Motor Cycling & Motoring

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# A RECORD RUN ON A SINGER MOTOR TANDEM.

The Singer Co. have now got all their machines up to a high pitch of perfection, but none more so than their tandem tricycle. From an actual experience of a run on one of their latest I can testify to this. Through the courtesy of the Singer Company and Mr. Duret—one of their motor experts—in particular, I have just had an opportunity of forming an opinion as to the sterling merits of the machine.

One of the latest pattern tandem tricycles having been brought down from Coventry to London with a prospective purchaser on board and with Mr. Duret in charge, I was invited to join him on the return trip back to Coventry, an offer of which I gladly availed myself. A pleasant trip for me was assured, and, what is more, a variety of circumstances combined to make it a rather sensational one. It happened in this way: The arrangement was that I should start from the Singer depot in the Brompton Road at 9 a.m. on Friday morning, then running on to Coventry in five or six hours. This would have enabled me easily to get a train connection for Manchester, where I had an important appointment to keep on the Saturday evening. But the wretched weather precluded any chance of the run coming off on the Friday at all. Was it possible to start away on the motor on the Saturday morning and get to Rugby so that I could catch the London to Manchester express there at 4 o'clock and keep the appointment? By making an early start this was quite easy to do, but the earliest that I could start was 10.30 in the morning, with Hendon as the starting point. Now, the Singer tandem does not claim to be able to accomplish great feats of speed; its chief merits are reliability and comfortable riding, and it would be a fair test of these claims if the motor—which is only 2½ h.p.—was equal to a straightaway run of 85 miles over only moderate surfaced and hilly roads without needing any attention, and, moreover, to do this distance in the time with a load of 23 stone on board it would have to be worked at a far harder pace than it is intended for.

*The Singer motor tandem on which the run was made.*

Then the machine is of a very compact and symmetrical build. The front rider does all the controlling and steering, and the rear rider has simply to sit comfortably and enjoy the scenery. Pedals are provided for both riders, a free-wheel clutch being fitted to each pedal gear, and both riders can assist for starting, or either can pedal independent of the other. Magneto electric ignition is fitted to the motor, and it is remarkable how efficiently this does its work.

After just a preliminary look round the various details of the machine and a general oiling up, we got into the saddles and pedalled the machines out of the yard of the "Welsh Harp" on to the main road. After the first dozen yards the motor began to fire and pick up speed, swinging along at an easy pace. A detour was made so as to get on to

### The Great North Road.

This meant cutting across country through some rather winding and hilly lanes. The motor now began to show its hill-climbing powers. Ordinary rises it simply took no notice of, and only at a very rough and steep part was it necessary to touch the pedals at all.

Passing through Finchley (3 miles) we ran on to Barnet; and going through the main street the machine was the object of considerable notice owing to its novel design. Barnet Hill was taken in fine style without touching the pedals. There was plenty of work ahead for the motor, and we got ready for Ridge Hill (5 miles) by running down slopes with exhaust valve open to cool the engine. It is surprising how beneficial this is. At the foot of the hill the valve was closed, throttle opened, and up the hill the machine went with the vigorous beat of the motor, which spoke of its doing its very best. Not till we were two thirds of the way up did the musical hum of the gears begin to deepen and indicate that a little assistance was desirable. The work of pedalling, as far as I can calculate, was about equal to that of pedalling a low-geared path racer along a cement track. St. Albans was now looming ahead, and, slackening speed (police cautions to cyclists are much in evidence here), we ran into the town and pulled up at the Clarendon Hotel for refreshments. If time was not so valuable one would have much liked to spend an hour or so at St. Albans to see the Abbey and gatehouse, St. Michael's Church, the Roman earthworks, etc., but on the stroke of noon we cleared the town, climbing the stiff and exceedingly rough ascent, and then on to a fairly level stretch through Friar's Wash, Flamstead, Markyate Street, to

### The Quaint Old Town of Dunstable.

Along this stretch we had an absolutely clear road, not a soul in sight for miles, and we could see no harm in putting the motor up to its best speed. Successive miles were timed in 2 min. 40 secs., 2.38, 2.45—which is far above what the motor was ever intended to do. Arriving at Dunstable the machine was run right into the yard of the Saracen's Head, where a supply of petrol was obtained. Mr. Duret went carefully over the whole machine to see that all was tight and sound, but his practised eye failed to discover anything amiss, despite the fact that the motor had been running 30 per cent. above its top speed. The motor was comparatively cool, and there was a welcome absence of mud or dust about the machine which may be attributed to the fan-like action of the wheel arms, which beat off the mud and dust. After being well looked after by the popular host of the Saracen's Head, who, by the way, caters specially for cyclists and motorists, we made another start. It is down hill from Dunstable for a mile or two, until Hockliffe is reached, where there is another rise. Some very fine views of the well-wooded country were obtained here as we rise gradually to Brickhill, and then there is a long descent (2 miles) to Fenny Stretford. Another stop here for light refreshment, and then off again over slightly undulating roads through Stony Stratford on to the curious old town of Towcester, arriving here at 2.40. At the Pomfret Arms Hotel we refilled the carburetter of the motor from the spare tank, and in ten minutes were off again. We had now exactly 70 minutes to do the 24 miles to Rugby, if I was to catch the train to Manchester, and Mr. Duret had every confidence that the Singer was equal to the task, barring accidents. With a fine rhythmic beat

### The Little Motor Swings Along

in grand style—nothing comes amiss to it. A stretch of new metal is sighted ahead—no time to dismount, so we plough through it at top speed. One forgets that we have pneumatics on the wheels, and on we go through Weedon, pedalling a little up the stiff hill by the barracks. We were nearing Daventry now, and ran carefully down the steep hill through the town, then on past Braunston and Willoughby, over a level stretch of road till we come to the stiff rise to Dunchurch, here we turn sharp to the right for the last stretch to Rugby. Roads were now deteriorating and putting a severe strain on the Singer axles—so I thought, but Mr. Duret scoffed at the idea. As we ran through Rugby town at slow speed it wanted but three minutes to 4 o'clock; should we reach the station in time? At a very doubtful turning we asked the way to the station, and were directed to it. It was about a mile ahead; but lo and behold! when we reached it with time in hand imagine our chagrin to find we had been directed to the new Great Central station instead of the L. and N.W. However, we faced about and made for the town again, reaching the station just in time to see the tail end of the train clear the platform. It was simply a case of sheer hard luck to miss it by just half a minute.

Well, having two hours to wait for the next train, we filled in the time very pleasantly by having a look through Rugby School (thanks to the courtesy of Mr. Gilbert, the agent for Singers in Rugby). After tea we proceeded leisurely to the station, and got the next train home. So ended a particularly pleasant trip, and one in which the merits of the Singer showed up remarkably well.

### The Magneto-Electric Ignition System

deserves high praise. Even at the highest speeds not a solitary miss fire could be detected, and for ease of regulation of speed nothing could be simpler than the throttle and exhaust lift adopted. Undoubtedly the ease of running and the high efficiency obtained from such a small motor can be mainly attributed to the frictionless roller bearings fitted to the motor, instead of the usual plain bearings. Then the cooling effect produced by the rapidly-revolving arms of the wheel is very evident. The carburation keeps constant even on rough roads, and no overheating whatever was apparent during the whole run. The workmanship of the cycle part of the machine is well up to the company's reputation and appears equal to any strain that it could be possibly subjected to.

On the whole the Singer motor tandem would seem to be an almost ideal machine for touring, and there should be a fine future before it. It can readily be converted into a single tricycle by removing a few bolts. "MAGNETO."

## THE COUNT DE DION.

SOME INTERESTING PERSONAL NOTES CONCERNING HIM.

At a large banquet recently given in Paris to commemorate the services rendered by the Count de Dion to the motor industry, the Chairman (the Baron de Zuylen) gave a brief sketch of the man who may justly claim to be one of the pioneers, if not *the* pioneer, of the motor trade.

"The Marquis de Dion," said the Chairman, "might have been content by right of birth and wealth to live the life of a member of the privileged class. But not so. The Count decided to move with the times, and whilst most people of his social standing would have found it beneath their dignity to be anything but soldiers, living in a mechanical age, he decided to become an engineer. In the engineering line he shares honours with Cugnot and Lenoir, in France, and Hancock and Gurney, in England, who, it will be recalled, were intimately connected with the motorcar movement 70 years ago. In England their efforts came to an untimely end owing to the passing of the Road Locomotives Act. But as a pioneer of the resurrected industry and pastime he comes an easy first. He started some twenty years ago in his essays. As partners in his mechanical experiments he had MM. Bouton and Trepardoux. As far back as 1882 old people will remember seeing him in the streets of Paris mounted upon his steam tricycle, and there was more determination in this act than most people see at first glance. Those were days when a man who experimented with horseless road vehicles was looked upon as only fit for an asylum. Even his own immediate friends looked upon him as a maniac. But he went on his way, taking no heed of ridicule. It was the absurd legislation and ridicule which blocked the way in England to mechanical road locomotion in 1830, and it might have been the same story repeated in France had not M. de Dion met and defeated old-fashioned prejudice. The year 1894 marked the success of his efforts, this being the historical date of the first great autocar event in France. After this the motorcar movement advanced by leaps and bounds, and we had the famous events of Paris-Bordeaux, Paris-Marseilles, Paris-Toulouse, the Tour de France, Paris-Berlin, and others as evidence of progress."

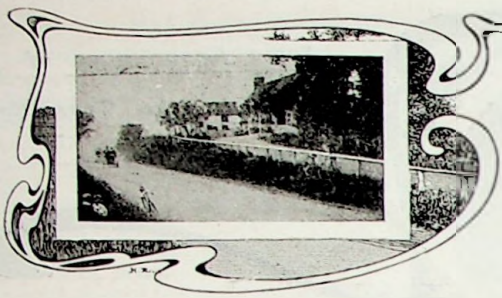
## Some Experiences of a Cyclist in the Transition Stage.

## IN TRANSIT.

**On Ignition.** After one has become familiar with one's motorcycle, and has got to know which parts of the mechanism are more prone to failure than others, there is very little to cause worry or trouble when setting out upon a ride. A careful inspection of the most delicate parts, and the making of any necessary adjustments, go a very great way towards avoiding trouble. And I can positively affirm that I take out my motorcycle with as much confidence as I do the ordinary cycle, and, moreover, with the feeling that I shall be able to go ever so much farther with less fatigue. And if there is a bit of a wind blowing, there is also that gratifying knowledge that neither the breeze nor the hills are going to pump me out on the ride. Without a word of exaggeration, that is the way in which I have now come to regard the motorcycle, and to compare it with the pedal-propelled vehicle. The charm of the new method has not worn off with the novelty of it—on the contrary, the charm has increased. The one feeling of uncertainty that exists is in regard to the ignition. One knows approximately how much current has been used from the accumulator, that is to say, how much of the 400 or 500 miles, which represents the capacity of the battery, has already been covered, but, as an accumulator will lose through leakage while it is lying idle, an unknown loss creeps in, and this loss may be rendered very great by a short circuit caused by a wire becoming bare.

