

PREPARING DIEPPE COURSE FOR GRAND PRIX

DIEPPE, June 18—Dieppe, 18 days from the race which will attract the attention of the whole world, is a dull city. The triangular set of roads beginning up on the high chalk cliffs just on the edge of the town has been closed to all racing cars and is being jealously watched by gendarmes in order that fast touring cars should not develop all the power that is in them. According to the official notice sent out by the club and the local authorities, all motor cars must travel over this course capable of speeds of 100 miles an hour at a rate of travel not exceeding 12 miles in the 60 minutes.

As European drivers would have difficulty in throttling down their speed monsters to such an extent, they have abandoned the circuit to the army of workmen which under the direction of the Dieppe municipality is endeavoring to put the triangular course into a condition satisfactory to the critical racing board of the Automobile Club of France. When the club officials came up last week for their formal examination of the course they were disappointed—perhaps it would be more correct to say they were vexed—and bluntly told the authorities who had undertaken to remake the roads that they were not at all up to standard. If fine weather continues during the next 18 days the Dieppe course may be a perfect tarred ribbon of road for a distance of 77 kilometers; if rain falls there will be spots strewn with loose stones and patches which cannot be considered good for speeds of over 70 miles an hour.

Though the Dieppe course has been deserted by every European contestant, America remains on the ground. Every morning around 9 o'clock a big red Thomas Flyer slips out of the Grand hotel garage, picks a way along the fish-strewn pier and crosses over the two wooden bridges spanning the docks. Dieppe is still nautical, and its population is as ignorant of the ways of the motor car as the natives of any fishing hamlet in wild Brittany. Generally when the big red Thomas—or any other car, for that matter—emits its first honk at the beginning of the narrow bridge, half a dozen tugs of war immediately commence between as many pairs of mariners engaged in transporting a heavy basket of fish. Sometimes it is a baby carriage containing one speck of humanity and some of the products of the briny that obstructs the way when the first honk goes forth. Then it is a struggle between the half dozen relatives as to which side of the road shall be chosen. The men will pull to starboard, the women will pull to port, while the baby threatens to fall overboard. A loud roar of laughter from Strang at the wheel of the immobilized Thomas, and the struggling group, realiz-

ing that there is nothing to fear from the big car, stop to respond with a smile at their own foolishness and fear. The baby is saved, but the next time it meets a motor car on the bridge it will be the center of the same scared group.

As there will be no possible chance of the American racing car going on the course until the moment it is given the order to start in chase of the fourteen ahead of it on July 7, Strang has made a practice of going round the course in a touring car from three to four times a day. Certainly the 1908 grand prix will be the most keenly contested race the world has ever seen; the cars have been prepared with greater care than ever before, and the drivers are more highly trained. For this reason alone it is essential to know the course so thoroughly that there will never be a moment when the nature of the stretch ahead cannot be recalled. There is some caution needed in this daily training, for although there are few cars, there are numerous tar wagons and workmen and a few keen-eyed gendarmes at Criel.

Because it is the only car on the road the Thomas Flyer has been frequently called upon to act the role of the good Samaritan. One afternoon it was a long-robed priest with his clerical garments pinned around his legs, who was carried back to the garage from an outlying spot on the course where his motorcycle had suddenly decided to go out of business. Half an hour's patching by the team of mechanics at the garage and the clerical gentleman had scrambled on his saddle and was tuf-tuffing down the road, after struggling to return thanks in broken English. Next afternoon it would be the village postman, who for the first time in his life had a practical experience of how 9 kilometers could be covered in 9 minutes. On the next round the gendarme himself would plead to be taken home faster than his legs could carry him; or the dignified government gamekeeper would make a sign that he would like to be helped along.

Although there are no racing teams on the course, practically every firm has secured headquarters either in Dieppe or in the little towns and villages of the neighborhood. Now and again an entire team will run up from Paris on a practice trip, stay a few hours and disappear with a formidable roar. Gabriel, Rigal and Hautvast, who made one of these appearances this week in their Bayard-Clement cars, claim they have covered the kilometer in :21, which is equal to the stupendous average of 106 miles an hour. Duray, of the Dietrich team, whose trial trips have been of no less than 500 miles a day, claims about the same speed. Szisz, chief of the Renault team, puts in lower claims for speed, but is none the less confident of winning, the three cars being marvels of reg-

ularity. Benz, Fiat and Itala are known by the French to be dangerous rivals which might again rob the tricolor of victory.

There is very little doubt but that the speed average of 70.6 miles an hour established last year will be broken next month, providing of course that weather conditions are favorable. It will be a remarkable performance to thus break the record, for under the 155-millimeter rule the cars have on an average been reduced in bore by 1 inch. Naturally under such rules the stroke exceeds the bore, all the engines with the exception of the British Weigel and the American Thomas being long-stroke, slow-speed engines. In the voiturette race to be held the previous day, exaggerated strokes are well in evidence. Some of the little single-cylinder cars with a bore of slightly less than 4 inches have a stroke of 7½ inches and an engine speed of 2,200 revolutions a minute. Horsepower is rated anywhere from 14 to 22, and maximum speed is estimated at 55 or 56 miles an hour.

MONEY FOR POPE CREDITORS

Hartford, Conn., June 25—The creditors of the Pope Mfg. Co. are to receive immediately 25 per cent of their claims; that is to say, an order has been signed by Vice-Chancellor Howell, of Newark, permitting the payment of 25 per cent on all the approved claims of the company. This payment was conditionally authorized by Vice-Chancellor Howell several weeks ago, the condition being that the money should be paid as soon as the \$50,000 representing the proceeds of the sale of a large block of American Wood Rim Co. stock, which constituted a part of the company's assets, was paid over to the receivers. The \$50,000 was duly received a few days ago and the order of the vice-chancellor directs that out of the balance that will remain in the hands of the receivers after the payment of 25 per cent the receivers shall deposit with the court of chancery the sum of \$65,000 "to the credit of the cause," to be retained by the clerk subject to a further order of the court for the purpose of paying hereafter so far as it may extend or be necessary a dividend of 25 per cent upon such amount as may hereafter be ascertained to be due on a claim of Louise A. Unzicker, Josephine Unzicker, Anna Louise and Otto Unzicker, owners of factory premises in Chicago leased by the Pope Co. for a term of 25 years at a yearly rental of \$25,000. The lease was given up by the receivers upon their assuming charge of affairs, but still has 17 years to run. Another direction contained in the order signed by Vice-Chancellor Howell is to the effect that as to a claim held by the International Trust Co., of Boston, the receivers shall deduct from that company's dividend the amount of

MOTOR AGE

CLEAN SWEEP FOR GERMANY IN GRAND PRIX



HANRIOT, BENZ, THIRD

LAUTENSCHLAGER, MERCEDES, WINNER

HEMERY, BENZ, SECOND

PARIS, July 7—Special cablegram—In 2 days of racing on the Dieppe triangular circuit, France and Germany divided high honors, with perfect weather and road conditions and before the largest throngs that ever witnessed a motor contest, national or international. In the voiturette event on Monday, the curtain-raiser for the grand prix, the first five cars to finish were of French manufacture, Guyot, piloting a double-cylinder Delage car, taking premier honors, with the marvelous average of 50½ miles an hour. Today in the grand prix Germany swept away all the high honors, the first three cars finishing this sensational struggle being of German manufacture. Bitter as was the crushing defeat of French, Italian, English and other contesting cars in this contest, the cheers that came from the thousands of Frenchmen when Lautenschlager, driving a big

Mercedes, flashed first past the wire after covering the 478.1-mile course in 6 hours 55 minutes 43 seconds, marked an epoch in international sport. Officially representing the president of the French republic, a cabinet minister doffed his hat, gave the signal to the scores of bands and lusty Frenchmen blew out the triumphant notes of the song so dear to the Vaterland—the “Wacht Am Rhine.”

Scarcely had the first refrain of this stirring German anthem echoed in the stand when Hemery, former Vanderbilt cup winner and piloting another German-made car, the Benz, finished second, 8 minutes 41 seconds behind Lautenschlager, while following closely and landing in third position was another Benz car, also driven by a French expert, Hanriot, who required 7 hours 5 minutes 13 seconds to complete the course.

GRAND PRIX RESULTS

First—Lautenschlager, of Germany, in a Mercedes; time, 6:55:43.

Second—Hemery, of Germany, in a Benz; time, 7:04:24.

