previous knowledge of the heart and its functions. The author's object is to direct attention to the various causes and earliest symptoms of heart disease, so that affections of the heart may be recognized and treated at the earliest possible moment in order to avoid much preventable cardiac disability in later life. The subject is treated in considerable detail, and many of the minor factors which militate against an efficient circulation are explained in a rational way. It is usually difficult to explain a technical subject to an untrained person, but we feel that Dr. Smith has succeeded in producing a book which should serve its avowed object. There may be a difference of opinion about doctors addressing the public on medical subjects, but we notice that Dr. Calvin Smith does not anywhere mention his address, and the copy we have received has been printed in this country. We think it right to our readers to mention that the author should not be confused with another member of the profession of the same name who is on the *British Medical Register*. The second book, by Dr. ROBERT H. BABCOCK, while also addressed to the public, is much more technical. The anatomy and physiology are described in too much detail, and terms are employed which will tend rather to confuse than help the popular reader. Otherwise the information contained is mostly sound and follows in general the same lines as the other volume.

A revised edition of the useful little pamphlet *To Wives and Mothers: How to Keep Yourself and your Children Well and Strong*¹⁰ has recently been issued. Its popularity is evidenced by the fact that its issue has reached 285,000. The pamphlet is compiled by the Association of Infant Welfare and Maternity Centres. As the committee responsible for it consists of certain leading authorities on child welfare, together with some medical officers of welfare centres and lay members practically interested in mothercraft, its contents may be taken as representing the most modern and practical teaching on this subject, standardized as far as is possible. It is not intended to replace expert medical advice, but rather does it represent excellent "notes" which an intelligent mother might take from the health talks of a doctor. Information is given clearly and concisely under good headings, and there is an index. In the chapter on care of the infant the statement is made that "until the cord is healed the baby should not be immersed in the bath water"; this teaching is contrary to the practice usually adopted by midwives. The method of breast-feeding is described fully, together with notes on mixed feeding and weaning. The management of children from 1 to 5 years is referred to, with a few words on character training. Other sections deal briefly with the usual infantile ailments, the common infectious diseases, and emergencies. The importance of sunshine, fresh air, and cleanliness is indicated. A few simple recipes, hints on washing, and directions for making a knitted outfit for the baby complete a most instructive little guide.

Lessons on the Care of Infants,¹¹ by Mrs. WATSON, is a revised edition of a small pamphlet first published in 1907. There is a preface and introduction by Mr. BENJAMIN BROADBENT, ex-Mayor of Huddersfield, whose interest in the welfare of mothers and children is well known. There are five lessons—on natural food, artificial food, clothes, sleep and fresh air, and general care. Simple information is given on these subjects and at the end of each lesson are a few questions. It should prove a useful little pamphlet to school teachers and those who give instruction in mothercraft.

The *Manuel de petite chirurgie* of MM. ARDIN-DELTEIL and P. SOUBEYRAN has now reached its third edition.¹² It is a large book of 917 pages, well illustrated, containing an account of the essentials of minor surgery, and ending with the technique of necropsy. The book follows traditional lines and gives a fair account of antisepsis, anaesthesia, splints, etc., and various of the lesser operations. It is intended for practitioners, students, and nurses, and will not lead them astray, but a book of this size might have been expected to reflect more clearly advances in surgical pathology and treatment.

Sir ARCHIBALD GARROD's Harveian Oration on *The Debt of Science to Medicine*,¹³ published in our columns on October 25th, 1924 (p. 747), has been printed in a pamphlet and published by the Oxford University Press.

¹⁰ National League for Health, Maternity, and Child Welfare, 117, Piccadilly, W. 1924. (Demy 8vo, pp. 59. 5d. post free.)

¹¹ *Lessons on the Care of Infants (for use in schools)*. By Mrs. Watson. With a preface and introduction by Benjamin Broadbent, C.B.E., LL.D., M.A., J.P. London: Longmans, Green and Co. 1923. (Cr. 8vo, pp. 19; frontispiece. 6d. net.)

¹² *Manuel de petite chirurgie et de technique médicale journalière*. Par P. Ardin-Delteil et P. Soubeyrant. Troisième édition. Paris: Masson et Cie. 1923. (Roy. 8vo, pp. 927; 507 figures. Fr. 45.)

¹³ *The Debt of Science to Medicine*. Oxford: By the Clarendon Press. 1924. (Med. 8vo, pp. 30. 2s. 6d.)

Dr. LOUISE BRINK's monograph on *Women Characters in Richard Wagner*¹⁴ is a study of *The Ring* from the standpoint of psycho-analysis. The work is divided into two parts, dealing respectively with the psychic problem and the problem in the drama, and traces a close relation between Wagner's drama and his psychic life. A bibliography of psycho-analytic works bearing on literature and mythology is appended.