**Testing Appliances.** A means of testing one's accumulator is an essential for everybody, and a voltmeter is generally regarded as a proper instrument to possess. But the testing lamp, besides being considerably cheaper, is by some said to be just as useful as a voltmeter. My own opinion is that either can be used according to the capacity of one's purse, but if both are available all the better. A voltmeter gives one definite information of the contents of the accumulator and, moreover, each cell can be tested separately, and the pressure of the current it contains can thus be ascertained. I always make a point of testing my cells separately; it can then be seen, if the reading of one is much below that of the other, that some defect is present. But the voltmeter merely records pressure and not quantity, and thus the information which it gives cannot always be relied upon. A testing lamp is one which requires a pressure of four volts in order to enable it to give a clear white light, and if the accumulator has less than this voltage the light will be dull, or the filament wire of the lamp may even only glow. But there is this advantage about the testing lamp—it not only requires a four-volt pressure but it requires a certain volume of current at that pressure to give a bright light, so that if there be very little current in the accumulator it could easily give a reading of four volts on the voltmeter but yet fail to give brilliancy to the lamp, and in this way warning would be given that the accumulator was running down. From this it will be seen that the testing lamp is a good guide to the condition of the battery, but one needs to get used to the appearance of the light so as to be able to judge that condition from the comparative brilliance of the lamp. But if it be used in conjunction with the voltmeter, and if each cell can be tested separately, one can make almost certain as to the condition of the battery.

**How to Conduct the Tests.** It is always advisable to test the battery at the end of a ride. If the testing be done just prior to setting out a false reading will result, because the cells gain a certain excess of pressure through standing, and this excess will rush out all at once on the application of the meter. In the same way one would get a false idea of the amount of gas contained in a tumblerful of mineral water if a meter were to be applied as the stopper was removed from the bottle: the first rush of gas would show a much higher reading than was actually the case. Unquestionably the best way to treat the battery is to keep it constantly charged. Make a charging board according to the instructions already given in this paper (the cost is only about a couple of shillings, or a well-made article, with certain refinements, can be bought for very little more), and charge the battery from the household or office current. This not only always gives one a fully charged battery but the battery is really benefited by it. Those who have not the opportunity to do their own charging can get it done commercially for sixpence or a shilling (the former is a remunerative charge), but the trouble of carting the battery backwards and forwards is the difficulty here. In this case a spare battery is the proper thing to have with one. But the weight and bulk of a battery are against this idea, unless one of the new Peto and Radford productions be used. This gets over the difficulty splendidly. It is small in bulk and it will run for 150 miles (no doubt it will do 180 or 200 miles), and, again, it is exceedingly cheap, costing only 11s. 6d. A place can readily be found for this, and then, should the chief battery run down, the stand-by can be used, and its capacity will no doubt be ample to last until the other has been re-charged. In order to get over the difficulty of changing places between the two batteries, involving carrying the big one outside and wedging the small one on in the place provided for the big one in the case, a length of wire should be carried so as to connect up the spare battery to the ignition circuit. Thus, the wire from the positive pole of the battery should be long enough to reach the terminal on the coil, whilst the negative wire can be taken and attached to the wire which proceeds to the switch on the handlebar. Or, if the negative wire can be carried into the case, it can be attached to the negative pole of the exhausted battery, without disturbing the wire already attached thereto. But the positive wire from the exhausted battery must be disconnected from the coil. Cyclomot.



# THE . . . LIGHT . . SIDE. . .

Amongst sundry other virtues the motorcyclist has a habit of minding his own business. We do not claim any abnormal excess of morality for the motorcyclist on this account, as it is possible that, from the engrossing nature of his business, he makes a virtue of necessity; nevertheless, it is well to remember that there are other occupations and pastimes whose devotees make a special study of someone else's business.

* * *

Croquet may be taken as a typical example of such a pastime; while among occupations Politics is a good specimen.

* * *

Some day, perhaps, we shall have a motor parliament, and the process of moving an amendment will be as quietly and expeditiously carried out as is the operation of regulating speed by a motorcyclist.

* * *

The registration of motorcars will, it is stated, shortly occupy the attention of Parliament. The case for the "registrates" is that it is necessary in the interests of law and order to give the police some more certain means of identification than they have at present. It is perfectly clear that to deal successfully with such a set of *riotous blackguards* as motorist the law must do one of two things: it must either label them like cabdrivers, or it must institute a special corps of motor-policemen to meet them on their own ground at their own velocity. The latter is of rather too progressive a nature for twentieth-century officialdom, so that if anything is done in the matter (although the fact of its being taken up by the House does not necessarily mean that anything *will* be done) it will probably result in tin plates.

* * *

As potential offenders against the law, the man who rides a motorcycle down Piccadilly and the man who turns into Salmon and Gluckstein's for an ounce of "Navy Cut," are equal; and you have no right, at the instance of a prejudiced minority, to compel either of them to display a registered number in the street merely to make the policeman's task a simpler one. If the voice of the majority proclaims that either the cyclist or the tobacco buyer is a menace to the community, and if, after due trial of any feasible and commonsense police reform, it is found that nothing but an enamelled tablet will meet the difficulty, then, and not till then, ought the enamelled tablet to be made compulsory. Modern officialdom is more prone to curtail the rights of the citizen in order to prevent or remedy an evil than to reform its own household at the cost of a little energy and possible discomfort to its employees.

* * *

It seems hard that when most of us are too poor to afford one motorcar some men should have two. What, for instance, can the Shah of Persia want with two cars reserved for his personal use, unless the climate of Persia is like our own, variable, in which case it is as well to be provided with an "*en-tout-cas*" ("on two car."—Foreign Editor "M. C.")

* * *

The "rotary impact centrifugal motor," which we referred to in a recent number, is the product of a Pennsylvanian brain, and, like all Yankee inventions, it has an eye to the main chance. A street car which can be run from Charing Cross to Putney Bridge for a farthing (which is what the r. i. c. m. works out at) ought to bring in a good many dollars to the man who runs it. This is much cheaper than a Royal Blue or a City Paragon. We would that we had a few shares in the company which has been formed to push the invention. But we hear that they have all been taken up, so that we must content ourselves with taking as many as we can get in the subsidiary company which we understand is in process of formation—a company which is being formed to *push the car* when the r. i. c. m. knocks off work.

* * *

In Chambersburg, Pa., there's a cute little cōterie
Formed, it is said, to finance the affairs
Of a highly ingenious centrifugal rotary,
Type of America's up-to-date wares.
First of its merits is *Motion Perpetual*
(Phrase on the ear which suspiciously strikes),
One which is certain, dear readers, to set you all
Longing for "Rotary-Motory-Bikes."
Next is its *Cheapness*. A car, for a ha'penny,
Will, it is claimed, run a dozen or more
Miles; that's, of course, if it chance to escape any
Subsequent "charge" at the hands of the law.
*Cheapness* and *Motion* are highly desirable
Features in vehicles such as the 'bus;
Hansoms are costly, and horses are tirable—
Rotary motion's the motion for us.

* * *

The policy of great public institutions like Parliaments, War Offices, Fire Brigades, Police Forces, and what not, is simplicity itself. They do not develop with the times, they compel the times to conform to their own stunted growth. An enormous development in the conditions and quantity of vehicular traffic has not been accompanied by any corresponding development in police regulations or reformations. The police have adopted a much simpler policy than that. They say, "Here we are, and here are our regulations; conform to them and all will be well with you; defy them, and you shall be branded as vehicular outlaws. Neither we nor our regulations, it is true, were modelled with any reference to you. But what of that? We got here first, and if you desire to come in and share the land with us you must take us and our regulations as you find them. We labelled growlers to save ourselves some trouble; and we propose to label *you* to save more."

* * *

No more mistaken idea could possibly be entertained than that motor cycling consists in "sitting tight" and letting the machinery do the work. Equally misleading is the "pushed-by-a-pint-of-paraffin" definition of the new sport.

* * *

As a matter of fact, motor cycling is a far more exacting, intelligent, and interesting occupation than cycling proper. The best way to prove the truth of these remarks is to buy a motorcycle and learn to ride it. But apart from any practical experience of the game, it is easy to see, in a minor degree, by watching others, and, to a larger extent, by reading the literature of motor cycling, that the handling of a motorcycle is no sinecure, and that in the endeavour to adapt his speed to the nature of the road, and to the necessities of his environment, as well as in the constant desire to get the best results out of his machine, the motorcyclist will have little cause to grumble at the tedium or monotony of his existence.

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## OPINION.

### *Motor-bicycles in the Paris-Vienna.*

Little has been written and little thought by the writers in the general press about the performances of the motor-bicycles in the great race from Paris to Vienna, and yet they have performed exceedingly well. To the Werner has fallen the great honour of being first and second to arrive at Vienna, both machines going through well from start to finish. It will be remembered that Bucquet (whose portrait we gave last week) was the first motor-bicycle to arrive at Belfort, the first control, having got over that part of the journey (253 miles) at the excellent average pace of 31 miles an hour. Bucquet eventually arrived first of the motor-bicycles at Vienna in the splendid time of 25 hrs. 35 mins. 8 secs., and Labitte on a Werner came through in 27 hrs. 42 mins. 12 secs. Reiger was third (riding a Laurin-Klement, known in England as the Hewitson) in 31 hrs. 5 mins. 29 secs. The performances of the three motor-bicycles are all the more noteworthy when it is remembered that they were, in every sense of the term, ordinary motor-bicycles. Both the Werners had motors of 2¼ h.p., and were fitted with Michelin tyres. That Bucquet on one of these wonderful little vehicles should actually beat the times of many of the racing cars is in itself a remarkable performance, proving as it does that the motor-bicycle is no toy, but a fast and reliable motor vehicle under adverse as well as favourable conditions. Imagine for a moment what the contest just ended means. Roads of varying quality, good in parts, execrable in others, ill-deserving the name of "road" elsewhere; hill-climbing, beyond anything we can dream of at home, over the snowy Swiss heights; ever changing atmospherical conditions—in short a hundred obstacles to be overcome; and yet all the time over those thousand kilometres the little engine on the bicycle pulsating regularly and ever doing its work beside, and in some cases ahead of, the leviathan cars with their high powered engines striving to outpace it. And in the end the little bicycle is there, a pigmy among the giants; it has got right through level with many of its giant rivals and in front of not a few. One should really find time in one's ecstatic contemplation of the speed of the racers for a generous thought to the motor-bicycle. We find on reference that Bucquet on the Werner got into Vienna well ahead of the following heavy cars:—Panhard and two Serpollets; the following light cars:—Delahaye, Clement, Eisenach, De Dietrich: and the following voiturettes:—Corre, G. Richards. Surely a fact well worthy of special notice.