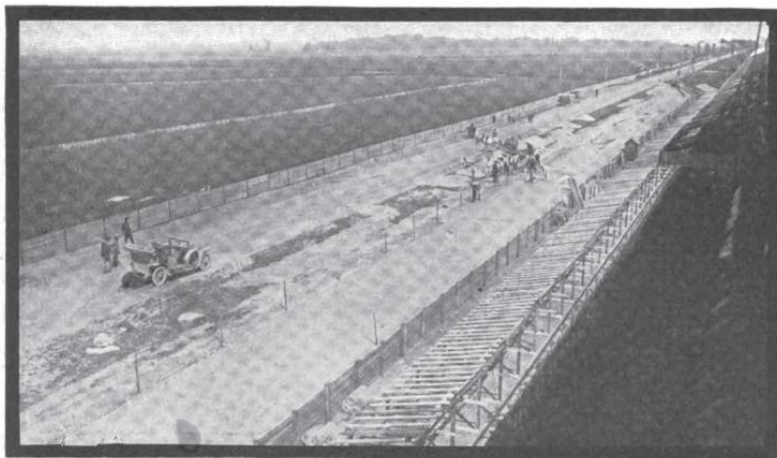
Third—Hanriot, of Germany, in a Benz; time, 7:05:13.

VOITURETTE RACE RESULTS

First—Guyot in Delage; time, 5:45:30.

Second — Naudin, Sizaire-Naudin; time, 5:52:06.

Third—Goux, Lion-Peugeot; time, 5:56:06.

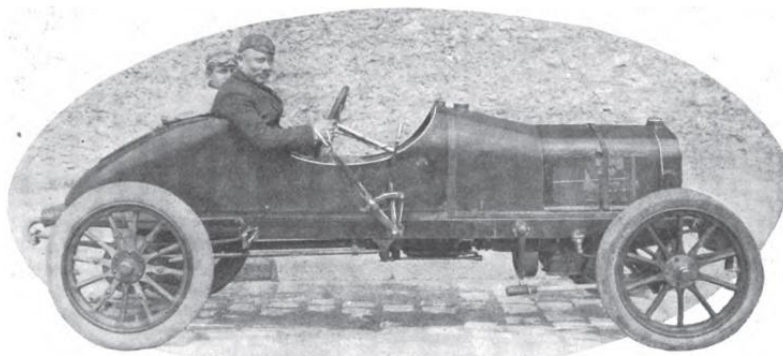


VIEW OF THE STRETCH IN FRONT OF THE GRAND STAND

Although a marvelous pace was maintained in the grand prix, six drivers setting new marks for the circuit in the first round, the speed all the way through did not exceed that averaged in last year's grand prix, when the mighty Nazzaro attained the record-breaking average of more than 70 miles—close to 71. But the 1908 performance of the winning Mercedes car was better than the mark of 1906 and quite creditable considering the adverse wind that prevailed at certain portions of the course. Official declaration is that Lautenschlager averaged 111 kilometers or 69.24 miles an hour for the race.

Thomas Meets With Accident

But if continental Europe and Great Britain looked for the favorite Renault to capture the highest honors, with Nazzaro piloting the Fiat making the concluding round a dare-devil finish for the goal one long to be remembered, what of the United States? Only one American car, the



DELAGES TWO-CYLINDER CAR, WINNER OF VOITURETTE RACE

Thomas Flyer, had been pitted against the nearly fifty other machines of European make and Lewis Strang, pilot of the victorious Isotta Fraschini car in two of the United States' greatest stock car races—the Savannah trophy and the Briarcliff—was the man expected to carry old glory to the front in this big event.

The Thomas car, however, was doomed to an inglorious defeat because of an untoward accident an hour before the signal was given to line up for the start. While driving the American car into the inclosure previous to the early morning start Strang's machine came to a sudden stop with a whirr and a crash. Something was wrong with the transmission and reversing gear. In desperation Strang called for his mechanic to eliminate the trouble. "Do something, for heaven's sake," was the frenzied cry of the driver, who had studied the course for weeks for this crucial test of speed.

But there was not time to remedy matters. Forced to enter the international battle disabled—with the first and second speed and reversing gear out of commission—the American competed only on his nerve. Technically speaking, had there been time for a conference, the American car would have been disqualified, as the

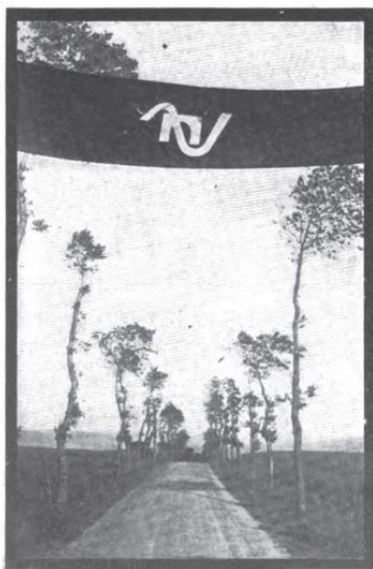
rules of the race plainly call for a reverse gear driven by the motor of the car. French, German, Italian, English and other cars were snorting around the picturesque and admirably protected circuit, and Strang had no alternative. With the car hopelessly out of the running, he drove it around the first circuit in 53 minutes 44 seconds, yielded several more minutes to tire troubles, kept up his courage when damaged cylinders gave the remainder of the motor its warning to desist, and withdrew from the unequal conflict after four rounds. He had plenty of company, for one by one the foreign cars that were in trouble retired soon after. Nearly 48 miles in less than 54 minutes with a damaged car! But that was not all. Strang's time for the second round with infinitely more tire trouble was 3 minutes and 43 seconds more than an hour. On the third round he totaled

56:47, and on the concluding round for his efforts his time was 58:01.

For the protection of the public—nearly 1,000,000 enthusiasts of all countries viewed the struggle from advantageous points on this Dieppe circuit—a whole brigade of soldiery was utilized. Not even the proverbial chicken or dog was reported destroyed under the flying wheels and no spectator attempted to pass the wall of steel bayonets. But this admirable police system did not serve to save the contestants themselves, the grand prix furnishing a distressing feature in the deaths of two contestants and the serious injury of another, as well as the partial blinding of Hemery, whose goggles were smashed by a flying stone sent hurtling through the dusty air by a racing car. Physicians immediately took charge of the Vanderbilt cup hero, injected cocaine into his eye to assuage the terrible pain and were horror-stricken when, a moment later, the plucky Frenchman insisted upon mounting his seat in the Benz car.

Cissac and Mechanic Killed

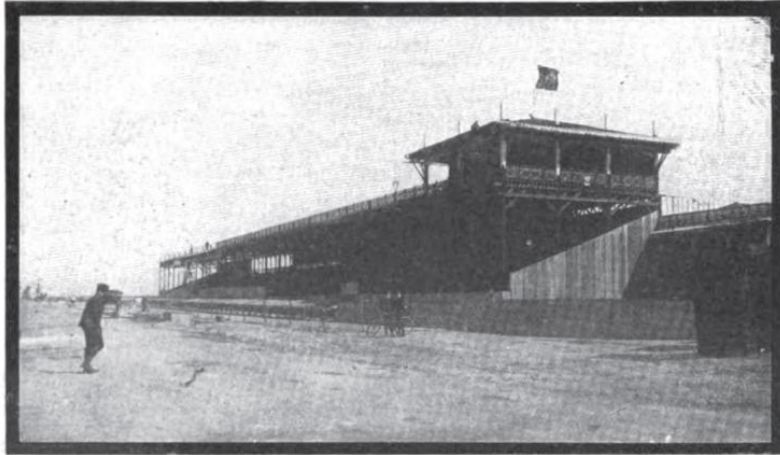
On the final round, after making a gallant effort to put the Panhard into a commanding position and while driving at a rate computed to be close to 77 miles an hour, Cissac, at the wheel of the French



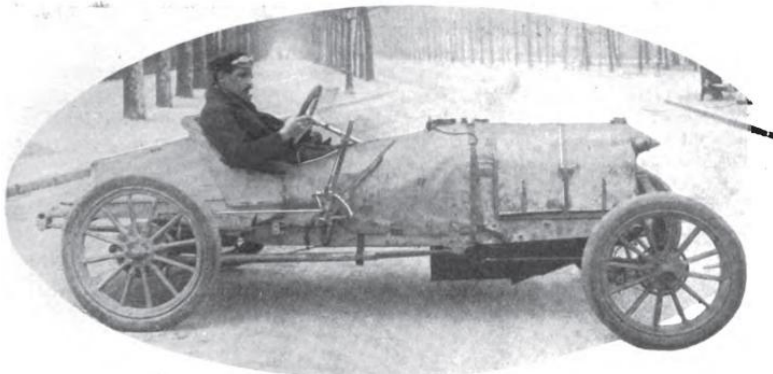
ROAD SIGN—TURN ON BRIDGE

Panhard, together with his mechanic, Schaub, were hurled to the roadway, the great car falling on top of their unconscious forms and crushing their bodies into a pulp. A tire had been torn off and before human hands could make a move to stem the disaster the destruction of the racing machine and its occupants was complete. Near Eu the Weigel car rounded a turn badly, upset and hurled Harrison, its driver, into the embankment. He was conveyed to a neighboring hospital tent and attended by physicians. Harrison was badly shocked and severely injured, but will be convalescent in a few days.

