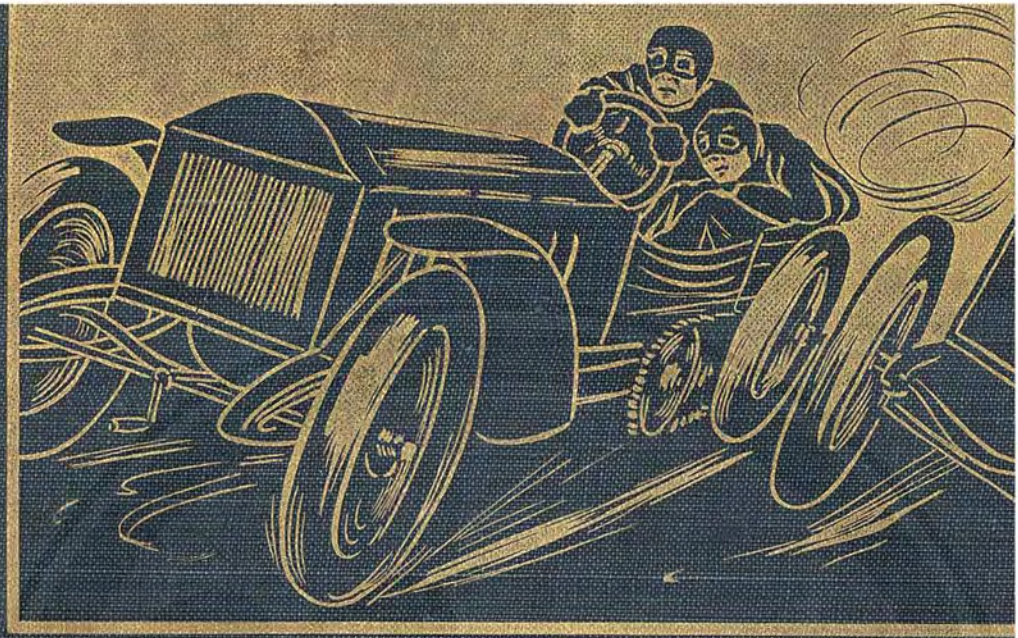

TEN YEARS OF MOTORS AND MOTOR RACING

CHARLES JARROTT

Vivian Porter - 1906
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WITH A FRONTISPIECE IN COLOURS
BY LESLIE WARD ("SPY"),
AND FORTY OTHER ILLUSTRATIONS

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PREFACE

When the idea of this book was first suggested to me, although I had no misgivings as to the interest of its subject for myself and those immediately concerned, I had some misgiving as to my ability to make it interesting to the general reader. I may say that this misgiving is by no means abated now that I see the finished result of my labours. But I felt a very earnest wish, which will be understood by those who have ever been in the thick of any exciting or momentous experience, to preserve, if only for my own satisfaction, some record of the early days of the motor-car in England and my own experiences in connection therewith, and to reconstruct some of the events of those exciting days before my impression of them should become blurred. In this way my book may perhaps come some day to have an interest of its own, when the world shall have forgotten that the thing we call the Motor Movement ever had a beginning.

September, 1906.

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I

THE VERY EARLY DAYS

NOVEMBER 14, 1896. A foggy, dull, wet, typical November morning found me making my way along Holborn to the Central Hall. This had been engaged for the purposes of a garage for the use of the intrepid people who were on that morning to make a run, involving much danger and personal risk, from London to Brighton.

For the first time in English history legal restrictions in regard to the use of motor-cars on the public highways, except when preceded by a man with a red flag, had been removed, and we were to be allowed to drive a car on the road at a speed not exceeding twelve miles an hour. The run from London to Brighton had been arranged to celebrate this important event.

The start was fixed for ten o'clock in the morning from the Hotel Metropole, and I made my appearance at the Central Hall at about eight o'clock to see what was happening. I shall never forget the scene which met my eyes when I entered. French mechanics and German inventors, with enthusiasts of all nationalities, were mixed up in indescribable confusion. Huge flares were being carried about from one machine to another to assist in lighting up the burners for the cars, which at that time were innocent of electric ignition. An occasional petrol blaze was seen through the fog which filled the hall, making the scene resemble a veritable inferno. In addition to this, the noise from the motors, which, after desperate efforts, the various persons interested had succeeded in getting started, prevented the merely human voice from being heard.

Léon Bollée was there, with a small fleet of those extraordinary little machines invented by him, which always, to

my mind, resembled land torpedoes more than anything else. The Panhard and Levassor machines, which had previously taken part in the great Paris-Marseilles race, were also there; and a dozen other notabilities in what was then the somewhat limited automobile world. After enormous difficulty and strenuous effort on the part of everybody, much pushing and many collisions, the cars slowly made their way out of the hall towards the starting-point at the Hotel Metropole. I accompanied Mr. C. McRobie Turrell, who was on that day driving No. 5, the car handled by M. Levassor in the Paris-Marseilles race, so to me was given the honour of holding on his car two flags mounted on a flagstaff. Proudly floating aloft was the Union Jack—at least, it was floating as much as the thick November fog would allow; and beneath was a red flag torn into ribbons, symbolical of that sign of danger which had previously preceded all mechanically-propelled vehicles on the road; the idea being that England had triumphed over her prejudices, and that the conservatism of the early thirties had at last been overcome and destroyed.

The scene at the Hotel Metropole at the start was one never to be forgotten. The spectators had availed themselves of every possible point of vantage, to view for the first time these wonderful machines which were that day allowed to be run upon English roads. Lamp-posts, housetops, balconies were all occupied, and the thousands thronging the roadways made the passage for our car almost impossible. At the Hotel Metropole a breakfast had been held, which many of the guests of the Motor-Car Club, who were organizing the run, attended; and the Earl of Winchilsea tore up, amidst great enthusiasm, a red flag, to show the contempt of the brave motorists present for the defunct regulations under the old Act. I myself was not driving a car, neither was I a guest to occupy a post of honour on any of the cars on that run.

It is said that the spectator often sees most of the game; and I must confess that I saw on that morning much to amuse me. It was all particularly funny when viewed in the light of later knowledge. For instance, I do not suppose that any of the occupants of the cars, excepting the actual

foreign mechanics who had come over from abroad with them and who had run them previously, could say how far any particular car would go on its fuel capacity. Electrically-propelled vehicles turned up with a great show, quite ignoring the fact that their capabilities were limited to less than a twenty-mile run. A parcels van was also in evidence, although I do not suppose it ever carried a parcel in its existence, and it certainly looked as if it would collapse forthwith if something larger than a hat-box was placed upon it. The drivers themselves made an interesting study. The Frenchmen were, of course, wildly excited; if gesticulation and talking could have accomplished anything, much would have been laid to their credit. The English crowd was rather fearful; in fact, one might say, almost nervous; going they knew not where, nor how; but, nevertheless, determined to go, while there was any possibility of going.

Most of the cars were historical, in view of the fact that they had, even then, accomplished great deeds. In the first, driven by M. Meyer, was seated Mr. H. J. Lawson, President of the Motor-Car Club, the car itself being the identical Panhard-Levassor on which M. Levassor had achieved his great victory of the previous year in the Paris-Bordeaux race. No. 2 was a German Daimler landaulette, which had the previous week occupied a prominent position in the Lord Mayor's Show, and contained, amongst other distinguished personages, Herr Gottlieb Daimler himself. No. 3 was a Panhard-Levassor car, which had won the Paris-Marseilles race. No. 4 belonged to the Hon. Evelyn Ellis. McRobie Turrell, as I have mentioned, was also driving a Panhard-Levassor car, whilst Léon and Amédee Bollée and H. O. Duncan were all handling Bollée tandem machines. Another machine of great interest was driven by Mr. E. J. Pennington, who, at that time, was claiming great things for the motor invented by him. And an American-made machine, in the shape of the Duryea, also figured prominently. Another bold person, in the shape of Mr. Gorton, jun., rode a fearful and wonderful tricycle, which started off with many kicks and jumps, much to the alarm of the crowd.

The progress of the start was slow, and as I watched the

cars slowly making their way towards Westminster Bridge, I distinctly remember wondering whether any of the party would come back alive. Of course there were a number of wrecks left at the starting-post, and one of the last things I noticed was a French mechanic, who spoke not a word of English, stranded with his car, in misery and rage, and keeping off the crowd with the aid of a particularly vicious and formidable-looking starting-handle. Another interesting machine I noticed was a motor bicycle; that is, if one can call a mass of mechanism mounted on two wheels by such a name. I have no idea how much it weighed, but the unfortunate rider who was endeavouring to control it was not only in a state of abject fright, but had no idea as to what he ought to do. One thing was clear, namely, that he had to get the machine going by running alongside, and when he had once started it he had in some manner or other, best known to himself, to get into his seat, a performance he signally failed to accomplish. The last sight I had of him was when he was lying prostrate in the road with the machine on top of him, helpless and unable to move.

The progress of the procession was duly recorded by the evening papers, and considering all things it might have been worse. But incidents were numerous, and accidents were not altogether unknown. Pennington endeavoured to get to the front very shortly after the start, and was put out of the procession by bursting a tyre somewhere near Brixton, having eventually to resort to the ignoble and much-despised train. The Duryea car seemed to be travelling very well, and from all accounts arrived in Brighton first, somewhere about three o'clock in the afternoon. Duncan, on his Bollée machine, had charged a hedge, landing himself and his passenger in a field, and eventually appeared being ignominiously towed behind a common cart. Stoppages were the rule, and as hardly anybody on the cars knew anything about them, devices to get going again were varied and ingenious, the most common one being to wind the starting handle vigorously in the hope that something would happen. In the case of the Bollée machines it usually did. Generally it was a back fire; and I have no doubt that

Duncan remembers to this day his painful experiences in this respect.

The parcels van I referred to was, as a matter of fact, fitted up as a "break-down" van (save the mark!). It contained many things which, in the opinion of the experts, might be required by the various cars on the road, and it was supposed to bring up the rear of the procession to aid any of the cars which were stranded. There was no question about it being in the rear of the procession; it was incapable of being anywhere else. Charles Rush, who was driving, explained to me that he arrived in Brighton on the following morning at three o'clock, having spent the best part of his time beneath his car repairing break-downs on the "break-down" car.

The effect of the run on the public was curious. They had come to believe that on that identical day a great revolution was going to take place. Horses were to be superseded forthwith, and only the marvellous motor vehicles about which they had read so much in the papers for months previously would be seen upon the road. No one seemed to be very clear as to how this extraordinary change was to take place suddenly; nevertheless, there was the idea that the change was to be a rapid one. But after the procession to Brighton everybody, including even horse dealers and saddlers, relapsed into placid contentment, and felt secure that the good old-fashioned animal used by our forefathers was in no danger of being displaced. It was, however, the beginning of the movement, and the start in England of the great modern era of mechanical traction on the road.

I do not think it will be out of place here to touch upon the events which led up to the start of the movement in England, as they are all interesting. They were followed by me very closely at the time. Prior to the middle of 1896, I had made up my mind that my path in life lay in the direction of acquiring as much legal knowledge and experience as it was possible for me to obtain, with the idea of making a somewhat precarious livelihood by benefiting through the troubles and quarrels of other people. The great difficulty

I had in reconciling myself to this idea lay in the fact that this method of living did not appeal to my sporting proclivities, and in endeavouring to mix up with my work cricket and cycling, including a few other sports, I am afraid that my legal studies suffered considerably. Hence, when I began to follow the developments which were taking place abroad in connection with motor-cars, I came to the conclusion that therein lay the beginning of an industry, sport, and pastime which would not only have an enormous future, but which would at the same time appeal to me personally. The information I obtained was, briefly, as follows :—

Herr Daimler had been working for many years upon the problem of making a motor-propelled road vehicle, and eventually he had succeeded. Other inventors were also working in the same direction, and a number of French and German enthusiasts were devoting their energies to the problem. This was in the year 1885. In 1886 Herr Daimler had built a road vehicle and fitted a petrol-driven motor into a launch, and from that time onward, step by step, the problem was being solved.

I will not deal with the history of the movement until the time when Daimler got into touch with M. Levassor, who was so impressed with the petrol boat and a quadricycle shown at the Paris Exhibition in 1889 that he set to work to build a complete motor-car. After many failures he succeeded, and one of the most extraordinary things in connection with his success is the fact that the form of construction adopted by him—in fact, one may say invented by him—is the form adopted even to this present day. His first car had the engine in front, a sliding change-speed gear arranged for various speeds, a counter-shaft carrying a differential gear, and sprockets for a chain-drive on to the back wheels, and was similar in a number of other points.

Levassor's experiments and successes were copied, and eventually sufficient vehicles were in existence to warrant the holding of a race—or rather a trial—in 1894, from Paris to Rouen. The first to arrive was a steam vehicle, built by De Dion et Bouton, but the success of the petrol vehicles was sufficiently pronounced to establish it as a fact beyond all

question that they were practical and successful. The excitement in France in connection with this race was very great, the new road vehicles being welcomed by the French populace with open arms. Although the first arrival was the De Dion Bouton steamer, nevertheless the Panhard and Peugeot cars were given the first prize, a De Dion steamer gaining the second, and a Serpollet steam car being awarded the third.

A movement was soon after started for the holding of another race for the following year, in which the Count De Dion and the Baron de Zuylen took an active part. It was eventually decided that a race should be run from Paris to Bordeaux and back, without stoppages of any kind. M. Levassor built a special car for the event, having a small $4\frac{1}{2}$ h.p. motor, and a number of other cars were also turned out by the various firms interested to take part. The race was held on 11 June, 1895, the start being from Versailles, and twenty-three vehicles presented themselves at the starting-point. Of these, nine completed the journey, eight of them being petrol-driven carriages and one steam. M. Levassor won the event, by accomplishing the journey in forty-eight hours on his little car—a magnificent performance, considering the stage of development to which the motor vehicles had attained at that time.

The movement continued to grow; and the Hon. Evelyn Ellis and Sir David Salomons both took an active part in bringing machines into England and demonstrating at various times, in, of course, private grounds, their capabilities and possibilities. The position in England at this period was rather curious, in view of the fact that the law upon the subject prescribed that any mechanically propelled vehicle should be preceded by a man with a red flag and should not exceed a speed of four miles an hour. Mr. Hewetson and the Hon. Evelyn Ellis had both driven their cars in England on the open road, but were subjected to annoyance at the hands of the authorities, in consequence of the regulations then existing. Eventually a movement was started in England for the passing of an Act which would enable motor-cars to be run in a rational manner, and a meeting was held, under Sir David Salomon's presidency, in December, 1895, for the

purpose of forming the Self-propelled Traffic Association in England. In November the "Auto-Car," a paper well known at the present day, was started by Mr. Henry Sturmey. Every effort was being made to enable the new road vehicle to be used in England. A deputation to the Local Government Board, petitions, etc., all had their effect, and the Light Locomotives Act (1896) was eventually passed, which made it legal for motor-cars to be run upon English roads at a speed not exceeding twelve miles an hour, with many other regulations and restrictions. Thus England was opened up for the free use of motor-cars on the highway.

In the meanwhile things had been progressing abroad. The French Automobile Club had been founded, and another big race had been organized from Paris to Marseilles and back, in which a much larger number of cars took part, and which also turned out to be very successful in proving that the new method of progression could be relied upon to cover great distances without difficulty. Then came the London to Brighton run, which I have mentioned. In November, 1896, the first real show of motor-cars was held in connection with the Stanley Exhibition at the Agricultural Hall, a small hall annexed to the main building being devoted entirely to the exhibition of horseless carriages. It was at this show that I had my first experience of explaining to the uninitiated public the mysteries and intricacies of motor mechanism. Not that I myself knew very much about it, having only, some two months before, had explained to me for the first time by Mr. Instone, the secretary of the Daimler Company, the difference between an exhaust box and a carburettor. But, anyhow, I consoled myself with the knowledge that if I knew little, everybody else knew less; and if I did occasionally explain that the cylinder was the boiler, and that the starting handle pumped up the compression, no one could correct me, for the reason that no one else was any wiser. At the same time it was a trying experience. The weather was bitterly cold, and the public flocked in their thousands to see the vehicles which had figured so prominently in the Brighton run, and about which so much had been written in the papers. Here is a

specimen of the sort of thing that took place on an average about five hundred times a day:—

Anxious inquirer: "Where is the electricity stored?"

You reply: "This is not an electric machine, but one driven by petrol."

Anxious inquirer: "What do you mean by petrol?"

You reply: "Petrol is a spirit," and then, in order to make it a little more clear to the anxious inquirer's very dense mind, you further explain, "something like methylated spirit." And the invariable answer you receive from the anxious inquirer is: "Goodness gracious! Doesn't it always blow up?" This sort of conversation, continued *ad nauseam* throughout every day for a whole week, was sufficient to kill the enthusiasm of the most ardent disciple of automobilism.

To such irritation were we, the unfortunate explainers, subjected, that I remember Turrell, somewhere about the end of the week, in reply to a question from a corpulent old gentleman, who, after poking one of the pneumatic tyres with his walking-stick and inquiring, "What is inside of that?" saying, with the utmost gravity, that the tyres were stuffed with sand, immediately making another convert to the belief that everything in connection with automobiles was fearfully and wonderfully made.

It was somewhere about this time that I had my first driving lesson. I had gone down to Coventry, and Turrell was just taking out a little 3½ h.p. van fitted with a Panhard motor, with the idea of seeing exactly how much pig iron this particular van would carry up Gibbet Hill, on the Coventry-to-Birmingham road, and with that generosity which I have noticed all automobilists extend to their uninitiated friends when they start out upon some dangerous experiment, he asked me to accompany him. For some time everything went well. The van toiled wearily under its load until at length we reached the foot of the hill we were going to climb. As we neared the top the feeble little motor began to labour heavily, and this particular moment, Turrell seemed to consider, was an exceedingly suitable one for taking walking exercise, and at the same time initiating me into the art of driving and controlling a motor-car.

With the injunction to hang on to the steering tiller—for in those days steering wheels were unknown—he jumped off the car, and behold! I was alone on a motor-car, with a long road stretching away before me, leading whither I knew not. Relieved of Turrell's weight the little motor struggled gallantly and soon left him in the rear, with the result that I found myself at the top of the hill with a long slope downhill in front of me, not knowing how to stop the car, and having but one idea in my mind, namely, to carry out Turrell's advice and hang on to the steering tiller. We hear nowadays that the engine has a strong braking effect on the car, but I would advise any one who wishes to thoroughly test this theory to get on the top of a long hill and put his car in any speed he wishes, and with a 3½ h.p. two-cylinder motor and 15 cwt. of pig iron in the back of the car, I undertake that the fallacy of the engine on that particular car having any braking effect will be demonstrated beyond all question. I discovered this very quickly, and at no time in my existence have I ever appeared to be travelling anything like as fast as I was travelling at that particular moment, when I found that the car had control of me. I reached the bottom of the hill safely; that is to say, I was still on the road; and as I began to climb again, wondering whether I was ever going to stop, Turrell came to my rescue, having raced downhill at top speed, which apparently had annoyed him considerably. He wanted to know why I had not taken out the "clutch" (whatever that meant) and put on the brakes. So far as I was concerned the car might have had no brakes. Hence my aggrieved feeling at what I considered his unreasonableness.

But the plunge had been taken, and I was an automobilist. I had driven a car and survived the ordeal. Hence I was entitled to wear a cap of true yachting shape, with an enormous badge, and applied for membership of the Motor-Car Club without delay.

After this things moved slowly. I was able to be in Coventry a great deal, and in addition to gaining some knowledge in regard to construction, I was able to see the

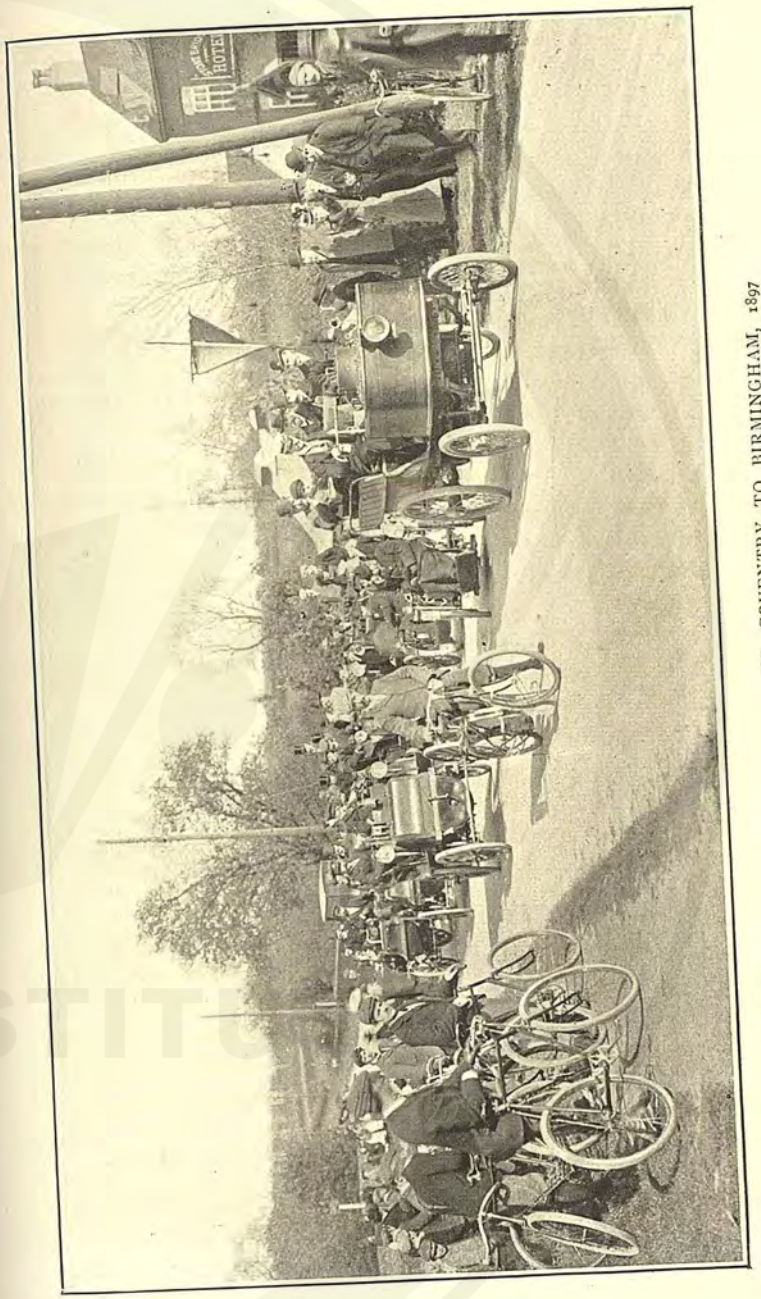
progress which was being made by the Daimler Company, who were at that time beginning to turn out English-built cars on the Panhard-Levassor principle. The Bollée machines, which I have previously referred to, also attracted me, and I discovered that they were very easily driven when once they were started. The starting, however, was one of those painful problems which all automobilists of the early days had to go through whenever they wished to use their cars. Ignition at that time was accomplished by means of platinum tubes, which were made red-hot by burners, and the result was that until a certain amount of skill had been obtained a back fire was inevitable. Sometimes the starting handle flew off and hit one's head, or possibly it stuck on and gave one a broken wrist. But in any event, the operation was one which left its mark in some form or another.

We had some real fun in Coventry at that time, by reason of the claims and performances of the Pennington machine. I must confess that Pennington was one of the most remarkable men I have ever met. Absolutely American, of big build, and with a commanding presence, it seemed impossible for any sane person to disbelieve anything he stated. He had in Coventry at the time a number of machines, all built somewhat on cycle lines. One was a very neat-looking motor-bicycle, regarding which he produced pictures showing it flying through the air over a river, with the further explanation that the machine was capable of travelling sixty miles an hour, and consequently could easily jump over any ordinary obstacle, such as a river. His four-wheel machine was much more powerful, and certainly accomplished some extraordinary feats in the light of the knowledge at that time existing in connection with motor-cars. I remember a dispute taking place between Pennington and Duncan, which resolved itself into both of them adjourning to a neighbouring field, placing the machines back to back, tying them together with rope, and then starting up the engines in what was virtually a tug-of-war. The fact that the Pennington had about double the horse-power of the Bollée made no difference, and when poor Duncan was dragged backwards round

the field in question he had to admit an ignoble defeat, and Pennington was able to claim for ever afterwards that he had beaten the Bollée on every point. I am not sure that I myself did not agree with him, because anything that Pennington said seemed almost impossible to disbelieve.

Another interesting point in connection with the Pennington machine, over which we had a great deal of discussion, was that Pennington used no carburettor. He poured the oil directly into the cylinder, and when asked how he succeeded in vaporizing his petrol in order to obtain a gaseous mixture, he explained that his electrical ignition device did everything necessary: it was so arranged as to give two sparks in the cylinder, almost simultaneously. The first, however, was a "long mingling spark," which vaporized the petrol, and the second was the ordinary spark to fire it. That "long mingling spark" of Pennington's was a standing joke for many months. I remember Pennington taking me on his big four-seated machine and reducing me to a state of absolute prostration, not because he travelled fast, but because he had the idea that the right way to convince those of us on the car of its capabilities was to drive it into ditches, over heaps of stones, and at top speed round a particularly uneven and bumpy field, resulting in our having to hang on for dear life to prevent ourselves, not only from being thrown off, but mangled by the machine as well.

In May, 1897, a great event took place. The Motor-Car Club decided to have another run, but on this occasion a much less ambitious programme was to be carried out. Coventry was to be the starting-place, and Birmingham the destination. This run was to give the various factories which had started in England an opportunity of showing the capabilities of some of the machines that had been turned out during the winter. On this occasion, having served my apprenticeship, I was entrusted with one of the Bollée machines. Some twenty-eight cars started from Coventry to make the journey. Turrell, on that day, was driving a De Dion steam brake, which had two months before won the Nice-Marseilles race. The Panhard cars, which had been brought by the various companies from France and which had figured in the Brighton



RUN OF THE MOTOR-CAR CLUB, COVENTRY TO BIRMINGHAM, 1897

run and Stanley Show, were also in evidence; and amidst the acclamations of the local populace the start was made.

A large number of the passengers were members of the Press, many of them making their initial experiment in automobilism. I had on my little Bollée machine (which I may describe as being somewhat on the lines of the present-day motor bicycle with a carrier attached in front) a well-known representative of one of the London papers. In my eagerness to show the capabilities of my little car, I started off at top speed over a particularly rough piece of ground, and eventually striking a huge hump in the road, had the gratification of seeing my passenger flying into space; and only by great agility and good luck did I prevent myself from running over him. He was very cross; in fact, he was furious. His clothes had suffered, as, also, had his hands and face. But at the same time, as I explained to him, it was an experience, and he ought to have taken everything as it came, most gratefully. The other participants in the run struggled on, and again a number of breakdowns had to be recorded. In fact, I think mine was the only Bollée machine, out of four that started, which succeeded in arriving in Birmingham to time. However, with only eighteen miles to cover, everybody managed to get there eventually, and the usual gorgeous and indigestible banquet was held in the evening, graced by the presence of the Mayor.

Some two or three months after this I was asked by Turrell whether I would go to Margate and bring back from there "No. 5," i.e. the car which M. Levassor had driven in the Paris-Marseilles race of the previous year and which Turrell had driven in the Brighton run. I believe he had driven it to Margate and been compelled to come back to London in a hurry by train. Hence his request that I would go down and fetch the car back to London. Of course I immediately acquiesced, although I had never driven it before, and had but a vague idea as to how I should find my way over such a big distance. All my experience in driving Bollée cars would obviously avail me little in connection with No. 5. But I kept my misgivings to myself and accepted the task with (apparent) eagerness. The first person I went to was

Frank Wellington, who had had some experience with motor-cars ; in fact, he had already been through one very bad smash, which had something to do, I believe, with running into a brick wall in the middle of the night, at the full-speed capacity of his car, somewhere about ten miles an hour. He, therefore, was an authority. I asked him to accompany me on the run, having explained to him very clearly that it would be quite a sporting run ; also that it might be no run at all, if we could not get the car to start. Without any hesitation he agreed to share all the risks, and we proceeded to Margate together. Arrived at the coach-house where the car was stabled, we found sundry tins of petrol, which we proceeded to pour into the tank, and hoped there would be enough to enable us to get to London. We had no idea as to how much petrol would be necessary for the journey, but we hoped and prayed that we should at least arrive within pushing distance of the metropolis.

Wellington, who was an expert on ignition burners (so he informed me), then proceeded to light the ignition lamps for the motor. His methods were drastic, novel to me, and terrifying to the bystanders. There was rather a big blaze, but, as he explained to me afterwards, that was a detail, and it really was not dangerous. Anyhow, when I say that he turned on the petrol tap, flooded the whole of the engine with petrol, turned the tap off, lit a match, dropped it inside the bonnet of the motor and then ran away, one can imagine that my criticism of his expertness was somewhat more forcible than the expression of the word "primitive." And having assured the bystanders that the aid of the fire brigade was not necessary, and the flames having subsided, we got the burners to work with the aid of some methylated spirit, and then proceeded to start the motor. In this we were quite successful. But before we started on our journey we walked round with an oil can, and very carefully poked oil into every conceivable crevice where oil could be put, in the hope that by this means we should make quite sure of getting the oil where it was really required. Whilst doing this, I suddenly discovered that one of the cylinders did not appear to be firing. I had not then learnt to appreciate the

beauties of the hit-and-miss system of governing adopted on the Panhard cars, and thus, when the slides operated by the exhaust cams missed the knife edges of the valve lifter, we had a very serious consultation as to whether we should tie the whole thing up with copper wire to make sure that each cylinder fired regularly. Indeed, we were very concerned over this, and had it not been for the fact that time was rapidly passing and we had not even made a start, I am inclined to think that some drastic experiment would have been undertaken by us.

With much fear and trepidation we climbed into the car. Wellington, with that nobleness of heart which always actuates one man when he is endeavouring to push another into a position of danger, explained that on no account would he deprive me of the honour and glory of driving. I was anxious for him to make the start, to see if his skill as a driver was sufficiently great to warrant my leaning upon him in case of emergency. He proved but a broken reed, and my heart sank as I realized that I was to be the pilot, and that the successful termination of our trip would depend upon me alone.

Of course Wellington was awfully nice, he explained everything beautifully ; but he would not drive. However, after slowly making our way out of Margate on to the open road, I really began to be pleased that this was so, because we were getting along famously. I was on a racing car with seventy long miles of road in front of me, and as far as one could gather at that moment with no obstacles ahead. Here my sporting instinct came to my comfort as we dashed along at a speed of at least twenty miles an hour.

Arriving at a small inn some fourteen miles from Margate, and it being five o'clock in the afternoon, I came to the conclusion that a good meal would be helpful in meeting the dangers and vicissitudes of the coming night. We accordingly stopped, and after a delay of about an hour we proceeded to start again on our long journey to London. Of course the usual procedure in starting a car at that time was to "wind." If the car did not start you wound again, and if it continued to be stubborn you wound still more vigorously.

In fact, one's knowledge—at least our knowledge—did not extend beyond the "winding" process. After we had been working hard in this direction for at least three-quarters of an hour, we came to the conclusion that something had really happened. As to what that something was, however, neither of us in the profundity of our knowledge had the faintest idea. Baffled but not dismayed, we did the only thing we could do—we went on winding. If I remember rightly, we wound for at least two hours. The sun set, darkness fell, and we were still winding. At last, poking inside the bonnet with a huge screw-driver (which I had discovered amongst the tool kit of the car), I touched something—and the next "wind" started up the motor in first-class style.

I learnt afterwards that the accelerator chain had got hung up, and that my fortunate touch had knocked it into its normal position. With blistered hands and weary bodies we climbed into the car, having lit our candle carriage lamps, and once more renewed the attempt to reach London. Then did I realize the great difference between driving a fierce racing car in broad daylight and handling the same car in the dark. Unlighted carts, wandering villagers, and dawdling lovers presented fresh terrors at every yard of the road, until at last I got on to the low speed, and there remained. The expostulations of Wellington were useless. When he goaded me to "let her go" I replied that so far as I was concerned I was not going to travel any faster, but that if *he* would take control *I* would be delighted to sit with him on the car, even if he drove at express speed. This, however, the bold and fearless Wellington refused to do. He explained that he had prepared himself for a night out, and really felt more assured by the knowledge that I was driving at a very safe speed.

Ten, eleven, twelve o'clock came, and we were still slowly making our way to London. Where we were I knew not. We got down occasionally, and saw finger-posts which indicated that London was so many miles away, but what that particular distance meant in regard to time, neither of us had an idea; we appeared to be travelling at about four miles an hour. And then, as a crowning disaster, the candles in our carriage lamps gave out, and we were left in the darkness of a country road on an inky-black night, with just sufficient rain falling to wet us thoroughly. We had no spare candles, and at that hour it was hopeless to think of buying any. Then phantoms appeared. Imaginary carts; ghostlike people; fantastic brick walls; huge and impassable hay carts—all of these, and many other strange objects, loomed up in the darkness before my straining eyes; with the result on each occasion that all the brakes were put on with a jerk in the attempt to avert what appeared to be a certain catastrophe, but which turned out to be only an imaginary terror. Vivid indeed are my impressions, even after all these years, of the trials of that long, long night.

Wellington sought refuge from his misery in slumber, which if not undisturbed was at least restful. But I, hanging on to the steering tiller, lived my life over again many times, saw sudden death staring me in the face every five minutes, and was quite prepared to find that my hair had turned white when I should come to examine it on the following morning. Daylight saw us approaching London in the neighbourhood of Blackheath, where, I may say, Wellington lived. But before we reached his house, somewhere about half-past four in the morning, we had one interesting little experience. Wellington had come out prepared for the drive. There was no question about that; his very clothes proclaimed the fact, in his resemblance to a mixture of a South African explorer and a bushranger. In addition to some very formidable-looking ships' biscuits in the way of food supplies (which, I must admit, became very acceptable during the night), he also carried a ferocious-looking revolver. He did not explain to me for what purpose this was carried, but I agreed with him, when he told me about it, that it might certainly come in very useful. I am not sure that suicide was not mentioned. It was in connection with this awful weapon that we had our interesting little experience. As we slowly approached Blackheath, we were able to distinguish by the dawning light a number of rabbits darting across the road ahead of the car. This fired all the sporting instincts of Wellington, and without further preliminaries, the revolver was produced and pot-shots taken by my gallant friend at

the little running targets. It was not till afterwards that I realized my personal danger during this exercise. By the way in which Wellington handled the revolver, I thought he could shoot, and I was therefore somewhat surprised to see that the rabbits still ran on merrily without being affected by his shooting. But the interesting part of the story now comes. A mounted police patrol, hearing the shooting, evidently had come to the conclusion that there was serious trouble somewhere, and I suddenly realized that we were being pursued at a full gallop by this member of the constabulary. Visions of imprisonment and fines for myself, and the immediate incarceration of my loyal friend in the nearest police-station, spurred me to desperate effort; and pressing down the accelerator to get the utmost speed out of the car, we endeavoured to out-distance our pursuer. Unfortunately, we were going uphill. No. 5 was doing her best, but under such circumstances six horse-power does not count for very much, and as I gazed round I could see that we were rapidly being gained upon. With the constable not twenty yards behind the car, we arrived at the top of the hill; with a crash in went the third speed, and then the fourth, and we were dashing away downhill to safety and freedom, I in the meantime hanging on desperately to the steering tiller to prevent the car and ourselves from being precipitated into the ditch. I will not describe in detail the agonies of progressing along the Old Kent Road into town on that particular morning. Grease and tram-lines, traffic and undecided old ladies, exhausted what the long night ride had severely taxed—i.e. my physical powers of endurance; and when I eventually arrived on Holborn Viaduct, with the car intact and myself and my companion alive, I felt as one who had passed through many dangers, and, in the fullness of my heart, returned thanks accordingly. Thus ended the first long run I had made on a motor-car driving myself.

Another interesting experience I had about this time was in connection with my Bollée machine, which I had lent to Mr. S. F. Edge. He had been using a motor tricycle for one

or two drives, and then came to the conclusion that he would like to have a long run on the "Bollée," and arranged with Mr. Harvey Du Cros to drive that gentleman into Oxfordshire. I remember he came to see me on Holborn Viaduct one Friday evening, to take away the machine, as he proposed starting out on the following Saturday morning. By that time I had gained some very considerable experience with the Bollée machine, but so far as Edge was concerned, he knew but one gospel—"winding." Thus it was with some misgivings that I saw him start off, certainly *appearing* to be very confident. But I had my doubts as to the experiment. I heard nothing further until the following Monday morning, when Edge telephoned through to me stating that he, with Mr. Du Cros, had, on the Saturday, arrived as far as Hounslow in splendid style. But there something had happened—what it was he did not know. He had used every spanner in the tool outfit on every nut he could see, and had worked on the car for hours, but without result. He had therefore been compelled to leave the car at a little stables, the address of which he gave me, and wanted to know whether I could send some one down to fetch it.

Being interested in ascertaining the real cause of the trouble, I went down myself with an engineer, found the car, and having gone over everything carefully, discovered that a little bit of grit had got into the nipple of the carburettor, thus obstructing the flow of petrol. This was removed in about twenty seconds, after which the engine started up as well as ever. When we came to pay the man who had stabled the car, however, he produced a beautiful silk-lined overcoat, which we learnt he had insisted on retaining as a guarantee that some one would pay for the stabling of the car and fetch it away. I afterwards ascertained that Edge had experienced much trouble in inducing him to take in the car at all, and it was only when Mr. Du Cros offered to leave his best overcoat that the car was allowed to be pushed into the stables. In view of the fact that the car itself was worth somewhere about £150, the incident was not without humour. It serves to show the ignorance which prevailed amongst the general public at that time in regard to what motor-cars were, what

their value was, and how the people who drove them should be treated.

I think it was in June of that year that M. A. Holbein made an attempt to cover over four hundred miles on the road in twenty-four hours on a safety bicycle. Believing that much assistance could be obtained from motor pacing, it was arranged that Turrell should pace him over a considerable portion of the distance with No. 5. Of course, at that time multi-cycle pacing had been brought to a fine art, but it was thought that greater protection would be afforded by the motor-car, especially if the day turned out to be windy. This happened to be the case; a fearful gale was blowing, and those of us who were at Wisbech did not consider it possible, at that time, for any human being to cover such a great distance as 400 miles within the twenty-four hours with such a tremendous wind to contend with. The route was over a number of out-and-home courses, and we were able to appreciate the difficulties by the fact that the men who were on the ordinary pacing bicycles were absolutely used up after a few miles riding, so strong was the wind. When No. 5 arrived on the scene a very different tale was told. Riding in comparative shelter, Holbein was able to make a splendid average, and everything was going well until at about eight o'clock in the morning No. 5 gave out. I forget what the trouble was, but it meant that Holbein was without the use of the car for at least six hours. Struggling on, nevertheless, with that dogged perseverance for which he is renowned, he was making an excellent show; but with only three hours to go, it seemed impossible that he would accomplish what he aimed at—to cover 400 miles in twenty-four hours. Then No. 5 once more appeared on the scene, and I shall never forget Holbein's shout of joy on arriving in Wisbech to find the car waiting to take him out on his last stretch. Picking up the time he had previously lost, after two and a half hours of hard riding, he got within his schedule, and at the end of the twenty-four hours was rewarded by having accomplished 404 miles within the time. Turrell, who had been driving hard during the night, as well as during most of the day, was absolutely used up, but much of the glory of Holbein's achievement

rested with him for having stuck so pluckily to the steering tiller.

Whilst this ride was progressing, and at about four o'clock in the afternoon, I went up to my room at the hotel to get a little sleep, and made the unpleasant discovery that my bedroom had been captured by two tired-out Dunlop pacers, and I had no alternative but to go for a walk to keep myself awake, as I had been up all night.

Just as I was leaving the hotel, accompanied by Rush, the engineer who had been looking after No. 5, we espied a tandem tricycle, belonging, as we afterwards learnt, to the identical two pacers who had stolen my room. It looked so nice and racy that the wicked idea of borrowing the machine came into my mind—a gentle little cycle ride would be so much more effective in keeping us awake. No sooner said than done. In the bustle and rush of pacers arriving, attendants running about with food, etc., it was easy to take possession of the machine unobserved. Hoisting myself into the front seat, from which the machine was steered, and Rush taking his place behind, we gaily set off along the road on which Holbein was expected. Fatigue soon disappeared. The effect of the bright sunny afternoon and the smooth, lively action of the tricycle was most exhilarating, and as we sped along I congratulated myself on the happy idea of taking possession of such a charming machine.

It was that awful craving for speed, which comes to all men at one time or another, which eventually proved our undoing. We seemed to get along together so well that I called out to Rush to do his very best, to see how fast we really could go. With our heads down, straining every nerve, we seemed to fly along; then, in a moment, the road disappeared, and I realized—alas! too late—that we were on a right-angled corner, with a sharp turn over a small bridge, blocked at that moment by a coal-cart. Yelling out to Rush to back pedal, I gave a mighty tug on the handle bars, but the clearance between the stone wall of the bridge and the coal cart was insufficient, and, with a tremendous crash, we struck the parapet. I have a dim recollection of a loud report (which I afterwards learnt was caused by the front tyre blowing off the

rim), then a dive into space and—oblivion. I woke up some little time afterwards, and found myself half lying in the small stream which ran beneath the bridge. I certainly had no limbs broken, but I felt very badly knocked about, and, as far as I could make out, my shoulder was sprained. My clothes were torn to ribbons, and I lay on my back for a few minutes, trying to remember where I was. At length I heard the voice of the unfortunate Rush some little distance off. He was calling upon all the saints for protection, and was evidently also in a bad way, but, as it turned out, he was suffering more from shock than anything else.

As we climbed wearily up the bank I began to wonder what the owners of the tricycle would have to say. It was certainly an ideal specimen of a wrecked machine. The front handle bars were twisted somewhere beneath the back axle, and it resembled scrap iron more than anything else. With the aid of the carter we made our way to the nearest railway station. I dared not face the wrath of the men who had left the machine outside the hotel, and proceeded forthwith to London. Not the least humiliating part of the incident was my having to sit in a railway carriage all the way to London with my clothes pinned together, in outward appearance greatly resembling a scarecrow.

My many experiences during the year 1897, and my many adventures on the road, I dare not attempt to set out in full. I had by that time realized what great possibilities there lay in the motor-car, and on every conceivable occasion I availed myself of the chance of gaining experience and knowledge. Some of my later experiences were probably more exciting, but at that time even trivial incidents had momentous results. I had gained as a companion in the exploration of many mysteries Mr. S. F. Edge, and the adventures we met with would in themselves occupy much space. Of course, breakdowns provided the greatest sport. It was impossible to know, when starting out on a journey, when or whether one would return. The car would be filled up, as far as possible, with spare parts, which, as a rule, were in great demand before the end of the journey. We were, of course, inquisitive, and, in addition to the inherent defects of the cars

themselves, we no doubt created trouble for ourselves by endeavouring to find out, when the car was running well, why it did so. Personally, I used to become depressed if my car went particularly well, because this always preceded some grand catastrophe: it was the lull before the storm.

In the ordinary way one would only have some small things happen, such as a gear wheel breaking up, a platinum tube bursting, a tyre puncturing, or the motor refusing to start. But if the car went exceptionally well for, say, twenty miles, something terrible was sure to happen afterwards, either the crank shaft would break, the gear box fall out, or a wheel come off. Hence, when one's car took into its head to travel exceedingly well, a wise precaution was to send off a wire stating one would not be home for two or three days.

On 29 November, 1897, the second London run of the Motor-Car Club took place. Twelve months had seen a vast change in connection with the industry. Companies which had promised favourably in regard to the manufacture of motor-cars twelve months before were dead or dying. The public had received a rude shock in connection with the first run, and a general belief was abroad that motor-cars were absolutely impracticable, and could only be looked upon as playthings and toys. The cars which had come from abroad, and the vehicles which had been turned out by one or two English factories then at work, did little to dispel this idea. There was general stagnation and lack of interest, although the movement was really making progress, but very slowly. It seemed impossible to devise a scheme whereby public interest might be revived. It was at this period that I took upon myself the work of acting secretary of the Motor-Car Club, for the purposes of arranging the run of 29 November.

Realizing that the shorter the distance the more possible would be our chance of having a successful run, I eventually arranged with the Sheen House Club for the run to take place with their Club House at Richmond Park as its destination. A large number of entries were secured, and the distance being short, every one was able to make the journey, practically without trouble.

After a luncheon at Sheen House, some motor-cycle races were arranged in the private park of the Club, and in these I took part, winning the motor-bicycle race in record time. It is amusing now to look back and remember the wild excitement of the spectators during the course of these races, as anything approaching the speed we then attained, somewhere about twenty-seven miles an hour, had never before been witnessed.

It has been interesting to me to watch during a period of ten years the growth of public opinion in regard to motor-cars; but certainly the most interesting period was the time when they were first introduced into England. Of course, if one stopped for any cause at all, either in the street or in the country, a "breakdown" was duly recorded. In fact, it was painful to sit on a motor-car, or be anywhere near one, whilst it was stationary. Omnibus drivers would hurl at one's unoffending head the advice to "take it home"; facetious carters would offer the assistance of a horse; and small boys would yell in derision that "another oil-can had broken down." At first this tortured my sensitive nature greatly, and I would be overwhelmed with confusion, to cover which I generally dived underneath the car, not because it was necessary, but merely that by so doing I could hide my head. However, as time went on, familiarity bred contempt. I cannot say that I ever became an expert in retaliation, but in the cultivation of a contemptuous smile I became proficient enough. Not that one did not *feel;* and many a time I would have given much money, and forgone many pleasures, to have been able to expostulate with some of my tormentors in the real old-fashioned British way.

II

MAKING HISTORY

I HAVE no doubt that all of us at one time or another in our lives have cast our minds back to the years that have passed, and found pleasure in the remembrance of incidents and experiences of long ago. Matters of life, trials as they may have been, when viewed through the misty glass of time present themselves in rosy tints and pleasing colours, and one is apt to forget that at the time of their happening they were as thorns in the flesh and trials of the spirit.

I have so often heard it said by motorists who have followed the sport and pastime from its commencement that motoring to-day presents few charms, gives little pleasure, and small amusement, because, owing to the increased speed and reliability to which motor-cars have attained, incidents of an unexpected character never occur, and a journey, either long or short, resolves itself into a mere passage from one place to another. I am glad, and rejoice exceedingly, that such is not my condition. I term this frame of mind a blasé state, which comes to all those who are not entirely whole-hearted in the enjoyment of an interest. It is true that the incidents, experiences, and troubles of the early days of motoring, and the uncertainty and lack of knowledge added a charm to that which was in itself pleasurable; but this uncertainty and lack of knowledge did not in themselves constitute the pleasure. After everything has been said in connection with the pastime of motoring, when one motors for the love of it, the joy is in the open road, the wide country, the new scenes, and the change of conditions with which one meets in a day's drive, no matter where that drive is taken. The charm is in the travel —not in the speed; the pleasure is in the change of environ-

ment, and the conditions under which the change is made. The troubles of the early days, vital as they appeared at the time, are merely amusingly interesting when one recalls them after the lapse of years; and I write about them, not in the belief that in them lay the great charm of motoring, but because they are interesting as showing the conditions under which we motored years ago.

I am particularly dealing in this chapter with the motor conditions of the year 1898, because it was in that year that motors reached the stage when long journeys could be undertaken with a reasonable amount of certainty that, in course of time, one would reach a destination. It was not a certainty as to *when* one would arrive, but, with perseverance and time at disposal, the goal could eventually be reached. In the beginning of that year most of my expeditions, adventures, and experiences, were made in the company of Edge, who was in possession of a motor tricycle and a small Bollée car, which carried one person in front and was driven from the rear seat. I usually had as my mount the much-beloved No. 5, which had been well tried and seldom found wanting. The Bollée machine, however, was quite a different story. Experimental to a great degree, unreliable in every degree, and full of peculiarities, it offered all the possibilities one could expect in connection either with a motor-car or any other form of unknown animal.

It was in the month of January, 1898, that Edge and I started to go to Brighton and back, Edge on the Bollée and I on No. 5, having as my companion a friend who was enjoying for the first time the delights of motoring. I do not think we seriously transgressed the speed limit of twelve miles an hour. When the Bollée really went it would approach a rate of speed approximating eighteen, but at intervals things would happen. I will not enter into technical details, but the winding process occurred frequently.

We started on our journey at somewhere about eight o'clock in the morning, and succeeded in reaching Brighton in company at about three o'clock in the afternoon, in time for an unappetizing and spoilt luncheon. Having travelled so far, it was obviously impossible to leave Brighton for three

or four hours. Both the Bollée and No. 5 required some care and attention before being fit to make the return journey, and it was at seven o'clock on a very black night that we started to cover the fifty-two miles back to London.

Edge was by himself on his Bollée car, and, in the ordinary way, No. 5 was considerably the faster of the two machines. I could see at some distance down the road the red tail-lamp of the Bollée, and I made every effort to reduce the lead which Edge had gained, but, to my astonishment, I appeared to get no nearer. No. 5 appeared to be going well, and I could not make out what fiend of power had entered into the soul of the Bollée to enable it to keep up such extraordinary speed. Up hill and down dale—sometimes out of sight—but nevertheless keeping the same distance, that red light beckoned me on. At last we struck Handcross Hill, and then I gradually decreased the distance, and the secret was discovered.

In his anxiety to retain the lead he had gained, Edge had got off the machine at every hill, and holding the steering wheel from the side, had run up each hill at top speed; the car thus being relieved of his weight, was enabled to make extraordinary progress. When I eventually came upon him, Edge was at the last gasp, lying across the seat of his car, still hanging on to the steering wheel, as the car slowly crawled up Handcross on its low speed. As a matter of fact, he was so exhausted that he had not even strength enough to climb into the seat. Just at this moment No. 5 developed a spasm, with the result that we reached the top of Handcross Hill leading by about one hundred yards, and then, to my horror, my candle lamps blew out. The possibility of Edge arriving in Crawley before us drove my companion into a frenzy, and I will never forget the manner in which he jumped off the car and held up an unoffending villager to obtain the very necessary match. I believe that in the end he snatched the matches out of the man's hand, and rushed back to the car using impolite language regarding the unfortunate man's slowness in producing them. By the time we had lit our lamps Edge had caught us again, and a ding-dong race into Crawley took place, at a speed of at least fifteen miles an hour.

What had happened to the Bollée on that particular trip I know not, but we arrived on the outskirts of London at eleven o'clock at night, in splendid style, but the effort had been too much, for with an expiring gasp, Edge's machine stopped in the middle of a particularly muddy road.

By this time I had dropped my passenger, and Edge and I proceeded to investigate the cause of the stoppage. Having tried nearly everything, we suddenly discovered that the exhaust valve had broken. Before discovering this we had rolled in the mud in the course of our investigation until, even before we started on the actual repair, we looked like two scavengers. The next thing to do was to fit a new valve. I will not weary you with details, or an account of how we eventually fitted a valve of a wrong size, but a quarter to three in the morning saw us once more proceeding on our way into London. The doctoring of the Bollée had disastrous effects, and under no circumstances would it travel at more than eight miles an hour, and at the slightest slope required to be pushed. Of course I could render Edge no assistance in this direction as I was driving my own car. The nearer we got to town, the more feeble the machine became, until at last, after crossing London Bridge, it had hardly sufficient power to mount the slight rise leading into King William Street. It had been raining heavily, and the asphalte was exceedingly greasy. As we slowly crept along towards the Mansion House, endeavouring to get back to Holborn Viaduct, where we were keeping our cars, No. 5, chafing at the manner in which she had been restrained for the last two hours, struck work, and just as we reached the Mansion House two terrific reports were heard and the car stopped. What happened, I do not to this day know, but never have I seen so many policemen appear in so short a space of time. Policemen came running down Cornhill and up Cheapside; they appeared from Princes Street; and the Bank of England produced a veritable army. I had the greatest difficulty in assuring them that an attempt had not been made to blow up the Mansion House, and had to give a more or less correct explanation of the noise to an irate sergeant who appeared on the scene, and who was evidently in doubt

as to whether he could not arrest me for being a dangerous person.

However, we got over this trouble, and then occurred one of the funniest incidents in connection with motor driving that I have ever seen. The road, as I have explained, was in a very greasy condition, and it being impossible to get the Bollée on the move again, except by pushing it and gently applying the engine, Edge endeavoured to do this; but immediately he tried to get on the machine it skidded away from him. And the last of us seen by the custodians of the City, was Edge endeavouring to hold on to an apparently runaway motor-car. The manœuvres of that machine were extraordinary to behold: it turned round, and slid from one side of the road to the other, but do what he might, Edge could not regain his seat. I eventually got down off my car, and we held a consultation as to what should be done. We only had a quarter of a mile to go, and the end of it was that I had to assist Edge into his seat and push the machine along until he got it going again. Perhaps the most pleasant memory in connection with that night ride is the recollection of the meal we had at 4.30 a.m., after arriving back at Edge's flat.

Some time after this I got hold of the car "No. 8," which had taken part in the Paris-Marseilles race of 1896, and which was, in fact, a sister car to No. 5. Edge expressed a wish to try this car, with the idea of buying it. He was staying in Oxfordshire at Cornbury Park over the Easter holidays, and I arranged to take the car down and bring him back on it.

I arrived in Oxford on my run through from town, and I remember that I put up at the Mitre Hotel. Facilities for storing motor-cars at that time were unknown, and it was only with the greatest difficulty that I persuaded the proprietor of the hotel to allow me to stand the car for the night in the ordinary stables. Next morning I sent to the nearest oil-shop for four gallons of petrol, and in the inexperience of youth I left word that the petrol, when it

arrived, was to be poured into the petrol tank. I returned to the hotel, had my breakfast, and then proceeded to start the car, having been informed that the petrol had been duly poured into the tank as required.

Of course I had to wind the handle to start the car, but it did not start; and my experience of the previous year in connection with No. 5 was repeated. I went over everything carefully, but no explosion could I get out of the motor. I tried every conceivable method within my knowledge to find out what the trouble was. Then it occurred to me that probably the petrol was at fault. This I proceeded to investigate, and found to my horror that paraffin had been poured into the tank, spoiling at the same time all the petrol which the tank had contained.

There was only one thing to do, namely, to empty the tank and replenish it with pure petrol; and then I made the mistake which led to all the trouble. With the carelessness born of inexperience, I emptied the whole of the contents of the petrol tank into the stable yard, where it might run down the drain, at the same time requesting the stablemen not to strike any matches, as it suddenly occurred to me that if a light were introduced interesting developments might be expected. After I had finished this operation, and was just getting ready to push my car away, in order to fill it up with the proper petrol, a young man—remarkable for the correctness of his attire, and for the absence of any appearance of brains—came into the yard with the confident intention of going out on a horse; and after striking a match to light a cigarette, he threw it, still alight, on to the ground. In a second the whole yard was a seething mass of flame, in which my car and I were enveloped. I had one idea, however, and that was to rescue the car from what seemed to be certain destruction. The excitement amongst the bystanders was intense, but no one seemed anxious to assist me in moving the 24 cwt. of motor-car out of danger. In addition to this, the knowledge that valuable horses were in the stables, which then appeared to be doomed, created still more excitement. The stablemen rushed up with bass brooms to beat the flames out, and found that, instead of accomplishing this, the

brooms themselves caught fire. The covering bonnet of my motor was off, and at last a brilliant genius rushed for sand; and, imagining that the unoffending motor was the cause of all the trouble, emptied the best portion of the sand into, around, and on the top of the motor, and very nearly ruined it in consequence. After scorching all the paint off the stable doors and burning the woodwork of the car, destroying a number of brooms and much wearing apparel belonging to the stablemen, the flames subsided and the danger was over.

I had a bad quarter of an hour with the proprietor, and I received a bill some days afterwards for £17, for damage done, which, I may say, I paid thankfully, as I realized it might have been much worse.

Having got out of this little adventure, I found the car was not damaged so far as the mechanism was concerned, as I covered the intervening distance between Oxford and Cornbury Park without incident. Just before arriving, however, whilst turning a sharp corner down hill, I came upon a coach full of people. The suddenness of my appearance caused the horses to shy, and there was immediately a scene of the utmost confusion, the lady members of the party being particularly excited. I was relieved to find that the occupants of the coach were some of the house party staying at Cornbury Park, among them being Edge, who, perched upon the top of the coach, looked abjectly unhappy, owing, I assume, to the slow method of progression. In a twinkling he was down from his seat and on the car beside us, and we took a run round before completing the journey.

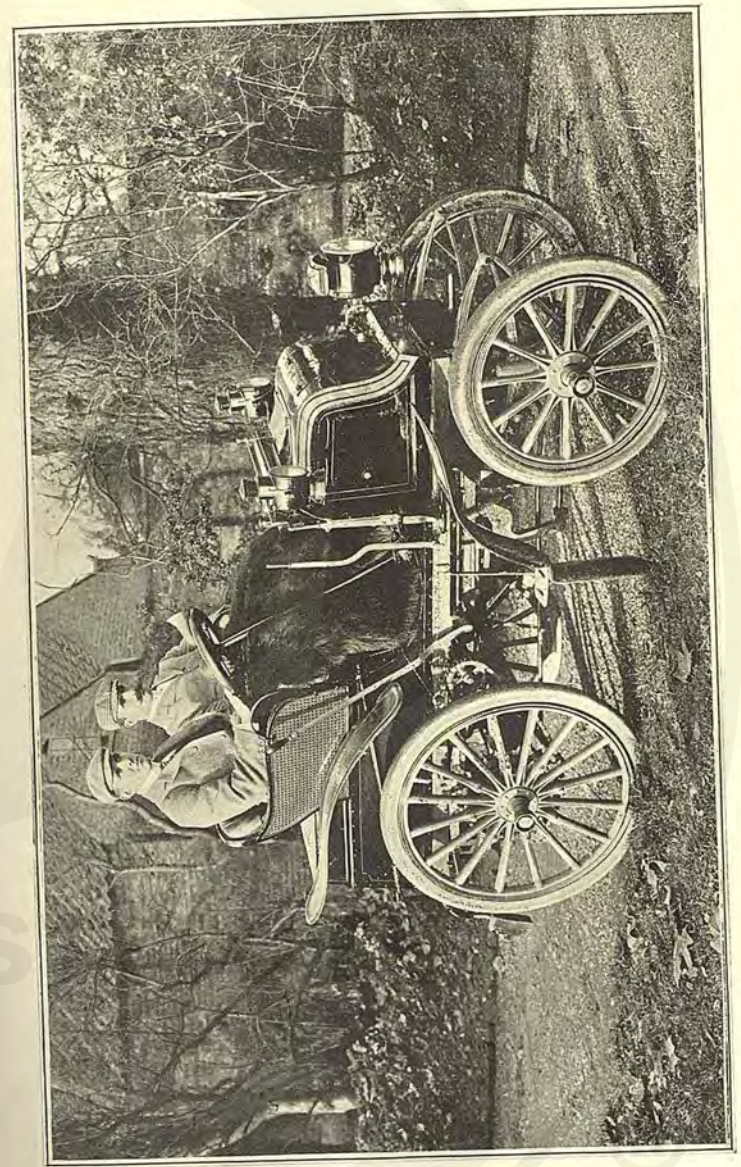
Before starting back in the afternoon I initiated Mr. Harvey Du Cros in the art of motor driving. It was a rather risky experiment, for the reason that he would not be content to remain on slow speed, and insisted on putting in the top gear, hanging on to the steering tiller with both hands, and we swayed and rocked about in a most alarming manner. Luckily the lesson was a short one; but, if temerity and boldness may be counted, Mr. Du Cros would have been a proficient driver forthwith.

Our run back to London had only one interesting incident.

Edge was on his motor tricycle, whilst I drove the car with Mrs. Edge as a passenger. All went well until we began to drop down Dashwood Hill. In consequence of carts having to use skids very frequently, when descending this hill, the road was always rather badly cut up, and particularly dangerous for motor-cars. In these days of pneumatic tyres it is not quite so bad, but on a car fitted with solid tyres and with tiller steering, the negotiation of the hill at any speed was absolutely dangerous. I took a risk on that day which was not justifiable, and as a consequence, whilst travelling fast down the hill, the front wheels dropped into a deep rut full of sand, and in a second the steering tiller was wrenched from my grasp, and the car turned completely at right angles, tipping up on two wheels and making for the edge of the drop on the right-hand side of the road.

To say that I was scared would not be true, because it happened so quickly that I had no time to realize any particular feeling, but as I pulled up with my front wheels on the edge, I realized that we had had a very narrow escape. A little more impetus on the car, or a little sharper turn, would have resulted in the car turning over sideways and crushing us beneath it. I do not know whether this erratic performance decided Edge to buy the car, but the fact remains that when we got back to town he had made up his mind to purchase it: and many a jaunt did we have together in it.

This incident brings back to memory another exciting experience I had, whilst descending the well-known Westerham Hill, which was at that time dangerous to descend on a motor-car, for the reason that the brakes then fitted to cars were fragile and ineffective. I was driving a little 4 h.p. Panhard phaeton, and although its speed was not considerable, it was a very comfortable car to drive. It had tiller steering and a very short wheel base, with small wheels in front and large wheels behind, fitted with solid rubber tyres of somewhat small size. Now, I suppose it is an admitted fact that whatever the capabilities of a car may be, one thing is certain, that provided it is heavy enough, and the hill steep enough, it will travel downhill at a great rate of



CHARLES JARROTT AND S. F. EDGE ON "No. 5," 1897

speed. This I demonstrated to the full on the occasion referred to.

I had just started on the descent, travelling slowly with the foot-brake hard on, when suddenly the rod operating the brake broke, and in a second we shot away. My side brakes operated shoes directly on to the rubber tyres, and I knew that to apply these would have the effect of wrenching the tyres out of the rims and would probably result in a bad accident.

I had a lady companion with me, and calling to her to sit tight and hold on, I decided to attempt to reach the bottom in safety, minus brakes. We took the whole width of the road to get round the first corner, and then the hill took an even sharper drop. Tiller steering and a short wheel base are bad points in a car for speed work, and as we gathered speed at every yard it seemed incredible that I should be able to reach the bottom of the hill without a terrible catastrophe. Edge was some distance down the hill on his motor tricycle, and as I was yelling at the top of my voice to attract attention, he quickly came to the conclusion that something was wrong. I think I had some vague idea that he might possibly get off his machine and hang on to the back of the car as it flashed by, though I do not see what good this would have done. In any event, he had no two opinions about the advisability of getting away, and putting on full speed he dashed off down the hill in front of us, expecting every moment to be caught up and pulverised by us in our mad flight. To my horror I saw a cart on the road, away near the foot of the hill, and I trembled at the thought that there might possibly not be room for us to get by; and then we reached it, and missed it by a hair's breadth, and continued our wild career.

My companion was speechless, but was carrying out my instructions to sit tight. Then I came within sight of the foot of the slope and realized that the danger was past, and we eventually pulled up close to Westerham Village, unhurt and without a scratch, having come through one of the most exciting experiences any motorist could wish for.

Talking about tiller steering, reminds me of a most lament-

able accident which happened in France, entirely due to this mode of controlling the steering. M. Levassor, in the Paris-Marseilles race of the previous year, had capsized No. 5 in an accident, which would not have occurred had his car been fitted with wheel steering. This accident eventually resulted in his death. The second representative of the Panhard-Levassor firm to suffer was M. Mayade, who had driven the winning car in the same race. On this occasion he was driving a touring car, and was proceeding along a French road when he met with an obstacle. The steering was wrenched out of his hands, and he himself was precipitated on to a kilometre stone, and sustained injuries from which he afterwards died. Very much as a result of these accidents, wheel steering was adopted by the Panhard and other firms who were engaged in building cars capable of travelling at any great speed, i.e. twenty miles an hour.

I have already referred to some of the experiences we had with the Panhard car which Edge had bought, and it was in connection with this car that I had my initial experience with pneumatic tyres on motor-cars. In France a number of the speed cars had been fitted with pneumatic tyres for some of the races, Michelin having built special tyres for the purpose—and being a man of courage, he himself drove a car so fitted. The troubles of the competitors were numerous, but nevertheless the fact remained that these tyres increased the speed enormously. Hence Edge was seized with the desire to emulate the example set abroad and have pneumatic tyres fitted to his own car.

It was useless for me to talk about the efficiency of solid tyres, the lack of trouble they gave, and their general suitability for the work. Edge had made up his mind to have pneumatic tyres, and nothing would move him from this decision. As a result, he appeared one day with his car fitted with pneumatic tyres which had been originally designed for use on ordinary carriages. I will refrain from giving the names of the manufacturers, although I do not suppose that their reputation would be affected in any way

by my recounting our experiences when their tyres were in the experimental stage.

Personally, I must confess, I did not like the appearance of the car, the large tyres looked so ungainly and so fragile. On the latter point, their behaviour confirmed what their appearance suggested. For the purpose of seeing what would really happen, I took my seat with Edge driving the car; and as we made our way out of London, over roads which were, on solid tyres, rough and uneven, I was bound to admit that pneumatic tyres were an improvement. We went along very gaily, and nothing happened.

Our spirits began to rise, and I had almost come to the conclusion that the experiment was an undoubted success, when, with a loud report, one of the tyres collapsed. It was then about eleven o'clock in the morning, and the sun was pouring down on the particular open spot where our troubles commenced. We proceeded to investigate. The tyres were wired on in the same fashion as the ordinary wired-on bicycle tyres, and rubber packing was introduced inside the rim to keep the tyre from blowing off. After wrestling with the outer cover for a long time, we eventually dismounted it, and found that, owing to the inner tube being very thin, a number of minute holes had been pinched in it through blowing down under pressure between the packing and the rim itself. We therefore had to patch the tube all the way round with long, thin strips of rubber. Then, to our horror, we noticed that the heat of the sun had apparently affected another tyre, and with a gasp it flattened out, even before we had finished the first one. Starting on the second, we found exactly the same trouble; and before we had repaired the second, we discovered that our first repair had been badly executed and that tyre was again flat.

Our condition by this time was pitiable. We had been toiling for hours under a burning sun, without food and without the possibility of help from anywhere; and as a further catastrophe, a third tyre gave out. The pumping alone of these tyres required a vast amount of energy, especially as the back wheels were forty inches in diameter, and those who have endeavoured to pump up a motor tyre,

once, without assistance, even on a cold day, will appreciate that we had more than our fair share of muscular exertion in this direction. We stuck to our task in the hope that eventually we should triumph over our troubles and be able to resume our journey, but a compact seemed to have been entered into between those tyres that on no account would they all stand up together. If we had two right, No. 3 was wrong. When, at last, we had the three tyres right, and had proceeded on our journey for about half a mile, No. 4 gave up the ghost, and before No. 4 was finished we found that No. 2 had again collapsed.

The sun set, the moon rose. We lit our lamps, and still toiled on. Nine, ten, eleven o'clock at night, and we were still struggling. At 1.30 in the morning, after having worked on them for fourteen and a half hours, we had the tyres right again; but as we crept into the hotel yard of the nearest town we were firmly convinced that pneumatic tyres were a snare and a delusion—at least when applied to motor-cars.

We had many such experiences. When the tyres were all right the extra comfort and speed which could be obtained by their use were so obvious that one was inclined to play with chance in the hope that things would go well. I even went to the extent of fitting them to No. 5, and thus our trials and tribulations were shared equally. However, the responsibility of having two cars on the road thus fitted, instead of one, involved a much greater amount of physical effort, patience, and perseverance.

I think we solved a number of important problems in connection with pneumatic tyres. We quickly discovered that the generation of heat when running made it impossible successfully to patch the inner tube without the patch being vulcanized. We also found what form of valve was most suitable for a large motor-tyre, and we experimented with many tyres made in different ways—some built up of canvas and some of fabric—whilst Edge on one occasion went so far as to use tyres filled with gelatine instead of air. This experiment caused us some amusement. From a riding point of view the tyres seemed much the same as ordinary pneumatic tyres. They were, perhaps, not quite as resilient, but a small pin-hole puncture in the outer cover, which would have caused the collapse of a pneumatic tyre, had no effect on the gelatine.

Our first run was to a place about fifty miles from London. We arrived at our destination late at night, and the car was put away in the ordinary course. However, when we came to take it out the next morning, we found that the wheels—or rather, the tyres—were D-shaped, instead of being absolutely round. The effect of this, when the car was driven, can be better imagined than described. We were rather puzzled at first to know the reason of this, which was, eventually, easily explained. The heat generated in the tyre during the run down had melted the gelatine, and when the car was put away for the night this gelatine was in liquid form. The weight of the car had pressed away the gelatine from the spot where the tyre made contact with the ground, and it had during the night resumed its solidity, with the results I have mentioned. After running a little distance the gelatine became liquid again and all was well.

Our tyre experiments could, in themselves, fill a chapter. Those who, at the present day, grumble because of the very few troubles they experience in the use of that undoubted luxury, the pneumatic tyre, should consider themselves fortunate that they did not have to undergo the unhappy experiences which we experienced in the very early days.

The charm of getting about the country, the possibility of covering fairly long distances, and the novelty of the pastime, induced us to make many long trips to various parts of England, and not the least pleasurable part to me was the ability I had to initiate beginners, and to give to some of my friends the opportunity of experiencing the delights of motoring. It was somewhat dangerous, however, to allow one's friends to have anything to do with the mechanism, and after one or two experiences of allowing friends to drive my car, I decided that, for the sake of my own neck and the good health of the car, I would not on any account do this

again. Edge, however, had to gain his experience in this direction, and I remember an unhappy experience he had. It was away in Norfolk that, through a momentary piece of carelessness on the part of one of Edge's novitiate friends, the car and the passengers were nearly brought to an untimely end. Edge was endeavouring to fill his lubricator whilst travelling up a steep hill, his friend steering the car meanwhile. Instead, however, of attending to what he had to do, namely to keep the car on the road, he was particularly interested in watching Edge, and in a moment the car got out of its course and started to climb a steep bank on the side of the road. Fortunately, they were going uphill on the low speed, but as it was, the two front wheels went up two or three feet, and the whole car only just escaped going over. The effect on the car was disastrous, and before we could get it to move we had to obtain a wire rope and employ a gang of men to straighten out the car, which was done by main force, the front part having been doubled up. Edge's anguished expression as he watched his car—which was to him as his life—bending and straining under the combined efforts of the farm labourers, lives in my memory to-day.