### *The Lesson to be Learned.*

As a result of the accidents which happened during the Paris Vienna race, there is certain to be an outcry against motoring, and it will be a hard matter to convince the anti-motorist that had the accidents been ten times as numerous they would have constituted no logical reason for condemnation; but a moment's reflection ought to prevent the rational reader from concluding that motoring is too dangerous a sport to be encouraged.

At the outset, let us disclaim any intention of arguing with the individual who looks upon motoring as a fad, and who regards the motorcar as a toy. Assuming this, an objector would have plausible grounds of complaint, and he might reasonably claim that a mere pastime which made no pretence to utility should be absolutely free from danger. The sound commonsense of the community would condemn the game of hopscotch if it could be shown that one girl in a thousand lost her life through it.

To those anti-motorists, however, who have sufficient intelligence to perceive that motoring is something more than a pastime, who can see far enough into the future to recognise it already as a great national industry, a system of universal locomotion, the wobbling Wilberforce of the equine slave trade—to such we would say, picture to yourselves for a moment any of the great industries with which generations of experience have made us familiar: coal-mining, shipping, or railroads. You open your "Telegraph" at the breakfast table and you read, "Dreadful Colliery Accident! Two Hundred Miners Entombed." You can imagine the rest, even before subsequent issues of the paper horrify you with lists of the dead; but what, after the shock of horror has passed over you, is your first impression? Do you condemn coal-mining? Do you denounce a Government which allows men to immure themselves in the bowels of the earth in search of coal? Do you say, "Down with coal mines as dangerous! Henceforth let us burn wood, peat, paper, cotton wool, or red-tape—anything which can be procured without risk to life and limb"; or do you rather deplore that mysterious and fortuitous concourse of conditions which we call *accident?* Do you deprecate the relaxation of supervision which, perchance, permitted some careless miner to carry matches in the midst of danger? Do you apprehend the necessity for scientific improvement in the miner's light or in the mine's ventilation? Do you, in short, realise that the accident, rightly viewed, may and must be turned to profitable account, and that every life lost to-day means a hundred saved to-morrow?

Would you give back to the sea the fruits of victory which man's eternal struggle against the elements of nature has won for his fellow man, because forsooth some gallant ship goes down to "the depths below the deep"?

Would you revive the good old days of the "Tally-Ho" and the "Tantivy" every time that a train runs off the rails? And would you walk from London to Edinburgh because your newspaper tells you that the Scotch Express broke an axle or was blown over a bridge?

And, if you would do none of these ridiculous and irrational things, why do you cry out against motoring because you hear of a fractured leg, a shattered machine, or, alas! sometimes a sudden death! Rather ought you to see in these accidents an earnest of future improvement, of increased skill in invention and manufacture, and of man's ultimate triumph over machinery. The death of one brave motorist to-day may be the means of saving you from a motorcar accident to-morrow.

*We are always glad to receive from our readers contributions of a literary or artistic character. At holiday times, especially, opportunities readily present themselves for picking up interesting "snaps" and experiences which are worthy of appearing in print. Incidents on the road, snapshots of general interest to motorists, and sketches may be submitted.*

C

# THE PARIS-VIENNA RACE.

***Some further interesting details of the great motor race, with special photographs.***

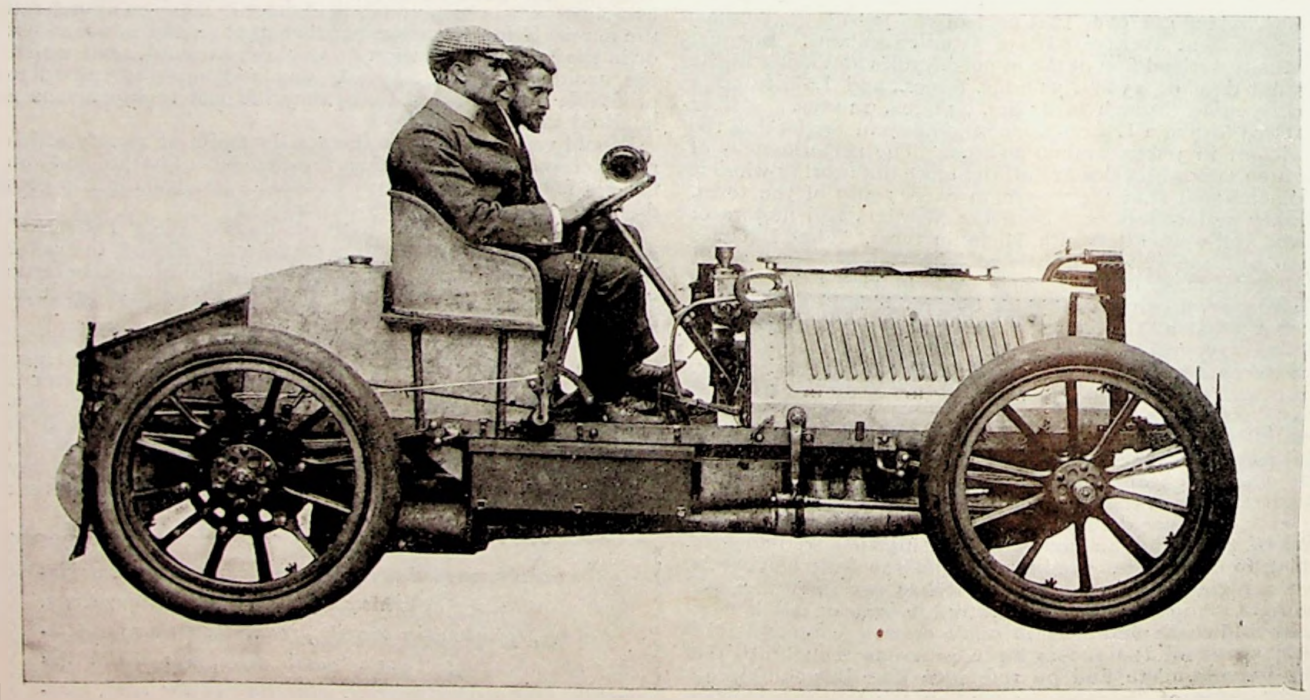
The Paris-Vienna race is over. But at the time of writing the officials are still wrestling with a mass of figures, and our correspondent at Vienna is of opinion it may be a week or more before an accurate official result is made known. One, at least, of the daily papers has published what it calls an "Official Result," but it is quite unreliable. The fact is, that at the moment neither the official decision in the Gordon-Bennett race nor that in the Paris-Vienna race has been made known, and one French journal asks dubiously, "Will it ever be known?" So far as the former contest is concerned, opinions are divided. It is held on the one hand that Mr. Edge's victory should be nullified because he had the assistance of some thirty men, believed to have been Austrian soldiers, who were manœuvring near Innsbruck, in extricating his car from a river-bed. This Mr. Edge denies, but, even if such assistance had been given, there is a distinct opinion in French automobile circles that Mr. Edge should receive the trophy.

This view of the matter is expressed thus by one of the best of French witers:—"If we exclude Edge from his rights for this reason, which will appear futile to the British public, we shall have the reputation of bad losers, seeking a petty excuse to annul the result."

We believe that the committee of the Automobile Club of France met on Wednesday last to consider the whole matter, but at the time of going to press their decision had not been made known.

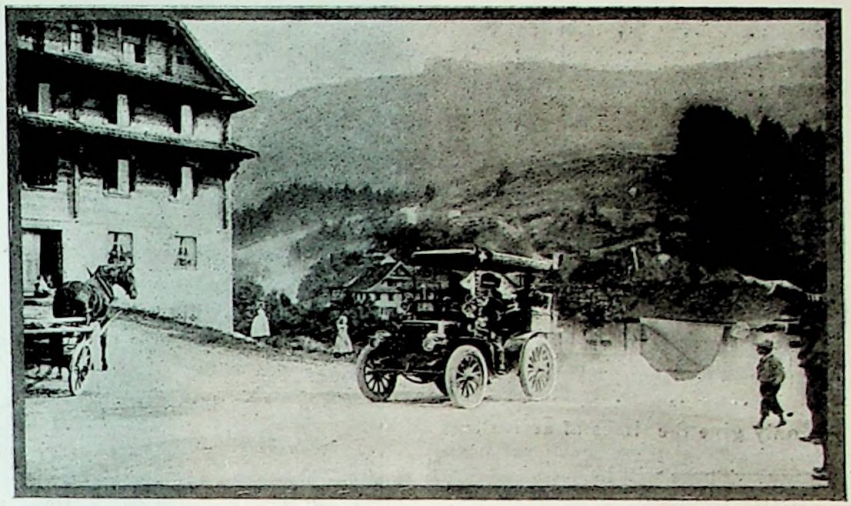
### *The Arrivals in Vienna.*

Some interesting details have been sent us from our correspondent at Vienna, who witnessed the arrivals of the cars at the last control, which was at a place called Florisdorf. As the cars ceased racing at this spot, it may be said that the race actually ended there, as the cars were taken in charge of cycling guides at Florisdorf and thus conducted slowly into Vienna. At this last control there was a huge crowd of spectators gathered from 11 o'clock in the morning, and considerable excitement prevailed. There was present a large force of police and perfect order was maintained. The weather was very fine and intensely hot, and the day being Sunday the crowds became greatly augmented as time went on. It was 2 o'clock when a cloud of dust and a buzz amongst the spectators heralded the approach of the first car, and the excitement was great as the vehicle came thundering along. As it



*Messrs S. F. Edge and M. S. Napier on the racing Napier car with which Mr. Edge won the Gordon-Bennett race.*

came near it was seen that the car bore on its front the number 147, but the driver and his assistant were quite disguised in their covering of thick white dust and the strange headgear and goggles which they wore. Considerable astonishment was caused at this last control by reason of the fact that M. Marcel Renault failed to stop his car in accordance with the directions, and flew past the officials at full speed. Our correspondent thinks he must have failed to observe the warning flag: certain it is that he ignored all the efforts of those at the control to warn him, and dashed right through to Vienna. It is alleged that M. Renault passed other control stations in the same way, and our correspondent states that these matters are being considered now by the officials, and it is expected that all the time thus gained will be deducted from his record. Thus it may be that even Renault may not be adjudged the real winner, although he was actually the first arrival. Less than four minutes after Renault came Count Zborowsky, and he duly



PARIS-VIENNA.
*Climbing one of the Swiss passes, 900 metres above sea level.*

PARIS-VIENNA.
*Henri Farman passing through Zurich.*

pulled up at the control, and proceeded slowly into Vienna. Six minutes later Baron Forest arrived, and this gentleman had exceedingly hard luck, for after arriving third at the last control his petrol ran out on the short run to Vienna, and in the actual placings of the arrivals into that town he only occupies seventh position. Maurice Farman followed Forest, and through the latter's break down, of course, went into third position at Vienna. Others followed in rapid succession as shown in the following table of arrivals, and perhaps one of the most noteworthy points in connection with this wonderful race is the closeness of all the leading cars, only a few minutes separating them in each case at the finish, after a journey of 870 miles, over good, bad and indifferent roads.