If despair due to accidents, failure of cars to maintain the desired speed and other circumstances seized Salzer, Sziisz, Lancia, Wagner, Cagno, Jarrott, Jenatzy and others, misery was the whole portion of Nazzaro, who had set his heart upon beating an average of 70.05 miles an hour.



GRAND STAND FROM WHICH SPECTATORS VIEWED THE GRAND PRIX



SIZAIRE-NAUDIN, SECOND IN VOITURETTE RACE

Tire troubles in the third round, together with a jammed clutch, put the hero of the 1907 grand prix into the slough of despond. His work in the opening round, in which he fought it out side by side when the roadway permitted this desperate racing with Salzer, the pair circling the course in the initial round in the heart-breaking time of 36:31 for 48 miles. This is at the rate of 126.5 kilometers an hour, and if it had been maintained all world's records would have appeared insignificant beside this one. But this was not the limit of the efficiency of the Fiat. In the second round the mighty Nazzaro, who seemed fearless, fought his way to the front. A great favorite among thousands in the crowds, the Italian started out to open a gap that would make his lead commanding. But he figured without the cost on tires. Sziisz, Thery, Bablot, Wagner, Salzer and an Italian and a German driver who had tested out Nazzaro's boldness in the awful drive in the opening round, sharing with him the honor of breaking last year's record for a circuit, also found the effect upon the tires was tremendous as well as dangerous.

The morning of the grand prix opened fair and favorable, the light breeze that tempered the air giving promise of a day

as pleasant as the preceding one had been when the voiturettes had their struggle. All the contestants were brought into orderly sequence according to numbers, under the direction of the trained attendants, while the representatives of the department of war with their field telegraph apparatus gave the final instructions to the soldiery. Closed to the racing cars for more than a week, the course had been treated with a preparation of tar and never was in better condition.

Lautenschlager a Dark Horse

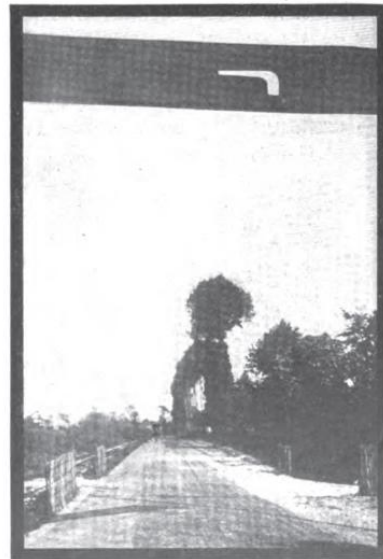
"Made in Germany" was a phrase conveying little beyond a sentiment of pride for another country with the hundreds of thousands of Frenchmen. "Germany has been out of a prominent position in the great motor racing world for years," said the adherents of the Panhard and Brazier.

"Poof, poof, the Fiat under Lancia, Nazzaro and Wagner has this contest in its grasp," was the strain from the Italians, with a considerable number of the experts from the sunny clime pinning their faith directly to the Itala car with Cagno, Fournier and Placenza as pilots.

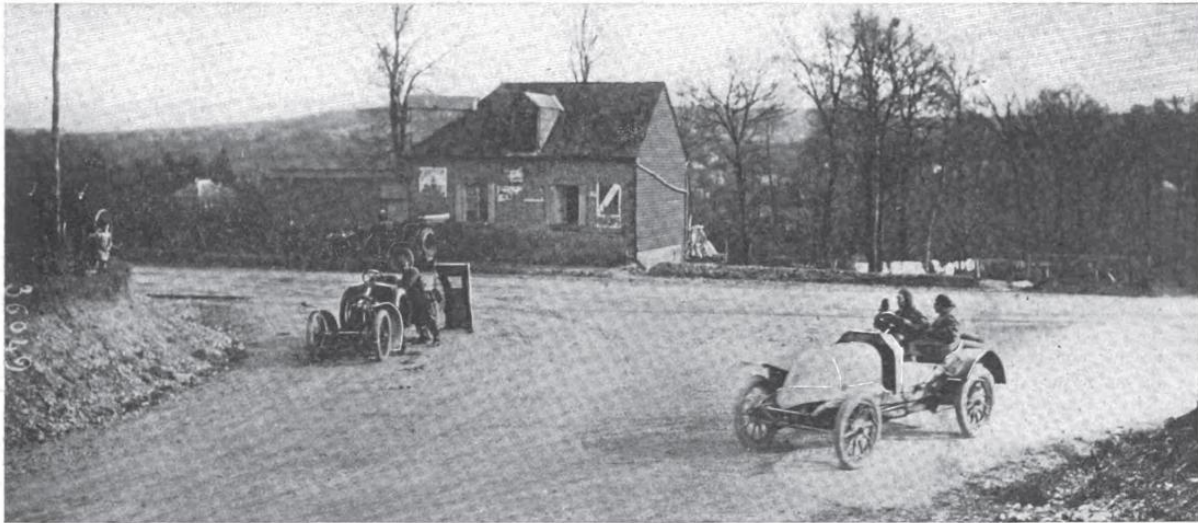
As for Lautenschlager, the handsome man who had one of the Mercedes cars in charge, there were few to pay him homage in the dawn hours. What a difference 6

hours made with this German. M. Maujan, undersecretary of the department of the interior, personal representative of President Fallieres, was glad, apparently, to bow his respects to the hero of the hour. It was no sacrifice of national honor for this high official to direct that the musical salute written boldly in French aria style in honest anticipation of a French victory on French soil, be transposed instantly into the familiar tune of the Rheinland.

Germany had repeated its victory of years ago gained in sanguinary traversing of French soil, followed by the exacting of a great gold treasure, but this time the triumph had come with steel steeped in oil, not blood; with hickory wood fashioned into spokes, not rifle butts; with essence as fuel, not gunpowder—but with the same stolid, patriotic and obedient character of man at the head of the mechanical invasion as the man in panoply of war. "Hoch der Kaiser" sounded



ROAD SIGN—A LEFT HAND TURN



HEATH IN A PANHARD PASSING CAILLOIS AT LONDINIERES IN TRAINING

just as loudly from the throats of Frenchmen, Britons, Italians and Americans gathered at the official stand as it did when uttered by alien forces, but there was a cadence about today's shouts that was interpreted by the visitors in this country that spelled out "wholesome competition."

Desperate Effort by French

Lautenschlager undoubtedly profited immensely by the trouble encountered by Nazzaro, taking the lead when the Fiat got into distress. After that the Mercedes plugged around the circuit like mad, steadily and with little tire trouble, no contesting car seriously menacing its lead. Szisz in a Renault and Duray in a Lorraine awoke to the desperate nature of their task when the German had the lead and made a terrific drive to get the first place. They, hero of the Gordon Bennett cup race of a few years ago and the man upon whose veteran experience many pinned their faith, was unable to achieve a commanding place. The Germans! The latter seemed to have monopolized every favorable position. There were Germans in front of him, but none behind him!



THEY, ONE OF THE OLD GUARD.

They found Frenchmen ahead of him in the fourth round, his compatriots Hemery and Hanriot having passed him. But they were at the wheels of German cars! Tire troubles marked the veteran's car. It was no use. The Germans seemed immune from tire troubles. And They constructively gave up the ghost. France was



STRANG, AMERICA'S REPRESENTATIVE

robbed of its only chance to show its colors in front in the seventh round.

