MOTOR CARS FOR MEDICAL MEN.

NEXT WEEK'S MOTOR SHOW.

By H. MASSAC BUIST.

THE resumed series of motor car shows in the Grand Palais, Paris, closes to-morrow (Sunday) night, and the twentieth yearly International Passenger Car Show, organized by the Society of Motor Manufacturers and Traders, under the patronage of the King, will open at Olympia, Kensington, on Friday next, October 22nd. It will remain open daily, Sunday excluded, until 10 o'clock on Saturday night, October 30th, the prices for admission being 5s. each day, with the exception of the Fridays and Saturdays, when the charge will be reduced to 2s. 6d. The scale of accommodation afforded in the enlarged building may be judged from the fact that, set end-to-end, there will be nearly three and a half miles of exhibits, the cars ranging in cost from £100 to nearly £4,000 each.

CONSIDERATIONS OF COST.

From the point of view of the average medical man cost takes precedence of all other considerations in respect of his motoring commitments. By cost I mean expenditure not only upon the acquisition but upon the maintenance (that is, the wearing life) of a car, since this matter has to be considered as a whole if one is to aim at obtaining the best value for money. This consideration needs stressing, particularly on the occasion of the forthcoming exhibition, because probably many a young medical man, without capital, will be sorely tempted to consider £100 cars. Doubtless he will read in the general press that the £100 car has arrived at last. In point of fact, the £100 car was standardized and offered to the public by Rover more than twenty years ago; and some of those cars are running to-day. But I do not advise any medical man in general practice to buy any £100 car that will be offered to him at Olympia, notwithstanding the fact that the least of them will have two cylinders, against one in the car of twenty years ago. The prime reason is that reliability and wearing life are essential in a medical man's car. Moreover, even if he is without capital he is not in the awkward predicament in respect of car purchases that those in his case were before the war.

FINANCIAL FACILITIES.

To-day much over 50 per cent. of the business in selling new motor cars is financed on the principle of payment by instalments. Therefore the medical man can set out in quest of real as distinct from apparent motoring value for money. To that end he must buy a car that has long wearing life. It is not merely that that is the most economical way; incidentally, it is a way that assures him, to a greater degree than any other method of procedure, a machine which shall be reliable no matter what the country of its origin. A long-wearing car must be one every detail of which, including the electrical fittings and so forth, will endure; therefore there will be no rattling loose, perishing of insulations, giving trouble through short circuits, and so forth.

When it comes to a borrowing transaction, one need only pay over a longer period, or slightly more for the usual number of intervals. I notice that one firm in London transacting business in all classes of cars has instituted a new purchase system by payments extending over a period of three years instead of the usual year or eighteen months. I am informed that the management has found the scheme answer very well, alike from the point of view of their clients and from that of the financiers. Consequently the actual bill of the medical man for equipping himself with a car really suitable to such strenuous all-the-year-round day and night service as the general practitioner is dependent upon no longer renders it impracticable for those who for the time being are in straitened financial circumstances to buy really sound cars. Unsatisfactory

cheap cars are unsound, each proving a very expensive car in the long run. Further, the lapse of another year still fails to reveal to my experience a single case of a young medical man setting up in practice who has not found that, by acquiring a thoroughly sound car, he has doubled his income the first year of its use.

FACTORS FAVOURING THOSE OF MODERATE INCOME.

The medical man must look in other directions than the £100 car if he is in quest of economy in association with satisfactory service. Happily, circumstances favour him. In spite of the coal strike—the effects of which on the motor industry have been severe, leaving many firms with heavy stocks, and putting others in the predicament of a shortage of raw material with which to carry on the production of new car types—prices all round show no increase. In nearly every instance in which the price factor is stationary, nevertheless additional equipment, or something else in the shape of more value for the given sum, is offered. In a great number of cases, of course, prices are reduced notably. Some of these developments are merely occasioned by the necessity to liquidate stock, which would have been disposed of by July last, at the latest, had not a prolonged coal strike upset the car trade. But in many cases reduction of price has been accomplished in association with developing products for the new season, and presenting them more or less in an entirely new guise, because in these factories there has been no accumulation of cars to work off and the captains of the industry have the pluck to carry on. I may mention in passing that when the coal strike is settled it is expected by the British motor industry that it will be quite two months before the flow of raw materials from the steel and auxiliary industries will begin.