Greatly to the surprise of all at Vienna, motor-cycles (tricycles and bicycles) made an excellent showing. Not only did Osmont, on his 8 h.p. De Dion tricycle, weighing 4 cwt., get through the whole of that trying journey, but three motor-bicyclists reached Vienna safe and sound. Forty-third in the matter of time,

### *Osmont arrived at Vienna*

as much as four hours ahead of some of the cars. He traversed the 870 miles which separated Vienna from Paris in the prescribed four days, the 675 miles over which racing was permitted being covered in 24 hours, 26 minutes, 16 seconds, which averages 27½ miles an hour throughout. Over the rough roads in the Tyrol the pace was necessarily slow, but the long climbs and the stiff rises (some of them had a gradient of 1 in 5) were all safely negociated. The same may be said of

### *The Three Motor-Bicycles.*

Bucquet, on his dainty Werner, looked almost fresh on dismounting at Florisdorf. His machine weighed just inside 100 lbs. avoirdupois, and the engine was reputed to be 2¼ horse power. His time was 25 hours, 35 minutes, 12 seconds. Labitte, on a precisely similar machine, secured second place in the bicycle class, his time being 27 hours, 42 minutes, 12 seconds. Reiger, on the Laurin-Klement, was third in this class in 31 hours, 5 minutes, 29 seconds.

What happened to Bardeau, and Lazon, and Bardin, and Hallex, on their motor-tricycles, we shall probably hear in course of a post or two, but information on these and many other points is coming through very slowly. Posdenick, on a Laurin-Klement, and Masson and Derny, both on Clements, were all going well the last time we saw them, and we await with a large amount of interest the news of the cause of their retirement from the contest.

The following list shows the order and times of arrival of the first twenty cars to reach Florisdorf, where racing ceased:—

| | H. | M. | S. |
|---|---|---|---|
| Marcel Renault .. | 2 | 0 | 0 |
| Count Zborowsky .. | 2 | 3 | 35 |
| Baron Forest .. .. | 2 | 9 | 57 |
| Maurice Farman .. | 2 | 17 | 35 |
| Baras .. .. .. | 2 | 21 | 55 |
| Edmond .. .. | 2 | 25 | 3 |
| Hemery .. .. | 2 | 26 | 6 |
| Bertreaux .. .. | 2 | 40 | 21 |
| Henri Farman .. | 2 | 42 | 9 |
| Chauchard .. .. | 2 | 46 | 24 |

| | H. | M. | S. |
|---|---|---|---|
| Tart .. .. .. | 2 | 55 | 30 |
| Crawhez .. .. | 3 | 10 | 0 |
| Teste .. .. .. | 3 | 10 | 35 |
| Caters .. .. .. | 3 | 15 | 0 |
| Derhamps .. .. | 3 | 18 | 28 |
| L. Renault .. .. | 3 | 19 | 29 |
| Barbaroux .. .. | 3 | 20 | 15 |
| Angiers .. .. | 3 | 20 | 45 |
| Marcellin .. .. | 3 | 22 | 35 |
| Collin .. .. .. | 3 | 23 | 17 |

The unofficially recorded times of the motorcycles are given as follows:—

| | H. | M. | S. |
|---|---|---|---|
| Osmont (De Dion tricycle) .. | 24 | 26 | 16 |
| Bucquet (Werner bicycle) .. | 25 | 35 | 8 |
| Sabitte (Werner bicycle) .. .. | 27 | 42 | 12 |
| Rieger (Laurin Klement) (Hewitson) .. .. .. .. | 31 | 5 | 29 |

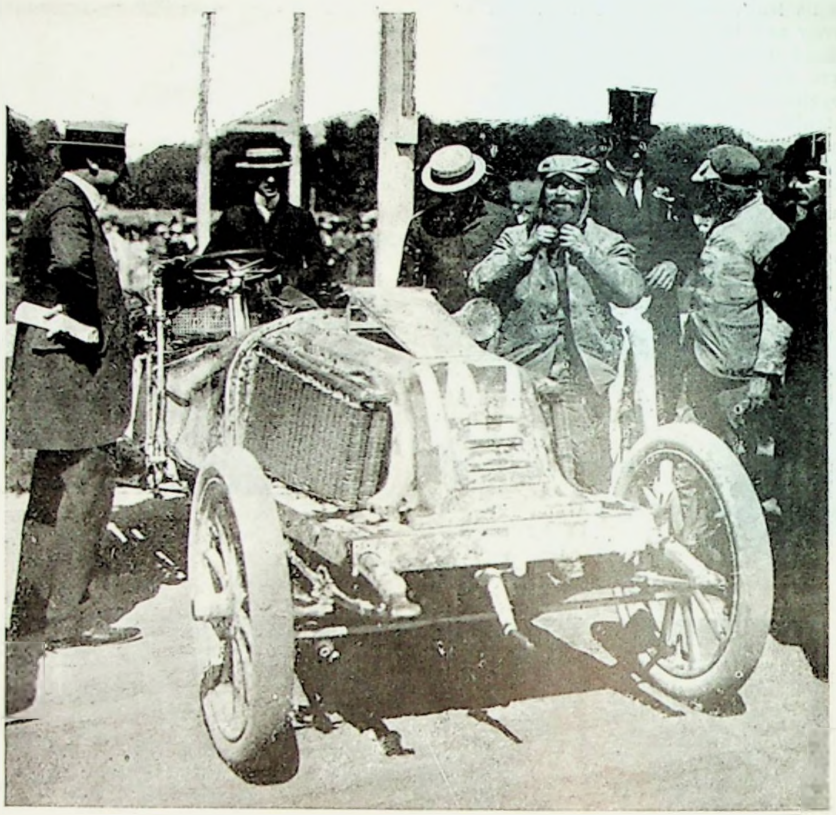
We only give the times of arrival, as no correct official times have yet been given out. These will be made known in "MOTOR CYCLING" as soon as they are officially announced.

The positions of the motists are being continually changed as the officials go deeper and deeper into the mass of figures before them. On Thursday last the following altered list was issued:—

| | | H. | M. | S. |
|---|---|---|---|---|
| 1. M. Renault | (v.l. Renault) | 26 | 22 | 43 |
| 2. H. Farman | (h.c. Panhard) | 26 | 36 | 30 |
| 3. Edmond | (v.l. Darracq) | 26 | 45 | 10 |
| 4. Zborowsky | (h.c. Mercedes) | 26 | 48 | 9 |
| 5. M. Farman | (h.c. Panhard) | 26 | 54 | 29 |
| 6. Baras | (v.l. Darracq) | 27 | 39 | 50 |
| 7. Teste | (h.c. Panhard) | 27 | 48 | 38 |
| 8. Hemery | (v.l. Darracq) | 27 | 58 | 38 |
| 9. Marcellin | (v.l. Darracq) | 28 | 13 | 30 |

v.l. — voiture legère.
h.c. — grosses voiture or heavy car.

[We regret to say that a later letter from our Vienna correspondent, giving a more detailed list of arrivals, has miscarried in the post.—Editor.]



MARCEL RENAULT.

*The first motorist to reach the Hippodrome, Vienna. M. Renault was snapped immediately after his arrival. He is undoing his headgear after the long tumultuous drive of over 800 miles.*

### *Edge gets the Gordon-Bennett.*

We are pleased to be able to state that all doubt is now at rest concerning the Gordon-Bennett trophy, and that the committee has definitely decided to award it to Mr. S. F. Edge. After very careful and lengthy consideration, the Automobile Club de France made their decision known on Saturday last and England is entitled to hold the trophy. All English motists will receive this news with the liveliest satisfaction, and we once more congratulate Mr. Edge.

PARIS-VIENNA.

*A Panhard Car in full flight near Salzburg.*

# NEWS.

"Motor Cycling's" score.

First out with the best photos of the Paris-Vienna race.

"Cycling" this week contains some very fine illustrations of the Grand Prix de Paris.

Motor-cyclists will find good accommodation for themselves and machines at the Crown, Ongar.

We should be glad to receive the address of the makers (in France) of the Peconnet motor-bicycle.

The present sultry weather suggests that motor cycling is a most pleasant sport. Motor cycling under the circumstances, is delightful.

It is suggested that a banquet be organised for Messrs. S. F. Edge and Napier, who were responsible for the grand win in the recent Gordon-Bennett Cup race.

Our enterprise in the matter of the Paris-Vienna race has been widely recognised, and we thank many readers who have written us on the subject.

A reader of "Motor Cycling" would be glad to know of the address of a maker of an invalid's electric motor-chair. He has an idea that such an article was to be seen at the last National Show.

W. Parry, of 158, High Holborn, recently recovered £15 and costs, for damages done to a second-hand motorcycle. The defendant, a prospective purchaser who was trying it, ran into a wall and badly damaged the machine.

A correspondent forwards us some particulars of an efficient belt-dressing named "Plomo." The agency for this is at 137, West Regent Street, Glasgow. Another excellent material he mentions is "Cling Surface," an American product, obtainable at 152, Virginia Street, Buffalo.

A bad accident happened on Saturday week to a youth whose bicycle got out of control on Holywell Hill, St. Alban's, and dashed into a motorcar owned by Mr. Julius Wernher, of the firm of Wernher, Beit and Co. Both the boy's legs were broken but he is doing well in a local hospital.

At the big athletic carnival organised by the West Ham United Football Club, at the Memorial Recreation Grounds on the 19th, a ten miles motor race is included in the programme. Entry forms and particulars from Mr. A. C. Davis, 29, Kelly Road, Canning Town.

