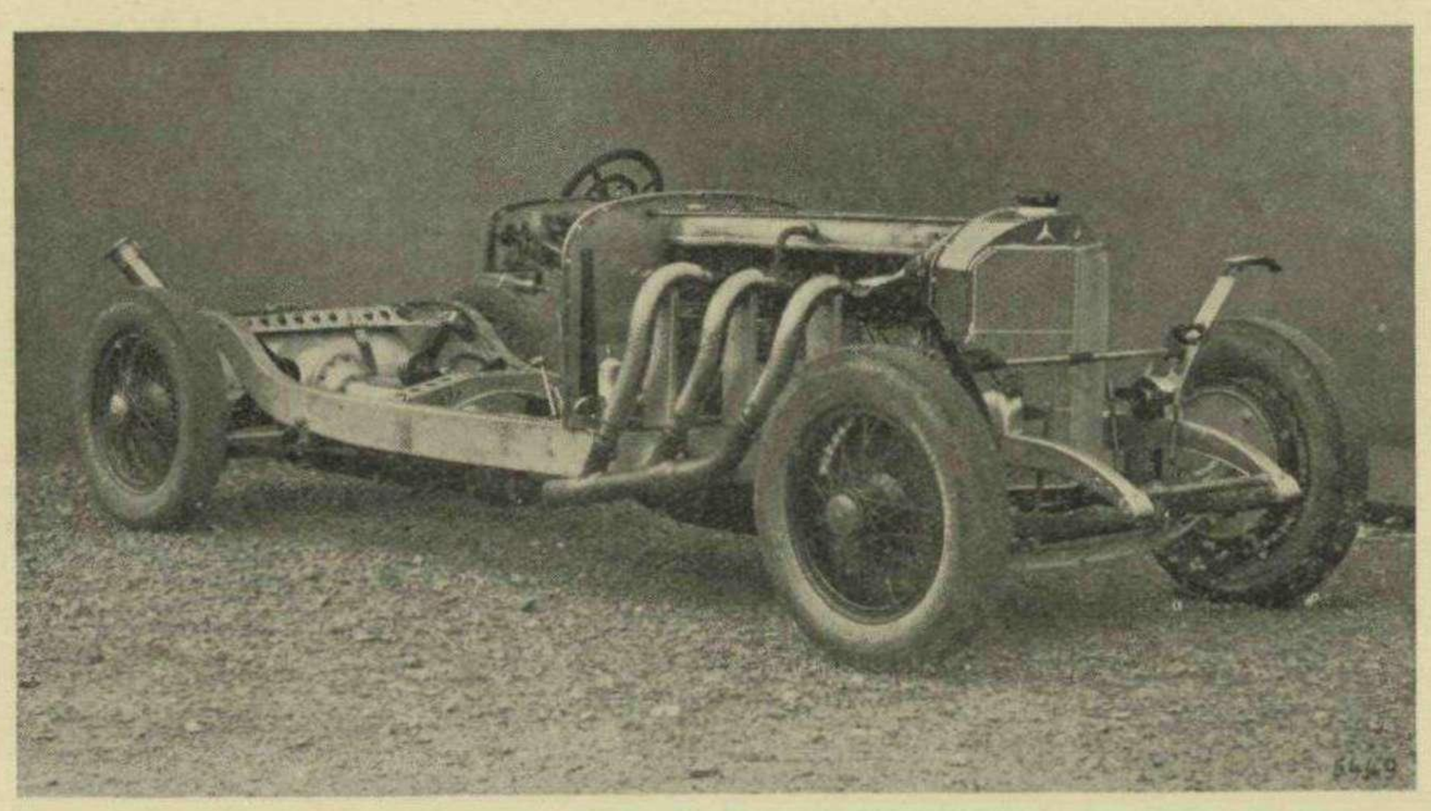
A FEW NOTES ON SPORTS CARS EXHIBITED AT OLYMPIA.

By R. L. W.

SINCE the visit of the enthusiast to the Olympia Show means a critical scrutiny of the new season's sports models, a brief survey of the more interesting exhibits will aid the sporting owner in his wanderings from stand to stand.

Following the general rule of the past few years, there are no revolutionary designs, and no startling innovations in the 1928 programmes. The general principle appears to be detail improvements in well tried design, which is more satisfactory to the potential buyer than experimental layouts which have not had the test of the ordinary user's experience.

An outstanding example of detail improvement is seen on the Mercédès Stand, where, on the 36/220 model the chassis has been brought several inches lower.



THE NEW 36/220 SUPERCHARGED MERCEDES. NOTE THE LOWERED CHASSIS.

This " Grand Prix Sports " model must rank among the very *elite* of sporting cars, and gives a performance even better than the older model, tested by *Motor Sport* two months ago. This latter model attained a speed of 100 m.p.h. on the open road, which augurs well for the maker's claim with the new chassis, of 110-125 m.p.h.

Items of note are the transverse position of the rear Hartfords, the duplex snubbers on the front axle, the great size of the 4-wheel brake drums, and the extremely neat housing for the spare wheel.

All models from the 2-litre to the 36/220 are six-cylinder and supercharged. The price of the 36/220 Grand Prix chassis is £2,000.

Approaching the revolutionary in body design is the new Air Saloon Body fitted to the Lancia " Lambda." This break with convention is calculated to create a sensation in sporting circles, as the design offers a definite solution to the problem of saloon comfort in a really " sports " body.

The striking appearance of this coachwork is brought about by careful stream lining combined with utility.

Internal equipment, amounting almost to furniture, includes a wireless set and luncheon outfit, both housed in polished walnut cabinets. A roof searchlight, an air speed indicator, altimetre, gradient meter and an electric fan ; altogether the car bristles with novel features. No visitor to the Show should miss what is without doubt a sensational exhibit.

Schneider models for 1928 are little changed from the 1927 production. Improvements have been effected in detail only. The 10/30 chassis is priced at £225 ; the 13/55 at £440, the 13/55 Sports Touring £580 and the Sports Saloon 13/55 at £675.

The Sports Model Aston-Martin in its 1928 form provides an excellent sports car at £495 with 3-seater at £575. The engine is 1½ litre, overhead camshaft giving 11.9 R.A.C. rating, taxed at £12 only. A four cylinder, fitted with Electron pistons yielding 1485 c.c., forms the power unit, with dual magnetos and pressure feed.

Amilcar in 1928 guise offers a Grand Sports model priced at £250 chassis of 8-9 h.p. or 9 h.p. at £254. Both these are 4 cylinder side valve engines capable of 70 m.p.h.

There is a 12 h.p. six cylinder racing chassis, a modified edition of which will be marketed at a considerably less price than for the same chassis last year. Messrs. Vernon Balls, Ltd., are now sole concessionaires for this *marque*.

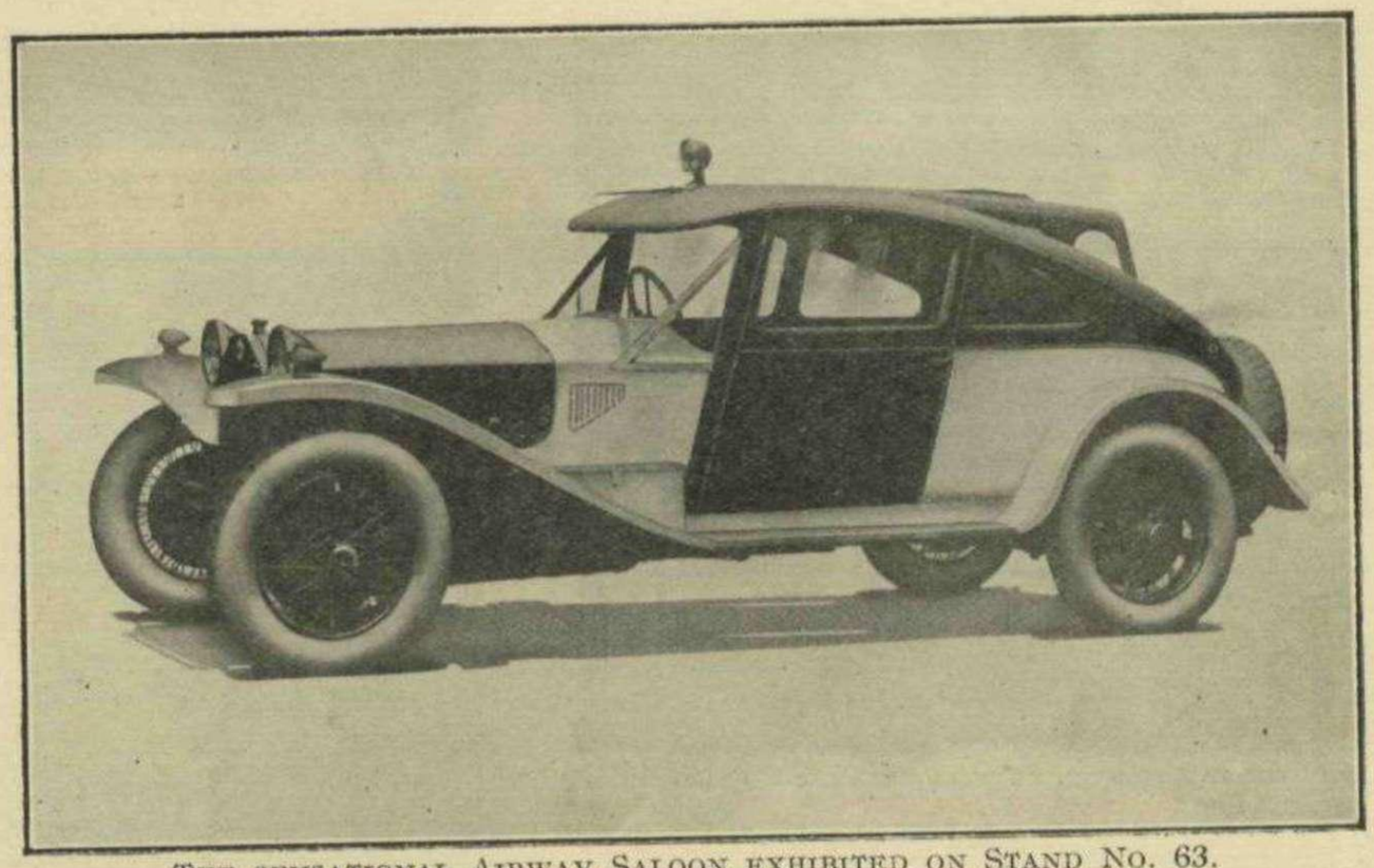
In the A.C. range chief interest will centre in the 16/66 Montlhéry model. This chassis has six cylinder engine, overhead camshaft and a speed of 85 m.p.h. This is priced at £630 for the 2-seater body. There is also the 12/40 four cylinder giving about 70 m.p.h. stripped, at £375 for a two seater body.

SPORTING CARS FOR 1928—continued.

Alvis show a 12/50 four cylinder model, with overheap valves operated by push rods. The speed of the two seater approaches 80 m.p.h. The price is £535. There are also two seater and saloon bodies, including the Alvista fabric saloon at £595. A six cylinder model has been introduced in the 1928 range at 14 h.p., chassis price £500.

Austro-Daimler has an attractive programme with a 19/100 Alpine model, six cylinder with overhead camshaft. This engine in the short chassis gives 100 m.p.h. Provisional chassis price £1,150.

A 19.70 six cylinder is included in the range, 65 m.p.h., chassis £595. Alfa Romeo exhibit chassis 15/60 and 22-90 h.p. both six cylinders, priced at £550 and £725, with maximum speeds of 75 m.p.h. and 85-90 m.p.h. respectively.



THE SENSATIONAL AIRWAY SALOON EXHIBITED ON STAND NO. 63.

Ballot present a 13/60 2-litre chassis at £495, with overhead camshaft.

Bentley needs no introduction to the enthusiast. The 3-litre speed model will attract all, and is as before 4-cylinder o.h. camshaft, speed up to 95 m.p.h., priced at £925 for chassis. The 4½ litre Bentley which made its debut at Le Mans is also shown.

A stand which will be the first stop of many will be the Bugatti. There is a very complete sporting range, including two litre eight cylinder, a 2½ litre supercharged chassis and the Grand Prix models of four and eight cylinders with maximum speeds from 95 m.p.h. to 118 m.p.h. in the 2-litre Grand Prix model. The price of this latter is £1,100.

On the Darracq stand an interesting exhibit is the 20/98 six cylinder. This chassis with Weymann saloon body is £895. There is a new 16 h.p. 6-cylinder model, and the 12/40 four-cylinder Sports car. The prices are £615 and £495 respectively.

Delage will naturally be a centre of attraction to sports owners, principally the 21 h.p. six-cylinder with a road capability of 75-85 m.p.h. This chassis is priced £590, saloon at £810.

Frazer Nash cars this year are on exhibition at M.S.L., in Hammersmith Road, opposite Olympia, where a range of direct appeal to the enthusiast is on show. This range includes long and short chassis editions of the super sports and Boulogne models.

The fast tourer (not supplied in short chassis) is priced at £290, super sports £340, Boulogne £410, Vitesse Boulogne £495. There is a supercharged model of the 3-seater Boulogne at £465, and of the Vitesse at £565.

Special supercharged cars are built to order.

Hispano Suiza is again one of the most imposing stands in the show, offering a 45 h.p. six-cylinder model with a speed of over 100 m.p.h., chassis price £1,950.

There is a 4 cylinder 15.9 h.p. Hotchkiss with a guaranteed maximum speed of 70 m.p.h. This chassis is priced as low as £400, with bodies as ordered.

A very majestic exhibit is the Isotta-Fraschini, with chassis of 45/100 eight cylinder engine. This engine developes 150 h.p. at 2,800 r.p.m. The super sports model attains 115 m.p.h. Prices: sports chassis £1,850; super sports £1,950.