In all these circumstances it will be appreciated that the home industry, in particular, is highly to be praised for carrying on, and especially for introducing entirely new designs at prices which represent better value than has ever been offered in the history of the trade, since, obviously, when a firm offers an entirely new superior design the temptation must be great to ask for it as much as it will fetch instead of tempting the buyer by marketing it right away at the lowest price that can possibly be contrived. Another factor in favour of the buyer at this moment is that the tyre industry has just reduced its prices. In some cases these reductions represent the third cut below the maximum prices obtaining during the rubber boom.

REDUCING THE DEPRECIATION FACTOR.

I have striven to show that one of the most important factors to be considered by the medical man in respect of his expenditure on motoring is the depreciation of the car. The 1926 London Motor Car Show will present him with many examples of vehicles of various powers, so produced as very largely to eliminate the problem of depreciation. This does not concern him only in respect of determining the moment at which he feels he must dispose of his car. On the contrary, it also concerns him by eliminating the frequent necessity for sending his car periodically to the coachmakers for revarnishing, if not actually repainting, often to his great inconvenience as well as no small cost. I refer to the introduction of gun-cotton, or cellulose, finishes for coachwork, a development pioneered by the explosive manufacturers in America. The great transatlantic car builders, who had acquired many of these businesses, found such plant suitable for producing new style finishes for motor cars in the form of lacquers.

The British industry has investigated these developments for a long time. But this is the first season in which there has been any general movement on the part of our manufacturers to standardize lacquer-finished cars which, in any case, are immune from the effects of ordinary scratching, and which, treated as ordinary paint and varnish coachwork is treated, actually improve with use, instead of deteriorating. Further, lacquer finish does what no paint and varnish scheme can do: the former meets the needs of the medical man of moderate means who is called out in the middle of the night to drive through rain and mud, and who, on getting back fatigued, puts his car into the garage—which is ruinous

to ordinary paint and varnish. With lacquer finishes it is not so, though it is advisable to have the car washed as soon as possible after it has become dirtied or wet; but it is not essential. Neglect of this sort by the month can be remedied by very thorough washing and subsequent treatment with one or other of the different special polishes that have been produced. One of the best I have come across has been evolved by a well known maker of boot polishes. Certainly, it takes out any marks of rain-spots and so forth.

THE COMING OF LACQUER FINISHES.

The best of these gun-cotton finishes not only improves with use; it is, besides, impervious to the effects of sun, cold, damp, sleet, grit, snow, tar, oil, grease, the heat of the engine under the bonnet, chipping, fading, and so forth. I do not know any one finish used so far by the British industry which embodies all these virtues. Most of those employed embody quite sufficient merits, however, to render them valuable to the motorist, especially to him whose circumstances are those of an owner-driver more or less maintaining his vehicle. For instance, if a cellulose finish does get chipped, the manufacturers can generally fill it over until the lacquer appears as new, because most of these processes are applied by pistol spraying under air pressure. Therefore all that is necessary is to spray and spray until an amount equal to the material lost by the act of chipping has become superimposed on the damaged part.

Some of these lacquer colours, however, are not immune from fading; but even so they do not fade as badly as do some of the lighter tones in paint or varnish. Some manufacturers, too, find that one process of lacquer gives satisfactory results in a given series of colours but unsatisfactory results in other series of colours; therefore they employ different processes, according to the hue they need. This is not always practicable, however, because very elaborate plant has to be laid down to utilize some of the best of these lacquer treatments. By contrast, some varieties can be applied by brush, and will dry in half an hour. Suffice it, however, that the results produced are really worth while. In fact, just as to-day nobody thinks of a passenger car being properly equipped unless it has brakes to all four wheels—though readers of the JOURNAL will remember that only two years ago the matter was still regarded with considerable doubt, not by the public in general merely, but also by the car builders—so in two or three years' time nobody will think of having a cheap car standardized for all-round service the body of which is finished in anything except some form of gun-cotton lacquering. Cellulose lacquers are generally solutions of nitro-cellulose in a mixture of various solvents, such as butyl and amyl acetates, with the addition of suitable gums to toughen the film and give adhesiveness, and also a modicum of plasticizer to make the whole easily workable.

NOVELTIES OF NOTE.