### *Praise for "Motor Cycling."*

"The very best account of any appearing on this side of the Channel," said Mr. Harvey Du Cros, jun., on Wednesday last when speaking of the way Motor Cycling had reported and illustrated the Paris-Vienna motor race. As Mr. Du Cros took part in the contest he is able to express an opinion from actual experience.

The Ganz Engineering Co., of Buda-Pesth, have opened works in the States, and we are told that they will shortly put on the market an electrical motor of an entirely novel pattern.

The trial of electrical vehicles, organised by the Automobile Club, has been postponed to the week beginning Monday, July 21. Another important fixture, the big trial, takes place the first week in September. Entry forms can now be obtained for both trials from the Automobile Club.

The makers of the Rex motorcycles and cars inform us that they have changed their title from the Birmingham Manufacturing and Supply Co. Ltd., to that of Rex Motor Manufacturing Co. Ltd. They are extending their works, and will be able to turn out a great many more motor-bicycles than they are able to do at present.

A most distressing accident occurred to S. T. Watson at the Plymouth meeting. He had ridden splendidly on the Friday, and was adjusting his Chapelle preparatory to taking part in Saturday's races, when the screw-driver slipped, penetrating one of his eyes. It is stated that possibly the sight of the eye will be saved.

The New Werner secured five prizes in five races at the Plymouth meeting.

It is stated that all German motorcar owners have now to register their cars, which are liable to be commandeered by the military authorities. Thus motorcars have been put on the same footing as horses in this respect.

### *Motorcycles and How to Manage Them.*

We have to hand a copy of the fifth edition of "Motorcycles and How to Manage Them," by A. J. Wilson. The first three chapters of the volume are devoted to a description of the standard pattern motor-bicycle. The information is of a sound practical nature and is accompanied by clear illustrations of the motor and its details. The motor-tricycle and quadricycle are very fully described, and a useful chapter is the one devoted to defects and how to remedy them. Legal matters are dealt with and there are also some useful notes on the grinding in of valves and the use of stands for motor-bicycles. The volume is published by Iliffe and Sons, 3, St. Bride Street, London, E.C. The price is 2s. 6d.

*M. MARCEL RENAULT*

*receiving the salutations of the officials upon his arrival at the Hippodrome, Vienna. It will be noticed that he is wearing a huge laurel wreath.*

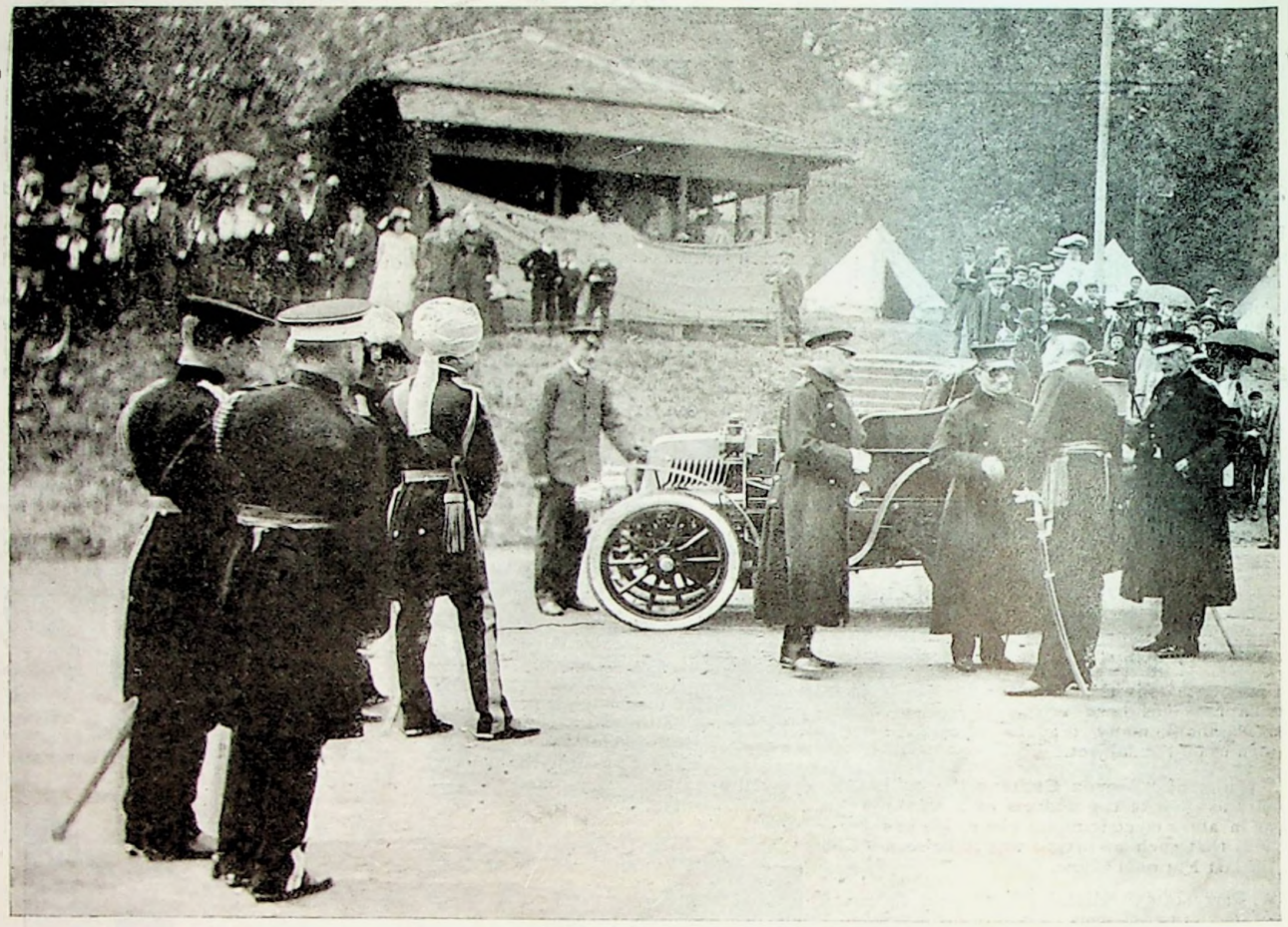


*Photo by* *J. M. Cooke, Hornsey.*

*THE DUKE OF CONNAUGHT AND LORD ROBERTS AT ALEXANDRA PARK.*

*This photo denicts H.R H. The Duke of Connaught (on the left), Lord Roberts (in centre with goggles), and Major-General Sir H. Trotter (on right) about to depart from the Park in one of the King's motor cars after an inspection of the Camp.*

Our readers are finding our Information Bureau of much value. This week two pages are devoted to replies.

### *A Motor-bicycle Controlled entirely by the Pedals.*

A patent has just been brought out by an American inventor for a system of controlling the motor by the pedals. The motor is built into the frame and the pedal shaft is concentric with the motor. The fly wheel on the pulley side is provided with a rigid friction disc which is recessed so that a cone can be pressed into it and thus form a brake. This is brought into action by a back-pedalling movement. The valve lifter and advance sparking-lever are brought into action by a forward move of the pedals. The mechanism to effect this is ingenious. It consists of a tapered sleeve on the right hand shaft which acts as a cam when the pedal is pulled outwards a little. This lifts the valve and allows the motor to be started, when an inward move of the pedal shuts the valve and closes the sparking circuit, and a slight further inward move causes the ignition to be advanced and thus increase the speed.

### *The Petrol Motor a Steam Engine.*

### *A Remarkable Theory.*

A celebrated French chemist has been making investigations as to the chemical changes that occur in the cylinder of the internal combustion motor. It is, of course, well understood that no explosion can take place without the admixture of air to the petrol vapour. This explosive mixture has a composition of carbon, hydrogen, oxygen, and nitrogen chiefly, but there are also certain other elements present which do not play an important part. What happens when this mixture is fired by an electric spark is this: The hydrogen of the petrol combines with the oxygen of the air with explosive violence. The result of this chemical combination is the production of water in the form of steam at great pressure which imparts energy to the piston. The temperature of the explosion varies between 1,200 and 2,000 degrees. There is now the question as to what becomes of the carbon. Practically all the oxygen is used up in the explosion, and the remaining carbon combines with some of the hydrogen forming compounds which give the peculiar pungent smell to the exhaust. Among these compounds may be detected acetylene gas. There is a considerable amount of energy lost through this combination.

It is sometimes wondered how the petrol motor will work at times with inefficient lubrication of the cylinder. The fact is, these vapours themselves form a sort of cushion between the piston and cylinder and thus prevent actual metallic contact and friction. From this latter theory it might be concluded that it is quite unnecessary to find oils capable of standing the temperature without vapourising.

### *No Police About.*

Motists who have suffered from the plague of police on main roads should try taking their drives abroad over by-roads where at present very few policemen are to be found. At a recent week-end one of ours drove from the South Coast to the North Midlands—a distance of about 180 miles—almost entirely over by-roads, and leaving main thoroughfares alone as far as possible; on this particular drive not a single policeman was observed between Windsor and Melton Mowbray.

# MOTOR-BICYCLES AT WESTERHAM.

*Competitors getting ready for the start.*

Last year, on the occasion of the fifteenth annual open hill-climb promoted by the Catford C.C., a time test for motorcycles was included and an entry of five riders was obtained. But this part of the programme was doomed to be a complete fizzle, for we only saw a couple of the entrants at the "weighing-in" station, and but one—Tessier—essayed the climb. He had already taken a couple of unofficial runs up the hill, but, as is frequently the case, the run under official eyes and against official clocks was early nipped in the bud owing to some minor trouble.

But since that day, matters have moved somewhat in connection with the single track motorcycle, and the announcement of the repetition of the experiment at this year's hill-climb brought no less than 27 entries.

The race was split up into two sections, one for motor bicycles not exceeding 1¾ h.p., the dimensions of the motor not to be greater than 66 mm. bore and 70 mm. stroke. The second class was for motors greater than 1¾ h.p. and not exceeding 2¾ h.p., the maximum bore being 79 mm. and the maximum stroke 79 mm. For the low-powered class there had entered H. R. Parton (Minerva), Colin Pattison (Phœnix), J. Van Heeydonk (Phœnix), E. T. Arnott (Princeps), A. C. Wright (Wright), W. Hardy (Martini), W. A. Walker (Walker), W. J. Westfield (Westfield's autobike), W. H. Grainger (Ormonde), H. B. Cook (Ideal), E. Perks (Singer—two machines), G. E. Roberts (Werner), J. Adams (Ormonde), E. E. Friedberg (Ormonde), B. A. Hunt (Clement Garrard), E. Perman (Princeps), and C. Denouille (Bordes). In the high-powered section there entered S. A. East (Shaw), S. R. Batson (The Bat), J. J. Leonard (Werner), H. Martin (Excelsior), E. Perks (Singer), E. T. Arnott (Princeps), T. H. Tessier (Rex), and Bert Yates (Humber). A gold medal was the award for the fastest time in each class, that for the high-powered section being given by the proprietors of "MOTOR CYCLING." Catford C.C. certificates were to be given to all who climbed the hill.