But Regal, at the wheel of a Bayard-Clement, had not given up hope. He kept the bonnet of his car headed in the center of the roadway with all speed on even the bad turns, managing to get the honor of fourth position at the finish and to be the recipient of the only strains of the French national air that came from the side of the presidential box. He finished the long route in 7:30:36, nearly 46 minutes after Lautenschlager had earned the title of hero of the Dieppe circuit. Two minutes behind Regal came Poegge piloting another Mercedes, while another "Made in Germany" car, the Opel, with Joerns at the wheel, followed the Mercedes into sixth place about 7 minutes later.

Erbe, at the wheel of the second Benz car to finish, was compelled to accept seventh place and have his time for the race posted as 7:43:31. Dimitriewitch, piloting

another Renault, finished the course with scarcely a cheer for him, taking eighth place in 7:54:12. Heath, with the Panhard that escaped the fate of Cissac's car, came next, a minute later. The order of finish of the remaining cars was:

Car and Driver.	Time.
Germain, Perpere	7:59:08
Itala, Cagno	8:07:56
Bayard-Clement, Gabriel	8:11:44
Motobloc, Courtade	8:12:42
Motobloc, Garcet	8:19:56
Renault, Caillois	8:19:57
Mors, Jenatzy	8:24:04
Mors, Jarrott	8:39:20
Austin, Brabazon	8:42:50
Austin, Resta	8:46:50
Itala, Fournier	8:47:20
Opel, Opel	9:08:11
Germain, Degras	9:13:34
Panhard, Maurice Farman	9:24:40

Guyot Wins Monday's Race

Motor history may assign larger letters and bigger numbers to the racing cars that participated in the grand prix, but the keen, thoughtful manufacturers of France are devoting more than ordinary attention to the marvelous results of the voiturette contest in which there were forty-seven starters out of an entry list of sixty-four and thirty-two finishers, including eight complete teams. France monopolized the first five honors of the voiturette race, not



NAZZARO, WINNER OF 1907 GRAND PRIX



JENATZY IN MORS TAKES S TURN NEAR LONDIENNES WHILE TRAINING

so much because forty of the entries were of French construction, say the critics, but because France is excelling the world in the manufacture of these little cars that perform what the designers confidently predicted they would do. Besides the care that the authorities had given the course set aside for the voiturettes had not sufficed to keep the stock touring cars from cutting up the roadway in places and the final stages of the subordinate struggle. The start in the curtain-raiser was taken for granted, many thousands preferring to have late breakfasts and still be in time for the crucial rounds.

It would require a bold use of the word to describe the voiturette race as thrilling—rather was it most interesting, while the going for the little cars was less advantageous than it was the following day.

While only a comparatively small crowd was out at the start of the small car event, fewer than 1,000 persons being seated on the monster grand stand, the crowds began to arrive before the third hour and it is estimated that fully 200,000 witnessed the the astonishing average of more than 50 miles an hour was recorded, the cars did

not seem to be tearing up Mother Earth as did the racers in the grand prix. The Delage car which took first honors had two mates in a team in the race, while three cars each of the following teams were also in the contest: Gregoire, Le Mebais, Lion, Werner, Roland, Pilain and Sizaire-Naudin. Guyot seemed to set his pace for an aver-

triumph to assuage some of the grief of the patriots for the loss of high honors in the long race.

The regularity cup, a trophy much prized by the winners, was awarded to the Delage manufacturers because their team was adjudged to have made the best showing.

Accidents were comparatively numerous but none was serious. Five machines overturned, the drivers escaping bad injuries. The first to meet disaster was the Truffault, driven by Charles. This struck the bridge at Ancourt and was almost destroyed, the driver escaping miraculously with only a few bruises.

Martini, driving a Demeester, struck a bridge at Eu where the fatal accident of today occurred and the car was overturned. The driver was badly cut about the head and shoulders. Prompt medical attendance put the wounded driver in a good frame of mind and he made light of his accident.

At Maux another accident marred the contest, Bordes, in a Guillemain, turning over at the turn. Martini's machine overturned without doing the driver much damage and St. Mare broke a wheel.



CISSAC, KILLED IN GRAND PRIX

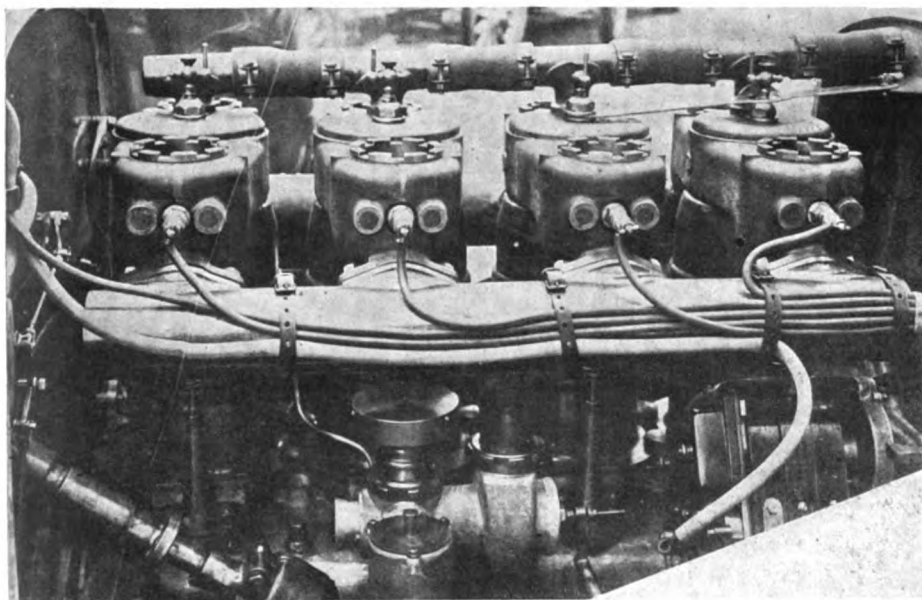
age of 80 kilometers or 4 more than Thery's average in the coupe international at Auvergne. The motor of his car is a double-cylinder and the official time for the course was 5 hours 45 minutes 30 seconds. Victory came to the winner not wholly because it was the speediest in the contest, but because of the remarkable regularity of Guyot's pace. A single-cylinder Sizaire-Naudin, that finished second, piloted by M. Naudin, in 5 hours 52 minutes 6 seconds, at times showed wonderful bursts of speed. The Lion-Peugeot, a single-cylinder car, driven respectively by Goux and Dugernoy, finished third and fourth, the first being only 4 minutes behind Naudin's car. Fifth place went to a Delage car with Thomas at the wheel. All were fitted with Michelin tires, which gives the makers of these tires the distinguished honor of having five leading cars in the small car race and the three leading cars in the grand prix—itsself enough of a French