The coming of lacquer finishes is exercising another influence on the appearance of cars in general. It presents the opportunity for standardizing hues of a delicacy most pleasing to the eye, eminently suitable for appearance on the open road, but which were not practicable from the maintenance point of view where produced by ordinary coachwork and varnishing schemes. Thus we are on the verge of an era of motor cars of more pleasing and less clumsy appearance. This tendency has even been noted by those charged with designing bodies treated on the ordinary paint and varnish principle: consequently next week it will be evident that the main novelty in the outward appearance of cars finished in conventional fashion is the use of two hues of the main colour scheme, in addition to touches of black here and there on the roofing. This use of two colours in panel fashion represents a development of real note, in that the most expensive motor carriages can be finished more effectively this way than by a reversion to the old coachbuilder's system of fine lines. Of course, the tapestry, linen and silk body coverings that are a novelty at the present French show are a mere attempt to create a passing vogue, and are

not to be considered seriously by motorists in general. A motor car travels so much faster than a horse-drawn vehicle that floral decorative themes, tartan and haggis designs, and small square lines, are not suitable, since the details, attractive or ugly, are alike visible only when the vehicle and the observer are both stationary.

By contrast, the same new British body-colouring scheme is rendered possible by raising radiators. This is a very general practice this year. Thus from the top of the radiator along the saddle of the bonnet to and including the waistline of the car—which is also raised without prejudice to the interior lighting, since the windows reach just as high towards the roof—it is possible to paint a perfectly plain panel of colour. For example, by painting the boot, the waistline, saddle of the bonnet, the wings and the wheels in a darker hue of, say, green than the side panels of the car and the sides of the bonnet, which are a lighter tint, an effect is obtained that can be seen to equal advantage when the vehicle is stationary or in motion. The principle also offers the opportunity to bluff some body lines, which are perforce bulky, or of an awkward angularity or curvature; this is done in some of the bodies on the largest chassis in the world, the new Daimler. Incidentally, an announcement which is timed to be made at the moment these notes appear is to the effect that the oldest firm established in the British industry is introducing a "double six" cylinder engined chassis of nominal 50, actual 150 h.p., the car developing its power in such flexible and smooth fashion that it can be driven at from 2 to 82 miles an hour on top gear, being, therefore, a machine on which one starts on the direct drive and generally completes even a long-distance cross-country journey without coming off it, to judge from various experiments I have had. Such vehicles can be of interest only to the motorist with a very large income. But the reason behind such development should be noted. From the strictly engineering point of view, the whole tendency is to limit the size of the individual cylinder, since, if some of our largest six-cylinder engines were to be made to produce the power they should do for their volume, their performance would become coarse.

THE BATTLE OF THE CYLINDERS.

Whenever one speaks with motorists in terms of miles an hour of travel, those facilities should be translated only into increased possibilities of flexibility for hill-climbing, and so forth, since very few people want to travel at more than forty miles an hour in any circumstances. But they would like to be able to maintain such speeds up gradients, especially if that could be done without change of gear. Therefore, the idea is to obtain greater flexibility with refinement, which means greater efficiency with, nevertheless, enhanced as distinct from prejudiced refinement.

Hence we shall see not only the introduction of more eight-cylinder-in-line engine chassis, notably a 35-h.p. type by Sunbeam, and a new 2½-litre type by Beverley-Barnes, also the introduction from America of a Stutz "straight-eight," but also a hint that the middle-size four-cylinder car engine is about to pass away as a type. In general, it may be stated that the builders of middle-size four-cylinder engined chassis tend to provide six-cylinder units instead, especially for vehicles coming within the 12 to 16-h.p. rating. This is merely to give a smoother and more flexible performance.

I foretell that in two years' time a general survey of the industry will reveal to anyone wanting a car of an engine size between our present 12 and 20-h.p. rating that it will be offered him in the form of a six-cylinder unit. Next week I shall deal more particularly with those new six-cylinder cars which come within the purse range of the average medical man, in which connexion I may say that notable fresh contributions are being offered by Clement-Talbot, Wolseley, Lagonda, and Standard in the smaller categories, and by Austin, Humber, and Sunbeam on the larger scale. As to four-cylinder engine practice of the very cheap sort, perhaps the most notable price contribution of the miniature-engined car is the £148 10s. overhead camshaft operated, overhead valve, 850 c.cm. Singer with quarter-elliptic springs fore and aft and rear-wheel brakes only.