Prior to starting, the machines were carefully examined and the motors gauged by the judge (G. F. Sharp), and at the conclusion of the cycle trials the first of the starters—Colin Pattison—made his attempt. He was travelling well, and the vastly quicker pace of the motorcycle as compared with the crawling struggle of the cycles which had preceded it was apparent to all onlookers. Pattison, however, found that his mixture was changing near the summit of the hill and in trying to improve it lost it altogether. On his second attempt he did the same thing, and thus spoilt his chance of a good performance. Next came Wright. His machine is novel. The motor is in the old Werner position over the front wheel and it drives through a reducing Crypto gear and thence by a chain to the front wheel. It went very well and his time was 2 mins. 42 1-5th secs. from bottom to top. The distance was increased this year to almost exactly three quarters of a mile, as the finish was taken to the danger board. Hardy did not succeed in breasting the hill.

*Denouille keeps the engine going by dismounting and running.*

Then Westfield went up doing 2 mins. 48 2-5th secs.; Grainger did not do so well his time being 3 mins. 11 4-5th secs. Then came Roberts who rode splendidly. He pedalled only at the right moments taking the stiffest part where the gradient is 1 in 6¼ easily, his time was 2 mins. 22 4-5th secs. Then came Perks on the Singer and he, too, made an excellent show. The best of his trials worked out at 2 mins. 16 2-5ths secs. Friedberg was successful, doing 2 mins. 50 secs. and Denouille after dismounting and running alongside and then remounting, did 3 mins. 35 2-5ths secs. Perks was thus placed first in this class, with Roberts second, and Wright third.

In the high-powered section East made first attempt and went up comparatively slowly doing 3 mins. 4-5ths secs. Martin and Leonard started together and they gave quite a sporting element to the trials, proving that the idea of running the men in pairs, had it been carried out, would have vastly increased the interest. Martin was the quicker to get going and gained a lead, which his extra half horse-power enabled him to increase. But on the summit he mistook a knot of spectators for the judges and started to dismount. The crowd yelled to him to "come on" and he did, finishing in 2 mins. 9 2-5th secs. Leonard was less

*Perman commences to tackle the stiff part of the hill.*

*Martin travelling in fine style.*

than a second behind him his time being 2 mins. 10 1-5th secs. He gained a few yards on Martin towards the last. Then Perks came up on his 2¼ h.p. Singer, and again did splendidly. His time was 2 min. 7 3-5th secs., a marvellous performance, but then Perks is one of the two inventors of the Singer and he knows how to get the best results from his engine. Thus Perks became the happy recipient of "Motor Cycling's" gold medal, Martin being placed second, and Leonard third. Every competitor pedalled most, if not all, of the way, but after the trials Perks removed his chain, was pushed off the mark, and his engine carried him right up the hill and over the top to the finishing line, the chain being displayed to the onlookers, who thought he had broken it and wondered how he had picked it up whilst travelling. These tests proved that the Singer is a splendid hill climber, and if it will surmount Westerham it should be good for almost every hill in this country. Martin rode the 2¾ h.p. Excelsior upon which he has won so many races and established so many records. Leonard's machine was a Parisian-Werner, very light in weight for the high power developed. Yates, Arnott and Batson were non-starters. The performances of the first two would have been interesting because both the Humber and the Princeps are chain driven. Batson has a special pulley being prepared to his own design, but it was not quite ready for the trials. The non-starters in the lower powered section were Hooydonk and Parton.

The timekeepers were H. J. Swindley and F. T. Bidlake, and the judges at the finish were C. W. Hartung and Jas. Blair.

The Catford Hill climb has become quite a leading motor function. A large number of cars and motorcycles were at Westerham and many a well-known face was to be seen.

A point of interest just now is that the first Catford Hill climb, promoted in 1887, was won by S. F. Edge, who, in 1902, just as the first successful motorcycle contest is carried out on the same hill, has become world-famous through winning the Gordon Bennett cup.

*The examining judge makes a critical survey.*

The prizes were presented by J. Armer, Catford C.C., after tea at Westerham.

Last year, competitors were allowed a flying start, their time being taken from the moment of crossing the line. This year they started from the tape at the word "go" and their time was taken from that instant.

The competitors were allowed to make a running start, vaulting into the saddle directly the engine commenced to work, or they could be pushed off, getting the first few revolutions by means of pedalling. The former generally turned out to be the quicker way of starting, because the rider could propel the machine much faster by running with it than by pedalling it.

Westerham Hill is in a much better condition than has been the case for many years. During the time occupied in the building of the fort at the summit the roads around were badly cut up with the heavy traffic over them; whilst the guns were being taken up, the traction engines left the roads in a condition that one could almost liken to a ploughed field.

Of Westerham Hill, about half a mile is really stiff, that is to say, having a gradient of more than one in twelve. Hills like Porlock Hill, in North Devon, average about one in nine for two or three miles. Some of the machines with the lowest powered engines (1¾ and 1¾ h.p.) were unable to breast Westerham on the homeward journey, especially if the rider happened to be out of form, and it is by no means the task for a hot summer's day to push a machine, weighing a hundredweight, up such a hill. Even the little things weighing 70 or 75 lbs. entailed a tax on the rider's—or, to be more correct, pusher's—energy. To anybody who may live in a hilly country, an engine developing at least 2 h.p. is necessary, whilst an extra half horse would not come amiss.

WHERE THE MOTORS HAD TO CLIMB.

*A snap-shot of one of the cars taken in the Pass de l'Oulberg, en route from Paris to Vienna.*

### *Featherweight Motor-Bicycle.*

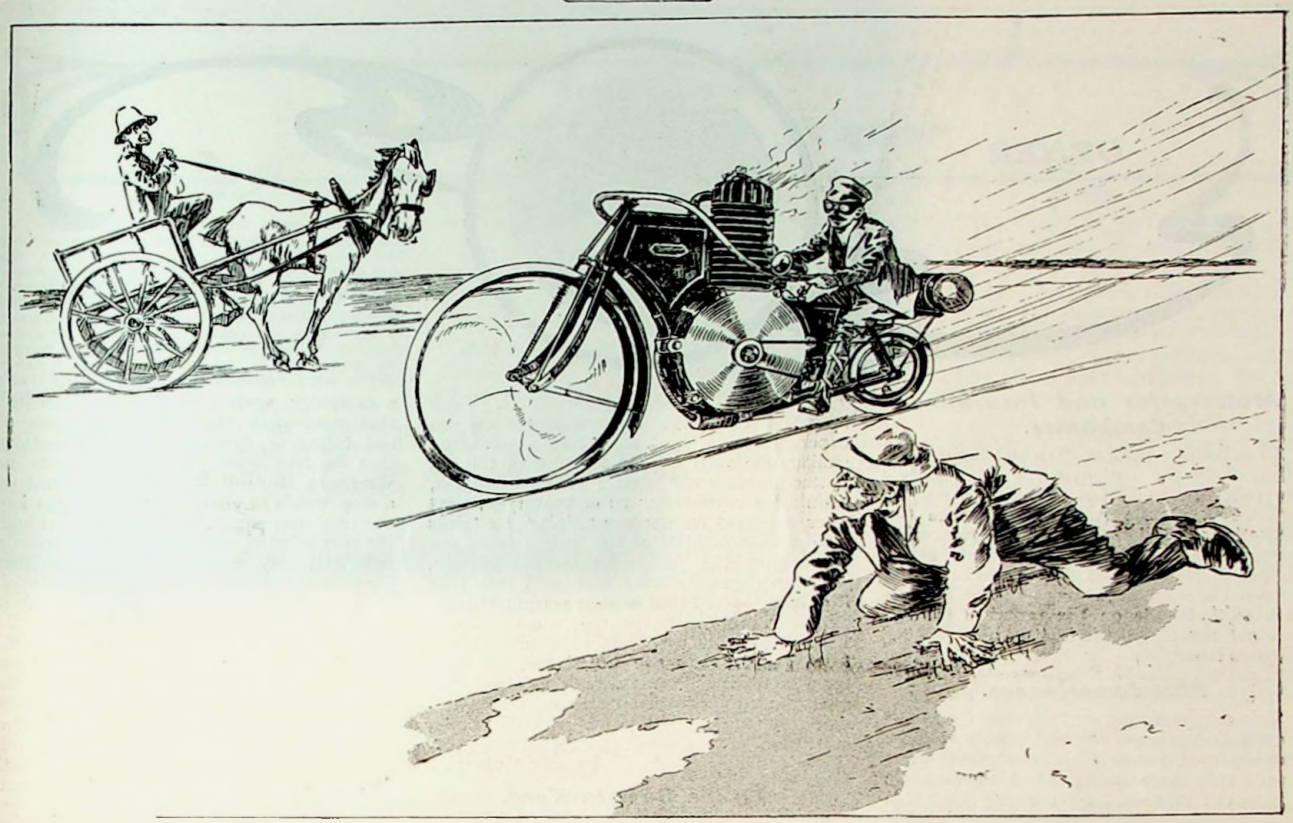
The term featherweight has been very prominent of late in connection with the cycle industry, and has now invaded the motor-bicycle trade. The Garrard Manufacturing Co. now advertise the Clement-Garrard as the "featherweight motor-bicycle."

### *The Trailer and its License.*

So much uncertainty exists as to the actual license required to be paid for a trailer that the following note will be read with interest. A reader communicated with the Inland Revenue Office, and they state that the license is 15s., and no license if attached to an ordinary bicycle. Coupling rods, ropes, etc. would not, of course, be liable—only trailing-cars.

### *Coventry Chain.*

It is interesting to note how quickly our English makers are going ahead in the motor industry now they have laid themselves out to do this. The Coventry Chain Company is a case in point. It does not seem very long since they entered the motor chain trade, and yet the cars recently supplied by the Daimler Company to the King were fitted with Coventry chains. This is a distinct score, upon which we congratulate the company.



*THE MOTOR-BIKE.*

*Who can say what this healthy infant will develop into in twenty years time? It might (at the same time it might not) look like this! "Sultry behind the engine," you say? But just fancy what a cosy corner it would be in an English spring!*

Donors and holders of cups given or won at the motorcycle race meeting of the A.C. at the Crystal Palace have been asked to have them transferred to events for motorcycles at Bexhill in August.