The problem in regard to obtaining reliable men as drivers, capable of looking after the mechanism of the car and of driving it in a safe and proper manner, was even more difficult then than at the present day. Mr. W. M. Letts found this out, as he was then manager of a motor coupé company, which let out for hire a number of rather well-built landaulettes, made at Daimler's factory in Germany. From the hiring-out point of view the company was undoubtedly a success, but the difficulties Letts experienced in regard to finding efficient and capable drivers for his cars proved almost too much for him. He used at that time to come to see me often, and ask my advice as to what he should do in various circumstances; and I assume this was the reason which induced him to wire me from Dover one night, that he was coming up by the next train to see me upon most important and urgent business. I met him at the railway station, and then he had a terrible tale of woe to tell me. It appeared

that he had gone to Dover for a few days' holiday and rest, but had that evening received a wire from some remote spot in Warwickshire that a terrible accident had taken place in connection with one of his cars; that the car itself was smashed up, one of the passengers killed, others seriously hurt, and the driver in such a bad way that he was not expected to live. Obviously the matter was serious, as, in addition to the wire from the man who had hired the car, he had also received a wire from the coroner of the place. I am perfectly certain that Letts was not clear at the time whether he personally would not be held responsible in some way or another.

There was only one thing to be done—get to the scene of action and find out what had happened. Accordingly, without even troubling to get a change of clothes, we caught the last train that night to Warwick. Upon arrival, in the early hours of the morning, we there ascertained that the scene of the accident was some fourteen miles away; and, having made arrangements for the hiring of a trap to take us to the place at five o'clock that morning, we obtained two or three hours' sleep, both feeling very worried as to what had happened, and not a little concerned as to the legal position of the driver, in the event of his recovery from the accident.

At five o'clock we started off behind a decrepit-looking animal, whose rate of progression was so slow as to drive us almost to distraction, instead of to our destination. Having found out that the accident had happened at the foot of Edge Hill, we got out of the trap half a mile from the spot, and walked the remainder of the distance. To say that we were horrified when we arrived on the spot would be but to faintly express our feelings. The place looked like a shambles. The car had been left lying in pieces in the ditch, and, from the appearance of the road, I would have been quite prepared to hear that half a dozen people had been killed. It was a sunny morning, and at that early hour no one was about, and it seemed difficult to realize that such a terrible tragedy had occurred there only a short time previously. However, the situation had to be faced, and we proceeded to the house of the man who had hired the motor, to ascertain all particulars,

find out the condition of the injured, and decide what steps could be taken on behalf of the unfortunate driver.

We had no idea who had been killed beyond the fact that it was a woman. In fear and trembling we approached the house, and, after some considerable delay, we had an interview with its owner. He naturally was very shocked and exceedingly annoyed, and it was some little time before we could get any details from him, he being chiefly concerned in blaming motors, motor-car drivers, and everybody connected with them.

At last we got to the bottom of the matter, and heard a remarkable story. It appeared that the driver of the landaulette, in the absence from home of the hirer, considered it an excellent idea to take the servants of the house out for a motor drive—not an unusual thing, as some of my readers will have ere now found out to their sorrow. The party was composed of three of the female servants of the house (including the cook, a somewhat elderly person, who I assume was acting the part of chaperon to the rest), and two male servants. All had gone well until the descent of Edge Hill had to be negotiated, when one of the party remarked to the driver that they hoped his brakes were in good order, giving him the opportunity of proudly demonstrating that this was the case, by stopping the car in the middle of the hill. The trouble, however, commenced at the bottom, when another of the party made the jeering remark that they did not consider the car had come down the hill at any speed at all, and thought it ought to have travelled much faster. Then a most extraordinary thing happened. The driver deliberately turned the car round, climbed the hill to the top, and turning back again, made the remark that he would now show them what the car could do. Faster and faster they went, until at last the driver realized that the car had got beyond control, and a tremendous swerve to one side of the road, followed by a lurch and another sharp swerve, completed the catastrophe, the car rolling over and over again, before coming to a stop. The unfortunate cook was killed on the spot, and the driver, crushed almost beyond recognition, sustained injuries resulting in concussion of the brain. The

other members of the party had also been badly knocked about.

We saw the doctor, and he expressed the belief that although the man's recovery would be slow owing to the serious nature of his injuries, he would in all probability live. We therefore had to do everything within our power to see that his interests were represented at the inquest, and a plea put forward on his behalf. We were down there for some days. The inquest was held on the unfortunate woman, and after much deliberation the jury brought in a verdict of "Accidental death."

This experience lived in my memory for a long time, as it brought home to me forcibly for the first time what the possibilities were in connection with a serious motor accident. I realized how easily a tragedy might occur where inexperience, recklessness, or stupidity dominated the actions of the driver of a car.

Probably at the present day such an accident would not easily happen. The improvement in the build of motor-cars, the extension of the wheel-base, and the improved steering devices as we know them now, would no doubt have saved the occupants of that car from disaster.

I think it was in June of that year that F. R. Goodwin decided to make an attempt to beat the record which M. A. Holbein had put up the previous year for the twenty-four hours bicycle record on the road, to which I have already referred. The value of motor pacing had been proved, and hence, as many motor tricycles as could be obtained were pressed into his service for this attempt, and quite a little band of those who owned motor tricycles turned up to render assistance.

I had obtained a new machine, from which great things were expected by everybody. H. O. Duncan had written over to me from Paris some time previously stating that Léon Bollée had constructed a new machine having two cylinders. It was expected it would attain a terrific speed. He reminded me that the single-cylinder racing Bollée was a

fast instrument, but with two cylinders something terrible might be expected. Being in the mood to desire something terrible, and wishing to see what a car such as he described would do, I ordered one. It arrived some four days before Goodwin's record attempt. It certainly looked formidable. Built low down on the ground, with a huge motor on each side of the back wheel, and an enormous petrol tank arranged over the back mudguard, just above the cylinders, it had an exceptionally racy appearance. We had desperate struggles with it before we could get it to start. In the first place, it was impossible to start it by means of the starting-handle, a fact which we only discovered after the starting-handle had been jerked off the fly-wheel, nearly braining a bystander, and after several of my friends, whom I generously allowed to attempt to start the machine, were more or less disabled. We eventually got the motors going by employing a number of men to push the machine along as fast as possible, and then throwing in the gear, the impetus of the car starting up the motors. We invented this method on the very day we ought to have been at Wisbech ready to assist in the record attempt.

Montague Graham White, who had just come down from Cambridge, where he had been having harrowing experiences at the 'Varsity with various objectionable motors he had introduced into the town, had decided to bear me company. We therefore put the car on the train, and arrived at Wisbech at about ten o'clock in the evening, Goodwin having started at five in the afternoon.

Our arrival was hailed with joy, and the row the machine made gave every one the impression that at last a speedy car had arrived, and that consequently Goodwin would be able to ride behind it and cover a phenomenal distance within the allotted time. At this moment Edge appeared on the scene, having already covered a considerable distance, pacing Goodwin on his motor tricycle. He was very troublesome. With that curiosity which has always been one of his characteristics, he would insist upon pushing down the inlet valve spring of one of the motors on my Bollée, when my back was turned, to—as he put it—see if it was free.

The first time he did this the explosion from the cylinder back-fired to the carburettor, and immediately the whole of the petrol in the carburettor was on fire, and as I had, just above the blaze, a tank containing about twelve gallons of petrol, my agitation was great. I remember I used my hat for the purpose of putting out the blaze, resulting in its absolute destruction. The only assistance Edge rendered was to dance about the machine and offer suggestions. Naturally, I was very much annoyed at what I termed his thoughtlessness. Having again got everything into order, I left the machine running and went away for a minute. On my return I found Edge still gazing at the inlet valve. He explained that he was certain it was sticking, to which I replied that I was quite prepared to take his word for it, but implored him under no circumstances to touch it again. I assume this was his excuse, for immediately he—as he said—"tapped it gently," and with a loud report we had a second flare up, even worse and more serious than the first.

By this time I was frantic, and expressed my feelings in language more forcible than polite, as, so far as I could see, by the time I had finished putting out these conflagrations I should be minus any wearing apparel at all. But that inlet valve seemed to hypnotise Edge, and incredible as it may seem, the fact remains that within ten minutes afterwards he had again repeated the "gentle tapping" process with the usual result. The arrival of Goodwin on the scene smoothed over all our troubles, and perhaps prevented a flare-up of another kind, as we were intent on getting away to take him on another out-and-home stretch of his journey. My Bollée led the way pacing Goodwin, with two motor tricycles bringing up the rear, in case of accident or breakdown to the Bollée, and as we sped along mile after mile, we became very cheerful at the prospect of the cyclist putting up a good performance. I was driving, with Graham White sitting on the front seat as the unfortunate passenger on look-out duty.

The night was very dark, but everything was going well and we were making good progress. Then, without any warning, the speed-lever broke in my hands, leaving the gear

in, and with no means of stopping the car except by stopping the engine. As we had then arrived on a very twisty portion of the road, for the sake of the safety of the cyclist and the other riders behind, I decided that I must stop, which I did, Goodwin going on behind one of the motor tricycles. When we came to investigate our trouble it left no doubt that we were hopelessly broken down, as, if we disengaged the gear to start the motor, the speed lever being broken, there was no means of again engaging the gear. We therefore submitted to the inevitable and started to push the car along the road to the nearest village or town.

We had no idea where we were, or whether we were fifteen miles from civilization or fifty. I must admit that I was depressed, but Graham White talked glibly about blacksmiths' shops, and how the lever could be repaired, etc., oblivious of the fact that it was two o'clock in the morning, and that even if we found a blacksmith we could expect little assistance from him.

Eventually we arrived in the middle of a village. The peculiar thing about it was that we did not know we were in a village until Graham White suddenly made the discovery—so black was the night. For all we could see, we might have still been in the open country. Not a single light was showing anywhere, and we had to knock up an unfortunate villager to ascertain if there was an hotel at which we could put up. Luckily we found one, and our troubles were over for the night. A repair to the lever was effected by the next afternoon, and we started on our way to London, realizing that it was useless for us to return in the hope of rendering any assistance to Goodwin, who, by that time, would have almost finished his ride. We afterwards ascertained that, through accidents to his pacing, Goodwin had had to give up the attempt.

Possibly the police-court proceedings, as a result of this ride, may be of interest. About a month after this eventful experience, I received a summons addressed to me under the care of a cycle company in Birmingham, who were the makers of the bicycle Goodwin rode in his record attempt. I was summoned to appear before the magistrates in a

remote town in Norfolk, to answer the charge of having driven a motor-car at a speed greater than twelve miles an hour, and in contravention of the law existing at that time. On comparing notes with Graham White, it was clearly proved that at that particular time I was not driving the car at all, because, after we had effected the repair, and by way of a slight recompense for the amount of work he had put in, I had allowed him to drive me back to London. No doubt the village constable had seen us go by, and the local sleuth-hound, in the shape of an inspector of police, had been laid on our trail, and having ascertained our names from the proprietor of the hotel, and at the same time, with the acumen of Sherlock Holmes himself, read in the local press that I had been present at Goodwin's attempt on record, with a motor-car, the mighty arm of the law was extended in the hope that I might be drawn within its grasp.

In view of the fact that I had not been driving the car at all, I considered I had a very good chance of defending the case, and proving to the police that guess-work evidence was somewhat unsatisfactory for the purposes of obtaining a conviction in an English court of law. I therefore instructed a solicitor, and I myself travelled from London to appear in the court on the morning of the hearing of the case. Knowing that one of the difficulties of the police would be the question of identity, I attired myself in a costume somewhat befitting the neighbourhood, and appeared on the scene in riding-breeches and gaiters, looking generally somewhat "horsey." I took my seat in court with the rest of the interested public, most of them country yokels. The case was called on, and my solicitor appeared on my behalf. After having ordered the witnesses out of court, he proceeded to cross-examine each one in turn as they were allowed into the court to give evidence.

I was somewhat astounded when I saw the dispensers of justice. The chairman was an elderly, austere, and ascetic-looking parson, with whom time had not dealt gently, and whom I could hardly imagine was capable of withstanding the arduous labour attendant upon such an important position.

A red-faced, fiery-looking farmer, who seemed as if he had just ridden to court at much personal inconvenience to himself, and was consequently desirous of venting his annoyance upon the unfortunate offenders who appeared before him, was the second J.P. The third was a weakly-looking, effeminate young man, evidently having only just recently returned from college, and wearing that vacant stare which nature kindly bestows upon those she has little endowed with brains. These three gentlemen were the men, learned in the English law, who were going to pronounce judgment on my case. When I realized this I congratulated myself that capital punishment for minor offences had been abolished in England many years before, otherwise there would have been no question but that I should have suffered the extreme penalty.

The case proceeded. Policeman number one, who was supposed to have seen the car pass, was asked whether he recognized the person who had driven it, to which, of course, he glibly replied that he did. When asked if that person was in court, he actually had the effrontery to remark that my solicitor, who was cross-examining him, was the man who had committed the offence, and was, in fact, Charles Jarrott. The astonishment of my legal adviser at this accusation rendered him for the moment speechless; but, having elicited the fact that constable number one knew nothing whatever about the case, he proceeded to cross-examine policeman number two, who, when asked a similar question, gazed in a most agitated manner at those of us who were sitting in court; and, having spotted an individual at the back of the court who looked as if he had come from London, and was a town man (by reason of the fact that he wore a black tail coat, and also wore spectacles), pronounced his weighty decision that this person was the offender, and the driver of the car in question.

My loud laughter as the accused man got up in his seat and said, in a very plaintive tone, "Please, sir, it was not me," proved to be my undoing. Another witness had to be called in the shape of a sergeant, and evidently he had received an intimation from some one in the court that I was the person they wanted to identify. So when he took his stand in the

witness-box he immediately pointed an accusing finger at me, and I stood revealed as the criminal. The bench were exceedingly wrath at the ridiculous figure the police had cut in putting forward the case; only they were not so much annoyed with the police as with my solicitor and myself, for having attempted to make fun of their much respected and highly esteemed local force.

And then my solicitor put forward my defence. I went into the box and described the machine, explaining that, although it was my car, I, nevertheless, was sitting on the front seat, and therefore had absolutely nothing whatever to do with the driving of it. The clerical gentleman in the arm-chair then asked me whether the car belonged to me or not, to which I replied that it did belong to me, but at the same time repeated my assertion that I was not driving it. I was then asked to divulge the name of the driver, which, under the advice of my solicitor, I declined to do. One would have thought that such a matter would require little consideration, but the chairman announced with much gravity that the bench would retire to consider their decision. After being out of court for some time they returned, and it was announced that they had decided to convict, and fined me the usual £5 and costs.

My solicitor was a London man, and I had, during the interval, requested him, in the event of the verdict going against me, to make some observations of a sufficiently strong character as would make the magistrates consider whether, perhaps, in their wisdom, they had on this occasion erred. But he assured me that there was no possibility of a conviction, and therefore there would be no necessity to say anything at all. When the decision was given that I was guilty of driving above the legal speed limit, when I had not even been driving the car at all, it was more than he was capable of enduring, and, bereft of his professional dignity, he grabbed up his papers, banged on his hat in the middle of the court and rushed out, having made use of an expression in an undertone, which could under no circumstances be considered as Parliamentary, but which was sufficiently audible to cause the reverend gentleman on the bench to shudder. He was a

respectable solicitor of excellent standing, but when I eventually strolled out of court I found him at the only hotel in the village, endeavouring to drown his indignation and rage in strong drink.

I do not know that even at the present day matters have changed very much, judging by the evidence one hears in connection with some cases brought against motorists for exceeding the speed limit. But there is some consolation in the fact that as it is to-day, so it was eight years ago. Let us fervently hope that it will not be so in eight years to come, and that the dispensation of justice at the hands of the Great Unpaid will by that time, in the light of progress, have been, if not abolished, at any rate reformed.

I think it was in the month of July, 1898, that the Paris-Amsterdam race took place, the course being from Paris to Amsterdam and back to Paris. It was eventually won by Charron with one of the new four-cylinder 8-h.p. racing cars. For a car to be fitted with an 8-h.p. motor and four cylinders seemed to be tempting Providence in regard to the speed which it would attain, and when Charron averaged forty-three kilometres an hour we almost came to the conclusion that finality had been reached in the matter of speed. I have no doubt that many enthusiasts at that time would have given much for the opportunity of a run on a car capable of such a performance.

I happened to be in Paris during the month following the race, and as usual called at Charron's depot to see if there was anything new. One of the first things that met my eyes was the Panhard racing car with which he had scored his great victory in the Paris-Amsterdam race of the previous month. It was somewhat late in the evening, and Charron was just leaving, but seeing me he immediately offered to take me for a little run on that very car. Needless to say, an invitation of that description did not go begging. As I took my seat beside him I marvelled at the size of the bonnet covering the motor in front. Compared with our engine of the present day it was a puny little motor, but at that time it looked a veritable speed monster.

The motor was started by a huge black attendant—a man of mighty muscle—whom Charron employed principally for the purpose of starting motors. I suspect a number of his clients were users of Bollée cars, and even the Panhard motors required a little energy to set them going; thus, strong men were at a premium. With a rattle and a roar the engine started, and in a flash we shot out of the garage into the Avenue de la Grande Armée, where Charron hypnotised me with a brilliant bit of steering to avoid a wagon and an omnibus, and with a whizz we found ourselves out in the Bois. We had no lamps and it was quite dark, but this did not seem to trouble Charron in the slightest degree. No doubt his experienced eye could see obstructions in the darkness, but to me it seemed as if we were driving into a dense black wall. I do not know whether we were going at top speed, but we seemed to be travelling at a tremendous rate. Of course, Charron had perfect control over the car, and as we eventually pulled up at Armenonville I felt that, although the experience was somewhat nerve-shattering, nevertheless fortune had been kind in giving me the opportunity of a spin on such a car in the hands of the famous driver. I think I eventually bought a car from Charron—there was always method in his amiability—but it was not the car I had tried, as he wanted a fabulous price for it.

It was at the latter end of 1898 that we held the third London run of the Motor-Car Club. Again the rendezvous was Sheen House, and again I undertook the arduous labour of organizing the event. The meet was even more successful than that of the previous year, over eighty cars taking part. I think I was practically the only one who had any real trouble. I was driving a little 6 h.p. Panhard phaeton, and had invited some ladies to accompany me on the car, having also requested them to don their best attire, as I wished to make an impression. I made the impression all right, but it was of a very different character from that which I had intended. As the procession slowly filed away from the Embankment, I, the master of the ceremonies, was left in solitary loneliness, going through the "winding" process. When, after a desperate struggle, I did induce the motor to

start, it was so late that by the time I arrived at Sheen House luncheon was almost finished. Everybody had been asking for me, and through my absence the utmost confusion had prevailed. The result was that no one thanked and everybody abused me.

I had arranged some cycle races on the track for the afternoon, and had sent down the tricycle which I intended to ride. Even this seemed to have entered into the spirit of general contrariness which pervaded everything with which I had to do on that day, for, after a desperate struggle, I was beaten by Edge, when really, had I been riding up to form, I should have won. However, the general sport of the afternoon was good, a race for motor bicycles being one of the items on the programme.

I may say that at this time the Motor-Car Club, except for the purposes of arranging these runs, seemed to have died out of existence, as the club had been run in the interests of private persons, and had lost its public character. As a consequence the "Automobile Club of Great Britain and Ireland" had been formed by some independent spirits, and had immediately become the recognized club of England. Even in those early days indications were not lacking of the important part this club would play in the history of the automobile movement in this country, and these indications are borne out by the position which this club holds at the present day.

I think I have shown that motoring in the year 1898 offered many possibilities to those who, in the extraction of pleasure from life, desire excitement. Motor-cars were not then fitted with the efficient mechanism and possessed of the luxurious carriage-bodies of the present day. The evolution of the motor-car has been extraordinarily rapid. It seems impossible that only a few years ago a journey from London to the sea and back again involved a day's travel, necessitating much preparation and the overcoming of many difficulties, when at the present day such a journey would be a morning's trip before luncheon.

The speed limit of twelve miles an hour, fixed by Parliament in the Act of 1896, had begun to cause us some

annoyance, as the police were realizing that the few people who drove motor-cars were wealthier than the much-harassed cyclists, and provided better sport. The dust annoyance was unknown, because, in the first place, the motors then in existence did not go fast enough to raise any dust; and again, only a few cars were fitted with pneumatic tyres, while the cars themselves and the mechanism were high up from the ground—all important considerations in connection with any motor-car raising dust as it travels along the road. Nevertheless, as I have shown, we had our troubles, but at the same time we had our pleasures, and for my part I must confess that motoring opened up a new life for me. I have always been fond of the road, with its twists and turns, its hills and valleys, its ever-changing scenery and ever-distant terminus. As a cyclist I had had an opportunity of gratifying my love of it, but even with the strength of youth the progress made was very slow, and when it became possible to utilize a vehicle which would travel on and on without fatigue, and yet enable one still to enjoy the charm and mystery which every road presents, it gave me a new interest in life. I was enabled to visit charming old-world towns which I had read about, little villages in distant shires, big cities and unknown watering-places, interesting terminations to still more interesting motor drives. Although at the present day I still delight in the making of new journeys, nevertheless there was an added charm at that time because everything was so new. And one felt through it all the strong conviction that the motor-car, the plaything of the moment, was eventually to take a great and important part in future life—that one was making history.

III

MOTOR CYCLING AT THE BEGINNING

OF the various forms of motor vehicles made in the very earliest days, I suppose none were more complete or perfect, as carrying out the ideas of their makers, than motor tricycles. One would have thought the first step in adapting a motor to a cycle would have been in the direction of a motor bicycle, it being the more popular type of machine. Several inventors did give their attention to this form of machine, and my old friend, H. O. Duncan, endeavoured with Monsieur Suberbie to make a success of manufacturing the Wolff-Muller motor bicycle in France; but it was of such a crude and clumsy design that their efforts were foredoomed to failure. It was in addition an exceedingly heavy machine, and only an expert gymnast could possibly ride it at all. I myself suffered a number of spills in endeavouring to master the peculiarities of a machine of this type.

At the same time a cycle seemed to lend itself to the adaptation of a motor, and it is interesting to know that Herr Daimler himself, in his experiments, first succeeded in adapting a motor to a little quadricycle before he had reached the stage of working out its possibilities when applied to a larger vehicle. The successful form of motor cycle was, however, undoubtedly the motor tricycle, and I attribute its success in a large degree to the fact that the well-known firm of Messrs. De Dion-Bouton took up its manufacture, and, like everything else emanating from that firm, the machines they turned out were both successful and practical.

The Count de Dion had previously spent much money and conducted many experiments in an attempt to make a motor tricycle propelled by steam, and when the petrol motor

became an accomplished possibility, he, with the aid of Monsieur Bouton, was successful in fitting a little petrol air-cooled motor to a tricycle in a very practical form. It is also interesting to note that Messrs. De Dion-Bouton also succeeded in adapting electrical ignition to their motors, thus making the machine much safer to ride and less liable to accident from fire, as compared with the platinum tubes used for ignition purposes by other makers. I once asked the Count de Dion why his firm had not devoted their attention to the manufacture of motor bicycles instead of motor tricycles, and in reply he informed me that they considered the motor bicycle was unsafe in the hands of the ordinary user, and that a three-wheeler could be ridden with much less danger and less effort. At the same time, Messrs. De Dion-Bouton did build a few motor bicycles which were very neat little machines and quite practical.

The first machines made by Messrs. De Dion-Bouton were fitted with ¾ h.p. motors, and it was on one of these, in 1896, that I had my first experience. I do not remember anything worth relating in connection with my first ride. It was a very simple machine to manage, and after the first little intricacies of regulation of gas taps and sparking lever had been mastered, was quite easily controllable. Very soon afterwards Messrs. De Dion-Bouton were making machines a little more powerful, and later on still more powerful motors were adopted.

It was on a 1¾ h.p. machine that I began to travel really long distances. One thing I soon found out, that instead of motor cycling being a lazy occupation, it was, on the contrary, one which required great activity and much muscular exertion. I discovered that 1¾ h.p. was of little use in propelling the machine and rider up a fairly steep hill, and that vigorous pedalling was required to assist the propelling effort of the motor. Messrs. De Dion-Bouton had wisely fixed a very low pedalling gear in order to render easy the effort of starting the machine and the motor, which were coupled direct together. This was, of course, an excellent idea for starting purposes, but when it came to pedalling uphill, I found that a thirty-inch gear required considerable agility to

work, and although the effort per revolution of the pedals was slight, the energy required to keep the machine running at the rate of fifteen miles an hour up a steep hill usually left one at the end of the performance quite exhausted. A two-speed pedalling gear would have been useful, but such a luxury had not then been worked out to any practical issue. The pedalling gear was fitted with a free-wheel, but that was not altogether a joy, because one of my most unhappy early experiences occurred through the free-wheel mechanism going wrong, necessitating my pedalling all the time to prevent it becoming locked and thus stopping the machine. It would not have been so bad if the locking had merely had the effect of making the pedals go round, but I found that unless I kept pedalling, the whole free-wheel arrangement jammed upon the frame and stopped the motor and tricycle altogether. My troubles were eventually made lighter by the chain breaking which connected the free-wheel ratchet and pedalling gear to the back axle of the machine, thus relieving me from the necessity of pedalling, but at the same time leaving me in the difficult position of not knowing how to start the machine except by pushing it, running alongside, turning on the switch, and endeavouring to scramble into the saddle. My first attempt at this resulted in the machine tipping up and my falling on to the back of my head, with the machine on top of me.

Of course the motor tricycles with motors of small horse-power were easy to ride, handle, and control, and they were reasonably light in weight, thus making it possible, when one did have a breakdown, to pedal the derelict some considerable distance before being absolutely exhausted. As larger motors came into use and the weight increased, breakdowns became more difficult to deal with, usually resulting in one having to obtain outside assistance to push the machine along to the nearest railway station if the case was hopeless.

Although these motor tricycles were fairly satisfactory, their lightness of construction and delicacy of mechanism rendered them liable to leave one stranded high and dry at the most inopportune moment. The electrical ignition device employed, although giving delightful results when it was

in order, nevertheless had many faults, and was usually the most fruitful source of trouble. The manufacture of the parts of this ignition had not reached the high standard of excellence that obtains at the present day, and defects in manufacture were obviously not things one could remedy on the road.

As time went on various other firms made motor cycles, nearly all of them following the lead of Messrs. De Dion-Bouton and making their machines on the tricycle pattern, a number of them buying the motors from Messrs. De Dion-Bouton and building the complete machines themselves.

Motor cycles eventually became one of the most popular forms of motor vehicle. I am now referring particularly to the years between 1897–1901, and competition between the makers had the result of causing important improvements to be introduced into the various machines as time went on.

I think the real charm of motor cycling lay in the fact that one could travel faster on these light little machines—especially if one was not averse to putting in a lot of work with the pedals—than one could travel on an ordinary motor-car ; and for a real sporting run I always chose my motor tricycle before my car. In addition to this I obtained a considerable amount of exercise which it would have been impossible to obtain in ordinary motoring. The adventures I met with at different times were many and varied. I think one of my first experiences was a collision I had with an omnibus in Newgate Street. It certainly was not my fault, but in those days omnibus-drivers considered the running down of a motor-propelled vehicle as their legitimate sport, and consequently one had always to be prepared for trouble in this direction. In the case in point the enterprising driver had jammed me between the omnibus and a refuge, nearly throwing me on to my head and causing my machine to be badly mixed up with the wheels of the omnibus. While endeavouring to drag the machine out of danger, of course the usual little crowd collected around me and a policeman appeared on the scene. I had a little education as to the feeling of the public towards motorists

at that time, when the policeman inquired in sympathetic tones from the 'bus driver whether my tricycle had damaged his omnibus.

I think some of the most amusing experiences I had in connection with motor cycling were when I endeavoured to explain to those of my friends thirsting for knowledge the art of controlling and steering a motor tricycle. Most people were quite ignorant as to how the machine was worked or controlled. It was quite easy to understand that by moving a certain lever the machine went faster or slower, but as to how the variation of speed was obtained they had no idea. I daresay that the Man in the Street would have expressed the opinion that motor tricycles were driven by electricity, and even amongst cyclists entire ignorance of motor mechanism was the rule.

Old ladies, incapable of riding an ordinary cycle, have asked my opinion as to whether a motor cycle would not be suitable for their use—evidently under the impression that it could be worked in the same simple manner as a bath chair. Elderly gentlemen, having tasted the delights of ordinary cycling, and seeing in the motor a possibility of travelling faster without increased physical effort, and not realizing that to travel faster involved many unthought-of responsibilities, likewise considered that a motor tricycle was the very machine they ought to have. As a rule, a little demonstration, and in some cases one personal trial, for ever killed the idea.

I was once staying at a well-known Kentish seaside resort, having ridden down from London on my tricycle. Whilst there I was introduced to an elderly clergyman, who was a very keen cyclist. Having seen the apparent ease with which I manipulated and controlled my motor tricycle, he expressed the desire to try it. I pointed out to him that perhaps it was not quite so simple as it looked, that he might not like the vibration, and also that it might prove too fast for him, and generally tried to dissuade him. But after his assuring me that he was quite willing to take the risk, I could only let him try the machine. I very carefully explained the functions of the various little levers and taps which governed the

pace, and I also explained to him that the switch on the handle bar merely required half a turn to stop the machine entirely. He listened very attentively, and I thought that all would be well. Climbing carefully into the saddle he started away down a long hill, and I noticed his pace increasing rapidly, till it got very fast indeed; then, in a twinkling, he turned almost at right angles to the road, steeplechased over a gutter, and took to the rough turf of the cliff-top. Over this the machine made its way in a series of jolts and leaps, the reverend gentleman sticking gamely on, but by this time almost paralysed with fright. Immediately on seeing him turn off the road I had started to run, and luckily arrived in time to save him from plunging over the cliff. In a second I had switched off, and the machine came to a standstill. I had practically to lift him out of the saddle as he was reduced to a state of absolute helplessness. I asked him why, when he found the machine was travelling too fast, he had not turned off the switch and put on the brakes, of which there were two fixed to the handle bar. He replied that immediately he had set the machine going a feeling of bewilderment had taken possession of him, and he had no recollection whatever of what he had been told in regard to the control of the machine, his one feeling being that he must hang on as long as he could. Needless to say, he was not converted to the cause of motor cycling, while I felt very thankful that a tragedy had been averted.

The Beeston Motor Company, having obtained a licence under the De Dion patents, started to make motor tricycles in England, but after turning out a few fitted with electrical ignition, they decided that it was too complicated, and eventually adopted the same form of ignition as was used on motor-cars, namely, by means of platinum tubes kept at red heat by burners. Of course, the result of a spill with one of these machines was usually serious.

I had one of the more powerful Beeston tricycles, and lent it to a friend of mine who had not the wherewithal to purchase a machine of his own. I heard nothing of him for four days, and then coming into my office early one morning, I found a dejected, dirty-looking individual fast asleep

on the sofa. Upon examination I discovered that it was my unfortunate friend, who had just returned from his wanderings. I had some difficulty in getting the story out of him, because he seemed to have lost all sense of time, space, and everything else pertaining to the everyday world, and he had evidently gone through most harrowing experiences. I eventually obtained the information from him that he had arrived by train from some remote spot in Essex, having travelled the best part of the night. After getting some food for him, I dragged the story out of him bit by bit. It appeared that he had had trouble with the machine ever since he had started. His first troubles were in regard to tyres. He knew nothing whatever about pneumatic tyres, and when one of them punctured it had taken him four hours to get the cover off the rim. Having, with the aid of a local cycle maker, put the tyre right, he proceeded on his journey, and then had the misfortune to run into some drunken navvies, who had retaliated with deadly effect. Having got out of this scrape he ran out of petrol, and had to pedal and push the machine over eight miles. He stated that he had then filled up the machine with petrol, and it took him exactly two days to get it going again, having eventually ascertained that he had been served with methylated spirits instead of petrol. I think it was on the fourth day he decided to come back to town, and as the machine was going rather well he thought he would travel through the night. He had, I may say, the misfortune to wear spectacles, and whether it was owing to this fact or to the road being very deceptive, the fact remains that he charged full tilt into a five-barred gate at top speed. This occurred at ten o'clock in the evening, and, as he explained to me, the conflagration drew people to the spot from miles around. Luckily, he himself was thrown clear, being pitched on his head into a ploughed field. But the machine had crumpled up on the gate like paper, and the burning lamp behind set fire to the petrol, and, as he sorrowfully explained to me, there was nothing left of it. I asked him if he had not succeeded in rescuing one little relic, but all had perished; and he pointed to his burnt hands and his scorched and

ragged clothes as evidence of the attempt he had made to save the machine.

I think this was the end of my ever offering to lend machines to my friends. If you had an accident with your own car, you at any rate felt that you were responsible for it and alone to blame, but when the accident happened to your machine whilst in other hands, you felt that you had had little satisfaction out of the experience, even though that experience happened to be a bad smash. My own feeling on the occasion in point was that I had cause for complaint, because even if I had run into a five-barred gate and the machine had caught fire and been burnt up, I should at least have had the pleasure of seeing the blaze.

During 1897 and 1898 a considerable number of races were held with special sections for motor cycles, and it was interesting to notice the improvement in form shown by motor cycles in these events. In connection with these races, the Bollée machines were allowed to qualify as motor cycles. I assume that they were motor cycles rather than motor-cars, but at the same time it seemed rather unfair to pit a machine such as the Bollée, with its large motors, against light little tricycles with small, air-cooled motors.

In June, 1897, a race was held for the Motor Cycle Cup, organized by the proprietors of the French paper "La France Automobile." I had the opportunity of seeing the start of this race from the Hannemont Gate on the road between St. Germain and Nantes. The route was to Ecquevilly and back, and the distance had to be covered five times, totalling in all one hundred kilometres. A very varied crowd of machines took part—De Dion tricycles, Bollée voiturettes, and a Wolff-Müller bicycle, ridden by an expert, came all the way from Germany. One of the competitors was a lady, Mademoiselle Lemoin, who rode very well right through. The race was eventually won by Leon Bollée, who covered the distance in two hours forty-six minutes, the Wolff-Müller bicycle running him a close second.

The Paris-Amsterdam race, held in July of the same year,

also enabled Jamin on a Bollée machine to achieve an extraordinary performance, covering the 170 kilometres in four hours thirteen minutes, and actually arriving before the special train which left Paris containing the members of the Automobile Club, which had broken down *en route*. The Bollée machines seemed to have scored very well in these various races, but their popularity was short-lived, and the neater and more mechanical form of the motor tricycles and motor quadricycles superseded them in popularity.

While this development had been taking place in connection with motor tricycles and the attention of most of the manufacturers was being turned particularly to this form of machine, nevertheless a number of experimental motor bicycles were being made, some of them being ridden in the various races, and much valuable information obtained with regard to the construction of a motor cycle with two wheels only.

I do not think motor bicycles ever appealed to me until, in the spring of 1897, I was strolling through the Bois de Boulogne one morning when I saw Fournier come flying along the road mounted on a motor bicycle. The machine was of an extraordinary length—almost as long as one of the ordinary triplets used for pacing purposes; a little motor was carried out near the back wheel—which extended some four or five feet behind the rider—and it was fitted with a pedalling gear of huge dimensions. The whole appearance of the machine was so racy that I did not rest until I had bought it. I saw another motor bicycle about two days afterwards, which I also bought. This machine was one made throughout by Messrs. De Dion-Bouton, whereas Fournier's machine had been built by some enthusiastic cycle maker merely as a freak. The De Dion machine, however, was in the possession of Charron. He demonstrated its running capabilities to me in his usual dashing style. It was a very neat machine, with the motor suspended between the frame, which was a shade longer than an ordinary bicycle, and was built of specially strong tubing. The motor drove the back wheel of the bicycle by means of a

flat leather band. One had to start it by running alongside, getting the gas and ignition rightly adjusted, then switching on the spark, and jumping into the saddle after the first two or three explosions. Of course, if you missed the saddle it was a serious matter, because, as happened to a friend of mine who attempted to ride the machine, it would then dash off by itself. I do not know that I ever cared very much for this little bicycle—it never seemed to go fast enough. It had to be geared fairly low for hill-climbing purposes, and also it was impossible to assist it by pedalling, as the pedals were fixed. The other speed-instrument, however, which I had bought from Fournier was quite a different machine. In the first place, it required tremendous muscular effort to get it going at all. It was all built of very heavy tubing, and weighed some hundreds of pounds. The high pedalling gear—which was very useful when the machine was actually going—made it difficult to start from a standstill. One had to be very careful in switching on the motor, because, unless sufficient way was obtained on the machine, the force of the explosion of the motor acting on the long connecting chains invariably broke them. I do not know how many new driving chains I fitted to that machine, until at last I had chains specially made of great strength.

This machine arrived in London one Saturday morning, and so keen was I to try it that I worked for two or three hours to get it into running order, and at about two o'clock on that Saturday afternoon I started away from Holborn Viaduct to get out into the country. I must have been plucky as well as foolish; and many were the narrow escapes I had as I made my way down the Strand out of London. I realized that if I once stopped it would be almost an impossibility for me to get going again, and I prayed that the traffic would not be so congested as to prevent my squeezing through. Of course I created tremendous excitement, and I felt very proud of my new toy. Then, in an evil moment, an omnibus pulled in front of me and I had to jump off to save myself being thrown off. I walked some distance with the machine before I ventured to get on again, and then seeing a friendly lamp-post I thought

this might afford me sufficient support in order to get into the saddle and start off again. I was fortunate enough to succeed in this, and, extraordinary to relate, I got through this ride without either breaking my neck or smashing up the machine.

After this, I had many long rides, but never alone, and only in the company of other motor cyclists who could be relied upon to give me assistance when it became necessary. To give an idea of the weight of the machine, I may say it was impossible for one man to lift it when it was lying on its side on the ground, I found this out to my cost one day on the Brighton Road. Two or three of my friends on motor tricycles, and myself on the bicycle in question, started to run from London to Brighton, and in an evil moment I was lured to take the left-hand road at the top of Handcross instead of going down Handcross Hill itself. I very soon found that I had a number of steep hills to negotiate, which required all the energy at my disposal to enable me to climb successfully, and it was only by dint of hard pedalling that I succeeded. However, I came to a long steep hill—I believe it was Clayton Hill—which finished me. Of course, so long as the machine could be kept going all was well, but directly it was allowed to slacken speed the motor gradually became more feeble and then stopped with a jerk, and I had to be very nimble in getting out of the saddle to prevent it falling on me. On the occasion in question, however, I was reduced to such a state of exhaustion that when the machine stopped I simply fell off and the machine fell on top of me. There I lay, helpless and unable to move, not caring whether I proceeded further or remained where I was. Eventually my friends came back and found me lying on the grass by the side of the road; and four of us pushed the machine to the top of the hill, but it was a terrible effort.

The joy of that machine was tasted when it was really going well. The smoothness with which it travelled over the road in comparison with a motor tricycle was very marked, and the assistance one could give the motor by pedalling made a great difference in its speed. I was able

to gauge what the delights of motor bicycling would be, provided the machine was fairly light, easily controlled, and reasonably powerful. I must confess, however, that I obtained much more pleasure and enjoyment from my motor tricycles, and although I tried every motor bicycle I had the opportunity of trying, nevertheless, if I went on a long motor cycling expedition, I preferred my tricycle.

It was in 1897, in Paris, that my friend Duncan introduced me to M. Jules Didier, of St. Cloud, and M. Chenard, of Asnières. M. Didier became a close friend of mine, and I saw a good deal of him during the next two or three years, as he was also a very keen motor cyclist. The particular point of interest about him was, however, that he had invented a little carriage, victoria-shape, which could be attached to a motor tricycle by a special attachment, and a passenger could be drawn along behind the tricycle in this trailer. At that time the most powerful motors fitted to tricycles were 1¾ h.p. I think I was one of the first persons to whom he showed this arrangement, and I certainly brought over to England the first attachment of its kind. It was a splendid idea—for the passenger. The unfortunate rider of the machine, however, had to work very hard on every hill to get the combined load to the top, and if it happened to be a particularly steep hill, the passenger had to get out and walk up. Then, if the empty trailer proved too much, it had to be disconnected at the foot of the hill, the tricycle taken up by itself, and the carriage attachment dragged up by hand afterwards. Nevertheless I had a vast amount of amusement in dragging about one of these trailers (which I may say was made large enough to carry two persons) and essayed some long journeys, becoming exceedingly expert in pedalling a 30-inch gear at top speed. As I used to say, if I then had the wish to race on an ordinary bicycle I should have been invincible, in consequence of the lightning sprint which I developed,

On a long journey with one of these vehicles it was advisable to invite two or three friends on motor tricycles to accompany one, because it was possible when travelling uphill for them to get behind the trailer, and by dint of hard

pushing and pedalling we would probably be enabled to get to the top of the hill without having to stop and disconnect.

Of course, your passengers did not always enjoy smooth sailing. For instance, one motor tricyclist I knew, taking out his wife for the first time in one of these trailer carriages, tipped her out at the first corner—much to her sorrow and his consternation. I myself on several occasions forgot that I had anything behind the tricycle, and in riding through traffic my passengers used to complain that they were always in danger through the manner in which I squeezed through between omnibuses and cabs, entirely forgetful of the fact that the full length of my vehicle extended some three yards behind the saddle. The development of this idea of the utilization of a trailer has been seen during the last few years in connection with ordinary bicycles, and those who have endeavoured to pedal an ordinary bicycle with one of these carriage attachments containing a fairly heavy passenger up a steep hill will have some idea of the struggles we had in connection with a similar device connected to low-powered motor tricycles.

Monsieur Didier afterwards invented a very neat two-speed gear to be fitted to the tricycle, and it certainly was very useful for ascending steep hills, but the working of the motor was seriously affected by it, and its use never became very popular.

Monsieur Chenard had quite a different idea. He came to the conclusion that the right place to carry a passenger was over the front wheel, and when I went down with Duncan to M. Chenard's workshop at Asnières, he took great trouble to explain to me that in order to get proper results out of a motor tricycle, one required a lot of weight over the front wheel, which steadied the machine and increased its comfort, consequently making it possible to travel faster. I could not quite follow this, but knowing from experience that it is always a very dangerous thing to differ from an inventor in regard to the merits of his invention, I explained to him that I thought the idea was a brilliant one, and I was quite prepared to go out

with him for a trial on the first machine he had so constructed.

Almost immediately after starting it was very clearly demonstrated that either Monsieur Chenard was very much excited over showing to me the powers of the machine, or that he had not experimented with it to any degree before taking me out. Duncan, who was always an interested spectator when anything exciting was going on, but who took great care that he was not the victim, had smiled genially as we started off, and said he would await our return. Everything went well while we kept along the straight road. But Monsieur Chenard suddenly took it into his head to go up a side turning, and instantly I found myself being pitched out on my head, the machine turning upside down, with Chenard underneath.

I do not think I was angry, but I certainly mournfully remonstrated with Chenard for having put me on such an unstable vehicle. He explained to me, with many gesticulations, the reason why this had happened, but I was not particularly interested on this point. My hands were very badly cut and my clothes were somewhat damaged, and I decided I would walk back to the place from whence we had started and endeavour to get Duncan to convey to Monsieur Chenard, in orthodox French, what I really thought of the whole business. While walking back, I came to the conclusion that the reason the machine had upset was because it only had one wheel in front, but when I gave my opinion to Monsieur Chenard, he became much excited. I had evidently run up against a pet theory of his, that three wheels were better than four, although, as he explained then, everybody had told him that two wheels in front were necessary, but he thought the contrary. However, with careful driving, it was really a very good machine, and went well, and a friend of mine in England bought it. Soon after this Monsieur Chenard came to the conclusion that he had better fit four wheels, and the first machine of this type which he built I myself bought. This type of motor cycle, known as a "quadricycle," became very popular. The firms of De Dion-Bouton, Clement, and Gladiator, in

France, and several English firms, turned out a considerable quantity of them. Before they became really popular, however, a much more powerful motor had to be fitted, the earlier machines involving the usual hard labour when hilly country had to be negotiated.

The number of motor cycles made in 1897 and up to 1902 must have been considerable. Even in 1898 Messrs. De Dion-Bouton were said to be making three hundred of such motors per month for other manufacturers, and two hundred complete machines. Whether this number was really accurate or not I do not know, but they were certainly doing a very large business.

In England several firms were experimenting in regard to making a successful motor bicycle. Humbers spent a considerable sum of money in endeavouring to produce a motor bicycle suitable for a lady. However, all the machines were clumsy, and required a very expert rider to handle them. The weight seemed to be the most difficult problem, and the danger of side-slip was also great.

I had the opportunity of seeing a number of very interesting machines being made in Coventry by Mr. McRobie Turrell to the order of Mr. H. J. Lawson. Mr. Lawson firmly believed that if a suitable motor bicycle could be made a tremendous number of orders would result, and he therefore spent much time, thought, and money in trying to solve the problem. His great idea was, however, that the motor should drive the machine by a friction wheel direct on to the tyre of the back wheel. I believe that dozens of motor bicycles were made, of various sizes and shapes, in the endeavour to solve the problem, but I must confess that none of them were of a type that I should have cared to trust myself on for any long period.

In 1898, two brothers in Paris—Werner frères—put on the market a very neat motor bicycle, having the motor suspended above the front wheel, and with the working parts very neatly arranged. Of course, the weight being up so high one had to be very careful in riding one of these machines on a greasy surface. My first experience resulted in a "cropper" directly I mounted the machine. A considerable number of them were sold, and up to within two or three years ago the "Werner" was one of the most popular forms of motor bicycle on the market.

The advantages of motor bicycles for pacing purposes had also been appreciated, and their utility in this direction was demonstrated on a number of occasions. It is interesting to note that one ingenious inventor, Pingault, succeeded in making an electrically propelled cycle. It was a very ingenious machine, and had special accumulators carried within the frame. The size and weight of the accumulators necessitated the machine being of tandem bicycle pattern, for the reason that an ordinary single bicycle would not have been large enough to contain the necessary power. The machine was driven by a small electric motor, placed down on the lower portion of the frame. Messrs. Humbers made a number of these tandems before the first experimental machine had been thoroughly tested and its limitations and disabilities ascertained. I suppose, as a machine, it would be deemed a failure on account of its only being able to travel short distances, and also owing to the delicacy of the special accumulators and the electric motor itself. It was, however, capable of travelling at a high rate of speed—as we knew speed at that time.

I had the opportunity of seeing the experiments which were conducted in connection with this machine, and, in a manner, being mixed up with them. Turrell had the whole matter in hand, and the control of Pingault who had come over from Paris to conduct the experiments and show what the tandem could do. It had been arranged that it should make its public appearance at a meeting of the Catford Club to be held at the Catford Track on Good Friday, 1897. It was deemed advisable to have a trial beforehand, and this was arranged to take place on the track the week prior to the public trial.

Pingault was of a very excitable temperament, and when, after toiling for days in preparing the machine, he eventually beheld it travelling at a fast speed round the Catford Track, his excitement was intense, and every time the tandem came round he insisted upon running up and down the

track in front of it, to the imminent danger of the two men who were riding it. In fact, we had to seize him, drag him by main force into the enclosure, and hold him there until the trial was finished. Then, having achieved the desire of his heart, and seen that his pet invention was actually practical, he lost all interest in it and expressed a desire to go back to Paris forthwith. Remembering that he had to give a public trial on the Good Friday, Turrell was not agreeable to this, as no one knew anything about the accumulators except Pingault. After a violent scene, in which imprecations in French and English were freely used, Pingault consented to stop, but with a very ill grace.

The accumulators were being charged by a firm of electrical engineers near Westminster Bridge, and on the Thursday evening, prior to the Good Friday, Turrell and I went down there to see if everything was in order and the machine ready to be taken down to Catford in a van the next morning. We arrived just in time to prevent Pingault leaving the premises, he having quarrelled with one of the engineers, thrown up his hands, and stated that he was off to Paris by the next train. He was quite determined on this point and would listen to no argument. Remembering that he had succumbed to physical force on a previous occasion, we adopted this method of dealing with him again, and after dragging him into the office, Turrell put on his best stage manner, seized the poker, and explained in his finest French that his reputation was at stake, that he was a ruined man if things on the morrow did not go successfully, and that as he did not wish to live with this black cloud hanging over his life, he had made up his mind to die, but before doing so, he would assist Pingault into the next world by way of company, in consequence of it having been his fault that he was driven to such desperate straits. His acting was undoubtedly realistic, and I am certain that Pingault became convinced that the English were a ferocious race. He begged and implored Turrell to do him no injury, and assured him that he would do everything he asked, even to the extent of living in England if it were necessary. Having gained his point, Turrell relented, and matters proceeded smoothly, the charging was completed, and the next morning everything was dispatched to Catford for the public trial.

Some weeks previously, Duncan had expressed a wish to see me race on an ordinary bicycle—a sport I had taken no part in since early in the previous year. With the idea of gratifying his curiosity, and also to fill up time during the meeting—as I intended to be at the track that afternoon to see the electric tandem run—I entered for the half-mile race and had my racing bicycle sent down. I wondered why I was doing it when the actual day arrived, because I had not mounted an ordinary bicycle that year—had not even been in the saddle! I had been riding a great deal on motors, but this, of course, was very little preparation for a cycle race.

When I arrived at the track, I found Pingault in a terrible state of mind, and again in despair and hopeless, because through some unfortunate mistake no acid had been sent down for the purpose of filling up the accumulators, which had to be done at the last moment before the machine was used. This was a terrible difficulty, but it had to be overcome, and I started off in a cab to visit all the chemists' shops in the neighbourhood, with the idea of buying up in small quantities all the acid they had. I think I started at eleven in the morning and arrived back at one o'clock, the race meeting starting at two. The explanations I gave, the books I signed, and the stories I told in order to get that sulphuric acid, are beyond description. Anyhow, the result was that I collected enough and arrived back in time.

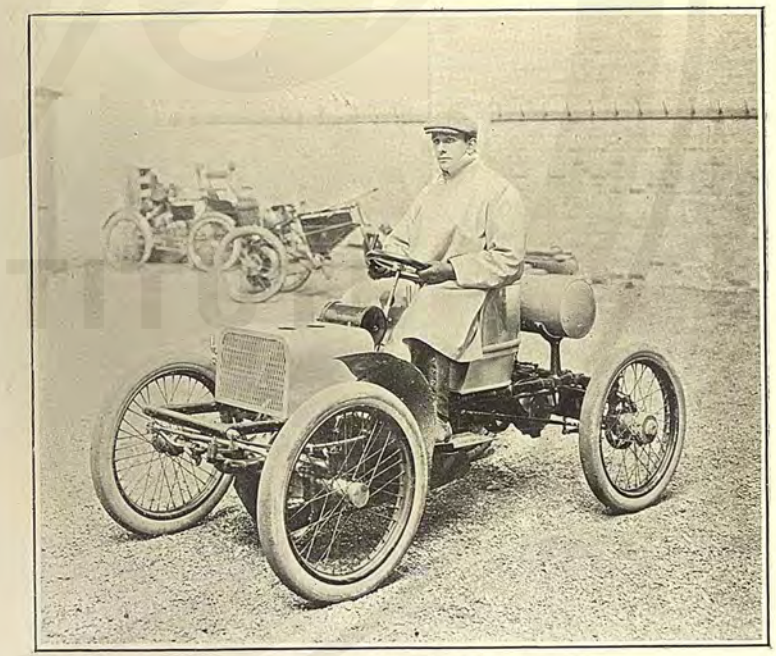
By this time I was very hungry, and there was only one small restaurant where I could get any food, and then I found that the only thing available was cold beef and cold plum-pudding—excellent food for one who intended to take part in an athletic contest that afternoon. I decided, however, that my hunger must be appeased at any cost, and hence gave up the idea of the bicycle race. Arriving back on the track I ran into Duncan, who had not heard of my troubles in connection with the electric tandem, and when I informed him that I did not propose to race, he would not

hear of it for one instant, and simply hustled me into the dressing-room, and before I realized it I found myself walking on to the track to take my place with the starters. I found that ninety-eight had entered for this event, and remembering that I had not been on a machine that year, I did not feel particularly hopeful of ever getting round the track at all. However, I have always been a thorough believer in the principle of doing what you undertake as well as you can. You may not succeed, but if you have exerted yourself to the utmost, you will have the satisfaction of knowing that you have not failed through want of trying. Hence when the pistol went and I was pushed off the mark, I decided that if I was to be beaten, I would at least make a show. I do not to this day understand how I did it, but the short distance of half a mile did not tell upon me to the extent that a mile race would have done, and I found myself crossing the line, winner of the first heat. Of course, Duncan was overjoyed, and watched me with tender care in the interval between the first race and the semi-final, which I eventually won in exactly the same fashion as the first race. Again I was hurried back, and carefully watched over until the final. And then I found that my want of condition told the story, and I was beaten for first place by half a yard, right on the tape.

I mention this little incident because it was the last bicycle race I ever rode in, and as for years previously I had derived the greatest pleasure from bicycle racing, it lives in my memory as a pleasant recollection of one of the sports in which I have in my life participated.

The trial of the electric tandem came on as the last event of the day, and caused the greatest excitement amongst the crowd. We were trembling as to whether its success of the previous week would be repeated. After a preliminary round or so full power was turned on, and it shot away on its attempt at record. The multitude surrounding the track were thrilled. Never had such speed been seen. The grim, set faces of the riders conveyed the fact they were engaged in a daring performance. As Dacier, the steersman, explained to me afterwards, he was scared to death, because the

PARIS—BORDEAUX, 1899



THE DE DION "SPIDER"

weight of the machine was so great that it was as much as he could do to get it round the bends of the track. As the machine continued to travel so well the excitement of the crowd became greater and greater. When it was found that the five miles had been covered in 8 min. 49 sec. (record time), there was tremendous cheering, and when the machine was stopped both the riders were congratulated by everybody on their remarkable performance.

That, I think, was the first and last public appearance of the electric tandem. It was billed to appear on several occasions, but the mechanism always gave out. I myself rode it on one or two occasions, but I always had the vague idea that I was running the risk of sudden electrocution, as blue sparks that flew from it in every direction gave you the impression that you were sitting on a sleeping volcano.

The year 1899 was a very interesting year for the sport of motor cycling, and it was in addition a particularly interesting year for those of us who in England were keen on the sport. There is no doubt that we were keen, as the following little story will show.

Three of us—Stocks, Edge, and myself—went to the Drury Lane Theatre together one bitterly cold night in January. Stocks had been tempted to wait over and go to the play instead of returning to Birmingham that afternoon by road, as he had arranged. He proposed to start out on his journey at midnight, as he had to be back in his office at Birmingham early the following morning. Half-way through the play Stocks suddenly realized that his journey back to Birmingham would be a very cold one. Then our three heads went together, and it was decided that Edge and I should accompany Stocks at least half-way, and then return to town. Accordingly, after the play we proceeded to Edge's flat, where I was able to borrow some clothes suitable for the occasion, and of a very special character. The night was bitterly cold and it was freezing hard, and we started away at about one o'clock in the morning. The three of us were particularly light-hearted as we slipped out of London under the light of a glorious moon which made the roads as clear and distinct as if it were daylight. The roads themselves

were as hard as iron, and glistening with white frost which sparkled on the trees and made the fields resemble a shimmering silver sea.

We had donned every conceivable form of garment capable of giving warmth, the most remarkable of the trio in this respect being Edge, who had pulled a thick pair of shooting-stockings over his ordinary boots, and had capped everything with a marvellous woollen cap. I remonstrated with him on his headgear on the ground that we should get into trouble with the police, as, away from our machines, we must have resembled real live burglars, of the type usually portrayed on the stage.

So we sped on our way, getting off occasionally to run up and down the road to restore circulation to our frozen limbs. Of course, we were not able to travel very fast, because our machines were incapable of going at any very great speed, but I think we shook hands with Stocks and wished him *bon voyage* about fifty miles from London, and then we returned to town, arriving at about seven o'clock, both of us having to be at business by nine.

Stocks had a funny story to tell when next he met us, as to his journey. He had arrived at a town *en route* at about seven o'clock, so tired and sleepy that, standing in front of the fire waiting for breakfast to be served, he went to sleep, fell into the fire, and suffered accordingly.

Early in that year, Mr. C. G. Wridgway, who was an old racing cyclist, and had done a great deal of motor cycling in France, came over to England, and became an active member of our little party, one of our great joys being to drag him out on his machine (which was a very powerful one, at least 2¼ h.p.), on to the greasy London asphalte, which usually resulted in his having hair-breadth escapes.

Wridgway was very keen indeed, and eventually scored over the rest of us by getting a very powerful racing tricycle from France, and then arranging a twenty-five mile match against Rigal, the well-known French racing motor cyclist, at the Crystal Palace. I believe the event was run off in April, and a very excellent race it was, Wridgway winning in 51 min. 19 sec., which was record time.

The following month, in May, a very excellent meeting was arranged by the Motor-Car Club, which then had as its secretary Mr. F. W. Bailey. The whole grounds of the Crystal Palace were given over to the event, and a circular course mapped out. The cars and cycles were classified, and some very interesting racing took place. The event partook of the nature of a series of control tests, and I think I succeeded in winning in the class confined to motor cycles assisted by pedalling. The great event of the afternoon, however, was the race for the Motor-Car Club Championship, which I have described under the chapter dealing with motor cycle racing, and in like manner I have dealt with the great motor and motor cycle race of the year—Paris-Bordeaux, in which I took part on my De Dion tricycle.

Racing and a lot of long-distance riding kept me busy during 1899, until I went to America at the end of the year. I had been asked to go to America to report upon certain machines which it was proposed to take up and manufacture over there. Before I went, however, I bought and took with me a very fine "Ariel" English-built motor tricycle, which, although not as fast as my De Dion, was very strongly built and capable of withstanding the rough roads over which I knew I should have to travel.

I arrived in America in the depth of winter, the week before the Madison Square Automobile Exhibition. It was during the Exhibition that I was induced by a number of my friends, and some very enthusiastic journalists, to take my tricycle out to one of the highly banked cycle tracks and give them a demonstration of high-speed motor-cycle racing, which they had never before seen. Wridgway had gone to America some months before, and he also had his racing tricycle, so I asked him to accompany me for a little spin on the track one afternoon. The track in question at Morris Heights was some little distance out of New York, and when our party arrived we found that it was half covered with ice. However, we had all gone out with the idea of having some sport, and we were not to be denied, so

after sprinkling some sand on the track, Wridgway and I started off. Our racing experiences in England had taught us a great deal in regard to the handling of our tricycles at a high speed, but I had no idea that the sight would be so thrilling to an onlooker unaccustomed to it. Everybody was amazed. Our admiring audience held their breath as we sped round the track with the wheels of our machines practically locked together, and when eventually we opened right out for a final lap and an all-out finish, the excitement was overpowering. I hope I may be pardoned for smiling when recalling those days. There was something very fascinating about it all—the unfailing novelty of doing something which had never been done before.

A large automobile company was started in Philadelphia, of which I was offered the management, but I could not resist the longing to return to England, and I came back in the month of May, 1900. Before coming back, however, I obtained some interesting knowledge with regard to the position American manufacturers were in at that time so far as motor-cars were concerned. Only one or two firms in America had given attention to making motors, and there was no indication that an enormous industry such as exists at the present day would spring up.

I left America with very much regret, for the reason that I had made a great number of friends there whose acquaintance I have never had the opportunity of renewing, as for one reason or another, although I have planned again and again to return there, I have always been prevented.

Before I left, however, I had a very funny experience, in which Mr. W. M. Letts figured rather prominently. Mr. Lawson was in America at the time—in connection with the Pennington business, which he had bought in England—and had brought over one of his motor bicycles, built somewhat on experimental lines, but capable of being ridden by an expert rider. Lawson arranged with Letts to ride this machine down Fifth Avenue one morning, to show some American people who were interested in it how easily it could be ridden and controlled. Letts could ride the machine very well, but was not what one might term an expert motor

cyclist, although he had had considerable experience with that machine. I happened to call upon him on the morning in question and found that he was suffering from a very severe cold, and was feeling very ill. However, he was very anxious to fulfil his obligation to Lawson, and took the machine out. I was interested to see what would happen, so I walked down to Fifth Avenue with him, helped him on to the machine, pushed him off, and away he sped. I may say that there had been a slight fall of snow that morning, and as I watched Letts wobbling down the street gathering speed at every yard, I realized that there would be trouble. The thought had no sooner flashed through my mind than the motor bicycle seemed to leap into the air, and with a crash over it went. I always believed that the first thing to touch the ground was Letts's head. He said it was a side-slip: it might have been a thunderbolt, judging from the suddenness with which it happened. When I ran towards him to render assistance, the first words he uttered as he lay on the ground were to the effect that never again would he attempt to ride a motor bicycle—a vow, I think, he has solemnly kept to this day. Needless to say there were many interested spectators, and motor bicycling has not "caught-on" in America, even to the present time. I am not suggesting that Letts's unfortunate fall at the early stage of the movement had anything to do with it, but the fact nevertheless remains.

I think the last motor tricycle which I used for ordinary touring in England was a $2\frac{3}{4}$ h.p. De Dion tricycle, made with a friction clutch. The idea, of course, was very charming. Instead of having to propel the weight of the tricycle as well as to overcome the compression of the engine in starting, the clutch had merely to be disconnected by a little lever on the handle-bars, and the engine was then started by the pedals, and immediately the engine was running the clutch was let in very gently and the machine moved along. The great drawback, however, lay in the fact that the clutch had necessarily to be very small, and consequently it was im-

possible to obtain a smooth take-up. I had my own machine adjusted to a nicety, but on one fateful day I lent it to a friend for the week-end. On the following day I happened to be with a party of friends at a little village some thirty miles from London, having motored out there on our cars.

While we were discussing motors and various other things outside the hotel before luncheon, my friend to whom I had lent the motor tricycle arrived on the scene with the machine. He was full of complaints, saying that the clutch on the machine did not work right, and that he had had to use the tricycle without making use of the clutch, owing to it having got out of order. Knowing how beautifully the machine had been adjusted when I handed it over to him, I scoffed at the idea that the fault was in the machine, and to prove my statement I got on to the tricycle and started up the motor. That something had happened there can be no shadow of a doubt. I ran the engine fast, and then tried to connect the clutch in the usual way and—as I thought—very gently. However, it went in with a jerk, the result being that the front wheel was lifted clean into the air, and I was thrown out of the machine backwards, the tricycle falling on top of me. To be hurled on to the back of your head without a moment's warning is not pleasant, but to have an admiring circle of friends watching the performance makes it even less pleasant. However, I was not to be daunted, and to show that I really did not care, I made another attempt, but on this occasion I did not use the clutch, and consequently started off without trouble. I rode for half a mile, and then turned and came back again, and I thought that on this occasion the smile was on my side, since I had succeeded in conquering the machine, but unfortunately some one stopped me just as I was riding into the stable yard, and I had to start off again. On this occasion I thought I would make another attempt to use the clutch, which I did, and was again thrown on to my head with even greater violence than before.

The same thing happened to Mr. C. S. Rolls at a gymkhana at Ranelagh on a similar tricycle. On that particular occasion he was winning comfortably a race which

had something to do with racing round a grass track and taking off one's coat and putting it on again a number of times. In his anxiety to get going again in a more or less half-dressed condition he dropped the clutch in suddenly, with the same result as I myself had experienced.

Regarding the popularity of motor cycling, I must confess that I am not surprised that motor cycling is not more popular. In the days when I rode a great deal, to obtain real enjoyment and pleasure from the pastime I had to be in the pink of condition. So far as a motor tricycle is concerned, with a three-track machine much more vibration from the road and discomfort from jolting are experienced than with a single-track machine like the motor bicycle. For this reason, and because of the increased speed obtained and the more convenient form of the machine, the motor bicycle has ousted the motor tricycle from popular favour. But even with a motor bicycle the discomfort from road vibration and jolting is very considerable, and to my certain knowledge a large number of riders have given up the pastime because of this.

It also seems impossible to build a really light motor bicycle for ordinary riding. Racing machines have been constructed of a reasonable weight, but none of the manufacturers seem to have cared about trying to build a machine which was light and not over-powered. I assume the craze for speed has caused this, and if a maker has started to build a motor bicycle with 1½ h.p. motor, he has immediately been forced into the manufacture of more powerful machines by his trade rivals, and this has necessitated a much stronger frame and other fittings. The result is that motor bicycles for ordinary use are heavy, and require a considerable amount of expert handling on greasy surfaces, and consequently are dangerous, except in the hands of a fairly strong and expert rider. This is a pity, because I am certain there are a very large number of people who would be delighted to enter the ranks of motor cyclists if it were possible to obtain a machine which had not the disadvantages

I have mentioned. In addition to this, speed and power obviously mean vibration, and the amount of knocking about a rider experiences is, except in the case of a rider of strong physique, injurious and not conducive to recruiting the number of followers of the pastime.

I have been told that severe competition has been the reason for a considerable number of firms giving up the manufacture of motor cycles, but my own opinion is that the real reason was because they did not make a proper machine. I am not suggesting they did not build motor bicycles which could go fast and which were powerful, but they did not build machines which would appeal to the average rider of a bicycle on the points of price, comfort, and reliability. My ideal motor bicycle would be a machine with a small light motor, with magneto ignition, a spring frame and large tyres, the motor to be capable of being disconnected from the machine at will, the drive from the motor to the rear wheel being by chain and a two-speed gear. The machine to be made not capable of exceeding twenty miles an hour, and every possible attention being paid to keeping the weight down to the very lowest limit. My own belief is that if a machine of this description were put on the market, it would have a very great success, provided it could be supplied to the public at a reasonable price.

There is in the pastime of motor cycling a great charm to any one who has not or cannot experience the delights of motoring on a large car, and I have known many men who preferred their motor cycles to a large motor-car for a sporting run. On the ground of convenience, of course, a motor cycle is much better than a large car. It is always ready, requires little trouble to keep clean, and little attention. It is easily transportable, and a very important point is that it is the cheapest form of motor in which one can indulge.

I do not know whether the future will give us a machine which the Man in the Street will be able to buy; I do not know whether the long string of cyclists which one meets on every main road on a bright Sunday summer morning will

ever give place to a similar string of riders on motor-propelled machines. The interest shown by manufacturers and public alike is, in my opinion, at the present moment on the wane, but I cannot help but believe that a genius will one day present us with a light form of motor cycle which will be as much a household necessity as the present human-propelled machine. When that day arrives the result will be a good one for England. Dwellers in the towns will travel farther afield; the hidden mysteries of the country will be even more deeply explored; the physically weak will not be debarred from participating in those enjoyments which are now confined to those who have the strength to propel themselves afar; and the great pastime of motoring will be opened up to that section of the community which needs it most and will appreciate it best—the workers, and the toilers in the towns.

This is not a dream, but something which is bound to be accomplished when the mechanical genius of years has evolved the right machine, and the productive capacity of our English factories is equal to making it.

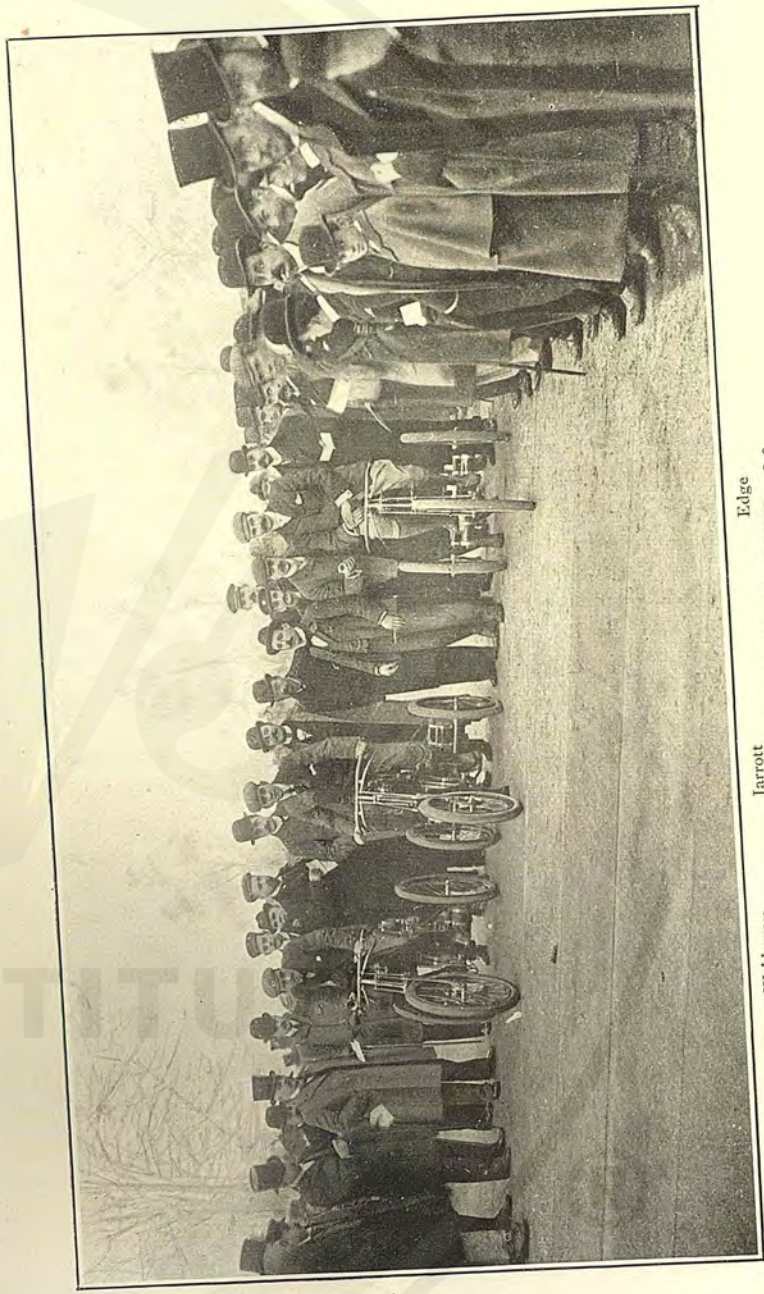
IV

MY MOTOR CYCLE RACES

I HAVE always been very keen when anything in the nature of a contest is in the air, and whether it be in the form of a running, rowing, or cycling race, a cricket or football match, or a contest at the National Sporting Club, these will always find me an eager and ready spectator if circumstances allow. I have been told that this instinct is not a worthy one, and it is the encouragement of the baser and more savage side of human nature at the expense of one's finer feelings. Perhaps this is so; perhaps not. In any event, I plead guilty and confess frankly to a liking for such forms of combat.

There is one thing, however, which is even better still, and that is to be a participant myself. Obviously, in matters of sport, where perfect physical condition is necessary, it is impossible to be an active follower unless you have the opportunity and leisure to attain that perfect physical condition. In games of skill there is little satisfaction unless one is proficient and can play the game in its perfection. Leaving the question of taking exercise for the sake of exercise, I would rather watch a good player than play myself if I could only play his particular game indifferently. But with equal conditions and a chance of winning, then I am as keen upon taking part in any form of contest as it is possible for any one to be.