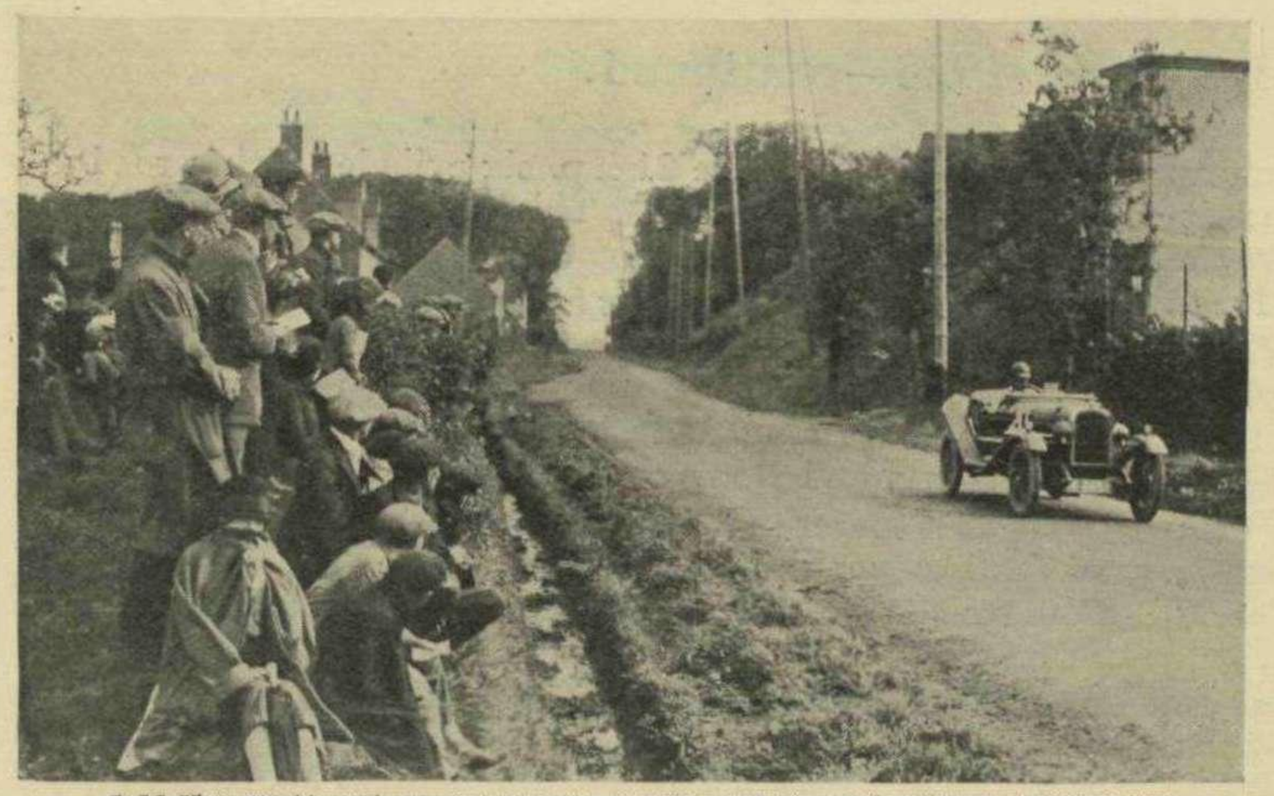
Lea-Francis present, in addition to their 12/40 h.p. four cylinder chassis at £325, a supercharged 1500 c.c., at £495. A six cylinder 14 h.p. model is also available.

The Grand Prix Salmson 10/20 h.p. four cylinder is priced at £215 for the chassis. There is also a 2-seater de luxe sports at £175.

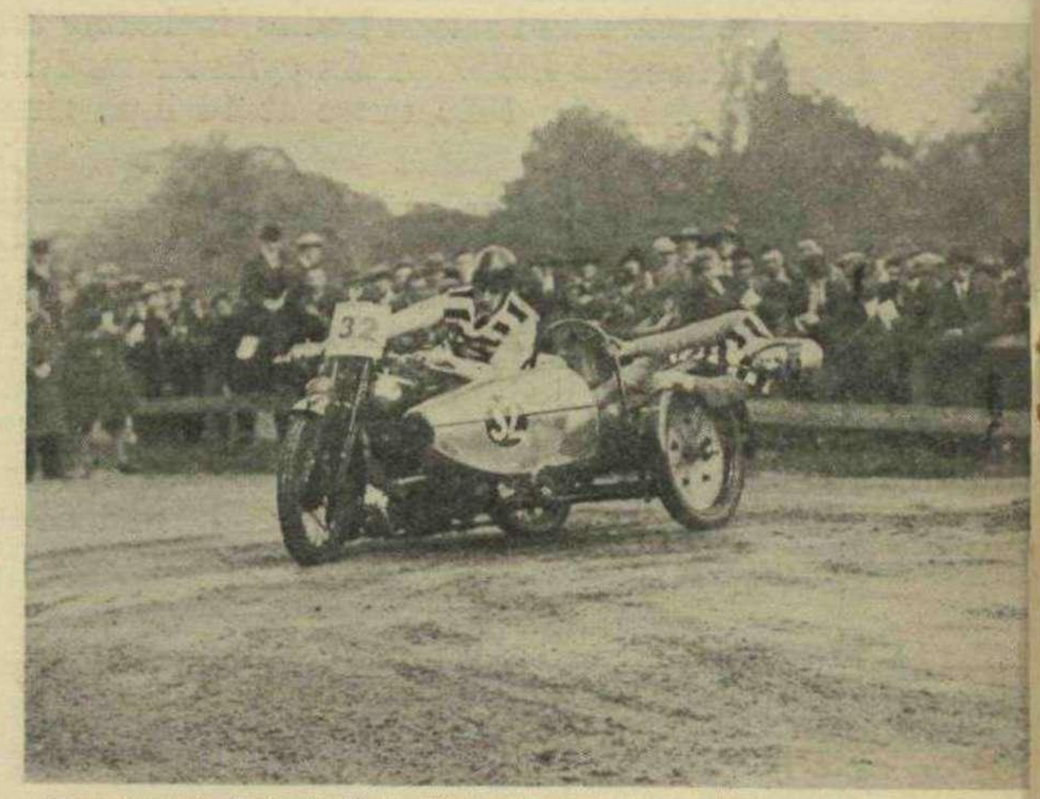
The 3-litre Sunbeam continues unchanged.

There is an interesting display by the Gallay Radiator Co. Ltd., who present a new supercharger known as the Cozette, whose carburetters are well known on the continent. This supercharger is on view for the first time in this country.

Recent Sporting



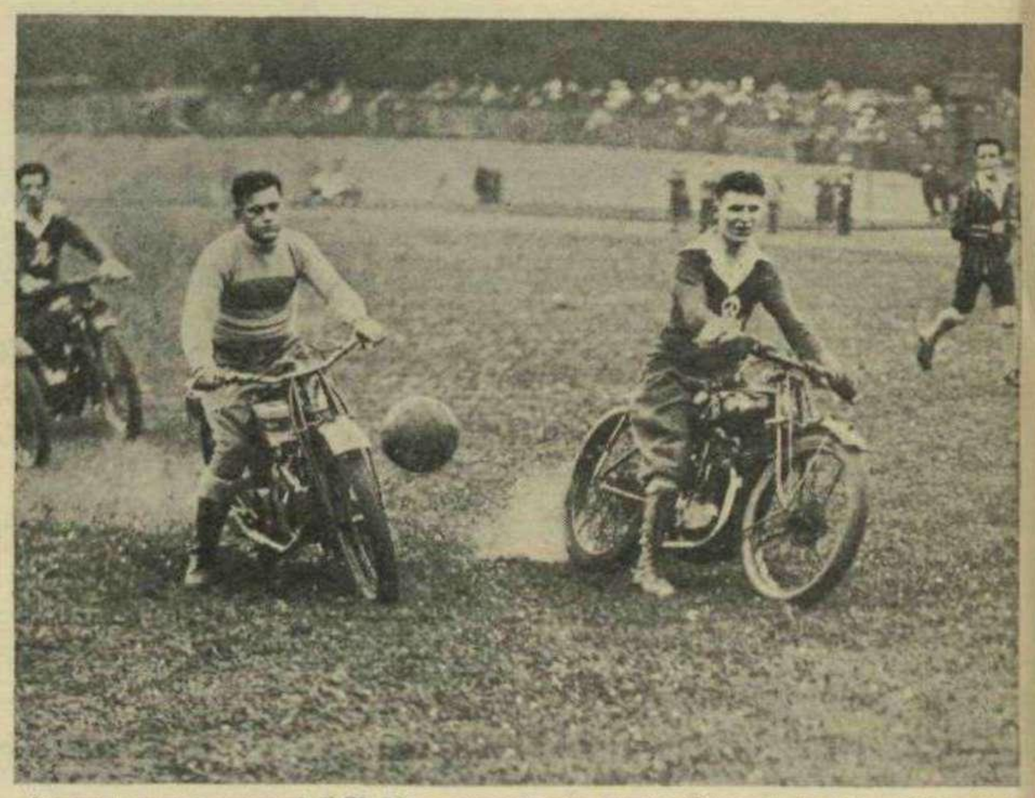
C. M. HARVEY (ALVIS), WHO DROVE SO WELL IN THE BOILLOT CUP RACE AT BOULOGNE.



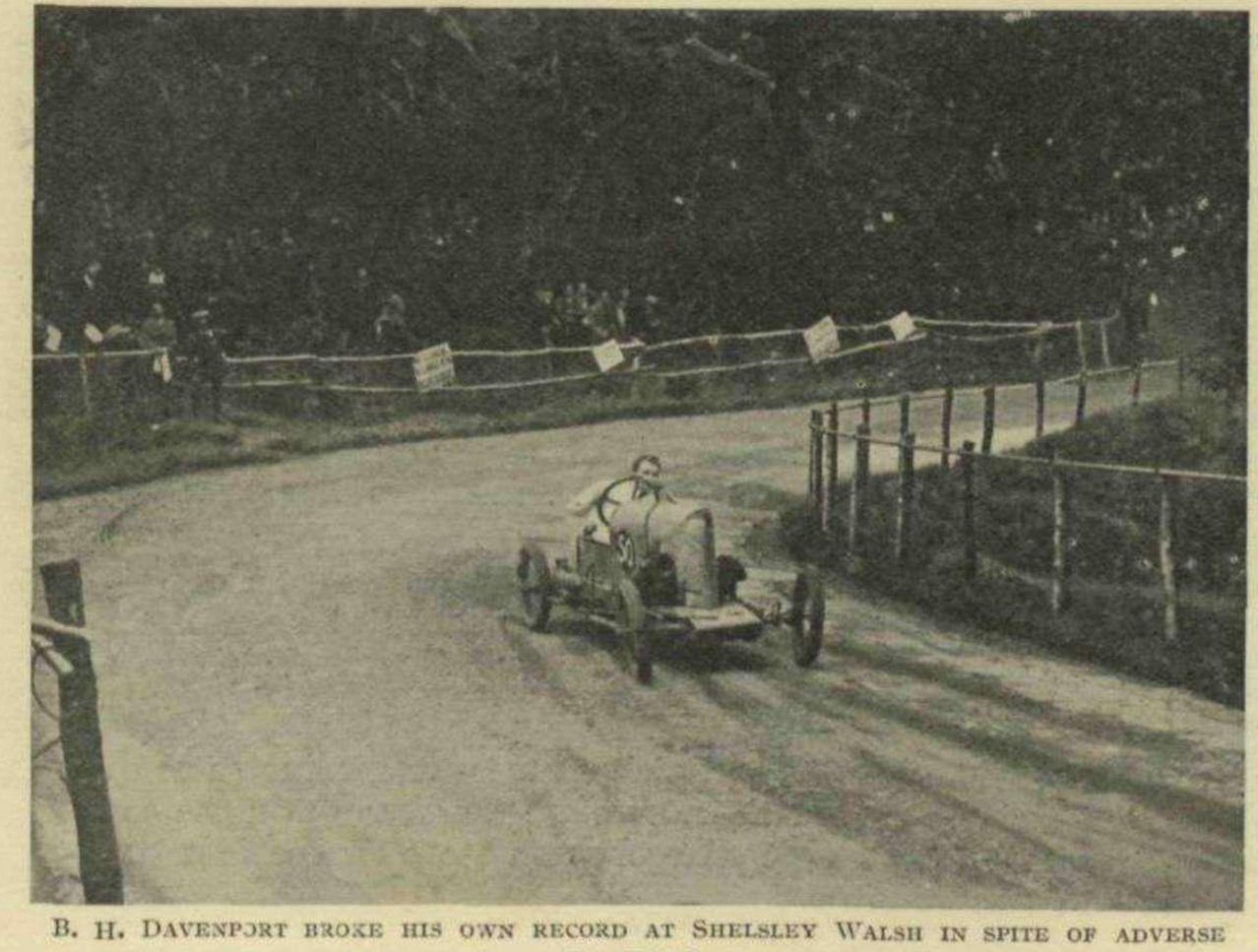
C. W. SEWELL (BROUGH SUPERIOR), WHO MADE FASTEST SIDECAR LAP AT THE LAST CRYSTAL PALACE MEETING.