### *Motorcycle Races at Harrogate.*

The Harrogate Camp, a big feature in the cyclist's diary, hold athletic sports on Monday, August 4th (Bank Holiday). Two motor-cycling events figure on the programme. These are a two miles motor-bicycle handicap, and the other a motor-cycle handicap at the same distance, "open to machines with more than two wheels, of not more than 4 h.p., and carrying not more than two riders." Entrance fees, 2s. each event, should be sent to the secretary, Mr. G. W. Smith, 23, Bank Street, Bradford, Yorks.

### *Swift and Sure.*

H. Martin's five miles flying-start motor-cycle record at the Crystal Palace, on June 21, gave the spectator a good idea of the combination of "swift and sure" which the motorcycle is capable of. In order to convey to the mind of the reader some notion of what can be done in "steady speed" by these machines, we may mention that the average speed for the whole run (equal to the distance between the Bank of England and Earl's Court) was, in round numbers, 45 miles an hour. The last mile was the slowest of the five, and the fourth mile was the fastest. The difference between the fastest and the slowest miles was *two and three-fifths seconds*.

The chain fitted to the King's latest Daimler has been supplied by the Coventry Chain Co. Ltd.

The Russian Court has eleven motorcars in daily use; these are all Gardner-Serpollet steam cars.

The club engineer engaged by the A.C. appears to have been a much-needed official, for his time since his engagement has been fully occupied.

Messrs. Werner Freres have largely increased their works, and their machines can now be delivered from stock in London. Frames are 22 inch or 24 inch, fitted with Dunlops, Clipper, or Michelin tyres.

The 1902 edition of the Road Book of the French Automobile Club has just been issued, price 2s. 6d., plus postage, to non-members. It contains the usual list of hotels, repairers, stores where tyres, petrol, or alcohol can be obtained, electrical charging stations, doctors, chemists, etc.

### *A Hint to our Authorities.*

Tramcars which carry motorcycles and cycles for a small charge on specially constructed platforms are not yet known in London, but several Continental towns introduced the system and they find it well patronised. At Geneva, the Campagnie Genevaise des Tramways Electriques has now introduced small trailing cars which run at certain times during the day for the transport of cycles to and from the town and the outlying suburban roads.

Motorcycles and other motors for the use of travellers going to Denmark can be imported free of charge on the verbal undertaking of the traveller that such will be exported within a reasonable time limit. In case a sale is effected the duty has to be paid.

### *Continental Tyres for Motors.*

It will interest our readers to know that Continental tyres can now be obtained from the Clipper Pneumatic Tyre Co., Ltd., of Alma Street, Coventry, and 164, Clerkenwell Road, E.C. These tyres are similar in construction and made of exactly the same material as the celebrated "Continental" tyres, which have gained such a reputation in both France and Germany. These tyres under the name "Clipper-Continental" can now be obtained, as we have already stated, from the Clipper Tyre Co. The tyres are manufactured for motorcycles also.

### *Thoroughly Tested.*

The Ormonde Motor Co. inform us that they send every one of their motor-bicycles for a road trial of at least 50 miles before delivery to the purchaser irrespective of the usual workshop test. As these trials keep several expert assistants continually on the road, they will be pleased to arrange a call upon any of our readers anticipating the purchase of a motor-bicycle, and residing within a radius of about 50 miles from London, upon receipt of a letter or wire, thus affording an opportunity of giving the machine a practical test over their own district.

# OTHER .. .. .. PEOPLE'S VIEWS.

### Motorcycles and Insurance Companies.

Sir,—Seeing a letter written by "Insurance" that under the conditions of a Company's fire policy he could not recover his loss, I at once wrote the Alliance Assurance Co. respecting the validity of my policy respecting storage of motorcycle in the house under existing policy, and was both pleased and surprised for them to write me saying:—"The keeping of a motor-bicycle on the premises insured will *not* affect the validity of our policy."—Yours faithfully, "TRUTH."

### Plug Experiences.

Sir,—On page 349 of "MOTOR CYCLING" for this week you ask any one to let you know who has used a vent plug fitted with short length tube like a quill pen. Hoovdonk fits this to the Phœnix. I have only had this present machine a little while and have ridden 200 miles, but up to the present I have found no oil come on to the boots. But any rider of the Phœnix could tell you who has been riding for a longer time.

I too wish something could be done to stop oil from "decorating exterior of crank case."—Yours faithfully, W. H. PHELPS.

### A Difficulty Explained.

Sir,—In your issue of June 25th, I notice a letter from Mr. G. Goude complaining of the trouble he has with a motor-quad that will run for a little distance and then apparently misfire, but if it rests a little while it will start again as well as ever.

He does not say, however, what carburetter he is using; but I think if he is using a surface carburetter he will find that the trouble is due entirely to this cause. I had a similar experience myself with a motor-quad, and found that this peculiarity was due to the pipe that leads from the exhaust to the carburetter, and which warms the petrol, being blocked up; the consequence is that the petrol does not vaporise quickly enough, and this accounts for the fact that after a rest is taken more petrol is allowed to evaporate, and so get a satisfactory mixture again.

Other friends besides myself have found this difficulty, and I think if he is using a surface carburetter that he will find that this is the cause of his trouble.—Yours faithfully,

J. DRING.

Sir,—Noticing a letter from Mr. G. Goude in this week's issue, recounting his curious experience with quad, as I had a somewhat similar one with a quad fitted with the old pattern surface carburetter I would suggest, should his carburetter be of that type, that after his quad commences to play its tricks he draw off a little of the petrol from the carburetter and test it for specific gravity, when, perhaps, he may find, as I did, that it only registered that of stale petrol although of the right specific gravity when starting. By emptying the carburetter and filling again from supply tank she would run all right for a bit with the same results. I have overcome the trouble by fitting a spray carburetter, and seem to get more power with it.—Yours faithfully,

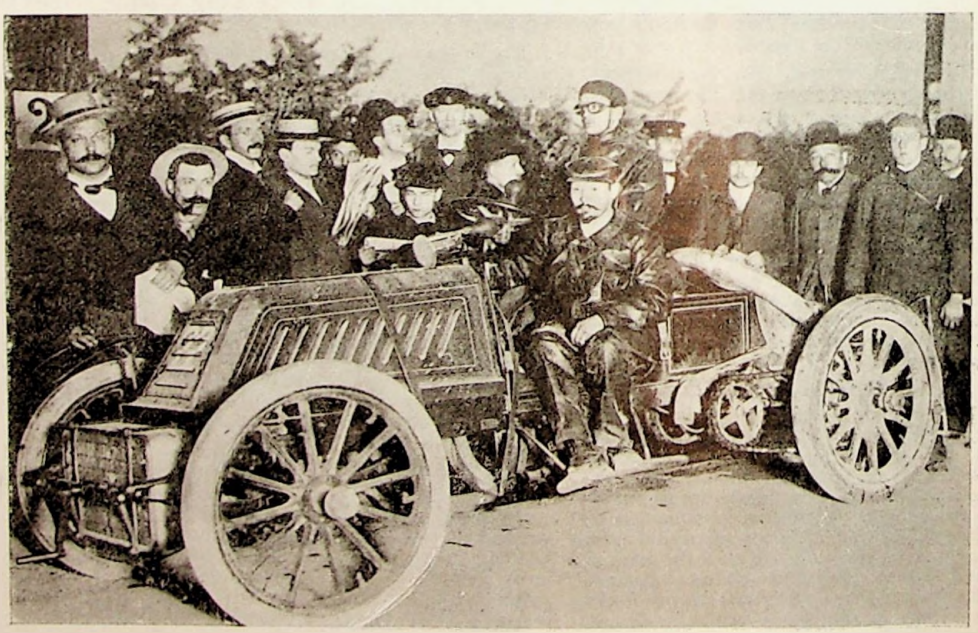
ROBERT GUERIN.

### Police Busy in Kent.

Sir,—I should like to bring to the notice of your readers, especially those who patronise the Kentish roads, the activity of the police at the present time on the Maidstone road. The other evening I was warned about fast riding by one of the police just after I had made a stoppage, and during a conversation with him I learned that they are commencing a campaign against cyclists and motists on that road with the view of stopping any fast riding or driving. He also mentioned that he had been appointed to duty near Wrotham Hill in plain clothes armed with a stop watch and had a measured portion of the road over which to time anybody, and as the part selected was a long slope of about one mile it is only reasonable to suppose that a good many captures will result. He mentioned an instance where he had stopped a motorcar recently for exceeding the legal speed. I asked him if there was anybody travelling on the road at the time, or if the motor was being recklessly driven. He replied that there was not a soul in sight and that the only reason he stopped the car was because it was travelling above the regulation speed.

Brentwood is also a hot-bed of persecution just now. The police in this district seem to be going to a good deal of trouble in order to make captures as they have a telephone between their own place and Romford so that they can time motists over the distance and if they should have exceeded the limit they are promptly stopped.

I trust these remarks will be of service in preventing others from following in the steps of "ONE OF THE VICTIMS."



THE HON. C. S. ROLLS

*on the beautiful Mors racing car on which he started in the Paris-Vienna race. Soon after leaving Champigny this splendid car was wrecked through the tyres puncturing, as described in our last issue.*

# OUR INFORMATION BUREAU.

*A large number of replies have been dealt with through the post. Information on all subjects pertaining to Motors, Motorcycles, and Motoring generally will be given to readers who seek such information or advice. Any reader who desires to ask a question with a view of ascertaining the views of other riders based upon actual experience should send his query, which will be inserted, and replies to such questions will duly appear, if of general interest; if not, a reply will be sent by post; a stamp, therefore, must always be enclosed.*

T. J. Newton (Blackburn).—We can only suggest that you submit your swing crank idea to one of the large components firms at Birmingham, such as the B.S.A. or Cycle Components.

W.F.C. (Sunderland).—The connections of the coil you inquire about will most probably be these:—P to the positive of battery. Negative of battery to handlebar. Contact breaker to P.M., and M. to Frame.

W.B. (Birmingham) has a 1¾ h.p. Werner, 1901 machine. What position should the piston be in the cylinder when firing? The piston should be just a ¼ inch from the end of its stroke with the crank just past the dead centre and going forward on the impulse stroke.

C.B. (Tunbridge Wells) has knocked a small piece of metal off his engine. What course should he take to put it right?—Take the machine to a smart motor repairer and get him to rivet a piece of metal over the hole. Aluminium cannot be soldered with any success.

### *Transmission.*

G.C.J. (Sleaford).—Both the band and gear wheel drive have their advantages and disadvantages; personally, we like the band. Magneto ignition with motor specially adapted for it gives very good results. The Hewetson motor-bicycle is fitted with magneto, and so also is the Royal Progress.