I obtained the greatest pleasure from cycle racing, but I was not content to specialize in the one form of sport; and cricket and other out-of-door games claimed my attention when I should have been devoting my time to training for the cycle-racing events in which I entered. Then I came within the sphere of motors, and the whole scene



Edge
Jarrott
Wridgway
SHEEN HOUSE MOTOR RACES, 1898

changed. The atmosphere of speed enveloped me, and the fascination of motor racing laid hold of me, and on the first possible opportunity I took part in a motor race. It was immaterial to me what I rode, so long as I rode something in competition. Hence, when I had the organization of the second meet of the Motor-Car Club at Sheen House, the existence of a track there gave me my opportunity to arrange for a motor cycle contest.

This was in 1897, and I remember there were only two competitors beside myself. One was F. T. Bidlake, who was riding a motor tricycle, and the other my old friend H. O. Duncan, who had agreed to get up on a De Dion motor bicycle. I had both a tricycle and a bicycle, and so was able to ride in both events. In the motor tricycle event Bidlake beat me. I had a De Dion machine, and he had one built by Clement, which was certainly faster than mine. With Duncan, however, I had a much easier task. Since the days when he was cycling champion of France he had seen much life and eaten in many countries; consequently his fifteen stones of avoirdupois made all the difference, and I romped home a winner, accomplishing the mile distance in 2 min. 8 sec.—record time. The machine I rode was the long motor bicycle which I have referred to in the previous chapter, and which I bought from Henri Fournier.

The following year we had another motor cycle meeting at Sheen House on the occasion of the third meet of the Motor-Car Club, which I have already referred to, and then we had many more entrants and much better sport. I, the much-harassed secretary, had many disappointments on that day, as nothing seemed to go right with me. The success of the racing however on the track, was the feature of the day, Edge, Wridgway, Gorton, myself, and other riders all taking part. Again I finished second, on this occasion being beaten by Edge.

The first real speed event, however, took place at the Crystal Palace, in the following year, 1899—I think it was in the month of May. Wridgway, on the Easter Monday, had ridden an exciting race against Rigal, the French crack, both of them having high-powered motor tricycles. Wridg-

way succeeded in winning in exceedingly fast time, beating all records, and those of us who were keen on the sport realized that it would take an exceptionally good machine to defeat him in the big motor tricycle race which had been announced to be held at the Crystal Palace on the following Whit Monday.

There were three entries for this event, namely, Wridgway, Edge, and myself. Both Edge and I had ordered from Messrs. De Dion-Bouton racing tricycles, on which we intended to take part in the Paris-Bordeaux race, which was being held in the summer, and we hoped to obtain delivery of them in time to compete at the meeting in question. Up to five days before the event, however, we had received no news as to when they would be ready, and then Wridgway, in a private trial at the Palace, did an even better performance than he had previously accomplished, and again broke records. This made us realize that he would secure an easy win unless we got our racing machines. Then I decided to send some one to Paris to get my machine and bring it over to London. My messenger started off, secured the machine, and in a desperate race against time brought the machine to the Palace track in a van about half an hour before the event was to be run off.

Edge's machine had not materialized, and consequently the race had necessarily to be between Wridgway and myself, between whom I may say the keenest friendly rivalry existed. I was able to run round the track a few times in order to become accustomed to the steering, and I realized that I was on a machine of extraordinary speed and power—at least, so it seemed at that time—but as to what its actual capabilities were I had had no opportunity of judging. However, I took my place on the starting line, and I remember forming the opinion that, provided the machines were equally fast, the man who obtained the inside position at the start would have considerable advantage. Consequently, when the pistol was fired I immediately pedalled as hard as I could to get the lead, and in this I was successful. We swung round the banking, and at the first bend I took the leading position, with Wridgway close in behind. Then

THE ONE HOUR MOTOR TRICYCLE RECORD

PINGAULT'S ELECTRIC TANDEM

a ding-dong race ensued. Again and again Wridgway came out on the straight at each side of the track to endeavour to pass me, and again and again, grimly holding on to the position I had secured, I was able to retain my lead. The speed seemed terrible, and the enormous crowd watching the race gave vent to their excitement in terrific cheering. As we flew round the track neck and neck it was impossible to tell which would win the race. Then the bell rang for the last lap, and Wridgway made a desperate final attempt to secure the lead, but my De Dion was not to be thwarted, and I flashed over the tape a winner by about a wheel in one of the most exciting races I ever took part in.

The end of May saw Edge and myself in Paris with our motor tricycles with the object of taking part in the motor cycle section of the Paris-Bordeaux race. We went over rather in the spirit of explorers. Our baggage was of a very meagre description, and we had but one idea—to see whether the sport of motor road-racing was all that had been claimed for it, and whether we could successfully play the game. Our arrival at the Paris terminus began our troubles. We had seen our tricycles successfully lifted into the guard's van at Calais, and everything was arranged so simply that we imagined the preliminary difficulties were over. At Paris, however, we had to pass our machines through the customs. I believe I had a maker's invoice which apparently saved me any further trouble, but in Edge's case he was not prepared with this. We explained to the custom officials that both machines were of identical construction, and that they were made by a French firm, and that we were merely bringing back into France what had originally come out of it. But the officials were obdurate. Then Edge produced an extraordinary collection of articles. First he pulled out of his pocket a passport bearing an enormous red seal; this document the customs officials tried to seize, but Edge would not on any account let go of it. This had no effect except to infuriate the *douaniers*. He then produced a ticket of the Cyclists' Touring Club, a badge of the Cyclists' Touring Club, a badge of the Motor-Car Club, a membership ticket of the Automobile Club, and

several other tickets and badges, pouring them in a heap on the table. Then, I think, the officials came to the conclusion that we were really people of great importance. Whether they imagined that these badges and tickets were some form of special decoration I do not know, but it all ended in Edge transferring his collection to his pockets and paying fifty centimes for a stamp which was stuck on to a big yellow document, which was duly signed by everybody present. We were then allowed to depart in peace.

We were the guests on this occasion of Mr. Paris Singer, and we made our way to his apartments in the Champs Elysées. After calling there with our luggage and machines we set off for Messrs. De Dion-Bouton's works, to have our tricycles gone over and prepared for the race, which took place on the following day. My own machine was practically all right, but a lot had to be done to Edge's before it was fit to start. We arrived at the works at about eleven in the morning, and after waiting for two hours until the workmen came back from *déjeuner*, we were able to give our instructions, and I decided to wait and see both the machines finished, Edge in the meantime going back into Paris to transact some business. And what an experience I had! My own machine was quickly put in order, and set on one side already to start. Then I took a seat on a pile of wood near by, and watched them work on the other tricycle. To my horror they began to pull it all to pieces. I explained that the machine was wanted for the race on the following morning—or at least, I tried to explain—but my words had no effect, and the dismounting process was continued.

Other riders—Bardin, Osmont, Tart, Gleize—all dashed about on their racing machines, apparently very happy and ready for the fray, but as far as I could gather there would be no machine for Edge on the following day. I could not communicate with him, and there was but one thing for me to do, namely, to sit there and see that as little time was wasted as possible by the men. Sunset, twilight, and then darkness; and little candles were produced, and the workmen still toiled on. It was eleven o'clock before the machine was finished, and I was out of Paris unprepared and without

any chance of getting any sleep that night, and the race was starting at five o'clock on the following morning. With the greatest difficulty I managed to borrow an ordinary bicycle, built—judging from its size—for a juvenile. Borrowing also a small paper lantern, I started to make my way through the Bois de Boulogne back to the Champs Elysées. When I remember the agony I experienced endeavouring to ride that bicycle and the number of occasions on which I lost my way, I realize that the troubles connected with all motor races are more or less alike. Anyhow, it always seems impossible to obtain a full night's rest before the start of the race, as something always turns up to prevent it. . . . I crept into bed tired out, without seeing Edge at all. I was informed that he had been in bed some hours; as he told me afterwards he felt quite convinced that I should see everything through all right. This was very complimentary, in fact charming, but not appreciated by me at the time.

Two hours' sleep, and I was awakened by Edge himself—he, refreshed and ready to start, and I worn out, sleepy, and very cross. However, I soon forgot my troubles, and as we made our way out to Messrs. De Dion's works by cab to obtain our machines, I think we both looked forward to an exciting experience and a good day's sport.

The start took place from the Bridge at Suresnes, and I was amazed to find such a number not only of spectators, but of competitors. The various cars were all ranged up in line—enormous 12 h.p. Panhards and vicious 10, 12, and 15 h.p. cars of other makes, all taking part in the race, the cars starting twenty minutes after the motor cyclists. There were seventy-eight entries all together, thirty-seven of these being motor tricycles, the start of the latter taking place at 3.15 a.m. So dark was it at this hour, that a considerable number set off with their lamps alight.

Our instructions at the start, so far as I could understand them, were exceedingly brief. An official with a red flag addressed the whole crowd of us lined up about four abreast —I think there were nine or ten rows all close up behind each other—and his speech was somewhat as follows:—

"Gentlemen, this is Paris. There is Bordeaux" (point-

ing to the road). "There is but one thing you have to do—*Get there!* Are you ready? Go!" Immediately every rider put every ounce of energy into getting his machine started, and then the fun began. Some of the riders could not start at all, and were run into by the riders behind. Some managed to get a few explosions and then stopped, the riders frantically pedalling to keep the machines going. Others, attending to their taps and levers, instead of their steering, ran into the side of the road, and those of us who missed these many dangers fled away up the hill in a big bunch, enveloped in a great cloud of dust, hardly able to see an inch in front of us in the darkness, and trusting to luck to keep on the road at all.

Edge had started just in front of me, and within ten minutes I came upon him pushing his machine, evidently in trouble, but realizing that it could not be serious I kept on my way. It seems that his engine "seized" immediately after the start.

And what a race we had!

At that time, as no restrictions were made in regard to speed through the towns and villages, everybody rushed along having but one idea, namely, to carry out the starter's instructions and get to Bordeaux. I was at that time in the best of physical condition, but the lack of sleep had affected me, and after two or three hours I began to feel tired; but there were many hours yet to go, and I realized that the ordeal was going to be very severe if I had any hope of reaching Bordeaux successfully. Then another horrible sensation overpowered me, and I began to be desperately hungry. This was a possibility which had never occurred to me. I had before starting put into my pocket some chocolate and some dried raisins, but when I came to hunt for these I found that they had been reduced to a pulpy mass in my pocket, mixed up with the sand and dust which had been poured over me by the other racers.

To make matters worse, the goggles with which I had provided myself were of a very primitive description. It was the first year that goggles had been considered necessary, and I found that those I had gave me very little

protection. To add to our discomfort, the cars which had started later began to overtake us. I forget which of the cars came along first; I think it was Charron, but it took me little time to realize that he was travelling faster than I was, and as he came by I made a desperate effort and dropped in behind him, and thereby obtained the benefit of his pacing, thus being drawn along behind the car with no wind resistance to overcome. It was a desperate game, as he, on a car fitted with springs, was able to take every inequality of the road, *caniveaux*, gutters, and *pavé* at top speed, whereas I, on my little machine without springs of any sort, found these obstructions terrifying, as I had no opportunity of seeing them before I struck them. It was all very thrilling while it lasted, and I stuck grimly on for miles. And then my engine began to over-heat, and to my despair I gradually dropped back. In the meantime, however, I had passed a number of motor cycles, and was in a very much better position than I had been before Charron's car assisted me. Then another car came along, but I found that another motor cyclist had followed my example, and was safely tucked in behind it. I made a desperate effort to hang on, but failed. On the next car coming by, however, I succeeded, and another twenty miles was covered in splendid style.

I was feeling terribly done, and my eyes were very painful from the dust. Then I arrived in a town which I was informed was Poitiers. Here I found a control where I had to sign my name in a book, and I was told that I was in the third place and only a few minutes behind the leader, Bardin, who was on another De Dion tricycle. I also obtained some refreshment, and started off again feeling much happier.

Within ten miles from Poitiers, however, the heavens seemed to open, and the rain came down in sheets. This was bad, but to my consternation my tricycle, which had previously run like clockwork, began to go very badly and my motor to misfire. It gradually became worse and worse, and then with a sudden jerk it stopped altogether. By this time I was reduced to a condition of absolute despair.

Tired to death, aching all over, and my eyes causing me the most excruciating pain, I flung myself down in the road by my machine and there lay oblivious of everything. I seemed to have lived a lifetime since the commencement of the race; Bordeaux appeared an impossible goal, and I seemed to have left Paris years before. My greatest trouble was in my eyes, and I tried to bathe them with my handkerchief soaked in rain-water. Shelter there was none. I seemed to have stopped in the middle of a wide, open, desolate plain. There was not even a shrub large enough to protect me from the down-pouring rain, and I could conceive of no one being in a more unhappy plight.

One or two cars and one or two motor cyclists passed me, and then there was a big interval. Suddenly a solitary rider appeared in the distance travelling very slowly. The figure appeared to be familiar, and presently, to my joy, I recognized it as Edge. Dismounting, he inquired what my trouble was, and in order to see whether my tricycle was really out of order he jumped on and pedalled it for ten or fifteen yards, but not an explosion could he obtain. He therefore rushed back to his machine, saying that as he could not help me he would go on. Then he found that his own machine would not go either. We were therefore both stranded at the same spot in very much the same plight, both equally tired, both with machines which would not go, both wet through to the skin. I should think we were delayed at this spot for an hour, and then it ceased raining, and we began wearily to push our way to the next village, which a kilometre stone advised us was some eleven kilometres away. The sun came out, the rain ceased, and then suddenly, without any warning, my tricycle started off again. I immediately sprang into the saddle and dashed off. Arriving in the village, I found a little *auberge* and discovered that they could give us some food. This I ordered, left my machine outside, and started to walk back along the road to render Edge assistance. Then I saw a very peculiar thing—a motor tricycle coming towards me and wandering from one side of the road to the other apparently with no one controlling it. It certainly looked very uncanny, as I could not imagine

where Edge had disappeared to and how the tricycle remained on the road. As I got nearer I discovered that Edge was pushing it, but he was so fatigued that he had laid his head down on the saddle, and with both arms stretched out to the handle bars was dragging himself along, pushing the machine in front of him, regardless of where it went; and in this position it was impossible to see his body from some distance away. Our combined efforts enabled us eventually to arrive at the village, and after we had obtained some food we started off with renewed vigour on the rest of the journey—but we were not to arrive at Bordeaux that day. Edge broke a chain, and in trying to start his machine by running along and springing into the saddle over the back axle he charged a curb in Ruffec, bending the axle and putting a wheel out of truth. I ran into a huge rocky boulder, which had been placed on the road by some miscreant for the benefit of the racing cars, and buckled my front wheel very badly. These delays, coupled with other troubles, made us resolve that we would spend that night at least in Angoulême and make Bordeaux on the following day, which we accordingly did.

Thus ended my first big motor cycle race. The experience I gained in it was invaluable, and I suppose its greatest charm lay in its novelty.

Bardin eventually won the race so far as the motor cycle section was concerned, and I found that he had accomplished his win in a very cunning manner. The reason our tricycles had stopped was because the rain, saturating the high-tension wire from the accumulator to the sparking plug, short-circuited the current. Bardin knew from experience that this happened, and as soon as it began to rain he, being near a farmhouse, dragged his machine under a shed, waited until the rain had ceased, and then went on his way without the running power of his machine having been affected in any way. It was another example of the old hand beating the novice.

On my return to England I found that the sport which had been provided at the Crystal Palace in my race against

Wridgway had been appreciated, and a number of events were organized from time to time on the various cycle tracks, in which both Edge and I, with a number of other motor cyclists, took part. The interesting point in connection with these events was that every race was won either by Edge or myself. Both of us had machines of identical power and of identical construction, and which were as far as possible tuned up to the same degree of perfection. So keen were we to obtain the utmost speed out of our machines that we even went to the extent of having specially thin track-racing tyres made for our tricycles, as we found they were faster than the ordinary heavy motor tyres used on the road. The result was that, whether we were starting in an hour's race or merely a race of one mile, neither of us knew which would win, and the finishes in every instance were of the most desperate character, position in the last lap usually deciding who would get home first. It was a common thing for one of us to beat the other by half a wheel after an hour's hard racing, and, for sheer sporting racing, I have never experienced anything in my life which I enjoyed better.

I remember one meeting particularly which took place in Birmingham. It was the first motor-cycle race meeting that had ever been held there, and as motor cycling in Birmingham at that time was strongly supported, a considerable number of entries were received. It was an evening meeting, and Edge and I arrived during the afternoon.

Just as we were going on to the track, and about two hours before the start of the first race, we met a mutual friend who was a keen motor cyclist, and he had brought down a specially built motor tricycle, confident in his ability to win every race in which he competed. He had ridden the machine to the track. It was fully equipped with mudguard, lamp, bell, tool-bag, etc., and when we saw him he was diligently divesting the machine of these road requisites, as he had apparently realized that they were not necessary when racing on the track. He had never seen a motor tricycle race before, although he had done a good deal of

riding. He did not realize that the art of racing lay in obtaining as much assistance as one possibly could from one's opponents, in the way of pace-making. He had not seen two motor tricycles dashing round the track at thirty-five miles an hour, with the front wheel of the rear machine almost touching the back axle of the machine preceding it. We left him, as I have said, taking off superfluous parts from his machine.

We had a spin on the track for about five miles at racing speed. As we dismounted, fully expecting him to have joined us in the meantime, I perceived him putting back the various parts he had been occupied previously in taking off. I immediately asked him for an explanation, which he gave me in a remarkably lucid and clear manner. He stated that he had made a mistake, that he was very keen on motor cycling, and that he had also been under the impression that as a racing motor cyclist he would have been a very great success, but if the exhibition of riding which Edge and I had just given was motor cycle racing, he was convinced that it was no game for him. He even went to the extent of describing it as courting death, and was so horrified and shocked that there was no hope of persuading him to reconsider his decision that evening, and away home he went. Afterwards, however, when more familiar with the sport, he took part in several events. But I shall never forget his horrified amazement on that particular evening.

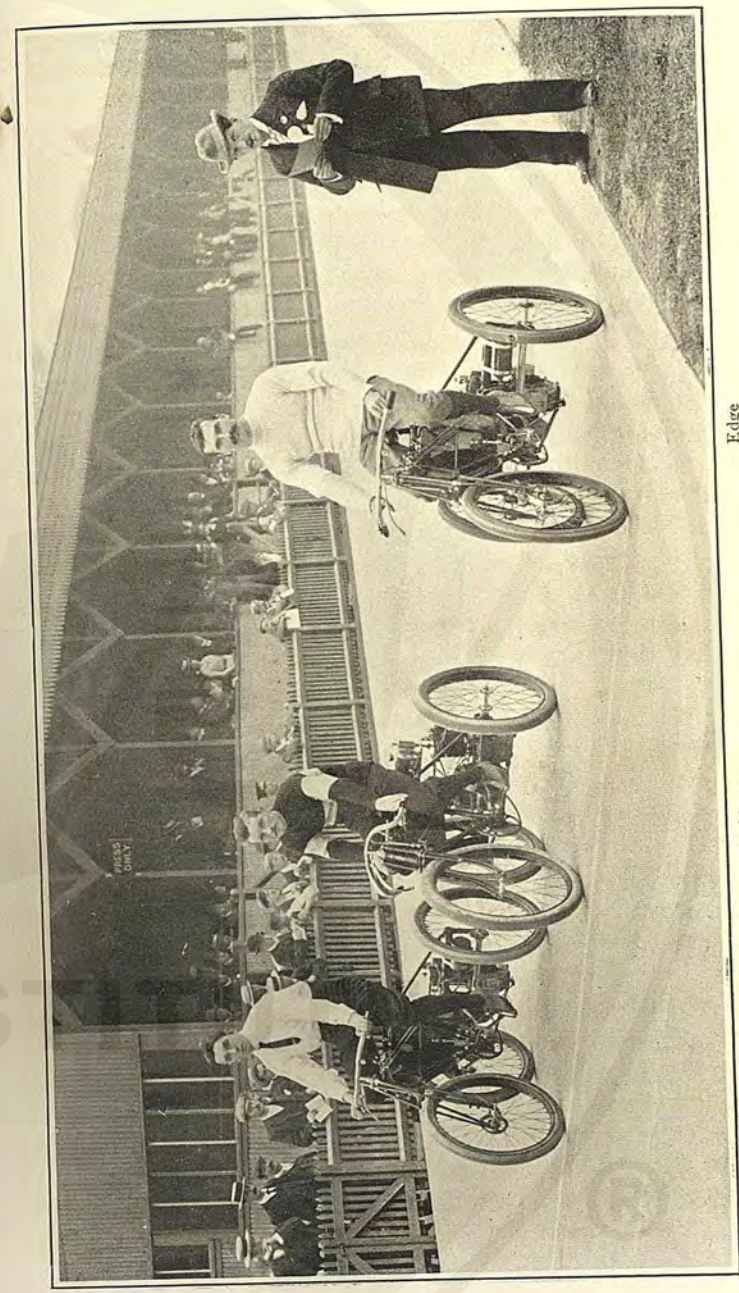
Motor cycle track racing, when providing really good sport, took a considerable hold on the public, and a big meeting was arranged at the New Brighton track, near Liverpool. Beconnais, Demestre, and Rigal—three of the most prominent French cracks—came over from France, and Edge and I met them in several races. We were successful in beating all of them except Beconnais, who had a particularly powerful machine, and at the race meeting in question broke world's records. A very successful motor race meeting was also held at the Aston track in Birmingham, and as showing the in-and-out running between Edge and myself, I may mention that although he was successful in

winning the one and five miles races, I defeated him in the ten miles. Later, at the Crystal Palace, there was a very big meeting held for the Crystal Palace Brassard—a huge silver challenge cup. In every race that day—and I think there were four—I finished second, with the exception of the two miles' handicap, which I won.

I remember we had a very interesting motor tandem race, with Edge and myself as partners on one machine, against Stocks and Wridgway on the other. It was the first and only occasion in my life on which I have ridden a tandem in competition, and Edge and I were very fortunate to beat two such renowned cyclists as Stocks and Wridgway, particularly as they made very effective use of their pedals. On 13 September, 1899, the race was held for the championship of the Motor-Car Club, and my win in that event was certainly the closest that I ever had in my life. The distance was five miles, which I covered in 8 min. 11 sec. But the real fight was, as usual, between Edge and myself, and it was only in the last hundred yards that I got my wheel in front and won by three inches—so the judge gave it.

The following year, 1900, on my return from America, I was able to obtain a much more powerful tricycle from Messrs. De Dion, and in addition to winning the hundred guineas Challenge Cup put up for competition by the Crystal Palace, I also won the Automotor, Autocar, and the Motor-Car Journal Cups, and set up new times for the hour and intermediate distance records. The trouble, however, was that the banking on the various tracks was insufficient for the speed which it was possible to attain on the more powerful machines, and the physical strain involved in holding a big, powerful tricycle at the corners was considerable, and in addition the strain thrown on the machine itself was very great indeed. An evidence of this was given in the fact that in an hour's race on the track a complete set of tyres was entirely worn away, it sometimes happening that they would not even last the full distance. It can, therefore, be imagined that motor cycle racing under these conditions became an expensive sport to indulge in.

In 1902 I ordered a still more powerful tricycle from



Edge
Wridgway
Jarrott

THE START FOR THE MOTOR-CAR CLUB CHAMPIONSHIP, 1899

Messrs. De Dion-Bouton, with an engine of 8 h.p., but before it arrived I decided to make an attempt to cover forty miles within an hour on an English track, which up to that time had not been accomplished. I selected Canning Town as being the best of the various London tracks for the purpose, and I remember that in the attempt I had a very narrow escape from a bad accident, owing to the spindle of my front wheel breaking when travelling at over forty miles an hour. Luckily I immediately realized what had happened, and steered for the grass and jumped backwards out of the saddle as the machine pitched over, without the slightest injury to myself. I was, however, very keen on securing this record, and when my 8 h.p. tricycle arrived I went down again to make another attempt. I had never ridden this tricycle previously, and owing to its power making it unsuitable for anything except very fast road or track riding, I had it sent down in a van by road. The speed at which it travelled the first time I took it round the track appalled me, and I found it was only with the greatest difficulty that I could negociate the bends.

Mr. F. T. Bidlake, the official timekeeper and old-time motor tricyclist, was there to take the official times, and the result he gave of my trial mile before starting on the hour attempt was very discouraging. One minute thirty-five seconds for the mile—much less than forty miles an hour. It then seemed impossible to me that I could do better, as it appeared to be courting death to let the machine out to full speed. However, I realized that it had to be done if the distance was to be accomplished, and after waiting an hour for the wind to drop, I started. The result exceeded my most sanguine expectations, the full distance I covered within the hour being 42 miles 235 yards, a tricycle record which I believe stands to this day.

We had one very exciting episode in a race at the Crystal Palace soon after this. Cecil Edge, a cousin of "S.F.," to whom I sold my 5 h.p. racing tricycle, was racing with me in a handicap race over a mile, and as I had the more powerful machine I was giving him about two hundred yards start. Entering on the final lap I lay behind him about

twenty yards, and then as he came on to the banking at full speed, the same accident befell him as had previously happened to me. The front spindle of his tricycle broke, and in a second he had dashed into the wooden palings at the top of the track. The machine was shattered to pieces, and with him came rolling down the banking right in my path. As I was travelling at a speed of at least forty miles an hour, it was only by a miracle that I avoided both him and the wreckage. His escape was extraordinary, and although he was slightly hurt, it was nevertheless nothing very serious.

The incident proved in a conclusive manner that there was an element of danger in connection with motor cycle racing which very few people had appreciated, and yet at all the motor cycle race meetings at which I have taken part no rider ever sustained any very serious injury.

I have not referred to the memorable race I had on my motor tricycle against the trotting horse "Goldring" at the Automobile Club Show at Richmond; nor to various hill climbs and speed tests against the watch.

The sport of motor cycling was one which appealed to me, as to others, very strongly, and it was only when the more alluring possibilities of driving big powerful racing cars presented themselves that I forsook motor cycle racing. Since those days, of course, speed has considerably increased; the three-wheeler has given way to the more popular motor bicycle, which is easier to ride on a banked track, and from which a much greater speed can be obtained. My interest, however, has always been with the sport, and unable as I am now, through lack of time and opportunity, to take part in racing, I thought it would be an excellent idea if I made it possible for another rider to represent me in one of the big motor cycle events of the year. Therefore, in connection with the eliminating trials to select the English team for the International Motor Cycle Cup, the race for which was run off in France in 1905, I arranged for Mr. Hodgkinson to represent me and ride a motor bicycle on my behalf. I was very anxious indeed to see England making a better showing in international motor cycle events, and hoped, if increased

interest were shown by the manufacturers and others in this country in the sport of motor cycle racing, that the desired result would be obtained by England securing a victory when it came to the running of the big international race. But I was doomed to disappointment. The eliminating trial in the Isle of Man was disappointing to the utmost degree. I found that the keen preparation of machines and requisites which had always been evident in connection with motor tricycle races in which I had taken part was conspicuous by its absence at the start of the race in question. A happy-go-lucky idea seemed to possess all the competitors that they would in some way finish in a more or less creditable manner, and that the proper testing of their machines and the carrying of the requisite spare parts, etc. were things hardly worth bothering about.

It was the last motor cycle race that I have seen, and was eventually won in a very plucky manner by Mr. Campbell, who certainly deserved to get through. But the manner in which the rest of the riders came along was so disappointing, and the general interest taken in the whole event so small, that I realized it was hopeless for us in England to obtain the enthusiasm in the sport which would warrant our taking the premier position. The apathy shown by manufacturers in regard to touring machines was equally apparent in regard to racing machines, even when required for international competition.

British manufacturers at the present time have no idea of the benefit they have received through S. F. Edge having had the pluck and determination to persevere until, in spite of many failures, he eventually won the Gordon-Bennett Cup for England, and placed a premium on English-made cars, the value of which they are receiving at the present day; and I am certain that if British manufacturers of motor bicycles had shown the same determination and enterprise in connection with their own particular line, a success would have been scored which would not only have been of a very valuable character for the particular firm, but also of enormous value to the whole of the motor cycle manufacturing industry in this country.

V

MOTOR-RACING AS A SPORT

I SHOULD probably have been wise to leave this chapter until the latter end of this book, because by doing so I should have saved myself the necessity of proving to those who are sceptical that there is sport in motor-racing. The special charm, however, and the degree of the sporting element which enters into each race, control in a great measure the pleasure derived from each particular event. I speak now of motor-racing as I found it, and I confess that it appealed to me as the greatest sport evolved by man. Competitive effort for any reward except the gain of money is exhilarating and ennobling to the individual character. The curse of commercialism is the ruin of every sport, and the degeneracy of motor-racing as a sport is due to the financial issues now involved in each race—the immense value of victory and the commercial disaster of defeat. The same story has been told of other sports, where the gain of the victor can be made use of for commercial profit and value. The charm disappears, the sordid element is obtruded to the extinction of every other feature; and I can see in the near future, and before the racing of motor-cars dies the death which is yearly predicted for it, the sporting element obliterated altogether by the all-devouring monster of commercialism—the curse of the twentieth century.

I have raced because I loved it. I raced at the very beginning of the sport because I loved it, and I would race to-day because of my love of it; but a race of the present to-day would offer none of the charm which a race of five years ago afforded. It would have none of the sporting feeling or good comradeship between the fellow-competitors. It would be instead of a play, a tragedy—a tragedy of commercialism

—a fight to the death in the arena, with each hired man striving for the death of his rival, showing no mercy and expecting no quarter. And why? Because the winning car is placed on the pedestal of a Grand Marque. The world places an enormous financial premium on its success, and this supremacy has to be obtained at all costs.

What were the conditions prevailing at the time of those good old days—the days of Paris-Berlin, Paris-Bordeaux, and Paris-Vienna races? Obviously the competitive element existed between the various manufacturers of cars taking part; they entered for a race in the hope that they could successfully beat their rivals; but the general idea underlying the whole event was the desire to prove to the world that motor-cars would go, and that they were capable of travelling long distances in a reliable and speedy manner. The events were looked upon as educational both to the public and to the manufacturer, in the evolution of vehicles, which were something more than mere pieces of machinery made for sale and barter. And lessons were learned, experience and knowledge gained, and that side of the sport which was influenced by the financial aspect of the event was satisfied in these rewards, and the extermination of all opposition to each individual interest was not thought of. The men who drove were also dominated by this idea. Dozens of them were independent, racing their own cars; others were racing, if not on their own cars, at any rate at their own expense; and none but were so enamoured of the sport as a sport, as to make the mere question of money subservient to the keen desire to drive a racing-car and to race. To race against one's friends, against one's compatriots, and against one's foreign rivals, to drive one's car faster and reach the distant goal sooner than somebody else in the event. And good fellowship and good sportsmanship prevailed amongst all, to add pleasure and enjoyment to the actual racing itself. And then the conditions of actual racing were so different. In the rapid march of progress new cars were built for each event. Months saw extraordinary progress, and working as the makers were in order to get their machines out for the event, they invariably failed to do so

until the very last minute. They were not particularly handicapped in consequence, because every maker was in the same plight, and consequently in each event a long line of practically untried new motor-cars formed up, their capabilities to be tested and their merits discovered over hundreds of miles of unknown road. And much of the charm of the sport lay in its glorious uncertainty. Where a result is bound to happen there is no real sport, and never were results more obscure than the results of those races. The fact of travelling successfully three-parts of the distance proved nothing, because probably some part would break and trouble ensue which placed one hopelessly *hors de combat*, and we all struggled on, making the best of our troubles, sympathising with each other's misfortunes, and doing our best to arrive at the finish. In addition to the excitement of driving a new and practically untried machine, you had also the fact that you were driving a much faster machine than you had ever driven before, because the power of the motors was increased for each event, and with all these glorious elements of uncertainty, a feeling that you were perhaps driving faster than any one had ever driven before, and there was a lack of that grimness and ferocity which marks latter-day motor-racing. To secure real and exciting sport obviously the spice of danger was an added interest, because, since we were not then accustomed to the speeds, this sense of danger always existed.

And then beyond all—the road: the space of a continent to be traversed, hundreds and hundreds of miles of road, varying in grade, in character, in scenery, and in every other kaleidoscopic feature which makes the road the Mecca of every true automobilist. You consider yourself a driver of skill and capability, you set a high personal value on what you can do. Your powers of controlling a high-speed motor-car at a high pressure over a long course are, in your own opinion, great—then here is your opportunity to prove your worth, to prove your superiority over your competitors; this is no circular course on which you can practise and study every little curve and corner months before the race. The long winding road stretches out before you, reaching

from the capital of one great country to the centre of another. Hundreds of miles of straight road, narrow road, right-angled corners, treacherous turns, maybe mountain passes, rough surfaces, and dangerous obstacles, all enveloped in a dense pall of dust caused by the cars which are preceding you and which you are endeavouring to overtake. And now we can see and appreciate what you are worth and what your capabilities are. The unknown presents itself at every yard, and your neck and the safety of your car depends on the soundness of your judgment. Are you better in dealing with these ever-recurring problems of driving than the man immediately in front of you, or the man just behind you? If not, he gains and you lose; you drop farther back and are passed from the rear, and as you wrestle mentally and physically with all the difficulties of the trial the excitement of it enters into your soul, and you realize that this is a sport of the gods. The glorious uncertainty of everything, capped by the intoxicating exhilaration of speed, would fascinate the most hardened sceptic.

But these racing conditions are disappearing, and in the measure that they cease to exist so does the sport of motor-racing decline. The terrific speeds of latter-day hard-fought races, and the deplorable disasters of Paris-Madrid, ended what need never have been ended had there been ordinary foresight shown in the organization of these events; and the only form of motor-racing now possible is that which is confined to a circuit which the cars have to travel round and round to complete the distance. As well compare the charm of long-distance road cycle-racing with a twenty-four hours' race on the track. The dreary monotony of grinding out a certain distance over the same road again and again destroys the charm, and instead of calling for the exercise of natural judgment in the negotiation of the road, merely resolves itself into a premium on the most reckless and daring driving rendered possible by the knowledge of the course. I have driven in a number of these circuit races, and the sensation is quite different. The first circuit race ever held was the Circuit des Ardennes in 1902, and although I succeeded in winning, never was I more bored than I was

during at least three-parts of this race. In spite of the fact that the course was only fifty-three miles in length, I did not even go round it before the race. The continual passing and repassing of the same landmarks are tiring; the sudden knowledge of every turn and twist of the course which is obtained during the first time round in the actual race robs the driving of a great deal of interest; you miss the welcome stoppages which are obtained at the various towns in a great straight-away race; and the whole effort is turned into an uninteresting driving strain, instead of a delightfully interesting sporting event.

And then again, part of the decrease in the interest of racing is due to the very excellence which is attained in the building of speed cars used at the present day. It has been realized that speed has its limitations, that "reliability" scores over speed, and that a combination of the two secures success to a racing car; and what is the result? In a hard-fought race a stoppage for any cause at all means defeat. There is no hope for you if you have to stop and make a repair. It sometimes happens that the winner has some little trouble which he quickly rectifies, but if so he is fortunate; and with the levelling up of the capabilities of racing cars the margin is so small as to be negligible. The hot finishes of the Gordon-Bennett races in Ireland and Germany proved this, and the desperate encounters in the last two Circuit des Ardennes races demonstrated it to the full. For instance, in one of the Ardennes races, Teste, on a Panhard car, when leading, burst a cover; and after fitting a new one, instead of throwing the old cover away, he stopped (from force of habit, I suppose, and excitement) to strap the useless old cover on to the back of his car, and he lost the race by seconds.

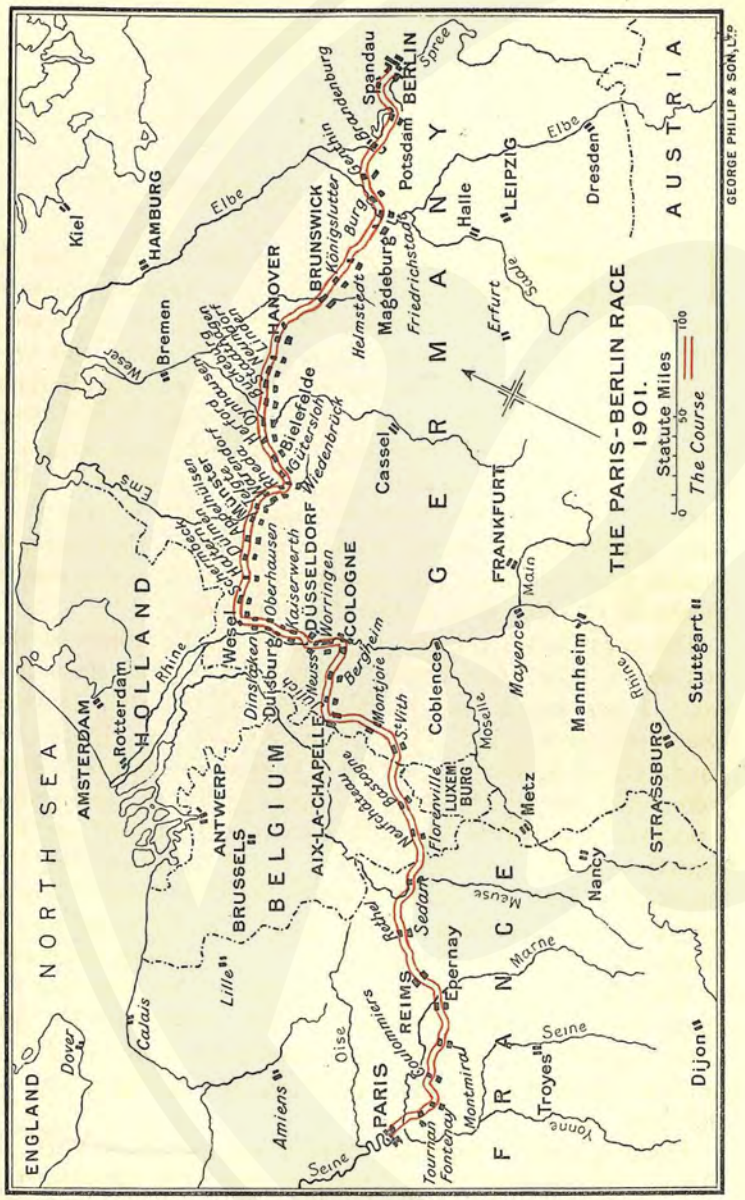
Above all, it is evident now that racing is rapidly being reduced to a business. The firm with the most money makes the most elaborate arrangements, and places the drivers of its cars at a corresponding advantage over its opponents. Win, and win at all costs, are their instructions; and the drivers are weighed down with the sense of responsibility which attends their efforts. A mistake, and they are

condemned for all time, and the reputation of the firm suffers in the eyes of the public; hence the rule of winning at all costs is followed out to the letter. I am saying no more on this point; but it is a pity. The result is that only men who make it their business to drive these cars can hope to be successful. What amateur owner would enter into any contest with this load of responsibility weighing him down? It is only possible for two classes of persons to drive in motor races at the present day, with any hope of success, namely, the man of means and leisure, and the man who does nothing else, whose livelihood depends on his capabilities as a racing driver, and whose whole time is thus devoted to the one thing. A circuit race requires weeks of preparation and training if there is to be any hope of winning. Every corner, curve, stone, slope, and peculiarity has to be studied and known; and only by close daily practice can the very best way to meet every such peculiarity be learned.

For the man in ordinary business, racing is an impossibility if he aspires to success. What chance has he of tuning his car up to the high standard of excellence, which, as I have described, is necessary in a racing car of the present day? What time has he to spend in going over the course and gaining that knowledge which is so essential? Formerly you obtained the car on which you were going to race, as a rule, two days before the event. Now all the cars are out months before, and are being subjected to the tuning-up process all the time prior to the race, both in the works and on the road; and hence the sport of driving racing motor-cars is now practically entirely in the hands of the paid driver. And although there are some really splendid sportsmen amongst these drivers, there can be no question that the general result of making the matter of driving a question of £ s. d. is bad for the sport, and will no doubt result, as a like principle has resulted in other sports, in killing public interest. Increased speed has also reduced each event to the level of a gladiatorial combat, instead of an interesting sporting event. Fast speed adds interest, but it is not necessary. If I were to take, say, twenty keen automobilists, all

having the real English sporting instinct, and if I were to conduct this party to Boulogne, and at Boulogne to hand over to each of these enthusiasts a small—say, 8 h.p.—car, the whole of the twenty cars picked at random from the stock of one hundred cars of exactly similar make and design—twenty automobilists and twenty cars all alike—and then to hand each man a course, from Boulogne to Nice, and start them all off on a race over that distance, at the expiration of one hour after handing them their cars and their route—do you not think that would be a sporting event? Would not you, if you are a keen sporting automobilist, like to be one of that twenty? I should! What fun you would have, what experiences the valiant twenty would have to tell when they met again, if ever, at Nice. Stories of roads missed, mechanical derangements experienced, trouble at the start, and carelessness of the manufacturers. To sum it all up, what is the predominant feature which would give the whole event its greatest interest? Uncertainty—the uncertainty of not knowing how your fellow-competitors were faring, and whether you were gaining on them or not; the uncertainty of the road, the uncertainty of knowing whether your little steed would carry you through safely. Not the speed: you would pray for more of it, but you would rest content in knowing that you were all on an equality in this respect.

And so it is with motor-racing as with every other kind of racing. Put a man in competition with his fellow-man; give them an interest in common, with a chance of winning, and it matters not whether they are riding horses, sailing yachts, running a foot-race, or racing motor-cars, they will have good sport. The degree, however, of enjoyment depends upon very many things; on conditions, on environment, on companionship, and on temperament; and it is, I assume, because I have been fortunate in experiencing the favour of fortune on all these points that I looked upon motor-racing —as I raced—as the sport of all sports, and capable of filling to the full all those cravings which come from a restless and adventure-loving temperament.



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VI

THE PARIS-BERLIN RACE

IT was a particularly happy idea of the French Club to hold a race between Paris and Berlin. The bitterness of the struggle of the seventies was still existent, and it seemed almost impossible that even in a sporting event the two nations could fraternize to the extent of opening up their roads for a race between the two great cities. It had been clearly shown, however, that the inter-country race idea was a good one, and when the suggestion was made to the German Club that the great automobile race for the year 1901 should be from the French capital to the German capital, it was received with the greatest favour, and arrangements for the race were forthwith commenced.

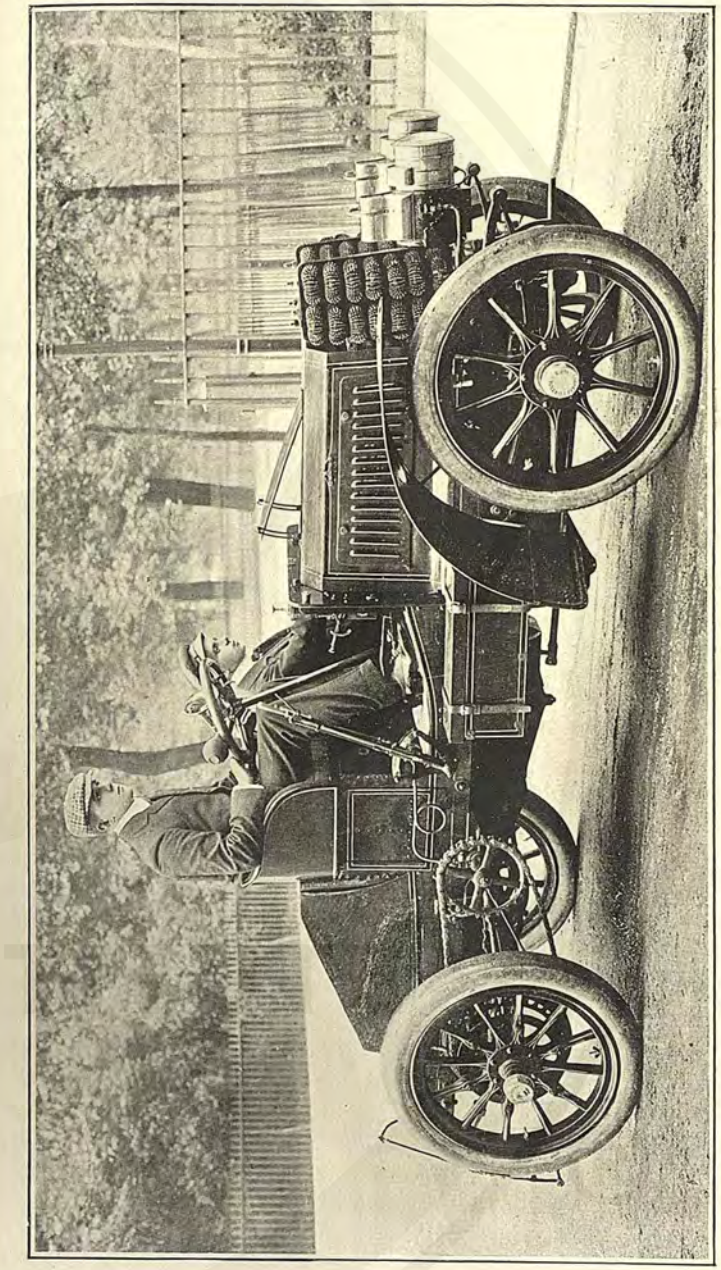
The event has a peculiar interest for me by reason of the fact that it was the first race in which I took part, driving a car. I persuaded that excellent sportsman, Mr. Harvey Du Cros (who had the Panhard-Levassor rights for England), to secure one of the Panhard racing-cars which were being specially built for the event, and at the same time I persuaded him that the right person to drive that car was myself, by reason of the fact that I was then handling the Panhard business in England on Mr. Du Cros' behalf. There was a certain tardiness on the part of M. Réné de Knyff, administrator of the Panhard firm, to consent to place one of their cars in my hands, since I was an untried, and for aught he knew an incapable, driver. However, Mr. Du Cros' arguments prevailed, and eventually I received the information that they had decided to let me have one of the cars.

About a week before the event I went over to Paris to obtain the car and prepare for the race. On entering the

works, one of the first persons I met was M. Clément, and he very kindly conducted me to the shop which contained my car. It would be difficult to express my feeling of pride as I gazed upon the monster which I was to conduct in the first really great race of my life. I noticed particularly that the car was painted green—a beautiful rich, dark colour, which gave the car such a handsome appearance that I wondered why everybody else had not painted their cars green also. But M. Clément gave me a reason for this. He explained that my number in the race was "13," and the reason it had been allotted to me was because no one else would have it. But they had been struck with the happy idea of painting the car green (the French lucky colour) with the object of nullifying the bad effect of the unlucky number. However, it mattered not to me—unlucky number or unlucky colour would have been all the same. The great point to me was that it was a racing-car, and I was going to drive it in the great Paris-Berlin race. The car appeared to me to be a monster. It had a 40 h.p. engine, and weighed altogether 28 cwt.

Without any warning I was asked whether I would like to go out and try it. Needless to say, I required no second invitation. Borrowing a pair of goggles from one man and a coat from another and a cap from another, I was soon in the driving seat, the engine going, and all ready to be off. De Knyff came up and whispered a few words of caution and advice in my ear, and then, in went the clutch and we shot out of the yard. I think that was the proudest moment in my life.

I had taken over as my mechanician a very excellent mechanic named Smits, who had distinguished himself as one of the best bicycle riders of his day and a man of indomitable courage—at least, that is my opinion, or otherwise he would not have dared to entrust his life in my hands, especially as he knew it was my first race. Smits had never taken part in a motor race before, but he had a very fair idea as to what was necessary and as to what we ought to do in the way of preparation, so that I made my way to the start on the morning prepared for almost any eventuality.



40 H.P. PANHARD, PARIS-BERLIN RACE, 1901

The arrangements in connection with the race were excellent. The distance was split up into three stages: the first day from Paris to Aix-la-Chapelle, 285 miles; the second day from Aix-la-Chapelle to Hanover, 278 miles; and the third day from Hanover into Berlin, 186 miles. It was a race which presented all sorts of possibilities. The Frenchmen knew that so far as the roads in France were concerned they could be relied upon as being of the very best description, but what the German roads were like they had no idea. Terrible stories were told before the race as to the quality of the roads which had to be negotiated, and every one started with the idea that it would be a long and hard race, and that only the cars of strong construction and great speed could possibly get to Berlin.

All the best-known French firms had entered cars, and altogether one hundred cars started, forty-three being in at the finish.

The start was fixed to take place on Thursday, 27 June, from Champigny, just outside Paris. I had obtained the good services of a friend to pilot me out from Paris, and I have never seen a more interesting and uncommon sight than met my eyes as in the darkness I made my way out to the start through the Bois de Vincennes at three o'clock on the morning of the race. Hundreds of cars and thousands of cyclists were rushing along in one continuous stream miles in length, a great multi-coloured serpentine of light winding away through the trees. The cyclists were carrying paper lanterns of all shapes, colours, and sizes; fires were lit by the roadside, and a scene of animation prevailed in the darkness the like of which only those who have witnessed the start of a great continental road race can ever have seen. Many had camped out all night, and were whiling away the time with song and music, and then as daylight gradually dawned a vast concourse of people were assembled at the actual starting-point. At four o'clock the first car was sent on its way, the rest following at two-minute intervals. There were two other Englishmen driving in this event besides myself, the first being Edge, on the first racing Napier ever built, and the second was Rolls, who was driving a Mors car. So I felt in a

measure that I was not altogether alone in making my initial attempt.

I started off splendidly, and had my first experience of seeing excited crowds of spectators waving and cheering as we dashed along. The first part of the road from Champigny is exceedingly rough, and in later races in which I have started from Champigny, I always started off very gently over this very rough part. But at the start of Paris-Berlin there was no question of taking anything gently. I put on full speed and struggled with might and main to keep the car on the road. Within twenty kilometres from the start my first trouble occurred through my engine governors sticking, and also the breakage of the spring pulling back the commutator. At first I thought the latter trouble was through the wire breaking, and as this wire was carried through a small copper tube I did not see how I could repair it as I could not get at it. I subsequently found it was the spring which had gone and soon remedied this.

These delays cost me altogether about half an hour, and then speeding on my way towards Viels-Maisons, seventy-eight kilometres from the start, I looked back and found to my horror that Edge, who had started a considerable time after me, had caught me and was just behind. I may say that up to then my mechanician must have been very unhappy. I started off and drove as if the race were for fifty kilometres instead of 700 miles. Corners were taken on two wheels, and it was very fortunate we had not even then come to grief. Edge's appearance was a climax, and throwing any remnant of caution to the winds, I opened up my car to its fullest extent down a long straight slope, in the hope of getting away from him. A sharp short rise presented itself, and we flew up it at a great speed; and then to my horror I found that I had a right-angle corner to negotiate. I certainly got the car round, but by a hair's-breadth. Smits, who was sitting on the footboard, being caught totally unprepared, was flung out, missing a very solid stone wall by a shave. The manœuvre was rendered the more difficult by reason of the fact that another Panhard car preceding mine, belonging to M. Loysel, had not evidently fared so well, as it

had struck the wall and was then lying in fragments beneath that portion of the wall which it had demolished. I came back to collect Smits, and Edge shot by me. Smits picked himself up, and almost on his knees implored me to remember that Berlin was a long way off, and emphasized the fact that if I drove with the same reckless abandon, we should undoubtedly come to grief. This narrow escape, however, sobered me down, and from there onwards I settled down to drive in a serious and deliberate manner.

Presently we came upon Edge again—stopped—and a wire I received later on in the day informed me that he had hopelessly broken down through one of his springs breaking.

The road between Epernay and Rheims afforded magnificent going, and I began to make up a little of the way I had previously lost owing to my stoppages. Of course, we were having great sport all the time, passing and repassing cars continuously. I had my first experience of driving through a dust storm to overtake a car in front, and I had my first experience of a faster car passing me, and then being pelted with stones and gravel thrown up by the road wheels as it gradually went ahead. The road through the Ardennes was a revelation. I had never believed it possible that so many corners could exist in any road—winding and winding, coming back on itself, and twisting in the most extraordinary manner. It certainly required a great amount of physical strength to drive at anything like speed. And on we went through Belgium over the frontier into Germany.

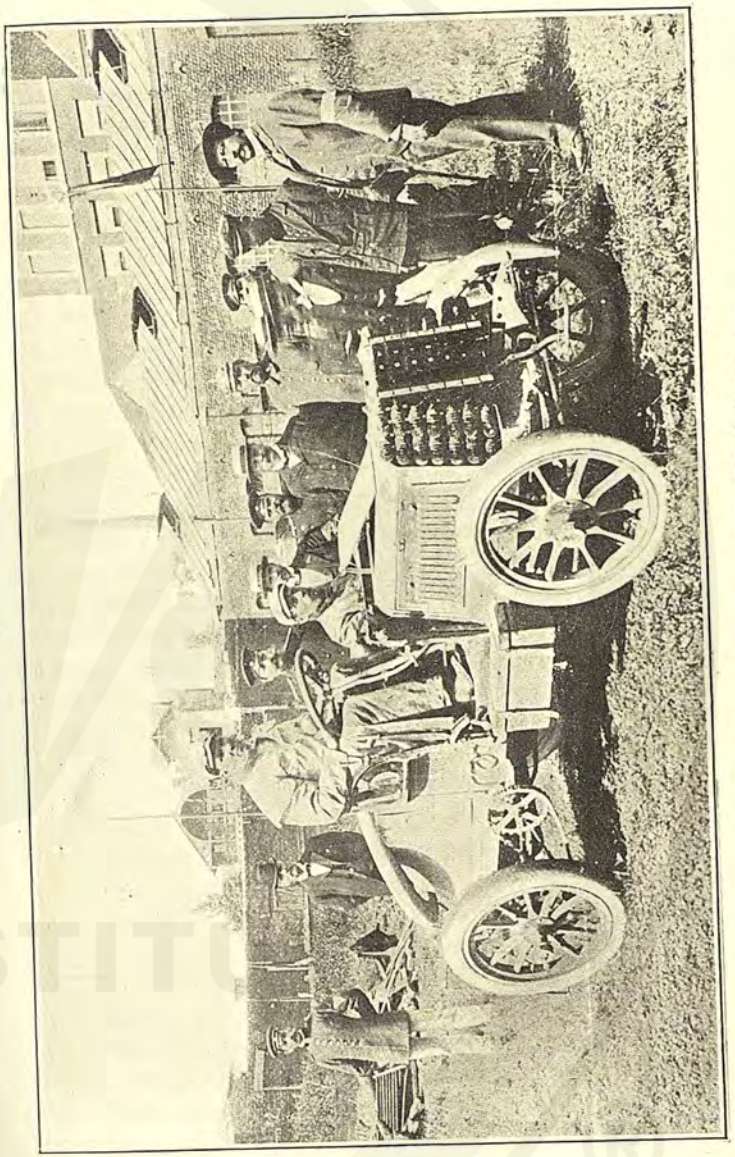
Twenty miles before Aachen I was caught by M. Pinson, and then we had a ding-dong race for twelve or fifteen miles of the most exciting description. He was as old and experienced in the art of racing as I was young and inexperienced. I gained downhill and he caught me uphill, and eventually we arrived in Aix-la-Chapelle practically together, and he told me after that our little battle was the best bit of racing he had ever had.

The greatest enthusiasm was displayed at all the villages and towns we passed through, most of which were "controlled," that is to say, the cars were stopped at the entrance to the town and were allowed a certain time to travel

through it, and this time was not included in the race time. On these occasions and in controls the cars had always to be preceded by a cyclist, and no car was allowed to pass the cyclist under pain of disqualification. The cyclist carried a card bearing the time of arrival, which was taken by the controllers at the entrance to the town, and the time was then checked at the outward control and the car allowed to proceed on its way at the expiration of the proper period. Invariably one got through the towns too quickly, and then had to wait until the allowed time had expired, when the signal was given to go. I soon realized that there was an advantage in being led by a speedy cyclist, as then I had more time at the other end of the control, and this time could be utilized to excellent advantage, either for the benefit of the car or for the procuring of food and refreshment.

In no race in which I have taken part has there been shown one tithe of the enthusiasm shown in that event. We were absolutely smothered with flowers thrown by the villagers, and nothing seemed too good to offer us in the way of refreshment at the various inward and outward controls. Champagne, food, cigars, cigarettes—everything was pressed upon us—and at the end of the race the small space by the side of my seat originally intended for the holding of tools, spare oil, grease, etc., presented a most extraordinary appearance. Flowers, food, fruit, cigars, cigarettes, grease, lubricating oil, and tools, all combined to make a most horrible mixture.

A magnificent reception awaited us at Aix-la-Chapelle. Thousands of people came out beyond the control to see the cars finish, and it was a very strange experience to have to drive at top speed into what seemed to be a packed mass of people occupying the road, which only parted and allowed enough room for the car to pass just as you seemed to be upon it. Even then I noticed that this seemed to try one more than anything else throughout the race, as the possibility of accident was so obvious. People would insist upon standing in the middle of the road to watch the car coming straight towards them, and I marvel that there was not a large number of people killed in consequence.



ARRIVAL AT AIX-LA-CHAPELLE, PARIS-BERLIN RACE, 1903

I arrived in Aix-la-Chapelle in exactly the same position as I had started from Paris, namely thirteenth, and I was very pleased with myself for doing so well over the first stage, having averaged altogether, including the low speeds in controls, exactly thirty-eight miles an hour.

And then, having got off my car, which was taken away from me and locked up with the other cars in an enclosure so that no work should be done to any of them, I was lost. Before starting I had no idea as to what sort of arrangements I ought to make, and it certainly did not occur to me that I could send a change of clothes along from place to place by train. All I realized was that I was going to travel as fast as I could from Paris to Berlin, and hence I came to the conclusion that any clothes I might be requiring I had better take on the car with me. Under these circumstances my luggage was not very bulky, and as I unstrapped the little hold-all from my car it seemed smaller than ever, especially when I looked down at my clothes and realized that in appearance I resembled a chimney-sweep rather than anything else. However, the question of appearance worried me but little. There was I in Aix-la-Chapelle, having finished the first stage of the Paris-Berlin race, and having performed remarkably well, at least in my own estimation, and nothing else mattered.

It took me some time to obtain sleeping accommodation, as I found that most of the hotels were full. The possibility of this had never occurred to me. Eventually I found a friendly restaurant keeper who provided me with a very small bed in a very small room as a very large favour. I had previously told Smits that, speaking the language, he had better look after himself, forgetting the fact that his knowledge of French in a German town would help him little more than my knowledge of English.

That night a great banquet was given in Aix-la-Chapelle, at which all the drivers were present. The Panhard team were very proud of me that evening, and on no account would they allow me to stay away from the banquet on the ground that my costume was particularly unsuitable. So I was taken along, a stranger among strangers in a strange

land. Then, to my horror, I found that the disreputable individuals whom I had last seen dressed in oily clothes and looking dusty and travel-stained had somehow or another obtained the regulation evening attire, and, immaculate and clean, were ready for the banquet. If I could have escaped I would, but I was not allowed to, and so I made the best of things, and my unorthodox attire made little difference in the reception which was given to me as one of the contestants.

That night I slept so soundly that when, at 2.30 on the following morning, Smits came to my room to rouse me, even the joys in store for me during the coming day did not seem anything like as attractive as a further five or six hours' sleep.

Fournier, who had won the Paris-Bordeaux race a few weeks previously, was again driving brilliantly, and had finished first over the Paris to Aix-la-Chapelle stage, and consequently was sent off first on the following morning, and as I had arrived thirteenth I left twenty-six minutes after him. It was bitterly cold, and a mist hung over the road which prevented one seeing more than fifty yards ahead. This mist, together with the dust made by the competitors in front, made passing impossible, and I could not catch any one before getting to Cologne. It was impossible to use goggles as the mist collected upon them, and then the dust adhering obliterated everything.

When I arrived at Cologne on the second day my misfortunes began. I punctured, and putting in a new tube, in my haste I nipped it. I took this tube out and put in another, but again, after an attempt to pump it up, took it out, and on testing found it was not screwed down tight at the valve seating. After this we made another attempt, and I found then that my pump had broken at the gauge. Altogether we had over one and a half hours' delay at Cologne, and a large number of cars had passed me before I got going again. It was rather a trial having to work in the town as, of course, the audience we attracted was very considerable. All sorts of help was offered to me in the most friendly manner, but in my then somewhat heated condition I am afraid that it was not

received with the grace it deserved. Later on I had further tyre troubles, and on that eventful day Smits and I changed three covers and eight inner tubes. Of course, the most exasperating point about it all was that it took time. The labour was considerable, but the awful knowledge that the other competitors were all the time gaining on me whilst I was at the roadside tyre-repairing was the greatest trial. The philosophy which comes to all those accustomed to racing had not then come to me. I had not fully realized that everybody in a more or less degree had trouble throughout the race. My troubles might arrive at one period, whilst they had theirs at another; but trouble in some form was certain, and the only thing one could do was to make the best of it, and get going again as quickly as possible. It was only in the last hundred miles that I managed to regain in a small measure the position I had lost. The road into Hanover was of the most atrocious description, and so rough that it was almost impossible to travel at any speed over it. But by this time I was desperate, and regardless of the well-being of my car I smashed along at top speed, and in the last twenty miles of this rough surface I passed a number of cars, and eventually finished in Hanover twenty-fifth, my time for the full distance of 278 miles being 7 hrs. 48 mins., this including the time taken going through and the delays in controls.

A great race had been taking place that day between the leaders. Fournier, with a slight lead, was still in front, but Giradot, de Knyff, Farman, and Brasier had been on his heels all day.

The enthusiasm at the various villages and towns had been maintained, and whenever opportunity presented itself we had been treated right royally. On the evening of our arrival in Hanover another banquet was held, but on this occasion I escaped, and in the knowledge that the following day would be the hardest of the three, as the roads were very bad, I found an hotel and turned in early, as by this time I had begun to feel the effect of the knocking about I had received on the car, and also the physical strain involved in holding it on the road. Punctually at three o'clock on the

following morning the faithful Smits arrived and dragged me out of bed again, and in the dimness of the dawn we made our way to the riding-school where the cars had been garaged overnight.

On the third day we were started off with some sort of an arrangement whereby the time occupied during the two previous days was taken into consideration, and we were supposed to have been started in the actual order in which we had arrived over the complete course on time calculation, Fournier was dispatched at 5.15, and about twenty-three or twenty-four cars were started before I eventually got away at about a quarter to seven.

The road was of the most tortuous description, and I was not surprised that a number of accidents took place over this portion of the journey. There was, as on the previous morning, a thick mist, and the greatest care had to be exercised, as the turns in the road were bewildering. Suddenly, as I turned one corner, within five kilometres of the start, I came upon a car which had gone clean off the road and was smashed to pieces. The spectacle it presented was appalling by reason of the completeness of the smash, and also the appearance of one of the occupants of the car, who I afterwards ascertained was the mechanician. How the car got off the road appeared to me a mystery. M. Degrais, the driver, was practically unhurt, and I had the opportunity of asking him that evening in Berlin how the accident occurred. He explained that he was following in the dust of another car, and the dust and mist combined obscured the road to such an extent that the only means whereby he could see that he was on the road was by looking at the tree-tops. Suddenly a break occurred in the trees, and the road seemed to go straight on, whereas it actually made a sharp turn to the left and another sharp turn to the right and then continued its course. In a second he was into the ditch, and as he was travelling at between fifty and sixty miles an hour, the car was turned upside down and smashed to pieces, whilst his mechanician was so badly injured that it was four months before he came out of the hospital.

As I groped my way along at the start, coming upon

HENRY FOURNIER

various cars at intervals in trouble or wrecked, I wondered that it had not occurred to the organizers of the event to start each morning a little later, when the sun would have cleared away the mist, and the only trouble would then have been the dust.

A thing which greatly surprised me in connection with this race was that I should have had no trouble at all with my car. Of course I had not reckoned to have so many tyre troubles, but nevertheless the car had travelled so splendidly as to lead one to believe that before the finish some great disaster would occur, especially in view of the harsh treatment all the cars were receiving over the rough roads.

That early morning I had a big duel with Werner, who was driving a Mercédès car. For miles we kept together, passing and repassing, and when, years after, in Paris-Madrid I had a similar experience with the same driver, my mind went back to Paris-Berlin. The Paris-Madrid duel, however, was of shorter duration, and finished in Werner coming to grief.

During the first portion of the last stage we made excellent running, and at Magdeburg I was amongst the first ten. And then my bad luck started again, and within five miles of the town I burst the right-hand front cover and drove into Magdeburg on the rim, as I knew there was a tyre depot there and I could obtain a fresh tyre and assistance in fitting it. This took exactly fifteen minutes, and I was soon on my way again. Then I had another puncture to my left-hand back tyre, and whilst this was being repaired I was again passed by three or four cars. One of these was driven by Monsieur Clement, who made desperate attempts to keep in front, but I gradually wore him down and went ahead, arriving on the Berlin racecourse at the finish, eighth out of the total number of starters in the big-car class, having taken four hours forty-nine minutes for the 186 miles from Hanover to Berlin, including low speeds in controls.

Of the many wildly enthusiastic scenes which I have witnessed in connection with automobile racing, none were more enthusiastic than the finish of Paris-Berlin. There were thousands of people there, and on my arrival I was dragged

out of my car and embraced in a most affectionate manner by dozens of people I had never before seen or heard of. The grime on my face was looked upon, I think, as a mark of honour, and it was only with the greatest difficulty that I could get away to obtain a very welcome wash. Fournier had won the race, and as he explained to me afterwards, it was only with the greatest difficulty that he had saved himself from being torn to pieces by the highly delighted Frenchmen and Germans at the finish. Huge laurel wreaths were laid on the cars, tied with the French and German colours, and altogether the scene, apart from being historic, was unique in regard to the enthusiasm displayed by everybody concerned.

After a delay of a couple of hours the cars were lined up for a grand procession into Berlin itself. The big Brandenburg gates, only opened on great national occasions, were flung wide, and headed at first by the victorious Fournier, we made our way down the Unter den Linden into the city. I said "at first" advisedly, because in connection with this procession occurred one of those interesting little episodes connected with racing which demonstrated how important a part luck plays. Fournier, as he led off, had not travelled two hundred yards before he broke one of his driving chains. He had no spare chain with him, only spare links, and any motorist knows that to fit spare links to a driving chain takes some little time. Had this mishap occurred, therefore, before the finish instead of after, the name of the winner of Paris-Berlin would in all probability have been Giradot, and of all the big fights which Giradot has made and of the many disappointments he has had in finishing but second, never was he nearer to winning than he was in the race from Paris to Berlin.

The unavoidable banquet followed on that evening, and again braving the conventionalities in regard to dress I was present. And I vow that none in the huge assembly that night was so pleased or gratified with his performance as I was. I had driven my first race, and I had driven it successfully. The hundreds of miles between Berlin and Paris had been negotiated satisfactorily, and I had carried out the instructions which De Knyff had given me at the start to the

letter: "Never mind about winning but finish, and I shall be satisfied."

As my mind goes back to that first race, there are so many incidents in connection with it which make the memory particularly pleasing. The impressions I received of the people, of the country, of the race itself, were all new, and like all new impressions had a charm which could never again be experienced. For the first time I had driven a fast car, "seeing red." Again and again the intoxication of speed had held me within its grasp as I was endeavouring to overtake and pass another car. I had fought with myself again and again when, in the realization of danger in driving blindly in the dust of another car, common sense and prudence advised me to slow down and let it get away, but reckless determination impelled me to go ahead, drive through the dust, and pass the car. No wonder that Paris-Berlin, to my mind, stands at the head of the great classic inter-country races.

VII

THE CIRCUIT DU NORD

I HAVE referred in the previous chapter to the accidents which took place in connection with the Paris-Berlin race, and it was unfortunate that at about that particular time the General Election in France took place, and certain politicians sought to make capital out of the attitude of the Government towards the sport of automobilism, and claimed that it was being run for the benefit of the classes at the expense of the masses. The Government met this promptly by refusing to permit any more automobile racing, and it seemed possible that the sport was doomed. But the following year the French Minister of Agriculture made an attempt to show to those interested in agriculture in France that alcohol—an agricultural spirit—could be used successfully on the vehicles using petrol in the ordinary manner. His suggestion that it was absolutely necessary to have a comparison between the merits of alcohol and petrol spirit always seemed to me was inspired; but the fact remained that he did consider it necessary, and, in his opinion, the only way this could be properly carried out was in the form of a speed trial. Hence, on his recommendation, the permission of the Government was obtained, and a permit issued for a speed trial of vehicles running on alcohol, which was in effect a race.

The date fixed for this event was 22 and 23 May, 1902. Some weeks previously another event had been announced —the Nice-Abazzia race—and in view of my performance in Paris-Berlin, the Panhard firm were only too willing to place a car at my disposal for this event. Since Paris-Berlin, however, new rules had been brought into force by the Automobile Club de France, and the maximum weight of racing cars

was limited to 1000 kilos; a second class being limited to 650 kilos, and a third class to 400 kilos. The importance of these rules in connection with the building of racing cars was very considerable. Previously it had been possible to build any type of car, regardless of horse-power and weight; but with a limit of 1000 kilos, all the ingenuity and knowledge of the leading constructors were requisitioned to enable the largest engine to be utilized in a car built within the weight limit. The same problem, of course, had to be grappled with in connection with the other classes.