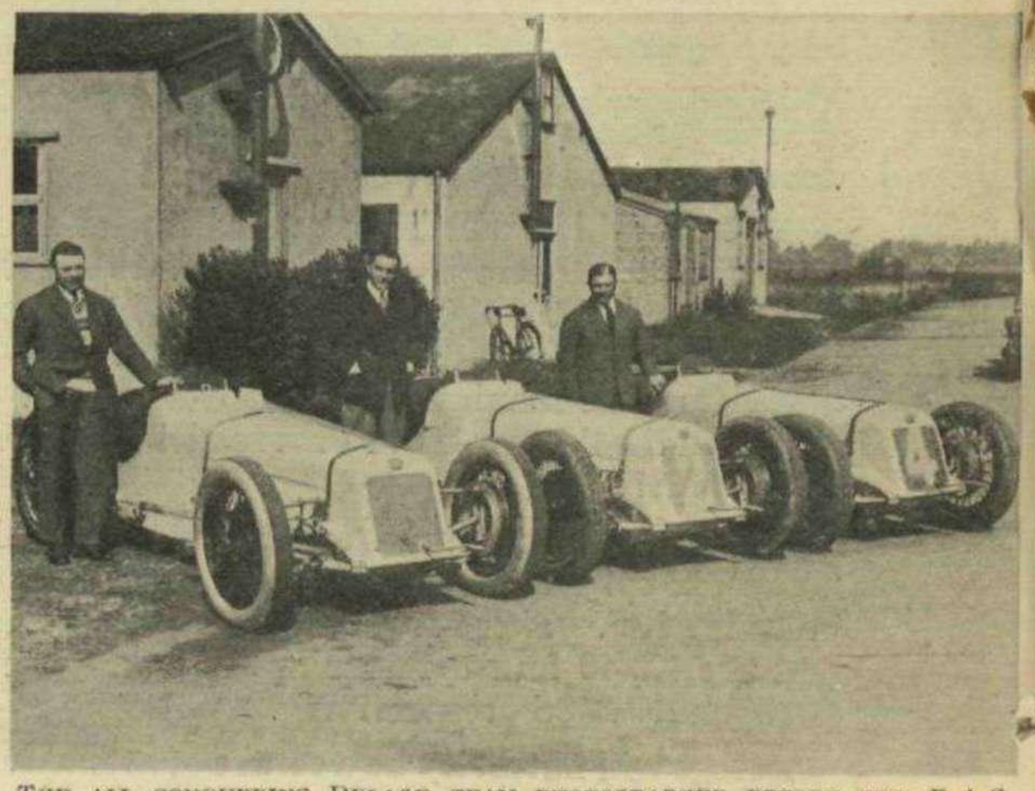
START OF THE LIGHT CAR GRAND PRIX AT BOULOGNE. THE LATEST FRAZER NASH RACER "SLUG" IS RUNNING SECOND.



AN INCIDENT IN THE A.C.U. FOOTBALL FINAL WHEN COVENTRY BEAT DOUGLAS.

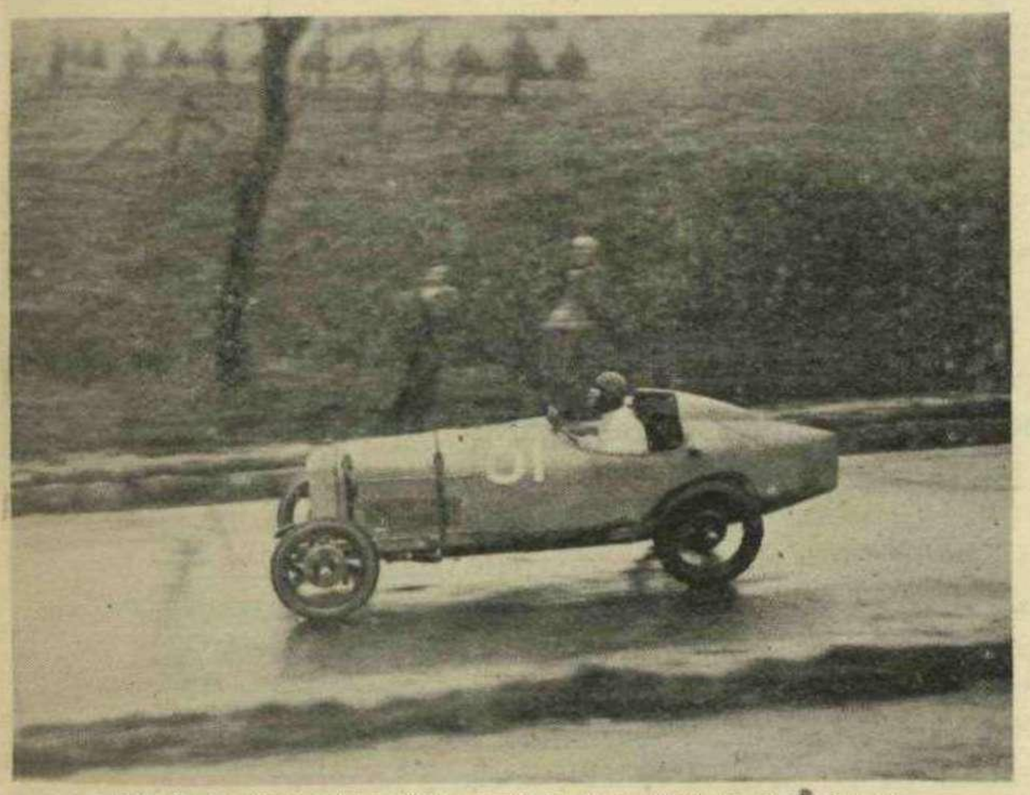


B. H. DAVENPORT BROKE HIS OWN RECORD AT SHELSLEY WALSH IN SPITE OF ADVERSE CONDITIONS.

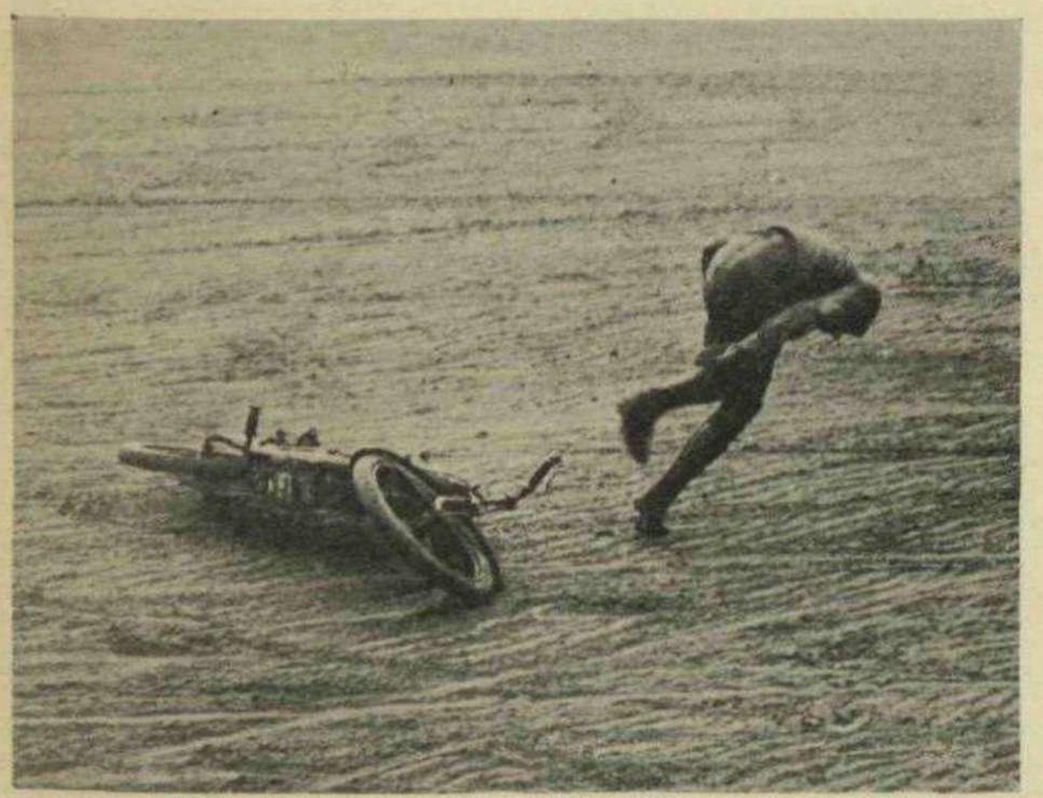


THE ALL CONQUERING DELAGE TEAM PHOTOGRAPHED BEFORE THE R.A.C. GRAND PRIX.

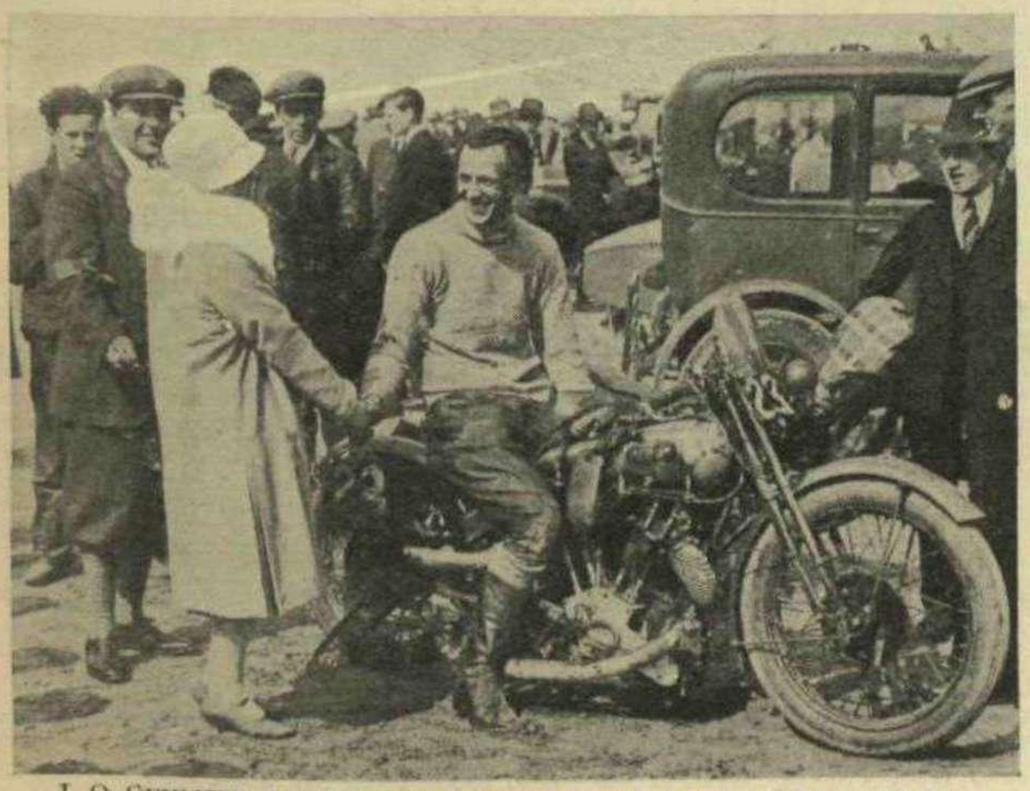
Events in Pictures



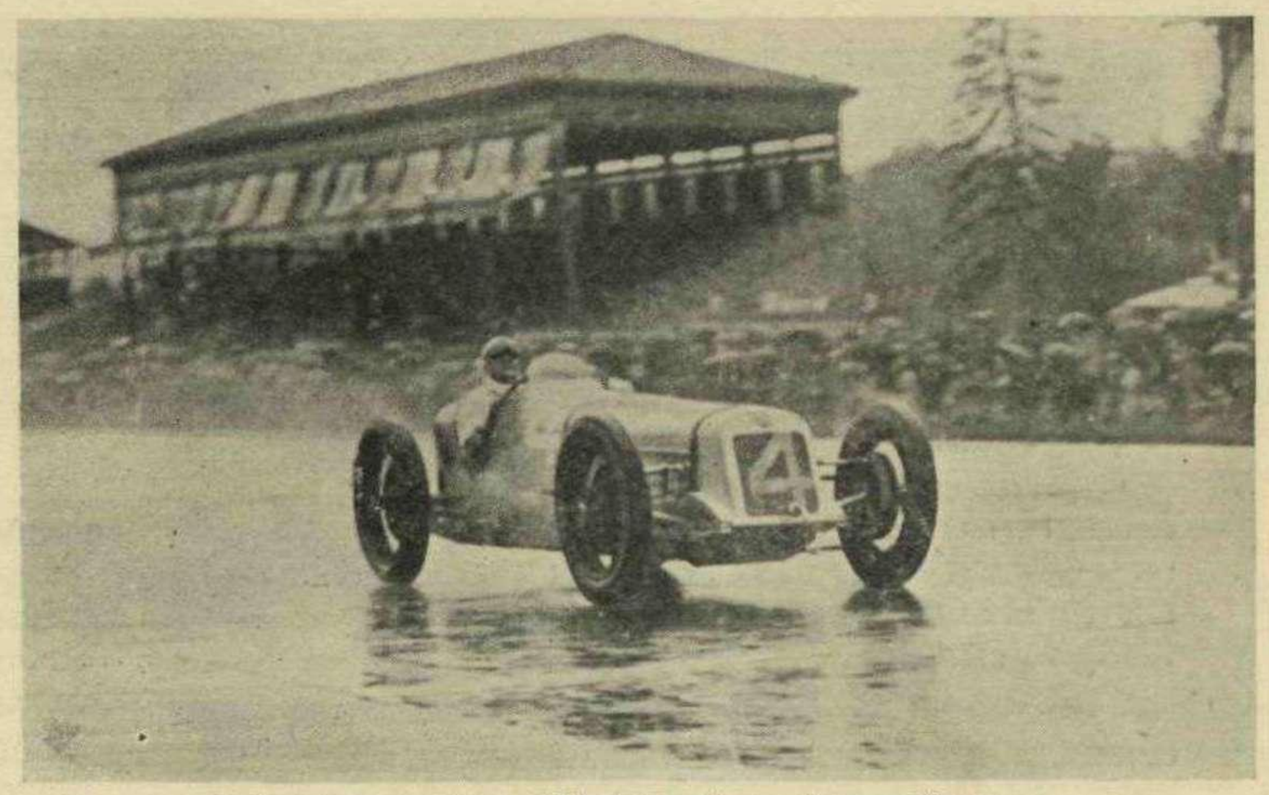
CASSE (SALMSON) SNAPPED DURING THE BOULOGNE MEETING.



A SPECTACULAR FALL AT A RECENT SOUTHPORT MEETING.



J. O. CUNLIFFE, A SUCCESSFUL AMATEUR RIDER, AFTER A SOUTHPORT WIN.



R. BENOIST WINNING THE EUROPEAN GRAND PRIX AT MONZA.



ALL TYPES OF MACHINES STARTING IN A WATERLOO M.C.C. 50 MILE RACE.



THE START OF THE BOILLOT CUP RACE AT BOULOGNE.



The MODERN MOTORCYCLE

By "THE ROOK."