SZISZ, WINNER OF 1906 GRAND PRIX

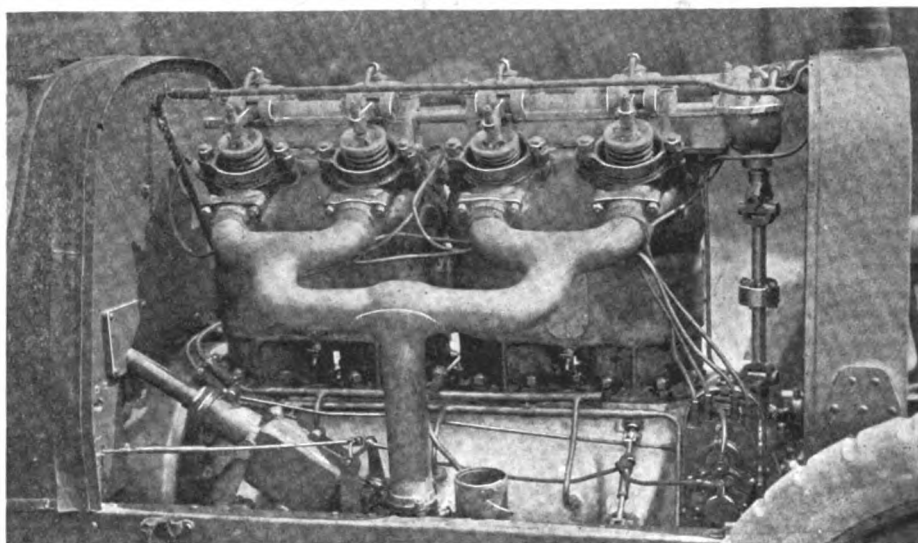


NAUDIN, A VOITURETTE DRIVER

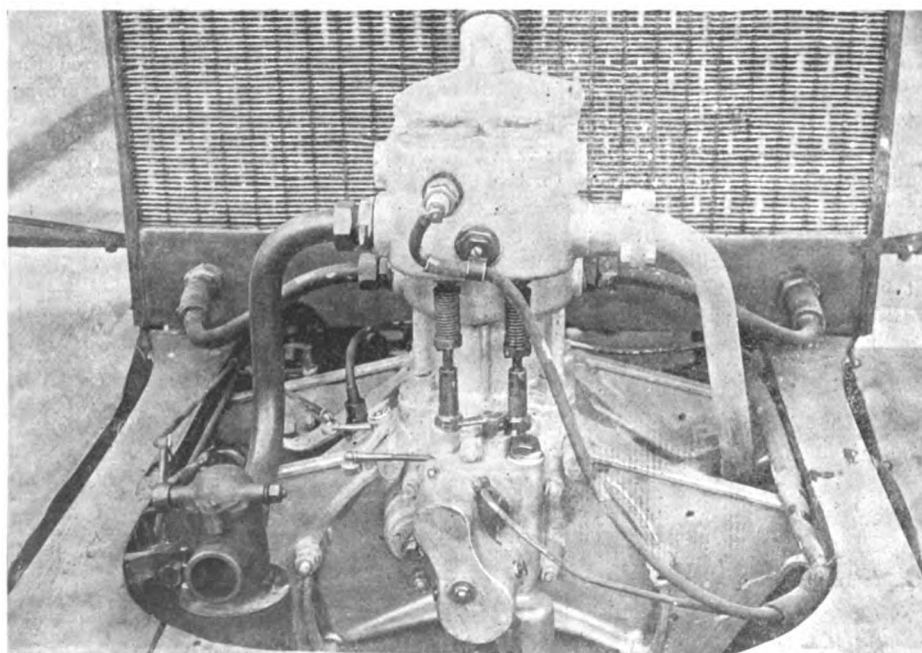


RIGHT SIDE OF THE PANHARD-LEVASSOR MOTOR

NOTHING could have had a greater effect on the status quo of the forty-nine grand prix racers for the present season than has the limitation of the cylinder diameters and the unlimited piston stroke permitted. This year 155 millimeters or 6.1 inches is the cylinder diameter permitted for the four-cylinder car, and 127 millimeters or 5 inches flat the diameter permissible for a six-cylinder machine. The results of this limitation are that the six six-cylinder cars entered, namely, the three Austin machines representing England, and the three French Porthos machines, have not exceeded this 127-millimeter limit. The Porthos comes to this exactly, while the Austin has been content with 125 millimeters. On these cars the Austin uses a 4.9-inch stroke and the Porthos a 4.7, these being the shortest-stroke engines in the race.



RIGHT SIDE OF THE BAYARD-CLEMENT MOTOR



MOTOR USED IN THE PASSE-PARTOUT VOITURETTE

Features of the

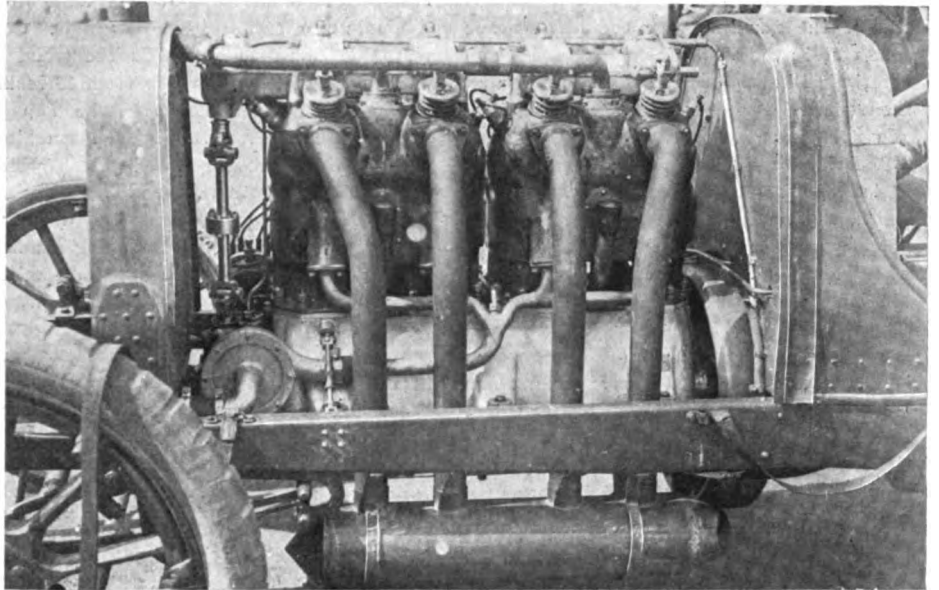
All of the remaining forty-three cars are four-cylinder creations, and practically every one of them has made use of the 6.1-inch bore; but many are the vagaries in the length of the stroke. The majority of them, however—in fact, all of them, with the exception of the Thomas Flyer, the sole American representative—have the stroke much in excess of the bore, which is a new departure in motor construction for racing machines and which was very conspicuous in the recent Prince Henry tour in Germany. Here are a few of the stroke lengths, and the reader can compare them with the 6.1-inch bore: Benz, 6.4; Brasier, 6.6; Bayard-Clement, 7.2; Fiat, 6.8; Germain, 6.6; Itala, 6.2; Lorraine-Dietrich, 6.8; Mercedes, 6.6; Motobloc, 6.6; Opel, 6.2; Panhard, 6.6; Renault, 6.2; Weigel, 6.6; Mors, 6.6; Thomas, 6.69.

The horsepower ranges from 80 in the Thomas to 123 in the Fiat and Lorraine-Dietrich. One hundred and twenty horsepower is the popular figure, this being the rating of Mors, Weigel, Panhard, Motobloc, Mercedes, Germain, Bayard-Clement, Brasier and Austin; the remaining cars are 115 and 110.

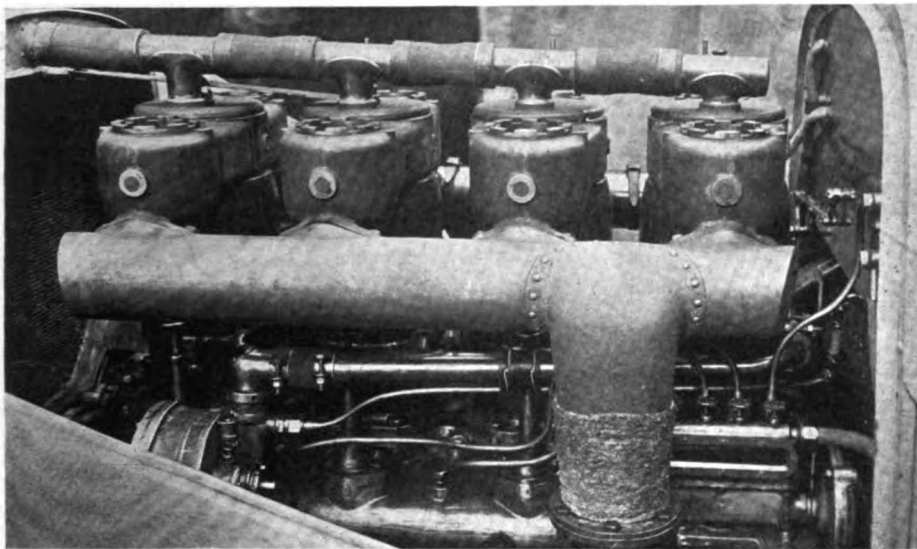
Second in importance to the long-stroke engines is the return of a few of the old-time builders to side-chain drive, conspicuous among which is the Panhard car so fitted, these machines of late having been fitted with shaft drive for racing purposes. In defense of the chain-drive situation for high-powered racing cars are the statistics, which show that in the twenty-five big road race events, now constituting the backbone of European road racing fourteen were won by chain-driven machines and eleven by shaft-drive. The shaft-drive exponents in this year's run are Austin, Bayard-Clement, Itala, Porthos, Renault and Weigel, a total of six makes, as compared with eleven pinning their