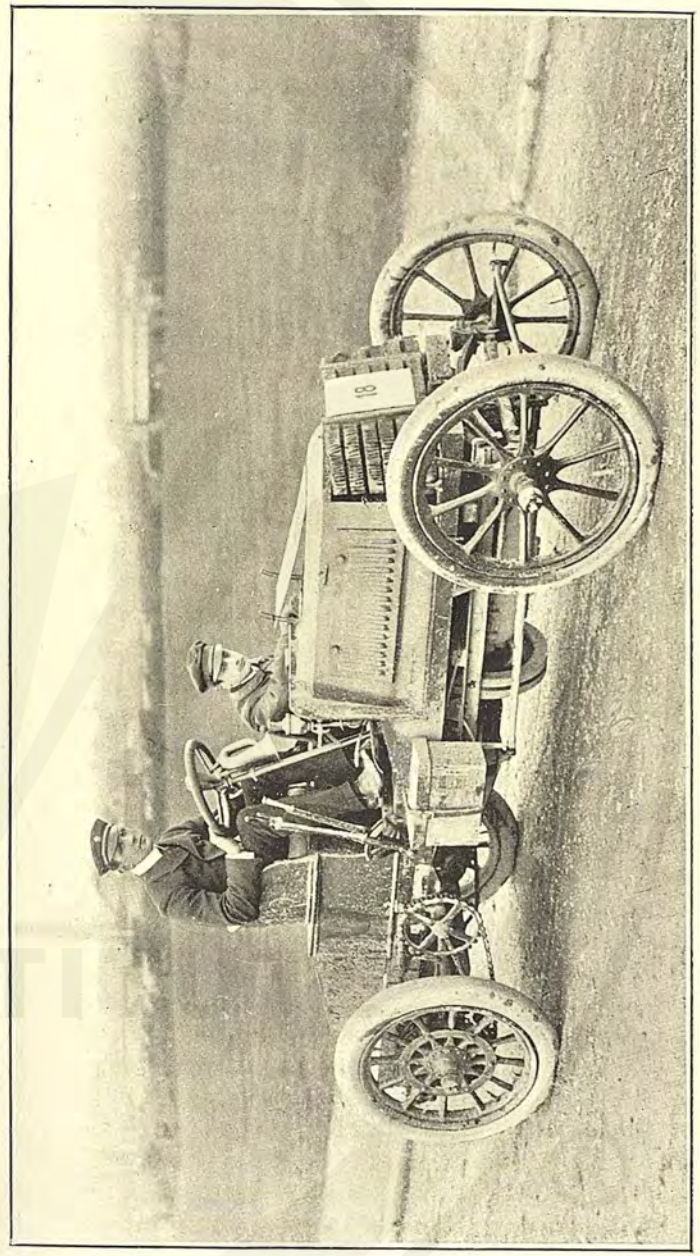
Much to my regret, it had only been possible to place at my disposal for the Nice-Abazzia race one of the 650-kilo class cars, having a 16 h.p. motor. As it eventually happened, the Nice-Abazzia race was not run, being prohibited at the last moment by the Government, and thus, as a little consolation, when the Circuit du Nord race was announced, De Knyff offered me the car which he himself had taken to Nice for the Nice-Abazzia race, as he was having a new car built to drive in the Circuit du Nord himself. I received very short notice of the race, and travelled over to Paris immediately to secure possession of the car. Instead of taking with me a mechanician, Mr. George Du Cros offered to accompany me, an offer which I was very pleased to accept. My experience of racing at that time was obviously slight, and his was, of course, *nil*, but the sport appealed to us, and we were determined to get as much fun out of it as possible.

Arriving in Paris, we made our way to the Panhard works in the Avenue d'Ivry. Just as we entered the gates we saw De Knyff driving down the private road which is used as a testing ground an extraordinary-looking racing car. It was extraordinary because it did not resemble in any way any racing car I had ever seen. On all other racing cars one sat up in the air in the orthodox fashion, but in this car the driver's position was almost on a level with the floorboards, the steering was set at a very sharp angle, and the whole car looked weird and uncanny. One of the workmen explained to us that this was the first 70-h.p. car the firm had built, and was the type prepared for the Paris-Vienna

race, to be held some weeks hence. As a preliminary trial De Knyff was driving the first vehicle in the Circuit du Nord race. On his return journey down the yard he saw us, and invited me to get into the seat beside him, and off we shot. The power of the motor seemed to me to be enormous, and immediately the prospects of driving a 40 h.p. car against such a monster appeared very tame. However, there was only one "70," and De Knyff had it. So we took our "40," and made ready for the event.

We had a week to spare, and nearly every morning we went out in company of some of the other Panhard racing cars over parts of the road which would come in the actual race. De Knyff came out with us on these occasions, and although, of course, the 40 h.p. I was driving was very much faster than the 40 h.p. car I had driven in the Paris-Berlin race, owing to the fact that it was very much lighter, nevertheless, when De Knyff came along on the "70" it seemed as if our puny little car was hardly moving at all. Of course he was having a considerable amount of trouble with a number of little details, as the car was absolutely new from beginning to end, but the increase of speed when actually moving was very great. The thing which worried him most was a slipping clutch.

We all lined up on the morning of the start, fairly confident that, whatever the result of the race might be, the Panhard cars would make an excellent showing. There were altogether forty-six starters, of which only nineteen finished. The total length of the course was 572 miles, divided into two stages, starting the first day from Champigny, and then going through Chalons-sur-Marne, Rethel, and St. Quentin to Arras; and on the second day, from Arras to Boulogne, Abbeville, Dieppe, Rouen, and finishing at St. Germain. All towns were neutralized, and all danger spots were flagged. We had to go through one new preliminary which was previously unnecessary, namely, all the cars had to be weighed on the day previous to the event, to see that the restrictions in regard to weight had been properly complied with. It was very curious to note that De Knyff's car,



40 H.P. PANHARD, CIRCUIT DU NORD RACE, 1902

although it looked so much heavier than the other Panhards, actually weighed less in spite of its 70 h.p.

Making our way to the start in the darkness on the morning of the race, we encountered on a smaller scale the long string of cyclists, automobiles, and sightseers making their way out to Champigny, and evincing almost the same interest in the event as was shown in connection with Paris-Berlin. I was always sorry that it was impossible to obtain a representation of any of these enormous processions of coloured lanterns, as they always presented one of the most picturesque features in connection with the start of a big road race in France.

Arrived at Champigny, we made our way to the position allotted to us, No. 5 in the line of cars, De Knyff being first and Maurice Farman second, and punctually at four o'clock the signal was given to De Knyff, the rest of us being sent off at two-minute intervals. As I have already explained, the race was actually arranged and run by the Minister of Agriculture, and was therefore officially organized by the Government. Large numbers of troops were requisitioned to keep the course clear at the start and at the various controls; and officers in many places acted as marshals and controllers.

I had been very much interested to find out exactly what the running of alcohol instead of petrol essence really amounted to. I found that an alteration was necessary to the carburettor, but beyond this the change of fuel made no difference in the running of the car, with the exception that the fumes emitted from the exhaust were acrid and exceedingly nauseous. I remember this one point being forced home to my mind as I was waiting at the starting-point with a car in front belching forth these objectionable fumes.

Ten minutes before the start of the race it had begun to rain, and Maurice Farman, who was starting immediately in front, advised me that caution would pay—a tip I took with considerable advantage to myself.

Our turn came, and we were dispatched on our journey of 254 miles. Twenty kilometres from the start we came upon De Knyff in difficulties with his clutch, but just starting off

again, and within a minute afterwards he came by us at a speed which seemed to be at least twice as fast as that at which we were travelling. The road at this time was well saturated, and it was every moment becoming more and more difficult to continue driving at a high speed. De Knyff's "70" was slipping in the most alarming manner, but he was soon out of sight. Then we came on to a little village with a road surface of *pavé*, and turning a sharp corner we found that Teste, on a 40 h.p. Panhard similar to our own, had come to grief on the corner, having smashed into a brick wall.

We were still holding our own, no one having passed us, when suddenly our engine stopped. Of course, this was George Du Cros' first race, and the spirit of the fight was as much in his blood as it was in mine. He had the somewhat thankless task of sitting on the floor of the car attending to the little details in connection with lubrication, and entrusting his neck to my care. I appealed to him at the first two or three controls as to whether he was enjoying it, or whether I was taking risks on the greasy roads which he did not appreciate, but his only wish was to be travelling all the time at top speed; to use his own description: "It is better than a steeplechase." When our first stoppage occurred, the pair of us were very concerned, and feverishly anxious to discover the source of our trouble. We eventually traced it to a stoppage in the petrol pipe, which, when we disconnected, we found full of chopped straw. How this could have got into the tank I do not know, but it was obvious that some kind friend had put into my tank a considerable quantity of this foreign matter, as we had trouble throughout the whole of the race, and had to stop frequently to clear our pipe. And then we were off again. We had in the meantime been passed by a number of cars, but very quickly caught up most of them. Some were smashed, some were broken down, and last of all we came upon De Knyff again, who was apparently still tinkering with his clutch, and I could see from the expression of his face that he was not enjoying himself. As he explained to me afterwards, he would not have minded so much if the "70" had not gone at all, but

when he was actually going it was so much faster than the other cars that it made it doubly disappointing to have trouble.

So we held on our way, slipping, sliding, and slithering over the *pavé*, with rain falling and a cold wind blowing, which made driving under any conditions anything but pleasant. The great trouble I had was in connection with my driving goggles. Even at the present day I have not solved in a satisfactory manner the best thing to do when driving continuously in heavy rain. It is possible, at a slow speed, to wear goggles, but at a high speed it is dangerous, as only a limited view of the road can be obtained through the misty glasses. So I found it in the Circuit du Nord. If I had my goggles on I could only see a very short distance ahead; and I could not drive at all, owing to the blinding rain, if I took them off. Eighty kilometres from the start I lost my cap, and it can be imagined how very happy we both were, especially as every few miles we had to stop to again clear out the fuel pipe, which kept getting choked.

We had news at the various controls that Maurice Farman had gone to the front. Teste at the time of his smash was lying second, but at Rethel we occupied this position only ten minutes behind Farman, in spite of our stoppages. Then soon afterwards, and before St. Quentin, Marcelin on a Darracq passed us, and at St. Quentin was eighteen minutes in front, a lead which during the next fifty kilometres I cut down by seven minutes.

The arrangements all through were perfect. At every control a bomb was fired half a mile down the road to announce our arrival, and a bugle would then be sounded at the controls, and the police and soldiers immediately cleared everybody off the road.

We were not doing so badly, and were well up to the front, but the continual stoppages we had been having were very disheartening, and I was only able to keep up with the leaders through reckless driving over the *pavé*. The 40 h.p. Panhard I was driving, however, was a beautiful car to handle, sensitive and delicately responsive to each movement of the steering wheel, clutch, and brakes. Whilst I would

not have attempted to travel at such high speeds on so dangerous a surface on many cars, it did not seem so dangerous on that particular one.

We eventually arrived in Arras at the end of the first stage at about 11.30, having taken 5 hrs. 43 mins. for the 254 miles, excluding neutralizations in passing through the towns. Farman had arrived fifty minutes in front of us, the next being Marcelin, who was seventeen minutes in front, and then Louis Renault with an eight-minutes advantage. Vanderbilt, De Caters, Teste, and Berteaux were all out of it, and out of fifty-six starters only thirty-three succeeded in covering the stage to Arras.

I had a funny example that day of the effect of the excitement and high speed of a race on some one unaccustomed to it. Having handed our car over to the military controllers in charge of the riding-school where the cars were housed for the night, we went to luncheon, but the funny part of it was that George Du Cros was unable to keep awake to eat. I have seen incidents of the same sort since then, but it was very amusing to watch him falling asleep continually during the meal, and eventually I had to induce him to go into the open air and get over his sleepiness before we could finish luncheon.

I had forgotten to mention that we had an additional interest in the race, owing to the fact that Harvey Du Cros, junior, was driving a 16 h.p. racer in the *voiture légère* class (the identical car which I had taken to Nice a few weeks previously for the Nice-Abazzia race). Knowing the treacherous nature of the roads over which we had come, and that it was his first racing experience, I should not have been surprised had we not seen him at Arras at all, but sure enough he eventually turned up, having had a vast amount of trouble with his car *en route*, but completing the distance in eight and a half hours. So ours was a merry party that evening, as we related the incidents of the day, and congratulated ourselves that we were fortunate to arrive so far successfully. De Knyff had eventually arrived some three hours after us, and it was an interesting point as to whether he would continue the race on the following day, and if so,

whether it would be possible for him to make up the time he had already lost.

The following was the very worst morning on which I have ever started out to race. The rain was descending in torrents, the roads were swimming, and it required little knowledge to know that the road back to Paris through Boulogne and Dieppe, with its long stretches of slippery *pavé*, offered many possibilities of trouble on such a day. At four o'clock Maurice Farman was dispatched on his way, and thirty-two minutes afterwards we followed. Farman reached St. Pol (sixty kilometres) in sixty-four minutes, we accomplishing the journey in sixty-three minutes, thus gaining one minute. By this time we were absolutely unrecognizable for mud. Of course we had no mud-guards on the cars, and how it was possible for all of us to keep going at that speed through the wind, rain, and mud we encountered over that stage of the journey, I do not know. It was obvious to me that unless Farman had trouble it would be impossible to cut down the fifty minutes he had gained on the first day. But everything is possible in connection with motor-racing, and we strained every nerve to pick up some of the time we had lost. And then, after St. Omer, 135 kilometres from Arras, where we gained five minutes on Marcelin's Darracq (which was the only car between ourselves and Farman, Louis Renault having come to grief on a corner), we had another stoppage in our fuel pipe; but in spite of this, at Boulogne we were but three minutes behind Marcelin; Farman, however, still retaining his thirty-minutes lead. Before going into Boulogne we had a terrific sideslip, the car turning completely round twice on the *pavé*, but I fortunately missed hitting anything or anybody.

There was great excitement at the control in Boulogne, as there I had to stop and change two sparking plugs, owing to misfiring on two of the cylinders. I found out afterwards that it was the coil which was giving me trouble; it had short-circuited through the rain. From thence onward we had the greatest trouble to keep four cylinders firing; obviously, when they were not firing, our rate of progress was somewhat slow. While replacing these plugs I was

passed by Edmond on another Darracq, but very quickly cut down his lead. Then we had a stoppage of a most exasperating description. The small gauge on the dashboard was connected to the pump of the engine by a small copper tube, and before arriving at Dieppe, this tube, owing to the vibration, broke away from the pump, and immediately we began to lose our most precious water. I pulled up in a tiny village, and we both jumped off the car, Du Cros endeavouring to find some wood which he could cut into a plug to stop up the hole, and I in the meanwhile stopping the flow of boiling-hot water with my hand, and eventually inducing a villager to take my place. Du Cros had been unable to find any wood, and, in view of the fight we were making for second place, our position was serious. I endeavoured to explain to the open-mouthed villagers, in my best French, that I wanted a piece of wood. I tried *bois* with every conceivable pronunciation, but the more excited I became the more stolid became their expression, and I am perfectly sure they were under the impression that the race had driven me mad. In despair, I shouted to Du Cros to get a piece of wood at all costs, even if he had to go into a house and take it. He required no further suggestion, and off he dashed. I took out of my pocket a big pocket-knife, and seeing a particularly solid-looking wooden shutter belonging to a house close by, proceeded to hack off a corner of it, much to the astonishment of the old lady who owned the house, and who up to that moment had taken but little interest in the proceedings. When, however, she saw me despoiling her beautiful green shutter, she flung herself upon me and endeavoured to drag me away. At this moment I perceived Du Cros running down the street bearing a huge block of wood, and pursued, it seemed to me, by an infuriated crowd. It appeared that a family in the village had been sitting eating their morning meal with the door wide open, when he rushed in, picked up a log of wood from the fireplace, and without any attempt at explanation (which, not knowing the language, would have been somewhat difficult), bolted for the door and back to the car, pursued by the head of the family down to the youngest. However, the great point was that we had obtained the

wood, and in a few seconds I had fashioned out a plug and driven it in, and the flow of water was stopped. A few hurried words of apology to the old lady and the now pacified householder (the crowd having by this time appreciated that there was method in our apparent madness), and then, even before we started, out came the plug again. This time a more brilliant idea occurred to me, and taking a small steel peg out of our kit, I hammered it in, trusting to luck lest the pump broke altogether, but desperate in the knowledge that unless something were done quickly our chance of finishing in a good position would be gone. Fortunately this repair held, and although it gave us many anxious moments before the end of the race it carried us through without further trouble.

At Dieppe (330 kilometres) it was still raining hard, but the roads were sandy, and in better condition. Farman had passed through at nine minutes past ten, with Marcelin thirty-five minutes afterwards, whilst we were eleven minutes after Marcelin.

The great question now was as to whether we could possibly catch Marcelin before the finish at St. Germain. And so we sped on downhill, round corners, feverishly anxious at every control to be off and away again to make up the distance between ourselves and the car in front. What was happening to the rest of the competitors we had no idea. Farman was too far ahead to be caught, but we had made up our minds that we had to catch that Darracq car before the finish, at all costs. Through Eu, Vernon, and Mantes we flew, learning at every control that we were slowly but gradually gaining, and eventually hearing that Marcelin had been dispatched but two minutes before. Thirty kilometres from the finish we saw his car. We had been having trouble all along with misfiring, and almost immediately we sighted him this trouble occurred again; and there we were, travelling almost at the same speed as he was, unable apparently to gain a yard, losing ground when going uphill and gaining when it came to the dash on the other side. Then we began steadily to creep up; then we drew level. He, of course, was straining every nerve to retain his advan-

tage, and we on our part were nearly falling out of the car in our anxiety to reduce every inch of windage so as to obtain the lead. Then we got in front, and immediately afterwards he drew level with us again, and another desperate duel took place, but we retained our lead, and all the time I was praying for the finish. St. Germain and the finishing-flag seemed such a terrible way off. Would it never come? At last, down the road I could see the crowd and the flags and the white banner across the road. By this time the rain had ceased entirely, and apparently in that portion of the country very little rain had been experienced. In any event we were raising a considerable quantity of dust, and Marcelin was still struggling within a foot of our rear wheel to make up the length of our car and finish in front. The finishing-point drew nearer and nearer. A mass of people were slowly parting to make way for us in the centre, and then I suddenly realized that unless we were careful a catastrophe would occur. It was obvious that the spectators in the distance could not see that two cars were coming along together, one behind the other. They were leaving sufficient room for one car to pass through only. Marcelin, sitting in my dust, obviously could see nothing, in fact I do not suppose that he even knew where the finish was. If I slowed down at the last moment he would draw out to pass me, and endeavour once more to gain the lead, and owing to the road not being clear, in all probability would charge the crowd and an awful accident would result. There was but one thing I could do. I had to finish "all out" over the finishing-line, and there would no doubt be plenty of room beyond for both of us to pull up; and, therefore, without an attempt to slacken, we finished at top speed.

At this moment a very regrettable accident occurred. A Commissaire of Police who, noticing the cars approaching, was attempting with the aid of his men to force back the crowd from the road, misjudged the pace of my car, and as I finished at top speed in the control he ran back across the road and was caught by my off-side wheel, and, through the pace we were travelling, hurled into the air. Du Cros, sitting on the step, said that the first thing he realized was that by

some means or other he had a man's head between his hands, which he instinctively hurled away from the car; and the Commissaire fell among the crowd. I immediately put on all my brakes and pulled up, and when I realized what had happened I was of course very much concerned, as it did not seem possible that anybody could have survived such a shock. Getting down from my car, I ran back and found the unfortunate police officer being carried towards a house close by in an unconscious condition. His clothes were torn to shreds, and as I looked at him I felt sure he must be dead. I was not reassured by the fact that many of my French acquaintances came up, and whilst expressing the opinion that the accident was not my fault in any way, at the same time commiserated with me on being in the terrible position of having killed a Commissaire of Police. I must confess that I myself, apart from the concern I had as to his injuries, was very much exercised as to what the result would be, and a French prison and a long period of imprisonment seemed within every reasonable possibility. There was nothing to be done at the moment, however, and whilst my car was taken away for the final weighing which had to be done after the race, I sat down and pondered as to the best course to adopt under the circumstances. So far as my action was concerned I had unquestionably done the right thing in finishing at top speed into the control. George Du Cros consoled me to a certain extent by confirming this opinion in very forcible language, and even went so far as to say that the Commissaire had, through his stupidity, deserved the penalty.

Then a messenger arrived from the little house to which they had taken the unhappy sufferer (which turned out to be the customs bureau) with a message that "Monsieur Le Commissaire" desired to speak with me. It was a relief to know that at least he was alive and conscious, but it was with very mingled feelings that I followed the messenger and was eventually shown into the room in which the unfortunate officer lay. Needless to say he was looking very bad, and had undoubtedly sustained a severe shock; but beyond the shock he had suffered no injury; and imagine my amaze-

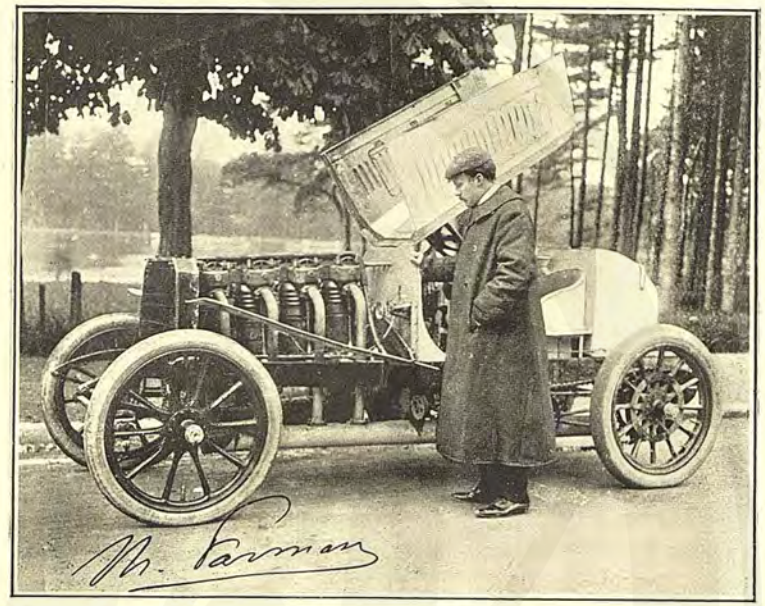
ment when he apologized in the most profuse manner for having been the cause of such an unfortunate incident, and having obstructed my path at the finish of such an important race. It would be impossible for me to describe my relief. My answer was very sincere when I told him how very sorry I was that I should have been the cause of the accident, and wished him a speedy recovery. As my mind goes back I am even more surprised now than I was then. Perhaps the race having been organized by the Government, and bearing the official hall-mark, may have had something to do with the philosophic manner in which the Commissaire endured his injuries, as I cannot conceive that under any other circumstances an important French official would have sustained such a slight without severe retaliation.

Later on I again went to see the victim of the accident, and it was obvious that he was recovering rapidly from the fright and shock, and although he had to remain in bed for several days, nevertheless was very soon well again, and we conducted a very interesting correspondence for some time after the event, and in the most friendly terms.

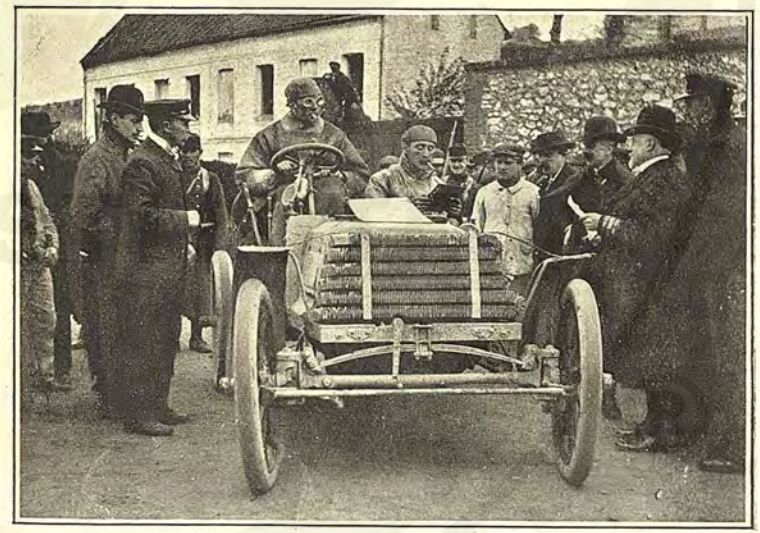
Immediately after this accident happened a telephonic message was sent through to the barracks at St. Germain, and soldiers were sent out to the control to line the road and keep back the crowd, so that the competitors following should not be inconvenienced.

One hour later Henry Farman finished on one of the light Panhards, and further arrivals occurred until a late hour that night, during which a most violent storm was raging. Out of the fifty-six starters, nineteen eventually finished. The only cars running in the heavy or 1000-kilo limit class to finish were Maurice Farman and myself on the Panhards, and one of the Gardener-Serpollet steam vehicles.

The value of the very interesting fight we had with Marcelin for second place was demonstrated when the actual times were published. Maurice Farman completed the distance of 572½ miles in 11 hrs. 56 min., our time being 13 hrs. 3 mins. 12 secs., with Marcelin on the Darracq but ten seconds behind us for third place. As an exciting piece of racing it would be difficult to imagine anything so close as



MAURICE FARMAN



CHARLES JARROTT AND G. DU CROS, CIRCUIT DU NORD RACE, 1902

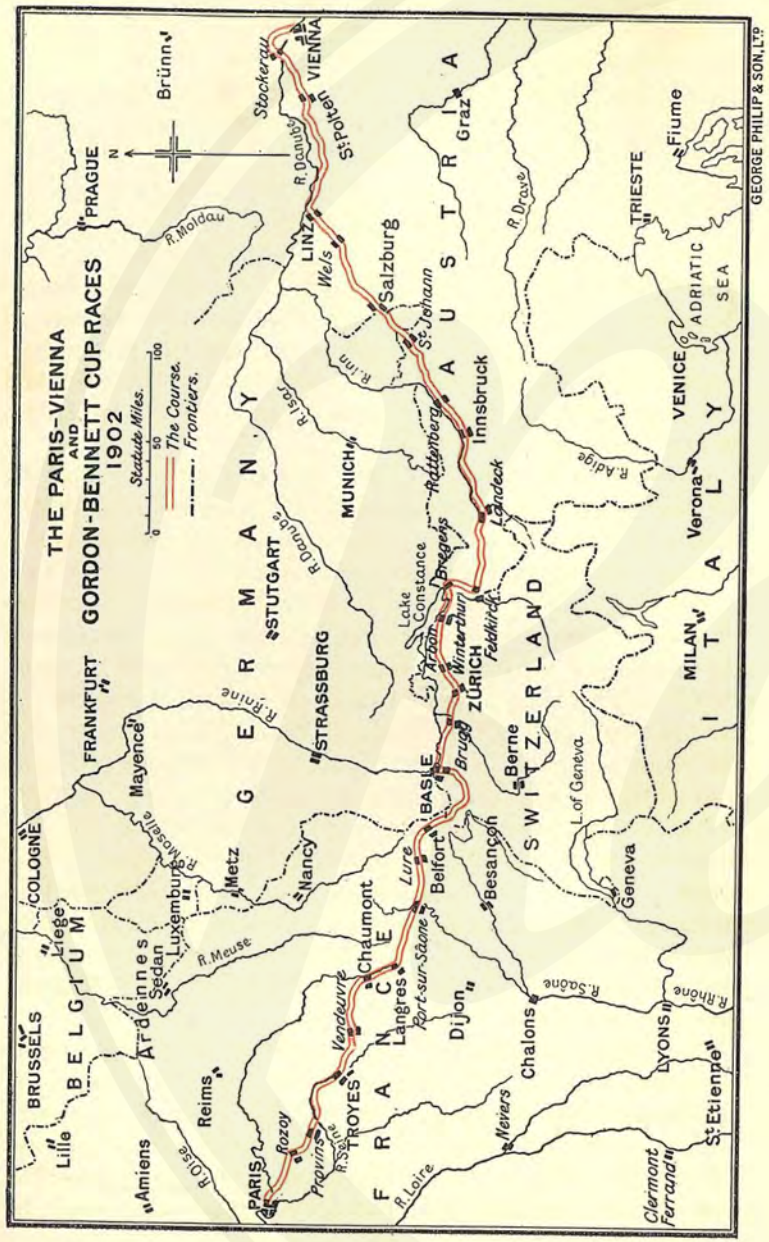
our last thirty-kilometre struggle with Marcelin. The whole question of second place was a matter of seconds, and as an example of the necessity for fighting out the finish of a race to the bitter end it could not be beaten.

Some of our experiences on the greasy *pavé en route* were of a very exciting character, particularly in the places where controls were fixed. The slightest application of the brakes had the result of not only making the car skid very badly, but, in two instances, of completely turning it round. We caused a scene of wild excitement and a scamper for safety amongst the spectators when, in one control, in my endeavour to pull up quickly, the car turned round and we stopped with the car facing in the direction from which we had just come.

This race was a success beyond all question. It proved that alcohol could be used with very great advantage to run vehicles driven in the ordinary way by petrol. It also proved that the actual speed and power of the motors were not affected by its use. It did more than this, however; it proved that a road race could be run, even at the increased speed, without any danger to competitors or spectators, provided proper and complete arrangements were made for the controlling of the route. Of course a number of cars broke down, and in several instances this was owing to the greasy nature of the roads, but no competitor received any injury, and apart from the unfortunate accident I have mentioned to the Commissaire of Police, no spectator was injured.

This race was particularly interesting by reason of the fact that it was the only race of recent years which had been run under bad weather conditions. It has always struck me as being fortunate that nearly every big race has had the accompaniment of good weather, and to my mind it would have been exceedingly interesting if some of the latter-day speed events had been run off in rain and storm. The dangers of skidding on a big powerful racing car are very evident, even on a dry day, but what would result on a really wet day I do not know. We had these conditions in the

Circuit du Nord, and even with the comparatively low-powered vehicles we then used the process of elimination was very rapid, and I am inclined to think that if one of the latter-day racing events, with racing cars of 120 h.p. or more, were run under the same conditions, this process of elimination would be even more drastic than it was then, and probably the results to the drivers would be more disastrous.



VIII

THE PARIS-VIENNA RACE

CHAMPIGNY looked as it always looked on the morning of the start of a big race, with thousands of cyclists, touring cars, and people occupying the village and roads adjacent to the start; and away up the hill stretched the long line of racing cars, much longer than had been seen in any previous race.

Once more I was lined up with my car, ready to start off on the long journey to Vienna, and once more, with the happy experiences of the Circuit du Nord race in mind, George Du Cros was accompanying me.

We had for this race obtained our "70" Panhard—a replica of the speed monster we had seen De Knyff use in the Circuit du Nord—and very much impressed we were with its capabilities. Three days before the race, I had taken the car out on the road for the first time. I remember, after our first real burst of speed, we had to pull up for a shower of rain, and when we got down to take shelter under a tree, we compared our sensations of the fearful speed which the car appeared to be capable of attaining. As a matter of fact, when it came to the race itself, we would have given much to have had an engine double the size. But our first experience, on a lonely country road, without the excitement and fever of the race itself, gave us something to think about during the few days before the start.

A word about the race itself may be of interest. The Paris-Berlin race had been so successful, both from the spectacular and sporting point of view, that a race with Vienna as its destination seemed to ensure a similar success. The trouble with the French Government had been smoothed over. The Circuit du Nord had proved that racing could be

carried out, if regulated properly, without danger to spectators, and the prohibition was removed when it was put forward by the champions of the industry that such an event would be beneficial and stimulating to manufacturers.

The race was somewhat involved, as it meant going through Switzerland, Germany, and Austria, and on no account would the Swiss Government permit of any racing in that country, although the authorities in Germany and Austria did everything in their power in order to make it a success. It was arranged that the race should occupy four days, and be run over four stages. The first, from Paris to Belfort, 408 kilometres; the second, from Belfort to Bregenz (this portion being neutralised); the third, from Bregenz to Salsburg, 369 kilometres; and the fourth, from Salsburg to Vienna, 343 kilometres; the total racing distance being 1120 kilometres.

Owing to the difficulty of obtaining a permit from the French Government for a special race for the Gordon-Bennett Cup, it was decided to run this race over the same route and at the same time as the race to Vienna, the competitors in the Gordon-Bennett race being also competitors in the longer race. The rules of the Gordon-Bennett race allowed the distance to be much shorter than from Paris to Vienna, and the finish of this event, therefore, was fixed at Innsbruck, which would be reached on the third day, giving a total distance of 609.92 kilometres. The Gordon-Bennett competitors who continued beyond that place would do so as competitors in the Paris-Vienna race only.

As holder of the Cup, France had selected her team to defend it—Girardot, the previous winner (C.G.V.), De Knyff (Panhard), and Fournier (Mors). England, being the only country to challenge, was represented by two cars—Edge (Napier) and Austin (Wolseley). The Gordon-Bennett competitors were given the post of honour at the head of the long line of starters, and were dispatched on their journey first. I, of course, driving a Panhard car, was not competing in the Gordon-Bennett race, but only in the race to Vienna.

Everything ready, spare tyres strapped on to the back,

tools in their proper places, petrol tanks filled, we were in outward appearance prepared to go through in great style. I had, however, noticed on the previous day with some misgiving that my car seemed somewhat lighter than the other 70 h.p. Panhards which were taking part in the race, and I ascertained that owing to lack of time it had been impossible to strengthen the frame of my machine, which had at the last moment been considered advisable in connection with the other cars; and this, as it turned out, proved to be my undoing.

At 3.30 Girardot (the winner of the previous year) was sent off on his long journey on his C.G.V. car. He was followed by Fournier at 3.32 on a Mors. Then came Edge and De Knyff, and the rest of us were dispatched at intervals of two minutes.

Having been over portion of the route prior to the race, I had decided that under no circumstances would I be bustled over the first eighty kilometres to Provins. The road was bad, and with hundreds of miles in front of us it did not seem advisable to run the risk of breaking up our beloved "Seventy" right at the commencement. It was very difficult to adhere to this decision when cars began to catch us, but I held on my way serenely, never attempting to use my fourth speed until, after leaving Provins, the character of the road changed and a smooth surface presented itself. Then in went the fourth speed and we really began to race. Pinson, who had previously passed us, was quickly caught and left behind, and we were in full flight after the leaders. Fournier we had already passed, and from his gesticulations it was obvious that he was in serious difficulty; hence one member of the French team was to all intents and purposes finished.

We soon came upon Girardot, also in difficulty, and this meant that only Edge and De Knyff were really racing for the Gordon-Bennett cup. After that we came upon Edge, who had started a considerable time in front of us, getting along very well. A wave of the hand, and he was soon swallowed up in our dust, and only three cars remained in front of us—De Knyff, who was leading, and Maurice

and Henry Farman. We eventually ran into a control at the same time as Maurice, and racing neck and neck we caught Henry. Then a terrific race took place between the three cars, and to this day I am not clear which of us did the fastest time to Belfort, although the actual order of finishing was officially given as De Knyff, H. Farman, Jarrott, M. Farman.

In the last control just before Belfort, both the Farmans dashed off instead of waiting for the proper signal to go, but I was very quickly after them, and Belfort saw us arriving within a minute of each other and within seven minutes of De Knyff, who had covered the total distance of 253 miles in 7 hrs. 11 mins.

Allowing for neutralizations, our actual travelling time was 4 hrs. 6 mins., being equal to fifty-six miles an hour.

Edge arrived some time afterwards, but with the exception of De Knyff, the other Gordon-Bennett competitors were out of it, both Girardot and Fournier having given up.

I remember on that evening having a conversation with De Knyff in regard to his retaining the Gordon-Bennett cup for France, and even then, on the day when he had finished first and seemed to be going better than anybody, he expressed a doubt as to whether he would be able to hold his position, as during the run that day his differential had developed a weakness which caused him considerable concern, and in view of the rough roads which had to be traversed before Innsbruck (which was the finishing-point of the race for the Cup) would be reached, the terrible journey over the Arlberg, which would try the strength and construction of every car in the most severe manner, had to be negotiated. If anything happened to De Knyff before Innsbruck, and Edge could only keep going, the Cup was a certainty for England. However, it was useless surmising as to what might happen.

Belfort is an interesting town, owing to its being on the frontier and the extraordinary precautions which have been taken to make it into a fighting town—every wall and house is loopholed, although, as Du Cros pointed out, a battery of modern guns some miles away would play havoc with the

town in spite of its preparedness for hand-to-hand fighting. But it was particularly interesting to us by reason of its lack of hotel accommodation, and it seemed at first that my usual experience of being landed in a town without a place to lay my head would be repeated. Finally, we found rooms some distance out of the town, and capturing our bags from the hotel to which they had been sent, we shouldered them and made ourselves comfortable in the house of a hospitable peasant.

One of the most extraordinary things in connection with racing is the apparent length of the days. Starting off at daybreak, it always seemed that by ten o'clock one had been travelling throughout the whole day, and having lost all count of time, midday seemed like four o'clock in the afternoon. As a rule, unless a great amount of trouble was experienced, it was always possible to finish by twelve or one o'clock, and thus the whole afternoon could be given up to watching the late arrivals and interchange of experiences with the various drivers.

That afternoon, in Belfort, I discovered Edge wandering about unable to find accommodation of any description, and it was only when we had tried every available place in the town and eventually discovered a small loft over a provision dealer's, in which a large number of hams were in process of curing, that Edge found a resting-place for the night.

On our arrival, our cars had as usual been taken charge of and lodged in a huge riding-school, being locked up for the night, and the procedure was somewhat amusing when early the next morning the great crowd of drivers, mechanicians, and mechanics were ready, waiting to be allowed to start off on the next stage. The cars were started off in order of arrival, and time was taken two minutes after the admittance of the driver and mechanician into the gates. This meant that immediately a particular driver and mechanician were admitted they started running at top speed to get to their car, as every moment was valuable, and then fearful scenes would be witnessed as the various cars were started up. All sorts of troubles would have developed during the night. Leaking cylinders, which had run all right during the

day owing to its being possible to replenish them with water *en route*, would have emptied themselves, and there was invariably a free fight for possession of water-buckets, as it often happened that several cars were in the same condition from this cause.

At these early morning starts one also had the opportunity of observing how easy some cars were to start and what efforts were required to make others move at all. There was no particular courtesy shown to anybody, and if a car was not ready to go a squad of soldiers took possession of it and pushed it outside the gates, and the time was taken forthwith. Some of the drivers with refractory engines soon discovered this was an excellent way of getting their cars started without trouble, and it was a common trick to utilize the whole of the time available in replenishing the car, and then, as the military squad arrived and started to push the car out, a skilful manipulation of the clutch on the part of the driver would connect up the engine, and the impetus given to the car would start it up and everything would be well.

I was not altogether happy at the start of the second day. I had noticed that the frame of my car during the run through to Belfort had bent in a very ominous manner, and, in fact, had started to crack on the right-hand side. How far this would extend I did not know, but I was hoping for the best.

The second stage of the race being through Switzerland, where racing was not allowed, was neutralized so far as speed was concerned, a maximum time being allowed between the controls, and any time taken beyond the maximum being deducted out of the total racing time.

Twenty kilometres from Belfort our troubles began with a puncture, and in our eagerness to effect a rapid repair we nipped the tube and had to do it all over again. This caused us the loss of valuable time, and a lot of cars passed us. Then after another twenty kilometres an ominous knocking sound from the engines betokened that something was wrong, and I found that a plug had come out of the pump and we had lost all our water. The engines on the

"70" Panhards were of most delicate construction, and the water-jackets were soldered on to the cylinders. Therefore, judge of my dismay when I noticed that the precious solder, on which we had depended to keep our water-jackets watertight, was running away in a molten stream. With the aid of a small hammer, and after spending a considerable amount of time, we managed to repair this, and then we set off across country to find water. Du Cros was the lucky discoverer of the precious fluid, and the nearest spot from whence it could be obtained was a farm-house at least a quarter of a mile away from the road. We toiled on, carrying a bucketful at a time, until at last we had filled up, and once more started on our way.

The delays experienced had had a disastrous effect on our average, as we had on each occasion far exceeded the time allowance between the various controls, and we knew that all the delays would be debited against our net running time in the race.

The frame of my car was getting worse and worse, and after crossing the frontier into Germany, when we were five kilometres away from Bregenz, a terrific crack advised us that one side had gone; and the other looked very much as if it might collapse at any moment. Arriving at the control where the cars were stored for the night, we pointed out the trouble to De Knyff, and he held out no hope of our being able to run even another ten kilometres after starting out on the following morning. Two very disconsolate men wended their way to the hotel that afternoon, and it seemed as if the hopes we had entertained of making a fine finish into Vienna were already dashed to the ground. We felt that if we could only strengthen up the sides of the frame by some means or other, it would probably hold out sufficiently for us to get over the next stage to Salzburg, 369 kilometres. But there we were, in a strange German town, unable to speak the language, and not knowing what we could obtain to effect the repair. However, it seemed that nothing could be done, so we resigned ourselves to our fate.

One effect of touring instead of racing was that we had had to sit for hours in a continual cloud of dust, and our appear-

ance on arrival at Bregenz was dirtier than anything I have seen before or since, and our one wish was to obtain a bath if that were possible. Upon inquiry at the hotel, however, we were informed that this was an unknown luxury. We therefore started out to see whether a bath was to be obtained anywhere in the town at all. On our way we met Edge and his cousin engaged upon a like quest, and at this moment I had the happy idea of using my slight knowledge of German to inquire from a passer-by as to whether there were any public baths in Bregenz to which we could go. He gave me minute directions which I did not understand; but, nevertheless, it was sufficient excuse for me to lead the party off in the direction indicated. Then we suddenly came upon the railway-station. This not being what we required, I again inquired of a bystander, who talked to me volubly in German, and pointed to—the railway-station. We were all very puzzled, and proceeded to retrace our steps to the town. Again I inquired, but although we travelled by a more circuitous route, we again found ourselves at—the railway-station. Luckily, I then met a friend who explained the whole matter. Why I should have imagined that "bath-house" in German was "*bahnhof*" I do not know, but the fact remains that I had all the time been inquiring my way to the "*bahnhof*," and consequently we found ourselves again and again returning to the railway-station. The purchase of clean linen in a small shop in the town also afforded us considerable scope in the language of gesticulation. Our experience of Bregenz, altogether, was not a happy one, when it came to making ourselves understood. It was typical, however, of the difficulties with which an Englishman not knowing the language had to contend in these inter-country events.

In my perambulations through the town I came across a shop in the window of which were exposed to view all sorts of tools, and it flashed into my mind that if I could succeed in obtaining suitable tools and material, I could possibly patch up our car sufficiently on the following morning to enable us to make another attempt to get over the next stage to Salzburg. So summoning Du Cros to my aid, we

entered the shop together and endeavoured to make known that we wished to purchase a large auger suitable for boring wood. Much to our surprise we found the very instrument we wanted, but by no manner of means could we get anything more. We required in addition some long bolts and four long thick pieces of wood, but in this we were doomed to disappointment, and we seemed no nearer the solution of our difficulties than we were when we entered. It was then five o'clock in the afternoon, and we were slowly making our way back to the hotel with the auger, having been quite unable to obtain either the bolts or the wood, when I met an English friend, who, hearing our story, undertook to get everything we wanted without difficulty. Of course it was obvious that even when we had obtained these things the fixing up of the car would not only be difficult but very likely impossible, but we sat down to dinner that evening feeling somewhat happier in the knowledge that we should at least be able to make an attempt at repairing the car.

My friend returned after dinner with a very long face and many apologies, saying that although he had been able to secure the eight bolts he had been quite unable to procure the wood. By this time I had given up the idea of being able to do anything, and we made our way up to bed, disconsolate and forlorn.

The bedroom given to me was fitted up with very solid-looking furniture, but I paid very little attention as to whether it was solid or not, as I was worrying over one thing only—how I could obtain suitable material to repair my car. I was just getting into bed and had turned to put out the light, when my eye fell upon a stand used for carrying a tray, and in a second I perceived that the four legs of that stand were exactly what I wanted. I immediately had Du Cros out of bed, and then we discussed the advisability of consulting the landlord as to whether he would sell us the stand. But it was then eleven o'clock, and we had to be up and off by four on the following morning, and possibly the landlord would not sell it to us, and then we should be in a hopeless position once more; so we came to the conclusion that the risk was too great, and the best

thing we could do was to ask nobody, and explain all about it afterwards.

So we set to work forthwith. Our great trouble was having to demolish the stand without making a noise, but after much effort we had secured the four long straight legs, had broken away the connecting pieces, and then all we had to do was to drill four holes in each length, so that on the following morning we could place the pieces on each side of the frame and bolt them up. Then I produced the auger, and we set to work to bore the holes. Never in my life have I known wood so hard as that happened to be. I believe it was mahogany, but in any event, after boring two or three holes in one piece we were utterly exhausted; but still we struggled on. In order to make matters easier, Du Cros had the happy idea of putting one piece of wood against the wall, thus being able to get greater power in forcing the auger through. He was delightfully successful, but the trouble was that he drove it through too far, and as the wall was coated with plaster, he succeeded in bringing down half the plaster when he attempted to extract the auger. The noise that plaster made falling was horrible, and it seemed impossible for us not to have awakened the whole hotel. This, however, did not satisfy him, and in endeavouring to show how easy it was on another portion of the wall he succeeded in bringing that down also.

By this time the room was in a terrible condition, everything being upside down, and plaster was strewn all over the floor.

Then I had an original idea, in the execution of which I bored a hole through my arm instead of through the wood, and for the next half-hour we were devising tourniquets and tearing up the bed-linen to make bandages. In fact, there was nothing in the room we did not utilize for something or other.

Having at last succeeded in boring all our holes, we then had to proceed to tidy up the room in case of trouble in the morning. With the aid of a towel we managed to sweep up the debris, and deposited it carefully in the bottom of a bureau. We afterwards moved the bureau to cover the wall,

and the appearance of the room when we had finished was quite respectable; but I hate to think what must have been the expression on the proprietor's face on the following morning when he discovered what had taken place. There was a great rush the next morning, and we had no opportunity of getting hold of him to explain. The only qualms of conscience I ever had in connection with the whole matter were that I had forgotten, and still forget, the name either of the proprietor or the hotel.

The next morning we were faced by another difficulty, namely, how we were to smuggle the table legs out of the hotel. It was dark, of course, and while I do not propose to describe how we managed to do it, I may say we were successful; and we dashed off to the control where the cars were stored, all ready to begin fixing up our car immediately we were allowed in. Of course the repair took time, but this was a minor detail compared with the importance of our finishing at Vienna, or at least getting over the next stage to Salzburg. De Knyff was highly amused when he saw our preparations, and none of the other competitors considered for one moment that we seriously hoped to repair the car and arrive at Salzburg. But we worked on feverishly, and eventually had the satisfaction of seeing the frame stiffening up, and so sound did it appear when we had finished, that there seemed no reason at all why we should not only arrive at Salzburg, but eventually get to Vienna, if the Fates were kind. By this time it was seven o'clock, and nearly everybody else had started.

Mist and dust made passing difficult, but we soon began to work our way through the long line of cars in front of us, having but one idea—to finish at all costs in Vienna.

And then at last the Arlberg loomed in sight, and, knowing the nature of the climb and the road in front of us, we made a hasty examination of the car to make sure that everything was in order. We discovered that our spare lubricating oil had been dropped overboard, and as it was too risky to rely upon the small quantity we had in our tank we had to return fourteen kilometres to the last control and obtain a fresh supply. This part of the journey was hair-

raising. We were meeting cars all the time, and how we escaped colliding, in the dust and fog, I do not understand to this day.

By the time we had procured this fresh supply of oil most of the cars had passed us, and once more I turned round and was off again in hot pursuit.

The Arlberg at last; and we were climbing the first portion of the ascent in magnificent style. Up and up we went, passing other cars at every hundred yards. Then we struck the winding and dangerous portion of the road, and still it went up towards the sky, the road itself being cut on a ledge on the side of the mountain, with a terrible drop on one side and a sheer cliff wall on the other.

The height we eventually reached was sufficient to scare the most intrepid driver, when the character of the road was taken into consideration. We found various cars in all sorts of difficulties. Some with engines overheated; others suffering from mechanical derangements; whilst in two or three instances the drivers seemed to have entirely lost their heads and driven hard into the side of the cliff, the continual effort of keeping away from that awful drop on the road absolutely unnerving them. Then the summit was reached and we began to descend. The "Seventy" had been travelling magnificently, and I was straining every nerve to regain some of the lost time which we had expended in repairing our car and in returning for the lubricating oil. As we rushed down the mountain, corner after corner presented itself, and with hundreds of twists and turns the road gradually led down towards the plain.

The aspect of a number of drivers on the descent was curious. Some were crawling down slowly with the brakes hard on, whilst others had actually stopped to rest. Then, swinging round a corner, I came upon a driver sitting in his car, which was motionless, with his head buried in his hands. A few yards farther on I noticed a coat and a bag of tools lying in the road, but this conveyed nothing to my mind, and the matter was forgotten almost as soon as we had passed. What had actually happened was that Max, a driver of a Darracq car, had gone clean over the precipice, and the sight

had so unnerved the driver of the car following that he was rendered helpless and unable to proceed another yard. The extraordinary part of the story was that Max was not killed. As the car leaped over the edge, the mechanician had been thrown out on to the road, and Max was also thrown out of the car after it had disappeared over the edge, and landed on a ledge some distance down, while the car was dashed to pieces in the depths below. It was said of Max that after he had been rescued the only observation he had to make was that it was just like his luck; apparently unable to appreciate his good fortune in having escaped with his life, and merely miserable because his car was hopelessly wrecked.

All this, of course, we did not see, and nothing checked our course down the mountain until we came upon a blue Panhard, similar to our own, deserted by the side of the road, and we immediately recognized it as the car belonging to De Knyff, who had obviously abandoned the race. The full significance of this did not strike us until we reached the bottom of the mountain and met De Knyff and Aristides walking into the nearest village. I immediately stopped and inquired what had happened, and he explained to me that the differential on his car had gone, and the last hope of France retaining the Gordon-Bennett Cup was lost. Only twenty kilometres from the finish at Innsbruck, hours ahead, but at the very last moment he had failed.

De Knyff expressed surprise at seeing me, as he had had information that I had smashed up *en route* and had been killed. But I assured him that I was very much alive and in good fighting form, and that my car was going to get to Vienna if the repairs we had executed that morning would only stand. Then we were off again, hoping to catch Edge, who was some little distance in front, and advise him of his good fortune. We had made up a considerable amount of time in the ascent and descent of the mountain, and though we were not in the first flight we were well up amongst the other cars.

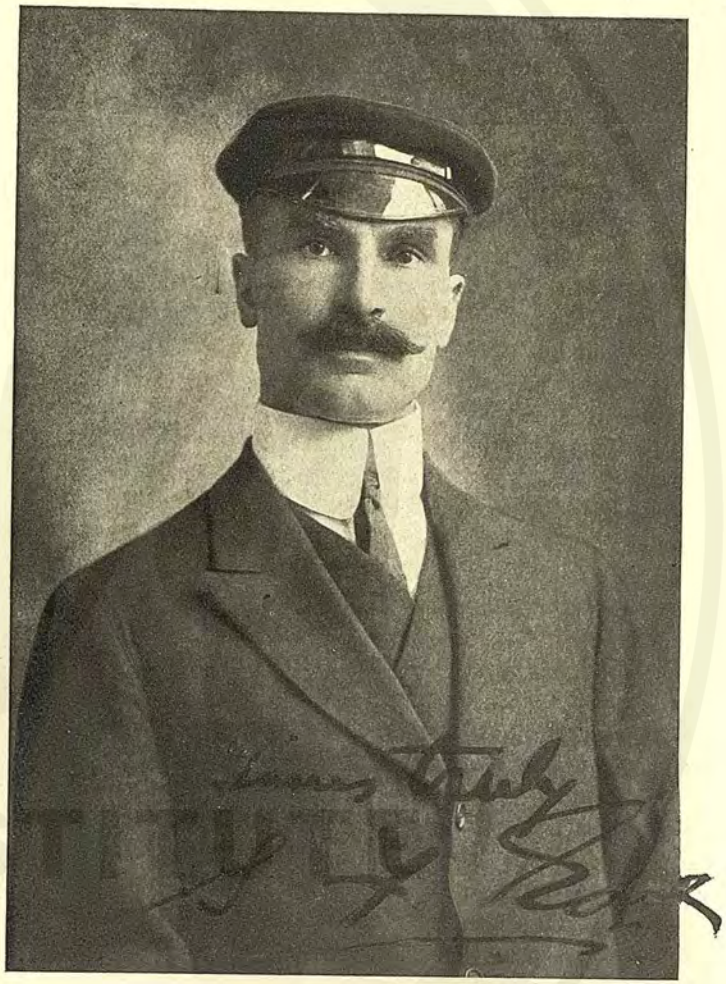
Coming down a long hill at top speed we discovered a railway crossing with closed gates and four cars held up,

waiting to get through. One of these turned out to be Edge's, and we had the pleasure of informing him that he had but to finish in Innsbruck, fifteen kilometres away, to be declared the winner of the Gordon-Bennett Cup. He appeared to have had some hair-raising experiences; had run off the road into a field, and had a narrow escape of smashing his car up altogether. He had also suffered many tyre troubles; and Cecil Edge had performed great feats of valour in capturing petrol, lubricating oil, and spare inner tubes from various depots belonging to other firms, on the road, the attendants not realizing at first that the car they were assisting was an English one, and making desperate attempts to regain what they had handed over when they discovered their mistake. I remember, just before the level-crossing was opened, telling Edge to run no possible risk over the next fifteen kilometres, but to take it gently. His method of doing this was to shoot off immediately the gates were opened, take the first corner at top speed, and, as it appeared to us, have an extraordinary escape from capsizing. However, we were after him and eventually passed him, again going very well.

Then once more we punctured, and had a further delay before getting into Innsbruck. There we again found Edge, radiant and joyful at having successfully completed the Gordon-Bennett course, and consequently having won the Cup for England.

Innsbruck, however, meant to us but another stage in the long struggle to Vienna. We were by then in sorry straits. The malformation of the frame of our car had been attended with disastrous effects upon our gear, and we were all the time adjusting or readjusting various parts of the car, as occasion required. The stop in Innsbruck enabled us to have our tyres put right, and then on we went towards Salzburg.

The struggles of a race and the work attendant upon the driving and management of a racing car are not conducive to a smart and tidy appearance, and although I have in various races looked somewhat disreputable, I do not think that I ever presented a more ruffianly appearance than



S. F. EDGE

during the Paris-Vienna race. Du Cros was very little better; in fact, I think he looked even dirtier than myself. Hence, when stopped at a control some little distance from Innsbruck, we were addressed by some English girls who were at the control witnessing the arrival of the cars, clad in immaculate white linen, we were overwhelmed with confusion, and would have given almost anything to have denied our nationality. They were sympathetic, however, and realized that iced claret would appeal to us more strongly than any mere words of encouragement—an opinion with which, needless to say, we were in full accord. I was amused, however, when one of these young ladies asked me whether there were any ladies taking part in the race. I replied that it was "not a lady's game, and that, as a matter of fact, I had come to the conclusion that it was more suitable for English navvies than for any other section of the community of which I had any knowledge." That is exactly how the Paris-Vienna race appeared to both Du Cros and myself. It was undoubtedly sporting, but for sheer hard work I think those four days (which we occupied in getting from Paris to Vienna) were the worst I have ever experienced either before or since.

Our difficulties with the car grew more serious every minute; and then once more we heard the ominous hiss of escaping air and realized that one of our tyres had punctured again. We congratulated ourselves that it had happened in a charming spot, with a beautiful clear stream running by the side of the road in the shade of great leafy trees, and as we pulled up out of the sun we were almost pleased that the puncture had occurred under such favourable conditions.

Little did we know what would happen before we had that tyre repaired. We soon discovered that we had stopped in the very midst of a vast colony of long-bodied, many-coloured dragon-flies, and as we got down to dismount the tyre we were surrounded by these fearful insects, which were nearly two inches in length, and seemed to take it in turns to dart upon us, and every time a huge swelling would result, attended by the most excruciating pain. The agony we endured I shall never forget; and at last, driven to distraction,

I dashed to the edge of the brook and held my head under water to obtain some relief. Our appearance by the time we started again was deplorable; we were almost unrecognizable from the effect of the bites.

Still, our determination to get to Vienna was as strong as ever, and we went plodding on again. During these various stoppages we had, of course, been passed and had repassed a considerable number of cars. My driving was not of a particularly careful or cautious character. When we were going we had to go fast, to make up for the stoppages. There could be no waiting behind any cars in front; we simply had to get by, without a moment's delay. The result was that to the drivers of the smaller cars, who were wandering about from one side of the road to the other (not being clear whether they were driving according to the rule of the road existent in Austria, or to the rule of the road of France), we were something to be feared; and after we had passed the same cars two or three times we generally found they were on the look out for us, and made way very quickly.

A funny incident occurred in connection with the passing of a voiturette which had as driver and sole occupant a big, bearded Frenchman, who seemed incongruously out of place on such a small machine. We had had some trouble in passing him previously, and I had consequently had to cut matters very fine in getting by. One of our stoppages had allowed him to pass again, and once more we approached him from the rear. Suddenly he turned and saw the "Seventy" bearing down upon him once again. In his fright he gave the steering-wheel of his little car a sharp twist and shot clean off the road into a hay-field, being almost hidden by the long grass before he pulled up. He got out of his trouble, and arrived in the next control before we left. He explained the presence of hay on the front of his car by jokingly remarking that he had been studying agriculture *en route*. But, as he told me, he thought when he saw our car coming behind him we should require the whole width of the road to get by, and consequently, not wishing to inconvenience us, he had effaced himself.

Salzburg was at last in sight, and never has any town

appeared more charming, and never has the flag at an arrival control been more welcome than the one at the entrance to that city.

It was a gala-day for the town, which was bedecked with flags and flowers, the inhabitants and a large crowd of visitors welcoming the cars as they arrived with the greatest enthusiasm. I am afraid that we missed most of it, for the reason that we were, over that particular stage, more than three hours late, and most of the cars had arrived in front of us.

We created some commotion on our arrival, however, as the news that I had been killed had reached Salzburg, and I had the pleasure of receiving the congratulations of nearly everybody at what they termed my "miraculous escape." What I had escaped from I did not know, but "The Times" correspondent had his telegrams completed announcing my fate, and it was only through my arrival in the nick of time that the news was not sent through to London.

The race up to then had been between Henry Farman, Count Zborowski, Maurice Farman, and Baron de Forest, who had driven magnificently and had done the fastest time on that day, accomplishing the full distance of 369 kilometres in 5 hrs. 23 mins. Henry Farman, however, was leading on time over the full distance, with Marcel Renault making a very fine showing in the light car class.

The sole topic of conversation that evening was the failure of De Knyff, and the fact that France had lost the Gordon-Bennett Cup. The Frenchmen, however, did not at that time attach very much importance to the holding of it —or at least they professed not to do so—and I do not think that any of us realized then the immense effect the winning of that Cup would have upon the automobile industry, both at home and abroad. Had the winning of the Gordon-Bennett Cup meant as much then as it meant in later years, the race would never have been undertaken by France in the same indifferent manner as was the case in 1902.

We had, in spite of the prophecies to the contrary, finished another stage, and there now lay between us and the goal of

Vienna, 343 kilometres. There was nothing further that we could do to our car, and it was in the knowledge that our struggle on the following day would be a hard one that we retired to rest that night. I think both of us had had quite enough of the race, and had it not been for the fact that we had announced that by some means or other we would bring our car to Vienna, I am certain we should have given up, and finished the race so far as we were concerned, at Bregenz. We had no chance of winning, and the mere fact of arriving in Vienna hardly seemed sufficient recompense for the hard labour we should have to expend on the following day to get there.

Five o'clock in the morning, and once again the same anxious crowd of mechanicians and drivers were congregated about the gates of the closed park where the cars were stored. As they were dispatched one after another, we realized how much we had dropped behind, and it seemed that our time to start would never come. Eventually we were admitted, and then a desperate struggle ensued between ourselves and the motor, which would not start. Reduced to exhaustion, we were finally taken in hand by the customary squad of soldiers and pushed on to the road, when suddenly in the last few yards the engine started up, and we were away once again.

I will not attempt to describe the various mechanical troubles which we experienced. One thing after another kept going wrong. Then a leak developed in our radiator, which necessitated filling up with water every few miles.

I believe one of the rules of the race was to the effect that no mechanical repairs should be effected in any of the controls. I very quickly learned that this rule had been made merely to be broken, and followed the example of everybody else, making use of any time which we were kept waiting in any of the towns in the most effective manner possible. On no occasion was any attempt made by the control officials to enforce this rule, except at one little village in Austria. Here the officials, wearing red sashes to

denote the importance of their positions, had evidently learned the regulations by heart, and were determined to enforce them. Hence when we arrived at the control and proceeded to open the bonnet and change one of our sparking plugs, an excitable old gentleman rushed up and poured out a torrent of expostulation, not a word of which we could understand. Du Cros, on this occasion, was doing the work, and the troubles and trials we had gone through had reduced his patience to the finishing-point. His only reply to the worthy official with the red sash was to wave a vicious-looking spanner in his face, accompanied with a warning, in very forcible language, to get away from the car. At this another official rushed to the aid of his friend, but both were defeated ignominiously by Du Cros and his spanner. Force of arms had evidently to be met with force of arms, and the next thing we realized was the appearance of a beautifully clad soldier, dressed in a shining helmet, a blue coat, and white ducks, carrying a gun with a fixed bayonet, shouting to us in stentorian tones and making ready to clear us away from the car. I talked to him soothingly, but apparently the more I talked the more angry he became, and matters began to look very serious, when Du Cros, who had been getting things out from the back of the car, arrived with a long engineer's oil-can, and proceeded to continue the conversation with the now infuriated soldier. I had never believed that Du Cros had such a beautiful command of the English language, and I was moved to admiration at the splendid manner in which he was emphasizing every remark with a swinging gesture of the hand in which he held the oil-can. I only realized a second sooner than the infantryman that every time he waved the oil-can he projected a stream of lubricating oil over the immaculate white ducks and the blue uniform coat. I shall never forget the mingled look of horror and disgust which came over the face of that soldier when he surveyed the result of the argument, and the alacrity with which he rushed out of range. As for myself, I had by this time climbed into the driving-seat, and was convulsed with laughter. Du Cros, however, was very serious, and threatened all and sundry within reach that he

would serve them in like manner if they came near the car. Then, the time when we ought to have started away having elapsed some minutes before, he jumped up into the car, and we were off once more.

I think it was on this day that we struck the "donkey backs" on the Austrian roads. The roads were cut in a series of steps, and before the car had recovered from the shock of leaping down one of these steps or drops in the road, another would be encountered. From a driving point of view, it was one of the most painful experiences I have ever had. It was impossible to travel at any speed, and the terrific strain thrown on our car completed its wreck. The leak in the radiator had become worse, and the only way we could get it to hold water at all was by wrapping a towel round one of the pipes, and Du Cros lying at full length along the bonnet, holding the water in.

Then we arrived at the last control but one. The car was getting worse and worse at every mile, but we hoped that we should yet be able to get to Vienna. At this control a number of the Panhard-Levassor workmen were stationed, but although they made an attempt to patch up our leaking radiator, their work was nullified immediately after we started.

Then, almost within sight of our goal, crossing over a bridge into the city, with a mighty crash the grand catastrophe happened. The distortion of the frame had at last broken our gear-box, and huge pieces of aluminium fell out into the road. I could not disconnect the clutch, and the car stopped with a jerk. Five kilometres away from the finish, and unable to go another yard! As I investigated the damage beneath the car I was enraged to think that all the struggling we had gone through was to result in our being stranded so near to the finish. There was but one hope—perhaps if I could get one of the Panhard workmen along he could suggest a means whereby the car could be made to travel those last five kilometres; otherwise it was hopeless.

The sun was pouring down and the heat was terrible. The question was as to how I could let the Panhard men in the last control know what had happened. There was but

one way of doing this, and taking away from the cyclist patrol, who was leading us into the city, the bicycle which he was riding, I took off my coat and proceeded to ride the five kilometres back to the last control, over the vile *pavé* of which the road was composed. Du Cros took charge of the car, around which a great crowd had assembled, and as I toiled back I was continually turning over in my mind the problem as to what could be done in order to get our car on to the racecourse, where the finish had been fixed. I had been tired before, but those five kilometres seemed interminable. At last I arrived at the control, but not a man could I get. When I explained what had happened, I obtained but a shrug of the shoulders and the information that I had better resign myself to fate, as nothing could be done; and that I had better leave the car at the nearest place and make my way into Vienna the best way I could. So I started back once more, hopeless and despondent. In my tired condition I could not be expected to ride a strange bicycle in a very expert manner, and the next thing that happened was that I ran into and bowled over a burly gendarme, who arrested me on the spot. What he must have thought of the wild-looking dirty individual who had run him down I cannot imagine. Without a cap (I had lost it some time before), without a coat, and with a grimed and dirty face, there could be no question but that I was the driver of one of the racing cars, and the welcome offices of a bystander who understood English straightened matters out for me, and the policeman's manner immediately changed; I was released from custody, assisted on to my machine, and sent off.

And then, as I bumped about on the *pavé*, a scheme came to me whereby I could drive the car and finish the race. It was a risky experiment and it would be risky driving, but the attempt was worth making. I sprinted over the remaining distance with renewed hope, and arrived back once more, to find that Du Cros had in the meantime been energetic, had engaged a cab, secured a rope and tied the car behind the cab, which he had loaded up with our coats and mackintoshes, etc. He himself had apparently been

well looked after in the way of refreshments, and, as he joyfully explained to me, we were going to finish with the car, even though it was behind a cab! I did not trouble to explain my scheme even to him, but pushed the crowd away, told the cabman to get out of the road, cut the rope, and jumped up into the driving-seat. The great trouble was that I could not take the clutch out, and consequently after starting up the engine, could not get in the gear. We got the engine started, and then I called out to the crowd to push, and immediately the car was taken possession of and was being run down the road. With a yell to Du Cros to jump up, I managed to force in the first speed, and the car shot off; and once more we were cutting down the distance to the finish.

Immediately after this our exhaust-box (which had been hanging by some thin wire) broke away, and as we dared not stop, we left it on the road; and now our condition was worse than ever. The engine was belching forth smoke and flame straight on to the road, blowing up a pillar of dust which must have been seen a very long way off, and smothering us to extinction.

Turning a corner, a cyclist almost brought us to grief, as it was impossible for me to stop the car except by switching off the engine, and once more we had the struggle of starting with the aid of a crowd.

At last, however, we arrived at the entrance to the race-course, and away on the other side we could see the finishing-point.

I do not suppose that any car finishing in that race caused anything like the commotion and sensation that ours did, creeping slowly along, with the dust ascending in a vast cloud, and the open exhaust sounding like the crackling of many quick-firing guns. Coatless and hatless, we with the car must have presented a picture typical of a real derelict. The vast crowd assembled to see the finish had departed by the time we arrived, and although we had nothing to grumble at in the cordiality of our welcome, nevertheless, the winner having finished some hours before, the enthusiasm had somewhat abated.

Immediately after I passed the finishing-point, my engine stopped once more, and when one of the officials came up and asked me if I would drive my car into the great hall where all the cars were placed on exhibition, I had to inform him that, much as I desired to comply with his request, I was absolutely unable to do so, as my car would not move another yard.

When the times were eventually published it turned out that we had finished twelfth in our class, but this was due chiefly to the excellent time we made on the first day.

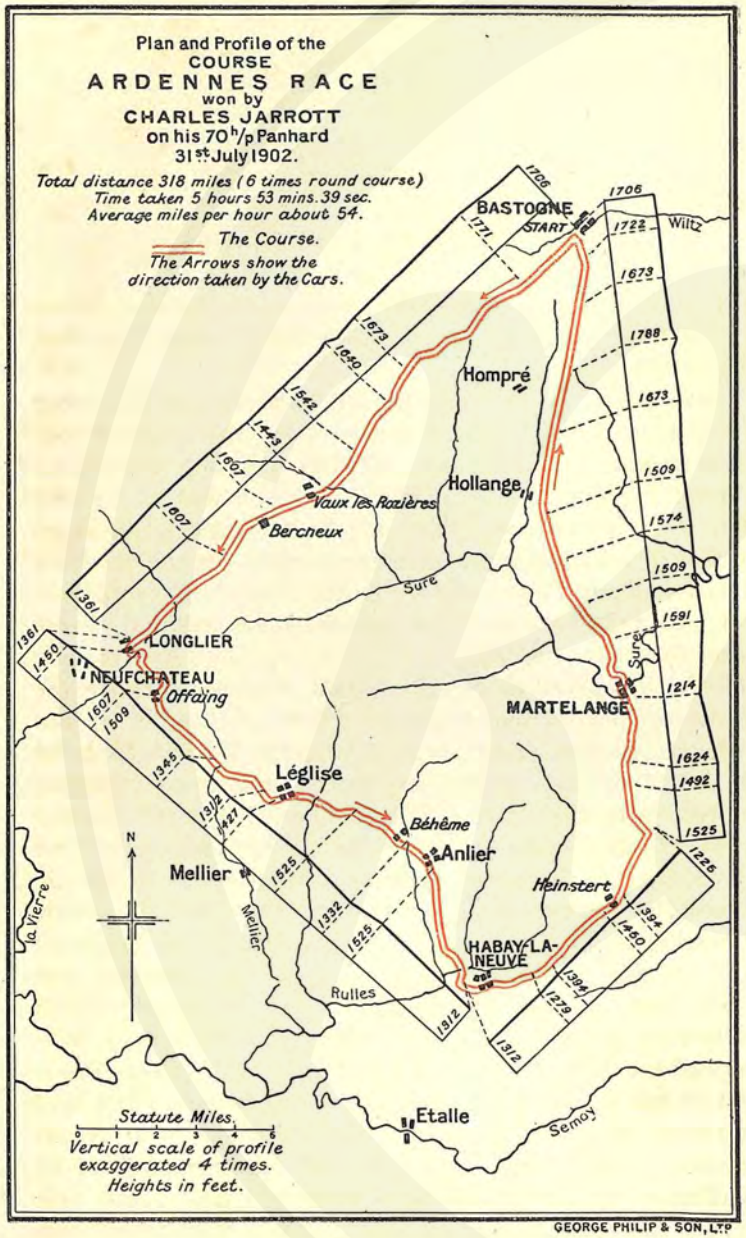
The next thing to do was to get to the hotel where we had booked rooms, to find baths and clean clothes. But here we met with a difficulty, as no cabman would allow us to get into his vehicle. The smart two-horsed victorias used as the common method of conveyance in Vienna during the summer, so smartly upholstered in fawn cloth, were altogether too fine for such disreputable creatures as ourselves, and it was only by offering much money, and agreeing to have horse-blankets laid on the cushions of the carriage, that we were permitted to get into one.

As may be imagined, I was almost dead with fatigue; but I think of the two Du Cros was worse than myself, and when we reached our rooms he flung himself full length on the floor, and his instructions to our two attendants who had travelled with our baggage were to remove the remainder of his clothes he was then wearing, and to take them away and never let him see them again. He said that so far as he was concerned, motor-racing might be very excellent sport, but Paris-Vienna had given him his fill. I do not want it to be supposed from this that Du Cros was not a sportsman. It may be sporting to drive a racing car, and even when troubles present themselves there is a certain amount of satisfaction in arriving at the other end of the journey, having successfully finished. But for the mechanician, whether he be amateur or professional, it seems to me a somewhat poor game. Achieving none of the glory, trusting his life in the hands of the other man all the time, doing most of the hard work and getting most of the grumbles, a mechanician's lot on a racing car is certainly not a happy one.