Some reflections on its reliability in the light of the behaviour of a selection of machines tested or owned by members of MOTOR SPORT *staff during the last year.*

MANY people are fond of proclaiming that the modern motorcycle is very nearly perfect and that it is only in detail refinements that there is any room for improvement. It is in answer to such as these that I am inspired to write this somewhat disordered account of some of the ailments which have occurred in the course of fairly ordinary running to certain machines which have been, or still are, in our possession.

From this article it must not be inferred that the road tests which occupy so much space each month are written to deceive. Far from it! They are all written as accurately as possible and in an attempt to show up evenly the good and bad points of the machine in question.

However, it must be remembered that these machines when tested are new or at any rate in sound condition; and they often remain in our possession for a fair time after testing. They are then put into ordinary use as hack machines with the variation of entering for an occasional local club trial or similar event, in fact they are put to just such service as many of our readers' machines, which are used for all round purposes, and although driven hard are driven reasonably intelligently. Their good points are quite sufficiently crowed about by the gentry mentioned in the first paragraph, and it is with their faults that we are now concerned. It should here be made quite clear that no prizes are offered for discerning what makes are referred to, and that some of the machines mentioned are privately owned by members of the staff and have never been the subject of any previous criticism in this paper.

What we will refer to as machine A was a lightweight hotstuff sidecar outfit which was not in our possession long enough to test thoroughly the rate of wear of any parts of it, and it functioned admirably until it was almost due to be returned to the works when it very tactlessly broke its frame at the rear chain stays, thus blotting its copy-book and losing the full marks which would otherwise have been due to it.

Machine B was a big twin likewise of the warm variety. This, while certainly having a terrific road performance, marred this performance by shattering the peace of the countryside by electing to hold a continuous competition between the exhaust and the overhead valve gear, as to which could make the most noise. After a short time the exhaust stole a good lead by demolishing the silencer, splitting off a bit at a time.

Not to be outdone the valve gear developed a hearty shriek to mingle with the clatter and in a final burst of enthusiasm a rocker seized, this in spite of a direct oil feed from a mechanical pump to the rocker box. The pipe led to a union on the rocker box from which a hole was intended to be drilled to the rocket bearing itself. This hole had been totally omitted with the result that the oil was being fed into the solid metal, and although we know that the pores of metals are capable of secreting molecules of gas, it has not been found that lubricating oil will pass through them in any appreciable quantity!

This hardly shows a very high standard of workmanship or inspection during manufacture.

Machine C was a popular overhead valve lightweight machine which was chiefly remarkable for the fact that there was a bit too much emphasis on the lightweight and not quite enough attention to strength of working parts.

Early in its life it developed loud squeaks in the timing case and on investigation it was found that the cams and tappets were excessively worn. These parts were replaced (be it said very promptly and gratis) by the makers who expressed themselves "at a loss" to account for it. However, in a very short time the noise developed again and one day the squeak became so piercing and awe-inspiring that it was considered judicious to tow the machine home. Further examination proved that the first state of affairs had repeated itself, with extras, and it was actually necessary to clip the scale off the tappet feet, such was the temperature that had been attained.

This machine was one of the many now fitted with "mechanical lubrication," i.e., a mechanical device externally mounted on the engine in a nicely vulnerable position, which feeds oil into the crankcase. However, no steps had been taken to ensure that any of it was fed to any highly stressed bearings of working parts, and as a result the camshafts ran dry, though we have no doubt that they were intended to be lubricated by "oil-mist" that delightful term so much employed by the modern manufacturer to include the lubrication of anything for which no proper provision has been made. We are fully aware that genuine oil mist lubrication is highly efficient but the mist is no good without the oil.

On this particular machine this trouble was overcome by suitable work with drills, unions, and piping and the

THE NEW MODEL

EXCELSIOR

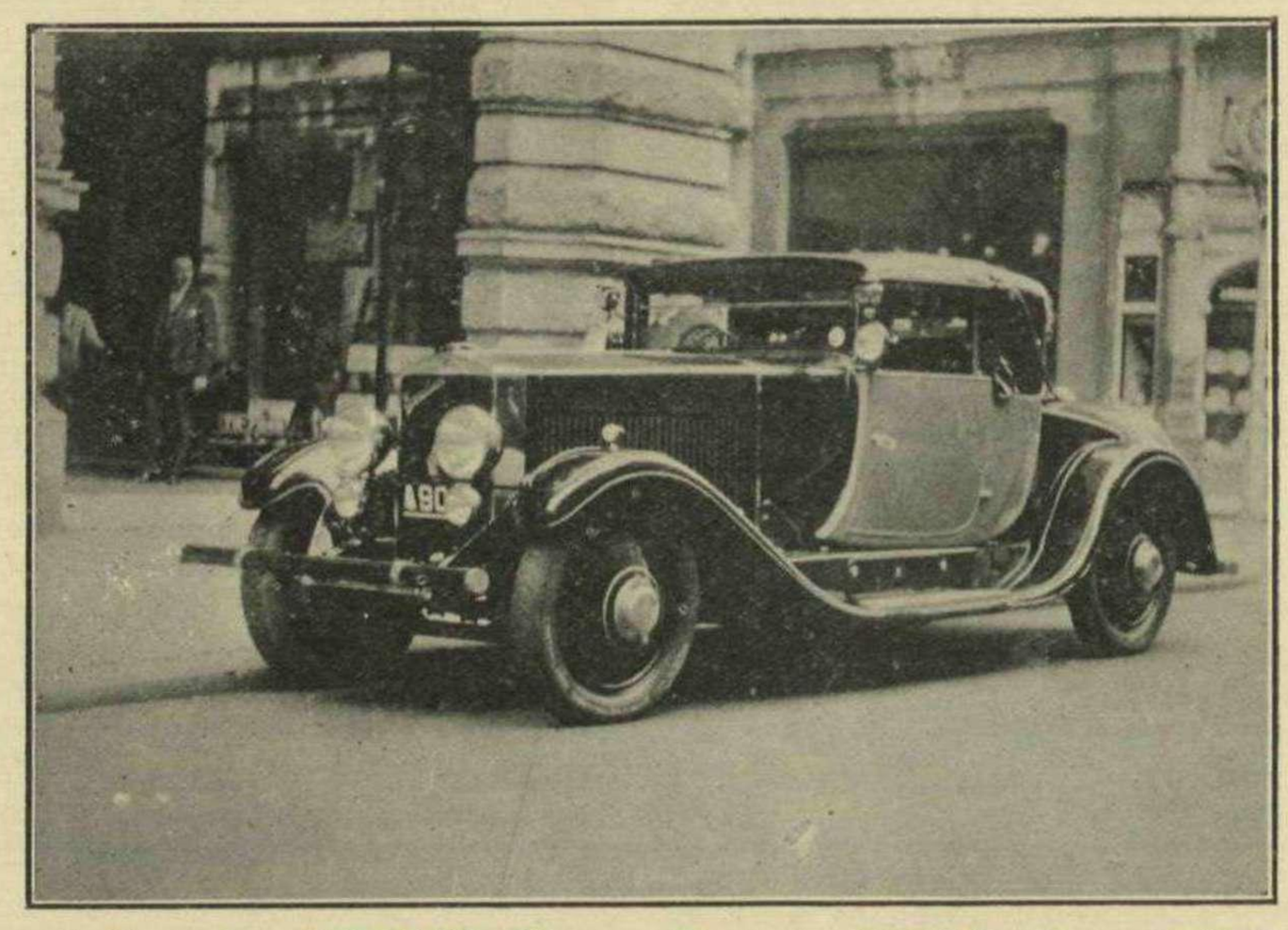
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THE MODERN MOTORCYCLE—continued.

third set of timing gear functioned for some months without wear until the machine was disposed of. However, having cured this trouble we found the overhead rocker bushes wore out with great rapidity and required regular renewal at much too frequent intervals, the only means of lubrication being the almost prehistoric screw-down greaser.

Another trouble with this engine was that in a few months the little end bearing showed signs of excessive wear and as the connecting rod had no bush, the ordinary methods could not be applied. The gudgeon pin and connecting rod were steels of similar hardness though not glass hard, i.e., the worst possible conditions for wear. As a result it was necessary to bore out rod and piston and fit an oversize pin, which process will have to be repeated every time wear occurs, and for the reasons mentioned above this will be often. No wonder so many people have a new machine every year. This machine also broke three rear wheel spindles in use no harder than that expected of a machine by any enthusiastic motorcyclist, and as it followed this up by breaking two fork spindles at short intervals (fortunately at low speeds in each case) it was considered wise to dispose of the machine without delay.

Machine D was another example of alleged value for money and while new was quite a pleasant machine though a trifle harsh, and with the usual clatter becoming so generally regarded as inseparable from the O.H.V. sports model. However, in a little over a month the machine presented an altered aspect and the opinions about it were not so complimentary.

The crude exhaust lifter ceased to function early in its life, which did not aid starting. In a few weeks top gear started jumping out ; a little later it would not even engage. A little hard work off the beaten track and the gearbox seized. Previous to this the enclosed kick-starter spring had broken, so the makers were informed and were only too pleased to hand out another gear box, in fact we were informed that their agents had "service" gearboxes in stock for this sort of contingency.

The steering was inclined to be treacherous until it was discovered that the forks had been sent out more or less solid. When they had been induced to work as spring forks the steering was quite O.K. The rear brake drum became distorted slightly and remained so, which made braking uneven though still adequate. The machine had electric lighting which functioned with some irregularity for a few weeks and then struck work altogether. Inside a month not one half of the total area of the tank remained covered with enamel, and finally the main bearing on the driving side having developed serious play, took to seizing intermittently and the machine is now in dock and likely to remain so for some time. It is nearly a year old and looks four times its age.

Machine E was one of the nicest machines to handle we have tried but was marred by a continual succession of troubles which could nearly all be traced to an effort to produce a machine for about £5 less than it should have been, and to a policy which included getting the machine eligible for the minimum tax. One of the first troubles was the now all too common one of a broken kickstarter return spring. True, this was a small item and easy to replace, but it should never have occurred on a 1927 machine. For a week, i.e., during the running in period, all went well ; then when on a fairly urgent journey to fetch a part needed for another machine for a competition, a connecting rod parted near the little end, and on examination it was found that the little end bosses had been also parting from the rest of the piston, which doubtless hastened the trouble.

Again the maker's service was tested and was found excellent and generous, though as will be seen this service evidently gained its efficiency by hard practice if our model was any criterion.

It must be admitted at once that this machine has been used extensively in trials by more than one rider, but nevertheless its mileage has not been excessive, and in view of the excellent performances put up in open trials by its brethren from the works many people would expect to be able to buy a standard model which would perform creditably in trials without a very great deal of special attention. Soon after the above episode the tanks started to give trouble and the machine has now had five new tanks, and one or two of these have been mended before being scrapped. In no case was any charge made but it naturally meant that the machine was out of commission. The chains were on the light side and wore at an incredible rate. The frame was also too light and whipped to such an extent on rough going that it was a very common experience for the chains to jump off the sprockets. Although the machine was seldom used two up, back wheel spokes broke repeatedly. At first they were repaired as soon as they broke but this became almost a daily task and the machine was usually ridden till 6 to 8 spokes were broken when they were replaced. No count was kept of the number used but in the first four months of its life at least enough spokes to build two complete wheels were used. At last it got such a nuisance that the wheel was dismantled and rebuilt with spokes several gauges larger than standard, since when no more trouble has been experienced.

In less than a month the machine developed a whine on middle gear that completely drowned the not unhealthy exhaust note, and shortly afterwards the gear box became loose in the frame owing to the holding down bolts pulling out of the aluminium casing, and then the gearbox was returned to the makers who very graciously supplied another, which to date of writing this eulogy has given no trouble. One of the next troubles was a continual drying up, ending in intermittent seizures which called for investigation. This revealed badly damaged pistons and cylinders, and caused more correspondence with the factory. We were informed that we must have the engine converted to the latest type of lubrication (this was an early 1927 model) or the trouble would recur. Also they would replace the cylinders and pistons at half list price. This was done and although the engine ceased to dry up the oiling soon developed the fault that the sight feed would not empty into the engine from the sight feed except when the engine was stopped. Thus the only method of lubricating the engine is to keep the sight feed full under pressure from the hand-pump. This method has the disadvantage

THE MODERN MOTORCYCLE—continued.

of being (a) very crude and (b) very messy, as the sight feed leaks oil over the tank. Clutch wires last on an average three weeks, which is annoying, as when in order the clutch is a very pleasant one.

Front brake wires also break too often (should they ever break ?) and the brakes have never worked with the power which should be easily obtainable from brakes of their size. The footrests refuse to remain rigid, will rattle about, and are very easily bent by any slight fall.

Bad misfiring and lack of power was noticed at one time and was traced to a worn camshaft bush which had also come loose in the crankcase. Owing to the fact that the bush was actually cast in the crankcase it was necessary to have a new crankcase. Again the makers "met us" on the price of this, but we had to do the work and the machine was some time out of commission. If any can point out to us the advantage of the above method of construction for this sort of job, we should be pleased to hear it. We fail to see it ourselves.

Not long ago the magneto ceased to give any spark and again the makers, this time of the instrument, were approached, who duly overhauled and repaired it. Very pleasant of them but very inconvenient for us. The steering head of this machine requires frequent adjustment and will shortly require new races. The carburation is anything but automatic, considerable "tap-twiddling" being required to get the best results. We can only hope that we had an unfortunate specimen and that next year's model will profit by these troubles.

