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MARMON FOLLOWS **NEW SPEED THEORY**

Constructs Special Racer Intended to Reduce Wind Resistance to Minimum.

Car of Large Dimensions Will Not

Be Handicapped With Fric-

tion Removed.

WEIGHT ALSO BIG FEATURE

By Howard Marmon.

The great increase in the number of

contests over previous years and up to the close of 1909, with a further increase in contests for 1910, has caused the contest board of the American manufacturers to give more than passing attention to the racing rules to govern contests for the season of 1910. While the general outline of the rules has been left very much as they were last season, new classes have been arranged, while rules to more firmly establish just what constitutes a

stock car and stock chassis are more sharply drawn. The manufacturer of 10,000 or more cars can no longer fall behind the clause of twenty-five special machines and thus enter contests with his handicapped competitor, who is unable to build that number, but he must now build a sufficient percentage of his output on certain lines, that dodging the stock chassis clause is well-nigh impossible. Additional latitude is given the manufacturer who desires to build a racing car and still compete in classes other than the free-for-ails, in



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By G. J. H Of the G & J Tin Possibly one of the m

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Wind Resistance is Problem.

this class. It will race in class 5, divi-

sion C, for cars of from 450 to 600 inches

piston displacement. This six-cylinder.

We have built a special racing ear for

their weight or stock parts.

lerence.

Sharply drawn.

will weigh close to 2,200 pounds, but with its pointed radiator and sharpened "fish" tail its speed is a matter of speculation at this time. I have always contended that it is not as much a matter of weight to promote speed as it is a matter of reducing wind resistance. A motor properly furning up dred pounds, more or less, with or at practically the same speed. It requires more time to start a heavy car than a light one, but once started and well under way over a fine surface, such as is furnished at the Speedway, a couple of

But against a wind surface, that is the vital question. Under ordinary speed this in not as important, but as the speed is increased it takes additional horse power to overcome the resistance, and as each additional mile is added the power required increases at a phenomenal rate. A car that with a given home power would travel at the rate of 100 miles an

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require just double its horse power to travel at the rate of 120 miles an hour, so

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Experiments Give Results. Scientific experiments have demon-

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speed as it is a matter of reducing wind resistance. A motor properly turning up at its highest speed will carry a few hundred pounds, more or less, with or at practically the same speed. It requires more time to start a heavy car than a light one, but once started and well under way over a fine surface, such as is furnished at the Speedway, a couple of hundred pounds makes but little difference. But against a wind surface, that is the vital question. Under ordinary speed this

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to overcome the resistance, and as each additional mile is added the power required increases at a phenomenal rate. A car that with a given horse power would travel at the rate of 100 miles an hour (if it had much wind surface), might require just double its horse power to travel at the rate of 120 miles an hour, so rapidly does the load from wind resistance increase.

Experiments Give Results. Scientific experiments have demon-

strated that the wind resistance at high speed forms a sort of block against the surface resisting it so that it absorbs power at a phenomenal rate after a certain speed is attained. This was proved at the Brooklands track. The great Benz with a flat radiator was

run at the rate of 105 miles an hour and seemed to be at the limit of its speed. A pointed radiator was then made, the starting crank was pointed, as were the axles and every wind resisting surface, while a pointed "fish tail" to overcome suction in the rear was added. The car that required all of its enormous 200horse power to travel at the rate of 105 miles an hour, at once reached the remarkable speed of 137 miles an hour for a short distance, while it may even do better than this at Florida Beach. I have held this contention for years, but this has been the first ear in the history of automobile rac-ing that the various types of cars have classified and with Division C of the limiting displacement, but

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Experiments Give Results.

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solutely correct. I expect this special machine, with wind resistance reduced to the minimum, to travel forty miles an hour faster than the same car which we are making into a the committee, made a note stock model, but with the regular wind "One toot, coming; two resisting radiator and construction such three toots, got him; four as is found in stock chassis.

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Scientific experiments have demonstrated that the wind resistance at high apsed forms a most of block against the surface resisting it so that it absorbs power at a phenomenal rate after a certain speed is attained, at the Brooklands track. This was proved

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