I think both of us were compensated in some measure by the warm congratulations we received from the rest of the drivers, and the members of the Panhard firm. No one had expected us to leave Bregenz on the second day; our arrival in Salzburg was considered extraordinary; and the possibility of our eventually reaching Vienna with a car in such a crippled condition had not occurred to anybody. It was the carrying out of the same old dictum: "Win if you can, but finish at all costs," which helped us to get through.

The winner of that race was eventually announced as Henry Farman, who was timed to have covered the full distance of 1120 kilometres in 16 hrs. 25 mins. But in the opinion of many the race should have been given to Count Zborowski (who was timed to have completed the distance in 16 hrs. 56 mins.), as he was held up for some considerable time on one of the frontiers through irregularity in connection with his papers. The fastest time was actually accomplished by Marcel Renault—15 hrs. 46 mins. But as he was driving one of the light cars, although first in general classification, the real racing interest lay between the cars in the heavy class.

Had I attempted to record all the happenings of Paris-Vienna, it would have required a whole book to itself. Never was a race fraught with so many incidents and so many surprises; and never have I struggled harder in any competition. It had all the charm of driving over ground with which none of us were acquainted, and the passing through of towns and the passage over forsaken roads which had up to then hardly ever been traversed by a motor-car. In fact this race had in every degree all those elements which go to make a really great sporting event, and although I cannot record it as being one of my successes, I have always felt that in my very failure I was successful, because for me, after the first day, it developed from being a race into a struggle between the car and myself as to whether we should reach Vienna or not.



IX

THE CIRCUIT DES ARDENNES

IT is a curious fact that my most successful win on the Continent was in a race in which I had, when I started, very little interest.

I was sitting in the Hôtel Bristol in Vienna, at the finish of the Paris-Vienna race, and bemoaning the wrecked condition of my car and the impossibility of having it ready for a speed kilometre race at Welbeck which was to be held some three weeks hence, the Panhard firm having informed me that it would be impossible for them to get the car back to Paris and put it into order within the time. M. Pinson, however, one of the keenest of the Panhard team, evidently knew more about the capabilities of the firm than I did myself, and after inquiring the date on which I wished to have the car, he suggested that I should run it in the Circuit des Ardennes, a race being organized by the Belgian Club for the first time over a circular course in Belgium, without controls or neutralizations. He explained that if I elected to enter for this event, no doubt the Panhard firm would get my car back to Paris, and make special efforts to enable me to have it for the race, and I could then take part, afterwards proceeding to England in time for the meeting at Welbeck. I did not feel particularly keen about this Belgian race, but it was obvious that entering in it was the only possible method of getting my car put right quickly; so I telegraphed my entry that evening to Baron de Crawhez, President of the Sporting Commission of the Belgian Club, and afterwards informed De Knyff, who immediately gave instructions that if I was driving in that event my car had to be returned to Paris without a moment's delay, and prepared. He explained to me that the firm themselves were

not officially entering for the event, and that only four or five Panhard cars were taking part, driven by their owners. I had, however, achieved my object.

Three days before the event I presented myself at the Avenue d'Ivry for my car, accompanied on this occasion by A. McCormack, who was then the manager of the Panhard and Levassor repair works in London. George Du Cros had decided, after our desperate finish into Vienna, that acting as an amateur mechanician on a racing-car was very poor sport and very hard work—an opinion with which I entirely agree, as very little glory comes to the second man on a racing-car, whether the car wins or not, and he has more than his share of the hard work to perform. McCormack, however, had never been in a race and was anxious for the experience, which, by the way, cured him once and for all.

The "70" was beautifully spick and span. The broken frame had been replaced, a new gear-box fitted, and every part of the car was *au point;* and we started off by road for the little village of Bastogne, away up among the pines of the Belgian Ardennes.

I may here explain that the race was an experiment, as nothing of the same nature had been held before. A 53½-mile course, almost triangular in shape, had been mapped out over roads of an ideally perfect surface on two sides of the triangle, but broken up as to the other part of the course by stretches of very winding road with a very bad surface, part of it running between dense pine forests. Therefore, while over a portion of the road very high speed could be obtained and maintained, a great amount of care had to be exercised in negotiating the difficult parts. With a circuit of 53½ miles it had been arranged that the race should consist in covering the course six times, making altogether a total of 321 miles. In addition, a touring section had been arranged to run over the same course at the same time as the racing-cars, and as there were over fifty entries of the latter, altogether apart from the very considerable number of touring-cars taking part, and all these vehicles were spread over a 53-mile circuit, it can be imagined that the race looked like

being an exciting affair. It was only when I arrived at Bastogne the day before the race and realized from the nature of the roads and the number of the competitors that the race would offer a great amount of sport that I began to be interested.

I arrived at Bastogne early in the morning of the day before the race, and as we had a lot of work to do to the car—new tyres and new chains had to be fitted and the many other little things attended to which are always necessary before starting out on a big road race—I did not bother about anything in the nature of rooms or hotel accommodation, as De Crawhez had previously written to inform me that he had reserved rooms for me in a private house in the village. I therefore pulled up my car in the middle of the village street, and there being no shed or other accommodation available, we started to work there and then and toiled all day until the evening. Then, having finished, the next problem was as to where I should put the car that night; and in this difficulty I met De Knyff and M. Clément. They were not racing, but they immediately joined me in trying to find in the village accommodation for my car. Eventually we found a little carpenter's shed lumbered up with wood, benches, and tools, which had to be cleared away before I could get the car in. It was then getting late, and if the car was going to be housed we had to do it ourselves; so the four of us set to work, cleared out the shop, and squeezed in the car.

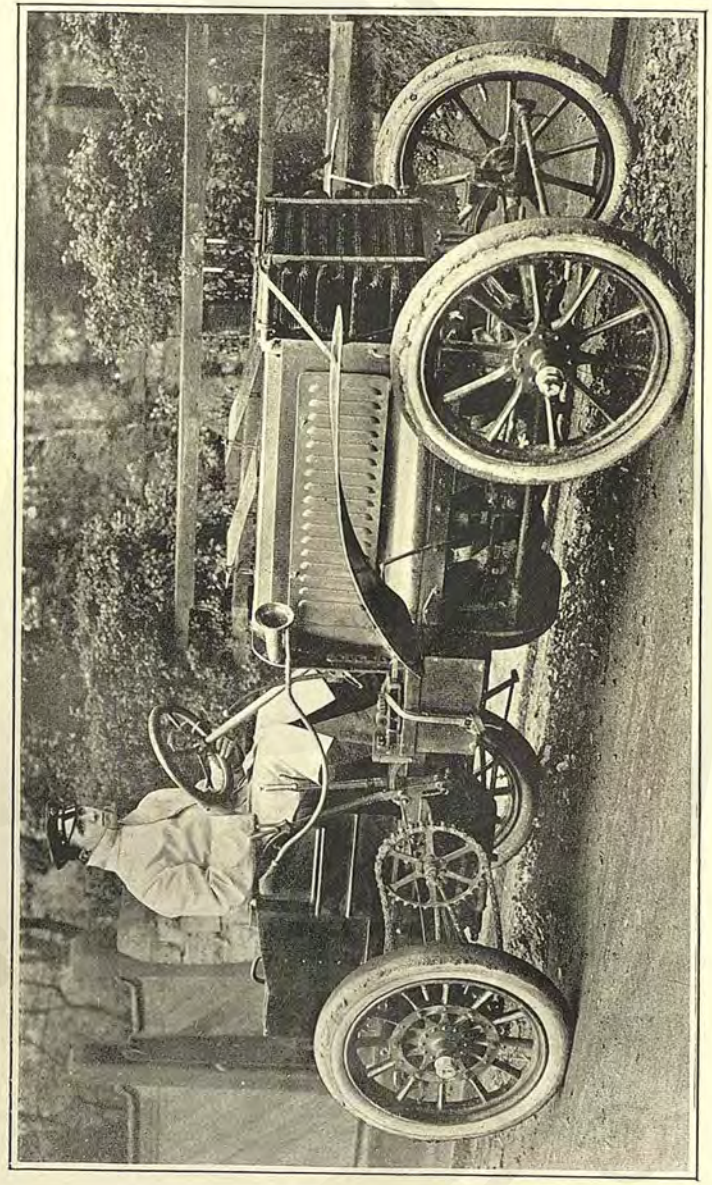
While walking down the road with De Knyff and Clément prior to discovering this shed we had an exciting experience. De Knyff and I had, of course, driven in the Paris-Vienna race the big 70 h.p. Panhards which were the racing-cars of the year, but neither of us had ever seen as a spectator one of these cars on the road travelling at top speed. Suddenly in the distance a little speck appeared and a sound like the droning of a bee could be heard. This sound became more and more distinct as the speck approached us, leaving behind a fan-like tail of dust. It was George Heath on his 70 h.p. Panhard just returning from a final run round the course, and we crouched into the hedge as the bounding, swaying monster came on to us; and I shall never forget my sensation as,

with an appalling crash, he shot by, leaving us enveloped in the huge dust-cloud. We got out of the ditch and gazed at one another. Even De Knyff never seemed to have realized how fast these cars were capable of travelling, and it certainly was a startling revelation to me. When we were talking to Heath about it afterwards, he explained that at that particular point he was just slowing up.

After housing the car McCormack and I went up into the village to secure our rooms, very tired and very hungry; and we received a severe shock when we were informed by the good lady of the house that owing to our not having presented ourselves earlier, the rooms had been given to some one else.

There existed in the village one tiny hotel, the Hôtel Collin, which had been filled up a week before, and I knew it was no good going back there, as we had just passed it on our way to the lodgings that should have been ours. The yard of the hotel presented a weird sight. Apparently everything in the place had been eaten up; and quite a number seemed to have made up their minds to accept the inevitable and give up the idea of going to bed at all. It was certainly quaint to see such lights in the automobile world as Clément, De Knyff, De Caters, and De Crawhez seated around ordinary packing boxes in the hotel yard (which was practically a stable yard), endeavouring to eat their dinner—and a very rough dinner too—by the light of many tallow candles.

Every private house had also been requisitioned to accommodate the big influx of competitors, officials, and visitors, and I had no friend to whom I could turn for assistance. McCormack was almost heart-broken at the idea that we should in all probability have to spend a night out in the open. I suggested that at the worst we should merely have to sit up and thereby lose a certain amount of sleep. This suggestion also affected him considerably, and he could not conceive it possible that we should be able to start in a big race on the following morning, having had no sleep the previous night. However, it was an experience that I had become accustomed to in the past, so I did not feel very much concerned at the prospect.



70 H.P. PANHARD, WINNER OF CIRCUIT DES ARDENNES RACE, 1902

I perched myself on my bag in the middle of the street and surveyed the situation, McCormack in the meantime walking up and down disconsolately and attempting quite ineffectually—owing to his very imperfect French—to obtain some assistance from the passing villagers. While I was sitting there, a man came up and spoke to me, and I did my best to make him understand what our trouble was. He appeared to understand me, but I certainly could not understand him. Perhaps this was due to my French being so good and his very bad; but somehow I have an idea that this was not quite the case. In the end I came to the conclusion that he was inviting me to accompany him, and wondering what might be in store, we set off together, McCormack bringing up the rear and asking all the time where we were going, and expressing the greatest surprise when I told him I didn't know and didn't care. The end of it was, however, that our worthy friend took us to his own home, gave us rooms and a most excellent meal; and calling us at 3.30 on the following morning, had ready the best meal of which I have ever partaken before the start of a race. This hospitality I have experienced on several occasions in Belgium, and never were any benighted travellers more grateful for food and accommodation than we weary mortals were on that night before the race started.

Half-past four, and we had our car out and took up our position—No. 32.

While sitting on my car, I discovered with pleasure a friend among the spectators in the shape of an English newspaper correspondent, who asked me the inevitable question as to how I felt. I had to confess that instead of, as usual at the start of a race, feeling very keen, my feeling was more of boredom than anything else, as for some reason this race did not appeal to me. I could imagine the sixty odd cars traversing that small fifty-six mile circuit, and the prospect of sitting in dust for over three hundred miles was not exhilarating. At one minute past five, Baron Pierre de Crawhez, the organizer of the event, as president

of the Sporting Committee of the Belgian Club, was sent off. He was back in 54½ minutes, having completed the first round of 53½ miles in that time. He had, of course, a clear course, and knowing the road like a book had made full use of his knowledge. He was driving the 70 h.p. Panhard previously driven by De Knyff in the Paris-Vienna race and accompanied by De Knyff's mechanician. At two-minute intervals the rest of the cars were started, without any attempt at classification, some being tourist cars carrying four persons, racing voiturettes carrying one only, then two or three racers, and then a light car.

Our number being 32 we were sent off at 5.32. Although the circuit was only fifty-three miles in extent, I had been unable to find time to take the opportunity of going over the route, and I therefore started off ignorant of what was in front of me, not knowing where the turns were, how far they were off, or what the road was like. One of the first things I came upon, almost immediately after the start, was Jenatzy's broken car, smashed into ten thousand pieces. It appeared almost impossible that any one could have escaped from such a wreck alive.

Then I began to pass cars which had started in front of me, and I immediately realized the appalling task it would be to complete the full course. Having once started, all my lethargy had disappeared and I was cramming on speed, intent upon one idea, namely, to overhaul every car in front of me. The worst task was the passing of the touring cars. They were undoubtedly driven by sportsmen and contained sportsmen as passengers, who were out for a good time first and a race next. It was rather exasperating when behind a car of this type, having swallowed a considerable quantity of dust, to discover them so intent upon drinking big, burly bottles of champagne, that they were oblivious of everything else, and the fact that a driver of a huge racing car was making desperate efforts to attract their attention to enable him to get by never entered their heads. We kept overhauling car after car, and having completed the first round, which took us exactly 58½ minutes, we began to catch up the other cars which had started behind us on the first round,

GABRIEL ON 100 H.P. DE DIETRICH

W. K. VANDERBILT, JUN.

and the passing became very frequent and the dust worse than ever.

Many of the cars were having trouble, and some of the "cracks" had already retired, having either given up or smashed up. De Crawhez in passing another car on his second round cut out the spokes of one of his steering wheels and came down with a terrific crash, both he and his mechanician having a miraculous escape. Charron collided with another car, and De Caters, driving in my dust after I had passed him, ran into a brick wall and retired. We were still travelling grandly, covering our second circuit in 57 minutes 5 seconds. Then I caught W. K. Vanderbilt, jun., who was driving one of the Mors cars and travelling in splendid style. He was on his third round, and, do what I would, I could not pass him. I do not know how many miles the two cars were together. On many of the corners they almost interlocked, as again and again I attempted to pass and could not manage it. It seemed to me that there was hardly any difference in the speed of the cars, and we travelled together a very great distance before I eventually, on a very sharp corner, managed to get by, and then went on to overhaul the next car.

I have already referred to the dust. The clearest impression I have in connection with this race was the anxiety of keeping the car at full speed through the blinding dust-cloud which enveloped the whole course. On the wide open stretches the wind cleared it off the road immediately; but between Haby le Neuve and Longlier, among the pine forests, it hung as a thick stifling pall, worse than a London fog, and at times it was only possible to judge of the direction of the road by watching the tops of the trees. It invariably happened that one came upon a slow-travelling tourist car in the very thickest dust-cloud, probably pulled up to repair tyres. I had numberless escapes in passing these obstructions.

Zborowski was driving finely. Vanderbilt, in spite of the lead I had gained on him, was doing well. But when I stopped for a few minutes to refill my tanks with petrol on the third turn—covered in 59 minutes 52 seconds

—I was informed that Gabriel, on one of the Mors cars, was travelling grandly, and that there were practically only two of us in the race. Then I realized that I had but one man to go for. It appeared that at one period of the race I got within thirty seconds of catching him, and yet did not see him. My car was going magnificently, and had not given a moment's trouble from the very commencement of the race, and as we passed car after car I could not help thinking that it was too good to last. At the corner at Longlier, we executed a perfect manœuvre in turning clean round in the loose dust, a performance I repeated again two turns later.

On the fourth circuit a bottle of champagne, handed up at the sharp turn at Bastogne, had a very reviving effect, and we gained two minutes on the next turn, completing it in 57 minutes 20 seconds. This little incident seemed to amuse the foreign crowd immensely, and marvellous stories were told after the race of the large number of bottles of champagne I had consumed *en route.*

At the end of the fifth turn—60 minutes 32 seconds—I stopped to make sure I had sufficient petrol and water to carry me through, and it was then that I was told Gabriel was sufficiently ahead to make the race an open one, and I knew that my last fifty-three miles would be a stern chase.

The dust by this time was fearful, and as we sped on I wondered if I could ever do it. On and on we went, and yet I could see no signs of Gabriel on the Mors. As time went by I became more anxious; and then, reaching a long open stretch of road, we eventually saw, away in the distance, a little speck which I knew must be Gabriel's car. We gradually but steadily gained on him, and then suddenly we shot into another dust zone between a forest of trees. Sitting in the dust, unable to see a thing, and yet pushing the car at top speed, it seemed incredible that we should come through without accident. There was no question now of slowing at corners or taking things steadily; it was only a question of who was to finish first. Then Gabriel's car loomed up in the dust before us and suddenly slowed down, and I narrowly escaped dashing into it from behind.

THE FINISH

De Caters
Jarrott McCormack

AFTER THE FINISH

THE ARDENNES RACE, 1902

Gabriel had stopped and we were alone, only seven kilometres from the finish, and we thundered down the long hill into Bastogne amidst the greatest excitement. As I approached the finishing point, with my brakes hard on, the first figure I recognized amongst the crowd was that of De Knyff, with his cap flung into the air, the most pleased and excited of all. I had won, in a race lasting five hours and fifty-three minutes for the 321 miles, including two stoppages.

I could understand afterwards the reason of the intense excitement of the crowd. It was known that only a few seconds divided Gabriel and myself on time, and that the car which appeared at the top of the hill first must be the winner. Hence every eye had been fixed on that one little spot on the road where the cars would first come into sight.

It was the hoisting of the Panhard flag once more, in the last big race of the year, and in view of the Panhard defeat in the Paris-Vienna race it was doubly welcome. Never was a victory better received. Frenchmen, Belgians, and Englishmen who had come over to see the race vied with one another in congratulating me on the run; and as I stopped my engine, which had been making merry music for six hours unceasingly, it seemed too good to be true that I had really won a big and important continental race.

Gabriel finished nine minutes later, the cause of his sudden stoppage being a broken chain; whilst Vanderbilt, with whom I had raced for such a long distance, eventually arrived third.

I have often been asked after a race what were my impressions and thoughts during its progress, and this question was put to me in regard to the Circuit des Ardennes. It is almost impossible to give a satisfactory answer. Thousands of incidents are crowded together in such an incredibly short space of time that the mind has hardly appreciated each incident before it is succeeded by the next, and so on. A stone on the road to be avoided; a sudden bend; the passing of a car; an unusual noise in the engine; these are matters of vital

moment when they occur, but almost before one realizes that they are happening they have been forgotten, and the mind is occupied with some other problem, to be in its turn equally soon forgotten. Thus when it was all over I only seemed to realize that a race had taken place, that I had driven in it and had won it, having passed a great number of cars on the road, journeyed through miles of dust, and that through it all the beloved "70" had travelled without a hitch or falter.

No sooner had we finished lunch than we were away again, *en route* for Sedan that night, and then home to England on the following day. It was then that McCormack suddenly discovered that the continual roar of the wind, the hiss and spit of the engine, and the clamour and noise of hurtling through the air, had effectually done their work in depriving him of any sense of hearing. Certainly the jubilation we felt at our victory was in his case spoiled, at any rate for that day, by the realization that possibly he had paid a very dear price for it. However, the next morning saw us once more *en route* for the coast, McCormack happy again in having made a complete recovery during the night.

The performance of the "70" at Welbeck in the speed trials is another story, but I may say that on that occasion she upheld her great reputation.

It was only after the finish of this race that I realized how perfect everything must be before it is possible to actually win. Had I given anything away, or luck been against me, I should have merely been in the position of one of those who finished instead of being the actual winner. The prize offered by the Belgian Club for the winner of this event was a beautifully designed little gold medal, which I treasure among my most valued possessions at the present day.

GEORGE PHILIP & SON, LTD

X

PARIS-MADRID

PARIS-BORDEAUX! The very name conjures up old memories of struggles, grim and fierce, and thrilling fights amongst those whose names are now almost forgotten, but who, on the old Paris-Bordeaux road, struggled in years past for the title of "King of the Road."

It all began in the days before motors were thought of, and when the cycle held its own as the most rapid form of road vehicle. Mills, Holbein, Huret, Lesna, Linton—great riders of their day—struggled hard to win the great road race of the year, Paris to Bordeaux. Later, De Knyff, Charron, Girardot, Farman, Fournier, and others whose names are quite forgotten, fought the same battles over the same long straight stretches. Their course was fleet and the pace was fierce, but it was all on the same old fascinating road, and as a grand finale, Paris to Bordeaux was the first and, as it eventually turned out, the last stage of the last great inter-country race from Paris to Madrid.

What do I remember of that race?

Long avenues of trees, top-heavy with foliage, and gaunt in their very nakedness of trunk; a long, never-ending white ribbon, stretching away to the horizon; the holding of a bullet directed to that spot on the sky-line where earth and heaven met; fleeting glimpses of towns and dense masses of people—mad people, insane and reckless, holding themselves in front of the bullet to be ploughed and cut and maimed to extinction, evading the inevitable at the last moment in frantic haste; overpowering relief, as each mass was passed and each chance of catastrophe escaped; and beyond all, a horrible feeling of being hunted. Hundreds of cars behind, of all sizes and powers, and all of them at my heels, travel-

ling over the same road, perhaps faster than I, and all striving to overtake me, pour dust over me, and leave me behind as they sped on to the distant goal of Bordeaux.

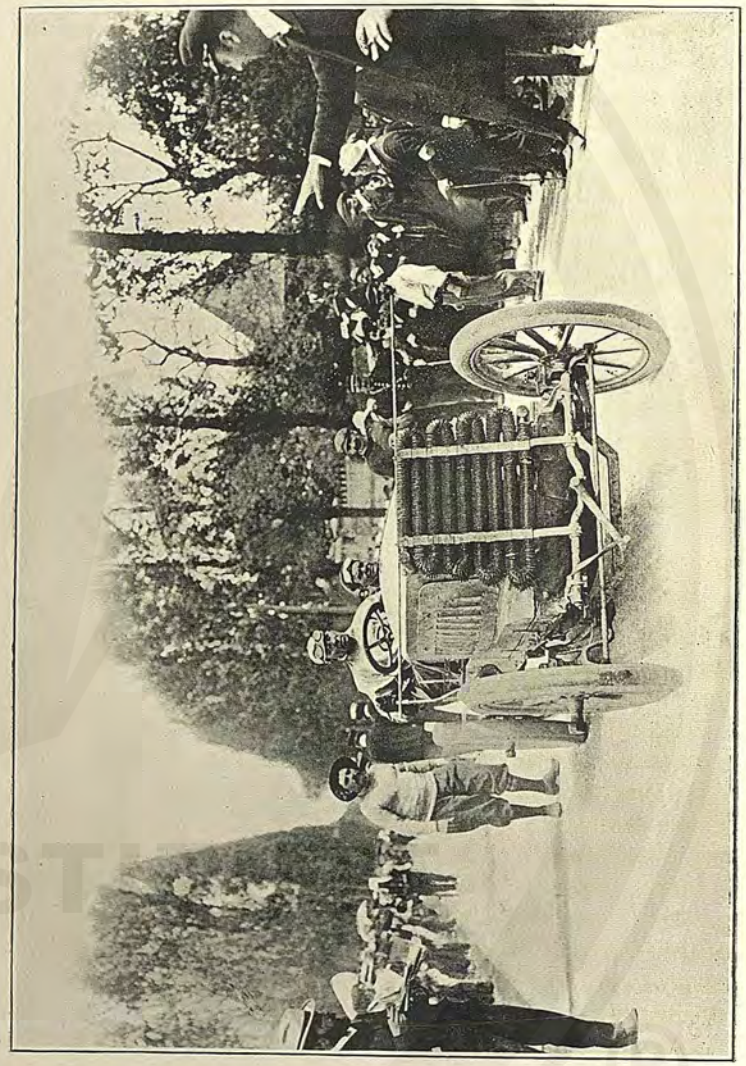
Even at the start, the remembrance of the gigantic line of vehicles at Versailles, all waiting to receive the signal to dash after me, weighed me down, and as we sped on and they came not, the strain became worse and worse. I have sympathy now with the hunted animal, for once in my life I was hunted; and of all the impressions of that wild rush to Bordeaux that awful feeling of being hunted was the most vivid and lasting, and, having experienced it, I do not wonder that No. 1 has seldom won a race.

Then that long lapse at Bordeaux after my arrival, and the ominous rumours which trickled through as the cars began to arrive. Stories of death and fearful accidents, drivers killed and spectators maimed. Then as the confirmation of these rumours came along, the realization that the inevitable had at last happened; that the last chapter had been written of the great sport, and that inter-country races could be held no more; the longing for news of friends in the race; anxiety at their non-arrival; grief at the realization that of the many sufferers, one of my best friends was terribly injured! I live it all over again, and I think it impossible for any one to have gone through in one day more varied sensations than I experienced on that eventful day when we started from Paris to go to Bordeaux.

Hundreds of cars of all sorts, shapes, and sizes. Some unsafe, unsuitable, and impossible. Some driven by men with every qualification as drivers of racing cars; others with drivers having no qualifications—all let loose over that long, broad Bordeaux road to "Get there."

I went back over the road after the race and I marvelled, not that several had been killed, but that so many had escaped. Cars in fragments, cars in fields, some upside down, others with no wheels. The sufferers were not all inexperienced; and two of the old brigade, Marcel Renault and Lorraine Barrow, handled the steering wheel for the last time, drove their last race and paid the extreme penalty.

The "Race to Death!" It need not have been so, but by



CHARLES JARROTT FINISHING AT BORDEAUX. PARIS-MADRID

an unfortunate combination of circumstances the levelling up of the penalties payable for the risk of motor-racing took place in one event. Before and since, what escapes many drivers have had! The same terrible smashes were experienced, but no penalty was exacted.

My old love had been forsaken. For the first time I was discarding the Panhard for the De Dietrich. Since my previous victory in the Circuit des Ardennes I had started my own business in London, and selected the De Dietrich firm as the most progressive of all the French manufacturers. I hoisted their colours and accepted the leading position in their team for the Paris-Madrid race in the year 1903.

De Dietrich et Cie had in the years gone by occupied a prominent position in the French industry, and the racing cars they were building for the Paris-Madrid race were not the first vehicles of the kind made by them. The brains of Turcat and Méry, the well-known French engineers, had, however, been brought to the assistance of the De Dietrich house, and although the racing programme was not new, the cars themselves were of a power and type entirely novel, and I, as driving one of these cars, had to stand or fall by its capabilities and behaviour in the actual race.

Peculiarly enough, the three big cars made by Messrs. De Dietrich for the race were all to be driven by Englishmen —Stead, a sturdy Yorkshireman, acclimatized to France by many years of residence, one of the very oldest of the old racing crowd; Lorraine Barrow, an Englishman resident at Biarritz, and one of the experts of the Continent; and myself. De Dietrich cars of smaller power were being driven by several other drivers, including Madame du Gast, but the real hope of De Dietrich lay in one of the three big cars.

I have already explained that the racing cars were of a new type, and I realized this when for one long, long week before the start I watched my car being built and rebuilt. The first trouble that happened was that through a miscalculation the car was considerably over the 1000 kilos limit. Everything was done to bring the weight down, but unsuccessfully, and at the last moment an engine of con-

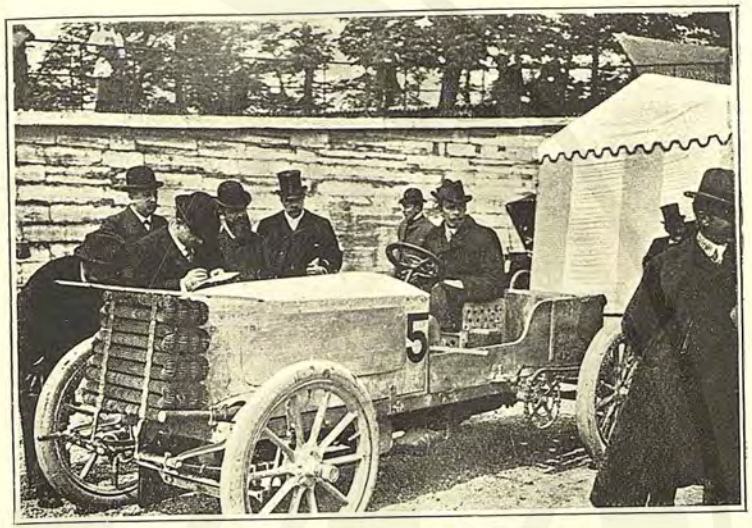
siderably less horse-power had to be fitted. I may say that this new engine had been put through as a safeguard in the event of the car weighing too heavy. The additional advantages obtained here, however, were that much stronger axles and much stronger springs were fitted, as the weight saved through the use of a smaller motor was very considerable, and we decided that in view of the bad roads of Spain it might be a better policy to build the carriage to stand the fearful roads it would have to travel over in Spain, than merely to construct it with a view to speed.

Innumerable troubles presented themselves one after the other, and we almost despaired that the car would be ready in time for the race. As for it being properly tried prior to the start, this was an absolute impossibility. My one great consolation lay in the fact that Stead's and Barrow's machines were giving as much or nearly as much trouble as mine.

Barrow and I lived together, worked together, and waited together during that wretched week in Paris, when it seemed impossible for human hands to overcome the troubles which cropped up at every turn in preparing our cars. However, by a desperate effort the cars were ready in time for the weighing-in preliminaries before the race, and having carried out the requirements in regard to weight by stripping the cars to the very last ounce, we returned to the garage to have them pulled down again and further alterations made.

The lighter-powered cars were all right, and as they left the garage one by one on the day before the start, we three unlucky Englishmen bemoaned our fate and agreed that Madrid would never see us. Then Stead got away with his car, off to Versailles, where we were staying over-night ready for the start in the morning. Then Barrow's car was ready, and he shook hands and said he would keep dinner for me; and I was left disconsolate, realizing that even if my car went at all, I had no chance of doing anything with it, as I had never had it on the road.

Seven o'clock in the evening, and at last all was ready. The slipping clutch, which had been giving all the trouble,



LORRAINE BARROW BEFORE PARIS-MADRID

A FAMILIAR SCENE IN A BIG RACE

had been arranged with a long lever, to which a strap was attached, and I was informed that if I had trouble with my clutch, I was to hang on to the strap and force it to hold. How I was to do this and drive a racing car at eighty miles an hour at the same time, was not explained. However, the mechanics had been working on my car for three nights running, with the keenest possible enthusiasm, and for their sakes I determined at least to start and see how far I could get before disaster overtook me.

So off I dashed to Versailles to food and sleep, and the last preparations for the race on the morrow.

No. 1 was my starting position on the following morning, and as I slipped over the ground out of Paris I thought that an appropriate place for me would have been at the end instead of the beginning of the procession. To my astonishment, however, the car was going well. Untried as it was, I nevertheless quickly realized that it was capable of travelling quite fast; but as for Madrid, why of course it was an impossibility, and this knowledge made my expression very gloomy as I walked into the Hotel des Reservoirs at Versailles on my arrival.

Barrow had been true to his word, and had held up dinner as long as possible. But by the time I arrived he had given it up, and he and Stead had settled down for their last good meal before arrival in Bordeaux on the following day. Then occurred one of those tragical little prophecies which are met with sometimes through that strange law which seems in some manner to give an inkling to mankind of the dark and misty future. The incident is as clearly defined in my memory now as when it occurred. As I approached, Barrow was raising a glass to his lips, and seeing me walking towards him he set it down, and expressed his delight that I had at last got to the start safely, and then, seeing me still lugubrious and unhappy, he slapped me on the back, and again raising his glass exclaimed: "Whatever is the matter with you! Are we not all here? Let us eat, drink, and be merry, for to-morrow we die!"—words spoken in jest, but fulfilled to the bitter end. On the morrow, when it was rumoured that my companions of the previous evening were

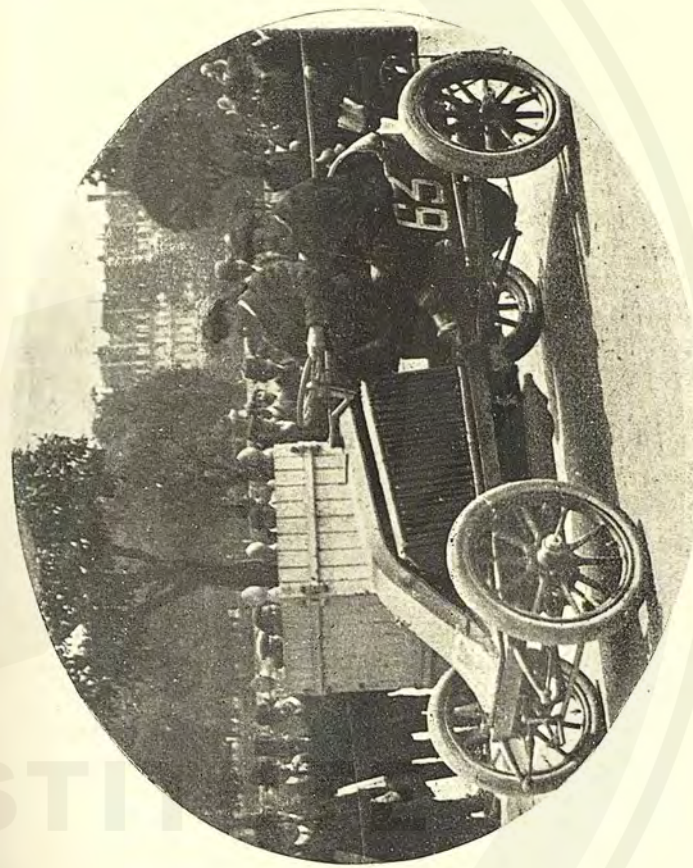
among the dead left on the road, the scene and words came back to me with horrible distinctness.

At two o'clock on the following morning Barrow came into my bedroom and roused me from a very sound slumber. If I had considered that I had a chance at all of doing reasonably well, I should have been willing and eager to be up getting ready. But as it was I was very cross and fractious, when I thought that in all probability the result of my efforts would be that I should hopelessly break down within ten kilometres of the start. However, Barrow had me up, and after a hurried cup of chocolate we were both out in the darkness getting our cars to make our way to the start.

From some inexplicable cause, my car, which had taken an hour to start on the previous evening, started up immediately. Perhaps Bianchi, who was my mechanic and was accompanying me for the first time in a big race, had, during the night, coaxed it into a submissive mood. But, try as we would, Barrow's car would not start. Eventually, with a shake of the hand, I had to leave him to his task, as, being first, I had to be in my position early.

Never did I wish a friend good luck more sincerely than I did Lorraine Barrow on that eventful morning, and never did a wish go more awry. It was the last time I ever saw him, and the memory of that hand-grip in the darkness in the hotel yard at Versailles is one of my few sad recollections in connection with motor-racing.

Picking my way carefully through the thousands of sight-seers in Versailles, I arrived at the Park from which the start was to take place, and got to the front of the long line already formed. The thousands assembled to see the start had availed themselves of every possible point of vantage, and a dense living mass filled the road right through the park. The rising of the curtain on the last great act of road-racing of the old style was dramatic and inspiring, with a vast concourse assembled to witness it, and unhappy as I was when I considered my own chance of winning the race, it was nevertheless a thrilling moment when taking my place, the very first car to start, with hundreds to follow me to Madrid.



MARCEL RENAULT BEFORE PARIS-MADRID

De Knyff was No. 2, and Louis Renault No. 3. Those of us in front decided that it was too dark at 3.30—the time fixed for the start—and so a respite of a further fifteen minutes was granted before dispatching me.

I asked what would happen to the swaying mass of people blocking the road when I started, and the only answer I received was a shrug of the shoulders and a reply that they would clear soon enough when I once got going. The soldiers intended for keeping the course clear were swallowed up in the huge concourse of spectators, and disorder reigned supreme.

Three forty-five at last. On with the switch and away went the motor. A hundred hand-shakes and a mighty roar from the crowd, and I was off. It seemed impossible that my swaying, bounding car could miss the reckless spectators. A wedge-shaped space opened out in the crowd as I approached, and so fine was the calculation made that at times it seemed impossible for the car not to overtake the apex of the human triangle and deal death and destruction. I tried slowing down, but quickly realized that the danger was as great at forty miles an hour as at eighty. It merely meant that the crowd waited a longer time in the road; and the remembrance of those hundreds of cars behind me and the realization that the hunt had commenced made me put on top speed and hope that Providence would be kind to the weak intellects which allowed their possessors to run such risks so callously.

Regarding that portion of the Paris-Bordeaux road to Chartres, I was ignorant. After Chartres I remembered it well, but the first corner after leaving the Park at Versailles nearly led to my undoing. As a matter of instinct, in motor racing, when travelling over a strange road and being in doubt as to the direction, one always took the road on which most people happened to be congregated, and on this occasion, coming to a fork, I decided to take the road to the right, when suddenly, as I arrived at the corner, I perceived the left-hand road was the correct one. Although travelling at eighty miles an hour I perceived that I could just make the turn, and as we swung round we missed the kerb-stone by inches.

I previously mentioned that my engine had had no running on the road, and now as I began to press her she began to clank in an ominous manner. It was obvious that she required very gentle handling, and I slackened down a little while Bianchi slaved at the lubricating pump and poured oil into the base chamber.

My great trouble was with my clutch, which persisted in slipping. I had, however, the long metal lever and strap, and by pulling on to the strap we could do what the clutch spring refused to do, namely, make the clutch hold. Until Bianchi had to start pumping oil, he of course hung on to the strap and prevented the clutch slipping, but he required two hands to pump, and even then it was terribly hard work. Hence, I had to hold on to the strap with one hand and steer with the other. And still we were pegging away on to Rambouillet and Chartres.

It was not unexpected, however, when before Rambouillet was reached, Bianchi by gesticulation told me that De Knyff was just behind. We must have been travelling well in spite of my having reduced speed, for it took him some considerable time before he got by and dropped us. And then Louis Renault came along very fast and was soon away, and immediately afterwards we reached Rambouillet control and found both cars there. De Knyff, however, was in trouble with his ignition, and he being delayed, I followed Renault out of the control. Soon after De Kynff came along again, but stopped immediately, and this was the last time I saw him. Renault was travelling magnificently, but we also were going well, and I had hopes that I should pull back the lead he had gained. I was delighted with the way in which my De Dietrich was behaving. Practically its first trial on the road, and it was running like an old, well-tried car. And then, suddenly, with a sob, the motor stopped. If there was one particular trouble in racing from which I suffered most, it was stoppages in the fuel pipe, and this was the cause of my stoppage on this occasion. As I drew up on the grass at the right-hand side of the road I wondered how many cars would pass me before I got going again. We quickly located the trouble, and started to disconnect the pipe from

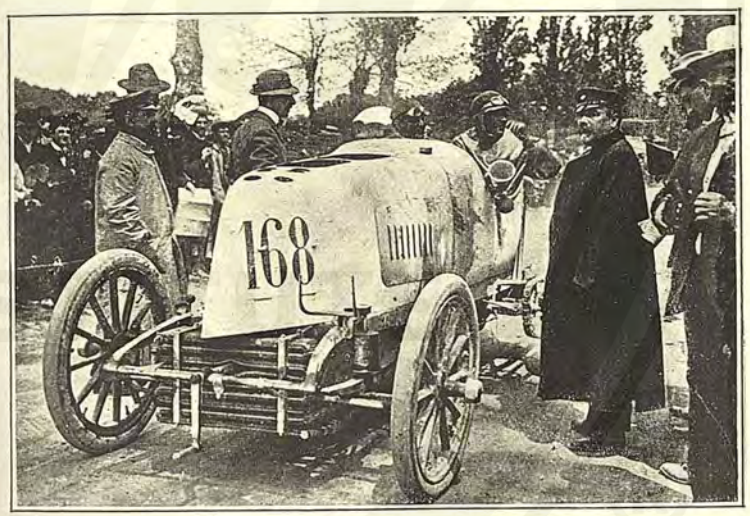
the tank and carburettor to clear it. The sensation I have mentioned of being hunted had overpowered me from the very start, and as we worked away it was almost with a sense of relief that I expected the other cars to come up and thus enable me to join in the chase instead of being chased myself. It was a glorious morning, not then six o'clock, the sun shining and the air so clear and fresh; and after the roar and rush of the wind when the car had been travelling, everything seemed so still. Not a sound could be heard except our own laboured breathing as we toiled on at the car. In vain I listened for the well-known hum in the distance, betokening the approach of another car. It seemed incredible. We appeared to have stopped hours, and yet no cars had overtaken us. Where was De Knyff? Where were the 90 h.p. Mercédès which were to have overwhelmed us at the very start? Where were the big Panhards? Had some terrible catastrophe happened and the road become blocked in some manner or the other? It seemed impossible that we could have travelled at a speed sufficient to have gained so much time on all the rest. And then we finished our work, the motor started up again, Bianchi resumed his pumping, and we were off once again *en route* for Tours. It was almost with a sickening feeling that I realized I was still the goal which the struggling multitude behind were endeavouring to overtake. As a race of sheer enjoyment I only appreciated that portion after Tours. The worries of the engine and the clutch, and the dense masses of people at every town, made the experience anything but pleasurable, keen as I was on the sport. In addition to this, in every control I was by myself. I might have been endeavouring to create a great record entirely alone, instead of being one of hundreds of cars rushing to Bordeaux, for I saw none of them. Louis Renault was in front, but so far in front that he had left each control before I arrived.

And then, just before Tours, Werner on one of the huge Mercédès racers came along, and after a tussle was by, and at last I had company. We had done so well that the fact that no other cars had caught us pleased me beyond measure, and as we trundled through Tours to the outward control,

little Bianchi's face, greasy and oily, was one broad grin of approval; and whether I was having a good time or not, it was perfectly clear that he was glorying in his first experience of a big road-race. Never was any engineer keener over his engines than Bianchi was over any car which I was driving in a race, and even his lack of knowledge of the French language did not prevent him capturing from under the noses of the guardian mechanics on the road—whether they belonged to De Dietrich or not—all and everything necessary for the good running and health of the car. I think his unadulterated enjoyment had something to do with the sheer *abandon* with which I drove the remainder of the race to Bordeaux. On going back over the times I find that all my time was lost over that first half of the journey, and that from Tours on, our times were not touched by any other competitor.

While waiting at the outward control at Tours, another car rolled up, and I was delighted to find that it was Stead on his De Dietrich, starting No. 5. Half-way to Bordeaux, and out of the first four cars two were Dietrich—this seemed a good record for the *marque*. However, for some reason or other, Stead was very gloomy. He grumbled at his car and abused his mechanician for some fault or another in a splendid combination of English and French. I inquired for news of Lorraine Barrow, and learned that he had arrived at the start all right, and moreover Stead had seen him at a control some distance back, when he was going very well. In the middle of my conversation with Stead, Werner's time expired and he was dispatched, and a gasp went out from the crowd as they saw the manner in which his car rushed up the winding road out of Tours. One minute after I was off and soon into his dust. Five kilometres farther on, with a wrench of the wheel I just missed the fragments of his car in the road, smashed to bits, and in the same second I saw both Werner and his man standing by the car, obviously unhurt, and the former sufficiently unconcerned as to be occupied in lighting a cigarette before even he could have known the cause of the accident. It appeared that his back axle had broken when travelling at top speed, and his escape must

LOUIS RENAULT FINISHING AT BORDEAUX



GABRIEL FINISHING AT BORDEAUX

have been miraculous; but nothing could shake the phlegmatism, characteristic not only of the Fatherland, but also of most of the best drivers of racing cars. It does not do to have nerves if engaged in driving a racing car, but Werner's stolidity was out of the ordinary, and his smash occurred so suddenly that he could have had no warning.

Louis Renault was thirty-five minutes ahead, but we were now utilizing the full power of the motor, and the car was travelling grandly. Corners did not exist. Hills disappeared, and on the long straight stretches it was merely a question of holding on.

Ruffec at last, and here we were in trouble. More delay in the changing of an ignition plate, red-hot from the heat of the engine. How long it took us I know not. I remember a blazing hot sun, a crowd of spectators who crowded on us regardless of our warnings that other cars were coming along the road, and the handling of red-hot pieces of metal with our bare hands, not noticing, in our feverish haste to be off again, that every time we took hold of these fiery parts the touch blistered white and hot. A welcome glass of champagne, and we were off and away once more on to Angoulême. Talking of champagne reminds me of the manner and method of taking food on these road events. Of course, it was possible in the controls to obtain almost anything in the way of refreshments. I seldom arrived in a town without finding a friend ready with some form of food and drink, but the difficulty was that if trouble was being experienced it was seldom possible either to eat or drink. I remember seeing Bianchi, suddenly attacked with hunger, munching a roll of bread which had received in some unhappy manner a bath of lubricating oil, but, as he explained to me afterwards, so intent was he on our engine that he had not noticed what he was eating.

Faster and still faster, until we seemed to be merely skimming over the ground, and a savage joy possessed me when I realized that we were holding our own with the hunters. The game was probably escaping; anyhow we had not been caught. The reckless crowds, assembled in the road at the entrance to each village and town, now had

no terror. We slackened for nothing. Bordeaux 120 kilometres away, and we had not been caught and overwhelmed by that long line I had seen as I made my way to the start in the morning. Renault was in front, but he was not in our class, and we were now gaining even on him. Then away in the distance, on the hill, Angoulême appeared in sight, and another stage had been completed.

Here the inhabitants and spectators were frantic with excitement and congratulations; flowers and fruit were showered upon us. Then an excited official at the control rushed up and said that Jenatzy on a 90 Mercédès had left the last control and was hard on my heels, and he implored me for the sake of La Belle France to beat the German car into Bordeaux. And I rose to the occasion, and swore that come what might my De Dietrich would finish first before any German car should be allowed to enter Bordeaux. I was also informed that Renault was still thirty-five minutes ahead, so that any hope of beating him was gone unless he broke down before Bordeaux.

Just as we were off, Bianchi got down and gave a hurried look around the car to see if everything was all right for our last dash, and suddenly informed me with horror in his voice that our front wheels were coming to pieces, the spokes having loosened themselves in the hub. I think I should have got down and investigated the matter had it not been for the knowledge that Jenatzy was coming on just behind me and might arrive at any moment. The bystanders saw the trouble also, and were terribly excited when I told Bianchi to jump up. If the wheels held up, a bucket of water on each at Bordeaux would put them right for the next stage, but we had to get to Bordeaux, and I could do nothing but take the risk.

The road after Angoulême is a series of twists and turns, corners and angles, and it was on this portion of the road that most of the unfortunate accidents in the race took place. It was here, however, that we made our biggest gain. At this stage I was driving as for my life, Jenatzy behind, Renault in front, and as corner after corner was negotiated, and nearer and nearer we drew to the finish with my car

STEAD'S SMASH

A DE DIETRICH UPSIDE DOWN

PARIS–MADRID

going better than ever, I longed for another two hundred kilometres in which to make up our lost time before Tours. That our wheels might go at any moment had not entered my head after leaving Angoulême, and when suddenly in the distance a white flag stretched across the road appeared, it almost seemed incredible that we had arrived at Bordeaux, the ninety kilometres between Angoulême and Bordeaux had been covered so quickly. We averaged over sixty miles an hour over this stretch, and gained twenty minutes on Louis Renault, finishing fifteen minutes after him.

No one had expected that there was any possibility of my finishing in almost the same position as that in which I had started, but it is the unexpected which always happens in racing, and the De Dietrich car, regarding which little had been said prior to the event, had provided a sensation of the race.

I was surprised to see so many friends at the control in Bordeaux. English and French, they impressed upon me their gratification and satisfaction at my having got through so successfully. Then, with an official on my car, I made my way into the town to the closed park, where the cars were locked up until the start on the second stage.

A long interval took place before any other cars arrived. I made my way to my hotel and afterwards back to the control to watch other arrivals. One or two cars arrived, but very little information was forthcoming from their drivers; they all seemed very vague as to what had happened to any cars other than their own.

Then in some extraordinary manner it began to be whispered that terrible accidents had happened, but no one knew from whence these rumours had come, only everybody was uneasy and fearful. Presently the cars began to roll in thick and fast, and the rumours were confirmed by the various drivers, but instead of being accurate in detail, everything was exaggerated. Every driver had a different story, until at last it seemed as if the road of passage must have been bestrewn with dead and dying. Who was killed? Who was hurt? What had happened? A feeling of horror came

over those of us assembled in the control that we were participating in a great carnage, and the lack of reliable information made matters so much worse. Charron eventually arrived, having driven a touring car in the race with ladies as passengers, as he had not been able to get his racing car in time, and from him I learned more than from any one else. There had undoubtedly been some terrible accidents, and I was horrified to learn that Lorraine Barrow and Stead on their De Dietrichs were smashed up and seriously injured and not expected to live, Barrow's mechanician having been killed on the spot. Stead had been cut down by another car and had capsized at eighty miles an hour, while Barrow had struck a dog, deranged his steering, and struck a tree end on at top speed. Marcel Renault had also smashed, and there had been dozens of other accidents *en route*. Charron said he had never seen anything like the scene the road presented.

Other cars came in and other stories were told. An English car driven by a novice had upset on a corner, and the unfortunate Englishman accompanying the driver had been pinned under the car, which caught fire and burned him to death. In Chatellerault a child had dashed in front of one of the cars and a soldier had rushed to save it. The driver, endeavouring to avoid both, not only struck and killed them, but also dashed into the crowd which hemmed in the course of the cars.

I need not recapitulate the list of deaths. The English papers of the 25th of May had the details of what they termed "the race to death."

Road racing was dead. Never again would it be possible to suggest a speed event over the open roads, and the sport —which, while it was sport, was in my opinion the best of all sports—was finished. The peculiar thing about it all was that the outside world had not appreciated up to that moment that there was an element of danger in motor-racing. One or two drivers had certainly been injured, but accidents were very rare; and then suddenly, by one of those compensations which occur with all things in life, the toll was paid in one event, and so heavy was it that with a shudder and a gasp

THE SPRING HANGER OF BARROW'S CAR FIXED IN THE TREE

ALL THAT WAS LEFT OF BARROW'S CAR

PARIS-MADRID

the world at large realized that motor-racing might be really deadly.

Bordeaux that night was filled with an anxious, terrified crowd. Some of the drivers were unnerved after what had taken place, and the great topic was as to what had really happened on the road and as to whether the race ought to be stopped.

Louis Renault's joy at achieving the magnificent performance of having finished first was turned to sorrow and grief, and he left Bordeaux that night to attend the death-bed of his brother Marcel. News came in that Stead and Barrow were both in the same hospital at Libourne, both at death's door. And much as I wanted to go on to Madrid, there would have been no satisfaction in winning a race under such unhappy circumstances.

The French Government decided the matter for everybody concerned. The race was stopped forthwith, and all the racing cars taken possession of by the authorities. Special trains were secured, and the cars were dragged to the railway-station behind horses and returned to Paris; not even the motors were allowed to be started.

The fastest time from Paris to Bordeaux was accomplished by Gabriel on his Mors car, and as an extraordinary piece of driving it stands unequalled and will always stand alone. Starting 168th, he came right through the scores of cars, blinding dust-clouds, and wrecks, in 5 hrs. 14 mins. running time, averaging over 65 miles an hour. Salleron, on another Mors, finished second in 5 hrs. 47 mins.; and I was classified third, covering the 557 kilometres in 5 hrs. 52 mins.

Two days later I went back over the road in a touring car, accompanied by Baron de Turckheim and Madame du Gast, who had driven so splendidly in the race itself, and who had stayed and rendered first aid to Stead when she had come upon him immediately after his smash.

The number of cars left upon the road was extraordinary. Whether the dust or the winding nature of the road was the cause, I cannot say, but we came upon car after car abandoned from one cause or another. A driver of a light De Dietrich had taken one corner too fast, and the car was

absolutely upside down on a heap of stones. The driver and mechanician were Englishmen, and the peasants near by informed us that after the smash—in which neither of the occupants of the car was hurt—the first thing the amateur mechanician did was to rescue his camera from the car and take a snapshot of it. Farther on we came on the spot where Mayhew, who had driven finely, had run off the road on his Napier through the steering breaking, and had had a miraculous escape from death. Stead's car, upside down, was inspected, when we were able to see clearly marked on the front wheel where the other car had cut him down as it passed. Most of the other cars were smashed to pieces, and I think the only thing that saved Stead was the fact that he capsized in a ditch and the car formed a sort of bridge over his body, otherwise only immediate death could have resulted. The most fearsome and terrible sight, however, was of the fragments which remained of Lorraine Barrow's car. It appeared that when travelling at top speed—about eighty miles an hour—he had struck a dog which had been allowed to stray into the road, and this jammed his steering gear, and in a flash he struck, end on, a huge tree. His mechanician, Pierre, a Spaniard and an old servant of Barrow's, was shot out of the car straight on to the tree, which he struck with his head, being killed on the spot. Barrow himself was flung out of the car, clearing the tree and pitching over twenty yards away into the ditch on the side of the road, sustaining terrible and, as it eventually proved, fatal injuries.

I have in many races seen many cars wrecked from one cause or another, but never could I have conceived it possible for any car to be so completely broken up as was Barrow's. One of the front spring hangers was driven up to the hilt and broken off short in the tree, the force of the impact being so great that the strap holding up the starting-handle and the string and leaden customs seal were also driven right into the solid wood. The car, as a car, did not exist. The shock had torn the motor out of the frame and hurled it yards away, and even the pistons themselves in the motor, were in fragments; frame, gear-box, and road-wheels were all in small pieces. As I stood and gazed on the ghastly

FRAGMENTS OF BARROW'S CAR

BARROW'S ENGINE AFTER THE SMASH

PARIS-MADRID

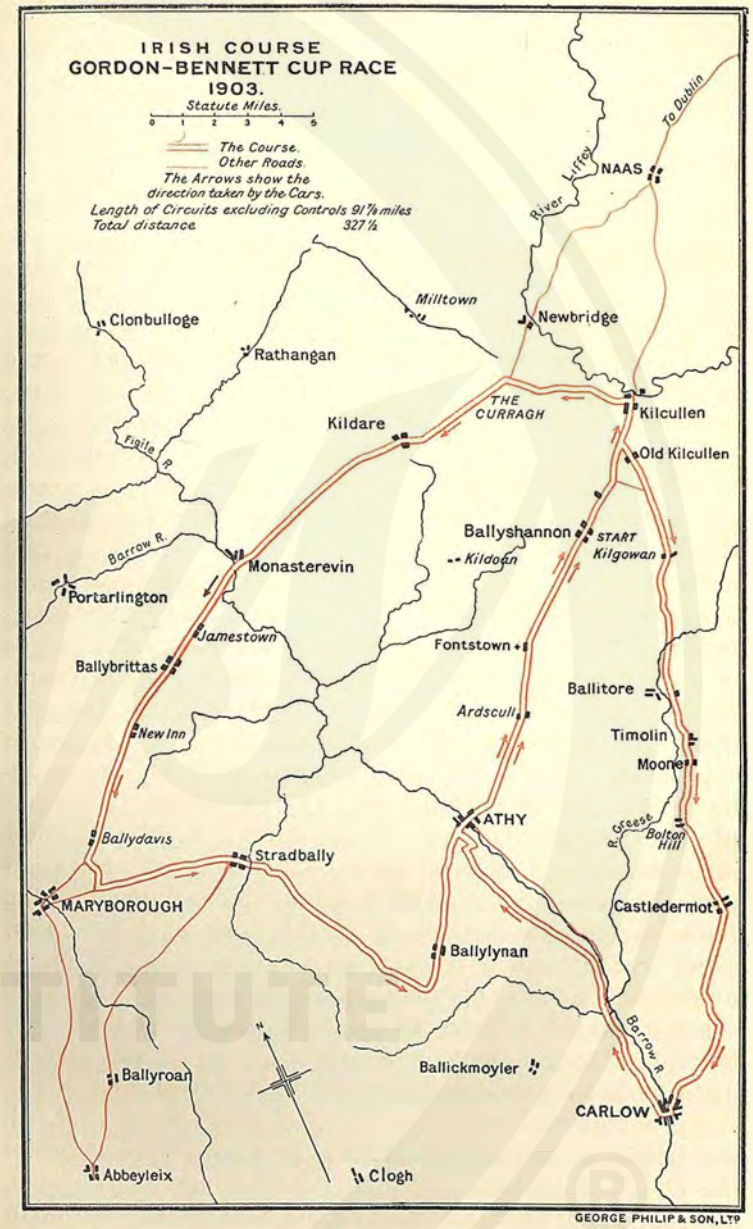
evidence of this tragedy I thought how quickly had come the end to my cheery and good-natured friend. At one moment slipping along on the road, all well, driving a fine race and rejoicing in the knowledge that Bordeaux was but thirty kilometres away, and then the fearful crash, the momentary realization of disaster, oblivion, and eventually —death.

And thus ended the most dramatic race in the history of automobilism. Dramatic, because of its surprising incidents, of Gabriel's marvellous drive, and of the colouring which is always given to an event which provides a tragedy. It was the last great road-race ever to be run on the classic French roads. I say the last, because I do not put circuit racing in the same category as those straight-away races from one place to another. Paris-Amsterdam, Paris-Berlin, Paris-Vienna,—all were of the past, never to be repeated; and to my mind it was a fitting end to an inevitable happening that the curtain should have been rung down on the Paris-Bordeaux road, the scene of many a great race and Titanic struggle, and the road on which Levassor himself showed to the world at large, in the first great motor race in history, the vast and far-reaching possibilities of the motor-propelled vehicle.

XI

GORDON-BENNETT RACES I HAVE DRIVEN IN

OF the many big automobile races which have been held since the commencement of the sport, none have occupied a position of greater importance and none have been more keenly fought out than those international races which were run for the cup awarded by Mr. Gordon Bennett, known to fame as the "Gordon-Bennett Cup." A wordy warfare between M. Charron and Mr. Winton during 1899 as to the respective merits of French and American cars induced Mr. Bennett to give the cup to the winner of a race which M. Charron and Mr. Winton would have the opportunity of taking part in. The cup was placed in the hands of the Automobile Club de France for the framing of conditions to make the contest an international one. This was done, and the first race was run in 1900 from Paris to Lyons (352 miles). It was won by M. Charron, Winton being hopelessly out of it, and stopping at 175 kilometres. I do not propose to give a résumé of the various Gordon-Bennett races which were held, as they excited but little attention until the race of 1902, which was run in connection with the Paris-Vienna race, France up to this time having won on every occasion when the cup was competed for. I might explain that one of the conditions of the race was that each country had the right to choose three drivers and three cars to represent it in the race for the cup, and in the race in question in 1902 the team selected on behalf of France was composed of Fournier on a Mors, De Knyff on a Panhard, and Giradot—who was the previous year's winner—on one of the new C. G. V. cars. Only one other country challenged, and that country was England, represented on the occasion in question by a Wolseley car and a Napier, driven by S. F. Edge.



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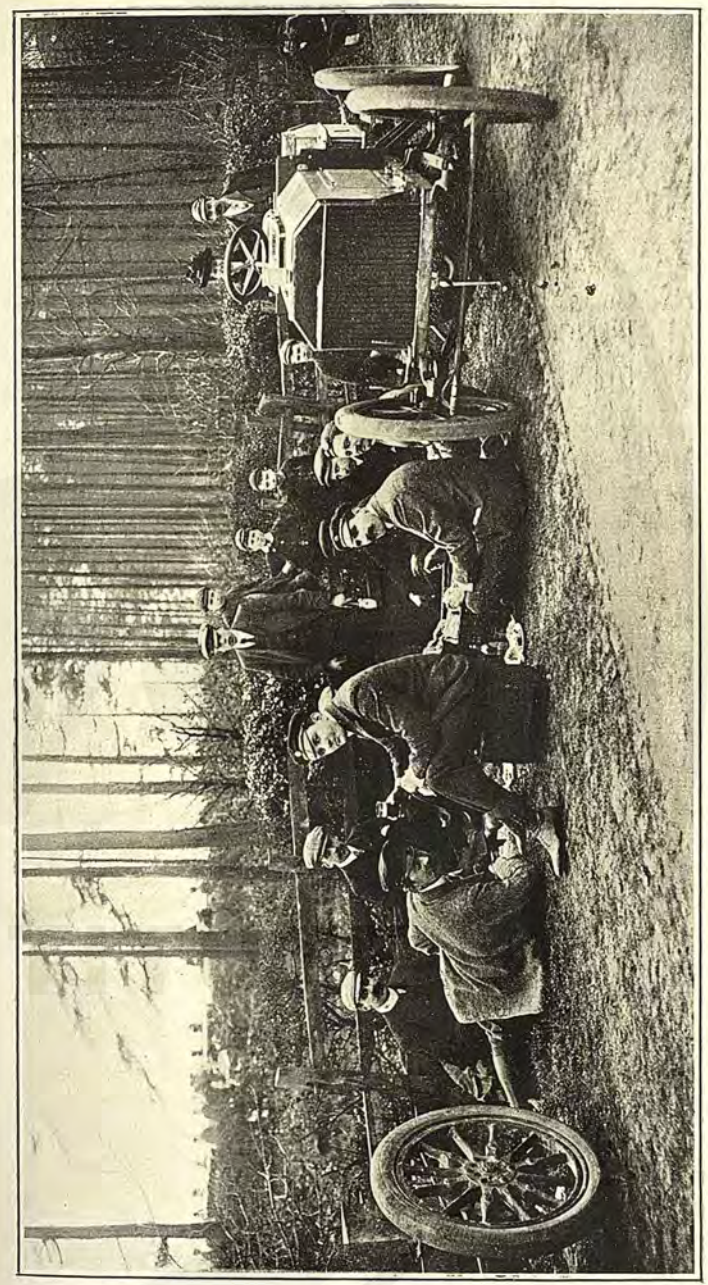
Disaster attended the French champions from the very beginning: Fournier hopelessly broke down within the first few miles, Giradot soon after followed suit. De Knyff was the sole hope of France; he had driven magnificently, and finished first on the first day over the stage to Belfort, but on the second day he had serious trouble with his car, which broke down hopelessly, and he had to leave it on the slopes of the Arlberg, within only a few kilometres of the finish. Edge, who was some hours behind at this point, plodded along, and successfully reached Innsbruck, which was the finishing-point so far as the Gordon-Bennett race was concerned, and thereby secured the cup for England.

The English Club had then to face a difficulty; if they wished to retain the cup, they had to arrange the race to be run within British territory during the following year. The difficulty of this was very soon made apparent, and had it not been for Ireland coming to the rescue and offering to provide a course, the cup would have had to be handed back to France. As it was, however, the idea of having a great motor race in Ireland appealed to the sport-loving Irish character, and with that energetic enthusiasm which is so characteristic of the Irish nation all difficulties were removed, a special Bill passed in the House of Commons, and the Gordon-Bennett race of 1903 in Ireland made possible. The selection of the team to represent England in this race was, of course, a momentous matter. Edge was entitled to his place in the team by reason of the fact that he had won the cup in the previous year; the second place in the team was awarded to me by the Committee of the Automobile Club. A series of tests were then carried out by the Automobile Club in the way of speed trials and hill-climbing, and the third place was secured by Mr. J. W. Stocks with a Napier car. As I also elected to drive a Napier, it meant that the three of us—Edge, Stocks, and myself, old-time companions in many sporting experiences—were to represent England on three Napiers.

The course having been decided upon, we started on our preparations for the race very early in the year. Every available minute we could spare from business saw us in

Ireland travelling round and round the course which had been selected for the race, and making ourselves acquainted with every twist, bend, and turn. The surface then was very bad, but for months the various road surveyors toiled energetically to improve it, until eventually on the day of the race, although the road was on the rough side, nevertheless the course was a very creditable one. A fortnight or three weeks before the date when the race was to be run our team went over to Ireland with their cars and went into serious training and special preparation for the event. In no other race that I have competed in have I taken so much trouble to be physically fit, nor have I taken more care in regard to seeing that my car was as perfect as it was possible to make it. The Napier car that I was driving was nothing like as fast or as powerful as the Panhard which I had driven to victory in the Ardennes race a few months previously, or the De Dietrich which had carried me through to Bordeaux that year. It was a much smaller car, and I had my doubts that it could possibly be good enough or powerful enough to win the big race. Power in a racing-car is very useful if it is under proper control, and I felt that another 20 h.p. would have been particularly useful had it been available.

Challenges had been sent to the English Club by three countries, viz.: France, Germany, and America, and with three representatives from each country, the race would be between twelve men. France had become very anxious to retrieve the defeat of the previous year, and big preparations were made in order that her representatives should have every chance. Germany had also realized that the credit of winning the Gordon-Bennett race was well worth striving for, and America, believing that she had a chance, intended also to make a fight; and as time went along and the date of the race grew nearer, the excitement in Ireland itself became more and more intense. I could almost fill a book with the experiences we had from time to time as we were practising over the course, when one had the opportunity of experiencing those delightful instances of Irish humour and wit which one reads about so much but which few people have the opportunity of experiencing. There was one thing



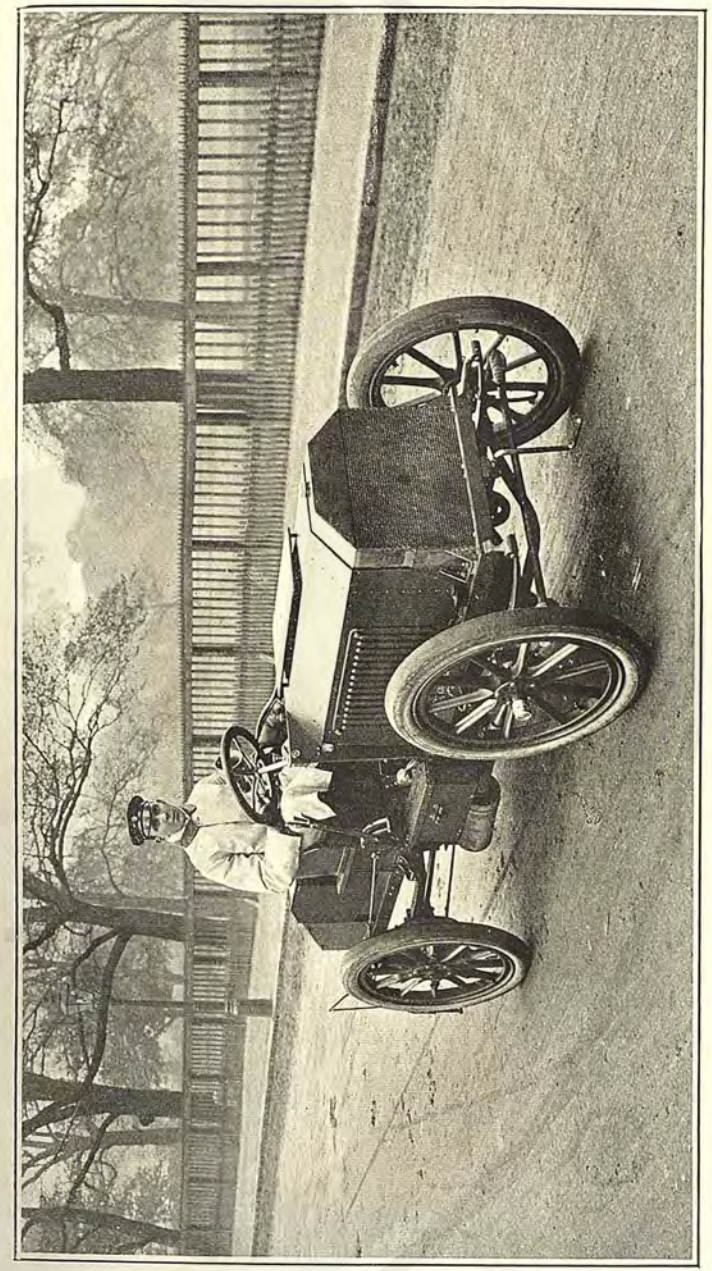
J. W. Stocks Mark Mayhew Clifford Earp
Roger Fuller Charles Jarrott S. F. Edge
LUNCHEON AT WELBECK. ELIMINATING TRIALS, 1903

we found out very quickly, and that was that the high roads in Ireland were used more or less as farmyards for the breeding of chickens and other birds and beasts. The result was that the greatest care had to be exercised to prevent disaster occurring; occasionally, however, all the skill in the world would not prevent an unfortunate chicken being run over. We always made a rule on these occasions to find out the owner and recompense him or her for the loss. On no occasion did we find the owner displeased; a price was put upon the bird, you paid your money, the owner retained the carcase, and you went on your way—if not rejoicing, at least satisfied that you had done the right thing. After this became known it was extraordinary to notice the increased number of chickens on the road. I do not suggest that they were turned out purposely, but the fact remains. The increased number was balanced to a certain extent by the increased intelligence displayed, as the chickens after a time seemed to understand that the proper thing to do was to clear out quickly when a car appeared in sight.

We were staying at Rheban Castle, near Athy, and Athy was practically the head-quarters of the various teams. The special boat from France arrived with the French cars and their drivers and many friends; the German cars and drivers also appeared on the scene. The Americans had been on the course for weeks prior to the event, and party feeling among the natives ran high. People flocked over from England, the final arrangements were completed, and everything made ready. Never has a race been so well organized as that race in Ireland; with the remembrances of the disasters of the Paris-Madrid race, occasioned through the stupidity and recklessness of the spectators, and in the realization of the responsibility carried under these special circumstances, the officials of the English Automobile Club and the Government officials in Ireland left not a stone unturned to safeguard the road at every point in the interests of both spectators and competitors. The Irish constabulary were ordered up in full force, and they lined the road throughout the whole distance of 103 miles. It had been found impossible to have a large enough circuit

if only one circuit were utilized; it was therefore decided to make the course in the shape of the figure 8. The meeting-place of the two circles was in Athy, the distance of the smaller circuit being 45 miles and of the larger 58 miles. I remember so well the scene at Naas the day before the race, when we presented ourselves with our cars for weighing-in formalities—the blazing hot sun, the scores of touring cars, the host of friends, the excitement of populace, officials, and competitors, the trouble the French cars had in getting under the proper weight, and the annoyance of De Knyff as his car had to be stripped of every subtle fitting which he had devised to secure his successful running, to get it under the thousand kilos limit. With the exception of the English cars, they all had some difficulty in getting down below the proper weight, and hours were spent in these preliminaries. Edge and a staff of workmen from England had been busily engaged in preparing a car of much greater horse-power which had just come out of the Napier works, and which was very much faster than the one he had originally elected to drive, and therefore the bustle in our camp was very pronounced, as every one was rushing about on some special job or another. My own car had been ready for days; little finishing touches had been given to it, and Bianchi (my *mécanicien*) and myself had nothing to do but get to the start on the following morning as fit and as ready as it was possible for both the car and ourselves to be. Weighing-in difficulties being finished, we made our way back towards our quarters at Athy.

