

## THE PHYSICIAN AND THE AUTOMOBILE.

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A very few years ago an article appearing with the above title would have been regarded quite apropos as an opportunity to bring out discussion as to whether the automobile was at all designed to become a popular and useful mode of conveyance for the busy doctor. Nowadays it is quite different. The automobile has been tried and tested and not found wanting, and is deemed by all competent observers as the conveyance par excellence for the physician. The question now most pertinent, and one which is agitating the user and manufacturer alike, is what form of self-propelled vehicle is best designed to meet the uses of the busy man. What shall be its motive power? What are the most essential points to be observed in its construction to provide for the user durability, comfort, comparative ease and safety of handling. Physicians all over the land, city and country alike, are thinking, and thinking seriously, over these very things. It is often a question of great perplexity to an intending purchaser of a motor car, amidst the maze of manufacturers and the convincing arguments set forth by their representatives. The motorists of Long Island, with its vast area of what have been called the finest roads in the world, the birthplace of the Vanderbilt cup races and the much talked of motor parkway, should be able to give much valuable and interesting experience concerning the question previously mentioned. The medical men especially, not only throughout the country part of the island, but in the metropolitan section as well, who have had experience with many varieties and makes of car, should be able to provide a very lively discussion upon the relative merits of their respective cars. It is for this reason partly that this article has been written, to form a sort of open parliament on this question. The Journal of the Medical Association established a precedent when it issued its Automobile number in April, 1906. The Horseless Age also has occasionally issued a "Doctor's Number." This is proof therefore, that the physicians' opinion as to what is required in the automobile for practical use has some weight. Undoubtedly the doctor in general practice wants the car that gets there with the least possible annoyance and adjustment. The consensus of opinion among the doctors contributing to the automobile symposium in the Journal of the A. M. A. seems to be almost unanimously of the solid tire, the high wheel and the air-cooled motor. It must be remembered that the doctors who were thus giving their opinion and experience are scattered all over the United States, under widely varying conditions of roads. It must also be borne in mind that these men were looking at the matter from an intensely practical point of view, so far as their own convenience was concerned, but in many cases their opinions were not based upon a practical scientific basis so far as the intricacies of motor construction is concerned. For instance; in the matter of the air-cooled motor. Although it may be ideal in many ways, it is evidently not regarded as practical by the great majority of manufacturers, or else it would be more universally adopted. A very profitable discussion upon this question of motor cooling, based upon actual experience of users of either system, would certainly be of value to user and manufacturer alike. Common sense, however, would seem to indicate that machinery of any kind would last and wear better when run

at a temperature of say, 200 degrees F., than it would at a temperature of 400 degrees F., as is sometimes attained in an air-cooled motor; and when the troublesome pump is eliminated, quite a state of perfection has been reached. When it comes to either the high carriage wheel or the solid tire, the country doctors, especially in the territory west of the Mississippi, are almost unanimously in favor of both. This emphasizes the fact that what the doctor wants is the car that gives him the least possible annoyance without regard to appearance, even comfort being sacrificed sometimes. The reasons given for desiring a high wheel are that the car will be high enough from the ground to prevent the vacuum from sucking up dust into the machinery and to clear obstructions, such as large stones and high-centered roads. This does not seem a good reason, as all machinery, especially when located in the front under the hood, is most thoroughly protected, and nearly all low-base cars are sufficiently high to clear any ordinary obstruction. One doctor sums up his views for solid tires as follows: "While they decrease speed and increase the danger of injury to the machinery, due to jars and shocks (unavoidable on the road), still if driven with care over the roughest of roads this objection would be in a measure overcome, but the freedom from delay on starting on a hurried call, and finding a deflated tire, delay on the road from punctures and blowouts, longer life and the doing away with the actual manual labor of pumping up tires, recommend them over the very unreliable pneumatic tires, for the doctor's use." A comparison of the various motive powers for automobiles might be briefly summed up as follows: The electric cars are quiet, easily controlled, clean, and start

without cranking, but they are heavy, due to excessive battery weight. The batteries require much attention and are easily injured. They are practically useless for touring, due to uncertain distance between charging stations. Steam cars are quiet, easily controlled and start without cranking, but the many things to watch and care for, besides the danger of the exposed flame, render it impossible for the operator to do or think of much else. Gasoline engines have the slight disadvantage of starting with a crank, but an operator soon learns to manipulate the starting device and the trouble is forgotten in considering the many advantages gained by using this type of engine. The experiments going on at the present time, in comparing utility of alcohol and kerosene, may revolutionize things in this direction. There is no doubt in my mind that the car for convenience, safety and ease of handling and general management is one that has easy accessibility to all its working parts, its engine in front (under the hood), purposely simple in its construction, double opposed cylinders, shaft-driven, water-cooled, no pump. The simpler the machine, and the fewer the parts, the less is the possibility of trouble. The lighter the weight consistent with strength, the longer will be the life of the machine. The engine should be ten to twelve horsepower; in other words, high power and light weight consistent with safety. The car designed especially for the doctor must be roomy both front and back of seat for satchels, and ride easily. So far as the satisfaction to be obtained in owning and operating a car, much depends upon the personal equation manifested in the care, use and abuse of a car, and in the judgment shown in the primary selection.