Grand Prix Cars

faith to side-chain for motor cars. Many of the continental racing enthusiasts have an additional interest in the race this year because of the introduction of the hemispherical combustion chamber in place of the box-like type heretofore considered standard. It is interesting to note that the seeds sown by that eminent English gasoline motor engineer, Dugald Clerk, are already bearing fruit in such factories as Bayard-Clement, Fiat, Itala, Motobloc, Weigel, Benz and Mercedes, and in the Renault factory, where the combustion chamber is approximately but not exactly hemispherical. Continental makers are more and more coming to the conclusion that responsiveness is a great feature in the motor of a racing car, and this can be vastly increased by making the combustion chamber semi-globular and further



GENERAL VIEW OF THE BAYARD-CLEMENT ENGINE

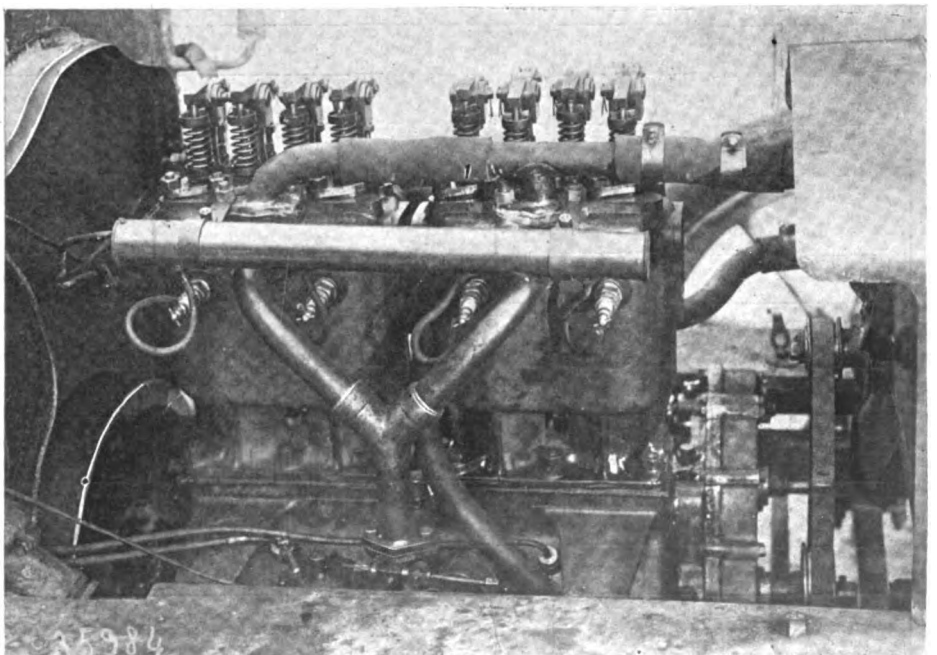


SHOWING LEFT SIDE OF THE PANHARD ENGINE

increased by placing the valves in the cylinder domes instead of locating them in the floors of offsets on the right and left sides of the cylinder castings. The Bayard-Clement engine, illustrated on these pages, is a typical example of the valve-in-the-head proposition, together with the overhead camshaft. Equally noticeable in this motor is the transverse forward shaft carrying the magneto on the right and the water pump on the left. Care has been taken to entirely inclose the camshaft with its gears and cams throughout its entire length, as well as to fit a universal joint at the forward end of the motor which drives the camshaft from the front end of the crankshaft. The cooling fan has been eliminated in this motor.

It is difficult to say whether low-tension or high-tension is victor in the fight for ignition supremacy, the general assumption being, however, that the high-tension is on the winning road. Of the forty-nine cars thirty-four have high-tension magneto ignition fitted and fifteen low-tension. The

Mercedes cars continue, as last year, in the high-tension ranks; the Motobloc has joined these ranks during the last year; while the Brasier and Lorraine-Dietrich have shifted over from high-tension to low-tension. The Mors car, which has not been in the racing field for some time, but which has reentered it this year, uses the low-tension system. The Thomas is fitted with an Eisemann magneto with an Atwater Kent system in reserve. While the Bosch magneto is fitted on practically forty of the cars, the Nilmelor is used on the Motobloc and Panhard cars, and the Eisemann on the Thomas. The Renault continues as the only example of the thermo-syphon circulation. In carburation the majority of the concerns have adopted a carburetor of their own design, the majority of them being laid out on the perpendicular air current style. The Panhard uses its hy-



MOTOR USED IN THE DEMEESTER VOITURETTE

draulic governor as heretofore. Twenty-one of the machines use the leather-face cone clutch; the Mercedes employs its characteristic Lindsay spiral spring clutch, and the remainder use multiple disk clutches of one style or another.

American makers may perhaps find a little consolation in the fact that Europeans, who are adepts at road racing, have been gradually working to the shorter wheelbase. The Mercedes cars that were 111 inches in wheelbase last year are 105 this year; Panhard was 111 last year and has cut to 103 inches, a measurement which is also used on the Motobloc cars. The popular wheelbase measurements are 105, 107 and 108 inches; the Mors are the shortest, measuring 102 inches, and the Porthos the longest with 125 inches.

Few changes have been made in the transmission system, the great majority of the makers relying on a four-speed selective set. Followers of this class are Austin, Benz, Bayard-Clement, Fiat, Itala, Lorraine-Dietrich, Mercedes, Motobloc, Opel, Panhard and the Thomas. Three-speed selective is used in the Weigel, Porthos, Germain and Brasier. The three-

speed progressively operated type finds but a couple of users, Mors and Renault. Considerable variance occurs in the tread of the machines, these varying from 49 inches in the Mors to 56 inches in the Thomas and Weigel. With the French machines 50 and 52 inches are the most popular.

In the voiturette race which took place over the grand prix course the day previous to the big event, embracing six laps of the circuit, or a total of 288.04 miles, much more latitude in motor design appears, and it will not be in the slightest surprising to find many of the 1909 grand prix machines patterned in many minor details after the little car, or voiturette, as it is called in France. For this little race the cylinder diameter was limited as follows: In a single-cylinder car, 3.93 inches; in a two-cylinder car, 3.07; in a three-cylinder car, 2.87; and in a four-cylinder car, 2.44. The majority of the sixty-four entrants were of the vertical two-cylinder type, single-cylinder ones were numerous, and but few four-cylinder types appeared. It is worthy of note that in a great many of the single-cylinder cars a De Dion motor is employed. A few of

these little cars are: Four-cylinder Isotta-Fraschini, with cylinders cast in en bloc, with a bore of 2.36 inches and a stroke of 3.93. It has a three-speed transmission. The Fouillaron is a typical representative, using the single-cylinder De Dion motor with a 3.93-inch bore and 5.9 stroke. The car employs a leather-faced cone clutch and transmits by shaft to the back axle. The Sizaire-Naudin has a single-cylinder 16-horsepower engine with 3.93-inch bore and 6.29-inch stroke, this being one of the many examples of the exceptionally long-stroke type. A good example of the two-cylinder car is the Alcyon with its 3.07-inch bore and 5.9-inch stroke. It is fitted with a high-tension magneto, a three-speed transmission, and, like the Sizaire, uses wire wheels. The Delage is another example of the single-cylinder type characterized by low-tension ignition and thermo-syphon circulation. Another car of this name is entered, but it is of the two-cylinder type. A contestant not familiar to American readers is the Roland-Piland, which uses a four-cylinder motor with 2.4-inch bore and 3.9-inch stroke.