The afternoon fled away and evening came—the evening of a lovely Irish summer day. Of the many impressions which I received in connection with this race in Ireland none are clearer in my mind than the memory of the glorious sunset of that evening; it was awe-inspiring in its grandeur and beauty, a sky of gold changing into a sea of blood, with heavy ominous clouds rolling up in the distance, causing weird rays of light to strike on the horizon. It was solemn and impressive, and as I stood there and watched it, a strange feeling of impending disaster seemed to come over me. Never before or since then, before the start of a race,



THE NAPIER CAR DRIVEN BY CHARLES JARROTT IN THE GORDON-BENNETT RACE, IRELAND, 1903

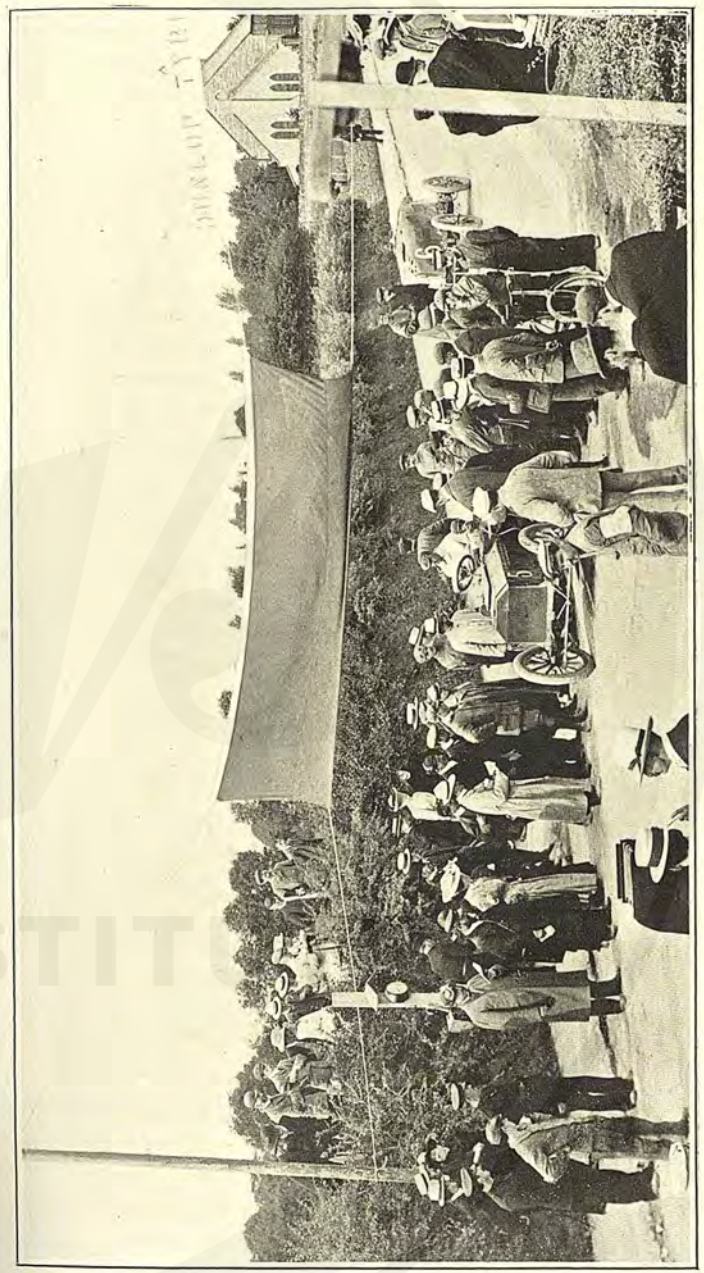
have I ever felt it was possible that under any circumstances I could come to grief, and yet that night I felt that some great catastrophe was in store for me. I do not know why I had this feeling, but the more I tried to shake it off the more depressed I became. With bustle and confusion, noise and animation around me, it seems strange that I should have had this idea of the possibility of everything not going right. Although I had not expressed the opinion to a soul, I had nevertheless in my own mind felt that no one had a better chance of winning on the following day than myself. I went to bed very early, having previously, for some cause I could not understand, sealed up all my private papers and addressed them to the persons interested, also leaving a note of general instructions in case of anything happening on the following day. This was all most strange, and as I recall it at the present time I would very much like to know why I should have done all this for the first and only time in my life.

A good night's sleep, however, dispels many fancies, and a sunny summer morning in Ireland does not allow one to be very depressed. As I made my way to the starting-point at Ballyshannon all sense of impending disaster had disappeared, and I was keen and ready for the fray. It was a very novel experience to me, this race in Ireland, because it was so different from any I had previously taken part in. In the races abroad I was a foreign competitor racing amongst other men who were at home; in Ireland I was at home, and other men were under the disadvantage of racing on foreign soil. The French language was very much in evidence, and for a moment one could almost have imagined oneself at Champigny and at the start of one of the big French races, an idea immediately dispelled by the cheery tones of a friend greeting one with "Good Luck" in the dear old mother tongue. I am not here going to repeat the conversation I had with the Chevalier de Knyff that morning in private, but it was obvious that he started off feeling exceedingly uncomfortable. For some cause that I could never understand, a large number of people abroad were under the impression that everything possible, fair and unfair, was

going to be done to prevent the Cup leaving English hands, and this belief went to the extent of warning letters being written to some of the competitors. De Knyff had more than his share of these communications, and although he had only smiled at them, nevertheless I know he was a little anxious as to what it all meant.

I think I was able to reassure him, and the result proved how very foolish any such suggestions were. All my French friends and acquaintances of my races abroad came up, and while wishing me the best of luck, at the same time sorrowfully remonstrated with me for opposing their champions; and then Edge was sent on his way, De Knyff following, with Owen and Jenatzy coming next, and myself, as the second English representative, being No. 5. The other teams were as follows: De Knyff and Henri Farman on Panhards, and Gabriel—who had driven so magnificently in the previous Paris-Bordeaux race—on a Mors, representing France; De Caters, Jenatzy, and Foxhall-Keene all on Mercédès representing Germany; Winton and Owen on Winton cars, and Mooers on a Peerless representing America.

Of the race itself I can say but little, as I saw little of it. I believe that the fastest time for the first circuit, or larger half of the complete course, was made by Edge, and that my running time came within a few seconds of his; a result with which I was satisfied in view of the fact that I was driving a car of much smaller horse-power. Anyhow the fact remains that at Carlow I had caught up Jenatzy, who had started seven minutes in front of me, which meant that I had obtained a decided gain in the first thirty miles. I think it was the sight of my arrival at Carlow on his heels that made Jenatzy infuriated with Owen, who was in front, and who had apparently been impeding his progress, or at least had, owing to the dust, rendered it impossible for Jenatzy to pass him. I was feeling perfectly contented and happy, and was in a good driving mood, and as we ran into the Kildare control, having begun really to settle down, I almost came to the conclusion that we were going to be well in it at the finish. Within two miles of the Kildare control, however,



IN ATHY CONTROL, GORDON-BENNETT RACE, IRELAND, 1903

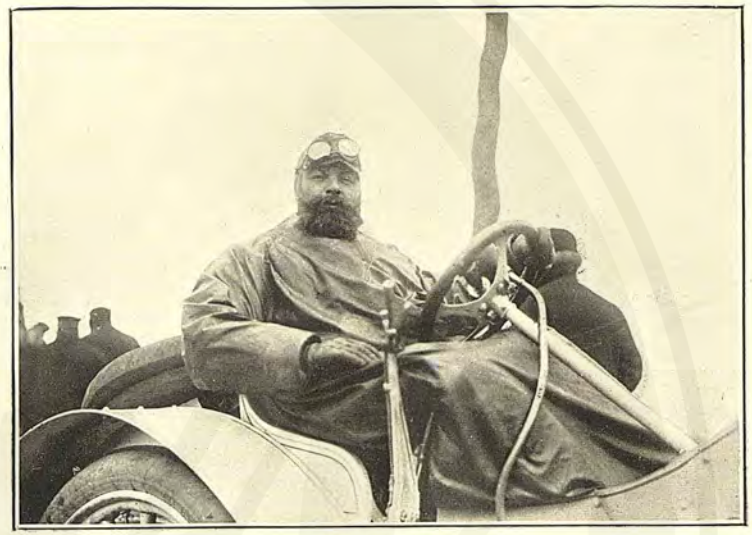
my engine began to miss fire, and, immediately stopping, I found one of the wires loose on a sparking plug. This was remedied, and we were away again immediately, having lost a minute. Round by the sharp turn at Maryborough and on towards Stradbally we sped, and then on a perfectly straight stretch of road, with the car travelling at about sixty miles an hour—not very great for a racing car, but quite fast enough under the particular circumstances—when I suddenly realized that it was not under my control, and that something had gone wrong with the steering.

In a second, and before the brakes could be applied or anything done, the car made a sudden right-angled turn, charged a high grass bank, missing a telegraph pole by a fraction; with a crash we struck the hedge at the top, the car at the same time turning over and down the bank again. The impetus was, of course, terrific, and until I found myself lying in the road I hardly realized that the car had passed over me, crushing me to the ground, and had turned over three or four more times endways and sideways. The dust for the moment prevented anything being seen, and I suddenly realized that before the race I had instructed Bianchi to strap himself into the car to prevent his being thrown out, my experience being that in the case of a *mécanicien*, his chief danger was in being thrown out of the car. However, in this case Bianchi had gone with the car, and as I picked myself up and ran towards it, it was obvious that he was in a tight place. As I reached the car he made an agonized appeal to me to get him out as quickly as possible, as the red-hot exhaust pipe was pressing on to his chest, and he was in danger of being burned. My own dread was that the car—or rather, what remained of it—might, before I rescued him, catch on fire. And then I was able to accomplish one of those extraordinary feats which are only possible of accomplishment in moments of extreme necessity, and under the stress of something more than ordinary will-power.

I had, before the race, endeavoured by my own unaided strength to raise a wheel of the car to see whether it was possible to do so, in which case we would have carried a

fixed stand to rest the car upon in case of a tyre repair being necessary, instead of carrying the usual lifting-jack. But I found that the weight of the car was altogether too much for my strength, and we had to give up the idea and complete our equipment with the usual form of screw-jack. And yet when Bianchi appealed to me I forgot everything except that the car had to be lifted off him by some means or other immediately. Even before any one reached me I had seized a corner of the car and actually lifted it off Bianchi, and there I held it until assistance came from some of the on-lookers, who were on the other side of the hedge, and who seemed at first somewhat reluctant to assist, in view of the fact that other racing cars were expected along every moment. Even then we could not get Bianchi out of his perilous position, as he was held fast underneath by the strap around his wrist, and after I had made a futile attempt to cut this strap away by crawling under the car, the bystanders eventually solved the difficulty by uniting to lift the car off bodily.

I remember seizing Bianchi by the collar, dragging him across the road out of danger—and then earth and sky seemed to meet, and I lost consciousness. The story has been so often told that it hardly bears repetition, but the fact remains that the next thing I remember was a sudden realization that I could not see. I remembered that an accident had happened, and I wondered where I was. I opened my eyes and yet saw nothing. Then the horrible idea occurred to me that possibly, as a result of the accident, I had been rendered totally blind. I was conscious of a sickening numbness down one side, but nevertheless found that I was able to use one arm, and then I discovered the reason I could not see was because a sheet had been thrown over me and I was, in fact, lying in a farmyard, left for dead, with an affrighted crowd of spectators some little distance off. A glance to the left showed that close to me lay another figure, also under a sheet, and I shall never forget the horror of the moment when it occurred to me that under that sheet lay poor little Bianchi dead. I called out to him, and to my relief he replied. I then asked him the somewhat superfluous



DE KNYFF

JENATZY

question as to whether he was alive. He replied in a very faint voice that he thought he was alive, but that he felt very bad.

The various little incidents that occurred are not very clearly imprinted on my memory, but I remember one of the first things I asked for was a cigarette out of my coat pocket and some telegraph forms. I knew the story which would go forth to the world immediately the smash became known, and I knew there was one person in England waiting and longing for news, whom I had to advise of the truth before all else and before false news could arrive. I also sent a telegram to Dr. Lambert Ormesby, the President of the College of Surgeons, Dublin, who I knew was on the grand-stand, and who had previously advised me jokingly that he was available if I wanted him, at a moment's notice.

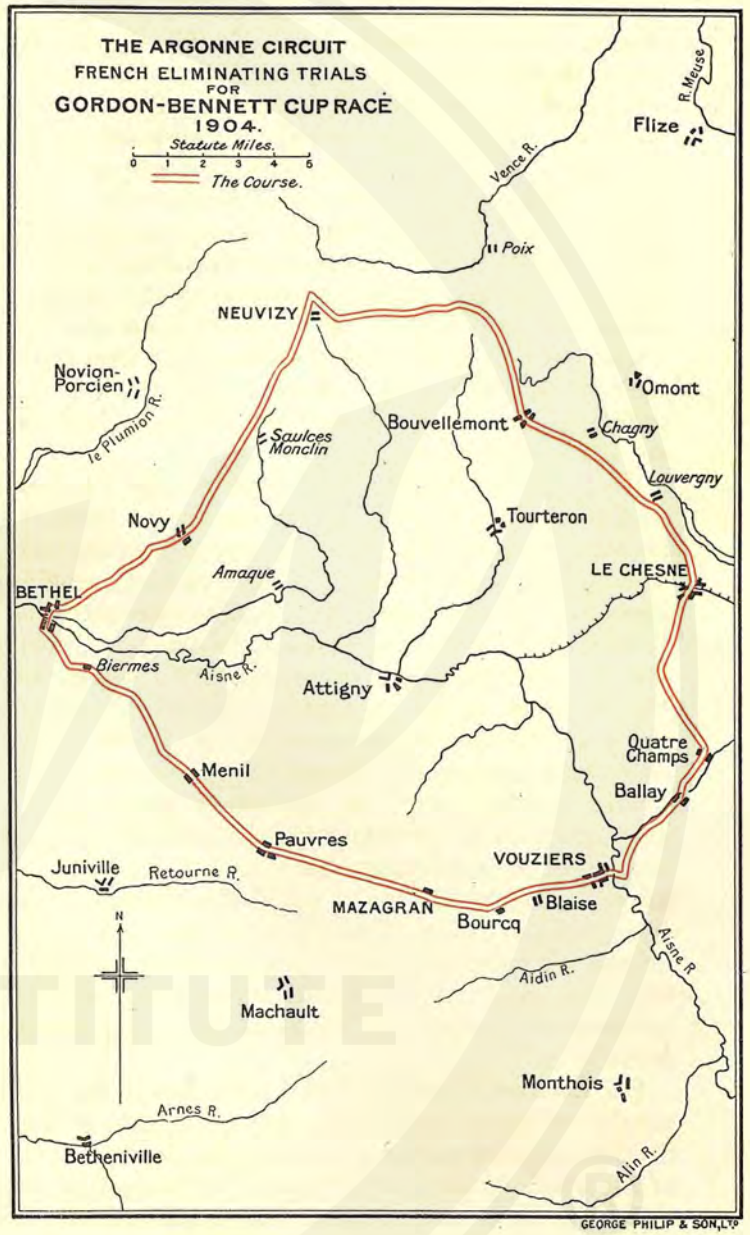
Both of us were lying on the grass, and Bianchi not only felt very bad, but looked very bad. Then I felt that I must see my car, and in spite of an attempt made to stop me, I made my way out on to the road, walked to my car, and satisfied myself as to the part of the steering which had broken.

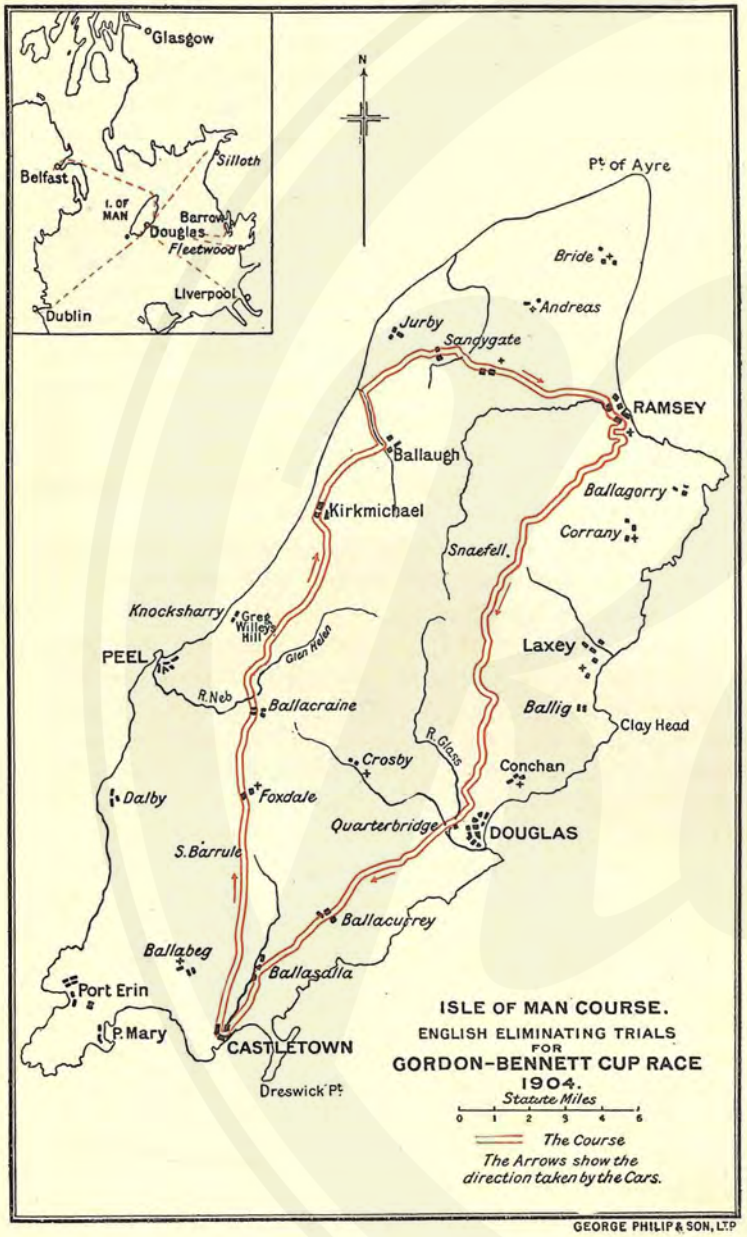
It was while I was standing gazing at my car, presenting a somewhat ghastly spectacle, with my clothes torn to shreds and blood streaming down my face, that De Caters dashed down the road, and seeing me standing there pulled up. The conversation we had I remember very well, although I was in a somewhat dazed condition. De Caters called out and asked me what had happened and whether I was seriously hurt and whether my mechanician was hurt; to which I replied that my steering was broken; I was, so far as I could tell, not very badly hurt, and I did not think my mechanician was badly hurt either. Then it suddenly dawned on my mind that De Caters was also in the race. It appeared to me that he had come in quite an opposite direction to the way in which I had been travelling prior to the smash. As I realized this I asked him if he was in the race, or whether something had happened to him also and he was going back again. He answered that he was in the race and was going well. Then I became greatly excited in my anxiety that he

should go on without delay, which he did. I have, in another chapter dealing with his personality, referred to his chivalrous action in afterwards stopping on his arrival at the grand-stand, and advising the officials and my friends that he had seen me, and that I was not seriously hurt—an act, I venture to assert, as noble in its character as it is possible for any sportsman to display under any circumstances. My great regret of that day was that my sister, who was witnessing the race, was not at the grand-stand at the time of De Caters's arrival. She was on another portion of the course, and received the definite news of my death, and underwent the anguish of six weary hours of waiting until after the finish of the race she could get to Rheban Castle, where she expected to find my dead body, but where, on the contrary, she found me alive and doing rather well.

To go back to the smash. Immediately De Caters had shot off, I again fainted, and on my second recovery found myself lying under a very shady tree, in a much more comfortable position; and almost as soon as I recovered a doctor appeared on the scene. His first advice was that both Bianchi and I were to be removed to the local hospital, but this was a course of procedure to which I would not agree. He explained to me that my collar-bone was out, and he was very vigorous in his methods of fixing it up again. After having examined Bianchi, he reported that so far as he could ascertain there was no actual breakage of limbs, although both of us had torn muscles and were terribly bruised. Our subsequent journey back to Rheban Castle through Athy in a little 7 h.p. single-cylinder car, and the agonizing pain of the journey over that very rough road, lives in my memory even now, as also does the geniality of the Irish police-sergeant who accompanied us; and the kindness and help extended to us by a very sympathetic priest.

Dr. Lambert Ormesby's wild dash round the course on another racing-car to our aid; the arrival back of Edge and Stocks, with their stories of disaster; the dejected appearance of the whole of our party; the filtering through of the news of De Knyff's grim fight and Jenatzy's splendid win, all made





GEORGE PHILIP & SON, LTD

up moments of interest to me during that afternoon and evening. Then, when I had been left alone, late at night and suffering horrible pain, it suddenly came back to me with brutal vividness that the Gordon-Bennett race of 1903 had been run, and that every chance I had had of distinguishing myself had gone, and that I had not even finished. As I realized this the misery of abject despair took possession of me, and I wished, in my wretchedness, that the smash had been complete and that I had not been left to live. I mention this fit of despondency because it possessed me for quite a long time; in fact, it did not leave me for months; and although the physical injuries I sustained were of a character which made even walking a difficulty for a number of weeks, nevertheless the greatest trouble I had was to fight the mental depression which I was labouring under, and which was no doubt caused in a very great measure by my weak physical condition.

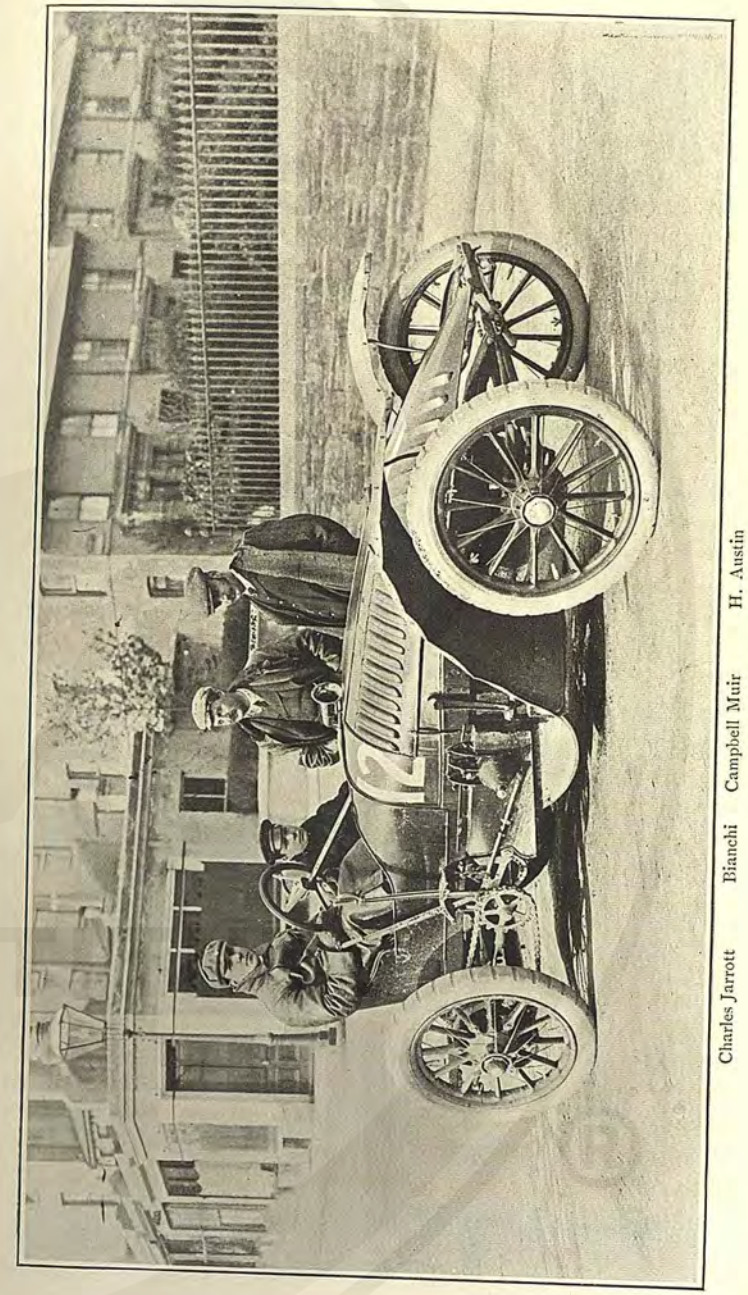
Thus ended my first attempt to repeat the performance which Edge had achieved the previous year, and secure for England the Blue Ribbon of the motor-racing world. I have driven in many races, and I have been successful in a great number, but no race would I rather have won than that race for the Gordon-Bennett Cup in Ireland. I again took my place in the English team in the following year for the same race, which took place in Germany, but it had not the charm and I had not the same keenness, and I shall always look back with regret to the event for which I made the greatest preparation and expended the greatest care, and yet in which Fate decided that, so far as I was concerned, it was to be fraught with the most disastrous results of any race in my career.

In spite of it all, in connection with that race in Ireland, I consider myself lucky — lucky that I should have gone through such an experience and yet have had such a remarkable escape. My consolation is that even though I was not successful, nevertheless I had on that particular occasion played very fast and loose with Death and had come through the ordeal better than could be expected. Three months passed before I again drove a car, and then it was a small voiturette, which was, moreover, just as much as I could

manage in my then weak state. An autumn tour, however, in the West and some weeks spent in exploring little old-world villages in Cornwall assisted my recovery, and the end of the long winter saw me well and fit again.

When Mr. Austin, of the Wolseley Company, wrote me asking whether I would take one of the new 96 h.p. Wolseley racing cars through the trials which were to be held in the Isle of Man for the selection of the English team for the 1904 Gordon-Bennett race, which, owing to Jenatzy's win, was to be run off in Germany, the desire to figure again in the sport was too strong for me, and I consented. The difficulty of finding a suitable course on this occasion was overcome by the people of the Isle of Man, who, when the suggestion was made to them that they should allow a speed contest over certain roads which had been chosen in the island, eagerly welcomed the idea. Making their own laws and controlling their own territory, they were in the position of being able to do what they pleased, and eventually a circular course was selected and agreed upon which embraced the towns of Douglas and Ramsey, and at the same time took in the long winding road over Snaefell. The race was for a period of time—namely, eight hours—instead of an actual distance. The course itself was fifty-one miles in extent, and it was the idea of the Races Committee of the Automobile Club to find out how far each competitor would be able to travel within the time mentioned.

The date fixed for the race was 10 May, and in view of the fact that the race in Germany was to take place on 17 June, none too much time was allowed the selected team to get ready for the German course. I am not going to touch upon the extraordinary rules and conditions that governed these eliminating trials. For some reason best known to themselves the Committee of the Automobile Club wished to obscure the fact that the trial was really a race, the selection of drivers of cars remaining entirely in their hands, regardless of what the results of the trials were. There were altogether eleven entrants, consisting of Messrs. Campbell Muir, Girling,



Charles Jarrott Bianchi Campbell Muir H. Austin
ISLE OF MAN ELIMINATING TRIALS, 1904

and myself on Wolseley racing cars; Messrs. S. F. Edge, Mark Mayhew, J. R. Hargreaves, J. W. Stocks, and Clifford Earp on Napier cars; and three Darracq cars, one driven by that old polo champion Mr. A. Rawlinson, and the others by Edmond and the now famous Hemery.

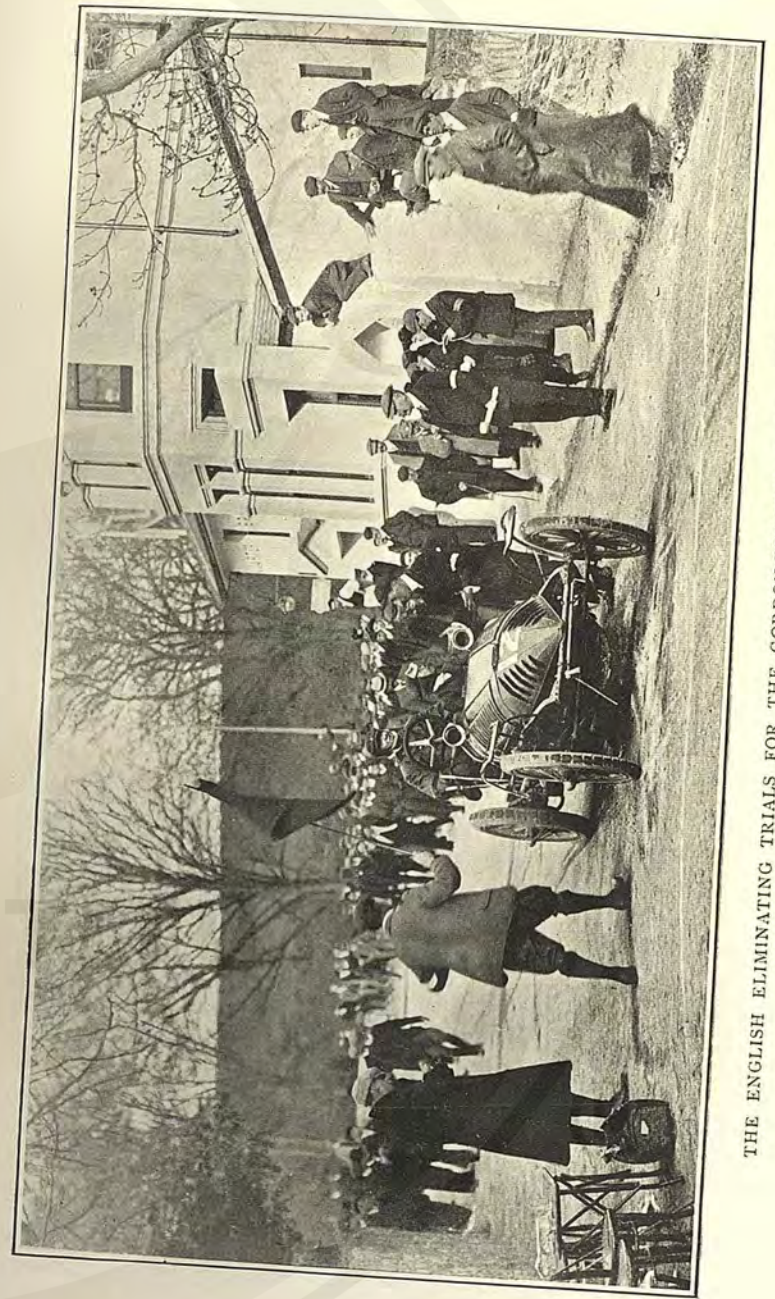
The great performance in that event was unquestionably that of Girling, who drove very finely. Edge also secured a place, and the third place lay between Earp and myself. In the speed trials, taking place after the actual race, and which formed part of the test, Earp smashed his car to pieces by running into a stone wall, and badly injured himself, so that the question as to which of us was to take third place in the team was automatically solved for the Committee. Therefore the English team selected consisted of Girling and myself on Wolseley cars, and Edge on a Napier.

There was one point in connection with the Isle of Man race which had a peculiar interest for me. I had always been given to understand that after a bad smash, such as I had sustained in Ireland, one was bound to suffer from "nerves," and thus I feared that in some indefinable manner, when I came to drive a car in a race, all that dash which is necessary to race successfully would be lacking. I had never known what nerves meant, and any sense of danger when racing was foreign to me. It can therefore be understood that I was somewhat anxious to know whether I had changed. My start was certainly not very happy. Just as I was taking up my position on the starting line my first-speed gear-wheel broke, and I started at the very commencement of the race with only three speeds instead of four, and loose bits of gear-wheel were knocking about inside the gear-box, likely at any moment to jam in the other wheels and wreck the car. But we got through all right, and I found that I was still able to take all out of my car; sharp corners and turns at top speed presented no terrors, and I had no dread of another catastrophe. In short, I enjoyed the sport as much as ever, and it had all its old fascination and charm. Prior to my taking part in the Isle of Man race I had done a somewhat peculiar thing, as I had also agreed to drive a De Dietrich car in the eliminating trials which were to be

held in France for the selection of the French team for the Gordon-Bennett race. I had agreed to do this before having promised to drive a Wolseley in the English trials, and hence, immediately the latter were over, I travelled straight to France, secured my De Dietrich 80 h.p. racer, and prepared for the French elimination race which took place on 20 May. The course selected was in the French Ardennes, having Mazagran as a centre. It was, of course, circular, and was 94 kilometres in circumference. As this distance had to be covered six times, the total distance of the race was 564 kilometres. There were in all 29 competitors, all the leading cars being represented, three cars of each make being allowed. Our De Dietrich team was composed of that well-known sportsman the Baron de Forest, Gabriel (who had performed so remarkably in the Paris-Madrid race of the previous year), and myself. The winner turned up in Théry, who covered the full distance in 5 hrs. 20 mins. on a Richard-Brazier car. Salleron, on a Mors, obtained second place, and Rougier, on a Turcat-Mery De Dietrich, came third. These three were thereupon selected to represent France in the struggle in Germany.

Gabriel was the only one of our team who did well, and he finished fourth. Baron de Forest had trouble with his clutch in the second round, and I had trouble with a broken radiator from the third round. I struggled on, however, and covered over 500 kilometres, and was still endeavouring to finish when the race was called off and the course opened. I had then been driving for something like twelve hours, having innumerable delays in connection with my car, which had never been properly tested before the race, as of course I only had one week between my driving in the Isle of Man and taking part in the French race.

I could say a great deal regarding my experiences during that week, however. We had to put up in a little village among the hills and depend upon the accommodation which could be offered by the villagers, as there were no hotels in the district. I remember that I was looked after by a charming old French dame who lived in a rambling and old-fashioned farm-house. Sleeping accom-



THE ENGLISH ELIMINATING TRIALS FOR THE GORDON-BENNETT RACE, ISLE OF MAN, 1904

modation was all we obtained. Everything was spotlessly clean, but very primitive; so much so that we had to go to the well in the morning and draw water for the morning tub. One became, however, so accustomed to roughing it in connection with these races, that provided it was possible to obtain a clean bed and good food one did not seem to mind other inconveniences very much. In spite of the discomforts I experienced during our few days' stay at that little French farm-house, I nevertheless should have been very sorry to have missed it, and I carry pleasant recollections of the old-world courtesy of that French dame, who, doubled with age, considered it only consistent with her ideas of proper hospitality to insist upon my joining with her in drinking good luck to myself in some extraordinary and very palatable sweet liqueur at five o'clock in the morning, prior to my starting out for the race.

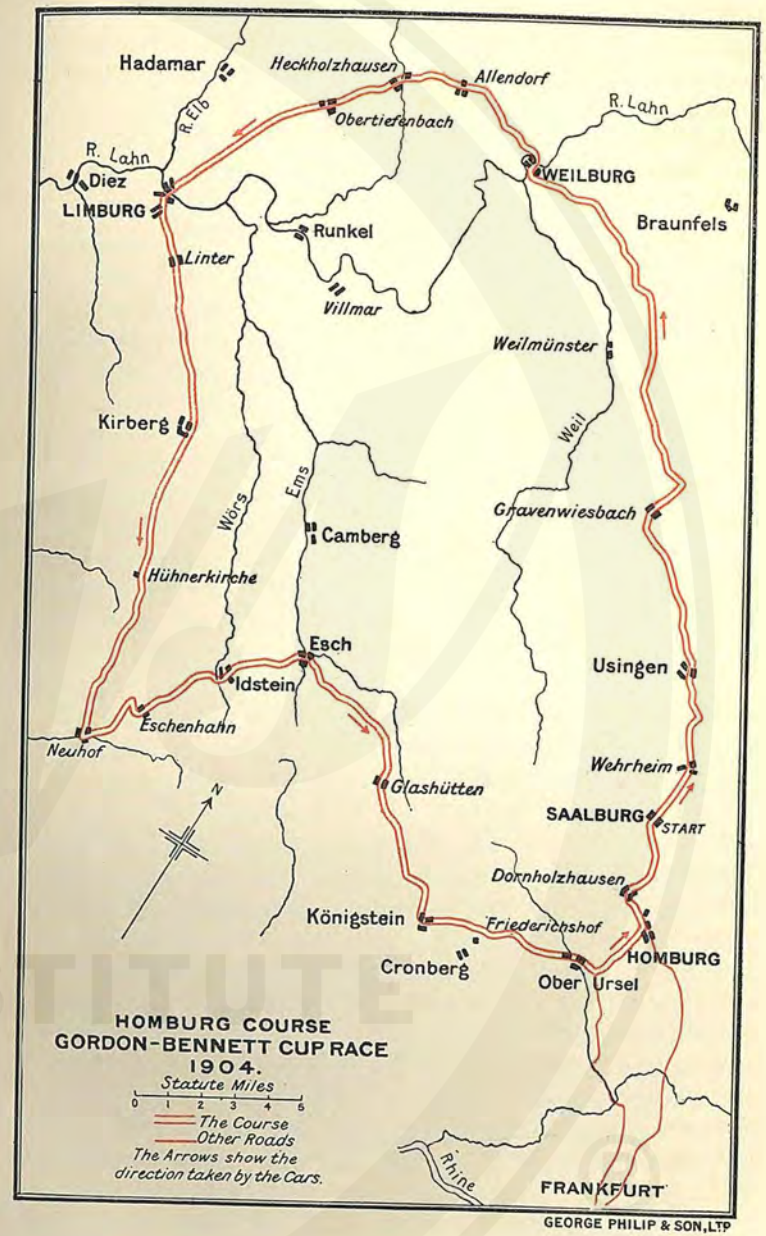
With the experience gained through the disasters of Paris-Madrid, occasioned through the callousness and carelessness of the spectators, 5000 troops were requisitioned for keeping the course clear; and this race was an excellent example of what could be done where some effort was made to organize a racing event properly. The fact that I did not secure a place in the French team was perhaps somewhat fortunate under the circumstances, as otherwise I should have had the unpleasant task of deciding which country I should represent in the actual race. This I was however spared, and having been selected, I was for the second time to represent England in the big international event.

My car was, of course, the Wolseley I had driven in the Isle of Man eliminating trials. From the Isle of Man it had gone back to the Wolseley Works, a number of small improvements had been made as the result of my experience with the car, and when she was eventually handed over to me it was very evident that these improvements were actual, and that the car was running very much better than when she was in Manx Land. I made my way over to Germany a fortnight before the date of the race, so that I might become acquainted in some measure with the course and understand its intricacies and dangerous places. And what a delightful

country it was situated in! With Homburg as a centre, the broad road made its way up to the Saalberg and passed through the site of that old Roman camp which the German Emperor has taken so great an interest in preserving in its original form as a relic of the Roman occupation. Winding away through pine forests and charming surroundings to Weilburg, passing through strange little villages which had been roused from centuries of calm by the excitement of the race; on through Limbourg, picturesque and beautiful, to Neuhof; then a sharp turn and a run through Idstein; and then from Esch, through majestic pine forests where a magnificent broad road with splendid surface made it possible for almost any speed to be obtained, one came back to Homburg by Königstein. Altogether eighty-seven miles over an ideally give-and-take course, most of it with a splendid surface, and yet sufficiently winding and hilly to test to the utmost the capabilities of both cars and drivers. Never have I competed in any event under more charming or more comfortable circumstances. The hotel accommodation in Homburg was excellent, and the toil and labour of preparation in regard to one's car was relieved by relaxation of the most pleasant character.

Although the promise of the railway company was to the effect that my car would be in Germany by the time I arrived there, it was at least four days late, and during these four days I had as practically my sole companion at Ritter's Park Hotel that great automobile sportsman, the late Mr. Clarence Gray Dinsmore. Of all the racing enthusiasts, none were so enthusiastic as he. The owner of the winning car driven by Jenatzy in Ireland in the Gordon-Bennett race of the previous year, he had again bought the latest production from the Mercédès works, and his car was again to be driven by Jenatzy in the coming race. I shall never forget his glowing enthusiasm for the sport in which he himself, from age and physical infirmity, was unable to be an active participant, but who, nevertheless, made me feel that I was but a poor partisan in comparison.

My car arrived exactly nine days before the race, which took place on 17 June; and I immediately set to work to get



her into racing trim. The garage we had arranged for our cars was situate at Usingen, a little village near Homburg, and with a very capable staff from the Wolseley Company, willing and anxious to do everything necessary to the car, the work of preparation was made delightfully easy for me, and my various training and practice spins were carried out day after day with unfailing regularity. I had several experiences which were interesting, not the least of them being the chase I had across the course one afternoon on hearing a harrowing account of an accident to Edge and Swindley, acting as one of the timekeepers for the Automobile Club, who were out on Edge's racing car. The rumour was that the car was smashed to pieces and that they were mangled corpses ; and I was considerably relieved to find on arriving at the spot that no accident had happened, and that both the passengers were safe and sound.

I travelled round the course altogether about ten or twelve times before the race, and must say the road seemed to get easier every time I went over it. That is to say, that when one came to know the corners they were nothing like as difficult to negotiate as they seemed at the first attempt.

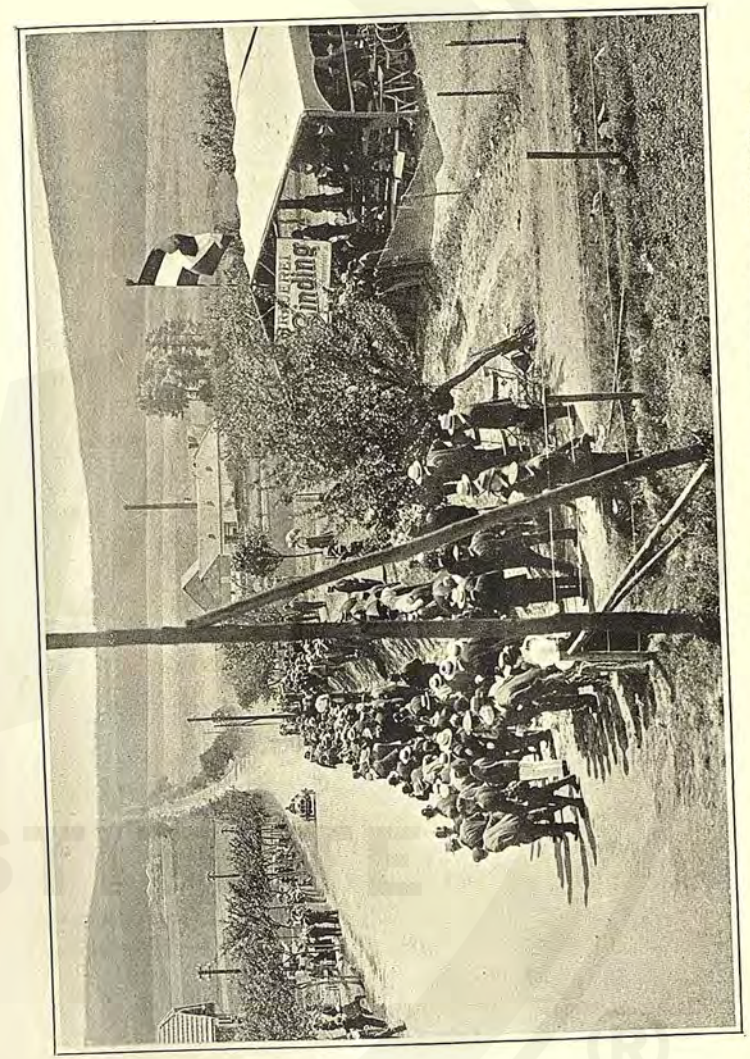
The monotony of travelling the same road over and over again was somewhat relieved by my picking up different passengers; Edge, having no car, came with me on one journey. The secretary of the English Automobile Club, Mr. J. W. Orde, also travelled with me on another occasion. Another day, as I was proceeding alone to Usingen, I picked up two burly German gendarmes, and packed them into the mechanician's seat—sabres, pistols, helmets, and top-boots complete. I have been told that it was an absolute impossibility to pack two men into such a small space. In any event the fact remains that I did it. The second speed impressed and the fourth speed paralysed them, and as they tumbled out of the car when I stopped before going into the village, they waved their arms to heaven and said that never, never again would they risk their necks on such an infernal machine controlled by a mad Englishman. At least, I am told this is what they said—as they repeated their opinion

later on in the afternoon to the hotel-keeper in the town, who explained all about it to me in English. Up to then I had been under the impression that their violent gesticulations were merely expressions of joy and pleasure at their novel experience. Verily, where ignorance is bliss 'tis folly to be wise. So much for my lack of knowledge of the German language.

The incidents of the start at the Saalberg, with its enormous grand-stand and royal box, were diverting and interesting. The increased number of competitors representing the various nationalities made the race particularly interesting from the spectators' point of view. The teams and countries taking part were as follows: Germany (the holders) by Jenatzy and De Caters (Mercédès) and Fritz Opel (German-built Darracq); France by Théry (Richard Brasier), Salleron (Mors), and Rougier (Turcat-Mery De Dietrich); England by Girling and Jarrott (Wolseley) and Edge (Napier); Italy by Lancia, Storero, and Cagno (Fiat); Austria by Braun, Werner, and Warden (Mercédès); Belgium by Hautvast, Augieres, and Baron de Crawhez (Pipe). Eighteen in all, and representing six different countries. America on this occasion, remembering the bad showing of her team the previous year, preferred to stand down for one year until the manufacturers were ready with cars which would do them justice.

Before the start I walked along and talked to some of my competitors, and all were more or less in the state of wishing it was all over instead of just beginning, as it was generally recognized that it was going to be a big fight. Although it was but seven o'clock the Emperor was already in attendance, the grand-stand was packed with people, and everybody was extraordinarily excited. And then amid a roar Jenatzy was sent on his long journey, the rest of us being started at seven-minute intervals.

My first round was uneventful. I had made up my mind before starting that whatever came I would take the first round steadily. I thought it probable that elimination would



THE RUN DOWN FROM THE SAALBURG. GORDON-BENNETT RACE, GERMANY, 1904

proceed in a somewhat drastic fashion, and it was just as well to see what was going to happen before taking the utmost chances. However, in this respect I was agreeably surprised, and it must have been a source of gratification to everybody, competitors and clubs alike, that there was no accident to a single spectator or competitor during the race. However, in spite of taking the corners easily and the down-hill stretches steadily, we accomplished the first eighty-one miles in one hour thirty-five minutes, and we were but a few minutes behind the leader on the first circuit; and then with everything full open I started to *go*.

My run down the long hill from the Saalberg on the commencement of the second round was one of the fastest pieces of travelling I have ever accomplished. The road was not particularly smooth, but the engine was pulling magnificently, and I held her to it all the way. The "S" corners before Usingen and the other turns and small village to be negotiated before Weilburg came to us with startling rapidity, and at Limburg, if I had been asked to express an opinion, I would have said that we had travelled over that portion of the journey at least twenty per cent faster than I had accomplished on the previous round.

Just after Limburg our troubles began. Travelling along very fast on a rather rough piece of road, there was a tremendous crash. Bianchi was struck a violent blow on the arm, our left-hand driving-chain flew into space, disappeared into the distance before we could pull up, and was too far away to make it worth while looking for it. We immediately set to work and fitted a new chain. Ten miles further on I found that my governor was not working, causing the engine to race every time I took the clutch out, thus making everything terribly hot, and also making it necessary before changing speed to retard the motor by the ignition. The difficulty of this was minimized to a certain extent by Bianchi switching off at the corners to enable me to take them with the clutch out, and switching on again when we got round. The same procedure was, of course, necessary when changing speed. We played this little duet together for some considerable distance. The engine was getting

terribly warm, and there was no question but that its health was suffering through this very drastic and crude method of driving. However, as needs must, we made the best of it.

A little farther on, however, a real catastrophe happened. After taking one corner with the clutch out and the switch off, the switch went on a shade too soon, just before I let the clutch in, and as the engine, racing at a tremendous number of revolutions a minute, was dropped into gear on the third speed, something went with a crash, and my third speed, so far as driving was concerned, was *hors de combat.* However, a little thing like that in a race had not to be considered, so leaving speed No. 3 out of the driving proposition for the rest of the race, it was first, second, fourth, second, first. In view of the fact that the course was essentially a third-speed gear course to make the best fast running, this was a terrible handicap, and it was not made any easier when, in addition to our troubles, the pressure feed pipe to the petrol tank began to leak, necessitating continual pumping to keep the motor supplied with fuel. Instead of Bianchi attending to lubrication and other important matters, he was now switching off at the corners with one hand, and pumping all the time with the other. We stopped at Usingen on the third round, and the Wolseley staff in energetic fashion worked hard for half an hour in order to try and fix up the governing gear, and make the car more drivable. We thought it had been accomplished, but at the first corner I realized our efforts had been in vain, and so we proceeded on our way still in the same difficulties, and made the third circuit without further calamity.

Before the race I was informed that the tyre people would endeavour to cool our tyres as we left each control by pouring buckets of water over them, but I very soon found that the men were more expert in fitting tyres than they were in throwing water, and as we came out of each control each man missed his shot at the wheels with his water, and we had the refreshing experience of having bucketfuls of water thrown all over us instead of the tyres, and wetting us to the skin. Not that we objected—the day was hot, the work was

CHARLES JARROTT

JENATZY

GORDON-BENNETT RACE, GERMANY, 1904

hard, and the water cool. I might here explain that the watering of the tyres had to be done outside the control and just as the car was getting away, so that there was some possible excuse for the aim being bad.

At the commencement of the fourth circuit we came upon Edge, who had started an hour and a half in front of us in the morning, hopelessly finished. At the speed at which we passed it was impossible to see what the mishap was, but from the gesture of Edge and his mechanician it was obvious that their troubles were serious and hopeless.

In the fourth turn two further troubles assailed us, namely, a leaky radiator—one of the copper pipes breaking away—necessitating our refilling with water at every control. And the other trouble was that just before Limburg, for some unaccountable reason, the motor started to misfire. Not that misfiring on one cylinder at this period of the race worried us particularly. I was not driving a winning race then, but a finishing one, and as the troubles came upon us I became more determined that, come what might, we would *finish* at all costs : but still our progress was considerably impeded by having to run on three cylinders instead of four.

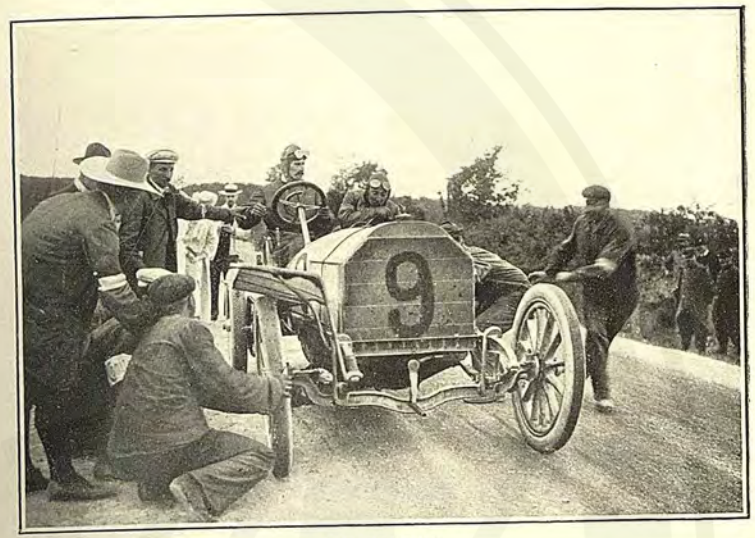
The question was—Should I stop with seventy kilometres to go, and lose the time to find out what was the matter with the one cylinder, or should I go on and make the best time I could with the three? In the earlier part of the race there would have been no question about it. I should have stopped and put it right. As it was, we did everything we could, and received terrific electric shocks from the high-tension wires as we investigated matters at the controls, but we wasted not a minute and kept pegging away on the three cylinders, the fourth firing occasionally to remind us that it was still there.

Our journey was considerably enlivened at this stage by our catching up Cagno on the Fiat. As far as I could make out he also was somewhat lame, and there did not seem to be half a mile an hour difference between the two cars in the matter of speed. Then he made a desperate effort, and gained at least ten seconds on me at the Königsberg control on the last round. This spurred me to yet further effort,

and with my three cylinders and my three gears I opened up the distance between us from Königsberg to Homburg, and eventually had the satisfaction of finishing in front of him at the Saalberg. The most extraordinary thing about this, however, lay in the fact that immediately after leaving the Homburg control, and five kilometres from the end, the fourth cylinder made up its mind to be in it at the finish, and the beat of the engine as we swept up the long hill to the finishing-point at Saalberg was splendid.

The magnificent duel between Théry and Jenatzy came to an end in Théry's victory. From the commencement he steadily gained on each round. At the end of the third circuit it was apparent that, failing accidents, he was a certain winner. But when Jenatzy finished at the end of the race, and Théry was not in sight, it was an anxious moment for France as to whether he would arrive within the margin which he had allowed Jenatzy at the start. Jenatzy had driven like a demon right through, but when he finished he knew he was a beaten man, and the congratulations of his friends at the Saalberg consoled him but little when he realized that his rival was actually in front of him on time. And sure enough, amidst the greatest excitement, Théry came along with minutes in hand, and regained for France the Cup which had not rested in France since it was first taken away by Edge in 1902. Théry's time for the full course (which, deducting neutralizations, amounted to 326 miles), was exactly five hours fifty minutes—a truly magnificent performance remembering the intricacy of the course and the fierceness of the struggle. Jenatzy, as I have mentioned, finished second; De Caters third, with Rougier (France) fourth.

My own personal experience in the race was that it was very hard work. The heat was terrible, and during the waits in the various controls, almost unbearable. I started away in the morning at exactly 8.30, and I finished that evening at 7.40, one of the longest and most tiring days I have ever experienced. My own position in the race was twelfth, as I arrived one hour and forty minutes after the winner, averaging right through about forty-two miles an hour. I had never



DE CATERS

THERY, THE WINNER

GORDON-BENNETT RACE, GERMANY, 1904

expected to win, because in my own mind I knew my car was not good enough, but there were two things I was very desirous of doing. First, because it was the last race in which I intended to take part, I was very anxious indeed to beat my old rival and racing companion, Edge, and had I not succeeded in doing it in this event it would have been a life-long disappointment. Secondly, I had definitely promised Austin that no matter what happened there was one thing he could rely upon, and that was that I should complete the course and be in at the finish. In both these attempts I was successful.

With this race ended my career as a participant in the great motor races on the Continent. It cost me a great deal to make up my mind to give up taking part in the great sport, but the claims of business had gradually become more and more urgent and the time at my disposal so much less that it appeared an impossibility for me to hope to do myself justice. In addition to this, the sport had gradually developed into a commercial business, and as a business it had no charms for me. The months of preparation which it was the business of the professional drivers to give to these events, the knowledge they were able to obtain of the course, and the time of preparation they were in a position to give their machines, placed all such as I at a peculiar disadvantage, and therefore I finished.

In the memory of those long white roads with their never-ending fringe of lofty trees flashing by with dazzling rapidity; the roar and stress of the wind intermingled with the hiss and spit of the engine; the flying kilometre stones and the rapidly approaching goal—I long even now for the possibilities of the past and the living again of all that I went through. It is all gone and finished; but I would not exchange my memories with any man, whatever his experience and in whatever sport.

XII

RACING MOTORISTS I HAVE MET

MUCH of the joy attending any sport or pastime, and much of the pleasure in its pursuit, depends in a great measure on the votaries of that particular sport or pastime who, with you, are its followers. Whether it be with the gun, on the golf links, with the hounds, or on the car, the companionship of good sportsmen will give an added zest to your enjoyment, especially if you are all imbued with the one idea, namely, The Sport. In no other sport of which I have been a follower is this more strongly emphasized than in the sport of motor-racing, and as my mind goes back over the many happy incidents of the past I feel that I should be leaving a sorry blank were I not to pay a tribute to those good fellows, good sportsmen, and good comrades, some of my erstwhile rivals in the great continental road races.

The pleasure in doing this is unkindly marred by the knowledge that the old days are gone, the old faces have disappeared, and the great sport is no more; but as we live again in the remembrance of the past, just so do the names of De Knyff, Charron, Giradot, Zborowski, Farman, Berteaux, Lorraine Barrow, De Caters, and many, many more, breathe fresh visions of the long roads of France, the struggle of the race, and the scene of battle, happy meetings in little villages and strange cities, and charming courtesies such as no Englishman competing abroad would have dreamed of. Therefore the personalities of these men, who they were, what they did, and what made them princes of the sport, are of interest, and you must know more of them.

1. Charron
4. Fournier
5. De Knyff
2. Giradot
3. H. Farman

SOME RACING MOTORISTS

RENE DE KNYFF

Do you remember the figure of De Knyff in the Gordon-Bennett race in Ireland—the standard-bearer of the flag of France, and the one of all others to whom France looked to regain the Cup? And do you remember how he fought? Huge-limbed, bearded, and sullen-faced, throughout the whole of that long day, when he alone of the French team was left to defeat the dare-devil Jenatzy, do you remember how he calculated his chances, how he drove to *finish*, in the belief that his opponent could *not* finish, and do you remember that last wild desperate lap when he realized that he had left it too late, and that Jenatzy and time had secured the Cup for Germany? If you saw De Knyff on that day you should be proud, because you saw him at his best, fighting out a race against odds.

From the very beginning of the sport, no race of importance was run without the Chevalier being a competitor. Panhard-Levassor and De Knyff are to-day synonymous terms, as they were ten years ago. Paris-Marseilles in 1896, and even before then, saw him following the sport, and his title "le Roi de l'Automobile" was undisputed. His triumphs were many, and however trying the race may have been, and however used up the other competitors were at the end of the journey, one thing was certain—De Knyff always arrived, calm, collected, and, so far as one could judge, capable of doing the whole distance again without resting. As my mentor in motor racing I owe him much. Encouragement and good advice I always obtained from him, and his dictum "always finish" was the paramount idea in my mind during every race in which I took part.

I remember it was just before Paris-Berlin, and having become confident in the handling of my 40 h.p. Panhard, I asked De Knyff whether he thought I had a chance. The responsibility laid upon my shoulders by the Panhard firm in entrusting me with one of their racing cars weighed heavily upon me, but the Chevalier relieved my mind. Said he: "How can you expect to win your first race amongst so many veterans? Your time is not yet. Finish, and we shall

all be delighted, and your turn to win will come later on." And I proved the excellence of his advice in the years that were to come.

On the many trial runs which those of us driving Panhard cars made before some of the big events, it was De Knyff who arranged the programme and it was De Knyff who assisted us in our difficulties.

As a sportsman knowing France and her roads like a book, as a *compagnon de route*, he was always fascinating. No matter what town one arrived at, De Knyff knew all its most interesting features, knew where the right hotel was and what wine had to be sampled. It was at Chalons sur Marne, when Pinson, Chanchard, and Berteaux, with their racing cars, were members of the party, that De Knyff introduced to my palate a delicious brand of red champagne. In Turin, he knew that a special sort of cigar could be obtained. Vienna had a speciality in the form of a particular Rhine wine. And in all matters pertaining either to equipment, route, feeding, or technical knowledge, we all looked to him for guidance.

His natural and picturesque place, however, was at the steering wheel of his car, when he gave one the idea of domination and of a master. One of his peculiarities was that he always wore when racing one of those peaked yachting caps such as he had always been accustomed to in the days when 50 kilometres an hour were unknown. The disinclination of a cap of this type to keep on the head at 120 kilometres an hour did not deter him from always starting with this head-gear, with the result that in his later races it was usual to see him with his big brown beard wind-blown and dust bestrewn, and his closely-cropped head minus covering of any sort, his cap usually having blown off at the commencement of the race when he had began to travel fast.

Belgian by birth, De Knyff nevertheless is absolutely French in sympathy, and is jealous to the utmost degree for the reputation of the Panhard firm of which he was and is a director. Serious and deliberate in all his actions, he did everything possible to see the Panhard colours carried to victory.

Powerful in physique, he kept himself in training by playing racquets, and many mornings I have seen him at the covered-in courts in the Tuileries Gardens getting fit for the big race of the year.

He is also a great sportsman. Pigeon-shooting and cycling at one time knew him as a leader, and I have seen him at a great boxing contest at the National Sporting Club, as well as a spectator and admirer of Shrubb, when that well-known English runner won the French Cross Country Championship.

To my mind, De Knyff always was and is to-day the most interesting figure amongst the many interesting personalities of the French automobile world.

An interesting personage in connection with De Knyff's races was Aristides, his trusty little mechanician. A little thick-set boy when he started, he developed into a thick-set youth, and was the acknowledged head of all racing mechanicians, past and present. What Aristides did not know about his car was not worth knowing, and the Chevalier trusted him on all detail matters connected with getting his car into racing trim.

De Knyff pointed Aristides out to me one day in a garage at Nice puzzling out the intricacies of a new automatic oiler he had just dismounted from his racing-car, and when asked why he had pulled it all to pieces, he explained that he had been puzzled all the way down from Paris as to how and why it worked, and therefore at the first opportunity he had pulled it to bits to find out.

It was significant of the confidence Aristides had in De Knyff, that when the Chevalier stopped racing, Aristides would accompany no one else, although he was responsible for putting George Heath's car into racing trim the year he won the Circuit des Ardennes.

CHARRON

I never had the opportunity of being brought into very close contact with Charron during actual racing. His great days were, if anything, a little before my time, and although he drove in several events in which I took part, nevertheless

the victories of the past were not to be repeated by him, and he lacked the luck which has to be with him who is to secure victory. His personality, however, was always exceedingly interesting. Dare-devil, dashing, and full of the winning spirit, his wins were hard fought and hard won. Without being what is ordinarily called nervous, he nevertheless was a mass of nerves, and he received little assistance from his physique to carry him through the strain and stress of driving a racing-car at full speed throughout the long day. An old-time French champion cyclist, he is slightly built, small, dapper, and as quick as lightning when occasion calls for quickness. He is charmingly courteous, and I found that my slight knowledge of the French language and his lack of knowledge of the English language never prevented the exchange of many ideas, and the extending to me at various times of assistance, information, and help. Paris-Amsterdam-Paris, Paris-Bordeaux 1899, Paris-Lyon, when he won the Gordon-Bennett Cup, were all victories of his.

I remember in the Paris-Bordeaux race, in which I was competing on a motor cycle, Charron was driving a 12 h.p. Panhard. Bordeaux from Paris on a 12 h.p. car is a long way, and some 150 kilometres from the finish he had the bad luck to puncture. Tired out and thoroughly used up, Charron flung himself down by the side of his car not caring what happened or who won. At this time he was leading by a short distance from De Knyff, who presently arrived on the scene. Noticing Charron's apathy he pulled up, and finding out what the trouble was, he encouraged Charron to fix up his car and get going again, which he did. De Knyff, who had gone on, then had trouble with his tyres, and Charron passed him again, eventually landing in Bordeaux the winner of the race. I mention this little incident as being thoroughly characteristic of both Charron and De Knyff.

As a really brilliant driver, Charron at his best had no equal, excepting perhaps the invincible Levegh, and he will always be included in that band of pioneers who, at the commencement of the sport of automobilism, made interesting and important history.

GIRADOT

"The Eternal Second." I wonder in how many races Giradot finished second! He certainly won Paris-Boulogne and the Gordon-Bennett race in 1899, but he finished second in so many more races that he was dubbed "The Eternal Second." Giradot always interested me by reason of this particular peculiarity in his career. It was nearly always through bad luck that he did not win. I would not have called him a dashing driver, but he was sound and safe. He always knew his car thoroughly, and, grimly determined, he would stick to his opponents like a leech. In the great Paris-Berlin race he was Fournier's terror. Only a few minutes to the bad, he chased Fournier all the way through, but the few minutes sufficed, and Giradot finished in his usual place, namely, second. He was one of the few men who drove in the early races, and of that little band I should say he was the last to retire, his unfortunate accident in the French eliminating trials for the Gordon-Bennett Cup in 1905 being serious enough to persuade him that his day was finished, and that there are some compensations in looking on.

DE CATERS

Of the many men who have figured in motor-racing and in the automobile sport, none stands out more prominently as a real good sportsman than the Baron de Caters. I hardly know how to describe him from my own point of view. A personal and intimate friend, a true sportsman, and the very best of fellows, would, perhaps, sum up shortly his characteristics. I owe him a debt of gratitude for his consideration in stopping during the Gordon-Bennett race in Ireland and informing my friends at the grand-stand that although both I and my car were *hors de combat*, nevertheless I was not seriously damaged. A chivalrous act which I of all others appreciate, because I know what it means to stop in a race when the blood is up and the eyes see red, and the catastrophe of a competitor is likely to be looked upon merely as an incident removing a rival from the road. And

when I thanked him for it he remarked that he could see no virtue in his action, and that he would not have been human had he seen a friend lying in the road, desperately hurt, and yet passed on without stopping.

In the first Circuit des Ardennes I was unwittingly the cause of his undoing. He was driving one of the Mors cars, but in that race my Panhard had the measure of all of them, and as I passed De Caters he gave a despairing howl as I waved my hand. It was a winding road, narrow, and overhung with trees; the dust I raised was terrible, and in a second he was enveloped. Intuition of the right road did not help him at all, and with a crash he was into a stone wall, unhurt, but with only the remnants of his car left. He explained all this to me at the conclusion of the race when he was extending his congratulations on my win over a bottle of champagne, and as I gripped him by the hand I realized that a man who could congratulate a rival under such circumstances could only be termed a really great and true sportsman.

I have always had the opinion that the Baron is a good driver. He has represented Germany in three Gordon-Bennett races, but whether from bad luck, or because his winning day has not yet arrived, he has never been fortunate in winning a big event. I am certain that were he successful he would be congratulated as no other man would be congratulated, because all automobilists know him for what he is. Like a number of my motoring friends he is a Belgian, and in paying a tribute to him, I extend it to the Belgians as a nation. Among the many places which I have visited, I have never had a warmer welcome than I have always received on my various visits to Belgium.

FOURNIER

The first time I saw Fournier was many years ago, when he figured as the leading light among many brilliant racing cyclists. It was on the indoor track at Olympia, where he every evening electrified the crowd and his competitors by that extraordinary lightning sprint which usually landed him home a winner.

One of the first transactions I had with him was to buy a weird and freakish-looking motor bicycle, which I saw him riding in the Bois de Boulogne. Motor-cycle racing soon claimed him, and he was one of the foremost of that hardy, reckless crowd which included Tart, Teste, and Osmont; expert exponents of the art of racing on motor-tricycles. And then in one big race—the Paris-Lyons Gordon-Bennett race in 1890 I think it was—he acted as mechanician to the winning Charron. An accident having happened to Charron's friction-driven water pump, Fournier, holding on to the car with one hand, held the pump in position on to the fly-wheel of the motor for many kilometres—a feat requiring nerve and pluck, as any one can imagine, whether he has ever endeavoured to hang out over the side of a racing-car travelling at full speed holding on by one hand or not.

I was standing in the inward control at Tours in company with H. O. Duncan, and we were waiting for the first arrivals in the race from Paris to Bordeaux in 1901, and for the sake of sport, Duncan made a little bet that the first car to arrive would be a Mors. Ten minutes after Levegh rolled in on his Mors car, and then Duncan, elated at his correct prophecy, made another bet, namely, that the second in would be Fournier on his Mors, and sure enough, some few minutes afterwards, in came the one and only Henri, having averaged about eighty-five kilometres an hour, but looking as if he had only just come out for a short spin, although Paris was nearly three hundred kilometres away. He had only Levegh to beat, and as I shook him by the hand I congratulated him as the winner, but as he then remarked, it was rather early. Anyhow, the inevitable happened. Levegh broke down, and Fournier won his first race.

Paris-Berlin in the same year, however, was his great triumph, and his second and last win. The victory he gained then lived in memory for years. From Paris to Aix-la-Chapelle; from Aix to Hanover; and from Hanover to Berlin, it was Fournier first, with the pack close at his heels all the way through—Giradot, De Knyff, Charron, and Henri Farman in the front rank, endeavouring to overtake Fournier, who was described as driving like a fiend. I was eighth,

and saw the fight between the leaders, but Fournier just got home.

At his best Fournier was a great driver, but whether from over-eagerness, or an inclination to drive on his reputation, he never, after Paris-Berlin, made any show. Picked to represent France in the Gordon-Bennett race of 1902, he broke down on the first day, his troubles beginning the run of bad luck which resulted in the cup being lost to France.

Inclined to be excitable and over-eager, he was nevertheless bold and daring, and I have no doubt that in the year 1901 he was rightly looked upon as being the best of the French drivers. He, like the rest, has now retired on his laurels, and the serious part of business life, as director of one of the large Paris garages, has claimed him for itself. His massive frame at the present time would require a severe thinning-down process were he to again think of handling the steering wheel of a racing-car. Business has left its mark upon him, but the happy-go-lucky Henri of five years ago is still the same Henri of to-day.

MAURICE AND HENRI FARMAN

I was never able to make up my mind as to which of the two Farman brothers was the better driver. I have asked many people, but I have had an equal expression of opinion in respect to the merits of each of the brothers. One thing, however, was certain, they were both good sportsmen and excellent drivers. Their father, although living in Paris, was an Englishman, and was Paris correspondent for the London "Standard." Consequently I always felt, when I started in a race in which either or both of the Farman brothers were competing, I was not quite alone among a crowd of foreigners. Of the two, I think I always had the idea that Henri was the sounder driver. Why I had this opinion I do not know. Where Maurice was brilliant, Henri was persevering. Both were hard drivers, but were skilled in the art of nursing their cars to a successful finish in the long inter-country races.

Just before the Circuit du Nord race, I remember Maurice coming along to my car to shake hands before starting. It had begun to rain, and he gave me a friendly word of warning to go cautiously over the long stretches of greasy *pavé* we should have to negotiate. The necessity for this caution was very soon demonstrated, as disastrous side slips proved to be the order of the day. Maurice Farman and I, who had driven all through a finishing race, were left to fight for the first place on the last day. He had the misfortune to break a spring, but I had many other troubles, and whilst he finished first, I had to be content with second position.