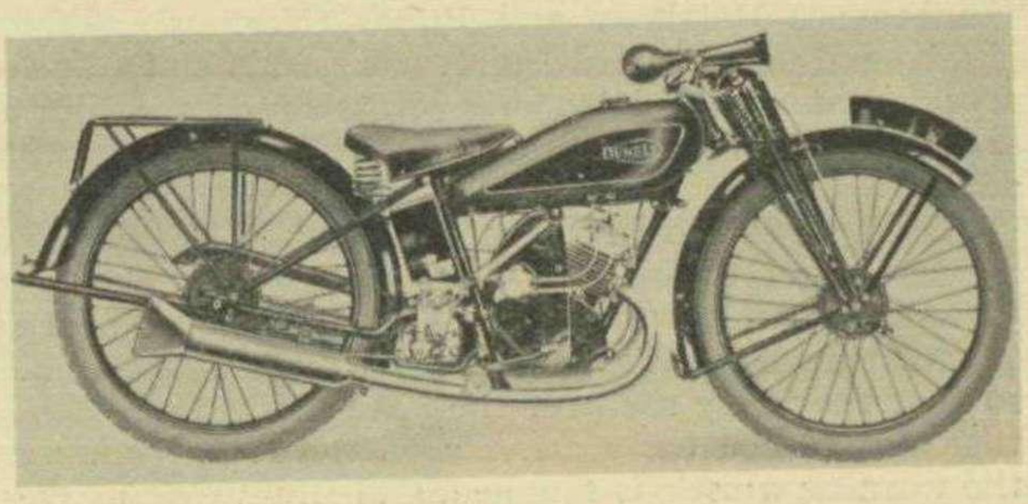
The next machine, which we will call F was only with us a short time and we were sorry to return it so soon. True it broke the kickstarter return spring, but otherwise it behaved well. It was from a factory famous for the soundness and reliability of its products and gave more signs of standing up to hard use than most we have had, and our only regret is that we were unable to prove this. It was a hotstuff 500 c.c. machine but combined smoothness with power. Machine G was of similar type and confirmed the good impression of this class inspired by the other, though this machine was not free from the need of minor adjustments at short intervals. Both these last were more suited to sidecar than solo work on anything in the way of rough going.

H was a 350 O.H.V. which may be briefly dealt with as a good bicycle with an engine which would be vastly improved by a little racing experience. It was another short test machine and therefore gave no time to be worn out. However, all the valve springs were broken when handed back and the engine was remarkable for a certain "period" in it. Most single cylinder engines have a "period," i.e., a speed at which they vibrate. This engine had a special sort of "period," i.e., a speed at which it did *not* vibrate. In other respects the machine earned a high percentage of marks.

The machine which comes last of this selection for comment, provoked several of us in turn to violence by its consistent refusal to break anything or even to call for adjustments. The only breakage that occurred the whole time it was in our hands was a fracture of the connecting link of the front chain. In our efforts to improve on this the machine was subjected to the most violent treatment in some of the roughest local scrambles available, and owing to its remarkable steering it could be driven much faster over real rough stuff than any other machines mentioned in this article, and thus could be knocked about more. In spite of this, and of several pretty violent falls and absolute full bore driving on roads, not a single nut required tightening, nothing was ever adjusted, nor was any adjustment called for, nor was anything bent. Furthermore, and bitterest facts of all, this machine was a full year older than any other machine we are dealing with, the finish was as new, and the country of its origin was *not* G.B. Its first cost was slightly higher than the average machine of its class' but surely reasonable quality is worth paying for, and it seems a pity that a country famous in the engineering world for the sound workmanship and long life of its products should have so many examples of cheese-paring in the one industry in which it now leads the world. True, the maker's service is now good, but there is need for it, and we are afraid the fault lies in the present clamour for a machine of low first cost. Another few pounds on the price would in many of the cases mentioned in this article have obviated many of these troubles, which are a faithful record of *Motor Sport's* stable for a period of twelve months. Perhaps we have been unlucky in our selection, but if we have, many others will have suffered similarly this year. May 1928 show more attention to detail reliability and less price cutting, and this may lead towards the ideal machine. It is still well beyond the horizon.

A Rover Novelty.

When the Motor Show opens a novelty will be seen in the new two-litre Rover "Six" saloon. Most motorists will have experienced the difficulty of backing down a lane or private drive at night and many will have scraped their cars against the bank or hedge. To prevent this, the Rover company has fitted a neat lamp at the rear of the body on the near side, pointing *backwards*. This is the same size as a side-lamp, but has a head lamp bulb and thus gives a powerful light, making a run backwards down a dark lane relatively simple. The lamp, which is controlled from the dash-board, can also be swivelled round to face front, when it is of great assistance in picking out the near side of the road during foggy weather.



THE 1928 EDITION OF THE 250 C.C. DUNELT WHICH RECENTLY PUT UP SOME EXTREMELY CREDITABLE WORLD'S RECORDS.

THE 1927 AMATEUR ROAD RACE.

A Fine Race Under Terrible Conditions.

IT was no mere pit-a-pat, but a steady downpour that greeted us when we awoke in Douglas on the morning of Thursday, September 8th. An absolutely unbroken grey sky foretold a race run under the worst possible conditions, and one could scarcely envy those who were to take part in the mad, tearing, desperate battle on the famous T.T. circuit between the hours of ten and three.

The practising weather had been mainly fine, and the present terrible conditions would undoubtedly upset the chances of many a rider. Visitors began to whisper that chance had come, long overdue, to the Scott riders. How near these enthusiasts came to the truth is now common knowledge.

With the exception of those unfortunates who had either crashed in practising or not reached the island at all, every entrant had succeeded in qualifying. The non-starters were Hewison (Velocette), H. Farquharson, Illingworth (Norton), Mavrogordato (Scott), Wolfenden (Sunbeam) and Crone (Chater-Lea).

For the first time since the inception of the race, the competitors were started at intervals of twenty seconds, this measure being necessary in order to accommodate the enormous entry of seventy-five.

The pre-race parade of the riders through the streets of Douglas is a somewhat bizarre event, presenting, as it does, the spectacle of leather-clad riders, in full racing gear, sedately piloting their highly-tuned mounts at a snail's pace up to the Glencrutchery Road. Arrived at the start, the riders proceed to replace touring plugs with ones more suited to racing. Despite the weather, 9.45 finds the grand-stand tolerably well filled, and long lines of cars and pedestrians can be seen moving out of the town to the local vantage-points. There is not quite such a breathless hush as usually precedes the firing of the first maroon, and it comes as a mild surprise to all, spectators and riders alike, when No. 1, Braidwood (P & M.) pushes off on his long ride. Idle chatter is immediately drowned by a round of cheering, and the crowd settles down, in defiance of the Clerk of the Weather, to enjoy itself. Incidents during the starting period are few and far between, nearly all the riders getting under way immediately.

Speculation is rife as to the chances of the various men; the chief favourites seem to be: Birch and Hancocks, (Sunbeams), Matthews and Provis (Nortons), Stables (Scott) and the departed Braidwood. Rain and mist are reported at all the telephone points round the course, and it is still raining, though less vehemently, at the start.

Having seen the last man on his way, we seize our machine, and thread our way through the throng to Governor's Bridge. Here the crowd is amazing: late arrivals are borrowing ginger-beer crates and the like, so that they may see over the head of the more advantageously-placed early arrivals. After a few minutes, the warning whistle is sounded, and Braidwood arrives, some 37-38 minutes after ten. Six minutes more elapse before the next man is seen; he turns out to be No. 11, Hunt (Norton), and is closely followed by No. 9, Dawson (X-Jap). What has become of Nos. 2 and 3, Cullis and Oldroyd (Sunbeams), both fast men? They are soon through, however, and, as riders are taking the famous hairpin cautiously, we make our way, by a detour, to Signpost. Here again, valour is tempered with discretion, no doubt on account of the poor visibility on approaching the corner.

Hillbery is the next point we visit, and here the cornering, although not hectic, is fast and neat. A particularly speedy passage is noted against Limmer (Scott), and Prescott, on a sister machine, also takes the corner prettily. Brockington (500 A.J.S.) is fast but rather wild. Out of the mist which is coming down from Brandish corner, there appears a Scott rider and it is immediately seen that he is in difficulties. His mount is completely out of control, and just as he reaches the corner, he is thrown, fortunately clear. Another rider is already in sight, so a danger flag is waved, while willing hands—police, marshals, and press—dash to the assistance of the hapless rider, and drag his machine from the course. The forks have broken beneath the crown, and thus ends the race as far as Lomas, absolutely unscratched, is concerned.

The race has now been in progress for nearly an hour and a half, so we return to the scoring board to see how the riders are faring. As we reach the start, Braidwood is just leaving his pit on the commencement of his fourth lap.

The leaders on the first two laps were:—

Lap 1.		Lap 2.	
Braidwood	58.30 m.p.h.	Matthews	58.87 m.p.h.
Matthews	57.78 m.p.h.	Braidwood	58.73 m.p.h.
Limmer	57.10 m.p.h.	Limmer	57.93 m.p.h.

So far, a great race, with nothing between the leaders.

Meanwhile Braidwood is signalled at Ballacraine, his rival, Matthews, being somewhere on the Mountain. The latter's indicator moves on to Creg-ny-baa, but the P. & M. rider's seems to remain at Ballacraine a long time. The Norton is now at Governor's Bridge, but Braidwood is not yet signalled at Kirkmichael. Has the marshal there missed him, or ——? We wait in suspense, and presently the third lap places are put up, showing Braidwood once more in the lead, albeit by a very small margin.

Lap 3.

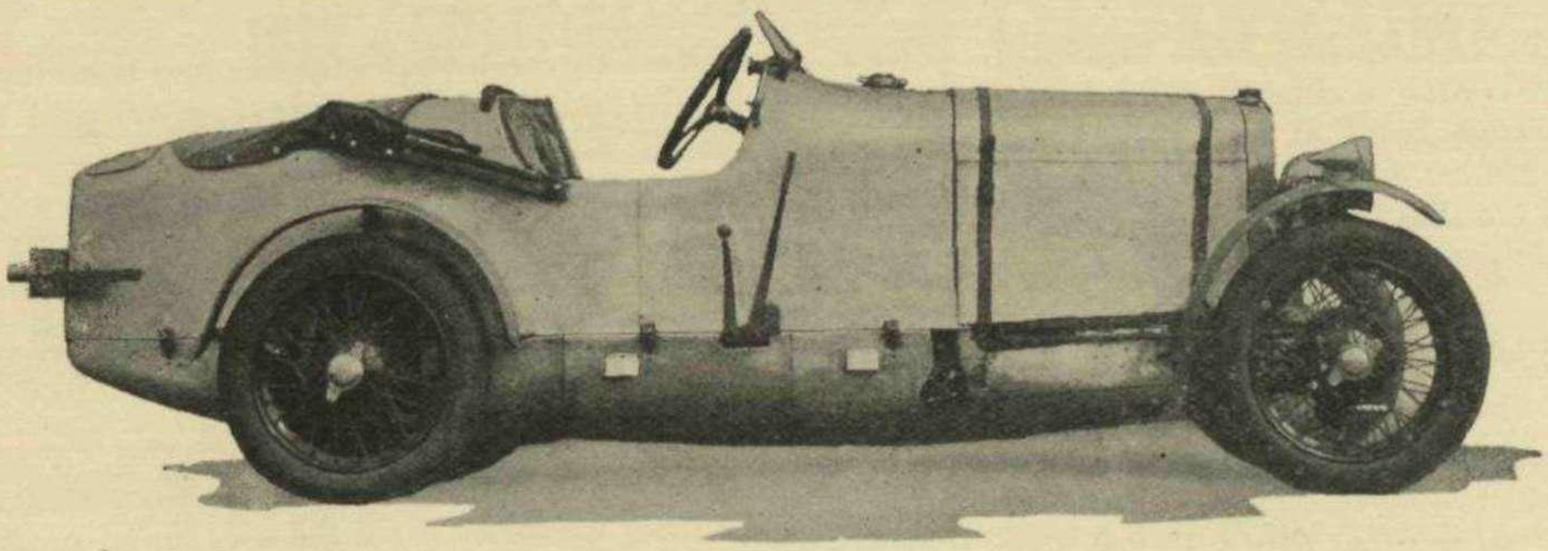
Braidwood	59.19 m.p.h.
Matthews	58.86 m.p.h.
Limmer	57.84 m.p.h.

Limmer is reported to be cornering magnificently, and is very close on the heels of the leading pair.

Meanwhile, a fine struggle is taking place for pride of place among the 350s, who are led by Thomas (Rex-Acme), closely followed by Gates (Velocette).

And now, at long last, comes news of Braidwood. He pushes in to Kirkmichael, having retired with serious engine trouble: and so ends a fine ride.

Our eyes go immediately to Matthews' pointer. Surely he, too, has stuck; and such proves to be the



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THE 1927 AMATEUR ROAD RACE—continued.

case, news coming through that he has been unlucky enough to become involved with a bunch who have come to grief on a treacherous bend at Greeba. This bend, although previously almost unknown as a danger spot, has been giving much trouble to the riders. Seven are reported to have crashed here in the space of a few minutes.

Thus Limmer jumps into the lead, and the leaders on Lap 4, are :—

Limmer (Scott)	57.67 m.p.h.
Hunt (Norton).....	56.76 m.p.h.
Provis (Norton)	56.77 m.p.h.

Hunt leads on the road, his number being 11, whereas the Scott rider's is 47.

After these places have been certified by the addition of the times, we scan the boards to see how many retirements have been announced. The first lap claimed nine victims—Nash (Scott), J. D. Potts, Brookes and Cunliffe (H.R.D.'s), Hogg (O.K.), Archibald (Triumph), Hancocks and White (Sunbeams), and Lomonosoff (McEvoy). A further ten entrants had failed to survive the second lap, these being—Fletcher and Weston (Cottons), Harrington, Jackson, Kehoe and Moorhouse (Nortons), Robinson (Chater-Lea), Hanson (Velocette), Lomas (Scott) and Leonard (Enfield).

Meanwhile Thomas, the 350 leader at half-distance, has retired, his place being taken by Gates, who, by three very consistent laps, retains it to the end.

Soon after, Hunt comes through and commences his final lap, and all eyes are keenly watching Limmer's dial. The Norton is going beautifully, whereas the Scott appears to be slowing, a contention which is borne out when the Lap 5 leaders are announced :—

Limmer	57.15 m.p.h.
Hunt	57.05 m.p.h.
Provis	55.58 m.p.h.

Only 22 seconds between the first two men after nearly 190 miles ! But do the riders know the position ? Hunt's pointer moves steadily on, but surely Limmer's is sluggish ! And so goes on the ding-dong struggle, until the Norton is signalled at Governor's Bridge, and almost immediately roars over the line, to the accompaniment of enthusiastic cheering.

