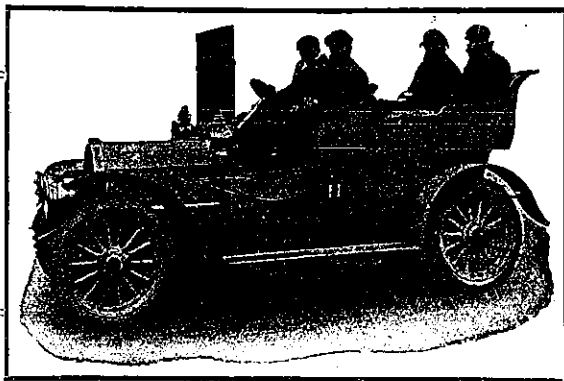


Motors



Motoring

OLYMPIA.

Progress in Motor Body Construction.

(By H. Waymouth Prance, A.I.E.E., A.M.I.A.E.)

At the time of the Olympia Show one annually looks round to see what progress has been made in the various branches of the motor world, and in late years the department with which I propose to deal in this article, that of motor body construction, has been noteworthy for the vigorous strides which have been made, and for the striking innovations which have taken place. In order to best gauge the progress which has been made it is advantageous to consider the ends and ideals which are being aimed at in the perfecting of bodies for motor vehicles. As in all other motor matters, the final design is one of compromise, but this compromise is made up of several independent features, each of which must receive its due consideration in the course of the development.

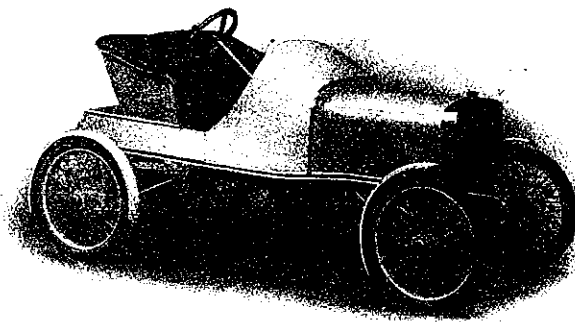
First among these aims may be mentioned comfort, the primary object of the body-work being the carrying of the passengers with as much comfort and convenience as possible. Appearance also is an important factor, whilst lightness and strength, features which have distinct bearings one upon the other, enter largely into the calculation. In these days of the popular car, wearing capabilities and moderation of price also have to be reckoned with, whilst, controlled perhaps by wearing capabilities, is the essential feature of noiselessness, and abiding the factor of appearance is that of the desirability of low wind resistance.

Having briefly reviewed the factors upon which progress must be based, it is interesting to consider the stages of development since the early days of the motor vehicle. Taking the horse-drawn carriage bodies, generally of the dog-cart type, as an ideal, the motor body builders produced the uncomfortable motor vehicles of the nineties. Developing to a further stage, the tonneau body became popular, and in striving to add to the appearance of the ungainly looking vehicle then in vogue the Roi-des-Beiges body was produced. At this time came the period of a striking innovation, the side-entrance body, which immediately became popular and ousted all former designs.

Up to this period the comfort of the passenger had not received serious consideration, beyond the providing of well-sprung upholstery, whilst the driving seat remained as in the very earliest days of the

motor vehicle, the driver being practically without any protection other than that afforded by a low dashboard of the horse vehicle type. Between this period and the development which was shortly to take place a few body builders commenced to add doors to the front seats, but these for the most part were exceedingly low and of very little use in affording protection to those occupying the front seats.

Last year's show will always be remembered for the next development in the progress of motor body building, the popularising of the torpedo, flush-sided, and boat-shaped bodies, as they are variously called. From this it must not be understood that torpedo bodies have not been built before, designs indeed of this type having appeared on numerous occasions, but it was not until the display of the 1910 models at Olympia was made that these bodies were to be found upon practically every make of chassis. Undoubted-



THE CHEAPEST CAR IN THE RECENT OLYMPIA SHOW.

ly competitions and road races such as the Prince Henry and Tourist Trophy events have had their influence in the development of motor body construction, and it is noteworthy that low-pitched bodies with high doors and practically flush sides were to be seen in these competitions long before the body of the pleasure car had reached development on these lines.

At the Olympia Show now in progress many bodies—which for the sake of conciseness may be termed torpedoes—of excellent design are to be seen, this type being practically universal, whilst the lines have also invaded the realm of the closed body. It must not, however, be taken that finality of the torpedo design has by any means been arrived at; certain points at which, apparently, different body builders are at variance still remain to be decided, whilst further development in the reduction of wind resistance and the improving of appearance is readily possible.

As an example of this it will be noted by those inspecting the exhibits that certain of the torpedo bodies are narrower at the

rear than at the front, whilst some are of the same width throughout, and instances are to be seen of those which are wider at the rear than at the front. It would be without the province of this article to discuss the stream-line effects of these various forms, but it is obvious that there must be a best among these as regards non-wind-resisting and non-dust-raising properties. Concerning this latter point it is perhaps worthy of remark that few makers, although very pronounced regarding the merits of their flush-sided bodies, have made any attempt to obtain flush underlines, a feature which has not as yet received the attention which it deserves either upon the road or the racing track. It is also worthy of note regarding these properties of wind resisting and dust raising, that no disc wheels, such as have become so popular at Brooklands, are to be found upon the stands.

Perhaps among noteworthy developments of this year's Show may be mentioned the provision of access to the driving seat from either side, a point which is of very considerable added convenience, the popularising of the two-seated coupe, and the development of the fully open or fully closed double-purpose vehicle.

Of the latter the cabriolet body is to be found in various shapes, and it is interesting to note that of the many examples shown several are to be found which are considerably lighter than have been the majority of these bodies since they came into prominence a short time back.

Of closed bodies of the limousine type development would appear to be restricted to the further added luxury of the interiors and the production of fancy lines such as instanced by the postchaise bodies shown upon some of the stands. Ventilation of closed bodies is now receiving some attention, and examples are to be found of roof ventilators and of sliding roofs. This attention to the proper and efficient ventilation of large enclosed cars, the interiors of many of which more closely resemble ladies' boudoirs than travelling vehicles, may be marked down as a distinct step in progress.

Of hard-wear bodies very little development has taken place, judging from the exhibits at Olympia, and in the course of my examination I did not notice a single example of the matt surface unvarnished body with painted metal work, for which there would appear to be a certain demand. An example of painted metal work, in which the head lights, side lights, horn, acetylene generator, wind screen frame, hood irons, etc., are painted and lined to