The "Wellcome" *Photographic Exposure Calculator*¹⁵ for 1925 contains the usual memoranda, with certain additions. Two methods of developing with the aid of a tabloid desensitizer are described, and a comprehensive list of the comparative speeds of development of papers and lantern slides is given. Over 280 kinds of plates and films, including the later varieties, and more than 100 kinds of bromide and gas-light papers are classified.

¹⁴ *Women Characters in Richard Wagner*. By Louise Brink, Ph.D. Nervous and Mental Disease Monograph Series. No. 37. New York and Washington: Nervous and Mental Diseases Publishing Company. 1924. (Med. 8vo, pp. xv + 125.)

¹⁵ London: Burroughs Wellcome and Co. 1925. Price 1s. 6d.

MOTOR NOTES FOR MEDICAL MEN.

CHANGING CONDITIONS IN 1925.

By H. MASSAC BUIST.

THE three outstanding fresh phases of motor enterprise in the New Year which have a direct bearing on the medical man's use of a car are:

(a) The readjustment of the broken period licence charges, which comes into operation on New Year's Day.

(b) The Road Traffic Bill, which will be introduced in February by Lieut.-Colonel Wilfred Ashley, Minister of Transport, to consolidate the law in regard to the use of vehicles on the road; it will, it is anticipated, abolish the twenty miles an hour and all other speed limits, require the evidence of at least two witnesses before a motorist can be convicted of dangerous driving, and make the use of rear lights compulsory for all vehicles on the road, including pedal bicycles.

(c) The introduction of a remodelled scheme for the safeguarding of industries, whereby the hard-pressed British motor car maker will be shielded in some degree against the competition of car industries in other countries, all of which are assured of their home markets.

Medical men who are relatively new to motoring may be reminded that all vehicle licences have to be taken out at the New Year; that it is not usual to give more than six days' grace in face of the opportunity offered to send in the necessary papers, and so forth, a fortnight before the end of the year.

SITUATION IN REGARD TO LICENCES.

The new arrangement in regard to taking out what are called broken period licences for cars does not concern the owner who takes out a licence during the first month of the year. It is in the nature of an adjustment, as distinct from a concession. In short, the revenue does not stand to lose anything by it. Like all changes, of course, examples can be cited in which it causes hardship on the motor owner by comparison with the situation that obtained formerly. These matters, however, have to be arranged always on the principle of securing the greatest good to the greatest number. From that point of view the readjustment is more equitable in the majority of cases. It is possible to obtain a quarterly licence now on payment of 27½ per cent. of a full annual licence. If a broken quarter is taken into account, together with what remains of the calendar year, there is a calculation of "one-twelfth of the full annual rate of duty for each month, or part of a month, included in the given period, and a further amount calculated at the rate of 5 per cent. of the amount so ascertained." The car owner has to pay one-third of the quarterly rate for one month, two-thirds for two months, and the full rate for any balance of weeks or days over two months.

CAR TAXATION.

As far as motor taxation is concerned, it is extremely unlikely that any reduction in car licences will be made in

the Budget this year. The reason is that, even as the present scale of licences exceeds anything that was anticipated when it was introduced, so, unfortunately, does the expenditure on roads. It is being realized that this is becoming more effective, and that motorists will obtain full value for their money.

Again, it is now abundantly plain that the one branch of the world's industry which in general might be said to suffer from the licence scheme—it has an overwhelming advantage in every other respect—is American manufacturing and export. It is already clear that practically all the leading makers in the United States will shortly produce engines which will come out much more favourably under European engine rating schemes than the power plant they have put in their vehicles hitherto. Consequently any hardship under that head will tend to diminish. Current types of transatlantic cars enjoy such an enormous advantage in the matters of low initial cost, and so forth, that any item of extra tax would have to be paid for more than a dozen years before an owner's costs would begin to be on a par—under the combined heads of initial purchase price and licence fees—with a home-made car.

SAFER NIGHT DRIVING.

Probably medical men are the section of the car-using community which stands most to benefit by the legislation to be introduced in February concerning road traffic. Medical men have necessarily to do a good deal of motoring by night, and the strain of watching for a bicycle ahead without a rear light is serious. Driving at night will also be rendered easier by the numerous improvements being made all over the country to eliminate dangerous turnings, and so forth. Such improvements are urgently needed, for commercial night traffic is increasing at an amazing rate. It seems probable that before very long main roads will be as busy at night as during the day.