First or second ? Nobody can definitely say. Limmer is climbing the Mountain, and might just arrive in time to win. The spectators are breathless with excitenent until, with Limmer between Creg-ny-baa and Governor's Bridge, it is announced that " No. 11, Hunt, cannot now be beaten on time." By the time the renewed cheering has subsided, Limmer flashes past, two minutes behind the winner. Truly a great race !

Five minutes later, de Ferranti (Scott) arrives, and we settle down to see whether he has displaced Provis from third place. When the latter passes the line, allowing for their starting difference, it appears that they have dead-heated, but it subsequently transpires that the Scott has got home by the narrow margin of 2 seconds !

The winner's speed works out at 57.66 m.p.h., a wonderful achievement under such appalling conditions. His last lap was covered at 60.40 m.p.h., being the fastest speed achieved in the race.

News now filters through that Limmer had been handicapped by ineffective brakes during Laps 5 and 6, a misfortune which, no doubt, cost him the race.

Having conscientiously seen the last finisher arrive, we return to the town to await the evening prize-giving. Our final impression is of a small, wet, but triumphant, boy-scout, still perched up behind the indicators, joyously whistling his farewell to that apparently unceasingly departing creature, the blackbird.

The Palace, on the occasion of prize-giving, presents a very animated scene, and the riders, successful and unsuccessful alike, come in for a deal of good-natured banter. The Trophy is presented to an obviously embarrassed young man amidst the acclamations of a mighty throng, and so concludes one of the finest sporting events of the year.

The complete list of finishers was :—

FINISHING ORDER.

	h.	m.	s.	m.p.h.
1. P. Hunt (499 Norton)	3	55	55	= 57.66
2. G. W. Limmer (498 Scott)*	3	57	36	= 57.17
3. D. de Ferranti (498 Scott)*	4	3	11	= 55.86
4. C. W. Provis (490 Norton)*.....	4	3	13	= 55.85
5. A. Cownley (490 Norton)*	4	10	38	= 54.20
6. S. Gates (348 Velocette)†	4	21	55	= 51.87
7. W. H. T. Meageen (498 H.R.D.)	4	25	54	= 51.09
8. W. L. Birch (493 Sunbeam).....	4	29	41	= 50.37
9. D. Oldroyd (493 Sunbeam)	4	31	49	= 50.01
10. J. L. M. Morton (346 H.R.D.)	4	36	54	= 49.06
11. P. A. C. Brockington (498 A.J.S.)	4	38	17	= 48.82
12. A. Brewin (493 Sunbeam)	4	38	24	= 48.79
13. E. A. Mellors (499 P & M.)	4	39	28	= 48.61
14. A. Davenport (493 Sunbeam)....	4	40	29	= 48.43
15. R. A. Jones (346 H.R.D.)	4	40	56	= 48.35
16. T. C. Cullis (493 Sunbeam)	4	42	45	= 48.04
17. R. Farquharson (346 Royal Enfield)	4	44	54	= 47.68
18. A. Fides (499 Rudge-Whitworth)	4	48	29	= 47.09
19. W. A. Empsall (499 Rudge-Whitworth).....	4	49	40	= 46.90
20. H. G. Potts (493 Sunbeam)	4	51	35	= 46.59
21. A. Shelbourne (493 Sunbeam) ...	4	56	5	= 45.88
22. J. C. Bramwell (498 H.R.D.) ...	5	1	22	= 45.08
23. L. A. Hutchings (348 Velocette)	5	1	26	= 45.07
24. M. N. Gledhill (490 Norton).....	5	4	14	= 44.65
25. E. T. N. Jones (498 A.J.S.).....	5	5	43	= 44.43

* Gained replicas.

† Winner of 350 c.c. cup.

An Innovation in Lighting Sets.

For some time past the Villiers Engineering Co. of Wolverhampton has been making a very excellent little lighting set, the flywheel magneto supplying current direct to the lamp. This was cheap, simple and thus quite satisfactory, except that it did not supply a light when the engine was not running, unless a switch-over battery was carried. After various experiments and continual tests, the Villiers people have now introduced a set in which a 6 volt. accumulator is charged from the magneto. The charging rate is low—about .7 amp.—but it is sufficient for all ordinary requirements.

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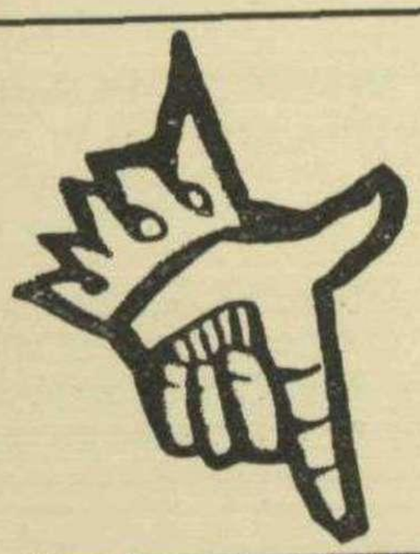
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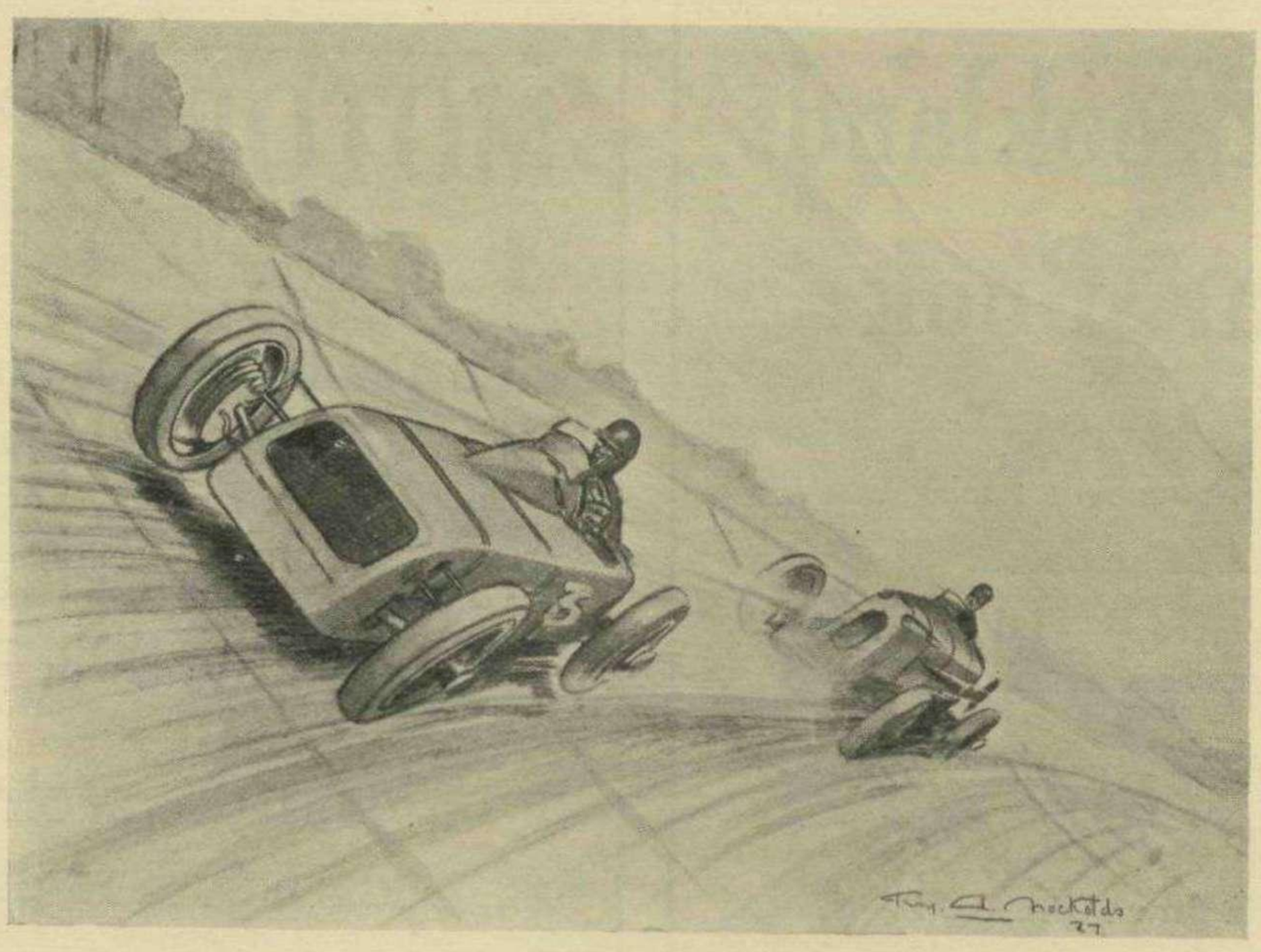
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RACING NEWS.

CLOSE OF THE B.A.R.C. SEASON.

AUTUMN BROOKLANDS MEETING.



FOR 50 MILES PURDY AND COBB WAGED A THRILLING DUEL AT 112 M.P.H., THE FORMER WINNING BY A WHEEL.

ON Saturday, September 17th, the Brooklands Auto Racing Club brought their season to a close with a fine day's racing in brilliant weather. The handicapping was excellent, and the finishes close.

100 M.P.H. SHORT HANDICAP.

In this race, Malcolm Campbell, on his Bugatti, showed terrific speed, but was overtaken by Eyston's supercharged Bugatti and George Duller's Bentley. Eyston won at a tremendous pace $\frac{1}{5}$ sec. in front of Duller.

90 M.P.H. SHORT HANDICAP.

This race was won by R. A. Railton on an astonishingly fast Riley Nine.

THE LIGHTNING SHORT HANDICAP.

This provided a very close finish, J. R. Cobb on the Leyland-Thomas starting at scratch and just beating Campbell's 2-litre Bugatti.

THE 90 M.P.H. LONG HANDICAP.

This event proved a win for the handicapper, Boyd-Carpenter's Austin Seven holding its lead to the finish, although almost caught by the Bugatti driven by P. Densham.

100 M.P.H. LONG HANDICAP.

In the next race, a 100 m.p.h. Long Handicap, Eyston again got his Bugatti moving, and despite the re-handicapping, brought it home well ahead of the next man, Raymond Mays on the 1980 c.c. Mercédès. Cobb on the big Fiat had a thrill when something happened to one front wheel, which, owing possibly to a tie rod coming adrift, wobbled drunkenly along at over 100 m.p.h.

RACE FOR THE BROOKLANDS PRESIDENT'S GOLD PLATE.

V. Gillow on his Riley at last came into his own, and walked off with the President's Gold Plate, Campbell on the 200 mile race Talbot doing no better than second place.

THE LIGHTNING LONG HANDICAP.

This race showed what Campbell can do, however, his 2-litre Bugatti winning fairly easily from Cobb's Leyland-Thomas although the issue was in doubt up to the Byfleet Banking.

50-MILE HANDICAP.

The grand finale was the 50 mile handicap, which developed into a terrific battle. Thirteen started, but retirements rapidly followed, Whale (Calthorpe) and Felix Scriven ("Nanette") being early strewn by the wayside. Passing and re-passing was constant, but the four seater Alvis driven by F. Hallam gradually increased its lead, eventually crossing the line a lap ahead of the next man. Second place provided a terrific duel between H. W. Purdy (Thomas Special) and J. R. Cobb (Vauxhall) the former scraping home barely a length ahead.

Results in full overleaf:—

RACING NEWS—continued.

100 M.P.H. SHORT HANDICAP (6½ MILES).

1. G. E. T. Eyston, Bugatti (1,493 c.c.) ... 0m. 8s.
2. G. Duller, Bentley (2,996 c.c.) ..... 0m. 27s.
3. E. K. Rayson, Bugatti (1,990 c.c.) ..... 0m. 24s.

Won at 101.33 m.p.h. by 2 lengths.

90 M.P.H. SHORT HANDICAP (6½ MILES).

1. R. A. Railton, Riley (1,074 c.c.) ..... 0m. 48s.
2. F. H. Boyd-Carpenter, Austin (749 c.c.) 1m. 2s.
3. V. Gillow, Riley (1,495 c.c.) ..... 0m. 37s.

Won at 91.37 m.p.h. by 1 mile.

LIGHTNING SHORT HANDICAP (6½ MILES).

1. J. R. Cobb, Leyland-Thomas (7,266 c.c.) Scratch
2. M. Campbell, Bugatti (1,990 c.c.) ..... 0m. 25s.
3. K. Don, Sunbeam (1,988 c.c.) ..... 0m. 5s.

Won at 116.3 m.p.h. by 20 yards.

90 M.P.H. LONG HANDICAP (9⅓ MILES).

1. F. H. Boyd-Carpenter, Austin (749 c.c.) 1m. 23s.
2. P. L. Densham, Bugatti (1,496 c.c.) ... 0m. 19s.
3. J. D. Benjafield, Salmson (1,087 c.c.) ... 0m. 24s.

Won at 78.38 m.p.h. by 15 yards.

100 M.P.H. LONG HANDICAP (9⅓ MILES).

Handicap.

1. G. E. T. Eyston, Bugatti (1,493 c.c.) ... Scratch
2. R. Mays, Mercédès (1,980 c.c.) ..... Scratch
3. J. Dunfee, Ballot (2,973 c.c.) ..... 0m. 18s.

Won at 111.24 m.p.h. by 250 yards.

BROOKLANDS PRESIDENT'S GOLD PLATE (9⅓ MILES).

1. V. Gillow, Riley (1,495 c.c.) ..... 1m. 7s.
2. M. Campbell, Talbot (1,487 c.c.) ..... Scratch
3. H. N. Thompson, H.N.T. (1,372 c.c.) ... 0m. 35s.

Won at 89.43 m.p.h. by ¾ mile.

LIGHTNING LONG HANDICAP (9⅓ MILES).

1. M. Campbell, Bugatti (2,996 c.c.) ..... 0m. 33s.
2. J. R. Cobb, Leyland-Thomas (7,266 c.c.) Owed 3s.
3. G. Duller, Bentley (2,996 c.c.) ..... 1m. 1s.