The best sport I ever had, however, with the Farman brothers was our race into Belfort during the first stage of Paris-Vienna. With De Knyff in front only two or three minutes, and the three of us racing neck and neck for miles, we eventually arrived in Belfort all together with two other cars at our heels.

Maurice gave up racing, after the lamentable Paris-Madrid race, when his close and intimate friend, Marcel Renault, was killed. Henri had an experience in the eliminating trials held in France for the Gordon-Bennett race in 1905 (when he smashed up while travelling at 85 miles an hour) as will have induced him, I should think, to retire while his neck yet remains sound and whole.

JENATZY

"The Red Devil" he has been christened; and of all the men engaged in the sport of automobile racing, none present so terrible an appearance on the car as Jenatzy. This has always amused me, because although he is reckless, daring, and excitable to the utmost degree when actually racing, a more meek and mild individual when off his car cannot be imagined. Jenatzy was racing years ago, but up to the time when he gained his one and only win in the Gordon-Bennett race in Ireland, he never seemed to finish in any race. He was always driving what I call "forlorn hopes": strange motor-cars of novel and original design, but deadly as racing instruments, judging by the experiences Jenatzy used to have in driving them. I forget exactly what the name was of the car he drove in the first Circuit des

Ardennes race, but I have a vivid recollection of seeing, as I dashed by, during the race a car smashed into thousands of pieces—the motor and one part of the frame on one side of the road, and the back axle and wheels some hundred yards down the road on the other side. That any one could have survived such a smash seemed incredible! A little further on, however, I came on Jenatzy, in a small car, proceeding back to the control, and as he stood up and waved his hands I caught a glimpse of a red beard, a blood-stained face, and a bandaged head, a picture thoroughly characteristic of his reputation.

The Gordon-Bennett race in Ireland was Jenatzy's winning day. His frantic excitement when I caught him in Carlow on the first round, after starting seven minutes behind him, I shall never forget. We were delayed there some few minutes under the regulations, and Jenatzy came to me trembling with rage, because, he said, Owen, one of the American team just in front, was impeding him. I endeavoured to encourage him, but he got on to his car waving his arms and vowing that if the American did not get out of his way there would be bloodshed. It was after he left me in Carlow that I had an opportunity of seeing how he was driving. The road was very winding, and Jenatzy went "all out." Some of his skids on the corners were hair-raising, and he missed several stone walls only by a fraction, judging by his wheel marks. I did not think it possible that he could continue to take such risks and survive. De Knyff evidently thought the same. But his brilliance was not to be denied, and he came through in magnificent style.

And how he tried to repeat his victory the following year in Germany, and how nearly he succeeded! If hard work could have scored, Jenatzy should have won. Morning after morning for weeks before the race he was out on the course until he knew every little corner and every little stone as a book. In fact, during the fortnight before the race, when Jenatzy was covering the course twice a day, his regularity was sufficiently marked to warrant one setting one's watch by his passage. But it availed him nothing. Théry

was too good, and Jenatzy suffered defeat by a few minutes, in one of the hardest races ever run, when the heat was terrible, and the mere act of being in the open was painful, without the attendant strain and stress of driving a racing-car for ten hours at a stretch.

Meteoric is the right word to express Jenatzy's driving, and while one cannot but admire this style, it is, nevertheless, the combination of this quality with certainty and precision that secures victory.

LEVEGH

Of the many brilliant drivers which France has produced, none ever shone more brightly than Levegh. To style him by his right name I should properly call him Velghe, but Levegh was the name he raced under. The name of Levegh and Mors were indicative of a formidable combination in any race, and the splendid performances achieved by him, particularly in the Paris-Toulouse-Paris race, stamped him as a Speed King. The first time I met him was in a paper-chase in which I took part in France in 1898. Driving a Mors car, he was endeavouring to make up speed at the finish in the Forest of St. Germain. He had a lady passenger with him, and as he whizzed by we were amazed to see Levegh and his passenger sitting on the floor in order to save windage, and thus increase their speed to some fractional extent, and Levegh was steering the car holding on to the steering-bar above his head. What he did when he wished to stop, I do not know—presumably he resumed his proper seat first.

Some time after this I met him again, and he had a great story to tell me of a marvellous racing-car which he was having built. As far as I could understand it, the special idea was in the body of the car. It was to have a top like an inverted boat very strongly built and with just a hole in it for the driver to see out of. If, owing to the terrific speed —a motor of at least 12 h.p. was going to be used— the car turned over at a corner, the driver merely tucked in his head, the car rolled over and over, and the driver, being safely inside, escaped unhurt. Duncan, who was with

me at the time that this extraordinary idea was propounded, was thrilled, and told me afterwards that Levegh with such a car would beat everybody. The whole idea must have been visionary, as I never saw the car and I am afraid that Levegh's dream was never realized. Bordeaux-Biarritz in 1899 was his first success, but he with his Mors car pressed De Knyff severely at one stage of the Tour de France race of the same year. His great success, however, was in the Paris-Toulouse-Paris race in 1900, when, after a magnificent duel with the Panhard cars, he lowered their colours, and won the race, covering the 1348 kilometres in just over twenty hours.

As I have before mentioned, he was brilliant as a driver, but at the same time he had not the excitable character which is usually associated with the French nationality. Levegh was cool to the degree of coldness. He never appeared to hurry over anything, and never allowed anything to perturb him; and yet when driving he was a veritable whirlwind. His knowledge of his car was perfect, and much of his success was due to the high state of perfection in which he kept it. He is of the little band who have laid down their lives for the sport. Inherent consumptive tendency was aggravated by the exposure and hardship involved in motor-car racing, and at the height of his fame he retired from the sport and journeyed to a strange land to die.

Practically his last great race was when he defended France in the Gordon-Bennett race of 1901.

ZBOROWSKI

The man who could least have been spared to the sport was he who in every event in which he competed excited the admiration of competitors and spectators alike by reason of his keenness and at the same time sportsmanlike conduct.

He was one of a number of wealthy sportsmen who bought their racing-cars and raced absolutely for the fun of it, who had no trade interest to sustain, no commercial banner to uphold, and no monetary gain to wish for, who took their cars, made their own personal arrangements, and went

through a race, enjoying every moment of it, and yet as keen on winning as if their very lives depended on it. The car he always raced was the German-built Mercédès, and although I had met him on many occasions, I do not think that I competed in any race with him before Paris-Vienna. In this race and through the controlled portions of Switzerland we were much together, or rather our cars were, and in the fierce struggle on the third day from Bregenz to Salzburg I saw something of him. His driving right through was splendid. On the Salzburg to Vienna stage he surpassed himself, and it is the opinion of some to-day that a mistake was made in the times, and that in reality Zborowski was the winner of the Paris-Vienna race. I would that it had been so, for then he would have been content, and the catastrophe resulting in his death at Nice the following spring would not have occurred. Although driving very hard during the actual race, I think I most admired his nonchalance in the controls. Other competitors might stop their cars in the full heat of the noonday sun and in other undesirable positions, but Zborowski, who was always immaculately dressed, even when racing, would arrive and proceed to draw up under the shadiest tree or in the shadiest spot available. He seemed to have a gift for finding these little oases of shade, and then lighting a cigarette he would imperturbably await the signal of the Control Marshal when his time was up, and then dash off at top speed over the next stage.

I believe he was really annoyed when they put a laurel wreath about his neck on his arrival at the Prater in Vienna, but at the bottom of his heart he was delighted at having done so well over such a trying course, and the rest of us congratulated him heartily and sincerely.

His end was deplorably sad, and yet it was, I venture to say, the end he would have chosen—at the wheel of his beloved *voiture de course*, and in full flight. The climb up La Turbie at Nice had always been an annual event, and the Count, having obtained his new 60 h.p. Mercédès, entered for it. I was not present that year, but a mutual friend who was talking to Zborowski just before the start explained to me what happened. It appears that the Count had made up his

mind to win the event, and he was prepared to run all risks to do this. The course was dangerous, and full of twists and sharp turns, with a drop on one side of the road of thousands of feet. And what happened? The signal to start was given, and immediately he dashed off at top speed. He did not attempt to slacken even at the first sharp corner, and with a crash the car struck the rocks on the side of the road and was smashed to atoms, and the gallant but reckless driver was killed on the spot.

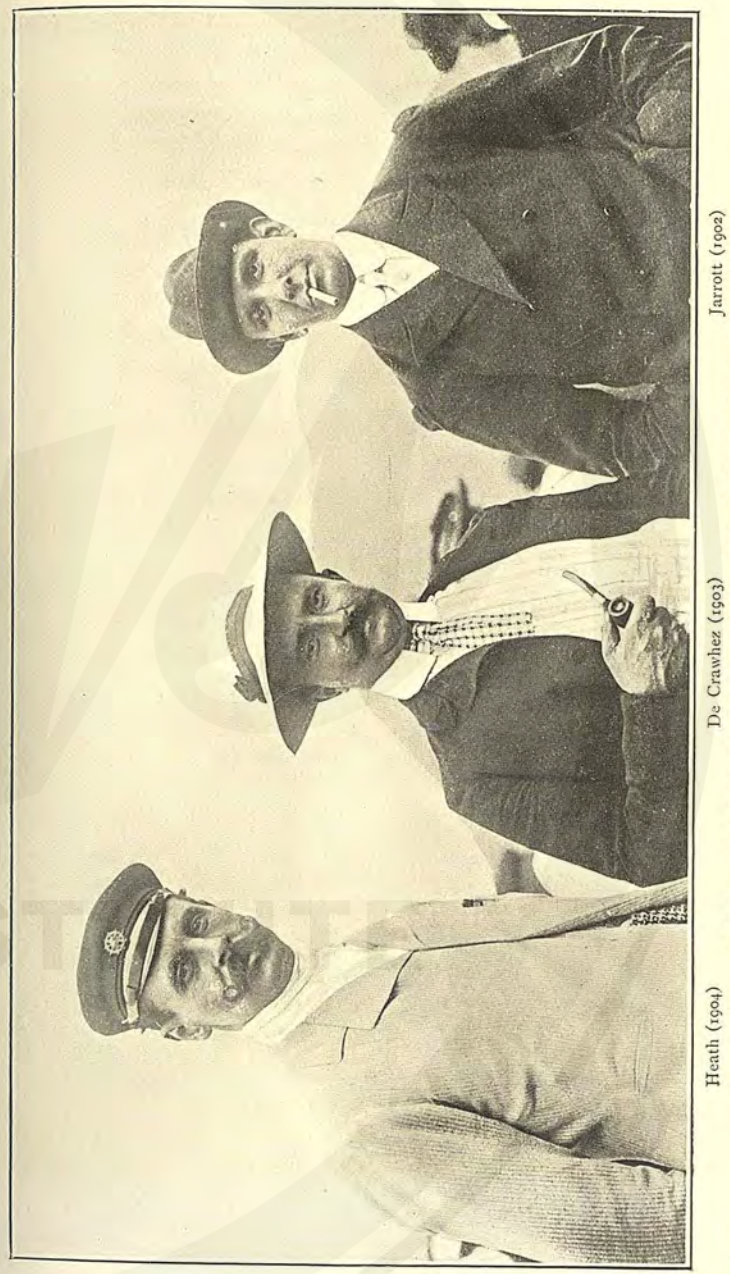
As I have already said, the Count Zborowski could ill be spared in the interests of any sport with which he was associated, and I am sure that he would desire no higher tribute than that he should be called what he unquestionably was—a brave man, a keen motorist, and a sportsman.

DE CRAWHEZ

Like De Knyff and De Caters, the Baron de Crawhez owes allegiance to Belgium as the land of his birth, and I venture to say that if it had been possible for Belgium to put into an inter-country race three really good cars, and at the same time it were possible for De Knyff, De Caters, and De Crawhez to drive them, the Belgian team would be one of the most formidable in the world.

Untold experience in connection with all the great continental races has secured for the Baron de Crawhez the position he holds to-day in his native land, viz. as being the expert and authority on all automobile speed matters. Like other chauffeurs successful in racing, he secured his great success on a Panhard, and it was on Panhard cars that he raced so successfully for so many years. His one and only win, however, was in the second Ardennes race in 1903. In the 1902 race, which was the first Ardennes race run, he made a bold bid for victory, but that day was *my* winning day, and although De Crawhez did the first 100 kilometres very fast, the final victory was mine.

My acquaintance with De Crawhez was not of an intimate character. I have often had to thank him, however, for many kindly acts of courtesy when I was racing in Belgium, and



Heath (1904) De Crawhez (1903) Jarrott (1902)

THREE WINNERS OF THE CIRCUIT DES ARDENNES RACE

as a leading figure in the racing world of two or three years ago, his personality was certainly interesting.

Fearless and inclined to be reckless, he was always capable of snatching a victory, although bad luck continually dogged his course until his victory in the Ardennes.

In the Gordon-Bennett race in Germany in 1904 he represented Belgium, but again his bad luck followed him, and he struggled on in the broiling sun of that scorching hot July day until his final disaster, and he had to stop. I often wondered what the Kaiser thought of the Belgian baron who, on account of the heat, had discarded the best part of his wearing apparel for the sake of comfort, but who, nevertheless, with no coat, jacket, or waistcoat appeared as unconcerned as if that were the costume he usually favoured in public.

President of the Commission Sportive of the Belgian Club, all the very successful Ardennes races have been organized by him as the head, and there can be no doubt that while he retains that position and his interest in the sport, the Ardennes races, so far as Belgium is concerned, will be an annual fixture.

EDGE

I have in this book referred to S. F. Edge on many occasions, showing him under many different circumstances. Knowing his limitations and capabilities, I viewed his debut as a driver of a racing-car with the very greatest interest. He had on many occasions raced with me on motor cycles—but how would he figure as the driver of a racing-car? The first race he competed in was the Gordon-Bennett race run in conjunction with the Paris-Bordeaux race in 1901, eventually won by Henry Fournier. As I have before mentioned, I was in Tours during this race, and was very gratified to see Edge arrive there safely. Disaster, however, overtook him soon after, and, his car breaking down, his first experience was soon finished.

In Paris-Berlin we were both handling high-powered cars, and in my attempt to get away from him I nearly came to grief. However, when I arrived in Aix-la-Chapelle at the

end of the first day's race, I received from Edge the following puzzling telegram :—

Jarot Paris Berlin race Aix la Chapelle.
Broken bank cring trying to get repailed adwire club officiers and ottner internoit
Edge.

Edge's bad writing is proverbial, but, with the aid of the "Times" correspondent, I translated the message as follows:—

"Jarrott Paris-Berlin race Aix-la-Chapelle
Broken back spring trying to get repaired advise club officers and others interested"

Unfortunately the repair was not effected and Edge was again *hors de combat.*

He drove in the Paris-Vienna race (in which the Gordon-Bennett was also run) when De Knyff, Giradot, and Fournier, all representing France, had troubles with their cars, leaving Edge to finish alone, and thus secure the cup for England.

The Gordon-Bennett race in Ireland, 1903, and the race in Germany the following year were the other races which he took part in, but he did not have the good fortune in any of these events to repeat his success of 1902.

As a racing driver Edge always interested me, because for some cause or another I always had the idea that he was rather too inclined to consider his neck and calculate his chances, either to make a really successful driver or a fighting finisher. It was very difficult to form any real opinion, because he always had a lot of trouble with the cars he drove, and personally I should have been delighted to have seen Edge upon a really good racing-car, properly "tuned up," which could have gone through a hard race without having trouble, as then I have little doubt that he would have scored a great victory. He had a chance in the Gordon-Bennett race in Germany when he drove a splendid first circuit, but afterwards again had bad luck like the rest of our team in that race.

That he had the necessary "devil" was proved beyond question in connection with the Gordon-Bennett race in Ireland, and I was thrilled as I lay in my bed after my accident in that race to hear the story of Edge's passage by the grand-stand on the first round. I knew the physical strength necessary to keep one's car on the road at that spot, and I also knew the difficulty of steering the car which Edge was driving, and I realized that he had thrown all caution and care to the winds, and that come what might he had decided not to be beaten if devilment and courage in driving could count. And such a spirit I admire.

Like most of the old crowd he has given up racing to attend to business, not because he did not care for the sport, but because he found, as many of us have found, that business cannot always be combined with pleasure.

Those whom I have dealt with are the men who have made automobile racing history—*les rois de l'automobile*—but there are many others whom I have met in the pursuit of motor racing and in the many struggles between time and distance in which I have taken part about whom I should have liked to have told the stories of their successes and failures. Pinson, Paul Chauchard, Berteaux, George Heath, all fine sportsmen, and whom I saw much of when we were all racing under the Panhard flag. Stead and Lorraine Barrow, both Englishmen and, like me, driving De Dietrich cars, and both having terrible accidents in that disastrous Paris-Madrid race; that well-known sportsman Baron de Forest, who did so well in the Paris-Vienna race and had such hard luck in the French eliminating trials for the Gordon-Bennett race in 1900; W. K. Vanderbilt, jun., the unlucky, with whom I had such a fierce duel in the 1902 Ardennes race—these are a few names from the host of drivers whom I have seen on the road and whom I have had the opportunity of watching through some of the big races. Baras Hemery, Osmont, Duray, Rigolly Gabriel—who at his best I considered one of the finest drivers in the world—Théry, "the chronometer," whom I first saw as a youth going through trick-driving performances at the Richmond Show of the Automobile Club on a small voiturette; Wagner, Tart, Teste, Rougier—they are all experts, all skilled in the art of holding the mechanical

bullet on to the road and controlling its course and governing its speed throughout the strain and stress of a hard race; all accustomed to the carrying of their lives in their hands and used to putting their trust in the frail connections of the mechanism which if shattered would result in death—sudden death—and the end of all things. To them all I tender my respect and admiration, and I myself am glad that fortune was so kind to me that I was able to measure my capabilities and try my strength against such worthy foemen. All their names will be inscribed on the roll of fame as automobile sportsmen—the men who were at the top at the beginning of things. And in the days when automobile sport will be unknown, when the value of the automobile from a commercial point of view has smothered its sporting aspect, these men will be viewed by later generations as pioneers, and will receive their reward for the part they have played in the development and evolution of the mechanically propelled vehicle in the first ten years of its existence.

XIII

MOTOR RACING AND ITS VALUE TO THE INDUSTRY

NO question has been discussed at greater length during the last two or three years than that of the value of racing. Those countries able to organize racing events have held the view that racing is beneficial, both to the sport and industry. In England, on the other hand, a strong feeling has existed that the time when racing was of any benefit has passed, and that the correct attitude to adopt towards motor racing is that of disapproval. In my opinion this is all wrong. Racing carried out under proper conditions and limitations can still be of the greatest benefit to the industry, although I am afraid that from a sporting point of view pure and simple it is beyond control.

The benefit obtained by the various countries successful in winning the Gordon-Bennett Cup, and the strenuous efforts made by France to regain the Cup after it had been lost to England and Germany, are sufficient evidence of the importance attached by the trade to the winning of races.

During this year, however, a slight reaction has taken place and more reasonable and moderate views have been expressed, although I think most authorities are in accord that racing under the existing rules cannot continue, as speed is the one and only thing aimed at. Power and speed are not the only things we are requiring at the present day, and if new racing rules could be framed which would be of utility to the industry in its present condition, racing could still teach us many useful lessons. As to the value or otherwise of racing in its effect on the design and construction of the present-day touring vehicle, I will deal with that later on; but however bigoted the opponent of speed may be, and however opposed to

the running of road-races having speed as the great and paramount factor, there can be no question but that the motor-car of the present day owes its very existence to racing. The French have realized this for years, and the strenuous representations they have made to the French Government, and the manner in which that Government has received those representations with regard to the holding of road-races in France, are sufficient proofs that France as a nation, as the possessor of a great industry, and as a people of enlightenment and progress, has realized the value of holding these speed events.

To understand the whole subject thoroughly let us go back to the very beginning and conception of the motor-car. What was the position? There were two or three enthusiastic men, endeavouring to make machines which would travel by their own power. Alone, disjointed in their efforts, unconvincing in the results they obtained, and discouraged in their aims, they might have been even to-day still making some crude road-machines merely because the process of evolution had not been forced along with lightning rapidity through the utilization of the racing idea. The first thing they required was publicity. The world had to know and had to understand what they were striving for, as with that knowledge the world would encourage and make the task easier. The public might have heard of the existence of these mechanical toys; one or two adventurous and trusting men might have bought them. Who knows what would have happened if this new invention had been introduced in a different and less trying manner than in the form of a public speed competition? Motor-cars were bound to come, but ten years would not have seen their coming. Instead of a forced growth, they would merely have drifted into existence as some new thing requiring many years to perfect. We know what the motor-car is at the present day. We know its power, its utility, its scope, and the extraordinary change it has made in our everyday life, and the remarkable thing about it all is that motor-car racing has in reality been responsible for nearly all of it. The easy proof of this can be dealt with under two headings.

The first, dealing with the benefit racing has been to the industry and manufacturers, from the point of view of publicity. Imagine the effect, if at the beginning, say twelve manufacturers were conducting experiments in regard to various types of mechanical vehicles which they were trying to build. Most of them would be working over the same ground, meeting with the same troubles, and by reason of the secrecy they would maintain in regard to their experiments none of them would be aware what the others were accomplishing. Each would be ploughing his own little furrow, and his efforts would have little effect so far as the world was concerned. Hundreds of individual runs would not have obtained publicity or claimed the attention of the public in the early days so easily as one race. A paragraph or a notice stating that M. de Gaetan had driven from Bordeaux to Paris and back in forty-eight hours would have excited very little comment. But when the feat was accomplished by M. Levassor in a *race*, the whole world blazed with the story. The idea was different. Here were a number of intrepid constructors with weird and uncanny-looking machines, on which they were going to attempt to travel to Bordeaux and back along an unknown highway. Moreover, they were going to race against one another to see who could accomplish it in the quickest time; each kilometre of the many hundreds between the two cities was going to form a separate battle-ground between each contestant; and these men were going to drive their vehicles and struggle desperately for supremacy, not for minutes, but for many hours, not for a few yards, but for hundreds of long miles, and the novelty, the mystery, and the sport of it all, appealed to the sensation-loving French mind. The world was informed of what was going to take place, and the world was amazed, wondering how it was that France had been allowed to make this great discovery, and at the same time wondering whether there was really any great value in this new idea.

But the seed had been sown. The great motor race was an accomplished fact. Run before the eyes of the whole world, it was, by the very publicity it obtained, invaluable in proving up to the hilt that, beyond all question, the motor

vehicle was not a mechanical toy, but a great and marvellous invention capable of covering huge distances by its power, and opening up a new form of traction and transit.

Then, as the number of converts increased, and the number of engineers and constructors devoting their brains and skill to the improvement and perfection of the motor vehicle also increased, what better way could have been adopted for bringing the many improvements into publicity and demonstrating to the world at large the rapid strides which were being made, than the organization of the sporting road-races which tested to the full the individual skill and mechanical genius of the constructors, and at the same time obtained a vast advertisement for the industry at large and interested a number of wealthy amateurs? The value of winning big speed events year by year also increased, and apart from the advertisement and publicity obtained by the industry and by the particular nations organizing the events, an exceedingly valuable tribute was obtained by the winner of each event to the reliability and general utility of the winning machine.

I have yet to deal with the extraordinarily rapid evolution in the actual building and construction of machines as the result of racing during the past ten years, but I first want it to be thoroughly understood that the world at large has been brought to its acceptance of the motor vehicle as the practical result of the racing idea, which has steadily built up from the very foundation the machines which at the present day represent in themselves and in their capabilities the sole reason for their existence and use, and that such capabilities have been proved in the first instance, and in the strongest and most convincing manner, by their performances in the great continental road-races, which at the same time have also demonstrated the capability of their designers and constructors to build machines strong, safe, and reliable, for use under the hard and ever-changing conditions of the ordinary highways.

What do you suppose is the reason that France has obtained such a great lead in the building of motor-cars? Why has she at the present time such a great name amongst

the nations for the construction of mechanical road vehicles? Surely not because she has better engineers than England or more inventive genius than America! The reason is that in the early days French cars obtained publicity and secured their reputation when other countries, although building motor-cars, had not been heard of. The French cars came out into the fierce light of competition, they raced between themselves, they came forth to the world as having accomplished great things, and they have reaped, and are reaping, the reward. In addition to this, think of the enormous value for the constructors to be able to pit their productions against each other. The net result of it all was that a reputation and fame was built up by the French industry which it retains even to the present day.

Why is it that Italy has come so prominently to the front during the last two years? Why is it that Italian cars are so much in favour in the world's automobile market? I am entering now into no discourse upon the relative size or merit of the industry in any particular country; I am endeavouring to draw conclusions as to the benefit of racing to the industry. Italy started manufacturing long after France and many years after England, and what do we find at the present day? Italian cars are in demand, not only in their own country, but in every other country where motoring is indulged in, and not only in demand, but in very great demand. What has made them so popular in so short a space of time? It is not because Italian cars are superior to cars made in other countries; I do not admit that they are superior, but what I do say is, that the effect on the public mind through that splendid race which Lancia drove on his Italian car in the Gordon-Bennett race last year in France, and two Italian cars finishing second and third in that race, was a very powerful one. The Italian programme all the way through has been to demonstrate their manufactures by proving their speed qualities, and the publicity and general advertisement so obtained have already placed them in the foremost ranks as constructors of motor-cars.

Do you remember what it was that originally built up the reputation of the well-known German-built Mercédès? It

was the racing programme. What was it that made the name of Panhard-Levassor a household word in France and throughout the automobile world? The fact that they had won most of the big road-races held in France. The name of De Dietrich was known as being that of a fine old engineering firm, but no one talked about De Dietrich as being great motor-car manufacturers until I was fortunate enough, in the Paris-Madrid race, on the first big racing car constructed by them, to prove to the world that they were capable of building motor-cars which could beat most of those then holding the highest reputation. I could go on with many instances showing that the value of racing from the point of view of publicity alone has been of incalculable value, both to the industry and individual firms in the various countries.

There is, of course, the other important bearing which racing has had upon automobilism, and that is in regard to the construction and evolution of the vehicles themselves. Without the stress of competition, without the incentive to the manufacturers to build more and more powerful machines, which racing has fostered, I wonder where we might be at the present moment? Levassor puzzled over the difficulty of having to make his machine travel over undulating roads at the utmost possible speed, knowing that his power was all the time constant; and he devised that ingenious change-speed gear which, even at the present day, in spite of the mighty changes which have taken place in connection with motor-cars, is nevertheless adopted by a considerable number as being of the most satisfactory description.

The first start was with a small two-cylinder motor, and it took twelve months before a motor of a larger type could be produced which gave a little more horse-power. But even then, in the year 1896, riding on one of the cars, I expressed the opinion that if we could only go just another two miles an hour faster that would be practically all that any one could wish for. Two miles an hour faster! The maximum speed of the machine we were on was about sixteen miles an hour. When one remembers the heavy, luxurious road Pullmans of the present day, I wonder what that poor little

motor would have been capable of doing in these vehicles, even if it had had the capability of propelling my early car another two miles an hour faster!

There were three firms in France who were striving with one another in the early road-races, and these were Panhard-Levassor, Mors, and Peugeot. All of them, each year, built special machines for the various races, and vied for the honour of winning them. One can trace the evolution of the motor-car through the various races which were held, extending right back to 1895. In 1896, Panhard and Levassor risked the great experiment of building one of their cars for the race with a motor having four cylinders, and the increased power which was thus obtained was sufficient to enable the car in question to win the event.

So from one step to another the improvement, lightening, and perfecting of the modern automobile has been achieved. The necessities of racing involved the use of wheel-steering instead of the old-fashioned tiller-steering, as it was found that the higher speeds obtained with the more powerful cars could only be accomplished with safety if the car were controlled by the more stable steering-wheel. The old ignition burners of the earlier cars gave way to the more scientific—although at that time more complicated—ignition by electricity, simply because it was found that more power could be obtained from the motors, and thus better speed could be secured and the possibilities of winning a race made greater. From 5 h.p., with a speed of eighteen miles an hour, within six years cars were being made with 50 h.p. capable of attaining a speed of seventy miles an hour.

The increase in horse-power was not made all at once, but was only accomplished step by step and year by year, and the various big races were the incentive to the manufacturers to build bigger and bigger motors. Obviously they were each year gaining experience, and the result of twelve months' experiments would be shown in the production by the firm of the racing cars for the event of the year.

Another problem had been engaging the mind and energy of the manufacturers concerned in the manufacture of racing cars, namely the building of a strong pneumatic tyre which

would stand the strain and stress of these long-distance road events. Michelin had from the very beginning been an active participant in most of the races, fitting his own tyres to the car he was driving, and inducing a number of competitors to do likewise. The stories told in connection with the very early races of disaster to pneumatic tyres are evidence of the difficulties under which the early pioneers laboured. But there can be no question that pneumatic tyres increased the speed of the vehicles very considerably, and therefore pneumatic tyres had to be used, and they had to be made of sufficient strength and durability to stand the strain. Year by year they were improved and refashioned, being brought to that state of perfection which made them a necessity on any high-speed car. This, of course, had a great bearing in regard to the various vehicles which were made for ordinary use, as it was very properly argued that tyres which gave a reasonable amount of satisfaction in a race could be expected to wear well and show durability when merely having to undergo the wear and tear of low-powered touring vehicles.

It eventually became clear that owing to the unrestricted limits which manufacturers had in the building of these racing cars there was a weakness. Motors of what was then termed abnormal horse-power were being fitted into *chassis* not only of great strength but of great weight, and the result was that we were racing in 1901 on cars containing motors of about 50 h.p., and weighing between 28 and 30 cwt. The Races Committee of the French Automobile Club took this matter up immediately, and rules were framed without delay, which came into operation in 1902, restricting the weight of all racing vehicles, it being believed that by doing so the construction of motors of abnormal horse-power would be discountenanced, and machines of a more rational and usable type result.

The various cars were divided into three classes: the first to weigh, complete, not more than 1000 kilos, i.e. about 19½ cwt.; the second to weigh not more than 600 kilos, i.e. about 11½ cwt.; the third to weigh not more than 450 kilos, i.e. about 8½ cwt. The two former to be built to carry a

driver and mechanician, and the lightest class to be arranged to carry only a driver. One would have imagined that the problem set before manufacturers would have been sufficiently difficult to have caused them to reduce the horse-power of the motors in order to construct a thoroughly strong car within the weight limit. The problem, however, was not tackled in a half-hearted manner, and the result was that in the following year (1902) vehicles of practically the same horse-power were on the road, but yet were built within the weight limits. How was this result achieved? Every portion of the cars had been designed with the object of embodying lightness combined with the largest margin of strength; and whether each manufacturer had successfully combined these two ideas was proved in the later races. Some succeeded where others failed; but the goal was the right one, and it is the goal which manufacturers, in a measure, are aiming at even at the present day. Then we saw a repetition of what had previously happened in regard to the increase of engine-power. It was a difficult task in 1902 to build a 50-h.p. racing car within the weight limit, but yet it was very easy to do so in the following year, when the various manufacturers were endeavouring to fit 70 h.p. motors instead of 50. And at the present day the power is increased to 150 h.p., and yet the 1000-kilo weight is not exceeded.

It may be asked, How is it that we are now able to accomplish what before was impossible? There is no doubt but that it has been practically through the necessity of building new cars year by year for the various big races which have taken place. New metals have had to be employed; the knowledge and brains of the scientific metallurgist have been brought to bear on the subject, and material tougher and stronger than has ever before been produced has had to be manufactured to meet the special conditions for which it is required. The stress and strain has been increased two-fold, and yet the weight and bulk of the material itself have had to be decreased. The brains of the designer have been employed in the fashioning of those necessary parts in connection with the car in the lightest, simplest, and most effective form. Every ounce of useless metal has been cut

out, and every ounce of metal that remained has been utilized with the sole object of giving increased strength to the complete vehicle. Valve and ignition devices have been arranged with subtle ingenuity, with the sole object of obtaining the greatest possible power out of the largest engine it is possible to fit within the frame. The moving mechanism of the car, the change-speed gear, has to be designed and constructed to transmit the enormous power to the road-wheels of the car; and yet the weight allowed for it is less than was originally allowed for a gear only required to transmit 16 h.p. The frame of the car, on which everything is fixed, and which holds together the various units, cannot be of that heavy, solid construction which it was found necessary to employ in the building of the racing cars of one-fifth the horse-power of previous years. It has to be light, strong, and rigid.

The problem to be solved by the pneumatic tyre maker is very different from that which existed in the days when the maximum speed to be attained was fifty miles an hour. Tyres that will stand the stress of ninety and one hundred miles an hour, and even more, have required more scientific building and a more careful selection of material and a greater knowledge in construction.

So, throughout the whole of the car, the nature of the problems set before the manufacturers can be easily appreciated. And when it has all been accomplished and the high-powered racing car is a thing complete in itself, it may be asked what benefit automobilism and automobilists using vehicles for ordinary purposes, not desiring to travel at excessive speeds and not wishing to do more than drive over the roads and use their cars in a rational manner, can obtain from the construction of racing cars.

In the first place, it must be pointed out that the manufacturers themselves are, through a race, able immediately to ascertain whether the material, design, and construction of the special cars they have built have been of a satisfactory character. After a car has travelled at racing speed for four hundred or five hundred miles, any faults will have shown themselves long before the finish.

Weakness of material or bad design may have a disastrous effect on the car and possibly the driver as well. If these be right, it may even then be that the scheme of design with regard to the details of the car has been faulty, and through a trivial mistake any chance of the car performing successfully may be ruined.

The building of a successful racing car is a science in itself. And now I would like to explain as to what effect that science has upon the construction and design of the ordinary motor-car.

In the first place, let us consider the question of horse-power. I have again and again heard it argued that racing at the present day is of little use owing to the fact that machines of abnormal horse-power are used, and therefore any results obtained are of benefit to nobody. My mind travels back four or five years, and I have heard the same arguments used year by year in regard to the vehicles which were being raced on in each particular year. When motors of nominally 40 h.p. were first fitted into racing cars, a cry went up that at last a climax had been reached and that no useful purpose could be served by racing with such powerful vehicles. And yet to-day a motor-omnibus for use in the streets of London is under-powered unless it has at least a 40 h.p. motor. The 40 h.p. engines which, when first placed within the bonnets of vehicles and raced on the road, were unwieldy and difficult to control, even in the hands of the great experts of the day, are now being driven by men of little knowledge and in many cases of little skill, and are handled as mere playthings; but no one suggests there is anything unusual in a motor of 40 h.p.; in fact, quite the contrary is the general view. You have no doubt observed those large, handsome, covered-in carriages which are now so common in London, and which are becoming necessities among those who can afford them for use in town and country, for theatre-going and for long-distance touring. It is quite common to find these vehicles of 60 h.p. and more. They are not racing vehicles; they are designed for everyday

use, and yet they have the same power as the racing-car which three years ago won the Gordon-Bennett Cup.

I may be told that finality has at last been reached on this question of horse-power, but is that so? I have been told that each year. There can be no question but that petrol-driven engines of very big horse-power are eventually to be used for every known method of road locomotion. And how are the steps towards the perfecting of these large engines to be taken? It may be that many firms will build, for ordinary experimental purposes, engines up to 150 h.p., but I venture to suggest that the problem of building powerful engines capable of doing almost any work is being materially assisted through the manufacturers having the incentive in front of them to design and construct forthwith these powerful motors for racing purposes. Never was this more clearly demonstrated than in connection with the building of motors for motor-boats. It was the racing programme which opened up the way for the ingenuity and skill of the designers and constructors.

Then, when the race has been run, what is the lesson learned by the manufacturer? It is obvious that, with the exception of great speed, most of the qualities praiseworthy in connection with a racing car are equally praiseworthy in cars for everyday use. The special material which has been experimented with by the manufacturer in the construction of his racing vehicles is found to be satisfactory, and is utilized forthwith on the cars he is supplying to the public. A new idea worked out in connection with the engine; a new form of suspension; a certain quality of springs; a special arrangement in connection with the steering; all these, with the results obtained from their use in connection with a race, are carefully analysed, and the result is their adoption or rejection in complete or modified form by the manufacturer. The necessity of fitting longer springs, stronger axles, larger tyres, and the thousand-and-one improvements one could mention in comparing an up-to-date car with a vehicle constructed five years ago, owe their origin to the consideration of these points by the manufacturers when constructing their racing models. We all

know how disastrous it is to a manufacturer in turning out a new type to have to ascertain from the public buyers of the cars knowledge in regard to its weaknesses. It is obviously to his advantage to test his material before the cars are made and supplied commercially. Obviously the car which will stand the strain of a big race and go through without giving trouble will give little trouble when used for ordinary purposes under ordinary conditions.

Of course I am aware that some of the big racing cars as we know them at the present time could hardly under any circumstances be utilized for touring purposes pure and simple; yet there are cars which have been designed for racing, which, while having that remarkable turn of speed necessary for a car to be termed a racing car, are nevertheless of such flexible construction that they might be termed "absolutely ideal touring carriages." It depends very much upon the interpretation of the latter term, which varies according to the individual idea.

I am personally of the opinion that a speed race, pure and simple, without other conditions, is not now as beneficial to the industry as it was two or three years ago. It is very difficult to define the line where horse-power becomes abnormal, but nevertheless I cannot help thinking that cars containing engines developing 150 h.p. are not the vehicles which we are wanting, or which are necessary to teach us the valuable lessons I have set forth. I do hold, however, that speed is the important factor in drawing a comparison between cars of various makes. If racing, with speed as the sole idea, is not now giving to the industry the benefit it originally gave, then it is very obvious that to obtain this benefit other important points have to be considered. To my mind, in order to improve the type of vehicle used in the ordinary way, there should be modified restrictions in regard to weight, and also in regard to the size of the motors; rules should also be made in regard to the weight carried on the car.

To sum the matter up briefly, most valuable lessons could be learned from allowing ordinary touring vehicles to compete in an event, the winning of which depended upon a

certain distance being covered in the shortest space of time. If a weight of chassis was stipulated, and a certain size of engine (these limits being decided upon by a committee having knowledge of the ordinary requirements for a motor-car), and a standard once having been agreed upon, the various manufacturers entered cars in competition, knowing that having built their vehicles in accordance with the rules they had but to cover the racing distance in the shortest possible time in order to win the event, I am certain that much good would result.

I have heard it argued that the fixing of a certain size of cylinder is not the correct way to restrict excessive speed, and that the proper way of providing for this is to restrict the amount of fuel used in an event. But this I do not agree with. For the industry to obtain the best results from racing I should like to see vehicles constructed to a given size and weight, and then full scope given to the various manufacturers to obtain whatever benefit they could from the various forms of design employed by them in order to obtain the best speed. The result of this would be that in the first place efficient motors would be built—motors which would develop the very maximum of power for their size and give the very best results under the hard and strenuous conditions of a speed race. Transmission of power from the engine to the road-wheels would also receive careful attention, and every part of the car would be built with the idea of obtaining the best efficiency with the stipulated size of engine and the specified weight of chassis.

I do not know that racing carried out under these conditions would be as interesting from a spectacular point of view as it is at the present day, but I am certain that it would benefit the industry to a much greater degree than the big speed events which are held from time to time, although, as I have already pointed out, valuable lessons can be learnt from the latter. Racing under these conditions from a sporting point of view would be just as interesting, and possibly, owing to the easier nature of the task, keen amateurs might once again be seen at the wheel. As a thrilling spectacle it is undoubtedly at the present day more worthy of witnessing

than it was three or four years ago, but it is a huge battle of commerce; a fierce struggle for supremacy between the various firms engaged, with the sole idea of enhancing the value of the ordinary cars made by them and sold to the public. Obviously, the expense is enormous. The building of these special speed leviathans involves the expenditure of thousands of pounds, and the retaining of skilled professional drivers, and the many attendant expenses in connection with the running of the race itself, all mean a huge total which any firm might rightly, at the end of the financial year, weigh up and wonder whether the racing policy pays. My own opinion is that it does, even under these severe conditions, providing any particular firm is reasonably successful and the success is handled in a sound commercial manner, but there is really no necessity for the huge expenditure which is involved solely through the speed idea alone being accepted.

The time will no doubt come when such a thing as motor-car racing will not exist, and the period will be lengthened or shortened according to the progressive ideas governing the framing of rules controlling the events. In my opinion, rules governing racing should be varied frequently if the greatest value is to be obtained from the running of races. This fact was very forcibly impressed upon me after seeing the race for the Grand Prix over the Sarthe Circuit in 1906. The ingenuity and skill of the constructors have altogether outgrown the rules and regulations which were framed for racing five years ago, and the racing machine of the present day is so formidable that extraordinary precautions and arrangements have to be made to enable a race to be run. The special preparation of the road, the obtaining of thousands of soldiers to guard the course, the arrangements necessary for the convenience of the spectators, make the organization of a race a gigantic undertaking, and the value of it all carried out to finality benefits one firm alone, viz. the firm constructing the winning car.

I would like it to be understood, however, that my remarks refer to racing under the present regulations. I believe thoroughly in competitions which are decided on the speed

basis, but with restricted power; and on these lines many valuable lessons might be learned and much valuable experience gained. Speed, pure and simple, now teaches us nothing. Speed was never necessary for sport, and its sole value at the present moment is the assistance it gives to the quick elimination of the competitors through accidents. The problem should be efficiency for given size and weight. As the sporting side of racing is now practically non-existent, the driving factor and the individual skill of the driver should be put at the biggest discount possible and every facility given for a decision to be arrived at on the efficiency or otherwise of the vehicle itself. The only justification for motor racing at the present time is that it benefits the industry, and when the time comes, as come it must, that it does not benefit the industry, that very day racing will be finished.

At one time it was the beginning and end of everything, and as one who loved the sport for the sake of the sport, I do not want our debt to it forgotten. Perhaps in the days to come those who follow us will be unable to appreciate the various steps which marked the perfecting of the mechanically-propelled vehicle; but it must always be borne in mind that the great speed events which took place between the years 1896 and 1906 had much to do with the perfecting of the beautifully designed and exquisitely made vehicles which will be in use twenty years from now.

XIV

REMINISCENCES

ONE of my earliest adventures occurred in connection with a tour of the Automobile Club in the year 1898. The first stage of the run had been fixed for Reading. Most of the members had started early in the afternoon, but owing to my being detained in town on business I was unable to leave before seven o'clock in the evening. The car I was driving on that occasion was my old Panhard "No. 5," which had just been newly fitted with pneumatic tyres and specially painted and varnished for the occasion. I may explain that in those days acetylene lamps for motor-cars had not been invented, and the only lamps I had on my car were ordinary candle carriage-lamps. My only companion was my pet bull-terrier, who was as keen on motoring as I was myself, and he sat up in state beside me as we started off from London on the run to Reading, which in these days is a comparatively short distance from London, but at that time was thought to be quite a considerable journey.

At Hammersmith I lit the carriage-lamps and quickly made my way through Hounslow on to the open Reading road. "No. 5" had never travelled so well. The advantage I had gained in fitting pneumatic tyres was very evident, and I was in every hope of arriving at the hotel at Reading before the other members of the club had retired to bed. The toll-gate at Maidenhead proved no obstacle, and I only realized five miles beyond that I ought to have stopped to pay the toll; but I had not even noticed the gate, and it looked as if I should accomplish a record performance between London and Reading. The night was exceedingly dark, but the white road stretching out before me was clear, and what

I then considered a big speed was maintained, even though the only light I had was derived from two feeble candles.

Suddenly, within five miles of Reading, crossing over a railway-bridge and on a slight decline, with the top gear in, and the car travelling at its best, I caught sight of a number of sheep on the road, and before I had realized that they were there, the car had struck them. I was thrown out, the car turned over sideways, and a big smash resulted. It all occurred so suddenly that I hardly realized what had happened. As I was thrown out of the car I had doubled myself up and landed on to my back and had then rolled vigorously, having a faint idea that the car would probably fall on top of me. Jumping up unhurt, I ran back and found the car absolutely upside down, but the motor was still running. In those days ignition was obtained by means of red-hot platinum tubes, and my one fear was that the petrol which was pouring out on the ground would ignite from the burners and so set light to the car. My first care, however, was for my dog Jack. I had not the faintest idea what had happened to him, and it was only after having called him for some time that he appeared, looking shaken and evidently very much astonished at our sudden stoppage.

With the aid of some men who happened to be passing, I was able to get the car on to its four wheels again. Although it was very badly knocked about it was drivable, and I started up the engine and proceeded very slowly into Reading, congratulating myself that I had come out of the smash so well, and thankful that more serious damage had not been done to the car.

I may add that before starting off again I endeavoured to discover whether I had killed any of the sheep, but not a trace could I find of them anywhere, so I assume the damage I did in that direction was slight.

I suppose all motorists have at various times suffered in some form or another from the actions of drivers of horse-drawn vehicles, who might be classed under the category of "road hogs."

I happened on one occasion some years ago to be coming back from Ripley, driving a small voiturette with two friends, and some distance behind us J. W. Stocks was driving S. F. Edge on a quadricycle. Coming along the open country-road we met a high trap driven by a horsey-looking individual with another man sitting beside him. As this trap passed us I suddenly felt the swish of a whip about my head, and then realized that the driver had deliberately struck at us with his whip as he passed. Stopping my car and turning round, I saw him slash at Edge and Stocks, who were coming on behind. In a second I had turned the car round and we were off in pursuit, with the quadricycle following close behind. Overtaking the trap we stopped it, and then the driver received a lesson which he had never before experienced in his life. An invitation to him to step down from the trap and explain matters was met by a violent attack with the butt-end of the whip, and there remained but one thing to do, namely, climb into the trap and expostulate in the fashion most approved of by Englishmen. The second man in the trap climbed out from the back and made the best of his way across country out of danger.

I am aware that it is illegal to take the law into one's own hands, but at the same time there are occasions when adequate justice is only done by retaliating on the spot.

Another incident of this description occurred when I was driving in France, having as my companion on the car George Du Cros.

We were coming from Paris to Boulogne on the car I had driven in the Paris-Berlin race, and near a little country village two men deliberately picked up huge stones from the road and hurled them at the car as it passed. This was more than we could stand, even in France, and I immediately had all the brakes on and the reverse in, and we were running backwards to deal out summary justice to the delinquents. Du Cros was down first, and before I had stopped the car I had a vision of two white-smocked Frenchmen running for their lives, with Du Cros, who was clad in a heavy motor costume, in full flight after them. Before I could stop the engine and get down they had disappeared round a corner,

and when I ran back I found myself in a little nest of houses with little lanes and side turnings, but nowhere could I discover either Du Cros or the offending Frenchmen.

Presently Du Cros appeared, running along and holding by the scruff of the neck one of the men who had thrown the stones, and who was absolutely green with fright. I am certain he was under the impression that the wild foreigner who had captured him intended to put him to death forthwith. When he appeared before me he dropped on to his knees, clasping his hands and imploring me to save him. As five minutes before he had hurled a stone at my head, which would probably have killed me had it struck me, I had little pity. But the ludicrous part of the whole incident lay in the fact that Du Cros all the time was calling him every name he could think of and demanding that he should apologize. The experience of the little man had been somewhat painful, because, as Du Cros afterwards explained to me, when he had caught him up, for fear of *la savate* he had leaped upon him and borne him to earth; then, having knocked all the wind out of him, had dragged him back to me to apologize.

I kept a serious face as long as possible, and then sat down at the side of the road and shrieked with laughter. The change of expression on the face of that Frenchman when he realized that his life was to be spared and that the whole matter was one which might be treated with levity, was extraordinary. The tears merged into smiles, and he laid his hand on his heart and lied in the most approved fashion, explaining that in reality he had not thrown the stone at the car or at us, but that he had merely been throwing stones for the sake of exercise.

As I have already explained, in the early days one always had to be prepared to protect oneself when out motoring, as the sympathy one obtained from the populace and from the authorities was conspicuous by its absence.

I had one very unpleasant experience in the Kennington Road. It was late one Sunday evening, and I had driven a considerable distance that day in a small De Dion voiturette, my only companion being a pet bulldog, then in the puppy stage.

Suddenly my car stopped. It was eleven o'clock at night, and I got down and commenced to investigate the trouble, which eventually proved to be lack of petrol. While I was looking round the car of course a crowd collected, and a big fellow of the "loafer" type, leaning over the car, discovered my bull-pup sleeping peacefully through all the proceedings. The discovery was followed by pushing the dog about, with the idea, I assume, of seeing what it looked like. I naturally resented this, and requested that my dog should be left alone. This was immediately followed by a repetition of the incident, and I then expostulated in more emphatic language. Then, without warning, the loafer made a rush round the car, and before I realized what was happening I was engaged in a desperate set-to, having the knowledge that if I once went down I should in all probability be kicked to death.

What the result would have been I do not know, had the police not arrived on the scene very quickly, but as one of the many unpleasant experiences I had in the early days, I still remember the terrific swing of that loafer, which, had it once got home, would probably have ended my motoring career.

Years ago, I was never averse to undertaking anything in connection with driving if it offered a new sensation and a new experience. I therefore accepted the opportunity of driving one of the first cars of a new firm, from London to Northampton, where it was to be fitted with a carriage body. I took with me an experienced mechanician, and started off on the run early one evening. We proceeded splendidly until we reached Hampstead, and there we were hung up from some trivial cause until darkness set in. Lighting our lamps, we continued our journey, arriving at Dunstable about eleven o'clock at night, but, determined to reach the end that night, we proceeded on our way to cover the additional twenty miles to Northampton.

Then, five miles from everywhere, something happened in the gear-box, and although the engine was running perfectly the car did not move. With the aid of matches we investigated the interior of the gear-box, and found that the cause of the trouble was irreparable, and we were hopelessly stranded.

If there was one great quality which motorists in the early days possessed more than another, it was that of being philosophical, and this was a quality which I had many opportunities of cultivating. What was to be done? The car could not be left alone at the side of the road. It was useless to walk into the next village, for the reason that every one would be in bed. Therefore the only alternative was to pull out the cushions and go to sleep on the side of the road.

Oddly enough, Edge happened to be travelling over that same road that night in the opposite direction, and had been hung up with tyre troubles, and in the early dawn of the morning I was awakened by the sound of a car in the distance, and to my gratification Edge arrived on the scene, on his way back to London. Leaving the mechanician with the car, I very readily accepted a seat on Edge's car, and arrived back in town in time for breakfast.

Camping out was not an uncommon experience then, and one became hardened to it. But I am inclined to think that if any motorist of the present day were asked to pull out the cushions of the car and make his bed by the roadside, he would feel himself considerably aggrieved.

The Paris-Bordeaux race of 1901, which was eventually won by Henri Fournier, promised to be exciting, and Harvey Du Cros, jun., and I proceeded over to France on his 16 h.p. Panhard to witness it. Leaving Paris on the night before the start of the race, we journeyed on during the night to Tours, where we arrived at daybreak. At about six o'clock the sun was well up, and the racing cars began to arrive from Paris.

Edge was competing in this event on a huge Napier, and we were delighted to see him arrive safely in Tours, although we learned in conversation that he had had hairbreadth escapes *en route*. Going to the outward control we assisted him in replenishing his car with petrol, and then I essayed the task of starting the engine for him. Napier, I may say, was acting as mechanician on the car, and either as the

result of the hairbreadth escapes they had had on the way, or because of the fatigue he had undergone the previous two or three nights in preparing the car, was not in that robust state of health which made the starting of a huge engine like that fitted to the Napier a pleasure. The engine was so big that it could not be started in the orthodox manner with the starting-handle, but had a huge lever. For twenty long minutes I tugged away at that lever, endeavouring to get an explosion out of the motor, until at last, when I had almost collapsed from exhaustion, with a roar it started up, Napier jumped aboard, and away they went. We then returned to the hotel, got out our Panhard, and started off after them, expecting to see them in Bordeaux that evening.

We had picked up Cecil Edge in Tours, and he was the third passenger on the car, together with our mechanician. Running along in great style, about fifteen kilometres from the town we came upon the Napier stranded by the side of the road. Some vital part had broken, but I forget what it was at the moment, and not another yard would it move. In addition to this, there was a huge leak in the petrol tank. When we arrived, Napier was lying on the grass in a despairing attitude, while Edge was philosophically sitting up in the driving-seat waiting for something or somebody to turn up. An investigation proved beyond all question that the car would not run, and the only thing to do was to procure a rope and tow the racer back into Tours by means of our car. I think the mechanician on our car must have been a genius. At all events he was very far-seeing, and I certainly smiled when he pulled out from the back of the car a long length of rope all ready for an emergency. The only question was whether the rope would stand the strain of pulling such a heavy car as the Napier up the hills, and with the idea of testing its capabilities, after connecting up the two cars, Napier and Edge sat on the racer whilst our mechanician took the Panhard and started off. The rest of us looked on approvingly and prepared to walk to the top of the hill to join the cars there, so that we could run back into Tours. It was evident that the rope was strong enough, as both cars went up the hill slowly but surely. As we strolled up the

hill in the burning sun one of the party expressed gratification that we had not to walk the whole way into Tours. Then suddenly the two cars, having reached the top of the hill, disappeared out of sight. Presumably the brakes had not acted immediately, and they were waiting for us just on the other side. But as we toiled on to the top I had a horrible misgiving that some misunderstanding had occurred and that we were left. So it proved to be. By the time we reached the top of the hill both cars were almost out of sight, and although we waved and gesticulated in the hope that either Edge or Napier would look back, nothing happened. There we were, stranded under a burning sun, with not a tree in sight under which we could obtain shelter.

If Edge and Napier had heard the remarks we applied to both of them when we realized that we had been deserted, I am sure there would have been trouble when we met them again. Their brutality in so treating us after we had lent them our car overcame us to the extent of rendering us quite unable adequately to express our feelings. Obviously they intended to go on into Tours and send our car back to fetch us. In the meantime we had to amuse ourselves as best we could.

In our haste when leaving Tours, we had come away without any food, and after the further delays on the road we suddenly came to the conclusion that food and drink had to be obtained from somewhere at any cost. A peasant whom we met on the road informed us that there was a village about a kilometre away, off the main road. So we drew lots as to who should toil into the village and obtain provisions. Cecil Edge was the unfortunate one, and stripping himself of his jacket he started off, while Harvey Du Cros and I lay down by the side of the road and cursed our fate. I was in an utter state of exhaustion owing to the stupendous efforts I had been making some little time before in starting the Napier, and it was only after I had been severely bitten that I discovered I was lying on a nest of ferocious red ants, who seemed, by a concerted plan, to have attacked me from every point at once. The bites from these insects nearly drove me frantic, and I was only consoled

when Cecil Edge arrived back carrying bottles of wine, a huge loaf of bread, and some impossible butter, which we sat in judgment upon and condemned forthwith. These provisions he had obtained at great cost and with much difficulty. He denied indignantly the suggestion that his knowledge of French had caused most of the trouble in obtaining the food, and attributed his difficulty in making himself understood to the fact that the people in that particular village had a peculiar *patois* of their own.

Refreshed with food and drink, the next thing we had to consider was how to pass the time until the car returned to take us back to Tours.

I may say that when Cecil Edge arrived back he brought with him the whole of the village, who evidently had been amazed at a foreigner walking in in his shirt sleeves and calmly walking off again into the open country carrying wine and bread. Therefore, with the idea of investigating the mystery, they followed at his heels. We thus had an audience who smiled at us approvingly as we ate, and were still more pleased when we handed over the last bottle of wine for division amongst the male members of the crowd.

I do not know whose the suggestion was, but it was quickly acted upon, viz., we would organize some village sports. Collecting a number of the boys, we explained to them the idea, and the first event run off was a hundred-yards race for a five-franc piece. The whole of the villagers, who by this time numbered about twenty, wanted to join in, but we explained to them that their turn would come later, and that this was a race for juveniles. It was won in brilliant style by a lanky youth who took off his shoes and stockings and thereby gained a decided advantage over his fellow-competitors. A two-legged race was the next item on the programme, and provided great amusement. By this time we had forgotten the heat and were thoroughly enjoying ourselves amidst the excited villagers, who apparently were willing to do anything or go anywhere when they discovered that some money was to be made.

By the side of the road, at regular intervals, were placed heaps of stones which were there for road-mending purposes,

and this gave us the brilliant idea of placing a bottle on one of these heaps and offering a really big money prize to the villager, old or young, successful in hitting it first. This was an open competition, and the prize was one louis. Never, in the whole of my experience, have I witnessed anything so exhilarating as that contest. Standing on one heap of stones, they threw at the bottle on the other. The fun waxed fast and furious, but the bottle remained untouched, until, suddenly, during a lull in the firing, the smallest boy in the crowd, taking a particularly large stone, hurled it with all his might and shattered the target. He was immediately handed the prize, and when last we saw him he was running down the road chased by his mother, anxious to capture the money before he could get away.

In the midst of the excitement which this incident provided, a *cantonnier* in charge of that portion of the road arrived on the scene, and there was terrible trouble through the stones which had been carefully piled up at the side of the road now being strewn all over it. A bribe, however, soon pacified him. Then we were struck with another excellent idea and immediately organized another throwing competition. We explained, however, that the only stones allowed to be thrown were those in the road. The result was that, before the next bottle was smashed, most of the stones which were on the road had been thrown back again on to the heap.

I doubt not that the memory of those sports is fresh even now in the minds of the villagers, and certainly it was one of the most amusing experiences I ever had on the road. We were almost sorry when the car arrived and we made our way back into Tours.

One of my weirdest experiences in France was when Edge and I came back from Bordeaux on our tricycles after the Paris-Bordeaux race of 1899. Our machines had been badly knocked about in the race itself, but we had had them repaired in Bordeaux and started away from Bordeaux *en route* for Paris on the same day as the bicycle race from Bordeaux

to Paris was to take place, and which started at nine o'clock in the evening.

The chief excitement during that day in the run to Angoulême was a race we had with a fast car which was travelling in the same direction as ourselves. The speed of our tricycles and this car was very much the same, and uphill and downhill we hammered away. Uphill we would gain, downhill the superior weight of the car would give it an advantage. And the end of it was that all three of us eventually found ourselves many miles off the road, having paid more attention to beating each other than noticing where we were going.

The speed of our 2¼ h.p. tricycles was not very terrible, but it seemed very fast then. We arrived in Angoulême that evening at about seven o'clock, and after dining at the quaint old commercial hotel in the town, proceeded to bed to get two or three hours' sleep preparatory to getting out on the road again to watch the racing cyclists come through.

De Knyff on his 12 h.p. racing car had arranged to pace Huret, then in his prime as the finest long-distance rider in the world; and Girardot was pacing Fischer, another great long-distance rider; while some of the other racing cars were pacing other riders.

At eleven o'clock we were up on our tricycles and off along the road to the top of the long hill which leads up away from the town. There stopping, we lay down on the grass and waited. Not a sound could be heard. It was an intensely black night, not even a star showing, and the stillness was almost oppressive. Suddenly, away down the hill, appeared the light of an acetylene lamp which appeared to come from a bicycle, and I remarked at the interminable time which the cyclist took to mount the hill, forgetting that it was over a kilometre long. Then we heard a humming which grew louder and louder, and with a roar we were passed not by a bicycle but by a huge racing car, with a dark figure enveloped in dust pedalling for dear life behind. A yell of "Huret" from the car announced that it was De Knyff and Huret, who had arrived half an hour before they were expected and travelling at a great speed. Almost before we

had recovered from our astonishment another car had roared by. It was Girardot with Fischer, and we were thrilled at the terrific contest which was being fought out in the dark between the two great road-racing cracks.

Mounting our machines, we were quickly in pursuit, but although we could see the lights from the cars away up on the hills in front we seemed to gain but little on them. Through little villages, round corners and over that long straight road, almost feeling our way in the darkness, we fled along; and just as day was dawning we arrived in Poitiers. An excited crowd was waiting, and they immediately rushed at us to ask for information as to where Huret was. It appeared that both cars had reached the town almost together, Fischer safely behind Girardot's car, but when they came to look for Huret he was nowhere in sight; and then he suddenly appeared walking in the midst of the crowd with his machine, having had a bad spill just as he was entering the town, without it being noticed from the car.

Signing their names at the control they were off again, and then as Edge and I made our way along the road, Edge ran into a huge boulder and wrecked his machine, and we had to make our way back to Poitiers, put our machines on the train, and proceed to Paris in order to see the end of the race at the Parc de Princes track.

Toiling under a broiling sun, I do not know what the riders must have endured on that day. As we waited at the track the news came along that Huret was leading slightly, that Fischer was very close to him, but that it was expected that Huret would finish first. Almost as soon as the telephonic message came through Huret arrived on the track, the pacing car steered off into the centre, and then the unfortunate rider had to complete two circuits of the track before the race was completed. I forget the time which he actually took to cover the distance from Bordeaux to Paris, but it was certainly record. But his condition was pitiable, as he had fallen off his machine fifteen times. Smothered with dust, with his clothes torn to shreds and covered with blood, it was inconceivable that human endurance could have possibly fought against such odds. Almost before Huret had finished Fischer arrived,

losing the race by a few minutes, and, although he was not in the same terrible condition as Huret, he also had fallen a number of times, but had gamely fought the finish of the race to the bitter end.

Some of my most pleasant recollections of motoring as apart from racing are in connection with France and with French towns and French roads. When I went down for the Nice-Abazzia race, which was eventually prohibited by the French Government, I took as my companion Cecil Edge, and a great sporting run we had from Paris to Nice. Experiencing all the troubles of a new racing car, we grappled with them on the road, overcoming them one by one, and although it was raining in torrents throughout the whole of the journey we revelled in our very misery, as it was all such a novelty. Our arrival in Cannes was somewhat dramatic. We had arrived at the foot of the Esterelles in the darkness, and our acetylene lamp, which had been working very indifferently, thereupon gave out altogether. Neither of us had any idea of where we were going, but as we groped our way up and up in the darkness it seemed as if we were never coming down again. I had heard of the Esterelles in a vague way, but I had never imagined I should meet them in the dark and have to get over them by feeling my way. We stopped half-way up by the side of a little bridge, and leaning over endeavoured to make out what lay below. I dropped over a stone, and when after a terrible lapse of time we heard it strike on the rocks below, I came to the conclusion that I had climbed as high as I cared to go. There was no help for it, however. Cannes lay in the distance, and we had to get there. I am not sure that our hair-raising experience of climbing was not eclipsed by the still more exciting experience of coming down the other side.

We arrived in Cannes that night at eleven o'clock, unrecognizable from dirt and oil. Having found a garage for our car we inquired the name of the best hotel and proceeded there to obtain rooms for the night. Our feelings can be better imagined than described when I say that owing to our dirty

condition we were turned away by the hall-porter and refused admission. The sight of gold, however, has an extraordinary influence in France, as everywhere else in the world, and we were eventually ushered into a lift (having previously been requested not to sit down and so spoil the cushions) and elevated to a room at the top of the building, food being brought to us there rather than that we should show ourselves downstairs. It was all very ludicrous, and we enjoyed it immensely.

I think it is the unexpected which one always appreciates, and the only reason people become blasé in connection with motoring is because everything occurs according to programme and nothing out of the ordinary happens.

On that trip we had great experiences in Italy. An encounter with some muleteers in which we deemed discretion the better part of valour afforded us some excitement. I cannot say that I care to run away from anybody under most circumstances; it does not seem quite dignified. But when, after a little incident on the road, a swarthy Italian rushes at you brandishing a huge knife, I do not think it is inadvisable to efface yourself as quickly as possible.

There occurs to me an exciting episode which happened in the Circuit du Nord race. We were rushing down a long steep hill, when there appeared in the distance at the foot a railway crossing; and as we approached at full speed the two women who looked after the gates (which in this particular instance consisted of two poles stretched across the road) waved frantically to us to draw our attention to the fact that the poles were down and that a train was expected. Evidently they did not appreciate the short distance in which a motor-car can be pulled up, and in the terror of the moment, imagining that we should dash into the poles, they entirely lost their heads, rushed to the poles and raised them. The opportunity was too good to be missed, and in a second all the brakes were off, the clutch was in, and we dashed for the opening which presented itself. The line was hidden from our view by trees, and as we struck the crossing

I caught sight of an express train coming towards us not thirty yards away. It is not necessary for me to say that we were too quick, and the collision did not take place—otherwise I should not be telling the story; but as we reached the other side of the crossing the train flashed by, and just for one moment I thought of what might have happened had we been two seconds later.

I took part in the second Ardennes race, which was run in 1903, this time driving the De Dietrich car which a few weeks before I had taken through to Bordeaux in the Paris-Madrid race. I started off in very steady fashion, and half-way through the first circuit began to drive hard. Then my troubles began. I had just completed one round and was travelling at top speed, when I received a terrible blow on the back of my head, which nearly knocked me out of the car. The whole of the tread of one of my tyres had come off, and a piece two or three feet long had swung round and struck me. This was bad enough, but when all the tyres began to serve me in the same manner I quickly realized that I was in a dangerous position. On the first opportunity I changed two of the covers, started off, and the same thing happened again. It eventually turned out that the tyres I was using were "green," and would not stand the terrific heat they were subjected to in driving at a high speed. My plight was similar to that of all the other competitors in the race using the same make of tyres, and after struggling on hopelessly through a second round I had to retire ignominiously and admit myself beaten. My only consolation was in seeing Mr. Austin, of the Wolseley Company, working hard on one of the Wolseley cars, the driver of which had run on the rim for some considerable distance, with the result that the rim was perfectly flat, and those who have had this experience will appreciate the amount of labour involved in putting the rim into shape sufficiently to allow of a tyre being fitted to it again.

One of the funniest experiences I ever had was in connection with the first Edinburgh-London non-stop run. I think it was in the year 1903. The idea was to travel from Edinburgh to London in two stages, the first day being to Leeds and the second to London at a speed not exceeding twenty miles an hour.

I entered this event, driving a 24 h.p. De Dietrich car, and I may say that at that period cars were not quite so reliable as they are at the present day, although there were a number of very excellent cars made, capable of doing this performance without difficulty. Very little happened on the first day, except that we had one or two narrow escapes, starting off in the morning. Owing to the distance to be travelled the start was fixed at a very early hour; in fact it was almost dark when we left Edinburgh. I did not go to bed that night. A supper party given by some Scotch friends kept me up very late, and I decided that I would feel much more tired if I attempted to get any sleep, and as when I returned to the hotel it was all bustle and excitement, I elected to stay up. The result was that when I actually started from Edinburgh I was decidedly sleepy, and almost before I had left the city I fell asleep at the wheel of the car. The observer I had on board was rather shocked at my apparent lack of appreciation of the importance of the occasion, but said very little. When I repeated the performance, however, he began to be alarmed, and on the third occasion, when out in the open country I just missed running into a telegraph pole, I am convinced that he would have been delighted to have vacated his seat and returned to his native town.

The run, I may say, was one strictly to schedule, but I had the idea that the correct thing to do was to get to the front. We were not allowed to arrive at certain places before a certain time; but so keen were those of us on our car on our time-keeping, that we eventually found ourselves in the very front of the procession, out of the dust, and we arrived in Leeds first. I only appreciated the importance of this when the evening papers came out, and I read that I had won the first stage of the race from Edinburgh to London. There was evidently a great deal more in this idea of finishing

first than I had fully appreciated. But other competitors also had come to the conclusion that the idea was a good one, and the next day there were a considerable number of drivers endeavouring to emulate my example of the previous day.

There were a great number of cars in the run; but by virtue of the fact that I had finished first I started off first, and was hoping to keep my position, when suddenly, coming down a long hill on the North Road, two policemen jumped out of the hedge and I discovered that I had run into a police trap. This was one of the privileges of being in front, and I was more annoyed at losing my position than at having been stopped for exceeding the legal limit. Whilst I was drawn up at the roadside arguing with the policemen, of course the other cars came by, and the time I was stopped on the road was being taken notice of, as I had to allow the same time to be added to my minimum time of arrival in London, which meant that at least six or seven cars would be entitled to finish in front of me. The extraordinary thing about it was that I convinced the policemen by argument that they had made a mistake, and I was let off without even being asked my name and address, with the caution that I was "not to do i again." This stoppage, however, had delayed us seven minutes, and I could not see how under these circumstances that it was possible for me to arrive first in London. I felt, however, that I would like to be in front as long as possible, and therefore quickly overtook the cars which had passed me, without their apparently appreciating that I had been actually stopped and delayed on the road to any extent.

And so we made our way into London. Six or seven cars were in a line, and my car at the head of the procession. Then as I got into the intricacies of the London streets, I was requested by the driver of the second car to give the other cars a chance of keeping together, as they were not conversant with the way into town and to the Automobile Club at Piccadilly. It then occurred to me that if I could delay the other cars and make them seven minutes late and arrive on time myself, there was a possibility that I might gain the coveted honour of finishing first.

I was very thankful that the other drivers were from the north of the border, and that London was not an open book to them. My observer was equally ignorant. I therefore chose the best possible road into town, which incidentally happened to be the longest, and proceeded at a pace which even the most bigoted opponent of motor-cars could not have grumbled at. Then, within five minutes of the time when the other cars ought to have been at the Club (which meant that I had still twelve minutes to spin out), I began to be aware of the fact that great uneasiness prevailed amongst the cars behind. But there they were in a veritable labyrinth, not knowing one street from another, and I steadily pursued my course until, when they were five minutes late and I had two minutes to spare, I suddenly brought them out on the Marble Arch, and then, putting on a little speed, I ran down Park Lane and arrived at the Club, first.

That night the evening papers announced that I had won the great "race" from Edinburgh to London, entirely ignoring that it was purely a reliability trial at a fixed speed. I think this was the easiest "race" I ever won, and to those of my fellow-competitors in that event I make this confession for the first time, as I do not think to this day they ever realized that their late arrival was the result of a pre-arranged scheme.

One of the most historic events in connection with English automobilism was the thousand miles trial of 1900. This consisted of a circular tour through England, up to Scotland and back to London.

Edge at that time had received the first Napier car and was driving it in the event, and as I had then disposed of "No. 5" he offered to let me have his old Panhard, into which a Napier engine had been fitted. The fitting, however, was of a rather primitive character, and when on the morning of the start I presented myself for the car with Harvey Du Cros, jun., who was accompanying me, we found that only one of the two cylinders seemed anxious to do any work. Napier, who was accompanying Edge on his car, came down to the

start with us, and in the course of investigation on the way explained that a short circuit had occurred in the high-tension wires which were arranged in close proximity to the exhaust-pipe, and that if we found the engine missing fire the only thing we could do was to "joggle the wires." We knew very little about it, but it certainly seemed a primitive method of remedying the trouble, especially as we had one thousand miles to cover. But Napier had no time to stop, and he jumped on to Edge's car, leaving us to do the best we could.