The proposed abolition of the speed limit of twenty miles an hour, which rarely troubles the medical man, and which in most parts of the country has been regarded by motorists and the authorities as a dead letter, is of itself not a matter of importance. Its consequences may, however, be important. Thus, whenever it is desired to prosecute hereafter it will have to be on the charge of dangerous driving. There is nothing to prevent any person, or persons, accusing a road-user of dangerous driving in circumstances in which it would be practically impossible for the motorist to disprove such a charge on his own evidence alone. The proposal to require two witnesses is in accordance with the recommendation of the Departmental Committee. It must be admitted that police evidence is sometimes prejudiced, and that even when unprejudiced the constable who gives it may be no competent judge. As cars are now being designed and built the efficiency of control varies enormously, and even experts may not always be prepared to give testimony one way or another. As a matter of practice we know also that the proclaimed policy of several benches in the country, carried out during the last score of years, has not been quite impartial. The bill it is proposed to introduce next month will probably remain in force for a good many years, and it is essential that all concerned should look carefully at the probable practical effect of the proposed changes. The clause in the bill should be so clearly worded as to make it impossible for any bench to indulge its prejudice by distorting the letter of the law. A wrongful accusation of dangerous driving may result in an innocent accused being sentenced to a term of imprisonment. Unless the bill is worded very explicitly under this head, leaving no loophole for discretion or no power of discretion on this point to departments (that is, unless it strictly and satisfactorily defines the conditions on which a prosecution may succeed), I personally am of opinion that removal of the twenty miles an hour motor car speed limit will be popular for nine days only and be regarded as a curse afterwards. It is the most difficult problem the Government has to face in drafting this bill. The bill will not contain any proposal to require car drivers to undergo medical examination before driving licences are granted.

FUTURE DEVELOPMENT OF CARS.

Mechanically, there will be many changes. There is a world-wide tendency to obtain better performance from smaller and, therefore, lower-taxed power plant. We shall see more of this when the motor show comes to be held at the end of October and the beginning of November next. It will be noted that this is a later date than that of the successful experiment at Olympia in mid-October last year. This is due to the situation in Paris, and to an old understanding between the organizations of the British and the French industries. A period will have to be put to that unwritten arrangement, however, in that it works to the detriment of the motor vehicle user and buyer, as well as to the motor manufacturer and trader, in this country. Indeed, we want, in London, not a show in the middle of October, but in the first week of that month. There will be no motor show in Scotland this year, for there were two last year.

There will be no 1,000-mile trial for standard cars in the Highlands of Scotland, nor in this country, and no Tourist Trophy car race in the Isle of Man. But there is likely to be some important racing in Dublin, for which the Royal Irish Automobile Club has been preparing for a long time.

More important in regard to the development of the car, however, is the introduction in Parliament of what a few years ago would have been regarded as fantastically impossible—namely, a private bill to permit the closing of roads for a few hours in order to conduct in the heart of England, probably in the Midlands, an international road race. Such an event could not be held this year. But the necessary Parliamentary powers are likely to be obtained this year, because it is recognized that the motor industry is a key one, and that ours is handicapped greatly by comparison with the industry on the continent of Europe and in America, where road racing is permitted. As there could be no road racing in England until 1926, and as the present small car engine limitation (1,500 c.c.m. cylinder content) will be the limit for the largest cars to be raced in the classic event in America in 1926, it seems not unlikely that such a private bill will go through. It would assist experiment and trade greatly.

From the medical man's point of view, as one who requires to use covered types of cars, I would mention that if this essential work of experiment is carried forward under every encouragement from wise regulations, there is no reason why a 500 c.c.m. (or motor-bicycle size) engined car should not be sufficient in less than a decade to propel a four-seated saloon; this will mean an enormous saving, not only in initial cost and taxation, but also in running costs (tyre and fuel). Meantime, much more will be learned by manufacturers this year concerning lacquer finishing for cars, which can be cheap, durable, and proof against spilt petrol.

THE FUTURE OF FUEL.

Very important fuel experiments are being made. Of course, there is no such thing as British fuel, because benzol failed us badly last year, owing to the depression in the coal and iron industries. It cannot be produced in sufficient quantities, since it pays only to distil it as a by-product. Before a decade is out, however, we shall have something really important and quite different in the way of home-produced fuel. The talk of British petrol proves seldom to be more than the embarkation of British capital in purchasing and working oil fields in countries which, if not hostile, are at least subject to all sorts of influences from nations and interests hostile to ourselves. In the event of a national emergency such oil fields would rather need guarding than be an assured source of fuel supply to our navy. Consequently, we are living in a fool's paradise as long as we assume that we are assured of foreign oil fields. Far more important are the oil fields which exist in British territory, no matter by whom owned. At least, their outputs could and would be commandeered in emergency. But we shall not have completed the vital task until we derive a suitable motor fuel from treating raw material obtainable in these islands. At the moment I cannot state more beyond indicating that the necessary experiment will assume a very important phase by September or October next.