Won at 108.28 m.p.h. by ¼ mile.

50 MILES HANDICAP.

1. F. Hallam, Alvis (1,496 c.c.) ..... 12m. 0s.
2. H. W. Purdy, Thomas-Special (1,495 c.c.) 1m. 57s.
3. J. R. Cobb, Vauxhall (2,996 c.c.) ..... 1m. 57s.

Won at 84.99 m.p.h. by 1½ miles.

Two-Stroke Records.

It is not often that two-stroke motorcycles break records at Brooklands, for the track habitues have of recent years devoted themselves to the cultivation of the overhead valve engine. The performance of a 1928 Dunelt "K" in securing the 7 hours, 500 miles and 8 hours records in the 250 c.c. class last week is thus particularly creditable. The speeds were 64.65 m.p.h., 64.22 m.p.h., and 64.16 m.p.h. respectively, which beat the existing records by some three miles per hour.

Actually the riders—N. Anderson and J. B. Arrowsmith, taking the saddle alternatively—started off by lapping at about 73 m.p.h. They were then "flagged down," as this was unnecessarily fast, and lapped at about 69 m.p.h., so that the average for the first six hours, including stops for replenishments, etc., was approximately 67 m.p.h. In the seventh hour ignition trouble developed and 15 minutes or so were spent in fitting a new contact breaker and a new plug. This was of little avail, but the machine kept on running and despite the loss of time the records mentioned above were broken. After 8 hours the ignition failed altogether and the riders were thus unable to attack the longer records.

To average 64 m.p.h. under these trying conditions for eight hours is, however, no mean performance and it proves that the two-stroke, especially in the Dunelt super-charged form will run fast and cool for an indefinite period.

THE BROOKLANDS CHAMPIONSHIP MEETING.

ONCE again Freddie Dixon, the racing motorcyclist, has created a record. A few weeks ago he distinguished himself by covering the Flying Kilometre on his Brough-Superior at the terrific speed of 130 m.p.h.; now he has lapped Brooklands track at over 100 m.p.h. on the same machine but with a sidecar attached!

Some riders, basing their assertions on the results of the Ulster Grand Prix, have said that the big-twin is "finished" in that it is no faster than the single. Dixon's recent successes destroy this theory completely for no single cylinder has lapped Brooklands at anything like 100 m.p.h. with a sidecar—in fact but few of them have done it solo—and there is no doubt at all that a super-tuned big-twin is, as it ought to be, considerably faster than a single of similar design.

The Brooklands champions for the year proved to be as follows: Solo—250 c.c., J. S. Worters (Excelsior); 350 c.c., C. Lacey (Grindlay-Peerless); 500 c.c., H. Le Vack (New Hudson), and 1000 c.c., O. M. Baldwin (Zenith); sidecar—350 c.c., F. G. Hicks (Velocette); 600 c.c., C. S. Staniland (Norton), and 1000 c.c., F. W. Dixon (Brough-Superior). Dixon also won the sidecar handicap race, the solo handicap falling to T. G. Meeten's Francis-Barnett which, with its tiny 122 c.c. Villiers engine, averaged over 55 miles per hour.

Grand Prix Items.

There was very little "scrapping" on the corners, drivers usually refraining from overtaking except on the straight. On one occasion however Williams overtook Campbell entering the last set of bends but got into difficulty by the final sandbank and was repassed by Campbell, who as usual was cornering very soberly.

The Bugatti brakes seemed to stand up better than those of the Delages. Right up to the end of the race Materassi, Chiron and Williams were leaving their deceleration until very late whereas the Delage drivers were noticeably more cautious. It is possible, however, that the Bugattis were fitted with new shoes at half time as we observed quickly "fit-able" spare shoes in some of the pits.

RUMBLINGS.

EXHAUST NOTES—By BOANERGES.

FAR be it from me to spoil anyone's pleasure, or deny happiness to any man. The rôle of wet-blanket or skeleton at the feast is very unbecoming to the sporting motorist. But it becomes a duty to open our throttle and roar with condemnation of those whom we see to be heading down the wrong turning, and otherwise straying from the paths of rectitude.

All of which outburst is occasioned by the increase in the activities of the " high-street speedman," the most loathesome of all mortals. These youths earn more abuse for motorists than all the high-averagers put together.

I suppose they really think it is a source of wonder and delight to all the local damsels, when they career down the High Street flat out in middle gear. Possibly the hearts of the said local damsels are caused to rev. up a little at the sight of Eustace doing a good forty. The o.h.v. motorcycle with twin port engine appears to be the mount most favoured by these horrible specimens. But worse than this treatment of good machines, is that accorded to side valve engines, more famous for their cheapness than their maximum speed. These are usually in the hands of youths lower in the social scale than their brilliantined rivals, and seek to emulate their deeds of daring.

These types of riders are on the increase and form a perfect pestilence in the ranks of motorists. I hope this opinion of their efforts will come to the notice of some of them, if they can spare time to read *Motor Sport* instead of taking their fish-tails off.

* * *

The Motor Show is upon us once again. Once more we trek off to view the new models and to renew our wishes for unlimited wealth. A remarkable thing about the Shows one has visited is that in a great many cases, one has seemed to know far more about the exhibits than the elegant young men in charge thereof.

One is forced to wonder, glancing at these dazzling creatures as they speak in tired tones of " a mere seventy or so," whether they have ever sat behind the wheel of a fast motor at anything like the speeds they despise so much. I am going to look around this Show for the young expert who thought the crank-case of an expensive sports model was a leather affair for holding the starting handle.

* * *

Talking of fast motors, and sports models, and that sort of thing, reminds me that Capt. Frazer Nash has some second hand cars for sale at reasonable prices which are very quick indeed.

* * *

Vernon Balls has opened very fine new showrooms in High Holborn. Customers should note his remarkable frieze, done by one of the younger artists who is rapidly coming to the fore. It presents a kind of journey by car with all sorts of backgrounds and varying conditions. It is quite worth seeing.

By the way, a real chance occurs for a speed enthusiast to acquire a fast car cheaply. Vernon Balls offers for sale his own Amilcar, which is well known to those keen on racing. This little car laps at 98 m.p.h. and has a maximum speed of round about 108 m.p.h., which is pretty fast. It is a four cylinder and supercharged, and can be bought for £350 if you hurry up.

* * *

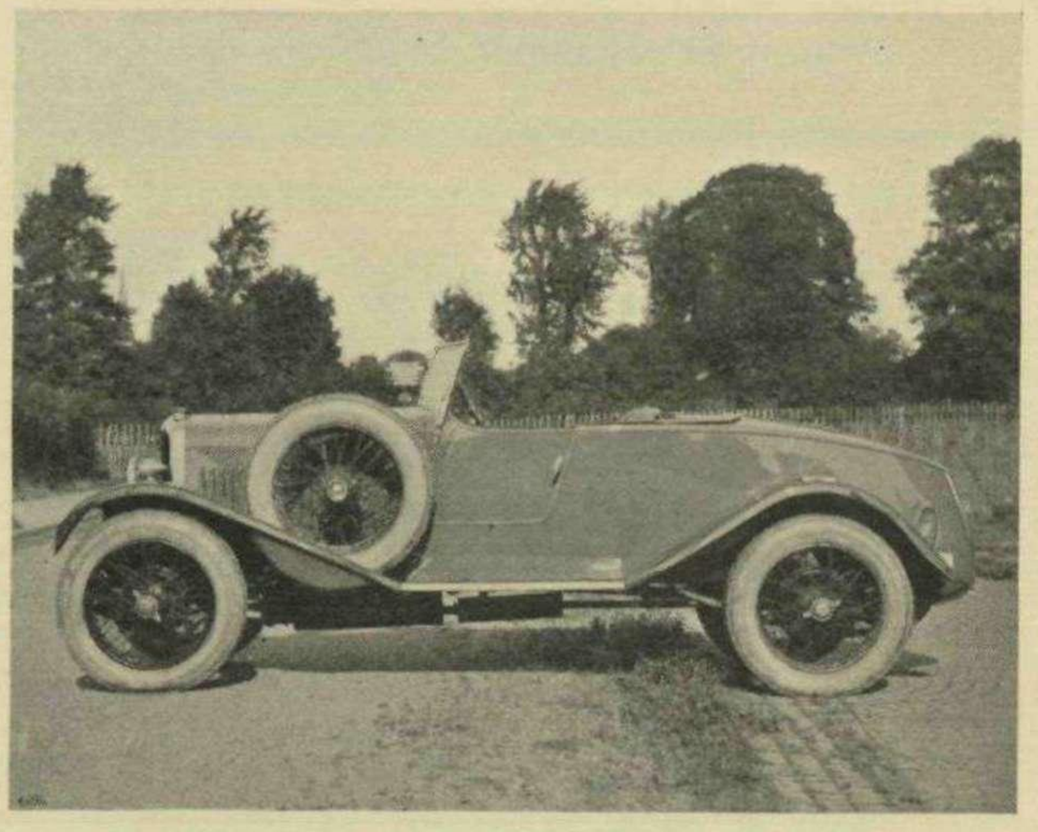
Many a fellow motorist has come groaning to me with a tale of woe. Every time he greases up or does any little job which entails dirty hands, it means half an hour's work with hot water, parafin and brushes before a state of civilization is regained.

For my part the difficulty is solved, for I always keep handy a tin of that extraordinarily good stuff " Gresolvent." This really does do what it says, and that quickly and easily. A good sized tins cost 8d. and is well worth it.

* * *

In view of the Motor Cycle Show opening on October 31st, our next issue will be primarily a motor-cyclists one, and will include a review of the sports mounts exhibited.

There is no doubt that the modern fast motor cycle is growing ever faster, and it is a reassuring fact that the progress of brake design is in the majority of cases, keeping pace with the increase in engine efficiency.



A VERY SMART 1928 TH. SCHNEIDER, ALL MODELS OF WHICH MAY BE SEEN AT 138, LONG ACRE, W.C.

There is an interesting new publication shortly to be on sale, which is a kind of encyclopaedia for the non-technical motorist. This will appear in fortnightly parts at one and threepence each part, and will be called " Cars and Motor Cycles."

The first issue includes articles by Major H. O. D. Segrave, Capt. Malcolm Campbell, the Earl of Cottenham, W. L. Handley, Freddie Dixon, and many other famous motorists.

The paper is edited by Lord Montagu of Beaulieu, and published by Isaac Pitman & Sons, Ltd.



CORRESPONDENCE

To the Editor.

DEAR SIR,

Some months ago you had an Editorial urging the institution of a car T.T. race in the Isle of Man. The fiasco of the R.A.C. Grand Prix Race recently is another occasion pointing to the lack of road racing in England. The sandbanks and artificial turns do not present anything approaching actual road conditions, as the surface of the track, and the great distance travelled after negotiating the turns before reaching them again, is quite unlike the conditions of a normal road race.

While the Road Races Bill seems to have been lost or forgotten, it is time to start a car race over the motor cyclists T.T. course in the Isle of Man. Surely this course cannot be objected to upon any grounds at all.

If motorcycles can average 68 m.p.h. for the whole race, it presents an excellent fast course for cars. Perhaps after a year or two's practise in real road races, we shall be able to put a team into the field capable of beating the best continental drivers in World's Championship events.

Yours, etc.,

ROAD RACE FAN.

DEAR SIR,

Another Olympia Motor Cycle Show is in the near future, and judging by the advance details of 1928 designs, we are to be served up with layouts pandering to fashion again, as was the case in 1927.

There appears to be a decree of Fashion in motor cycles as in ladies' clothes. The thing nowadays seems to be a twin port engine, a straight tube from steering head to rear hub, and Brooklands silencer.

Every lad of the village wants to appear astride a thing that looks like a record breaker ; and quite old established and common sensed factories are about to provide him with this.

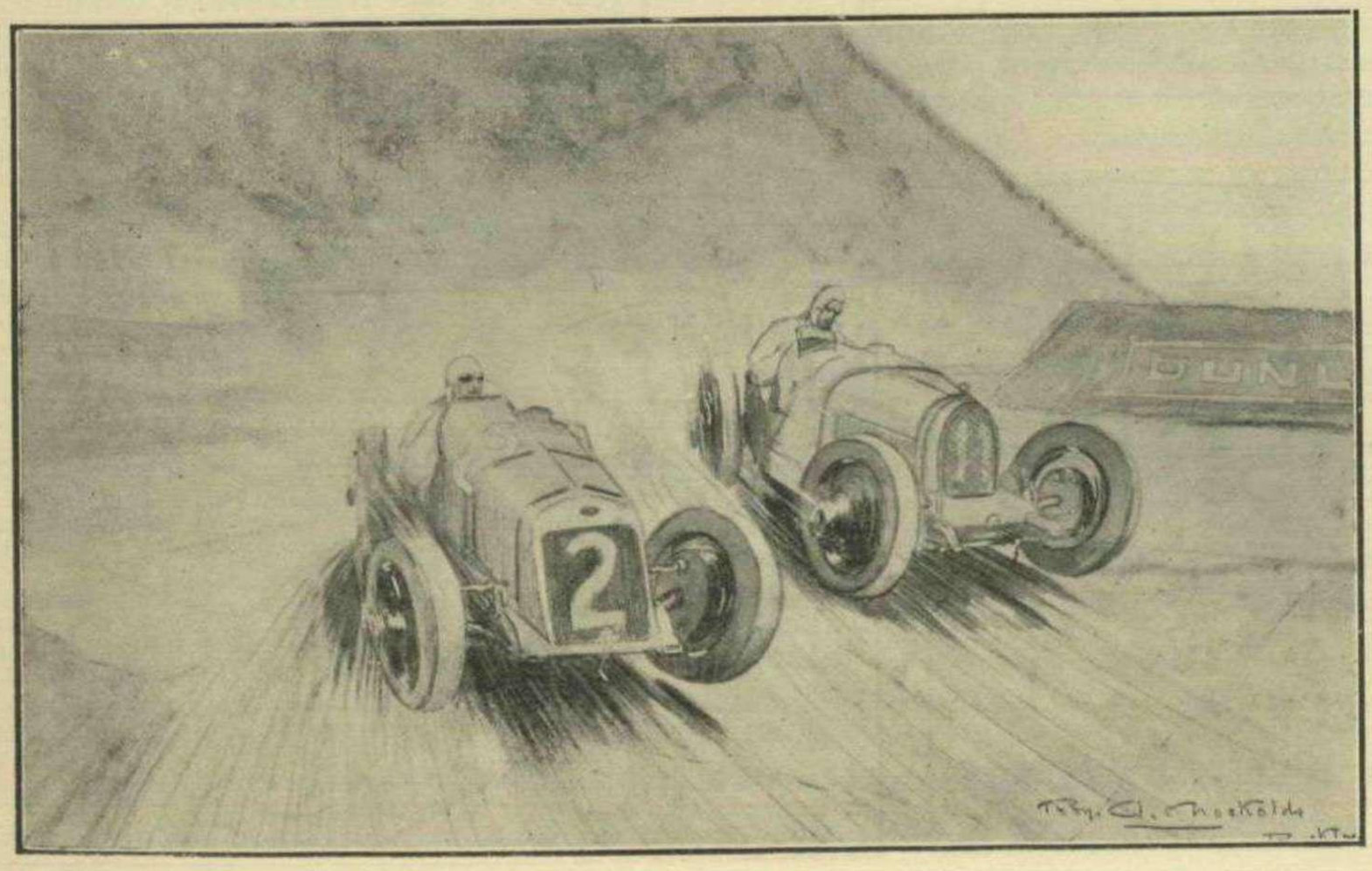
Just putting another pipe on an engine won't make the engine any faster, and the straight tube frame with a low saddle well in front of the rear wheel is a mockery, a delusion, and a snare.