In a more or less satisfactory manner we drove out to Hounslow, where the official start took place, and thence on to Reading.

The first thing we discovered was that the new engine absorbed an enormous amount of petrol, and before we had arrived at Reading we had used up all the petrol in the tank and were rushing about to buy more. Before this happened, however, we had the most harrowing experience in our attempt to "joggle the wires." My companion made the first attempt when the car was travelling along, and the result was that as he was sitting on the footboard he received a shock from the electric coil which nearly threw him out of the car. As the engine was then missing fire very badly I implored him to make another attempt, but his only suggestion was that I should stop the car and get down and make the attempt myself. The event was not a race, but it partook of the character of one, and the fact that other cars were passing us all the time rendered me desperate; and therefore I jumped down and plunged my hand amongst the wires in the endeavour to carry out Napier's advice, and thus perhaps remove the point of contact which was short-circuiting. I have no idea what voltage we were using, but I have a vivid recollection of receiving a fearful shock, and thereafter I also decided that, whether the car went or stopped for ever, Napier's advice was not worth carrying out on that particular point. I therefore climbed back into the car, and in a more or less unhappy fashion proceeded on our way. Sometimes the engine went well, other times it would not go at all.

At Reading most of those taking part stopped for an early breakfast, but we had no time for this, and we solemnly plodded on at an exceedingly slow speed, wondering what would happen over the 960 miles which we then had to cover.

I forget where we eventually stopped—it was in a very remote country district, and all the other cars were well ahead. But apparently the extra horse-power of the engine had proved too much for the gear in the car, and with a crash it suddenly stopped. Upon investigation we found that the bolts holding the gear-wheels together had all broken, and that so far as we were concerned we had finished.

By good luck we happened to stop outside a house in which festivities were going on in the shape of a garden party, and receiving an invitation on to the lawn we left our car exactly where it stood, and thenceforth forgot that we had ever had anything to do with it. I have an idea that the following morning a horse towed the car to the station, and that it was ignominiously returned to town by rail.

Later on we again joined in the tour, but on our motor tricycles, which although not possessing the luxury and comfort of a big car, were reliable and fast.

The thousand miles trial marks an epoch in the career of several successful firms of the present day, but under no circumstances could I put it down as one of my successes, at least from a motoring point of view.

At one of the early motor exhibitions at the Agricultural Hall a series of motor sports was arranged in the form of driving competitions, etc., and most of the prominent motorists took part. A regular programme for each day was arranged, and these various competitions attracted the greatest interest, because the public was able to appreciate how controllable the motor vehicle was, and also to observe the skill which a driver could attain in the handling of it; and as the greatest keenness existed between competitors good sport resulted.

Amongst other things a number of cyclist volunteers gave demonstrations, and it occurred to somebody that very excellent sport would be provided if a Balaclava mêlée was arranged between the cyclists and motor tricyclists. When the idea was suggested to me I thought it offered great possibilities in the way of having some fun, and eventually a team composed of C. S. Rolls, C. G. Wridgway, and myself, on motor tricycles, opposed three picked men of the volunteer cyclists.

It was decided that, in view of the fact that it was an experiment, we should have a rehearsal one evening just as the show was closing. There was some doubt in our minds as to whether we could manipulate our motor tricycles with one hand and at the same time handle the single-sticks which we had to use. However, we were soon fixed up in plumed helmets and leather jackets and ready for the fray.

I have a very mixed idea of what really happened. In the first place, the cyclists were absolutely terrified when they saw us bearing down on them at a fast speed, and without waiting for the encounter turned round and rode away as hard as possible. This, of course, increased our eagerness, and quickly a desperate conflict was taking place between the three pairs, with disastrous results to the cyclists. I remember Rolls attacking one in the most desperate style, and with one blow not only knocking out the plume of his opponent but knocking him off his machine. At the same time, out of the corner of my eye, I could see Wridgway making fearful havoc of the unfortunate cyclist opposed to him. My opponent seemed the cleverest of the three, and relied upon his skill in getting away to save himself. Then suddenly he started off at top speed down the arena with myself in close pursuit. Evidently my blood was up, for the result of our encounter was that I ran into his machine at full speed, jammed the unfortunate man up against the barrier, upset my own tricycle, and finished the combat. My opponent was taken off on a stretcher, and although I was unhurt my machine was not improved by the encounter.

The result of our conference after was that we decided the sport was much too exciting for public exhibition, and the

experiment was certainly too expensive to be made a second time.

I have travelled in many countries, on various types of cars, and have had the opportunity of appreciating and admiring the most glorious scenery under varying conditions, but I do not think that I could ever recall a touring experience which gave me greater pleasure, which provided me with happier recollections and the sight of finer scenery, than a tour I had in Ireland in 1901. I had only a little 7 h.p. Panhard, and therefore the exhilaration of great speed was absent, but the roads in Ireland were not made for speed. I would even assert that they were not made for motors, but the fact remains that a motor-car can be driven over them, and all the delightful spots in that delightful country placed within the automobilist's possibilities. Some of the roads are good, some are very bad, but with careful driving they can all be traversed with ease, and I would prefer driving over some of the very worst Irish roads to negotiating some of the many bad stretches of *pavé* one finds, for instance, in France.

It surprises me somewhat that English automobilists, in their search for novelty and in their desire to escape from the irksome, troublesome, and unjustifiable officialism of the police in England, do not favour for touring purposes a visit to the Emerald Isle. If scorching is desired, then Ireland is unsuitable, but for variety of scenery and climate, and the making of a grand tour on a small scale, it should not be missed. And the Irish character as met with in the country districts is something for an ordinary pessimistic Englishman to appreciate.

The visitors from England on the tour in question consisted of Roger Fuller, who was, prior to his death, one of the very keenest of English automobilists, Harvey Du Cros, jun., and myself, and, as may be imagined, we were desirous of showing the natives what a motor-car could do. The speed of our little cars surprised everybody, and we had exciting little races between ourselves. Our route

lay through Waterford, and from Waterford on to Parknasilla and Killarney, and on to Kilkee on the west coast, and from thence we cut back across country through Kilkenny and the Vale of Avoca, down to Glendalough and the Wicklow mountains, and so back to Dublin.

I shall never throughout the whole of my life forget the first view I obtained of the Killarney Lakes. It was late in the afternoon, and we had been toiling up and up the mountains, wondering how much farther we should have to go before reaching our destination, when suddenly we reached the top, and, dismounting from the car on to the narrow winding road, we peered through a cleft in the rock and looked down on to the fairest scene I can remember. I would not attempt to describe it. It was so majestic, so grand and so beautiful that it made a lasting impression on my mind. I do not remember how long I stayed at that spot watching the light fade away, but Killarney was not far off, and it was dark when we arrived at our hotel. I may have caught the scene in its most beautiful aspect, but whether that was so or not, it is one of the places I have visited which I intend to visit again.

At Killarney, Fuller, Harvey Du Cros, and I, decided that we would attempt to get through the historical Gap of Dunloe with our cars. Report had it that many years ago a wheeled vehicle with two horses driven tandem had got through the Gap into the Black Valley, but this was the sole instance of a vehicle on wheels getting through, and in the ordinary way horses and ponies only were used for the journey. The Irish members of the party scoffed at our suggestion of getting through, but we were determined to make the attempt, so we started off on our three respective cars—Harvey Du Cros and myself on 7 h.p. Panhards, and Roger Fuller on his trusty little De Dion.

Arrived at the foot of the Gap, we were met by our first difficulty. The lake covered up the whole of the road—in fact there was no road, as it ceased at the water and started again at the other side. The natives poured out of their huts to ascertain what we were after, and we were told that the water was quite impassable. However, we had to go

through it if we were going up, and after wading in and testing the depth we made a dash and landed all right on the other side. And then the climb began. We had not the powerful cars of the present day, and many times our fate hung in the balance. There was no possibility of turning round, and if the first car had not succeeded in climbing up the interminable path through the Gap we should have had to come down backwards—a fact we hardly dared to contemplate on such a narrow path, with a cliff wall on one side and a precipice on the other. Half-way through we stopped, as the cooling-water in Du Cros' car had boiled away and fresh water had to be obtained somehow. We had no bucket, but eventually solved the problem by taking a waterproof rug, climbing up the cliff to a little mountain stream, and by holding up the four corners of the rug were able to obtain sufficient water to enable him to get going again.

And thus slowly and laboriously we made our way to the top, much to the amazement of the peasants living there in their huts, who exist by selling goats' milk and potheen to hardy tourists who make the ascent on horseback. I believe that other automobilists since then have repeated the performance, but with our little cars the feat was none too easy.

Motor-cars were so rare in Ireland then that crowds poured out to see the cars as we passed through, and a big crowd would always collect if we left the cars outside an hotel. Curiosity was not always accompanied by respect (as least so far as the juvenile members of the community went), as Harvey Du Cros found to his cost one day when, after leaving his car during luncheon, he came out and found that Billy Murphy had endeavoured to perpetuate his old and famous name by inscribing it in big letters on the back panel of the beautiful and expensive Rothschild carriage body, using for the purpose a large and broad-edged stone. Had Billy Murphy been discovered I dread to think of the vengeance which would have been wreaked upon him.

I do not think there is a more sporting body in the world than the Royal Irish Constabulary, and during my visits to Ireland I had many occasions of noticing this. On one

occasion I was out on a spin round the Gordon-Bennett course on the car I was to drive in the race. I was travelling, I should imagine, much above the limit, when, seeing a cart some distance ahead, I immediately slowed down preparatory to passing it. Suddenly from behind the cart appeared a police-sergeant on a bicycle, and to my utter amazement he jumped off his machine and hurled it into the hedge. He then stood in the centre of the road, either to stop my car or be mangled in the attempt. Having the car well in hand I approached him gently, and asking him what was the matter, he informed me that I had been travelling over the legal limit, and that he was certain I had been travelling at fifteen miles an hour, and as there had been some complaints about fast driving he must ask me for my name and address. The road had been perfectly clear and we were in the open country, but as I had been doing at least thirty miles an hour I thought his complaint was, to say the least of it, somewhat moderate. However, I suggested to him that it was a very serious matter for me, and that as his contention was that I had only been travelling one mile an hour over the legal limit—fourteen miles an hour being the limit in Ireland then—it might be possible for him to overlook the offence, especially as he might have made a mistake, and I further pointed out the difficulty of telling the difference merely by sight alone between fourteen and fifteen miles an hour. He was, however, quite positive of the fifteen miles an hour, so I complied with his request and handed him my card. And then what a change took place when he realized that I was one of the English team over in Ireland for the purpose, as he put it, of "beating them furriners!" After having apologized for having inconvenienced me by stopping me, he expressed the view that I could go like—well, any speed I liked—and more power to me and my machine, and as a parting word of advice he expressed the opinion that under any circumstances I must beat "them Germans"—a feat I signally failed to perform.

On another occasion a sporting constable gave me the advice to look out for "them furriners" breaking into our garage at Rheban Castle and ruining our cars, and further-

more that as he was on duty in the neighbourhood he would keep a special guard, and woe betide the marauders when they arrived. I believe he was under the impression that those of us representing the various countries were deadly foes, capable of shooting each other on sight, as he further advised me to keep out of Athy village, or perhaps one of the foreign partisans would knife me. When I jokingly suggested, however, that I perhaps ought to carry a revolver to protect myself, he would not hear of it, because it was against the regulations.

Half the pleasure of any pastime lies in the recalling of early experiences, and one of my great regrets is that I never took the trouble to record carefully the many happenings which occurred to me in different countries and at different times. Some of them I have been able to remember—most of them I have forgotten. But at the present day, when, if I may term it, the romance of motoring exists no longer; when in a prosaic and matter-of-fact manner one proceeds to run from London to Monte Carlo within forty hours, practically certain of arriving there within the time prescribed; when a non-stop run from London to Edinburgh is a performance capable of achievement on most well-built cars—it gives one a vast amount of pleasure to recall those days when nothing was certain, nothing could be depended upon; when the motor-car was a box of mystery, offering infinite possibilities and impossibilities; when one started on a journey, never knowing whether the end would be reached or not. Those days will never come again, and I shall always be grateful that Fate was kind enough to enable me to be one of those who, starting at the beginning, experienced all the pleasures and tortures of the early pioneers of the pastime.

XV

THE ART OF DRIVING

IT has always been a source of trouble to me to explain to an enthusiastic novice the difference which lies between driving a car well and merely steering it accurately so as to avoid other objects on the road. There is such a great difference that the one can never be confused with the other if this difference is carefully considered.

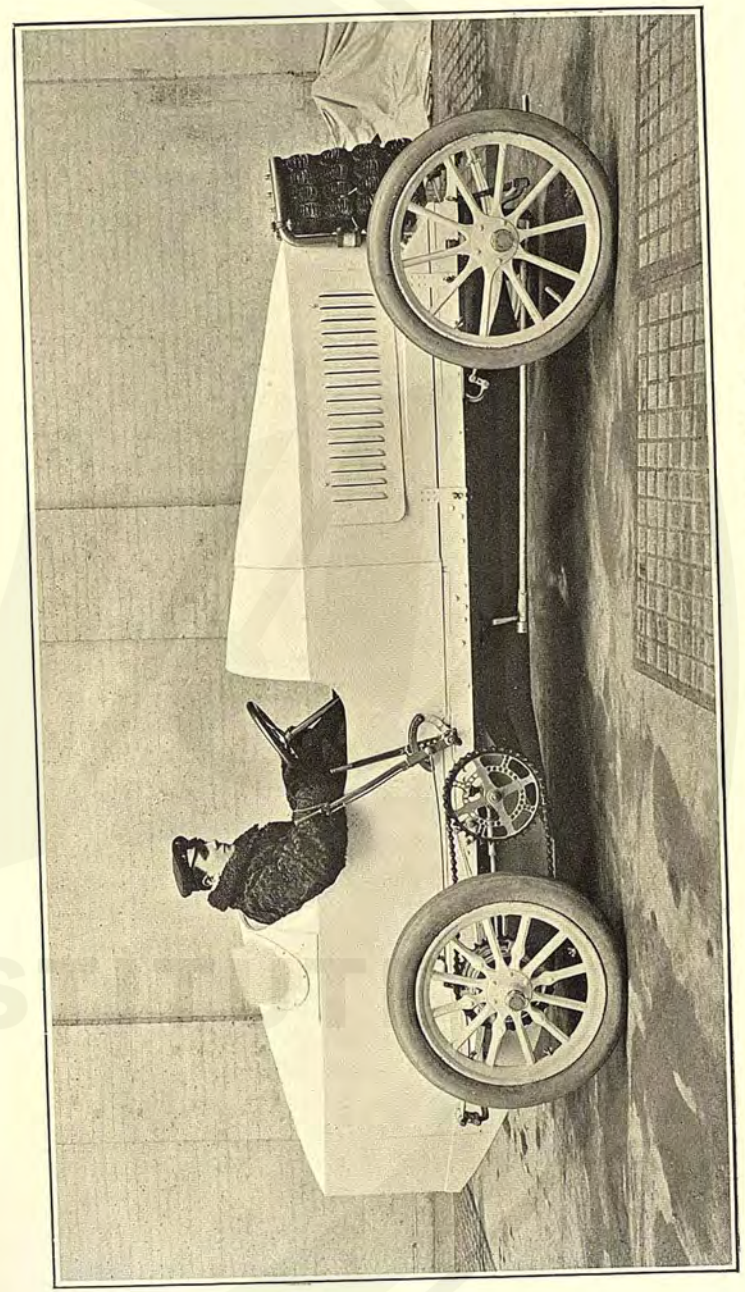
We have all, I have no doubt, at one period or another of our automobile career, had the misfortune to sit on a car driven by one of those hardy beings who take a delight in dashing through traffic at top speed, shaving other vehicles on the road by a hair's breadth, and swinging round corners on two wheels. I must confess that on the occasions on which I allow myself to be driven, if from any mischance I happen to get into the hands of a driver of this type, I am in mortal fear until I get off the car again, realizing that I am being driven by an irresponsible driver, and, at the same time, an ignorant one. A passenger on the car knowing nothing about driving or the limit of control the driver has over the car, would probably describe the style of driving I have mentioned as brilliant, and if you were to ask him what he thought of the driver, he would probably describe him as a very fine driver indeed. In the critical judgment of the man who knows, however, a journey of this description is exasperating and nerve-destroying. Instead of the vehicle being driven at a speed suitable for the class of traffic encountered, the drive resolves itself into a series of shocks and jars, rushes and stops.

There is no art in rushing at top speed up to another vehicle and then smashing on the brakes to avoid a collision.

There is no art in cutting in between a motor omnibus and a street refuge with the thickness of a coat of paint to spare on each side. There is no art in swinging through traffic anywhere and everywhere at full speed, or travelling round a corner at the utmost limit of speed at which it is possible to negotiate the corner at all. It is all easily accomplished, but it must always be remembered that it is the pitcher which goes to the well most often that usually gets broken, and it is the driver, expert or otherwise, who takes the most risks who most frequently comes to grief. Good steering it may be, but the proper handling of a motor-car involves much more than the mere direction of its course.

At the present day, when powerful motors are the rule rather than the exception, the *finesse* of handling a car well is not appreciated to the same degree, nor is it so necessary as it was in the days when the proper handling made the difference between the car travelling well or badly. Then the manipulation of air and gas levers, clutch and brake pedals and accelerator, made the difference between climbing a steep hill and failing to do so; but now, in the days of "forties" and "sixties," the power of the engine itself makes expert manipulation of the car less necessary for the actual purposes of progression. The underlying idea, however, remains. The object is to get over the road as quickly, smoothly, and unostentatiously as possible; not by a series of wild rushes, sudden brakings, and narrow shaves. And how is this object to be attained?

First, know your car. There are very few drivers in the world who can get on to an entirely strange car and after a few moments drive it as well as the man who has been in charge of it for months; but there are some drivers who can do so. And why? They have that extraordinary instinct of sympathy with mechanism which enables them immediately to appreciate and understand each little characteristic of the car they happen at the moment to be driving. Strange though the car may be to them, you do not find them missing gears, racing or stopping the engine, or dropping the clutch in with a jerk. Each twist of the steering wheel, each movement of the change-speed lever or appli-



CHARLES JARROTT ON A DE DIETRICH, PARIS-MADRID RACE, 1903

cation of the foot-brake, denotes that the man in charge knows exactly the capabilities of the car, and there is a unity between the two which is very apparent.

The reason of all this is that he knows his car. Instinct has given him the knowledge which the ordinary driver only acquires after lengthy experience, but that knowledge has to be acquired before perfection in driving that particular car can be attained. This knowledge is, of course, made up of a number of apparently insignificant details. The adjustment of the throttle lever, the position of the sparking, the amount of slip on the brakes, the distribution of the weight over the four wheels, all these have a bearing on that knowledge which the driver must acquire before it is possible for him either to drive the car perfectly, or obtain the best results from it. This knowledge must also cover each little characteristic of the engine, the exact amount of lubrication required, and the many other little things in connection with the mechanism itself which go to make the vehicle complete and perfect. This knowledge can only be acquired, except by the genius, by study and careful observation, whereas proficiency in steering pure and simple can be obtained by practice and the necessary amount of natural nerve.

Having then learned the lesson, and acquired all this necessary knowledge, you must drive the car more as a live animal than as a machine—drive it sympathetically. Perhaps this may be termed a curious phrase to use, and yet I know of no word which more correctly describes what I mean. The driver and the car, to secure a perfect combination, must "understand one another" thoroughly, and the true art of driving lies in the utilization of the knowledge one has of the car to obtain a perfect result in the running of it as a road vehicle.

Take a certain car and put on it as driver an enthusiastic youth, strong and full of dash, not caring one little bit about the health or condition of the mechanism which he has to control, and set him off on a journey. What happens? Gears are smashed in; every time the clutch is manipulated it is let in with a shock; crossings, bad roads, loose metal are all taken at top speed, and the journey winds up with an

application of the brakes which locks both back wheels and pulls the car up in a few feet, bruised and strained in every part. The journey has been accomplished! Was that not all that was required? And the occupant of the car has the memory of a hair-raising drive, full of incidents and possibilities.

Now put on to the same car, for the accomplishment of the same journey, a man who has that knowledge of and sympathy with the car which, in my opinion, every driver should have. What is the result? Every movement is smooth, the gears change smoothly, the clutch goes in smoothly, the car gathers speed smoothly, and when the brake has to be applied it is applied smoothly. You do not find this driver rushing up behind a cart and suddenly applying his brakes. He slows down gradually if he has to pass a vehicle, and the curve outward that he makes to do this is a gradual one and not a lurch. He takes a corner, not with a sudden application of the brakes, a skid and a roll, but with a gradual slowing down and picking up which obviates any shock either to the car or to the passenger.

I could point to no clearer example of the great difference I have mentioned, between steering a car well and driving it well, than the driving of the motor omnibuses at present running about London. I have often watched with amazement the feats of skill and daring which some of the drivers of these omnibuses perform in the most crowded thoroughfares. It is not an easy matter to take a bulky motor omnibus through congested traffic, but when this feat is performed at a speed of twenty miles an hour or even more, however much the performance may be condemned as reckless, foolhardy, and dangerous to the public safety, nevertheless the actual skill in steering is sufficiently marked to call forth comment. Two minutes afterwards the same driver will be seen wrestling with his change-speed lever, with the gears crashing and shrieking at the brutal manner in which he attempts to change speed; and then the clutch is let in with a mighty jerk. The frame of the car momentarily twists and writhes under the sudden shock, and with a grunt and a groan the

vehicle—with the motor knocking badly—slowly picks up way again. And the pity of it is, you know perfectly well as you watch this performance, that in the hands of a sympathetic driver every movement would be sweet and smooth; the gears would change quietly and the very running of the car would be different.

And the reason of the whole matter is that the driver knows nothing about and cares nothing for the mechanism which he is controlling. There is no question of sympathy so far as he is concerned. A gear lever is there for him to pull at, and a clutch pedal is arranged to be pushed in and out. The engine is stuck in front of the vehicle to drag it along, and there the whole matter begins and ends so far as he is concerned. He does not know and does not want to know. In no sense of the word does such a driver understand the art of driving a motor vehicle, in spite of the skill which he may have attained in piloting his unwieldy charge through the many perils of the London streets.

The accidents resulting from side slip on motor omnibuses are too numerous to make pleasant reading, and in my opinion most of them result through the driver's lack of sympathy with his machine. A patch of grease or a slippery stretch of asphalte is something to be slowed down for, but he seldom knows to what extent he has charge of the machine and to what extent the machine has charge of him, because he is not in sympathy with it.

The permanent effect of this style of driving is most noticeable in connection with the car itself. The marvel to my mind is that cars stand up as well as they do under the brutal treatment they usually receive. Sudden shocks and sudden strains take more from the life of a car than anything else, and if only owners and drivers appreciated in a greater measure the value of this sympathetic style of driving, I cannot but believe that it would become more common.

There are, however, a number of things, apart from the car itself, which have to be studied and thoroughly understood before proficiency in driving can be attained. A driver has to cultivate the habit of seeing everything happening on the road, and knowledge and instinct must actuate his move-

ments as to the course of action to be adopted under given circumstances. The ears of an approaching horse will indicate whether it will shy or not. The movements of a child five seconds before will denote whether it intends crossing the road in front of the car. The actions of every moving object on the road will indicate whether danger lies in that direction or not. And the motorist who would avoid trouble has to attend all the time to these ever-changing objects, and to the most important matter in hand, namely, the direction and control of his car. Then there are two other qualities requiring cultivation—Decision and Precision.

"He who hesitates is lost" is never more clearly demonstrated than in the case of driving a motor-car. Never be caught in two minds as to the correct thing to do. Having decided, act. What is more terrifying than to be driven by a man who, for instance, thinks he can pass a cart, puts on full speed, and then, almost at the last moment, hesitates and puts his brakes on hard; and finally changing his mind decides to try and scrape through? Perhaps he is successful, but no nerves would stand the strain of more than one experience of such a driver. Therefore, to think quickly and act promptly will often result in enabling one to get out of a tight place in which delay would be attended with disastrous circumstances.

There are, of course, some circumstances under which it is necessary to change your mind and also your course of action, but if your previous judgment has been sound such a change should only have to be made through a change of conditions having taken place. For instance, you have made up your mind to pass a vehicle in front, and immediately proceed to do so, when suddenly and without warning a cyclist swinging out of a side road bears down directly on to the car. It is possible that without changing your course you may avoid him, but the probabilities are that he will be forced into the ditch. Instead, therefore, of carrying out your original intention of passing the vehicle in front, you apply your brakes and drop in behind such vehicle to allow the intrepid cyclist plenty of room to pass through. In short, you alter your course of action solely because a new element

in the shape of the cyclist appears on the scene and alters the driving problem of passing the vehicle.

Good judgment in regard to time and space and speed of other vehicles on the road is also necessary in order to attain perfection in the art of driving. To know how fast a vehicle is travelling in relation to other moving objects on the road; to know where two vehicles will meet; to know the amount of space required for passing—all this knowledge is necessary and can only be acquired by practice and experience, when it eventually comes to one's aid in dealing with various driving problems, almost instinctively.

And then in reference to that ever-present problem of driving safely on greasy surfaces. A question which I was asked most frequently two or three years ago was as to how it was possible to drive over greasy roads without coming to grief. There is, of course, only one reply, namely, that safety depends on three varying conditions: the skill of the driver, the build of the car, and the exact state of the road. There is no golden rule, and we must come back again to the necessity for the driver knowing his car and every little tendency in connection with it, and then handling it sympathetically, knowing to what extent it is liable to slip on a given surface, and always keeping a reserve in hand to allow for a contingency, such as a swerve or sudden application of the brakes.

In these days of metal-studded tyres and bands, the problem is not so vital or important as it was before these devices came into use, and a more slap-dash style of driving has come into vogue in consequence. In spite of the claims which are made on behalf of these metal-studded and corrugated tyres, I think it is a very great pity that they are allowed to be used. Their primary purpose is for minimizing the dangers of side-slip: but is this all they do? Does not their use put a premium on hard and fast driving over wet and greasy surfaces, undesirable, in my opinion, under any circumstances, and rendering it unnecessary for the driver to exercise that knowledge of his car under varying road conditions which I have previously pointed out is vital to ensure absolute proficiency and safety. It may be urged

that the car would be in additional danger, but I think this would be met by the additional caution necessary on the part of the driver.

My particular complaint against metal-studded tyres is that they are delusive and misleading in their action. Although capable of holding the car on a straight course when the road is wet and muddy, they will nevertheless slip and slither in the most alarming manner on a flinty road or on *pavé*, on a perfectly dry day; and in taking a corner at any speed, if fitted to the front wheels, the steering is more or less erratic. To sum up the matter briefly, the perfect handling of a motor-car, showing all the delightful power of control an expert has over a car, cannot be demonstrated on a vehicle fitted with any of these so-called non-skid devices. There is one other matter, however, bearing on their use, which although it has nothing whatever to do with driving, is nevertheless of the greatest importance to automobilism. There can be no question but that non-skid tyres are responsible in a very great measure for the dust curse about which we hear so much each summer, and which I am certain every automobilist would be prepared to sacrifice a great deal to obviate.

I have examined roads in France and England very carefully, over which a large number of cars have passed in nearly every instance fitted with metal-studded tyres. I was particularly interested to observe the effect on the various corners. Deep holes had been cut into the road, the road itself had been torn up in the track of the wheels, and the stones so dug up lay scattered all over the road. The wheels of the cars acting as scarifiers, the whole track along the road was cut out in the form of two ruts where the motor traffic had passed. I agree with the dictum that the roads when made should be suitable for all and every kind of traffic, but to my mind it seems an unfair tax to put upon any road surface to expect it to stand up and wear well under the wear and tear of thousands of motor vehicles weighing from ten to forty hundredweights travelling from ten to forty miles an hour, and all shod with these destructive metal-studded tyres.

One final word in regard to the special qualities in connection with the successful driving of a racing car. The general rule applies that the driver must know his car. If this rule is important in the driving of an ordinary touring car, it is doubly important when the car is built for speed, and for the taking of risks with the sole idea of covering the longest distance in the shortest space of time. A mistake then has no opportunity of being rectified. There must be no ignorance of the power of the brakes or the skidding propensities of the car, and brutality in handling would end in disaster. A racing car, like a racehorse, must be *nursed* through. If the strenuous nature of the race demands that everything must be risked in the fight to finish first, then the driver knows what he is risking, and a breakage or an accident is not unexpected. The art lies in obtaining and maintaining the very utmost speed over every yard of the road, with at the same time the least possible strain on the car.

In driving in a race, the great idea is to keep going and to allow nothing to dishearten or discourage. It is the driver who is always "pushing on"—meeting his troubles, overcoming them, and no matter how annoying or serious the delay, getting going again as soon as possible, wasting not a moment unnecessarily and pressing on to the finish—who eventually finds himself, in spite of all his troubles and difficulties, finishing in a good position.

I hope I have shown that there is something more in the driving of a motor-car than appears to the ordinary superficial eye, and that knowledge and skill are necessary in their proper application to obtain all that perfection of control and consequent pleasure and enjoyment which is possible in motoring. If a system of driving on these lines was universally practised, I am convinced that the general adoption of motor vehicles would be advanced many years, and that the regulations governing their use would naturally become of such a nature as to be acceptable even to the keenest votary of the pastime.

XVI

THE PLEASURES AND PENALTIES OF MOTORING

TEN years! How they have sped along. It seems but yesterday that I took my first ride on a motor-car and experienced all the attendant thrills and emotions which come with the discovery of a new sensation, and yet since that day ten years of change of every sort and kind have taken place. Cars have changed, roads have changed, driving conditions, laws, people—all have changed; and last of all, I suppose that I too have changed; and yet I am glad to think that many thousands of miles over every sort and condition of road in various parts of the world have not wearied me of my love of driving. There is still a charm for me—and a very great charm—in directing and controlling a car along the twisting and winding highway, and in the pleasure which the mere act of such control gives. The pastime of motoring is as fascinating to me at the present moment as it was in the days of old, when motor-cars had their peculiar vagaries and offered great possibilities in the exploration of unknown roads and in the happenings and eventualities of such exploration. True it is that the road does not present itself in such novel guise as it did when my sole means of progression was limited by my physical powers as a cyclist, but nevertheless away from the ordinary routes there is still the unknown. There is so much new country even in England which has yet to be discovered by me, that the charm will never entirely wear off.

I am fond of driving for the sake of it. My week-ends and odd moments are even now, after ten years of keen indulgence, spent in driving. Apart from the actual pleasure derived from travelling over the road and in the surveying of new scenes, there is also the interest of learning and

undertaking something fresh in connection with motoring. It is seldom that one drives a motor-car without learning some new lesson, understanding some little thing which has previously perhaps been a mystery, or noticing some phenomenon which one has never noticed before; and from this alone each drive is stamped with the mark of individuality.

I am fully aware that to a large number of motorists the driving of a car in time palls and become monotonous. This blasé state is noticeable in certain people in every pastime when the novelty and freshness wears off. I call to mind many of my friends who years ago were, if possible, keener than myself on driving their cars and obtaining every possible enjoyment from motoring merely for the sake of motoring. Time, however, has in their particular cases worked its change. The time when they were prepared themselves to undertake the little necessary duties in connection with a run, and considered the work a labour of love, when the mystery of the mechanism fascinated, and the sometimes arduous struggle to arrive at the distant destination was enjoyed—those days have gone, and with them has gone the desire for and love of the game. They have now entirely given up the idea of driving, and to-day are being driven about in luxurious and massive covered-in cars, utilizing a motor merely as a means of conveyance instead of as a sporting vehicle; and this in spite of the fact that cars at the present day are reliable, very much easier to drive and control, and possess none of the heart-rending vagaries of a few years ago.

To those who have entirely discarded the delights and pleasures of driving, I would say that they are missing much. I have been told that pleasurable driving is almost impossible in these days of police traps and prejudiced magisterial benches, and yet, although I motor over a very great distance every year, the occasions on which I have actually come into collision with the police have been exceedingly rare; and I must admit that on each of these occasions, with one exception, I had been breaking the law which prescribes the speed at which it is legal to travel. The un-English method adopted by the police of laying traps in the open country to

enforce this inadequate speed-limit has much to do with spoiling the pleasure of motoring, but nevertheless it is possible to drive many thousands of miles without getting into difficulty, if ordinary caution is exercised, although I admit that one is likely to be unfortunate on occasions.

To those who, like myself, love the country for its ever-changing colouring, its white or yellow roads, its charming little villages, and the freshness of pure air with that indescribable perfume of the English country-side, motoring is bound to appeal so strongly as to make it among the first things in life. My own particular taste lies in the direction of driving over a really long distance with a very far off destination. To get up in the early morning and travel on and on, and then at the close of the day feel that you are but one stage on your journey, and that there still lie in front of you hundreds of miles yet to be negotiated before reaching your destination, always has for me a peculiar pleasure.

I have breakfasted in London one morning and dined in Monte Carlo the following evening—a nine hundred miles run full of interest and excitement. Luncheon has seen me in Bordeaux after leaving Paris the same morning, and I have accomplished a 350 miles jaunt before midday ; and journeys of this length contain incident enough to satisfy even my craving for long-distance driving. I am not, however, suggesting that my great pleasure is to rush through the country at top speed, having as my sole object the covering of as much space as possible in the shortest time. For rational enjoyment I favour a day's steady drive with the knowledge of other days of similar journeys before me and my destination.

To drive to the sunny south of France is more enjoyable if four days are occupied over it than if it is all crammed into a forty hours period. Perhaps if I were able to take these lengthy journeys more often the charm would not be so great, but there is for me untold satisfaction in the knowledge that having finished a long day's run there is yet another day of similar driving in store for me on the morrow.

There is one place, however, which does not appeal to me as a driving ground, and that place is our great and

wonderful London. There is no pleasure in driving in London. First, except to the very hardened, it is trying to the nerves. Motor omnibuses dashing about in every direction, uncontrollable hansom cabs, carelessly driven drays and recklessly driven tradesmen's carts, are all pit-falls even to the most expert of drivers, and their avoidance is not a pleasurable effort or one affording much amusement. In London I like to be driven, for the reason that one uses a motor-car there as a means of conveyance, and for the transacting of business. In fact it takes the place of the ordinary and humble cab. It is impossible while driving yourself to do two things at once. If you are driving you must devote your whole time and attention to the handling of the car, and hence in being driven when on business bent you are able to devote the mind to matters of more importance than the mere getting from one place to another. It took me a very long time to get accustomed to being driven. It always seemed that every driver I happened to be driven by was so slow—not slow in the speed at which he drove, but slow in perception and slow in action. I soon discovered, however, that this apparent slowness was only really slow in comparison with my own instinct, and that I was quite safe from the perils and dangers which seemed to arise and which were apparently only noticed and avoided by the driver at the last moment. It is extraordinary to notice how the powers of observation, immediate judgment, and quick action are developed by years of driving. Every person, vehicle, animal, and object on the road is noticed in one sweep of the eyes, their actions anticipated, and their safety assured. Instinctively the car is controlled, the obstruction avoided, passed, or warned.

The point which always worried me when I was being driven was that the driver did not see things as quickly as I did myself, forgetting that years of driving had given me a much keener perception, and hence enabled me to drive with a larger margin of safety both to the car and to pedestrians and vehicles on the road. It took me a very long time to realize that the other man's margin of safety was more than ample, and then, instead of expecting a catastrophe every second, I found myself philosophically

accepting the fact that I was absolutely safe. To my mind it is a great pleasure to be driven by a really experienced, first-class driver. The car in his hands becomes a living animal controlled and directed as surely and delicately as would be the case were the driver part of the mechanism itself. Yet in spite of a certain admiration for the skill of the other man, I candidly confess that, no matter who the driver was, I would in the open country very much prefer to drive myself—not because I cannot appreciate the skill of any one else, but because the mere driving is to me a real pleasure.

Motoring, however, appeals to a much larger section of the community than those merely indulging in the pastime because of the pleasure of driving. There are so many who cannot and will never drive from various and many causes; some people have not the necessary nerve to make it safe for them to undertake the control of a fast-moving vehicle on the road, while others have not the physical strength, and again there are many who have not even the inclination.

I cannot conceive, however, that any idea would be more acceptable to an invalid than being gently driven through country surroundings, obtaining all the benefit of fresh air which is so necessary to the restoration of complete health, and which has usually to be obtained under the often unpleasant conditions of some health resort. Perhaps the gentler sex is the most susceptible to all the influences, privileges, and possibilities which are contained in the use of a motor-car, enabling as it does every aspect of the country to be opened up to the curious gaze. Tiny little villages and sleepy old towns, instead of being buried away in the far and distant country, are brought within the reach of a short journey made under ideal circumstances. Imagine the towns in England which one has never seen, the people who dwell in them whom one has never met, and yet these are opened up to your intimate knowledge by the aid of the car. You may have travelled through a place many times, but you can know but little of it, because your knowledge is confined to the cramped and restricted view obtained from a rapidly moving train. And, unlike travel by rail, there is in motor travel no confusion of cabs and railways; the car takes you

from your own door direct to your destination; and you are in effect as free as on board a ship on a great wide sea, except that you are able to cast anchor when, how, and where you will.

There is one aspect of motoring which has always interested me very considerably, and that is the one dealing with the question of speed. To some the degree of speed measures in a more or less satisfactory manner the amount of amusement and pleasure they obtain from a motor-car; to them the whole and sole idea is to get over the ground as quickly as possible, eating up the miles and ever dashing on to the unreachable horizon. I have often attempted to analyse this craving for speed, and as I myself have experienced it, I might reasonably be supposed to know the cause. My own experience was that it grew, and like other diseases became stronger as time went on. When I drove a 4 h.p. car, I craved for a 6, and after that the speed obtained from an 8 h.p. engine seemed to offer every bliss in life. From 20 to 30 and from 30 to 40 miles an hour and then on again, and perhaps because I then took to racing, speed pure and simple appealed to me beyond everything else. Driving a 40 h.p. car, I wanted a 70, not because I should stand a better chance of winning a particular race, but because I wanted to experience the sensation of travelling faster; and the end of it was that on the long straight roads of France, and through participation in the big continental races, I satiated myself with speed, and forthwith the desire to travel faster and still faster departed, and to-day I obtain as much pleasure in driving a 16 h.p. car as I would in handling a 60.

I have on occasions been amused to notice the effect the exhilaration attendant upon travelling at a fast speed has upon certain natures. I have seen a gentle old man—almost a patriarch in appearance—incapable in ordinary life of acting inconsiderately to any one; but who, when seated behind the wheel of a powerful car, seemed to be possessed by the concentrated energy of a thousand fiends, and, regardless of everybody and everything on the road, he has dashed along having the sole idea in his mind of travelling faster and still faster. Men not possessing sufficient courage to enable them

to climb a high ladder on the side of a house seem nevertheless to be able to drive a motor-car at a great speed without turning a hair, and without feeling that the performance is attendant with danger either to themselves or other users of the road. The intoxication of speed seems to lift them out of themselves and change them into new creatures. I have always noticed that time has proved to be the remedy for the complaint, and that when the feverish craving for speed departs a moderate rate of progression eventually takes its place; but the phase while it lasts is curious.

There are so many things which a modern motor-car accomplishes and makes possible that the penalties are almost non-existent in comparison with the enormous privileges and advantages which are obtained. To the business man to whom time means money it is a money saver; to the follower of field sports it places within easy reach hundreds of spots which in the ordinary way would be inaccessible; to the shooting man a modern automobile is a boon because it puts the moor within reachable distance; to the hunting man it is a speedy, comfortable, and rapid conveyance towards home after a hard day's run; and to the golfer it places a score of links within his easy reach. The advantages of using a motor-car in town are so obvious as to require no repetition. It is the latest form of rapidity of the twentieth century, and in any and every way it makes our modern life easier and more pleasant.

There is of course no doubt that the country-side dweller and the inhabitants of many of the roads on which motor-cars travel most frequently do not look upon the advent of the motor-car in quite the same light. Accustomed for many years to deserted roads with practically no traffic, it is no wonder that there is a certain feeling of resentment against the modern swift-moving vehicle, the range of which is not confined to any distance. It is stated that the open country is now but a suburb to the town, and that the rural aspect of the whole of England is being changed in consequence. This is of course an exaggerated view to take of the condition of things at the present day, but the inevitable is bound to happen. The inhabitants of the English villages of

the seventeenth century, if it were possible to set them in the midst of the great towns now standing on what to them were deserted fields and stagnant marsh, would be amazed that such a change could have taken place; and in like manner, I doubt not that if we could see the England of two hundred or even one hundred years hence we should see a new world in which the old order of things had entirely changed.

Hampstead Heath at the present day could have but little attraction for the highwayman of a hundred years ago. The then desolate spots between London and Hounslow and the dreary wilds of the Hindhead could hardly now be considered as dangerous to the traveller. Time makes for change, and as truly as one century has seen the introduction of the mechanically propelled vehicle, so surely will another century see it accepted as the only possible means of travel, transit, and transport over our English roads. The transition stage in any movement is never pleasant: interests are jeopardised, jealousies are created, and prejudice is felt. We at the present day suffer by reason of the fact that our modern roads have not yet been made thoroughly suitable for motor traffic. I am sure that no fair-minded motorist can have any other feeling than that of regret that the course of his passage is often attended by inconvenience and discomfort to other users and occupiers of the road, and I think it is assumed in the public mind that those actually motoring do not sympathise with those who are the sufferers. I have on very many occasions heard it expressed by motorists after a long drive through the country on a summer's day that they would be prepared to do almost anything were it possible to remedy the upraising of the dust clouds on the road.

It is unnecessary for me to digress on the dust question—the problem will eventually be solved to the satisfaction of everybody concerned; but in my own case I must confess on many occasions a drive has been more or less spoilt through the knowledge that the landscape in the rear of the car has been blotted out by a huge dust cloud. Speed has of course something to do with the quantity of dust raised from the road, and it is only within recent years, when constructional lines have favoured low-built, speedy cars with big pneumatic

tyres, that the dust nuisance has been in evidence. In the old days when the cars were built dangerously high up off the ground, were fitted with solid tyres, and fortunately were incapable of travelling at a bigger speed than twenty miles an hour, one never heard of such a thing as dust existing. It has been interesting to notice in various parts of the country that some roads are by reason of their construction and formation practically dustless, whilst others are covered with a depth of dust that even a bicycle is capable of stirring into a huge cloud. With the general adoption of fast mechanically propelled traffic, no doubt roads will in the future—and I hope in the very near future—be provided with a suitable dustless surface.

To be a motorist in the early days was equivalent to being an object of ridicule, scorn, and abuse. We English are extraordinary in our conservatism and love of the old order of things. We cling to our old traditions and usages—not because they have any particular merit, but because they are old. Our fathers and their fathers before them found them good enough, and we hold on up to the last desperate moment when common sense forces us to adopt newer methods and ideas. There are many things of the old days which we regret and which would be in existence to-day if they had not been superseded by something better. Modern science, engineering skill, and inventive genius have bestowed many rich gifts upon us with the object of making easy many life-problems. To the ordinary intelligent brain it would to-day be impossible to seriously throw ridicule and scorn on the evolution of the motor vehicle, and yet not so many years ago the great penalty for being a motorist was to receive abuse, ridicule, and scorn, not only from the populace but even from the more educated and learned section of society.

That has been lived down. The motor vehicle is a power in the land, its utility proved and permanence assured. Originally a plaything of the rich, it has become a necessity for the multitude, and is an important factor in the lives of thousands of workers in the great cities.

The prejudice, however, remains—venomous, unreasonable,

and intense. The mechanical revolution has been too rapid for many slow-moving minds, and never is this more clearly demonstrated than when it is necessary through some unfortunate reason for a motorist to be involved in a dispute in which an appeal to law is necessary. Laws are of course necessary to govern and control all things, and laws are necessary for the safe and proper running of vehicles upon the roads; but why is a distinction made in enforcing these laws more specifically against those using motor-cars than any other section of the community? If the protection of the public and public property is the fundamental idea controlling the making of laws, how is it that so much attention is given by our police to the conviction of a motorist for travelling over the legal limit over an absolutely deserted stretch of road, while at the same time, through the very absence of the police on motor detection duty, houses in the neighbourhood are being broken into by ruffians who would otherwise have been caught? Again, perhaps I can hope that the future will have in store for us a new order of things, when equal and fair-minded justice will be meted out—even to a motorist.

It must be borne in mind that the mere fact of driving or being driven in a car immediately places a great burden of responsibility upon you and involves you in considerable risk. An unfortunate cyclist may hurl himself from a side road right under your wheels with disastrous effect, and the chances are that, no matter what the facts may be, you will be held to be the party at fault, because—you drive a motor. A runaway horse may charge you from the rear, and when your car is quite stationary, and the probability is that the owner of the horse will claim its value from you on the grounds that you caused the horse to run away, and claim successfully because—you drive a motor. Your word is doubted in a court of law, and your veracity as a person of truth is not accepted because—you drive a motor.

And now one word in conclusion on a personal penalty which is paid by a number of enthusiasts, who, it may be, have not yet appreciated what the penalty is. In the ordinary course of things one naturally has to take a certain

amount of exercise in moving about from one place to another. With the motor-car out of our existence many of us would be occupied in the pursuit of some sport or pastime which would at the same time procure a certain amount of physical exercise. I have been so keen a motorist for so many years that I have been able to appreciate to the full how very easy it is to roll through the world without exertion and without trouble. One of the things which has troubled me most since I gave up motor-car racing is the question of how to keep myself in fit physical condition whilst devoting all my spare time to motoring. I have no doubt whatever that the same question has given concern to many keen automobilists, who, previous to taking up the pastime, devoted much time to some athletic pursuit. It is surprising how a man keen bitten by the pastime of motoring will desert everything and follow it assiduously to the detriment of everything else; and then the very vital question arises—How to keep well and fit without exercise.

I have throughout the whole of my life taken an active part in some form of sport or another. Cricket, tennis, boxing, cycling, sculling, swimming—all had their share until I began to motor; and then, instead of being ordinarily, I became abnormally fit, as the struggles and exertions we went through for many years to keep a car running on the road at all gave one more physical exercise than the pursuit of any sport yet heard of. Then, when cars became more perfect, I began racing, and driving in motor races gave me as much physical exercise as I required. Apart from the exertion entailed by driving in the actual race, the labour involved in preparing and tuning up my car for each event was by no means slight.

With my discontinuance of racing, however, and the increasing claims of business, I found that it was not easy to find time to take sufficient exercise to keep in the physical state of fitness to which I had always been accustomed, and the difficulty was to find a sport or pastime which could be indulged in at odd convenient moments.

Unlike its forerunner, the car of to-day involves no labour and no trouble in the running. Regularity and reliability are two of its most perfect features, and, therefore, any hope

of obtaining exercise merely from driving a car can be dismissed from the mind. I found that ordinary physical exercises had to be taken in very large doses to do me any good, and the trouble was that taking the mere exercise without any other interest was monotonous. Many of my friends recommended me to try golf, but I have not up to the present succumbed to the fascinations of the royal and ancient game, although I am of the opinion that of all the forms of exercise which seem to fit in best with a reasonable indulgence in motoring, golf has the very best of claims. So many motorists lack an object for a drive. The general idea is to drive somewhere and eat and drink and drive back again, whereas if the destination in view was to some accessible and pleasant golf-links, two things would be accomplished at the same time—a pleasant drive and some excellent exercise.

But from some cause or another golf has never appealed to me, and hence I had to work out my salvation by some other means when I found myself sinking into the apathy which seems to be characteristic of many keen motorists in regard to exercise. Tearing myself away from my beloved car and away from the fascinations of the road, I worked hard at some of the more violent summer games until I succeeded in restoring myself to that physically fit condition which gives a rosy colouring to all things in life, and makes it a joy instead of a burden. The lesson I learned was an important one, and one which I shall not be likely to forget for a long time to come. The disinclination to take physical exercise grows stronger and stronger as it is allowed to dominate your actions, and I do not think that even my motoring keenness will prevent my giving attention to proper and efficient physical work.

My reason for referring to my own personal experience is to make it plain to all those enthusiasts who are inclined to think that a motor-car is the beginning and end of all the pleasure in life, that it is as insidious as a secret disease in making one careless and indifferent to the exercise which is so necessary for the health of the human system; and enjoyable as it may be to spend the time luxuriously

surveying the landscape, it inevitably happens that Nature has her revenge.

In conclusion, I would like those who have already appreciated to what extent the motor has broadened and extended their possibilities in life to imagine how much poorer their existence would be without it. Surely they will congratulate themselves that their day is in the twentieth century, and not in the dark ages when the merry hum of the motor was unknown, and the whir of the wheels making sweet music had not been heard.

XVII

THE FUTURE

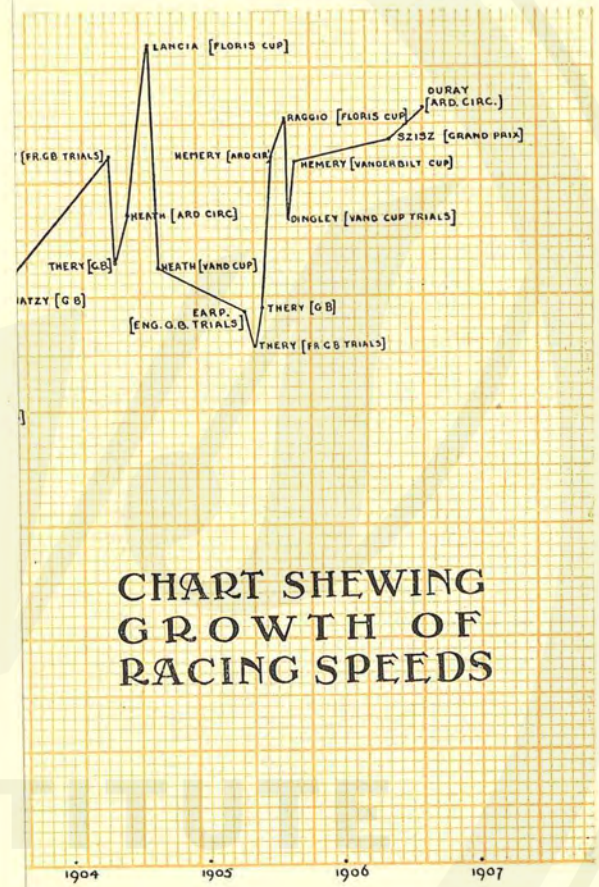
IF I were asked to state what new element has most greatly influenced the habits, sympathies, and characteristics of the people of the world during the past fifty years, I would unhesitatingly reply that it is the science of mechanism, the development of the ingenuity of the human mind and brain in combating the laws of nature and in conquering the stupendous forces which sway and affect the lives of all inhabitants of the globe. The labour of the beast, the manual work of the slave, and the expenditure of human labour are being swept away. The age of the machine is upon us. The soulless and subservient mechanism is the great power of to-day and of the future, and in the years to come we shall forget the why and wherefore, we shall forget the conditions under which our forefathers lived, and we shall fail to understand the measure and immensity of the influence on our everyday life of the science of mechanism.

The long steel roads and their millions of human freight which girdle the earth, and the thin speaking wire—the bridge of many thousands of miles in as many thousands of seconds—the utilization of the very air waves, intangible and invisible, for the conveyance of human thought and will, and the annihilation of space by the use of the mechanical, become, all unconsciously to ourselves, necessities of our very life. In the days of old our ancestors could only command for the execution of their plans and works and travels the beasts of burden and the energy of slaves; and we in the acceptance of the new conditions of life are prone to forget that it was not always so, and that we owe what we have to the science of mechanism.

And I do not assume that even my unkindest critic, however unsympathetic he may be at the moment, would deny that of all the great and far-reaching discoveries in the science of mechanism, that of the self-propelled road vehicle is the greatest. It is safe to say this, because we have as yet merely touched the fringe of this mighty discovery; so much so, that a moment's reflection on its possibilities convinces the most bigoted opponent of the movement, if only he is frank enough to admit it.

Centuries of road making, from the days of Cæsar, have prepared the way. None of the labour of preparation, the levelling of hills, the toiling of excavation and the piercing of the earth has been left to us; the roads are there waiting to be used, and the wisdom of man has at last realized it, and his ingenuity has conquered; and time alone will tell how the beasts of burden and the toil of manual labour will be known only by the knowledge of the past. As for the future—ten years have done what they have done. Ten short years, and yet the ten years to come—and I dare prophesy this much—will have witnessed a revolution so wide-reaching, so vast in its results and so changing in its course, as to be beyond our conception. A bloodless revolution, when the spirits—if such there be—of millions of dumb animals, victims of the lash and of the load, sacrificed to the cause of man before the acknowledgment of the science of mechanism, will rest content in the knowledge that in the near future fate such as theirs will be a possibility only in that portion of the globe beyond the ken of civilization.

And in view of this promised land I leave you. The future may be no happier than the past, but certainly it will be different. Were we to know all things to come, life would be for us a living death, and hence you and I, fortunate, perhaps, in our ignorance and hope, look forward with eager anticipation to that which is yet to come, believing that great things are in store.



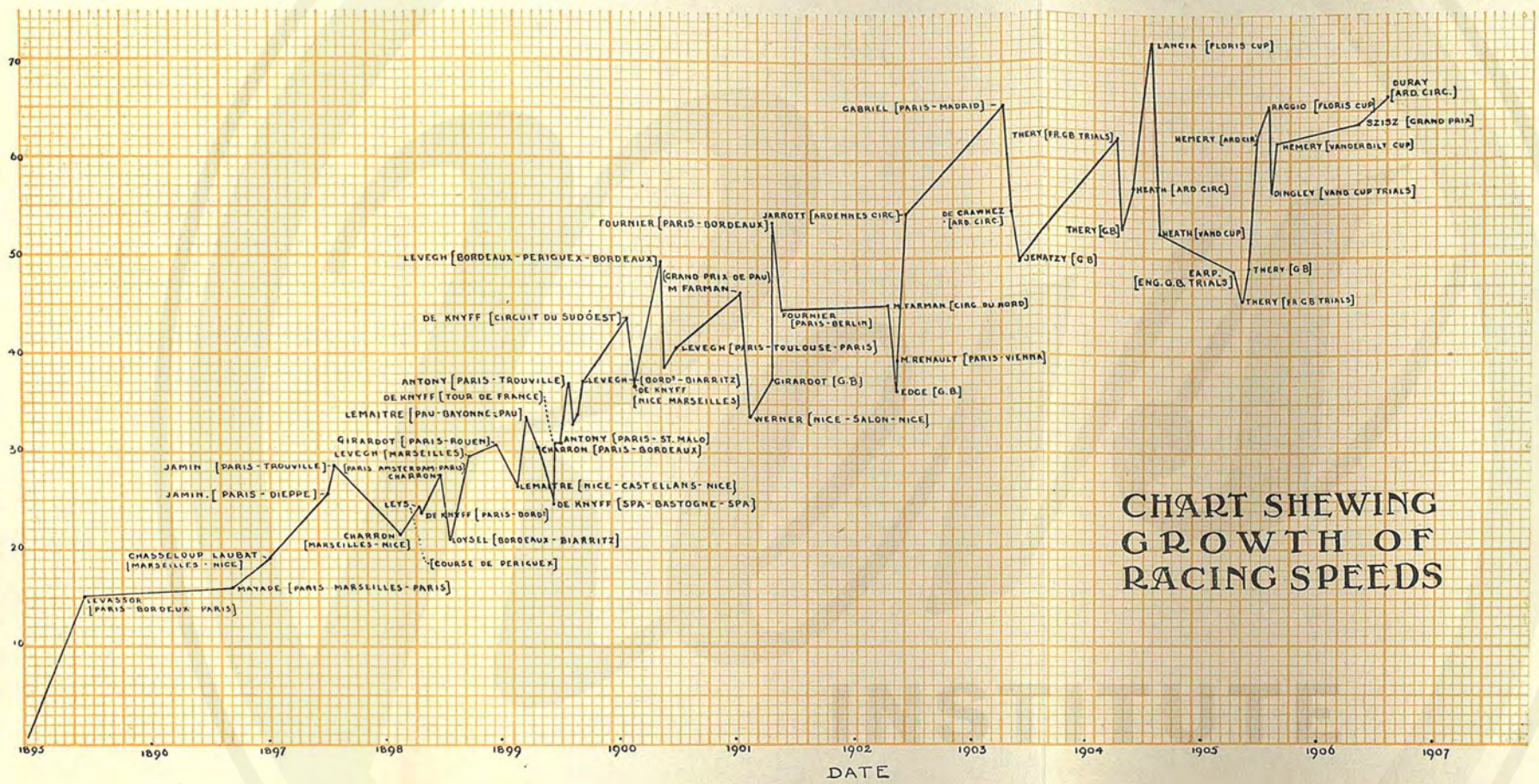


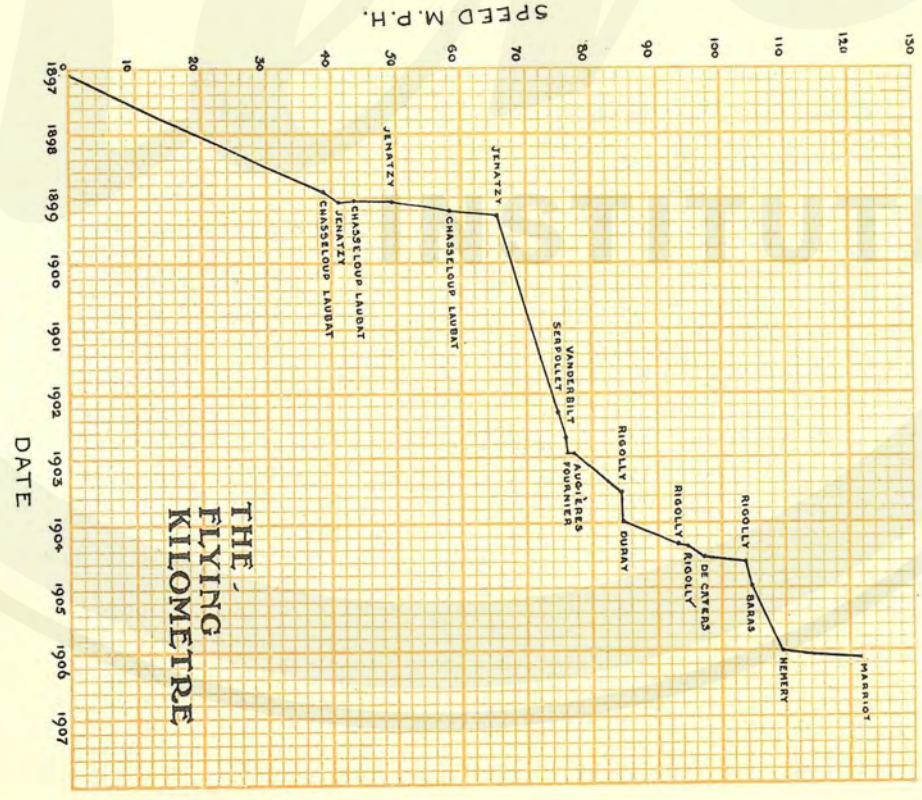
CHART SHEWING GROWTH OF RACING SPEEDS
SPEED IN M.P.H.
DATE
70
60
50
40
30
20
10
1895
1896
1897
1898
1899
1900
1901
1902
1903
1904
1905
1906
1907
LEVASSOR [PARIS-BORDEAUX-PARIS]
CHASSELOUP LAUBAT [MARSEILLES-NICE]
JAMIN [PARIS-TROUVILLE]
JAMIN [PARIS-DIEPPE]
MAYADE [PARIS MARSEILLES-PARIS]
CHARRON [MARSEILLES-NICE]
LEYS
DE KNYFF [PARIS-BORD.]
LOYSEL [BORDEAUX-BIARRITZ]
[COURSE DE PERIGUEX]
GIRARDOT [PARIS-ROUEN]
LEVEGH [MARSEILLES]
[PARIS AMSTERDAM PARIS]
CHARRON
LEMAITRE [PAU-BAYONNE-PAU]
DE KNYFF [TOUR DE FRANCE]
ANTONY [PARIS-TROUVILLE]
DE KNYFF [CIRCUIT DU SUDOEST]
LEVEGH [BORDEAUX-PERIGUEX-BORDEAUX]
FOURNIER [PARIS-BORDEAUX]
LEVEGH [BORD.-BIARRITZ]
DE KNYFF [NICE MARSEILLES]
ANTONY [PARIS-ST. MALO]
CHARRON [PARIS-BORDEAUX]
LEMAITRE [NICE-CASTELLANS-NICE]
DE KNYFF [SPA-BASTOGNE-SPA]
(GRAND PRIX DE PAU)
M. FARMAN
LEVEGH [PARIS-TOULOUSE-PARIS]
FOURNIER [PARIS-BERLIN]
GIRARDOT [G.B]
WERNER [NICE-SALON-NICE]
JARROTT [ARDENNES CIRC]
GABRIEL [PARIS-MADRID]
M. FARMAN [CIRC. DU NORD]
M. RENAULT [PARIS-VIENNA]
EDGE [G.B]
DE CRAWHEZ [ARD. CIRC]
THERY [FR.GB TRIALS]
JENATZY [G.B]
THERY [GB]
LANCIA [FLORIS CUP]
HEATH [ARD CIRC]
HEATH [VAND CUP]
EARP [ENG.G.B. TRIALS]
THERY [FR.GB TRIALS]
THERY [G.B]
DINGLEY [VAND CUP TRIALS]
MEMERY [ARD CIR.]
MEMERY [VANDERBILT CUP]
RAGGIO [FLORIS CUP]
SZISZ [GRAND PRIX]
DURAY [ARD. CIRC.]

A RECORD OF TEN YEARS' RACING

Year.	Date.	Race.	Winner.	Car.	H. P.	Distance.	Time.	Average Speed.
						MILES.	H. M. S.	M. P. H.
1895	June 11, 12, 13	Paris—Bordeaux—Paris	Levassor	Panhard	4	732	48 48	14·91
1896	Sept. 24, Oct. 3	Paris—Marseilles—Paris	Mayade	Panhard	4	1077	67 42 58	15·9
1897	Jan. 29, 30, 31	Marseilles—Nice	Marquis de Chasseloup-Laubat	De Dion	Steam	145·6	7 45 09	18·8
1897	July 24	Paris—Dieppe	Jamin	Bollée	3	106·8	4 13 33	25·3
1897	August 14	Paris—Trouville	Jamin	Bollée	3	108	3 48 56	28·3
1898	March	Marseilles—Nice	Charron	Panhard	8	147·5	6 53 45	21·4
1898	May 1	Course de Periguex	Leys	Panhard	6	89·375	3 42	24·1
1898	May 10 and 11	Paris—Bordeaux	Chev. R. de Knyff	Panhard	8	358·875	15 15 31½	23·5
1898	July 7–12	Paris—Amsterdam—Paris	Charron	Panhard	8	901·5	33 04 34	27·3
1898	August 20	Bordeaux—Biarritz	Loysel	Bollée	8	163	7 48 00	20·9
1898	October 20	St. Germain—Vernon—St. Germain	Levegh	Mors	6	78·75	2 41 00	29·3
1899	January 26	Paris—Rouen—Paris	Girardot	Panhard	6	134	4 26 00	30·25
1899	March 21	Nice—Castellane—Nice	Lemaitre	Peugeot	20	75	2 52 50	26·1
1899	April 5	Pau—Bayonne—Pau	Lemaitre	Peugeot	20	128·75	3 52 56	33·2
1899	May 24	Paris—Bordeaux	Charron	Panhard	16	353	11 43 29	30·2
1899	July 4	Spa—Bastogne—Spa	Chev. R. de Knyff	Panhard	16	113·125	4 37 00	24·5
1899	July 16–24	Tour de France	Chev. R. de Knyff	Panhard	16	1376·9	44 39 37½	30·8
1899	July 30	Paris—St. Malo	Antony	Mors	16	232·5	7 32 00	30·8
1899	August 27	Paris—Trouville	Antony	Mors	16	109·375	2 58 30	36·8
1899	September 1	Paris—Ostend	Girardot / Levegh	Panhard / Mors	12 / 16	201	6 11	32·5
1899	September 17	Paris—Boulogne	Girardot	Panhard	12	143·75	4 17 44	33·5
1899	October 1	Bordeaux—Biarritz	Levegh	Mors	16	163	4 24 00	37·0
1900	February 25	Circuit du Sud-Ouest	Chev. R. de Knyff	Panhard	16	209·44	4 46 57	43·7
1900	March 26	Nice—Marseilles	Chev. R. de Knyff	Panhard	16	125·575	3 25 30	36·7
1900	June 3 and 4	Bordeaux—Periguex—Bordeaux	Levegh	Mors	28	198·75	4 01 45	49·4
1900	June 14	Paris—Lyons(Gordon-BennettCup)	Charron	Panhard	20	353·75	9 09 00	38·6
1900	July 25, 27, 28	Paris—Toulouse—Paris	Levegh	Mors	28	838·08	20 50 09	40·2

A RECORD OF TEN YEARS' RACING—*continued*

Year.	Date.	Race.	Winner.	Car.	H. P.	Distance.	Time.	Average Speed.
						MILES.	M. H. S.	M. P. H.
1901	February 17	Grand Prix de Pau	M. Farman	Panhard	24	206·25	4 28 10	46·1
1901	March 25	Nice—Salon—Nice	Werner	Mercédès	25	225·375	6 45 48	33·3
1901	May 29	Paris—Bordeaux including	Fournier	Mors	60	329·78	6 10 43	53·3
1901	May 29	Gordon-Bennett Cup	Girardot	Panhard	40	329·78	8 50 59	37·3
1901	June 27, 28, 29	Paris—Berlin	Fournier	Mors	60	691·25	15 33 06	44·4
1902	May 22 and 23	Circuit du Nord	M. Farman	Panhard	40	540·625	12 01 52⅘	45·0
1902	June 26, 27, 28, 29	Paris—Vienna including	M. Renault	Renault	16	619·375	15 47 43⅘	39·2
1902	June 26, 27, 28	Paris—Innsbruck (G.-B. Cup)	Edge	Napier	40	386·25	10 41 58⅘	36·1
1902	July 31	Circuit des Ardennes	Jarrott	Panhard	70	319·98	5 53 39⅘	54·3
1903	May 24	Paris—Madrid (Bordeaux)	Gabriel	Mors	70	342	5 14 31⅒	65·3
1903	June 22	Circuit des Ardennes	Baron de Crawhez	Panhard	70	320·25	5 52 07⅕	54·5
1903	July 2	Gordon-Bennett Cup	Jenatzy	Mercédès	60	327·5	6 39 00	49·2
1904	May 20	French G.-B. Eliminating Trials	Théry	Richard-Brasier	80	331·875	5 20 28	62·1
1904	June 17	Gordon-Bennett Cup (Germany)	Théry	Richard-Brasier	80	309	5 50 03	52·9
1904	July 25	Circuit des Ardennes	Heath	Panhard	90	370·3125	6 30 49	57·0
1904	September 4	Florio Cup	Lancia	F.I.A.T.	90	231·25	3 12 56	72·0
1904	October 8	Vanderbilt Cup	Heath	Panhard	90	284·4	5 26 45	52·2
1905	May 30	English G.-B. Eliminating Trials	Earp	Napier	80	288	5 57 30	48·4
1905	June 16	French G.-B. Eliminating Trials	Théry	Richard-Brasier	96	343·61	7 34 49⅒	45·3
1905	July 5	Gordon-Bennett Cup (France)	Théry	Richard-Brasier	96	343·61	7 02 42⅘	48·8
1905	August 7	Circuit des Ardennes	Hemery	Darracq	80	370·3125	5 58 32	62·0
1905	September 10	Florio Cup	Raggio	Itala	112	313·3125	4 46 47⅘	65·6
1905	September 23	Vanderbilt Cup Eliminating Trials	Dingley	Pope-Toledo	60	113·2	2 00 50	56·5
1905	October 14	Vanderbilt Cup	Hemery	Darracq	80	283	4 35 48	61·6
1906	February 12	Cuban Race	Demogeot	Darracq	80	217·97	3 38 18⅘	59·9
1906	June 26 and 27	Grand Prix	Szisz	Renault	105	774	12 14 07	63·5
1906	August 13	Circuit des Ardennes	Duray	De Dietrich	120	372·8	5 38 39⅒	66·0
1906	October 6	Vanderbilt Cup	Wagner	Darracq	100	297·1	4 50 10	61·3



THE FLYING KILOMETRE RECORD

OFFICIALLY TIMED AND RECOGNIZED

Year.	Date.	Driver.	Car.	H. P.	Where Made.	Time in Seconds.	Speed. M. P. H.	Motive Power.
1898	December 18	Comte de Chasseloup-Laubat	Jeantaud	Electric	Achères	57	39·24	Electricity
1899	January 17	Jenatzy	Jenatzy	,,	Achères	54	41·42	Electricity
1899	January 17	Comte de Chasseloup-Laubat	Jeantaud	,,	Achères	51 1/5	43·69	Electricity
1899	January 27	Jenatzy	Jenatzy	,,	Achères	44 4/5	49·92	Electricity
1899	March 4	Comte de Chasseloup-Laubat	Jeantaud	,,	Achères	38 2/5	58·25	Electricity
1899	April 29	Jenatzy	Jenatzy	,,	Achères	34	65·79	Electricity
1902	April 13	Serpollet	Serpollet	Steam	Nice	29 4/5	75·06	Steam
1902	August 5	Vanderbilt	Mors	60	Ablis-St.-Arnoult	29 2/5	76·08	Petrol
1902	November 5	Fournier	Mors	60	Dourdan	29 1/5	76·60	Petrol
1902	November 17	Augières	Mors	60	Dourdan	29	77·13	Petrol
1903	July 17	Duray	Gobron-Brillié	100	Ostend	26 4/5	84·21	Alcohol
1903	November 5	Duray	Gobron-Brillié	100	Dourdan	26 2/5	84·73	Alcohol
1904	March 31	Rigolly	Gobron-Brillié	100	Nice	24	93·20	Alcohol
1904	March 31	Rigolly	Gobron-Brillié	100	Nice	23 2/5	94·78	Alcohol
1904	May	Baron de Caters	Mercédès	90	Nieuport Ostend	23	97·26	Petrol
1904	July 21	Rigolly	Gobron-Brillié	100	Ostend	21 3/5	103·56	Alcohol
1904	November 13	Baras	Darracq	100	Ostend	21 2/5	104·53	Petrol
1905	December 30	Hemery	Darracq	200	Arles Salon	20 2/5	109·65	Petrol
1906	January 26	Marriott	Stanley	Steam	Ormonde, Flor.	18 2/5	121·52	Steam

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