MECHANICAL FEATURES OF THE CARS THAT TOOK PART IN THE GRAND PRIX

Car	Drivers	Engine	Stroke	H. P.	Carbureter	Cooling	Ignition	Clutch	Trans- mission	Drive	Track Inches	Wheel base Inches
AUSTIN, England....	Moore Brabazon Rosta Wright	6 cylinders, cast in pairs	4.9	120	Parallel currents	Cent'f'l pump, Austin ra- diator	H. T. magneto	Leather cone	Sel. sliding gear, 4 speeds	Shaft	52	107
BENZ, Germany.....	Hemery Hanriot Erbe	4 cylinders, in pairs, dome heads, valves at 45°	6.4	110	Perpend currents	Cent'f'l pump, honeycomb radiator	H. T. Bosch magneto	Leather cone	Sel. sliding gear, 4 speeds	Side chains	52	108
BRAZIER, France....	Thery Baras Bablot	4 cylinders, in pairs,	6.6	120	Converg. currents	Cent'f'l pump, tubular radiator	L. T. Bosch magneto	Leather cone	Sel. sliding gear, 3 speeds	Side chains	52	107
BAYARD CLEMENT, France	Rical Gabriel Hautvast	4 cylinders, in pairs, dome heads, single overh'd cam-shaft	7.2	120	Bayard- Clement	Cent'f'l pump, honeycomb radiator	H. T. Bosch magneto	Metallic disk	Sel. sliding gear, 4 speeds	Shaft	50	105
FIAT, Italy	Lancia Nazzaro Wagner	4 cylinders, in pairs, dome heads, single camshaft	6.8	123	Perpendic. currents	Cent'f'l pump, honeycomb radiator	L. T. Bosch magneto	Metallic disk	Sel. sliding gear, 4 speeds	Side chains	50	107
GERMAIN, Belgium..	Degrals Roch-Braut Perpere	4 sep. steel cylin- ders, copper jack- ets, valves oppo- site sides	6.6	120	Single noz- zle, with- out ad'nal air	Cent'f'l pump, honeycomb radiator	H. T. Bosch magneto	Expand. metallic	Sel. sliding gear, 3 speeds	Side chains	52	119
ITALA, Italy,	Cagno Fournier Placenza	4 cylinders, in pairs, dome heads	6.2	115	Perpend. currents	Cent'f'l pump, honeycomb radiator	L. T. Bosch magneto	Metallic disk	Sel. sliding gear, 4 speeds	Shaft	54	118
LORRAINE- DIETRICH, France	Dursy Rougier Minola	4 cylinders, in pairs,	6.8	123	Perpend currents	Cent'f'l pump	L. T. Bosch magneto	Metallic disk	Sel. sliding gear, 4 speeds	Side chains	52	107
MERCEDES, Germany	Saizer Poegge Lautenschlager	4 cylinders, in pairs, dome heads	6.6	120	Perpend. currents	Cent'f'l pump, honeycomb radiator	H. T. Bosch magneto	Lindsay spiral spring	Sel. sliding gear, 4 speeds	Side chains	52	105
MOTOBLOC, France..	Courade Pierion Garcet	4 cylinders, in pairs, flywheel in center dome heads, over- head valves with single camshaft	6.6	120	Perpend currents	Cent'f'l pump, honeycomb radiator	H. T. Nilmellor magneto	Metallic disk	Sel. sliding gear, 4 speeds	Side chains	50	103
OPEL, Germany.....	Opel Joerns Michel	4 cylinders, in pairs	6.2	115	Converg'nt currents	Cent'f'l pump, honeycomb radiator	H. T. Bosch magneto	Leather cone	Sel. sliding gear, 4 speeds	Side chains	52	103
PANHARD- LEVASOR, France.	Heath Maurence Farman Cissac	4 sep. steel cylin- ders, copper jack- ets, valves oppo- site sides	6.6	120	Automatic hydraulic regulator	Cent'f'l pump, honeycomb radiator	H. T. Nilmellor magneto	Metallic disk	Sel. sliding gear, 4 speeds	Side chains	50	103
PORTHOS, France...	Stricker Gaubert Simon	6 cylinders separate	4.7	95	Automatic	Cent'f'l pump, honeycomb radiator	H. T. Bosch magneto	Leather cone	Sel. sliding gear, 3 speeds	Shaft	52	125
RENAULT, France..	Siziz Cailliois Dimitriewitch	4 cylinders, in pairs, valves one side	6.2	115	Perpend. currents	Copper tube rad'or on dash; thermo- syphon	H. T. Bosch magneto	Leather cone	Progressive sliding gear, 3 speeds	Shaft	50	105
THOMAS FLYER America.....	Strang	4 cylinders, separ- ate; valves oppo- site sides	5.7	80	Perpend. currents	Gear-driven pump, cellular radiator	H. T. Eiseman magneto; Atwater K't generator	Metallic disk	Sel. sliding gear, 4 speeds	Side chains	56	112
WEIGEL, England...	Luxen Harrison Coleman	4 cylinders, one cas- ing, dome heads, valves at 45°	6.6	120	Parallel currents	Cent'f'l pump, honeycomb radiator	H. T. Bosch magneto; stor. batteries	Leather cone	Sel. sliding gear, 3 speeds	Shaft	56	111
MORS, France.....	Jenatzy Jarrott Lanson	4 cylinders, separate overhead valves	6.6	120	Automatic	Tubular radiator gear driven pump	L. T. Mors magneto	Leather cone	Progressive sliding gear, 3 speeds	Side chains	49	102

GRAND PRIX DRIVERS AND DIEPPE CIRCUIT

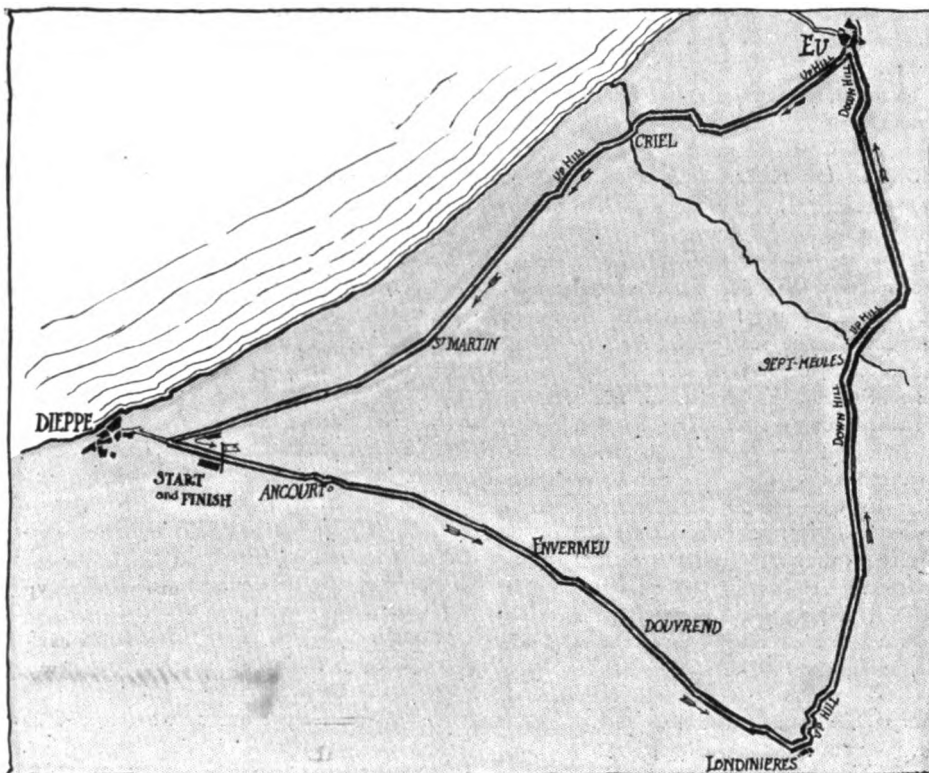
STRANGELY enough, no French prognostication of the outcome of the 1908 grand prix took the winning driver, Herr Lautenschlager, into consideration. For weeks the motoring experts busied themselves dividing the principal drivers into groups, basing their classifications on the temperament of the men and their resourcefulness in driving, on the titles dare-devils, cool bloods or cool heads and prudent ones. Lautenschlager did not get a place in any of these divisions.

Those who were said to be in the first class—men who threw prudence to the four winds and cared not what they did so long as they could win, were Wagner, Salzer, Poege, Duray, Baras, Nazzaro and Lancia. The cool heads were tabulated Caillois, Cagno, Hemery, Heath and Thery, while the prudent, careful drivers were said to be included in the following list: Rigal, Hautvast and Cissac. The first, it appears, was the French driver who pushed up into fourth place while Cissac was killed. Nazzaro made the speed on the first round marvelous and was followed by Salzer and four others, but there are many who do not agree with the general French characterization of the Italian as a dare-devil. They instance the fact that he always finished in his races up to this year, failing only in the Targa Florio and the grand prix of 1908. Since winning the Vanderbilt, Hemery has developed the faculty of showing meritorious coolheadedness in his contests, his victory in the Moscow-St. Petersburg road race calling forth all his resourcefulness on a long public highway.

Thery showed he has lost none of his old-time skill by hanging on doggedly, although heavily penalized by tire troubles, until he finally had to give up the gallant struggle to put France's colors in the lead. After winning the Gordon Bennett Thery said he would not take part again in any more competitions, but the call of the 1908 grand prix caught him and his presence among the distinguished veterans helped to add much eclat to the race.