I have ridden some of these frames at high speeds, and the feeling when one applies the rear brakes is simply horrible. The weight having been all slumped forward, the back wheel simply bounces up and down on the road in a frenzied manner. There is only one frame of this lay-out that is really a genuine design, that is the Cotton.

May I plead therefore for a greater experimental stage in the new designs about to be placed in the hands of raw youths. But I suppose it is now too late.

Yours faithfully,

TRIANGLE.



A GRAND PRIX IMPRESSION—BENOIST OVERTAKING MATERASSI BETWEEN THE SAND-BANKS.

STRIKING NEW RUDGE FOURS.

THE Rudge-Whitworth 1928 programme shows that three different types of the 499 c.c. machine will be marketed. These are the Standard at £46, the Special at £55, and the Sports at £60. An electric lighting set costs five guineas extra in each case.

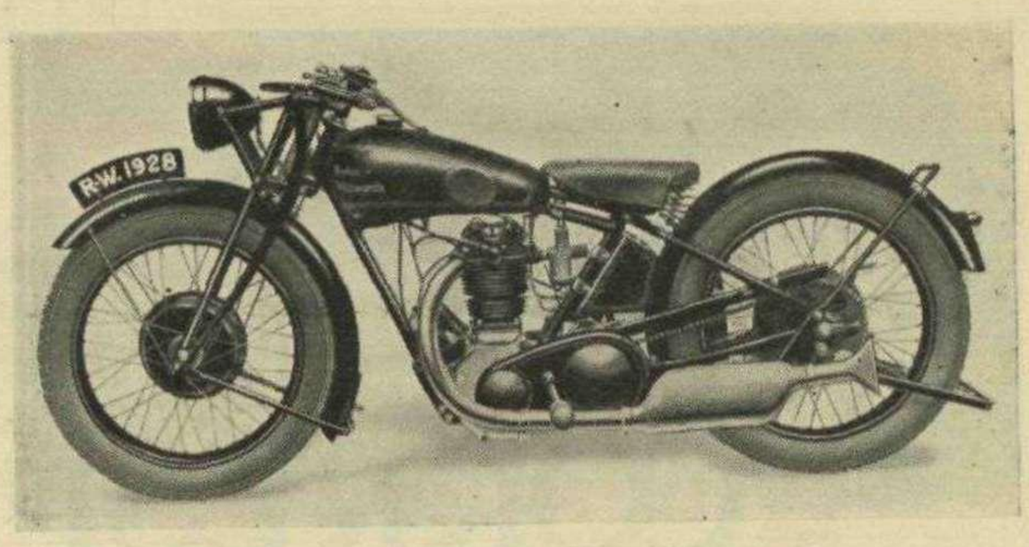
The Standard machine is of similar lines to this year's model, but the Special and Sports have been entirely redesigned. Four valves are used as in the past, but the exhaust ports are now set at 90 degrees instead of being parallel, and long pipes run to silencers which are located one on each side of the rear wheel. Each silencer then has a tail pipe with a large fish tail and the result is that whilst the exhaust note is clear and healthy it is too moderate to cause annoyance.

The engine has a bore and stroke of 85 x 88 mm. with a cubic capacity of 499 c.c. An aluminium alloy dome top piston is used with a fully floating gudgeon pin equipped with phosphor bronze end caps. Roller bearings are fitted to the mainshaft and big-end.

The most striking alterations are in the frame, tank and wheels. The latter now have internal expanding brakes, of large diameter and width, proportionally coupled together as in the past, so that one pedal applies both together. The brakes, incidentally, are of 8 in. diameter and 1½ in. width, and the braking surface is thus very much larger than is found on most motorcycles.

The frame has a special double top tube, connected by a central lug, on which fits a handsome saddle tank finished in black and gold. The oil and petrol tanks are now combined, the capacities being three pints and 2½ gallons respectively and the space on the seat tube formerly occupied by the oil tank is neatly filled by a metal tool-box. The specification includes a four-speed gearbox, shock absorbers, a steering damper, adjustable knee-grips, and twist grip or lever control to the carburetter. The Special machine has 26 x 3.25 in. tyres and 6 in. mudguards, the Sports model being equipped with 27 x 2.75 in. tyres and 5 in. guards. Lubrication is by means of a mechanical pump neatly housed in the timing box cover, only one external pipe being used.

The Standard machine is capable of 60 m.p.h., the Special of 70 m.p.h., and the Sports of 85 m.p.h., speeds which should satisfy the most enthusiastic of "road-burners." On the latter machine two compression plates



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are fitted below the cylinder, and these must be removed for the maximum speed to be obtained. When they are in place, the Sports model is docile and comfortable for touring, but even when they are removed it can be run with safety on a 50-50 petrol-benzol mixture, alcohol fuels being unnecessary. There is no doubt that the new Rudges are as sound in design and manufacture as in the past and their appearance is such that they should be extremely popular during the coming year.

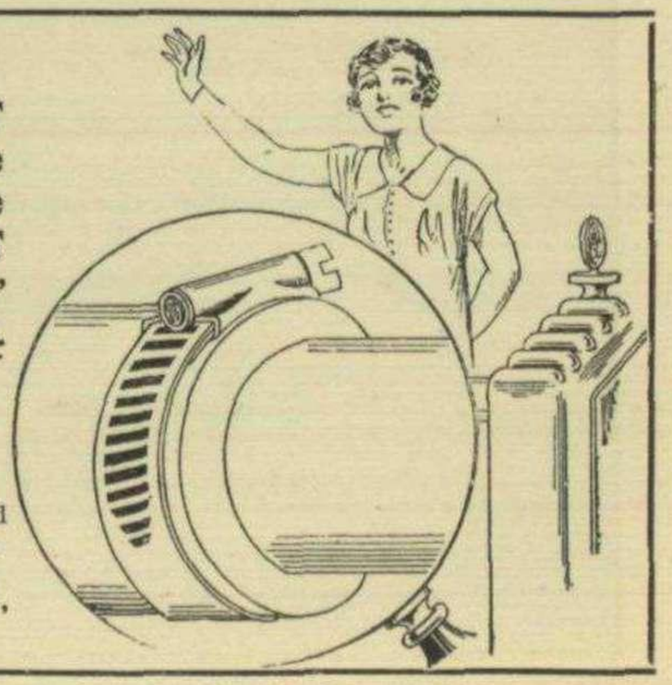
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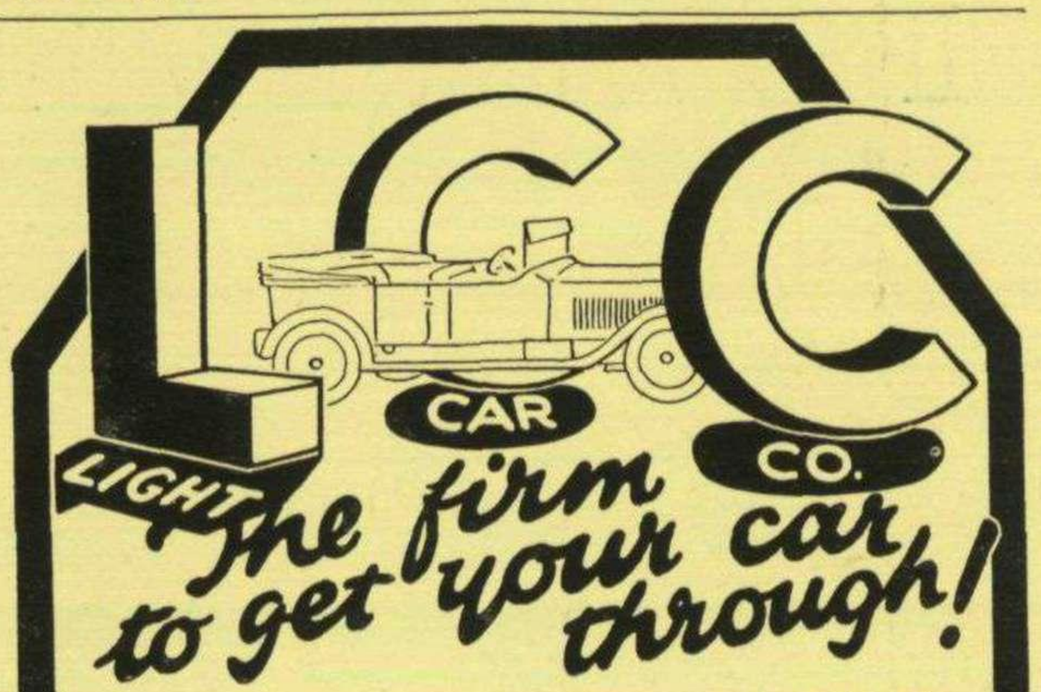
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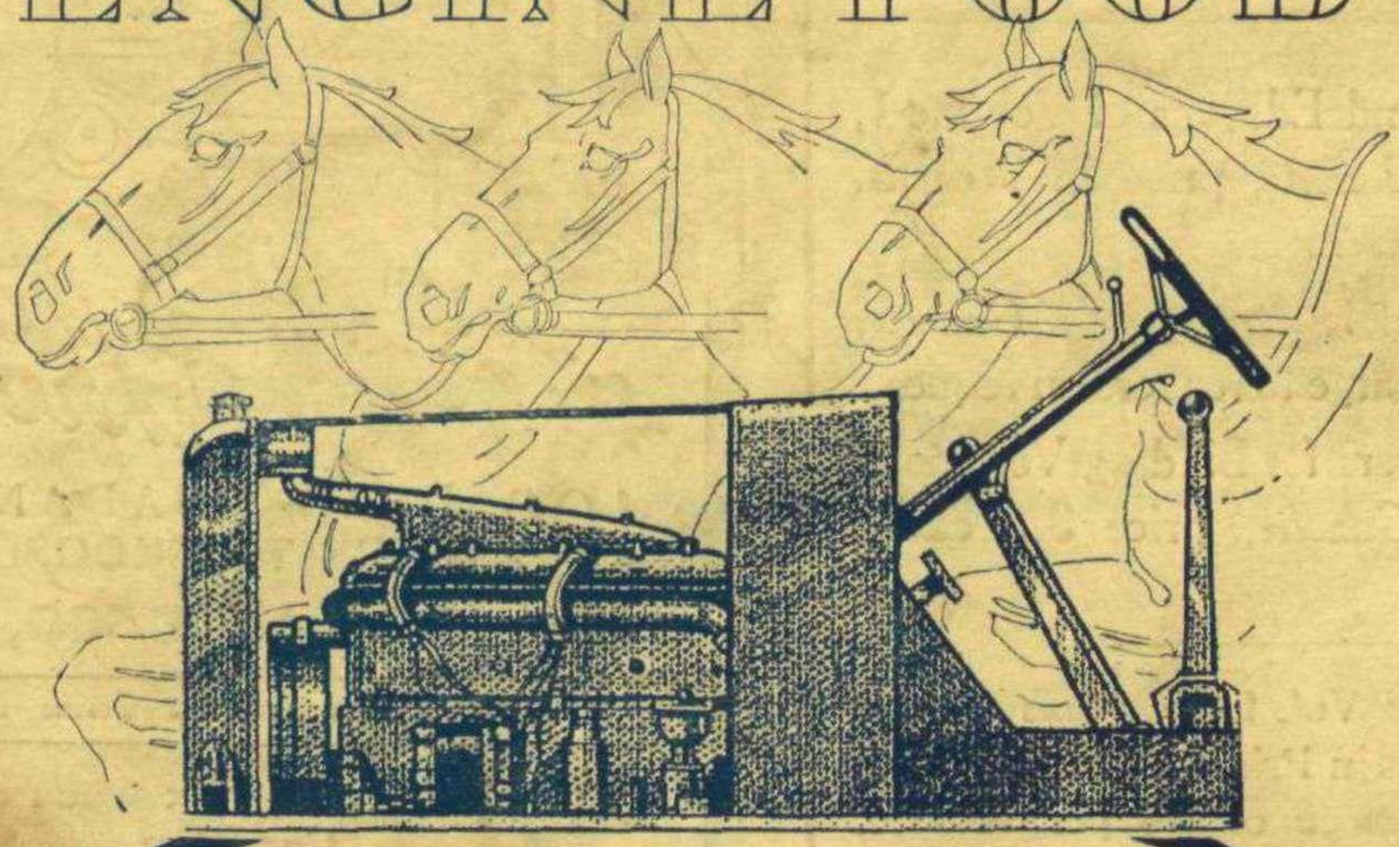
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