### *The Ormonde.*

J.F.W. (Brixton).—We have a high opinion of the Ormonde, and the motor fitted is considered to be one of the best designed on the market. A good number of these machines are to be seen in daily use now, and it was described last week. You will find the Ormonde as fast as the other machine you name.

### *The Singer.*

C.A.B. (Ilkley).—The "MOTOR CYCLING" Manual will deal with the Singer amongst other machines. There was a special article in a recent issue on its special features. We believe you will be able to fit the Wilkinson tread satisfactorily to the plain Dunlops, and think you will find them excellent non-slippers and puncture preventers.

### *Ignition.*

H.A. (Strand, W.C.) asks which gives best results:—(1) Magneto ignition or coil. Both are equally good for their own type of motor. (2) Belt or chain drive. A matter of opinion; probably the belt. (3) Inside or outside fly wheels. The outside. (4) Spray surface or wick carburetter. Spray. We give the above view from actual experience, after obtaining good results in each case.

H.I.B. (Folkestone).—Have the Quadrant.

M.A.C. (Manchester).—We have not the addresses of makers of marine motors at hand, but the address of the Lozier Co. is Piccadilly, London, W.

H.E.C.C. (London, W.C.).—Under the circumstances we are of opinion that you would find the "Singer" the most suitable motor-bicycle. Write to the Company mentioning the work you want the machine to do. We should say petrol could be got easily enough in the towns of South Africa.

### *Purchase Now.*

A. Crosby (Farnham).—You would be well advised to invest in a good machine this season. There is not likely to be any new principle adopted for next, and any improvements will be in matters of detail chiefly. No. 1 in your list should be a good machine, but is not yet on the market; the others we place in following order—5, 3, 2, 1, 4. We should also bracket the "Singer" with No. 5.

### *Hire-Purchase Forms.*

L.W. (Bath) asks:—"Can you inform me where I can obtain hire-purchase forms for motor-bicycles, or would the usual cycle hire agreement form do? Also, am I liable if I do not take out a license for the motor-bicycle?"—We are not aware that special forms are needed for motor-bicycle hire-purchase. The usual form should suffice. You are liable to a 15s. license if you ride a motor-bicycle.

### *The Throttle Valve.*

W.M.T. (Manchester).—The abolition of the throttle valve is a point on which there is some difference of opinion. Personally we do not regard it as of much importance, as the quantity of petrol used is automatically governed by the speed of the motor. As the exhaust valve is only lifted for a very short time the waste of gas is negligeable. We hear good accounts of the Humber chain drive, and consider it one of the best of its class.

### *Building a Motor-bicycle.*

G.D. (Derby) is building a motor-bicycle, and wishes for advice as to the ignition. He writes:—"First to have attained a good speed, then switch the current from a low tension magneto machine, driving off the fly wheel of the engine on to the armature. Cut out the dry cell by means of a switch, and continue the running with the magneto working the coil. Kindly tell me if you think this possible, and, if so, let me know the best size and quantity of wire to wind the armature with, and size and number of permanent magnets to be used. The engine is a 1¾ b.h.p." His idea, we are of opinion, would work out rather complicated. It would be better for him to fit the Simms-Bosch magneto or stick to the accumulator and coil. To actuate a jump spark plug, it would be necessary to fit a drum armature wound with fairly thick wire, say No. 20. A battery of 4 magnets would be required, each 6 inches high, 1¼ inches wide, and 3 inches between the poles.

"Whizzer" asks for the address of a firm in Birmingham who let out motor-bicycles on hire.

H. Beale (Newcastle).—You would be well advised to invest in an Ormonde; the motor on this machine is an excellent one.

S.W. (Sheffield).—The Princeps autocar we believe has a good reputation. We have no actual experience of the car, however.

G. Freestone (Saffron Walden).—At the present time we cannot afford space to deal further with this matter, but will do so when opportunity admits.

T.V. (Hornsey).—We should say you are legally entitled to the return of your money if the motor is not as specified. Return the motor and get legal advice if he does not return the money.

G.F.G. (Dulwich).—We do not possess a machine at present having a flat belt drive, hence we could not test your invention, but we are bearing your offer in mind and will avail ourselves of it at the first opportunity.

W.D. (Wigan).—(1) The Minerva motor patent deals chiefly with the method of attachment to the cycle frame. (2) We do not know exactly, but it is about $2\frac{3}{16} \times 2\frac{1}{4}$. (3) The London Autocar Co., Gray's Inn Road, would supply you with a set of castings.

### *Selecting a Machine.*

"Clutch" (Exeter) is going in for a motor-bicycle, but the difficulty presents itself as to the pattern to choose. He fancies the Princeps and asks if it can be recommended for speed and hill climbing. He will find the Princeps a very good machine, and for hill climbing it has a good record.

### *The Liliputian Motor.*

W.H.P. (London, W.).—There is not an agency for the Liliputian so far as we know in London. It is rather difficult to state the reason for your motor slowing up when the spark is advanced, but it is probable that some of your connections are not perfectly sound. Examine all these carefully.

### *A String of Questions.*

R.J. (London, N.W.).—(1) We can recommend the Brown motor. (2) It is not less than 1¼ h.p. and works up to 1¾ h.p. (3) A method of determining horse power was described in No. 6. (4) It will take a trailer on the level, but going up hill it will require assistance from the pedals. (5) A 2 to 2¼ horse power motor is to be recommended for hill work with a trailer.

### *Trouble With the Driving Belt.*

"Liberty" (Ongar) writes:—"I have a Werner rear-driving bicycle. The flat belt *will* climb on top edge of pulley-wheel on back wheel, sometimes one side and sometimes the other. I have tried it three degrees of tightness but it is just the same. Can you tell me how to cure it, as with the belt on the edge of pulley the engine does not work well and makes it very hard to start. The difficulty with regard to the belt is due to the driving wheel pulley not being exactly in line with the motor pulley. Line these up dead true so that a piece of twine touches equally at the four edges when placed across.

H.B. (Woolton, Liverpool).—Yes, we can thoroughly recommend the Royal Eagle 2¾ h.p. motor-bicycle.

"Cyclist" (Liverpool).—Of the machines you mention you would find in our opinion the Ormonde best and No. 2 the next.

J.L.D. (Southsea).—The Kelecom motor you will find a very good one. We do not know sufficient about the other pattern to express a definite opinion.

F.N.W. (Westergate).—There is not a motor-bicycle made that would draw the weight you mention. Your best plan would be either to invest in a tandem tricycle, say the Singer, or a small car.

J. H. (London, E.).—(1) You would find the Roubeau carburetter as supplied by Brown Bros., Great Eastern Street, London, a good one. There is no law in this country compelling you to have name and address on a motor-bicycle.

### *Petrol, etc.*

C.P. (West Ham).—(1) You may store petrol up to 60 gallons in 2-gallon vessels. That sold by Carless, Capel and Leonard can be recommended. (2) A license costing 15s. for motorcycle can be obtained from the post office. (3) Ordinary cycling dress, with the addition of a pair of leggings; or you may go in for a leather suit. See advertisements in our columns.

### *The Difficulty in Choosing.*

E.W.N. (Halifax) is desirous of purchasing a motorcycle for use in his work as traveller; but having had no experience of these he wants some unbiased recommendation on the matter. He would be quite safe in going in for a second-hand machine providing it was of a good make, say a Quadrant, Single-lever Phœnix, or Enfield, but it would certainly be advisable to get a guarantee of its condition or have it inspected if he is not able to judge for himself.

J.F.B. (Sunderland).—There is the Dupont two-speed gear that you might get fitted.

R.H.W. (Plymouth).—You would be well-advised to fit accumulators. Get them from Messrs. Peto and Radford, Hatton Garden, London, who will also send you a descriptive booklet on the subject.

F.H. (London, N.W.).—Our manual will be published very shortly. A book to suit you for cars would probably be the "Motorcar Manual," published by the Motorcar Co., 168, Shaftesbury Avenue, W.C.

### *Motor Licenses.*

L.S. (Hawkhurst) writes:—"Would you kindly let me know the terms of a license for a trailer to be drawn by a motorcycle. I have paid 15s. for my motor license, but now I am informed that the license for a trailer is £2 2s. Your information on this matter will be much appreciated."—The additional license for trailer is 15s. See paragraph in another part of the paper.

### *Storage of Motorcycles.*

C.S.P. (Snareshrook) asks (1) Where a motorcycle can be stored in the City. The storage would only be required for a day at a time, but would have to be in the immediate neighbourhood of the Bank.—We cannot give you the exact address of a place in the City for storage, but you will find one or two places in Queen Street, Cheapside, we believe.—(2) Also could you tell me the cause of the positive plates of one cell of my accumulator being coated with grey deposit, and the negative plates the same. The other cell is all right, being quite clean, and the accumulator has been re-charged, and appears to have taken the current well, lighting up a 4-volt lamp perfectly.—The reason for the plate becoming a grey colour is due to "sulphating," which is a chemical action showing that the cell has been standing uncharged for some time. It will disappear with a few charges and discharges.

W.S. (Stratford-on-Avon).—The address of the Motor Cycling Club's hon. secretary is—Mr. A. Westlake, 82, Portsdown Road, Maida Vale, W.

A. Greenhalgh (Bury).—We have your sketch to hand and will deal with the matter as soon as possible. At present the pressure on our space is very great.

E.R. (London, W.) wishes to affix a motor to his bicycle. One of the best motor sets we know of for attaching to a bicycle, in our opinion, is the Clement-Garrard. Write them for particulars.

"Petrolier," while motor biking along a country road, encountered some calves not under proper control and was thrown from his machine. "Have I," he asks, "any legal remedy against the owner of the calves?"—Yes, he can bring an action for damages.

G. C. A. (Nottingham).—(1) We prefer a rear driver. (2) Band and rim brakes. (3) This is the order we place the machines you name in—B. C. A. Although A is the last we are of opinion that the workmanship is superior to the others; it is only the question of position that places it last.

### *Will give Satisfaction.*

J. M. D. (Uckfield).—There are so many good machines of equal merit on the market that it would be a difficult matter to single out any one as the best, but in the Singer you have a machine that we are sure will give you every satisfaction, especially being reliable and easy of manipulation.

### *The Precision Motor.*

H. S. Burgess (Burgess Hill).—Although we have not had any actual riding experience with the Precision motor, we have heard it well spoken of by riders. We believe the Universal coaster hub to be one enabling machine to be wheeled backwards. A Quadrant 1¾ h.p. motor in our possession does well on hills, and we should say that you should let the makers see yours.


*On some main roads the Police Stations are connected up by telephones.*