Wagner, too, has Vanderbilt cup honors to bear and he did not drive like a dare-devil in the grand prix. Fortune did not favor him, however, and his skill and ability to get the last ounce of power out of his car was of little use when his Fiat refused to go the route. Heath, also a Vanderbilt cup winner, had the wheel in a Panhard, and this, like other French entries, gave up the struggle after the Germans got the commanding positions.

Although the road surface of the Dieppe circuit was as perfect as human skill could make it, the drivers all knew that piloting a car on the 47-mile triangle was not a mere matter of opening the throttle and letting the machine run. From the grand stand start and finish point to Londinieres, the first leg, there is a straightaway where



MAP SHOWING DIEPPE CIRCUIT USED IN GRAND PRIX

a speed of 100 miles an hour is not at all an impossibility. The turns and descents are inconsequential in the journey to Envermeu, where the soldiers barricaded the streets, leaving a wooden bridge for the populace to cross the road. Thence to Londinieres the road is varied—a few miles of straightaway, just enough turns on down grades to keep the drivers alert and nothing serious to bring out rare driving qualities being noted. But at Londinieres there is a double S turn over the railroad tracks, followed by a long, winding rise. Fortunately for all concerned, however, on the day of the race the government puts its ban on railroad traffic and the danger from collision with trains is eliminated. This is the most difficult spot on the course for a driver to negotiate the road in safety, but it also is the place that all the drivers familiarized themselves with by constant driving. Ability to drive at that point counted for much time saved in the actual race.

After passing this double S turn, a winding climb comes to give the car and the driver some trouble, the ascent continuing for 3 or 4 miles. The drivers drop into third speed here and ability in getting the most out of a car that has had its known powers for hill-climbing explained to the man in charge, invariably has been an asset at this point in the triangle.

Half way around the second leg there is a diversity of course that makes for excitement, first a sharp descent and then a short, stiff hill-climb followed by a straightaway. Going into Eu there is a

rapid descent and at the foot of this hill a wide hairpin turn has to be made through the center of a famous old market place. After this the driver must negotiate a 12 per cent grade and for 5 miles the roadway is so diversified, up hill and down dale that brakes occasionally have to be applied and the change speed lever has to be operated.

After passing Criel on the third leg, the driver finds a favorable opportunity to work the throttle and for 10 miles it is possible for him to open the gas supply to its limit with only an occasional shut-off. On the last few miles of the home stretch leg the drivers may look away to the left or opposite side of the triangle over the grand stand. But 3 miles out from Dieppe he encounters the famous hairpin curve that calls for closing down, although the roadway is wide enough for a careful driver to get around without danger. One mile further and the driver arrives at the stand.

The managers of the grand prix made a change in the stands this year that proved to be not only a pleasing one but a valuable one for the throngs that attended the contest. The stands which last year were a couple of miles from the Dieppe hairpin and on the seashore stretch of the road, were moved over to the opposite side and were on the outside of the course with a northern view and open to the sea breezes. This change not only permitted the spectators to view the contestants on the long straightaway in front of the stands, but to look across the country.

Published Weekly
The Class Journal Company
1200 Michigan Avenue, Chicago
New York Office. Flatiron Building

MOTOR AGE

Subscription Rates
United States and Mexico, per
year, \$5.00 Other countries
including Canada, \$5.00



Entered as Second-Class Matter September 19, 1899, at the Postoffice
at Chicago, Illinois, under Act of March 3, 1879



RESULTS OF THE GRAND PRIX



LAST, poor France, we told you so! After having been successful in killing the Bennett cup race it is not unnatural for America now to look for France to discontinue the grand prix because of Italy's success in it a year ago and Germany carrying off first, second and third honors this year. The grand prix was and still is, we think, a pet creation of the Automobile Club of France, designed primarily with the object of giving France immeasurably greater representation in its road races than was possible with the Gordon Bennett rules. Critics interpreted this action as a long step toward the regaining of France's supremacy in the racing field, this assumption being based on the fact that the premier event in international road racing would be a big French race. The last 2 years has shown France's abnormal representation has not been equal to the situation and Germany with its scanty entry and Italy with its equally small one have been instrumental in working the latest revolution on road racing.

Rumor has it that the French makers were this year attaching more importance to the voiturette race, which took place the day previous to the grand prix, than to the grand prix itself, the reason for this being found in the exceptional interests French makers have taken of late in the small car. This seems to bear out the contention made in these columns within the last 2 weeks that the small car is destined to supersede the seven-passenger machine for city and average country use; and it may be that the present road racing situation is but the handwriting on the wall of the inevitable. Next year we may look for the voiturette race to be the premier road event not only of France but of the international racing world; and, bearing out this assertion, is the unanimous support the Thompson cup stock chassis race is receiving at the hands of the American makers. It will not be at all disappointing if the stock chassis race entirely supersedes the Vanderbilt. When such conditions as this arrive the result to the industry will be phenomenal in that it will place the mark of approval upon a type of machine that must be the ultimate climax of motor car design in this country, namely, a machine adaptable and equal to the varied needs of the great masses of the American people.

Viewed philosophically from this standpoint, France's unpardonable attitude toward international road racing during the last 3 years can be transmuted into a halo,

or literally translated into a great good for the motor industry at large. The voiturette race of this year, in which the winning two-cylinder car averaged 50 miles an hour over a 288-mile course and in which some single-cylinder cars made practically as good an average, is ample proof of the speed proclivities of machines of this type and their endurance is equally well indicated by their ability to withstand continued high-speed work of this nature. It looks very much as if the war of the cylinders might be relegated to a position held by it 3 or 4 years ago; the main factor in a successful motor car not being the presence of any particular number of cylinders but to the construction, the design and workmanship which enter into the make-up of the car. Races of this nature prove that the laurels go to the well-made car and perhaps not the one of what might be called latest design.

ASPECTS OF THE GLIDDEN



WHILE the combined strength of the Glidden and Hower tours for this year is fifty-six as compared with sixty-three a year ago, the tour gives promise of being immeasurably more beneficial to the trade than what it has been heretofore, due primarily to the closer scrutiny which will be made by the committee in charge because of the presence of observers on the cars. With an observer on each contesting vehicle, it means that the running of a car into a friendly factory to repair certain parts during a day's run; the departure from the prescribed course in order to fix a new axle, and the visiting of back yards on farms in order to make certain repairs that it was most desirable to keep from the knowledge of the other contestants will be a thing of the past, and at the completion of the tour, providing the observers do their part, the motoring public in America will be aware of the exact performance of all the contestants throughout this strenuous contest promoted by the American Automobile Association.

There is not a question of doubt but that the tour has this year ceased to be a tour in the ordinary sense of the word and that it has entered the ranks of a reliability contest promoted solely for the benefit of the manufacturers and not conducted with

the aim of providing a pleasurable trip for motor enthusiasts. Because of this change it would be better for the industry at large to designate it the "Glidden reliability or endurance contest." This change of character from a tour to a reliability contest is largely accounted for by the presence of observers who are supposed to be impartial reporters of the daily progress of the car. The value of the observer rests chiefly with the fact that evasions of the rules are not attempted when he is aboard and whatever is done by way of repairing or replacement to a car is reported. Experience has proven that without observers tours and reliability contests are of little value to motoring.

One year ago the sealed bonnet test was advanced as the substitute for the observer situation, but the great weakness in it lies in the fact that the breaking of a single seal results in disqualification, which is an unfair state of affairs. As events have shown, a car frequently has been disqualified because of breaking a seal that did not protect the vital part of it and the repairing of which called for but a moment's work. Disqualifications have been caused by cracked spark plugs and loose battery connections, neither of which is of sufficient import to put a car completely out of the running.

From a critical viewpoint the worst feature of the Glidden rules is the disqualification of a car for the replacement of a part not carried with the car from the start of the tour. Those familiar with touring are fully aware of the need of replacement of a small part which rarely gets in trouble—a part capable of replacement in 5 minutes, and not worth 25 cents. The replacement of this, however, if the needed part were not carried in the extra spares, would result in disqualification, whereas any country blacksmith could make it and replace it for the motorist in less than 10 minutes.

In transportation, time and safety are the cardinal factors and it seems possible and highly probable in touring contests of this nature to convert every break and delay into its time equivalent and penalize on failure along this line. A course of this nature would eliminate disqualification because of a slight oversight on the part or a little carelessness in equipping before the start of the run.

